



City of Springfield

Agenda

City Council

Ken McClure, Mayor

Zone Councilmembers

Monica Horton, Zone 1

Abe McGull, Zone 2

Brandon Jenson, Zone 3

Matthew Simpson, Zone 4

General Councilmembers

Heather Hardinger, General A

Craig Hosmer, General B

Callie Carroll, General C

Derek Lee, General D

July 22, 2024

6:30 PM

**Regional Police-Fire Training Center
2620 West Battlefield Road
Room 101, 102, and 103**

[Rules and procedures.](#)

1. ROLL CALL.

2. APPROVAL OF MINUTES.

- 2.1. Approval of Minutes. July 8, 2024, City Council Meeting and July 9, 2024, Special City Council Meeting.

3. FINALIZATION AND APPROVAL OF CONSENT AGENDAS.

CITIZENS WISHING TO SPEAK TO OR REMOVE ITEMS FROM THE CONSENT AGENDAS MUST DO SO AT THIS TIME.

4. CEREMONIAL MATTERS.

- 4.1. Council Bill 2024-141 (McClure)

A resolution recognizing Teresa Allen for 27 years of dedicated service to the City of Springfield upon the occasion of her retirement.

5. CITY MANAGER REPORT AND RESPONSES TO QUESTIONS RAISED AT THE PREVIOUS CITY COUNCIL MEETING.

6. SECOND READING AND FINAL PASSAGE.

Citizens Have Spoken. May Be Voted On.

- 6.1. Council Bill 2024-128 (Jenson)

A general ordinance amending the Springfield Land Development Code, Section 36-306, 'Official zoning map and rules for interpretation,' by rezoning approximately 0.70 acres of property generally located at 1400 West Walnut Street from R-SF, Single-Family Residential District to O-1, Office District; and adopting an updated Official

Zoning Map. (By: First General Baptist Church of Springfield; 1400 W. Walnut St.; Z-14-2024).

6.2. Council Bill 2024-129 (Simpson)

A general ordinance amending the Springfield Land Development Code, Section 36-306, 'Official zoning map and rules for interpretation,' by rezoning approximately .70 acres of property generally located at 1102, 1106, 1114, and 1120 East Cherokee Street from R-SF, Single-Family Residential District to R-MD, Medium-Density Multifamily Residential District with Conditional Overlay District No. 247; and adopting an updated Official Zoning Map. (By: One Hundred Two Glenstone Inc.; 1102, 1106, 1114, & 1120 East Cherokee Street; Z-2-2024 w/ Conditional Overlay District No. 247).

6.3. Council Bill 2024-131 (Hosmer)

A special ordinance authorizing the City of Springfield to dispose of approximately 4.93 acres of property generally located at the 200 block of East Farm Road 192.

6.4. Council Bill 2024-132 (Jenson)

A special ordinance authorizing the Director of Planning and Development to accept the dedication of public streets and easements to the City of Springfield, Missouri, as shown on the Preliminary Plat of Campbell Acres Phase II, generally located at 3505 and 3525 South Campbell Avenue and 3446 South Main Avenue, upon the applicant filing and recording a final plat that substantially conforms to the preliminary plat; authorizing the City Clerk to sign the final plat upon compliance with all the terms of this Ordinance; and approving the Planning and Zoning Commission's grant of two subdivision variances.

6.5. Council Bill 2024-133 (Hardinger)

A special ordinance amending the Fiscal Year 2024-2025 budget for the Department of Environmental Services in the amount of \$3,500,000 to appropriate retained earnings from the Clean Water Fund for the design phase of the Environmental Services Operations Facility capital improvement project.

6.6. Council Bill 2024-134 (Hosmer)

A special ordinance amending the Fiscal Year 2023-2024 operating budget of the City of Springfield in the General Fund by increasing both revenue and expenses in the amount of \$189,564, for the purpose of adjusting for certain reimbursements and associated offsetting expenses, adjusting the salary budget for retirement payouts, and adjusting interdepartmental budgets.

6.7. Council Bill 2024-135 (Carroll)

A special ordinance amending the Fiscal Year 2023-2024 operating budget of the City of Springfield by increasing both revenue and expenses in the amount of \$436,659, in various Special Revenue Funds, for the purpose of accounting for certain reimbursements and associated offsetting expense items.

6.8. Council Bill 2024-136 (Carroll)

A special ordinance amending the Park Board's Fiscal Year 2023-2024 operating budget by increasing revenues by \$700,000 and appropriating Parks Fund Balance of

\$633,892, for a total of \$1,333,892, to offset unanticipated expenditures of \$1,333,892, and increasing both revenues and associated expenses within the Golf Enterprise Fund by \$500,000, for an overall budget adjustment of \$1,833,892.

6.9. Council Bill 2024-137 (Hosmer)

A special ordinance amending the Fiscal Year 2024-2025 budget in the amount of \$750,000 to appropriate the fund balance from the Art Museum Special Project Fund to support the design and construction of the Springfield Art Museum Renovation and Expansion Project at the Springfield Art Museum.

6.10. Council Bill 2024-138 (Simpson, Carroll, McGull, Hardinger)

A general ordinance amending Special Ordinances 27640, 27641, 27642, 27643, and 27730 to revise funding appropriated for retention payments and a city-wide housing study; amending the budget for Fiscal Year 2024-2025 to appropriate funds from the City's Coronavirus State and Local Fiscal Recovery Funds, established by the American Rescue Plan Act of 2021, for certain projects in the amount of \$611,819.00; and authorizing the City Manager, or designee, to enter into agreements for said projects.

6.11. Council Bill 2024-139 (Carroll)

A special ordinance authorizing the City Manager, or designee, to accept American Rescue Plan Act funds in the amount of \$100,000 from Greene County for use by the Springfield-Greene County Health Department in implementing and operating the Family Connects Program; and amending the Fiscal Year 2024-2025 budget in the amount of \$100,000 to appropriate the funds.

6.12. Council Bill 2024-140 (Lee)

A special ordinance amending the Fiscal Year 2024-2025 budget regarding the Human Resources Department in order to adjust the authorized full time equivalent positions of Human Resources Assistant from 1.5 positions to 2 positions.

7. RESOLUTIONS.

Citizens May Speak. May Be Voted On.

7.1. Council Bill 2024-142 (Simpson)

A resolution granting a Short-Term Rental Type 2 permit for the property generally located at 413 East Seminole, for the purpose of allowing the establishment of a Short-Term Rental Type 2 pursuant to Section 36-473 of the Land Development Code.

7.2. Council Bill 2024-143 (McGull)

A resolution adopting the Springfield-Branson National Airport Master Plan Update as an element of the Springfield Comprehensive Plan.

8. EMERGENCY BILLS.

9. PUBLIC IMPROVEMENTS.

10. GRANTS. Citizens May Speak. May Be Voted On.

10.1. Council Bill 2024-144 (Lee)

A special ordinance authorizing the City Manager, or designee, to enter into a Carbon Reduction Program Agreement with the Missouri Highways and Transportation Commission in the amount of \$355,200 for the purpose of accepting federal grant funds to be used to design an extension of the Fassnight Greenway multi-use trail near Bennett Street and to do those things necessary to obtain such funding and carry out the identified activities; approving a budget adjustment amending the Fiscal Year 2024-2025 budget of the Department of Public Works to appropriate said funds; and declaring that this Ordinance qualifies for approval in one reading under City Charter Section 2.16(25).

11. AMENDED BILLS.

12. COUNCIL BILLS FOR PUBLIC HEARING.

13. FIRST READING BILLS.

Citizens May Speak. Not Anticipated To Be Voted On. Except Item 13.2. May Be Voted On.

13.1. Council Bill 2024-145 (McClure)

A special ordinance calling an election on Tuesday, November 5, 2024, in the City of Springfield, Missouri, to submit to the qualified voters the question of whether to enact a city sales tax at the rate of three-quarters of one percent (3/4-cent), one-quarter for the purpose of funding public safety initiatives, to include funding the remaining obligation of the Springfield Police Officers' and Firefighters' Pension and increasing police officer and firefighter pay, with said one-quarter to not sunset, and two-quarters for the purpose of funding projects consistent with the City's comprehensive plan, to include capital improvements, community and neighborhood initiatives, and park projects, with said two-quarters to sunset after a period of ten years; and declaring an emergency pursuant to City Charter Section 2.12.

13.2. Council Bill 2024-146 (Carroll)

A special ordinance authorizing the City Manager, or designee, to enter into a Municipal and Cost Apportionment Agreement with the Missouri Highways and Transportation Commission in the not to exceed amount of \$939,000 to share costs associated with new sidewalks on East Sunshine Street; amending the Fiscal Year 2024-2025 budget for the Department of Public Works in the amount of \$939,000 to appropriate federal Transportation Alternative Program funds, Surface Transportation Block Grant – Urban funds and 1/4-cent Capital Improvement Sales Tax fund balance reserves for this project; and declaring that this Ordinance qualifies for approval in one reading under City Charter Section 2.16(25).

13.3. Council Bill 2024-147 (Lee)

A general ordinance amending Chapter 118 of the Springfield City Code, 'Vehicles for Hire,' Sections 118-31, 118-49, and 118-52, for the purpose of aligning City Code with current technology and state statute with regard to the use of electronic taximeters within the City of Springfield.

13.4. Council Bill 2024-148 (Hosmer)

A special ordinance authorizing the City Manager, or designee, to accept a grant renewal in the amount of \$100,000 from the Missouri Children's Trust Fund for use by the Springfield-Greene County Health Department to continue operating the Family Connects Program; enter into necessary agreements to carry out the grant; and amend the Fiscal Year 2024-2025 budget in the amount of \$100,000 to appropriate the grant funds.

13.5. Council Bill 2024-149 (Hosmer)

A general ordinance amending the Springfield City Code Chapter 2 "Administration" Article III "Officers and Employees" to add a new Section 2-95 "Appointed officer and employee code of ethics."

14. PETITIONS, REMONSTRANCES AND COMMUNICATIONS.

15. NEW BUSINESS.

15.1. As per RSMo. 109.230 (4), City records that are on file in the City Clerk's office and have met the retention schedule will be destroyed in compliance with the guidelines established by the Secretary of State's office.

15.2. The Mayor recommends the following reappointments to the Springfield-Greene County Public Library Board: Aaron Jones and David Yancey with terms to expire July 1, 2027.

16. UNFINISHED BUSINESS.

17. MISCELLANEOUS.

18. CONSENT AGENDA – FIRST READING BILLS.

19. CONSENT AGENDA – ONE READING BILLS. See Item #3.

19.1. Council Bill 2024-150 (Carroll)

A resolution approving the Mayor's appointment of five (5) members to the Tax Increment Financing Advisory Commission and acknowledging the appointments made by other taxing districts.

20. CONSENT AGENDA – SECOND READING BILLS. See Item #3.

20.1. Confirm the following appointments to the Building Trades Examination & Certification Board: Allen Brashears and Edward Baxter with terms to expire December 1, 2025.

20.2. Confirm the following appointments to the Building Trades Examination & Certification Board: Jeff Crouch, Bryant Garrison, and John Boddie with terms to expire December 1, 2026.

20.3. Confirm the following reappointment to the Building Trades Examination & Certification Board: Yankton Sothern with term to expire December 1, 2027.

20.4. Confirm the following reappointments to the Building Trades Examination & Certification Board: Lonney Smith and Chris Straw with terms to expire December 1, 2025.

21. END OF CONSENT AGENDA.

22. ADJOURN.



City of Springfield

Minutes

City Council

Ken McClure, Mayor

Zone Councilmembers

Monica Horton, Zone 1
Abe McGull, Zone 2
Brandon Jenson, Zone 3
Matthew Simpson, Zone 4

General Councilmembers

Heather Hardinger, General A
Craig Hosmer, General B
Callie Carroll, General C
Derek Lee, General D

July 8, 2024

6:30 PM

**Regional Police-Fire
Training Center
2620 West Battlefield Road
Room 101, 102, and 103**

1. ROLL CALL.

Present: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Absent: None.

2. APPROVAL OF MINUTES.

2.1. Approval of Minutes. June 18, 2024, Special City Council Meeting and June 24, 2024, City Council Meeting.

Councilmember Hosmer moved to approve the minutes of the June 18, 2024, Special City Council Meeting and the June 24, 2024, City Council Meeting as presented. Mayor Pro Tem Simpson seconded the motion, and it was approved by the following vote: Ayes: Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, Councilmember Jenson, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

3. FINALIZATION AND APPROVAL OF CONSENT AGENDAS.

CITIZENS WISHING TO SPEAK TO OR REMOVE ITEMS FROM THE CONSENT AGENDAS MUST DO SO AT THIS TIME.

The Consent Agenda was approved as presented by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

4. CEREMONIAL MATTERS.

5. CITY MANAGER REPORT AND RESPONSES TO QUESTIONS RAISED AT THE PREVIOUS CITY COUNCIL MEETING.

Jason Gage, City Manager, noted the City of Springfield would benefit from appropriation support from the State of Missouri for the third year in a row. In addition to seeing funding support for the I-44 expansion in the Springfield area, Springfield would receive \$10 million for the Springfield Art Museum expansion and renovation, \$3.4 million for the LeCompte Roadway Improvements Phase II, \$3.5 million for Hammons Field additional improvements, and \$1 million for the Springfield-Greene County Health Department's Family Connects Program. He added the City was grateful for the support of Governor Parson, the hard work of Senator Lincoln Hough, Chairman of the Senate Appropriations Committee, Representatives Bill Owen, Betsy Fogle and Stephanie Hein, members of the House Budget Committee, and the rest of the delegation who supported Springfield-area projects.

Mr. Gage noted the City was notified by the United States Department of Transportation they were selected to receive a Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant in the amount of \$24.8 million for the "Ungap the Map" project which was one of the Top 10 initiatives of the Forward SGF Comprehensive Plan. He added the "Ungap the Map" project would construct approximately 3.14 miles of Ozark Greenways trails connecting neighborhoods on the west side of Springfield. The project would eliminate at-grade crossings, install approximately four pedestrian bridges, remove abandoned culverts, install traffic-calming and green infrastructure, construct ADA-accessible sidewalks, and provide dedicated bicycle paths. Mr. Gage further noted RAISE grants were awarded on a competitive basis. This application was based heavily on citizen input to eliminate critical greenway system gaps connecting many economically challenged neighborhoods to parks, downtown, and other business areas.

Mr. Gage noted the ribbon cutting for the rebuilt Fire Station 7 at 2129 E. Sunshine would occur on July 16 at 2:00 p.m. This fire station was located near the Brentwood and Oak Grove neighborhoods. He added funding for the rebuilt station was provided by the voter-approved Level Property Tax at a cost of just over \$3.5 million.

Mr. Gage introduced Ron Schneider as the new Director of Parks and Recreation. He added Mr. Schneider's most recent appointment before joining the City was as Executive Director for the Freeport Park District in Freeport, Illinois. Mr. Schneider earned his Bachelor of Science degree in Recreation, Parks, and Tourism Administration from Western Illinois University, and he was a Certified Park and Recreation Executive. Mr. Schneider had nearly 25 years of full-time management experience in the parks and recreation field, and was selected after a nationwide search, led by the Park Board, with representation from City management.

Mayor McClure welcomed Mr. Schneider to the City.

Ron Schneider, Director of Parks and Recreation, thanked City Council and the City for the opportunity. He noted the importance of parks to the community.

Councilmember Hosmer noted the Federal Railroad Administration was reviewing an Amtrak line that would run from New York City to Dallas. He expressed his belief it would be beneficial for the City to support Amtrak running through the City. Mr. Gage noted if City Council were supportive, a letter could be drafted.

Councilmember Lee thanked staff for their work on the RAISE grant. He expressed his support for their work on the grant.

6. SECOND READING AND FINAL PASSAGE.

Citizens Have Spoken. May Be Voted On. Except Item 6.1. Citizens May Speak.

6.1. Council Bill 2024-120 (Jenson)

A general ordinance amending Section 1-9 of the Springfield City Code, 'City Limits,' and Section 46-1 of the Springfield City Code, 'Boundaries of wards, precincts and council zones,' for the purpose of annexing approximately 2.72 acres of private property generally located at 3801 West Sunshine Street, and referenced as Annexation A-2-2024, into the City of Springfield.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

Ordinance 6860. Council Bill 2024-120 (Jenson) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

6.2. Council Bill 2024-121 (Horton)

A special ordinance authorizing the City Manager, or designee, to enter into a License Agreement to Use City Property with the Commercial Street Community Improvement District, for the purpose of allowing the installation and placement of concrete pads and screening for solid waste containers on City rights-of-way and City-owned property.

Ordinance 28017. Council Bill 2024-121 (Horton) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

6.3. Council Bill 2024-122 (Horton)

A special ordinance authorizing the City Manager, or designee, to enter into a contract to purchase the property generally described as 1660 and 1661 North Boonville Avenue and to execute all necessary documents in support thereof; and authorizing the City Manager, or designee, to enter into a contract to purchase current furnishings within said property.

Ordinance 28018. Council Bill 2024-122 (Horton) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

7. RESOLUTIONS.

Citizens May Speak. May Be Voted On.

7.1. Council Bill 2024-123 (McClure)

A resolution accepting the Citizens' Commission on Community Investment Report to City Council.

Jason Gage, City Manager, provided a brief overview of the proposed. Mr. Gage noted the action would be to accept the report. He added the Commission was to review the Police and Fire Pension sales tax that was set to expire. The Commission was formed to discuss best use of the sales tax if renewed and make recommendations to City Council. Mr. Gage further noted the recommendations were to ask voters to support a new 3/4-cent sales tax. He added 1/4-cent would be used for public safety, including full funding of the legacy pension program. This portion would have no sunset. The remaining 1/2-cent would be utilized for initiatives that relate to recreation and community and were in alignment with the ForwardSGF Comprehensive Plan. Mr. Gage noted this portion would have a sunset of ten years.

Mr. Gage introduced Phillis Ferguson, Citizens' Commission for Community Investment Co-Chair. Ms. Ferguson noted the issue was previously discussed at a City Council Lunch and offered to answer any questions.

Councilmember Lee thanked Ms. Ferguson and Dr. Prater for their work on the Commission.

Mayor McClure thanked the Commission for their efforts.

An opportunity was given for citizens to express their views.

Alice Barber spoke in support of the proposed. Ms. Barber, a member of the Citizens' Commission on Community Investment, expressed her belief City Council should accept the report. Ms. Barber asked City Council to be mindful of what would be best for all in Springfield, as an ordinance was created based on the recommendations. Ms. Barber noted nearly 60 percent of residents were renters and one-in-three lived near or below the poverty line. She expressed her belief it would be important to invest in the most vulnerable residents. Ms. Barber noted she would like to see funding specifically allocated to housing and Code enforcement.

With no further appearances, the public hearing was declared closed.

Mayor Pro Tem Simpson noted he and Councilmember McGull were City Council liaisons for the Commission. He thanked the co-chairs and members for their work and time. Mayor Pro Tem Simpson expressed his support for the initiative.

Mayor McClure noted the proposed would accept the report from the Commission.

Resolution 10762. Council Bill 2024-123 (McClure) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

7.2. Council Bill 2024-124 (Lee)

A resolution authorizing the City Manager, or designee, to apply for up to \$3,000,000 in grant funds from the United States Department of Labor Critical Sector Job Quality Grant Program to support and expand the hospitality workforce.

Amanda Ohlensehlen, Director of Economic Vitality and Workforce Development, provided a brief overview of the proposed. Ms. Ohlensehlen noted the proposed would allow the City to apply for up to \$3 million in grant funds from the United States Department of Labor Critical Job Sector Job Quality Grant Program to support the hospitality workforce. She further noted the grant would allow for focused training for the hospitality sector and serve a minimum of 350 individuals. Ms. Ohlensehlen added the projected start date would be September 2024 and span over three years. The grant would provide opportunity and address barriers such as transportation and access to childcare.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

Resolution 10763. Council Bill 2024-124 (Lee) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

8. EMERGENCY BILLS.

9. PUBLIC IMPROVEMENTS.

10. GRANTS. Citizens May Speak. May Be Voted On.

10.1. Council Bill 2024-125 (Horton, Jenson)

A special ordinance authorizing the City Manager, or designee, to enter into a Surface Transportation Block Grant Program Agreement with the Missouri Highways and Transportation Commission for the purpose of funding maintenance and rehabilitation of the Grant Avenue Viaduct; amending the Fiscal Year 2024-2025 budget of the Department of Public Works in the amount of \$2,022,339 to appropriate federal Surface Transportation Block Grant Program funds; and declaring that this Ordinance qualifies for approval in one reading pursuant to City Charter Section 2.16(25).

Eric Claussen, Assistant Director of Public Works, provided a brief overview of the proposed. Mr. Claussen noted the proposed would provide rehabilitation for one of the City's longest bridges. He further noted the bridge was built in 1927 and rehabilitated in 1978. Mr. Claussen added the rehabilitation would include replacement of the expansion joints, bridge deck repair, epoxy overlay, and structural repairs. The rehabilitation was anticipated to last approximately 20 to 25 years. Mr. Claussen noted the proposed would be a great opportunity to use the federal funding.

Councilmember Jenson asked if there would be opportunity for place-making efforts by placing murals on the bridge. He asked if there were issues with right-of-way. Mr. Claussen responded they had been in contact with the Law Department to work through details for adding public art.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

Ordinance 28019. Council Bill 2024-125 (Horton, Jenson) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

10.2. Council Bill 2024-126 (Horton, Jenson)

A special ordinance authorizing the City Manager, or designee, to enter into a Surface Transportation Block Grant Program Agreement with the Missouri Highways and Transportation Commission for the purpose of funding maintenance and rehabilitation of the Martin Luther King Jr. Bridge on Benton Avenue; amending the Fiscal Year 2024-2025 budget of the Department of Public Works in the amount of \$935,284 to appropriate federal Surface Transportation Block Grant Program funds; and declaring that this Ordinance qualifies for approval in one reading pursuant to City Charter Section 2.16(25).

Eric Claussen, Assistant Director of Public Works, provided a brief overview of the proposed. Mr. Claussen noted the proposed would allow for rehabilitation and maintenance of the Martin Luther King, Jr. Bridge. He added the rehabilitation would be anticipated to last 20 to 25 years.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

Ordinance 28020. Council Bill 2024-126 (Horton, Jenson) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

10.3. Council Bill 2024-127 (Hardinger)

A resolution authorizing the City Manager, or designee, to accept \$1,000,000 in grant funds from the United States Environmental Protection Agency for the Revolving Loan Fund Grant Supplemental Funding program to provide additional loans and subgrants for environmental cleanups in Springfield through the City's Brownfields Revolving Loan Fund.

Amanda Ohlensehlen, Director of Economic Vitality and Workforce Development, provided a brief overview of the proposed. Ms. Ohlensehlen noted the proposed would authorize acceptance of \$1 million in grant funds from the Environmental Protection Agency to provide loans and subgrants for environmental cleanups through the City's Brownfields Revolving Loan Fund. Ms. Ohlensehlen further noted the City had operated Brownfield's programs since 1999. The program offers loans and subgrants for cleanup. She added the funds would allow additional loans and subgrants to eligible entities.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

Resolution 10764. Council Bill 2024-127 (Hardinger) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

11. AMENDED BILLS.

12. COUNCIL BILLS FOR PUBLIC HEARING.

Citizens May Speak. Not Anticipated To Be Voted On.

12.1. Council Bill 2024-128 (Jenson)

A general ordinance amending the Springfield Land Development Code, Section 36-306, 'Official zoning map and rules for interpretation,' by rezoning approximately 0.70 acres of property generally located at 1400 West Walnut Street from R-SF, Single-Family Residential District to O-1, Office District; and adopting an updated Official Zoning Map. (By: First General Baptist Church of Springfield; 1400 W. Walnut St.; Z-14-2024).

Daniel Neal, Senior City Planner, provided a brief overview of the proposed. Mr. Neal noted the proposed would allow for rezoning of .70 acres located at 1400 West Walnut from Single-Family residential to Office District. Mr. Neal further noted the building was currently used as a church. The building would be used for offices if the rezoning were approved. Mr. Neal added the placetype was center city.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

12.2. Council Bill 2024-129 (Simpson)

A general ordinance amending the Springfield Land Development Code, Section 36-306, 'Official zoning map and rules for interpretation,' by rezoning approximately .70 acres of property generally located at 1102, 1106, 1114, and 1120 East Cherokee Street from R-SF, Single-Family Residential District to R-MD, Medium-Density Multifamily Residential District with Conditional Overlay District No. 247; and adopting an updated Official Zoning Map. (By: One Hundred Two Glenstone Inc.; 1102, 1106, 1114, & 1120 East Cherokee Street; Z-2-2024 w/ Conditional Overlay District No. 247).

Councilmember Lee recused himself from Council Bill 2024-129 and left the dais.

Michael Sparlin, Senior City Planner, provided a brief overview of the proposed. Mr. Sparlin noted the proposed would allow rezoning to Medium-Density Multifamily Residential District (RMD). The location was approximately .70 acres located at 1102, 1106, 1114, and 1120 East Cherokee Street. The applicant intended to build a multi-family development at the location. Mr. Sparlin added a step-down approach was to be used. He noted the plan encouraged missing-middle housing types. Mr. Sparlin noted these housing types encouraged diversity in housing stock and had moderate increases in density. Mr. Sparlin noted the maximum density was 21 units per acre with a two-story maximum structure height. He added a six-foot fence would be installed along the Residential Single-Family (R-SF) side of the property. Mr. Sparlin further noted the applicant had requested 21 dwelling units per acre and RMD district allows up to 29 dwelling units per acre. He added a connectivity analysis and road network evaluation were conducted. Mr. Sparlin added the development scored 6 Development Guideline points for pedestrian amenities, scale, orientation, and landscaping, and internal connectivity. Mr. Sparlin added the plan recommended a step-down approach. He noted the plan would span from R-SF to General Retail (GR) with RMD in the middle. Mr. Sparlin noted greater densities would be on the periphery of the neighborhood. Mr. Sparlin further noted staff recommended approval, and the Planning and Zoning Commission recommended denial.

Mayor McClure noted there was only one speaker at the Planning and Zoning Commission meeting. That speaker was in favor of the proposed. Mr. Sparlin responded affirmatively. There were no speakers in opposition.

Councilmember Hosmer expressed his belief transition directly from single-family homes to apartments was detrimental to quality of place. He asked the number of residential lots. Mr. Sparlin responded there were four. Councilmember Hosmer asked what was in the area. Mr. Sparlin responded single-family across two sides and multi-family use on one side. There was also a hotel and retail in the area. Councilmember Hosmer expressed his belief conflict could be avoided if there were better separation between single-family and higher density areas. Councilmember Hosmer asked if there would be any additional buffers required. Mr. Sparlin responded a standard bufferyard between R-SF and the proposed would be required.

Councilmember Jenson noted comments from the neighborhood requested low-density. He expressed his belief that six additional units on the property would most likely have a negligible effect. Mr. Sparlin responded the low-density maximum was 8 units. The proposed had retail in the area which counted as a point to increase density. Councilmember Jenson asked if there was any other difference other than density between RLD and RMD zoning. Mr. Sparlin responded there was not. Councilmember Jenson expressed his belief many neighborhood requests had been met but that the proposed would add needed housing to the City.

Mayor Pro Tem Simpson noted the proposed would be limited to two-story. Mr. Sparlin responded affirmatively. Mayor Pro Tem Simpson asked for the height of the neighboring hotel. Mr. Sparlin responded four to five stories. Mayor Pro Tem Simpson asked if the project would be considered as part of the missing middle category. Mr. Sparlin responded affirmatively.

Councilmember Hosmer asked for a visual of where the project would fit. Mr. Sparlin noted the proposed would range from R-SF to an area with the feel of a tri-plex or quad-plex.

An opportunity was given for citizens to express their views.

Daniel Richards, a representative of Lee Engineering, noted Latoka Flats was an existing project which was constructed similarly. Mr. Richards further noted fourteen units were needed to make the project economically viable. He added no neighbors attended the Planning and Zoning meeting. Mr. Richards noted the property to the south was under contract to be purchased as a buffer. He further noted the project fits into the missing middle. Mr. Richards added comments from neighbors had been incorporated, and the housing was intended for working-class individuals.

Councilmember Horton asked what universal design features had been incorporated and if mixed income had been considered. Mr. Richards responded allowing greater density would make the units more affordable due to economy of scale.

Ryan Phillips, architect for the project, noted the project did have a designated Americans with Disabilities Act (ADA) unit on the ground floor. He added the unit also had a dedicated parking space. Mr. Phillips further noted there was covered parking for residents. He added ForwardSGF guidelines and principles were adhered to in the design. Mr. Phillips noted these included strategic multi-family development, commercial corridors, and a step-down approach. The proposed would provide housing availability in one of the City's key areas. Mr. Phillips added care was taken to ensure the character of the neighborhood was retained. He further noted the orientation of the building was carefully considered for integration of the project into the neighborhood.

Councilmember McGull asked if the parking lot was to the rear of the development. Mr. Phillips responded affirmatively. Councilmember McGull commended Mr. Phillips on the feature and expressed his belief the proposed would be a good compliment to the area. Councilmember McGull noted the City was in need of new housing options and expressed his support for the proposed.

Councilmember Jenson noted the rents for Latoka Flats were \$750 per month for a studio apartment and the fair market rent in Springfield per the Department of Housing and Urban Development (HUD) was \$718. He asked the developer to take this into consideration when pricing units.

With no further appearances, the public hearing was declared closed.

Councilmember Lee returned to the dais.

13. FIRST READING BILLS.

Citizens May Speak. Not Anticipated To Be Voted On. Except Item 13.1. May Be Voted On.

13.1. Council Bill 2024-130 (Simpson)

A special ordinance approving the plans and specifications for Galloway Street Widening from Luster Avenue to Lone Pine Avenue; accepting the bid of Hartman and Company, Inc., in the amount of \$6,513,765 for said project; authorizing the City Manager, or designee, to enter into a contract with such bidder; and declaring this Ordinance qualifies for approval in one reading pursuant to Charter Section 2.16(25).

Nicholas Edelman, Professional Engineer, provided a brief overview of the proposed. Mr. Edelman noted the proposed would approve the plans for Galloway Street widening from Luster Avenue to Lone Pine Avenue. He added the proposed would allow for acceptance of the bid of Hartman and Company in the amount of \$6,513,765 for the project. Mr. Edelman further noted the plans would allow construction of roundabouts at the intersection of Luster Avenue and Lone Pine Avenue, widen Galloway Street, install new stormwater infrastructure including water quality basins, build a ten-foot trail on the north side of the street, and a five-foot sidewalk on the south side of the street. He added bids opened on June 11, and six bids were received with one non-responsive bid. Hartman and Company submitted the low bid in the amount of \$6,513,765.

Councilmember McGull asked if the stormwater improvements would address local flooding. Mr. Edelman responded improvements would be made.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

Ordinance 28021. Council Bill 2024-130 (Simpson) was approved by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hosmer, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: None. Absent: None. Abstain: None.

13.2. Council Bill 2024-131 (Hosmer)

A special ordinance authorizing the City of Springfield to dispose of approximately 4.93 acres of property generally located at the 200 block of East Farm Road 192.

Bob Hosmer, Planning Manager, provided a brief overview of the proposed. Mr. Hosmer noted the proposed would allow disposal of property located at the 200 block of East Farm Road 192. He added the property was located in Christian County. Mr. Hosmer noted the property was acquired by City Utilities to be used for a substation but was never developed. He further noted City Charter required land disposal be reviewed by the Planning and Zoning Commission, and the disposal was approved by the Commission.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

13.3. Council Bill 2024-132 (Jenson)

A special ordinance authorizing the Director of Planning and Development to accept the dedication of public streets and easements to the City of Springfield, Missouri, as shown on the Preliminary Plat of Campbell Acres Phase II, generally located at 3505 and 3525 South Campbell Avenue and 3446 South Main Avenue, upon the applicant filing and recording a final plat that substantially conforms to the preliminary plat; authorizing the City Clerk to sign the final plat upon compliance with all the terms of this Ordinance; and approving the Planning and Zoning Commission's grant of two subdivision variances.

Councilmember Lee recused himself from Council Bill 2024-132 and left the dais.

Bob Hosmer, Planning Manager, provided a brief overview of the proposed. Mr. Hosmer noted the proposed would accept the dedication of public streets and easements to the City for 16 acres of property located at 3505 and 3525 South Campbell Avenue, and 3446 South Main Avenue. He added the property was currently an automobile dealership. Mr. Hosmer further noted the property was currently a split zone of Highway Commercial and Residential Townhouse. He added the proposed subdivision would have two lots in the front and one lot in the back.

Councilmember Horton asked why the proposed was not on the consent agenda. Mr. Hosmer responded the proposed normally would be. The item was placed on the regular agenda to allow for review of the variances.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

Councilmember Lee returned to the dais.

13.4. Council Bill 2024-133 (Hardinger)

A special ordinance amending the Fiscal Year 2024-2025 budget for the Department of Environmental Services in the amount of \$3,500,000 to appropriate retained earnings from the Clean Water Fund for the design phase of the Environmental Services Operations Facility capital improvement project.

Errin Kemper, Director of Environmental Services, provided a brief overview of the proposed. Mr. Kemper noted the proposed would amend the budget for the Department of Environmental Services in the amount of \$3.5 million for the design phase of the new Environmental Operations Facility. He added in 2021, the consent judgment was renegotiated with the State. The capital improvements listed in the overflow control plan included a new operations facility.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

13.5. Council Bill 2024-134 (Hosmer)

A special ordinance amending the Fiscal Year 2023-2024 operating budget of the City of Springfield in the General Fund by increasing both revenue and expenses in the amount of \$189,564, for the purpose of adjusting for certain reimbursements and associated offsetting expenses, adjusting the salary budget for retirement payouts, and adjusting interdepartmental budgets.

Jody Vernon, Assistant Director of Finance and Comptroller, provided a brief overview of the proposed. Ms. Vernon noted the budget adjustment was prepared as part of the Finance Department's year end process. She further noted events occurred during the year that resulted in expenditures and revenues that were not anticipated at the adoption of the budget. Ms. Vernon noted the adjustments were processed at the end of the fiscal year for efficiency purposes. Ms. Vernon further noted the General Fund year-end adjustments consisted of \$189,564 in reimbursements for Niche software, Police Department Training Apprenticeship Program, sale of City gear, sale of scrap metal, and a small amount of donations. Ms. Vernon added the budget adjustment also included salary items. She added the budget adjustment also included distribution of City-wide contingency monies and adjustments between departments.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

13.6. Council Bill 2024-135 (Carroll)

A special ordinance amending the Fiscal Year 2023-2024 operating budget of the City of Springfield by increasing both revenue and expenses in the amount of \$436,659, in various Special Revenue Funds, for the purpose of accounting for certain reimbursements and associated offsetting expense items.

Jody Vernon, Assistant Director of Finance and Comptroller, provided a brief overview of the proposed. Ms. Vernon noted the year-end budget adjustment for Special Revenue Funds included \$395,000 paid from buyer escrow funds held by the City, \$23,724 for the Fire Department from Missouri State University Southwest Missouri Council of Governments for travel reimbursement, \$70 for the Fire Department in donations for the smoke alarm program, \$5,793 for the Police Department for the sale of brass, and \$12,073 for the Public Information Office for Route 66 merchandise sales.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

13.7. Council Bill 2024-136 (Carroll)

A special ordinance amending the Park Board's Fiscal Year 2023-2024 operating budget by increasing revenues by \$700,000 and appropriating Parks Fund Balance of \$633,892, for a total of \$1,333,892, to offset unanticipated expenditures of \$1,333,892, and increasing both revenues and associated expenses within the Golf Enterprise Fund by \$500,000, for an overall budget adjustment of \$1,833,892.

Jerry Mitchell, superintendent of Parks Business Operations, provided a brief overview of the proposed. Mr. Mitchell noted the Springfield-Greene County Park Board was requesting a budget adjustment of \$1,833,892 to utilize additional revenue to offset various repairs and maintenance. He further noted the parks system was growing, and there were maintenance needs for aging parks infrastructure and equipment. Mr. Mitchell further noted maintenance was needed for safety reasons and to keep the parks at their best.

Councilmember Jenson asked the cost associated with deferred maintenance. Mr. Mitchell responded he would review this with staff and provide an amount.

Councilmember McGull asked what the expenditures were for the three \$25,000 amounts. Mr. Mitchell responded the expenditures were bank fees associated with credit card processing fees due to increased utilization of credit card use.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

13.8. Council Bill 2024-137 (Hosmer)

A special ordinance amending the Fiscal Year 2024-2025 budget in the amount of \$750,000 to appropriate the fund balance from the Art Museum Special Project Fund to support the design and construction of the Springfield Art Museum Renovation and Expansion Project at the Springfield Art Museum.

Nick Nelson, Art Museum Director, provided a brief overview of the proposed. Mr. Nelson noted the proposed would amend the Art Museum Fiscal Year 2025 budget in the amount of \$750,000 to appropriate funds for the design and construction of the Art Museum Renovation and Expansion Project. He added the funds were raised by the Friends of the Springfield Art Museum.

Councilmember Jenson thanked Mr. Nelson and the Friends of the Springfield Art Museum for their work.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

13.9. Council Bill 2024-138 (Simpson, Carroll, McGull, Hardinger)

A general ordinance amending Special Ordinances 27640, 27641, 27642, 27643, and 27730 to revise funding appropriated for retention payments and a city-wide housing study; amending the budget for Fiscal Year 2024-2025 to appropriate funds from the City's Coronavirus State and Local Fiscal Recovery Funds, established by the American Rescue Plan Act of 2021, for certain projects in the amount of \$611,819.00; and authorizing the City Manager, or designee, to enter into agreements for said projects.

Jody Vernon, Assistant Director of Finance and Comptroller, provided a brief overview of the proposed. Ms. Vernon noted a portion of American Rescue Plan Act funds were previously approved to be utilized for retention payments and a city-wide housing study. She added \$5.9 million was budgeted for retention payments and \$500,000 was budgeted for the housing study. Ms. Vernon further noted 2024 was the final year budgeted for retention payments and expenditures were approximately \$195,000 less than budgeted. She added the housing study was funded by other grant funds. The American Rescue Plan Act (ARPA) Committee met on June 7, 2024, and reviewed additional ARPA fund requests. Ms. Vernon noted the Committee recommended the remaining ARPA funds to be allocated to the following; \$100,000 for the Forvis Mazars ARPA Compliance Services Contract; \$100,000 to the United States Department of Housing and Urban Development (HUD) five year consolidated plan to support housing; \$50,000 for the HUD consolidated plan for fair housing; \$100,000 to ForwardSGF corridor and neighborhood planning; \$66,000 for Fire Department decontamination stations at Fire Stations 2, 3, 6, and 9; \$55,819 for the Fire Department aerial awareness drone on 150-foot tether; \$50,000 to the Commercial Street Community Improvement District (CID) budget request; and \$90,000 for additional neighborhood cleanups through Community Partnership of the Ozarks. Ms. Vernon added all but \$83,662.43 of the City's ARPA funds will be allocated.

Mayor McClure asked the time frame for allocation of remaining ARPA funds. Ms. Vernon responded the remaining funds had to be allocated and obligated by December 31, 2024.

Councilmember Jenson asked how much in total had been paid to Forvis for their services. Ms. Vernon responded the initial contract was in the \$300,000 to \$400,000 range. She added she would gather and provide the total to City Council.

Mayor Pro Tem Simpson noted the Committee reviewed the requests, and most allocations had been spent. He added the Committee would meet again to ensure obligation deadlines were met. Ms. Vernon responded grantees had been requested to speak at the next ARPA Committee meeting.

Councilmember Horton thanked the ARPA Committee. She asked the scope of work for neighborhood planning and neighborhood cleanups regarding the allocation. Councilmember Horton noted this information could be provided by memo at a later date. Ms. Vernon responded the information would be provided.

Councilmember Hosmer asked if the ForwardSGF neighborhood planning would be in addition to the consultants at Multistudio. Steve Childers, Director of Planning and Development, responded there had been meetings to discuss, and they were developing a scope of work. He expressed his belief the work would need to be subcontracted. Councilmember Hosmer asked if this was a corridor study for a specific corridor. Mr. Childers responded it was for the Sunshine Street corridor from Glenstone to a point west. He added the study would have to be under contract by the end of the year.

Councilmember Horton asked if the allocation for the specific scope of work was for the Sunshine corridor. Mr. Childers responded affirmatively. Councilmember Horton noted an allocation of Community Development Block Grant (CDBG) funds requested for neighborhood planning. She added there would be an upcoming Kearney Street corridor update on August 27. Councilmember Horton expressed her interest in the scope of work for continued neighborhood planning for neighborhoods with high need. Mr. Childers responded this would be a great opportunity to listen to neighborhood comments. He added the department would get an update from the Neighborhood Division.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

13.10. Council Bill 2024-139 (Carroll)

A special ordinance authorizing the City Manager, or designee, to accept American Rescue Plan Act funds in the amount of \$100,000 from Greene County for use by the Springfield-Greene County Health Department in implementing and operating the Family Connects Program; and amending the Fiscal Year 2024-2025 budget in the amount of \$100,000 to appropriate the funds.

Katie Towns, Director of Public Health and Welfare, provided a brief overview of the proposed. Ms. Towns noted the proposed would allow acceptance of \$100,000 in ARPA funds for use in implementing and operating the Family Connects program. Ms. Towns further noted approximately 100 families have been reached through the program to date, and they received approximately 200 referrals.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

13.11. Council Bill 2024-140 (Lee)

A special ordinance amending the Fiscal Year 2024-2025 budget regarding the Human Resources Department in order to adjust the authorized full time equivalent positions of Human Resources Assistant from 1.5 positions to 2 positions.

Darla Morrison, Director of Human Resources, provided a brief overview of the proposed. Ms. Morrison noted the proposed would allow change of a .5 Full Time Employee (FTE) position to a 1.0 FTE. She added the position was currently vacant due to the retirement of an employee.

An opportunity was given for citizens to express their views. With no appearances, the public hearing was declared closed.

14. PETITIONS, REMONSTRANCES AND COMMUNICATIONS.

15. NEW BUSINESS.

15.1. As per RSMo. 109.230 (4), City records that are on file in the City Clerk's office and have met the retention schedule will be destroyed in compliance with the guidelines established by the Secretary of State's office.

15.2. The City Manager recommends the following appointments to the Building Trades Examination & Certification Board: Allen Brashears and Edward Baxter with terms to expire December 1, 2025. Recommended.

15.3. The City Manager recommends the following appointments to the Building Trades Examination & Certification Board: Jeff Crouch, Bryant Garrison, and John Boddie with terms to expire December 1, 2026. Recommended.

15.4. The City Manager recommends the following reappointment to the Building Trades Examination & Certification Board: Yankton Sothorn with term to expire December 1, 2027. Recommended.

15.5. The City Manager recommends the following reappointments to the Building Trades Examination & Certification Board: Lonney Smith and Chris Straw with terms to expire December 1, 2025. Recommended.

16. UNFINISHED BUSINESS.

17. MISCELLANEOUS.

18. CONSENT AGENDA – FIRST READING BILLS.

19. CONSENT AGENDA – ONE READING BILLS.

20. CONSENT AGENDA – SECOND READING BILLS. See Item #3.

- 20.1. Confirm the following reappointments to the Springfield - Greene County Park Board: Susan Turner and Mark McNay with terms to expire June 1, 2027. Confirmed.
- 20.2. Confirm the following appointment to the Springfield - Greene County Park Board: Dale Moore with term to expire June 1, 2027. Confirmed.
- 20.3. Confirm the following appointment to the Board of Equalization: Trish Hubbell with term to expire April 1, 2025. Confirmed.
- 20.4. Confirm the following reappointments to the Citizens' Advisory Committee for Community Development: Zipporah Burns and Beth (Mary) Nichols with terms to expire May 1, 2027. Confirmed.
- 20.5. Confirm the following reappointments to the Citizens' Tax Oversight Committee: Charles Cowherd, Duane Keys, and Ray Lampert with terms to expire May 1, 2027. Confirmed.
- 20.6. Confirm the following appointment to the Landmarks Board: Nichole Falconer with term to expire November 1, 2024. Confirmed.
- 20.7. Confirm the following reappointment to the Personnel Board: Russell Rowe with term to expire March 1, 2027. Confirmed.
- 20.8. Confirm the following reappointments to the Police Officers' and Fire Fighters' Retirement System Board of Trustees: Justin Setser and Charles Munsey with terms to expire April 30, 2027. Confirmed.

21. END OF CONSENT AGENDA.

22. ADJOURN.

Mayor Pro Tem Simpson moved to adjourn. Councilmember Horton seconded the motion, and it passed by the following vote: Ayes: Councilmember Jenson, Councilmember Horton, Councilmember McGull, Mayor Pro Tem Simpson, Councilmember Hardinger, Councilmember Carroll, Councilmember Lee, and Mayor McClure. Nays: Councilmember Hosmer. Absent: None. Abstain: None.

**July 9, 2024
Springfield, Missouri**

The City Council met in special session on July 9, 2024, in the Councilman Denny Wayne Conference Room on the 4th Floor of the Busch Municipal Building. The meeting was called to order by Mayor McClure.

Roll Call

Present: Brandon Jenson, Monica Horton, Abe McGull, Matthew Simpson, Craig Hosmer, Callie Carroll, Derek Lee, and Ken McClure. Absent: Heather Hardinger.

Closed Session

Councilmember Hosmer moved City Council hold a closed meeting to discuss legal actions, causes of action or litigation involving a public governmental body and any confidential or privileged communications between a public governmental body or its representatives and its attorneys pursuant to Section 610.021(1), RSMo.; and this meeting, record, and vote shall be closed and the City Council shall stand adjourned at the end of the closed session.

Mayor Pro Tem Simpson seconded the motion, and it was approved by the following vote: Ayes: Horton, McGull, Simpson, Hosmer, Carroll, Lee, Jenson, and McClure. Abstain: None. Absent: Hardinger.

Prepared by
Michelle Kaasa

Anita J. Cotter, CMC/MRCC
City Clerk



EXPLANATION TO COUNCIL BILL 2024-141 (MCCLURE)

FILED: 07/17/2024

ORIGINATING DEPARTMENT: City Clerk

TITLE: A resolution recognizing Teresa Allen for 27 years of dedicated service to the City of Springfield upon the occasion of her retirement.

PURPOSE: To recognize Teresa Allen for 27 years of dedicated service to the City of Springfield upon the occasion of her retirement.

BACKGROUND INFORMATION: Teresa Allen began her career with the City of Springfield as an Accounting Clerk II with the Parks Department on October 28, 1996. She was promoted to Accounting Services Representative on September 29, 1997, promoted to Accounting Services Coordinator on July 14, 2003, and promoted to Financial Analyst on July 7, 2008. Ms. Allen served the Parks Department, the Finance Department, and the Environmental Services Department as a Financial Analyst between July 2008 and January 2019.

She was promoted to the position of Budget Coordinator in the Finance Department on January 6, 2019, where she played an instrumental role in preparing the annual City Budget. During her tenure, Ms. Allen was instrumental in the implementation of the OpenGov budget and transparency software. Ms. Allen has also served as the Finance Department's representative for Welcome to the City and the City Ambassador Program (CAmP).

Ms. Allen received her Certified Government Financial Manager designation in 2006 and is a member of the Ozarks Association of Government Accountants where she has served in numerous leadership roles since 2007.

She was a member of the Friends of the Garden Board from 2018 to 2023 and served as the Board's Treasurer from 2019 to 2021. Ms. Allen has always been known for her extensive knowledge and willingness to help others. She will retire on August 9, 2024, leaving a legacy of commitment and excellence.

Submitted By: Anita Cotter, City Clerk

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Jason Gage, City Manager 7/17/2024

Attachments: 1. Allen Retirement_res

One-rdg. X
P. Hrngs.
Pgs. 3
Filed: 7-12-24

Sponsored by: McClure

COUNCIL BILL 2024-141 RESOLUTION

A RESOLUTION

1 RECOGNIZING Teresa Allen for 27 years of dedicated service to the City of
2 Springfield upon the occasion of her retirement.
3 _____
4

5 WHEREAS, Teresa Allen began her career with the City of Springfield as an
6 Accounting Clerk II with the Parks Department on October 28, 1996; and
7

8 WHEREAS, she was promoted to Accounting Services Representative on
9 September 29, 1997, promoted to Accounting Services Coordinator on July 14, 2003,
10 and promoted to Financial Analyst on July 7, 2008; and
11

12 WHEREAS, Ms. Allen served the Parks Department, the Finance Department,
13 and the Environmental Services Department as a Financial Analyst between July 2008
14 and January 2019; and
15

16 WHEREAS, on January 6, 2019, she was promoted to the position of Budget
17 Coordinator in the Finance Department, a position in which she has played an integral
18 role in preparing the annual City Budget; and
19

20 WHEREAS, during her tenure, Ms. Allen was instrumental in the implementation
21 of the OpenGov budget and transparency software; and
22

23 WHEREAS, in addition to her regular duties, she also served as the Finance
24 Department's representative for Welcome to the City and the City Ambassador Program
25 (CAmP); and
26

27 WHEREAS, Ms. Allen was a member of the Friends of the Garden Board from
28 2018 to 2023 and served as the Board's Treasurer from 2019 to 2021; and
29

30 WHEREAS, Ms. Allen received her Certified Government Financial Manager
31 designation in 2006; and
32

33 WHEREAS, she became a member of the Ozarks Association of Government
34 Accountants in 2007 where she has served in numerous leadership roles; and

35
36 WHEREAS, Ms. Allen has always been known for her extensive knowledge and
37 willingness to help others; and
38

39 WHEREAS, she will retire on August 9, 2024, leaving a legacy of commitment
40 and excellence.
41

42 NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF
43 SPRINGFIELD, MISSOURI, as follows, that:
44

45 Section 1 – The City Council hereby recognizes and honors Teresa Allen for her
46 twenty-seven years of service to the City of Springfield, the City Council, Springfield
47 Finance Department, and the citizens of this community, and congratulates her upon
48 the occasion of her retirement.
49

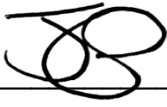
50 Section 2 – This Resolution shall be effective immediately upon adoption.
51

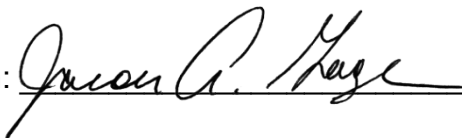
52 Passed at meeting: _____
53
54

55 _____
56 Mayor
57

58 Attest: _____, City Clerk
59

60 Filed as Resolution _____
61

62  _____, City Attorney
63
64

65 Approved for Council action:  _____, City Manager
66

EXPLANATION TO COUNCIL BILL 2024-128 (JENSON)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Planning and Development

TITLE: A general ordinance amending the Springfield Land Development Code, Section 36-306, 'Official zoning map and rules for interpretation,' by rezoning approximately 0.70 acres of property generally located at 1400 West Walnut Street from R-SF, Single-Family Residential District to O-1, Office District; and adopting an updated Official Zoning Map. (By: First General Baptist Church of Springfield; 1400 W. Walnut St.; Z-14-2024).

PURPOSE: Amending the Springfield Land Development Code, Section 36-306, 'Official zoning map and rules for interpretation,' by rezoning approximately 0.7 acre of property generally located at 1400 West Walnut Street from R-SF, Single-Family Residential District to O-1, Office District. (Staff and Planning and Zoning Commission recommend approval.)

BACKGROUND INFORMATION: ZONING CASE NUMBER Z-14-2024

The applicant is requesting to rezone approximately 0.7 acres of property generally located at 1400 West Walnut Street from R-SF, Single-Family Residential District to O-1, Office District. The applicant intends to allow for administrative, professional and medical office uses in the existing structure.

REMARKS: The Planning and Zoning Commission held a public hearing on June 13, 2024, and recommended to approve, by a vote of 8 to 0.

The Planning and Development staff recommends the application be approved (see the attached Development Review Staff Report).

FINDINGS FOR STAFF RECOMMENDATION:

1. The applicant is requesting to rezone approximately 0.7 acre of property generally located at 1400 West Walnut Street from R-SF, Single-Family Residential District to O-1, Office District. The applicant intends to allow for administrative, professional and medical office uses in the existing structure.

2. This application is consistent with the Center City Neighborhood placetype which consists of a diverse range of single-family homes with varying architectural styles, setbacks, compact and shared spaces and parcel sizes. Center City neighborhoods historically had small scale neighborhood supporting retail services provided at key intersections, streetcar routes, and neighborhood centers. These building types and commercial uses were integrated into the neighborhood fabric.

3. The creation of neighborhood-scale commercial should focus on the incorporation of context-sensitive designs and low intensity uses to ensure integration into the surrounding area. These low intensity uses could include dining, personal services, office, and essential goods. These nodes could be located along historic streetcar routes or higher classification roadways on the edges of the neighborhood.
4. The subject property has access to City Utilities' infrastructure, and any necessary extension of such services can be provided via City Utilities' extension policy, though new easements may be necessary to accommodate this.
5. There are a few changing conditions in the area affected that make the proposed rezoning necessary. Minor development of property within the vicinity has been occurring.
6. The range of uses in the proposed O-1 district is compatible with the uses permitted on other property in the immediate vicinity. There is HM zoning to the north and CS zoning to the west of the subject property. This will provide for a step-down zoning approach from the R-SF to the east and south. The existing building is already being used for non-residential uses.
7. There are adequate utility and sewer and water facilities existing or can be provided to serve the uses that would be permitted on the property if it were rezoned.
8. The impact of the uses, which would be permitted if the property were rezoned, is not expected to significantly increase the volume of vehicular and pedestrian traffic or reduce traffic safety in the vicinity.
9. The proposed zoning will not correct an error in the application of this article, but rather will provide a viable use of the property subject to the provisions of the zoning district.
10. A reasonably viable economic use of the subject property will not be precluded if the proposed rezoning is denied. The property would be allowed to have a church or other R-SF uses.
11. A Bufferyard Type C is required between the properties zoned O-1 and R-SF to the south. If a six-foot solid wood fence is provided, then the bufferyard can be reduced by 5 feet. This bufferyard would need to be established according to Section 36-482 when building permits are issued.

STAFF RECOMMENDATION: Staff recommends approval based on the proposal's general conformance to the Comprehensive Plan's Center City Neighborhood placetype and on the finding of facts above.



Submitted By: Daniel Neal, Senior City Planner

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

- Attachments:**
1. Z-14-2024 1400 West Walnut Street_Ord
 2. Z-14-2024_exh A
 3. Z-14-2024_exh B
 4. Z-14-2024_exh C

One-rdg. _____
P. Hrngs. X
Pgs. 39
Filed: 07-02-24

Sponsored by: Jenson

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-128

GENERAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Springfield Land Development Code, Section 36-306, 'Official
2 zoning map and rules for interpretation,' by rezoning approximately
3 0.70 acres of property generally located at 1400 West Walnut
4 Street from R-SF, Single-Family Residential District to O-1, Office
5 District; and adopting an updated Official Zoning Map.
6 _____
7

8 WHEREAS, an application has been filed for a zoning change of the property
9 generally located at 1400 West Walnut Street from R-SF, Single-Family Residential
10 District to O-1, Office District; and
11

12 WHEREAS, following proper notice, the Planning and Zoning Commission held a
13 public hearing on June 13, 2024, a copy of the Record of Proceedings from said public
14 hearing being attached hereto and incorporated herein by this reference as "Exhibit B,"
15 and said Commission made its recommendation; and
16

17 WHEREAS, the City has reviewed the applicant's request and prepared a staff
18 report concerning the application, which is attached hereto and incorporated herein by
19 this reference as "Exhibit C"; and
20

21 WHEREAS, proper notice was given of a public hearing before City Council, and
22 said hearing was held in accordance with the law.
23

24 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
25 SPRINGFIELD, MISSOURI, as follows, that:
26

27 Section 1 – The property generally located at 1400 West Walnut Street and
28 described in "Exhibit A," which is attached hereto and incorporated herein by this
29 reference, is hereby rezoned from R-SF, Single-Family Residential District to O-1,
30 Office District. Springfield Land Development Code, Section 36-306, 'Official zoning
31 map and rules for interpretation,' is hereby amended, changed, and modified consistent
32 with this Ordinance.
33

34 Section 2 – City Council hereby directs the City Manager, or designee, to update
35 the City's digital zoning map to reflect this rezoning, and City Council adopts the map
36 thereby amended as the Official Zoning Map of Springfield, Missouri, as provided for in
37 the Springfield Land Development Code, Section 36-306, 'Official zoning maps and
38 rules of interpretation.'

39
40 Section 3 – The Official Zoning Map herein adopted shall be maintained and
41 archived in the same digital form in which this Council has approved its adoption.

42
43 Section 4 – This Ordinance shall be in full force and effect from and after
44 passage.

45
46 Passed at meeting: _____

47
48 _____
49 Mayor

50
51 Attest: _____, City Clerk

52
53 Filed as Ordinance: _____

54
55 Approved as to form: Laura Vales
56 _____, Assistant City Attorney

57
58 Approved for Council action: Jason A. Hays
59 _____, City Manager

EXHIBIT A
LEGAL DESCRIPTION

ALL OF LOTS 107 AND 108 IN THE RECORDED PLAT OF WEST END ADDITION TO THE CITY OF SPRINGFIELD AND ALL OF LOT 9 IN THE RECORDED PLAT OF GEIGER AND ABBOTTS ADDITION TO THE CITY OF SPRINGFIELD. ALSO, THAT PORTION OF A 10.00 FOOT VACATED ALLEY ALONG THE SOUTH SIDE OF LOTS 107 AND 108 IN SAID WEST END ADDITION AND A 2.00 FOOT VACATED ALLEY ALONG THE NORTH SIDE OF LOT 9 IN SAID GEIGER AND ABBOTTS ADDITION. ALL ALLEYS BEING VACATED ON AUGUST 16, 1976, BY CITY ORDINANCE NO. 17441; EXCEPT A PART OF LOT 9 IN GEIGER AND ABBOTTS ADDITION TO THE CITY OF SPRINGFIELD. MORE PARTICULARLY DESCRIBED AS BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 9; THENCE NORTH ALONG THE EAST LINE OF SAID LOT 9, A DISTANCE OF 65.05 FEET (PLATTED 50.00 FEET) TO AN IRON PIN SET AT THE NORTHEAST CORNER OF SAID LOT 9; THENCE WEST ALONG THE NORTH LINE OF SAID LOT 9, A DISTANCE OF 100.00 FEET; THENCE SOUTH, PARALLEL TO THE EAST LINE OF SAID LOT 9, A DISTANCE OF 65.05 FEET TO AN IRON PIN SET ON THE SOUTH LINE OF SAID LOT 9; THENCE EAST, A DISTANCE OF 100.00 FEET TO THE POINT OF BEGINNING. ALL BEING IN THE CITY OF SPRINGFIELD, GREENE COUNTY, MISSOURI.

EXHIBIT B
RECORD OF PROCEEDINGS
Planning and Zoning Commission – June 13, 2024

Z-14-2024

1400 West Walnut Street

Applicant: First General Baptist Church of Springfield

Mr. Neal stated that this is a request to rezone approximately 0.7 acre of property from R-SF, Single-Family Residential District to O-1, Office District.

Ms. Candance Fruge' 639 S. Grant Avenue here on behalf of the clinic owner and believes the location is well suited to have as a continuous activity/treatment facility for children with autism. She also noted that there were no objections during the neighborhood meeting.

Ms. Broekhoven closed the public hearing.

COMMISSION ACTION:

Planning and Zoning Commission Board Member Colony moved to approve Z-14-2024, Commissioner Knuckles seconded the motion. It **Passed** with the following vote. Ayes: Commissioner Ridge, Commissioner Broekhoven, Commissioner Gunther, Commissioner Pauly, Commissioner Scott, Commissioner Lebeck, Commissioner Colony, Commissioner Knuckles. Nays: None. Absent: Commissioner Doennig. Abstain: None.

A handwritten signature in black ink, appearing to read 'Bob Hosmer', written over a horizontal line.

Bob Hosmer, AICP
Planning Manager



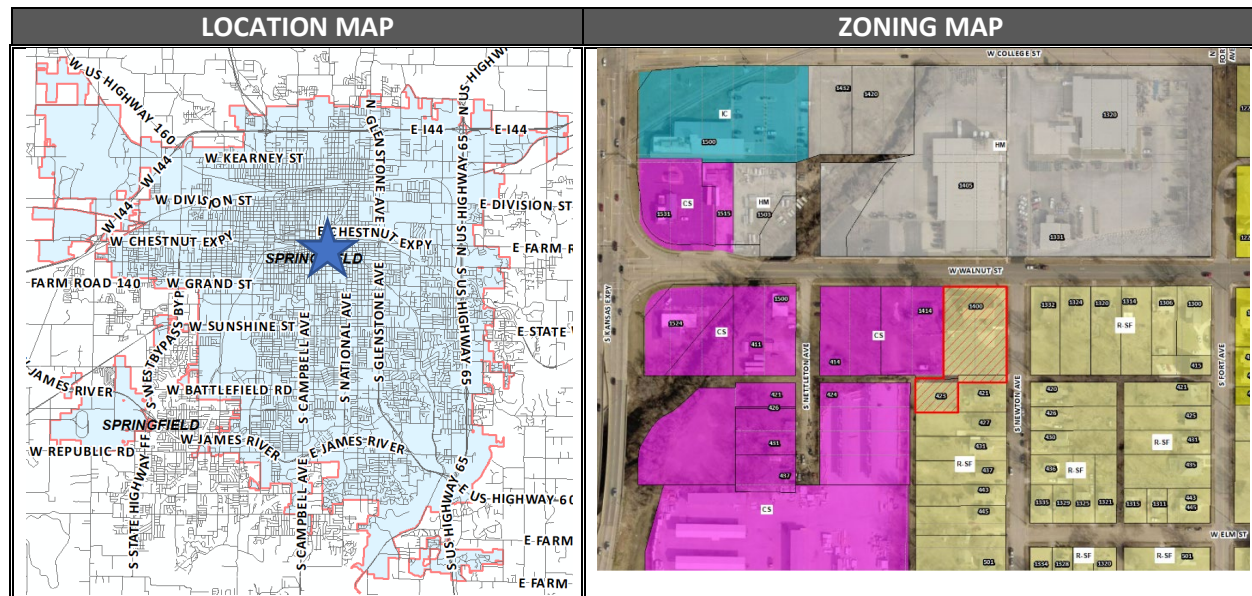
DEVELOPMENT REVIEW STAFF REPORT

PROJECT INFORMATION

Case Number:	Z-14-2024
Location:	1400 W. Walnut Street
Total Acres:	0.7 acres
Applicant:	First General Baptist Church of Springfield
Existing Land Use:	Church uses
Neighborhood Meeting:	May 23, 2024
Planning and Zoning Commission:	June 13, 2024
City Council:	July 8, 2024
Public Notification:	Mail, posted property, and legal in Daily Events
Staff:	Daniel Neal, Senior Planner
Staff recommendation:	Staff recommends approval
Proposed motion:	I move to recommend approval of rezoning case Z-14-2024 (All commission motions are made in the affirmative).
Required Vote:	A majority of those present (5 members are a quorum).

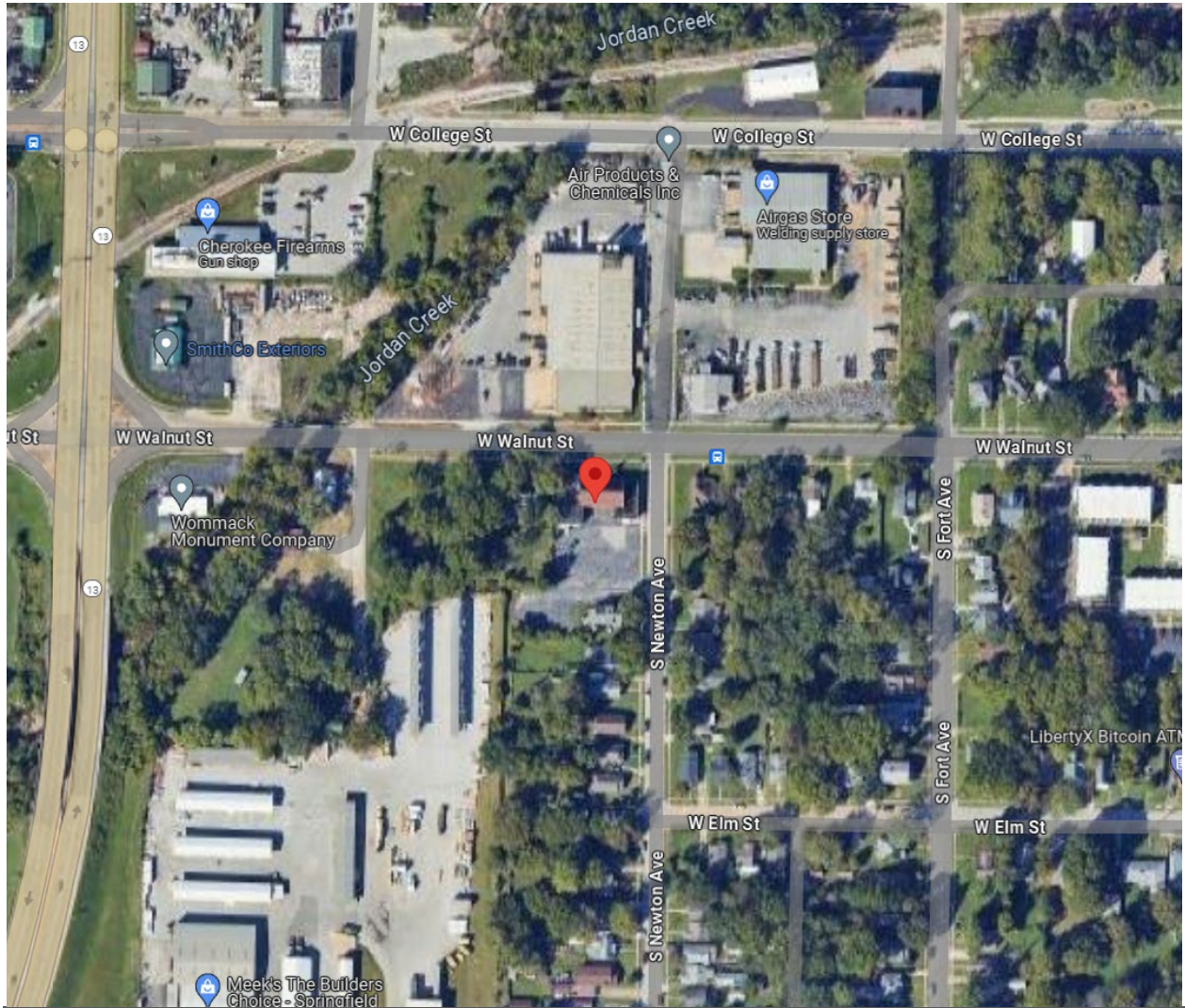
PROJECT SUMMARY:

Request to rezone approximately 0.7 acres of property generally located at 1400 West Walnut Street from R-SF, Single-Family Residential District to O-1, Office District.



DEVELOPMENT REVIEW STAFF REPORT

GOOGLE AERIAL OF LANDMARKS, BUSINESSES, AND ATTRACTIONS:



GOOGLE STREETVIEW:



DEVELOPMENT REVIEW STAFF REPORT

PROPERTY HISTORY:

The subject property was zoned R-SF in the 1995 city-wide remapping.

PLANNING AND ZONING COMMISSION AUTHORITY:

Sec. 36-367. – Amendments

(7) Findings by the commission.

(a) Rezoning. If the application is for a reclassification of property to a different zoning district classification on the zoning map, the report of the planning and zoning commission may consider:

1. Whether the proposed zoning district classification is consistent with the Springfield Comprehensive Plan;
2. Whether there are any changed or changing conditions in the area affected that make the proposed rezoning necessary;
3. Whether the range of uses in the proposed zoning district classification are compatible with the uses permitted on other property in the immediate vicinity;
4. Whether adequate utility and sewer and water facilities exist or can be provided to serve the uses that would be permitted on the property if it were rezoned;
5. The impact the uses, which would be permitted if the property were rezoned, will have upon the volume of vehicular and pedestrian traffic and traffic safety in the vicinity;
6. Whether the proposed rezoning would correct an error in the application of this article as applied to the subject property;
7. Whether a reasonably viable economic use of the subject property will be precluded if the proposed rezoning is denied; and
8. Information submitted at the public hearing.

ZONING ORDINANCE REQUIREMENTS:

CODE ITEM	REQUIREMENTS FOR O-1 DISTRICT
Use Limitations	(a) All activities and permitted uses except off-street parking and loading facilities, drive-thru facilities and day care activities shall be conducted entirely within a completely enclosed building. (b) All uses shall operate in accordance with the noise standards contained in section 36-485, noise standards. (c) No use shall emit an odor that creates a nuisance as determined by chapter 2A, article X, Springfield City Code.

DEVELOPMENT REVIEW STAFF REPORT

	(d) Uses on parcels not served by public water and public sewer shall meet the requirements of subsection 36-303(22).
Minimum Lot Size	Not applicable to the O-1 District
Maximum Height	Thirty-five feet, except that all structures shall remain below a 45-degree bulk plane as measured from the boundary of any R-SF or R-TH district.
Bulk Plane	None, except that all structures shall remain below a 30-degree bulk plane as measured from the boundaries of any R-SF or R-TH district.
Minimum Yard Requirements	1. <i>Front yard:</i> a. Twenty-five feet along a street classified as a collector or higher classification street or as required by section 36-453, supplemental open space, and yard regulations. b. Fifteen feet along a street classified as a local street or as required by section 36-453, supplemental open space, and yard regulations. 2. <i>Side yards:</i> Ten feet on each side of a lot or as required by section 36-453, supplemental open space and yard regulations, provided that no side yard is required for any building that has a common wall on a lot line. 3. <i>Rear yards:</i> Twenty percent of the lot depth, but may not be less than ten feet nor more than 25 feet be required.
Minimum Open Space	Not less than 20 percent of the total lot area shall be devoted to open space including required yards and bufferyards unless modified in accordance with subsection 36-482(15). Open space shall not include areas covered by buildings, structures, parking, loading and other paved areas and internal streets. Open space shall contain living ground cover and other landscaping materials.
Design Requirements	(a) A site plan meeting the requirements of section 36-360, site plan review, shall be submitted and approved. (b) A landscape plan meeting the requirements of section 36-482, landscaping and bufferyards, and 36-483, off-street parking and loading area design standards, shall be submitted, and approved. (c) All off-street parking and vehicular use areas shall be screened from all residential uses in accordance with section 36-480, screening, and fencing.

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	(d) All outdoor storage and refuse storage areas shall be screened from view in accordance with section 36-480, screening, and fencing. (e) Mechanical and electrical equipment, including air conditioning units, shall be screened from view in accordance with section 36-480, screening, and fencing. (f) Lighting shall be designed to reflect away from any adjacent or nearby residential area and in accordance with section 36-484, lighting standards. (g) Accessory buildings and structures shall meet the requirements of section 36-450, accessory structures and uses.
Buffering and Landscaping	Whenever any development in an O industrial commercial district is located adjacent to a different zoning district, screening and a bufferyard shall be provided in accordance with sections 36-480, screening, and fencing, and 36-482, landscaping and bufferyards.

COMPATIBILITY WITH COMPREHENSIVE PLAN:

PLACETYPE:

The *Comprehensive Plan's Land Use & Development* chapter identifies the subject property within the Center City Neighborhood placetype.

Center City Neighborhoods are Springfield's oldest residential neighborhoods, dating to before WWII. They are typically characterized by a diverse range of single-family homes with varying architectural styles, setbacks, compact and shared spaces and parcel sizes. Center City neighborhoods historically had small scale neighborhood supporting retail services provided at key intersections, streetcar routes, and neighborhood centers. These building types and commercial uses were integrated into the neighborhood fabric. Most Center City Neighborhoods follow a gridded block pattern with alleys, tree-lined streets, and a well-connected sidewalk network that allows residents to walk to nearby neighborhood amenities. Due to their compact form and proximity to urban centers, these neighborhoods are places where residents should reasonably be able to walk, bike, or ride transit to meet some of their educational, employment, shopping, and recreational needs. Center City Neighborhoods are also integrated with key cultural and institutional uses, such as schools and places of worship that serve surrounding residents.

Center City Neighborhoods consist of housing of varying conditions, age, affordability, and vacancies. Opportunities for infill development are pursued where appropriate, diversifying the housing stock. Much of the housing stock uses traditional stick-framed construction with lap siding or masonry veneer. Elevated porches with columns and stoops are focal points

DEVELOPMENT REVIEW STAFF REPORT

common to homes in these areas. Infill can include higher density residential development that should blend with the surrounding character. Vacant and underutilized properties are considered for new uses, such as pocket parks, community gardens, or small neighborhood commercial nodes as well as housing.

The creation of neighborhood-scale commercial should focus on the incorporation of context sensitive designs and low intensity uses to ensure integration into the surrounding area. These low intensity uses could include dining, personal services, office, and essential goods. These nodes could be located along historic streetcar routes or higher classification roadways on the edges of the neighborhood.

Primary Land Uses:

- Single-family detached

Supporting Land Uses:

- Single-family attached
- Low-intensity multifamily
- Low-intensity, neighborhood commercial
- Parks, greenways, and open space
- Public and private schools and places of worship
- Low-intensity urban agriculture

Characteristics

TRANSPORTATION & INFRASTRUCTURE

- Traffic-calming measures, such as speed-humps, bump-outs, roundabouts, landscaped chicanes with integrated stormwater management, and on-street parking are used to slow traffic.
- Best management practices for stormwater management are required in development projects and within public rights-of-way, such as permeable paving, rain gardens, green roofs, native landscaping, and other low impact design strategies.
- Sidewalk gaps are filled, and sidewalks connect to transit routes, greenways and trails, and supportive uses are located within the neighborhood and around the perimeter.
- Alleys provide pedestrian connections, alternative access to rear yards, detached garages, and other approved accessory uses.
- Sense of place and identity is enhanced through neighborhood organization efforts, preservation and planting trees, neighborhood identification signs, and traffic calming improvements that double as streetscape elements.
- As technology, trends, and funds permit, utilities are buried or are consolidated along rear property lines, reducing conflicts with street trees, pedestrian infrastructure, and viewsheds.
- Major entrances into neighborhoods are marked by identification signs and landscaping.

URBAN DESIGN - BUILDING AND SITE TYPOLOGY:

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- The main entrances of new residential developments are oriented towards the primary street.
- Preservation and adaptive reuse of neighborhood schools and surplus buildings are encouraged.
- When appropriate, adaptive reuse of residential structures for low-intensity, neighborhood-scale nonresidential uses, including missing middle housing types, is encouraged at neighborhood nodes and along edges.
- Accommodations are made to allow expanded home occupations, without detracting from the character of the neighborhood, being conscious of changing trends and advances in technologies.
- New and infill buildings maintain the proportions and architectural features common in the existing block.
- When commercial buildings are located within or adjacent to the neighborhood, they are oriented to the street, focus on pedestrian-scale, and provide limited vehicle parking.
- Residential subdivisions are designed and platted in more conventional layouts with shorter blocks.
- Lots have a variety of widths, depths, and setbacks creating unique identity from neighborhood to neighborhood.
- While not as common, attached and detached garages provide limited parking options and create a greater demand for on-street parking.
- Garages reflect the architectural style and scale of the primary buildings and are often setback well behind the front facade.
- Driveways are often accessed from the rear alley and are shared or absent in exchange for sidewalks to the front door or porch, which provides increased on-street parking opportunities.
- Properties and neighborhoods eligible for local historic designation are continually identified and preserved.
- Key corridors that offer transit and other multimodal, trail, or greenway connections can be enhanced with increased housing and neighborhood scale services, shops, and dining.
- Low-impact, neighborhood-scale commercial uses should be considered at locations where community facilities and amenities or other informal neighborhood hubs already exist, at former streetcar stops, along the edges of the neighborhood or at other significant neighborhood destinations.
- Neighborhood parks, community centers, greenway or trailheads, museums, gardens, schools, and churches can serve as anchors for neighborhood commercial hubs.

TRANSITIONS:

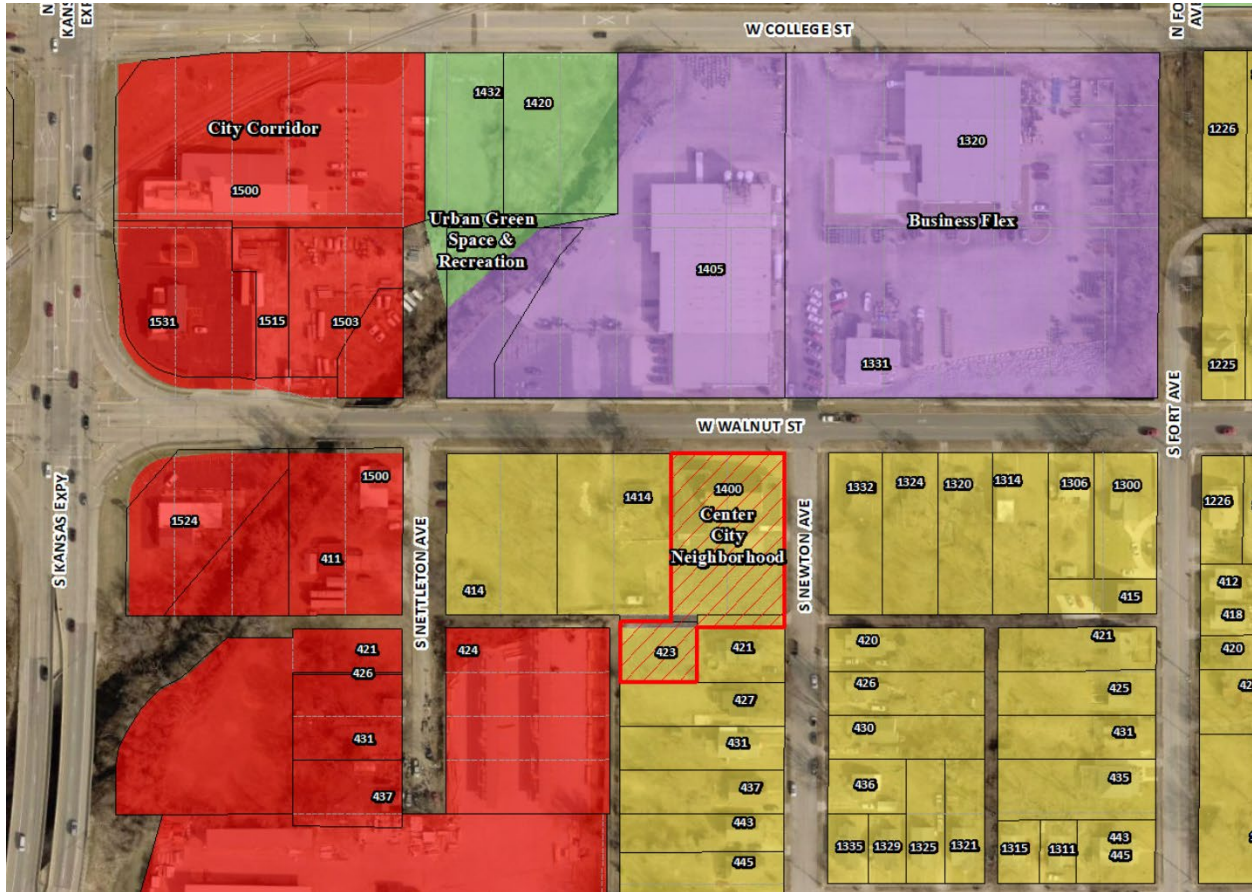
- A “stepped down” approach is used to transition from higher density/intensity residential and non-residential uses to single-family residential homes and uses, with greater densities/intensities located on higher functioning roadways, at the periphery of the neighborhood.

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- Lower density residential uses are sufficiently screened and buffered between higher density housing and non-residential uses.
- The design of higher density residential uses integrated into the Residential Neighborhood Placetype should complement the scale and character of the surrounding neighborhood. Attention should be given to building height, orientation, architectural style, and setback to ensure the existing neighborhood character is retained.

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FUTURE PLACETYPE MAP:

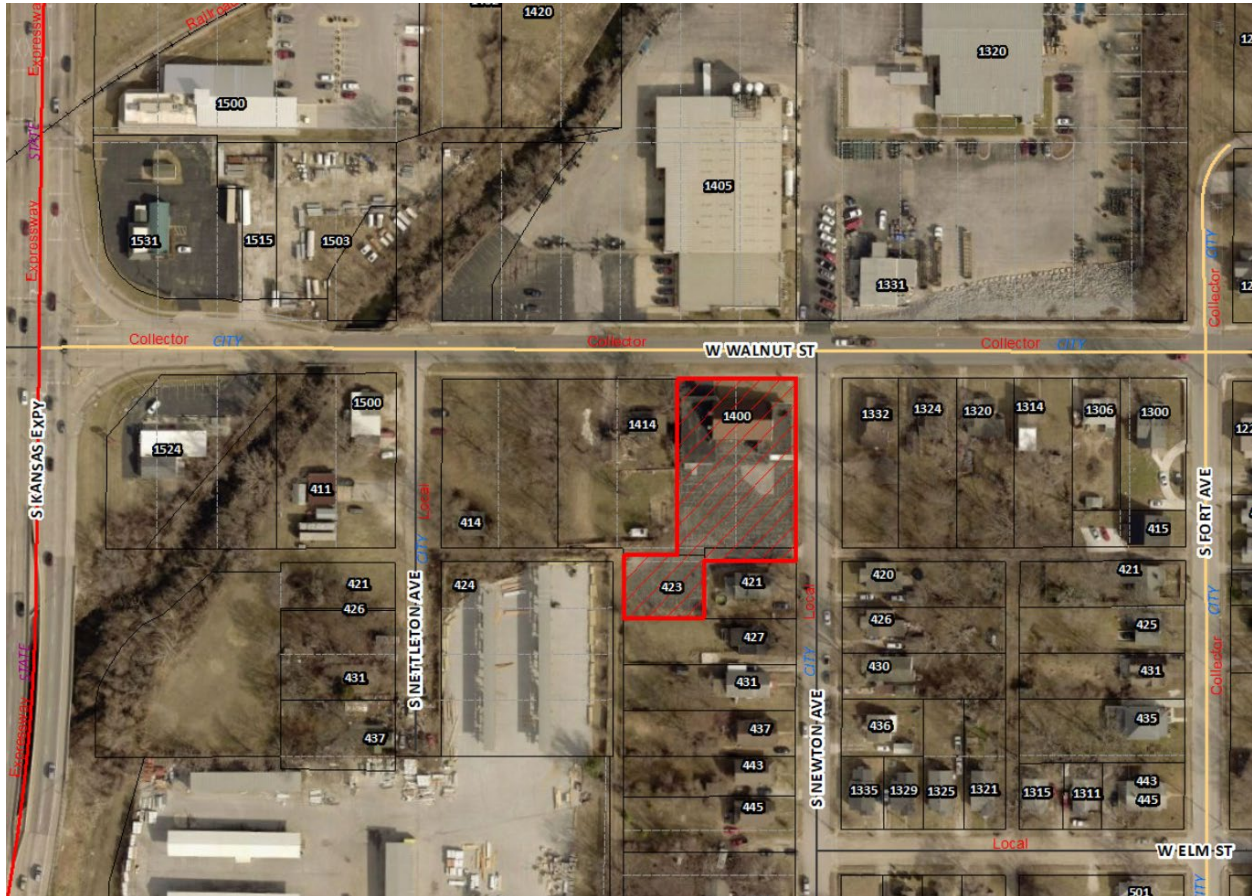


PLACETYPES	LAND USES														
	Single Family Detached	Single Family Attached	Multi-family	Parks & Open Space	Sports Complexes & Recreational Facilities	Office / Hospitality / Retail Sales & Service	Neighborhood Commercial	Maker / Artisan & Innovation Spaces	Public & Private Schools & Places of Worship	Government / Colleges & Vocational Schools	Personal Services & Institutional Facilities	Light Industry	Warehouse & Distribution Facilities	Heavy Industry & Manufacturing	Airport / Railroad & Freight Facilities
Residential Neighborhood	●	○	◇	○	◇	○	○	○	○	○	○	○	○	○	○
Mixed Residential	●	●	○	○	◇	○	○	○	○	○	○	○	○	○	○
Downtown	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Mixed-Use	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
City Corridor	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Institutional & Employment Center	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Business Flex	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Industry & Logistics	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Urban Green Space & Recreation	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

- **Primary Land Use:**
More prominent and play a pivotal role in characterizing that placetype
- **Supporting Land Use:**
Less prevalent and serve to support the primary land use.
- ◇ **Low Intensity Supporting Land Use:**
Less prevalent and serve to support the primary use at neighborhood scale

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MAJOR THOROUGHFARE MAP:



SURROUNDING ZONING, LAND USES AND PLACETYPES:

	NORTH	SOUTH	EAST	WEST
ZONING	HM	R-SF	R-SF	CS
LAND USE	Industrial/manufacturing uses	Single-family residential	Single-family residential	Single-family residential
PLACETYPES	Business Flex	Center City Neighborhood	Center City Neighborhood	Center City Neighborhood

DEPARTMENT OF BUILDING DEVELOPMENT SERVICES:

No comments.

CITY UTILITIES:

No issues with the proposed rezoning.

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DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER MANAGEMENT DIVISION:

No issues. Tract has access to public sewer.

FIRE DEPARTMENT:

No comments.

DEPARTMENT OF PUBLIC WORKS TRAFFIC ENGINEERING DIVISION:

	Street Name	Street Classification	Jurisdiction	ROW from Centerline (ft.)		Traffic Count (vehicles per day)	On-Street Parking	Sidewalk	
				Required	Existing			Required	Existing
Street 1	W. Walnut St	Collector	City	30	30	NA	No	Yes	Yes
Street 2	S. Newton Avenue	Local	City	25	25	NA	No	Yes	Yes

ACCESS - All new or modified driveway approaches shall comply with current City of Springfield standards for the street classification.

TRAILS, BUS STOPS, AND ADDITIONAL INFORMATION - There are no Greenway Trails near the property. There is one (1) bus stop near the property.

IMPROVEMENTS - No improvements are required for this rezoning. A traffic study is not required for this rezoning.

DEPARTMENT OF PUBLIC WORKS STORMWATER ENGINEERING DIVISION:

SITE DESCRIPTION & DRAINAGE PATTERN

No existing detention or water quality Stormwater Control Measures are present. The property is in the **Jordan Creek Lower Branch** drainage basin. The property **is not** located in a FEMA designated floodplain. Staff **is not** aware of flooding problems in the local or downstream area. The city **is not** aware of a sinkhole or other Karst feature at this location. The property **does not have a stream buffer on site**. A fee in lieu of on-site stormwater detention **is not applicable because the site is built out**.

PW Stormwater has no concerns for the proposed change from R-SF to O-1. Please note that development of the property will be subject to the following conditions at the time of development:

All chapter and section references below are to the City's Flood Control and Water Quality Protection Manual Version April 2022.

DEVELOPMENT REVIEW STAFF REPORT

DETENTION AND DISCHARGE REQUIREMENTS

1. Any development or redevelopment that increases runoff, through the increase in impervious surface, current detention requirements must be met per Chapter 3 Sec. 2.3.3. The Site is existing 95% impervious area.

WATER QUALITY REQUIREMENTS

N/A

FLOODPLAIN

N/A

NATURAL CHANNEL & STREAM BUFFERS

N/A

SINKHOLES & KARST FEATURES

N/A

ADDITIONAL STORMWATER REQUIREMENTS

N/A

STAFF ANALYSIS AND RECOMMENDATION:

1. The applicant is requesting to rezone approximately 0.7 acres of property generally located at 1400 West Walnut Street from R-SF, Single-Family Residential District to O-1, Office District. The applicant intends to allow for administrative, professional and medical office uses in the existing structure.
2. This application is consistent with the Center City Neighborhood placetype which consists of a diverse range of single-family homes with varying architectural styles, setbacks, compact and shared spaces and parcel sizes. Center City neighborhoods historically had small scale neighborhood supporting retail services provided at key intersections, streetcar routes, and neighborhood centers. These building types and commercial uses were integrated into the neighborhood fabric.
3. The creation of neighborhood-scale commercial should focus on the incorporation of context sensitive designs and low intensity uses to ensure integration into the surrounding area. These low intensity uses could include dining, personal services, office, and essential goods. These nodes could be located along historic streetcar routes or higher classification roadways on the edges of the neighborhood.
4. The subject property has access to City Utilities infrastructure, and any necessary extension of such services can be provided via City Utilities' extension policy, though new easements may be necessary to accommodate this.

DEVELOPMENT REVIEW STAFF REPORT

5. There are few changing conditions in the area affected that make the proposed rezoning necessary. Minor development of property within the vicinity has been occurring.
6. The range of uses in the proposed O-1 district is compatible with the uses permitted on other property in the immediate vicinity. There is HM zoning to the north and CS zoning to the west of the subject property. This will provide for a step-down zoning approach from the R-SF to the east and south. The existing building is already being used for non-residential uses.
7. There are adequate utility and sewer and water facilities existing or can be provided to serve the uses that would be permitted on the property if it were rezoned.
8. The impact of the uses, which would be permitted if the property were rezoned, is not expected to significantly increase the volume of vehicular and pedestrian traffic or reduce traffic safety in the vicinity.
9. The proposed zoning will not correct an error in the application of this article, but rather will provide a viable use of the property subject to the provisions of the zoning district.
10. A reasonably viable economic use of the subject property will not be precluded if the proposed rezoning is denied. The property would be allowed to have church or other R-SF uses.
11. A Bufferyard Type C is required between the properties zoned O-1 and R-SF to the south. If a six foot solid wood fence is provided, then the bufferyard can be reduced by 5 feet. This bufferyard would need to be established according to Section 36-482 when building permits are issued.

STAFF RECOMMENDATION:

1. Staff recommends approval based on the proposal's general conformance to the Comprehensive Plan's Center City Neighborhood placetype and on the finding of facts above.

PLANNING AND ZONING OPTIONS:

The planning and zoning commission shall make one of the following recommendations in connection with each proposed change in zoning district classification of this article:

1. Recommend against the proposed change in the zoning district classification.
2. Recommend a change in the zoning district classification.
3. Recommend a change in the zoning district classification together with recommendations which, in the judgment of the planning and zoning commission, will protect adjacent property and ensure that the proposed amendment is consistent with the purpose and intent of this article.

Attachment 1

AFFIDAVIT OF NEIGHBORHOOD NOTIFICATION AND MEETING SUMMARY

1. Request change to zoning from: Residential SF to Office 1
(existing zoning) (proposed zoning)
2. Meeting Date & Time: 5-23-2024 4-6:30 pm
3. Meeting Location: 1400 W. Walnut Springfield MO 65806
4. Number of invitations that were sent: All of the labels provided by P & Z
5. How the mailing list was generated: P & Z made labels
6. Number of neighbors in attendance (attach a sign-in sheet): 6

7. List the verbal comments and how you plan to address any issues:
(City Council does not expect all the issues to be resolved to the neighborhood's satisfaction; however, the developer must explain why the issues cannot be resolved).

1. Neighbor thought the whole block was being changed
→ Clarified it was just the church property

2. Neighbor was concerned it would be another KVC
overnight at risk youth facility (Kids removed from home)
→ Clarified it was day program for Autism and not
for at risk youth, overnight or Kids removed from home

8. List or attach the written comments and how you plan to address any issues:

We received no written comments

Neighbors were in support of the rezoning
as well as neighborhood association.
We did not receive any objections.

I, Candace Frugé (print name), attest that the neighborhood meeting was held on
5-23-2024 (month/date/year), and is at least twenty-one (21) days prior to the Planning and Zoning
Commission public hearing and in accordance with the attached "Neighborhood Notification and Meeting Process."

Candace Frugé
Signature of person completing affidavit

Candace Faith Frugé 05/29/2024

Candace Faith Frugé

Candace Frugé
Printed name of person completing affidavit

Michael Miser 05/29/2024

Michael Miser

NAME	ADDRESS	PHONE
Matthew Hyde	1414 W Walnut St. Springfield	417-669-1285
Nick Willett	501 S. Newton Ave	417-693-4830
Bob Guffey	414 N. Horton	874-4800
Emily J Hinkley	→ 4205 Newton Ave	417-_____
Lauren Kelsey	1015 W. Walnut St	



EXPLANATION TO COUNCIL BILL 2024-129 (SIMPSON)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Planning and Development

TITLE: A general ordinance amending the Springfield Land Development Code, Section 36-306, 'Official zoning map and rules for interpretation,' by rezoning approximately .70 acres of property generally located at 1102, 1106, 1114, and 1120 East Cherokee Street from R-SF, Single-Family Residential District to R-MD, Medium-Density Multifamily Residential District with Conditional Overlay District No. 247; and adopting an updated Official Zoning Map. (By: One Hundred Two Glenstone Inc.; 1102, 1106, 1114, & 1120 East Cherokee Street; Z-2-2024 w/ Conditional Overlay District No. 247).

PURPOSE: Amending the Springfield Land Development Code, Section 36-306, 'Official zoning map and rules for interpretation,' by rezoning approximately 0.70 acres of property generally located at 1102, 1106, 1114 & 1120 East Cherokee Street from R-SF, Residential Single-family to R-MD, Medium Density Multi-Family Residential District with Conditional Overlay District No. 247 (Staff and Planning and Zoning Commission recommend approval).

BACKGROUND INFORMATION: ZONING CASE NUMBER Z-2-2024/ CONDITIONAL OVERLAY DISTRICT NO. 247

The applicant is requesting to rezone approximately 0.70 acres of property generally located at 1102, 1106, 1114 & 1120 East Cherokee Street from R-SF, Residential Single-family to R-MD, Medium Density Multi-Family Residential District with Conditional Overlay District No. 247. The applicant intends to develop a multi-family development.

REMARKS: The Planning and Zoning Commission held a public hearing on June 13, 2024, and recommended denial, by a vote of 2 to 5. Commissioner Ridge did not vote. Please see Exhibit C, the Record of Proceeding from the Planning and Zoning Commission meeting, for the Commission's reasoning underlying the denial recommendation.

The Planning and Development staff recommends the application be approved (see the attached Development Review Staff Report).

FINDINGS FOR STAFF RECOMMENDATION:

1. The applicant is requesting to rezone approximately 0.70 acres of property generally located at 1102, 1106, 1114 & 1120 East Cherokee Street from R-SF, Residential

Single-Family to R-MD, Medium Density Multi-Family Residential District with Conditional Overlay District No. 247. The applicant intends to develop a multi-family development.

2. The Comprehensive Plan's Land Use & Development chapter identifies the subject property as the Traditional neighborhood placetype. This placetype lists low-intensity multi-family as a supporting land use.

3. The R-MD District is intended to accommodate multi-family developments at densities up to approximately twenty-nine (29) dwelling units per acre. The applicant is requesting a maximum of twenty-one (21) dwelling units per acre. This density has been determined to be appropriate for this area based on an assessment completed under the Revised Multi-Family Development Location and Design Guidelines. That assessment resulted in a density of 21 to 24 dwelling units per acre with the Opportunities and Constraints section. Staff can support an increase in density based upon being adjacent to higher intensity uses, being in a redevelopment area and a physical barrier in the area. Further analysis of the proposed development under the Revised Multi-Family Development Location and Design Guidelines is attached (Attachment 2). The development must be in substantial conformance to the attached site plan (Attachment 4).

4. This application is consistent with the Comprehensive Plan's Housing and Neighborhoods chapter which encourages creative housing solutions to add housing diversity and support downsizing households, young professionals, and aging-in-place. The Plan encourages the use of "missing middle" housing types. Missing middle housing sits in the middle of the development spectrum between single-family homes and mid-rise to high-rise apartment buildings. These housing types should be integrated into Springfield's existing neighborhoods to increase housing diversity and provide a wider, more equitable range of housing choices.

5. Missing middle housing types provide opportunities for the city to increase the diversity of its housing stock through moderate increases in density, while maintaining the neighborhood character Springfield residents cherish. They range from low density duplexes to mid-density multiplexes and triplexes, which can be integrated into the City's housing mix by using single-family lots to accommodate two to three units in a context-sensitive manner.

6. The Plan recommends a "stepped down" approach to be used to transition from higher density/intensity residential and non-residential uses to single-family residential homes and uses, with greater densities/intensities located on higher functioning roadways, at the periphery of the neighborhood. The subject property is located on Cherokee Street, classified as a collector roadway and near National Avenue, classified as a primary arterial. Traffic from the proposed development does not have to traverse through a neighborhood to get to a higher-classification street.

7. The subject property has access to City Utilities' infrastructure, and any necessary extension of such services can be provided via City Utilities' extension policy, though new easements may be necessary to accommodate this.

8. There are a few changing conditions in the area affected that make the proposed rezoning necessary. Minor development of property within the vicinity has been occurring.

9. The range of uses in the proposed R-MD district is compatible with the uses permitted on other property in the immediate vicinity. There are duplexes and multi-family developments along the north side of Cherokee Street.

10. There are adequate utility and sewer and water facilities existing or can be provided to serve the uses that would be permitted on the property if it were rezoned.

11. The impact of the uses, which would be permitted if the property were rezoned, is not expected to significantly increase the volume of vehicular and pedestrian traffic or reduce traffic safety in the vicinity.

12. The proposed zoning will not correct an error in the application of this article, but rather will provide a viable use of the property subject to the provisions of the zoning district.

13. A reasonably viable economic use of the subject property will not be precluded if the proposed rezoning is denied.

STAFF RECOMMENDATION: Staff recommends approval based on the proposal's general conformance to the Comprehensive Plan's Traditional Neighborhood placetype and on the finding of facts above.

Submitted By: Michael Sparlin, Senior City Planner

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Attachments:

1. Z-2-2024 COD 247 - 1102, 1106, 1114, and 1120 East Cherokee Street_Ord
2. Z-2-2024 COD 247_exh A
3. Z-2-2024 COD 247_exh B
4. Z-2-2024 COD 247_exh C
5. Z-2-2024 COD 247_exh D

One-rdg. _____
P. Hrngs. X
Pgs. 22
Filed: 07-02-24

Sponsored by: Simpson

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-129

GENERAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Springfield Land Development Code, Section 36-306, 'Official
2 zoning map and rules for interpretation,' by rezoning approximately
3 .70 acres of property generally located at 1102, 1106, 1114, and
4 1120 East Cherokee Street from R-SF, Single-Family Residential
5 District to R-MD, Medium-Density Multifamily Residential District
6 with Conditional Overlay District No. 247; and adopting an updated
7 Official Zoning Map.
8 _____
9

10 WHEREAS, an application has been filed for a zoning change of the property
11 generally located at 1102, 1106, 1114, and 1120 East Cherokee Street from R-SF,
12 Single-Family Residential District to R-MD, Medium-Density Multifamily Residential
13 District with Conditional Overlay District No. 247; and
14

15 WHEREAS, Conditional Overlay District No. 247 shall modify the requirements of
16 the Springfield Land Development Code Section 36-383, Medium-Density Multifamily
17 Residential District, by requiring that the property described in "Exhibit B" comply with
18 the requirements described in "Exhibit A," both attached hereto and incorporated herein
19 by this reference; and
20

21 WHEREAS, following proper notice, the Planning and Zoning Commission held a
22 public hearing on June 13, 2024, a copy of the Record of Proceedings from said public
23 hearing being attached hereto and incorporated herein by this reference as "Exhibit C,"
24 and said Commission made its recommendation; and
25

26 WHEREAS, the City has reviewed the applicant's request and prepared a staff
27 report concerning the application, which is attached hereto and incorporated herein by
28 this reference as "Exhibit D"; and
29

30 WHEREAS, proper notice was given of a public hearing before City Council, and
31 said hearing was held in accordance with the law.
32

33 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF

34 SPRINGFIELD, MISSOURI, as follows, that:

35
36 Section 1 – The property described in "Exhibit B," which is attached hereto and
37 incorporated herein by this reference, is hereby rezoned from R-SF, Residential Single-
38 Family District to R-MD, Medium-Density Multifamily Residential District with Conditional
39 Overlay District 247. Springfield Land Development Code, Section 36-306, 'Official
40 zoning map and rules for interpretation,' is hereby amended, changed, and modified
41 consistent with this Ordinance.

42
43 Section 2 – City Council hereby establishes Conditional Overlay District No. 247,
44 which shall contain the requirements and standards provided in "Exhibit A," which is
45 attached hereto and incorporated herein by this reference as though set forth herein.
46 The requirements of Conditional Overlay District No. 247 shall modify the requirements
47 of the Springfield Land Development Code Section 36-383, Medium-Density Multifamily
48 Residential District, by requiring the property described in "Exhibit B" to comply with the
49 requirements contained in "Exhibit A."

50
51 Section 3 – City Council hereby directs the City Manager, or designee, to update
52 the City's digital zoning map to reflect this rezoning, and City Council adopts the map
53 thereby amended as the Official Zoning Map of Springfield, Missouri, as provided for in
54 the Springfield Land Development Code, Section 36-306, 'Official zoning maps and
55 rules of interpretation.'

56
57 Section 4 – The Official Zoning Map herein adopted shall be maintained and
58 archived in the same digital form in which this Council has approved its adoption.

59
60 Section 5 – This Ordinance shall be in full force and effect from and after
61 passage.

62
63 Passed at meeting: _____

64
65 _____
66 Mayor

67
68 Attest: _____, City Clerk

69
70 Filed as Ordinance: _____

71
72
73 Approved as to form: Laura Vales, Assistant City Attorney

74
75
76 Approved for Council action: Jason A. Page, City Manager
77

EXHIBIT A

PROVISIONS FOR CONDITIONAL OVERLAY DISTRICT NO. 247

The requirements of Section 36-383 of the Springfield Zoning Ordinance shall be modified herein for development within this district to include the following:

1. The maximum density shall be limited to twenty-two (21) dwelling units per acre for a maximum of 14 dwelling units total located within this district.
2. The maximum structure height shall be limited to two (2) stories.
3. A six (6) foot solid, wooden fence shall be required adjacent to property zoned R-SF, Residential Single-family along the south property line.
4. The development of the subject property shall be in substantial conformance to the Revised Multi-Family Location and Design Guidelines (Attachment 2), and the attached site plan and elevations (Attachment 4).

EXHIBIT B
LEGAL DESCRIPTION

All of Lots One (1), Two (2), Three (3) and Four (4) of Fredericks and Hicks Subdivision, a subdivision in the City of Springfield, Greene County, Missouri, as shown on the recorded plat thereof.

EXHIBIT C
RECORD OF PROCEEDING
Planning and Zoning Commission – June 13, 2024

Z-2-2024 COD 247

1102, 1106, 1114 & 1120 East Cherokee Street

Applicant: One Hundred Two Glenstone, Inc.

Mr. Sparlin stated that this is a request to rezone approximately 0.70 acres of property from R-SF, Residential Single-family to R-MD, Medium Density Multi-Family Residential District with Conditional Overlay District No. 247.

Mr. Knuckles asked if any drainage improvements were conducted in the area, and it was confirmed that there was substantial drainage improvements along Hampton Avenue up to Cherokee Street.

Mr. Scott asked about the connection/access to the south and staff noted that they developer wants to maintain access between the two apartments (current project and one apartment complex completed in 2018).

Mr. Daniel Richards, 1200 East Woodhurst Drive, Suite D200 stated that at the neighborhood meeting the concerns were “how many stories,” “density,” and “fencing” and have agreed to limit it to 2 stories and add a fence along the south property line and limit the density.

Mr. Colony asked if they feel that they have answered/met all of the neighborhood complaints.

Mr. Daniels feels that they have met all of the neighborhood complaints.

Ms. Broekhoven closed the public hearing.

Mr. Pauly voiced his concern regarding the neighborhood comments and does not see this following the step-down approach that Forward SGF recommends as it is right up against a residential neighborhood and will not be supportive of this project.

Mr. Lebeck also voiced his concerns stating that it does not follow the true step-down approach.

COMMISSION ACTION:

Planning and Zoning Commission Board Member Knuckles moved to approve Z-2-2024 COD 247, Commissioner Pauly seconded the motion. It **Failed** with the following vote. Ayes: Commissioner Scott and Commissioner Knuckles. Nays: Commissioner Broekhoven, Commissioner Gunther, Commissioner Pauly, Commissioner Lebeck, and

Commissioner Colony. Absent: Commissioner Doennig. Abstain: None. Commissioner Ridge did not vote.

A handwritten signature in black ink, appearing to read 'Bob Hosmer', with a long horizontal flourish extending to the right.

Bob Hosmer, AICP
Planning Manager



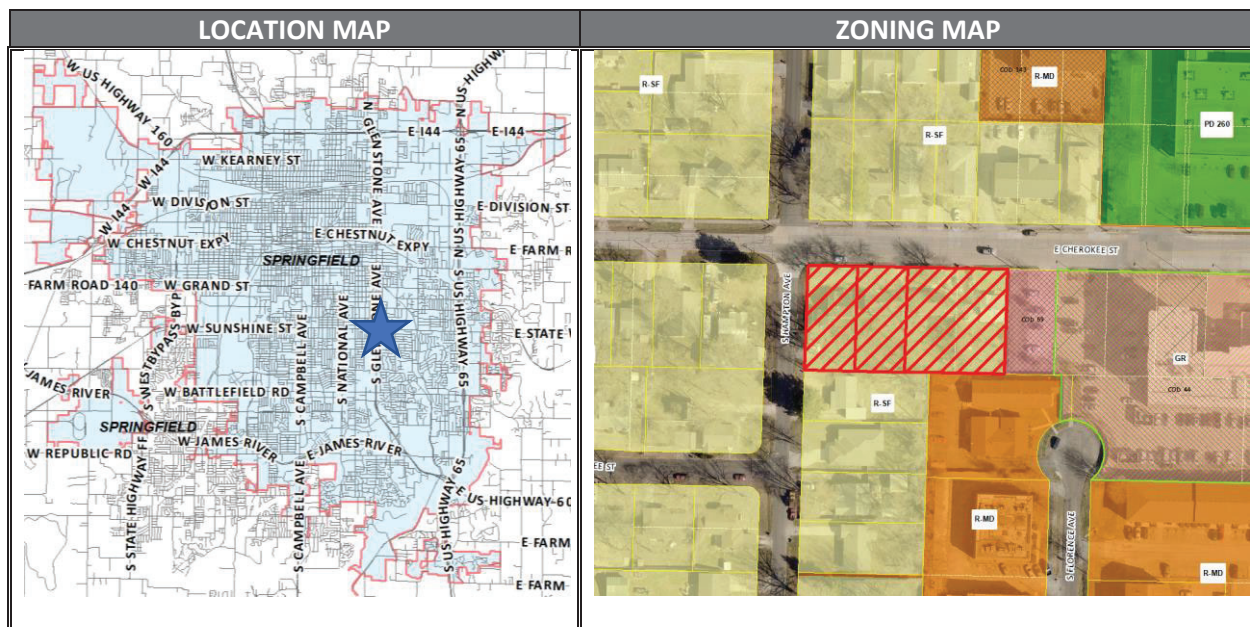
DEVELOPMENT REVIEW STAFF REPORT

PROJECT INFORMATION:

Case Number:	Z-2-2024 with Conditional Overlay District No. 247
Location:	1102, 1106, 1114 & 1120 East Cherokee Street
Total Acres:	0.70
Applicant:	One Hundred Two Glenstone Inc.
Existing Land Use:	Single-family homes
Neighborhood Meeting:	December 13, 2023
Planning and Zoning Commission:	June 13, 2024
City Council:	July 8, 2024
Public Notification:	Mail, posted property, and legal in Daily Events
Staff:	Michael Sparlin, Senior Planner
Staff recommendation:	Staff recommends approval
Proposed motion:	I move to recommend approval of rezoning case Z-2-2024 with Conditional Overlay District No. 247 as set forth in Attachment 1 (All commission motions are made in the affirmative).
Required Vote:	A majority of those present (5 members are a quorum).

PROJECT SUMMARY:

Request to rezone approximately 0.70 acres of property generally located at 1102, 1106, 1114 & 1120 East Cherokee Street from R-SF, Residential Single-family to R-MD, Medium Density Multi-Family Residential District with Conditional Overlay District No. 247.



DEVELOPMENT REVIEW STAFF REPORT

GOOGLE AERIAL OF LANDMARKS, BUSINESSES, AND ATTRACTIONS:



GOOGLE STREETVIEW:



DEVELOPMENT REVIEW STAFF REPORT

PROPERTY HISTORY:

The subject property was zoned R-SF in the 1995 city-wide remapping.

PLANNING AND ZONING COMMISSION AUTHORITY:

Sec. 36-367. – Amendments

(7) Findings by the commission.

(a) Rezoning. If the application is for a reclassification of property to a different zoning district classification on the zoning map, the report of the planning and zoning commission may consider:

1. Whether the proposed zoning district classification is consistent with the Springfield Comprehensive Plan;
2. Whether there are any changed or changing conditions in the area affected that make the proposed rezoning necessary;
3. Whether the range of uses in the proposed zoning district classification are compatible with the uses permitted on other property in the immediate vicinity;
4. Whether adequate utility and sewer and water facilities exist or can be provided to serve the uses that would be permitted on the property if it were rezoned;
5. The impact the uses, which would be permitted if the property were rezoned, will have upon the volume of vehicular and pedestrian traffic and traffic safety in the vicinity;
6. Whether the proposed rezoning would correct an error in the application of this article as applied to the subject property;
7. Whether a reasonably viable economic use of the subject property will be precluded if the proposed rezoning is denied; and
8. Information submitted at the public hearing.

ZONING ORDINANCE REQUIREMENTS:

CODE ITEM	REQUIREMENTS FOR R-MD
Minimum Yard Requirements	Front yard: Twenty-five feet along a street classified as a collector or higher classification street or as required by section 36-453, supplemental open space, and yard regulations.
Maximum Height	Thirty-five feet plus one additional foot for each additional two feet of setback provided on each side of the structure up to 75 feet. Above 75 feet, no additional setback is required.
Minimum Open Space	Not less than 20 percent.
Buffering and Landscaping	A Type C bufferyard is required adjacent to property zoned R-SF.

DEVELOPMENT REVIEW STAFF REPORT

COMPATIBILITY WITH COMPREHENSIVE PLAN:

PLACETYPE:

The *Comprehensive Plan's Land Use & Development* chapter identifies the subject property as the Traditional neighborhood placetype. Traditional Neighborhoods are comprised of post-war residential neighborhoods that contain predominantly single-family detached dwellings with uniform setbacks, building designs, and parcel sizes, that are separated from dissimilar uses by distinct zoning boundaries and buffer yards. Housing in Traditional Neighborhoods range from bungalows to expansive ranch style homes constructed with a variety of materials and methods. Neighborhood parks, schools, and churches are dispersed throughout to serve nearby residents. These neighborhoods can follow a gridded block pattern or curvilinear streets and are well connected internally with sidewalks and trails. Traditional Neighborhoods tend to be expansive, isolating residents from services and resources on the edges, often beyond walking distance. Planning for Traditional Neighborhoods should strive to increase and integrate quality of place and complete neighborhood characteristics. These characteristics could include beautification efforts such as planting street trees, expanding connections and access to the greenway and trail system, and support for low-intensity multi-family, low-intensity neighborhood commercial, or a mix of uses to serve area residents. Multi-family, neighborhood commercial, or mixed use should be located on the edges of the greenway system, on higher classification roadways, or areas identified by residents during the neighborhood planning process. Preservation of residential housing and housing patterns should be prioritized where lots are predominately accessed from side or internal local streets.

Redevelopment of traditional single-family residential housing for higher-density housing or commercial should be limited to areas adjacent to identified activity centers, where circulation and access will not negatively affect the adjoining neighborhood.

LAND USES PRIMARY USES

- Single-family detached

SUPPORTING USES

- Single-family attached
- Low-intensity multifamily
- Low-intensity, neighborhood commercial
- Parks, greenways, and open space
- Public and private schools and places of worship
- Low-intensity urban agriculture

CHARACTERISTICS TRANSPORTATION & INFRASTRUCTURE

- Traffic-calming measures, such as speed-humps, bump-outs, roundabouts, landscaped chicanes with integrated stormwater management, and on-street parking are used to slow traffic.

DEVELOPMENT REVIEW STAFF REPORT

- Best management practices for stormwater management are required in development projects and within public rights-of-way, such as permeable paving, rain gardens, green roofs, native landscaping, and other low impact design strategies.
- Sidewalk gaps are filled, and sidewalks connect to transit routes, greenways and trails, and supportive uses are located within the neighborhood and around the perimeter.
- Alleys provide pedestrian connections, alternative access to rear yards, detached garages, and other approved accessory uses. • Sense of place and identity is enhanced through neighborhood organization efforts, preservation and planting trees, neighborhood identification signs, and traffic calming improvements that double as streetscape elements.
- As technology, trends, and funds permit, utilities are buried or are consolidated along rear property lines, reducing conflicts with street trees, pedestrian infrastructure, and viewsheds.
- Major entrances into neighborhoods are marked by identification signs and landscaping.

URBAN DESIGN - BUILDING AND SITE TYPOLOGY

- The main entrances of new residential developments are oriented towards the primary street.
- Preservation and adaptive reuse of neighborhood schools and surplus buildings are encouraged.
- When appropriate, adaptive reuse of residential structures for low-intensity, neighborhood-scale nonresidential uses, including missing middle housing types, is encouraged at neighborhood nodes and along edges.
- Accommodations are made to allow expanded home occupations, without detracting from the character of the neighborhood, being conscious of changing trends and advances in technologies.
- New and infill buildings maintain the proportions and architectural features common in the existing block.
- When commercial buildings are located within or adjacent to the neighborhood, they are oriented to the street, focus on pedestrian-scale, and provide limited vehicle parking.

TRADITIONAL NEIGHBORHOOD

- Residential subdivisions are designed and platted with curvilinear streets in structured layouts that maximize use of land.
- Lots have uniform widths, depths, and setbacks that align with home sizes and densities.
- Attached garages are a standard element, typically integrated into the design of the home and make up a dominant part of the front elevation, reducing the on-street parking demands.
- Vehicular driveways are provided for each home and are accessed almost exclusively from the front or side street, limiting on-street parking opportunities.
- Neighborhoods are often self-regulated by covenants that limit use, size, and design of structures, as well as care and use of private amenities and common areas.

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TRANSITIONS

- A “stepped down” approach is used to transition from higher density/intensity residential and non-residential uses to single-family residential homes and uses, with greater densities/intensities located on higher functioning roadways, at the periphery of the neighborhood.
- Lower density residential uses are sufficiently screened and buffered between higher density housing and nonresidential uses.
- The design of higher density residential uses integrated into the Residential Neighborhood Placetype should complement the scale and character of the surrounding neighborhood. Attention should be given to building height, orientation, architectural style, and setback to ensure the existing neighborhood character is retained.

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FUTURE PLACETYPE MAP:



PLACETYPES	LAND USES														
	Single-Family Detached	Single-Family Attached	Multi-family	Parks & Open Space	Sports Complexes & Recreational Facilities	Urban Agriculture	Office, Hospitality, Retail Sales & Service	Neighborhood Commercial	Major, Artisan & Innovation Spokes	Public & Private Schools & Places of Worship	Universities, Colleges & Vocational Schools	Government, Healthcare & Institutional Facilities	Personal Services, Outdoor Sales & Service	Light Industry	Warehouse & Distribution Facilities
Residential Neighborhood	●	○	◇	○	◇	◇	○								
Mixed Residential	●	●	○	○	◇	◇	○								
Downtown	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Mixed-Use	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
City Corridor	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Institutional & Employment Center	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Business Flex				○	○	○	○	○	○	○	○	○	○	○	○
Industry & Logistics				○	○	○	○	○	○	○	○	○	○	○	○
Urban Green Space & Recreation				○	○	○									

- **Primary Land Use:**
More prominent and play a pivotal role in characterizing that placetype
- **Supporting Land Use:**
Less prevalent and serve to support the primary land use.
- ◇ **Low Intensity Supporting Land Use:**
Less prevalent and serve to support the primary use at neighborhood scale

DEVELOPMENT REVIEW STAFF REPORT

MAJOR THOROUGHFARE MAP:



SURROUNDING ZONING, LAND USES AND PLACETYPES:

	NORTH	SOUTH	EAST	WEST
ZONING	R-SF	R-SF	GR COD 44	R-SF
LAND USE	Single-family homes, duplexes and multi-family apartments	Single-family, Multi-family apartments	Hotel	Single-family homes
PLACETYPES	Traditional neighborhood	Traditional neighborhood	Institutional & Employment Center	Traditional neighborhood

DEPARTMENT OF BUILDING DEVELOPMENT SERVICES:

No comments.

CITY UTILITIES:

No issues

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DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER MANAGEMENT DIVISION:

No issues. Tract has access to public sewer.

FIRE DEPARTMENT:

No objections to rezoning.

DEPARTMENT OF PUBLIC WORKS TRAFFIC ENGINEERING DIVISION:

	Street Name	Street Classification	Jurisdiction	ROW from Centerline (ft.)		Traffic Count (vehicles per day)	On-Street Parking	Sidewalk	
				Required	Existing			Required	Existing
Street 1	E. Cherokee St	Collector	City	30	30	NA	Yes	Yes	No
Street 2	S. Hampton Avenue	Local	City	25	25	NA	Yes	Yes	No

ACCESS - All new or modified driveway approaches shall comply with current City of Springfield standards for the street classification.

TRAILS, BUS STOPS, AND ADDITIONAL INFORMATION - There are no Greenway Trails near the property. There are no bus stops near the property.

IMPROVEMENTS - No improvements are required for this rezoning. A traffic study is not required for this rezoning.

DEPARTMENT OF PUBLIC WORKS STORMWATER ENGINEERING DIVISION:

SITE DESCRIPTION & DRAINAGE PATTERN

The property is in the **South Creek** drainage basin. The property **is not** located in a FEMA designated floodplain. Staff **is not** aware of flooding problems in the local or downstream area. The city **is not** aware of a sinkhole or other Karst feature at this location. The property **does not have a stream buffer on site**.

A fee in lieu of on-site stormwater detention **will not be allowed and detention is required**.

PW Stormwater has no concerns for the proposed change from R-SF to R-MD. Please note that development of the property will be subject to the following conditions at the time of development:

All chapter and section references below are to the City's Flood Control and Water Quality Protection Manual Version April 2022.

DETENTION AND DISCHARGE REQUIREMENTS

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1. Any development or redevelopment that increases runoff, through the increase in impervious surface, current detention requirements must be met per Chapter 3 Sec. 2.3.3. The site plan is showing a detention for flood control along the Northside with discharge to either E Cherokee St or S Hampton Ave.
2. The recent City of Springfield S Hampton Ave Stormwater Improvements project has improved the storm sewer system downstream from this project.

WATER QUALITY REQUIREMENTS

1. The proposed project exhibit is 0.68 acres of total disturbance. Water quality would not be required with less than 1 acre of disturbance.
2. ES-Water Quality will recommend to the developer to save as many mature trees on site as possible before the wrecking permit is approved.

FLOODPLAIN

N/A

NATURAL CHANNEL & STREAM BUFFERS

N/A

SINKHOLES & KARST FEATURES

N/A

ADDITIONAL STORMWATER REQUIREMENTS

1. Stormwater Control Measures are the responsibility of the property owner or property owners' association to maintain, repair, and update unless the agreement is made with the City to operate. Operation and maintenance agreements are required for any permanent stormwater control measures.

STAFF ANALYSIS AND RECOMMENDATION:

1. The applicant is requesting to rezone approximately 0.70 acres of property generally located at 1102, 1106, 1114 & 1120 East Cherokee Street from R-SF, Residential Single-Family to R-MD, Medium Density Multi-Family Residential District with Conditional Overlay District No. 247. The applicant intends to develop a multi-family development.
2. The *Comprehensive Plan's Land Use & Development* chapter identifies the subject property as the Traditional neighborhood placetype. This placetype lists low-intensity multi-family as a supporting land use.
3. The R-MD District is intended to accommodate multi-family developments at densities up to approximately twenty-nine (29) dwelling units per acre. The applicant is requesting a maximum of twenty-one (21) dwelling units per acre. This density has been determined to be appropriate for this area based on an assessment completed under the Revised Multi-Family Development Location and Design Guidelines. That assessment resulted in a density of 21 to 24 dwelling units per acre with the Opportunities and Constraints section. Staff can support an increase in density based upon being adjacent to higher intensity uses, being in

DEVELOPMENT REVIEW STAFF REPORT

a redevelopment area and a physical barrier in the area. Further analysis of the proposed development under the Revised Multi-Family Development Location and Design Guidelines is attached (Attachment 2). The development must be in substantial conformance to the attached site plan (Attachment 4).

4. This application is consistent with the *Comprehensive Plan's Housing and Neighborhoods* chapter which encourages creative housing solutions to add housing diversity and support downsizing households, young professionals, and aging-in-place. The *Plan* encourages the use of "missing middle" housing types. Missing middle housing sits in the middle of the development spectrum between single-family homes and mid-rise to high-rise apartment buildings. These housing types should be integrated into Springfield's existing neighborhoods to increase housing diversity and provide a wider, more equitable range of housing choices.
5. Missing middle housing types provide opportunities for the city to increase the diversity of its housing stock through moderate increases in density, while maintaining the neighborhood character Springfield residents cherish. They range from low density duplexes to mid density multiplexes and triplexes, which can be integrated into the City's housing mix by using single-family lots to accommodate two to three units in a context-sensitive manner.
6. The *Plan* recommends a "stepped down" approach to be used to transition from higher density/intensity residential and non-residential uses to single-family residential homes and uses, with greater densities/intensities located on higher functioning roadways, at the periphery of the neighborhood. The subject property is located on Cherokee Street, classified as a collector roadway and near National Avenue, classified as a primary arterial. Traffic from the proposed development does not have to traverse through a neighborhood to get to a higher classification street.
7. The subject property has access to City Utilities infrastructure, and any necessary extension of such services can be provided via City Utilities' extension policy, though new easements may be necessary to accommodate this.
8. There are few changing conditions in the area affected that make the proposed rezoning necessary. Minor development of property within the vicinity has been occurring.
9. The range of uses in the proposed R-MD district is compatible with the uses permitted on other property in the immediate vicinity. There are duplexes and multi-family developments along the north side of Cherokee Street.
10. There are adequate utility and sewer and water facilities existing or can be provided to serve the uses that would be permitted on the property if it were rezoned.
11. The impact of the uses, which would be permitted if the property were rezoned, is not expected to significantly increase the volume of vehicular and pedestrian traffic or reduce traffic safety in the vicinity.

DEVELOPMENT REVIEW STAFF REPORT

12. The proposed zoning will not correct an error in the application of this article, but rather will provide a viable use of the property subject to the provisions of the zoning district.
13. A reasonably viable economic use of the subject property will not be precluded if the proposed rezoning is denied.

STAFF RECOMMENDATION:

1. Staff recommends approval based on the proposal's general conformance to the Comprehensive Plan's Traditional Neighborhood placetype and on the finding of facts above.

PLANNING AND ZONING OPTIONS:

The planning and zoning commission shall make one of the following recommendations in connection with each proposed change in zoning district classification of this article:

1. Recommend against the proposed change in the zoning district classification.
2. Recommend a change in the zoning district classification.
3. Recommend a change in the zoning district classification together with recommendations which, in the judgment of the planning and zoning commission, will protect adjacent property and ensure that the proposed amendment is consistent with the purpose and intent of this article.

DEVELOPMENT REVIEW STAFF REPORT**ATTACHMENT 1****CONDITIONAL OVERLAY DISTRICT PROVISIONS NO. 247**

The requirements of Section 36-383 of the Springfield Zoning Ordinance shall be modified herein for development within this district to include the following:

1. The maximum density shall be limited to twenty-two (21) dwelling units per acre for a maximum of 14 dwelling units total located within this district.
2. The maximum structure height shall be limited to two (2) stories.
3. A six (6) foot solid, wooden fence shall be required adjacent to property zoned R-SF, Residential Single-family along the south property line.
4. The development of the subject property shall be in substantial conformance to the Revised Multi-Family Location and Design Guidelines and the attached site plan and elevations (Attachment 4).

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ATTACHMENT 2

MULTI-FAMILY DEVELOPMENT LOCATION AND DESIGN GUIDELINE ASSESSMENT

ZONING CASE Z-2-2024 & CONDITIONAL OVERLAY DISTRICT NO. 247

The applicant is requesting approval of a 14-unit multi-family apartments on 0.70 acres of property. According to the Multi-Family Location and Design Assessment Matrix, the proposed development has attained 12 points. This density increase, combined with credits from the Opportunities and Constraints and Assessment Criteria Score, would allow for 21-24 dwelling units per acre (a total of 14 units maximum).

Below is an analysis of the four categories used to calculate the Matrix score.

- A. Land Use Accessibility (2/3 points)
Two points were given for land use accessibility. There is neighborhood retail mix and a hospital within 1/4 mile and employment concentration with a 1/2 mile of the subject property.
- B. Connectivity Analysis (2/5 points)
Two out of a maximum of five points were given for connectivity. The proposed development received scores for its proximity to transit, sidewalks, and roadways.
- C. Road Network Evaluation (1/2 points)
A maximum of one point was given for the road network evaluation.
- D. Design Guidelines (6/6 points)
A maximum of six points were given for design guideline criteria. Below are the design considerations that have been incorporated into the proposed development.
 - 1. Pedestrian Amenities - Pedestrian amenities shall include benches placed near walkways at appropriate locations throughout the development. Lighting sources or luminaries that do not have a cutoff and are used in parking lots and pedestrian ways shall not exceed a maximum of 15 feet in height. Pedestrian-scale lighting shall be provided within the development. Lighting sources or luminaries that do have a cutoff shall not exceed a maximum of 30 feet in height. All lighting shall be glare-free and shielded from the sky and adjacent residential properties and structures, either through external shields or through optics within the fixture. A site lighting and photometric plan shall be submitted conforming to these requirements for building permits.
 - 2. Building Scale and Articulation - Street facing walls that are greater than 50 feet in length shall be articulated at least each 25 feet with bays, projections, or recesses. Articulation means a difference in the vertical plane of the building at least 18 inches or more. This project shall follow the attached site plan and elevations.
 - 3. Building Orientation and Interior Landscaping – All building orientations will address Cherokee Street and Hampton Avenue to receive design points for this

DEVELOPMENT REVIEW STAFF REPORT

element. Landscaping and open spaces shown shall be provided with approved ground cover and/or plantings per required city ordinances and zoning requirements. Landscaping islands with plantings shall be located throughout the parking lot. A landscaping plan shall be submitted conforming to these requirements for building permits.

4. Avoidance of Blank Walls along pedestrian circulation areas - Facades that face public streets or connecting pedestrian frontage that are greater than 25 feet in length shall be subdivided and proportioned using at least one or more of the following features: windows; entrances; arcades; arbors; awnings (over windows or doors), distributed along the façade at least once every 25 feet. This project shall be in conformance with the attached site plan and elevations.
5. Internal Connectivity – Internal sidewalks shall connect internally and to the public sidewalk system in accordance with the attached site plan.
6. Useable Recreational Area/Facility – Benches will be located throughout the common areas providing for useable tenant amenities in accordance with the attached site plan; however, a minimum of 20% usable open space is required.
7. Amenity Calculation – The guidelines do not require amenities for developments under 20 dwelling units.
8. Preservation of Trees –All existing trees of 6” caliper or greater shall be preserved or replaced with 2-inch caliper trees in accordance with the attached site plan and the city ordinance.

DENSITY: The initial assessment criteria resulted in a total of 11 points for a maximum density of 18 to 20 dwelling units per acre. The applicant has requested a density of 21 dwelling units per acre and to allow the additional density under the Opportunity and Constraints section.

Opportunities and Constraints

Although the maximum density based on the multi-family guidelines evaluation recommended 20 dwelling units per acre, additional density can be allowed based on special circumstances as described in the Guidelines Opportunity and Constraints section. Staff can support an increase in density based upon being adjacent to higher intensity uses, supports revitalization goals, and has a physical barrier within ½ mile of the site.

Opportunities and Constraints that apply:

1. How much higher density exists or is planned/approved for area?

DEVELOPMENT REVIEW STAFF REPORT

Staff may consider a recommendation of a higher density than that determined by the matrix calculation when the site is contiguous to higher intensity uses such as higher density multi-family, retail, office, and institutional uses on two or more sides.

The site is situated adjacent on to multi-family to the north, a hotel to the east and an institutional use (Mercy Hospital) with in a ¼ mile of the site.

AFFIDAVIT OF NEIGHBORHOOD NOTIFICATION AND MEETING SUMMARY

Attachment 3

1. Request change to zoning from: R-SF to R-MD
(existing zoning) (proposed zoning)
2. Meeting Date & Time: December 13, 2023; 4-6:30 pm
3. Meeting Location: Fire Station 1 Community Room, 720 E Grand St, Springfield, MO 65807
4. Number of invitations that were sent: 141
5. How the mailing list was generated: City of Springfield
6. Number of neighbors in attendance (attach a sign-in sheet): 8
7. List the verbal comments and how you plan to address any issues:
(City Council does not expect all the issues to be resolved to the neighborhood's satisfaction; however, the developer must explain why the issues cannot be resolved).

See the attached Neighborhood Meeting Summary and comment sheets.

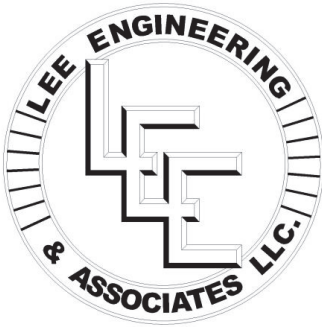
8. List or attach the written comments and how you plan to address any issues:

See the attached Neighborhood Meeting Summary and comment sheets.

I, Martha Middleton (print name), attest that the neighborhood meeting was held on 12/13/2023 (month/date/year), and is at least twenty-one (21) days prior to the Planning and Zoning Commission public hearing and in accordance with the attached "Neighborhood Notification and Meeting Process."

Martha Middleton
Signature of person completing affidavit

Martha Middleton
Printed name of person completing affidavit



LEE ENGINEERING AND ASSOCIATES, L.L.C.

CIVIL ENGINEERING & LAND SURVEYING

1200 E. WOODHURST., SUITE D200, SPRINGFIELD, MO 65804
TELEPHONE: (417) 886-9100 • FACSIMILE: (417) 886-9336 • dlee@leeengineering.biz

May 31, 2024

RE: PLN2023-00296
Z-2-2024 COD 247 - 02.Zoning Map Amendment - 1102 E CHEROKEE ST

Lee Engineering hosted a Neighborhood Meeting on December 13th, 2023 at Fire Station #1 from 4:00-6:30 p.m. to discuss the proposed rezone with the neighborhood.

Below is a summary of the comments we received—both written and verbal—from the neighborhood meeting and how we will address each comment. A copy of this letter will be sent to the City of Springfield Planning Department and the changes will be added to the Conditional Overlay District documents.

Screening:

A bufferyard is required between the proposed development and the adjacent single family residential. The required bufferyard is the City of Springfield bufferyard “C”, which does not require a fence. A fence was specifically requested, and we will be adding a 6’ privacy fence along the south property line as a conditional requirement to the rezoning.

Limit Building Height to Two Stories:

At the request of the neighborhood, the developer has agreed to limit the building height to two stories with a Conditional Overlay. R-SF zoning allows three-story, 45’ max buildings to be constructed, so the developer is agreeing to limit the height below what is even allowed under the existing zoning.

Stormwater:

The project will meet the City of Springfield stormwater requirements, which ensures that flooding/stormwater issues will not be exacerbated by this rezoning. The City of Springfield recently improved stormwater infrastructure along Cherokee Avenue which this development will connect to.

Density:

The existing R-SF zoning allows 7 units/acre. The proposed R-MD zoning would typically allow 29 units/acre. We do not intend to maximize the density in the R-MD zoning. R-LD would only allow 11 total units on the 0.68 acre tract. Our client needs 14 units to make the project economically feasible, which puts the density at 20.59 units per acre. This is a 16% increase from what would be allowed in R-LD (17.78 units/acre) and is necessary to make a small-scale apartment development economically feasible.

Lighting:

A photometric lighting study will be submitted to the City of Springfield to meet the City’s 36-484 Lighting Standards, which regulates lighting spillover and glare.

Traffic:

14 dwelling units will generate a low level of traffic compared to the capacity of Cherokee Ave at this location. The intention is to provide driveway access onto Cherokee Avenue, so the traffic from the development will not be introduced onto the adjacent residential local streets.

Parking:

Parking for these units based on the City of Springfield parking requirements will be provided in a parking lot behind the apartments.

The owner wants to work with the neighborhood and city staff to develop the property in a way that preserves the character of the neighborhood. To summarize, the developer has agreed to the following changes based on city staff and neighborhood comment:

- Provide a 6' privacy fence on the south property line between the proposed development and the R-SF lot
- Limit the building height to two stories

If you have any questions or need additional information, please contact our office. Thank you.

Sincerely,
Daniel Richards





LEE ENGINEERING AND ASSOCIATES, L.L.C.

CIVIL ENGINEERING & DESIGN

1200 E. WOODHURST DR., SUITE D200, SPRINGFIELD, MO 65804
TELEPHONE: (417) 886-9100 • FACSIMILE: (417) 886-9336 • dlee@leeengineering.biz

Jan 11

COMMENT SHEET

Neighborhood Meeting

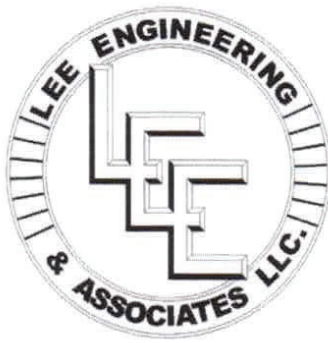
Wednesday, December 13, 2023

Re: Rezone from Single Family Residential to Medium Density Residential
1102-1120 E. Cherokee St.
Springfield, MO 65807

NAME	ADDRESS	PHONE
Joan Blinn Blinn	2012 S. Hampton	417 840 9349

COMMENTS:

1. What are the plans for how water would flow off the property - run off Big concern.*
2. Concerned about how many floors
3. There is an existing fence now - needs a fence - needs a privacy fence 6'
4. I went looking at similar multifamily on Lakota & there is no single family house behind either of them.
5. How much light given off
6. NOT IN FAVOR OF THIS
7. Do the plan at low density



LEE ENGINEERING AND ASSOCIATES, L.L.C.

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COMMENT SHEET

Neighborhood Meeting

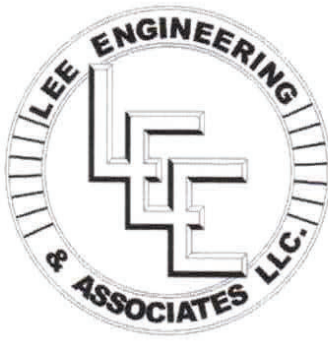
Wednesday, December 13, 2023

Re: Rezone from Single Family Residential to Medium Density Residential ^{< 19 units}
1102-1120 E. Cherokee St.
Springfield, MO 65807

NAME	ADDRESS	PHONE
Greg + Tori Carleton	2055 S. Hampton Ave.	417-315-2789

COMMENTS:

- 1) point me to one apartment building - anywhere - that increases property values. ^{Height}
- 2) apartment buildings will eventually bring crime and drugs and an overall demise to any neighborhood.
- 3) We are not in favor of a rezoning.
- 4) Traffic already exceeds the capacity of the roads Cherokee, National, Sunshine & Seminole.
- 5) Why Medium instead of low density?
- 6) Do not want to have 65807 Crime rate any higher.
- 7) An apartment building will compound density issues we are already experiencing.



LEE ENGINEERING AND ASSOCIATES, L.L.C.

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COMMENT SHEET

Neighborhood Meeting

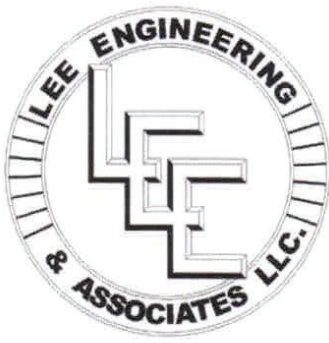
Wednesday, December 13, 2023

Re: Rezone from Single Family Residential to Medium Density Residential
1102-1120 E. Cherokee St.
Springfield, MO 65807

NAME	ADDRESS	PHONE
Sam Franklin	1107 E. CHEROKEE ST.	(417) 409-8420

COMMENTS:

My name is Sam Franklin and I reside at 1107 E. Cherokee. I'm representing the owner, Larry Schmitt. He doesn't have any issue with the rezoning to Medium Density Residential.



LEE ENGINEERING AND ASSOCIATES, L.L.C.

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COMMENT SHEET

Neighborhood Meeting

Wednesday, December 13, 2023

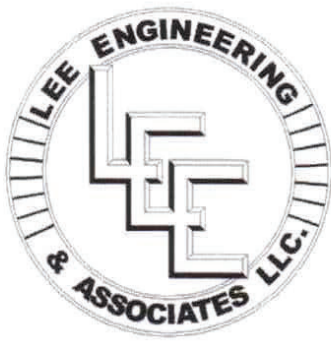
Re: Rezone from Single Family Residential to Medium Density Residential
1102-1120 E. Cherokee St.
Springfield, MO 65807

NAME	ADDRESS	PHONE
Bobbi Ream	1448 E BERKELEY	917 883-3430

COMMENTS: Representing Meadows Park Neighborhood
association -

MPNA would recommend Low Density
with a height limited to 2 story, with
future development in mind RLD
will be much "kinder" to single
family residences that exist

Bobbi Ream



LEE ENGINEERING AND ASSOCIATES, L.L.C.

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COMMENT SHEET

Neighborhood Meeting

Wednesday, December 13, 2023

Re: Rezone from Single Family Residential to Medium Density Residential
1102-1120 E. Cherokee St.
Springfield, MO 65807

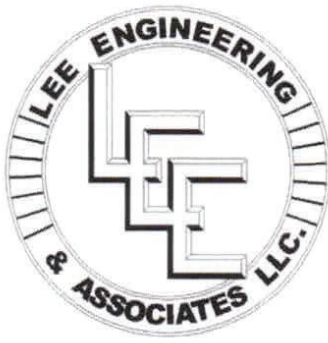
NAME	ADDRESS	PHONE
WILLIAM COOPER	2405 S VIRGINIA AVE	816-289-0485

COMMENTS:

1) WANT to limit to two stories

2) would prefer R-LD versus R-MD

Commenting for Seminole Howard Neighborhood Association.



LEE ENGINEERING AND ASSOCIATES, L.L.C.

CIVIL ENGINEERING & DESIGN

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COMMENT SHEET

Neighborhood Meeting

Wednesday, December 13, 2023

Re: Rezone from Single Family Residential to Medium Density Residential
1102-1120 E. Cherokee St.
Springfield, MO 65807

NAME	ADDRESS	PHONE
Bruce Hibbard	1946 S. Holland	417 848 6001

COMMENTS:

Consider R-LD in lieu of R-MD
2 story Maximum
privacy fence between R-SF / R-MF
Talk to Geminda Holland N.A. about
"where does this density stop"
"long range N.A. - Plan for overlay district"



LEE ENGINEERING AND ASSOCIATES, L.L.C.

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TELEPHONE: (417) 886-9100 • FACSIMILE: (417) 886-9336 • dlee@leeengineering.biz

COMMENT SHEET

Neighborhood Meeting

Wednesday, December 13, 2023

Re: Rezone from Single Family Residential to Medium Density Residential
1102-1120 E. Cherokee St.
Springfield, MO 65807

NAME	ADDRESS	PHONE
Don Underwood	2056 S Hampton	

COMMENTS:

- Concerns about stormwater runoff & effects on new storm water system.
- Would prefer 2 story maximum.
- Would prefer R-LD zoning.



Jan 11

LEE ENGINEERING AND ASSOCIATES, L.L.C.

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COMMENT SHEET

Neighborhood Meeting

Wednesday, December 13, 2023

Re: Rezone from Single Family Residential to Medium Density Residential
1102-1120 E. Cherokee St.
Springfield, MO 65807

NAME	ADDRESS	PHONE
Jennifer Repschleger	2015 S. Hampton Ave Springfield, MO 65807	816-686-3778

COMMENTS:

what are the work hours?

What is the parking situation?

• I have concerns about the privacy/building process invading Hampton Ave. Can we keep the chaos very isolated to the building area? ~~Yes~~

• I want to know if parking will be provided to the tenants or if they will want to utilize street parking? It is important to me that the street stays as clear & quiet as possible.

ZONING REQUIREMENTS:

ALL UTILITIES TO BE PROVIDED BY:
CITY UTILITIES OF SPRINGFIELD
301 E. CENTRAL
SPRINGFIELD, MO 65802
(417)863-3000

PROPOSED SITE AREA: 0.68 AC (29,456 SF)

TOTAL UNITS=14
DENSITY=20.59 UNITS/ACRE

USABLE RECREATIONAL AREA 16.3% (4,800/29,456)
USABLE RECREATIONAL AREA REQUIRED: 13%

ZONING: R-SF
PROPOSED ZONING: R-MD

BICYCLE PARKING PROVIDED: 2
MINIMUM BICYCLE PARKING REQUIRED: 1

PARKING PROVIDED:
*HANDICAP SPACES 2
*STANDARD SPACES 20
TOTAL 22

PARKING REQUIRED:
14 1-BR UNIT (1.5 SP/UNIT) = 21
0 2-BR UNIT (2 SP/UNIT) = 0
0 MICRO EFF UNIT (1 SP/UNIT) = 0
100 BICYCLE PARKING REDUCTION = 2
TOTAL 23

OPEN SPACE: 34% (10,170/29,456)
MINIMUM OPEN SPACE REQUIRED: 20%
IMPERVIOUS SURFACE: 66%
MAXIMUM IMPERVIOUS SURFACE ALLOWED: 80%

PERIMETER LANDSCAPING:
REQUIRED: 10 S.F. OPEN SPACE PER ONE L.F. OF FRONTAGE = XXXX S.F.
PROVIDED: XXXX S.F.

INTERIOR LANDSCAPING:
PERCENTAGE OF PARKING DEVOTED TO LIVING INTERIOR LANDSCAPING: NOT REQUIRED, LESS THAN 30 PARKING SPACES AND LESS THAN 12,000 SQ FT (6-1209 A)

BUILDING SETBACKS:
FRONT 25' (CHEROKEE ST)
REAR 15'
SIDE 15'

BUFFERYARDS:
10' WIDE (NARROW LOT) BUFFERYARD C ALONG SOUTH PROPERTY LINE WHERE PROPERTY ADJUTS R-SF

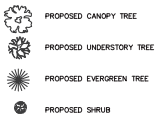
AMENITIES NOTES:

NO AMENITIES ARE REQUIRED TO MEET THE MULTI FAMILY DESIGN OUTLETS SINCE THE NUMBER OF DWELLING IS LESS THAN 20.

BUILDING ARTICULATION AND ELEVATION NOTES:

1. STREET FACING WALLS THAT ARE GREATER THAN 50' IN LENGTH SHALL BE ARTICULATED AT LEAST EVERY 25' WITH BAYS, PROJECTIONS, OR RECESSES.
2. BUILDINGS ADJACENT TO THE STREET SHALL BE SITUATED ON THE SITE TO PROVIDE PEDESTRIAN ACCESS TO THE STREET.
3. FACADES THAT FACE STREETS/PEDESTRIAN FRONTAGE THAT ARE GREATER THAN 20' IN LENGTH SHALL BE SUBDIVIDED AND PROPORTIONED USING AT LEAST ONE OF THE FOLLOWING FEATURES: WINDOW, ENTRANCES, ARCHES, WINDOWS, OR AWNINGS, DISTRIBUTED ALONG THE FACADE AT LEAST ONCE EVERY 25'.

PLANTING LEGEND



LANDSCAPING NOTES:

QUALITY: ALL TREES AND SHRUBS SHALL HAVE WELL-DEVELOPED LEADERS AND TOPS, AND ROOT CHARACTERISTIC OF THE SPECIES, CULTIVAR OR VARIETY AND SHALL SHOW EVIDENCE OF PROPER NURSERY PRUNING. ALL PLANT MATERIALS MUST BE FREE OF INSECTS, DISEASE, MECHANICAL INJURIES AND OTHER OBSTRUCTABLE FEATURES AT THE TIME OF PLANTING.

COVERAGE: GRASS, GROUND COVER, SHRUBS AND OTHER LIVING LANDSCAPE MATERIALS SHALL BE USED TO COVER ALL OPEN GROUND.

TREES SHALL HAVE THE FOLLOWING CHARACTERISTICS:

CANOPY TREES SHALL BE DECIDUOUS TREES THAT HAVE A MINIMUM HEIGHT OF THIRTY FEET AT MATURITY. ALL CANOPY TREES SHALL HAVE A CALIPER WIDTH OF ONE AND ONE HALF INCH AT THE TIME OF PLANTING.

UNDER-STORY TREES SHALL BE DECIDUOUS TREES THAT HAVE A MAXIMUM HEIGHT OF LESS THAN THIRTY FEET AT MATURITY. ALL UNDER-STORY TREES SHALL HAVE A CALIPER WIDTH OF ONE INCH AT TIME OF PLANTING.

ORNAMENTAL TREES SHALL BE FLOWERING DECIDUOUS TREES. ALL ORNAMENTAL TREES SHALL HAVE A CALIPER WIDTH OF ONE INCH AT TIME OF PLANTING.

EVERGREEN OR CONIFER TREES SHALL HAVE A MINIMUM HEIGHT OF TWENTY FEET AT MATURITY. ALL EVERGREEN OR CONIFER TREES SHALL BE AT LEAST SIX FEET HIGH AT TIME OF PLANTING.

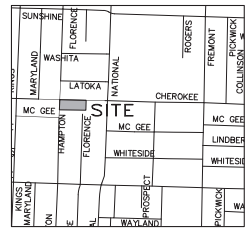
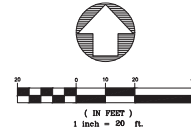
SHRUBS AND HEDGES: SHRUBS SHALL BE A MINIMUM OF 18" IN HEIGHT WHEN MEASURED IMMEDIATELY AFTER PLANTING. HEDGES, WHEN INSTALLED, SHALL BE PLANTED AND MAINTAINED SO AS TO FORM A CONTINUOUS, UNBROKEN, SOLID, VISUAL SCREEN WHICH WILL BE AT LEAST THREE FEET HIGH WITHIN ONE YEAR AFTER TIME OF PLANTING.

INTERIOR LANDSCAPING: THERE SHALL BE 2 UNDERSTORY TREES OR 1 CANOPY TREE PLANTED FOR EVERY 30 PARKING SPACES OR 12,000 SQUARE FEET OF PARKING OR VEHICULAR USE AREA.

PERIMETER LANDSCAPING: THERE SHALL BE ONE CANOPY, ONE UNDERSTORY, ORNAMENTAL OR EVERGREEN TREE AND 4 SHRUBS PER 100 LINEAR FEET. IN AREAS WHERE CANOPY TREES ARE NOT ALLOWED, EACH REQUIRED CANOPY TREE MAY BE REPLACED BY 2 UNDERSTORY, ORNAMENTAL OR EVERGREEN TREES.

ZONING EXHIBIT
CHEROKEE ST MULTIFAMILY

= USEABLE RECREATIONAL AREA



- LEGEND
- FOUND IRON PIN
 - SET IRON PIN OR MARKER AS NOTED
 - △ RW MARKER
 - BOUNDARY LINE
 - EASEMENT LINE
 - SETBACK LINE
 - MEASURED
 - PLAT
 - DEED
 - RECORD
 - LIGHT POLE
 - SANITARY SEWER MANHOLE
 - SANITARY SEWER CLEANOUT
 - SANITARY SEWER LINE
 - UTILITY POLE
 - ELECTRIC METER
 - OVERHEAD ELECTRIC
 - UNDERGROUND ELECTRIC
 - GUY WIRE
 - PHONE/COMMUNICATION MANHOLE
 - PHONE PEDESTAL
 - CABLE TV RISER
 - CABLE TV LINE
 - UNDERGROUND PHONE
 - OVERHEAD PHONE
 - FIBER OPTIC LINE
 - WATER VALVE
 - WATER METER
 - WATER LINE
 - FIRE HYDRANT
 - GAS VALVE
 - GAS METER
 - GAS LINE
 - FENCE LINE (AS NOTED)
 - ROAD SIGN (STOP, SPEED LIMIT, ETC)
- ABBREVIATIONS:
- XFMR TRANSFORMER
 - ICV IRRIGATION CONTROL VALVE
 - CI STORMWATER CURB INLET



ZONING EXHIBIT
CHEROKEE MULTIFAMILY

Missouri State Certificate of Authority
Engineering #2005015504
Land Surveying #2006035505

LEE Engineering & Associates, L.L.C.
1200 E. Woodhurst Dr. Suite D200
Springfield, Missouri 65804
417-886-9100 (phone)
417-886-9336 (fax)
lee@leeengineering.biz
Engineering with Integrity



DATE: 2024-04-12

SHEET: 1 of 1

PROJECT: 2358

FILE: 2358 - 1102 Cherokee - Zoning

LeeE.Lee



EAST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION



WEST ELEVATION



EXPLANATION TO COUNCIL BILL 2024-131 (HOSMER)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Planning and Development

TITLE: A special ordinance authorizing the City of Springfield to dispose of approximately 4.93 acres of property generally located at the 200 block of East Farm Road 192.

PURPOSE: To authorize City Utilities to dispose of approximately 4.93 acres of property generally located at the 200 block of East Farm Road 192. (Planning and Zoning Commission and staff recommend approval.)

BACKGROUND INFORMATION: REQUEST TO DISPOSE #533

City Utilities is proposing to dispose of the property generally located on the south side of the 200 block of East Farm Road 192. The property was acquired for a potential electric substation; however, the demand for this substation never developed.

FINDINGS FOR STAFF RECOMMENDATION:

1. The subject property is outside the city limits of the City of Springfield.
2. The proposed disposal will not adversely affect the operations of City Utilities or the City of Springfield.
3. The property was acquired for a potential electric substation. The demand for this substation never developed.
4. The disposed property will be surplus by sealed bid.

The Planning and Zoning Commission held a public hearing on June 13th, 2024 and recommended approval, by a vote of 8 to 0, of the proposed property disposal on the tract of land described on the attached sheet.

REMARKS: The Planning and Development staff recommends the application be approved (see the attached Development Review Staff Report).

Submitted By: Andrew Menke, Senior Planner

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

- Attachments:**
1. Dispose 533 - 200 Block of East Farm Road 192
 2. Dispose 533_exhA
 3. Dispose 533_exhB

One-rdg. _____
P. Hrngs. _____
Pgs. 12
Filed: 07-02-24

Sponsored by: Hosmer

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-131

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AUTHORIZING the City of Springfield to dispose of approximately 4.93 acres of
2 property generally located at the 200 block of East Farm Road 192.
3
4 _____

5 WHEREAS, the City of Springfield ("City") previously purchased the 4.93 acres of
6 land generally located at the 200 block of East Farm Road 192 (the "Property"), as a
7 potential site for an electric substation under City Utilities; and
8

9 WHEREAS, the anticipated demand for the substation has not developed; and
10

11 WHEREAS, the Property is outside the city limits of the City of Springfield, and
12 disposal of the Property will not adversely affect the daily operations of the City of
13 Springfield or City Utilities; and
14

15 WHEREAS, the Property, if disposed, will be surplus by sealed bid; and
16

17 WHEREAS, the Planning and Zoning Commission recommended approval of the
18 disposal of the Property at its meeting held June 13, 2024; and
19

20 WHEREAS, disposition of real property calls for City Council approval.
21

22 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
23 SPRINGFIELD, MISSOURI, as follows, that:
24

25 Section 1 – City Council hereby approves the disposal of approximately 4.93
26 acres of property generally located at the 200 block of East Farm Road 192, as depicted
27 in "Exhibit B," and more particularly described in "Exhibit A," both of which are attached
28 hereto and incorporated herein by this reference, and grants the Mayor authority to
29 execute those documents necessary to carry out the intent of this Ordinance, provided
30 they are on a form approved by the City Attorney.
31

32 Section 2 – This Ordinance shall be in full force and effect from and after
33 passage.
34

35 Passed at meeting: _____
36 _____
37 Mayor
38
39 Attest: _____, City Clerk
40
41 Filed as Ordinance: _____
42
43
44 Approved as to form: Laura Vales, Assistant City Attorney
45
46
47 Approved for Council Action: Jason A. Hays City Manager

EXHIBIT A
LEGAL DESCRIPTION
REQUEST TO DISPOSE NO. 533

The east 400 feet of that Tract of land described in the Greene County, Missouri Recorder's Office in Book 1927, Page 1658, containing 4.93 acres more or less, being a part of the Southwest Quarter of the Southwest Quarter of Section 25, Township 28 north, Range 22 west, Greene County, Missouri.

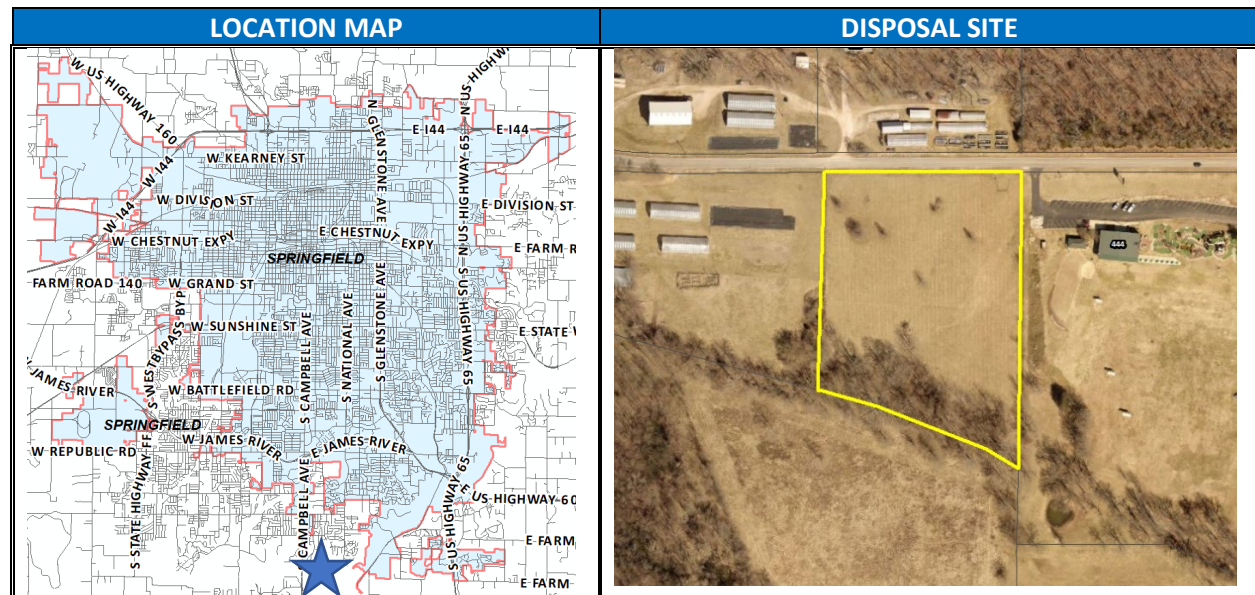
DEVELOPMENT REVIEW STAFF REPORT

PROJECT INFORMATION

Case Number:	Request to Dispose 533
Location:	200 blk of East Farm Road 192 (south side)
Total Acres:	4.93 acres
Applicant:	City Utilities
Existing Land Use:	Undeveloped
Planning and Zoning Commission:	June 13, 2024
City Council:	July 8, 2024
Staff:	Andrew Menke, Senior Planner
Staff recommendation:	Staff recommends approval
Proposed motion:	Move to approve as submitted in the staff report. (All commission motions are made in the affirmative.)
Required Vote:	A majority of those present (5 members are a quorum).

PROJECT SUMMARY:

City Utilities is proposing to dispose of the property generally located on the south side of the 200 block of East Farm Road 192. The property was acquired for a potential electric substation; however, the demand for this substation never developed.



DEVELOPMENT REVIEW STAFF REPORT

GOOGLE AERIAL OF LANDMARKS, BUSINESSES, AND ATTRACTIONS:



GOOGLE MAPS STREET VIEW:



DEVELOPMENT REVIEW STAFF REPORT

PLANNING AND ZONING COMMISSION AUTHORITY:

Sec. 11.7. - Legal status of master plan.

- (1) Master plan to provide general guidelines. The master plan shall be prepared and maintained as a general guide for the orderly and efficient development and redevelopment of the City of Springfield. The master plan shall be kept current through review not less than every five years. When required by this Charter or otherwise deemed necessary, such review shall include proposed revisions or alterations in the master plan and public hearings thereon.
- (2) Regulations to generally conform to master plan. All rezoning of land, subdivision plats, development proposals, and the zoning ordinance, subdivision ordinance and the zoning map should generally conform with the guidelines set forth in the master plan and should be reviewed for consistency with the master plan; provided, however, inconsistencies with the master plan shall not constitute cause to invalidate any such matter. The master plan shall not have the effect of a regulatory ordinance.
- (3) Master plan to guide public improvements. The master plan shall provide guidelines for the location of public streets, parks and other public ways, grounds and spaces, public buildings and structures, facilities of public or private utilities, and the acquisition of real property by the city for public use. To that end the planning and zoning commission shall review the following:
 - (a) All proposals to construct or extend public streets.
 - (b) All proposals to improve land as a park.
 - (c) All proposals to lay out or improve other public ways, grounds or spaces.
 - (d) All proposals to construct public buildings and structures.
 - (e) All proposals to lay out and construct facilities of public utilities, whether publicly or privately owned.
 - (f) All proposals to acquire real property for public purposes.

In reviewing and approving all such proposals, the function of the planning and zoning commission shall be to determine whether they are generally consistent with the master plan of the city. No such proposals shall be constructed or authorized until the location, extent and character thereof has been submitted and approved by the planning and zoning commission.

In case of disapproval, the commission shall communicate its reasons to the city council, and the city council, by vote of not less than two-thirds of its entire membership, may overrule the disapproval and, upon the overruling, the city council or the appropriate board or officer may proceed, except that if the proposal is by an agency other than an agency of the city and the authorization or financing does not fall within the province of the city council, then the submission to the planning commission shall be by the agency having jurisdiction, and the planning commission's disapproval may be overruled by that agency by a vote of not less than two-thirds of its entire membership. The acceptance, widening, removal, extension, relocation, narrowing, vacation, abandonment, change of use, acquisition of land, sale or lease of any street or other public facility is subject to similar submission and approval, and the failure to approve may be similarly overruled.

DEVELOPMENT REVIEW STAFF REPORT

In the event the commission shall fail to act within thirty days after the date of official submission of a proposal (which date shall be the date that the matter is placed upon the agenda of the commission) to the commission, then the proposal shall be deemed to have been approved by the commission, unless a longer period for review by the commission shall have been authorized by the council or by the public officials submitting the proposal. In any case in which the commission finds that it is not reasonably able to complete its review of a proposal within thirty days, it may extend the time for such review for not more than thirty days.

SURROUNDING ZONING, LAND USES AND PLACETYPES:

	NORTH	SOUTH	EAST	WEST
ZONING	County R-1	County R-1	County PAD	County PAD
LAND USE	Nursery	Undeveloped	Mini golf course	Nursery
PLACETYPES	Traditional Neighborhood	Traditional Neighborhood	Traditional Neighborhood	Traditional Neighborhood

LAND DISPOSAL POLICY:

Planning and Zoning Commission adopted the following policy statement for land disposals by public bodies:

1. Where is the property located?

Approximately 1000 feet east of Highway 160 on Farm Road 192.

2. Legal description.

See last section of staff report.

3. Why doesn't City Utilities need the property anymore?

The need for a substation in that area never arose.

4. When was the current building erected?

No buildings on the property.

5. Why was property acquired? What did City Utilities originally intend to do with the property?

The property was acquired for a potential electric substation. The demand for this substation never developed.

6. Who will purchase property?

It will be surplus by sealed bid.

DEVELOPMENT REVIEW STAFF REPORT

STAFF ANALYSIS AND RECOMMENDATION:

1. The subject property is outside the city limits of the City of Springfield.
2. The proposed disposal will not adversely affect the operations of City Utilities or the City of Springfield.
3. The property was acquired for a potential electric substation. The demand for this substation never developed.
4. The disposed property will be surplus by sealed bid.

STAFF RECOMMENDATION:

1. Staff recommends approval based on the findings of fact above.

PLANNING AND ZONING OPTIONS:

1. Recommend that the request to dispose is determined to be generally consistent with the master plan (Comprehensive Plan Forward SGF).
2. Recommend that the request to dispose is determined to be not consistent with the master plan (Comprehensive Plan Forward SGF).

DEVELOPMENT REVIEW STAFF REPORT

LEGAL DESCRIPTION:

The east 400 feet of that Tract of land described in the Greene County, Missouri Recorder's Office in Book 1927, Page 1658, containing 4.93 acres more or less, being a part of the Southwest Quarter of the Southwest Quarter of Section 25, Township 28 north, Range 22 west, Greene County, Missouri.





EXPLANATION TO COUNCIL BILL 2024-132 (JENSON)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Planning and Development

TITLE: A special ordinance authorizing the Director of Planning and Development to accept the dedication of public streets and easements to the City of Springfield, Missouri, as shown on the Preliminary Plat of Campbell Acres Phase II, generally located at 3505 and 3525 South Campbell Avenue and 3446 South Main Avenue, upon the applicant filing and recording a final plat that substantially conforms to the preliminary plat; authorizing the City Clerk to sign the final plat upon compliance with all the terms of this Ordinance; and approving the Planning and Zoning Commission's grant of two subdivision variances.

PURPOSE: Authorizing the Director of Planning and Development to accept the dedication of public streets and easements to the City of Springfield, Missouri, as shown on the Preliminary Plat of Campbell Acres Phase II, generally located at 3505 & 3525 South Campbell Avenue and 3446 South Main Avenue upon the applicant filing and recording a final plat that substantially conforms to the preliminary plat; authorizing the City Clerk to sign the final plat upon compliance with all the terms of this Ordinance; and concurring with the Planning and Zoning Commission's grant of two subdivision variances. (Staff recommends that City Council accept the public streets and easements.)

BACKGROUND INFORMATION:

A. An original Preliminary Plat of Campbell Acres Phase II dated April 24th, 2024, is on file in the Department of Planning and Development. A reduced version of which is included for general reference in "Exhibit B, Attachment 3."

B. The Planning and Zoning Commission held a public hearing on June 13th, 2024, and approved the Preliminary Plat and two subdivision variances by a vote of 8 to 0, subject to the following conditions:

1. All improvements shall be constructed in accordance with the "Design Standards for Public Improvements" of the Public Works Department and the maintenance and operation of such improvements shall be the responsibility of the developers unless approved by the Director of Public Works. All required sanitary sewer, street, sidewalk, and drainage plans shall be prepared in accordance with City standards and specifications and approved by the Director of Public Works.
2. All required street rights-of-way, drainage and utility easements and limitations of access shall be dedicated on the final plat.

3. The developer shall meet all city and state erosion control regulations prior to disturbing the soil.

4. It is determined that the public interest requires assurance concerning adequate maintenance of common space areas and improvements. The restrictive covenants, rules and bylaws creating the common ownership must therefore provide that if the owners of the Property Owners Association shall fail to maintain the common areas or improvements in reasonable order and condition in accordance with the approved plans, the City may, after notice and hearing, maintain the same and assess the costs against the units or lots, per the Common Open Space and Common Improvement Regulations section of the Zoning Ordinance.

5. The developer shall be responsible for the relocation costs of any existing utility services and shall be responsible for clearing all utility easements of trees, brush, and overhanging tree limbs.

6. All other requirements which are necessary for this subdivision to be in compliance with the Subdivision Regulations.

All required improvements shall be the sole responsibility of the sub-divider. As prescribed by Section 36-233 of the Subdivision Regulations, the improvements shall be made or guaranteed by means of bond, escrow agreement, letter of credit or other appropriate security agreement. Release of the final plat for recording shall be withheld until the sub-divider has complied with this section.

Section 36-226 of the Subdivision Regulations requires that a final plat be submitted within two years of City Council's acceptance of the public streets and easements.

Attached for Council information is a sketch showing the location of the plat area, an exhibit showing the proposed plat, and a copy of the Planning and Development Department staff report to the Planning and Zoning Commission.

The Comprehensive Plan's Land Use & Development chapter groups this area into the City Corridor Placetype. This placetype predominantly consists of commercial and service-related development varying in scale, ranging from standalone businesses to large retail centers. City Corridors are also key locations to support and encourage multi-family developments that rely on proximity to retail, commercial services, and employment centers. Each of these use groups are best located along major roadways with high volumes of traffic. This placetype is not only highly accessible by car, but also by walking, biking, and transit. City Corridors provide a wide range of shopping, service, entertainment, and employment destinations for both residents and visitors. Common uses within the placetype include chain restaurants, gas stations, hotels, national retailers, movie theaters, smaller offices, and a variety of support services. City Corridors contribute significantly to Springfield's economy and local tax base with a regional customer draw. City Corridors are locations of significant redevelopment

opportunity, where absorption of underserved housing, employment, sales, and service, can be accommodated. Underutilized properties may be redeveloped into higher density multifamily or mixed-use developments where appropriate to increase activity within the placetype. (p. 46, Chapter 5: Land Use & Development)

The proposed plat is supported by the City Corridor objective of seeking out underutilized property for redevelopment. The existing lots fronting on Campbell Avenue are already developed and there is no immediate need for the vacant land on the rear side of these lots. Reconfiguring the lots gives the vacant land direct access to Main Avenue. This provides opportunity for future development of the site, whether it be one large development or further subdivided to allow for multiple uses.

REMARKS: Staff recommends approval.

Submitted By: Andrew Menke, Senior Planner

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Attachments:

1. PPlat of Campbell Acres Phase II _ord
2. PPlat Campbell Acres Phase II_exhA
3. PPlat Campbell Acres Phase II_exhB

One-rdg. _____
P. Hrngs. _____
Pgs. _____
Filed: 07-02-24

Sponsored by: Jenson

First Reading: _____ Second Reading: _____

COUNCIL BILL 2024-132 SPECIAL ORDINANCE _____

AN ORDINANCE

AUTHORIZING the Director of Planning and Development to accept the dedication of public streets and easements to the City of Springfield, Missouri, as shown on the Preliminary Plat of Campbell Acres Phase II, generally located at 3505 and 3525 South Campbell Avenue and 3446 South Main Avenue, upon the applicant filing and recording a final plat that substantially conforms to the preliminary plat; authorizing the City Clerk to sign the final plat upon compliance with all the terms of this Ordinance; and approving the Planning and Zoning Commission’s grant of two subdivision variances.

WHEREAS, an original Preliminary Plat of Cambell Acres Phase II, dated April 24, 2024, is on file with the City’s Department of Planning and Development; and

WHEREAS, the Planning and Zoning Commission of the City of Springfield, Missouri, held a public hearing and conditionally approved the Preliminary Plat of Campbell Acres Phase II, which is generally located at 3505 and 3525 South Campbell Avenue and 3446 South Main Avenue, on June 13, 2024, a copy of the Record of Proceedings from said public hearing being attached hereto and incorporated herein by this reference as “Exhibit A”; and

WHEREAS, a request for two subdivision variances was filed concurrently with the Preliminary Plat, pursuant to City Code section 36-206; and

WHEREAS, the Planning and Zoning Commission approved the requested subdivision variances and City Council hereby concurs with said subdivision variances.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SPRINGFIELD, MISSOURI, as follows, that:

Section 1 – City Council hereby authorizes the Director of Planning and Development, on behalf of the City of Springfield, to accept the land, easements, and improvements dedicated to the City, as shown on the Preliminary Plat of Campbell

Acres Phase II, which is generally located at 3505 and 3525 South Campbell Avenue and 3446 South Main Avenue, as approved by the Planning and Zoning Commission. The original plat of Campbell Acres Phase II is on file in the Department of Planning and Development ("Approved Preliminary Plat"), a reduced version of which is attached hereto for general reference as "Exhibit B –Attachment 4." All of "Exhibit B," including attachments, is incorporated herein by this reference.

Section 2 – The Director of Planning and Development shall be authorized to accept the land, easements, and improvements dedicated to the City, as shown on said plat, upon the applicant filing and recording a final plat in accordance with this Ordinance and the Subdivision Regulations of the City, which final plat shall substantially conform to the Approved Preliminary Plat, including those conditions described in "Exhibit B – Attachment 2," and upon the Director of Public Works certifying to the Director of Planning and Development and the City Clerk that the public improvements have been made in accordance with City standards and specifications. Said public improvements shall not be accepted until the occurrence of all conditions referenced herein and in "Exhibit B – Attachment 2."

Section 3 – The final plat shall not be recorded until: (1) the public improvements relating to the Approved Preliminary Plat have been constructed according to the specifications of the City of Springfield, Missouri, and are approved by the Director of Public Works, and all engineering fees, permit fees, licenses, and other fees occasioned by or in connection with the construction of said improvements have been paid to the City; or (2) in lieu of the construction of the improvements, that the Applicant has filed with the City Manager, according to the terms of the Subdivision Regulations of the City, the prescribed financial assurances in a form acceptable to the City to ensure the construction of the improvements and the payment to the City of all engineering fees, permit fees, licenses, and other fees occasioned by, or which will be occasioned by, the construction of the improvements.

Section 4 – Upon compliance with all the requirements of this Ordinance, including the conditions described in "Exhibit B – Attachment 2," the City Clerk is hereby authorized to endorse City Council's approval upon the final plat pursuant to Section 445.030, RSMo., and such endorsement shall constitute the acceptance of the Public Improvements contained therein.

Section 5 – City Council hereby approves the Planning and Zoning Commission's grant, under City Code section 36-206, of two subdivision variances for Campbell Acres Phase II, as shown in "Exhibit 3 – Attachment 3."

Section 6 – This Ordinance shall be in full force and effect from and after its passage.

Passed at meeting: _____

80 _____
81 Mayor
82

83 Attest: _____, City Clerk
84

85 Filed as Ordinance: _____
86

87
88 Approved as to form: _____, Assistant City Attorney
89

90
91 Approved for Council action: _____, City Manager

EXHIBIT A
RECORD OF PROCEEDINGS
Planning and Zoning Commission – June 13, 2024

Preliminary Plat of Campbell Acres Phase II
3505 & 3525 South Campbell Avenue and 3446 South Main Avenue
Applicant: Westport Management, LLC

Mr. Menke stated that this is a request to approve a preliminary plat for a 3-lot subdivision and approve variances from Sections 36-243(2) & (3) and 36-251(4) of the Subdivision Regulations.

The variance shall expire, and the existing access shall be removed at the time any of the following occur:

- a. Any change in use from a retail automotive dealership or any addition of any use type added to the property which is not generally consistent and customary with that of other retail automotive dealerships.
- b. The property redevelops to a material degree requiring a change in access and/or significant traffic flow changes warranting a new site plan. Any redevelopment of the property whereby the use remains as a retail automotive dealership, but a site plan is required by the city (i.e., any building SF addition under the 40% requirement referenced below) shall not trigger this clause.
- c. Any future subdivision activity or lot adjustments to the property.
- d. Any building construction for 3505 S. Campbell Avenue increasing the square footage of the current building residing on the property (as of the date of this variance) more than 40 percent.
- e. Any modification to the access not consisting of routine maintenance or pavement sealing.

Mr. Knuckles asked if this was to be a gated community and any plans for rezoning to multifamily in the future.

Mr. Scott asked if the location of the property line between the buildings on lots two and three was existing. Mr. Menke confirmed it is an existing property line.

Mr. Daniel Richards, 1200 East Woodhurst Drive, Suite D200 representing the developer said main purpose of the plat is to take the unused, undeveloped land behind the KIA and Nissan dealership and create one parcel and not adding any additional lots, just reconfiguring the lot lines.

The first variance will preserve the main entrance into the Nissan service center; however, it is nonconforming, but has been in place for approximately 50 years and the conditions are not changing the use of the building. The second variance is for the extension of Main Street so we are not landlocking any parcels and if the access point is shared it would force retail traffic through currently zoned residential (planned for a future gated multifamily residential development).

Mr. Pauly asked about information for sidewalks along south Main for walkability and Mr. Richards stated that he will mention that to the developer for possible consideration.

Mr. Knuckles again mentioned his concern if this will not be a gated community, and Mr. Richards noted that the property is split zoned and they plan to clean up the zoning, but at this time the developer is not ready to commit to multifamily zoning.

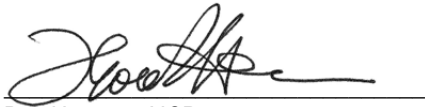
Mr. Colony asked if the developer knows how many units they are planning, and Mr. Richards noted that the best answer would be what is in the fire code regulations on the number of units.

Commission members asked for the assurances that would trigger the variances/exceptions. Staff noted there is a system hold in the program that would apply when someone applied for any type of permit. Concerns were also stated for the one access and asking for conditions on any possible rezoning and why the variances did not go through the Board of Adjustment process. Staff explained that Board of Adjustment is for zoning, and this is a subdivision project therefore it does not go in front the of Board of Adjustment.

Ms. Broekhoven closed the public hearing.

COMMISSION ACTION:

Planning and Zoning Commission Board Member Colony moved to approve Preliminary Plat of Campbell Acres Phase II, Commissioner Knuckles seconded the motion. It **Passed** with the following vote. Ayes: Commissioner Broekhoven, Commissioner Gunther, Commissioner Pauly, Commissioner Scott, Commissioner Ridge, Commissioner Colony, Commissioner Knuckles, Commissioner Lebeck. Nays: None. Absent: Commissioner Doennig. Abstain: None.

A handwritten signature in black ink, appearing to read 'Bob Hosmer', written over a horizontal line.

Bob Hosmer, AICP
Planning Manager

PROJECT INFORMATION

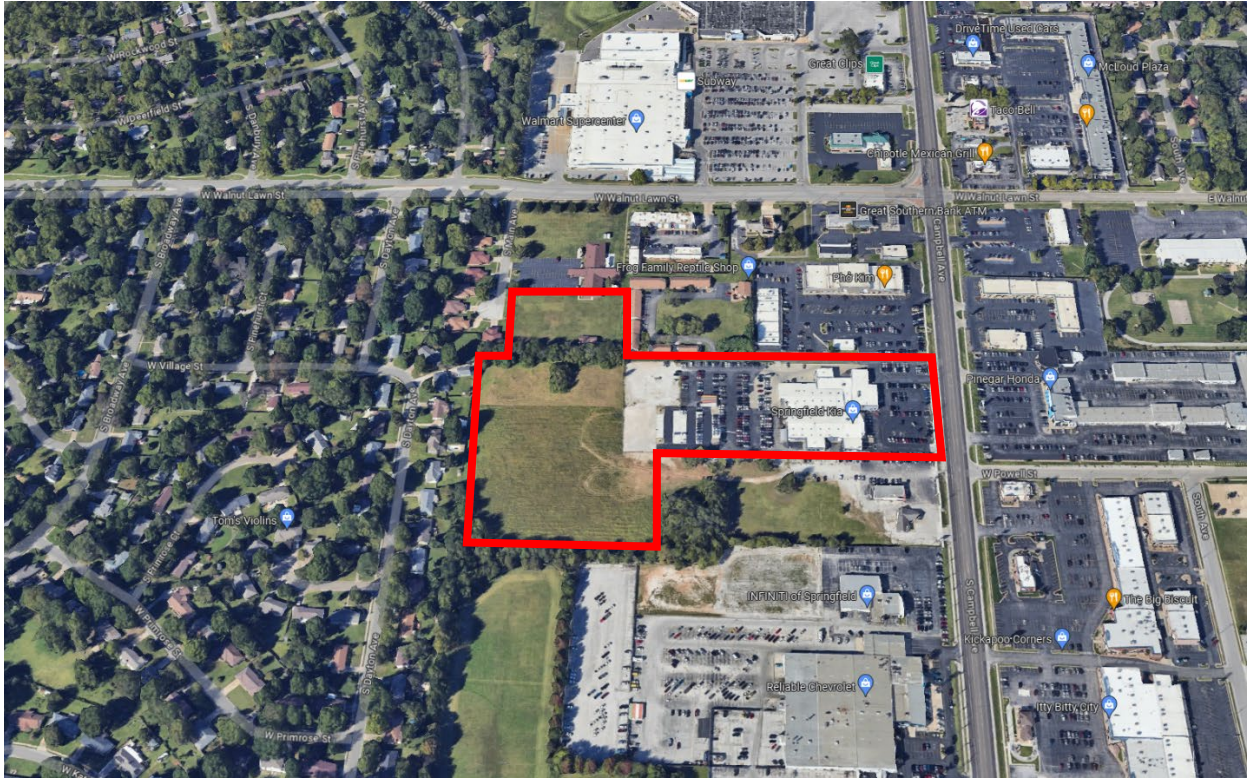
PROJECT SUMMARY:

- 1) Sections 36-243(2) & (3) of the Subdivision Regulations to allow for subdivision activity without providing a continuation of existing streets in adjoining areas or making provisions for the proper projection of streets in unsubdivided adjoining areas.
- 2) Section 36-251(4) of the Subdivision Regulations to allow for subdivision activity without closing an existing driveway on the proposed Lot 2.

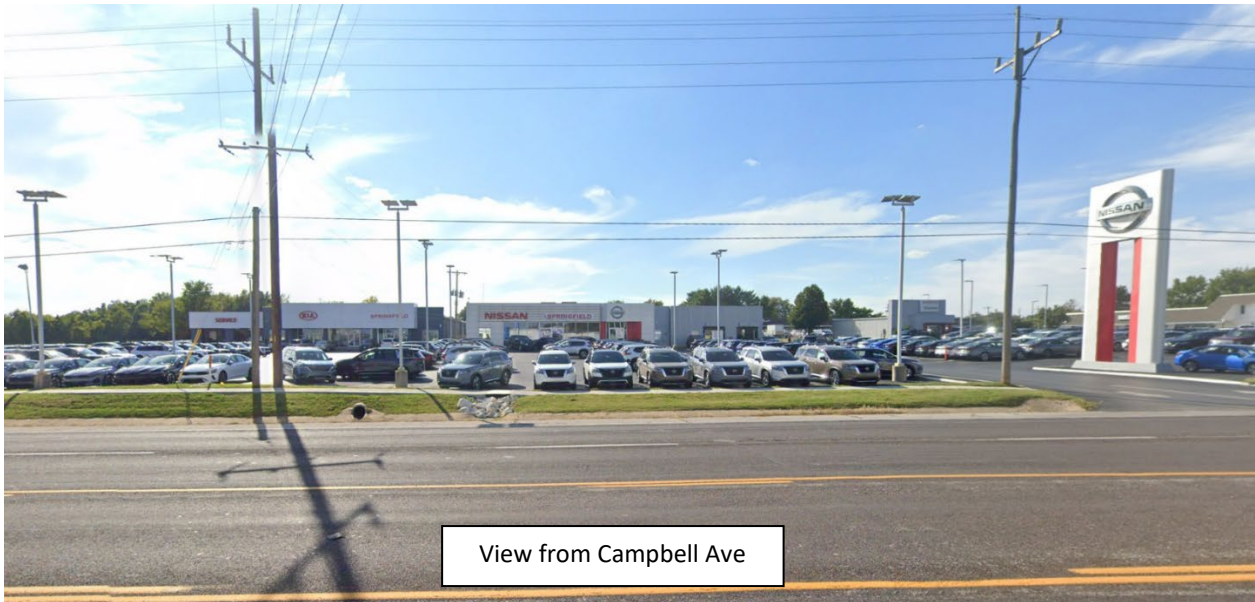


DEVELOPMENT REVIEW STAFF REPORT

GOOGLE AERIAL OF LANDMARKS, BUSINESSES, AND ATTRACTIONS:



GOOGLE MAPS STREET VIEW:



DEVELOPMENT REVIEW STAFF REPORT



PROPERTY HISTORY:

The subject property was annexed into the city on December 31, 1967. The adjacent stretch of Main Avenue was dedicated as part of Lam Subdivision in 1978. Lot 3 and the south half of Lot 1 of the proposed subdivision were first platted as Lot 1 of Campbell Acres, which was recorded at the Greene County Recorder's Office on April 3, 2023.

At the time of the 1995 citywide remapping, the first 800 feet west of Campbell Avenue was zoned Highway Commercial and the remaining area within the subject property was zoned Residential Townhouse. In 2006, an additional 180 feet of the south half of the proposed Lot 1 was rezoned to Highway Commercial. The north half of the proposed Lot 1 was approved for rezoning to Medium-Density Multifamily Residential with Conditional Overlay District #131 in 2017, but failed to meet a condition of the rezoning within two years of City Council approval. This rendered the rezoning void.

PLANNING AND ZONING COMMISSION AUTHORITY:

Sec. 36-226. - Major subdivision review procedure.

(3) Preliminary plat.

- (a) After participating in the pre-subdivision review with city staff, the subdivider may prepare a preliminary plat, together with supplementary material as prescribed in section 36-263.
- (b) Copies of the preliminary plat and supplementary materials specified, together with a fee for administrative handling and processing in the amount prescribed by ordinance, shall be submitted to the director of planning and development with written application for approval. Upon determination that the application is complete, the director shall place the application on the agenda of the commission at a regular meeting not later than the second such meeting following the date of the filing of the application.

DEVELOPMENT REVIEW STAFF REPORT

- (c) The commission shall hold a public hearing on the preliminary plat. Notice of the public hearing shall be made in accordance with city ordinance and the rules of the commission.
- (d) The commission shall review the preliminary plat and supporting material, recommendations from agencies or officials, and testimony and exhibits submitted at the public hearing. The commission shall approve, conditionally approve or disapprove the preliminary plat and if approved, the commission shall express its approval and state the conditions of such approval, if any, or if disapproved, shall express its disapproval and its reasons, therefore. In any case, a notation of the action taken, and the reasons, therefore, shall be entered in the records of the commission.
- (e) If approved by the commission or approved with conditions acceptable to the applicant, then the director of planning and development shall forward the preliminary plat to the city council for its approval. Council shall determine if the land or easement proposed to be dedicated by the applicant for public use or if the public improvements shall be accepted by the city. If the city council determines that the location of the land to be dedicated for public use or the location of public improvements is appropriate and complies with applicable ordinances then the city council shall authorize the acceptance of the dedication of the land or easements upon the applicant filing and recording a final plat which substantially conforms to the preliminary plat and shall authorize the acceptance of the public improvements upon the director of public works certifying to the director of planning and development and the city clerk that the public improvements have been made in accordance with city standards and specifications.
- (f) If approved with modifications which are not acceptable to the applicant or if disapproved, the director of planning and development shall attach to the plat a statement of reasons for such action and return it to the subdivider.
- (g) Actions by the commission regarding the preliminary plat are final unless such action is appealed by the subdivider to the city council within 90 days of the action by the commission.
- (h) Effective period of preliminary approval.
 - 1. The approval of a preliminary plat shall be effective for a period of two years. The application for final plat approval must be submitted to the department of planning and development within the two-year period. Any plat not submitted within the two-year limit shall be null and void except as provided in subparagraph 2. below.
 - 2. The planning and zoning commission may at its discretion and upon application by the subdivider extend the effective period of preliminary approval by two years, one time. All other submittals shall be considered a new preliminary plat and subject to applicable reviews.

Sec. 36-206. - Variances.

- (1) *General.* Deviations from and exceptions to the standards and procedures of this article may be granted by the city council, the planning commission or the director of planning and development, as set forth herein only if such deviations and exceptions conform to the following conditions and procedures. Such deviations and exceptions are referred to, for purposes of this article, as variances relative to zoning and other ordinances and codes effective in the City of Springfield. No application for preliminary plat which would create conditions requiring a variance or exception from zoning standards or other ordinances or

DEVELOPMENT REVIEW STAFF REPORT

codes by the board of adjustment, shall be submitted to the planning and zoning commission unless and until the applicant's request for variance or exception shall have been first submitted to and approved by the board of adjustment.

- (2) *Purpose and intent.* It is the purpose and intent of this variance procedure to provide relief from unusual hardship, inequitable construction procedures, design requirements which may be impractical and other conditions which occur with a specific parcel of land but do not occur in the normal subdivision process.
- (3) *Conditions of variance approval.* No variance shall be granted unless it is found that:
 - (a) There are special and unusual circumstances affecting said property such that the strict application of the provisions of this article would deprive the owner of the reasonable use of his land and is not the mere grant of a privilege; and
 - (b) The variance is necessary for the preservation and enjoyment of a substantial property right of the owner; and
 - (c) The granting of the variance would not be detrimental to the public safety, convenience or welfare or be injurious to other property in the vicinity.
- (4) *Recording required.* When a variance from these regulations has been approved, the details of such variance shall be recorded in the office of the Recorder of Deeds of Greene County. No such variance shall be recorded, however, until a 30-day period shall have passed during which time said variance may be challenged in a court of competent jurisdiction.
- (5) *Authority to grant variances.*
 - (a) The planning commission shall be empowered to grant variances with respect to the improvements and the design standards relative to lot dimensions and arrangements, street location, alignment, the location, and alignment of easements, building lines and similar standards.
 - (b) City council shall review requests for variances only upon an appeal by an applicant from a denial of a request by the commission and only upon the written record made before the commission.
- (6) *Procedure.*
 - (a) Variances shall be reviewed in accordance with one of the two following procedures:
 1. Requests for variances may be submitted concurrently with the preliminary plat or final plat if it is a minor subdivision. The applications for variance shall be made on forms provided by the director and shall state precisely the provisions from which variance is requested along with the reasons therefor. Such variance application shall be reviewed and acted upon concurrently with the preliminary plat or final plat if a minor subdivision.
 2. Requests for variances independent of plat review shall be permitted if the applicant can show good cause why such request was not made at the time of the preliminary plat and shall be submitted on forms provided by the director along with a fee for administrative processing in the amount prescribed by ordinance. Such application shall be submitted to the commission.

DEVELOPMENT REVIEW STAFF REPORT

3. Within 30 days after commission has acted on a variance, the city council may, by vote of council, elect to conduct independent review of any variances considered by the commission and may grant, reverse, modify or affirm the decision of the commission based on the provisions of this article and procedures for granting variances.

ZONING ORDINANCE REQUIREMENTS:

CODE ITEM	REQUIREMENTS FOR HIGHWAY COMMERCIAL
Minimum lot dimension requirements	36 feet of frontage along a public street
Maximum structure height	None, except that all structures shall remain below a 30-degree bulk plane as measured from the boundary of any R-SF or R-TH district.
Front yard setback	15 feet along local streets 25 feet along Collector streets or higher
Side and rear yard setback	None, except as required by section 36-453, supplemental open space and yard regulations, and the buffer yard requirements in subsection 36-422(8)
Street Classification	S Campbell Avenue – Primary Arterial S Main Avenue – Residential Local
Sidewalks	Along the property frontage of S Campbell Avenue there are existing sidewalks and sidewalks are required. There are no sidewalks along the property frontage of S Main Avenue, and none are required.
Open Space Requirements	Not less than 20 percent of the gross site area.

CODE ITEM	REQUIREMENTS FOR RESIDENTIAL TOWNHOUSE
Minimum lot dimension requirements	- Single-family detached dwellings and residential group homes: 5,000 square feet - Duplexes: 7,500 square feet. - Each single-family semi-detached dwelling on a separate platted lot: 3,750 square feet. - Each townhouse on a separate platted lot: a. End lots: 4,000 square feet b. Interior lots: 3,000 square feet - All other uses: 7,500 square feet
Maximum structure height	- When side yards are less than 15 feet in width: 35 feet or two and one-half stories above the finished grade. - When side yards are 15 feet in width or greater: 45 feet or three stories above the finished grade.
Front yard setback	15 feet along local streets 25 feet along Collector streets or higher
Side yard setback	- Townhouses: Six feet or as required by section 36-453, supplemental open space and yard regulations, provided that no side yard is required for a townhouse or attached single-family dwelling when a common wall is located on the lot line. - All other uses: Five feet.

DEVELOPMENT REVIEW STAFF REPORT

Rear yard setback	Ten percent of the lot depth but may not be less than ten feet nor will more than 20 feet be required.
Street Classification	S Campbell Avenue – Primary Arterial S Main Avenue – Residential Local
Sidewalks	Along the property frontage of S Campbell Avenue there are existing sidewalks and sidewalks are required. There are no sidewalks along the property frontage of S Main Avenue, and none are required.
Open Space Requirements	Not less than 20 percent of the total lot area.

COMPATIBILITY WITH COMPREHENSIVE PLAN:

PLACETYPE: CITY CORRIDOR

The *Comprehensive Plan's Land Use & Development* chapter groups this area into the City Corridor Placetype. This placetype predominantly consists of commercial and service-related development varying in scale, ranging from standalone businesses to large retail centers. City Corridors are also key locations to support and encourage multi-family developments that rely on proximity to retail, commercial services, and employment centers. Each of these use groups are best located along major roadways with high volumes of traffic. This placetype is not only highly accessible by car, but also by walking, biking, and transit. City Corridors provide a wide range of shopping, service, entertainment, and employment destinations for both residents and visitors. Common uses within the placetype include chain restaurants, gas stations, hotels, national retailers, movie theaters, smaller offices, and a variety of support services. City Corridors contribute significantly to Springfield's economy and local tax base with a regional customer draw. City Corridors are locations of significant redevelopment opportunity, where absorption of underserved housing, employment, sales, and service, can be accommodated. Underutilized properties may be redeveloped into higher density multifamily or mixed-use developments where appropriate to increase activity within the placetype. (p. 46, *Chapter 5: Land Use & Development*)

The proposed plat is supported by the City Corridor objective of seeking out underutilized property for redevelopment. The existing lots fronting on Campbell Avenue are already developed and there is no immediate need for the vacant land on the rear side of these lots. Reconfiguring the lots gives the vacant land direct access to Main Avenue. This provides opportunity for future development of the site, whether it be one large development or further subdivided to allow for multiple uses.

DEVELOPMENT REVIEW STAFF REPORT

MAJOR THOROUGHFARE MAP:



SURROUNDING ZONING, LAND USES AND PLACETYPES:

	NORTH	SOUTH	EAST	WEST
ZONING	R-TH, R-MD, & GR	R-TH & HC	HC	R-TH & R-SF
LAND USE	Church, Residential, & Commercial	Undeveloped & Vacant Commercial	Commercial	Residential
PLACETYPES	City Corridor	City Corridor	City Corridor	Traditional Neighborhood

DEVELOPMENT REVIEW STAFF REPORT

STAFF ANALYSIS AND RECOMMENDATION:

1. The applicant is proposing to subdivide approximately 16.7 acres into a three (3) lot subdivision named "Campbell Acres Phase II".
2. The applicant is requesting two subdivision variances.
3. The applicant is requesting a subdivision variance to vary from Sections 36-243(2) & (3) of the Subdivision Regulations to allow for subdivision activity without providing a continuation of existing streets in adjoining areas or making provisions for the proper projection of streets in adjoining areas not subdivided.
 - a. The north portion of the proposed plat and the adjacent land to the south are unplatted. Application of these Subdivision Regulations requires Main Avenue to extend south to the adjacent unplatted area. Potential future connections could then be made to Campbell Avenue or Swan Street.
4. The applicant is requesting a subdivision variance to vary from Section 36-251(4) of the Subdivision Regulations. The requested variance is for allowing an access point on the proposed Lot 2 to remain:
 - a. Section 36-251(4) of the Subdivision Regulations requires a minimum distance of 200 feet from edge of driveway to edge of driveway. The driveway on Lot 2 is roughly 40 feet from the access drive to the north. Tracts less than 250 feet wide must either share common access or take access from a local or collector street. The proposed Lots 2 & 3 are 150 feet wide and 180 feet wide, respectively. Based on these requirements, no direct access would be allowed for Lot 2.
 - b. The variance shall expire, and the existing access shall be removed to the satisfaction of the Director of Public Works and made to comply with existing City Code and Subdivision Regulations valid at the time any of the following occur:
 - i. Any change in use from a retail automotive dealership or any addition of any use type added to the property which is not generally consistent and customary with that of other retail automotive dealerships.
 - ii. The property redevelops to a material degree requiring a change in access and/or significant traffic flow changes warranting a new site plan. Any redevelopment of the property whereby the use remains as a retail automotive dealership, but a site plan is required by the city (i.e., any building SF addition under the 40% requirement referenced below) shall not trigger this clause.
 - iii. Any future subdivision activity or lot adjustments to the property.
 - iv. Any building construction for 3505 S. Campbell Ave increasing the square footage of the current building residing on the property (as of the date of this variance) more than 40 percent.

DEVELOPMENT REVIEW STAFF REPORT

- v. Any modification to the access not consisting of routine maintenance or pavement sealing.

The access shall be removed, or the cost of the removal held by securities (escrow) with the City prior to issuance of any permits triggering removal of the access as noted herein.

5. A response from the applicant in the variance approval criteria (**Attachment 3**) indicates plans for a multifamily development on Lot 1. This use is not permitted by the existing zoning and a rezoning will be required to develop the proposed lot in this manner.
6. All lots meet the minimum dimension requirements of the City's subdivision regulations, the Highway Commercial District, and the Residential Townhouse District.
7. If Planning and Zoning Commission approves the preliminary plat, then the plat will be forwarded to City Council for acceptance of public streets and easements. An approved preliminary plat is active for two (2) years.
8. The proposed preliminary plat was reviewed by City departments and comments are contained in **Attachment 1**. Conditions of Approval are provided in **Attachment 2**. Variance approval criteria is provided in **Attachment 3**. The Preliminary Plat drawing can be found in **Attachment 4**. Letters submitted by the applicant, requesting a subdivision variance, are included as **Attachment 5**.

STAFF RECOMMENDATION:

1. Staff does not provide a recommendation on variance requests; however, the proposed conditions will go into effect if approved.
2. The proposed subdivision is consistent with the *Land Use and Development Element of the Comprehensive Plan*, the Highway Commercial District, and the Residential Townhouse District and all proposed lots meet the subdivision regulations, except for the proposed variances from Section 36-251(4) and Sections 36-243(2) & (3).
3. Staff recommends approval of the preliminary plat with conditions.

PLANNING AND ZONING COMMISSION OPTIONS:

The commission shall review the preliminary plat and supporting material, recommendations from agencies or officials, and testimony and exhibits submitted at the public hearing.

1. The commission shall conditionally approve the preliminary plat with the variances.
2. The commission shall conditionally approve the preliminary plat with modifications that do not include one or both variances.
3. The commission shall disapprove the preliminary plat.

DEVELOPMENT REVIEW STAFF REPORT

PUBLIC NOTIFICATION AND COMMENTS:

The property was posted by the applicant at least 10 days prior to the public hearing. No comments were received by citizens for this case at the time of publication.

DEPARTMENT COMMENTS:

ATTACHMENT 1

1. AT&T:

Did not respond in allotted review time.

2. CITY UTILITIES:

Approved.

3. DEPARTMENT OF PUBLIC WORKS CONSTRUCTION INSPECTION DIVISION:

Approved.

4. DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER MANAGEMENT DIVISION:

Plat is approvable. Variance has no impact on public sewer.

5. FIRE DEPARTMENT:

All development shall comply with the currently adopted Fire Code.

6. DEPARTMENT OF PUBLIC WORKS STORMWATER ENGINEERING DIVISION:

The Driveway Variance does not affect PW-Stormwater requirements.

Site Description and Drainage Pattern

Combined plat area drains primarily to the southeast and should discharge to S Campbell Ave ROW. Some existing detention or water quality Stormwater Control Measures are present on Lot 2 only. The property is in both the **Ward Branch and Inman Creek** drainage basins. The property **is not** located in a FEMA designated floodplain. Staff **is not** aware of flooding problems in the local or downstream area. The city **is not** aware of a sinkhole or other Karst feature at this location. The property **does not have a stream buffer on site.**

A fee in lieu of on-site stormwater detention **will not be allowed, and detention is required.**

Please note that development of the property will be subject to the following conditions at the time of development:

All chapter and section references below are to the City's Flood Control and Water Quality Protection Manual Version April 2022.

Detention and Discharge Requirements

DEVELOPMENT REVIEW STAFF REPORT

1. Any development or redevelopment that increases runoff, through the increase in impervious surface, current detention requirements must be met per Chapter 3 Sec. 2.3.3. Detention is required at time of development for each lot.
2. Any shared or regional detention Stormwater Control Measures will require a Public Improvement Project.
3. Existing Stormwater Control Measures need a drainage easement recorded.

Water Quality Requirements

1. Water Quality is required for new development projects or redevelopment projects, with new or increased impervious surfacing, within the city limits of Springfield that disturb 1 acre or greater. Including projects less than 1 acre that are part of a larger common plan of development or sale that will disturb 1 or more acres over the life of the project. Chapter 10 Sec. 2.0.
2. A land disturbance permit will be required with disturbing 1 acre or greater per Chapter 4 Section 5 of the City's Flood Control and Water Quality Protection Manual.
3. Water Quality Credits are available to use in design for preserved trees and new planted trees. Landscaping and Bufferyard trees required by planning cannot be used for the water quality credits unless it is part of a SCM. Chapter 10, Section 3.1.

Floodplain

N/A

Natural Channels and Stream Buffers

N/A

Sinkholes and Karst Features

1. No Sinkholes are present or mapped on the proposed subdivision's lots. The entire subdivision is in the Sinkhole Watershed of Sinkhole S116 located 4017 S Campbell Ave. The watershed requires the property to provide detention for flood control of the sinkhole.

Additional Stormwater Requirements

1. Stormwater Control Measures are the responsibility of the property owner or property owners' association to maintain, repair, and update unless the agreement is made with the City to operate. Operation and maintenance agreements are required for any permanent stormwater control measures.
7. DEPARTMENT OF PUBLIC WORKS TRANSPORTATION ENGINEERING RIGHT-OF-WAY DIVISION:

Approved.

DEVELOPMENT REVIEW STAFF REPORT

8. DEPARTMENT OF PUBLIC WORKS TRAFFIC ENGINEERING DIVISION:

Access

All access to the development shall be per current City of Springfield standards for the street classification unless the following subdivision variance is approved by the Planning and Zoning Commission:

A Subdivision Variance is allowed for the existing access on Campbell Ave. for 3505 S. Campbell Ave. to remain in its current state. The variance shall expire, and the existing access shall be removed to the reasonable satisfaction of the Director of Public Works and made to comply with existing City Code and Subdivision regulations valid at such time should any of the following occur:

- Any change in use from a retail automotive dealership or any addition of any use type added to the property which is not generally consistent and customary with that of other retail automotive dealerships.
- The property redevelops to a material degree requiring a change in access and/or significant traffic flow changes warranting a new site plan. Any redevelopment of the property whereby the use remains as a retail automotive dealership, but a site plan is required by the city (i.e., any building SF addition under the 40% requirement referenced below) shall not trigger this clause.
- Any future subdivision activity or lot size adjustments to the property.
- Any building construction for 3505 S. Campbell Ave increasing the square footage of the current building residing on the property (as of the date of this variance) more than 40 percent.
- Any modification to the access not consisting of routine maintenance or pavement sealing.

The access shall be removed, or the cost of the removal held by securities (escrow) with the City prior to issuance of any permits triggering removal of the access as noted herein.

Trails, Bus Stops, And Additional Information

There are no Greenway Trails near the property. There are two (2) bus stops near the property.

Improvements

No improvements are required for this preliminary plat. A traffic study may be required at the time of development.

	Street Name	Street Classification	Jurisdiction	ROW from Centerline (ft.)		Traffic Count (vehicles per day)	On-Street Parking	Sidewalk	
				Required	Existing			Required	Existing
Street 1	S. Campbell Avenue	Primary Arterial	City	50	60	41,126	No	Yes	Yes
Street 2	S. Main Avenue	Local	City	25	25	NA	Yes	No	No

DEVELOPMENT REVIEW STAFF REPORT

CONDITIONS FOR APPROVAL:

ATTACHMENT 2

Staff recommends the Planning and Zoning Commission approve the Preliminary Plat, with the conditions listed below:

1. All improvements shall be constructed in accordance with the "Design Standards for Public Improvements" of the Public Works Department and the maintenance and operation of such improvements shall be the responsibility of the developers unless approved by the Director of Public Works. All required sanitary sewer, street, sidewalk, and drainage plans shall be prepared in accordance with City standards and specifications and approved by the Director of Public Works.
2. All required street rights-of-way, drainage and utility easements and limitations of access shall be dedicated on the final plat.
3. The developer shall meet all city and state erosion control regulations prior to disturbing the soil.
4. It is determined that the public interest requires assurance concerning adequate maintenance of common space areas and improvements. The restrictive covenants, rules and bylaws creating the common ownership must therefore provide that if the owners of the Property Owners Association shall fail to maintain the common areas or improvements in reasonable order and condition in accordance with the approved plans, the City may, after notice and hearing, maintain the same and assess the costs against the units or lots, per the Common Open Space and Common Improvement Regulations section of the Zoning Ordinance.
5. The developer shall be responsible for the relocation costs of any existing utility services and shall be responsible for clearing all utility easements of trees, brush, and overhanging tree limbs.
6. All other requirements which are necessary for this subdivision to be in compliance with the Subdivision Regulations except sections 36-243(2) & (3) and 36-251(4) as varied by Commission.

If the request is recommended for denial by the Commission and the applicant requests City Council consideration, all the above conditions, plus any amendments made by the Planning and Zoning Commission, shall be included in the Council Bill.

DEVELOPMENT REVIEW STAFF REPORT

VARIANCE APPROVAL CRITERIA:

ATTACHMENT 3

Sections 36-243(2) & (3) of the Subdivision Regulations states in part: No variance shall be granted unless it is found that;	Applicant's Response
There are special and unusual circumstances affecting said property such that the strict application of the provisions of this Article would deprive the owner of the reasonable use of his land and is not the mere granting of a privilege;	This is a unique subdivision. The subdivision regulations are generally intended to provide access to lots which are being subdivided into multiple lots, necessitating road extensions or access easements to ensure proper access after subdivision occurs. For this subdivision, we are actually combining all the undeveloped area into one large lot (Lot 1) without creating any additional lots across the 16.73 acres. Our subdivision is necessary to create a single, usable lot between the car dealerships and the existing residential single family to the west. Our intent is to increase the size of an existing large lot that fronts S. Main Street, not to create new lots that landlock adjoining lots. The land we are subdividing is in a fully developed area with all adjoining lots having access to public streets. The adjacent lot to the south was developed as a car dealership before 1980 and currently utilizes the green space behind the dealership for a buffer to the residential uses to the west. Historical aerials show that over the years the car dealership has expanded their retail operation to the west multiple times. This property is not landlocked and has several access points onto the public street system. The only access point that Lot 1 has to the public street system is to Main St, and it is not reasonable in this instance to interpret sections 36-243 (2,3) to mean that this property needs to share its only access point with the adjoining property.
The variance is necessary for the preservation and enjoyment of a substantial property right of the owner, and	It is the developer's intent that Lot 1 of Campbell Acres- Phase 2 be developed as multifamily housing with gated access to secure the development. We would not be able to gate the housing development and the security of the housing development would be compromised if access must be provided through the property. Our intent to provide a private multi-family development on Lot 1 would no longer be desirable if adjoining retail land could drive through the private residential parking lots to access Main Street.

DEVELOPMENT REVIEW STAFF REPORT

The granting of the variance would not be detrimental to the public safety, convenience or welfare or be injurious to other property in the vicinity.

The property to the south already has multiple access point to Campbell and multiple access points to W Swan Ct; therefore, it should not need additional access to Main St. There are no public safety or welfare concerns with this variance.

Sections 36-251(4) of the Subdivision Regulations states in part: No variance shall be granted unless it is found that;	Applicant's Response
There are special and unusual circumstances affecting said property such that the strict application of the provisions of this Article would deprive the owner of the reasonable use of his land and is not the mere granting of a privilege;	The entrance for 3505 S Campbell Ave is the lot's primary access point onto Campbell Ave and is directly aligned with the Nissan dealership's service center. The entrance location is existing and has been in place for over 50 years. The owner of the Nissan dealership has stated that direct access onto Campbell Ave is critical for his business and for the ability of his customers to use the service station. Closing this entrance would reduce the business and deprive the owner of the ability to operate the dealership and service center to its current extent.
The variance is necessary for the preservation and enjoyment of a substantial property right of the owner, and	If the subdivision regulations and design standards are applied to the existing property, the owner would lose his primary entrance/exit point for the dealership. The existing entrance is a wide commercial entrance that was constructed for customers to comfortably pull off Campbell Ave directly into the dealership to use the service center or purchase a vehicle. The facility was designed around this entrance location, and the entrance is necessary for the preservation of the owner's current use of the property.
The granting of the variance would not be detrimental to the public safety, convenience or welfare or be injurious to other property in the vicinity.	The entrance has been in place for over 50 years. Since this is an existing entrance, granting the variance will simply allow the entrance to remain—it will not be creating a safety concern. Since the driveway entrance has been in use for a significant period, local drivers are already accustomed to its presence and have adapted their driving behavior accordingly. Removing or relocating the entrance could introduce confusion and disruption to the traffic flow, potentially leading to safety hazards during the adjustment period. Since there are limited alternatives to this entrance, removing this entrance could force traffic to use the secondary entrance to the north that is shared with another property. This

DEVELOPMENT REVIEW STAFF REPORT

entrance is too narrow and does not meet the city's minimum driveway width, which creates a safety issue for vehicles as they would need to decelerate to a slower speed than is typical when turning into a business.

There have been several meetings with the city's traffic and planning department to determine acceptable conditions for granting the variance for the entrance location. These conditions, noted on the plat, are as follows:

A Subdivision Variance is allowed for the existing access on Campbell Ave. for 3505 S. Campbell Ave. to remain in its current state. The variance shall expire, and the existing access shall be removed to the reasonable satisfaction of the Director of Public Works and made to comply with existing City Code and Subdivision regulations valid at such time should any of the following occur:

- *Any change in use from a retail automotive dealership or any addition of any use type added to the property which is not generally consistent and customary with that of other retail automotive dealerships.*
- *The property redevelops to a material degree requiring a change in access and/or significant traffic flow changes warranting a new site plan. Any redevelopment of the property whereby the use remains as a retail automotive dealership, but a site plan is required by the city (i.e., any bldg. SF addition under the 40% requirement referenced below) shall not trigger this clause.*
- *Any future subdivision activity or lot size adjustments to the property*
- *Any building construction for 3505 S. Campbell Ave increasing the square footage of the current building residing on the property (as*

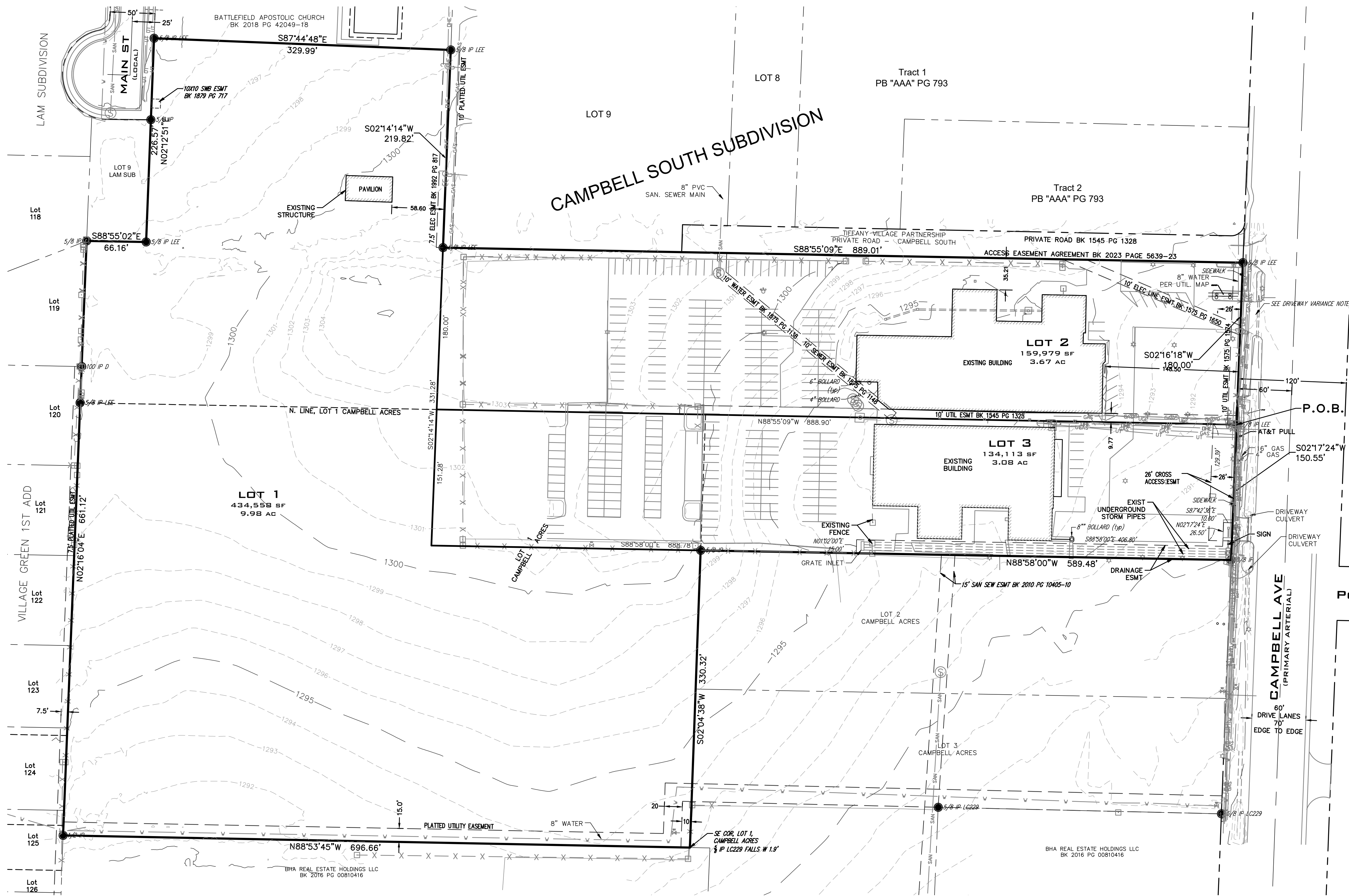
DEVELOPMENT REVIEW STAFF REPORT

of the date of this variance) more than 40 percent.

- *Any modification to the access not consisting of routine maintenance or pavement sealing.*

The access shall be removed, or the cost of the removal held by securities (escrow) with the City prior to issuance of any permits triggering removal of the access as noted herein.

CAMPBELL ACRES PHASE 2

A PRELIMINARY PLAT BEING PART OF THE
NE/4, NE/4, SECTION 11, T28N R22WOWNER/DEVELOPER:
WESTPORT MANAGEMENT LLC
3980 EAST EAGLECLIFFE DRIVE
SPRINGFIELD, MO 65809

SURVEY NOTES -

Accuracy Standard: Type Urban Property

SOURCE OF TITLE: Book 2003 Page 002940-03
Book 2018 Page 038283-18
Book 2023 Page 010774-23
Book 2023 Page 010775-23

The utilities shown were compiled from existing mapping from city services, field locates, and from other mapping/plans such as highway plans. The utilities shown are only to the extent of the available mapping and may not represent all utilities on site. Any particular areas that become of concern during design/planning should be researched further. All buried utilities shown are approximate only.

SURVEYOR'S CERTIFICATE:

Know all men by these presents:

That I, Don Ray Berry, do hereby certify that this plat was prepared under my supervision from actual surveys of the land herein described, prepared and signed by me dated October 21, 2021 and April 20, 2023 and that the corner monuments and lot corner pins shown herein were placed under my personal supervision in accordance with the Missouri Standards for Property Boundary Surveys and Section 410.5 of the Subdivision Regulations, Article II, of the City of Springfield, Greene County, Missouri.

Signature

Don R. Berry, PLS, Missouri L.S. No. 2004017829

Date prepared

April 24, 2024

LEGEND

- FOUND IRON PIN
- SET IRON PIN OR MARKER AS NOTED
- △ R/W MARKER
- BOUNDARY LINE
- - - R/W LINE
- - - EASEMENT LINE
- - - SETBACK LINE
- (M) MEASURED
- (P) PLAT
- (D) DEED
- (R) RECORD
- ☆ LIGHT POLE
- ✉ MAILBOX
- ⊙ SANITARY SEWER MANHOLE
- ⊙ SANITARY SEWER CLEANOUT
- ⊙ SANITARY SEWER LINE
- ⊙ UTILITY POLE
- ⊙ ELECTRIC METER
- ⊙ OVERHEAD ELECTRIC
- ⊙ UNDERGROUND ELECTRIC

GUY WIRE

- PHONE/COMMUNICATION MANHOLE
- PHONE PEDESTAL
- CABLE TV RISER
- CABLE TV LINE
- UNDERGROUND PHONE
- OVERHEAD PHONE
- FIBER OPTIC LINE
- WATER VALVE
- WATER METER
- WATER LINE
- FIRE HYDRANT
- GAS VALVE
- GAS METER
- GAS LINE
- FENCE LINE (AS NOTED)

ROAD SIGN (STOP, SPEED LIMIT, ETC)

ABBREVIATIONS:

- XFMR TRANSFORMER
- ICV IRRIGATION CONTROL VALVE
- CI STORMWATER CURB INLET

STORMWATER NOTES -

- Detention will be provided on each lot at the time of development.
- The area shown hereon is not located in a storm sewer district as of the date of recording and may be subject to future assessment cost if included in future storm water benefit district deemed necessary resulting from problems created by surface water runoff. This is due to the fact that the surface water runoff is presently being accommodated by street and open drainage facilities.
- All Common Areas shall be considered drainage easements. All Common Areas are to be maintained by the property owner's association. All drainage easements are to be maintained by the property owner.
- No fences, plantings, or obstructions other than mailboxes are permitted within the limits of any drainage easement, unless the drainage is enclosed in a below grade conduit. At no time shall permanent structures be allowed in the easement.

SANITARY SEWER NOTES:

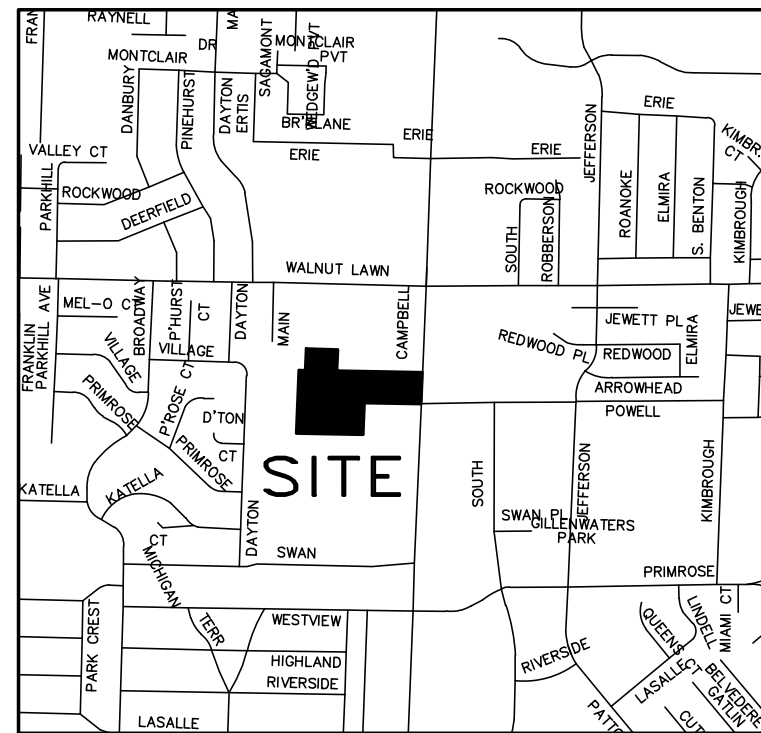
- 3525 S Campbell was issued a special sewer connection permit in 1985 and is served by a private lateral.
- A portion of proposed Lot 1 and the West Half of proposed Lots 2 & 3 are not in a sewer district. Any building constructed in this area may require a special connection agreement or public improvements to be served by public sewer.

VARIANCE - DRIVEWAY

Subdivision Variance is allowed for the existing access on Campbell Ave. for 3505 S. Campbell Ave. to remain in its current state. The variance shall expire and the existing access shall be removed to the reasonable satisfaction of the Director of Public Works and made to comply with existing City Code and Subdivision regulations valid at such time should any of the following occur:

- Any change in use from a retail automotive dealership or any addition of any use type added to the property which is not generally consistent and customary with that of other retail automotive dealerships.
- The property redevelops to a material degree requiring a change in access and/or significant traffic flow changes warranting a new site plan. Any redevelopment of the property whereby the use remains as a retail automotive dealership, but a site plan is required by the city (i.e. any bldg SF addition under the 40% requirement referenced below) shall not trigger this clause.
- Any future subdivision activity or lot size adjustments to the property
- Any building construction for 3505 S. Campbell Ave increasing the square footage of the current building residing on the property (as of the date of this variance) more than 40 percent
- Any modification to the access not consisting of routine maintenance or pavement sealing

The access shall be removed or the cost of the removal held by securities (escrow) with the City prior to issuance of any permits triggering removal of the access as noted herein.

VICINITY MAP
NOT TO SCALE

GENERAL NOTES:

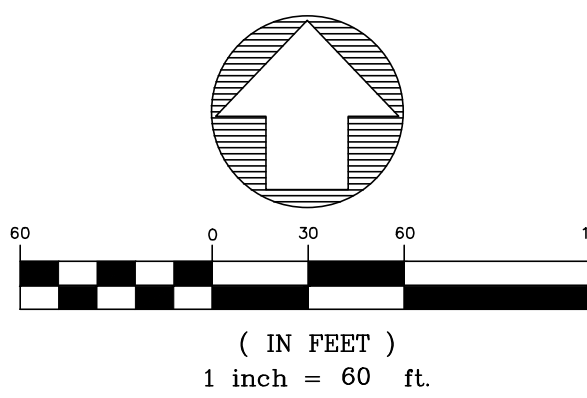
DATE OF PREPARATION: MARCH 27, 2024

TOTAL ACREAGE: 16.73 ACRES
CURRENT ZONING: HC (EAST) & R-TH (WEST)
TOTAL LOTS: 3SMALLEST LOT: 134,113 SF - 3.08 AC (LOT 3)
LARGEST LOT: 434,558 SF - 9.98 AC (LOT 1)

SETBACKS WILL BE DETERMINED BY THE ZONING IN EFFECT AT THE TIME OF DEVELOPMENT.

VARIANCE - STREET EXTENSION

A Subdivision Variance is allowed that will allow Main Street to maintain its current location and configuration and not be extended South through Lot One.



BASIS OF BEARINGS:

BEARINGS ARE GRID NORTH BASED ON THE MISSOURI STATE PLANE COORDINATE SYSTEM OF 1983, CENTRAL ZONE VIA GPS TIES TO THE MODOT VRN NETWORK

FLOOD NOTE:

THIS PROPERTY LIES IN FLOOD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO FIRM COMMUNITY PANEL 29077C0343E, EFFECTIVE DECEMBER 17, 2010.

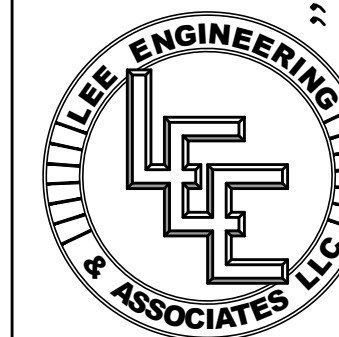
SURVEY DESCRIPTION -

All that part of the Northeast Quarter of the Northeast Quarter of Section 11, Township 28 North, Range 22 West, City of Springfield, Greene County, Missouri and that part of Campbell Acres, a subdivision recorded in Plat Book "AAA" Page 889 of the Greene County Deed Records, and being more particularly described as follows: BEGINNING at an existing iron pin at the Northeast corner of Lot One of Campbell Acres, a recorded subdivision in the City of Springfield, Greene County, Missouri, said pin also lying on the West right-of-way line of Campbell Avenue; thence, South 02°17'24" West, along and with said West line, a distance of 150.55 feet to an existing iron pin between Lots One and Two of said Campbell Acres; thence, North 88°58'00" West, along and with the line between said Lots One and Two, a distance of 589.48 feet to an existing iron pin between Lots One and Two; thence, South 02°04'38" West, along and with the East line of said Lot One, a distance of 330.32 feet to an existing iron pin at the Southeasterly corner of said Lot One; thence, North 89°53'45" West, along and with the South line of said Lot One, a distance of 696.66 feet to an existing iron pin at the Southwest corner of said Lot One; thence, North 02°16'04" East, along and with the West line of said Lot One and its Northerly extension, said line also being the East line of Village Green First Addition, a distance of 661.12 feet to an existing iron pin at the Northeast corner of Lot 119 of said Village Green First Addition, also being the Southwest corner of Lot Nine of Lam Subdivision, both being recorded subdivisions in the City of Springfield, Greene County, Missouri, per the respective recorded plats thereof; thence, South 88°55'02" East, along and with the South line of said Lot Nine, a distance of 66.16 feet to an existing iron pin at the Southeast corner of said Lot Nine; thence, North 02°12'51" East, along and with the East line of said Lot Nine and the East right-of-way line of Main Street, a distance of 226.57 feet to an existing iron pin; thence, South 87°44'48" East, leaving said East line, a distance of 329.99 feet to the West line of Lot Nine of Campbell South, a recorded subdivision in the City of Springfield, Greene County, Missouri, per the recorded plat thereof; thence, South 02°14'14" West, along and with said West line, a distance of 219.82 feet to the Southwest corner of said Lot Nine; thence, South 88°55'09" East, along and with the South line of said Campbell South subdivision, a distance of 889.01 feet to an existing iron pin at the Southeast corner of said subdivision, said point lying on the West right-of-way line of Campbell Avenue; thence, South 02°16'18" West, along and with said West line, a distance of 180.00 feet to the POINT OF BEGINNING, containing 16.73 acres more or less and being subject to easements, restrictions and rights-of-way, if any.

Preliminary Plat
for

CAMPBELL ACRES PHASE 2

SPRINGFIELD, GREENE COUNTY, MISSOURI

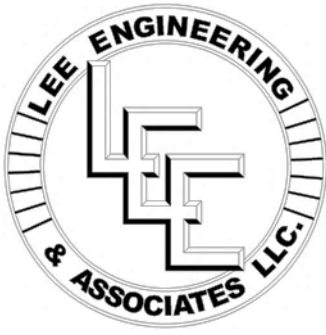
Missouri State Certificate of Authority
Engineering #2005015504
Land Surveying #2009028050LEE Engineering & Associates, L.L.C.
1200 E. Woodhurst Dr., Suite D200
Springfield, Missouri 65804
417-886-9100 (phone)
417-886-9336 (fax)
dlee@leeengineering.biz

DATE: 2024-04-24

SHEET: 1 OF 1

PROJECT: 1703

FILE: 1703 - Campbell Acres PH2
Preliminary Plat.dwg



ATTACHMENT 5

LEE ENGINEERING AND ASSOCIATES, L.L.C.

CIVIL ENGINEERING & DESIGN

1200 E. WOODHURST DRIVE., SUITE D200, SPRINGFIELD, MO 65804
TELEPHONE: (417) 886-9100 • FACSIMILE: (417) 886-9336 • dlee@leeengineering.biz

City of Springfield
Planning and Zoning Department

March 28, 2024

RE: Campbell Acres Phase II Subdivision Variance for Extension of Main St Access to the South

We are requesting a variance to the following subdivision regulations:

Section 36-243 (2)– Relation to adjoining street system: The arrangement of streets in new subdivisions shall make provision for the continuation of the existing streets in adjoining areas.

Section 36-243 (3) –Projection of streets: Where adjoining areas are not subdivided, the arrangement of streets in new subdivisions shall make provision for the proper projection of streets.

These subdivision regulations, as interpreted by the city's planning department, indicate that an access easement would need to be provided from Main St to the north through Lot 1 of Campbell Acres-Phase 2, granting access to the adjacent property to the south. We are requesting a variance so that we will not be required to extend Main St or provide access through Lot 1 of Campbell Acres-Phase 2.

(a) There are special and unusual circumstances affecting said property such that the strict application of the provisions of this article would deprive the owner of the reasonable use of his land and is not the mere grant of privilege, and

This is a unique subdivision. The subdivision regulations are generally intended to provide access to lots which are being subdivided into multiple lots, necessitating road extensions or access easements to ensure proper access after subdivision occurs. For this subdivision, we are actually combining all the undeveloped area into one large lot (Lot 1) without creating any additional lots across the 16.73 acres. Our subdivision is necessary to create a single, usable lot between the car dealerships and the existing residential single family to the west. Our intent is to increase the size of an existing large lot that fronts S. Main Street, not to create new lots that landlock adjoining lots.

The land we are subdividing is in a fully developed area with all adjoining lots having access to public streets. The adjacent lot to the south was developed as a car dealership before 1980 and currently utilizes the green space behind the dealership for a buffer to the residential uses to the west. Historical aerials show that over the years the car dealership has expanded their retail operation to the west multiple times. This property is not landlocked and has several access points onto the public street system. The only access point that Lot 1 has to the public street system is to Main St, and it is not reasonable in this instance to interpret sections 36-243 (2,3) to mean that this property needs to share its only access point with the adjoining property.

(b) The variance is necessary for preservation and enjoyment of a substantial property right of the owner, and

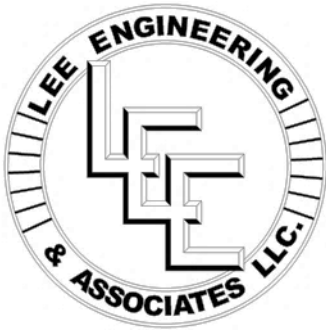
It is the developer's intent that Lot 1 of Campbell Acres- Phase 2 be developed as multifamily housing with gated access to secure the development. We would not be able to gate the housing development and the security of the housing development would be compromised if access must be provided through the property. Our intent to provide a private multi-family development on Lot 1 would no longer be desirable if adjoining retail land could drive through the private residential parking lots to access Main Street.

(c) The granting of the variance would not be detrimental to the public safety, convenience or welfare or be injurious to other property in the vicinity.

The property to the south already has multiple access point to Campbell and multiple access points to W Swan Ct; therefore, it should not need additional access to Main St. There are no public safety or welfare concerns with this variance.

LEE ENGINEERING AND ASSOCIATES, L.L.C.

1200 E. WOODHURST DRIVE • SUITE D200 • SPRINGFIELD, MO 65804
FACSIMILE: (417) 886-9336 • dlee@leeengineering.biz • TELEPHONE: (417) 886-9100



LEE ENGINEERING AND ASSOCIATES, L.L.C.

CIVIL ENGINEERING & DESIGN

1200 E. WOODHURST DRIVE., SUITE D200, SPRINGFIELD, MO 65804
TELEPHONE: (417) 886-9100 • FACSIMILE: (417) 886-9336 • dlee@leeengineering.biz

City of Springfield
Planning and Zoning Department

March 27, 2024

RE: Campbell Acres Phase II Subdivision Variance for Existing Driveway

Section 36-251 (4) - Access criteria for major streets provides guidelines for access restriction that the existing entrance for the 3505 S Campbell property does not meet. The owner is requesting that the existing entrance for 3505 S Campbell, which has been in use since it was constructed sometime between the years 1960-1975, would be allowed to remain in place.

(a) There are special and unusual circumstances affecting said property such that the strict application of the provisions of this article would deprive the owner of the reasonable use of his land and is not the mere grant of privilege, and

The entrance for 3505 S Campbell Ave is the lot's primary access point onto Campbell Ave and is directly aligned with the Nissan dealership's service center. The entrance location is existing and has been in place for over 50 years. The owner of the Nissan dealership has stated that direct access onto Campbell Ave is critical for his business and for the ability of his customers to use the service station. Closing this entrance would reduce the business and deprive the owner of the ability to operate the dealership and service center to its current extent.

(b) The variance is necessary for preservation and enjoyment of a substantial property right of the owner, and

If the subdivision regulations and design standards are applied to the existing property, the owner would lose his primary entrance/exit point for the dealership. The existing entrance is a wide commercial entrance that was constructed for customers to comfortably pull off Campbell Ave directly into the dealership to use the service center or purchase a vehicle. The facility was designed around this entrance location, and the entrance is necessary for the preservation of the owner's current use of the property.

(c) The granting of the variance would not be detrimental to the public safety, convenience or welfare or be injurious to other property in the vicinity.

The entrance has been in place for over 50 years. Since this is an existing entrance, granting the variance will simply allow the entrance to remain—it will not be creating a safety concern. Since the driveway entrance has been in use for a significant period, local drivers are already accustomed to its presence and have adapted their driving behavior accordingly. Removing or relocating the entrance could introduce confusion and disruption

to the traffic flow, potentially leading to safety hazards during the adjustment period. Since there are limited alternatives to this entrance, removing this entrance could force traffic to use the secondary entrance to the north that is shared with another property. This entrance is too narrow and does not meet the city's minimum driveway width, which creates a safety issue for vehicles as they would need to decelerate to a slower speed than is typical when turning into a business.

There have been several meetings with the city's traffic and planning department to determine acceptable conditions for granting the variance for the entrance location. These conditions, noted on the plat, are as follows:

A Subdivision Variance is allowed for the existing access on Campbell Ave. for 3505 S. Campbell Ave. to remain in its current state. The variance shall expire and the existing access shall be removed to the reasonable satisfaction of the Director of Public Works and made to comply with existing City Code and Subdivision regulations valid at such time should any of the following occur:

- *Any change in use from a retail automotive dealership or any addition of any use type added to the property which is not generally consistent and customary with that of other retail automotive dealerships.*
- *The property redevelops to a material degree requiring a change in access and/or significant traffic flow changes warranting a new site plan. Any redevelopment of the property whereby the use remains as a retail automotive dealership, but a site plan is required by the city (i.e. any bldg SF addition under the 40% requirement referenced below) shall not trigger this clause.*
- *Any future subdivision activity or lot size adjustments to the property*
- *Any building construction for 3505 S. Campbell Ave increasing the square footage of the current building residing on the property (as of the date of this variance) more than 40 percent*
- *Any modification to the access not consisting of routine maintenance or pavement sealing*

The access shall be removed or the cost of the removal held by securities (escrow) with the City prior to issuance of any permits triggering removal of the access as noted herein.

LEE ENGINEERING AND ASSOCIATES, L.L.C.

1200 E. WOODHURST DRIVE • SUITE D200 • SPRINGFIELD, MO 65804
FACSIMILE: (417) 886-9336 • dlee@leeengineering.biz • TELEPHONE: (417) 886-9100



EXPLANATION TO COUNCIL BILL 2024-133 (HARDINGER)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Environmental Services

TITLE: A special ordinance amending the Fiscal Year 2024-2025 budget for the Department of Environmental Services in the amount of \$3,500,000 to appropriate retained earnings from the Clean Water Fund for the design phase of the Environmental Services Operations Facility capital improvement project.

PURPOSE: To approve a budget adjustment to amend the Fiscal Year 2024-2025 Budget for the Department of Environmental Services in the amount of \$3,500,000 to appropriate retained earnings of the Clean Water Fund for the design phase of the Environmental Services Operations Facility capital improvement project.

BACKGROUND INFORMATION: The City's Supplemental Overflow Control Plan (SOCP) was approved concurrently with the 2nd Amended Consent Judgment on or about 4/27/2021. The investment strategies contained within the SOCP include the construction of a new Environmental Services Operations Facility. As the department has increased its staff and equipment resources, as required to execute its programs and the commitments contained within the SOCP, it has utilized space available in multiple municipal buildings and facilities. This has resulted in operational inefficiencies as staff attempt to collaborate and work together on projects. The department has reached a point where it has utilized all available space and is now occupying space that other adjoining departments would prefer to have available for their use.

The department is intending to construct a new operations facility that will generally consist of office space, equipment garages, and materials storage. The facility will be constructed along W Rountree Road (Farm Road 168) on land located adjacent to the SW Treatment Plant, said land being already owned by the City and managed by the Environmental Services department. The facility will allow the department to consolidate its daily operations by having nearly all department staff, heavy equipment, and other resources in close proximity to each other. This also allows space currently occupied by the Environmental Services department in numerous city buildings and garages to be reallocated for use by other departments with space needs, including but not limited to Public Works.

A consulting team has been selected to proceed with the design of the operations facility. This budget adjustment will allocate funds for the entirety of the consulting team's design and construction phase work, which is approximately \$3,000,000. The remaining \$500,000 of the budget adjustment will allocate funds for other miscellaneous design phase tasks (including costs related to LEED certification) and contingency, if needed, during the design phase. Once plans are complete and



construction phase costs estimates are refined, a future budget adjustment will be brought to council for construction phase costs related to the project.

REMARKS:

Approval of this budget adjustment will allow design phase tasks to proceed to develop plans and specifications for construction of the operations facility.

Future approval of a separate budget adjustment will be necessary to authorize funds for construction of the operations facility.

The requested budget adjustment of \$3,500,000 is intended to allocate funds for the full project cost of the design team's professional services and includes funds for miscellaneous design phase costs and contingency, if needed.

RECOMMENDATIONS: The Department of Environmental Services recommends approval of this Council Bill and budget adjustment.

Submitted By: Ron Petering, Assistant Director of Environmental Services

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Attachments:

1. ES Operations Facility CIP - Ord
2. BA ES Operations Facility CIP

One-rdg. _____
P. Hrngs. _____
Pgs. 5
Filed: 07-02-24

Sponsored by: Hardinger

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-133

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Fiscal Year 2024-2025 budget for the Department of
2 Environmental Services in the amount of \$3,500,000 to appropriate
3 retained earnings from the Clean Water Fund for the design phase
4 of the Environmental Services Operations Facility capital
5 improvement project.
6 _____
7

8 WHEREAS, the City of Springfield, Missouri, by and through the Department of
9 Environmental Services (the "Department") desires to provide environmentally and
10 economically responsible wastewater, stormwater, and solid waste management to the
11 citizens of Springfield and the region; and
12

13 WHEREAS, on April 5, 2021, through Special Ordinance 27480, the City
14 approved the 2021 Supplemental Overflow Control Plan ("SOCP") to comply with the
15 2nd Amended Consent Judgment; and
16

17 WHEREAS, the Environmental Services Operations Facility was identified within
18 the SOCP as an infrastructure need to promote efficiencies in department operations
19 and to accommodate growth in department staff and equipment resources as required
20 to execute the City's commitments under the SOCP; and
21

22 WHEREAS, this Project is listed in the Council-approved Capital Improvements
23 Program ("CIP") as 19-0053.
24

25 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
26 SPRINGFIELD, MISSOURI, as follows, that:
27

28 Section 1 – The Fiscal Year 2024-2025 budget of the Department of
29 Environmental Services of the City of Springfield is hereby amended in the accounts
30 and in the amounts as shown on Budget Adjustment No. 007, a copy of which is
31 attached hereto and incorporated herein by reference as "Exhibit A."
32

33 Section 2 – The City Council hereby finds that the budget adjustment made
34 above has been recommended by the City Manager.

35
36 Section 3 – The City Manager, or designee, is directed to cause the appropriate
37 accounting entries to be made in the books and records of the City.

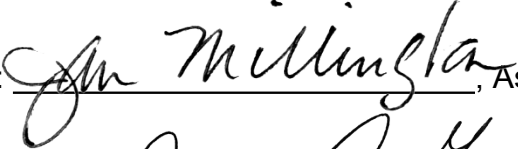
38
39 Section 4 – This Ordinance shall be in full force and effect from and after
40 passage.

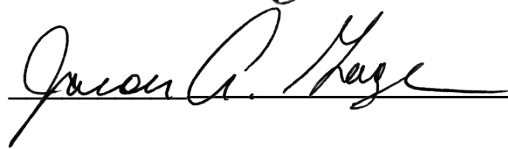
41
42 Passed at meeting: _____

43
44 _____
45 Mayor

46
47 Attest: _____, City Clerk

48
49 Filed as Ordinance: _____

50
51
52 Approved as to form: , Assistant City Attorney

53
54
55 Approved for Council action: , City Manager

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit A

Budget Adjustment
007

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
Net Revenue Adjustment						\$ -	

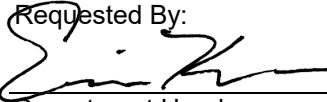
Expenditures:

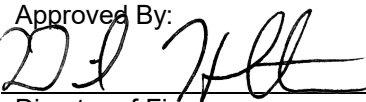
Fund	Dept	Org	Account	P&G	Location	Amount	Description
53020	08	33520	509110	102752	00000	\$3,500,000	Environmental Services New Operations Facility - Design Phase
Net Expenditure Adjustment						\$3,500,000	

Fund Balance Appropriation:

Fund	Title	Amount
53020	Clean Water Improvement Fund	(3,500,000)

Explanation: To amend the FY2024-25 budget of the Department of Environmental Services by appropriating fund balance reserves totaling \$3,500,000 from the Clean Water Enterprise Fund for the design phase of the Environmental Services New Operations Facility.

Requested By:  July 2, 2024
Department Head Date

Approved By:  July 2, 2024
Director of Finance Date

City Manager Date

Authorization:
Council Bill No. 2024-133
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____



EXPLANATION TO COUNCIL BILL 2024-134 (HOSMER)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Finance

TITLE: A special ordinance amending the Fiscal Year 2023-2024 operating budget of the City of Springfield in the General Fund by increasing both revenue and expenses in the amount of \$189,564, for the purpose of adjusting for certain reimbursements and associated offsetting expenses, adjusting the salary budget for retirement payouts, and adjusting interdepartmental budgets.

PURPOSE: Amending the City's Fiscal Year 2023-2024 operating budget in the General Fund by increasing both revenue and expenses in the amount of \$189,564.

BACKGROUND INFORMATION: During the fiscal year, various events occurred resulting in revenue and expenses which were not anticipated at the time the budget was developed. Some of the most common events are insurance proceeds for damaged equipment and the corresponding cost to repair the equipment, sale of assets, and reimbursements for various City services. Each revenue adjustment has a corresponding increase in expense. For efficiency purposes, these adjustments to the budget are typically handled toward the end of the fiscal year. Although Fiscal Year 2023-2024 ended on June 30, 2024, the books remain open for year-end entries. The Fiscal Year 2023-2024 year-end budget adjustment includes a revenue and expense adjustment of \$189,564 for reimbursements. This year's reimbursements include funds from Greene County, Republic, and Nixa for Niche software, reimbursement for the Police training apprenticeship program, sale of City gear and event merchandise items, sale of scrap metal and a small amount of donations.

Actual year-end salary expense often varies from budget due to sick leave and vacation payments that are paid at retirement. These payouts are not budgeted. Overall, salary expense in the General Fund did not exceed the budget in Fiscal Year 2023-2024; however, it is necessary to adjust appropriations between departments. Some departments may need additional funds due to numerous retirees, while other departments have funds available due to vacancies. Finally, the distribution of city-wide contingency, and other adjustments between departments, are included for funding shortfalls and emergencies experienced throughout the budget year.

REMARKS: The purpose of this budget adjustment is to adjust the Fiscal Year 2023-2024 budget for reimbursements and associated offsetting expense items as well as adjust the salary budget for retirement payouts. This is separate from and different than a carryover budget adjustment which appropriates available funds in excess of the operating reserve. The information for the carryover budget adjustment is not available until the financial statements for the fiscal year are complete. This generally occurs in



November following the close of the fiscal year in June. It is not known at this time the amount of carryover funds from the Fiscal Year 2023-2024 budget.

Submitted By: Teresa Allen, Budget Coordinator

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Attachments:

1. FY 23-24 Year End General Fund Budget Adjustment_ord
2. Year-End FY24 Budget Adjustment_BA

One-rdg. _____
P. Hrngs. _____
Pgs. 5
Filed: 07-02-24

Sponsored by: Hosmer

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-134

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Fiscal Year 2023-2024 operating budget of the City of Springfield in
2 the General Fund by increasing both revenue and expenses in the amount
3 of \$189,564, for the purpose of adjusting for certain reimbursements and
4 associated offsetting expenses, adjusting the salary budget for retirement
5 payouts, and adjusting interdepartmental budgets.
6 _____
7

8 WHEREAS, during a fiscal year, various events occur resulting in revenue and
9 expenses which were not anticipated at the time the budget was developed; and
10

11 WHEREAS, for efficiency purposes these adjustments to the budget are typically
12 handled toward the end of the fiscal year or shortly thereafter; and
13

14 WHEREAS, the Fiscal Year 2023-2024 operating budget for the General Fund
15 needs to be adjusted for revenue and expenses of \$189,564 for reimbursements, salary
16 budget adjustments for retirement payouts, and interdepartmental adjustments.
17

18 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
19 SPRINGFIELD, MISSOURI, as follows, that:
20

21 Section 1 – The budget of the City of Springfield for Fiscal Year 2023-2024 is
22 hereby amended in the accounts and in the amounts as shown on Budget Adjustment
23 No. 076, a copy of which is attached hereto and incorporated herein by this reference
24 as “Exhibit A.”
25

26 Section 2 – City Council finds the budget adjustment has been recommended by
27 the City Manager and that the budget adjustment made herein is necessary to reconcile
28 differences between budgeted revenues and expenditures and actual revenues and
29 expenditures.
30

31 Section 3 – City Council hereby directs the City Manager, or designee, to cause
32 the appropriate accounting entries to be made in the books and records of the City.
33

34 Section 4 – This Ordinance shall be in full force and effect from and after
35 passage.

36
37 Passed at meeting: _____

38
39 _____
40 Mayor

41
42 Attest: _____, City Clerk

43
44 Filed as Ordinance: _____

45
46
47 Approved as to form: Laura Vales, Assistant City Attorney

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50 Approved for Council action: Jason A. Hays, City Manager

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit A

Budget Adjustment
076

Revenues:

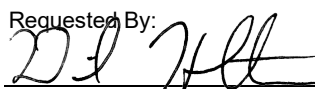
Fund	Dept	Org	Account	P&G	Location	Amount	Description
10110	10	15050	414110	000000	00000	245	Fire Sale of Scrap Metal
10110	18	97580	414110	000000	00000	32,000	Police Training Apprenticeship through WFD program
10110	18	97510	413030	000000	00000	117,003	Police - Outside agencies reimbursement for Niche
10110	19	20010	414110	000000	00000	3,742	PIO - Sale of City gear and event merchandise
10110	19	20140	413010	000000	00000	35,500	PIO - Event advertising support
10110	19	20130	414110	000000	00000	738	PIO - Mayor's Tree lighting donations
10110	19	20140	414100	000000	00000	336	PIO Sale of Scrap Metal for Clean Green program
Net Revenue Adjustment						\$ 189,564	

Expenditures:

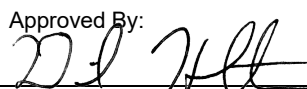
Fund	Dept	Org	Account	P&G	Location	Amount	Description
Reimbursements:							
10110	10	15050	501260	000000	00000	245	Fire Sale of Scrap Metal
10110	18	97580	501260	000000	00000	32,000	Police Training Apprenticeship through WFD program
10110	18	97510	504580	000000	00000	117,003	Police - Outside agencies reimbursement for Niche
10110	19	20010	501260	000000	00000	3,742	PIO - Sale of City gear and event merchandise
10110	19	20140	501260	000000	00000	35,500	PIO - Event advertising support
10110	19	20130	501260	000000	00000	738	PIO - Mayor's Tree lighting donations
10110	19	20140	501260	000000	00000	336	PIO Sale of Scrap Metal for Clean Green program
Reallocate salaries by department:							
10110	04	11030	500110	000000	00000	20,000	City Attorney- Salaries
10110	05	12010	500110	000000	00000	5,000	City Clerk- Salaries
10110	06	13010	500110	000000	00000	65,000	City Manager - Salaries
10110	09	14020	500110	000000	00000	60,000	Finance - Salaries
10110	12	16010	500110	000000	00000	10,000	Human Resources - Salaries
10110	15	19020	500110	000000	00000	(205,000)	Municipal Court - Salaries
10110	19	20010	500110	000000	00000	45,000	Public Information Office - Salaries
Distribute contingency funds by department:							
10110	06	13120	502780	000000	00000	30,405	City Clerk Additional Election Expense
10110	05	12010	502190	000000	00000	(30,405)	City Clerk Additional Election Expense
10110	06	13120	502780	000000	00000	(6,800)	Finance-Short Term Rental Monitoring Software shortfall
10110	09	14140	501230	000000	00000	6,800	Finance-Short Term Rental Monitoring Software shortfall
10110	06	13120	501230	000000	00000	(23,167)	Information Systems-Software project shortfalls
10110	13	17010	501230	000000	00000	23,167	Information Systems-Software project shortfalls
10110	06	13120	502780	000000	00000	(50,000)	Planning Fiscal Impact Analysis
10110	17	60010	504580	102641	00000	50,000	Planning Fiscal Impact Analysis
10110	06	13120	508170	000000	00000	(15,617)	PW Emergency Repair the Expo Center HVAC Controllers
10110	20	79030	508170	000000	00000	15,617	PW Emergency Repair the Expo Center HVAC Controllers
10110	06	13120	509110	100912	00000	(36,653)	PW Pre-Construction Services Historic City Hall
10110	20	73020	508350	100912	00000	36,653	PW Pre-Construction Services Historic City Hall
10110	06	13120	509110	102501	00000	(25,000)	PW Construct Monument Sign at Fire Station 13
10110	20	73020	509110	102501	10737	25,000	PW Construct Monument Sign at Fire Station 13
10110	06	13120	509110	103133	00000	(35,000)	PW Replace/Install fencing around HVAC Units Busch Bldg
10110	20	73020	509110	103133	00000	35,000	PW Replace/Install fencing around HVAC Units Busch Bldg
10110	06	13120	502780	000000	00000	(19,191)	HR Oracle Advanced Benefits Software Project
10110	12	16010	504580	000000	00000	19,191	HR Oracle Advanced Benefits Software Project
10110	06	13120	502780	000000	00000	(50,000)	PIO Clean Green Springfield program
10110	19	20140	501260	000000	00000	50,000	PIO Clean Green Springfield program
10110	06	13120	502780	000000	00000	(14,032)	WFD Installation for Badge Entry at Missouri Career Center
10110	21	28110	501220	000000	00000	14,032	WFD Installation for Badge Entry at Missouri Career Center
Other adjustments between department:							
10110	17	60130	504580	000000	00000	(11,000)	Move Mayor's Comm. on Human Rights from Planning
10110	06	13150	504580	000000	00000	11,000	Move Mayor's Comm. on Human Rights to City Manager
10110	10	15010	509110	103197	00000	80,390	Fire Station # 6 shortfall funded by Public Works
10110	20	70010	502780	000000	00000	(80,390)	Fire Station # 6 shortfall funded by Public Works
Net Expenditure Adjustment						\$ 189,564	

Explanation: To amend the fiscal year end 2023-24 budget for the General Fund.

Requested By:


Department Head July 2, 2024
Date

Approved By:


Director of Finance July 2, 2024
Date

Authorization:

Council Bill No. 2024-134
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____

City Manager _____
Date



EXPLANATION TO COUNCIL BILL 2024-135 (CARROLL)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Finance

TITLE: A special ordinance amending the Fiscal Year 2023-2024 operating budget of the City of Springfield by increasing both revenue and expenses in the amount of \$436,659, in various Special Revenue Funds, for the purpose of accounting for certain reimbursements and associated offsetting expense items.

PURPOSE: Amending the City's Fiscal Year 2023-2024 operating budget by increasing both revenue and expenses in the amount of \$436,659 in various Special Revenue Funds.

BACKGROUND INFORMATION: During the fiscal year, various events occur resulting in revenue and expenses which were not anticipated at the time the budget was developed. Some of the most common events are insurance proceeds for damaged equipment and the corresponding cost to repair the equipment, sale of assets, and reimbursements from other agencies. For efficiency purposes, these adjustments to the budget are typically handled toward the end of the fiscal year. Although Fiscal Year 2023-2024 ended on June 30, 2024, the books remain open for year-end entries. The Fiscal Year 2023-2024 year-end budget adjustment includes \$395,000, which was paid out of the fire escrow funds held by the City. Often, an insurance company will issue checks for reimbursement of fire damage to both the City and the property owner. The City holds the funds in escrow until the property damage is cleaned up and the property meets the requirements of City code. The Fire department received \$28,724 from MSU SMOG (Southwest Missouri Council of Governments) for travel reimbursement and \$70 in donations for the smoke alarm program. The Police department received \$5,793, for the sale of brass from spent ammunition. The Public Information Office received \$12,073 in Route 66 merchandise sales and other reimbursements not anticipated during the budget process.

REMARKS: The purpose of this budget adjustment is to adjust the Fiscal Year 2023-2024 budget for reimbursements and associated offsetting expense items. This budget adjustment includes special revenue funds. These funds are designated for a specific purpose and must be used only for this purpose.

Submitted By: Teresa Allen, Budget Coordinator

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Attachments: 1. FY 23-24 Year End Special Revenue BA- Ord

2. Special Revenue Fund Year-End FY24_BA

One-rdg. _____
P. Hrngs. _____
Pgs. 5
Filed: 07-02-24

Sponsored by: Carroll

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-135

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Fiscal Year 2023-2024 operating budget of the City of Springfield by
2 increasing both revenue and expenses in the amount of \$436,659, in
3 various Special Revenue Funds, for the purpose of accounting for certain
4 reimbursements and associated offsetting expense items.
5 _____
6

7 WHEREAS, during a fiscal year, various events occur resulting in revenue and
8 expenses which were not anticipated at the time the budget was developed; and
9

10 WHEREAS, for efficiency purposes these adjustments to the budget are typically
11 handled toward the end of the fiscal year or shortly thereafter; and
12

13 WHEREAS, the Fiscal Year 2023-2024 operating budget for various Special
14 Revenue Funds needs to be adjusted for reimbursements and associated offsetting
15 expense items by increasing both revenue and expenses in the amount of \$436,659.
16

17 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
18 SPRINGFIELD, MISSOURI, as follows, that:
19

20 Section 1 – The budget of the City of Springfield for Fiscal Year 2023-2024 is
21 hereby amended in the accounts and in the amounts as shown on Budget Adjustment
22 No. 077, a copy of which is attached hereto and incorporated herein by this reference
23 as “Exhibit A.”
24

25 Section 2 – City Council finds the budget adjustment has been recommended by
26 the City Manager and that the budget adjustment made herein is necessary to reconcile
27 differences between budgeted revenues and expenditures and actual revenues and
28 expenditures.
29

30 Section 3 – City Council hereby directs the City Manager, or designee, to cause
31 the appropriate accounting entries to be made in the books and records of the City.
32

33 Section 4 – This Ordinance shall be in full force and effect from and after
34 passage.

35
36 Passed at meeting: _____

37
38 _____
39 Mayor

40
41 Attest: _____, City Clerk

42
43 Filed as Ordinance: _____

44
45
46 Approved as to form: Laura Vales, Assistant City Attorney

47
48
49 Approved for Council action: Jason C. Page, City Manager

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit A

Budget Adjustment
077

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
22110	03	10010	414110	000000	00000	\$ 395,000	BDS - Fire Escrow Fund payouts
22690	10	15080	414070	000000	00000	70	Fire State of Mo Fund- Smoke alarm program donation
22630	10	15070	414110	000000	00000	23,724	Fire HazMat Fund - Reimbursement for travel expenses
25060	18	97580	413100	000000	00000	5,793	Police Special Revenue Fund- Sale of brass
23640	19	20120	414110	000000	00000	12,073	PIO Route 66 Fund - Merchandise sales and reimbursements
Net Revenue Adjustment						\$ 436,659	

Expenditures:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
22110	03	10010	502210	000000	00000	\$ 395,000	BDS - Fire Escrow Fund payouts
22620	10	15080	501260	000000	00000	70	Fire State of Mo Fund- Smoke alarm program donation
22630	10	15070	501260	000000	00000	23,724	Fire HazMat Fund - Reimbursement for travel expenses
25060	18	97580	501190	000000	00000	5,793	Police Special Revenue Fund- Sale of brass
23640	19	20120	504580	000000	00000	12,073	PIO Route 66 Fund - Merchandise sales and reimbursements
Net Expenditure Adjustment						\$ 436,659	

Fund Balance Appropriation:

Fund	Title	Amount

Explanation: To amend the fiscal year end 2023-24 budget for reimbursements received for various funds.

Requested By:


Department Head

July 2, 2024
Date

Approved By:


Director of Finance

July 2, 2024
Date

Authorization:

Council Bill No. 2024-135
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____

City Manager Date



EXPLANATION TO COUNCIL BILL 2024-136 (CARROLL)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Parks

TITLE: A special ordinance amending the Park Board's Fiscal Year 2023-2024 operating budget by increasing revenues by \$700,000 and appropriating Parks Fund Balance of \$633,892, for a total of \$1,333,892, to offset unanticipated expenditures of \$1,333,892, and increasing both revenues and associated expenses within the Golf Enterprise Fund by \$500,000, for an overall budget adjustment of \$1,833,892.

PURPOSE: Amending the Park Board's Fiscal Year 2023-2024 operating budget by increasing revenues by \$700,000 and appropriating Parks Fund Balance of \$633,892, for a total of \$1,333,892, to offset unanticipated expenditures of \$1,333,892, and increasing both revenues and associated expenses within the Golf Enterprise Fund by \$500,000, for an overall budget adjustment of \$1,833,892.

BACKGROUND INFORMATION: During the fiscal year, actual revenues and expenditures can vary from the operating budget estimates developed prior to the start of the fiscal year. As a result, a budget adjustment is typically submitted to City Council to recognize these differences and adjust the Parks Budget at or near the close of each fiscal year.

During Fiscal Year 2023-2024, unanticipated expenditures exceeded budgeted expenditures by \$1,333,892 and Parks is requesting a budget adjustment to appropriate funds from the Parks Property Mill Tax Revenues and the Parks 2001 and 2006 Sales Tax Revenues, received in excess of budget in the amount of \$700,000, and to utilize \$633,892 from the Parks Fund Balance, to offset the total unanticipated expenditures within these funds for the fiscal year ending June 30, 2024. In addition, the Golf Enterprise Fund revenues will exceed the amount budgeted by Parks by approximately \$500,000 (rounded estimate). This additional revenue will be used to offset expense items in the Golf Enterprise Fund.

Submitted By: Lana Woolsey, Assistant City Attorney

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Attachments:

1. Parks 2024 Budget Adj_ord_
2. Parks Year End Budget Adjustment_BA

One-rdg. _____
P. Hrngs. _____
Pgs. 5
Filed: 07-02-24

Sponsored by: Carroll

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024 -136

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Park Board's Fiscal Year 2023-2024 operating budget by increasing
2 revenues by \$700,000 and appropriating Parks Fund Balance of
3 \$633,892, for a total of \$1,333,892, to offset unanticipated expenditures of
4 \$1,333,892, and increasing both revenues and associated expenses
5 within the Golf Enterprise Fund by \$500,000, for an overall budget
6 adjustment of \$1,833,892.
7 _____
8

9 WHEREAS, during a fiscal year, various events occur resulting in revenue and
10 expenses which were not anticipated at the time the budget was developed; and
11

12 WHEREAS, for efficiency purposes these adjustments to the budget are typically
13 handled toward the end of the fiscal year or shortly thereafter; and
14

15 WHEREAS, the Fiscal Year 2023-2024 operating budget for the Park Board
16 needs to be adjusted for reimbursements and associated offsetting expense items.
17

18 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
19 SPRINGFIELD, MISSOURI, as follows, that:
20

21 Section 1 – The Park Board's Budget for Fiscal Year 2023-2024 is hereby
22 amended in the accounts and in the amounts as shown on Budget Adjustment No. 078,
23 a copy of which is attached hereto and incorporated herein by this reference as “Exhibit
24 A.”
25

26 Section 2 – City Council finds the budget adjustment has been recommended by
27 the Park Board and the City Manager and that the budget adjustment made herein is
28 necessary to reconcile differences between budgeted revenues and expenditures and
29 actual revenues and expenditures.
30

31 Section 3 – City Council hereby directs the City Manager, or designee, to cause
32 the appropriate accounting entries to be made in the books and records of the City.

33
34 Section 4 – This Ordinance shall be in full force and effect from and after
35 passage.

36
37 Passed at meeting: _____

38
39 _____
40 Mayor

41
42 Attest: _____, City Clerk

43
44
45 Filed as Ordinance: _____

46
47 _____
48 Approved as to form: _____, Assistant City Attorney

49
50
51 _____
52 Approved for Council action: _____, City Manager
53

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit A

Budget Adjustment
078

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
20120	16	80020	401510	000000	00000	\$ 100,000	Parks 2001 Sales Tax Revenue
20130	16	80030	401510	000000	00000	100,000	Parks 2006 Sales Tax Revenue
20110	16	80010	401030	000000	00000	500,000	Parks Property Mill Tax Revenue
57010	16	25010	412020	000000	10170	100,000	Horton Smith Golf Course Activity Fees
57010	16	25010	412020	000000	10355	200,000	Rivercut Golf Course Activity Fees
57010	16	25010	412020	000000	10410	200,000	Bill and Payne Stewart Golf Course Activity Fees
Net Revenue Adjustment						\$ 1,200,000	

Expenditures:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
20120	16	80010	502430	000000	00000	\$ (276,347)	Reserve Appropriation
20130	16	80010	502430	000000	00000	(128,129)	Reserve Appropriation
20120	16	80010	504620	000000	00000	(260,000)	Specialty Services
20120	16	80010	502230	000000	00000	235,000	Contingency-Insurance
20110	16	80010	500110	000000	00000	213,800	Base Salaries
20120	16	80010	500110	000000	00000	233,000	Base Salaries
20130	16	80010	500110	000000	00000	240,200	Base Salaries
20110	16	80010	500130	000000	00000	25,000	Temporary Salaries
20120	16	80010	500130	000000	00000	25,000	Temporary Salaries
20130	16	80010	500130	000000	00000	25,000	Temporary Salaries
20110	16	82610	501200	000000	10076	3,543	Repair Maintenance Supplies
20110	16	80520	502710	000000	00000	4,517	Building Repairs
20110	16	80520	502710	000000	10118	22,344	Building Repairs
20110	16	80520	502710	000000	10141	10,499	Building Repairs
20110	16	82570	502710	000000	10248	59,768	Building Repairs
20110	16	80550	502740	000000	00000	30,172	Motor Vehicle Repairs
20110	16	80520	502760	000000	00000	5,886	Plant Equipment Repairs
20110	16	80520	502760	000000	00000	61,399	Plant Equipment Repairs
20110	16	80520	502760	000000	10065	2,753	Plant Equipment Repairs
20110	16	80520	502760	000000	10222	2,416	Plant Equipment Repairs
20110	16	80520	502760	000000	10245	6,825	Plant Equipment Repairs
20110	16	80520	502760	000000	10441	2,675	Plant Equipment Repairs
20110	16	80010	504580	000000	10245	4,500	Other Professional Services
20110	16	80020	504580	000000	10099	12,735	Other Professional Services
20110	16	82570	504580	000000	10248	31,647	Other Professional Services
20110	16	82570	504580	000000	10292	14,000	Other Professional Services
20110	16	82540	508170	000000	00000	27,000	Other Equipment
20110	16	80020	508220	000000	00000	86,650	Other Improvement
20120	16	82540	501190	000000	10263	4,082	Tools and Equipment
20120	16	80010	501290	000000	00000	57,589	Safety Items
20120	16	80520	502710	000000	10065	23,000	Building Repairs
20120	16	80520	502710	000000	10101	18,006	Building Repairs
20120	16	80520	502710	000000	10118	3,436	Building Repairs
20120	16	80550	502740	000000	00000	63,032	Motor Vehicle Repairs
Net Expenditure Adjustment						(Continue)	

Fund Balance Appropriation:

Fund	Dept	Title	Amount
20130	16	Parks 2006 Sales Tax Fund	(140,877)
20120	16	Parks 2001 Sales Tax Fund	(364,886)
20110	16	Parks Property Mill Tax Fund	(128,129)
	16	Total Fund Balance Approp	(633,892)

Explanation: Page 1 - To amend the FY2023-24 budget by appropriating Parks Property Mill Tax Revenue, Parks 2001 and 2006 Sales Tax Revenue, Golf Enterprise Fund revenue, and Parks Operating Fund Balance appropriation to offset unanticipated expenditures in excess of budget for the fiscal year ending June 30, 2024.

Requested By:

July 2, 2024
Department Head Date

Approved By:

 July 2, 2024
Director of Finance Date

Authorization:

Council Bill No. 2024-136
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____

City Manager Date

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit

Budget Adjustment
078

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
Net Revenue Adjustment						\$ -	

Expenditures:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
20120	16	80520	502760	000000	10065	\$ 15,808	Plant Equipment Repairs
20120	16	80520	502760	000000	10101	9,449	Plant Equipment Repairs
20120	16	80520	502760	000000	10104	87,132	Plant Equipment Repairs
20120	16	80520	502760	000000	10263	15,612	Plant Equipment Repairs
20120	16	80020	504520	000000	10212	7,325	Building Security-Non Capital
20120	16	88030	504520	000000	10229	4,273	Building Security-Non Capital
20120	16	88030	504520	000000	10364	3,002	Building Security-Non Capital
20120	16	80020	504580	000000	10212	66,879	Other Professional Services
20120	16	88030	504580	000000	10229	8,500	Other Professional Services
20120	16	87510	504580	000000	10099	100,000	Other Professional Services
20120	16	80020	508170	000000	10212	10,012	Other Equipment
20120	16	80020	508220	000000	10065	10,173	Other Improvements
20120	16	80020	508220	000000	10212	924	Other Improvements
20130	16	80510	501260	000000	10094	7,198	Operating Supplies
20130	16	80020	501290	000000	10094	41,189	Safety Items
20130	16	80520	502710	000000	10092	27,149	Building Repairs
20130	16	80520	502710	000000	10405	16,760	Building Repairs
20130	16	80520	502750	000000	10405	6,635	Office Equipment Repairs
20130	16	80520	502760	000000	10092	3,595	Plant Equipment Repairs
20130	16	80520	504580	000000	10405	1,280	Other Professional Services
57010	16	25010	507520	000000	10410	70,000	Inventory Purchases
57010	16	25010	507520	000000	10355	70,000	Inventory Purchases
57010	16	25010	507520	000000	10170	30,000	Inventory Purchases
57010	16	25010	502080	000000	10410	25,000	Banking Charges
57010	16	25010	502080	000000	10355	25,000	Banking Charges
57010	16	25010	502080	000000	10170	25,000	Banking Charges
57010	16	25010	501130	000000	10169	15,000	Chemical and Drug Lab Supplies
57010	16	25010	501130	000000	10354	15,000	Chemical and Drug Lab Supplies
57010	16	25010	501130	000000	10409	15,000	Chemical and Drug Lab Supplies
57010	16	25010	501260	000000	10410	25,000	Operating Supplies
57010	16	25010	501260	000000	10355	25,000	Operating Supplies
57010	16	25010	501260	000000	10170	25,000	Operating Supplies
57010	16	25010	501280	000000	10169	15,000	Plumbing and Electrical
57010	16	25010	501280	000000	10354	15,000	Plumbing and Electrical
57010	16	25010	501280	000000	10409	15,000	Plumbing and Electrical
57010	16	25010	500110	000000	10410	30,000	Base Salaries
57010	16	25010	500110	000000	10355	30,000	Base Salaries
57010	16	25010	500110	000000	10170	30,000	Base Salaries
Net Expenditure Adjustment						\$ 1,833,892	

Fund Balance Appropriation:

Fund	Title	Amount

Explanation: Page 2 - To amend the FY2023-24 budget by appropriating Parks Property Mill Tax Revenue, Parks 2001 and 2006 Sales Tax Revenue, Golf Enterprise Fund revenue, and Parks Operating Fund Balance appropriation to offset unanticipated expenditures in excess of budget for the fiscal year ending June 30, 2024.

Requested By:

July 2, 2024
Department Head Date

Approved By:

 July 2, 2024
Director of Finance Date

Authorization:

Council Bill No. 2024-136
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____

City Manager Date



EXPLANATION TO COUNCIL BILL 2024-137 (HOSMER)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Art Museum

TITLE: A special ordinance amending the Fiscal Year 2024-2025 budget in the amount of \$750,000 to appropriate the fund balance from the Art Museum Special Project Fund to support the design and construction of the Springfield Art Museum Renovation and Expansion Project at the Springfield Art Museum.

PURPOSE: A special ordinance to amend the Fiscal Year 2024-2025 budget in the amount of \$750,000 to appropriate the fund balance from the Art Museum Special Project Fund to support the design and construction of the Springfield Art Museum Renovation and Expansion Project at the Springfield Art Museum.

BACKGROUND INFORMATION: The Springfield Art Museum continues to work on its transformative renovation and expansion project for its building and grounds. Private donations to this effort have been accepted by the Friends of the Springfield Art Museum, Inc. ("FOSAM"), a 501c3 non-profit corporation with a mission and purpose to raise funds for the Springfield Art Museum. Funds raised for this project held by FOSAM have been invested to maximize returns on donated funds and will be transferred to the Art Museum as investment vehicles mature and funds are needed. This \$750,000 in donated revenue has been transferred to the Art Museum Special Project Fund. The fund balance appropriation will be used to cover costs, including the design and construction of the Springfield Art Museum Renovation and Expansion Project.

Submitted By: Nick Nelson, Director of Art Museum

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Attachments:

1. Art Museum Fund Balance Appropriation_Ord
2. 003 FY25 Art Museum Private Donations for Construction (1)

One-rdg. _____
P. Hrngs. _____
Pgs. 4
Filed: 07-02-24

Sponsored by: Hosmer

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-137

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Fiscal Year 2024-2025 budget in the amount of \$750,000 to
2 appropriate the fund balance from the Art Museum Special Project
3 Fund to support the design and construction of the Springfield Art
4 Museum Renovation and Expansion Project at the Springfield Art
5 Museum.
6 _____
7

8 WHEREAS, the Springfield Art Museum continues to work on its transformative
9 Museum Renovation and Expansion Project (“Project”) for its building and grounds; and
10

11 WHEREAS, private donations for the Project have been accepted by the Friends
12 of the Springfield Art Museum, Inc. (“FOSAM”), a 501c3 non-profit corporation with a
13 mission and purpose to raise funds for the Springfield Art Museum, and placed in the
14 Art Museum Special Project Fund, where they have been invested to maximize returns
15 on donated funds and will be transferred to the Art Museum as investment vehicles
16 mature and funds are needed for the Project; and
17

18 WHEREAS, \$750,000 in donated revenue now needs to be appropriated from
19 the Art Museum Special Project Fund to the Art Museum, to cover costs, including the
20 design and construction, of the Springfield Art Museum Renovation and Expansion
21 Project.
22

23 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
24 SPRINGFIELD, MISSOURI, as follows, that:
25

26 Section 1 – The budget of the Springfield Art Museum for Fiscal Year 2024-2025
27 is hereby amended in the accounts and in the amounts shown on Budget Adjustment
28 No. 003, a copy of which is attached hereto and incorporated herein by reference as
29 “Exhibit A.”
30

31 Section 2 – City Council finds that the budget adjustment made above has been
32 recommended by the City Manager.
33

34 Section 3 – The City Manager, or designee, is directed to cause the appropriate
35 accounting entries to be made in the books and records of the City.

36
37 Section 4 – This Ordinance shall be in full force and effect from and after
38 passage.
39

40
41 Passed at meeting: _____

42
43 _____
44 Mayor
45

46 Attest: _____, City Clerk
47

48 Filed as Ordinance: _____
49

50
51 Approved as to form: Mary B. Bozart, Assistant City Attorney
52

53
54 Approved for Council action: Jason A. Hays, City Manager

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit A

Budget Adjustment
003

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
29130	02	21010	414070	000000	00000	\$ 750,000	Art Museum - Donations
Net Revenue Adjustment						\$ 750,000	

Expenditures:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
29130	02	21010	509110	103254	00000	\$ 750,000	Construction - Capital Improvement
Net Expenditure Adjustment						\$ 750,000	

Fund Balance Appropriation:

Fund	Title	Amount
		-

Explanation: To amend the FY2024-2025 budget by appropriating Donations from the Art Special Project Fund for the renovation construction costs of the Art Museum building.

Requested By:

Approved By:

Authorization:

Department Head _____ Date

Director of Finance _____ Date

City Manager _____ Date

Council Bill No. _____
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____



EXPLANATION TO COUNCIL BILL 2024-138 (SIMPSON, CARROLL, MCGULL, H

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Finance

TITLE: A general ordinance amending Special Ordinances 27640, 27641, 27642, 27643, and 27730 to revise funding appropriated for retention payments and a city-wide housing study; amending the budget for Fiscal Year 2024-2025 to appropriate funds from the City's Coronavirus State and Local Fiscal Recovery Funds, established by the American Rescue Plan Act of 2021, for certain projects in the amount of \$611,819.00; and authorizing the City Manager, or designee, to enter into agreements for said projects.

PURPOSE: Amending Special Ordinances 27640-27643 and Special Ordinance 27730 to revise funding appropriated for retention payments and a city-wide housing study, amending the budget for Fiscal Year 2024-2025 to appropriate funds from the City's Coronavirus State and Local Fiscal Recovery Funds, established by the American Rescue Plan Act of 2021, for certain projects in the amount of \$611,819, as recommended by the City Council ARPA Review Committee.

BACKGROUND INFORMATION: The American Rescue Plan Act ("ARPA") of 2021 was passed by Congress on March 10, 2021, and signed into law on March 11, 2021. The Act provided \$1.9 trillion in aid to families, governments, businesses, schools, non-profits, and others impacted by COVID-19. The Act included, among other things, \$656 billion for direct financial assistance to individuals, businesses and non-profits; \$56 billion in assistance to individuals and families, \$211 billion for education and childcare programs; \$86 billion for health programs; \$40 billion for transportation, including airports and rail; \$61 billion for a variety of other programs and \$350 billion for state and local governments in a Fiscal Recovery Fund.

Of the \$350 billion in state and local ARPA Fiscal Recovery Fund administered by the U.S. Department of Treasury, the City of Springfield directly received an allocation of \$40,276,290. The City award of \$40,276,290 in ARPA Funds was accepted by City Council through Special Ordinance 27535 passed on July 26, 2021.

City Council, through Special Ordinance 27640 through Special Ordinance 27643, approved funding retention payments to police, fire, and health employees totaling \$5.9 million. After all retention payments have been paid, \$195,481.43 remains unspent and is being reallocated with this council bill.

City Council, through Special Ordinance 27730, approved funding of a city-wide housing study totaling \$500,000 which was ultimately paid for with non-ARPA funds, resulting in the entire balance of \$500,000 remaining and is being partially reallocated



with this council bill.

With approval of this ordinance, the funding appropriated to support retention payments will be reduced to \$0 from \$195,481.43 and the funding appropriated to a city-wide housing study will be reduced to \$0 from \$500,000. This funding totaling \$695,481.43 is available within the ARPA fund pool for funding projects. The City ARPA committee met on June 7, 2024, and recommended a portion of the remaining APRA funds be allocated/reallocated to the following projects:

- \$100,000 Forvis Mazars Compliance Services Contract
- \$100,000 HUD 5 year consolidated plan to support housing
- \$ 50,000 HUD consolidated plan for fair housing
- \$100,000 Forward SGF corridor/neighborhood planning
- \$ 66,000 Fire Department decontamination stations in Fire Stations 2,3,6,9
- \$ 55,819 Fire Department aerial awareness drone on 150-foot tether
- \$ 50,000 Commercial Street CID budget request
- \$ 90,000 Additional neighborhood cleanups through CPO

With the approval of the ordinance, all but \$83,662.43 of the City ARPA funds will be allocated, and a budget adjustment will be approved for Fiscal Year 2024-2025 for funds for the above listed projects.

Submitted By:

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

- Attachments:**
1. ARPA Reallocation _ Ord
 2. 004 FY25 ARPA Funds Reallocation

One-rdg. _____
P. Hrngs. _____
Pgs. 6
Filed: 07-02-24

Sponsored by: Simpson, Carroll, McGull, Hardinger

First Reading: _____ Second Reading: _____

COUNCIL BILL 2024-138 GENERAL ORDINANCE _____

AN ORDINANCE

1 AMENDING Special Ordinances 27640, 27641, 27642, 27643, and 27730 to
2 revise funding appropriated for retention payments and a city-wide
3 housing study; amending the budget for Fiscal Year 2024-2025 to
4 appropriate funds from the City's Coronavirus State and Local Fiscal
5 Recovery Funds, established by the American Rescue Plan Act of
6 2021, for certain projects in the amount of \$611,819.00; and
7 authorizing the City Manager, or designee, to enter into agreements
8 for said projects.
9 _____

10
11 WHEREAS, the City of Springfield received an award of \$40,276,290.00 in the
12 American Rescue Plan Act ("ARPA") Funds in July 2021; and
13

14 WHEREAS, the City Council, through Special Ordinances 27640, 27641, 27642,
15 and 27643, approved funding retention payments to police, fire, and health employees
16 totaling \$5.9 million; and
17

18 WHEREAS, after all such retention payments have been paid, \$195,481.43
19 remains unspent and available for reallocation; and
20

21 WHEREAS, the City Council, through Special Ordinance 27730, approved
22 funding of a city-wide housing study totaling \$500,000.00; and
23

24 WHEREAS, said study was ultimately paid for with non-ARPA funds, resulting in
25 the entire balance of \$500,000.00 remaining and available for reallocation; and
26

27 WHEREAS, with approval of this Ordinance, the funding appropriated to support
28 retention payments will be reduced to \$0 from \$195,481.43, and the funding
29 appropriated to a city-wide housing study will be reduced to \$0 from \$500,000.00,
30 resulting in a total amount of \$695,481.43 in the ARPA fund pool available for funding
31 projects; and
32

33 WHEREAS, the City's ARPA Review Committee met on June 7, 2024, and
34 recommended a portion of these funds be reallocated to the following projects:
35

- 36 • \$100,000 Forvis Mazars ARPA Compliance Services Contract
- 37 • \$100,000 HUD five (5) year consolidated plan to support housing
- 38 • \$ 50,000 HUD consolidated plan for fair housing
- 39 • \$100,000 Forward SGF corridor/neighborhood planning
- 40 • \$ 66,000 Fire Department decontamination stations in Stations 2, 3, 6, 9
- 41 • \$ 55,819 Fire Department aerial awareness drone on 150-foot tether
- 42 • \$ 50,000 Commercial Street CID budget request
- 43 • \$ 90,000 Additional neighborhood cleanups through Community
44 Partnership of the Ozarks; and
45

46 WHEREAS, with approval of this Ordinance, all but \$83,662.43 of the City's
47 ARPA funds will be allocated and a budget adjustment approved for Fiscal Year 2024-
48 2025 for funds for the above-listed projects.
49

50 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
51 SPRINGFIELD, MISSOURI, as follows, that:
52

53 Section 1 – The remaining ARPA funds originally allocated for retention
54 payments in Special Ordinances 27640, 27641, 27642, and 27643 are hereby reduced
55 to \$0 from \$195,481.43.
56

57 Section 2 – The entire balance of ARPA funds originally allocated for a city-wide
58 housing study in Special Ordinance 27730 is hereby reduced to \$0 from \$500,000.00.
59

60 Section 3 – The following projects recommended by the City's ARPA Review
61 Committee are funded by the reallocated cumulative balance of \$695,481.43:
62

- 63 • \$100,000 Forvis Mazars ARPA Compliance Services Contract
- 64 • \$100,000 HUD five (5) year consolidated plan to support housing
- 65 • \$ 50,000 HUD consolidated plan for fair housing
- 66 • \$100,000 Forward SGF corridor/neighborhood planning
- 67 • \$ 66,000 Fire Department decontamination stations in Stations 2, 3, 6, 9
- 68 • \$ 55,819 Fire Department aerial awareness drone on 150-foot tether
- 69 • \$ 50,000 Commercial Street CID budget request
- 70 • \$ 90,000 Additional neighborhood cleanups through Community
71 Partnership of the Ozarks
72

73 Section 4 – The City Manager, or designee, is hereby authorized and directed to
74 execute agreements, approved as to form by the City Attorney, for said projects by and
75 on behalf of the City of Springfield.
76

77 Section 5 – The Fiscal Year 2024-2025 budget is hereby amended in the
78 accounts and in the amounts as shown on Budget Adjustment No. 004, a copy of which
79 is attached hereto and incorporated herein by reference as “Exhibit A.”
80

81 Section 6 – City Council finds that the budget adjustment made above has been
82 recommended by the City Manager.
83

84 Section 7 – The City Manager, or designee, is directed to cause the appropriate
85 accounting entries to be made in the books and records of the City.
86

87 Section 8 – This Ordinance shall be in full force and effect from and after
88 passage.
89

90
91 Passed at meeting: _____
92

93
94 _____
95 Mayor

96 Attest: _____, City Clerk
97

98 Filed as Ordinance: _____
99

100
101 Approved as to form: Laura Vales, Assistant City Attorney
102

103
104 Approved for Council action: Jason A. Hage, City Manager

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit A

Budget Adjustment
004

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
Net Revenue Adjustment						\$ -	

Expenditures:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
22520	10	18050	500110	103132	00000	(80,499.00)	Fire Base Salaries
22520	11	18050	500110	103132	00000	204,768.36	Health Base Salaries
22520	18	18050	500110	103132	00000	(319,750.79)	Police Base Salaries
22520	17	18050	504580	103248	00000	(500,000.00)	City Wide Housing Study
22520	09	14110	504580	103396	00000	100,000.00	Finance - Forvis Mazars Compliance Service
22520	17	18050	504580	000000	00000	100,000.00	HUD 5 year Consolidated plan to support housing
22520	17	18050	504580	000000	00000	50,000.00	HUD Consolidated plan for fair housing
22520	17	18050	504580	000000	00000	100,000.00	Forward SGF Corridor/neighborhood planning
22520	10	18050	508100	000000	00000	66,000.00	Fire - Decontamination stations in Fire Stations 2, 3, 6, 9
22520	10	18050	508130	000000	00000	55,819.00	Fire - Aerial Awareness Drone on 150-foot tether
22520	17	18050	504580	000000	00000	50,000.00	Commercial Street CID budget request
22520	17	18050	504580	000000	00000	90,000.00	Additional neighborhood cleanups through CPO
Net Expenditure Adjustment						\$ (83,662.43)	

Fund Balance Appropriation:

Fund	Title	Amount
22520	US Dept. of the Treasury Fund	\$ 83,662.43

Explanation: To amend the FY2024-25 budget by appropriating the American Rescue Plan Act fund balance for reallocating Health, Police, and Fire employees retention pay and the City Wide Housing Study.

Requested By:


Department Head July 2, 2024
Date

Approved By:


Director of Finance July 2, 2024
Date

Authorization:

Council Bill No. 2024-138
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____

City Manager Date



EXPLANATION TO COUNCIL BILL 2024-139 (CARROLL)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Health

TITLE: A special ordinance authorizing the City Manager, or designee, to accept American Rescue Plan Act funds in the amount of \$100,000 from Greene County for use by the Springfield-Greene County Health Department in implementing and operating the Family Connects Program; and amending the Fiscal Year 2024-2025 budget in the amount of \$100,000 to appropriate the funds.

PURPOSE: Authorizing the City Manager, or designee, to accept American Rescue Plan Act funds in the amount of \$100,000 from Greene County for use by Springfield-Greene County Health for use in implementing and operating the Family Connects Program to offer no-cost home visits to parents of newborns in Greene County, Missouri; amending the Fiscal Year 2024-2025 budget in the amount of \$100,000 to appropriate the funds.

BACKGROUND INFORMATION: The Springfield-Greene County Health Department ("SGCHD") has the opportunity to accept American Rescue Plan Act ("ARPA") funding in the amount of \$100,000 from Greene County. The ARPA funds were originally planned for Jordan Valley Community Health Center ("Jordan Valley") to implement and operate the Family Connects Program ("Family Connects") in Greene County. Now that Jordan Valley has transferred this program to SGCHD, the ARPA funding will be used to support SGCHD's implementation and operation of Family Connects.

Family Connects provides foundational support for all families with newborns in Greene County. The Family Connects model brings a trained nurse into the home to offer newborn and postpartum health assessments to systematically assess family needs, provide supportive guidance, and link Greene County families to community resources, as needed and desired.

This budget adjustment accepts the increase in funds and budgets the amount of \$100,000 for expenditures in the SGCHD Fiscal Year 2024-2025.

REMARKS: The Springfield-Greene County Health Department recommends approval of this Council bill and budget adjustment appropriating the funds.

Submitted By: Brad Stulce, Public Health Resource Manager

Authorized for inclusion on the agenda pursuant to City Code section 2-33:



- Attachments:**
1. Greene County Family Connects ARPA Funding_Ord
 2. Exh A_BA

One-rdg. _____
P. Hrngs. _____
Pgs. 5
Filed: 07-02-24

Sponsored by: Carroll

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-139

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AUTHORIZING the City Manager, or designee, to accept American Rescue Plan Act
2 funds in the amount of \$100,000 from Greene County for use by the
3 Springfield-Greene County Health Department in implementing and
4 operating the Family Connects Program; and amending the Fiscal
5 Year 2024-2025 budget in the amount of \$100,000 to appropriate the
6 funds.
7 _____
8

9 WHEREAS, the Springfield-Greene County Health Department ("SGCHD") has
10 the opportunity to accept American Rescue Plan Act ("ARPA") funding in the amount of
11 \$100,000 from Greene County, said funds originally planned for Jordan Valley
12 Community Health Center ("Jordan Valley") to implement and operate the Family
13 Connects Program ("Family Connects"); and
14

15 WHEREAS, the Family Connects Program has now been transferred to SGCHD,
16 and the ARPA funding will be used to support SGCHD's implementation and operation
17 of Family Connects; and
18

19 WHEREAS, Family Connects provides foundational support for all families with
20 newborns in Greene County. The Family Connects model brings a trained nurse into the
21 home to offer newborn and postpartum health assessments to systematically assess
22 family needs, provide supportive guidance, and link Greene County families to
23 community resources, as needed and desired.
24

25 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
26 SPRINGFIELD, MISSOURI, as follows, that:
27

28 Section 1 – The City Manager, or designee, is hereby authorized to accept
29 \$100,000 in ARPA funding from Greene County, to support the Family Connects
30 Program.
31

32 Section 2 – The Fiscal Year 2024-2025 budget of the Springfield-Greene County
33 Health Department is hereby amended in the accounts and in the amounts as shown on

Budget Adjustment No. 008, a copy of which is attached hereto and incorporated herein by reference as "Exhibit A."

Section 3 – City Council finds that the budget adjustment made above has been recommended by the City Manager.

Section 4 – The City Manager is directed to cause the appropriate accounting entries to be made in the books and records of the City.

Section 5 – This Ordinance shall be in full force and effect from and after passage.

Passed at meeting: _____

Mayor

Attest: _____, City Clerk

Filed as Ordinance: _____

Approved as to form: Mary B. Bozarth, Assistant City Attorney

Approved for Council action: Jason A. Hage, City Manager

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit A

Budget Adjustment
008

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
22510	11	53590	416010			\$ 100,000	Greene County ARPA funds for family connects.
Net Revenue Adjustment						\$ 100,000	

Expenditures:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
22510	11	53590	500110			\$ 100,000	Salaries
Net Expenditure Adjustment						\$ 100,000	

Fund Balance Appropriation:

Fund	Title	Amount

Explanation: To amend the FY2024-25 budget by appropriating \$100,000 of ARPA funds from Greene County to support the Family Connects Program.

Requested By:

Department Head

July 2, 2024

Date

Approved By:

Director of Finance

July 2, 2024

Date

Authorization:

Council Bill No. 2024-139

Ordinance No.

1st Reading

2nd Reading

Journal Imp No.

City Manager

Date



EXPLANATION TO COUNCIL BILL 2024-140 (LEE)

FILED: 07/11/2024

ORIGINATING DEPARTMENT: Human Resources

TITLE: A special ordinance amending the Fiscal Year 2024-2025 budget regarding the Human Resources Department in order to adjust the authorized full time equivalent positions of Human Resources Assistant from 1.5 positions to 2 positions.

PURPOSE: Amending the Fiscal Year 2024-2025 budget of the City to adjust the authorized employee positions in the Human Resources Department by changing one-half (.5) full-time equivalent ("FTE") position to one (1.0) full-time equivalent ("FTE") and to fund said position.

BACKGROUND INFORMATION: The Human Resources Department desires to increase the one-half (.5) full-time equivalent ("FTE") Human Resources Assistant, PAT-4 position to a one (1.0) full-time equivalent position which provides administrative support for various divisions within the Human Resources Department. This position is currently vacant and was previously filled by a part-time employee who was willing to work the maximum number of hours authorized for a part-time regular position (28 hours per week). The recommended change will increase the regular part-time position to become a regular full-time equivalent position in order to meet ongoing staffing needs for long-term City services and administrative support work, including such items as the transition to paperless personnel files and other HR paperwork that will be moving to electronic workflow, and ongoing support of a variety of modules within HR's software program.

BUDGET NOTE: The recommendations and explanations contained herein are consistent with Council's policies. This position, and related funding, is included in the Fiscal Year 25 budget recently approved by City Council; therefore, no funds are requested, and a budget adjustment is unnecessary.

Submitted By: Darla Morrison, Director of Human Resources

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Attachments: 1. Budget Adj_ord HR adding .5 FTE 6-21-24 (1)

One-rdg. _____
P. Hrngs. _____
Pgs. 3
Filed: 07-02-24

Sponsored by: Lee

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-140

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Fiscal Year 2024-2025 budget regarding the Human Resources
2 Department in order to adjust the authorized full time equivalent
3 positions of Human Resources Assistant from 1.5 positions to 2
4 positions.
5 _____
6

7 WHEREAS, the Fiscal Year 2024-2025 budget authorizes the funding of 1.5 full
8 time equivalent Human Resources Assistant positions; and
9

10 WHEREAS, the City desires to change the current part-time (.5 full time
11 equivalent) Human Resources Assistant position to a full time position by adding a .5
12 full time equivalent Human Resources Assistant position to the budget; and
13

14 WHEREAS, no adjustment to the budget is necessary as the funds to increase
15 the position to a full time Human Resource Assistant position are already contained in
16 the Fiscal Year 2024-2025 budget for the Human Resources Department.
17

18 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
19 SPRINGFIELD, MISSOURI, as follows, that:
20

21 Section 1 – The Fiscal Year 2024-2025 budget of the City is hereby amended by
22 adding a .5 full time equivalent to the number of authorized Human Resources Assistant
23 positions within the Department of Human Resources, such that there will now be 2.0
24 full time equivalent Human Resources Assistant positions.
25

26 Section 2 – This Ordinance shall be in full force and effect from and after
27 passage.
28

29 Passed at meeting: _____
30

31 _____
32 Mayor
33

34 Attest: _____, City Clerk

35

36 Filed as Ordinance: _____

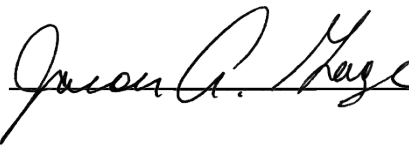
37

38

39 Approved as to form:  _____, Assistant City Attorney

40

41

42 Approved for Council action:  _____, City Manager



EXPLANATION TO COUNCIL BILL 2024-142 (SIMPSON)

FILED: 07/02/2024

ORIGINATING DEPARTMENT: Planning and Development

TITLE: A resolution granting a Short-Term Rental Type 2 permit for the property generally located at 413 East Seminole, for the purpose of allowing the establishment of a Short-Term Rental Type 2 pursuant to Section 36-473 of the Land Development Code.

PURPOSE: Granting a Short-Term Rental Type 2 permit for the property generally located at 413 East Seminole, for the purpose of allowing the establishment of a Short-Term Rental Type 2 pursuant to Section 36-473 of the Zoning Ordinance.

BACKGROUND INFORMATION: The property owner has applied for a Short-Term Rental (STR) Type 2 permit to establish a Short-Term Rental Type 2 at 413 East Seminole. Section 36-473 of the Zoning Ordinance requires that no STR Type 2 shall be permitted on a block face with fewer than four residential structures unless an appeal is granted by City Council. There are only 3 residential structures located along the block face of the subject property. Block face is defined as one side of a street from one intersection to the next, not including alleys. A residential structures' block face is determined by the mailing address assigned to the residence.

The applicant has conducted the required neighborhood meeting and obtained three signatures from the five adjacent property owners, resulting in sixty (60) percent consent as shown on "Exhibit C".

The two adjacent property owner who did not sign the consent form have been notified with a letter of opposition that clearly states that "Failure to return this letter of opposition prior to the City Council meeting indicates that you do not oppose the application for a Short-Term Rental."

Property owners within 500 feet of the proposed Short-Term Rental Type 2 establishment have been notified by regular mail of the June 10th City Council meeting.

If approved, all other requirements of the Short-Term Rental requirements of Section 36-473 of the Zoning Ordinance must be met.

Submitted By: Corey Stinson, Associate Planner

Authorized for inclusion on the agenda pursuant to City Code section 2-33:



Maurice S. Jones, Deputy City Manager 7/17/2024

- Attachments:**
1. STR2 Appeal - 413 East Seminole_Res
 2. STR 2 Appeal_413 E Seminole_exhA
 3. STR 2 Appeal_413 E Seminole_exhB
 4. STR 2 Appeal_413 E Seminole_exhC
 5. STR 2 Appeal_413 E Seminole_exhD

One-rdg. X
P. Hrngs.
Pgs. 21
Filed: 07-16-24

Sponsored by: Simpson

COUNCIL BILL 2024-142 RESOLUTION

A RESOLUTION

1 GRANTING a Short-Term Rental Type 2 permit for the property generally
2 located at 413 East Seminole, for the purpose of allowing the
3 establishment of a Short-Term Rental Type 2 pursuant to Section
4 36-473 of the Land Development Code.
5 _____
6

7 WHEREAS, the owner of the property located at 413 East Seminole has applied
8 for a Short-Term Rental (“STR”) Type 2 Permit, as shown in “Exhibit A” and “Exhibit B,”
9 which are hereby incorporated in their entirety; and
10

11 WHEREAS, Section 36-473 of the Land Development Code requires at least four
12 (4) residential structures on a particular block face before allowing a permit to be issued
13 for an STR Type 2; and
14

15 WHEREAS, if there are fewer than four (4) residential structures on a block face,
16 City Council may, by resolution, grant the STR Type 2 Permit upon appeal; and
17

18 WHEREAS, “block face” is defined as one side of a street from one intersection
19 to the next, not including alleys; and
20

21 WHEREAS, the block face containing the property located at 413 East Seminole
22 has only three (3) residential structures; and
23

24 WHEREAS, the owner of the property located at 413 East Seminole has
25 obtained three (3) of the five (5) signatures of property owners adjacent to and
26 immediately across the street from the property, resulting in sixty percent (60%) consent
27 of the adjacent property owners, as shown on “Exhibit C,” which is hereby incorporated
28 in its entirety; and
29

30 WHEREAS, property owners within 500 feet of the proposed STR Type 2
31 establishment were notified by regular mail of the July 22, 2024, City Council meeting.
32

33 NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF
34 SPRINGFIELD, MISSOURI, as follows, that:
35

36 Section 1 – City Council hereby grants the applicant an STR Type 2 Permit for
37 the property located at 413 East Seminole. The granting of the Permit is expressly
38 subject to compliance with Section 36-473 of the Land Development Code, and any
39 other applicable provisions of City Code.

40
41 Section 2 – This Resolution shall be in effect immediately upon adoption and
42 passage.

43
44 Passed at meeting: _____

45
46 _____
47 Mayor

48
49 Attest: _____, City Clerk

50
51 Filed as Resolution: _____

52
53
54 Approved as to form: Laura Vales, Assistant City Attorney

55
56
57 Approved for Council action: Juan C. Hays, City Manager

EXHIBIT A

Alyssa Ince
2021 S. Grant Ave
Springfield, MO 65807
incealyssa@gmail.com
(417) 630-9448
June 20, 2024

City of Springfield
Planning and Development Department
840 Boonville Avenue
Springfield, MO 65802

Dear Springfield City Council,

Subject: Appeal for Approval of Short Term Rental at 413 E. Seminole St.
Springfield, MO 65807.

I am writing to formally appeal my approval to operate a Short Term Rental at my property located at 413 E Seminole St. due to the home being located on a short block face. I respect and understand the City of Springfield's regulations and concerns regarding short-term rentals, and I would like to address any issues that may be had regarding my operations.

My property is well-maintained and located in a residential neighborhood that attracts tourists and visitors to Springfield. I believe that my home can provide a positive experience for guests while also contributing to the local economy. I have taken several steps to ensure that my property does not negatively impact my neighbors or the community.

I currently operate a Short Term Rental at 2156 South Jefferson Avenue since 2022. I have had zero disturbances with this property that is located adjacently. I have the next door neighbors phone numbers as well as they have mine to ensure there are never issues coming from my current Short Term rental. If there were to ever be, I would be alerted immediately. Up to this point, there has never been a single issue. I personally live 2 blocks away from both of these residences as well and operate 100% on my own. I also have a large number of returning travelers that frequently visit Springfield for various reasons and enjoy staying at my current Short Term Rental so I am excited to hopefully expand and provide more hospitality to visitors.

I am committed to adhering to all local regulations governing short-term rentals. I have familiarized myself with the relevant ordinances and am prepared to make any necessary modifications to my property or its use to ensure full compliance.

Thank you for considering my appeal. I am eager to provide any additional information or clarification that may be required.

Sincerely,

Alyssa Ince, AI Ventures LLC



Application for Short-Term Rental Type 2

eCity INSTRUCTIONS

PLEASE FOLLOW STEPS 1 & 2 BEFORE SUBMITTING THIS APPLICATION

1. Fill out the Short-Term Rental Intake Form and apply on eCity.
2. Wait for Planning staff to review and send a follow-up email requesting payment of fees.

Case No.	
Date Filed	
Received By	
Receipt No.	

*Fee Amount Paid: \$ _____
See Fee Schedule

The signers of this application ask the City Council of the City of Springfield, Missouri to approve an application for the use of a short-term rental at the following address:

Property Address: 413 E Seminole

We, the signers of this application, do attest to the truth and correctness of all facts and information presented with this application as required by the Zoning Ordinance of the City of Springfield.

PROPERTY OWNER'S INFORMATION:

Name of current property owner: Alyssa Ince

If corporation: Corporate Official: AI Ventures LLC

Mailing Address: 2021 S Grant Ave Springfield, MO

Zip Code: 65807 Phone: 417 630 9448

E-mail: ince alyssa@gmail.com

PROPERTY OWNER'S SIGNATURE: Alyssa Ince

Application Timeframe by

Department

Planning &
Development
3-6 weeks

Building Development
Services
1-3 weeks

Licensing
2-3 weeks

See checklist on page 2 for additional
information.

OPERATOR'S INFORMATION (if different):

Name: _____

Mailing Address: _____ Zip Code: _____

Phone: _____ E-mail: _____

NOTE: All the items listed on the attached checklist must be submitted during the application process or the application will be denied. The timeframes established in the attached checklist must be followed or the application will be denied.

*Fees are non-refundable

EXHIBIT B

AFFIDAVIT OF NEIGHBORHOOD NOTIFICATION AND MEETING SUMMARY

1. Request to establish a Short-Term Rental Type 2.

2. Meeting Date & Time: June 7, 2024 at 4-6:30

3. Meeting Location: 413 E Seminole St

4. Number of invitations that were sent: 95

5. Number of neighbors in attendance (attach a sign-in sheet): 0

6. List the verbal comments and how you plan to address any issues:

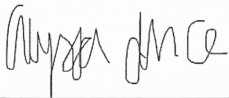
(City Council does not expect all the issues to be resolved to the neighborhood's satisfaction; however, the owner/operator must explain why the issues cannot be resolved.)

None available

7. List or attach the written comments and how you plan to address any issues:

None available

I, Alyssa Ince (print name), attest that the neighborhood meeting was held on
June 7, 2024 (month/date/year), in accordance with the attached "Neighborhood Notification and Meeting
Process."



Signature of person completing affidavit

Alyssa Ince
Printed name of person completing affidavit

6/12/24

There is no meeting summary because
no one showed up to it.

Alyssa Ince

Alyssa Ince



SHORT-TERM RENTAL TYPE 2 ADJACENT OWNER CONSENT AFFIDAVIT

Address of Proposed Short-Term Rental: **413 E Seminole**

STATE OF Missouri)

COUNTY OF Greene)

The undersigned hereby states that the undersigned verified the ownership of each residential property adjacent to the above-referenced address as defined in section 36-473(2) and obtained written consent of the proposed short-term rental at the above-referenced address from at least 55% of said owners as shown on Exhibit 1 and attached hereto. The undersigned further states that he or she personally witnessed the signatures contained on Exhibit 1 and that each person signed Exhibit 1 in the undersigned's presence. If the owner(s) signatures cannot be witnessed by the undersigned, then a notarized signature(s) of the adjacent residential property owner(s) must be obtained.

(Corporate Seal**)

Alyssa Ince
Signature of Owner/Operator

Alyssa Ince
Typed or Printed Name

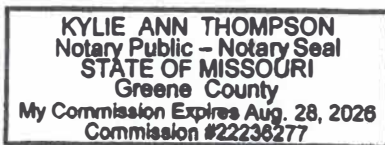
ATTEST:

Owner
Title

Corporate Secretary
(If no seal)

AI Ventures LLC
Name of Company or Organization
(If Applicable)

Subscribed and sworn to before me a notary public on this 5 day of June, 2024.



Kylie Ann Thompson
Notary Public

My Commission expires: 08/28/26

**City of Springfield Short-Term Rental
ADJACENT OWNER CONSENT FORM**

The undersigned hereby certifies that they are the owners of property referenced below and that they consent to the proposed short-term rental located at: **415 E Seminole**

If the ownership is under two or more individuals (each individual) must sign this form. Only the owner's signature constitutes consent.

The address and owner of record of all adjacent residential properties must be listed, whether they consent or not.

4.	Address of Adjacent Residential Property: 2156 S JEFFERSON AVE Alyssa Ince Owner(s) of Record (Typed or Printed) Alyssa Ince Signature(s) of Owners Member - Owner Title	Notary Seal (only required if signature not witnessed by applicant) SEAL
5.	Address of Adjacent Residential Property: 412 E SEMINOLE ST Owner(s) of Record (Typed or Printed) Signature(s) of Owners Title	Notary Seal (only required if signature not witnessed by applicant) SEAL
6.	Address of Adjacent Residential Property: Owner(s) of Record (Typed or Printed) Signature(s) of Owners Title	Notary Seal (only required if signature not witnessed by applicant) SEAL



City of Springfield Short-Term Rental
ADJACENT OWNER CONSENT FORM

The undersigned hereby certifies that they are the owners of property referenced below and that they consent to the proposed short-term rental located at: **413 E Seminole**

If the ownership is under two or more individuals (each individual) must sign this form. Only the owner's signature constitutes consent.

The address and owner of record of all adjacent residential properties must be listed, whether they consent or not.

1.	Address of Adjacent Residential Property: <u>1880 E SUNSET ST</u> <u>405 E SEMINOLE</u> <u>William J. Weber</u> CS Owner(s) of Record (Typed or Printed) <u>[Signature]</u> Signature(s) of Owners <u>Manager</u> Title	Notary Seal (only required if signature not witnessed by applicant) SEAL
2.	Address of Adjacent Residential Property: <u>3411 S KICKAPOO AVE</u> <u>421 E SEMINOLE</u> <u>VISTAS AT PLANO, LLC</u> CS Owner(s) of Record (Typed or Printed) <u>by David A. Sudolath (Manager)</u> Signature(s) of Owners <u>[Signature]</u> Title <u>MANAGER</u>	Notary Seal (only required if signature not witnessed by applicant) SEAL
3.	Address of Adjacent Residential Property: <u>2434 W CARDINAL ST</u> <u>2143 S BOANOCK</u> CS Owner(s) of Record (Typed or Printed) Signature(s) of Owners Title	Notary Seal (only required if signature not witnessed by applicant) SEAL

AFFIDAVIT OF SIGN POSTING

Attach photo here

Picture
was
emailed

(sign lettering must be legible in photo)

I, Alyssa Ince (print name of owner, agent, attorney), attest that the above sign was posted 10 days before the public hearing on June 7, 2024 (month/day/year) and in accordance with the given posting requirements.

Alyssa Ince
Signature of person completing sign posting

Alyssa Ince
Printed name of person completing sign posting



Legend

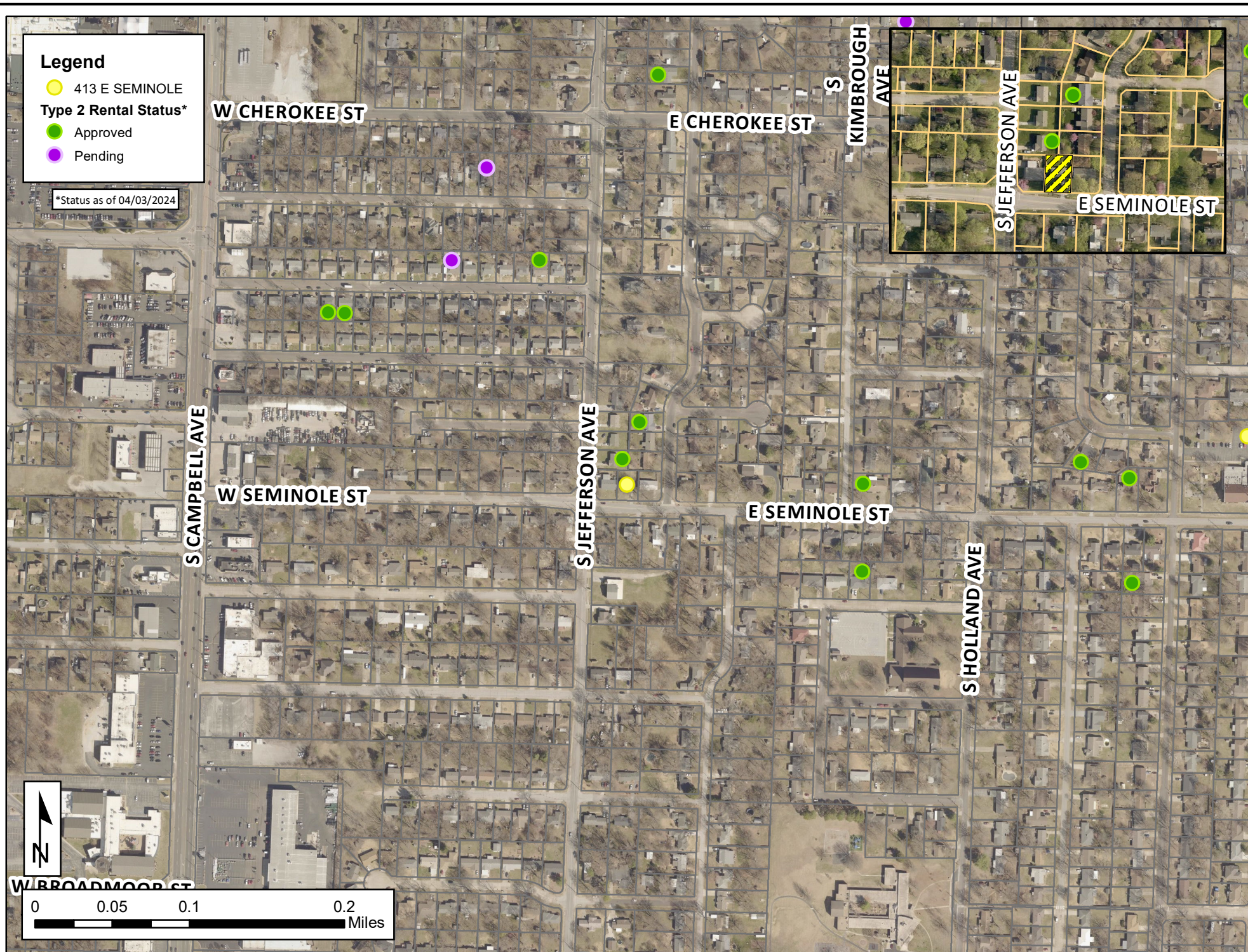
● 413 E SEMINOLE

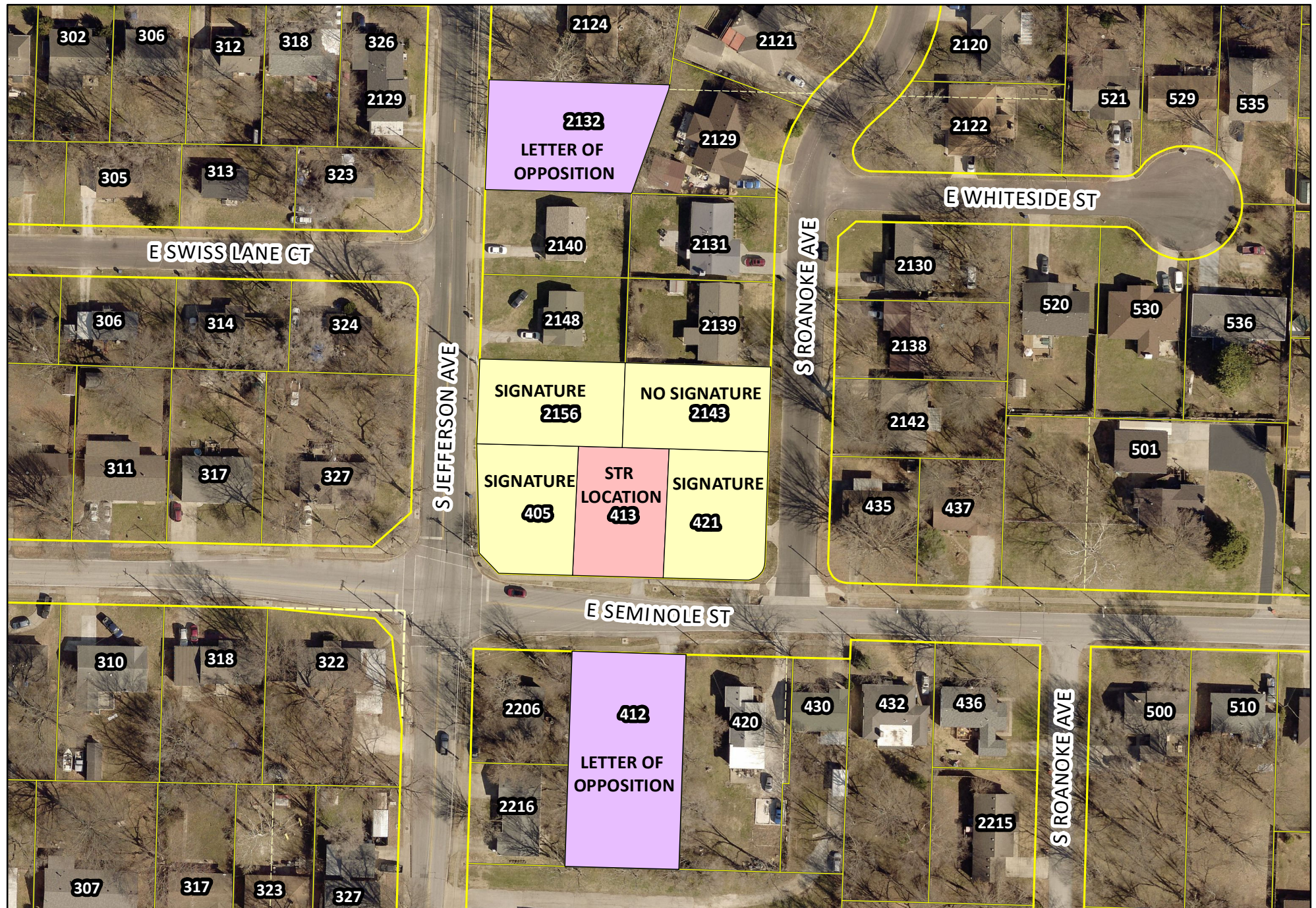
Type 2 Rental Status*

● Approved

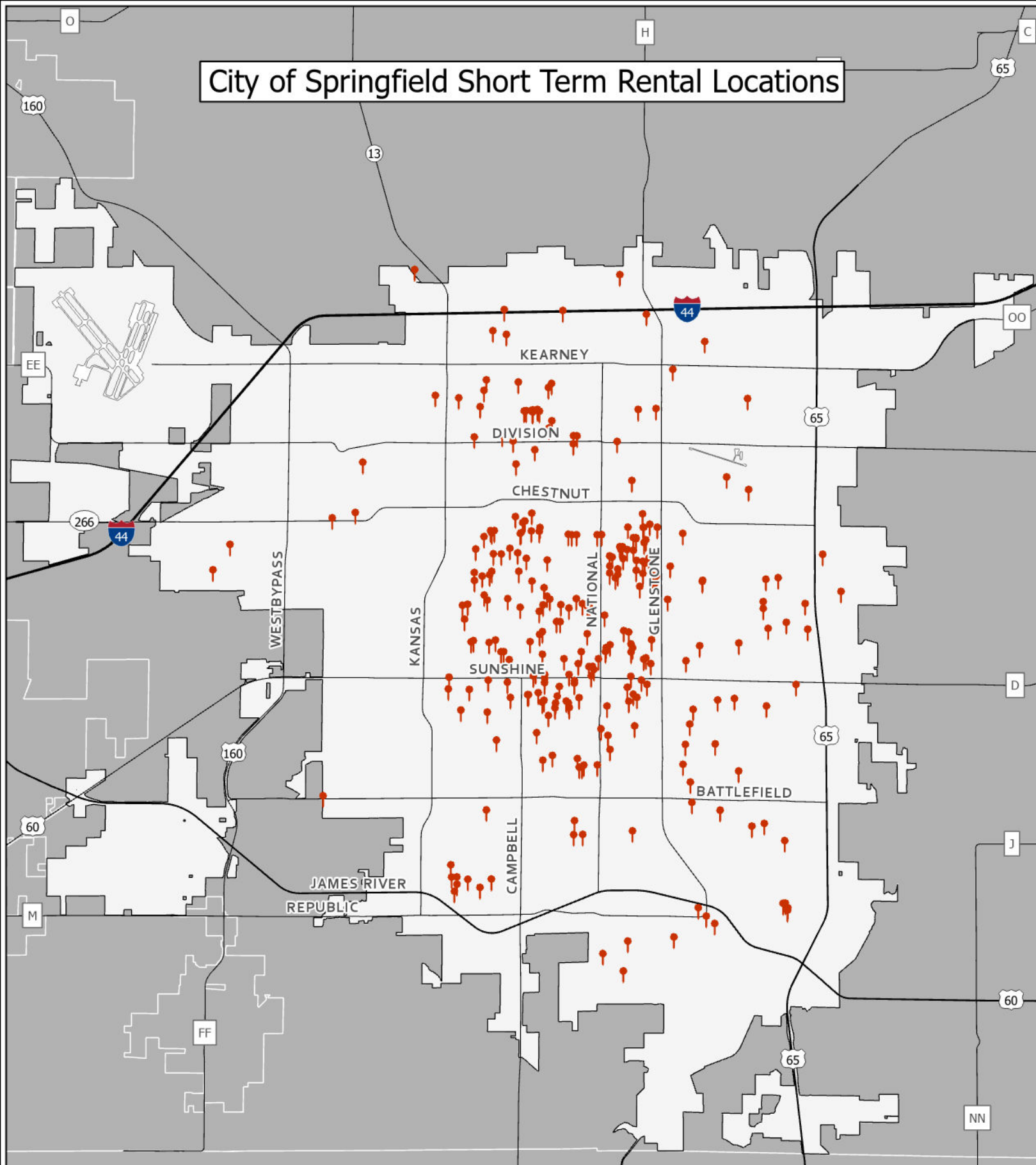
● Pending

*Status as of 04/03/2024





City of Springfield Short Term Rental Locations



As of February 9, 2024, the Finance Department of the City of Springfield has successfully completed the registration process for a total of 280 short-term rentals, as depicted on this map, created on February 12th 2024

DISCLAIMER: All information included on this map or digital file is provided "as-is" for general information purposes only. The City of Springfield, and all other contributing data suppliers, make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the data for any particular use. Furthermore, the City of Springfield, and all other contributing data suppliers, assume no liability whatsoever associated with the use or misuse of the data.



City of Springfield, Missouri

Short-Term Rental Intake Form

1. Business Name (if applicable): AI Ventures LLC
- Operator(s) Name: Alyssa Ince
- Operator(s) Address: 2021 S Grant Ave, Springfield MO 65807
- Phone: (417) 630-9448 E-Mail: incealyssa@gmail.com

Short-Term Rental Address: 413 E Seminole

2. Property owner name, address, e-mail, and phone (if different):

3. Does the Short-Term Rental operator reside at the residential dwelling? ☐ Yes ☒ No

4. ☐ Type 1 (operator occupied; all zoning districts).

- ☒ Type 2 (non-operator occupied, zoned R-SF or R-TH).

- ☐ Type 3 (non-operator occupied, all other districts except R-SF or R-TH; no more than 2 units per premise).

Unit _____ Unit _____

5. Are guests housed in a primary or accessory structure? ☒ Primary Structure ☐ Accessory Structure

6. Is the dwelling unit currently being renovated or are there plans for renovation prior to completion of this application? ☐ Yes ☒ No

Alyssa Ince
Owner/Operator

Alyssa Ince
Signature

APPLICANT FILL OUT TO THIS POINT

PLANNING and DEVELOPMENT

1. Proposed location is zoned: R-SF
2. Verification of rental type: Type 2
3. Verification of Historic Carriage House: N/A
4. Verification of Density Requirements: City Council

PLN: PLN2024-00123 Personnel: CSTINSON Date Reviewed: 05/17/2024

Comments: _____

EXHIBIT D

Short-Term Rental Type 2 Letter of Opposition

You are receiving this letter of opposition because you are an adjacent residential property owner of a proposed Short-Term Rental Type 2 and you did not sign the Adjacent Owner Consent Form. If you wish to oppose the application for the Short-Term Rental, sign the letter on the reverse side and mail it back to the Department of Planning & Development. An application for a Short-Term Rental Type 2 at **413 E Seminole Street** may be scheduled to go before City Council in the coming weeks and notification will be sent prior to that meeting.

Failure to return this letter of opposition prior to the City Council meeting indicates that you do not oppose the application for a Short-Term Rental at **413 E Seminole Street**.

A notice with the date of the City Council hearing will be mailed at least 10 days prior to the meeting.

Why is a Short-Term Rental application going before City Council?

A Short-Term Rental Type 2 application requires a notarized affidavit containing signatures of at least 55 percent of adjacent residential property owners, including those adjoining and immediately across the street. If the signatures of at least 55 percent of neighboring property owners cannot be secured the applicant may apply to the city council to obtain a resolution granting the STR type 2 permit.

Return to: Department of Planning & Development
c/o Development Review
City of Springfield
840 Boonville Avenue
Springfield, MO 65802

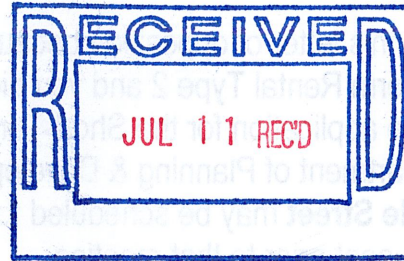
What to Remember When Signing the Letter of Opposition:

1. The letter must be signed by a property owner.
2. If more than one property owner signs, each must sign their name personally. Spouses cannot sign for each other.

If you have any questions about this procedure, please call the Department of Planning and Development at (417) 864-1611.

SHORT-TERM RENTAL TYPE 2 LETTER OF OPPOSITION TO THE
CITY COUNCIL OF SPRINGFIELD, MISSOURI

City of Springfield, Missouri
Department of Planning and Development
840 Boonville Avenue
Springfield, Missouri 65802



SHORT-TERM RENTAL ADDRESS: **413 E Seminole Street**

PROPERTY OWNER(S):

Wendy A. Eno
PRINT NAME
and
Shirley Eno
PRINT NAME

OWNER ADDRESS: 412 E SEMINOLE ST
PROPERTY ADJACENT TO PROPOSED STR

The undersigned hereby states that they are the verified owner(s) of property at the above-referenced address. The undersigned hereby states that they are opposed to the Short-Term Rental located at the above-referenced address.

Signed:

Signature of Owner: [Signature]

Signature of Owner: Shirley A Eno

****CAUTION**** This email originated from outside the organization. Do not open attachments or click links from sources you do not know and trust.

This is Karen Lewis, I own a house down the street from this property that the owner is requesting permission for it to be an air b & b.

There are already two within the same block, this would make three of them.

I am concerned about the frequent turnover of people this brings to the neighborhood.
It is much more desirable to have permanent renters and not ones that will only be there a short time.

We already have a duplex across the street that rents to traveling nurses.

I would like to oppose the approval of another air b & b in this neighborhood.

My address is
2132 S Jefferson Ave.

Thank you

Karen Lewis

Sent from my T-Mobile 5G Device



EXPLANATION TO COUNCIL BILL 2024-143 (MCGULL)

FILED: 06/28/2024

ORIGINATING DEPARTMENT: Airport

TITLE: A resolution adopting the Springfield-Branson National Airport Master Plan Update as an element of the Springfield Comprehensive Plan.

PURPOSE: To adopt the Springfield-Branson National Airport Master Plan Update.

BACKGROUND INFORMATION: The airport is in the final stages of an approximate eighteen-month process to update the Airport Master Plan. The plan includes an inventory of existing airport facilities, consideration of socioeconomic factors impacting aviation demand, forecasts of aviation activity for a twenty-year planning period, and recommended facility improvements to meet the anticipated aviation demand. There was significant public outreach and input throughout the process. The plan is important in meeting the air transportation needs of the region and in seeking future federal and state aviation grant funding. The last Airport Master Plan Update was approved by City Council in 2012.

The Airport Board passed a resolution on May 16, 2024, recommending that the City Council adopt the Master Plan Update. The Planning and Zoning Commission held a public hearing on June 13, 2024, and voted to recommend approval of the Master Plan Update.

Submitted By: Joy Latimer, Assistant City Attorney

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Collin Quigley, Deputy City Manager 7/15/2024

Attachments:

1. AP Master Plan_ord
2. SGF - FULL Master Plan Update_Exh A

One-rdg. X
P. Hrngs.
Pgs. 361
Filed: 07-16-24

Sponsored by: McGull

COUNCIL BILL 2024-143 RESOLUTION

A RESOLUTION

1 ADOPTING the Springfield-Branson National Airport Master Plan Update as an
2 element of the Springfield Comprehensive Plan.
3 _____
4

5 WHEREAS, the Planning and Zoning Commission, by state statute and Section
6 11.2 of the Springfield City Charter, has the authority and the responsibility to develop a
7 master plan, referred to by Springfield as its “comprehensive plan,” for the development
8 of the City of Springfield, Missouri; and
9

10 WHEREAS, Section 11.5 of the City Charter provides that the master plan for the
11 physical development of the City, with the accompanying maps, plats, charts,
12 descriptive, and explanatory matter, shall show the Commission’s recommendations for
13 the development of City territory; and
14

15 WHEREAS, Section 11.6 of the Charter provides that the Commission may adopt
16 the master plan as a whole by a single resolution, or may by successive resolutions
17 adopt successive parts of the plan, said parts corresponding to major geographical
18 sections of the City or to functional divisions of the subject matter of the plan, and may
19 adopt any amendment or extension thereof or addition thereof; and
20

21 WHEREAS, the Commission has decided to proceed with formation and
22 adoption of its comprehensive plan by functional elements; and
23

24 WHEREAS, after due notice and public hearings, the Commission did adopt on
25 June 13, 2024, the Springfield-Branson National Airport Master Plan Update as an
26 element of the Springfield Comprehensive Plan; and
27

28 WHEREAS, City Council has previously adopted a Springfield-Branson National
29 Airport Master Plan Update as an element of the Springfield Comprehensive Plan on
30 November 5, 2012 (Council Bill 2012-321); and
31

32 WHEREAS, Section 11.6 of the Charter provides that no plan or part thereof
33 shall be considered adopted until approved by the Council after a public hearing; and
34

35 WHEREAS, the Airport Board has requested that the City Council adopt the
36 Springfield-Branson National Airport Master Plan Update as an element of the
37 Springfield Comprehensive Plan ("Airport Board Resolution 2024-1"); and
38

39 WHEREAS, after due notice, this Council has received public comment at a
40 public hearing held on July 22, 2024.

41
42 NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF
43 SPRINGFIELD, MISSOURI, as follows:
44

45 Section 1 – That the Springfield-Branson National Airport Master Plan Update, a
46 copy of the same being attached hereto and incorporated by reference a "Exhibit A," is
47 hereby recognized as an element of the Springfield Comprehensive Plan for the
48 development of the City of Springfield, Missouri, the same being on file with the City
49 Clerk, and is hereby adopted as an element of the Springfield Comprehensive Plan for
50 the development of the City of Springfield, Missouri.
51

52 Section 2 – That the Director of Planning and Development and the City Clerk
53 are directed to maintain official copies of this plan in their offices.
54

55 Section 3 – This Resolution shall be effective immediately upon adoption.
56
57

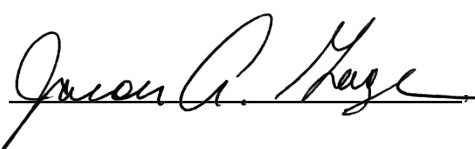
58 Passed at meeting: _____
59
60

61 _____
62 Mayor
63
64

65 Attest: _____, City Clerk
66
67

68 Filed as Ordinance: _____
69
70

71 Approved as to form:  _____, Assistant City Attorney
72
73

74 Approved for Council action:  _____, City Manager

Springfield-Branson National Airport

Master Plan Update

JUNE 2024

Prepared by

Crawford, Murphy & Tilly, Inc.



Preparation

"The preparation of this document was financed in part through a planning grant from the Federal Aviation Administration (FAA) as provided under Section 505 of the Airport and Airways Improvement Act of 1982, as amended by the Airway Safety and Capacity Expansion Act of 1987. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein, nor does it indicate that the proposed development is environmentally acceptable in accordance with applicable public laws."

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Chapter One

Airport Inventory

1.1 Master Plan Introduction

An Airport Master Plan is a planning document that assists the airport, the community, and the surrounding region in providing guidelines and direction over a 20-year period. Its long-term development concepts encompass the present and future aviation needs. The most recent Master Plan for Springfield-Branson National Airport (SGF or Airport) was developed in 2012 and an Airport Layout Plan (ALP) was completed in 2013. The 2012 Master Plan has largely been built-out and needs to be updated to reflect current conditions of the Airport, current projections of airport activity, and new environmental considerations. Furthermore, it will consider other regulatory factors, while planning for future land uses, facility development, and changes in the aviation environment.

The Federal Aviation Administration (FAA) provides documented guidance for Airport Master Plans¹. Additionally, the FAA Central Region and the Missouri Department of Transportation (MoDOT) require ALP updates to include aeronautical survey and aerial imagery acquisition in order to meet standards set forth in Advisory Circulars (ACs)². These are significant items both in terms of effort and cost. They are necessary to obtain enhanced instrument approach capabilities and provide an Airports Geographic Information System (AGIS) compatible dataset, in order to aid in decision making and future airport design projects. The resulting ALP will go on file with the FAA to maintain airspace protection and permit the City of Springfield to receive federal funding associated with proposed improvements at the Airport.

The following chapters will make up the SGF Airport Master Plan Report, as specified by the FAA AC:

- Chapter One – Airport Inventory
- Chapter Two – Terminal Area Inventory
- Chapter Three – Demand Projections
- Chapter Four – Airport Facility Requirements
- Chapter Five – Terminal Facility Requirements
- Chapter Six – Airport Alternatives
- Chapter Seven – Terminal Alternatives
- Chapter Eight – Land Use Compatibility Plan
- Chapter Nine – Implementation Plan/CIP

¹ FAA Advisory Circulars (ACs), specifically AC 150/5070-6B, Change 2, "Airport Master Plans"
https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5070-6B-Change-2-Consolidated.pdf

² FAA Advisory Circulars (AC) 150/5300 -16A, -17C and -18B

Due to the extensive use of acronyms in airport master plans, **Appendix 1** provides a comprehensive list of these acronyms. This list aims to offer guidance on the most common acronyms used in the aviation industry and throughout this master plan. Readers are encouraged to refer to this appendix for clarification and to ensure a better understanding of the terminology used.

1.1.1 Background

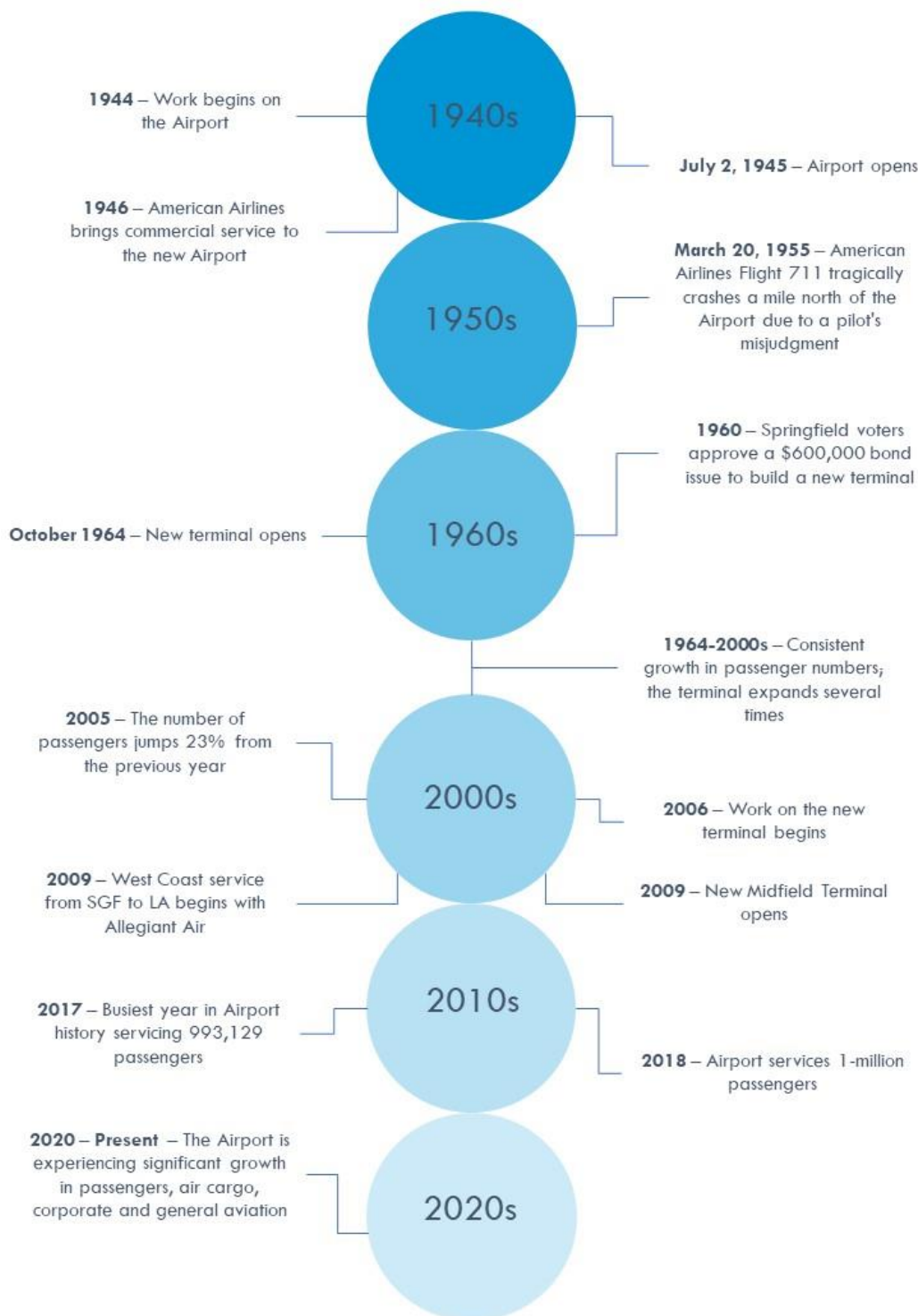
AIRPORT HISTORY

As an influx of wounded military personnel came back from World War II to receive treatment at O'Reilly General Army Hospital in Springfield, Missouri, the unpaved McClure Flying Field was inundated with large military planes leading the community to vote to build a new airport. The doors of Springfield Municipal Airport opened in July 1945 where the new amenities were quickly realized by commercial services and has been a growing asset ever since.

Almost two decades later a new terminal opened at the Airport in October 1964. The terminal was expanded several times to accommodate changes that occurred over the last quarter of the 20th century. Due to the booming tourism industry in neighboring Branson, MO, the Airport changed its name to Springfield-Branson Regional Airport in 1992.

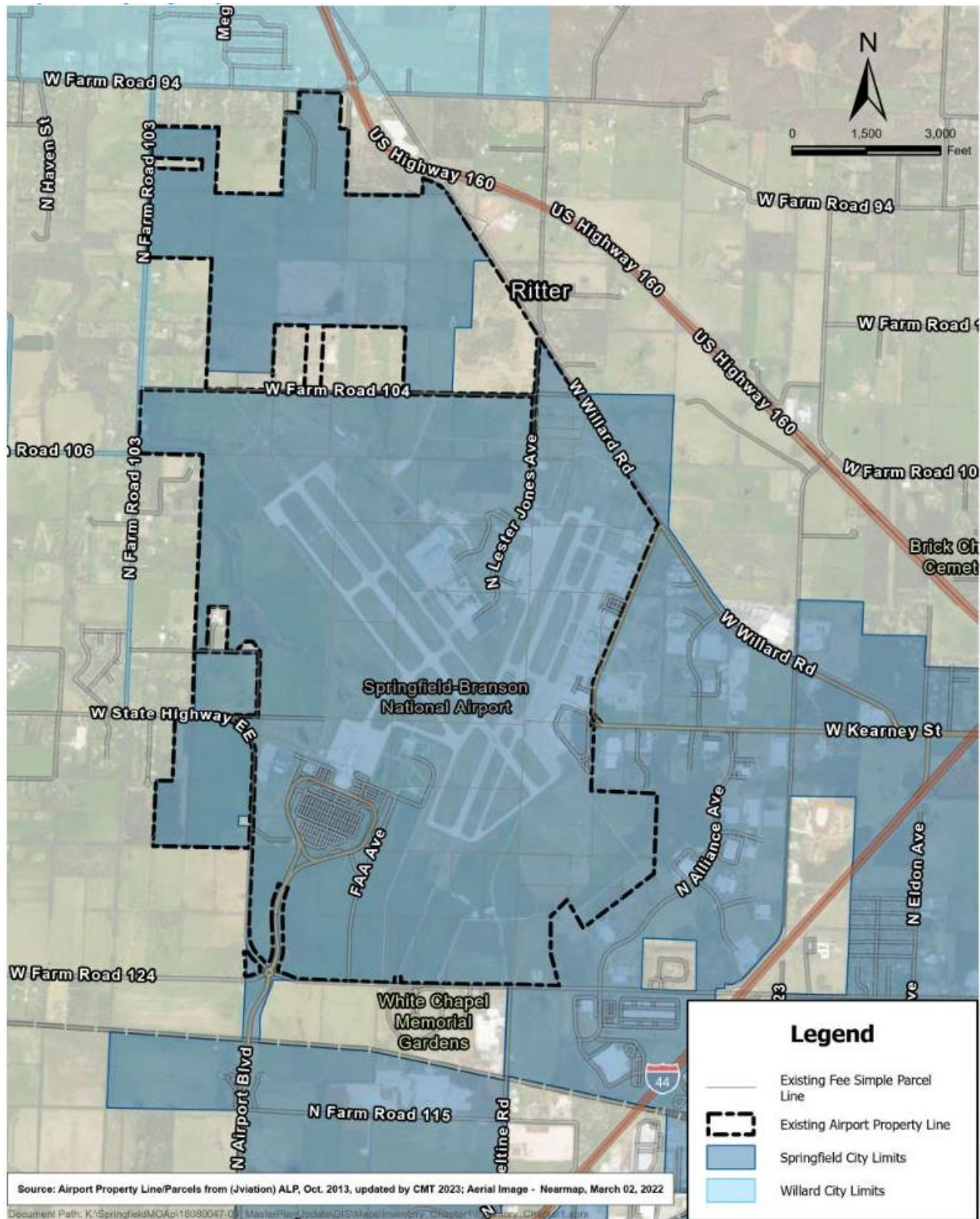
In 2006 the Airport broke ground on what is the current commercial terminal; the terminal opened in 2009. Shortly thereafter, the Airport changed its name to Springfield-Branson National Airport. In 2018, the Airport moved 1 million passengers, the most people in its history. **Exhibit 1.1-1** illustrates the timeline of SGF, with further historical information presented in **Appendix 2**. **Exhibit 1.1-2** shows the current footprint of SGF.

Exhibit 1.1-1: Timeline of Springfield-Branson National Airport



Source: <https://www.flyspringfield.com>

Exhibit 1.1-2: Airport Property



Source: CMT (2022); www.greenecountyassessor.org

1.1.2 Role in the National Aviation System

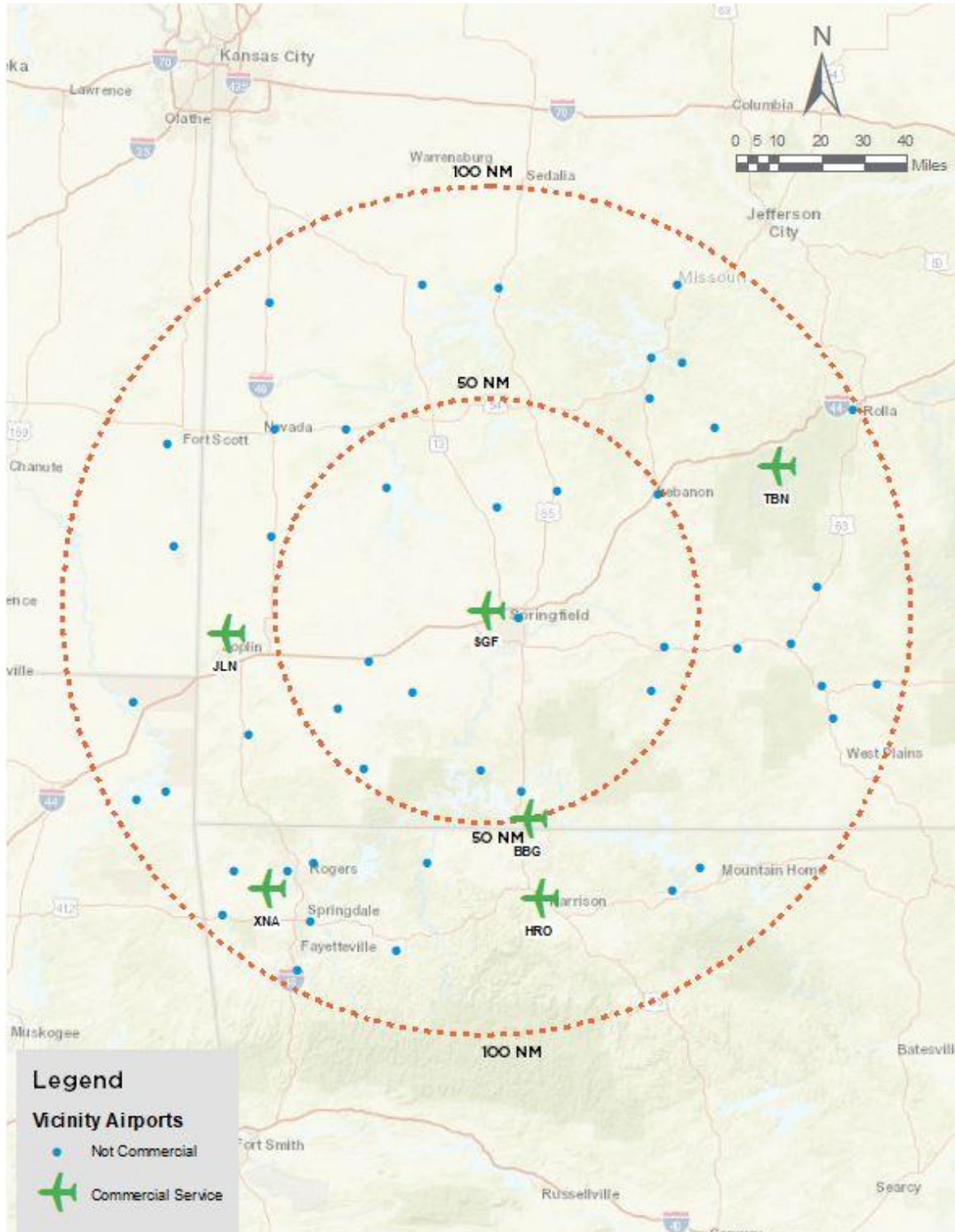
Springfield-Branson National Airport is a public-use airport in Greene County, Missouri owned by the City of Springfield and is managed by an 11-member administrative board. Public airports in the United States that are eligible for Federal Airport Improvement Program (AIP) funding are those included in the National Plan of Integrated Airport Systems (NPIAS). Airports in Missouri are also required to be included in the Missouri State Airport System Plan (MoSASP). SGF is included in both the Federal and State plans.

The FAA further classifies airports through passenger enplanements by total number and by percentage of annual passenger boardings on the national level. Airports are classified as Primary Airports if they have more than 10,000 annual passenger enplanements (boardings); SGF is classified as a Primary Airport.

The FAA further defines airports as “hub” types by the airport’s percentage of annual passenger enplanement of the United States’ passenger total. For example, an airport that boards more than 10,000 passengers, but between 0.05% to 0.25% of the annual U.S. commercial enplanements, is considered a Small Hub Primary Airport; SGF is classified as a Small Hub Primary Airport and is currently served by four airlines.

There are 13 public-use airports within a 50 nautical mile (NM) radius of SGF, with SGF being the only commercial service airport. Within a 100 NM radius of SGF there are a total of 53 public-use airports, 4 of which offer scheduled airline service (excluding SGF). Of these airports, SGF has the longest runway. **Exhibit 1.1-3** shows the public-use airports within 50 NM and 100 NM of SGF. **Table 1.1-1** lists the public-use airports within 50 NM and the commercial service airports within 100 NM of SGF.

Exhibit 1.1-3: Airports within 50 NM and 100 NM of SGF



Source: CMT (2021)

Table 1.1-1: Regional Airports

AIRPORT	ID	LOCATION	LONGEST RUNWAY LENGTH	DISTANCE (NM)	DIRECTION
General Aviation Airports within 50 NM of SGF					
Ava Bill Martin Memorial	AOV	Ava, MO	3,634'	38	SE
Bentonville Municipal	VB	Bentonville, AR	4,426'	67	SW
Bolivar Municipal	M17	Bolivar, MO	4,000'	21	N
Branson West Municipal	FWB	Branson West, MO	5,002'	33	S
Buffalo Municipal	H17	Buffalo, MO	3,220'	28	NE
Cassville Municipal	94K	Cassville	3,599'	41	SW
Downtown	3DW	Springfield, MO	4,037'	7	E
Floyd W Jones Lebanon	LBO	Lebanon, MO	5,000'	43	NE
Jerry Sumners Sr Aurora Municipal	2H2	Aurora, MO	3,001'	23	SW
M Graham Clark Downtown	PLK	Branson, MO	3,738'	38	SE
Mansfield Municipal	03B	Mansfield, MO	3,000'	38	E
Monett Regional	HFJ	Monett, MO	5,000'	36	SW
Mount Vernon Municipal	2MO	Mount Vernon, MO	3,195'	26	SW
Stockton Municipal	MO3	Stockton, MO	3,060'	32	NW
Commercial Service Airports within 100 NM of SGF					
Boone County	HRO	Harrison, AR	6,161'	60	S
Branson	BBG	Branson, MO	7,140'	44	S
Joplin Regional	JLN	Joplin, MO	6,501'	54	SW
Springfield-Branson National Airport	SGF	Springfield, MO	8,000'	-	-
Northwest Arkansas National Airport	XNA	Bentonville, MO	8,801'	73	SW
Waynesville-St Robert Regional	TBN	Fort Leonard Wood, MO	6,037'	67	NE

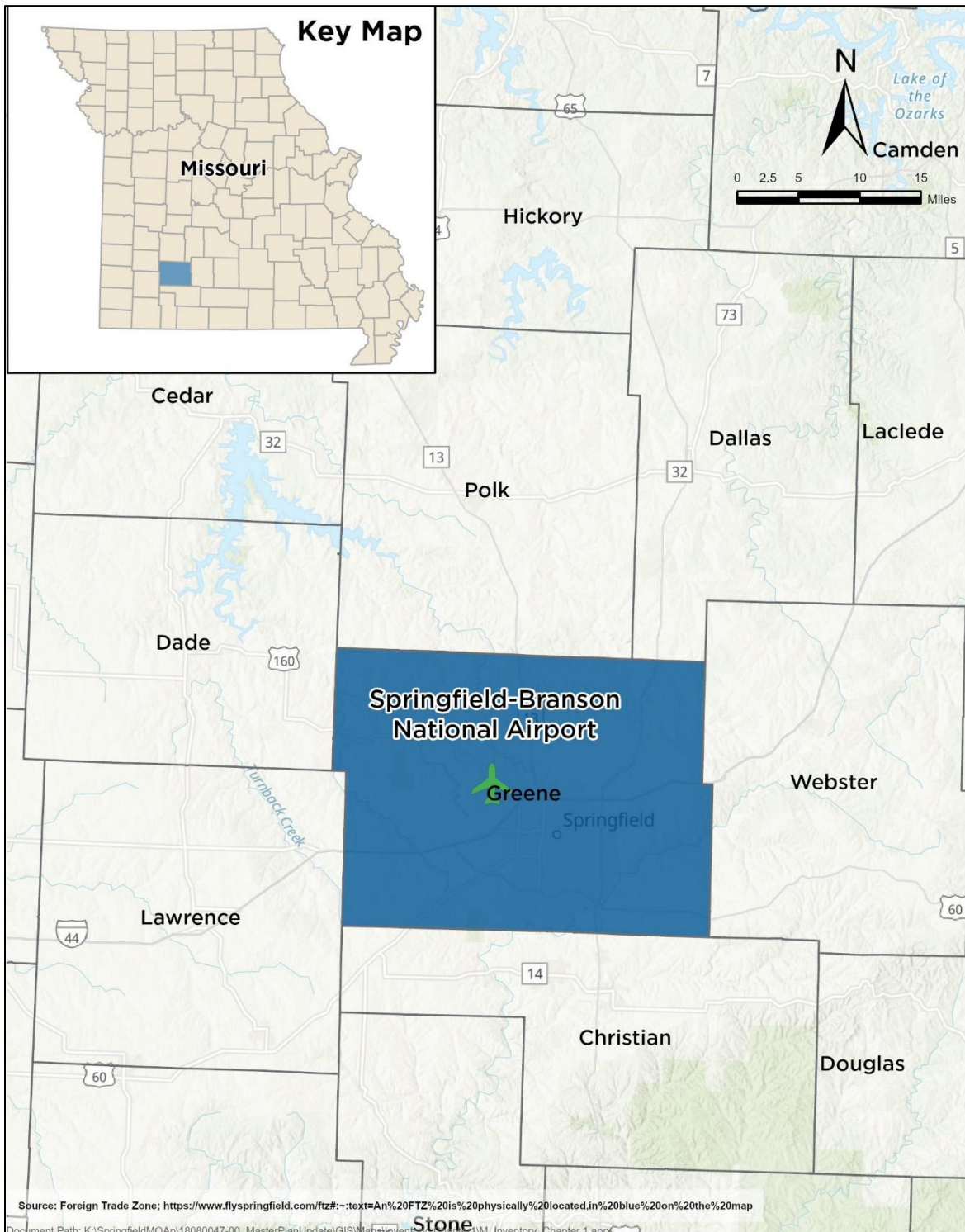
Source: CMT (2022)

1.1.3 Site Location

SGF is located within Greene County, MO in northwest Springfield, MO and is part of the Springfield, MO Metropolitan Statistical Area (MSA). Springfield is the premier location for visitors and residence as a place where the unique natural beauty and urban spaces meet. As a gateway to the Ozarks, Springfield and SGF are situated to attract visitors from other parts of Missouri, northern Arkansas, northeast Oklahoma, and southeastern Kansas. About 45 minutes south by car, is Branson, MO which is one of the nation's most popular entertainment towns. The city is also surrounded by several large reservoirs, state, and national parks which are valued by locals and visitors alike.

Exhibit 1.1-4 shows SGF's location within Greene County.

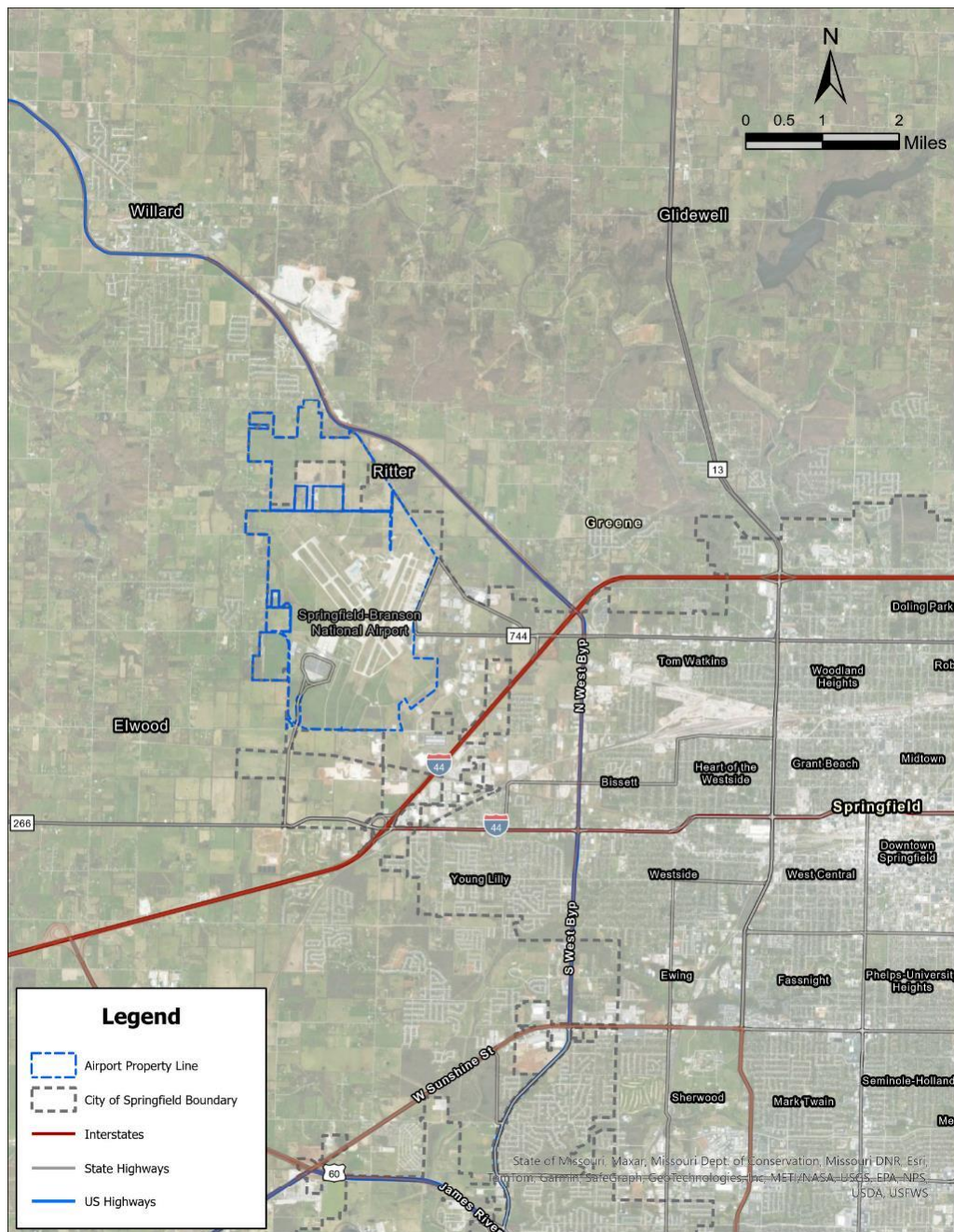
Exhibit 1.1-4: Airport Vicinity Map



Source: CMT (2022)

Springfield is a transportation hub for not only air traffic but vehicular traffic as well, as a connector of Interstate 44, U.S. 65, and MO 13 Highways. **Exhibit 1.1-5** shows the roadway network surrounding SGF. The airport is located on the western front of the city of Springfield with several of the largest automotive connectors servicing the site. Being of industrious use and requiring protection zones, the airfield is removed from many of the residential and commercial services of the city but is still accessible being only 15 minutes away by car to the city's downtown.

Exhibit 1.1-5: Roadways Connecting to SGF



Source: CMT (2021)

1.1.4 Socioeconomic Profile

Referencing socioeconomic trends of the environs of an airfield may reveal key indicators of future aviation demand. Economic growth can be measured by several different indicators. Those indicators can often be associated with total employment and personal income to which the state of Missouri, the Springfield, MO MSA, and Greene County, MO have been experiencing a general positive trend in both categories since the late 1960s.

Correlations can be drawn from economic activity to aviation activity and can suggest a future direction for an airport.

WOODS & POOLE ECONOMICS, INC.

The database consulted for this socioeconomic assessment is from Woods & Poole Economics. Woods & Poole Economics is a small, independent corporation that specializes in long-term county economic and demographic projections.

The Woods & Poole Economics database contains more than 900 economic and demographic variables for every county in the United States for every year from 1969 to 2050. This comprehensive database includes detailed population data by age, sex, and race; employment and earnings by major industry; personal income by source of income; retail sales by kind of business; and data on the number of households, their size, and their income. The specialized and reliable data provided by Woods & Poole was utilized to perform much of the socioeconomic assessment of the area surrounding SGF.

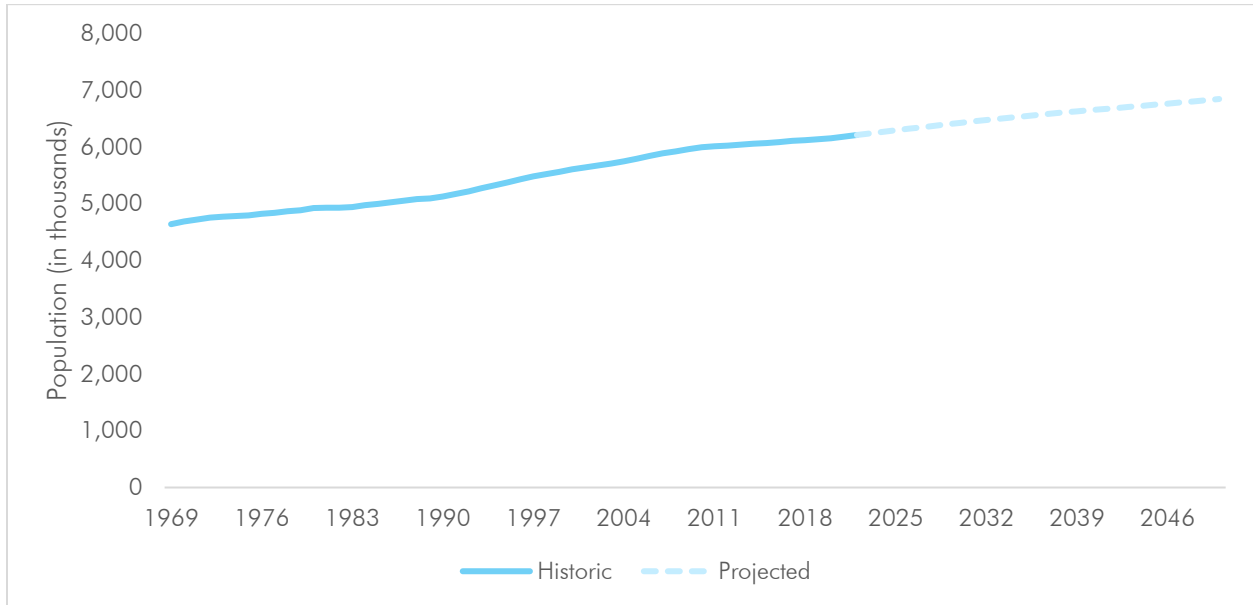
POPULATION

Since 1969 Missouri, the Springfield, MO MSA, and Greene County, MO have experienced growing trends in population. Missouri has a compound annual growth rate (CAGR) of 0.55% and Greene County sports a healthy 1.29% CAGR.

The general population in Missouri has grown by a little over 1.5 million people since 1969 and Greene County accounts for approximately 9% of the total population growth in the state.

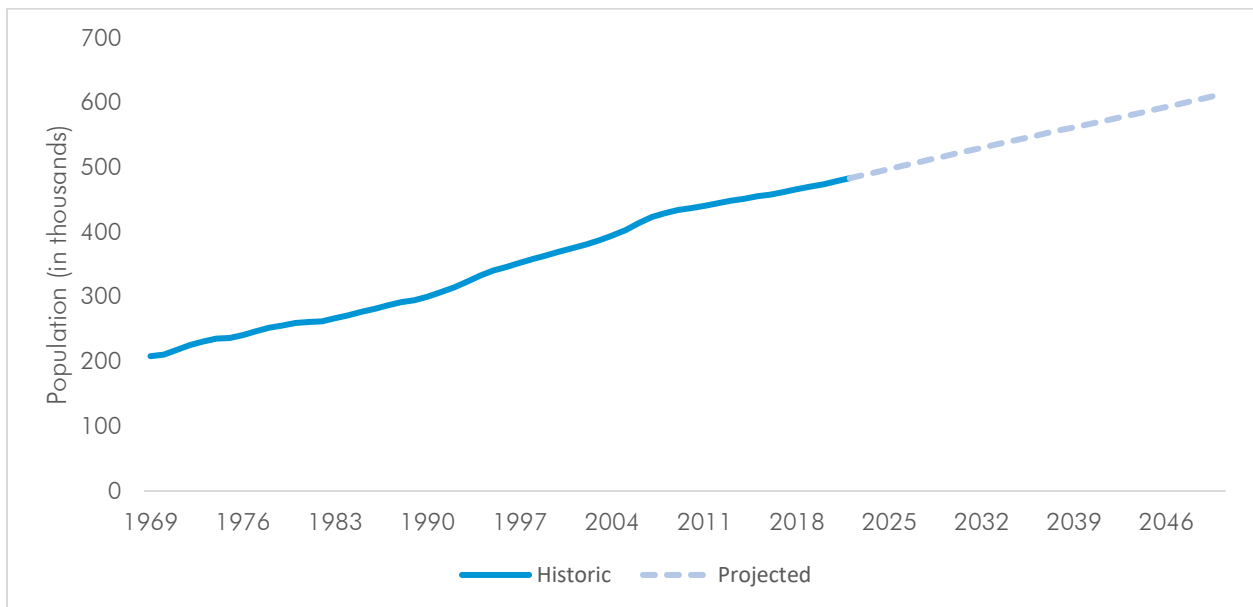
Exhibits Exhibit 1.1-6, Exhibit 1.1-7, and Exhibit 1.1-8 illustrate the growth in population in Missouri, the local MSA, and Greene County, MO, respectively.

Exhibit 1.1-6: Total Population (in thousands) - Missouri



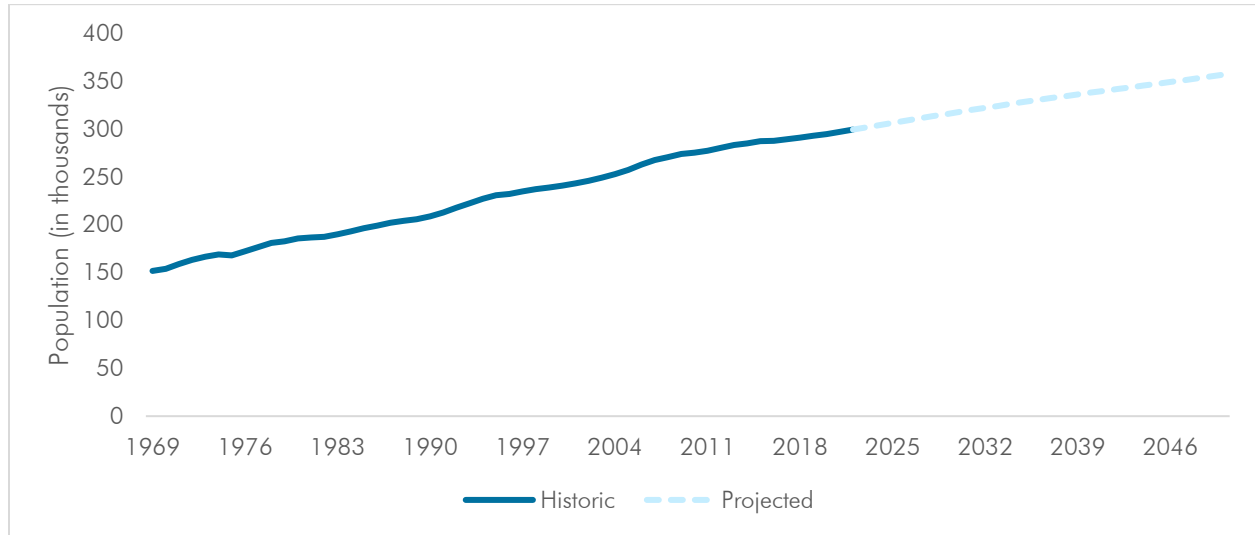
Source: Woods & Poole Economics (2021), CMT

Exhibit 1.1-7: Total Population (in thousands) - Springfield, MO MSA



Source: Woods & Poole Economics (2021), CMT

Exhibit 1.1-8: Population (in thousands) - Greene County, MO



Source: Woods & Poole Economics, CMT

Table 1.1-2 summarizes the growth in population in Missouri, the local MSA, and Greene County, MO, respectively, from 2011 to 2021.

Table 1.1-2: Population Growth Summary – 10 Years

YEAR	MISSOURI		SPRINGFIELD, MO MSA		GREENE COUNTY, MO	
	POPULATION	% CHANGE	POPULATION	% CHANGE	POPULATION	% CHANGE
2011	6,010,275	-	440,432	-	277,446	-
2012	6,024,367	+0.23%	444,432	+0.90%	280,447	+1.07%
2013	6,040,715	+0.27%	448,427	+0.89%	283,605	+1.11%
2014	6,056,202	+0.26%	451,556	+0.69%	285,241	+0.57%
2015	6,071,732	+0.26%	455,593	+0.89%	287,312	+0.72%
2016	6,087,135	+0.25%	457,917	+0.51%	287,818	+0.18%
2017	6,106,670	+0.32%	462,090	+0.90%	289,512	+0.59%
2018	6,121,623	+0.24%	466,273	+0.90%	291,054	+0.53%
2019	6,137,428	+0.26%	470,300	+0.86%	293,086	+0.69%
2020	6,154,407	+0.28%	473,960	+0.77%	294,813	+0.59%
2021	6,182,426	+0.45%	478,611	+0.97%	297,165	+0.79%
CAGR (2011-2021)	+0.28%		+0.83%		+0.69%	

Source: Woods & Poole Economics 2021; Bureau of Labor Statistics; CMT

INCOME

On average, both Missouri and Greene County have observed over a 5% CAGR in personal income per capita since 1969. Greene County leads the state and MSA with a CAGR of 5.33% versus the state's and MSA's CAGRs of 5.22% and 5.29%, respectively. This steady increase is a fundamental indicator of consistent growth with potential airport demand.

Table 1.1-3 displays the personal income per capita CAGR per geography from 1969-2021.

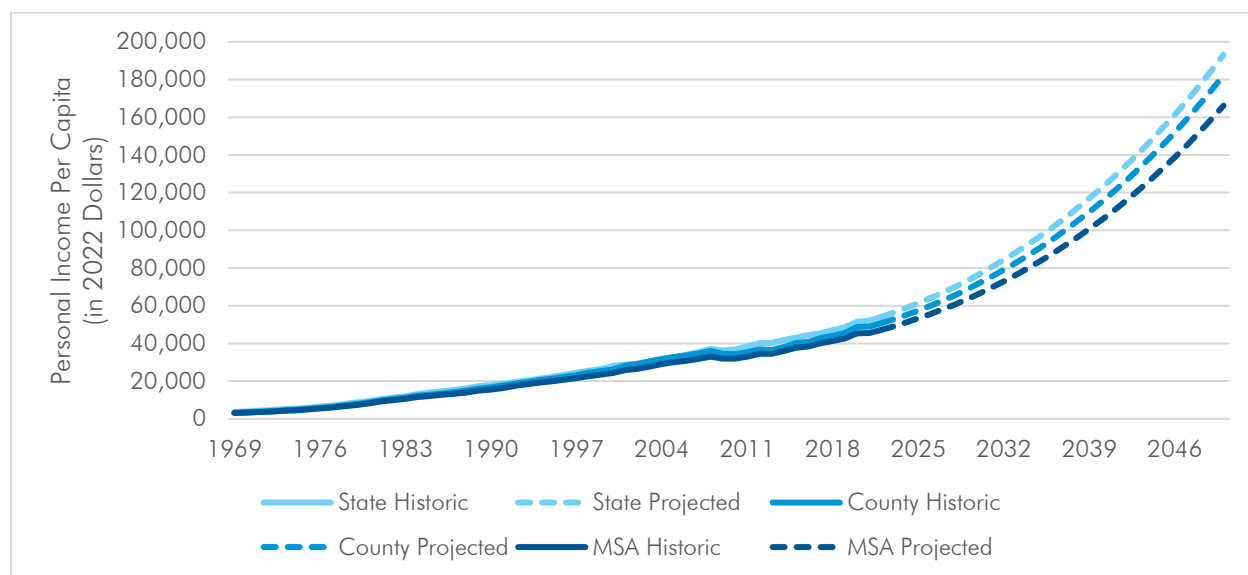
Table 1.1-3: Personal Income Per Capita CAGR (1969-2021)

GEOGRAPHY	CAGR
State	5.22%
MSA	5.29%
Greene County	5.33%

Source: Woods & Poole Economics 2021; Bureau of Labor Statistics; CMT

Exhibit 1.1-9 illustrates the historic and projected total personal income per capita in the state of Missouri, Springfield MSA, and Greene County.

Exhibit 1.1-9: Personal Income Per Capita (in 2022 Dollars) - MO, Greene Co, & Springfield MSA



Source: Woods & Poole Economics, CMT

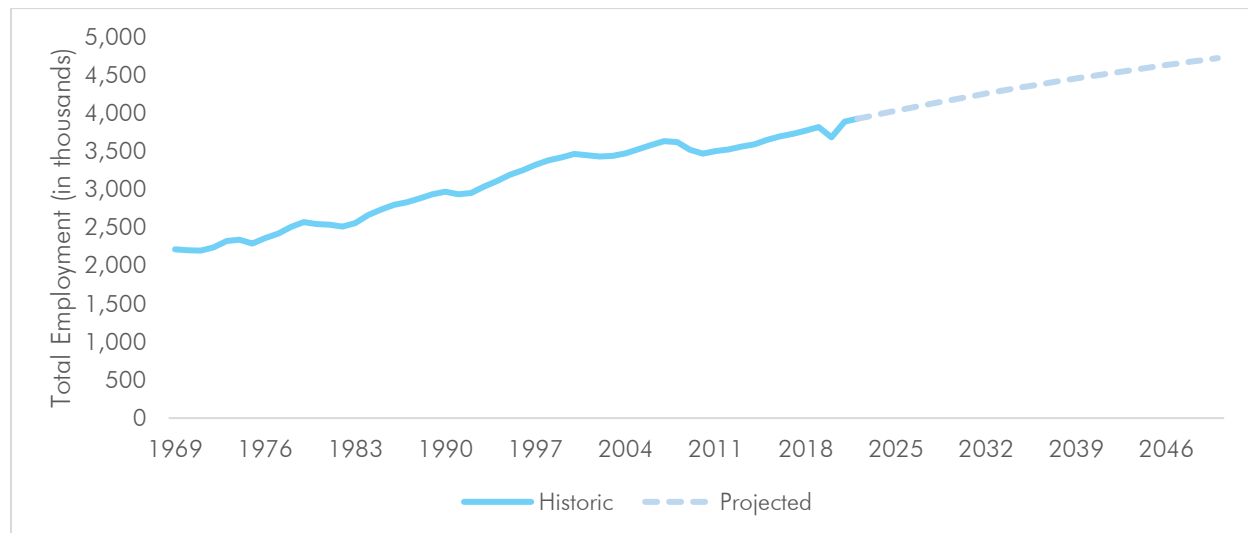
EMPLOYMENT

The total employment of the state and Springfield area have been regularly growing in the last 54 years. Like population and income, employment in the Springfield, MO MSA and Greene County are growing marginally faster than the state with respective CAGRs of 2.24% and 2.17% over the state's 1.09%.

Each year over the last decade all three geographies experienced growth in employment, in terms of number of jobs, except for 2020. In March 2020 the COVID-19 pandemic was declared a national emergency and in the following months had a significant impact on the Springfield area and nationwide. 2021 employment figures indicate the number of jobs has rebounded and exceeded pre-pandemic levels.

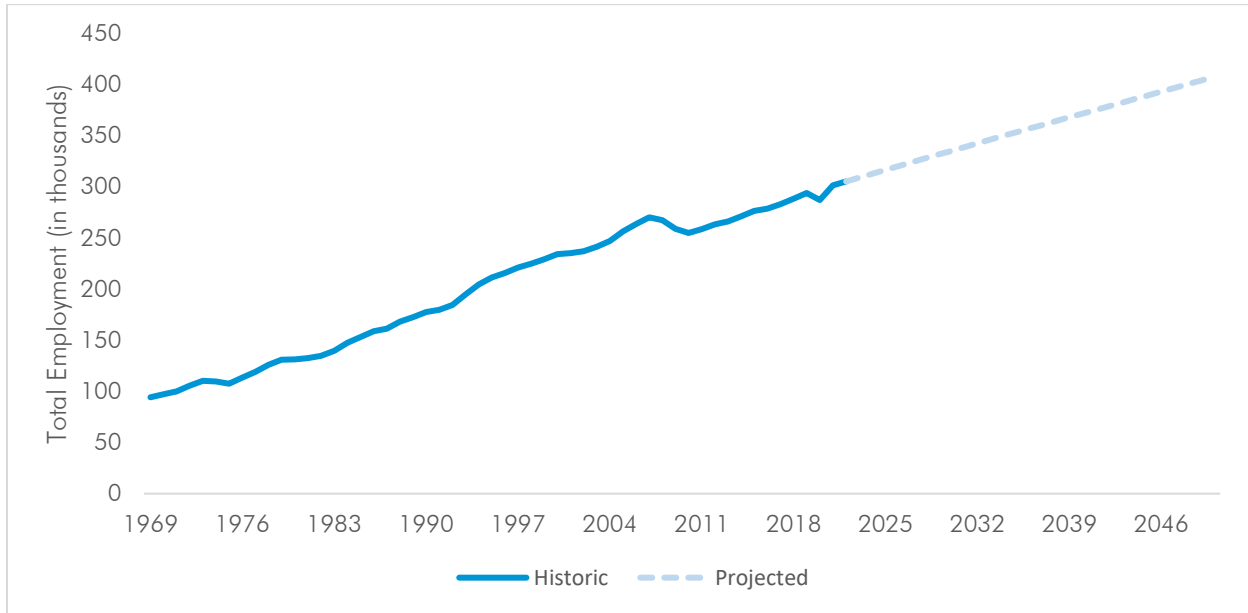
Exhibits Exhibit 1.1-10, Exhibit 1.1-11, and Exhibit 1.1-12 illustrate the total employment figures for Missouri, the Springfield, MO MSA, and Greene County, MO, respectively. **Table 1.1-4** provides a comparison of the figures.

Exhibit 1.1-10: Total Employment (in thousands) – Missouri



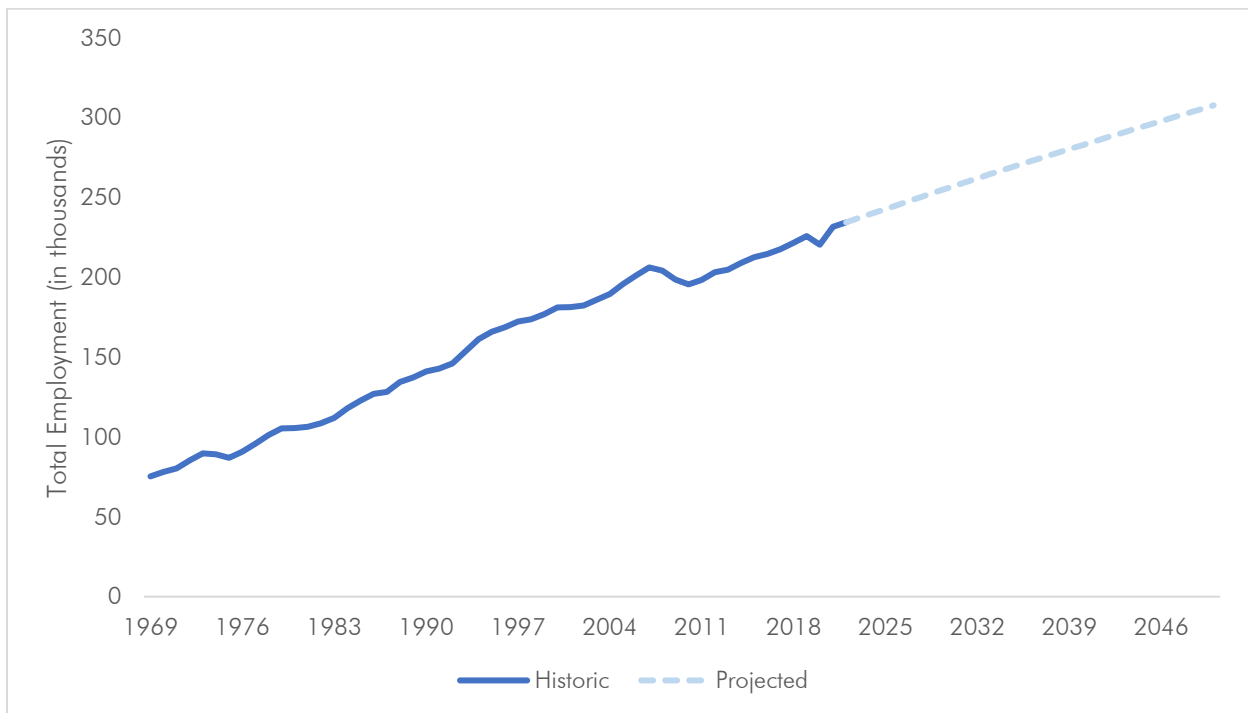
Source: Woods & Poole Economic, CMT

Exhibit 1.1-11: Total Employment (in thousands) – Springfield, MO MSA



Source: Woods & Poole Economic, CMT

Exhibit 1.1-12: Total Employment (in thousands) – Greene County, MO



Source: Woods & Poole Economic, CMT

Table 1.1-4: Employment Growth Summary – 10 Years

YEAR	MISSOURI		SPRINGFIELD, MO MSA		GREENE COUNTY, MO	
	JOBS	% CHANGE	JOBS	% CHANGE	JOBS	% CHANGE
2011	3,506,571	-	258,568	-	198,500	-
2012	3,528,130	+0.61%	263,486	+1.90%	203,287	+2.41%
2013	3,565,929	+1.07%	266,174	+1.02%	204,946	+0.82%
2014	3,596,750	+0.86%	271,201	+1.89%	208,965	+1.96%
2015	3,655,817	+1.64%	276,355	+1.90%	212,736	+1.80%
2016	3,700,664	+1.23%	278,711	+0.85%	214,762	+0.95%
2017	3,735,894	+0.95%	282,941	+1.52%	217,746	+1.39%
2018	3,776,354	+1.08%	288,308	+1.90%	221,717	+1.82%
2019	3,821,912	+1.21%	293,979	+1.97%	225,975	+1.92%
2020	3,687,551	-3.52%	287,191	-2.31%	220,432	-2.45%
2021	3,895,864	+5.65%	301,497	+4.98%	231,625	+5.08%
CAGR (2011-2021)	+1.06%		+1.55%		+1.56%	

Source: Woods & Poole Economics 2021; Bureau of Labor Statistics; CMT

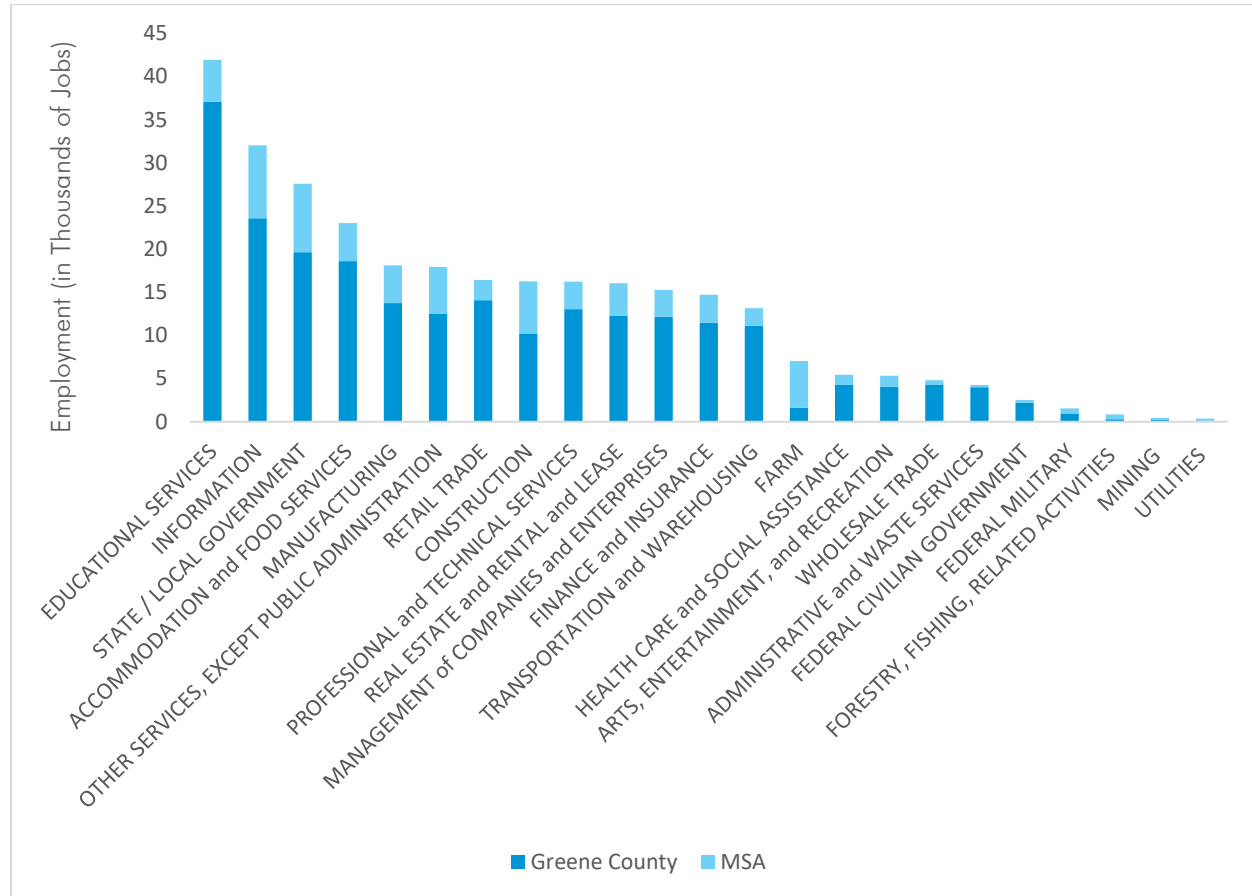
INDUSTRY

In terms of employment in number of jobs within the Springfield MSA, educational services is the largest industry comprising 14% of the job market. Geographically magnified in Greene County, educational services is a slightly larger industry with 16% of the job market, which may be attributed to the 11 higher education and training facilities as well as the large public school district located in Springfield. As Greene County is the nexus of the MSA, the industrial trends mimic one another, and no significant outliers are generated from the data produced.

Exhibit 1.1-13 is a graphic representation of what industries are driving the economy in the Springfield, MO MSA and Greene County, MO in 2021 in terms of number of jobs. The data from the county is overlaying the MSA data in the exhibit, illustrating the total number of jobs in the industry as well as the synergistic relationship between the two data sources.

Table 1.1-5 lists the top 10 employers in Springfield, MO, and their respective industries.

Exhibit 1.1-13: Springfield MSA and Greene County Employment Sectors in 2021



Source: Woods & Poole Economic, CMT (2022)

Table 1.1-5: Major Employers in Springfield, MO

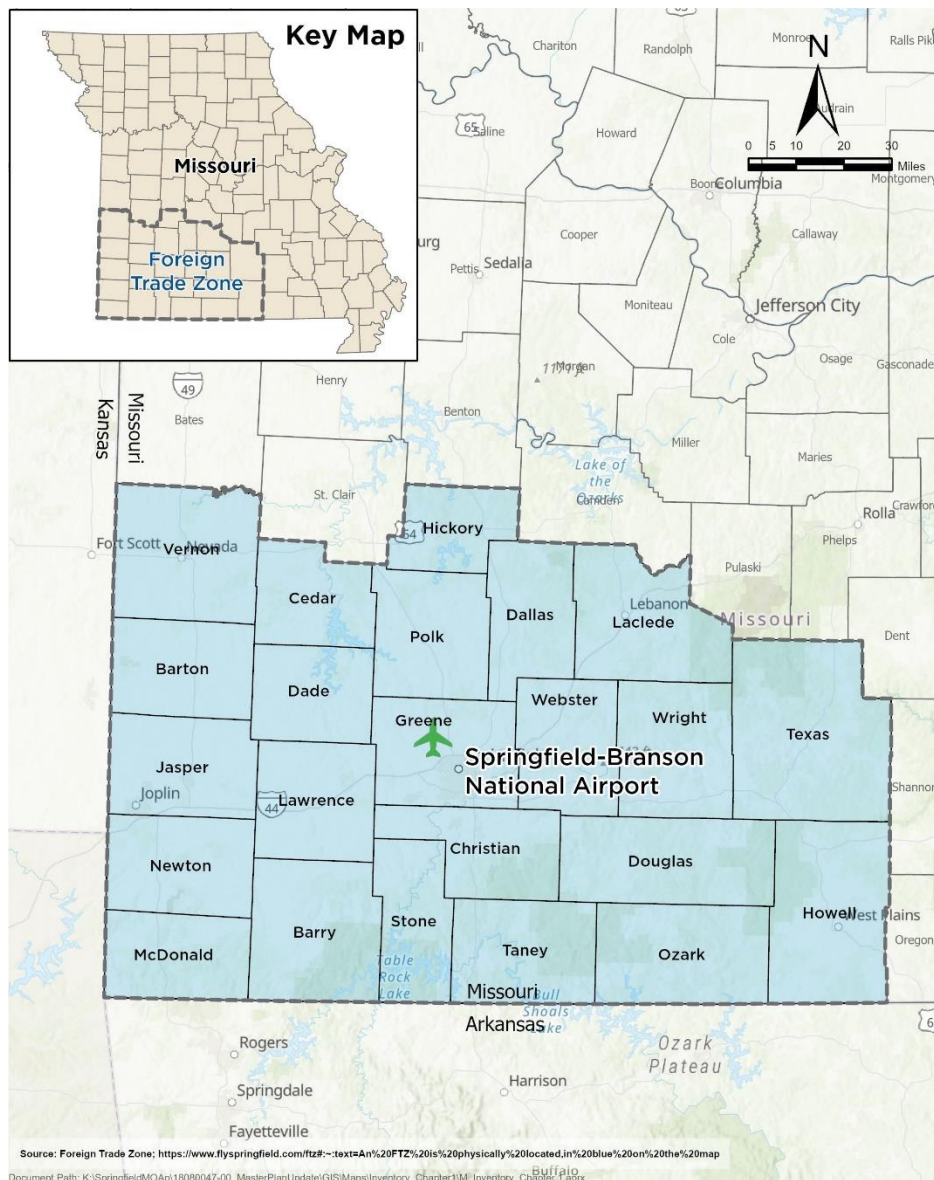
RANK	# OF JOBS	EMPLOYER	INDUSTRY TYPE
1	12,164	CoxHealth	Healthcare
2	8,202	Mercy Hospital Springfield	Healthcare
3	5,381	Walmart Inc.	Retail
4	3,694	Springfield Public Schools	Education
5	3,127	Bass Pro Shops White River Marine Group	Retail/Manufacturing
6	3,018	State of Missouri	Government
7	2,919	United States Government	Government
8	2,760	Missouri State University	Education
9	2,307	O'Reilly Auto Parts (HQ)	Retail/Manufacturing
10	2,028	City of Springfield	Government

Source: <https://www.springfieldregion.com/data/major-employers/>

FOREIGN TRADE ZONE

SGF is the hub for the Southwest Missouri Foreign Trade Zone. As a federal economic incentive program, foreign trade zones (FTZ) enhance the capabilities of local businesses competition on the global trading market. The Southwest Missouri Foreign Trade Zone is unique as it not only includes businesses within the airport, but also extends the customs easing benefits to businesses with fixed sites within the 23 counties surrounding the airfield. The FTZ is a regional economic booster and attractant. An FTZ can reduce operating costs, improve supply chain pace, and defer, delay, or eliminate duties and taxes on goods manufactured or processed within the FTZ. **Exhibit 1.1-14** illustrates the Southwest Missouri FTZ boundary.

Exhibit 1.1-14: SGF Foreign Trade Zone



Source: SGF & CMT (2022)

1.2 Airfield and Airspace

1.2.1 Runways

SGF is configured with two intersecting runways: Runway 14-32 and Runway 02-20. Runway 14-32 exists as the primary runway. **Table 1.2-1** details an overview of the components of each runway.

Table 1.2-1: SGF Runway Characteristics

RUNWAY FEATURE	RUNWAY 14-32		RUNWAY 02-20	
	14	32	02	20
Length	8,000'		7,003'	
Width	150'		150'	
Pavement Type	Grooved Concrete		Grooved Concrete	
Pavement Classification Number (PCN)	60/R/C/W/T		60/R/C/W/T	
Runway End Elevation	1,260.2'	1,268.2'	1,263.9'	1,261.9'
Runway Edge Lighting	HIRL		HIRL	
Runway Markings/Condition	PIR/good	NPI/good	PIR/good	
Displaced Threshold	No		No	

Note: HIRL – High Intensity Runway Lights; PIR – Precision Instrument; NPI – Non-Precision Instrument

Source: FAA ADIP; CMT (2022)

1.2.2 Airport Reference Code (ARC) and Runway Design Code (RDC)

The FAA uses two designations to design airports and runways. They are the Airport Reference Code (ARC) and the Runway Design Code (RDC). The ARC refers to the operational and physical characteristics of the type of aircraft operating at the airport. Additionally, the ARC also signifies an airport's most demanding RDC excluding the visibility component. Each runway at SGF has an Airport Reference Code (ARC) of D-IV.

The RDC signifies design standards used to build a runway. Both codes are used for planning and to determine design standards. The three elements of RDC are: Aircraft Approach Category (AAC), Airplane Design Group (ADG), and visibility minimums. The AAC is represented by a letter from A-E and reflects aircraft approach speeds. ADG is represented by a roman numeral from I-VI and reflects tail height and wingspan in feet. Finally, runway visibility minimums are a measurement of the instrument approach visibility minimum recorded, in feet, as the Runway Visual Range (RVR). A breakdown of the AAC, ADG and Visibility Minimums is shown in **Table 1.2-2**, **Table 1.2-3**, and **Table 1.2-4**, respectively.

Table 1.2-2: Aircraft Approach Category (AAC)

CATEGORY	APPROACH SPEED V_{REF} (KNOTS)
A	< 91
B	$91 \leq \text{and} < 121$
C	$121 \leq \text{and} < 141$
D	$141 \leq \text{and} < 166$
E	$166 \leq$

Source: FAA Advisory Circular 150/5300-13B

Table 1.2-3: Airplane Design Group (ADG)

CATEGORY	TAIL HEIGHT (FT.)	WINGSPAN (FT.)
I	< 20	< 49
II	$20 \leq 30$	$49 \leq 79$
III	$30 \leq 45$	$79 \leq 118$
IV	$45 \leq 60$	$118 \leq 171$
V	$60 \leq 66$	$171 \leq 214$
VI	$66 \leq 80$	$214 \leq 262$

Source: FAA Advisory Circular 150/5300-13B

Table 1.2-4: Visibility Minimums

RVR (FT)	INSTRUMENT FLIGHT VISIBILITY CATEGORY (STATUTE MILE)
5,000	Not lower than 1
4,000	Lower than 1 but not lower than $\frac{3}{4}$
2,400	Lower than $\frac{3}{4}$ but not lower than $\frac{1}{2}$
1,600	Lower than $\frac{1}{2}$ but not lower than $\frac{1}{4}$
1,200	Lower than $\frac{1}{4}$

Source: FAA Advisory Circular 150/5300-13B

RUNWAY SAFETY AREAS

According to the FAA, runways must have a Runway Safety Area (RSA). The RSA is a measurable rectangular area around a runway that reduces the risk of aircraft damage should an aircraft overshoot, undershoot, or travel off the runway. AC 150/5300-13B determines the dimensions of the RSA, which is based on the Runway Design Code (RDC). An RSA must not have any objects within its boundaries, except for items necessary for safe operations such as navigational aids (NAVAIDS).

RUNWAY OBJECT FREE AREAS

The FAA requires a Runway Object Free Area (ROFA). The ROFA encompasses a large rectangular shape centered around the runway that provides a buffer from objects and operating aircraft. Objects required for aircraft navigation and ground maneuvering are allowed to be located within the ROFA. AC 150/5300-13B also dictates dimensions for the ROFA.

RUNWAY PROTECTION ZONES

The Runway Protection Zone (RPZ) is established to protect people and property on the ground. Runways require an approach and departure RPZ. The RPZ has a trapezoidal shape and is located beyond each end of a runway. An RPZ's dimensions are established in AC 150/5300-13B, which considers AAC for each runway end with visibility minimums being a factor for the approach RPZ, and departure procedures being a factor for the departure RPZ. **Table 1.2-5** lists the RSA/ROFA/RPZ dimensions for both runways at SGF.

Table 1.2-5: SGF RSA/ROFA/RPZ Dimensions

SAFETY AREA	RUNWAY 14-32		RUNWAY 02-20	
	14	32	02	20
RSA (Width x length)	500' x 1,000'		500' x 1,000'	
ROFA (Width x length)	800 x 1,000'		800 x 1,000'	
Approach RPZ (Inner width x outer width x length)	1,000' x 1,510' x 1,700'	500' x 1,010' x 1,700'	1,000' x 1,750' x 2,500'	1,000' x 1,510' x 1,700'
Departure RPZ (Inner width x outer width x length)	500' x 1,010' x 1,700'		500' x 1,010' x 1,700'	

Source: FAA AC 150/5300-13B, CMT (2021)

1.2.3 Taxiways

Each runway at SGF has two parallel taxiways, creating an efficient and comprehensive taxiway system. Several other taxiways run perpendicular to the runways, providing access to different areas of the airfield. All taxiways at SGF are 75 feet wide and are designed for ADG-IV aircraft, or aircraft with up to 171-foot wingspans, except the portion of Taxiway N south of Runway 14-32, which is 60 feet wide. This portion of Taxiway N can accommodate most ADG-IV aircraft, except those in which the cockpit to main gear (CMG) dimension and width of the main gear (MGW) exceed the values prescribed in AC 150/5300-13B, such as the Boeing 767. **Table 1.2-6** provides a description of each taxiway.

Table 1.2-6: Taxiway Description and Pavement Condition Index (PCI)

TAXIWAY	DESCRIPTION	AVERAGE PCI
A	Taxiway connector from the GA Apron to Runway 02-20. Located southeast of the Runway 20 threshold	73
B	Taxiway connector from the GA Apron to Runway 02-20. Located southeast of the Runway 20 threshold	53
C	Located at the midpoint of Runway 02-20 and connects the runway to Taxiway U to the west and the West Kearney Complex Apron to the east	73
D	Full length parallel taxiway for Runway 14-32 on the northeast side of the runway	72
E	Connects the Commercial Apron at main terminal to Taxiway U	79
F	Connects Runway 14-32 to the Commercial Apron on the southwest and Taxiway D on the northeast	80
G	Connects the MO National Guard Apron to Taxiway D	79
H	Connects Runway 14-32 to Taxiway D	83
J	Connects the MO National Guard Apron to Taxiway D	77
N	Full length parallel taxiway on the southeast side of Runway 02-20	69
P	Connects Taxiway N to the fuel farm and t-hangars on the north end of the GA Apron	71
R	Connects the GA Apron to Taxiway N	72
S	Connects the threshold of Runway 32 to Taxiway N	68
T	Connects the GA Apron to Taxiway N	79
U	Full length parallel taxiway located on the northwest side of Runway 02-20. Provides access to Cargo Apron.	80
W	Parallel taxiway located on the southwest side of Runway 14-32	89

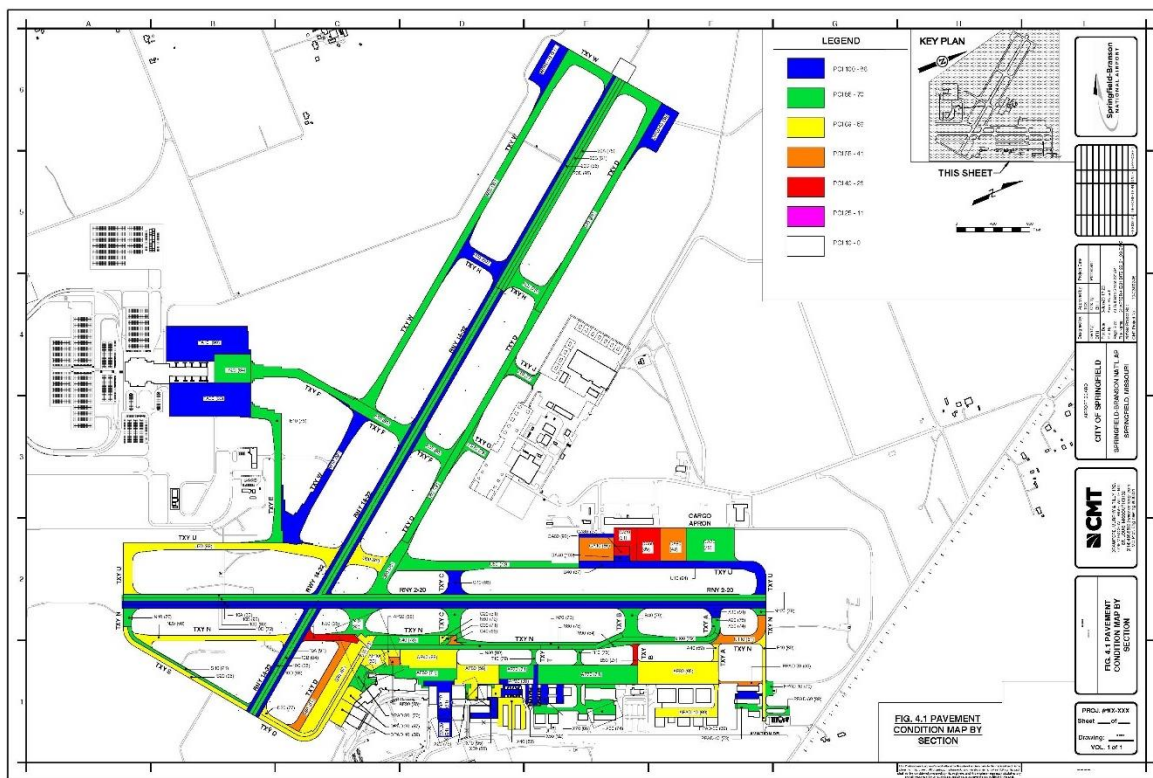
Source: CMT (2022-23)

1.2.4 Pavement Condition Index (PCI)

As per the requirements of FAR Part 139 (Airport Certification), all civilian pavements at SGF are inspected each morning by Airport staff. Pavements are inspected for safety concerns, to ensure no foreign object debris (FOD) is present, as well as inspecting for pavement distresses. These inspections may lead to pavement repair, such as crack and spall repair on concrete pavement and patching on bituminous pavement.

In addition to daily inspections, a Pavement Management Plan (PMP) update was conducted in 2022 to assess the condition of and better manage airfield pavements and identify rehabilitation projects within the CIP. **Exhibit 1.2-1** shows the current PCI map. The full PMP report is provided in **Appendix 3**.

Exhibit 1.2-1: Pavement Condition Index Map



Source: CMT (2022-23)

1.2.5 Airspace, Instrument Approaches, and Navigational Aids

Weather in aviation is defined in two conditions: Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC). Aircraft, as defined by the FAA, can fly under either Visual Flight Rules or Instrument Flight Rules. Visual flight is conducted on a see and be seen method and weather conditions includes cloud heights greater than 1,000 feet above the surface and more than three miles visibility. These conditions, paired with the airspace in which they exist, dictate the use of instrument approaches and navigational aids at any given time.

INSTRUMENT APPROACHES

There are several published Standard Instrument Approach Procedures (SIAP) that serve SGF.

Table 1.2-7 summarizes the existing instrument approach procedures available at SGF.

Table 1.2-7: Instrument Approach Summary

APPROACH TYPE	RUNWAY END	CEILING (FEET/AGL) AND VISIBILITY MINIMUMS (MILE)*
ILS or LOC	RWY 02	200 - 1/2
ILS or LOC	RWY 14	300 - 3/4
RNAV	RWY 02	400 - 3/4
RNAV	RWY 14	3/4
RNAV	RWY 20	3/4
RNAV	RWY 32	1
VOR/DME or TACAN	RWY 02	3/4
VOR or TACAN	RWY 20	3/4

Source: FAA Digital Approach Plates, July 2021.

*Lowest minimums are shown. Actual minimums are based on aircraft category type (A, B, C or D).

NAVIGATIONAL AIDS

Instrument Landing System (ILS)

An ILS is a type of ground-based navigational aid that provides precision vertical and horizontal guidance to aircraft. The ILS consists of several components but most notably a localizer (LOC), glide slope antennae, and distance measuring equipment (DME).

- **Localizer (LOC):** Generates and radiates signals to provide final approach azimuth navigation information to landing aircraft. The antenna sends a VHF carrier signal with 90-Hz and 150-Hz sideband signals that the aircraft instruments determine as left and right of the centerline. The aircraft interprets the signal and displays them on the cockpit indicator guiding the pilot until the runway is in sight.
- **Glide Slope:** In a similar manner as the LOC signal (just turned 90 degrees on axis), the Glide Slope sends a UHF carrier signal with the same two 90-Hz and 150-Hz sideband frequencies that aircraft instruments determine as above or below the desired glide path. This is approximately 3 degrees to the horizon which gives the aircraft a descent rate of approximately 500 feet per minute.
- **Distance Measuring Equipment (DME):** A radio navigation aid used by pilots to determine the aircraft's slant range from the DME ground station location. The DME avionics in aircraft send a pulse signal to the ground based DME, which responds with an answer pulse signal. The receiver in the aircraft measures the time delay between the sent and received pulses and calculates the slant range distance. There is no azimuth information, only distance.³

Airport Surveillance Radar

Airport Surveillance Radar is an integrated primary and secondary radar system that has been deployed at terminal air traffic control sites. It interfaces with both legacy and digital automation systems and provides six-level national weather service calibrated weather capability that provides enhanced situational awareness for both controllers and pilots.⁴

Rotating Beacon

The Airport's rotating beacon is used to identify the location of the Airport by projecting beams of light which alternate white and green flashes. The beacon is especially useful to guide pilots in nighttime and inclement weather conditions.

Airfield Lighting and Approach Lighting Aids

Airfield lighting consists of taxiway and runway edge lighting, and approach lighting systems (ALS). The runway edge lights at SGF consist of high intensity runway lights (HIRL). Runway 32 is equipped with Runway End Identifier Lights (REILs), which indicate the beginning of the usable runway for approaching aircraft. Medium Intensity Approach Light Systems with Runway Alignment Indicator Lights are installed on Runways 02 and 14. Runway 20 is equipped with a similar system, which is known as a MALS and

³ https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices

⁴ https://www.faa.gov/air_traffic/technology/asr-11/

excludes the 1,000-foot-long Runway Alignment Indicator Lights. All taxiways are equipped with Medium Intensity Taxiway Lighting (MITL).

Visual Approach Aids

The visual glideslope indicators (VGSIs) that provide pilots with the location of their aircraft in relation to the glideslope of a runway are a Visual Approach Slope Indicator (VASI) and Precision Approach Path Indicator (PAPI). VASIs and PAPIs consist of four boxes that emit red and white lights to indicate if an aircraft is below, above, or on the glideslope to a runway. A VASI has two boxes in front of two boxes, while the PAPI has four boxes in a row. The colored lights appear in different sequence depending on the aircraft's position relation to the glideslope. Runways 14, 32 and 20 all have PAPI systems. Runway 02 has a VASI system.

Windsocks

A visual aid in the form of a fabric cone that visually provides surface wind direction and approximate speed information to pilots. They are installed near the operational runway.

Weather Reporting

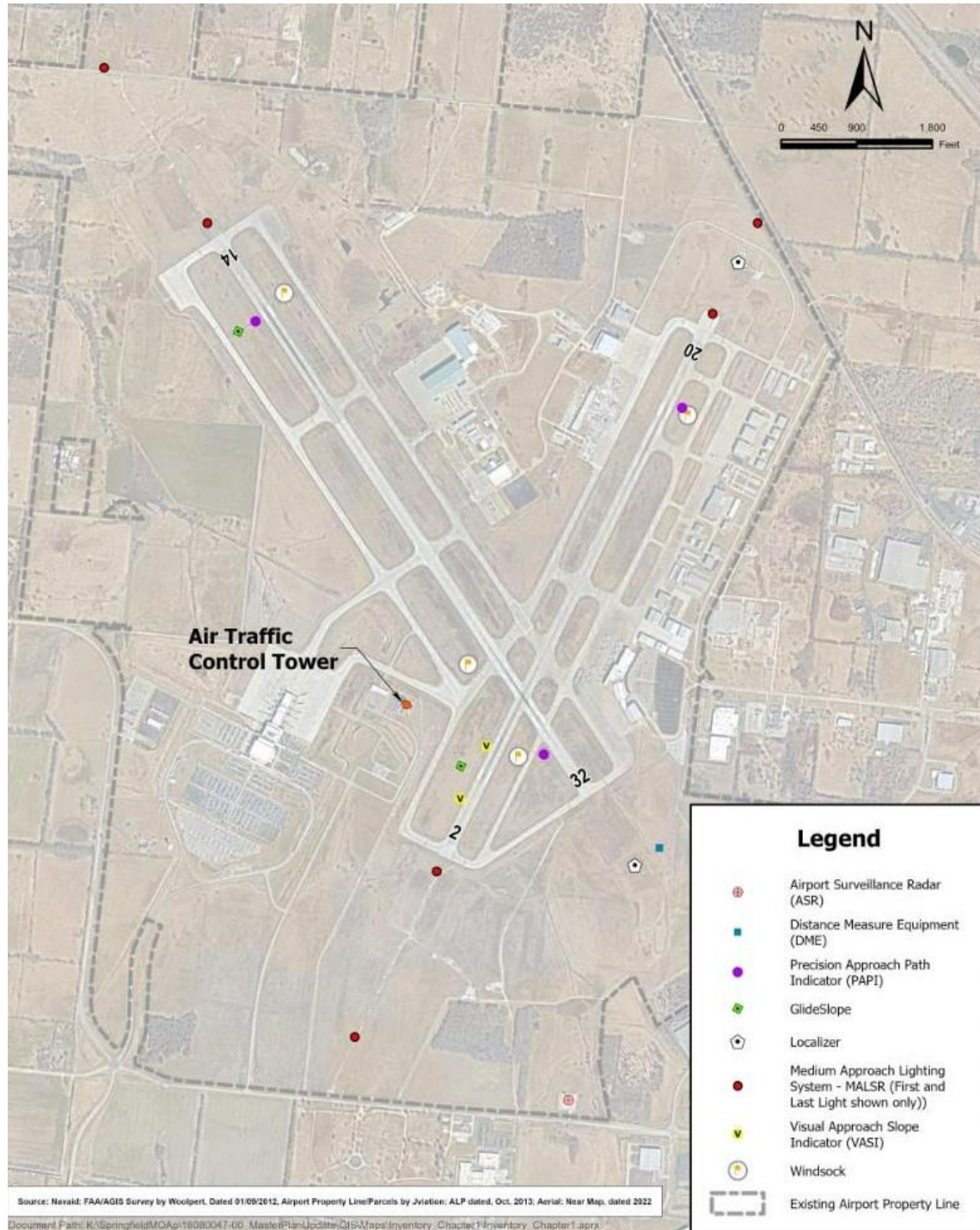
The National Weather Service station of Springfield is located just west of the Airport and provides reliable weather reporting to the airfield and the region with weather surveying equipment such as an Automated Surface Observing System (ASOS) and a WSR-88D(NEXRAD) doppler radar.

AIRPORT TRAFFIC CONTROL

SGF is served by an Airport Traffic Control Tower (ATCT) that controls the Airport's air traffic 24 hours a day. There is also a Terminal Radar Approach Control (TRACON) facility located at the SGF ATCT that offers approach control for the Airport and a large portion of southwest Missouri. The ATCT uses a radar surveillance system that is located on the south side of the airport. The secondary radar is a beacon interrogator which obtains a radio signal from an aircraft with location, altitude, and aircraft-specific identification.

Exhibit 1.2-2 illustrates the location of SGF's navigational aids.

Exhibit 1.2-2: Navigational Aids



Source: FAA/AGIS Survey by Woolpert (2012); CMT

1.2.6 Airspace

Serving as the major airport to the region, the airspace surrounding SGF is not complex. The airport is protected by Class C airspace, which the FAA defines as:

*"...generally airspace from the surface to 4,000 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower, are serviced by a radar approach control, and have a certain number of IFR operations or passenger enplanements. Although the configuration of each Class C area is individually tailored, the airspace usually consists of a surface area with a five NM radius, an outer circle with a ten NM radius that extends from 1,200 feet to 4,000 feet above the airport elevation. Each aircraft must establish two-way radio communications with the ATC facility providing air traffic services prior to entering the airspace and thereafter must maintain those communications while within the airspace."*⁵

Exhibit 1.2-3 illustrates the FAA Airspace Classifications. Exhibit 1.2-4 depicts the portion of the Sectional Aeronautical Chart that surrounds SGF. The airspace represented by the magenta circles around SGF is the Class C airspace.

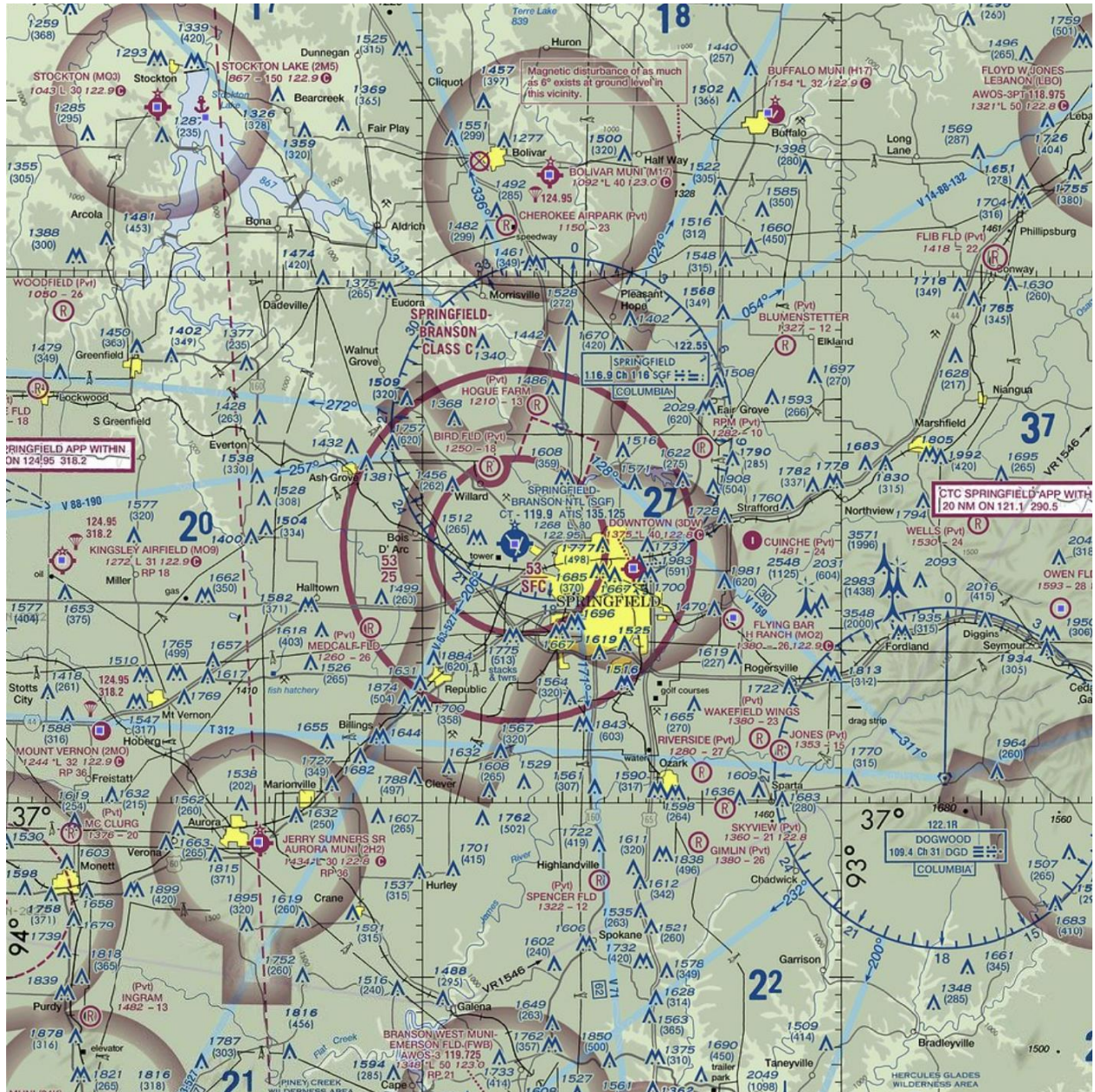
Exhibit 1.2-3: FAA Airspace Classifications



Source: https://www.faa.gov/gslac/ALC/course_content.aspx?cID=42&slD=505&preview=true

⁵ Airspace Classification (aspm.faa.gov)

Exhibit 1.2-4: Regional Airspace



Source: VFR Map; CMT (2022)

1.3 Passenger Terminal and Facilities

Located on the southwest side of the airfield, the new passenger terminal broke ground in 2006 and opened in 2009. Less than a decade later, SGF serviced 1 million passengers. An inventory of the commercial terminal and facilities is provided in Chapter Two – Terminal Area Inventory.

1.4 Landside Facilities

1.4.1 Aprons

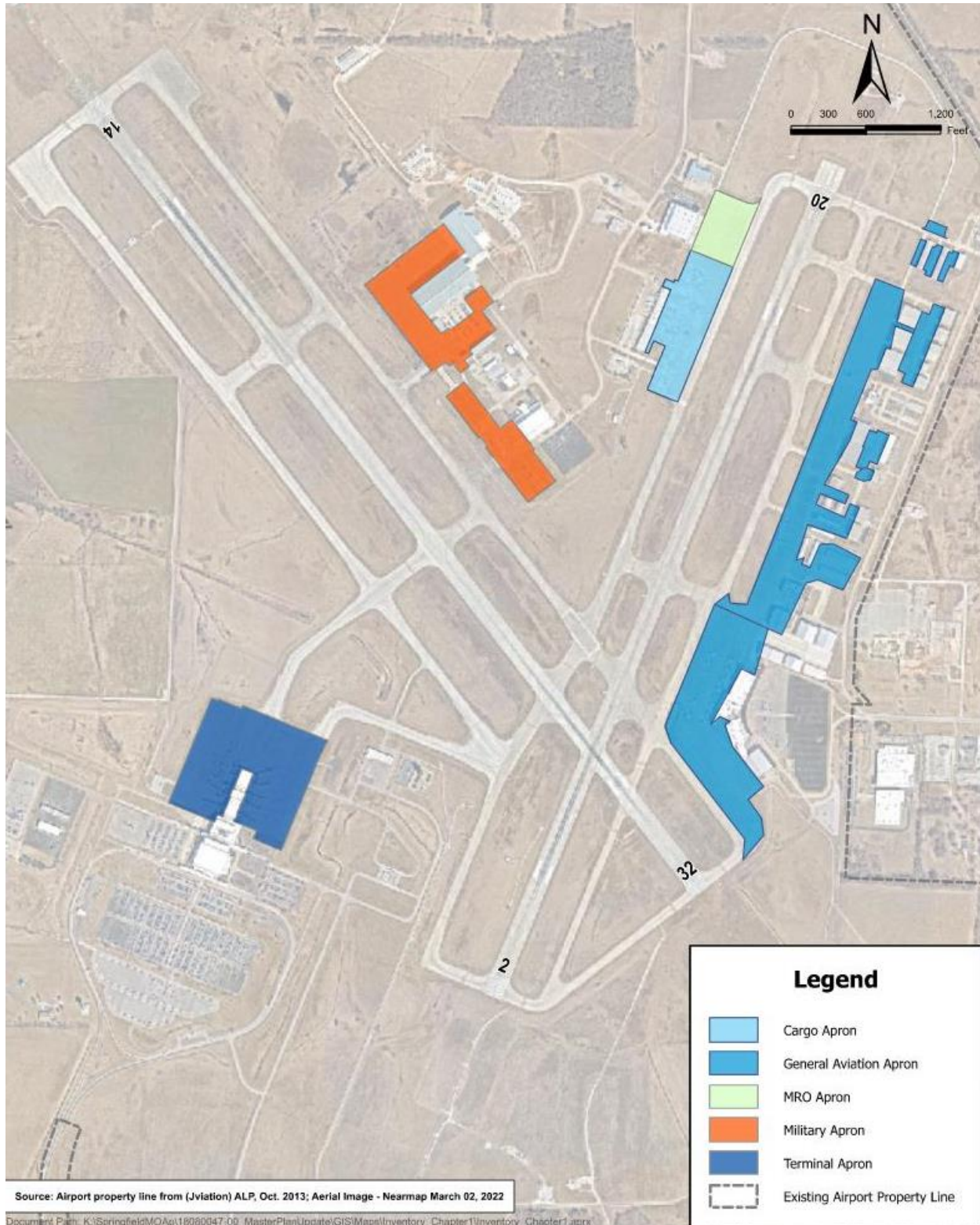
There are different types of aprons at an airport that serve different purposes, such as aircraft parking, fueling, maintenance, loading/unloading of passengers, and special use aprons. **Table 1.4-1** summarizes the size of each main apron area. **Exhibit 1.4-1** identifies the existing apron areas at SGF.

Table 1.4-1: SGF Apron Areas

APRON	AREA (yd ²)	PAVEMENT TYPE	PCI
Terminal	85,000	Concrete	85
Military	121,000	Concrete	66
Air Cargo	65,000	Concrete	61
Maintenance, Repair, & Overhaul (MRO)	19,800	Concrete	69
General Aviation	117,000	Concrete	92

Source: CMT 2022

Exhibit 1.4-1: Apron Areas

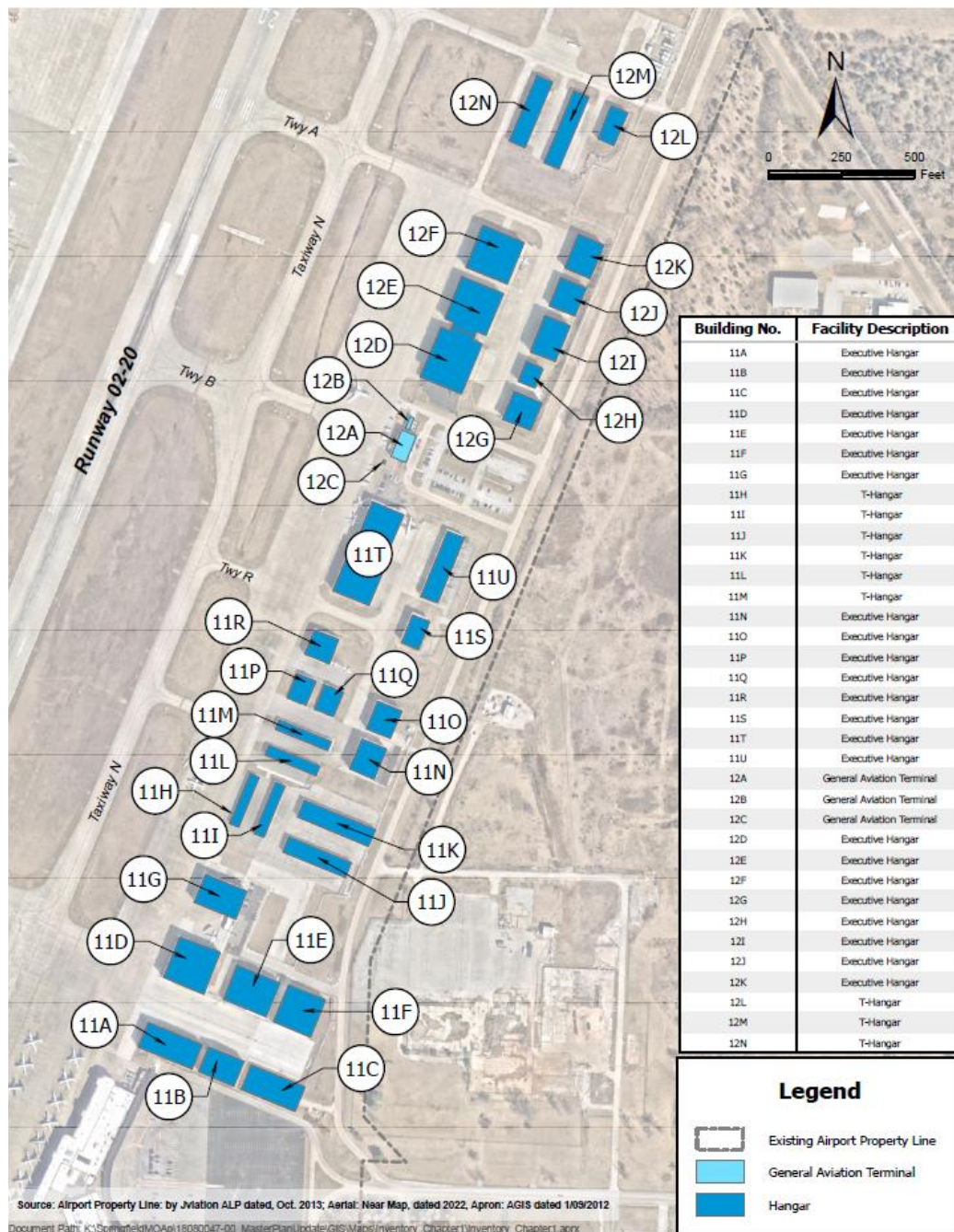


Source: CMT (2022)

1.4.2 Hangars and T-Hangars

The Airport has a total of 32 hangar buildings on the GA apron, with an additional hangar under construction. There are 22 executive (box) hangars and 9 t-hangar buildings. **Exhibit 1.4-2** depicts the different hangars on the GA Apron. In 2021 the Airport reported 143 based aircraft. As of June 2022, there are 35 individuals on the hangar wait list.

Exhibit 1.4-2: GA Hangar Area



Source: SGF; CMT (2022)

1.4.3 Air Cargo Facilities

The Airport's cargo facilities are located to the west of Runway 02-20, and south of the Snow Removal Equipment (SRE) and MRO facilities. **Exhibit 1.4-3** depicts the current apron parking positions for cargo planes at SGF. Currently there are four parking positions for cargo aircraft on the apron and is currently utilized by two cargo carriers.

Exhibit 1.4-3: Air Cargo Positions



Source: CMT 2022

1.4.4 Missouri National Guard - Aviation Classification Repair Activity Depot (MO-AVCRAD)

MO-AVCRAD is located north of the midpoint of Runway 14-32 and has been located at SGF for over 50 years. The mission of MO-AVCRAD is to provide general support, backup direct support, and limited depot maintenance for approximately 359 helicopters and other aircraft assigned to 33 National Guard facilities within a 14-state support area in the Central United States and is one of four AVCRADs in the nation.

The facilities underwent a multi-phased expansion plan with the first two phases completed in 2008 and 2012. The final expansion phase finished at the Roy Blunt Aviation Logistics Facility and was completed in 2021. The expansion is expected to result in a 20% to 30% workload increase with an associated increase in personnel.⁶

Exhibit 1.4-4: MO-AVCRAD Roy Blunt Aviation Logistics Facility



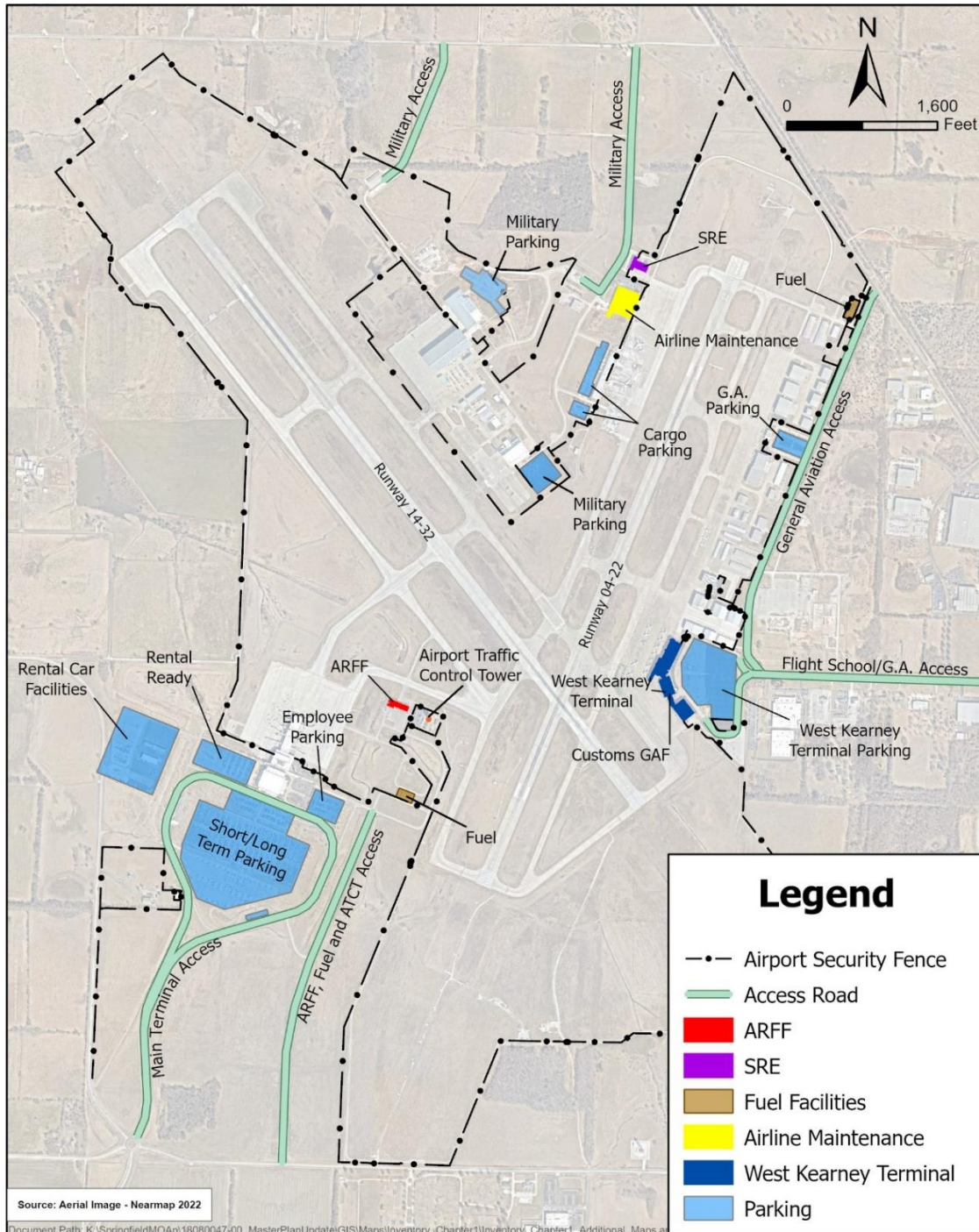
Source: Sapp Design Architects (2022)

⁶ Springfield News-Leader: <https://www.news-leader.com/story/news/local/ozarks/2021/08/20/national-guard-avcrad-facility-springfield-missouri-named-sen-roy-blunt/8210103002/>

1.4.5 Support Facilities

The support facilities are found north of the West Kearney Terminal and South of the GA hangar area. Exhibit 1.4-5 depicts the location of the Support facilities at SGF.

Exhibit 1.4-5: SGF General Aviation and Support Facilities



Source: CMT (2022)

AIRPORT TRAFFIC CONTROL TOWER (ATCT)

The SGF ATCT is located on the south side of the airfield, just east of the aircraft rescue and firefighting (ARFF) facility. The tower is approximately 93 feet above field elevation.

AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) FACILITIES

SGF maintains an FAA Airport Operating Certificate under 14 CFR Part 139, as it serves scheduled operations of air carrier aircraft seating more than 30 passengers. SGF is identified under the FAA classification system as a Class I airport. The Airport maintains an ARFF Index B and has the capability to become Index C or D upon request between 1100 Zulu (Z) and 0600Z. The Airport's ARFF Index is determined by the length of the air carrier aircraft serving the airport with five or more daily departures. For SGF, Index B was determined by air carrier aircraft service from the following aircraft:

- CRJ Series – 200/700/900
- Embraer Series – 135/145/175
- Airbus 319-320

The SGF ARFF facility is located northeast of the passenger terminal and adjacent to the FAA ATCT. The 17,270 square-foot building was constructed in 2009. **Exhibit 1.4-6** shows the ARFF facility.

Exhibit 1.4-6: SGF ARFF Facility



Source: Mead & Hunt

One bay of the ARFF facility is currently being used to store SRE. **Table 1.4-2** provides a detailed list of the ARFF equipment. In addition to performing ARFF tasks and emergency medical services (EMS), ARFF members are responsible for providing fuel services at SGF.

Table 1.4-2: ARFF Equipment

VEHICLE	NAME	YEAR	WATER (gal.)	AFFF (gal.)	DRY CHEMICAL (lbs.)
Oshkosh Striker 3000	EZ-7	2023	3,000	420	500
Oshkosh Striker 3000	EZ-6	2009	3,000	420	500

Source: SGF (2024)

SNOW REMOVAL EQUIPMENT/MAINTENANCE STORAGE FACILITIES

The Snow Removal Equipment (SRE) facility is located on the northwest side of Runway 20. The SRE building is used to house both SRE and other airfield and airport maintenance equipment. Due to limited capacity and nature of use, SRE is stored at various locations across the airfield.

Each piece of equipment is assigned a number, starting with two letters that identify its use and storage location:

- AF – Airfield
- AP – Airport
- GA – General Aviation
- TM – Terminal

Equipment numbers starting with AF and AP are primarily stored in the SRE facility, with limited equipment being stored in a spare bay at the ARFF facility. GA equipment is currently stored outside the GA facility. TM equipment are split between being stored outside, at the terminal loading dock, or in the terminal boiler room. Given the seasonal nature of snow removal, some equipment is converted to SRE with the addition of plows and spreaders every October and then reverted to traditional maintenance equipment every April. **Table 1.4-3** provides a list of current SRE.

Table 1.4-3: SRE Equipment Inventory

TYPE	EQUIPMENT #	YEAR	DESCRIPTION
Truck	AF6	2014	Ford F350 4x4 1-ton utility with plow
Truck	AF8	2022	Ford F350 4x4 flatbed with spreader and plow
Blower	AF48	2011	Craftsman 45" snow blower
Truck	AF50	2002	Chevy C7500 dump truck with hydraulic spreader and plow
Spreader	AF54	2015	SaltDogg electric spreader
Truck	AP13	2005	Ford F250 ¾-ton utility with plow
Plow	AP23	2002	Oshkosh P-Series spreader-plow
Plow	AP24	2002	Oshkosh P-Series spreader-plow
Plow	AP25	2018	Oshkosh P-Series 6x6 20' plow
Truck	AP26	2002	4x4 Pick-up with Street Plows
Wheel Loader	AP27	2001	CASE wheel loader
Broom	AP28	2018	Oshkosh snow broom
Broom	AP29	2018	Oshkosh snow broom
Blower	AP30	2018	Oshkosh snow blower
Wheel Loader	AP31	2022	John Deere with 16' box blade
Truck	TM6	2015	Ford F350 4x4 Super Duty
Side-by-Side	TM19	2012	Kawasaki Mule
Sweeper	TM20	2009	Nissan sweeper truck
Tractor	TM30	2013	New Holland tractor 4x4
Truck	TM36	2019	Ford F350 4x4 1-ton
Side-by-Side	TM38	2021	Kawasaki 4x4 Mule
Spreader	TM150	2022	SaltDogg unleaded spreader

Source: SGF; CMT (2024)

WEST KEARNEY TERMINAL

The West Kearney Terminal, located on the east side of the airfield, served as the primary commercial terminal prior to the construction of the Midfield Terminal. The West Kearney Terminal has been reconfigured for corporate office space and is currently leased to a commercial entity, which occupies over 100,000 square feet of the 175,000 square-foot building with almost 1,000 employees. The facility also houses a U.S. Customs Port of Entry.

1.4.6 Fuel Storage

SGF has two primary fuel farms on the airfield. There is a fuel farm located at the commercial terminal that consists of three jet fuel, one gasoline, and one diesel tank. There is also a fuel farm located north of the GA facilities that has three jet fuel, two avgas, one gasoline, and one diesel tank. A full breakdown of the fuel storage is listed in **Table 1.4-4**.

Table 1.4-4: Aircraft and Vehicle Fuel Storage

LOCATION	CONTAINER TYPE/ CAPACITY	FUEL TYPE
General Aviation	(3) 30,000-gallon AST	Jet Fuel
	(2) 15,000 AST	Aviation & Gasoline
	5,000-gallon AST	Diesel
	5,000-gallon AST	Gasoline
Midfield Terminal	(3) 30,000-gallon AST	Jet Fuel
	5,000-gallon AST	Diesel
	5,000-gallon AST	Gasoline
SRE Facility	100-gallon AST	Waste Oil
Airfield Lighting/Electric Vault	660-gallon Emergency Generator Fuel Tank	Diesel
Line Services Vault	300-gallon AST	Diesel
Quick Turnaround Facility	(2) 12,000-gallon AST	Gasoline
	1,000-gallon AST	Gasoline
ARFF Building	300-gallon Tank	Diesel
Airfield Electrical Vault	550-gallon Tank	Diesel
Parking Lot	300-gallon Tank	Diesel

Source: SGF

1.4.7 Fixed Based Operator

SGF has one Fixed Based Operator (FBO), Midwest Premier, located just east of the intersection of Runway 20 and Taxiway B and operates out of the GA terminal. The FBO is owned and operated by the City and provides services to GA operators at the airport. The FBO's services include aircraft line services, apron tie-downs, hangar storage space, catering coordination, and access to weather and flight planning services. Aircraft maintenance and other services are handled by private agencies at the airport.

The GA terminal was built in 1990 and was last updated in 2011; it is in the design process to remodel and expand its current facility. The GA terminal project is anticipated to be completed in 2024. **Exhibit 1.4-7** depicts a rendering of the planned GA terminal expansion.

Exhibit 1.4-7: GA Terminal Rendering



Source: Dake Wells

1.4.8 Rental Car Facilities

Three rental car brand families operate at SGF. The rental car facilities are located just west of the main terminal with a newly paved overflow/holding area that is attached to the quick turnaround service area. The facilities are located strategically on the west side of the terminal to allow users a seamless access point to Airport Boulevard.

1.4.9 Vehicle Parking

SGF has four main parking areas that correspond to the regions of the airfield. To the southwest, the largest parking lot is the terminal parking lot. This lot is primarily for commercial passengers and employees. To the northwest is the military parking lot that is gated and has limited road access. The northern parking area is used for both cargo drop-off and employee parking in the air cargo region of the airfield. To the southeast is the general aviation parking lot. This lot is primarily used by private entities that lease or own space in the hangars in this region of the airfield. **Table 1.4-5** provides a summary of the number of parking spaces, including accessible spaces (ADA), in each parking area. **Exhibit 1.4-8** illustrates the primary parking areas at SGF. **Exhibit 1.4-9** depicts the passenger automotive circulation in relation to the parking areas.

Table 1.4-5: Summary of Landside Auto Parking

LANDSIDE LOCATION	NUMBER OF PARKING SPACES	
Parking Type	Regular	ADA
Air Passenger Terminal		
Long Term Parking lot	1,508	30
Long Term Economy	759	
Short Term Parking	278	18
Cell Phone Lot	32	
Pay booth Employee Parking	4	1
TOTAL SPACES	2,630	
Rental Car Facilities		
Pickup and Return Lots	Pick up: 240 Return: 264	
Overflow Parking	492	
Quick Turn Around & Maintenance	South Lot: 140 North Lot: 280	
Rental Car Employee Parking	56	3
TOTAL SPACES	1,475	
Main Terminal & Employee		
Administrative Parking	32	4
Employee Parking	227	8
ARFF Lot	12	2
Air Traffic Control Lot	53	3
SRE Employee Lot	12	2
Airline Maintenance Lot	60	6
TOTAL SPACES	421	
GA Facilities		
West Kearney Parking Lot	986	22
GA Facilities	110	4
TOTAL SPACES	1,222	
Cargo & Military		
Cargo Parking Lot	155	
Military Parking Lot	General Public: 236 Reserved: 28	7
TOTAL SPACES	426	
Total Landside Auto Parking Spaces	6,174	

Source: CMT (2022)

Exhibit 1.4-8: Vehicle Parking



Source: CMT (2022)

Exhibit 1.4-9: Passenger Automotive Circulation



Source: CMT (2022)

1.4.10 Security

The Airport Police Department (APD) headquarters is in the main terminal building and provides the airport with 24/7 police protection. In June 2002 the APD achieved status as a criminal justice agency and is recognized by the Missouri Department of Public Safety as a stand-alone law enforcement agency. The APD has an authorized strength of 13 full-time commissioned officers.

Since SGF serves scheduled passenger operations where the Transportation Security Administration (TSA) conducts passenger screening, it is required to maintain an Airport Security Program (ASP) as described in 49 CFR Part 1542/1540, Airport Security. This program is designed to control access to the Air Operations Area (AOA), control the movement of persons and ground vehicles on the AOA, and to promptly detect and act to control entrance of the AOA by unauthorized individuals. SGF maintains security fencing around the perimeter of the facility.

1.4.11 Global Entry Enrollment Center

In 2021 SGF became home to Missouri's third Global Entry Enrollment Center. Global Entry is a program operated by U.S. Customs and Border Protection (CPB). It allows for faster clearance through customs for pre-approved, low-risk travelers. It is often used by frequent international travelers. The Global Entry Enrollment Center is in SGF's commercial terminal.

1.4.12 Utilities

Electricity

CU provides electricity to SGF. The three main sources of power come from coal, combustion turbines, and long-term purchased power. Additionally, CU has pushed to find renewable electricity sources such as wind and solar energy sources.

Water

Water at the airport is provided by CU. As the main water provider to the City of Springfield, it also has three water treatment facilities, two impoundment areas, and seven sources of water supply. Those sources include Fulbright Spring and Well No.1, McDaniel Lake, Fellows Lake, James River, Stockton Lake, and Distribution Wells. The water is received at SGF through a 12-inch water main from the utility corridor between Kearney Street and Willard Road. The water is then distributed throughout the airport's facilities.

Sanitary Sewer

Springfield's sanitary sewer services are provided by the Environmental Wastewater Management Division of the Department of Environmental Services, which maintains the publicly owned treatment works (POTW). The POTW is made up of a wastewater collection system and two treatment plants and services the city of Springfield and the surrounding communities.

Stormwater

The Rainier Branch of the Clear Creek and the Sac River Basin catch the stormwater runoff from SGF. A series of open channels and pipes direct the flow of water through the airport property to drainage basins to catch and hold water as well as provide best management practices for cleaning the water before releasing it back into the water table.

Exhibit 1.4-10 illustrates the sanitary sewer and stormwater infrastructure near SGF.

Exhibit 1.4-10: Sanitary Sewer and Storm Water Infrastructure near SGF



Source: <https://gisdata-cosmo.opendata.arcgis.com/> CMT (2022)

Natural Gas

CU provides natural gas to SGF and the surrounding environs.

Communications

AT&T is the primary telecommunications provider to the Springfield area. The city is also equipped with fiber optic services.

Table 1.4-6 provides a summary of SGF’s utility providers.

Table 1.4-6: Summary of Utility Providers

Utility	Company
Electric	City Utilities of Springfield (CU)
Gas	
Water	
Communications	AT&T
Sanitary Sewer	City of Springfield, MO

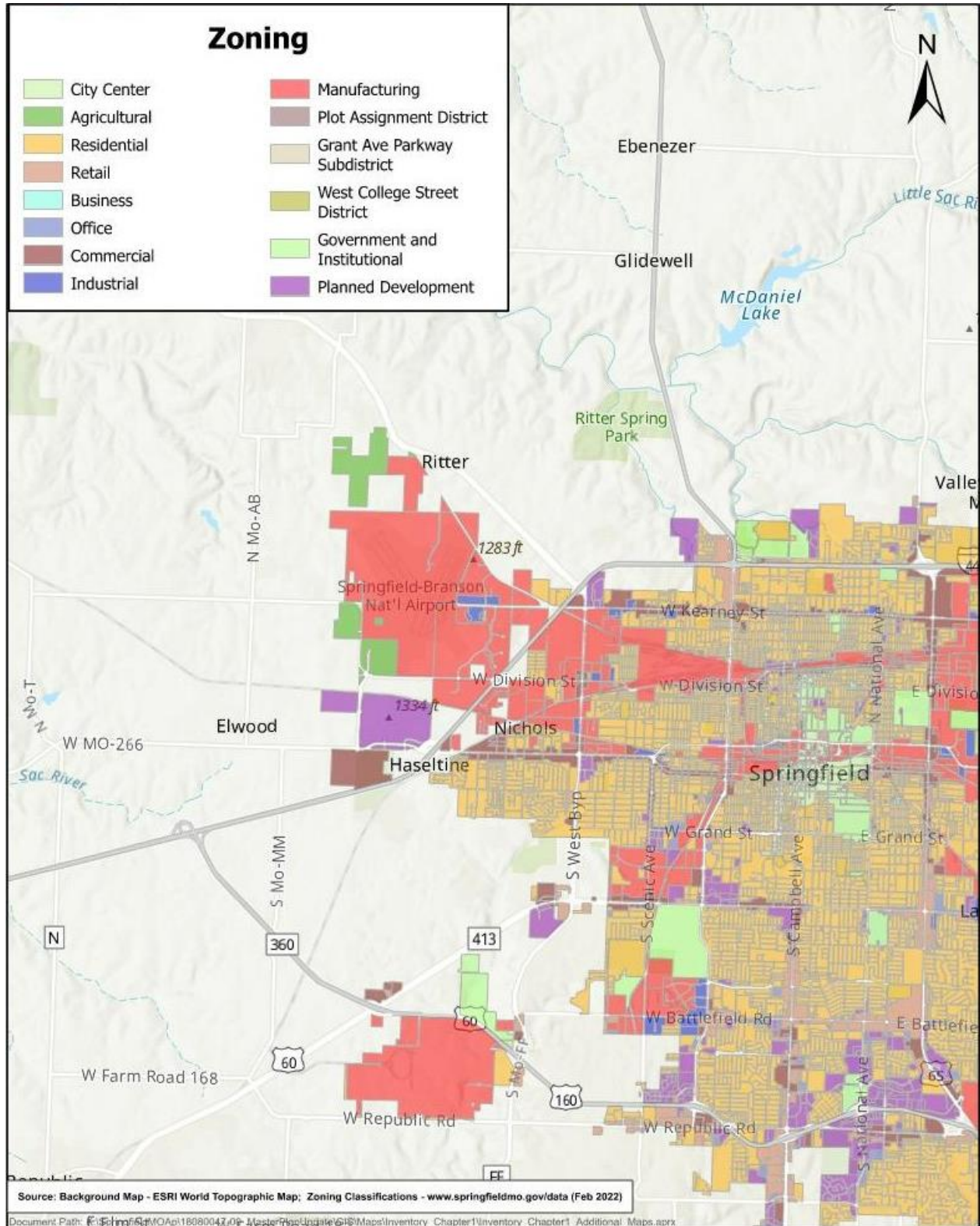
Source: CMT (2022)

1.5 On and Off-Airport Land Uses

1.5.1 Zoning

The Airport lies within the City of Springfield’s General Manufacturing (GM) district. The GM district serves as Springfield’s basic manufacturing district; airports are a permitted use within the district. The Airport is surrounded with similarly zoned heavy manufacturing and industrial commercial districts as well as county-zoned agricultural districts. Exhibit 1.5-1 depicts a zoning map of SGF and the city of Springfield.

Exhibit 1.5-1: Springfield Zoning Map



Source: www.springfieldmo.gov/data

Two airport overlay (AO) districts, AO-1 and AO-3, serve as an additional layer to the existing zoning to regulate the development of noise-sensitive land uses, promoting compatibility between the Airport and the surrounding land uses, and to promote the health, safety, and general welfare of property users.

The AO-1 district is regulated by the City of Springfield and includes all areas within 2,000 feet of any airport runway centerline extending out 10,000 feet from both ends of any airport runway.

The AO-3 district includes all areas encompassing the airport zones defined in the Airport Zoning Law, Chapter 305 Revised Statutes of Missouri (RSMo), which is specific to Greene County. This law states that the areas encompassing the airport are designed to protect the existing runways and potential runways. **Exhibit 1.5-2** displays the AOs in relation to SGF.

The AO-1 district prohibits residential, public uses, and recreational uses, except as modified by the AO-3 district. While AO-1 prohibits the aforementioned uses, the AO-3 district allows for the construction of single-family dwellings, including manufactured homes, on a lot or parcel of land of 10 acres or more. These uses may be permitted on a lot of less than 10 acres if they lawfully existed at the effective date of the zoning code, provided: an avigation easement is granted to the city, and noise level reduction (NLR) practices are installed during construction.

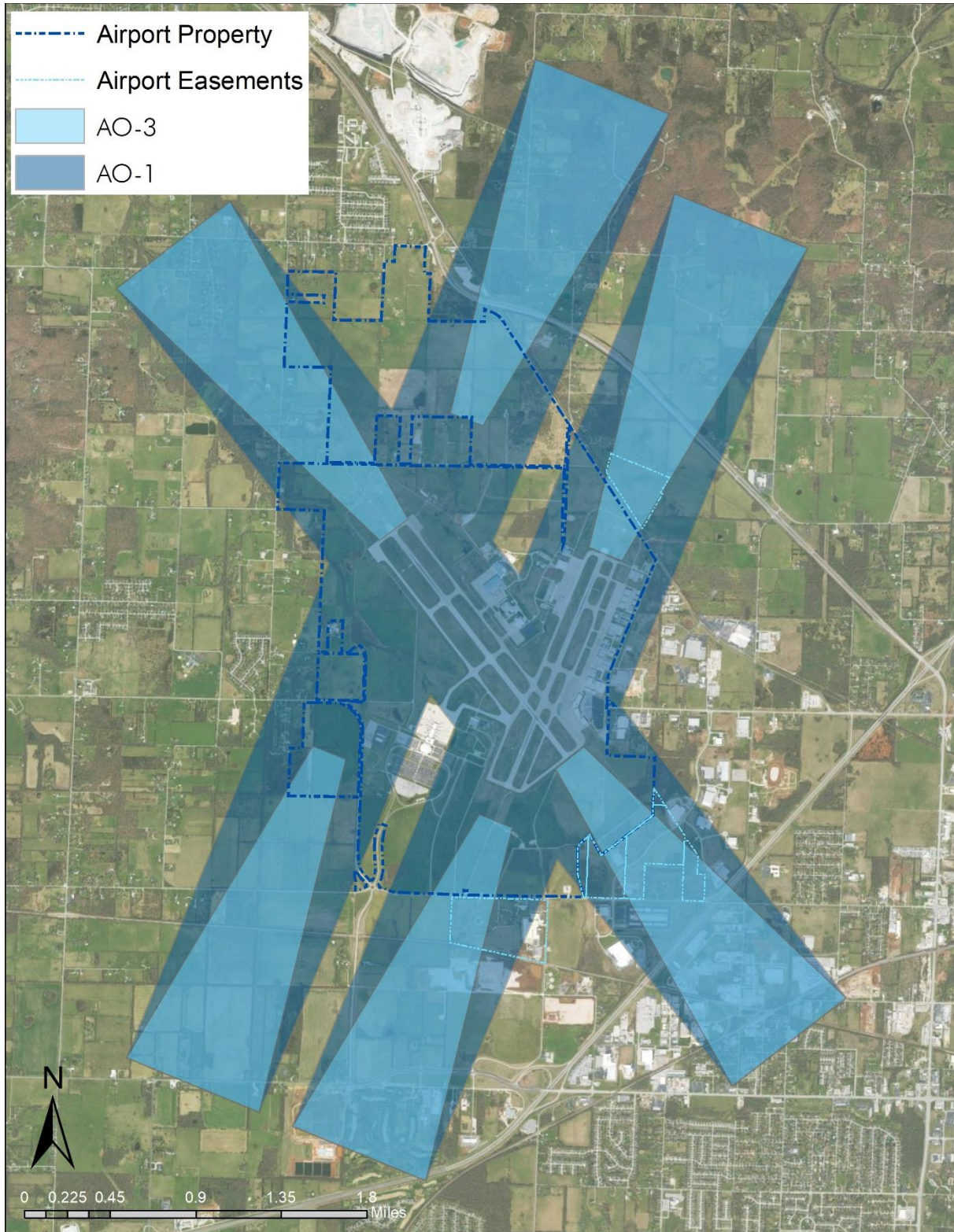
Structures and the accompanying landscaping in the AO districts are required to be not more than 50 feet in height. This height restriction along with the allowable uses steers the area toward an industrial use, with low density and low buildings that are compatible with airport operations.

Any development within 1.5 miles of the ultimate end of any existing or planned runway shown on the most current ALP is required to obtain a Conditional Use Permit. In 2021, playfields were added as only allowable conditional use in the AO districts. The Springfield-Branson National Airport Board shall review any Conditional Use Permit applications in the AO districts for potential impacts to the Airport and make its recommendation to the City's Planning and Zoning Commission. The Planning and Zoning Commission will make its own recommendation on the matter to the City Council for a final action.⁷

The overlay districts protect the planned but unbuilt runway parallel to Runway 02-20 to ensure that further development of the airport is possible without outside influences.

⁷ City of Springfield, Missouri zoning regulations

Exhibit 1.5-2: Airport Overlay Map



Source: CMT, SGF ALP 2012

1.5.2 Current Land Uses

SURROUNDING ENVIRONS

With the development conditions set forth by the city code, the predominant land uses surrounding the airport are heavy manufacturing and industrial within the city limits. The leading land uses outside the city boundaries are agricultural and estate-sized single-family dwellings. This type of development surrounding the airfield matches what was envisioned for 2020 in the Northwest Development Study adopted by the Ozarks Transportation Organization in 2005, then again outlined in the Greene County Land Use Plan assembled in 2018.⁸

In spring 2019, the City of Springfield kicked off a new comprehensive plan, *Forward SGF*, and adopted the plan in late 2022. *Forward SGF* identifies future land use through place type instead of traditional future land use maps. This approach means the city's future development is guided by a set of principles that create defined spaces in a place-based approach in a collectively identifiable set of environments through what uses function together. This methodology allows for a more fluid set of uses to mix across very well-place-defined nodes of the city.

Future land uses around the airport must be able to operate within the height restrictions for runway approaches, and support or compliment the airport. Parcels near the airport, not owned by the city, are candidates for light industrial and commercial uses. The large tracts of land west of the airport currently zoned for agricultural use and identified as future urban reserve have the most potential. The city can analyze the current state of infrastructure to determine the relative difficulty of development for marketing purposes. Increased activity from the airport may create the demand for more commercial uses outside of the facility itself. Proximity and access to the airport will determine the cross pollination of nearby commercial uses with the aviation community.

There are two existing land uses in the vicinity of the airport that are compatible with the Airport's surrounding but are not industrial or agricultural: White Chapel Memorial Gardens and Betty & Bobby Allison Sports Town.

White Chapel Memorial Gardens

White Chapel Memorial Gardens is a cemetery that sits just south of the airfield on the south side of W. Division St. where the object free zone for Runway 02-20 spills over onto the cemetery's property. The Airport has established an easement on the property that grants the rights to trimming trees as needed to mitigate obstructions.

Betty & Bobby Allison Sports Town

In 2021 a Conditional Use Permit was approved in the AO districts for the first time to allow for a "playfield" on West State Highway 266. The resulting Betty & Bobby Allison Sports Town opened in 2022 and offers 12 outdoor sports fields and a 94,000-square-foot indoor facility that houses basketball courts, volleyball courts, and indoor soccer fields.

⁸ Greene County Land Use Plan April 2018 <https://greenecountymo.gov/files/files.php?id=1567>

1.6 Environmental Inventory

This environmental inventory aims to provide a general summary of environmental conditions in the vicinity of Springfield-Branson National Airport. This inventory of environmental resources enables the preparation of development alternatives that have the highest possibility for implementation by minimizing potential environmental impacts.

The FAA has issued guidance documents associated with the consideration of environmental impacts of aviation-related actions under the *National Environmental Policy Act (NEPA)* of 1969 and implementing regulations. At the master planning level, the FAA Advisory Circular⁹ states that environmental considerations should be incorporated into the master planning and alternatives development processes. FAA Order 5050.4B¹⁰, and FAA Order 1050.1F¹¹, serve as a guide for the discussion below and identify those resources that will require evaluation prior to commencing any project actions.

FAA Order 1050.1F Desk Reference identifies 14 environmental categories that require evaluation. The following pages describe the categories that pertain to the focus of this plan as well as any known resources present within the project area:

- Air Quality
- Biological Resources - Threatened and Endangered Species
- Department of Transportation Act, Section 4(f)
- Farmlands/ Soils
- Noise
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historical, Architectural, Archeological, and Cultural Resources
- Water Resources
- Environmental Justice

1.6.1 Air Quality

The U.S. Environmental Protection Agency (EPA) has adopted air quality standards that specify the maximum permissible short-term and long-term concentrations of various air contaminants. The National Ambient Air Quality Standards (NAAQS) consist of primary and secondary standards for six criteria pollutants which include: ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), and lead (Pb).

⁹ FAA Advisory Circular AC specifically AC 150/5070-6B, Change 2, "Airport Master Plans"

¹⁰ FAA Order 5050.4B: *NEPA Instructions for Airport Actions*

¹¹ FAA Order 1050.1F: *Environmental Impacts: Policies and Procedures*

Various levels of review apply within both the National Environmental Policy Act (NEPA) and local permitting requirements. Potentially significant air quality impacts, associated with an FAA project or action, would be demonstrated by the project or action exceeding one or more of the NAAQS for any of the time periods analyzed.

Neither Greene County nor Springfield, MO are listed in the EPA's Green Book which contains nonattainment areas for criteria pollutants.

1.6.2 Threatened and Endangered Species

There are six species identified by the U.S Fish and Wildlife Service to be aware of in the vicinity of SGF. All the mammals listed are bats; the gray bat and Indiana bat, and tricolored bat are endangered species, and the northern long-eared bat is threatened. The habitat for these bats is normally in and among live and dead trees in the summer and in caves for winter hibernation. While these bats may use the skies near SGF to forage for food, there are no active habitable forests or caves on airport property for these mammals to dwell.

There are two fish species in the area listed as threatened: The Ozark Cavefish and the Niangua Darter. The Ozark Cave Fish lives in caves, sinkholes and underground springs that are untouched by light, and while there are no obvious caves on the airport property, some unopened sinkholes on the property could potentially house this creature but it is unlikely as the cavefish is dependent on bat populations as it feeds on their guano. Niangua Darters live in clear Ozark creeks and small rivers draining hilly areas and are normally found in their namesake Niangua River. SGF property does not have the flowing water needed to support this fish, but to support the conservation of this fish and other wildlife the prevention and mitigation of pollutants is crucial.

The monarch butterfly is listed as a candidate, meaning that efforts to conserve the species are encouraged, but not required. **Table 1.6-1** summarizes the threatened and endangered species in the vicinity of SGF.

Table 1.6-1 - Federally Protected, Endangered and Threatened Species

Common name	Species	Federal Status	State Status
Gray Bat	<i>Myotis grisescens</i>	Endangered	Endangered
Indiana Bat	<i>Myotis sodalist</i>	Endangered	Endangered
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Threatened	Threatened
Tricolored Bat	<i>Perimyotis subflavus</i>	Endangered	Endangered
Niangua Darter	<i>Etheostoma nianguae</i>	Threatened	Threatened
Ozark Cavefish	<i>Amblyopsis rosae</i>	Threatened	Threatened
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	Candidate

Source: US Fish and Wildlife Service, Midwest Region Endangered Species, County Distribution of Federally Listed Endangered, Threatened, and Proposed Species; IPaC - Information for Planning and Consultation

1.6.3 Department of Transportation (DOT) Act, Section 4(f)

The U.S. DOT Act of 1966 protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites. Section 4(f) provides that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land off a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, State, or local significance, only if there is no feasible and prudent alternative to the using that land and the program or project includes all possible planning to minimize harm resulting from the use.

No publicly owned land from a public park, recreational area, or wildlife and waterfowl refuge of national, state, or local significance; or any land from a historic site of national, state, or local significance is present within the airport environs.¹²

1.6.4 Farmland and Soils

Farmlands are defined as those agricultural areas considered important and protected by federal, state, and local regulations. Important farmlands include all pasturelands, croplands, and forests (even if zoned for development) considered to be prime, unique, or of statewide or local importance.

Under the Farmland Protection Policy Act (FPPA), federal agencies are directed to identify and consider the adverse effects of federal actions on the preservation of farmland, to consider appropriate alternative actions which could lessen adverse effects, and to assure that such federal programs are, to the extent

¹² Section 4(f) of the U.S. DOT Act of 1966 (now codified at 49 U.S.C. § 303)

practicable, compatible with state or local government programs and policies to protect farmland. The FPPA guidelines developed by the U.S. Department of Agriculture (USDA) apply to farmland classified as prime or unique, or of state or local importance as determined by the appropriate government agency, with concurrence by the Secretary of Agriculture.

According to the USDA Web Soil Survey in the general vicinity of the airport 45.3% of the surveyed area is classified as prime farmland. Further surveying will need to be conducted with specific improvements of undisturbed soils.

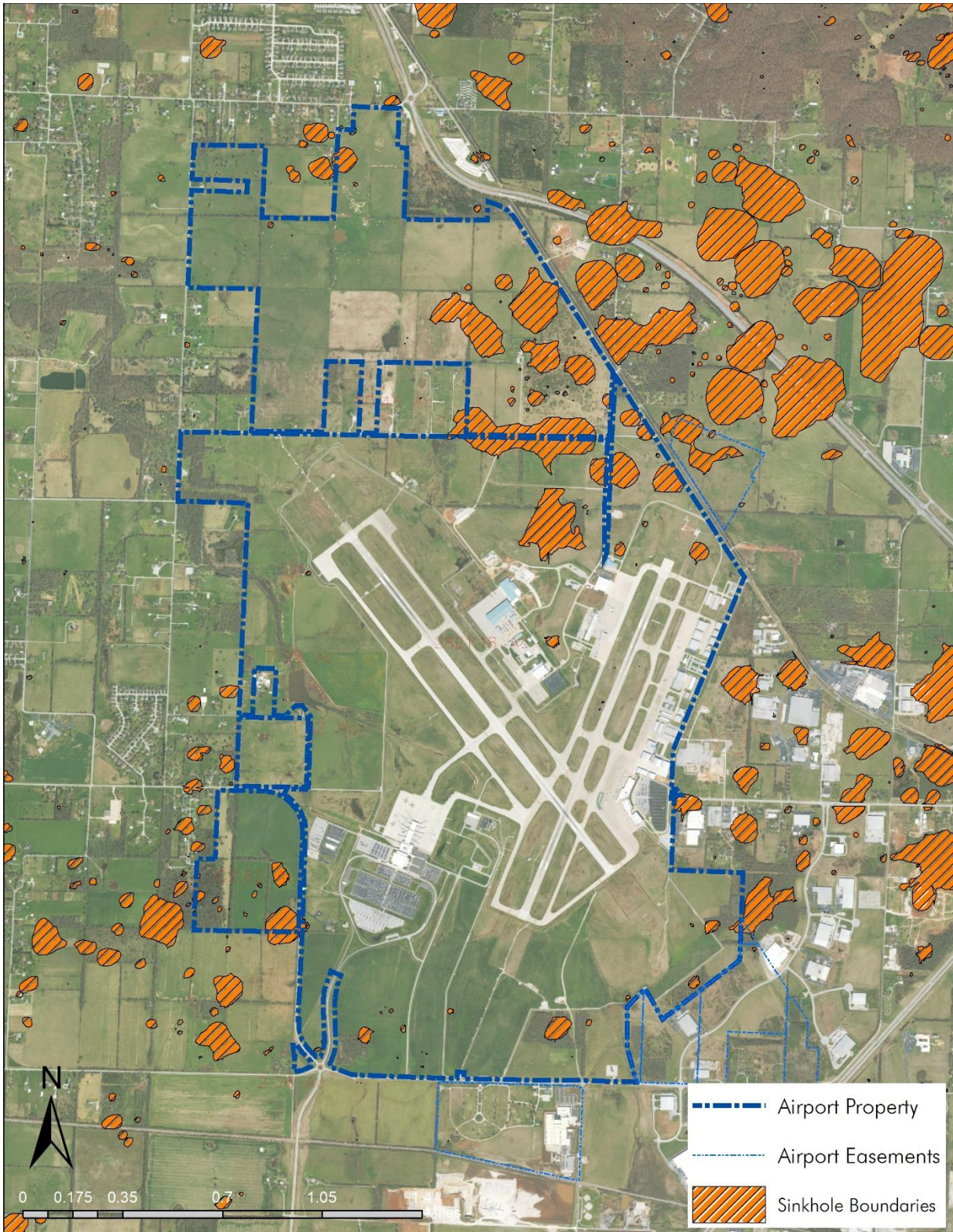
Of the studied area, 52% of the soils are of the karst landscape. Karst is a type of landscape where the dissolving of the bedrock has created sinkholes, sinking streams, caves, springs, and other characteristic features. Karst is associated with soluble rock types such as limestone, marble, and gypsum. In general, a typical karst landscape forms when much of the water falling on the surface interacts with and enters the subsurface through cracks, fractures, and holes that have been dissolved into the bedrock. After traveling underground, sometimes for long distances, this water is then discharged from springs, many of which are cave entrances.

Karst is ideal for storing water as an aquifer and provides vast amounts of clean drinking water to people, plants, and animals. Because of the porous nature of karst, water flows quickly through it and receives little filtration. Therefore, contaminants that enter a karst aquifer are rapidly transported creating water quality problems. About 20% of the United States is underlain by karst landscapes and 40% of groundwater used for drinking comes from karst aquifers. It is imperative for our health and safety to protect karst landscapes.¹³

With karst landscapes, sinkholes are an often a nuisance to development. **Exhibit 1.6-1** shows the known sinkholes in the Airport's vicinity.

¹³ <https://www.nps.gov/subjects/caves/karst-landscapes.htm>

Exhibit 1.6-1 – Known Sinkholes in the SGF Environment



Source: <https://www.springfieldmo.gov/>, CMT (2022)

1.6.5 Noise

Aviation noise primarily results from the operation of fixed and rotary wing aircraft, such as departures, arrivals, overflights, taxiing, and engine run-ups. Noise is often the predominant aviation environmental concern of the public. Significant levels of aircraft noise in communities around airports generate the most issues. However, there are increasing concerns in areas of moderate noise exposure, and noise issues are raised by residents in suburban and rural areas where ambient noise is lower than in the more urbanized areas that tend to surround many commercial service airports. Zoning practices have protected SGF from most noise conflicts of the airports neighbors by primarily being surrounded with industrial uses. The residential homes near the airport are the only apparent noise sensitive land use near the airfield but little to no complaints have been recently voiced. No Part 150 studies have been conducted, but further development increasing the density near the airfield could prompt the need for the study.

1.6.6 Hazardous Materials and Solid Waste

There are two sites on Airport property identified by the EPA's Brownfields and Land Revitalization Program. Between 2009 and 2010 the EPA conducted assessments of the former National Airport Terminal, and the former Airport Terminal Parking Lot and deemed that the two sites have soils contaminated with petroleum products and volatile organic compounds (VOCs) and that the terminal location also has lead contamination. For both sites the EPA states that the "Extent of contamination unknown, further detail is needed before developing plans for remediation and redevelopment."¹⁴

Just east of the general aviation area of the Airport lies the Litton Systems Inc. site at 4811 W. Kearney St. The approximately 70-acre site was once used to manufacture printed circuit boards where heavy metals such as copper and VOCs were used. In 2001, Northrop Grumman Corp. and their subsidiary Guidance Electronics Co., acquired the site and since demolished the building in 2008. The now vacant lot has been the center of a Superfund Cooperative Program cleanup where investigative, cleanup, testing, and community involvement efforts are being seen through by the corporations and the Missouri Department of Natural Resources.¹⁵

1.6.7 Historical, Architectural, Archaeological, and Cultural Resources

There are no historic sites listed on the National Register of Historic Places near SGF. Additionally, the Airport and surrounding properties are not listed on any state or local registers of historic places.¹⁶

While the airfield is currently not registered as a historic place, it has been in operation since 1945 and has opportunities to apply and become a designated historic location. With most historic designations comes limitation in development to protect such historic assets. Building 50 years old or older are

¹⁴ https://cimc.epa.gov/ords/cimc/f?p=CIMC:31:::Y,31:P31_ID:118521#media ,
https://cimc.epa.gov/ords/cimc/f?p=CIMC:31:::Y,31:P31_ID:118681

¹⁵ <https://dnr.mo.gov/waste-recycling/sites-regulated-facilities/superfund/interest/litton-systems-inc>

¹⁶ National Park Service, National Register of Historic Places.
<https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>

eligible to be submitted for the register of historic places. Some buildings on airport property could become eligible for submission during this planning period.

1.6.8 Water Resources

Water resources, no matter their size, are an integral asset to society and environments. Water resources come in all different forms, from lakes, ponds, and rivers to underground aquifers and floodplains it is important to think about the entire water system when any development is considered. There are various wetland areas and floodplains existing within and around the SGF property.

Surface Waters - Surface waters include streams, rivers, lakes, ponds, estuaries, and oceans. Lakes and ponds in the vicinity of the airport include McDaniel Lake that sits about five miles northeast of the airfield. Fellows Lake is another lake located approximately ten miles to the northeast of SGF and Lake Springfield is located ten miles southeast. The Rainer Branch Stream flows from the west to the southeast portion of the airport. This small creek is channelized through the property around buildings and culverted under paved areas.

Groundwater - a subsurface water that occupies the space between sand, clay, and rock formations. The term aquifer is used to describe the geologic layers that store or transmit groundwater, such as to wells, springs, and other water sources. Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for groundwater. A significant impact exists if:

The action would:

- Exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or
- Contaminate an aquifer used for public water supply such that public health may be adversely affected.

Greene County and Springfield are located within the Springfield Plateau Groundwater Province. The province covers approximately 8,900 square miles (12.8% of the state).

Water in the Springfield Province is used for a wide variety of purposes including industry, agriculture, and drinking water. Several cities, such as Joplin and Springfield, heavily rely on surface water for their supply. However, nearly every city pumps groundwater to help meet their water needs.¹⁷

Floodplains - Executive Order 11988 directs federal agencies to take action to reduce the risk of flood loss, minimize the impact of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by the floodplains. Floodplains are commonly associated with the annual chance of flood events such as the 100-year (1% chance) or 500-year (.2% chance) floodplains.

¹⁷ <https://dnr.mo.gov/document-search/groundwater-provinces-missouri-springfield-plateau-groundwater-province-pub3002/pub3002>

According to Federal Emergency Management Agency (FEMA)¹⁸, the Airport has several flood hazard areas that impact the airfield. There are areas of 100-year floodplain that follow the Rainer Branch on the west side of the airport and blotches of floodplain that cover the northwest of Runway 02-20. There are also areas of 500-year floodplain located closer to the airfield at the ends of Runway 02-20. **Exhibit 1.6-2** shows the floodplains that interact with SGF.

Development within floodplains is permissible with permits, but consideration of engineered solutions will mitigate issues caused by flooding and improve insurance and funding rates.

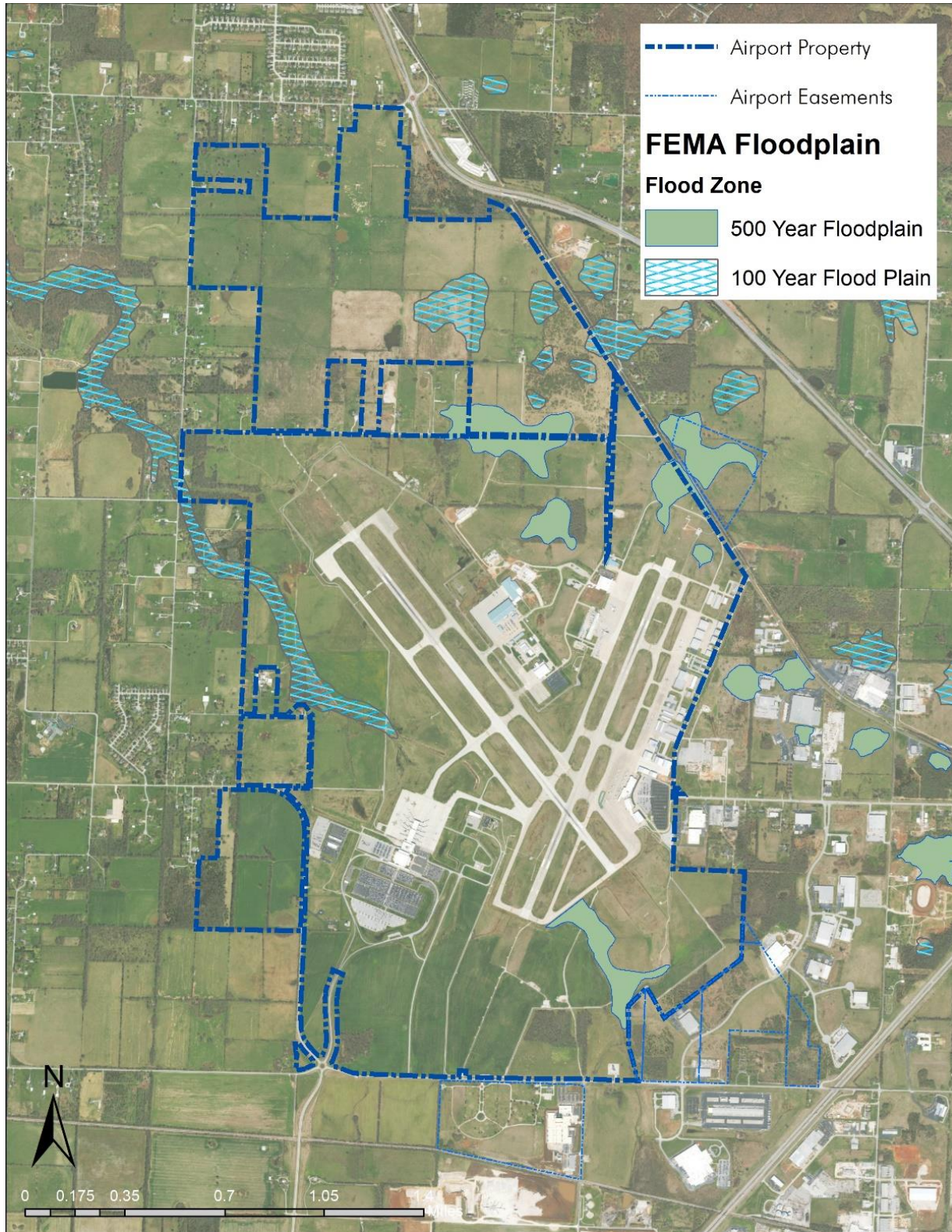
1.6.9 Environmental Justice

With the socioeconomic data shown earlier in the chapter all showing a general growth trend, it is important to consider development conflicts and general health and wellness of residents before developing near an industrialized land use. It is often seen that disadvantaged residents are residing in less desirable areas near point source pollutants such as highways and industrial facilities such as airports.

SGF has worked closely with the City of Springfield as well as Greene County to mitigate these conflicts and injustices near the airport. This has been addressed through active zoning techniques such as enforcing overlay districts which only permit uses that compliment and buffer the airfield's industrial nature and possible health hazards. Continuous implementation of these zoning techniques and regular environmental interventions will ensure that the airport is a key steward of environmental justice within the community.

¹⁸ Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) Panel 307, 194, 326
Greene County, MO established 12/17/2010

Exhibit 1.6-2 – FEMA Floodplains in SGF Vicinity



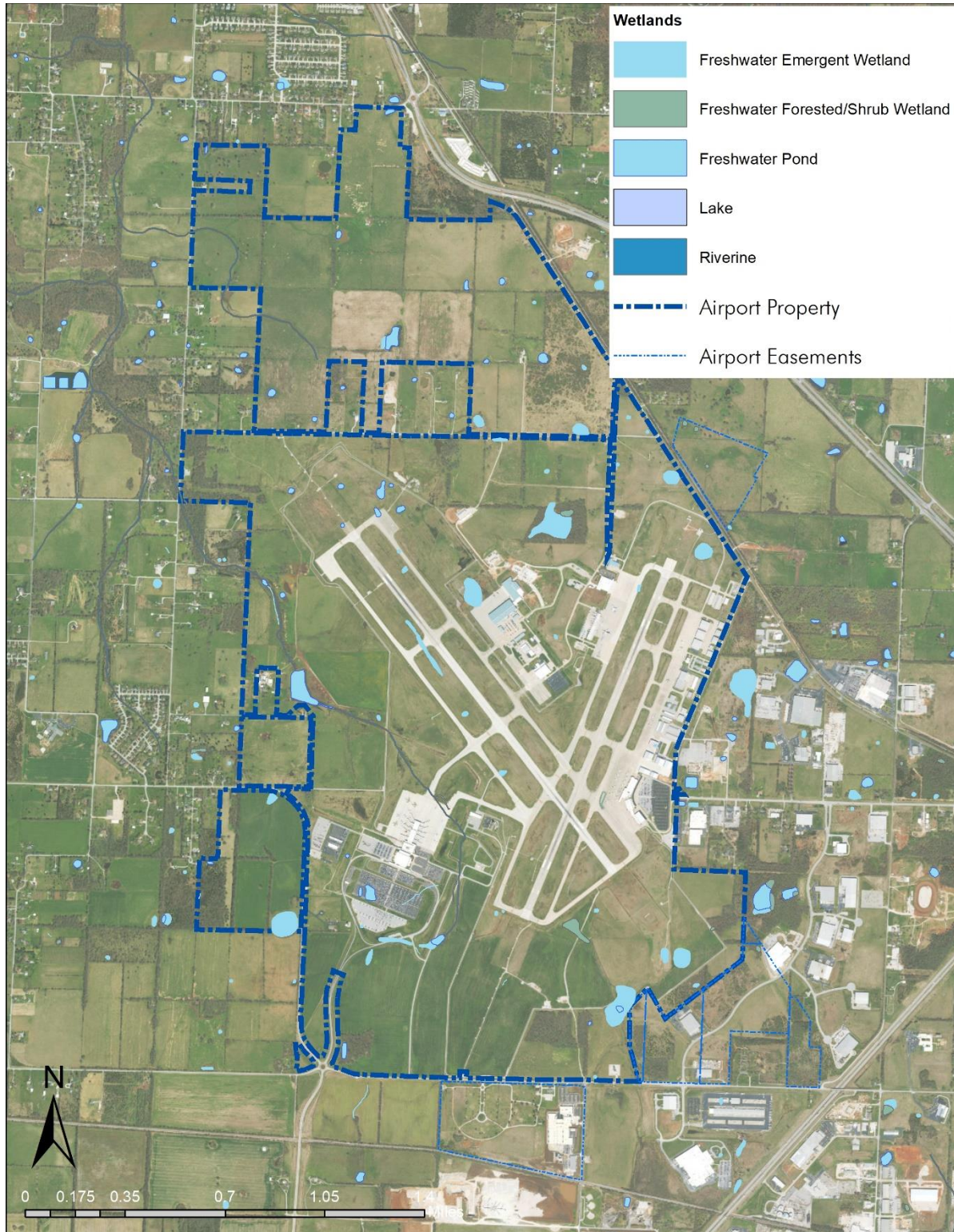
Source: <https://gisdata-cosmo.opendata.arcgis.com/> CMT (2022)

Wetlands - According to the Clean Water Act (CWA), waters of the United States (WOTUS) include rivers, streams, tributaries, interstate waters, and wetlands. Such areas are regulated and subject to permitting under the federal CWA by the EPA and the U.S. Army Corps of Engineers (USACE). Wetlands include areas where water either covers the soil or is present at or near the surface of the soil at a frequency and duration to support plants that would grow in saturated soil conditions. Hydrology largely determines how the soil develops and the types of plant and animal communities living in and on the soil, which can support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants, or hydrophytes, and promotes the development of characteristic hydric wetland soils.

A Wetland Delineation report was completed in January 2020 at the site of the now Envoy airplane maintenance and repair operation (MRO) hangar. One isolated wetland was identified in the study area and have been delineated and addressed as part of the project; the project was completed in December 2021.

According to the U.S. Fish and Wildlife Service Wetlands Mapper as seen in **Exhibit 1.6-3**, there are several small wetlands spattered throughout the airport and surroundings.

Exhibit 1.6-3 – Wetlands in SGF Vicinity



Source: United States Fish and Wildlife Services, National Wetlands Inventory <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.

Water Quality - The CWA provides the authority to establish water quality standards, control discharges, develop waste treatment management plans and practices, prevent, or minimize the of wetlands, and regulate other issues concerning water quality. Water quality concerns related to airport development most often relate to the potential for surface runoff and soil erosion, as well as the storage and handling of fuel, petroleum products, solvents, etc. The porous Karst soils found on the airport could potentially quickly distribute pollutants into the surrounding environments including the ground water.

Congress has mandated (through the CWA) the National Pollutant Discharge Elimination System (NPDES). This program addresses non-agricultural stormwater discharges. Using NPDES permits, certain procedures are required to prevent contamination of water bodies from stormwater runoff. The EPA can delegate this permit authority to individual states. EPA has delegated authority to the Missouri Department of Natural Resources (MoDNR) to issue all NPDES permits statewide, except those for biosolids processing facilities.

See **Appendix 4** for the detailed reports the were consulted for this environmental inventory.

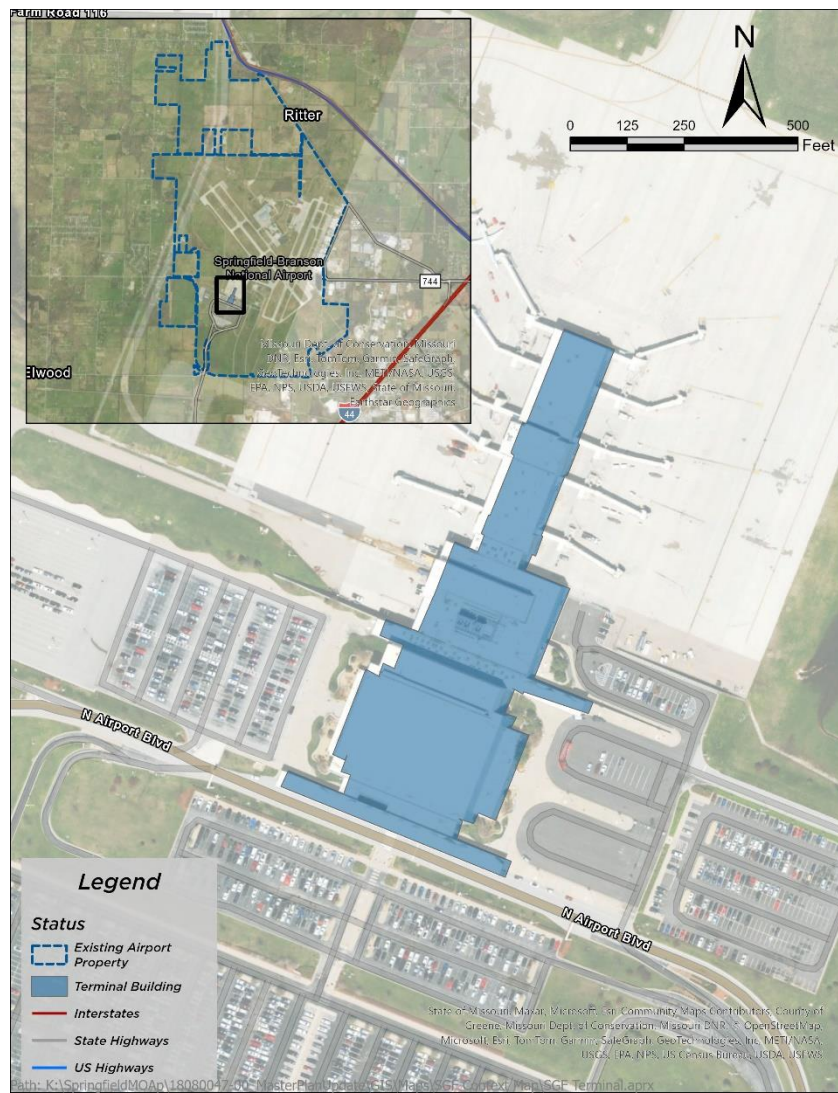
Chapter Two

Terminal Area Inventory

2.1 Passenger Terminal and Facilities

The terminal building opened in May 2009 and is located at the southwest corner of the airport property, west of intersecting Runways 14-32 and 02-20, as depicted in **Exhibit 2.1-1**. The total area of the three-level building is approximately 289,560 square feet, as summarized in **Table 2.1-1**. The following sections describe the terminal, associated concourse, and various passenger processing and Transportation Security Administration (TSA) functions.

Exhibit 2.1-1: Terminal Area



Source: CMT 2022

Table 2.1-1: Passenger Terminal Gross Area

LEVEL	TERMINAL	CONCOURSE	TOTAL (SF)
Apron	75,523	27,102	102,625
Main	116,713	46,843	163,556
Upper	19,932	6,295	26,227
Total (sf)	212,168	80,240	292,408

Source: Alliance (2022)

2.1.1 Terminal

The Terminal provides approximately 212,170 square feet on three levels:

- **Apron Level** = Airline and Airport operations
- **Main Level** = Passenger arrival and departure processing functions
- **Upper Level** = Mechanical, Electrical, Plumbing, and Communications/IT

Table 2.1-2 provides a space allocation summary by level.

Table 2.1-2: Passenger Terminal Space by Level

AREA	APRON LEVEL	MAIN LEVEL	UPPER LEVEL	TOTAL (ft ²)
Public Space				
Circulation ¹	-	39,484	-	39,484
Ticket Lobby Queue	-	2,155	-	2,155
TSA Passenger Security Screening & Offices	-	15,221	-	15,221
Baggage Claim (retrieval, device, meeter & greeter)	-	14,397	-	14,397
Restrooms, SARA, Nursing Mothers (pre/post-security)	-	2,393	-	2,393
Other (information, displays) ²	-	1,687	-	1,687
<i>Subtotal (ft²)</i>	-	75,337	-	75,337
Airline Space				
Ticketing (counter, ATO)	-	7,086	-	7,086
TSA Outbound Baggage Screening	3,139	-	-	3,139
Inbound Baggage Claim Laydown	8,576	-	-	8,576
Inbound/Outbound Baggage Circulation ³	26,870	-	-	26,870
Baggage Service Offices (BSO)	-	268	-	268
<i>Subtotal (ft²)</i>	38,585	7,354	-	45,939
Concessions				
F&B/Retail (BOH, Storage)	-	4,341	-	4,341
Rental Car ⁴	-	5,717	-	5,717
<i>Subtotal (ft²)</i>	-	10,058	-	10,058
Non-Public Space				
Non-Airline Tenant Space ⁵		1,979	-	1,979
Airport Administration	-	12,768	-	12,768
Restrooms/Circulation	3,790	2,198	227	6,215
Airport Operations ⁶	14,289	2,166	-	16,455
Building Systems (MEP, Communications/IT, Structure)	18,859	4,853	19,705	43,417
<i>Subtotal (ft²)</i>	36,938	23,964	19,932	80,834
Total Gross Area (ft²)	75,523	116,713	19,932	212,168

Note: Totals are based on areas measured to the inside edge of exterior walls and center of interior walls, rounded to the nearest square foot.

1/Includes public seating, ticketing, concourse, bag claim, and general circulation

2/Includes Global Entry Enrollment Center, US Mail Drop, and Meditation suite

3/Includes cart staging, storage, and GSE circulation

4/Includes rental car counters, queues, and associated offices

5/Includes Airport Police, mail, and evidence process rooms

6/Includes maintenance, janitorial, storage, and shops

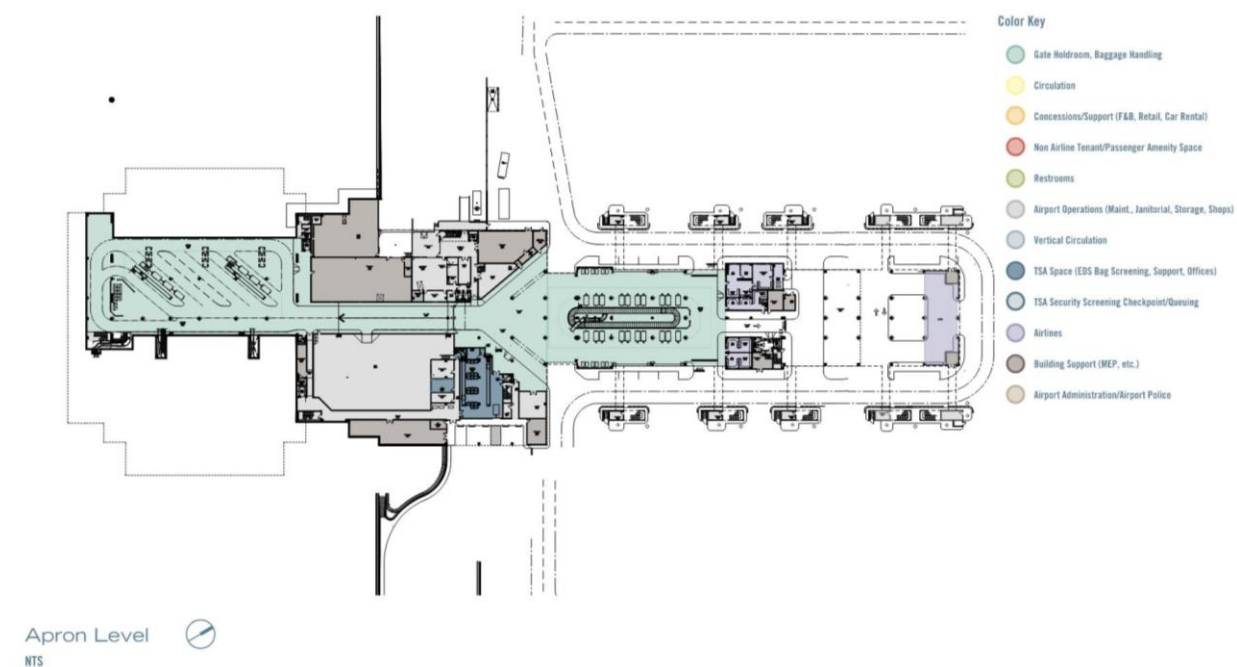
Source: Alliance (2022)

The Apron Level, as depicted in **Exhibit 2.1-2**, consists of all the areas associated with the non-public airline and airport operational support spaces and the TSA baggage screening functions. The south portion of the terminal includes the site devoted to baggage laydown consisting of two 40-foot conveyor piers with room for a future third pier located between the two.

A TSA baggage screening room to the north includes one CT-80 and one CT-80XL EDS unit and associated office space. A recent upgrade in May 2022 allows for automated screening of oversized baggage, such as golf bags. Inbound baggage laydown is accessed via the east and west GSE vehicle service roads (VSR), entering the midpoint of the terminal just after baggage makeup.

Additional support spaces include cart storage, mechanical/electrical/plumbing (MEP), janitorial rooms, maintenance-related workshops, storage, offices, shipping and receiving area and its related loading dock, and non-public restrooms and circulation corridors.

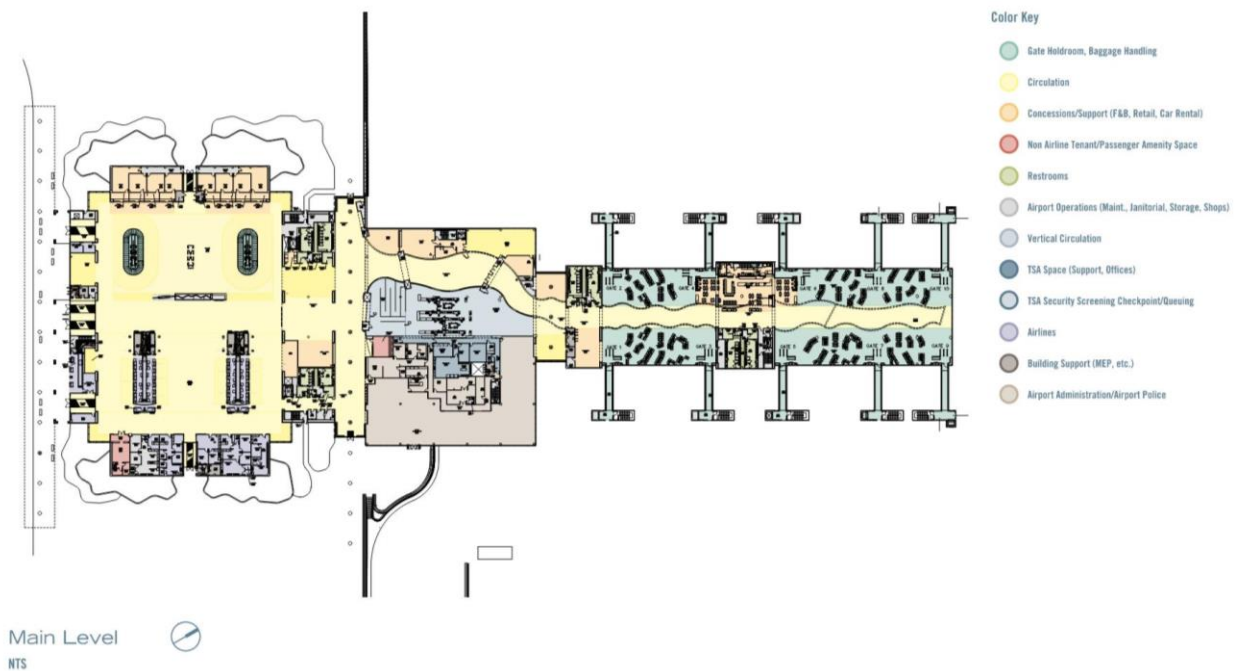
Exhibit 2.1-2: Terminal & Concourse Areas – Apron Level



Source: Alliance (2022)

The Main Level depicted in **Exhibit 2.1-3** includes all the passenger processing functions, including ticketing and baggage claim, TSA passenger screening, concessions and rental car offices, airline offices and support space, airport administration, restrooms, and gate holdrooms. Additional areas include airport police, a meditation room, a Global Entry Enrollment Center, US mail drop, a nursing mother's suite, numerous public seating areas including a meet and greet area, and an outdoor Service Animal Relief Area (SARA).

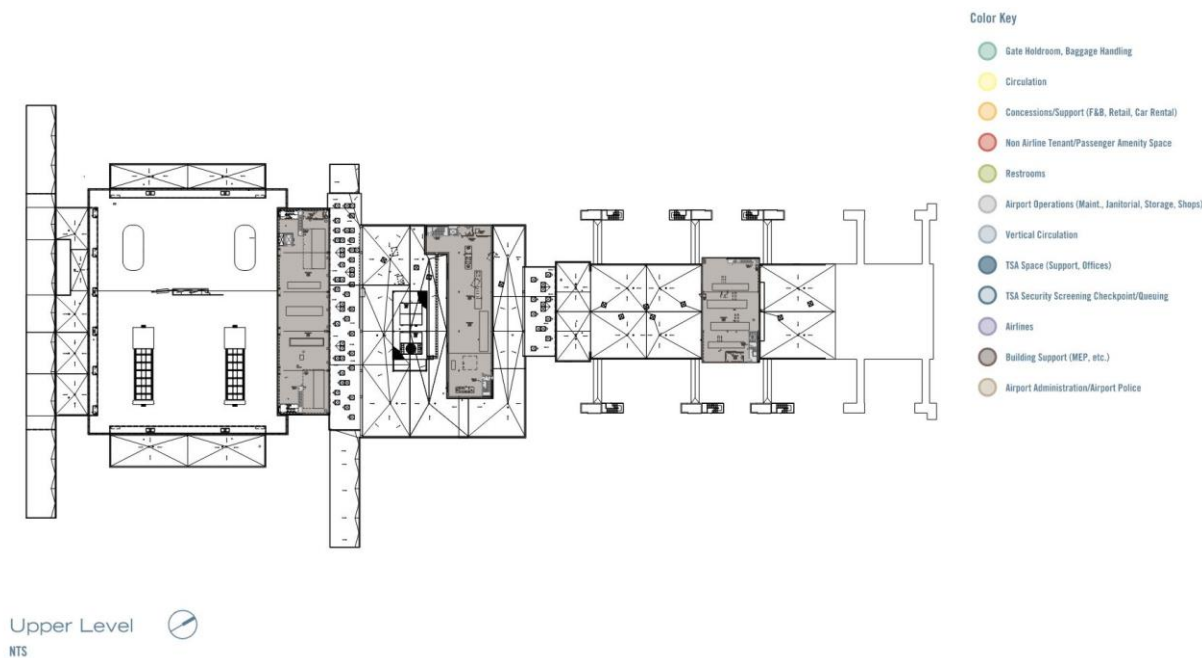
Exhibit 2.1-3: Terminal & Concourse Areas – Main Level



Source: Alliance (2022)

The Upper Level, as depicted in **Exhibit 2.1-4**, includes three large mechanical rooms, a single electrical room in each space, and roof access. One area is above the main terminal area, one above the TSA passenger screening area, and one spans the central concession and restroom node. Access for each location is by stairs and elevator.

Exhibit 2.1-4: Terminal & Concourse Areas – Upper Level



Source: Alliance (2022)

TICKETING

Ticketing functions are located on the east side of the terminal lobby, providing full-service airline agent positions and self-service devices (SSDs) to support the check-in process for passengers and their baggage. There are 28 agent counter positions, nine currently vacant, and eight SSDs for 36 possible check-in positions at two ticketing islands. The location and number of positions occupied by each airline are tabulated in **Table 2.1-3**. Each ticket island's baggage conveyor feeds the TSA baggage screening room on the Apron level. Ticketing queues extend 12 feet from the face of the existing counters.

TSA PASSENGER SECURITY SCREENING

The three-lane security screening checkpoint (SSCP) is adjacent to the Airport Administrative offices just north of the terminal lobby and near the head of the airside concourse. The area currently consists of two standard lanes with one walk-through metal detector (WTMD), one Smiths CT X-ray, one Smiths AT2 X-ray, and one Advanced Imaging Technology (AIT) body scanner. The third lane provides access for TSA PreCheck passengers consisting of one WTMD and one Smiths AT-2 X-ray.

Table 2.1-3: Ticketing Check-in Summary

AIRLINE	AGENT	SSD	TOTAL
North Island			
Delta	4	4	8
United	2	21	4
Vacant	8	-	8
Subtotal	14	6	20
South Island			
American	8	2	10
Allegiant	3	-	3
Charter	2	-	2
Vacant	1	-	1
Subtotal	14	2	16
Total	28	8	36

Notes: Airline agreements are Non-Signatory with Allegiant on a month-to-month basis per lease agreement termination dates provided by the Airport.

1/United SSDs are located at the agent ticket counter

Source: Alliance (2022)

BAGGAGE CLAIM

The baggage claim area is on the terminal lobby's west side, opposite the check-in islands. There are two slope bed carousels providing a total of approximately 232 linear feet of claim frontage. Each device offers about 116 linear feet of claim frontage oriented parallel to the curb front. Additional space is provided between the current devices for a future third device of equal length. Currently, this space is being utilized for the Sky Gallery art exhibit.

Inbound baggage delivery is located directly below baggage claim on the Apron Level, as previously described. Unclaimed or late arriving baggage is stored in each airline's ATO office or American's baggage service office (BSO) adjacent to the baggage claim area.

2.1.2 Concourse

The double-loaded linear airside concourse comprises ten gates north of the terminal headhouse. Each gate includes a short glass-enclosed "fixed" link with a downward-sloping floor containing stairs, a baggage elevator, and a passenger boarding bridge (PBB). The airside or post security area consists of two food and beverage areas (F&B), one before Gate 2 and one between Gate 4 and Gate 6. A news and retail location is located adjacent to Gate 1. Two sets of men's and women's restrooms are also found post security, one adjacent to Gate 2 and one between Gate 3 and Gate 5. The concourse space allocation is tabulated in **Table 2.1-4**. All ten gates are operated on a common-use basis where

no gate is assigned or leased to a particular airline. However, digital signage is provided at each gate for the four airlines. A summary of aircraft parking capabilities, PBB, and typical airline gate assignments is provided in **Table 2.1-5**.

Table 2.1-4: Concourse Space by Level

AREA	APRON LEVEL	MAIN LEVEL	UPPER LEVEL	TOTAL (ft ²)
Public Space				
Circulation ¹	-	16,266	-	16,266
Passenger Gate Holdrooms	-	19,708	-	19,708
Restrooms, SARA, Nursing Mothers (post-security)	-	2,595	-	2,595
Subtotal (ft ²)	-	38,569	-	38,569
Airline Space				
Outbound Baggage Makeup	9,989	-	-	9,989
Airside Operations/Storage	3,138	22	-	3,160
Inbound/Outbound Baggage Circulation ²	6,981	-	-	6,981
Other Offices/Support Space (DGS)	2,778			2,778
Subtotal (ft ²)	22,886	22	-	22,908
Concessions				
F&B/Retail (BOH, Storage)	-	5,997	-	5,997
Subtotal (ft ²)	-	5,997	-	5,997
Non-Public Space				
Restrooms/Circulation	385	519	-	904
Airport Operations ³	1,409	621	-	2,030
Building Systems (MEP, Communications/IT, Structure)	2,422	1,115	6,295	9,832
Subtotal (ft ²)	4,216	2,255	6,295	12,766
Total Gross Area (ft²)	27,102	46,843	6,295	80,240

Note: Totals are based on areas measured to the inside edge of exterior walls and center of interior walls, rounded to the nearest square foot.

1/Includes public seating, concourse, PBB fixed links, and general circulation

2/Includes cart staging, storage, and GSE circulation

3/Includes maintenance, janitorial, storage, and shops

Source: Alliance (2022)

2.1.3 Aircraft Apron Parking Area

The terminal area contains approximately 19 acres of apron space for aircraft parking and maneuvering around the concourse. The apron accommodates aircraft ranging from Narrowbody (B737/A320) to Medium Regional aircraft (CRJ, ERJ). The 10 PBBs serve 13 aircraft parking positions. Gate 9 contains an additional parking lead-in line, "9, A," with its PBB able to swing to each parking position. Gate 10 includes two additional parking lead-in lines, "10A" and "10B," with the ability to turn the PBB to each parking position. An FAA Aircraft Design Group (ADG) IV taxiway runs the concourse aircraft parking area's perimeter and is accessed via Taxiway "F" to the north and Taxiway E to the east. **Exhibit 2.1-5** depicts the existing aircraft apron parking plan.

Table 2.1-5: Aircraft Parking and Gate Summary

GATE	TYPICAL AIRLINE	LARGEST AIRCRAFT		PBB ²		
		ADG	AIRCRAFT ¹	MANUFACTURER	MODEL NO.	INSTALLED YEAR
1	Delta	III	SNB	ThyssenKrupp	TB 41/19.5-3	2008
2	Allegiant	III	NB	ThyssenKrupp	TB 41/24.5-2	2008
3	Delta	III	LR	Jetway	A3-58/110-125R	1998
4	Allegiant	III	NB	ThyssenKrupp	TB 41/24.5-2	2008
5	United	II	MR	Jetway	SA2-91/125-125R	2006
6	American	III	LR	Jetway	A2-65/99-125R	2006
7 ³	United	III	NB	Jetway	A3-48/86-125R	2006
8	American	III	LR	Jetway	AD2-65/99-125R	2001
9 ⁴	United	III	NB	ThyssenKrupp	TB 41/19.5-3	2008
10 ⁵	American	III	LR	ThyssenKrupp	TB 41/19.5-3	2008

Notes:

1/MR = Medium Regional, LR = Large Regional, SNB = Small Narrowbody, NB = Narrowbody

2/PBB information per the Airport

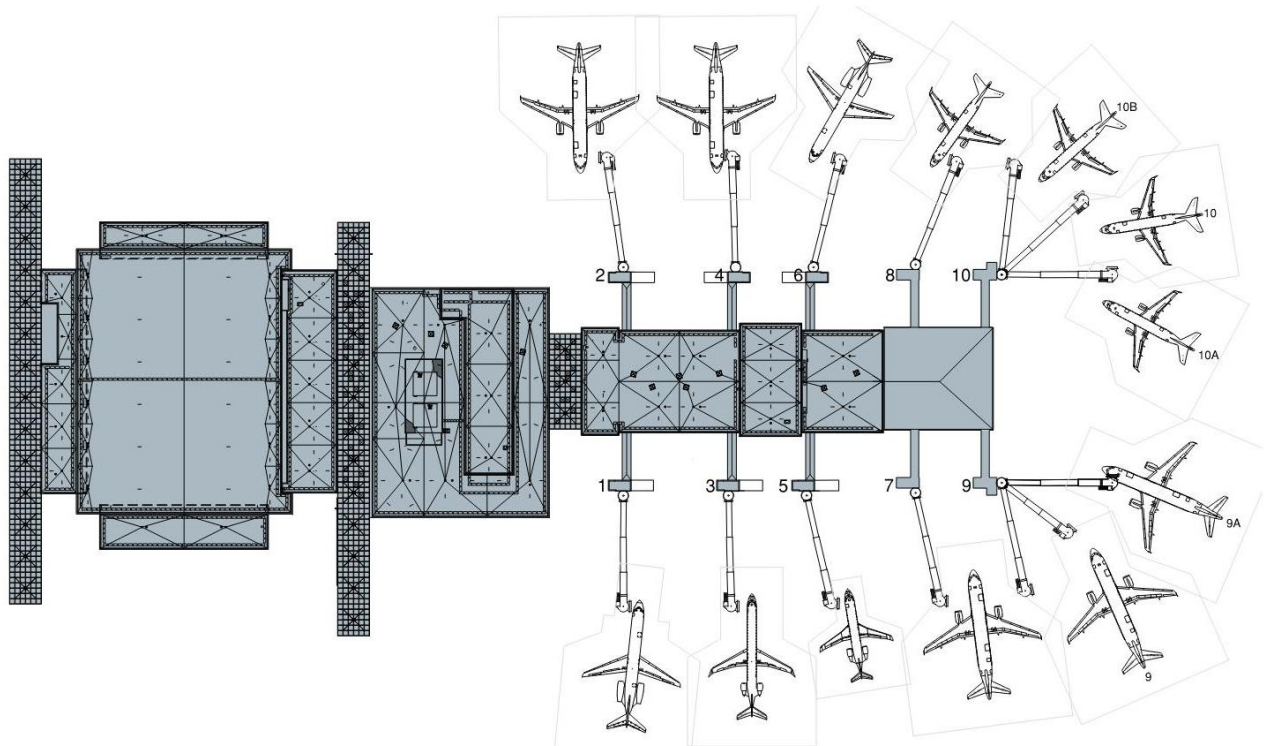
3/Gate 7 accommodates a 757 with restrictions to the adjacent gates

4/Gate 9 includes position 9A; both accommodate a 757 with restrictions to adjacent gates

5/Gate ten includes positions 10B and 10C

Source: Alliance (2022)

Exhibit 2.1-5: Existing Apron



Apron Parking Plan 
NTS

Source: Alliance (2022)

Chapter Three

Forecast of Aviation Demand

3.1 Introduction

Long-range development plans for airport development are based upon anticipated or projected levels of aviation activity. This activity is best described through airline passenger enplanements, aircraft operations and fleet mix, cargo landed weight, and based aircraft. A key element in the Airport Master Planning process is the forecast of Aviation Demand to assist with future development, financial planning and other key decisions affecting the Springfield Branson National Airport (SGF or The Airport). The Forecast of Aviation Demand analyzes historical data and current aeronautical and socioeconomic trends to develop future projections that can be reasonably expected to occur at SGF during the planning period (2021-2041).

The Federal Aviation Administration (FAA) Advisory Circular 150/5070-6B *Airport Master Plans* (AC-6B) provides guidance and standards for the preparation of airport master plans. AC-6B states the forecast must be realistic, based on the latest data available and provide adequate justification for airport planning and development. Ultimately, the forecast needs approval by the FAA and then may be used by the Airport for future planning and developmental needs.

The forecasts for SGF, as required by AC-6B, will include the following:

- Passenger/Commercial Service
 - Enplanement and operations
 - Peak month/design day
- Air Cargo
 - Tonnage (belly and all-cargo)
 - Operations
 - Landed Weight
- General Aviation (GA)
 - Operations and based aircraft
- Military
 - Operations
- Identification of Existing and Future Critical Aircraft

These forecasts will serve as the foundation to determine the overall facility needs and the basis for the analysis of the Master Plan process.

3.2 Forecasting Process

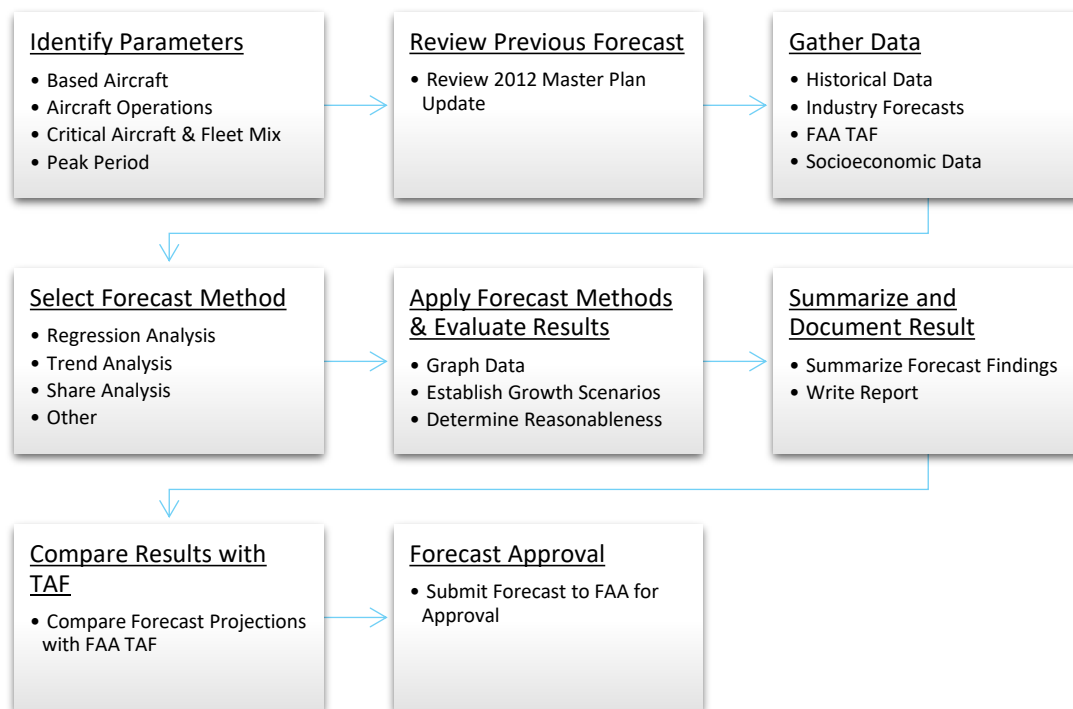
This process uses AC-6B and FAA's Office of Aviation Policy and Plans report Forecasting Aviation Activity by Airport to identify the key components and steps used in the forecast.

Two accepted philosophies for aviation forecasting include:

1. That aviation activity itself and the use of historical performance trends are alone sufficient to project future activity.
2. That economic, social, and technological factors are presumed to influence future aviation demand.

A balanced approach between the two philosophies is needed when creating the forecast. Irrespective of the approach used in a forecast, the size of the airport or scope of the study, the framework, or process, is often the same. **Exhibit 3.2-1** contains a flowchart that lists the forecasting process.

Exhibit 3.2-1: Forecasting Process



Source: Advisory Circular 150/5070-6B Airport Master Plans; CMT (2021)

The following sections will further explain the forecast process in more detail.

3.2.1 Identify Aviation Forecast Parameters and Measures

SGF serves a diverse range of airport users from commercial service (airlines), GA, air cargo, and military. A combination of passenger enplanements, aircraft operations, based aircraft, fleet mix, peak hour activity and cargo weight will all be analyzed to effectively determine the level and type of aviation activity that can be expected at the Airport, as well as the nature of the planning needing to be completed.

3.2.2 Review Previous Airport Forecasts

The review step in the forecast process collects and reviews previously published forecasts. It is recommended that the review of previous forecasts include any available federal, state, local and/or regional aviation planning forecasts. SGF completed a Master Plan in 2012, which is when the last locally prepared forecast was developed. The State of Missouri Department of Transportation (MoDOT) completed an Airport System Plan Update in 2019, which provided airport specific forecasts for airports within the state. Also, the FAA provides annual SGF forecasts included in the FAA Terminal Area Forecast (TAF).

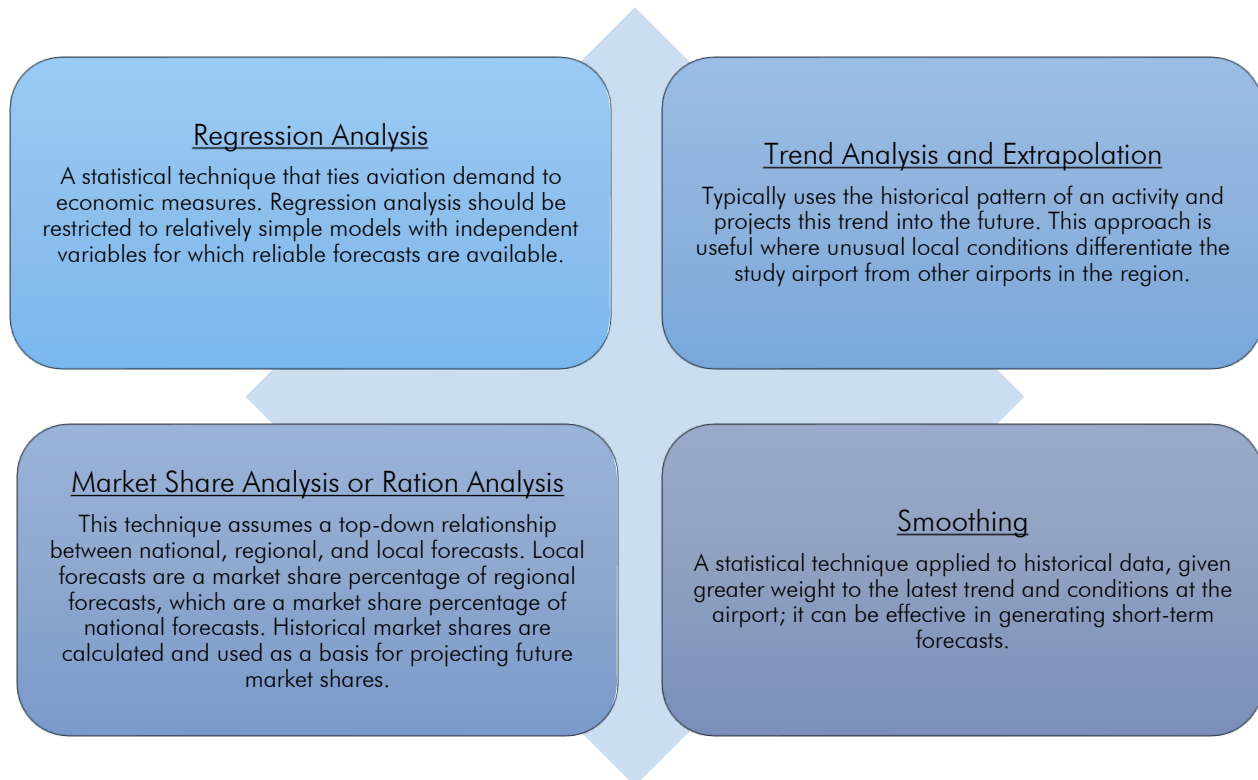
3.2.3 Gather Data

The data gathering step is essential to the forecasting process. Gathering historical, recent, and relevant data is essential to analyze the information that will aid in forecast projections. Consideration should be given to collecting data at the local, regional, national, and global levels. Data gathered includes, but is not limited to, historical aviation trends, FAA forecasts (TAF and Aerospace Forecast), industry publications, outlooks and forecasts, socioeconomic data, and labor statistics. Utilizing the most recent data available will help ensure that an accurate baseline and reasonable forecast is created. Data gathered in this step is also used to establish the baseline year (2021).

3.2.4 Forecast Methodologies

AC-6B states *"there are several appropriate methodologies and techniques for forecasting aviation activity at a specific airport."* The AC recommends the use of professional judgement to determine the different techniques which planners will use to evaluate and analyze data and to create projections from the established baselines. AC-6B lists four of the most common statistical methods used in aviation forecasting. **Exhibit 3.2-2** provides a description of these four methodologies.

Exhibit 3.2-2: Forecasting Methodologies



Source: Advisory Circular 150/5070-6B Airport Master Plans; CMT (2021)

3.2.5 Apply Forecast Methodology and Evaluate Results

The selected methodology is then applied to the baseline year data created from the previous steps which established parameters and gathered and analyzed data to create future projections of demand. Planners may use a combination of several methodologies to create forecasts. It is necessary to evaluate the resulting projections for reasonableness. All unreasonable forecasts should be rejected.

3.2.6 Summarize and Document Forecast Results

The process now requires a report-style writeup of the forecast(s) that have been evaluated and determined to be reasonable. The report will summarize the entire forecasting process, list the methodologies used, provide detailed analysis of the forecast, and explain any significant assumptions made during the process. Tables and graphs are used to present the historical and projected data used in the forecast.

3.2.7 Compare Forecast with FAA Terminal Area Forecast

This portion of the report compares the developed forecast to the FAA TAF. The FAA creates the TAF for all airports that are part of the National Plan of Integrated Airport Systems (NPIAS). According to AC-6B, “the general requirement for FAA approval of the master plan study’s forecasts is that they are supported by an acceptable forecasting analysis and are consistent with the TAF.” For SGF that means

the forecast cannot differ by more than 10 percent in the 5-year forecast and 15 percent in the 10-year forecast period. If any differences are made between the forecasts and the TAF, then proper justification of the differences need to be resolved prior to moving on to the rest of the report.

3.2.8 Forecast Submittal and Approval

The forecast is shared with Airport staff to verify they seem realistic and reasonable. Once Airport staff validates the forecasts, they are sent to the FAA for approval. FAA's approval of the forecast will allow for the subsequent chapters of the Master Plan to be developed.

3.3 Factors Affecting Demand

External local, regional, national, and global factors can and will influence future projections. Planners must take these issues into consideration when constructing a demand-driven forecast. As stated in AC-6B, planners should consider socioeconomic data, demographics, disposable income, geographic attributes, and other external factors such as fuel costs and local attitudes toward aviation. The following section will describe several of the many factors that can affect the aviation demand forecasts at SGF.

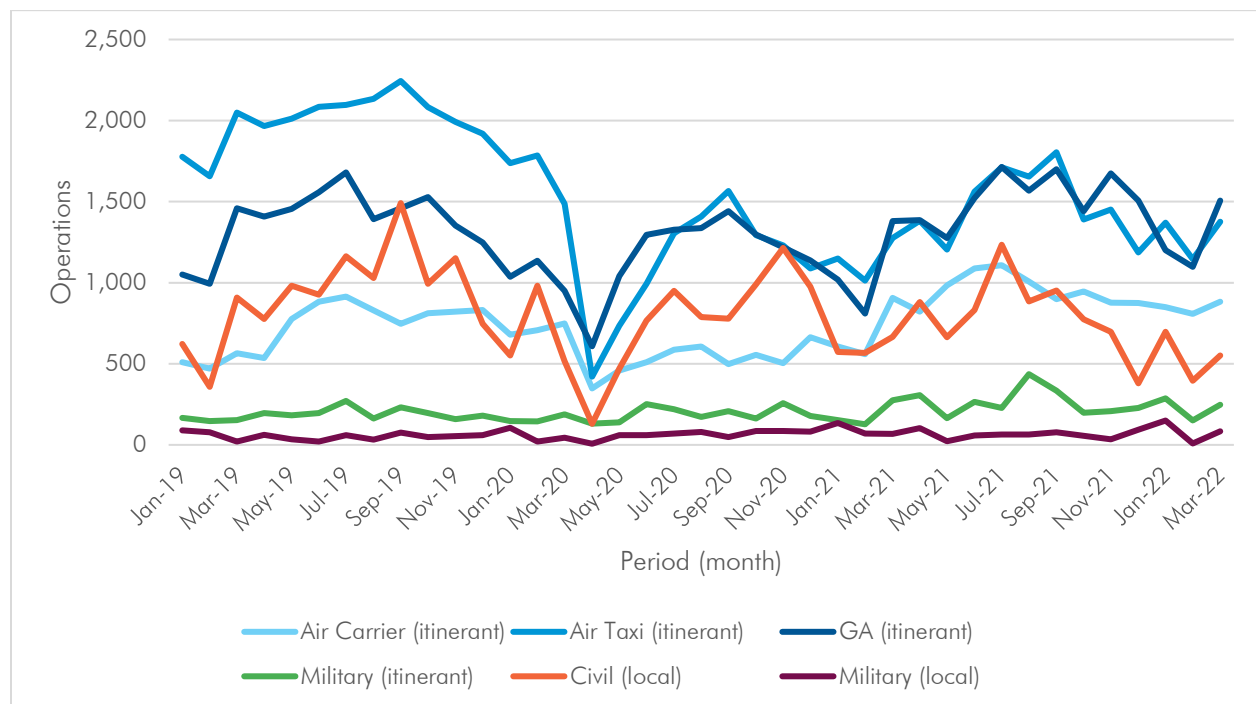
3.3.1 COVID-19 Pandemic

The COVID-19 global pandemic (COVID-19 or Pandemic) has substantially impacted the aviation industry around the world. Nearly all facets of the aviation industry have experienced unprecedented operational and economic impacts from COVID-19 beginning in early 2020. While the outbreak of COVID-19 slowly began spreading across the world throughout January and February of 2020 it was not until March 2020 that the United States (U.S.) experienced an increase in the total number of confirmed cases. COVID-19 has impacted airports differently, with airports that rely completely on commercial passenger traffic in non-leisure destinations being impacted the most, while many general aviation (GA) airports experienced minimal to no impact in activity.

Nearly all types of operations at SGF (except military) decreased in the Spring of 2020, however, operations did improve quickly despite the ongoing Pandemic. By 2021, SGF operations reached pre-Pandemic total annual operational levels (approximately 57,000) and are anticipated to remain consistent throughout the 20-year forecasting period (2021-2041). Subsequent sections of this chapter will examine the effects of COVID-19 on SGF's commercial segment in greater detail.

Exhibit 3.3-1 presents historical SGF operations by category from 2019 through the first quarter of 2022.

Exhibit 3.3-1: SGF Historical Operations By Category



Source: FAA OPSNET January 2019 through March 2022

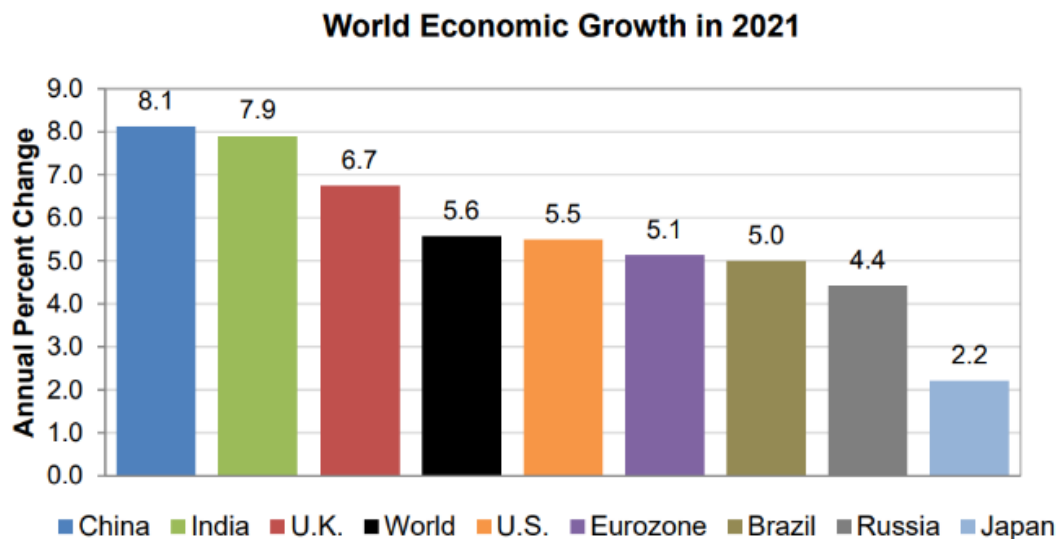
3.3.2 Global Influence

Global events can impact and influence airports of all sizes worldwide. The aviation industry experienced unprecedented and economic impacts from COVID-19 beginning in March 2020. Passenger demand (enplanements) within the commercial aviation sector dramatically decreased in result, causing many airlines to reduce capacity and routes. In April 2020, SGF enplaned approximately 3,036 passengers compared to the previous year in 2019 where SGF enplaned 44,001 passengers. The sharp decrease in enplanements recovered to 2021 substantially to 33,837 enplanements. Although SGF was greatly affected by the Pandemic, the post-Pandemic levels indicate significant recovery.

The FAA Aerospace Forecast Fiscal Years 2022-2042 presents a forecast showing global Gross Domestic Product (GDP) growth of 5.6% in 2021, after falling to 3.5% in 2020. The GDP globally is not anticipated to return to pre-Pandemic levels until about the middle of the decade. Moving into 2022 and 2023, countries are shifting their focus to fiscal restraint, rising interest rates and reducing inflation, contributing to moderate projected GDP growth in coming years.

On the other hand, the U.S. GDP growth is shown slowing from 5.5% in 2021 to 4.3% in 2022, and 2.9% in 2023 as the effects of COVID-19 relief wear off and consumer spending normalizes. The recovery from the Pandemic, as well as rising concerns of inflation, will be the key factors for GDP in the future. **Exhibit 3.3-2** depicts Worldwide GDP in 2021.

Exhibit 3.3-2: World Economic Growth in 2021

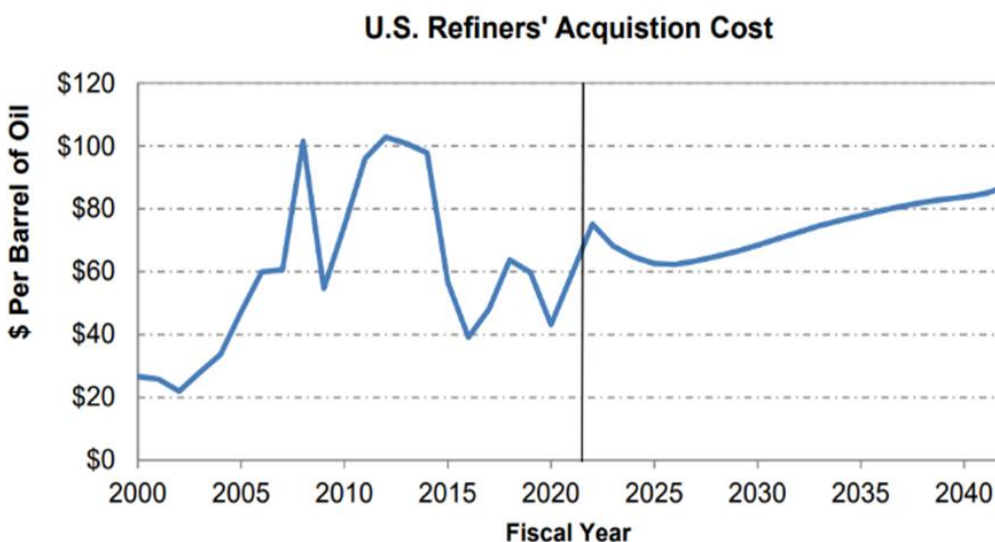


Source: FAA Aerospace Forecast Fiscal Years 2022-2042

3.3.3 National Influence

Oil costs have always been a driving factor for the aviation industry. Aviation fuel is the largest single expense to airlines and the price fluctuates with the price of a barrel of oil. Generally, fuel prices have a direct correlation on aviation activity. The FAA Aerospace Forecast Fiscal Years 2022-2042 projects the price of oil to increase due to growing global demand and higher costs of extraction. It has forecasted the U.S. refiners acquisition cost of crude to rise to \$87 a barrel at the end of the forecast horizon. **Exhibit 3.3-3** shows the projected Refiners' Acquisition Cost of oil. It is important to note that the FAA Aerospace Forecast Fiscal Years 2022-2042 does not include the impacts of the Russian invasion of Ukraine, which will likely drive the prices of oil even higher in 2022 and beyond.

Exhibit 3.3-3: U.S. Refiners' Acquisition Cost



Source: FAA Aerospace Forecast Fiscal Years 2022-2042

3.3.4 Local Influence

Factors affecting demand at a local level include influences spanning local businesses to local attractions and socioeconomic trends. These factors serve as important elements to the forecast and are factored into future projections for the Airport. According to FAA's OPSNET, SGF had over 57,000 total operations in 2021. Of those 57,000 total operations, nearly 10,000 of those were local operations (approximately 9,000 civil and 1,000 military). This data indicates a considerable portion of local traffic at SGF resulting from the presence of flight training activity and private aircraft based at the Airport. In addition to national and global issues, the Airport is largely affected by local factors which can heavily influence different areas of aviation at SGF. For example, existing companies in the area or ones that relocate to the area, will most likely use SGF. Additionally, companies that have flight departments may result in an increase in operations and based aircraft at SGF.

ECONOMY

SGF's local economy is robust and thriving due to many factors. The Springfield-Branson area is home to several big-name company's headquarters, including Bass Pro shop and O'Reilly Auto Parts. Amazon also has a large fulfillment center contributing to the local economy. Other big-name companies that have local branches include Expedia, T-Mobile, AT&T and Kraft Foods. Corporate headquarters commonly fly both executive level and employees to and from the area to conduct company business. This creates a demand for commercial airline service, charter service, corporate aviation and based aircraft at SGF.

Another economic driving factor that attracts businesses to the region is the Foreign Trade Zone (FTZ). FTZ's enhance the capabilities of local businesses competition on the global trading market. As previously mentioned in Chapter One – Airport Inventory, the Southwest Missouri FTZ is unique as it not only includes businesses at the Airport, but also extends the customs easing benefits to businesses with

fixed sites within 23 counties surrounding the Airport. The FTZ is a regional economic booster and attractant to businesses for the local area.

Springfield Missouri has functioned as a gateway for tourists due to the proximity it is to Branson and to Lake of the Ozarks, as these are both top tourist destinations. The surrounding area of the city also includes large reservoirs, national and state parks that are attractive destinations for people to visit. While tourism does play a large role in the region's economy, trade, health care and education are just as important to the region's sustainability.

Furthermore, within the local economy, there are several higher education institutions including Ozarks Technical Community College (OTC), Missouri State University (MSU), Drury University, Evangel University, Southwest Baptist University, Cox College of Nursing and nine other colleges in the area. Typically, large universities help generate commercial air traffic for the Airport due to student travel, athletic events, research, and recruitment.

SOCIOECONOMIC

Socioeconomic trends of the Springfield Missouri area may reveal key indicators of future aviation demand. Correlations can be drawn from economic activity to aviation activity and can suggest future need for the Airport. The database from Woods & Poole Economics was consulted for the socioeconomic assessment of the area surrounding SGF.

As presented in greater detail in Chapter One – Airport Inventory, key socio-economic data utilized in the forecasting process analyzed historical and projected data for Greene County, Springfield Metropolitan Statistical Area (MSA) and the State of Missouri for:

- Population
- Personal Income Per Capita
- Employment

FLIGHT TRAINING SCHOOL

Opening in Fall 2017, the local fixed-based operator (FBO) Premier Flight Center (PFC) partnered with the local community college, OTC, and the Airport to provide an FAA-approved Part 141 flight training program. As a vendor to OTC, PFC provides a flight training curriculum for students to train and obtain their private and commercial pilot's license, with an instrument rating, while at the same time working on an associate degree in Aviation Flight Technology.

Additionally, OTC is planning to build a new 22,700 square foot Airframe and Powerplant (A&P) facility on the Southeast side of the Airport. This new facility will boost enrollment for the college. Students will be able to achieve a certificate in Aviation Airframe Maintenance in which it prepares individuals for a career in aviation maintenance. The anticipated opening of the new facility is in the Fall of 2024.

MILITARY

For about 57 years, SGF has been home to the Missouri National Guard 1107th AVCRAD (Aviation Classification Repair Activity Depot) that services military aircraft from 14 states, including a fleet of around 370 helicopters and various other aircraft. The 1105th AVCRAD is one of four depots in the country that services U.S. Army helicopters. Such services include repairing aircraft damaged from sand and bullets as well as routine maintenance.

A recent facility expansion completed in 2020 has given the AVCRAD an extra 85,000 square feet to better perform services to aircraft such as the CH-47 Chinooks, AH-64 Apache, and UH-60 Blackhawks. The expansion allows for the depot to operate more orderly with the extra space to overhaul and repair. For the purposes of this Master Plan forecast, military operations, both itinerant and local, will be held constant at 2020 operational levels.

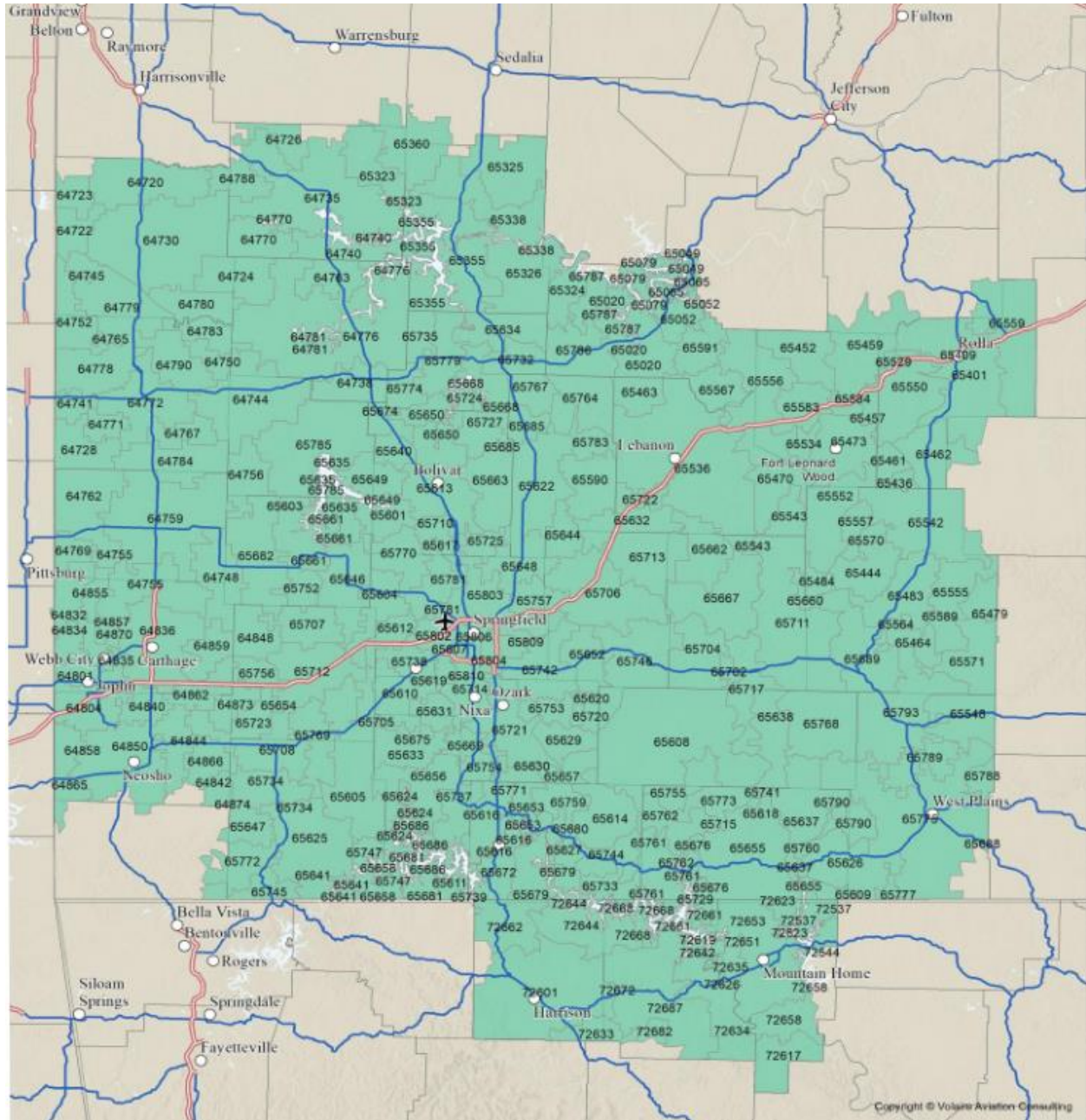
AIRPORT SERVICE AREA

The airport service area refers to the geographic area surrounding an airport that generates “local” activity. The population, economic characteristics, and capabilities of competing airports within an airport’s service area are principal factors in defining locally generated demand for aviation facilities and services and influence the Airport’s ability to attract transient aircraft activity. As previously discussed, the local economy is thriving, which bodes well for both GA and commercial passenger service at SGF.

From a commercial passenger perspective, the “catchment area” is the geographic area surrounding an airport where it can reasonably expect to draw passenger traffic from. The 2019 Leakage and Retention Study for SGF identified the Airport’s catchment area, which is depicted in **Exhibit 3.3-4**. The catchment area spans 258 zip codes throughout 36 counties in Southwest Missouri and three counties in North Central Arkansas. The 2019 study also evaluated airports in the Southwest Missouri region in relation to the amount of drive time to and from SGF. The drive time map, depicted in **Exhibit 3.3-5**, shows that while no airports are within the 60-minute drive time window of SGF, there are a significant number of other airports within the 120 and 180-minute drive time windows, including STL and MCI. So, while SGF can draw from a large area of local passengers, there’s also strong competition within only a few hours’ drive. The 2019 Leakage and Retention Study also determined the commercial passenger traffic distribution by airport among passengers from within the catchment area. The study showed that passengers from within the catchment area use seven airports 98% of the time, each with the following market share:

- 46.2% - SGF, Springfield-Branson National Airport
- 21.5% - MCI, Kansas City International Airport
- 18.9% - STL, St. Louis Lambert International Airport
- 4.7% - XNA, Northwest Arkansas Regional Airport
- 4.4% - TUL, Tulsa International Airport
- 1.3% - DFW, Dallas/Fort Worth International Airport
- 0.9% - LIT, Little Rock Clinton National Airport

Exhibit 3.3-4: Springfield-Branson National Airport Catchment Area



Source: Volaire (2019)

3.4 Industry Trends and Published Forecasts

In preparation for the development of an aviation forecast, it is important to collect, review and analyze industry trends, publications, and forecasts. Industry publications such as the FAA Aerospace Forecasts, General Aviation Manufacturers Association (GAMA) outlook, FAA Terminal Area Forecast (TAF), the Airbus Global Market Forecast and the Air World Cargo Forecast by Boeing should all be reviewed to gain an understanding of the broader outlook on aviation. These publications are generally created each year and use indicators such as historical trends, aircraft sales, tourism trends, oil prices, and economic outlooks to develop future projections.

3.4.1 FAA Aerospace Forecast Fiscal Years 2022-2042

The FAA Aerospace Forecast is published annually, providing market outlooks for all sectors of the aviation industry. The most current publication, FAA Aerospace Forecast Fiscal Years 2022-2042, provides industry outlook beginning nearly two years after the onset of COVID-19, which has been the largest disruption in aviation history.

According to the FAA Aerospace Forecast Fiscal Years 2022-2042, domestic commercial passenger growth over the next 20 years is projected to grow at a 4.7% compounded annual growth rate (CAGR). Following the COVID-19 recovery period (2020-2022), domestic passengers are forecast to return to 2019 levels by 2023 and continue growing at a 2.6% CAGR through the end of the forecast period.

The GA sector of the aviation industry was less affected by COVID-19 than the commercial sector. The FAA Aerospace Forecast Fiscal Years 2022-2042 projects the total active GA fleet to grow at 0.1% CAGR by the end of the forecast period. Over the 20-year outlook, the FAA projects piston aircraft to decrease at -0.8% CAGR, turbo prop aircraft to increase at a 2.6% CAGR, and jet aircraft to increase at a 2.6% CAGR. The FAA forecast expects air travel demand to grow between 2022 and 2026 due to the U.S. economy recovering from the impacts of COVID. Operations at towered airports are forecast to grow at a 1.5% CAGR over the forecast period with commercial activity growing at approximately five times the rate of non-commercial traffic. The FAA forecast states that at towered airports, total aircraft operations in 2021 increased by 7.4% compared to 2020. During the same time period air carrier activity increased by 4.1%, air taxi increased 7.1%, and GA increased by 9.1%.

3.4.2 General Aviation Manufacturers Association

GAMA is an international trade organization that primarily represents GA aircraft manufacturers. Historically, GAMA publishes an annual report each year, which not only includes historical aircraft delivery data, but also fleet and flight activity forecasts for all facets of the GA sector. However, since the onset of COVID-19, GAMA has not published an annual report, nor any industry forecasts. The most recent report published by GAMA is the 2019 Annual Report. Due to the report being published prior to the Pandemic, it is likely to be unreliable and unreasonable to consider in this Master Plan forecast. Therefore, no GAMA projections are documented in the SGF Master Plan forecast.

3.4.3 FAA Terminal Area Forecast

Every year the FAA publishes a TAF for each airport included in the NPIAS. The TAF assumes a demand-driven forecast based upon local and national economic conditions, as well as industry trends. In 2020, there was a major decrease in U.S. passenger enplanements and commercial operations because of the COVID-19 Pandemic. In 2021, there was modest recovery with passenger enplanements and commercial operations increasing above historical average growth rates. Due to the impact of COVID-19, the current published 2021 TAF (published March 2022) is inaccurate. As such, the FAA has provided the Airport a revised draft TAF that is anticipated to be published late in 2022. The Airport has agreed that the draft TAF better aligns with current conditions at SGF. Therefore, the revised draft 2022 TAF will be used and referenced throughout this forecast chapter for the purposes of enplanements and aircraft operations forecasting. The revised draft 2022 TAF did not include based aircraft counts, so the currently published 2021 TAF (listed in **Appendix A** inside this document) will be used for purposes of based aircraft forecasting.

The FAA's revised draft 2022 TAF projects commercial enplanements at SGF to increase from 422,931 in 2021 to 840,077 in 2041, which represents a 98.63% increase and a 3.49% CAGR. The draft TAF projects total aircraft operations to increase from 56,342 to 73,881 between 2021 and 2041, representing a 31.13% increase and a 1.36% CAGR. The current published 2021 TAF projects based aircraft to increase from 143 to 186 between 2021 and 2041, representing a 30.07% increase and a 1.32% CAGR.

Table 3.4-1 presents the data from the SGF revised draft TAF anticipated to be issued late in 2022.

Table 3.4-1: FAA Draft 2022 SGF Terminal Area Forecast

FISCAL YEAR	ENPLANEMENTS			AIRCRAFT OPERATIONS									BASED AIRCRAFT ¹
	Commercial Enplanements			Itinerant Operations					Local Operations			TOTAL OPS	
	Air Carrier	Commuter	Total	Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total		
2021	98,169	324,762	422,931	9,706	16,372	16,028	2,889	44,995	10,433	914	11,347	56,342	143
2022*	122,651	418,311	540,962	10,500	18,256	17,832	3,301	49,889	6,646	740	7,386	57,275	146
2023*	127,961	444,725	572,686	13,033	19,488	17,850	3,301	53,672	7,512	740	8,252	61,924	148
2024*	134,991	469,346	604,337	15,719	17,274	17,868	3,301	54,162	9,249	740	9,989	64,151	150
2025*	138,361	481,133	619,494	17,488	15,596	17,885	3,301	54,270	11,322	740	12,062	66,332	152
2026*	141,421	491,787	633,208	20,919	11,610	17,903	3,301	53,733	11,350	740	12,090	65,823	154
2027*	144,280	501,769	646,049	22,083	10,664	17,921	3,301	53,969	11,378	740	12,118	66,087	156
2028*	147,111	511,625	658,736	22,447	10,772	17,939	3,301	54,459	11,407	740	12,147	66,606	158
2029*	149,938	521,471	671,409	22,809	10,882	17,957	3,301	54,949	11,435	740	12,175	67,124	160
2030*	152,874	531,687	684,561	23,186	10,993	17,975	3,301	55,455	11,464	740	12,204	67,659	162
2031*	155,877	542,151	698,028	23,571	11,105	17,993	3,301	55,970	11,492	740	12,232	68,202	164
2032*	158,881	552,623	711,504	23,956	11,217	18,012	3,301	56,486	11,521	740	12,261	68,747	166
2033*	161,833	562,907	724,740	24,333	11,331	18,030	3,301	56,995	11,550	740	12,290	69,285	168
2034*	164,819	573,307	738,126	24,714	11,446	18,048	3,301	57,509	11,579	740	12,319	69,828	170
2035*	167,826	583,786	751,612	25,096	11,562	18,066	3,301	58,025	11,608	740	12,348	70,373	172
2036*	170,885	594,440	765,325	25,485	11,680	18,084	3,301	58,550	11,637	740	12,377	70,927	174
2037*	174,097	605,630	779,727	25,893	11,798	18,102	3,301	59,094	11,666	740	12,406	71,500	176
2038*	177,385	617,082	794,467	26,311	11,918	18,120	3,301	59,650	11,695	740	12,435	72,085	178
2039*	180,758	628,840	809,598	26,739	12,039	18,138	3,301	60,217	11,724	740	12,464	72,681	180
2040*	184,171	640,727	824,898	27,171	12,162	18,157	3,301	60,791	11,754	740	12,494	73,285	183
2041*	187,555	652,522	840,077	27,597	12,285	18,175	3,301	61,358	11,783	740	12,523	73,881	186

¹ Based aircraft presented from 2021 TAF Issued March 2022

Source: FAA Revised Draft 2022 SGF TAF

3.4.4 Airbus Global Market Forecast

The 2022 Airbus Global Market Forecast projects future traffic growth and passenger aircraft demand over the next 20 years. Airbus projects that the demand for new aircraft will progressively shift from fleet growth to the replacement of older, less fuel-efficient aircraft. Only 20% of the current in-service fleet is the latest generation of fuel-efficient aircraft, in result, driving future demand for newer aircraft.

The Airbus Forecast projects that 39,500 new aircraft deliveries will be needed over the 20-year period. Of the new passenger aircraft to be delivered worldwide, 6,580 aircraft will be delivered to North America. Similarly, 410 of the 890 total new freighter unit deliveries worldwide will be delivered to North America. Overall, the total projected aircraft deliveries by the end of the forecast period worldwide are projected to be 80% single aisle aircraft and 20% wide body aircraft.

Additionally, the Airbus Forecast projects global demand for passenger traffic will grow at a 3.6% CAGR over the next 20 years, while U.S. Domestic traffic is projected to increase at 2.1% CAGR.

3.4.5 Boeing Commercial Outlook

The Boeing Company's Commercial Market Outlook (CMO) 2022-2041 is a long term forecast of commercial air traffic and aircraft demand. The CMO reflects a global market that is recovering. The demand for domestic air travel has made strong recovery and is on track to return to pre-Pandemic levels by 2023 to 2024. CMO forecasts \$7.2 trillion in new airplane deliveries as global aircraft fleets increase 80% by 2041.

The CMO states that as technology advances and airlines strive to be fuel efficient and more sustainable, demand for new aircraft is significantly increasing. The CMO forecast projects approximately half of passenger jets will be replaced with newer models throughout the forecasting period. Asian markets account for 40% of the long-term global demand for new airplanes whereas, Europe and North American each account for 20% of the demand. The remaining deliveries is for all other global regions combined. In total, the CMO forecast demands for more than 40,000 new airplanes will be delivered over the next 20 years.

3.4.6 Boeing World Air Cargo Forecast

The Boeing Company also issues the World Air Cargo Forecast (WACF) 2020-2039 to provide a comprehensive, up-to-date overview of the air cargo industry. The forecast summarizes the world's major air trade markets, identifies major trends, and presents forecasts for the future performance and development of markets, as well as for the world freighter airplane fleet.

The Boeing WACF states that worldwide air cargo traffic is projected to grow at a 4.0% CAGR over the next 20 years. The Asia-Pacific region will continue to lead the world in average annual air cargo growth, with domestic China and East Asia markets expanding 5.8% and 4.9% per year. These markets are supported by faster-growing economies and growing middle classes, making these markets grow slightly faster than the world average growth rate. In the markets between North America and Europe, growth will be below the world average growth rate. North American is forecasted to increase 2.6% over the forecasting period.

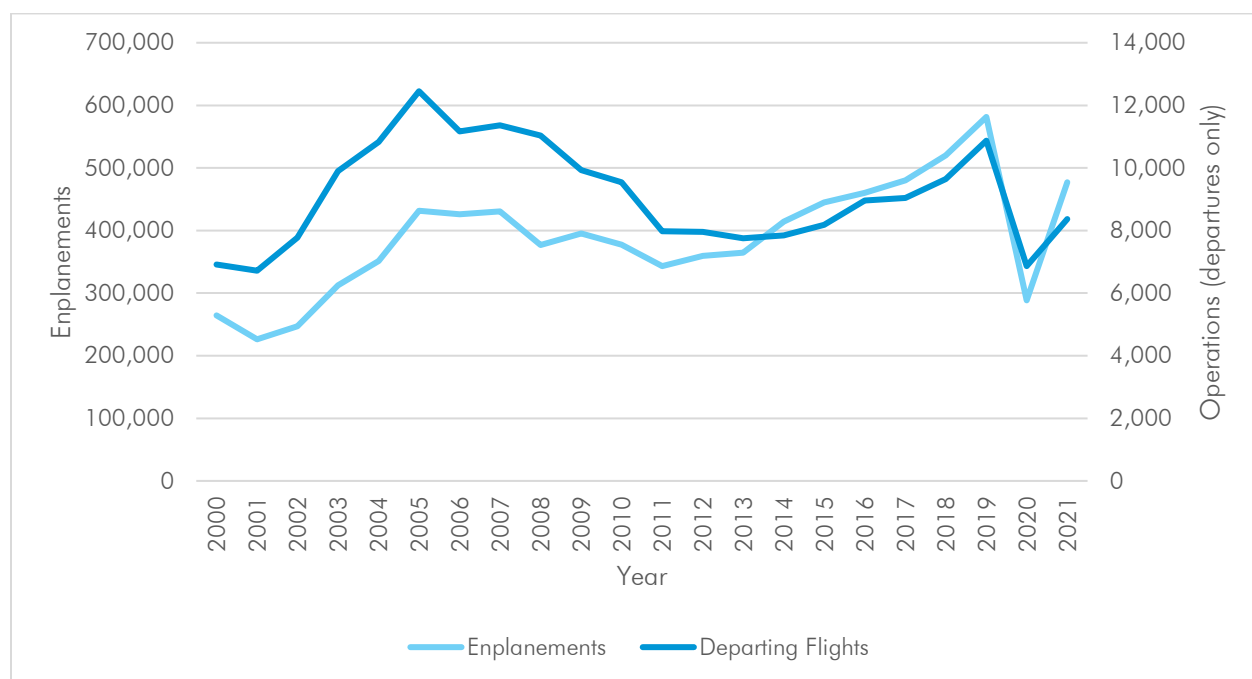
3.5 Commercial Aviation Forecast

This section presents the analysis and findings of the passenger air carrier and commuter (simplified as commercial) passenger service scenarios and forecasts at SGF. This analysis considers the recent air service available at SGF, the potential for growth, and various scenarios the forecast how growth could occur in the future.

3.5.1 Historical Passenger and Operations Data

Before the COVID-19 Pandemic, enplanements at SGF grew consistently from 2011 through 2019, at a 6.8% CAGR. This strong passenger growth is largely due to the strong local economy (previously discussed) and the continued economic growth in the region. At the same time, the number of departing flights at SGF grew at a 3.9% CAGR indicating that there was a growing number of passengers per departing flight, a trend will be explained in greater detail in subsequent report sections. **Exhibit 3.5-1** presents historical commercial enplanement and operations (departures only) data at SGF since 2000.

Exhibit 3.5-1: SGF 20-Year Historical Enplanements and Operations



Source: DOT T-100 Data for SGF 2000-2021; CMT (2022)

As the graph above shows, despite some stagnation due to the Great Recession in the late 2000s and early 2010s, SGF has seen significant growth in enplanements over the past 20 years. Over the period from 2000 through 2019, enplanements grew at an annual rate of 4.2%. This is significantly faster than the overall U.S. domestic average of 1.6% annually. While these trends were disrupted by the Pandemic, strong growth is anticipated to return to SGF once capacity stabilizes. This data historic data is listed in **Table 3.5-1** in tabular format

Table 3.5-1: SGF 20-Year Historical Enplanements and Operations

YEAR	ENPLANEMENTS	DEPARTURES
2000	264,202	6,909
2001	226,218	6,716
2002	247,174	7,768
2003	312,714	9,904
2004	351,251	10,826
2005	431,667	12,450
2006	426,114	11,164
2007	430,578	11,362
2008	376,885	11,030
2009	395,094	9,928
2010	377,180	9,540
2011	343,249	7,979
2012	359,692	7,957
2013	364,777	7,752
2014	414,232	7,845
2015	444,786	8,183
2016	460,001	8,963
2017	479,928	9,039
2018	520,122	9,645
2019	581,449	10,868
2020	288,265	6,859
2021	477,093	8,369

Source: DOT T-100 Data for SGF 2000-2021; CMT (2022)

3.5.2 Impacts of COVID-19 Pandemic on Commercial Aviation

Like most airports in the country, SGF was significantly impacted by the Pandemic, with much of the Airport's passenger demand evaporating overnight. At its worst, demand fell to 94% below 2019 levels in April 2020. While the rest of 2020 experienced reduced demand, by summer 2021 commercial activity was returning towards normal. Passenger demand in May 2021 was only 17% below 2019 levels and has been relatively consistent at that level as of this report writing (summer 2022). The challenge recently is not that demand has not recovered, instead, supply has remained below pre-Pandemic levels as airlines struggle with staffing and restoring their schedules. For example, scheduled seat capacity at SGF in July 2022 was 17% lower than in July 2019, but flights were incredibly full, with throughput at the Transportation Security Administration (TSA) checkpoints per scheduled seat at 0.96 (this will not match a true load factor due to airline crews and employees being screened and counted, but is a good indication of the strength of demand and more timely than other statistics). This analysis concludes that if supply had returned to 2019 levels, then the demand at SGF would have similarly recovered.

However, based on comments and published outlooks from airlines, an imminent recovery in airline capacity is not anticipated. The baseline (medium) forecast scenario, discussed in detail in the following section, has a return to 2019 passenger volumes in late 2023 into 2024. Until then, this scenario assumes that capacity will slowly return to SGF, but that load factors will remain elevated several percentage points higher than historical averages. Load factors come down to average in the baseline scenario at the end of 2024 as capacity stabilizes.

One lasting impact from the Pandemic that will be described in more detail later in this section are aircraft retirements and fleet changes. Several airlines have indicated a desire to dramatically scale back their 50-seat regional jet fleets and have already retired a significant number of aircraft. This is especially impactful in a market like SGF. In 2019, 68% of scheduled departures and 51% of scheduled seats were flown on 50-seat regional jets. By 2022, these adjustments already reduced those percentages to 44% of scheduled departures and 29% of scheduled seats. This analysis concludes that these trends will continue over time with fewer and fewer 50-seat regional jets in operation. Among other impacts, SGF can expect to accommodate larger aircraft, but with fewer flights, driving the average seats per departure higher. SGF will therefore experience more passengers in the terminal even as the number of flights does not significantly grow. The impact of this will be described in more detail in subsequent report sections.

3.5.3 Commercial Enplanement Forecast Scenarios

As part of the commercial enplanements analysis, numerous base forecasts were evaluated as the foundation to construct a Low, Medium, High and Super-High forecast scenario on top of. These base forecasts were developed and evaluated to determine the most appropriate to select as the foundation to build off for the commercial service forecasts for this Master Plan. The various base forecasts that were evaluated include:

FAA DRAFT 2022 TAF FOR SGF

Evaluated the FAA's 2022 Draft Terminal Area Forecast that we expect to be published in late 2022 for SGF.

SGF AS A % OF NATIONAL 2021 TAF (PUBLISHED MARCH 2022)

Calculated the percentage of enplanements that use SGF today of the national total, then applied that percentage to the national TAF for future years.¹

SGF AS A % OF FAA CENTRAL REGION 2021 TAF (PUBLISHED MARCH 2022)

Like the National TAF Scenario, the same methodology was used, but for the Central Region TAF.

POPULATION-BASED FORECAST

Using population forecast data from EMSI, the rate of air passengers per capita was calculated and evaluated how it was growing over time, then extended that trend onto future population forecasts. The "propensity to fly" rate (passengers per capita) for the Springfield area has been growing significantly,

¹ Although the Draft 2022 TAF is used throughout this report, only details for SGF is available at this time. Therefore, for comparisons to the national or regional TAF, the 2021 TAF that was published in March 2022 is used in the scenarios.

so this forecast methodology understates future demand, even though the passenger per capita rate was increased over time based on historical trends.

JOB BASED FORECAST

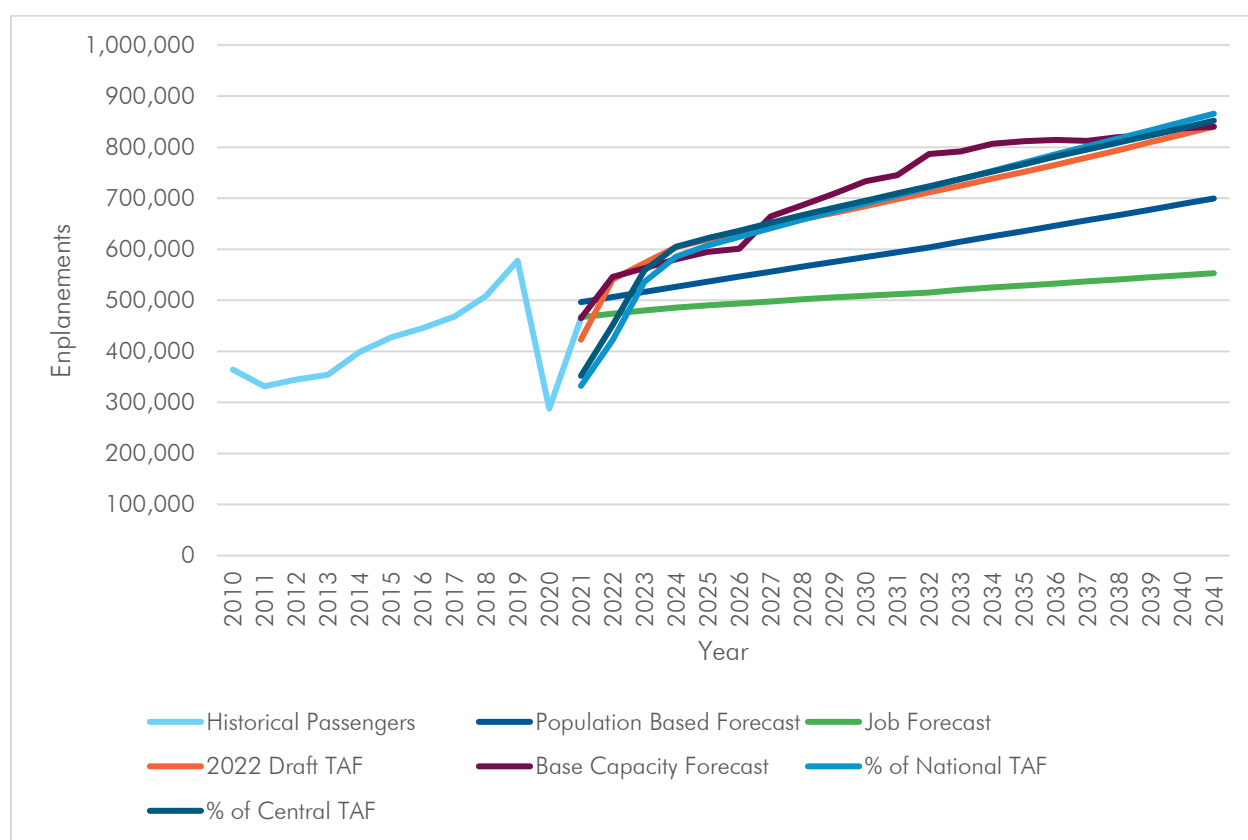
Just like the population-based forecast, future job growth in the area was compared to current passengers and extended the trend. This returned the lowest growth rate of any forecast.

BASE CAPACITY FORECAST

Last, but certainly not least, the Base Capacity Forecast was compiled by building airline capacity sets for each current and potential future market by month along with aircraft size and load factors. This base capacity forecast was ultimately selected as the foundation to be used for further development of the Low, Medium, High and Super-High forecast scenarios.

The base forecast projections are depicted in **Exhibit 3.5-2**.

Exhibit 3.5-2: Base Forecast Projections - SGF Commercial Enplanements



Source: CMT Analysis (2022)

Building upon the Base Capacity Forecast, a Low, Medium, High and Super-High commercial forecast scenario was developed, each modifying various possibilities for future air service at SGF. The details of each scenario are as follows:

LOW SCENARIO

- **Long Recession:** Assumes that a prolonged recession will begin in late 2022 and have an extended impact on the market. This scenario begins with the same core capacity assumptions as the Medium scenario, but with significant adjustments. First, load factors (how full planes are) are reduced significantly and stay depressed for the entire 20-year planning period. The Low scenario also holds back capacity growth and new markets significantly longer than they would likely begin. Simply as an example, the Base Capacity Forecast assumes that SGF will gain flights to a hub in the Northeast (likely DCA, PHL, JFK, or BOS) in 2024. In this Long Recession scenario, that same flight does not launch until 2028. Similar delayed growth plans are carried across all carriers and routes, where there is not only a delay in frequency growth but also delay up-gauging (larger aircraft).
- **Short Recession:** While not a part of the Low Scenario, a Short Recession scenario was developed since it is more likely to occur. While it has similar impacts with delayed growth, load factors and growth do return to normal far more quickly than in the Long Recession. However, since it tracks along with the Medium Scenario for most of the time, it was quickly dismissed as a separate scenario for further consideration.

MEDIUM SCENARIO

- **Base Capacity Forecast:** As previously described, the Base Capacity Forecast includes a monthly airline capacity set built out along with aircraft size. It assumed that all current details continue to be served, and that many of them see growth in frequency and/or size of aircraft going forward. For example, currently, United flies to Denver three times daily using 50-seat regional jets. Over time, this scenario upgauges the route to larger regional aircraft, and also adds additional flights so that by 2040 there are four daily flights on 76-seat regional jets to Denver. This scenario also includes new service to a Northeast Hub (likely DCA, PHL, JFK, or BOS) starting in 2024 and new service to an Upper Midwest Hub (likely MSP or DTW) starting in 2027. Lastly, this scenario includes Allegiant expanding some of their “experimental” Texas service into a more normal and consistent service pattern going forward. While this forecast scenario does show consistent growth, it is believed that it aligns with what airlines have said publicly about their business models, fleet growth, and hub service to be the most realistic scenario, and therefore after further evaluation of all scenarios, the Medium Scenario was selected as the Preferred Forecast for commercial enplanements.

HIGH SCENARIO

- **Allegiant Based Aircraft:** Allegiant currently provides service to SGF using aircraft and crews flown in from other cities. However, Allegiant has been opening up more bases around the country, including in cities with roughly the same size of operations at SGF. This scenario assumes that Allegiant does decide to open a base at SGF and assigns two aircraft to fly routes to and from SGF. This creates two large impacts that drives service higher. First, because those aircraft are based at SGF year-round, there is less seasonal variation in flying than there is today. Therefore, some off-peak months see an increase in service from Allegiant. There are still peak months, but some of that extra demand will be served by aircraft and crews based elsewhere rather than local SGF aircraft and crews. Second, the timing of flights changes

dramatically since aircraft start and end each day in SGF rather than in another city. This scenario does not assume changes in enplanements, but it does impact the peak hour of the day, as well as passenger volumes through the terminal at various times of the day, which will be detailed further in the subsequent Peak Hour section.

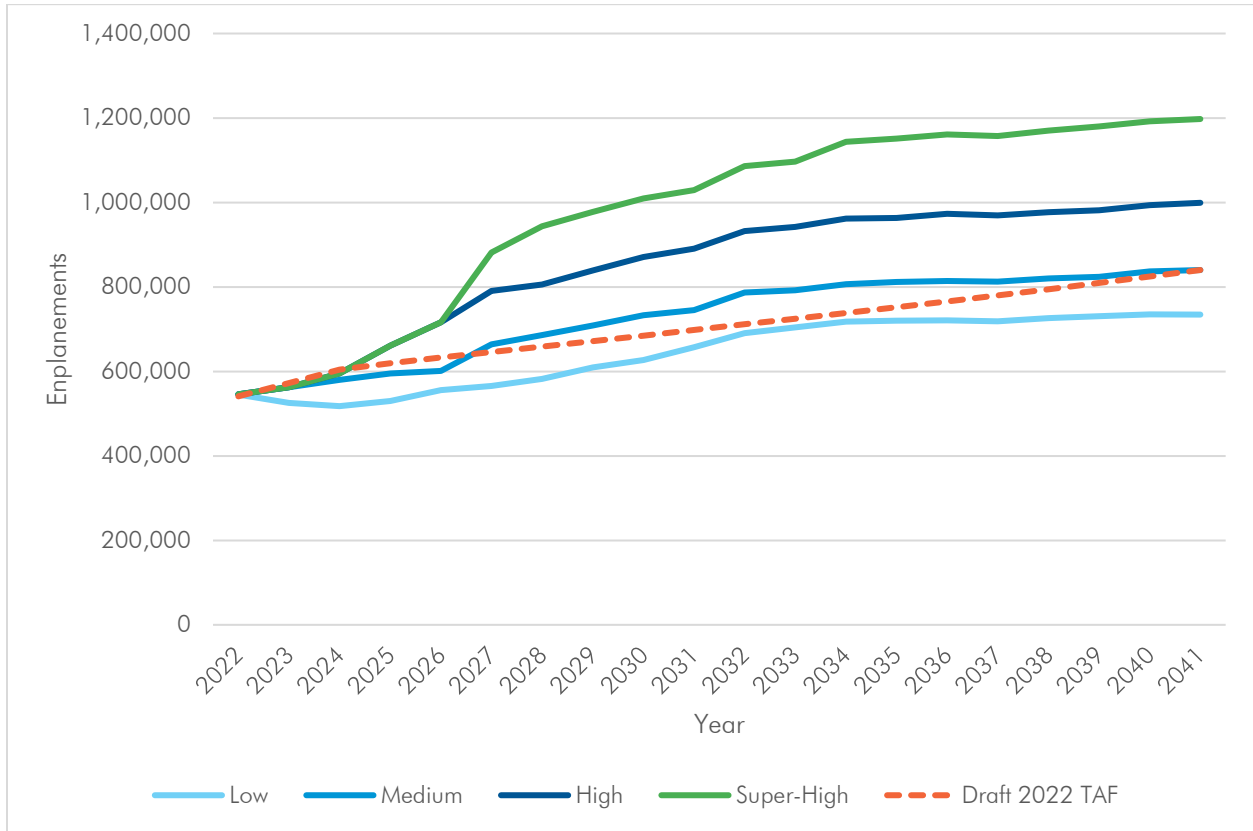
- **International Service:** While the Springfield region has relatively low international demand, this scenario assumes there is a limited market for international flying, particularly to leisure destinations like Cancun or Puerto Vallarta. Allegiant has publicly discussed plans to launch international service, and is seeking a partnership with Mexico's Viva Aerobus as part of their international strategy. However, this scenario does not assume that Allegiant or any specific airline would fly the service, other low-cost and ultra-low-cost carriers also operate similar routes today. In any event, this scenario calls for limited flying 2-4 times weekly at most, to meet this leisure demand. Service is often only seasonal, but will be flown on mainline high-density aircraft like a 737 or A320.
- **Ultra-Low-Cost Carrier Service:** Ultra-Low-Cost Carriers (ULCCs) are growing rapidly as a share of passenger volume in the domestic market, and they are anticipated to continue growing into cities like Springfield in the coming years. Like above International Service scenario, this Ultra-Low-Cost Carrier Service scenario assumes the opportunity is relatively limited, however with large high-density mainline aircraft, even minimal schedules can carry significant passengers. This scenario assumes service beginning in 2024, three weekly flights, and growing over time and peaking at nine weekly flights. This scenario does not specify destinations or a specific airline.

SUPER-HIGH SCENARIO

- **Southwest Airlines Service:** Due to the differences in Southwest's business model and the impacts their service would have on an airport like SGF, a Southwest Airlines (Southwest) service scenario was developed. Should Southwest begin service at SGF, this scenario assumes the frequency would begin with three daily flights and grow to just over five daily flights over time. Southwest only operates 737 aircraft, so each flight has a minimum of 143 seats onboard, meaning it drives a significant volume of passengers. While this scenario provides no opinion on the likelihood of Southwest Airlines service at SGF, Southwest has been growing into markets with a similar population size, so it was reasonable, and therefore prudent, to explore this scenario, particularly given how much larger it is than other scenarios shown here.

The Low, Medium, High and Super-High commercial forecast scenarios all vary from the 2022 Draft TAF though in different ways. This analysis concludes that in most cases, SGF will experience faster growth in the late 2020's and 2030's than the TAF provides, and that the growth rate will slow in the 2040's. All of the forecast scenarios developed reflect that similar trend; though, at significantly different levels and growth rates depending on the assumptions discussed above. **Exhibit 3.5-3** graphically provides a comparison between the Low, Medium, High and Super-High commercial forecast scenarios and the TAF, while **Table 3.5-2** provides the data in tabular format.

Exhibit 3.5-3: Forecast Scenario Projections - SGF Commercial Enplanements



Source: CMT Analysis (2022)

Table 3.5-2: Forecast Scenario Projections - SGF Commercial Enplanements

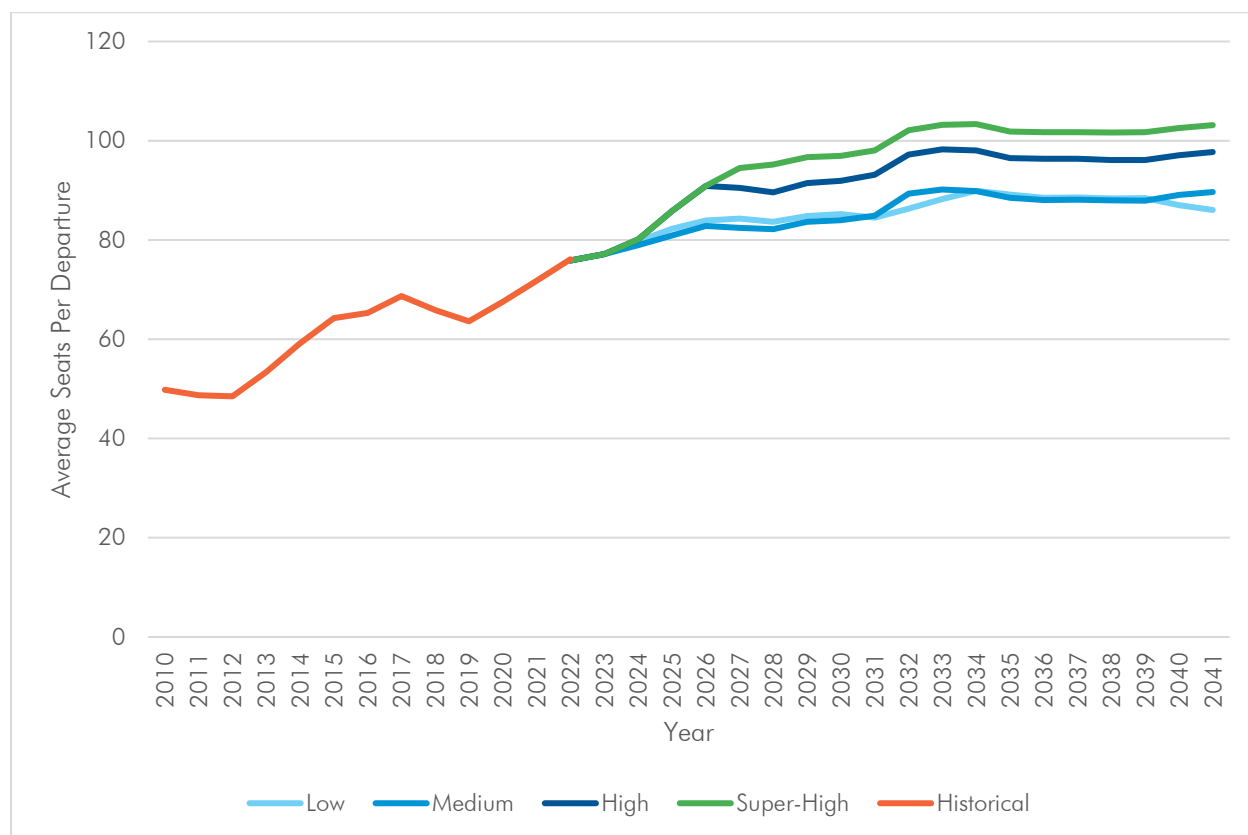
YEAR	LOW	MEDIUM	HIGH	SUPER-HIGH	2022 DRAFT TAF
2022	544,745	545,789	545,789	545,789	540,962
2023	525,483	562,671	562,671	562,671	572,686
2024	517,744	580,214	594,797	594,797	604,337
2025	530,130	595,060	660,948	660,948	619,494
2026	555,620	601,424	716,401	716,401	633,208
2027	565,435	664,133	790,613	881,165	646,049
2028	582,170	686,322	805,987	943,645	658,736
2029	609,309	709,076	839,142	977,874	671,409
2030	626,778	733,278	870,590	1,009,322	684,561
2031	657,143	745,378	890,830	1,029,562	698,028
2032	690,542	786,622	932,148	1,085,999	711,504
2033	704,225	791,838	942,364	1,096,399	724,740
2034	717,632	806,734	961,724	1,143,673	738,126
2035	719,961	811,874	963,233	1,151,192	751,612
2036	720,809	814,090	972,845	1,161,262	765,325
2037	718,958	812,570	969,450	1,157,409	779,727
2038	726,033	820,018	976,898	1,170,119	794,467
2039	730,616	823,666	981,438	1,179,808	809,598
2040	734,999	836,773	993,222	1,192,106	824,898
2041	734,492	840,018	999,130	1,197,499	840,077

Source: CMT Analysis (2022)

3.5.4 Commercial Aircraft Operations Forecast Scenarios

The commercial aircraft operations forecast tracks the previous enplanement scenarios in broad terms, but with a slower growth rate. This is due to the number of seats per departure is expected to grow over time. This is not a new trend for SGF - the average seats per departure has grown from 50 in 2010 to 76 in 2022. This continued growth in seats per departure is anticipated for the duration of the planning period in all scenarios. **Exhibit 3.5-4** depicts the previously discussed forecast scenarios for average seats per departure, illustrating a lower growth rate, driving the need for fewer additional departures over the planning period.

Exhibit 3.5-4: Forecast Scenario Projections – SGF Average Seats Per Departure

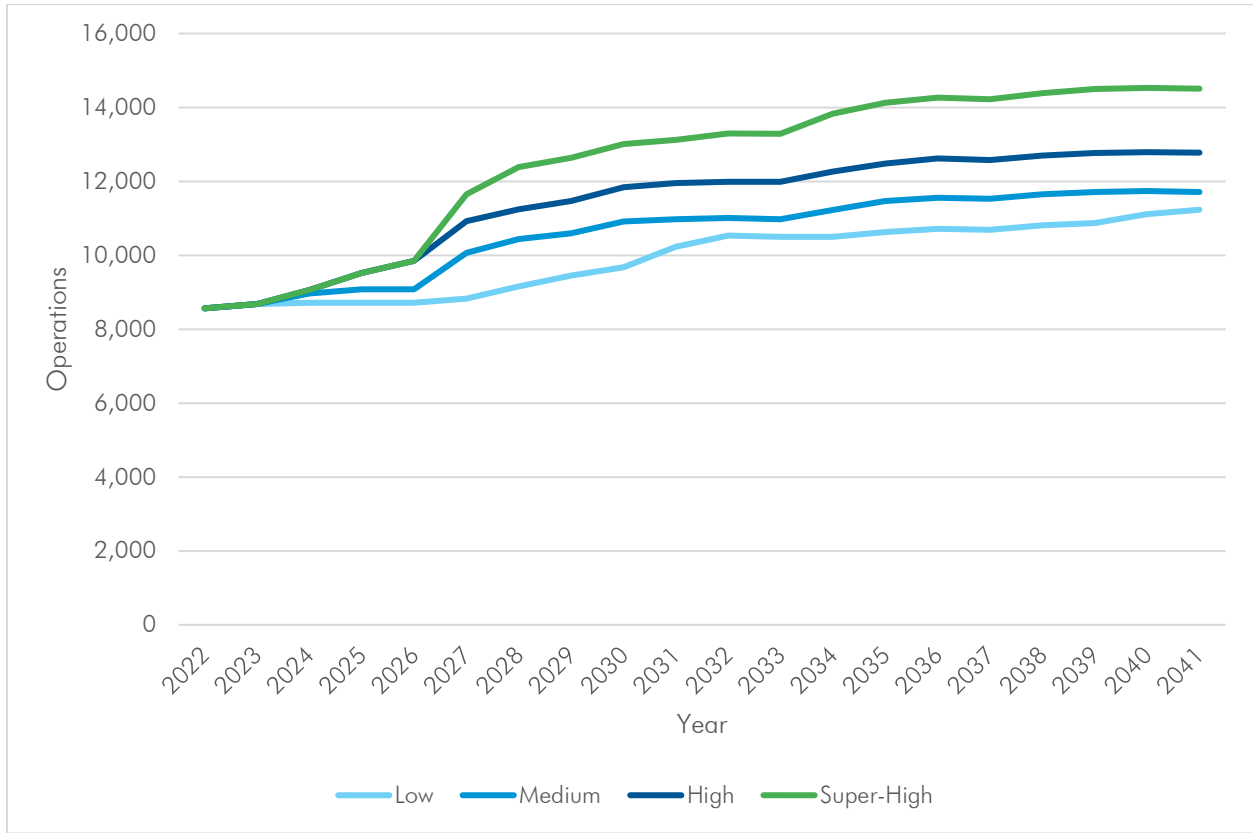


Source: CMT Analysis (2022)

Due to this growth in aircraft size, fewer additional departures are needed to meet the growth in enplanements that are forecast. Since much of the projected commercial growth comes from larger aircraft, the Low and Medium forecast scenarios have very slow growth in operations. However, the High and Super-High scenarios that add new airlines and new routes show far more additional operations, and those operations are generally on larger mainline aircraft from ultra-low-cost and low-cost carriers.

There is some variation in the number of seats per departure and total operations as capacity grows over time. This is generally since as a market grows, it is assumed that larger aircraft are substituted first, then additional flights are added later with smaller aircraft that we grow over larger over time as the market develops. **Exhibit 3.5-5** graphically depicts annual commercial departures for the Low, Medium, High and Super-High commercial forecast scenarios, while **Table 3.5-3** provides the data in tabular format.

Exhibit 3.5-5: Forecast Scenario Projections - SGF Commercial Departures



Source: CMT Analysis (2022)

Table 3.5-3: Forecast Scenario Projections - SGF Commercial Departures

YEAR	LOW	MEDIUM	HIGH	SUPER-HIGH
2022	8,564	8,564	8,564	8,564
2023	8,683	8,683	8,683	8,683
2024	8,718	8,963	9,061	9,061
2025	8,713	9,078	9,521	9,521
2026	8,713	9,078	9,851	9,851
2027	8,827	10,069	10,919	11,654
2028	9,155	10,439	11,243	12,386
2029	9,448	10,595	11,469	12,640
2030	9,675	10,917	11,840	13,011
2031	10,231	10,977	11,954	13,126
2032	10,530	11,006	11,984	13,296
2033	10,502	10,977	11,988	13,282
2034	10,502	11,222	12,263	13,832
2035	10,625	11,464	12,481	14,124
2036	10,713	11,555	12,622	14,269
2037	10,685	11,524	12,579	14,222
2038	10,807	11,647	12,701	14,390
2039	10,867	11,707	12,767	14,501
2040	11,110	11,738	12,789	14,528
2041	11,232	11,707	12,776	14,510

Source: CMT Analysis (2022)

3.5.5 Preferred Commercial Aviation Forecast

While all of the commercial forecast scenarios previously presented have a reasonable likelihood of occurring over the forecast period, it is the recommendation of this Master Plan that the Medium Forecast Scenario best aligns with FAA's methodology and guidance for developing a forecast and should therefore be used as the Preferred Commercial Forecast. The Preferred Medium forecast scenario is listed in **Table 3.5-4**.

Table 3.5-4: SGF Preferred Forecast Scenario – Enplanements and Operations

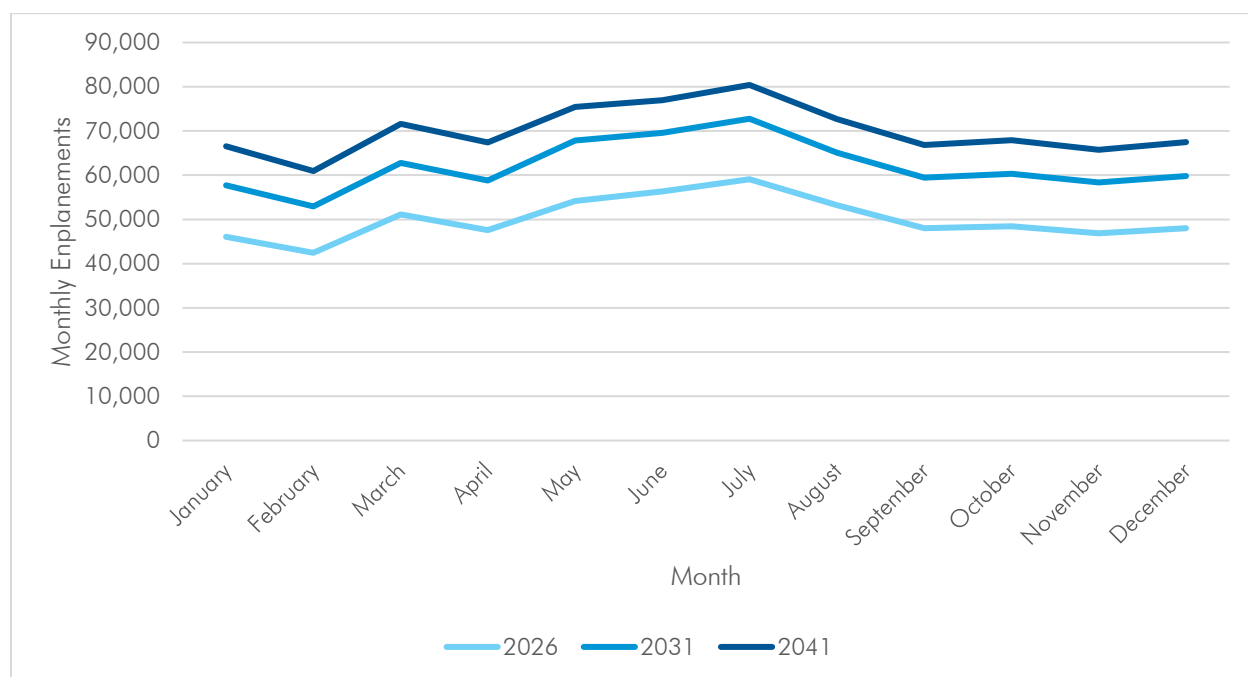
YEAR	ENPLANEMENTS (Medium Scenario)	OPERATIONS (Medium Scenario)
2021	430,964	17,036
2022	545,789	17,128
2023	562,671	17,366
2024	580,214	17,926
2025	595,060	18,157
2026	601,424	18,157
2027	664,133	20,138
2028	686,322	20,877
2029	709,076	21,190
2030	733,278	21,833
2031	745,378	21,953
2032	786,622	22,012
2033	791,838	21,953
2034	806,734	22,443
2035	811,874	22,928
2036	814,090	23,110
2037	812,570	23,048
2038	820,018	23,293
2039	823,666	23,413
2040	836,773	23,476
2041	840,018	23,413

Source: CMT Analysis (2022)

3.5.6 Peak-Hour Activity Forecast

While the Medium Forecast scenario is the preferred forecast for this Master Plan, peak-hour data for other scenarios were analyzed and presented to illustrate the differences in growth. To analyze the peak hour for commercial activity and operations, the peak month needs to first be identified. For this analysis, the base year +5, +10, and +20 years, or schedules for 2026, 2031, and 2041 were evaluated. Due to the Low scenario being largely similar to the Medium scenario (with smaller aircraft and lower load factors, but with comparable schedules) the focus of this analysis included the Medium, High, and Super-High scenarios. In the +5, +10, and +20 years, the Medium scenario shows that July is the peak month for enplanements, as depicted in **Exhibit 3.5-6**.

Exhibit 3.5-6: SGF Commercial Forecast Peak Month +5, +10 Year, and +20 Year



Source: CMT Analysis (2022)

Since many of the carriers operate varied schedules by day of week, this analysis needed to evaluate a specific day of the week. Throughout the forecast scenarios, Monday is either the busiest day or tied for the busiest day, therefore Monday was used to determine the peak hour as presented in **Table 3.5-5**.

Table 3.5-5: Forecast Scenario Projections – Commercial Forecast Peak Day Departures in July

Year	Scenario	MON	TUE	WED	THU	FRI	SAT	SUN
2026	Medium	30	22	24	25	29	27	29
	High	31	23	25	26	30	28	30
2031	Medium	37	29	31	30	36	33	35
	High	38	30	32	31	38	34	37
	Super-High	41	33	35	34	41	37	40
2041	Medium	39	31	33	32	38	35	37
	High	40	32	34	33	40	36	39
	Super-High	45	37	39	38	45	41	44

Source: CMT Analysis (2022)

The analysis then evaluated hours separately for each forecast scenario since they vary significantly in how airlines will schedule flights. This is most significant between the Medium and High scenarios where Allegiant bases aircraft at SGF. The impact from these based aircraft is not necessarily additional flights, but that these flights all depart early in the morning and return in the evening, shifting when there is a significant number of passengers using terminal facilities.

For example, looking at the 2026 Design Day Flight Schedules (DDFS) in the Medium scenario, the peak hour for departing passengers is in the 8:00am hour with 358 passengers departing. However, in the High scenario, that shifts to the 6:00am hour and grows significantly larger with 526 passengers departing. It is also important to note that the peak hour for passengers is not necessarily the peak hour for operations, as shown in the Medium scenario. The variation is largely due to the timing of mainline departures compared to regional jets, since the smallest mainline in the DDFS is roughly twice the size of most regional jets. This peak hour analysis determined the peak “clock hour” for passengers and number of flights for the Medium and High scenarios, which are listed in **Table 3.5-6**.

Table 3.5-6: Forecast Scenario Projections - Commercial Forecast Peak "Clock Hour"

DEPARTURES BY HOUR - 2026	MEDIUM		HIGH	
	Passengers	Flights	Passengers	Flights
06:00	229	4	526	6
07:00	162	3	162	3
08:00	358	3	210	2
09:00	61	1	61	1
10:00	122	2	122	2
11:00	128	2	277	3
12:00	80	2	229	3
13:00	210	3	210	3
14:00	149	1	149	1
15:00	210	2	61	1
16:00	0	0	0	0
17:00	128	3	128	3
18:00	61	1	210	2
19:00	61	1	61	1
20:00	298	2	0	0

Source: CMT Analysis (2022)

However, the table above is only evaluating the peak "clock hour" for simplicity and to illustrate the differences between it and the actual peak hour. The actual peak hour is determined by looking at the busiest 60-minutes of the day at the airport using 5-minute increments to evaluate schedules. **Exhibit 3.5-7** depicts how arriving and departing passengers peak and valley throughout the day in the 2026 Medium forecast scenario DDFS, looking at a rolling 60-minute evaluation by 5-minute increments, where departing passengers are positive and arriving passengers are negative.

Exhibit 3.5-7: 2026 Medium Commercial Forecast Scenario Actual Rolling “Peak Hour”



Source: CMT Analysis (2022)

Using this same methodology across the Medium and High forecast scenarios, the analysis determined that since the peak hour varies for each metric, and may occur several times throughout the day, the peak hour demand does not correlate to any specific 60-minute part of the day. **Table 3.5-7** lists the actual peak hour, in both departing and arriving passengers (pax) and operations, for the Medium and High forecast scenarios at the +5, +10, and +20 year periods.

Table 3.5-7: Commercial Forecast Actual “Peak Hour”

PEAK 60 MINUTES		DEPARTURES	DEPARTING PAX	ARRIVALS	ARRIVING PAX	TOTAL FLIGHTS	TOTAL PAX
2026	Medium	5	358	6	358	7	656
	High	6	526	7	499	9	824
2031	Medium	5	435	6	435	9	763
	High	6	547	7	478	9	824
	Super-High	6	547	7	540	11	1,053
2041	Medium	5	419	7	517	10	814
	High	6	563	7	536	11	869
	Super-High	6	563	7	536	11	946

Source: CMT Analysis (2022)

3.6 Air Cargo Forecast

Cargo, within the aviation industry, is referred to as being categorized as either “passenger cargo” (also known as belly cargo) or “all-cargo.” Belly cargo refers to cargo (freight or mail) that is transported under the main deck of a commercial passenger aircraft (i.e., United Airlines, American Airlines, Delta Airlines, etc.) along with the passenger luggage. All-cargo, refers to cargo that is transported by an air freight operator that is in the business of transporting cargo rather than passengers. At SGF, there are two all-cargo operators, FedEx and UPS.

The cargo industry, specifically the air cargo industry, is extremely complex. Transporting goods from one part of the world to another, typically via multiple modes of transportation (i.e., aircraft then by truck, vessel, rail, etc.) is accomplished within a niche network of highly skilled and highly technical operators. The elaborate network these operators manage must determine the best way to transport goods, giving consideration to the mode(s) of transportation needed based on location, shipping price and desired delivery date (i.e., overnight delivery, next day air, two-day shipping, etc.).

Like the commercial sector of aviation, the Pandemic impacted the air cargo industry too. Supply chain issues and demand for personal protection equipment (PPE) related to COVID-19, the sharp decrease in available passenger aircraft capacity to transport cargo, economic conditions, and more all contributed to unprecedented changes in the air cargo industry over the past couple of years. There were large changes to the work world brought on by the Pandemic, including a shift to the remote “work from home” schedule, while also bringing upon unemployment to many. With people now at home for longer periods of time throughout the day than usual, coupled with the fear of shopping in public stores, drove demand for e-commerce. As a result, the cargo industry experienced significant growth in many markets across the country.

The following report section presents the analysis and findings of the air cargo forecast scenarios developed for SGF. The analysis evaluates the existing air cargo operations at SGF and the potential for cargo growth within the Springfield market. Forecasts developed herein pertaining to cargo include an air cargo tonnage (belly and all-cargo) forecast, air cargo operations forecast, and an air cargo landed weight forecast. Given the complex nature of the cargo industry as illustrated above, the forecasts prepared in this report were developed for high-level facility planning purposes (i.e., apron sizing, parking positions, and land use planning) and are not intended to be used for detailed planning such as cargo building dimensions (which are determined by individual operators). It should be noted that UPS is currently in the process of upsizing their operation at SGF from a 2,500 sq.ft. facility to over 20,000 sq. ft. This cargo investment, along with signing a new long-term lease agreement with the Airport, illustrates the existing, and future, cargo growth and demand at SGF.

3.6.1 Historical Cargo Data

Each year, air carriers (passenger and cargo) and airports are required to report key statistical data related to aeronautical activity (including operations and landed cargo weight) to the Department of Transportation (DOT). Utilizing the DOT’s Air Carrier Statistics Database (also known as the T-100 data bank), historical data was analyzed. Ten years of historical SGF cargo data is presented in **Table 3.6-1**.

Table 3.6-1: SGF Historical Cargo Data

YEAR	AIR CARGO TONNAGE				AIR CARGO OPERATIONS		
	Belly Cargo (lbs)	All-Cargo: FedEx (lbs)	All-Cargo: UPS (lbs)	All-Cargo: Total (lbs) ¹	FedEx ²	UPS ²	All-Cargo Total
2011	32,908	15,327,438	31,096,129	46,423,567	518	896	1,414
2012	30,150	15,905,306	36,511,254	52,416,560	556	988	1,544
2013	21,069	15,442,779	36,020,752	51,463,531	536	970	1,506
2014	32,835	15,782,211	37,076,191	52,858,402	512	910	1,422
2015	46,543	16,156,506	36,628,237	52,784,743	542	910	1,452
2016	43,482	14,162,515	29,700,885	43,863,400	524	832	1,356
2017	33,279	14,715,313	33,840,333	48,555,646	516	908	1,424
2018	24,217	15,125,098	21,781,414	36,906,512	506	634	1,140
2019	25,892	14,897,817	19,917,001	34,814,818	516	620	1,136
2020	17,171	14,300,702	18,773,347	33,074,049	520	624	1,144
2021	29,213	15,856,394	23,795,438	39,651,832	504	898	1,402

¹ FedEx and UPS² Scheduled departures (2x)

Source: Bureau of Transportation Statistics, Air Carrier Statistics (Form 41 Traffic)-US Carriers, T-100 Domestic Segment; CMT (2022)

3.6.2 Air Cargo Operations Forecast

The air cargo operations forecast provides analysis and projections of aircraft operations for all-cargo operations at SGF. Research was conducted to better understand how FedEx and UPS operate at SGF, as well as the overall regional market from an air cargo perspective. Historical flight data and schedules, payload, freight, and load factor data was also analyzed.

The data analysis appears to support the business model of both FedEx and UPS largely concentrating their efforts at SGF with providing overnight package delivery services. This is evident by the early morning arrivals between the 3am and 6am hour. As the table above shows (except 2018-2020), UPS has historically operated approximately 74% more flights annually in and out of SGF than FedEx. The analysis shows that UPS generally operates two daily departures five days a week while FedEx operates one daily departure five days a week. FedEx flies directly to and from their hub in Memphis, Tennessee, at the Memphis International Airport (MEM) approximately 98% of the time, while UPS only flies to and from their hub in Louisville, Kentucky, at the Louisville Muhammad Ali International Airport (SDF) approximately 66% of the time. The analysis suggests UPS operates a slightly different routing system than FedEx. Unlike FedEx, UPS will frequently route aircraft to other airports before and after SGF to enplane and deplane cargo. These airports include the Wichita Dwight D Eisenhower National Airport (ICT) in Wichita, Kansas, and to the Mc Allen Miller International Airport (MFE) in Mc Allen, Texas.

Given the proximity of SGF to other major metropolitan cities in the regions (such as St. Louis, Kansas City and even Memphis), it is reasonable to assume that services other than overnight delivery (i.e., next day, two day, etc.) are within acceptable drive-times where cargo could be transported via truck rather

than air. For the purpose of this forecast, it is assumed both operators will maintain their business model of providing overnight package delivery services at SGF.

CARGO OPERATIONS SCENARIOS

This air cargo operations analysis generated 43 forecast scenarios of projected growth, using the historical trend, market share and regression analysis forecasting methodologies, as well as developing a custom forecasting scenario. Five-year and 10-year historical growth rates and datasets were utilized throughout the scenarios, and albeit the disruption in 2020, two-year growth rates were also evaluated in the forecast scenarios. The cargo operations forecast developed and evaluated the following scenarios:

Local Trend

The local trend analysis developed five forecast scenarios using the historical trend methodology. Three scenarios were created based purely on FedEx and UPS's two-year, five-year and 10-year historical growth rates, generating future projections assuming these growth rates would continue over the planning period. In order to customize the parameters and evaluate various growth scenarios, two additional scenarios were developed. The first scenario, "Local (Custom #1)," assumed no changes in both carriers' operational levels and were maintained throughout the planning period, projecting the 10-year average of annual operations for both carriers; FedEx 10-year average was 523 annual flights and UPS 10-year average was 835 annual flights. The second scenario, "Local (Custom #2)," assumed both carriers will upgauge aircraft beginning in 2031 to B767-300F aircraft. In this scenario FedEx maintains one flight a day but UPS shifts from two daily flights to one.

Market Share

The market share analysis assumes a top-down approach to forecasting. Using this methodology, six forecast scenarios were developed. Historical data was analyzed, and using a larger aggregate, (the FAA TAF's forecasted operations for the state of Missouri and for FAA's Central Region), a local "market share" forecast was derived. Using historical data, SGF's local market share percentage of cargo operations was determined when compared to both the state of Missouri and FAA's Central Region, and growth rates at the two-year, five-year, and 10-year intervals were identified. Using the FAA TAF's 20-year forecast for both larger aggregates, six scenarios were developed to generate SGF's local market share of cargo operations.²

Regression Analysis

Using the regression analysis methodology, 24 forecast scenarios were developed. This analysis performed regressions at the five and 10-year data points (and in some scenarios two-year data points were also evaluated) correlating cargo operations during these time periods to the Greene County, Springfield MSA, and state of Missouri data sets for population, income per capita, and employment. This forecast scenario also performed regression analyses against multiple variable socioeconomic indicators to evaluate if there were stronger relationships between multiple socioeconomic data sets. For these regression analyses, the Woods & Poole socioeconomic data previously discussed was used.

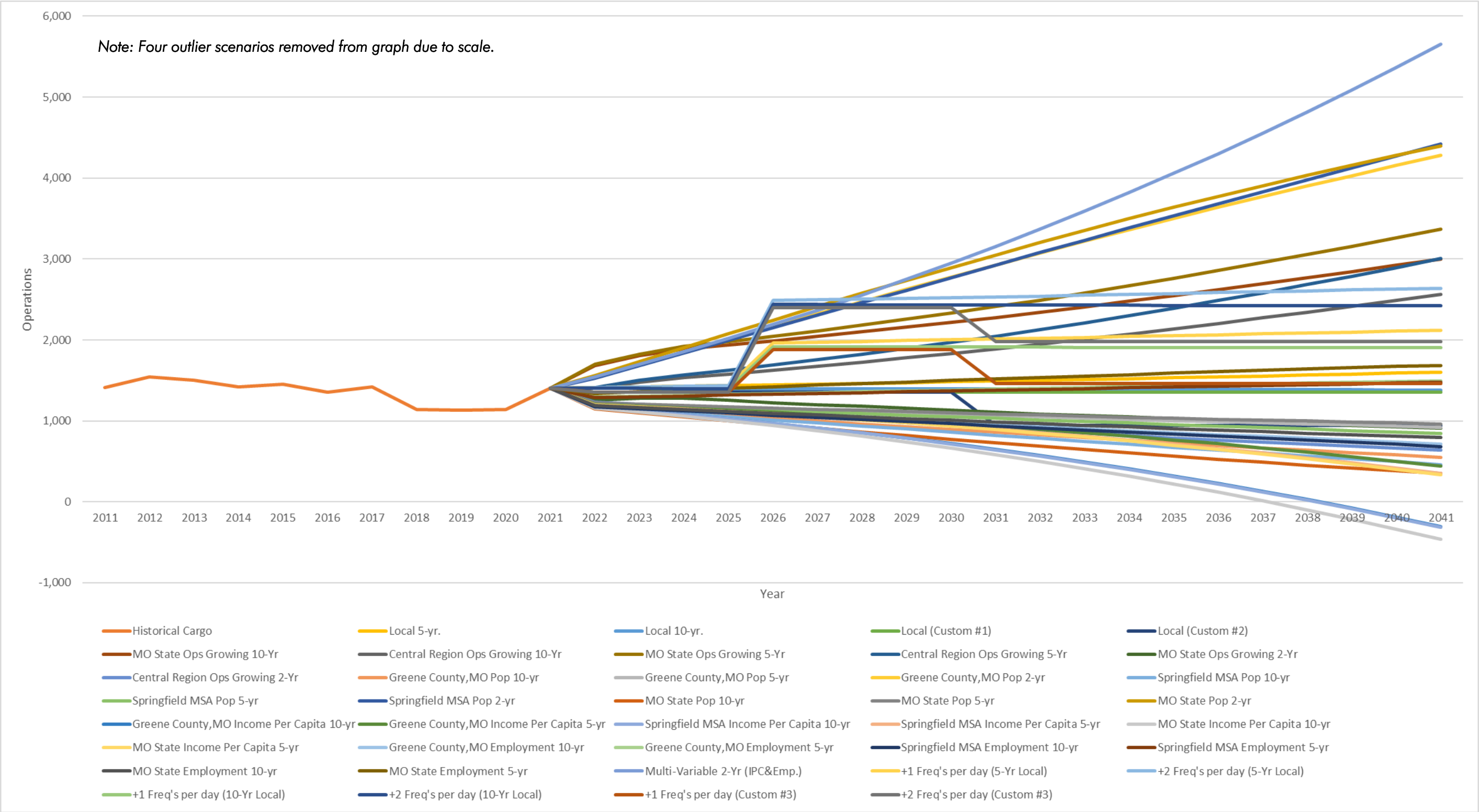
² The draft revised 2022 TAF was not published at the time of this analysis and therefore larger aggregates (state of Missouri and Central region) were unavailable, resulting in the 2021 TAF published in March 2022 being used for the market share analysis.

Additional Frequency

Eight additional forecast scenarios were developed in which a new cargo operator, likely Amazon Air, begins operations at SGF to serve the southwest Missouri region. Beginning in the +5 year (2026) planning horizon, his analysis evaluated adding one and two daily frequencies (using B737-800) on top of the Local Trend projections (which were based on historical growth rates). One additional scenario, "Custom #3," was developed that evaluated adding additional frequencies by the new carrier on top of the Local (Custom #2) scenario previously developed in Local Trends.

Exhibit 3.6-1 presents the scenarios developed for the air cargo operations forecast.

Exhibit 3.6-1: Air Cargo Operations Forecast Analysis



Source: CMT Analysis (2022)

PREFERRED AIR CARGO OPERATIONS FORECAST

The 43 air cargo operations forecast scenarios were evaluated using several metrics, including reasonability, statistical relationship (R^2 value), and professional judgement. While some scenarios statistically produced strong relationships (near 1.0 R^2), the number of operations projected over the planning period in some scenarios produced negative growth, and therefore were dismissed.

As such, the Historical Local Trend and Additional Frequency Scenarios were further evaluated. Professional judgement was used to select three scenarios for further consideration, which are depicted in **Exhibit 3.6-2** and consist of the following:

- **Low:** The Local (Custom #2) Scenario assumes that both FedEx and UPS will upgauge aircraft in 2031. From an operations standpoint, this did not change FedEx’s annual operations projections since they currently operate one aircraft daily. UPS however, due to upgauging to a larger aircraft, reduces its daily frequencies from two to one flight per day halfway through the planning period. This analysis produced the Low forecast scenario and generated 940 operations in 2041, yielding a -1.98% CAGR.
- **Medium:** The Local (Custom #1) Scenario assumes the status quo will be maintained throughout the planning period. Using historical data, average annual operations data for past 10 years for each air carrier was identified and assumed they would remain constant for each year over the planning period. This analysis produced the Medium forecast scenario and generated 1,358 operations in 2041, yielding a -0.16% CAGR.
- **High:** The +1 Freq’s per day (Custom #3) Scenario examined additional cargo frequency beginning in 2026 and layered these additional operations on top of the Local (Custom #2) Scenario. Assuming a new cargo operator would begin operations at SGF adding one frequency per day, five days a week, this scenario added 520 operations annually on top of the Local (Custom #2) Scenario. This analysis produced the High forecast scenario and generated 1,460 operations in 2041, yielding a 0.20% CAGR.

It is recommended that the Preferred Forecast for the air cargo operations forecast be the High Forecast Scenario.

Exhibit 3.6-2: Air Cargo Operations Forecast Scenarios



Source: CMT Analysis (2022)

3.6.3 Belly Cargo Forecast

T-100 data shows that belly cargo on passenger aircraft at SGF has consisted of, on average over the past 10 years, 2% mail and 98% freight, averaging a total weight of 30,614 lbs annually. In 2020, belly cargo fell to a 10-year low of 17,171 lbs. This is largely due to the fact that there were significantly less passenger aircraft operating that year from COVID-19 impacts to transport cargo on. As shown above in Table 3.6-1, belly cargo quickly rebounded in 2021, surpassing both 2018 and 2019 total annual weights.

BELLY CARGO SCENARIOS

This belly cargo analysis developed 17 forecast scenarios of projected growth, using historical trend and regression analysis forecasting methodologies. Five-year and 10-year historical growth rates and datasets were utilized for future projections, and albeit the disruption in 2020, two-year growth rates were also evaluated in a couple of the scenarios. The belly cargo forecast developed and evaluated the following scenarios:

Local Trend

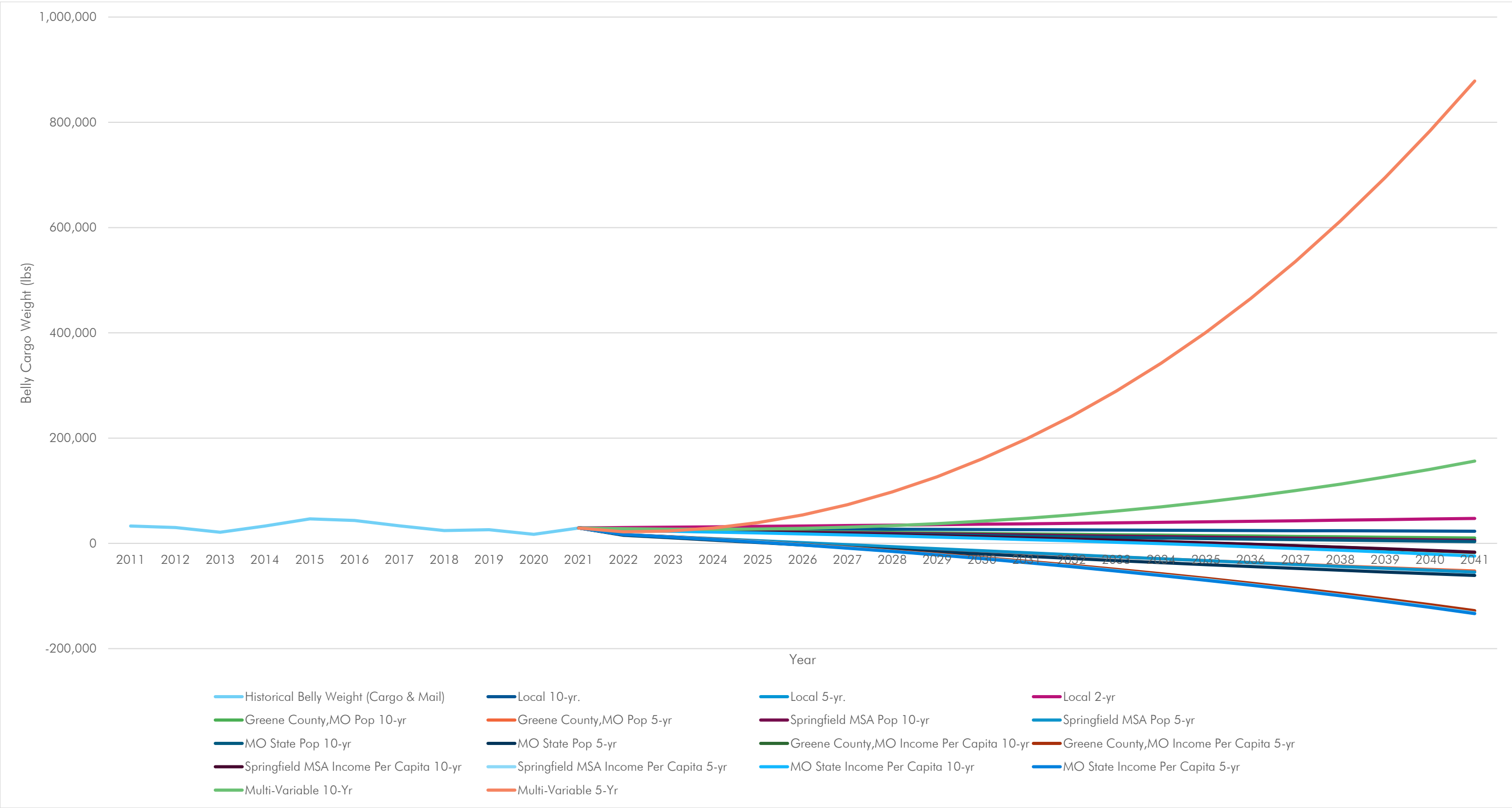
The local trend analysis provided three forecast scenarios using the historical trend methodology. Two-year, five-year and 10-year historical growth rates were determined, and future projections assumed these growth rates would continue over the planning period.

Regression Analysis

Using the regression analysis methodology 14 forecast scenarios were developed. This analysis performed regressions at the five and 10-year data points (and in some scenarios two-year data points were also evaluated) correlating belly cargo during these time periods to the Greene County, Springfield MSA and Missouri state data sets for population and income per capita. This forecast scenario also performed belly weight regression analyses against multiple variable socioeconomic indicators to evaluate if there were stronger relationships between multiple socioeconomic data sets. For these regression analyses, the Woods & Poole socioeconomic data previously discussed was used.

The 17 belly cargo scenarios are depicted in **Exhibit 3.6-3**.

Exhibit 3.6-3: Belly Cargo Forecast Analysis



Source: CMT Analysis (2022)

PREFERRED AIR CARGO TONNAGE “BELLY CARGO” FORECAST

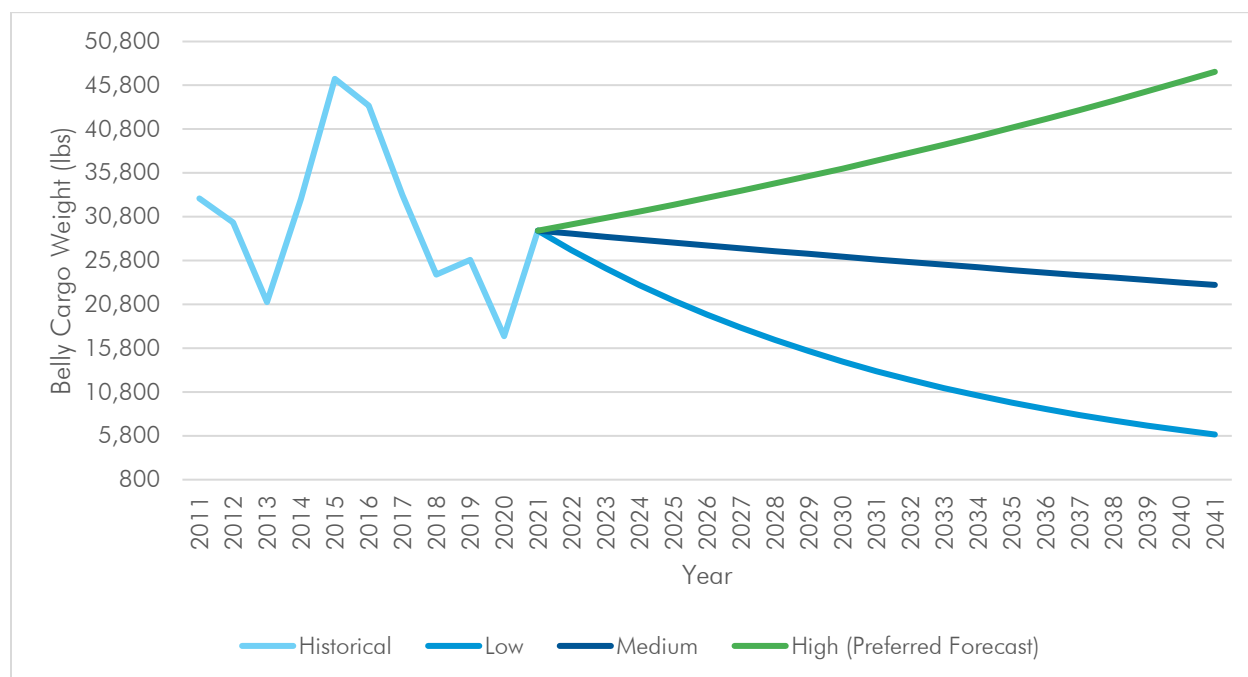
The 17 forecast scenarios produced different growth rates of future belly cargo weight. Throughout all regression analyses, there were no strong relationships (R^2 value) identified that logically explained the projected growth, and were therefore dismissed for further consideration. The strongest R^2 value produced was in the multi-variable regression scenario which yielded a 0.71 R^2 . This scenario was also dismissed for further consideration due to the unrealistic 18.55% CAGR it produced over the planning period.

As such, the historical (local) forecasts were further evaluated. Professional judgement was used to select three scenarios for further consideration, which are depicted in **Exhibit 3.6-4** and consist of the following:

- **Low:** The Local 5-Yr Scenario assumes that the five-year historical growth rate will be maintained throughout the planning period. This analysis produced the Low forecast scenario and projected 5,952 lbs. of belly-cargo in 2041, yielding a -7.65% CAGR.
- **Medium:** The Local 10-Yr Scenario assumes that the 10-year historical growth rate will be maintained throughout the planning period. This analysis produced the Low forecast scenario and projected 23,021 lbs. of belly-cargo in 2041, yielding a -1.18% CAGR.
- **High:** The Local 2-Yr Scenario assumes that two-year historical growth rate will be maintained throughout the planning period. This analysis produced the Low forecast scenario and projected 47,339 lbs. of belly-cargo in 2041, yielding a 2.44% CAGR.

Although it is not a generally acceptable practice to use a two-year historical growth as the foundation for future projections, the two-year growth rate appears reasonable considered cargo operators shift in operating since the Pandemic and it also produced the most realistic scenario over the planning period. Therefore, it is recommended that the Preferred Forecast for the air cargo belly-cargo forecast be the High Forecast Scenario, showing minimal growth.

Exhibit 3.6-4: Belly Cargo Forecast Scenarios



Source: CMT Analysis (2022)

3.6.4 All-Cargo Forecast

Over the past 10 years, in addition to FedEx and UPS, there have been a handful of other all-cargo carriers operating at SGF. However, FedEx and UPS have historically been responsible for 99.8% of all the all-cargo operations, and therefore, this analysis will only evaluate these two key operators.

DOT T-100 data showed that over the past five years, FedEx has exclusively operated the Boeing 757-200 aircraft at SGF. Over the same period, UPS has operated the Airbus A300-600, Boeing 757-200 and Boeing 767-300 at SGF, approximately 42%, 56% and 1% of the time respectively. As depicted above in Table 3.6-1, FedEx has generally been more consistent when compared to UPS, year over year, in regard to the volume of cargo transported each year. Between 2011 and 2021, FedEx's total annual freight ranged between 14.1 to 16.1 million lbs. of cargo transported, while UPS's total annual freight ranged between 18.7 to 37.0 million lbs. of cargo transported. In 2020, as COVID-19 peaked, UPS experienced the lowest year in cargo transported over the past decade (FedEx came close with 2020 being the second lowest volume year over the same period). Since 2020 however, both FedEx and UPS have experienced modest growth, 2.10% CAGR and 6.11% CAGR, respectively.

ALL CARGO SCENARIOS

This all-cargo analysis generated 33 forecast scenarios of projected growth, using historical trend and regression analysis forecasting methodologies, as well as developing a custom scenario. Two-year, five-year and 10-year historical growth rates and datasets were evaluated in the scenarios. The all-cargo forecast developed and evaluated the following scenarios:

Local Trend

The local trend analysis provided five forecast scenarios using the historical trend methodology. Three scenarios were based on FedEx and UPS's two-year, five-year and 10-year historical growth rates, generating future projections assuming these growth rates would continue over the planning period. Like the cargo operations Local Trend scenario, two additional "Custom" scenarios were also developed. The first custom scenario created, "Local (Custom #1)", assumed both carriers would maintain the status quo and continued to operate with no significant changes over the planning period. This scenario utilized the 10-year average of annual freight weight reported by both carriers. The FedEx 10-year average was 15,242,916 lbs. of cargo and UPS's 10-year average was 29,558,271 lbs. of cargo. The second custom scenario created, "Local (Custom #2)", assumed both carriers will upgauge aircraft in 2031 and both be operating the B767-300F at SGF. In this scenario FedEx maintains one flight a day but UPS shifts from two daily flights to one in 2031.

Regression Analysis

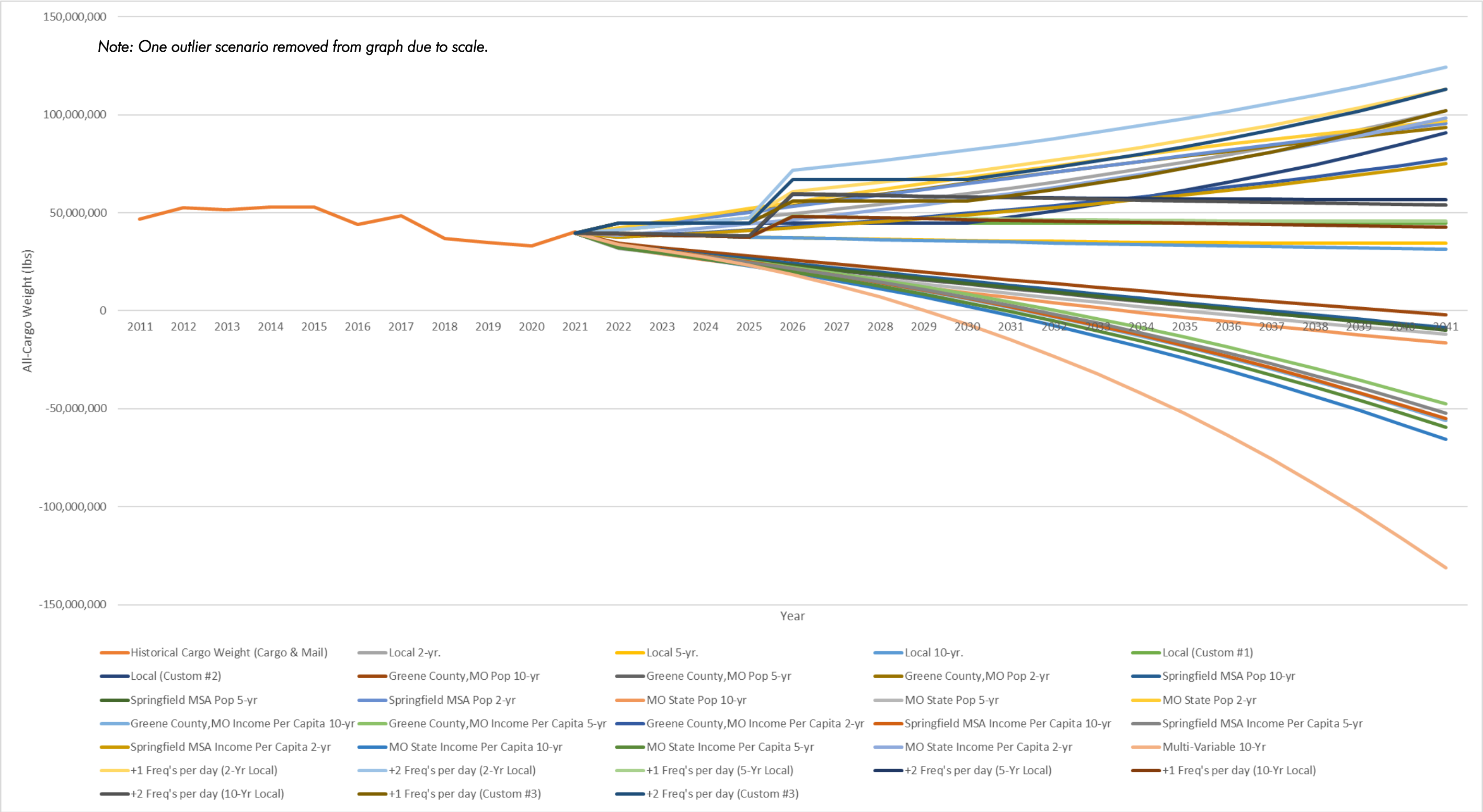
Using the regression analysis methodology 20 forecast scenarios were developed. This analysis performed regressions at the five and 10-year data points for annual belly cargo which correlated these time periods for each Greene County, Springfield MSA and Missouri state data sets for population and income per capita. This forecast scenario also performed all-cargo weight regression analyses against multiple variable socioeconomic indicators to evaluate if there were stronger relationships between regressing multiple socioeconomic data sets. For these regression analyses, the Woods & Poole socioeconomic data previously discussed was used.

Additional Frequency

Like the cargo operations forecast scenario, an all-cargo forecast scenario was developed that assumed additional cargo frequency would be realized at SGF in the +5 year (2026), likely from a new operator such as Amazon Air. Using the projected cargo operations from the Local Trend scenario in the section above, additional all-cargo weight was added on top of these forecasts. Like the cargo operations scenario, one- and two-day additional frequencies were evaluated. Assuming the new carrier would be operating a Boeing 737-800, the additional weight used in these forecast scenarios was determined by examining a typical Amazon Air route at a similar size operation as SGF. 2021 T-100 data for Amazon Air was collected on a route that flew almost exclusively 737-800 aircraft showed, load factors considered, that Amazon Air on average flew 21,388 lbs. of cargo per flight. This weight was used to calculate the additional frequencies. Like in the cargo operation scenario, a custom scenario, labeled Custom #3, was also evaluated that added additional frequency on top of the Custom #2 scenario that was developed under the Local Trend scenario.

The 33 all-cargo scenarios are depicted in **Exhibit 3.6-5**.

Exhibit 3.6-5: All-Cargo Forecast Analysis



Source: CMT Analysis (2022)

PREFERRED AIR CARGO TONNAGE “ALL-CARGO” FORECAST

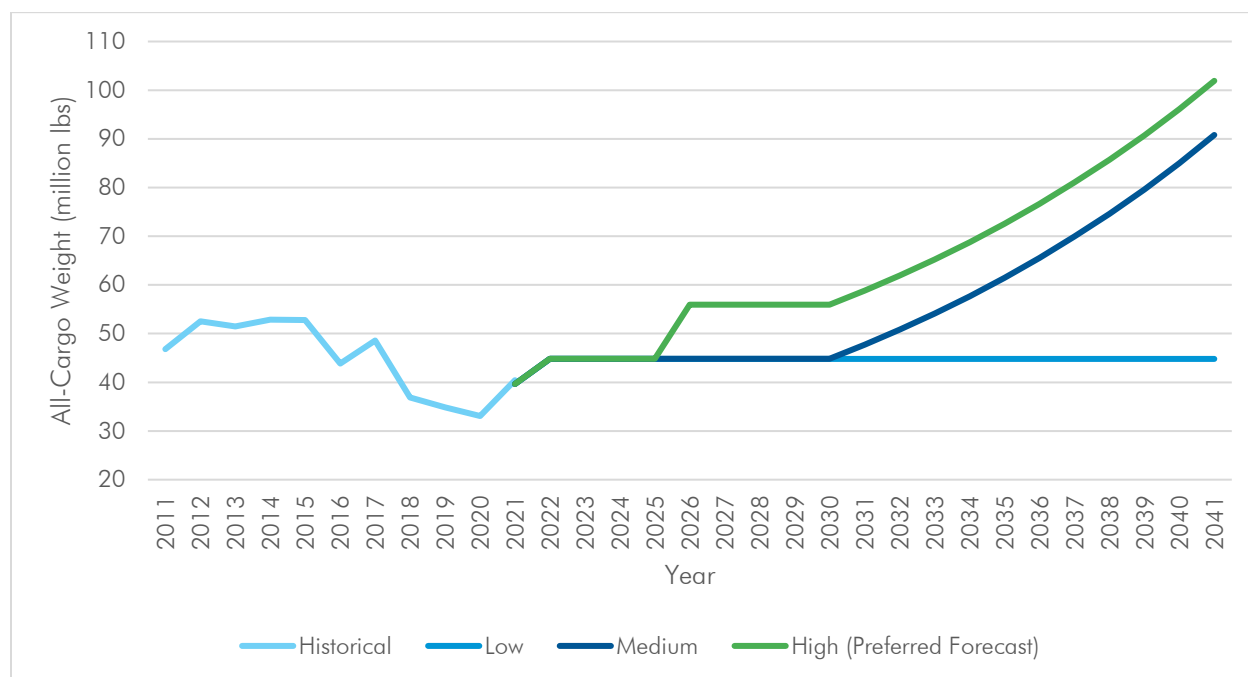
The 33 forecast scenarios produced significantly different growth rates of future all-cargo weight. Throughout all regression analyses, there were no strong relationships (R^2 value) identified that logically explained the projected growth, and were therefore dismissed for further consideration. The strongest R^2 value produced was in the multi-variable regression scenario which yielded a 0.91 R^2 . This scenario was also dismissed for further consideration due to the unrealistic 20.97% CAGR it produced over the planning period.

As such, the Local Trend and Additional Frequency scenarios were further evaluated. Professional judgement was used to select three scenarios for further consideration, which are depicted in **Exhibit 3.6-6** and consist of the following:

- **Low:** The Local (Custom #1) Scenario assumes the status quo will be maintained throughout the planning period. Using historical data, average annual freight weight for past 10 years for each air carrier was identified and assumed they would remain constant for each year in the planning period. This analysis produced the Low forecast scenario and generated 44,801,187 lbs of all-cargo weight in 2041, yielding a 0.61% CAGR.
- **Medium:** The Local (Custom #2) Scenario assumes that both FedEx and UPS will upgauge to a Boeing 767-300 aircraft in 2031. From an operations standpoint, this did not change FedEx's annual operations projections since they operate one aircraft daily. UPS however, due to upgauging to a larger aircraft, reduces its daily frequencies from two to one flight per day. In this scenario load factors drop in 2031 due to upgauging and gradually rebound over the planning period. Based on the operations counts this scenario produced, future weights were projected. This analysis produced the Medium forecast scenario and generated nearly 91,000,000 lbs of all-cargo weight in 2041, yielding a 4.23% CAGR.
- **High:** The +1 Freq's per Day (Custom #3) Scenario examined additional cargo frequency at SGF and layered these additional operations on top of the Local (Custom #2) Scenario. Assuming a new cargo operator would begin operations at SGF in 2026 adding one frequency per day, five days a week, this scenario added 520 new annual operations on a Boeing 737-800, transporting approximately 21,000 lbs. per additional operation on top of the Local (Custom #2) Scenario. This analysis produced the High forecast scenario and generated nearly 102,000,000 lbs. of all-cargo weight in 2041, yielding a 4.83% CAGR.

Given recent trends of Amazon Air launching new distribution points at locations similar in size to SGF it is feasible that SGF could be approached by a new cargo operator. Therefore, it is recommended that the Preferred Forecast for the all-cargo forecast be the High Forecast scenario.

Exhibit 3.6-6: All-Cargo Forecast Scenarios



Source: CMT Analysis (2022)

3.6.5 Air Cargo Landed Weight Forecast

The air cargo landed weight forecast provides analysis and projections for landed cargo weight at SGF. The annual landed cargo weight at an airport is an important number because it determines how much cargo entitlement funds an airport receives. According to the most recent FAA report “CY 2021 All-Cargo Airports by Landed Weight,” SGF ranked 113th among U.S. airports in terms of landed payload weight, with 160,333,000 lbs. recorded in 2021.

Landed cargo weight is determined by the certified maximum landed weight of an aircraft. FAA provides a list of maximum landed weight for all types of aircraft³. Since annual landed weight is based on the type of aircraft conducting the operations, this air cargo landed weight forecast utilized the Preferred Cargo Operations Forecast from Section 3.6.2 to determine projected landed weight at SGF. The preferred cargo operations forecast maintained existing FedEx and UPS operations until 2031, at which point both carriers upgauge aircraft to a Boeing 767-300F, each with one daily flight. The operations forecast also assumed a new cargo carrier beginning operations at SGF in the +5-year planning horizon (2026), utilizing a Boeing 737-800 aircraft.

Accordingly, future projected landed weight was calculated, and is depicted in **Exhibit 3.6-7** along with 10-years historical landed weight at SGF. The landed weight at SGF is projected to increase 24% in the first 5-year planning period due to the entrant of a new cargo operator. Then, as a result of upgauging

³The most recent published FAA list is the “Aircraft for CY2022 All-Cargo Report.”

of aircraft in 2031, the landed weight is then projected to decrease 4% which is maintained throughout the planning period.

Exhibit 3.6-7: Cargo Landed Weight Forecast



Source: FAA All-Cargo Airports by Landed Weight (2011-2021); CMT Analysis (2022)

3.7 GA Operations Forecast

This section presents the analysis and findings of the GA forecasts at SGF. To determine the GA facility needs, it is necessary to understand the demand for existing and future GA operations at SGF. This section will provide a GA aircraft operations forecast broken out by itinerant and local GA operations. A local operation is typically an aircraft that either stays in an airport's traffic pattern or travels to a practice area within 20 miles of the airport. The FAA defines an aircraft operation as either one takeoff or one landing (a touch-and-go equates to two operations). Subsequently, an itinerant operation is typically counted when an aircraft travels to/from a distance of greater than 20 miles from an airport. Similar to the analyses performed in previous sections, a series of analysis-based scenarios were developed to assess potential growth in GA aircraft operations at SGF.

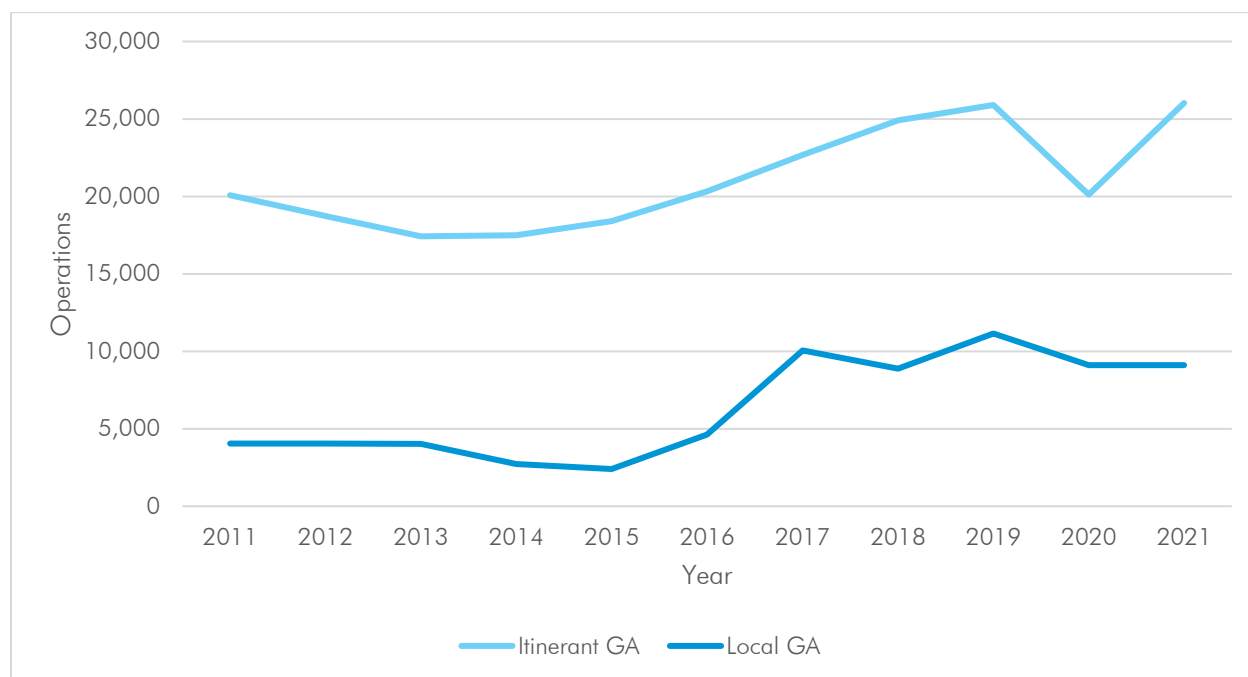
3.7.1 Historical GA Operations

To determine existing and historical GA operations counts at SGF an analysis of FAA's Operations Network (OPSNET) was conducted. FAA OPSNET is the official source of National Airspace System (NAS) air traffic operations and delay data⁴. The format which OPSNET presents the data is not necessarily an accurate representation of operations counts, specifically GA itinerant operations, at least not contextually for the purpose of this report. For master planning purposes, differentiating operations by commercial (i.e., those who use the terminal and purchase a ticket on an airline), and GA is important, as each serve different functions and have different facility needs. **Appendix B** in this document provides a table of the methodology used to determine itinerant GA operations from the OPSNET report for this forecast.

Historical itinerant and local GA operations at SGF are depicted in **Exhibit 3.7-1**. On average, over the past 10 years, GA itinerant and GA local accounted for 42% and 12%, respectively, of total operations at SGF. Over the past five years, on average, GA itinerant and GA local accounted for 42% and 16%, respectively, of total operations at SGF.

⁴ FAA Operations & Performance Data: (OPSNET) is the official source of NAS air traffic operations and delay data.

Exhibit 3.7-1: SGF Historical GA Operations



Source: FAA OPSNET (2011-2021); DOT T-100 Data (2011-2021); CMT Analysis (2022)

3.7.2 GA Itinerant Operations Scenarios

This GA itinerant operations analysis developed 26 forecast scenarios of projected growth, using historical trend, market share and regression analysis forecasting methodologies. Five-year and 10-year historical growth rates and datasets were utilized for future projections. The GA internet operations forecast developed and evaluated the following scenarios:

Local Trend

The local trend analysis provided two forecast scenarios using the historical trend methodology. Five-year and 10-year historical growth rates were determined, and future projections assumed these growth rates would continue over the planning period.

Market Share

The market share analysis assumes a top-down approach to forecasting. Using this methodology, four forecast scenarios were developed. Historical data was analyzed, and using a larger aggregate, (the FAA TAF's forecasted operations for the state of Missouri and for FAA's Central Region), a local "market share" forecast was derived. Using historical data, SGF's local market share percentage of total operations was first determined when compared to both the state of Missouri and FAA's Central Region, and growth rates at the five-year and 10-year intervals were identified. Future projections of total operations were then created using these market share growth rates. Market share projections based on total operations were first developed due to the way the OPSNET data was manipulated to derive accurate GA itinerant operations counts. The five and 10-year percent averages of itinerant GA

operations at SGF was determined and then applied to the total operations projections to develop the GA itinerant scenarios.⁵

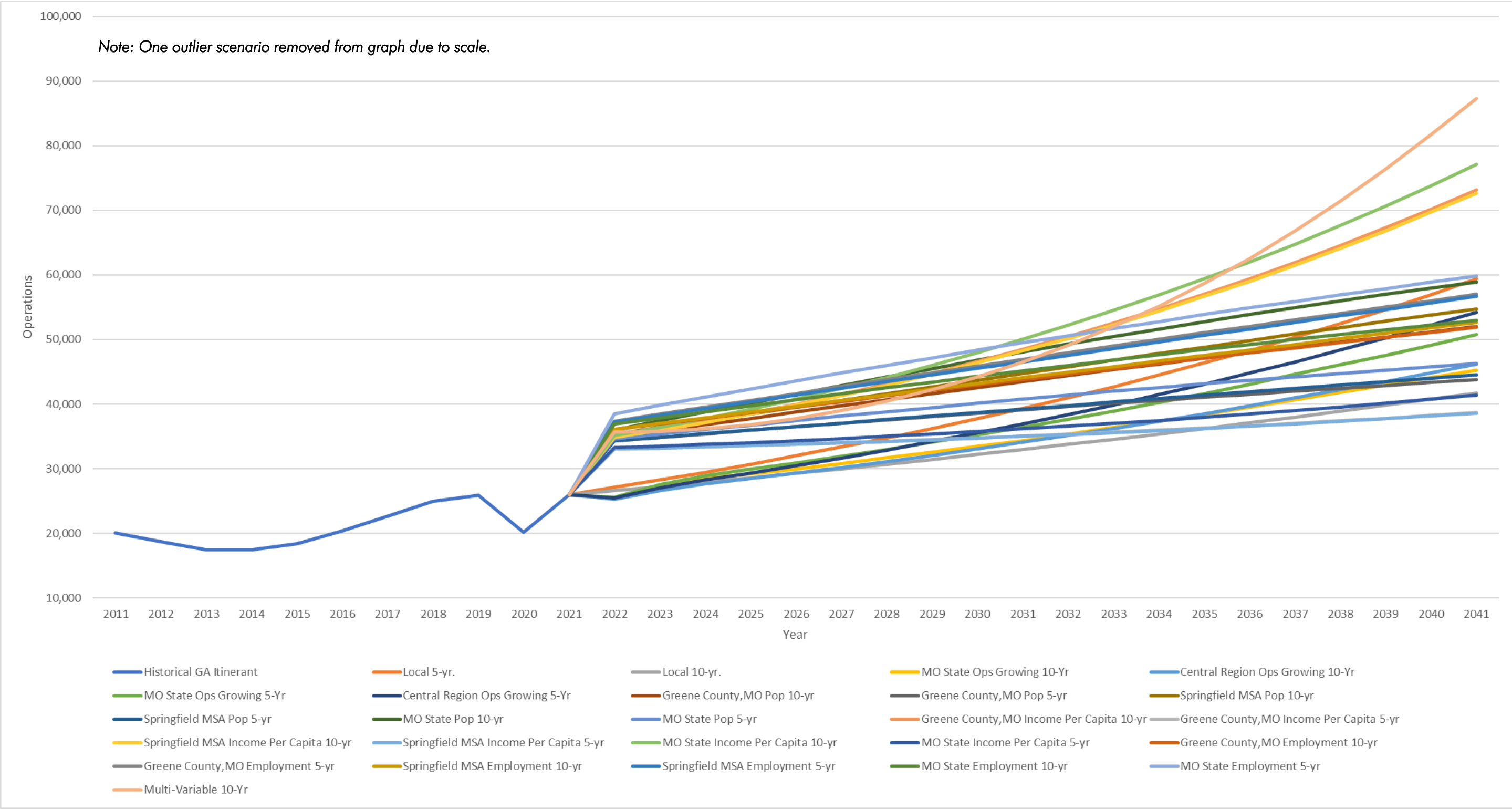
Regression Analysis

Using the regression analysis methodology 20 forecast scenarios were developed. This analysis performed regressions at the five and 10-year data points correlating GA itinerant operations during these time periods to the Greene County, Springfield MSA and Missouri state data sets for population, income per capita, and employment. This forecast scenario also performed GA itinerant operations regression analyses against multiple variable socioeconomic indicators to evaluate if there were stronger relationships between multiple socioeconomic data sets. Like previous regression analyses, the Woods & Poole socioeconomic data previously discussed was used.

The 26 GA itinerant operations scenarios are depicted in **Exhibit 3.7-2**.

⁵ The draft revised 2022 TAF was not published at the time of this analysis and therefore larger aggregates (state of Missouri and Central region) were unavailable, resulting in the 2021 TAF published in March 2022 being used for the market share analysis.

Exhibit 3.7-2: GA Itinerant Operations Forecast Analysis



Source: CMT Analysis (2022)

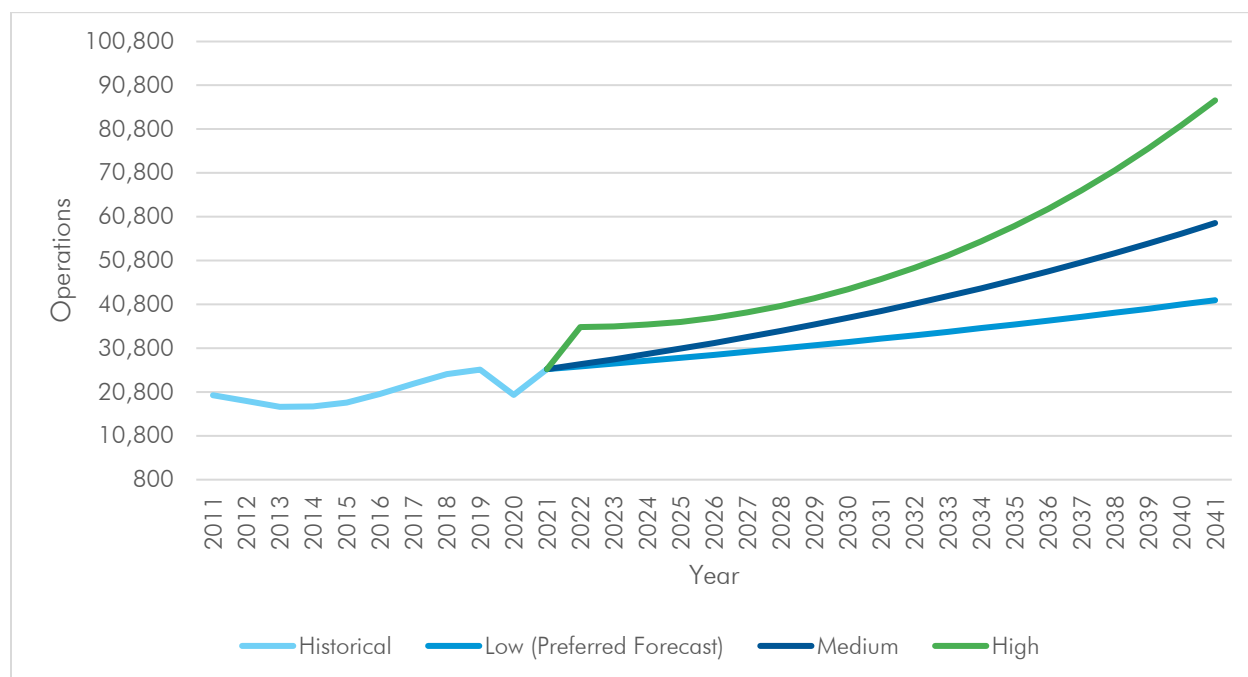
PREFERRED GA ITINERANT OPERATIONS FORECAST

The 26 GA Itinerant operations forecast scenarios were evaluated using several metrics, including reasonability, statistical relationship (R^2 value), and professional judgement. While some scenarios statistically produced strong relationships (near 1.0 R^2), the number of operations projected over the planning period in some scenarios produced negative growth, and therefore were dismissed.

As such, the historical local trend and regression analyses scenarios were further evaluated. Professional judgement was used to select three scenarios for further consideration, which are depicted in **Exhibit 3.7-3** and consist of the following:

- **Low:** The Local 10-Year Scenario assumes that the ten-year historical growth rate will be maintained throughout the planning period. This analysis produced the Low forecast scenario and projected 41,746 operations in 2041, yielding a 2.39% CAGR.
- **Medium:** The Local 5-Year Scenario assumes that the five-year historical growth rate will be maintained throughout the planning period. This analysis produced the Medium forecast scenario and projected 59,367 operations in 2041, yielding a 4.21% CAGR.
- **High:** The Multi-variable 10-Year (Regression) Scenario examined if a relationship existed between multiple socioeconomic data sets and GA itinerant operations using the regression analysis methodology. The correlation of 10-years historical data explained 79.5% of the projected GA itinerant operations in this scenario (R^2 value = .795). This analysis produced the High forecast scenario and generated 87,357 operations in 2041, yielding a 6.24% CAGR.

It is recommended that the Preferred Forecast for the GA itinerant operations forecast be the Low Forecast scenario.

Exhibit 3.7-3: GA Itinerant Operations Forecast Scenarios


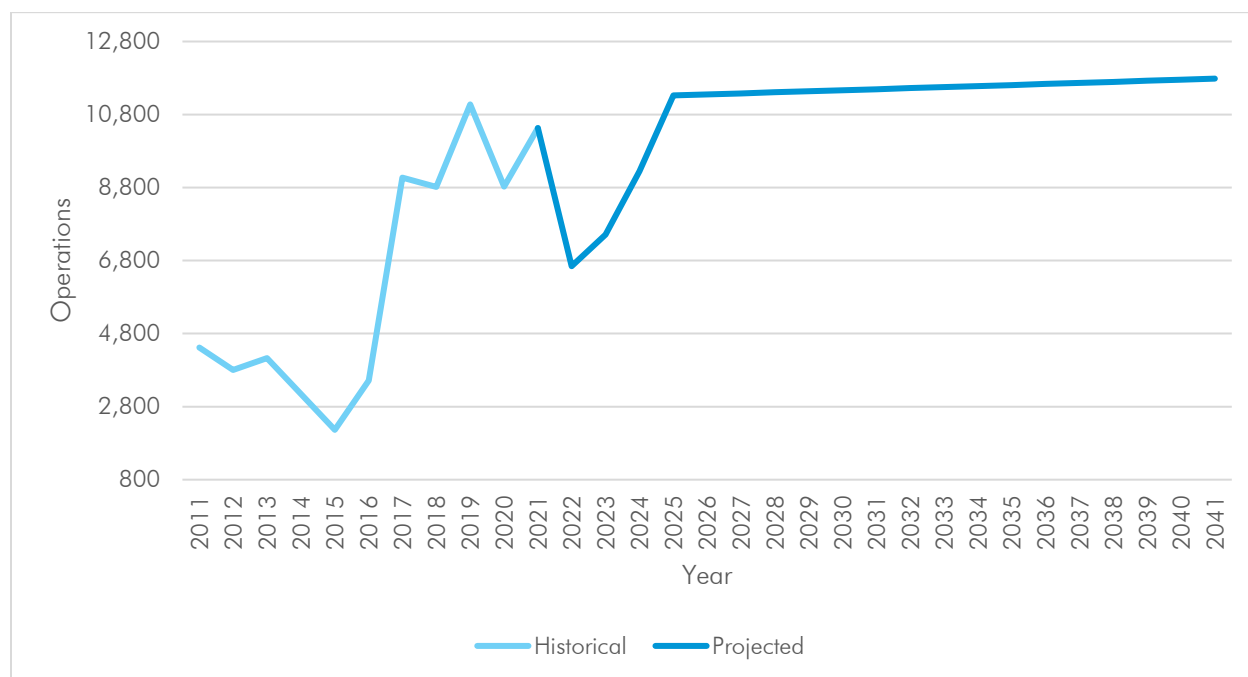
Source: CMT Analysis (2022)

3.7.3 GA Local Operations Forecast

As depicted in **Exhibit 3.7-1**, local operations significantly increased in 2017 (up 118% from 2016). This is largely due to PFC beginning operations in 2017 and providing flight training to local area. Operations counts of PFC flight training are not recorded and therefore historical data of flight training activity was not available for this analysis.

The revised draft 2022 FAA TAF reflects the 2017 uptick in local operations, and it is maintained throughout the TAF's planning period. Since PFC likely accounts for the majority of local operations, and since historical operations records of flight activity do not exist, it is recommended that the revised draft 2022 TAF's "Local – Civil" forecast be used as the Preferred Forecast for local operations. This forecast shows a 36% decrease in operations in 2022 with operations returning to 2019 levels in 2025. Over the planning period the forecast provides modest growth with 11,783 local operations in 2041, yielding a 0.61% CAGR. **Exhibit 3.7-4** depicts the GA local operations forecast.

Exhibit 3.7-4: GA Local Operations Forecast



Source: FAA Revised Draft 2022 SGF TAF

3.7.4 GA Aircraft Operations Fleet Mix Forecast

In order to evaluate an airport facility's ability to accommodate air traffic, it is important to understand the types of aircraft that utilize an airport. The "fleet mix" forecast is an analysis of the types of aircraft that currently operate and are forecast to operate at SGF.

The GA operations fleet mix forecast establishes the existing GA operations fleet mix and shows how it is forecast to change over the planning period. The data used to determine the GA operations fleet mix forecast includes the FAA TAF, IFR data, and metrics from the 2022 FAA Aerospace Forecast Table 29. The fleet mix forecast includes both local and itinerant GA operations and is based on the Low Forecast Scenario from the GA itinerant aircraft operations forecast.

The GA aircraft fleet mix forecast is listed in five-year intervals in **Table 3.7-1**.

Table 3.7-1: GA Operations Fleet Mix Forecast

AIRCRAFT TYPE	PROPELLER		JET					
Year	<i>Piston</i>	<i>Turbo Prop</i>	<i>Very Light Jet</i>	<i>Light Jet</i>	<i>Mid Size Jet</i>	<i>Super Mid Jet</i>	<i>Large Jet</i>	<i>Super Long Range Jet</i>
2021	23,958	11,772	20	334	112	88	142	34
% of Fleet	65.7%	32.3%	0.1%	0.9%	0.3%	0.2%	0.4%	0.1%
2026	23,757	16,023	24	394	132	104	167	40
% of Fleet	58.5%	39.4%	0.1%	1.0%	0.3%	0.3%	0.4%	0.1%
2031	24,192	19,247	28	464	156	122	197	47
% of Fleet	54.4%	43.3%	0.1%	1.0%	0.4%	0.3%	0.4%	0.1%
2036	24,882	22,654	33	548	184	144	233	56
% of Fleet	51.1%	46.5%	0.1%	1.1%	0.4%	0.3%	0.5%	0.1%
2041	25,810	26,308	39	646	217	170	275	66
% of Fleet	48.2%	49.1%	0.1%	1.2%	0.4%	0.3%	0.5%	0.1%

Very Light Jet - $\leq 10,000$ MTOW

Light Jet - 10,001-20,000 MTOW

Midsized Jet - 20,001-30,000 MTOW

Super Mid Jet - 30,001-41,000 MTOW

Large Jet - $\geq 41,000$ MTOW

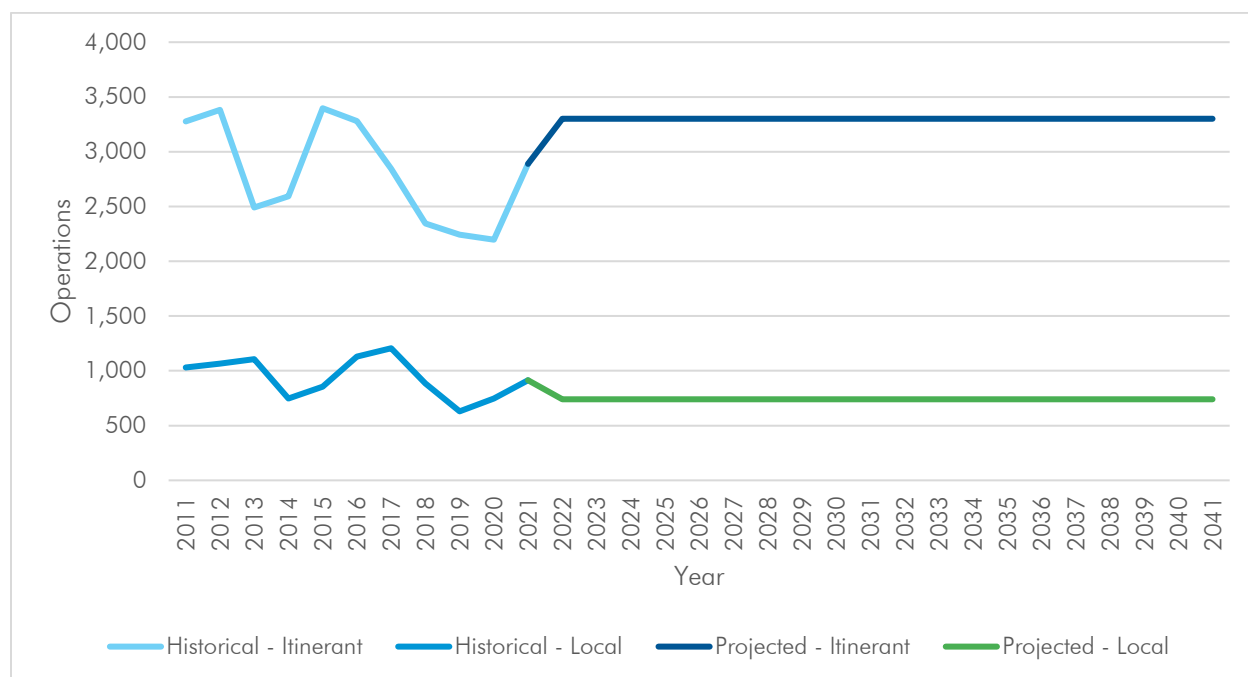
Super Long-Range Jet - $\geq 41,000$ MTOW AND 6,000NM or greater range

Source: CMT Analysis (2022)

3.8 Military Forecast

The Army National Guard, a branch under the Department of Defense (DoD), does not normally share historical or forecast data other than what is publicly available (i.e., FAA TAF), and therefore the Military data presented in the revised draft 2022 FAA TAF for SGF was utilized for the Military operations forecast. The TAF shows both itinerant and local to remain constant throughout the planning period, with 3,301 operations and 740 operations respectively. The TAF's historical and projected military operations counts are depicted in **Exhibit 3.8-1**.

Exhibit 3.8-1: Historical and Projected Military Forecast



Source: FAA Revised Draft 2022 SGF TAF

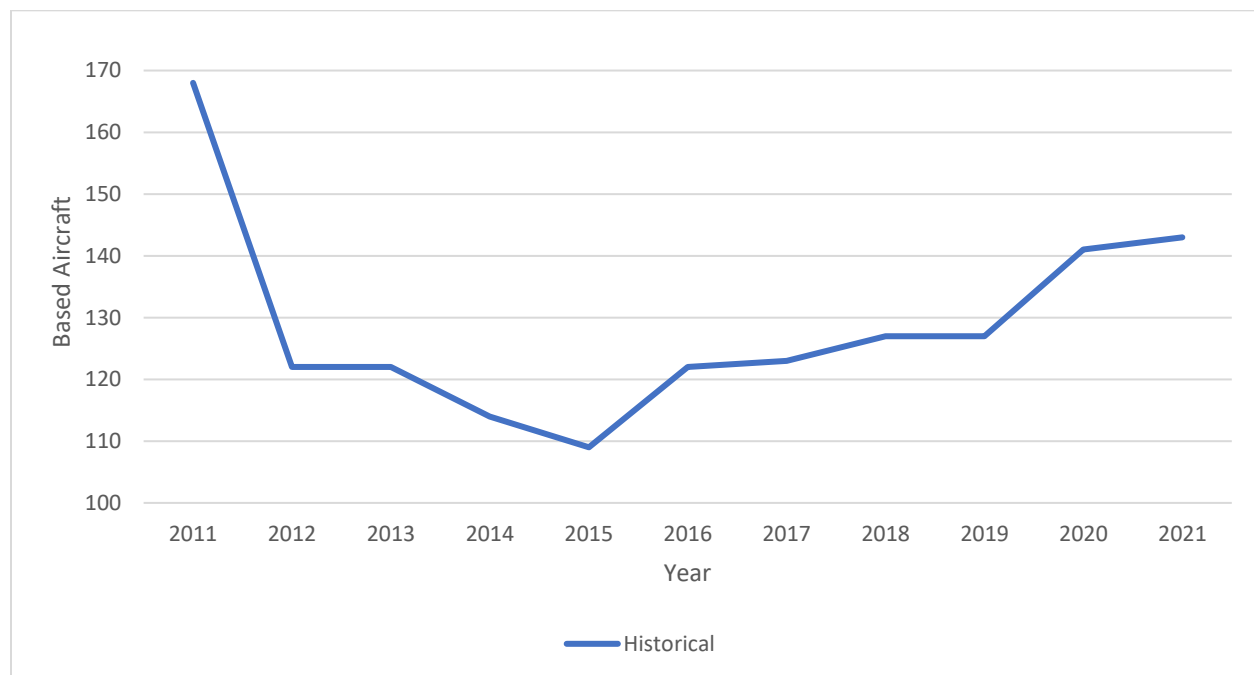
3.9 GA Based Aircraft Forecast

To determine the GA facility needs, it is necessary to understand the demand for existing and future based aircraft at SGF. The number of based aircraft at an airport generally serves as a good indicator of aviation demand. Typically, a higher based aircraft count is a positive indicator that the airport offers more desirable features versus the competing airports. Similar to the analyses performed in previous sections, a series of analysis-based scenarios were developed to assess potential growth in the number of GA aircraft based at SGF.

3.9.1 Historical Based Aircraft

The revised draft 2022 FAA TAF did not include based aircraft projections, and therefore the 2021 FAA TAF issued in March 2022 was utilized for evaluation of historical based aircraft counts SGF. The TAF provides historical based aircraft counts for all airports in the NPIAS. Airport sponsors submit an FAA Airport Master Record 5010 Form each year that provides FAA with current based aircraft counts. **Exhibit 3.9-1** depicts the SGF 10-year historical based aircraft data as presented in the 2021 FAA TAF. The data shows SGF has experienced year over year growth since 2015.

Exhibit 3.9-1: SGF Historical Based Aircraft Counts



Source: FAA 2021 SGF TAF Issued March 2022

3.9.2 Based Aircraft Scenarios

This based aircraft forecast analysis developed 27 forecast scenarios of projected growth, using historical trend, market share and regression analysis forecasting methodologies. Five-year and 10-year historical growth rates and datasets were utilized for future projections. The based aircraft forecast developed and evaluated the following scenarios:

Local Trend

The local trend analysis provided two forecast scenarios using the historical trend methodology. Five-year and 10-year historical growth rates were determined, and future projections assumed these growth rates would continue over the planning period.

Market Share

The market share analysis assumes a top-down approach to forecasting. Using this methodology, four forecast scenarios were developed. Historical data was analyzed, and using a larger aggregate, (the FAA TAF's forecasted based aircraft for the state of Missouri and for FAA's Central Region), a local "market share" forecast was derived. Using historical data, SGF's local market share percentage of based aircraft was determined when compared to both the state of Missouri and FAA's Central Region, and growth rates at the five-year and 10-year intervals were identified. Using the FAA TAF's 20-year forecast for both larger aggregates, four scenarios were developed to generate SGF's local market share of based aircraft. ⁶

Regression Analysis

Using the regression analysis methodology 20 forecast scenarios were developed. This analysis performed regressions at the five and 10-year data points correlating based aircraft during these time periods to the Greene County, Springfield MSA and Missouri state data sets for population, income per capita, and employment. This forecast scenario also performed based aircraft regression analyses against multiple variable socioeconomic indicators to evaluate if there were stronger relationships between multiple socioeconomic data sets. Like previous regression analyses, the Woods & Poole socioeconomic data previously discussed was used.

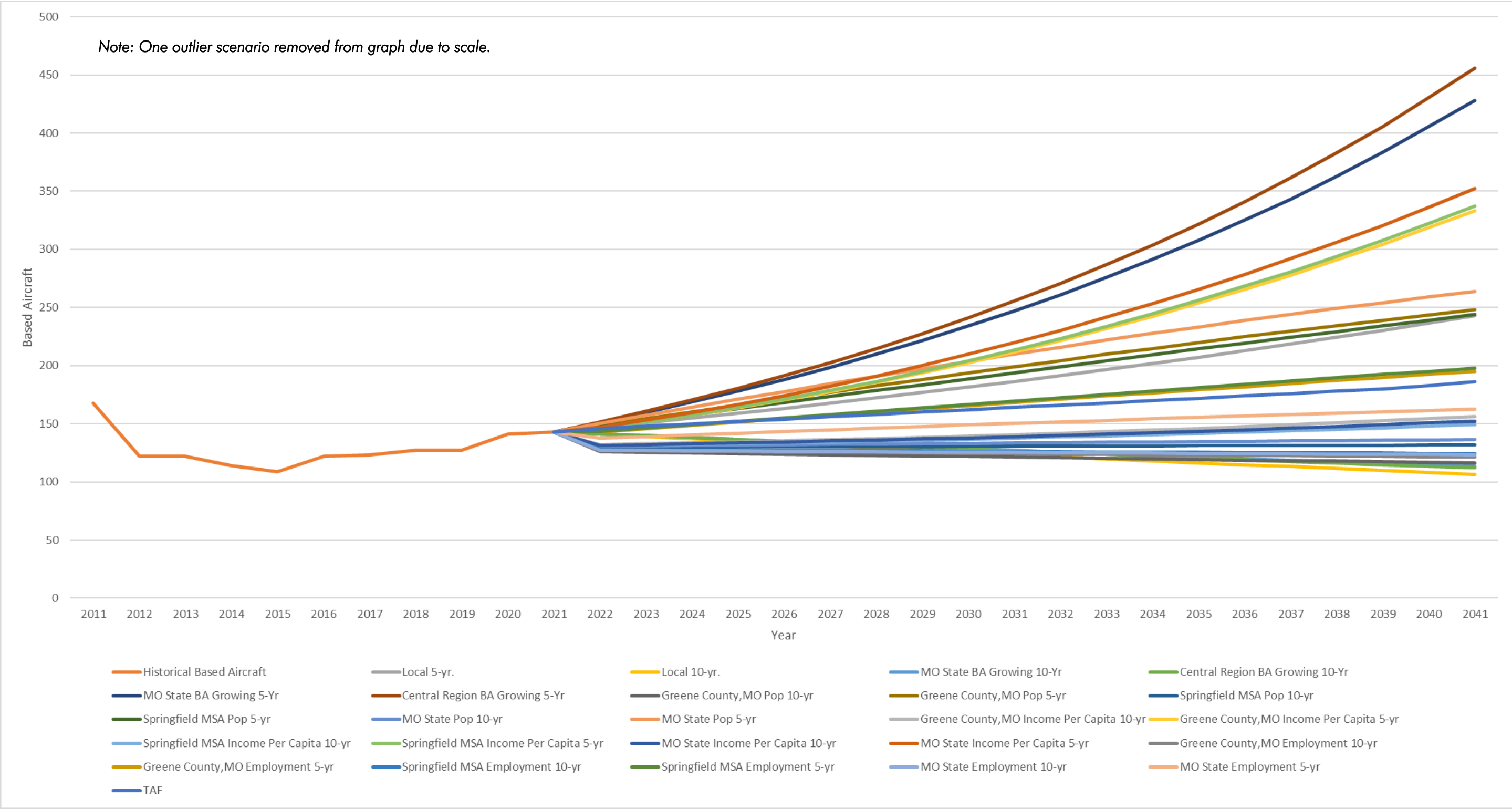
FAA 2021 TAF (Issued March 2022)

The based aircraft analysis also evaluated the based aircraft projections contained in the FAA's 2021 TAF prepared for SGF.

The 27 based aircraft scenarios are depicted in **Exhibit 3.9-2**.

⁶ The draft revised 2022 TAF was not published at the time of this analysis and therefore larger aggregates (state of Missouri and Central region) were unavailable, resulting in the 2021 TAF published in March 2022 being used for the market share analysis.

Exhibit 3.9-2: Based Aircraft Forecast Analysis



Source: CMT Analysis (2022)

3.9.3 Preferred Based Aircraft Forecast

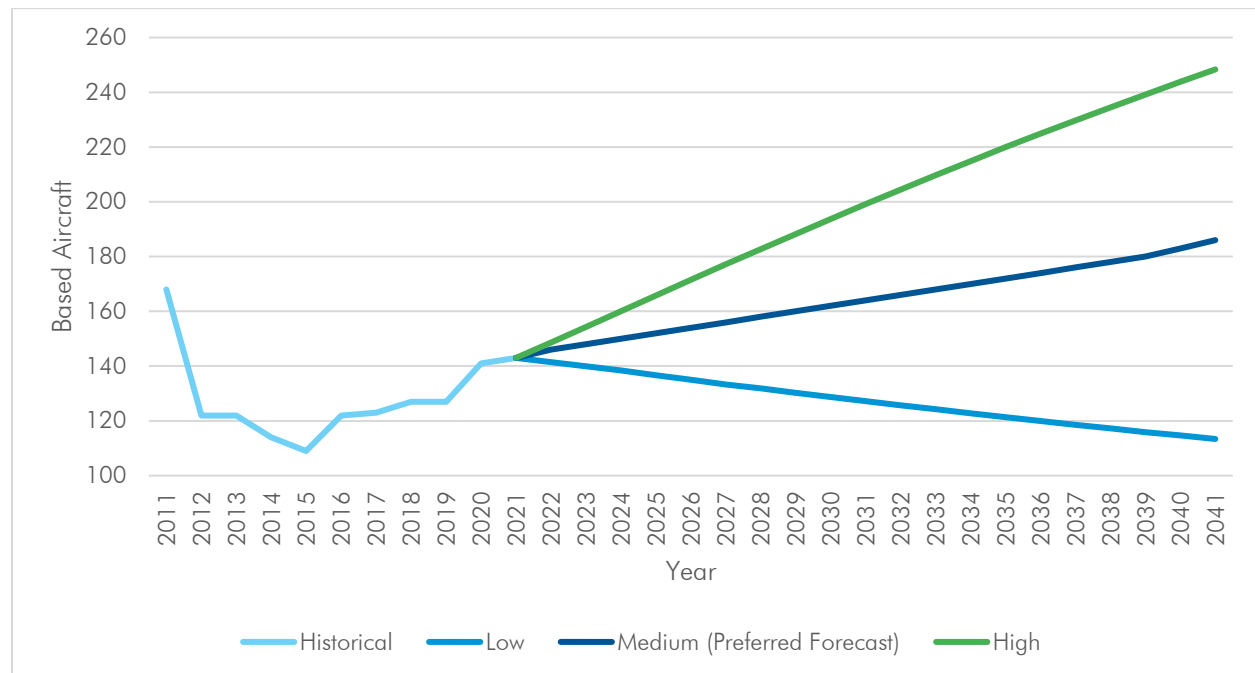
The 27 based aircraft forecast scenarios were evaluated using several metrics, including reasonability, statistical relationship (R^2 value), and professional judgement. While some scenarios statistically produced strong relationships (near 1.0 R^2), the number of based aircraft projected over the planning period in some scenarios produced growth that was unrealistic and not logical, and therefore were dismissed.

As such, analyses from all scenarios were further evaluated. Professional judgement was used to select three scenarios for further consideration, which are depicted in **Exhibit 3.9-3** and consist of the following:

- **Low:** The Market Share “MO State BA Growing 10-Yr” Scenario projected based aircraft growth based on the historical 10-year market share percentage of SGF’s local market share of based aircraft compared to the state of Missouri’s. Using the FAA 2021 TAF’s 20 year-based aircraft forecast for the state of Missouri and SGF’s historical local market share percentage, this analysis produced the Low forecast scenario and projected 113 based aircraft in 2041, yielding a -1.15% CAGR.
- **Medium:** The 2021 FAA TAF Scenario assumes SGF will add approximately two based aircraft each year over the planning period. The 2021 FAA TAF was evaluated as the Medium forecast scenario and projected 186 based aircraft in 2041, yielding a 1.32% CAGR.
- **High:** The Population Regression Analysis “Greene County, MO Pop 5-Yr” Scenario examined the relationship existed between population in Green County, MO and based aircraft at SGF. The correlation of 5-years historical data explained 86.8% of the projected based aircraft in this scenario (R^2 value = .868). This analysis produced the High forecast scenario and generated 248 based aircraft in 2041, yielding a 2.80% CAGR.

It is recommended that the Preferred Forecast for the based aircraft forecast be the Medium Forecast Scenario.

Exhibit 3.9-3: GA Based Aircraft Forecast Scenarios



Source: CMT Analysis (2022)

3.9.4 Based Aircraft Fleet Mix

The Preferred based aircraft forecast previously identified was the Medium Forecast Scenario (FAA 2021 TAF issued in March 2022). This forecast projects based aircraft to increase from 143 aircraft in 2021 to 186 in 2041, representing a 1.32% CAGR. However, the projected fleet mix does not align with recent SGF based aircraft activity. Over the past five years there has been significant demand (and construction) for corporate jet sized aircraft hangar storage. According to the historical TAF data, SGF has increased from 15 based jet aircraft in 2011 to 27 based jet aircraft in 2021. Therefore, to better position the Airport for future hangar planning in subsequent report sections, the TAF's fleet mix was modified. The projected fleet mix is listed in five-year intervals in **Table 3.9-1**.

Table 3.9-1: Based Aircraft Fleet Mix Forecast

YEAR	SINGLE	MULTI	JET	HELO	OTHER	TOTAL
2021	93	11	27	2	10	143
2026	99	15	29	1	9	154
2031	106	16	31	2	9	164
2036	112	17	33	2	10	174
2041	120	18	35	2	11	186

Source: FAA TAF 2021 Issued March 2022

3.10 Critical Design Aircraft

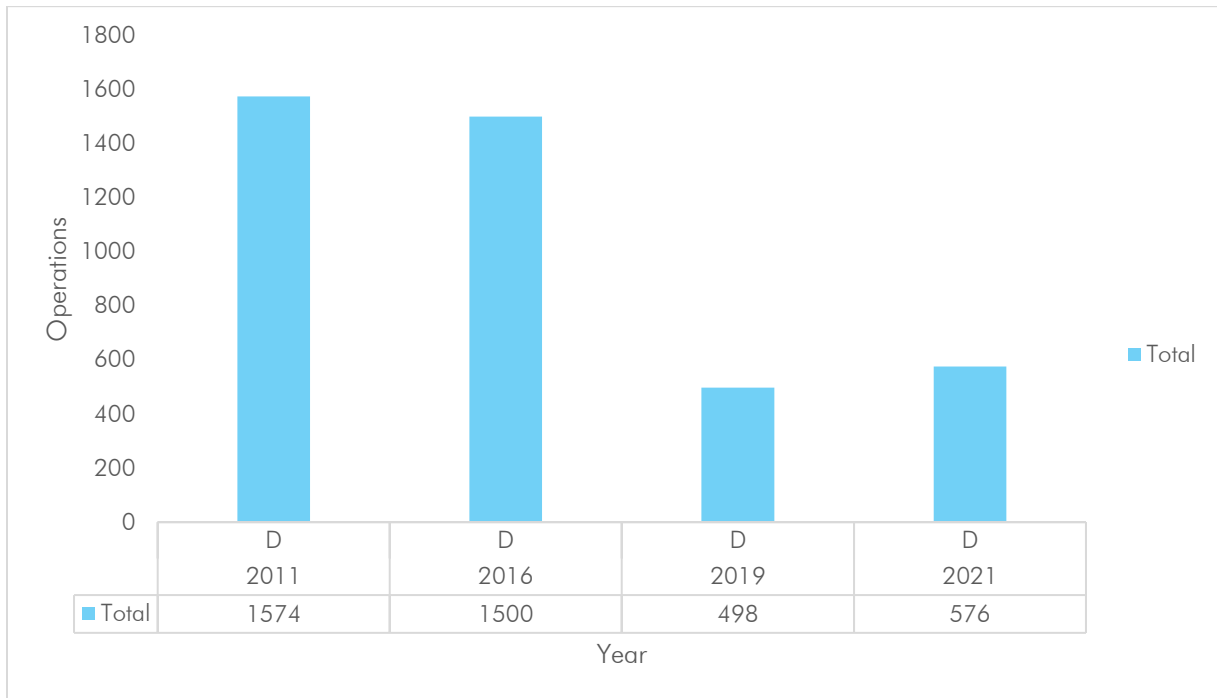
An important element of any aviation demand forecast is the determination of the appropriate level of facility planning needed to accommodate existing and anticipated aviation demand. This is accomplished by identifying the most demanding aircraft, or grouping of aircraft, that makes regular use of an airport, known as the critical aircraft. Regular use is defined by the FAA as 500 annual operations, including both itinerant and local operations, but excluding touch-and-go operations.

This section presents the analysis and findings that determined the critical aircraft at SGF. The critical aircraft determined in this report chapter will establish the Airport Reference Code (ARC), which is the most demanding critical aircraft of all the runways at an airport. The subsequent Master Plan chapter will determine the critical aircraft for each runway.

3.10.1 Existing Critical Aircraft

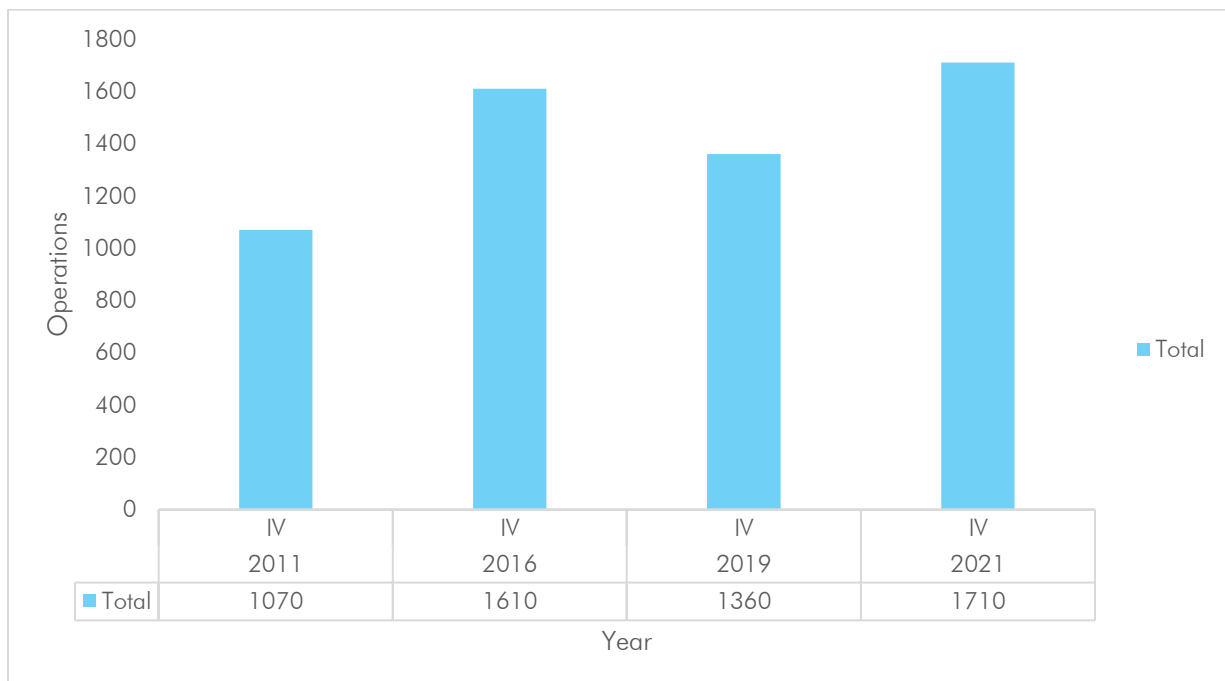
In order to determine the existing critical aircraft and to understand how operations by the most demanding aircraft types have changed at SGF over the past 10 years, an analysis of historical itinerant operations was completed using operations recorded by TFMSC from 2011 to 2021. Over the past decade, the most demanding Aircraft Approach Category (AAC) aircraft that made regular use of SGF was AAC D aircraft. Similarly, the most demanding Airplane Design Group (ADG) aircraft was group IV. Historical AAC and ADG data is graphically depicted in **Exhibit 3.10-1** and **Exhibit 3.10-2**.

Exhibit 3.10-1: Historical AAC Operations at SGF



Source: TFMSC 2011-2021

Exhibit 3.10-2: Historical ADG Operations at SGF



Source: TFMSC 2011-2021

The data shows AAC D aircraft declining between 2016 and 2019. During this time period, airlines (Delta and Allegiant) retired the MD-80 series aircraft (AAC D) and replaced it with newer equipment. The most recent data shows that in 2021, AAC D aircraft are flown by both commercial airlines (B737-800, B737-900, B757-300) and GA (largely GLF4, GLF5 and GLF6). The data also shows there to be well over 500 operations by ADG IV aircraft. This is largely due to cargo operators using the B757-200 aircraft.

Based on this analysis, the critical aircraft representing the existing ARC is D-IV (Family - B737-800, B737-900, B757-300, GLF4, GLF5, GLF6, and B757-200).

3.10.2 Future Critical Aircraft

The future critical aircraft and ARC are primarily driven by the cargo operations. While the preferred cargo operations forecast adds new frequencies and existing operators maintain and then upgauge their aircraft, all cargo operations are conducted by AAC D or ADG IV aircraft. Therefore, it is recommended that the future critical aircraft and ARC remain D-IV; however, the B767-300F is anticipated to replace the B757-200 in the air cargo fleet.

Table 3.10-1 presents the existing and future critical aircraft and ARC for SGF.

Table 3.10-1: SGF Existing and Future Critical Aircraft

DESIGN ELEMENT	EXISTING	FUTURE
Aircraft Approach Category	D	IV
Airplane Design Group	D	IV
Representative Aircraft	B737-800/900, B757-300, GLF4/5/6, B757-200	B737-800/900, B757-300, GLF4/5/6, B767-300F

Source: CMT Analysis (2022)

3.11 Summary and TAF Comparison

The previous sections presented various aeronautical demand forecasts at SGF individually. **Table 3.11-1** presents a summary of the commercial, cargo, GA and military forecasts. The operations forecasts are further broken out by itinerant and local traffic.

As discussed in the beginning of this chapter, forecasts must be “consistent” with the FAA TAF. To be considered “consistent”, a forecast must be within 10% in the 5-year forecast and 15% in the 10-year forecast period, when compared to the TAF. A summary of all forecasts prepared in this chapter are listed in **Table 3.11-2** as well as the percent variance when compared to the TAF. The two planning horizons that fall outside the tolerances prescribed by FAA are the +5 and +10 year forecast periods for total aircraft operations. For these instances, the TAF’s numbers will be used for programming purposes, and the Master Plan’s forecast will be used for local planning purposes.

The FAA’s forecast approval letter is provided in **Appendix 5**.

Table 3.11-1: SGF Preferred Forecast Summary

YEAR	ENPLANEMENTS	AIRCRAFT OPERATIONS							BASED AIRCRAFT
		Itinerant				Local		Total	
	Total	Commercial	Cargo	General Aviation	Military	General Aviation	Military	Total	Total
2021 (<i>base year</i>)	430,964	17,036	1,402	26,027	2,924	9,103	844	57,336	143
2022 (+1)	545,789	17,128	1,358	26,649	2,889	11,290	914	60,228	146
2023 (+2)	562,671	17,366	1,358	27,286	2,889	11,319	914	61,132	148
2024 (+3)	580,214	17,926	1,358	27,938	2,889	11,347	914	62,373	150
2025 (+4)	595,060	18,157	1,358	28,606	2,889	11,375	914	63,299	152
2026 (+5)	601,424	18,157	1,878	29,290	2,889	11,404	914	64,532	154
2027 (+6)	664,133	20,138	1,878	29,990	2,889	11,432	914	67,241	156
2028 (+7)	686,322	20,877	1,878	30,707	2,889	11,461	914	68,726	158
2029 (+8)	709,076	21,190	1,878	31,441	2,889	11,489	914	69,801	160
2030 (+9)	733,278	21,833	1,878	32,193	2,889	11,518	914	71,225	162
2031 (+10)	745,378	21,953	1,460	32,962	2,889	11,547	914	71,726	164
2032 (+11)	786,622	22,012	1,460	33,750	2,889	11,576	914	72,602	166
2033 (+12)	791,838	21,953	1,460	34,557	2,889	11,605	914	73,379	168
2034 (+13)	806,734	22,443	1,460	35,383	2,889	11,634	914	74,724	170
2035 (+14)	811,874	22,928	1,460	36,229	2,889	11,663	914	76,084	172
2036 (+15)	814,090	23,110	1,460	37,095	2,889	11,692	914	77,160	174
2037 (+16)	812,570	23,048	1,460	37,982	2,889	11,721	914	78,015	176
2038 (+17)	820,018	23,293	1,460	38,890	2,889	11,751	914	79,198	178
2039 (+18)	823,666	23,413	1,460	39,820	2,889	11,780	914	80,276	180
2040 (+19)	836,773	23,476	1,460	40,771	2,889	11,809	914	81,320	183
2041 (+20)	840,018	23,413	1,460	41,746	2,889	11,839	914	82,262	186
CAGR	3.39%	1.60%	0.20%	2.39%	-0.06%	1.32%	0.40%	1.82%	1.32%

Source: CMT Analysis (2022)

Table 3.11-2: SGF Forecast Comparison to TAF

COMMERCIAL ENPLANEMENTS				
Planning Horizon	Allowable Variation	Master Plan Forecast	Revised Draft 2022 FAA TAF	% Diff
2021 Base Year	-	430,964	422,931	-
2026 (+5)	10%	601,424	633,208	-5.0%
2031 (+10)	15%	745,378	698,028	6.8%

AIRCRAFT OPERATIONS				
Planning Horizon	Allowable Variation	Master Plan Forecast	Revised Draft 2022 FAA TAF	% Diff
2021 Base Year	-	57,336	56,342	-
2026 (+5)	10%	64,532	65,823	-2.0%
2031 (+10)	15%	71,726	68,202	5.2%

BASED AIRCRAFT				
Planning Horizon	Allowable Variation	Master Plan Forecast	2021 FAA TAF Issued March 2022	% Diff
2021 Base Year	-	143	143	0.0%
2026 (+5)	10%	154	154	0.0%
2031 (+10)	15%	164	164	0.0%

Source: Enplanements & Operations - FAA Revised Draft 2022 SGF TAF; Based Aircraft – FAA 2021 TAF; CMT Analysis (2022)

APPENDIX A

Appendix A: FAA 2021 SGF Terminal Area Forecast

FISCAL YEAR	ENPLANEMENTS			AIRCRAFT OPERATIONS									BASED AIRCRAFT
	Commercial Enplanements			Itinerant Operations					Local Operations			TOTAL OPS	
	Air Carrier	Commuter	Total	Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total		
2021*	100,185	330,779	430,964	9,706	16,372	16,028	2,889	44,995	10,433	914	11,347	56,342	143
2022*	100,755	400,925	501,680	10,572	17,144	16,730	2,889	47,335	11,290	914	12,204	59,539	146
2023*	112,085	448,525	560,610	12,614	16,691	16,747	2,889	48,941	11,319	914	12,233	61,174	148
2024*	116,878	468,382	585,260	14,680	14,171	16,763	2,889	48,503	11,347	914	12,261	60,764	150
2025*	119,425	478,838	598,263	16,000	11,830	16,780	2,889	47,499	11,375	914	12,289	59,788	152
2026*	122,017	489,203	611,220	17,235	9,667	16,797	2,889	46,588	11,404	914	12,318	58,906	154
2027*	124,798	500,358	625,156	18,331	9,104	16,814	2,889	47,138	11,432	914	12,346	59,484	156
2028*	127,650	511,812	639,462	18,916	9,195	16,831	2,889	47,831	11,461	914	12,375	60,206	158
2029*	130,364	522,727	653,091	19,196	9,287	16,848	2,889	48,220	11,489	914	12,403	60,623	160
2030*	133,034	533,450	666,484	19,465	9,380	16,865	2,889	48,599	11,518	914	12,432	61,031	162
2031*	135,734	544,293	680,027	19,735	9,474	16,882	2,889	48,980	11,547	914	12,461	61,441	164
2032*	138,464	555,261	693,725	20,005	9,569	16,898	2,889	49,361	11,576	914	12,490	61,851	166
2033*	141,116	565,920	707,036	20,263	9,664	16,915	2,889	49,731	11,605	914	12,519	62,250	168
2034*	143,879	576,998	720,877	20,533	9,761	16,932	2,889	50,115	11,634	914	12,548	62,663	170
2035*	146,638	588,096	734,734	20,803	9,859	16,949	2,889	50,500	11,663	914	12,577	63,077	172
2036*	149,381	599,117	748,498	21,068	9,957	16,966	2,889	50,880	11,692	914	12,606	63,486	174
2037*	151,965	609,511	761,476	21,313	10,057	16,983	2,889	51,242	11,721	914	12,635	63,877	176
2038*	154,527	619,810	774,337	21,554	10,157	17,000	2,889	51,600	11,751	914	12,665	64,265	178
2039*	157,131	630,273	787,404	21,799	10,259	17,018	2,889	51,965	11,780	914	12,694	64,659	180
2040*	159,776	640,922	800,698	22,047	10,362	17,035	2,889	52,333	11,809	914	12,723	65,056	183
2041*	162,472	651,719	814,191	22,301	10,465	17,052	2,889	52,707	11,839	914	12,753	65,460	186

Source: FAA 2021 TAF Issued March 2022

APPENDIX B

Appendix B: Methodology of Manipulating OPSNET Data

YEAR	ITINERANT										LOCAL		
	Air Carrier (AC)	Air Taxi (AT)	AC + AT	Comm. (T-100)	Cargo (T-100)	AC/AT minus T100	GA	NEW GA Itinerant	Military	Total	Civil	Military	Total
2011	3,048	18,396	21,444	16,468	1,414	3,562	16,509	20,071	3,278	41,231	4,034	1,030	5,064
2012	3,009	17,382	20,391	16,114	1,544	2,733	15,997	18,730	3,382	39,770	4,034	1,065	5,099
2013	2,771	16,936	19,707	15,996	1,506	2,205	15,216	17,421	2,490	37,413	4,029	1,105	5,134
2014	3,117	17,001	20,118	16,238	1,422	2,458	15,027	17,485	2,594	37,739	2,722	747	3,469
2015	5,648	15,188	20,836	16,722	1,452	2,662	15,737	18,399	3,397	39,970	2,400	854	3,254
2016	6,942	15,467	22,409	18,308	1,356	2,745	17,578	20,323	3,281	43,268	4,615	1,129	5,744
2017	9,455	13,814	23,269	18,378	1,424	3,467	19,205	22,672	2,844	45,318	10,061	1,206	11,267
2018	8,769	19,520	28,289	19,709	1,140	7,440	17,471	24,911	2,345	48,105	8,876	883	9,759
2019	8,696	24,010	32,706	22,257	1,136	9,313	16,581	25,894	2,242	51,529	11,147	630	11,777
2020	6,865	15,048	21,913	14,485	1,144	6,284	13,823	20,107	2,197	37,933	9,111	748	9,859
2021	10,679	16,788	27,467	17,036	1,402	9,029	16,998	26,027	2,924	47,389	9,103	844	9,947

Note: Red text indicates revisions/calculations CMT applied to OPSNET data for analysis.

Source: FAA OPSNET (2011-2021); CMT Analysis (2022)

Appendix B: SGF Summary of Airport Planning Forecasts

	Specify base year: 2021					Average Annual Compound Growth Rates			
	Base Yr. Level	Base Yr.+1yr.	Base Yr.+5yrs.	Base Yr.+10yrs.	Base Yr.+15yrs.	Base Yr. to +1	Base Yr. to +5	Base Yr. to +10	Base Yr. to +15
Passenger Enplanements									
Commercial	430,964	545,789	601,424	745,378	814,090	26.6%	6.9%	5.6%	4.3%
TOTAL	430,964	545,789	601,424	745,378	814,090	26.6%	6.9%	5.6%	4.3%
Operations									
<u>Interair</u>									
Commercial	17,036	17,128	18,157	21,953	23,110	0.5%	1.3%	2.6%	2.1%
Cargo	1,402	1,358	1,878	1,460	1,460	-3.1%	6.0%	0.4%	0.3%
General aviation	26,027	26,649	29,290	32,962	37,095	2.4%	2.4%	2.4%	2.4%
Military	2,924	2,889	2,889	2,889	2,889	-1.2%	-0.2%	1.1%	0.7%
<u>Local</u>									
General aviation	9,103	11,290	11,404	11,547	11,692	24.0%	4.6%	2.4%	1.7%
Military	844	914	914	914	914	8.3%	1.6%	0.8%	0.5%
TOTAL OPERATIONS	57,336	60,228	64,532	71,726	77,160	5.0%	2.4%	2.3%	2.0%
Peak Hour Enplanements	273	280	358	435	483	2.6%	5.6%	4.8%	3.9%
Peak Hour Commercial Operations	6	6	7	9	10	0.0%	3.1%	4.1%	3.5%
Cargo - Belly (lbs)	29,213	29,927	32,960	37,188	41,957	2.4%	2.4%	2.4%	2.4%
Cargo - All-cargo (1,000 lbs)	40,417	44,801	55,922	58,817	76,662	10.8%	6.7%	3.8%	4.4%
Cargo - Landed Weight (1,000 lbs)	160,333	160,674	198,634	191,254	191,254	0.2%	4.4%	1.8%	1.2%
Based Aircraft									
Single Engine (Nonjet)	93	94	99	106	112	1.1%	1.3%	1.3%	1.2%
Multi Engine (Nonjet)	11	14	15	16	17	27.3%	6.4%	3.8%	2.9%
Jet Engine	27	28	29	31	33	3.7%	1.4%	1.4%	1.3%
Helicopter	2	1	1	2	2	-50.0%	-12.9%	0.0%	0.0%
Other	10	8	9	9	10	-20.0%	-2.1%	-1.0%	0.0%
TOTAL	143	146	154	164	174	2.1%	1.5%	1.4%	1.3%

B. Operational Factors

	Base Yr. Level	Base Yr.+1yr.	Base Yr.+5yrs.	Base Yr.+10yrs.	Base Yr.+15yrs.
Average aircraft size (seats)					
Air carrier	76.6	81.0	89.6	91.4	93.7
Average enplaning load factor					
Air carrier	87.6%	91.7%	80.0%	80.0%	80.0%
GA operations per based aircraft	127	143	140	138	135

Appendix B: SGF Comparing Airport Planning and TAF Forecasts

		Airport		AF/TAF
	<u>Year</u>	<u>Forecast</u>	<u>TAF</u>	<u>(% Difference)</u>
Passenger Enplanements				
Base yr.	2021	430,964	422,931	1.9%
Base yr. + 5yrs.	2026	601,424	633,208	-5.0%
Base yr. + 10yrs.	2031	745,378	698,028	6.8%
Base yr. + 15yrs.	2036	814,090	765,325	6.4%
Commercial Operations				
Base yr.	2021	17,036	26,078 ⁷	-34.7%
Base yr. + 5yrs.	2026	18,157	32,529	-44.2%
Base yr. + 10yrs.	2031	21,953	34,676	-36.7%
Base yr. + 15yrs.	2036	23,110	37,165	-37.8%
Total Operations				
Base yr.	2021	57,336	56,342	1.8%
Base yr. + 5yrs.	2026	64,532	65,823	-2.0%
Base yr. + 10yrs.	2031	71,726	68,202	5.2%
Base yr. + 15yrs.	2036	77,160	70,927	8.8%

⁷ TAF operations include Itinerant "Air Carrier" and "Air Taxi & Commuter" while SGF operations are purely "commercial" (airline) operations. The TAF numbers count commercial, but also cargo, charter, on-demand, etc., so the TAF operations numbers do not represent true "commercial" only operations.

Chapter Four

Airport Facility Requirements

4.1 Introduction & Planning Activity Levels (PALs)

This chapter presents the future requirements for airport facilities to inform the City of the infrastructure required to meet the projected demand throughout the planning period at Springfield-Branson National Airport (SGF or Airport). In addition to providing sufficient capacity, consideration has been given to providing acceptable levels of service to all airport users throughout this section.

The requirements presented herein are primarily based on the demand and traffic projections presented in Chapter Three – *Forecast of Aviation Demand* of this Master Plan report. The requirements were calculated using Federal Aviation Administration (FAA) standards and established industry planning standards, where applicable. For master planning, the requirements presented in this chapter are tied to the demand for various Planning Activity Levels (PALs). These PALs, while associated with a projected point in time-based on the Forecast of Aviation Demand (5, 10, 15, and 20 years in the future), allow the Airport flexibility in the implementation of future projects based on actual growth in demand. **Table 4.1-1** presents the four PALs, their respective traffic volumes, and the projected point in time in which they are to occur.

Table 4.1-1: Planning Activity Levels

PAL	PROJECTED YEAR	TOTAL BASED AIRCRAFT	TOTAL ANNUAL OPERATIONS
Existing	2021	143	57,336
PAL 1	2026	154	64,532
PAL 2	2031	164	71,726
PAL 3	2036	174	77,160
PAL 4	2041	186	82,262

Source: CMT, FAA TAF (2021)

4.2 Airfield & Airside Requirements

The determination of airside facility requirements falls into four broad categories:

- **Runway Wind Coverage** – Assess the predominate wind conditions over a period of at least ten years which is then used to determine the adequacy of the existing runway alignments at SGF.
- **Runway Length** – Calculates the runway length needed to accommodate the existing and projected fleet mix.
- **Runway Design Standards** – Compares the current runway geometry to modern runway design standards to identify where changes and updates may be necessary, this includes not only physical runway pavements but runway safety areas and protection zones as well.
- **Taxiway Design Standards** – Compares the current taxiway geometry to modern taxiway design standards to identify where changes and updates may be necessary.

4.2.1 Airport Reference Code & Critical Aircraft

The Airport Reference Code (ARC) is an airport designation that is used to help categorize the airport's existing airfield capability, as determined by a set of design standards prescribed by the FAA. The ARC consists of two components; the first is a letter (A through E) that indicates the Aircraft Approach Category (AAC), and the second is a Roman numeral that indicates the Airplane Design Group (ADG). **Table 4.2-1** presents the various levels of ARC as defined by FAA Advisory Circular (AC) 150/5300-13B, *Airport Design*.

Table 4.2-1: Airport Reference Code

AIRCRAFT APPROACH CATEGORY		AIRPLANE DESIGN GROUP		
AAC	APPROACH SPEED (KNOTS)	ADG	TAIL HEIGHT (FT.)	WINGSPAN (FT.)
A	< 91	I	< 20	< 49
B	91 ≤ and < 121	II	20 ≤ and < 30	49 ≤ and < 79
C	121 ≤ and < 141	III	30 ≤ and < 45	79 ≤ and < 118
D	141 ≤ and < 166	IV	45 ≤ and < 60	118 ≤ and < 171
E	166 ≤	V	60 ≤ and < 66	171 ≤ and < 214
		VI	66 ≤ and < 80	214 ≤ and < 262

Source: FAA AC 150/5300-13B

As identified in the Forecast of Aviation Demand chapter, the existing ARC at SGF is **D-IV**. The ARC is determined by the critical aircraft which, in SGF's circumstance, is a combination of the commercial aircraft fleet mix consisting of Boeing's B737-800, B737-900, B757-300, and general aviation aircraft with Gulfstream's GLF4, GLF5, and GLF6. The existing Airplane Design Group (ADG) at SGF is considered an **ADG IV** largely due to the cargo operations with the B757-200 aircraft. Based on the fleet mix analysis completed in the Forecast of Aviation Demand chapter, SGF's future fleet mix will be comprised of the following airframes:

- Large Jet/Multi-Engine

- Commercial
- Aircraft with a maximum takeoff weight (MTOW) greater than 300,000 pounds

As stated in Chapter Three – *Forecast of Aviation Demand*, the future critical aircraft, and ARC are recommended to remain D-IV. However, the B767-300F is projected to replace the B757-200 in the air cargo fleet. The future fleet mix is expected to still span from piston-driven aircraft to commercial/cargo aircraft.

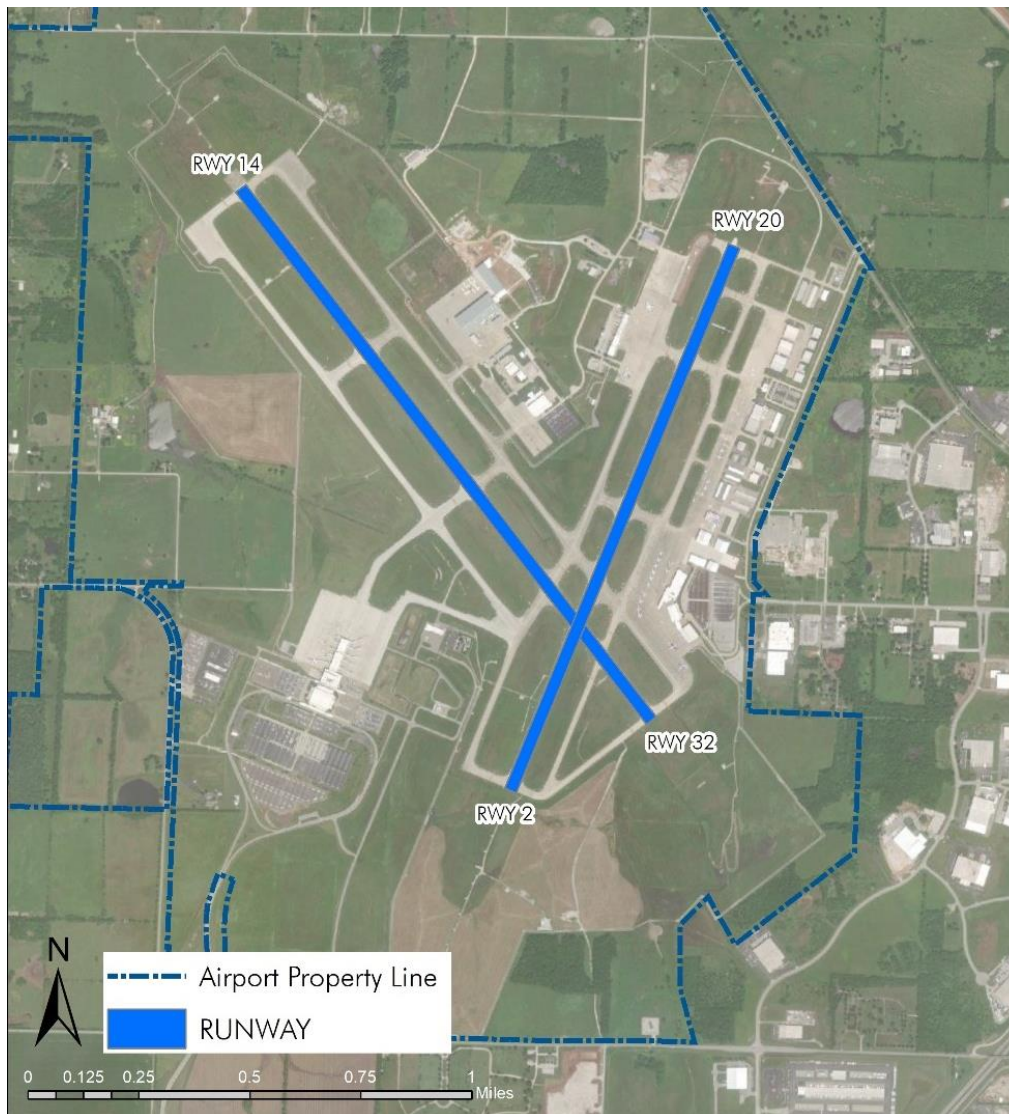
4.2.2 Airfield Capacity Analysis

The purpose of the SGF Airfield Capacity Analysis is to determine the capacity of the airfield in terms of the maximum number of operations that can be accommodated. This capacity is then compared to projected demand through PAL 4 to identify if and when additional airfield capacity may be needed.

The Airport's runway system is the central component in the assessment of airfield operational capacity. Airports that utilize a single runway or intersecting runway systems to accommodate their demand generally have lower operational capacity than airports that have parallel runways.

The existing runway configuration presented in **Exhibit 4.2-1** is comprised of two intersecting paved runways designated as Runway 14-32 (Primary) and Runway 02-20.

Exhibit 4.2-1: SGF Existing Airfield Configuration



Source: CMT (2022)

METHODOLOGY

The “Handbook Method,” or the methodology prescribed in FAA AC 150/5060-5 - *Airport Capacity and Delay*, was used to determine the capacity of the existing airfield system at SGF. This methodology relies upon the projected fleet mix of aircraft and the number of operations projected by each aircraft classification in the fleet mix. **Table 4.2-2** presents the aircraft classifications as defined by the FAA for the determination of airfield capacity and aligns these classifications with the projected fleet mix type from the Forecast of Aviation Demand chapter of this Master Plan.

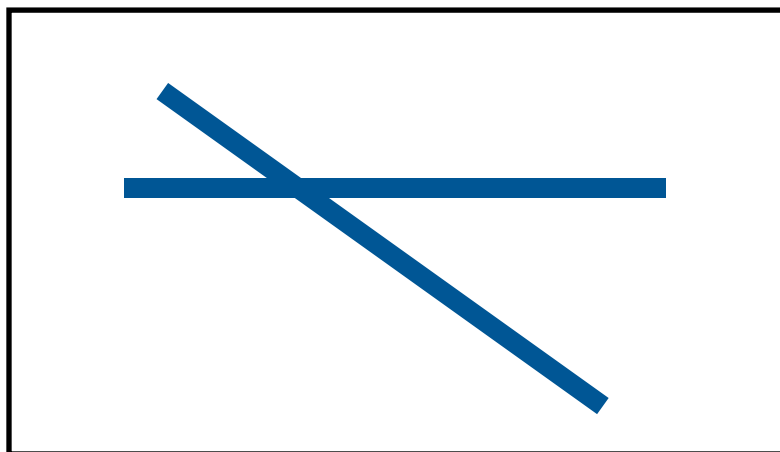
Table 4.2-2: Aircraft Classifications

AC 150/5060-5 AIRCRAFT CLASSIFICATIONS				
FLEET MIX TYPE	CLASS	MTOW (LBS.)	ENGINES	WAKE TURBULENCE CLASSIFICATION
Piston	A	< 12,500	Single	Small
Turbo Prop	B		Multi	
Light Jet	B			
Small Jet	B			
Medium Jet	B			
Large Jet	C	12,500 – 300,000		Large
Commercial	C			
N/A	D	> 300,000		Heavy

Source: FAA AC 150/5060-5, CMT (2022)

In addition to the projected fleet mix, the “Handbook Method” relies on a set of standard airfield configurations. There are 19 total configurations identified by AC 150/5060-5. These 19 configurations can account for most airfield configurations that exist. The intent of the AC is for the user to apply the standard configuration that most closely represents the airfield being assessed. Runway-use configuration N°9 was selected as the appropriate configuration to use, as shown in **Exhibit 4.2-2. Table 4.2-3** presents the corresponding capabilities of runway-use configuration N°9 in terms of hourly capacity under both visual flight rules (VFR) and instrument flight rules (IFR) as well as annual service volume (ASV).

Exhibit 4.2-2: Runway-use Configuration N°9



Source: FAA AC 150/5060-5

Table 4.2-3: Configuration N°9 Capacity

MIX INDEX (%C+3D)	HOURLY CAPACITY		ANNUAL SERVICE VOLUME (ASV)
	VFR	IFR	
0 to 20	98	59	230,000
21 to 50	77	57	200,000
51 to 80	77	56	215,000
81 to 120	76	59	225,000
121 to 180	72	60	265,000

Source: FAA AC 150/5060-5

AIRFIELD CAPACITY RESULTS

Mix Index Calculation

The Mix Index is determined by the percentage of operations conducted or projected by each of the four classes of aircraft (A, B, C, and D) as defined in **Table 4.2-2**. The percentages of each class of operations are then applied to the formula $\text{Mix Index} = \%C + (3 \times \%D)$. For this analysis, all Light Jets and Commercial Air Carrier operations are assumed to be Class C aircraft. **Table 4.2-4** presents the projected number of annual operations by each fleet mix type. These projections were utilized to determine the Mix Index.

Table 4.2-4: Annual Operations by Fleet Mix Type

	AIRCRAFT CLASSES				MIX INDEX
	A	B	C	D	%(C+3D)
EXISTING	44%	21%	35%	0%	35%
PAL 1	39%	26%	34%	0%	34%
PAL 2	36%	28%	35%	1%	39%
PAL 3	34%	31%	34%	1%	38%
PAL 4	33%	34%	32%	1%	36%

Source: CMT (2022)

Table 4.2-5 presents the Mix Index for each PAL and the resulting airfield capacities. The results of this analysis indicate that the existing airfield configuration provides sufficient annual and hourly capacity in both VFR under visual meteorological conditions (VMC) and IFR under instrument meteorological conditions (IMC) throughout the planning period.

Table 4.2-5: SGF Airfield Capacity

	EXISTING	PAL 1	PAL 2	PAL 3	PAL 4
Mix Index (%C+3D)	21-50				
Runway Use Configuration	9				
VFR Hourly Capacity	77				
IFR Hourly Capacity	57				
Peak Hour Operations - Projected	15	17	19	21	22
Annual Service Volume	200,000				

Source: FAA AC 150/5060-5; CMT (2022)

Based on the calculations for each PAL and the airfield capacity shown in the table above, the results of this analysis indicate that the existing two-runway airfield configuration at SGF provides sufficient annual and hourly capacity in both VFR under IFR throughout the planning period.

Previous planning studies for SGF have included a provision for a third runway that would be parallel to existing Runway 2/20. In addition, this future runway has been factored into and is factored into local zoning through the established airport overlay (AO) districts. Although an additional runway does not appear to be justified in the current 20-year planning horizon, preserving land for the third parallel runway should remain a priority for SGF to ensure it has the capacity to meet operational demand in the future. An assessment of the future Runway 2L/20R planning corridor is provided in **Appendix 6**.

4.2.3 Runway Wind Coverage

The wind is a key factor influencing runway orientation and the required number of runways at an airport. Ideally, a runway should be aligned with the prevailing wind. Wind conditions affect all aircraft to varying degrees, but generally the smaller the aircraft, the more it is affected by wind, particularly crosswind components. Per FAA AC 150/5300-13B, *Airport Design*, the crosswind component should not exceed the velocities for the specific Runway Design Code (RDC) presented in **Table 4.2-6**, more than five percent of the time. The RDC for SGF is D-IV.

Table 4.2-6: Allowable Crosswind Component per Runway Design Code (RDC)

RUNWAY DESIGN CODE (RDC)	ALLOWABLE CROSSWIND COMPONENT
A-I and B-I	10.5 knots
A-II and B-II	13.0 knots
A-III and B-III C-I through C-III D-I through D-III	16.0 knots
A-IV and B-IV C-IV through C-VI D-IV through D-VI	20.0 knots
E-I through E-VI	20.0 knots

Source: FAA AC 150/5300-13B

METHODOLOGY

The analysis performed to evaluate the wind coverage of the existing airfield geometry at SGF for this Master Plan was consistent with the guidelines prescribed in FAA AC 150/5300-13B - *Airport Design*, Appendix B. When a runway or system of runways provides less than 95% coverage for the aircraft that are projected to use the runway(s) regularly, evaluating the need for a crosswind runway may be necessary.

Wind Coverage at SGF

A windrose provides a graphical presentation of the average wind direction and velocity observed at an airport over a period of time compared to the existing runway headings.

All-weather and instrument flight rules (IFR) windroses were created for SGF per FAA AC 150/5300-13B - *Appendix B Wind Analysis*, and are depicted in **Exhibits 4.2-3 and 4.2-4**, respectively. Hourly weather data required to create the windrose was obtained from the National Weather Service Forecast Office, Springfield, MO, for the period January 1, 2011, through December 31, 2020, and included wind direction and wind speed.

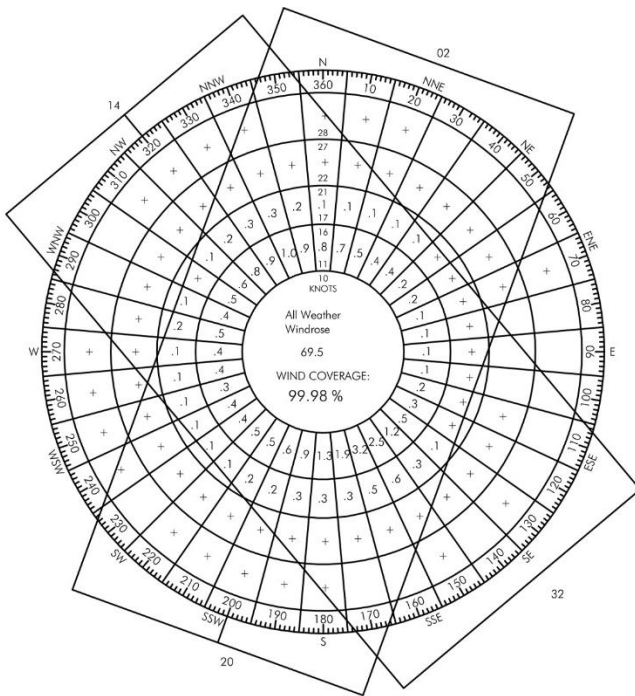
The wind direction, which is measured at ten-degree intervals between 0 and 360 degrees, is displayed by radial lines, with the directions labeled along the outer ring. The wind velocity is shown within the concentric circles at zero to ten knots, 11 to 16 knots, 17 to 21 knots, 22 to 27 knots, and 28 knots or greater.

Each segment of the windrose represents the percent occurrence of wind observations at the given direction and velocity range. Note that the center circle of the windrose displays the percent occurrence of wind observations at zero to ten knots regardless of wind direction. Percentages were calculated and rounded to the nearest one-tenth of one percent and entered in the appropriate segment of the windrose. Plus (+) symbols are used to indicate direction and velocity combinations that occur less than one-tenth of one percent of the time, but greater than zero percent of the time.

A crosswind template is overlaid on each windrose as parallel lines that show the existing runway end directions and crosswind limits, which for this analysis is 20 knots. This crosswind template is used to calculate the percent coverage offered by the runway orientation at each crosswind limit. By adding together the sum of the percentages that fall within each crosswind limit for all runways, the percent coverage can be calculated. The desirable wind coverage for an airport is 95%. This 95% considers various factors influencing operations and the economics of providing the coverage.

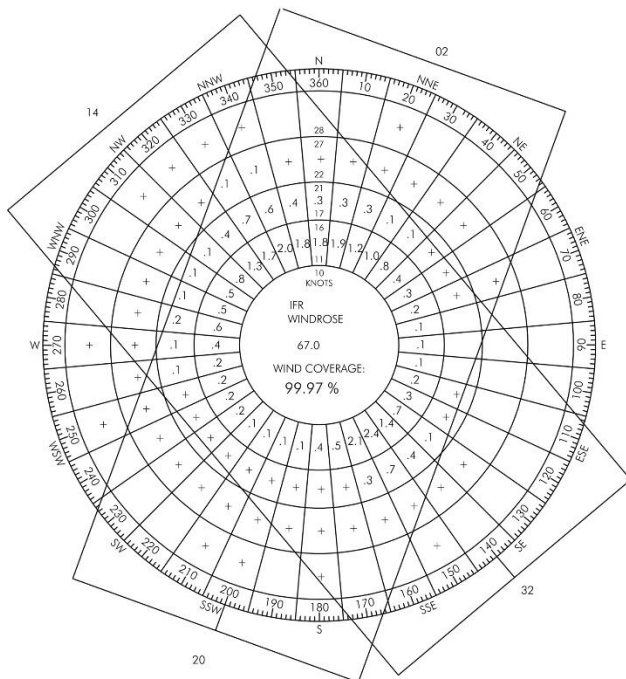
Based on the weather observations presented in the windroses for all-weather, the Airport provides at least 95% coverage under the existing runway configuration. **Table 4.2-7** and **Table 4.2-8** show the percentage of wind that is covered for each crosswind limit in all-weather and IFR conditions.

Exhibit 4.2-3: SGF All-Weather Windrose



Source: <https://adip.faa.gov/KSGF>, CMT 2022

Exhibit 4.2-4: SGF IFR Windrose



Source: <https://adip.faa.gov/KSGF>, CMT 2022

Table 4.2-7: All-Weather Wind Coverage by Runway End

CROSSWIND SPEED (KNOTS)	ALL-WEATHER WIND COVERAGE						All Runways
	14	32	14-32	2	20	02-20	
20	61.70%	44.91%	99.69%	42.47%	64.19%	99.76%	99.98%
16	61.10%	44.43%	98.61%	42.01%	63.40%	98.52%	99.87%
13	59.54%	42.86%	95.50%	40.46%	61.00%	94.57%	99.47%
10.5	57.58%	40.76%	91.45%	38.50%	57.19%	88.82%	98.37%

Source: <https://adip.faa.gov/KSGF>, CMT (2022)

Table 4.2-8: IFR Wind Coverage by Runway End

CROSSWIND SPEED (KNOTS)	IFR WEATHER WIND COVERAGE						All Runways
	14	32	14-32	2	20	02-20	
20	44.26%	61.82%	99.73%	62.14%	43.87%	99.66%	99.97%
16	44.08%	61.21%	98.95%	61.39%	43.01%	98.04%	99.86%
13	43.49%	58.89%	96.05%	59.05%	40.40%	93.11%	99.51%
10.5	42.84%	55.40%	91.92%	55.88%	36.82%	86.38%	98.53%

Source: <https://adip.faa.gov/KSGF>, CMT (2022)

The following runway wind coverage determinations can be made based on the results presented in the two tables above:

- Runway 14-32 and Runway 02-20 provide enough coverage for D-IV aircraft more than 95% of the time during all weather conditions.
- Runway 14-32 and Runway 02-20 provide enough coverage for D-IV aircraft more than 95% of the time during IFR weather conditions.

Based on this analysis, **the existing runway system at SGF provides enough wind coverage more than 95% of the time in all-weather and IFR weather conditions. For this reason, no further evaluation for a crosswind runway is needed at this time.**

A supplemental assessment was completed to investigate wind coverage patterns on individual runway ends while accounting for seasonal variations. Based on this assessment, it is observed that there is no distinct preference for a specific runway at SGF concerning favored wind direction and that annual operations for the critical design aircraft family exceed 500 on both Runway 14-32 and 02-20. This supplemental assessment is provided in **Appendix 7**.

4.2.4 Runway Design Standards

Ideally, all runways are designed and constructed following FAA guidelines and requirements at the time of construction. These guidelines will stipulate basic geometric requirements that enable a runway or runway system to accommodate traffic by a certain type or size of aircraft and will assist in identifying any airfield constraints that require modification. The following subsections present the runway compliance at SGF based on FAA AC 150/5300-13B, *Airport Design*.

As was mentioned in Section 4.2.1 of this chapter, the future ARC of SGF is **D-IV** based on future critical aircraft determination. Therefore, this chapter assesses the airfield’s infrastructure against the FAA’s requirements for an RDC of D-IV for both runways.

CRITICAL AIRCRAFT

The specific set of guidelines to which an airfield is to comply is determined by the size and needs of the largest aircraft which operates at an airport, or the “critical aircraft.” FAA AC 150/5000-17, *Critical Aircraft and Regular Use Determination*, defines a critical aircraft as **the most demanding aircraft type, or grouping of aircraft with similar characteristics, that make regular use of an airport. Regular use of the Airport is defined as 500 annual operations, including both itinerant and local operations, but excludes touch-and-go operations.** One landing is considered an operation as is one takeoff.

The FAA uses a coding system to relate airport design criteria to the operational and physical characteristics of the critical aircraft at an airport and classifies the critical aircraft using the following parameters: Aircraft Approach Category (AAC) – classified according to aircraft approach speeds and Airplane Design Group (ADG) – defined by its wingspan and tail height, whichever is most restrictive.

Chapter Three of this Master Plan identified the B737-800/900 family of aircraft as the most demanding aircraft used by commercial operators, and the B757-200 as the most demanding aircraft used by Cargo operators at SGF. However, the B767-300F is anticipated to replace the B757-200 in the air cargo fleet. Combining the operations of the most demanding aircraft indicates that the future critical aircraft for the airfield is a combination of the B737-900/900, as well as the B767-300F. According to interviews with the Air Traffic Control Tower, the utilization of these aircraft is similarly distributed over both runways. Anticipating the continued use of these aircraft as well as upgauging, D-IV will continue to be the ARC used to determine airfield design. **Table 4.2-9** presents the critical aircraft currently listed for each runway as well as that aircraft’s respective design grouping information.

Table 4.2-9: Critical Aircraft Information

FAA PARAMETER	RUNWAY 14-32	RUNWAY 02-20
Critical Aircraft	B767-300F	
AAC	D	
ADG	IV	
ARC	D-IV	
TDG	5	

Source: CMT (2022)

RUNWAY GEOMETRY

Table 4.2-10 presents a comparison of each runway at SGF to the respective runway geometry design standards as prescribed by the FAA based on the future critical aircraft for each runway.

Table 4.2-10: Runway Geometry Standards Evaluation

DESIGN ELEMENT	RUNWAY 14-32				RUNWAY 02-20			
	EXISTING		FUTURE		EXISTING		FUTURE	
	14	32	14	32	2	20	2	20
Runway Design Code	D-IV		D-IV		D-IV		D-IV	
Runway Width (ft.)	150		150		150		150	
Shoulder Width (ft.)	0		25		0		25	
Blast Pad Width (ft.)	200	0	200		0	200	200	
Blast Pad Length (ft.)	200	0	200		0	200	200	

Source: FAA AC 150/5300-13B

The runway geometry at SGF mostly aligns with FAA standards; however, SGF lacks the 25' paved shoulders on both runways and does not have blast pads on the ends of runways 32 and 2.

Constructing 200' by 200' blast pads at the aforementioned runway ends and adding 25' shoulders to the runways is recommended.

RUNWAY SAFETY AREAS & RUNWAY OBJECT FREE AREAS

FAA AC 150/5300-13B prescribes the geometric standards for Runway Safety Areas (RSAs) and Runway Object Free Areas (ROFAs) at airports in the United States. Each of these design elements are defined as follows:

RSA – A defined area surrounding the runway consisting of a prepared surface suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway.

ROFA – A clear area symmetrical about the runway centerline provided to enhance the safety of aircraft operations by remaining clear of objects, except for those necessary for air and ground navigation. The ROFA also provides wingtip protection in the event of an aircraft excursion from the runway.

The dimensions of these design elements are determined by the capabilities of the runway and the type of traffic the runway is intended to serve. **Table 4.2-11** presents a comparison of each runway at SGF and its associated RSA and ROFA to the respective dimensional guidance as prescribed by the FAA.

Table 4.2-11: RSA & ROFA Existing and Future Dimensions

DESIGN ELEMENT	EXISTING/FUTURE DIMENSION (FEET)	
	Existing	Future
RUNWAY 14-32 (RDC: D-IV)		
RUNWAY SAFETY AREA (RSA)		
Length Beyond Departure End	1,000	1,000
Length Prior to Threshold	600	600
Width	500	500
RUNWAY OBJECT FREE AREA (ROFA)		
Length Beyond Runway End	1,000	1,000
Length Prior to Threshold	600	600
Width	800	800
RUNWAY 02-20 (RDC: D-IV)		
RUNWAY SAFETY AREA (RSA)		
Length Beyond Departure End	1,000	1,000
Length Prior to Threshold	600	600
Width	500	500
RUNWAY OBJECT FREE AREA (ROFA)		
Length Beyond Runway End	1,000	1,000
Length Prior to Threshold	600	600
Width	800	800

Source: FAA AC 150/5300-13B

Exhibits 4.2-5 and 4.2-6 show the RSA and ROFA for Runways 14-32 and 02-20, respectively.

It is important to understand one of the purposes of protecting the land inside the RSA and ROFA is to provide an area for evacuation in case of an emergency. For this reason, it is the Airport's responsibility to ensure these areas remain free of objects or incompatibilities. As shown in the exhibits below, there are several instances of incompatible object(s) within each of these safety areas.

Mitigation of these objects may be achievable through one or a combination of operational restrictions, frangible mounting, or removal. In the instances where removal may be necessary, the Airport should evaluate the feasibility of doing so during the next upgrade or modification to the respective runway.

Navigational aids (NAVAIDs) typically should not be located within the RSA or ROFA, unless they are required to be in a specific location to function properly or are “fixed-by-function”.¹

“Fixed-by-function” NAVAID equipment can be defined as an object that is critical for its proper functioning and the safety benefit derived from the operation of the NAVAID outweighs the potential risk of an aircraft striking the NAVAID. A fixed-by-function determination allows NAVAIDs to be in the RSAs or OFAs².

Based on the analysis and exhibits shown below, it is determined there are several incompatible objects within the ROFA that are not considered “Fixed-by-Function”.

- On runways 14-32 there is a wind cone (304.93’ left of the centerline of RWY 14) within the ROFA, a localizer (On the centerline of RWY 32) within the RSA, and a portion of distance-measuring equipment (355.39’ Right of the centerline of RWY 32) within the ROFA.
- On runways 02-20 there are two wind cones (280.78’ left of the centerline of RWY 20) (281.76’ right of the centerline of RWY 2) and a portion of distance-measuring equipment (271.17’ left of the centerline of RWY 20) within the ROFA.

Supplemental wind cones are allowed within the ROFA provided they are currently frangible mounted. SGF’s supplemental wind cones are frangible mounted. At such times when the wind cones need to be replaced, the FAA recommends that they be relocated outside of the ROFA, if physically possible within the supplemental wind cone siting criteria and if allowed by airfield geometry and topography.

The DME antennas are located within the localizer equipment shelters within the ROFA. It is recommended that the shelters are located 1,000’ beyond the end of the runway and outside the ROFA.

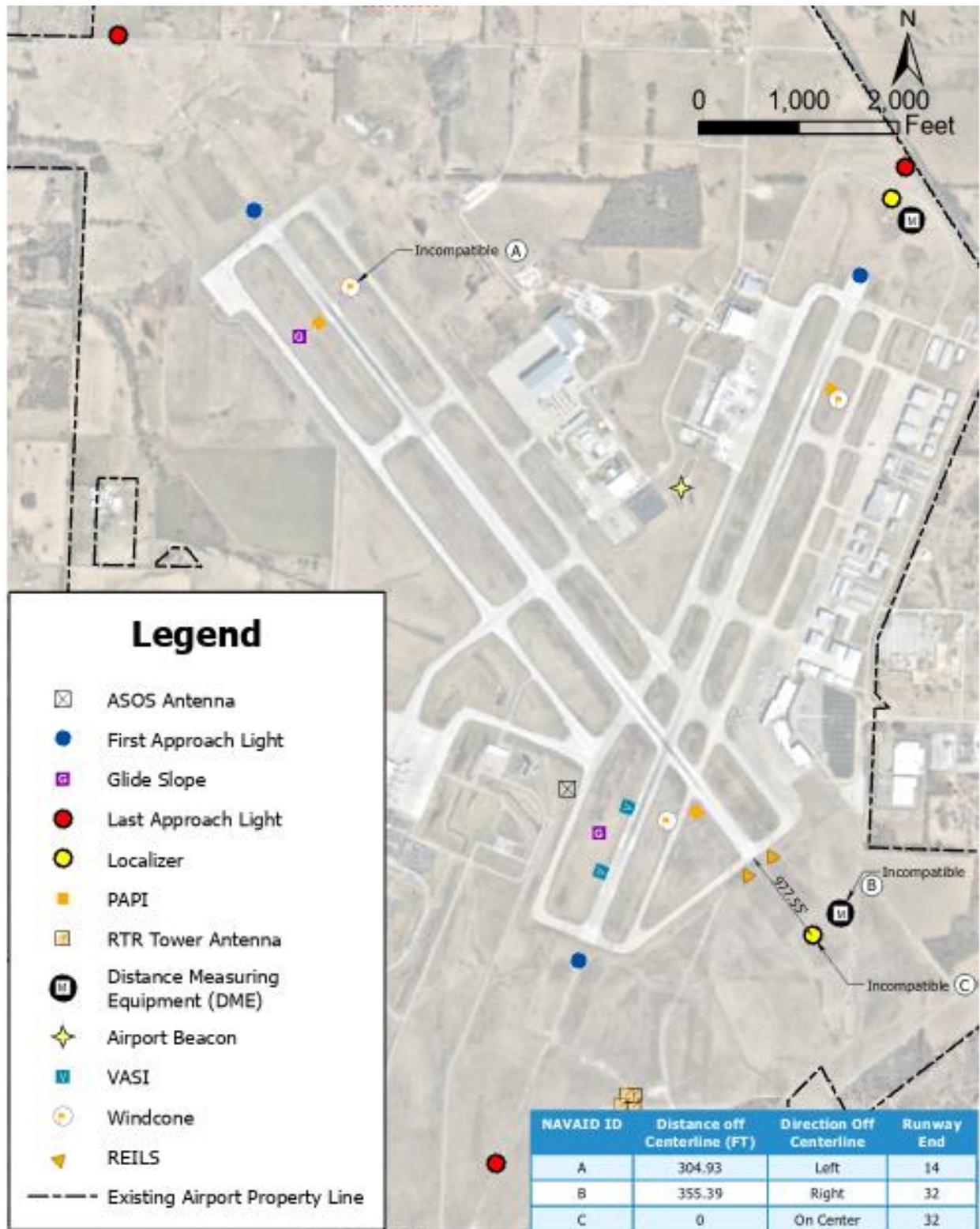
The localizer antenna located off the end of Runway 32 within the RSA, is measured 977.55’ beyond the end of the runway. Just as with the DME equipment, it is recommended that the equipment is located 1,000’ beyond the runway threshold, outside of the RSA.

Further, terrain off the end of Runway 32 within the ROFA penetrates the FAA’s 20:1 visual approach surface. One result of this penetration is the less-than-optimal one-mile visibility minimums for the Runway 32 instrument approach procedure. The high area of terrain is likely associated with an embankment above an FAA Technical Operations service line in the vicinity. Lowering the service line and grading the area is necessary to mitigate the visual approach surface penetration and request lower (3/4 mile) instrument approach visibility minimums.

¹ FAA AC 150/5300-13B, *Airport Design*, Table 6-1

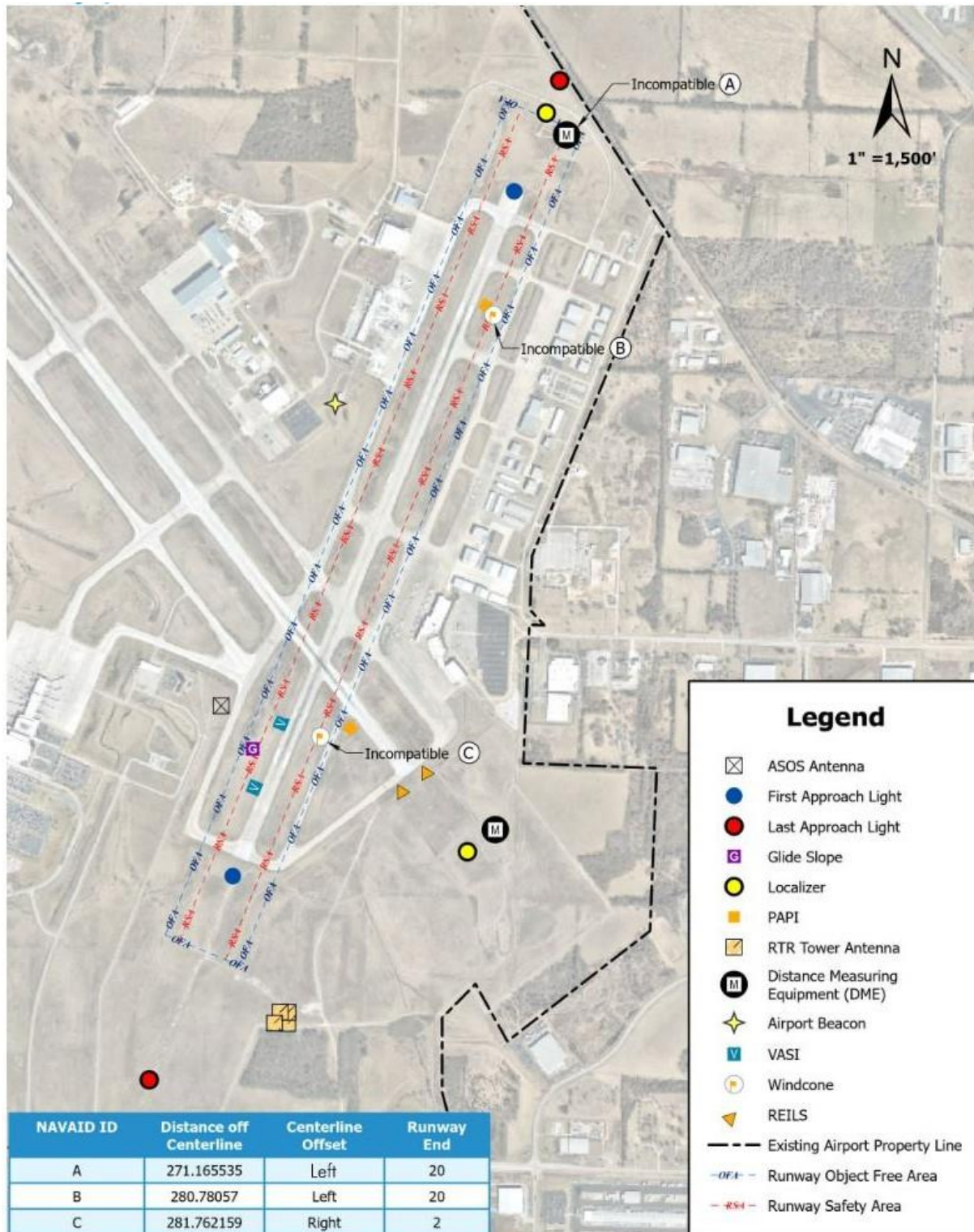
² FAA AC 150/5300-13B, *Airport Design*, Paragraph 6.11.6.1.

Exhibit 4.2-5: Runway 14-32 RSA & ROFA



Source: CMT (2022)

Exhibit 4.2-6: Runway 02-20 RSA & ROFA



Source: CMT (2022)

INSTRUMENT APPROACHES

An assessment of existing instrument approach procedures suggests that it is feasible to reduce visibility minimums on two runway ends, specifically:

- Minimums on the Runway 14 ILS approach can be reduced from $\frac{3}{4}$ mile to $\frac{1}{2}$ mile with obstacle removal (on-airport trees).
- Minimums on the Runway 32 RNAV (GPS) approach can be reduced from 1 mile to $\frac{3}{4}$ mile with obstacle removal (on-airport terrain).

Further details about the feasibility of reducing the visibility minimums described above are provided in **Appendix 8**.

RUNWAY PROTECTION ZONES

The Runway Protection Zone's (RPZ) function is to enhance the protection of property and people on the ground. The RPZ is defined by the FAA as, "an area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground." This is best achieved through airport owner control over the RPZs. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing the RPZ areas (and maintaining them clear) of incompatible objects and activities. Typical mechanisms to achieve control are 1] ownership of the RPZ property in fee simple or 2] possessing sufficient interest through easements, deed restrictions, or municipal zoning to control land uses.

Per FAA AC 150/5190-4B, *Airport Land Use Compatibility Planning*, airport service roads not open to the public and directly controlled by the airport operator are considered a permissible land use in the RPZ and require no further evaluation.

Like RSAs and ROFAs, the dimensions of RPZs are determined by the RDC and visibility minimums. Anticipated reductions in visibility minimums on Runways 14 and 32 will result in larger RPZ dimensions. **Table 4.2-12** presents the dimensions of each RPZ at SGF based on each runway's existing and future RDC and visibility minimums. **Exhibits 4.2-7** through **4.2-10** illustrate each approach and departure RPZ for every runway end at SGF. Further explanation of the methodology used to determine the appropriate RPZ dimensions for the Runway 20 end is provided in **Appendix 9**.

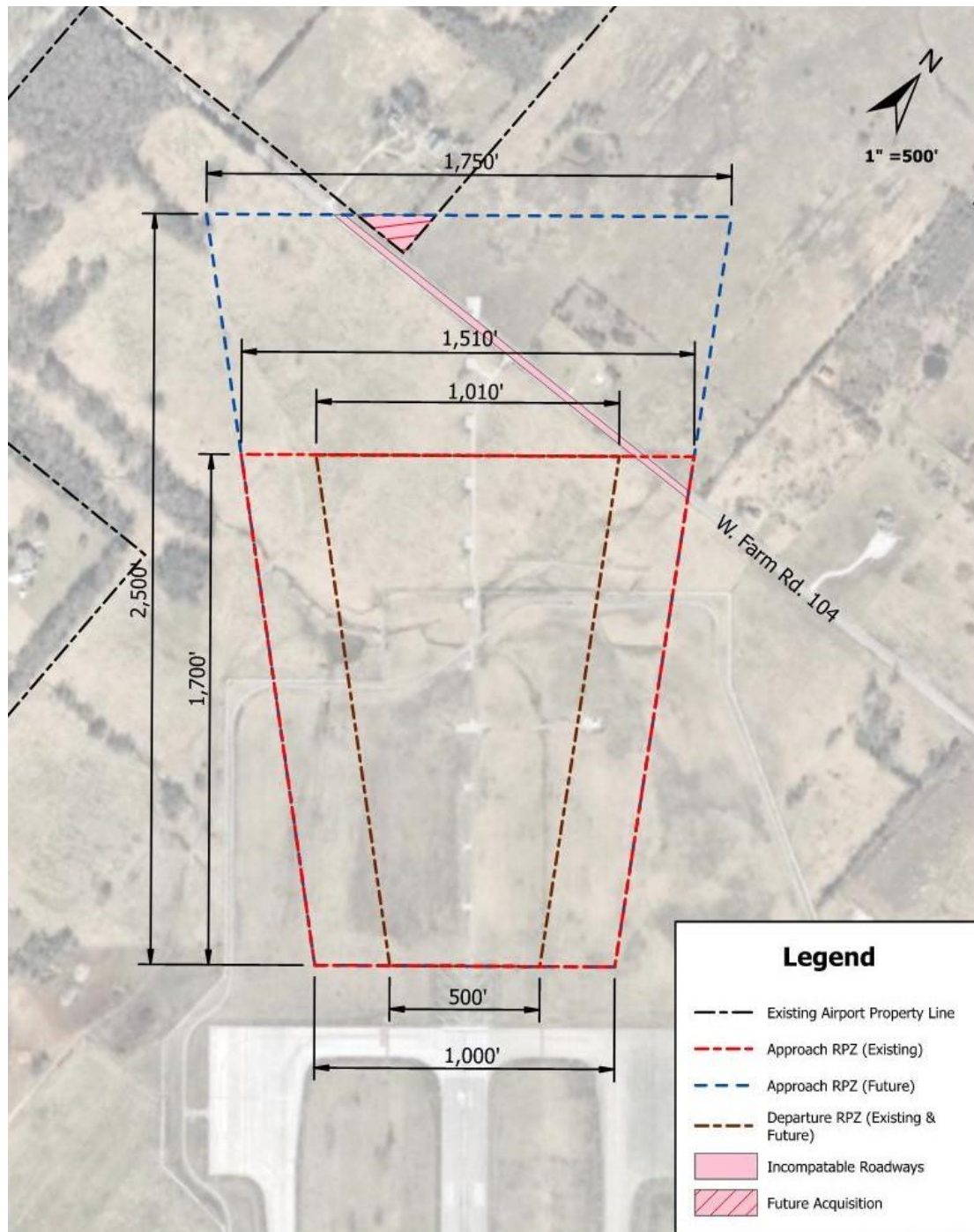
Similarly, with RSAs and ROFAs, the objective of SGF is to maintain each RPZ clear of any incompatible objects. For this reason, each RPZ exhibit is accompanied by an assessment of any incompatibilities.

Table 4.2-12: RPZs Exiting and Future Dimensions

PROTECTION ZONE	EXISTING DIMENSION (FEET)		FUTURE DIMENSION (FEET)	
RUNWAY 14 and RUNWAY 32 (RDC: D-IV)				
APPROACH RPZ	RWY 14	RWY 32	RWY 14	RWY 32
Length	1,700	1,700	2,500	1,700
Inner Width	1,000	500	1,000	1,000
Outer Width	1,510	1,010	1,750	1,510
DEPARTURE RPZ	RWY 14	RWY 32	RWY 14	RWY 32
Length	1,700	1,700	1,700	1,700
Inner Width	500	500	500	500
Outer Width	1,010	1,010	1,010	1,010
RUNWAY 2 and RUNWAY 20 (RDC: D-IV)				
APPROACH RPZ	RWY 2	RWY 20	RWY 2	RWY 20
Length	2,500	1,700	2,500	1,700
Inner Width	1,000	1,000	1,000	1,000
Outer Width	1,750	1,510	1,750	1,510
DEPARTURE RPZ	RWY 2	RWY 20	RWY 2	RWY 20
Length	1,700	1,700	1,700	1,700
Inner Width	500	500	500	500
Outer Width	1,010	1,010	1,010	1,010

Source: FAA AC 150/5300-13B

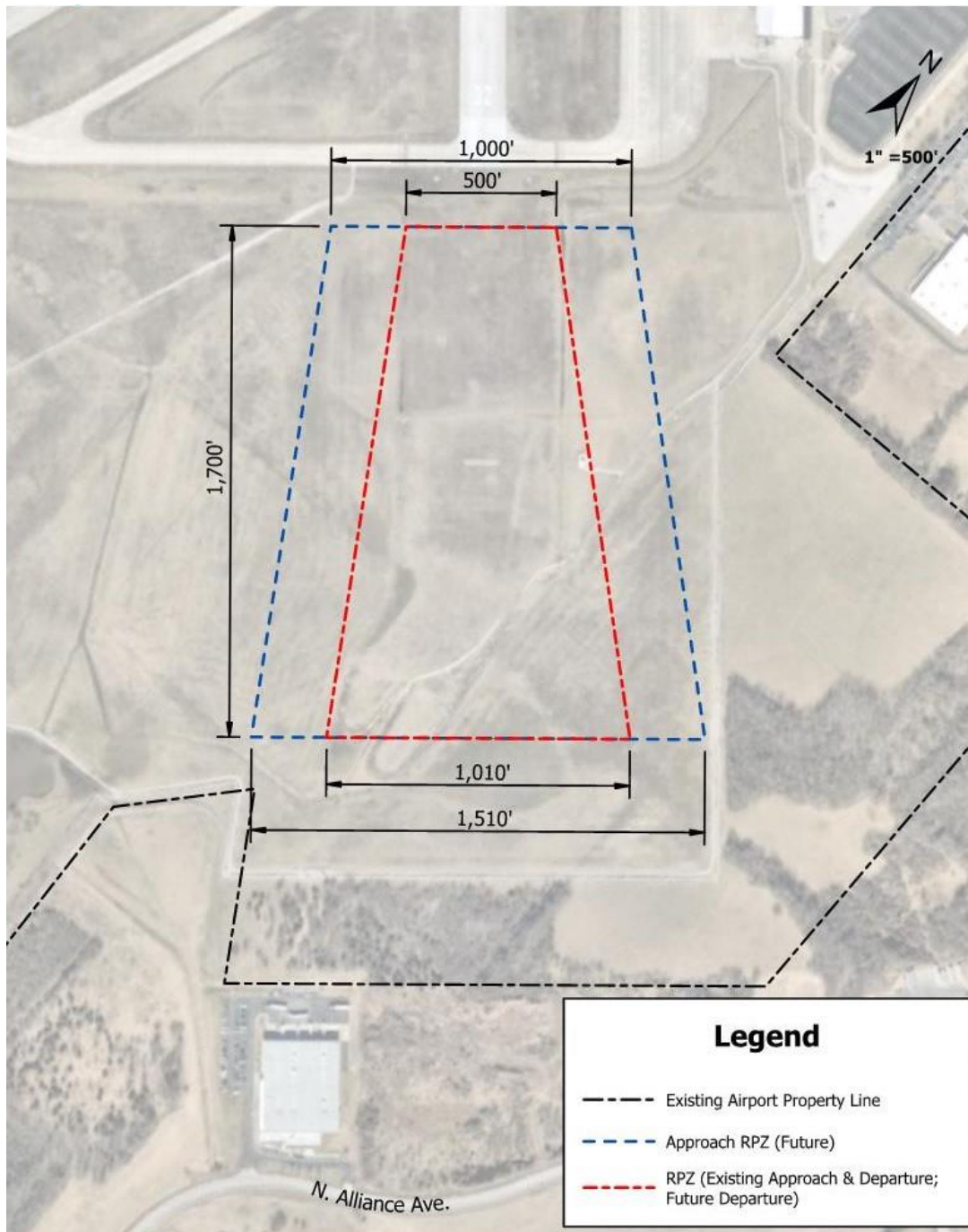
Exhibit 4.2-7: Runway 14 Approach & Departure RPZ



Source: CMT (2022)

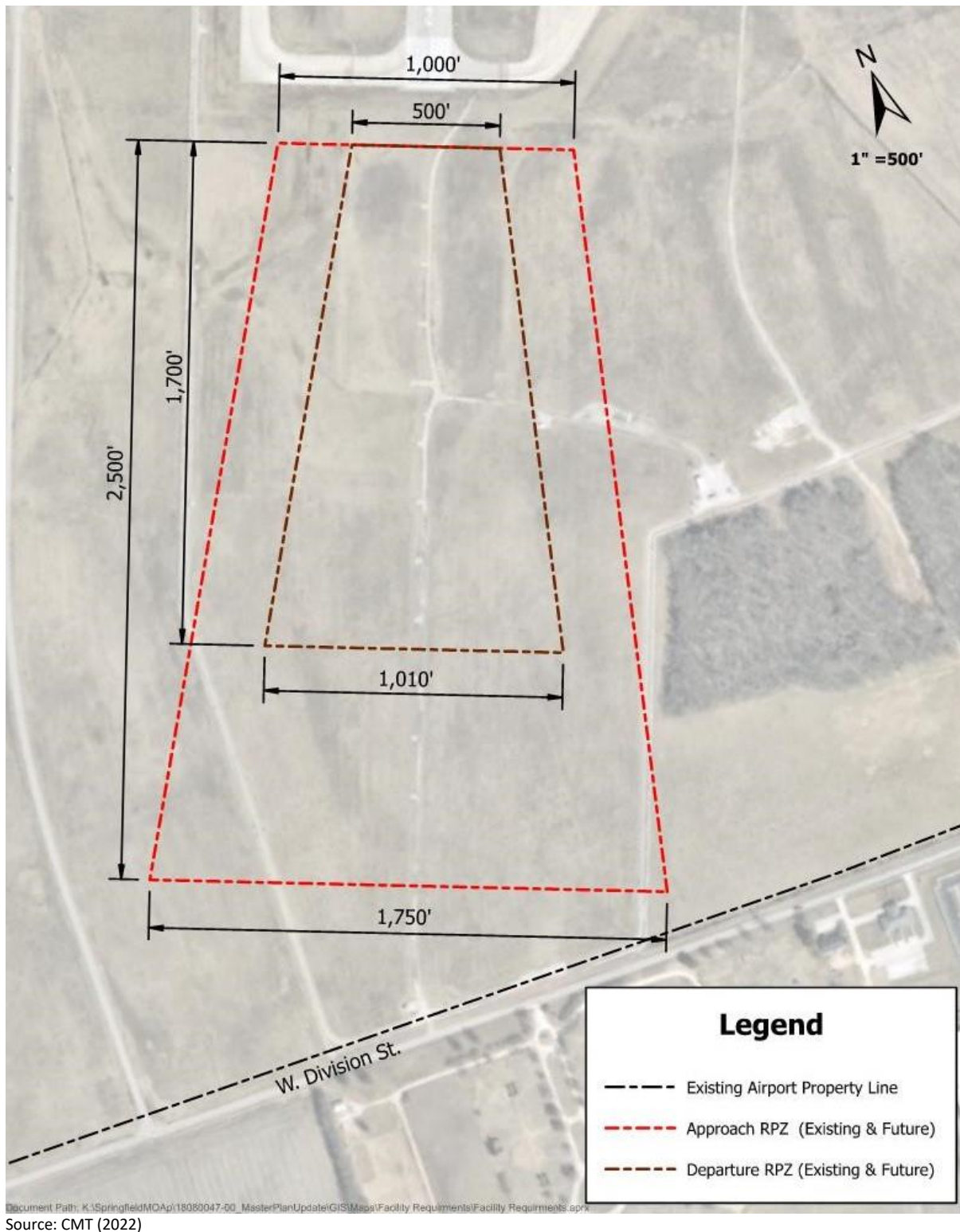
The portion of W Farm Road 104 traversing the Runway 14 Approach RPZ is identified as an incompatible land use. Approximately .38 acres of unowned property exists at the extent of the Future Runway 14 RPZ.

Exhibit 4.2-8: Runway 32 Approach & Departure RPZ



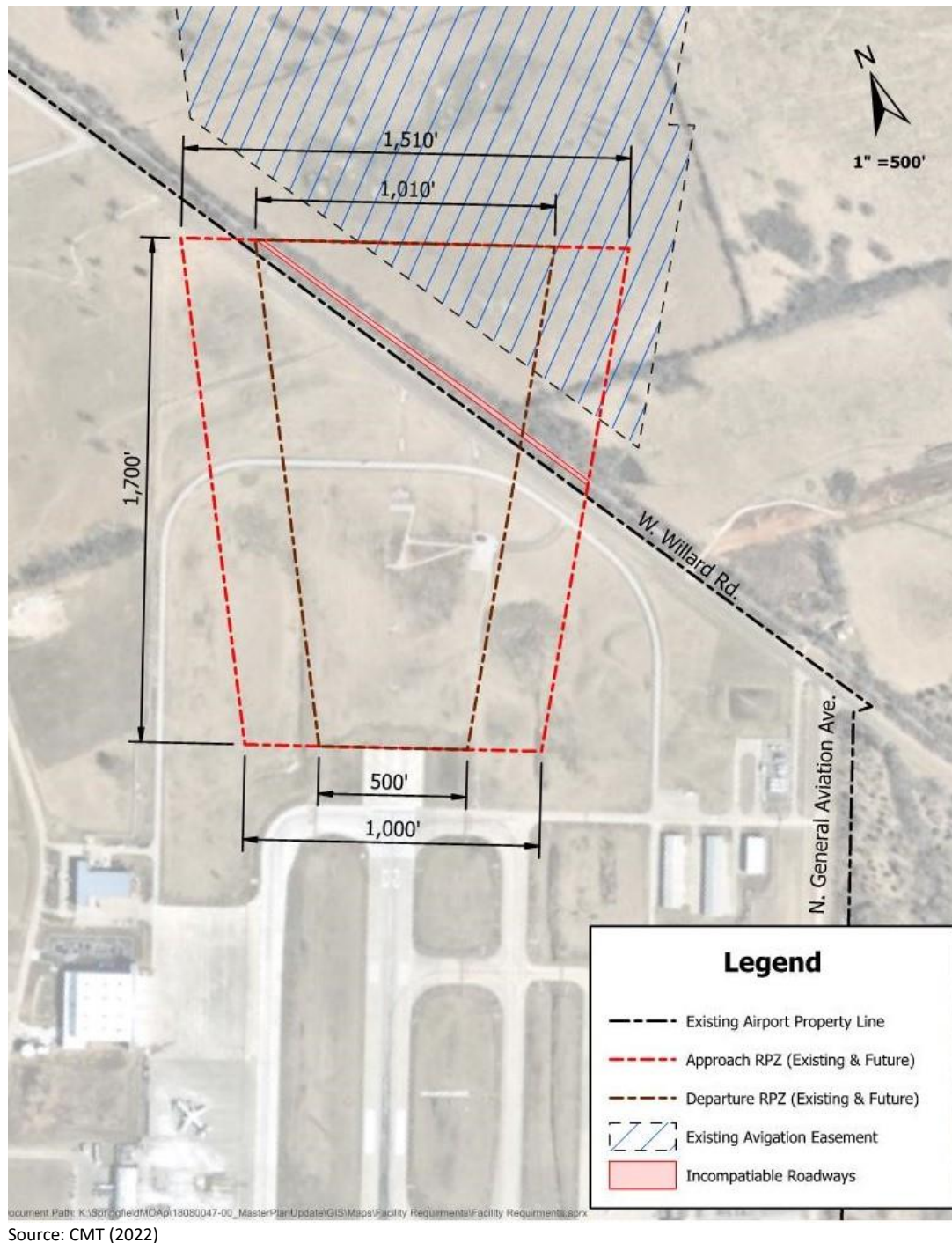
Source: CMT (2022)

Exhibit 4.2-9: Runway 2 Approach & Departure RPZ



No incompatible RPZ land uses are identified.

Exhibit 4.2-10: Runway 20 Approach & Departure RPZ



The portion of W Willard Road traversing the Runway 20 Approach and Departure RPZs is identified as an incompatible land use. The Airport possesses an easement to control use of unowned RPZ property north of W Willard Road.

Mitigation of RPZ Incompatibilities

Given that the identified RPZ incompatibilities at SGF are public roads, mitigation or relocation can represent a challenge due to the extensive planning and resources required to relocate a portion of a road. Where practical, Airport owners should own sufficient property interests under the runway approach and departure areas to at least the limits of the RPZ. It is desirable to clear the entire RPZ of all above-ground objects. Where this is impractical, airport owners, as a minimum, should maintain the RPZ clear of all facilities supporting incompatible activities. It is recommended that the Airport monitor activities within each RPZ and continuously work with its neighbors to prevent any incompatible activities and future developments.

If either the Airport or a surrounding municipality considers alternatives to relocate a road that impacts an RPZ, a separate RPZ study may be required.

RUNWAY LENGTH

Based on the assessment provided in **Appendix 10**, the existing 8,000' length of Runway 14-32 is considered adequate for existing and future users throughout the planning horizon.

The previous Master Plan recommended extending Runway 2-20 to a length of 8,003'. This recommendation will be carried forward as the extra length of Runway 2-20 would provide an extra measure of resiliency during weather, maintenance, and construction events. Per **Table 4.2-8**, the Runway 2 end provides the greatest degree of wind coverage during IFR conditions. Additional length on Runway 2-20 would enhance operational flexibility and efficiency during inclement weather conditions.

4.2.5 Taxiway Design Standards

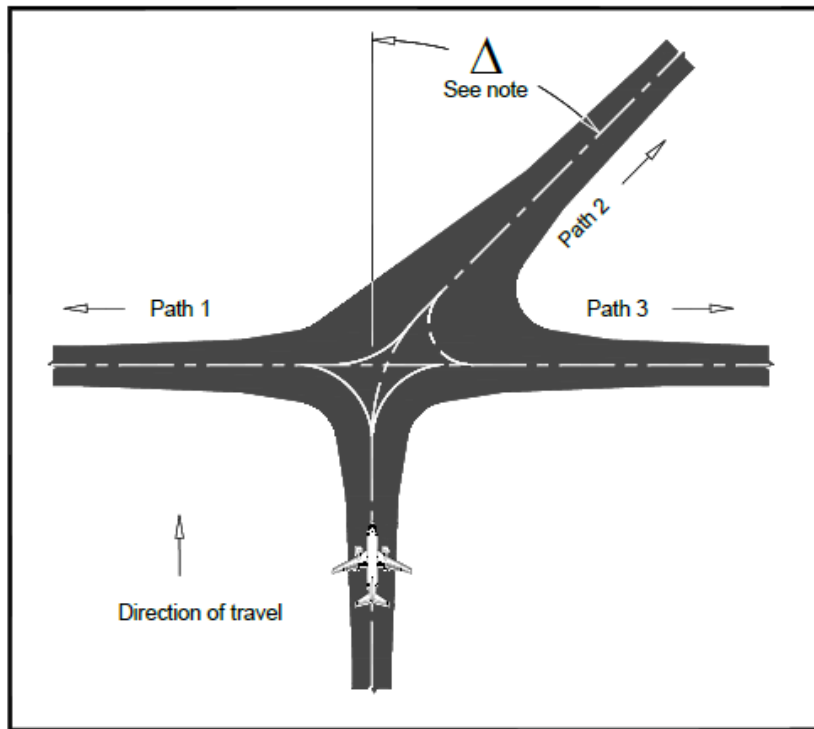
The FAA defines a runway incursion as "any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for the landing and takeoff of aircraft."³ In recent years, the FAA has placed special emphasis on the prevention of runway incursions and the maintenance of pilot awareness. FAA AC 150/5300-13B provides the following guidance on how to design taxiways and taxilanes in a way that enhances safety by reducing the probability of runway incursions:

- Keep taxiway systems simple by using the **three-path concept**. As illustrated in **Exhibit 4.2-11**, the three-path concept means a pilot should have no more than three choices at an intersection (preferably left turn, right turn, and straight).
- Avoid wide expanses of pavement with taxiway-to-runway interfaces. For example, an aircraft parking apron should not be directly connected to a runway by a taxiway.
- Reduce the need for aircraft to cross runways.
- Avoid high-energy area intersections. High-energy intersections are intersections in the middle third of the runway.

³ https://www.faa.gov/airports/runway_safety/news/runway_incursions/

- Provide right-angle intersections (between two taxiways and between a taxiway and a runway). Do not use acute angle runway exits as a runway entrance point or as runway crossing.
- Avoid dual-purpose pavements. Do not use runways as taxiways and vice versa.
- Do not construct taxiways that lead directly from an aircraft parking apron to a runway (direct access).

Exhibit 4.2-11: Three-Path Concept Taxiway Intersection



Note: The angle (Δ) is measured from the initial direction of travel.

Source: FAA Advisory Circular 150/5300-13B

Table 4.2-13 provides an evaluation of the taxiway design standards at SGF. Table 4.2-14 shows the existing and proposed dimensions of the taxiways at SGF, of which **all dimensions are compliant with FAA standards**.

Table 4.2-13: Taxiway Design Geometry at SGF

TAXIWAY DESIGN STANDARD	RECOMMENDED ACTION	COMPLIANCE
Three-Path Concept: avoid more than three paths at intersections	Avoid	YES
Wide Expanses of Pavement	Avoid	YES
Runway Crossings	Avoid	YES
High-energy Intersections	Limit	NO
Right-angle Intersections	Provide	YES
Dual Purpose Pavements	Avoid	YES
Direct Access to Runways	Avoid	NO

Source: CMT (2022)

TAXIWAY GEOMETRY

Table 4.2-14: Taxiway Design Standards

DESIGN ELEMENT	EXISTING / STANDARD DIMENSIONS (FEET)
ADG-IV	
Taxiway and Taxilane Protection	
TSA (Maximum ADG wingspan)	171
TOFA	243
TLOFA	224
Taxiway and Taxilane Separation	
Taxiway centerline to parallel taxiway centerline	207
Taxiway centerline to fixed or movable object	121.5
Taxilane centerline to parallel taxilane centerline	197.5
Taxilane centerline to fixed or movable object	112
Wingtip Clearance	
Taxiway wingtip clearance	36
Taxilane wingtip clearance	26.5

Source: FAA AC 150/5300-13B

Taxiway design standards are set by the FAA and are a function of the size of aircraft that are intended to use the taxiway. The FAA categorizes taxiways of varying capability using a system like that of the RDC discussed previously in this chapter called Taxiway Design Group (TDG). TDG is based on the

dimensions of the aircraft undercarriage. The determining factors are (1) the width of its main gear and (2) the distance between the cockpit and the main gear.

Table 4.2-15 outlines the future taxiway design group dimensions based on the B767-300F aircraft (ADG-IV, TDG 5). SGF currently meets these standards, except for paved taxiway shoulders. Existing taxiway shoulders at SGF consist of stabilized turf, whereas current FAA guidance calls for paved shoulders on taxiways accommodating ADG-IV and larger aircraft. In the past, FAA only recommended paved shoulders for ADG-IV taxiways. The Airport has requested and received FAA approval to omit paved shoulders on recent taxiway reconstruction projects where the result would be a non-continuous shoulder. Installation of paved shoulders should be considered during future taxiway projects.

Table 4.2-15: Parallel Taxiway Design Group Future Dimensions

DESIGN ELEMENT	EXISTING / REQUIRED DIMENSIONS (FEET)	
	TDG-5	
Parallel Taxiway/Taxilane Width	60-75	75
Parallel Taxiway Edge Safety Margin	10-14	14
Parallel Taxiway Shoulder Width	0	30

Source: FAA AC 150/5300-13B

All parallel taxiways at SGF are 75' wide and are designed for ADG-IV/TDG-5 aircraft, or aircraft with up to 171-foot wingspans, except the portion of Taxiway N south of Runway 14-32, which is 60' wide. This portion of Taxiway N can accommodate most ADG-IV aircraft, except those in which the cockpit to main gear (CMG) distance and main gear width (MGW) exceeds the values prescribed in AC 150/5300-13B, such as the B767-300F. Consideration should be given to widening this section of Taxiway N to comply with TDG 5 criteria.

The parallel taxiway systems at SGF should continue to be designed and constructed to ADG IV/TDG-5 standards. Connector taxiways into general aviation areas can be designed and constructed to lesser standards (typically ADG-III/TDG 3) based on the aircraft being served.

4.2.6 Airfield Lighting and Pavement Markings

SGF is actively participating in the AC 150/5345-53, *Airport Lighting Equipment Certification Program*, which assists airport sponsors in ensuring the airport lighting equipment meets applicable FAA standards for safety, performance, quality, and standardization.

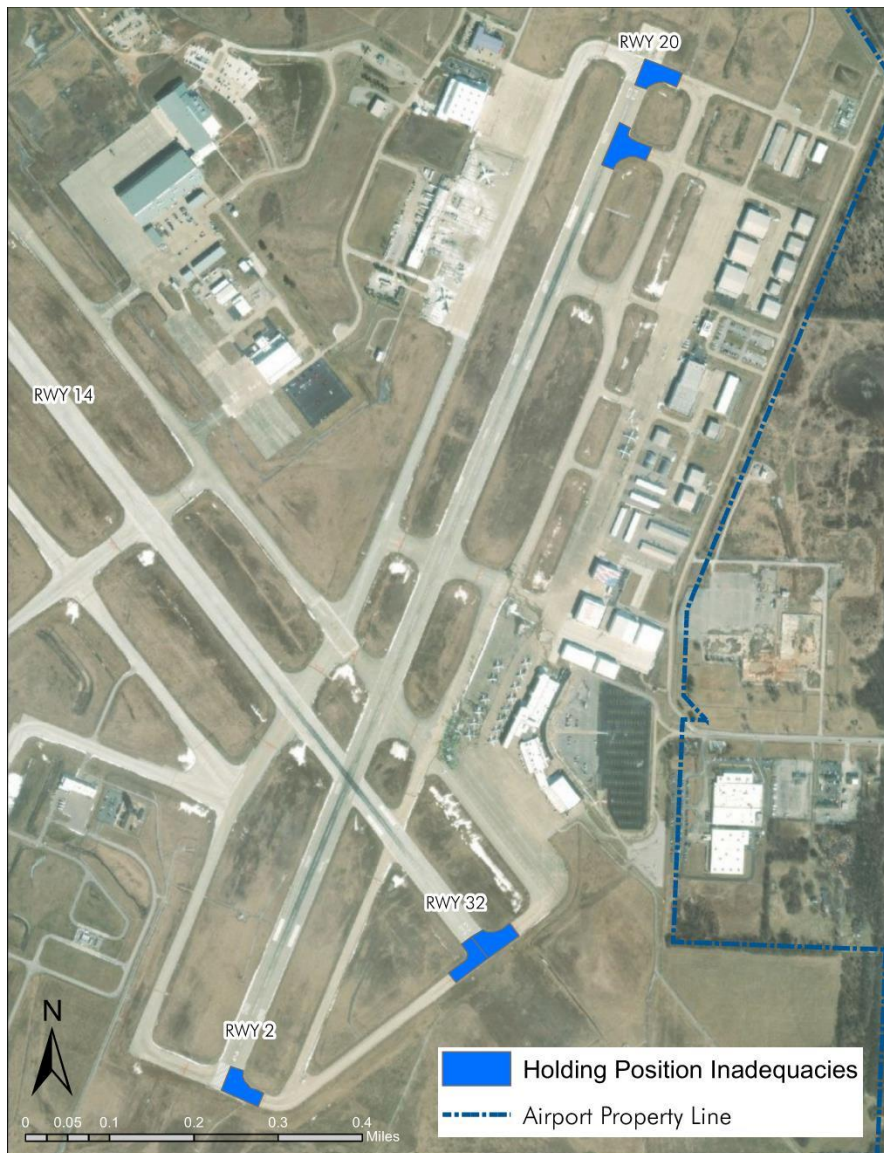
All existing runway ends are equipped with an Approach Lighting System (ALS) except for Runway 32. It is recommended that all runway ends with non-precision instrument approaches be equipped with at least a Medium Intensity Approach Lighting System (MALS) to enhance visual recognition of the runway end.

One deficiency was found with the airfield pavement markings. It was found that the holding position markings increase the distance of 1 foot for every 100 feet above sea level from a base separation of 250'. This means that the holding position markings at SGF need to be a minimum of 263' from the

runway centerline.⁴ Three instances of non-compliance are less than 263' at approximately 240' noted in the following **Exhibit 4.2-12**.

It is recommended to bring all holding position markings to the compliant distance of 263' from the runway centerline.

Exhibit 4.2-12: SGF Holding Position Marking Inadequacies



Source: CMT (2022)

⁴ Foot note 8- Runway Design Standards Matrix for AC 150/5300-13
Office of Airports

AIRFIELD HOT SPOTS

A "hot spot" is a runway safety-related problem area on an airport that presents increased risk during surface operations. Typically, it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc., and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.⁵

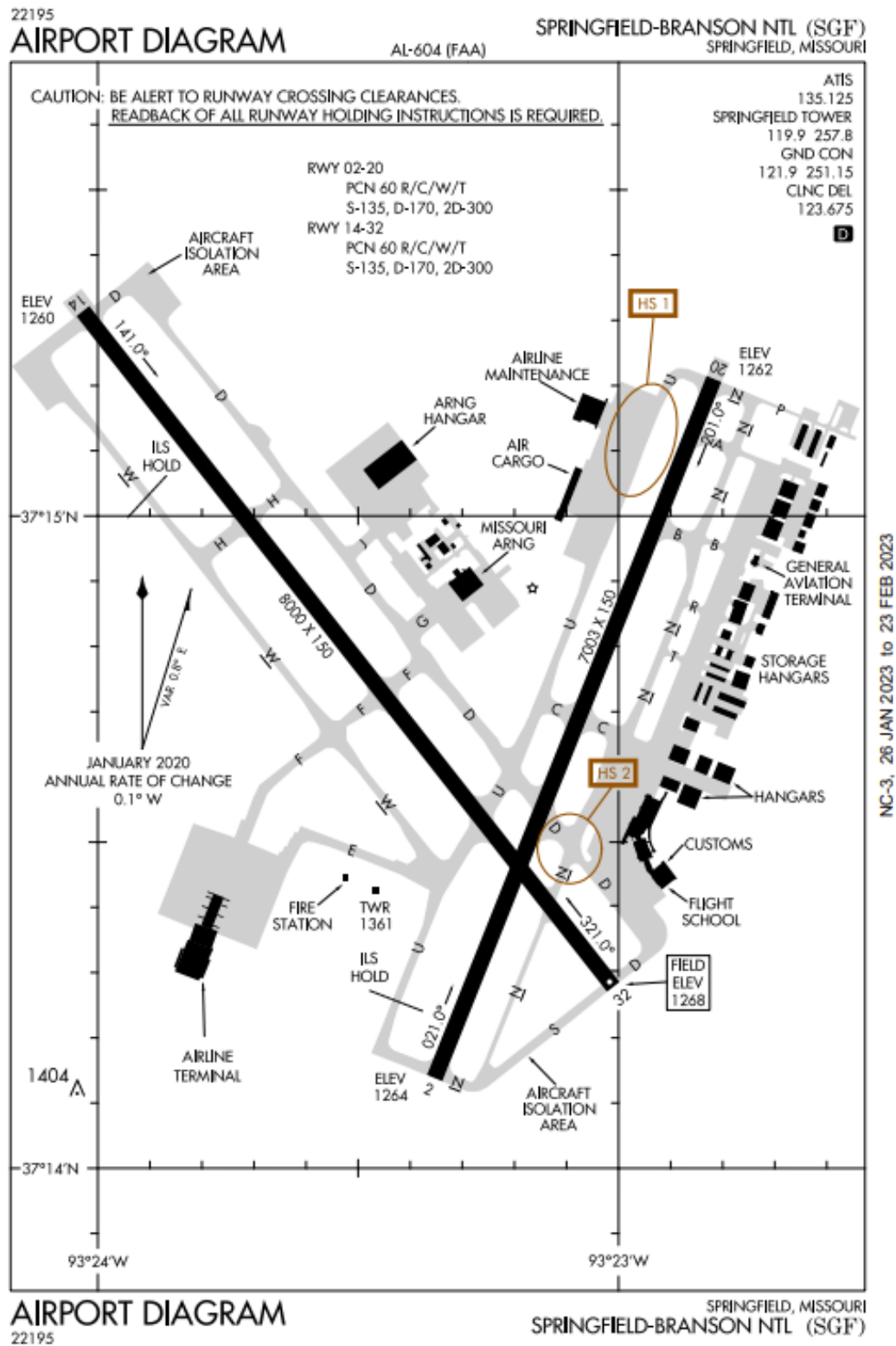
There are two hotspots noted on the Airport diagram at SGF. Those hot spots are as follows:

- HS 1 – Tower blind spot on the movement area.
- HS 2 – Intersection of Taxiway D and Taxiway N is in close proximity to Runway 02-20 and Runway 14-32. Use caution to ensure proper turns to avoid entering the runway without a clearance.

Exhibit 4.2-13, below is the airport diagram showing the location of the hot spots. It is recommended to take action to mitigate these hot spots.

⁵ <https://aeronav.faa.gov/>

Exhibit 4.2-13: SGF Hot Spots



Source: FAA (2023)

4.3 Cargo Operations - Facility Requirements

As described in Chapter Three – *Forecast of Aviation Demand*, cargo operations at SGF have been on a growth trend and are projected to continue growing well into the future.

The preferred forecast for all cargo shows the current operators, UPS and FedEx, upgauging to Boeing 767-300s. This will lower the operating frequency to one flight per day, per operator, as well as account for the addition of another operator, such as Amazon, with an additional operation of a Boeing 737-800 to make a total of three operational frequencies per day.

4.3.1 Cargo Hangars

Hangars are not needed for cargo operations at SGF at this time. Cargo aircraft are not regularly stored at the Airport, leaving cargo hangars out of the picture for the foreseeable future at SGF. The cargo requirements are based on apron space as opposed to hangar space.

4.3.2 Cargo Warehouse

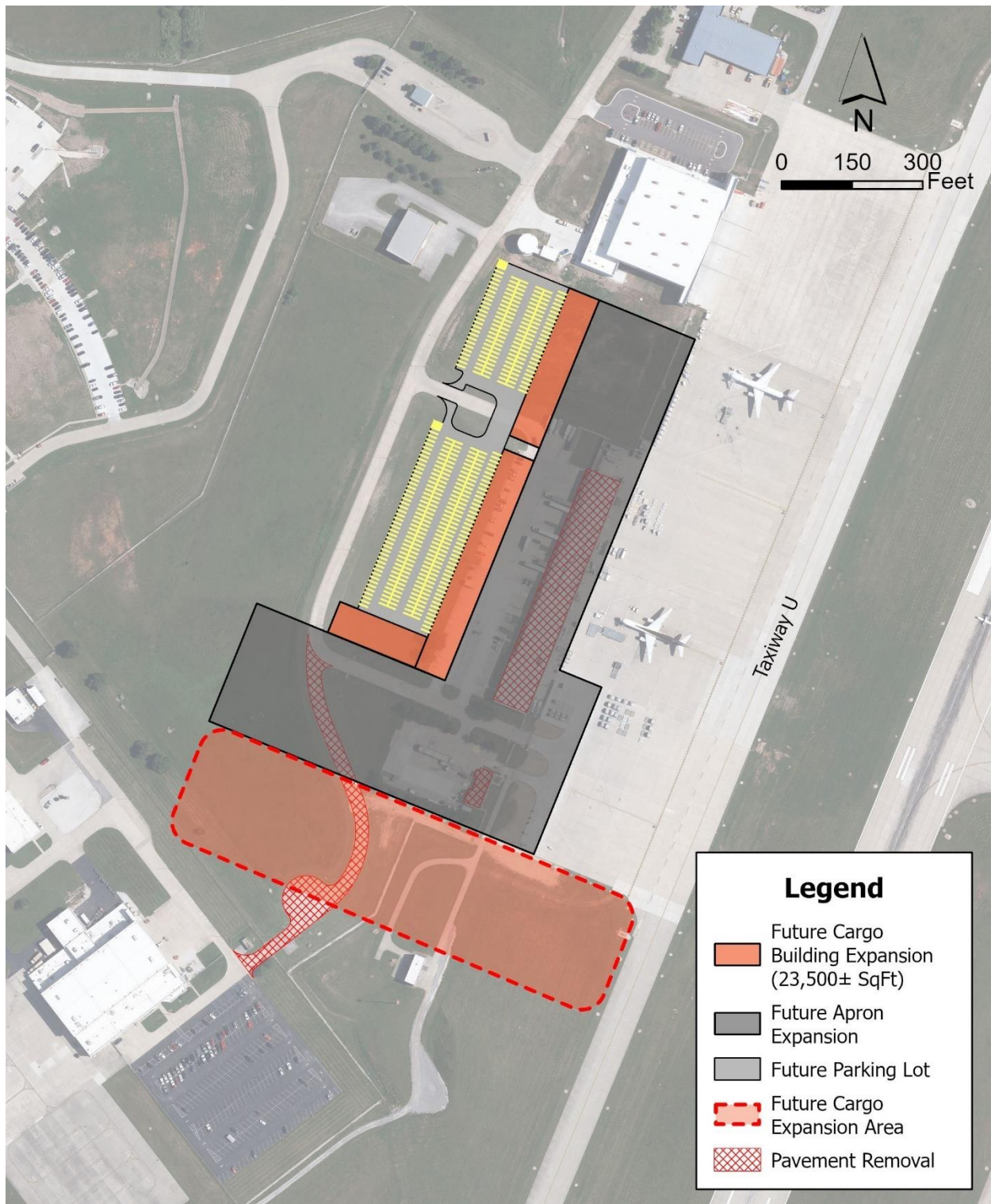
The preferred forecast adds a new all-cargo tenant to the airfield. A facility near SGF could be beneficial to the cargo operators, but a warehouse on airport property is not necessary. The operations of loading docks and bays that transfer the goods have been noted to be appropriate for the cargo operations at SGF by airport staff. Warehousing needs should be assessed as needed with cargo tenants.

4.3.3 Cargo Aprons

The process of an expansion to the southwest corner of the existing Cargo Apron, under the 2021 MoDOT Freight Enhancement Program Grant Proposal, is underway at SGF. The installation of a new nose tether system has also been utilized to reconfigure the pavement markings to accommodate four cargo aircraft parking spaces. The reconfiguration of the apron with the four parking spaces is sufficient for the projected cargo operations forecast.

Exhibit 4.3-1 shows the future Cargo Apron configuration at SGF.

Exhibit 4.3-1: SGF Future Cargo Apron Configuration



Source: CMT (2022)

4.3.4 Bays/Loading Docks

There are currently 20 cargo loading bays split amongst the two existing cargo tenants at SGF. Assuming a new operator, such as Amazon, arrives with similarly sized aircraft and the same frequency as the existing operators, another ten bays of loading docks could be assumed as adequate. Understanding that the current operations of UPS are in the process of upgrading their facility to 20,000 square feet, it would fit the preferred cargo forecast to develop a similarly sized cargo facility for another operator with an **additional 20,000 square-foot facility with 10 bays**. Offsetting future cargo facility development to the west could provide additional apron depth for cargo operations and, by moving aircraft tails further from Taxiway U, partially mitigating ATCT line-of-sight impacts documented as Hot Spot (HS) 1.

4.4 General Aviation/Corporate - Facility Requirements

4.4.1 Fixed Based Operator (FBO) Terminal

Midwest Premier is the full-service FBO at SGF providing services such as marshaling, tie downs, fueling, deicing, lavatory service, ground power unit (GPU) service, and towing capabilities, as well as ramp shuttle services. The FBO terminal is currently meeting serviceable standards with a façade update and 4,500 square-foot addition planned to be completed in 2024. **Exhibit 4.4-1** shows a rendering of the finished GA terminal at SGF.

Exhibit 4.4-1: Midwest Premier FBO Terminal Rendering



Source: SGF, Drake Wells Architecture (Acquired 2022)

4.4.2 General Aviation Hangars

The representative aircraft models shown in Exhibit 4.4-2 were selected based on SGF’s GA fleet mix: the **Cirrus SR-22 Turbo** is one of the most used airframes in the past five years, and the **Cessna Citation CJ2** is one of the most common jets that has utilized SGF facilities in the past (per TFMSC records).

Exhibit 4.4-2: SGF Representative Aircraft Models and Storage Space Required

REPRESENTATIVE AIRCRAFT	
T-Hangar	Box Hangar
S22T - Cirrus SR-22 Turbo 	C25A - Cessna Citation CJ2 
Aircraft Size	
26' x 38' 4" - 996.66 ft²	47' 8" X 49' 10" - 2,375.38 ft²

Source: CMT (2022)

To assess the future need for hangar space, the approximate square footage and number of parking positions of each hangar were assessed.

Table 4.4-1: SGF Existing GA T-Hangar Aircraft Storage Capacity

HANGAR	AREA (FEET²)
T-Hangar 11 H	6,500
T-Hangar 11 I	6,500
T-Hangar 11 J	12,800
T-Hangar 11 K	16,185
T-Hangar 11 L	6,430
T-Hangar 11 M	6,430
T-Hangar 12 L	7,560
T-Hangar 12 M	14,250
T-Hangar 12 N	14,290
TOTAL	90,945

Source: CMT (2022)

Table 4.4-1 shows that SGF has an existing T-hangar capacity of 90,945 square feet. The following assumptions were made concerning how each aircraft type will be stored:

- Single-engine aircraft will be stored inside T-hangars.
- Since the representative single-engine airframe requires nearly 1,000 square feet of storage, it is assumed all multi-engine aircraft will be stored inside box hangars.
- Jets will be stored inside box hangars.

Anticipating an additional 27 single-engine aircraft by 2041, there is a **26,910 square foot deficit of T-hangar space**. To visualize the deficit in actual hangar space it could be compared to 2 hangars at the same size as Hangar 17D, which is a 60' x 270' T-hangar (16,200 square feet), or three 10-unit T-hangars.

It was also assumed that any additional based aircraft beyond those currently based at SGF would require additional hangar space as the existing hangars at the Airport are completely occupied. The Airport currently has a waiting list of potential users, operators, and developers who are vying to get hangar space.

Table 4.4-2 below, displays the existing GA box hangar storage capacity at SGF.

Table 4.4-2: SGF Existing GA Box Hangar Aircraft Storage Capacity

HANGAR	AREA (FEET ²)
Box Hangar 11 A	17,700
Box Hangar 11 B	11,665
Box Hangar 11 C	17,700
Box Hangar 11 D	21,865
Box Hangar 11 E	19,600
Box Hangar 11 F	19,600
Box Hangar 11 G	15,350
Box Hangar 11 N	9,860
Box Hangar 11 O	9,115
Box Hangar 11 P	6,000
Box Hangar 11 Q	6,000
Box Hangar 11 R	8,200
Box Hangar 11 S	6,060
Box Hangar 11 U	14,525
Box Hangar 11 T	42,110
Box Hangar 12 D	22,580
Box Hangar 12 E	23,580
Box Hangar 12 F	23,000
Box Hangar 12 G	9,920
Box Hangar 12 H	4,345
Box Hangar 12 I	11,800
Box Hangar 12 J	9,190
Box Hangar 12 K	11,050
TOTAL	340,815

Source: CMT (2022)

SGF currently has a total of 340,815 square feet of box hangar space to house larger GA aircraft. The based aircraft fleet mix is projected to gain 15 new multiengine aircraft that will require a total of **35,631 square feet of box hangar space** by 2041.

Assuming that all existing hangars are currently operating at full capacity due to the hangar waitlist, **Table 4.4-3** presented below outlines the number of additional based aircraft throughout the planning period; the calculated spatial requirements for these additional based aircraft, taking into account the dimensions of the representative aircraft added to the existing hangar space; and the amount of additional hangar space needed per planning activity level.

Table 4.4-3: SGF Hangar Space Requirements – Total Area

BASED AIRCRAFT FORECAST				
AIRCRAFT TYPE	PAL 1	PAL 2	PAL 3	PAL 4
Single-Engine	99 (+6)	106 (+13)	112 (+19)	120 (+27)
Jet/Multi Engine	44 (+6)	47 (+9)	50 (+12)	53 (+15)
TOTAL SPACE REQUIREMENT (FEET ²)				
AIRCRAFT TYPE	PAL 1	PAL 2	PAL 3	PAL 4
Single-Engine	96,925	103,902	109,882	117,855
Jet	355,067	362,193	369,320	376,446
SURPLUS/DEFICIT (FEET ²) FROM BASELINE				
HANGAR TYPE	PAL 1	PAL 2	PAL 3	PAL 4
T-Hangar	5,980	12,957	18,937	26,910
Box Hangar	14,252	21,378	28,505	35,631
Total Hangar Space	20,232	34,335	47,441	62,541

Note: (+#) is the number of additional aircraft from the 2022 count. Red text indicates a deficit.

Source: CMT (2022)

By PAL 4 an additional 62,541 square feet of hangar space is anticipated. There are several different configurations of hangars that can be placed to accommodate future aircraft that may be demand and or developer driven. For instance, three 10-unit T-hangars would address the T-hangar demand by PAL 4, while four 100'x100' box hangars would create an additional 40,000 square feet of hangar space.

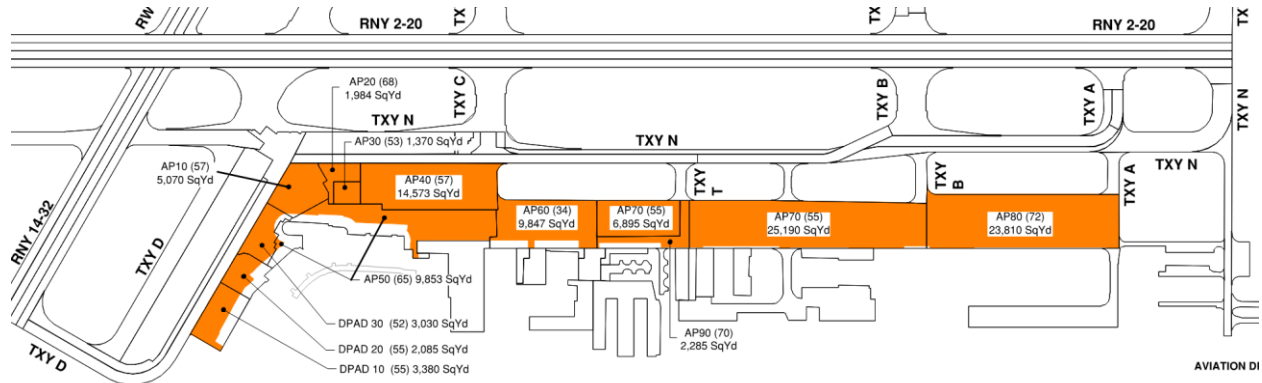
To account for the additional itinerant operations, an additional 200'x200' box or community hangar could provide temporary hangar service to those transient users. The next chapter in this Master Plan will discuss the different alternative configurations of additional hangars at SGF.

4.4.3 General Aviation Aprons

The General Aviation apron at SGF consists of approximately 117,000 square yards of pavement. The northern half of the apron is primarily used for everyday GA use, whereas the southern half of the apron, in front of the West Kearney Terminal building, is primarily used to tie down planes being serviced by the repair stations.

Exhibit 4.4-3 depicts the existing General Aviation apron area. Hangar aprons within 50 feet of a building were excepted from the apron sizing calculations, and an additional 3,000 square yards of existing apron is expected to be removed from operational service to minimize direct apron-to-runway access in the vicinity of Taxiway C. After these adjustments, the apron area used for sizing calculations is 106,372 square yards.

Exhibit 4.4-3: General Aviation Apron Area



Source: CMT (2024)

METHODOLOGY

The methodology employed in the analysis of the GA apron requirements for this Master Plan utilized the spreadsheet model developed by the FAA Central Region for the calculation of apron size for transient aircraft. This model utilizes a two-step method of calculating these requirements:

- Step 1: calculate the area required based on the projections of based aircraft.
- Step 2: calculate the area required based on the projected number of annual GA itinerant operations.

A unique factor affecting apron sizing at SGF is that Maintenance, Repair, and Overhaul (MRO) activities result in the need to stage aircraft that are going through the refurbishment process. Common aircraft types being refurbished include the Saab 340 and 2000, along with the Embraer 120 Brasilia. These aircraft, primarily parked on the southern portion of the GA Apron, take up considerable functional space from other GA Apron needs. The number of aircraft staged for MRO activities varies over time as they are cycled through the refurbishment process. Based on a review of historical activity levels, a conservative estimate suggests a range of between 20 and 25 staged MRO aircraft on the ground at a time.

The MRO activities were projected into the calculator by adjusting the percentage of itinerant operations to parking value. This was done by calculating the number of itinerant aircraft on the ground at a typical 50% parking factor, and then adding 20 aircraft, which is a conservative average number of parked MRO aircraft.

The total annual operations method was employed to determine the GA apron size requirements for SGF. The operational levels utilized as inputs for the apron size calculator tool are shown in **Table 4.4-4**. Additional details about input parameters used in the apron sizing assessment are provided in **Appendix 11**.

Table 4.4-4: SGF GA Operational Levels for Apron Size Calculation

OPERATIONAL LEVEL	PAL 1	PAL 2	PAL 3	PAL 4
Total Based Aircraft	154	164	174	186
Total Itinerant Operations	29,290	32,962	37,095	41,746
Total Annual Operations	40,694	44,509	48,787	53,585
Percentage of Itinerant Operations	72%	74%	76%	78%
Annual Operations during Busiest Month	13.21%			
Busiest Month	July			
# of Aircraft on the Ground	54	58	62	69

Source: CMT (2022)

Table 4.4-5 shows the results obtained with the FAA Central Region Apron Size Calculation spreadsheet.

Table 4.4-5: SGF Apron Size Requirements

APRON REQUIREMENTS	PAL 1	PAL 2	PAL 3	PAL 4
Apron Size Required (yd ²)	89,868	96,991	103,432	115,012
Surplus/Deficit (yd ²)	16,504	9,381	2,940	-8,640

Source: CMT (2022)

As indicated, a need for apron space can be expected at PAL 4. With the 10% size factor added for circulation, as given by the calculator, it can be expected that SGF will need 8,640 square yards of apron space; without the 10% increase, the demand is 104,556 square yards compared to the 106,372 square yards of existing apron.

With the demand for additional GA apron space on the cusp of the planning period, it is likely that redevelopment of areas such as the Kearney Terminal and other areas could absorb some of the demand for apron space. The balance between operational requirements and infrastructure supply can grow sustainably as the apron space currently exists.

Significant areas of the GA apron are identified as “watch list” pavements in the current Pavement Management Program due to significant distresses or low PCI values. As a result, much of the GA apron is recommended for reconstruction in the 2028 to 2032 timeframe. Decisions about investments in reconstruction of specific apron areas should be made based on operational parameters and documented needs at the time.

4.4.4 Maintenance, Repair, and Overhaul (MRO)

SGF has several MRO operations on the airfield with the largest being Envoy, which services larger commercial jets. Other MRO operators and maintenance providers include Worldwide Aircraft Services, Aviation Enterprises, and Cessna Mobile Service.

Currently, Envoy is located west of the of Runway 20 end and Worldwide Aircraft Services is located south of the GA terminal building, east of Runway 02-20. Consolidation of all MRO buildings to one section of the airfield could be conducive to efficient land use as it would allow for more unified sectors. **Exhibit 4.4-3** shows a preliminary layout of what an expanded and consolidated MRO area could look like.

Exhibit 4.4-4: Preliminary MRO Expansion and Consolidation



Source: CMT (2022)

4.5 Ground Access, Circulation, and Parking

4.5.1 Rental Car Parking

The rental car parking lot has recently been expanded with the addition of a paved overflow lot adding close to 500 new parking spaces. With the recent expansion for a total of 1,475 parking spaces, the capacity is sufficient for the rental demands. There have been reports of wayfinding issues from rental users and possible lot configuration issues. While the wayfinding issue is a somewhat simple problem to overcome with signage, the configuration of the lot may require an independent study to find efficient solutions.

4.5.2 Commercial Terminal Parking

Passenger vehicle parking requirements were calculated for each PAL to determine the adequacy of the existing public commercial terminal parking lots to accommodate the projected demand.

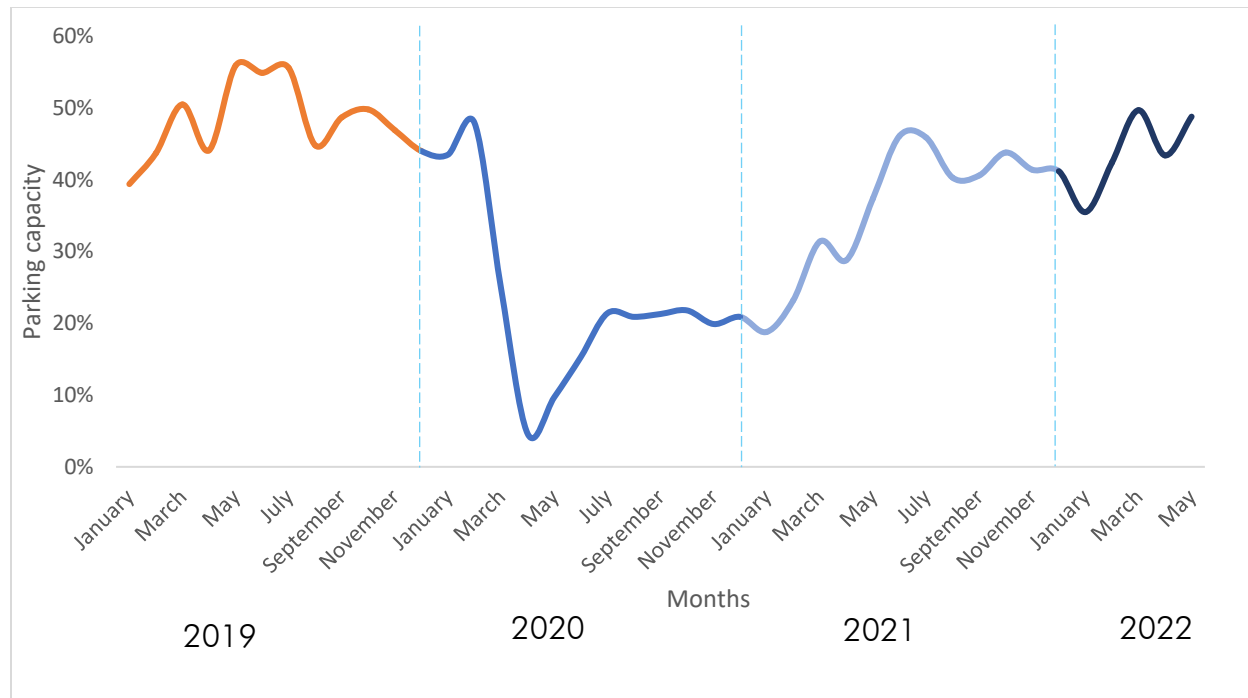
Currently, the Airport offers a total of **2,630** for passenger use, distributed across three parking areas: Short-Term, Long-Term, and Economy Long-Term Parking. Additionally, there is a 32-space cell phone lot and five (5) spaces reserved for pay booth attendants.

Given that the circumstances at each airport are different in terms of how passengers travel to and from the airport and how long their vehicles stay, it was important to understand the relationship between passenger traffic and vehicle parking.

To understand this relationship, parking data was obtained from SP Plus Aviation Services, the parking lot operator, for the period of January 2019 through May 2022 (the maximum data that was available at the time of this analysis). **Exhibit 4.5-1** shows the information that was extracted from this set of parking data.

The exhibit below illustrates that COVID-19 had a significant impact on parking utilization with a considerable dip in 2020. To avoid abnormalities caused by the COVID-19 pandemic, 2019 is the most recent benchmark for parking data and the utilization of the parking lot has quickly rebounded to a similar utilization in 2022.

Exhibit 4.5-1: Passenger Parking Utilization at SGF



Source: CMT, SP+ (2022)

As defined in the FAA AC 150/5360-13A, *Airport Terminal Planning*, level of service (LOS) is defined as a qualitative and quantitative measurement of comfort experienced by passengers using the airport passenger terminal facility. LOS is a balance, or compromise, between customer service, cost, and available space. It is a key parameter to address at the onset of the spatial programming process and will be used to understand the passenger parking state at SGF.

LOS is traditionally rated on a scale of A through F, from excellent to unacceptable. This metric has evolved in recent years to simplify the categories “optimum, sub-optimum, under-provided, and over-design” (International Air Transport Association (IATA) Airport Development Reference Manual). Factors that are weighed to determine LOS vary by each terminal element, but can include factors such as processing time, level of crowding, walking distance, climate, etc.⁶

According to the Advisory Circular mentioned above, two key factors for measuring LOS typically considered include (a) the ratio of peak period requirements to facility capacity, with a ratio of **85%** typically representing the limit of an acceptable LOS, and (b) the proportion of spaces located within an unassisted walking distance of **600 to 800 feet** of a terminal building entrance; ideally with all closed-in spaces located within this walking distance.

⁶ Advisory Circular 150/5360-13A, *Airport Terminal Planning*, 13 July 2018, P. 8.6.3

To reach an optimal level of service for parking, it is important to analyze the existing conditions through the lenses of walkability and circulation.

There are 1,508 parking spaces within 800 feet of the terminal entrance and 697 spaces of those are within 600 feet. **Exhibit 4.5-2** below shows two concentric circles, of which the radii are 600 feet and 800 feet from the terminal entrance. The aerial image reflects the expected level of service that users are more likely to utilize as the parking spaces within the circles are visibly more occupied.

Exhibit 4.5-2: Parking LOS at SGF



Source: CMT (2022)

As projected enplanements are expected to increase throughout the planning period, it can also be expected that the demand for parking within 600' and 800' of the terminal entrance will also increase. Parking representatives and operations personnel at SGF have regularly reported that the short-term parking lot closest to the terminal entrance is consistently at capacity.

- The peak parking day of 2019 was May 22nd with 1,902 cars, which makes up 0.41% of parking for the entire year.

Dividing the annual parked car count for 2019 by the annual number of enplanements from 2019 shows the annual parked cars per air passenger which is approximately .79. Applying this annual parked car per passenger measurement to forecasted annual enplanements from the FAA-approved Forecast of Aviation Demand produces a yearly parked car count for future yearly parking demands. The forecasted enplanements are referenced in **Table 4.5-1** below.

To understand what a peak day may look like during each Planning Activity Level, the 2019 peak day car count's ratio of 0.41% can be applied to the expected yearly parked car counts.

To find the number of parking spaces needed to achieve an optimal LOS as defined by the IATA, the projected peak day parking counts are compared to the existing number of parking spaces within 800' of the terminal entrance with an 85% capacity buffer applied to account for comfortable parking circulation. Utilizing the two LOS metrics described by the FAA ensures that the commercial passengers at SGF are experiencing a more than satisfactory level of service at the airport.

Table 4.5-1 below outlines future demands for commercial parking at SGF.

Table 4.5-1: Future Commercial Parking Requirements at SGF

PALs	Preferred Forecasted Enplanements	Projected Annual Car counts	Projected Peak Day Car Counts	Additional Parking Spaces Needed within 800' (To comply with 85% LOS)
PAL 1	601,424	475,378	1,967	807
PAL 2	745,738	589,446	2,439	1,362
PAL 3	814,090	643,473	2,663	1,625
PAL 4	840,018	663,967	2,748	1,725

Source: CMT (2022)

The findings show that over the planning period, an additional 1,725 parking spaces are required within 800' of the terminal entrance to meet the parking demands. While the configuration of these additional parking spaces can take on many forms, one of the most direct would be the construction of a multi-level parking garage.

4.5.3 Cargo Users Vehicle Parking

The cargo facilities parking is mainly established for employee parking and semi-truck accessibility. There are currently approximately **70 parking spaces** (+/- spaces utilized for dumpsters or double spaces for handicapped spaces) It is assumed that with a possible extension of the cargo facility to add another 20,000 square feet and 10 truck bays, there would need to be an additional 25 parking spaces that match the existing development’s parking space count to accommodate employees and other uses of the extension.

4.5.4 General Aviation Users Vehicle Parking

There are currently **110 parking spaces** at the GA terminal where primarily the public parks their vehicles. Most of the existing hangars have dedicated spaces for vehicle parking for GA users to conveniently park their vehicles next to where they store their aircraft. Currently, the parking lot at the GA terminal is adequate and is anticipated to have a similar demand as future GA hangars are built with adjacent parking.

4.6 Airport Support Facilities

4.6.1 Fuel Facilities

There are three fuel farms at SGF, two of which are focused on fueling aircraft and the third fuel farm provides fuel to rental cars. Of the two aircraft-supporting fuel facilities, one is in the midfield near the air traffic control tower (ATCT), and the other is on the north side of GA operations. Both locations have three (3) Jet A fuel tanks, each with a capacity of 30,000 gallons and room to add another tank of similar size; the GA fuel farm has two 15,000 Avgas tanks. The total fuel capacity is displayed in **Table 4.6-1** below.

Table 4.6-1: SGF Aircraft Fuel Storage Capacity

FUEL TYPE	CAPACITY (GALLONS)
Jet A	180,000
Avgas	30,000

Source: CMT, SGF (2022)

OBSERVATIONS

Given that the circumstances at each airport are different in terms of how fuel is consumed and dispensed, it is important to understand the relationship between aircraft operations and fuel consumption. To understand this relationship, historical fuel sales data was obtained from the Airport for fiscal years (FY) 2017 to 2021. **Table 4.6-2** shows the historic fuel sales and uplift for each fuel type from FY 2017 to 2021.

Table 4.6-2: SGF Fuel Sale Observations

OBSERVATION	Jet A	Avgas
Percentage of Fleet Mix	54%	46%
Average % of Operations During Busiest Month per Year	11%	11%
Average Annual Operations (2017-2019)	31,912	27,340
Average Annual fuel uplift (gal) (2017-2019)	7,419,904	722,404
Average fuel uplift per operation (gal)	232.51	26.42

Source: SGF, CMT (2022)

ASSUMPTIONS

To determine the future fuel demands per operation at SGF, it is necessary to establish a relationship between the number of projected operations and the number of gallons of fuel required. For this purpose, the following assumptions were established based on accepted industry best practices:

- All commercial operations use Jet A fuel.
- Piston-driven aircraft use Avgas.
- Turbine-driven aircraft use Jet A.
- As most of the operations for the military at SGF are helicopters, it can be assumed that they use Jet A.
- To avoid inconsistencies due to the COVID-19 Pandemic, the historic uplift and peak month data was derived from 2017 through 2019 data.
- 80% of the fuel tank's capacity is "useable" fuel due to overfill prevention, vapor loss, and outlet port locations.⁷ For example, a 30,000-gallon tank would only have 24,000 gallons of usable fuel.

Table 4.6-3 below, is the assumptions applied to the data created from Chapter Three

⁷ Airport Management Guide for Providing Aircraft Fueling Services (2019) pg. 172

Table 4.6-3: Fuel Use Projections

ASSUMPTION	Existing	PAL 1	PAL 2	PAL 3	PAL 4
Avgas					
Piston Ops from Forecast	23,958	23,757	24,192	24,882	25,810
Avg Fuel Uplift/Operation (gal)	26.42				
Annual Uplift (gal)	633,041	627,730	639,240	657,453	681,973
Daily Uplift (gal)	2,259	2,240	2,282	2,347	2,434
Jet-A					
Jet Ops from Forecast	33,378	40,775	47,534	52,279	56,452
Avg Fuel Uplift/Operation (gal)	232.51				
Annual Fuel Uplift (gal)	7,760,841	9,480,764	11,052,206	12,155,436	13,125,816
Daily Uplift (gal)	26,348	32,188	37,523	41,268	44,563

Source: SGF, CMT (2022)

Using the projections shown in the table above, the existing fuel tank capacity can be compared to the demand.

The target is to have a three-day supply of fuel on hand to satisfy an industry standard. The purpose of this three-day supply is to maintain a continuity of operations in the event of a fuel supply disruption. While the three-day standard is common practice, a five-day fuel supply would account for more inconsistencies in an abnormal supply chain.

Table 4.6-4 below, shows the storage requirements needed for Jet A and Avgas on a three-, five-, and seven-day supply throughout the planning period.

Table 4.6-4: SGF Fuel Storage Requirements

Storage Requirements (GAL)	Existing	PAL 1	PAL 2	PAL 3	PAL 4
Avgas					
3 Day Supply	6,780	6,730	6,850	7,040	7,310
5 Day Supply	11,300	11,210	11,410	11,740	12,180
7 Day Supply	15,820	15,690	15,980	16,430	17,040
Jet A					
3 Day Supply	79,050	96,570	112,590	123,810	133,710
5 Day Supply	131,750	160,950	187,650	206,350	222,850
7 Day Supply	184,450	225,330	262,710	288,890	311,990

Source: CMT (2022)

With the data above being compared to the useable fuel, the surplus or deficit can be deduced. **Table 4.6-5** below outlines the difference between the requirements and the existing useable fuel capacity.

Table 4.6-5: Useable Fuel Versus Future Storage Requirements

Storage Requirements (GAL) Surplus or (Deficit)	Existing	PAL 1	PAL 2	PAL 3	PAL 4
Avgas: 24,000 Gal Useable*					
3 Day Supply	17,220	17,270	17,150	16,960	16,690
5 Day Supply	12,700	12,790	12,590	12,260	11,820
7 Day Supply	8,180	8,310	8,020	7,570	6,960
Jet A: 144,000 Gal Useable*					
3 Day Supply	64,950	47,430	31,410	20,190	10,290
5 Day Supply	12,250	(16,950)	(43,650)	(62,350)	(78,850)
7 Day Supply	(40,450)	(81,330)	(118,710)	(144,890)	(167,990)

*Useable fuel is 80% of total fuel capacity

Source: CMT (2022)

As seen in the table above, Jet A and Avgas fuel demands are projected to meet the three-day supply standard with the existing fuel tanks. The Avgas tanks will meet the demands well past the planning period, but additional Jet A fuel tanks will be needed on a five-day supply. This data shows that there is little room for any supply chain inconsistencies or abnormalities.

It is recommended that a 30,000-gallon Jet A fuel tank be added at each PAL to provide the airport with a reliable five-day supply of fuel.

Future space requirements to locate Sustainable Aviation Fuel (SAF), unleaded aviation gas (EAGLE program—Eliminate Aviation Gasoline Lead Emissions), and electric charging stations for electric aircraft were not evaluated as part of this Master Plan Update but should be considered in a future planning study.

4.6.2 Aircraft Rescue & Fire Fighting (ARFF)

14 CFR Part 139 dictates that operators of Part 139 airports must provide ARFF services during air carrier operations that require a Part 139 certificate. One of the requirements of Part 139 establishes that within three minutes from the time of the alarm, at least one required ARFF vehicle must reach the midpoint of the farthest runway serving air carrier aircraft from its assigned post or reach any other specified point of comparable distance on the movement area that is available to air carriers and begin application of the extinguishing agent.

An ARFF Index for the Airport is defined in 14 CFR Part 139.315, Paragraph C, and is determined by the longest air carrier passenger aircraft with an average of five or more daily scheduled departures. However, when there are fewer than five average daily departures of the longest air carrier aircraft serving the Airport, the Index required for the Airport will be the next lower Index group than the Index group prescribed for the longest aircraft. The requirements for Index determination are presented in Table 4.6-6.

Table 4.6-6: Airport ARFF Index Determinations

AIRPORT INDEX	LENGTH OF AIRCRAFT (ft) ⁸	VEHICLES ⁹		EXTINGUISHING AGENTS (gal) ¹⁰	
		LIGHT-WEIGHT	SELF-PROPELLED	DRY CHEMICAL	WATER ¹¹
A	< 90	1	0	500 or 450	0 or 100
B	90 – 125.9	1	1	500	1,500
C	126 – 158.9	1	2	500	3,000
D	159 – 199.9	1	2	500	4,000
E	200 +	1	2	500	6,000

Source: 14 CFR 139.312, Aircraft Rescue and Firefighting: Index Determination

The ARFF station at SGF is located near the ATCT and can regularly provide an ARFF Index B and can provide an Index C or D upon request between 1100Z and 0600Z (Zulu time). The facility has the capability of increasing the service to provide Index C requirements if there is an increase in daily departures or the length of air carriers increases.

Table 4.6-7 presents the planning assumptions used in the development of these requirements. These planning assumptions were based on industry planning standards for airports of similar size and level of operations. **Exhibit 4.6-1** identifies the path that emergency vehicles would take to reach the midpoint of Runway 02-20 from the ARFF station which is the furthest runway from the station.

Table 4.6-7: ARFF Stations Response Time Assumptions

PLANNING ASSUMPTIONS	VALUE
Straight path speed (mph)	49.7
Turn path speed (mph)	34.7
Alarm to departure (seconds)	40

Source: CMT (2022)

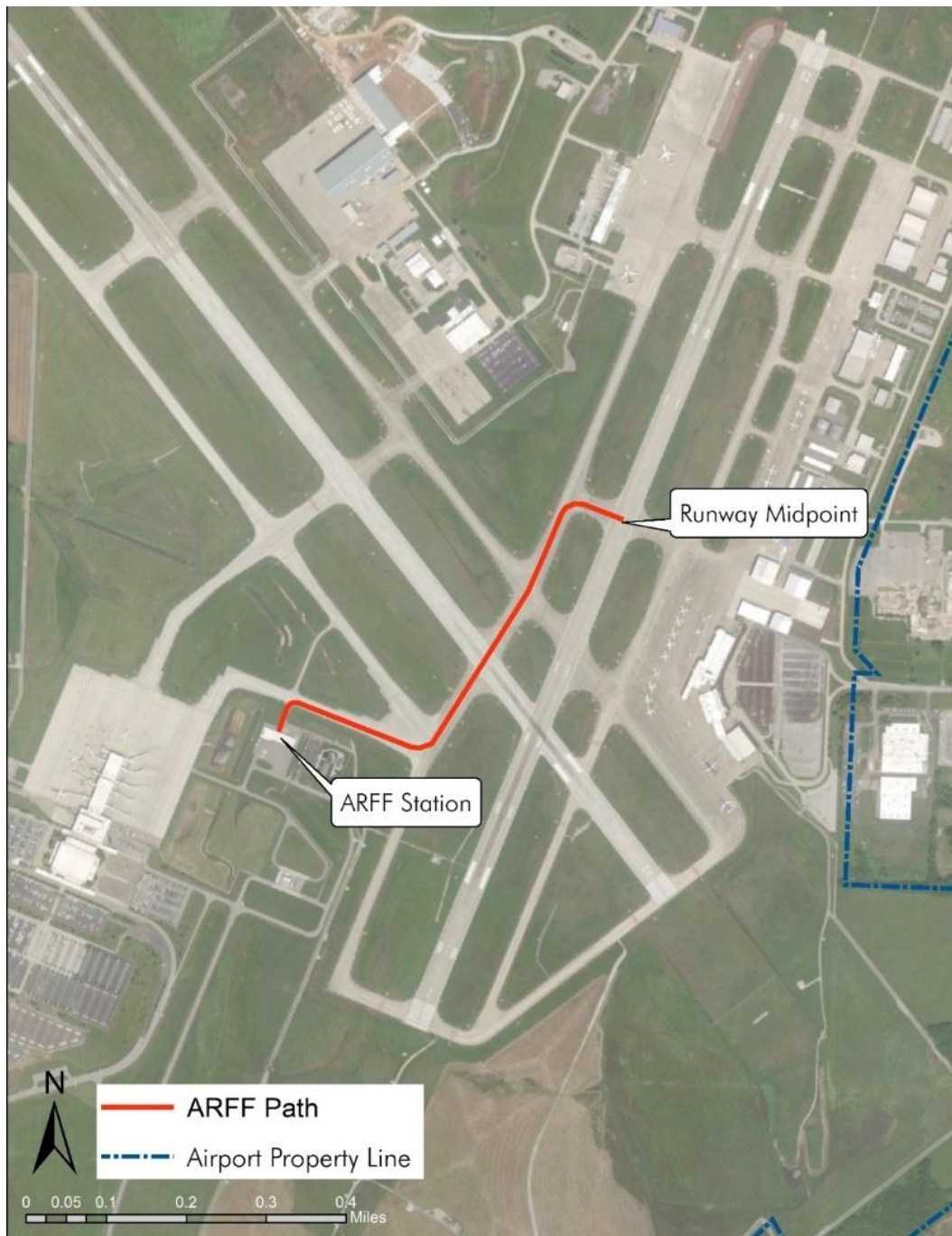
⁸ Length of largest aircraft providing an average of five scheduled departures daily.

⁹ Light-weight vehicle requirements for Index A are part of the total for Index B-E.

¹⁰ The protein-based agents may be substituted for aqueous film forming foam (AFFF) and the quantities of water shown increased by a factor of 1.5. Dry chemicals in the ratio of 12.7 pounds per gallon of water may be substituted for up to 30 percent of the water specified for AFFF.

¹¹ Water for protein foam production.

Exhibit 4.6-1: ARFF Station Path



Source: CMT (2022)

The ARFF station has a total response time of **1 minute 34 seconds** based on the previously presented methodologies and assumptions. The results of this analysis indicate that the station complies with Part 139 requirements since the response time to reach the midpoint of Runway 02-20 is less than three minutes.

4.6.3 Snow Removal Equipment (SRE) Storage & Ground Service Equipment Maintenance and Storage

Briefly discussed in the Chapter 1 – *Airport Inventory*, snow removal equipment (SRE) storage is scattered about the airfield in various other facilities. The main SRE facility is an approximately 17,500-square-foot that stores SRE equipment and other general airport maintenance equipment in an estimated 11,000-square-foot warehouse. Taking up approximately 5,500 square feet of space alone are the SRE vehicles. Including the storage of other equipment, ice melt, sand, and space for work bays, the warehouse is pressed for space often leaving little to no room for other equipment such as mower decks and tractors. Storage of some of these vehicles and machinery has been moved to other facilities or even pushed outside of the building into the elements causing quicker deterioration of their conditions. Two shipping containers have been placed next to the building to attempt to relieve some of the space issues.

Summing the square footage of the eastern portion of the building where the main vehicle storage areas are with the bulk of the parking bays comes to approximately 11,200 square feet of vehicle and equipment parking space. Utilizing the equipment safety zone requirements without calculating the existing vehicles buffers the parking within the building by 2,760 square feet leaving 8,440 square feet of parking. Based upon current conditions, the vehicles are not able to be parked 10 feet parallel to other parked vehicles which alone, take up more than 5,500 square feet.

Table 4.6-8 describes the safety zones required for parking SRE vehicles.

Table 4.6-8: Equipment Safety Zones

Minimum Clearances for Equipment Safety Zone (ESZ)				
Parked Equipment (Without Attachments)	5 feet (1.5 m) When next to side walls or other stationary objects.	4 feet (1.2 m) When rear of parked equipment faces a wall or other stationary objects.	10 feet (3 m) Parallel to other parked equipment (parallel parking)	10 feet (3 m) From door opening.
Between moving equipment on dual drive-through lanes				
Moving Equipment on single or dual drive-through lane.*	15 feet (5 m) From parked equipment that includes a safe walk-around zone in front of at least 3 feet (0.9 m).	10 feet (3 m) Small Plows 10 ft or less (3 m)	14 feet (4.3 m) Intermediate Plows and Small Sweepers 1 Over 10 ft up to 15 ft (3 – 4.6 m)	20 feet (6.1 m) Large Plows and Large Sweepers 1 Over 15 ft up to 22 ft (4.6 – 6.7 m)

* Assumes a 7-ft carrier vehicle width with attachments at 30-degree perpendicular to vehicle body

Source: CMT, FAA AC 150/5220-18A

Calculating the storage requirements described in FAA AC 150/5220-18A produces a total requirement of approximately 21,000 square feet for the general support items, materials, special equipment, and parking buffers. With an estimated 5,500 square feet of vehicles and an existing footprint of 17,500 square feet, there is a **deficit of 3,500 square feet of space**.

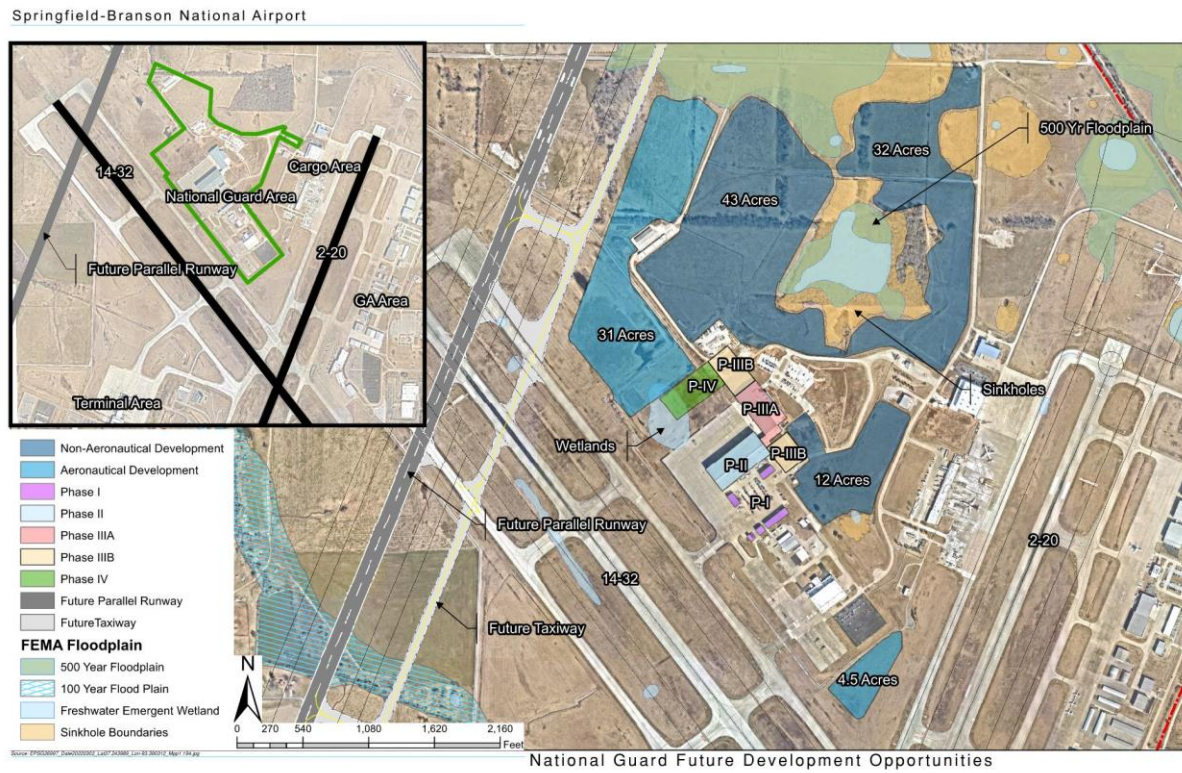
Likely, the storage of bulky pavement condition-treating is not in a specifically dedicated area. It is recommended that a 1,300-square-foot addition or separate permanent building is constructed to accommodate the facility.

An addition to the SRE building could be the reformative solution, the revolutionary solution would be to **relocate the SRE facility** to a new 21,000 square foot facility. The facility must have access to the airfield, but it does not need to be located directly next to the runways. Moving the SRE facility to a location that has a clear path to move the large equipment to the airfield but is not directly adjacent to the runways opens desirable real estate for many other airport users to bring in more revenue. Locations for a new SRE facility will be explored in the Alternatives Chapter of this report.

4.6.4 Missouri National Guard

The Missouri National Guard has intentions of expanding their area of operations at SGF. While the military will conduct a planning study separate from this one, it is important to incorporate the future of the National Guard when discussing SGF's development plan. **Exhibit 4.6-2** shows the possible future areas of military development at SGF.

Exhibit 4.6-2: National Guard Future Development Opportunities at SGF



Source: SGF; CMT (2022)

4.7 Summary of Facility Requirements

Table 4.7-1 provides an overall summary of the net change in facility requirements for the Airport when compared to existing conditions.

Table 4.7-1: SGF Facility Requirements Summary

RESULT	RUNWAY	EXISTING	PAL 1	PAL 2	PAL 3	PAL 4
Airside Requirements						
Runway Wind Coverage – All Weather	All	99.97%	-	-	-	-
Runway Width (ft.)	02-20	150	-	-	-	-
	14-32	150	-	-	-	-
Runway Length (ft.)	02-20	7,003	+ 1,000 (8,003)			
	14-32	8,000	-			
Runway Shoulder (ft.)	02-20	0	+25			
	14-32	0	+25			
Blast Pad Width x Length (ft.)	02	0	+200 x 200			
	20	200 x 200	-			
	14	200 x 200	-			
	32	0	+200 x 200			
RSA & ROFA Incompatibilities	02-20	Wind cones (2), Distance Measuring Equipment (1)	Complete Aeronautical Study or Relocate			
	14-32	Wind cone (1), Distance Measuring Equipment (1), Localizer (1)	Complete Aeronautical Study or Relocate			
Existing Runway Protection Zone (RPZ) Incompatibilities	02	-	Maintain Control and Ownership of Land			
	20	W Willard Rd.	Maintain Control and Ownership of Land			
	14	W Farm Rd 104, unowned land	Maintain Control and Ownership of Land/Acquire Property Interests			
	32	-	Maintain Control and Ownership of Land			
Runway to Parallel Taxiway Separation (ft.)	02-20	400	-			
	14-32	400	-			
Parallel Taxiway Width (ft.)	All	60-75	75			
Parallel Taxiway Shoulder Width (ft.)	All	-	30			
Holding Position Distance	All	3 instances less than 263'	Fix to 263' from runway centerline			

Source: CMT (2022)

RESULT	RUNWAY	EXISTING		PAL 1	PAL 2	PAL 3	PAL 4
General Aviation (GA)/Corporate Facility Requirements							
GA Hangars Total Area (ft²)	-	T-Hangar	90,945	96,925 (+1 ten-unit Hangar)	103,902 (+1 ten-unit Hangar)	109,882	117,855 (+1 ten-unit Hangar)
		Box Hangar	340,815	355,067 (+1 140'x140' Hangar)	362,193	369,320 (+1 140'x140' Hangar)	376,446
GA Aviation Aprons Area (yd²)	-	106,372		-	-	-	+ 8,640
Landside Access and Parking Requirements							
GA & Cargo Users Vehicle Parking (spaces)	-	110 (GA)		GA: Locate new parking spaces based on new hangar locations			
		70 (Cargo)		Cargo: +25 spaces based on new facility			
Commercial Users Vehicle Parking (Spaces)	-	2,630		Within 800' of Terminal Entrance			
				+807	+1,362	1,625	+1,725
Airport Support Facilities Requirements							
Fuel Storage – Jet A (gallons)	-	180,000		1 - 30,000-gal tank	1 - 30,000-gal tank	1 - 30,000-gal tank	1 - 30,000-gal tank
Fuel Storage – Avgas (gallons)	-	30,000		-	-	-	-
Aircraft Rescue and Firefighting	-	14,300 square feet of building space		-	-	-	-
Airport Maintenance /SRE Storage (ft²)	-	17,500 square feet of building space		+ 3,500 square feet (construct new 21,000 square foot SRE facility)			

Source: CMT (2022)

Chapter Five

Terminal Facility Requirements

5.1 Passenger Terminal Facility Requirements

The following sections summarize and describe the methodology and rationale for developing the terminal building requirements and associated aircraft gate needs.

5.1.1 Methodology and Assumptions

Various methodologies and planning metrics are utilized by planners to develop terminal programs. The approach for developing SGF's terminal requirements included: industry acceptable planning standards as well as those unique to SGF, communication with Airport staff, local Transportation Security Administration (TSA) staff, airlines, and the "2019 Passenger Insights Study". Additionally, knowledge of industry trends and the application of industry-accepted planning guidelines were also utilized. These include ACRP Report 25, *Airport Passenger Terminal Planning and Design*; FAA AC 150/5360-13A, *Airport Terminal Planning*; the TSA Checkpoint Requirements and Planning Guide (CRPG); the TSA Planning Guidelines and Design Standards (PGDS) for Checked Baggage Inspection Systems Version 7.0; ACRP Report 226, *Planning and Design of Airport Terminal Restrooms and Ancillary Spaces*; and the International Air Transport Association (IATA) *Airport Development Reference Manual (ADRM)* 12TH Edition.

IATA's Level of Service (LoS) standards are typically utilized by airport planners to provide a LoS standard qualitatively or quantitatively at various processing functions within the terminal building. An "Optimum" LoS was utilized when validating the functional passenger spaces and is often referred to as LoS "C" and defined by IATA as providing "Good LoS; condition of stable flow; acceptable brief delays; good level of comfort". Current utilization ratios were determined using the existing terminal computer-aided design (CAD) plans provided by the Airport and the 2022 Design Day Flight Schedule (DDFS), which serves to establish a baseline condition of demand compared to current facility capacities.

Airport terminal facilities are typically programmed using demand associated with future projections of annual and peak hour passengers and operations. Although annual activity is a good indicator of overall airport size, peak hour volumes more accurately reflect demand for specific passenger processing functions within the terminal facilities. These peak hours are typically calculated from the peak month's average day (PMAD) and are commonly referred to as Design Hour passengers. A summary of the annual and peak hour activity is provided in **Table 5.1-1**.

Table 5.1-1: Annual and Peak Hour Activity Forecast Summary

	BASE YEAR 2022	PREFERRED FORECAST PLANNING YEARS			
		PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
Enplanements					
Annual	545,789	601,424	745,378	814,090	840,018
Peak Month	55,450	60,000	74,361	81,216	83,803
% of Annual	10.0%	10.0%	10.0%	10.0%	10.0%
Design Day	2,184	2,257	2,797	3,055	3,152
Peak Hour Passengers					
Enplaned	257	358	435	477	419
Deplaned	346	358	435	477	517
Total	492	656	763	788	814
Peak Hour % of Daily Activity					
Enplaned	11.8%	15.9%	15.6%	15.6%	13.3%
Deplaned	15.8%	15.9%	15.6%	15.6%	16.4%
Total	22.5%	29.1%	27.3%	25.8%	25.8%

Note: The total peak hour does not reflect the sum of the enplaned/deplaned peak hour components as each occurs in different hours.

Source: CMT, October 2022

This analysis used two types of peak passenger levels based on individual airline use and common use. Individual airline passenger levels refer to the peak activity for each carrier that occurs over a 60-minute period based on that airline's flight schedule. As a result, these individual airline peaks may happen at different times of the day and therefore do not typically coincide in the same clock hour. The assumption is that this peak demand is appropriate to use when determining the facility requirements for individual airlines that are allocated certain functional space within the terminal. These areas include individual airline's ticket counters, gates/holdrooms, and in some instances, baggage claim facilities depending on the operating use agreement with the Airport. Common use peak passenger levels refer to the cumulative peak passenger volume in a given "rolling" hour for all airlines at the Airport. These common use peak demand levels are typically used for calculating non-airline specific functions such as passenger security screening, baggage screening, and public areas including general seating and meeter/greeter lobbies.

Other functional area projections are typically determined by their relationship to the number and type of aircraft or the number of gates/seats serving the terminal area. The relationship of area projections per aircraft operations, or by gates/seats is also a typical way to compare airport building component requirements. These areas of the terminal can include airline operations space, inbound/outbound baggage operations, and secure public restrooms.

The complexities involved in understanding the aircraft capacity implications of the term "gate" has led to a methodology to standardize the capacity definition of a "gate". This standardization methodology is referred to as the Narrowbody Equivalent Gate (NBEG) index. This index converts the gate requirements of diverse aircraft, from commuters to large new aircraft, so that they are equivalent to the apron capacity of a narrowbody aircraft gate. The amount of space or linear frontage each aircraft

requires is based on the maximum wingspan of the aircraft in its respective airplane design group (ADG), as shown in **Table 5.1-2**.

Table 5.1-2: Narrowbody Equivalent Index

Airplane Design Group	Wingspan	Typical Aircraft	NBEG Index
I Small Regional	< 49 Feet	Cessna/Learjet	0.4
II Medium Regional	< 79 Feet	CRJ/ERJ	0.7
III Narrowbody/Large Regional	< 118 Feet	A220,320,321/B717,737/Q400/E175	1.0
IV B757 Specific	< 125 Feet	B757	1.1
IV Widebody	< 171 Feet	B767	1.4
V Jumbo	< 214 Feet	B747,777,787/A330,340	1.8
VI Super Jumbo	< 262 Feet	A380	2.2

Source: FAA AC 150/5300-13B, *Airport Design* and Hirsh & Associates

Another methodology used for terminal facility program comparisons, similar to that of NBEG, is the Equivalent Aircraft (EQA) Index. This methodology looks at the passenger demand associated with gate usage. With EQA each gate is converted based on the seating capacity of the aircraft that can be accommodated. The base Equivalent Aircraft is that of a Group III narrowbody aircraft with seats in the range of 145-150 with an EQA of 1.0 as the base. Smaller aircraft may use the gate, but the EQA capacity should be based on the largest aircraft/seating typically in use. One example of where this methodology is used is ramp equipment (bag carts/containers) required for aircraft arrivals and departures at the gate. **Table 5.1-3** summarizes the EQA of each aircraft group.

Table 5.1-3: Equivalent Aircraft Index

Airplane Design Group	Seats	Typical Aircraft	EQA Index
I Small Regional	25	Cessna/Learjet	0.2
II Medium Regional	50	CRJ/ERJ	0.4
III Large Regional	75	Q400/E175,190	0.5
III Narrowbody	145	A220,320,321/B717,737	1.0
IV B757 Specific	185	B757	1.3
IV Widebody	280	B767	1.9
V Jumbo	400	B747,777,787/A330,340	2.8
VI Super Jumbo	525	A380	3.6

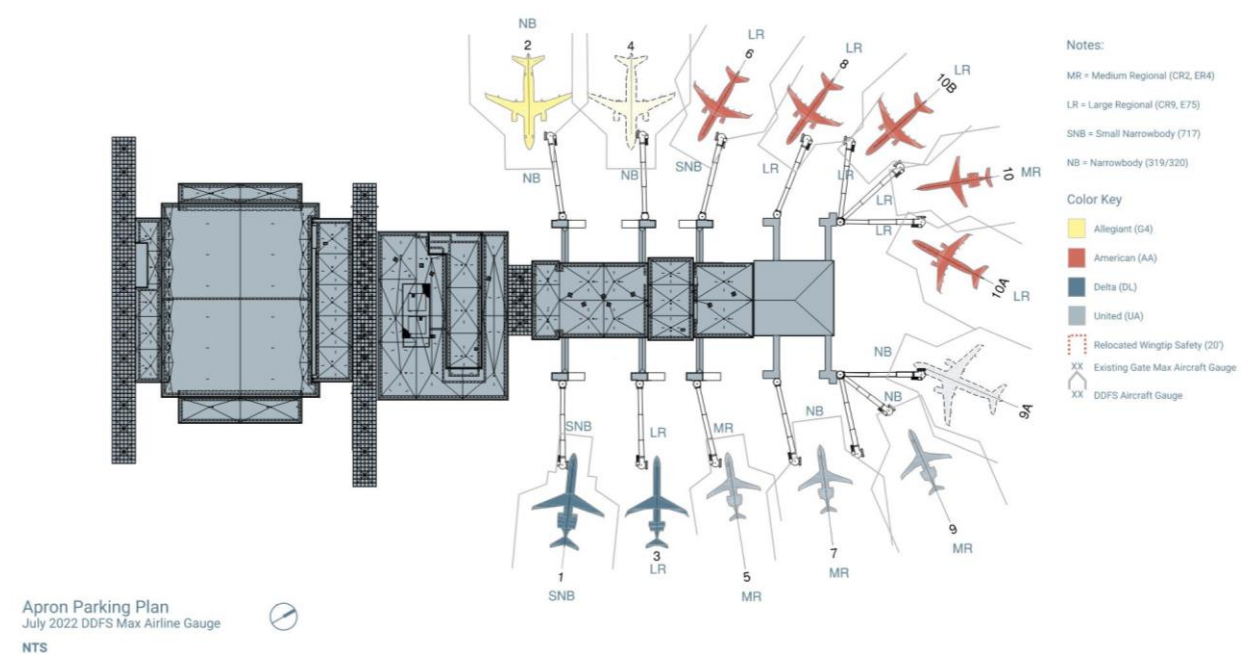
Source: Apron & Terminal Building Planning Manual for US DOT, Ralph M. Parsons Company, July 1975 and updated values based on Hirsh & Associates data.

The following sections describe the findings of the projected gate requirements along with major passenger processing areas within the terminal.

5.1.2 Projected Gate Demand

A terminal “gate” is defined as a location where an aircraft is parked at the terminal for loading and unloading of passengers. Passengers using a gate can access an aircraft directly from the apron level via a stairway integrated into the aircraft, by a portable stairway or, more typically, through a passenger boarding bridge (PBB) which is referred to as a “contact” gate. At full operational capacity, the Airport currently has 10 contact gates with a total of 13 parking positions (see **Exhibit 5.1-1**) operating in a Common Use environment. Gate 9 includes two parking positions 9 and 9A sharing one PBB while Gate 10 accommodates three parking positions 10, 10A, and 10B utilizing one PBB. These additional positions are primarily used for Remain Overnight (RON) aircraft (late evening arrivals with early morning departures the following day). Common Use allows the Airport to slot flights onto gates when they become available throughout the day. While the current operations group the airlines for ground handling efficiencies, it does not preclude an airline from operating at any gate. This was considered when developing future gate needs.

Exhibit 5.1-1: Existing Gate Assignments and Aircraft Gauge by Airline



Source: Alliance, October 2022

Gate demand by airplane design group (ADG) was developed from the DDFS with the following assumptions and results summarized in **Table 5.1-4**.

- The DDFS assumed the existing airline gate allocations in a Common Use operating environment.
- Aircraft were grouped based on the FAA’s ADG categories as shown in **Table 5.1-3**.

- An alternate airline gate assignment scenario was analyzed by relocating Allegiant to Gates 7 and 9, Delta to Gate 2, and United to Gate 1 and 3.

As shown in **Table 5.1-4**, approximately 60% of the current aircraft parking positions can accommodate Narrowbody aircraft with the remaining gates accommodating regional aircraft. The gated July 2022 DDFS showed predominant need for regional aircraft gates, 30% Medium Regional, and 40% Large Regional. The future DDFS distribution of aircraft types shift from Medium Regional aircraft activity to heavier use of Large Regional and Narrowbody aircraft. Future gate requirements were based on increasing the existing departures per gate ratio. As a result, no additional gates will be required over the 20-year planning horizon. However, the terminal alternatives look beyond PAL 4 (2041) in order to preserve land envelope for future building and subsequent gate expansion opportunities.

Table 5.1-4: Projected Gate Demand

		BASE YEAR 2022		PREFERRED FORECAST PLANNING YEARS			
				PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
Annual Enplanements		545,789		601,424	745,378	814,090	840,018
PMAD Departure Ops		26		30	36	37	38
Airplane Design Group (ADG)		Max Gauge ¹	Utilized Gauge	Recommended Gates			
II	Medium Regional	1	3	2	-	-	-
III	Large Regional	3	4	5	6	6	6
	Narrowbody	6	3	3	4	4	4
Total Contact Gates		10 ²	10	10	10	10	10
Total RON		13	9	9	9	9	9
Departures per Gate		2.6		3.0	3.6	3.7	3.8
Annual Enplanements per Gate ³		54,579		60,140	74,540	81,410	84,000

1/Represents the largest aircraft gauge in each design group, not necessarily the aircraft gauge currently being utilized at the gate

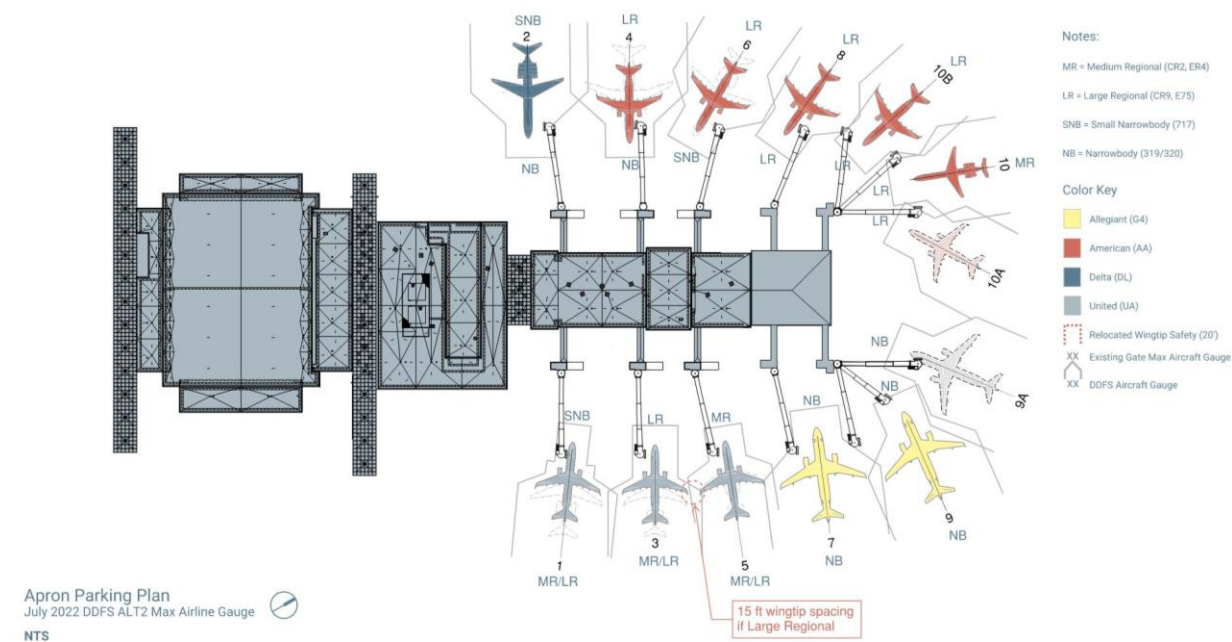
2/Existing Gate 9 includes two parking positions, Existing Gate 10 includes 3 parking positions

3/Values rounded

Source: CMT/Alliance, October 2022

The alternate airline gate assignment scenario as shown in **Exhibit 5.1-2** produced no additional gate demand but would allow Allegiant Airlines to make use of additional gate holdroom capacity at the end of the concourse. This would only be advantageous if no near simultaneous departure flights occur at the adjacent gates.

Exhibit 5.1-2: Alternate Gate Assignments by Airline



Source: Alliance, October 2022

5.1.3 Passenger Boarding Bridges

There are ten PBBs at SGF, one for each terminal gate. **Table 5.1-5** below identifies the PBBs, the year they were built, and the year they were installed at the existing terminal.

Table 5.1-5: SGF Passenger Boarding Bridges

Gate	PBB Manufacturer	PBB Model No.	Year Manufactured	Year Installed
1	ThyssenKrupp (TK)	TB 41/19.53	2008	2008
2	ThyssenKrupp (TK)	TB 41/24.5-2	2008	2008
3	Jetway	A3-58/110-125R	1998	1998
4	ThyssenKrupp (TK)	Tb 41/24.5-2	2008	2008
5	Jetway	SA2-91/125-125R	1991	2006
6	Jetway	A2-65/99-125R	1991	2006
7	Jetway	A3-48/86-125R	1991	2006
8	Jetway	AD265/99-125R	2001	2001
9	ThyssenKrupp (TK)	TB 41/19.5-3	2008	2008
10	ThyssenKrupp (TK)	TB 41/19.5-3	2008	2008

Source: SGF; CMT 2022

The PBBs marked in red on the table above are the oldest bridges at SGF, which were brought over to the new terminal building from the old terminal across the airfield in 2006. The ThyssenKrupp (TK) models were added to the existing terminal in 2008.

A PBB condition and assessment report by JBT Aerotech was produced in 2016 where it identified all jet bridges to be in “very good condition” with some general maintenance needed on each bridge. In 2018 the five Jetway bridges were upgraded with new ground power units.

The airport conducts a yearly discrepancy list which prioritizes the maintenance of each PBB. While some of the bridges are in better condition than others, some are reaching the end of their use where maintenance can be more costly than replacement. It is recommended that the annual discrepancy list is continued, and replacement of the older bridges is considered as maintenance increases to outweigh the value of the unit.

5.1.4 Terminal Building

PUBLIC SPACE

This category of the terminal space program represents a major portion of the public passenger processing functions of the terminal building. It contains all the areas typically required and leased by the tenants to support their operations. The following paragraphs describe the requirements for these areas such as ticketing check-in locations and associated queue space, TSA passenger security screening, gate holdrooms, and the baggage claim hall. Additional non-passenger processing areas in this category include restrooms and circulation.

Ticketing and Check-In

This airline function is based on the Peak Hour check-in demand, the associated early arrival passenger profiles, acceptable service times associated with the check-in process, IATA’s optimum passenger wait time by processor type, and acceptable LoS square feet factors which are utilized to evaluate current and future demand.

Currently there are 28 agent check-in positions, and 8 self-service devices (SSD) for a total of 36 equivalent check-in positions. This includes a total of nine vacant agent counter positions. Future ticketing requirements were based on passenger profile data provided by the “2019 Passenger Insights Study” as well as the following assumptions:

- Early passenger arrival profiles applied to the DDFS to determine actual peak demand at each of the airlines check-in counters.
- A system wide load factor of 80% was utilized.
- 100% Origin & Destination (O&D) with 70% of the passengers checking bags.
- 43% Agent use, 15% SSD use (for those airlines with self-service), 44% online check-in (15% utilize bag drop counters upon arrival).
- Processing rates for the various modes of check-in include agent with bags, agent without bags, SSD with bags, and SSD without bags with assumes rates of 2.5 to 3 minutes for agents, 2 to 2.5 minutes per kiosk, and 1.8 minutes for bag drop.

- A max queue wait time of 10 minutes (IATA LoS “C”) and typical queue depth of 15 feet plus 10 feet of cross-circulation in front of the agent counters. Currently both check-in islands provide a queue depth of 12 feet.
- 6 linear feet per agent position (includes one bag scale per agent)

Overall, the ticketing positions as shown in **Table 5.1-6** are adequate throughout the planning horizon with additional capacity available from the current vacant counter positions. The programmed queue area exceeds existing capacity today, however additional depth could be converted from the excess cross-circulation depth between the entrance vestibules and the queue entrances. While plenty of queueing depth is available between the two existing ticketing islands, should a third island ever be implemented the resulting depth dedicated for queueing (when taking into account the required cross-circulation width) will become constrained.

Table 5.1-6: Ticketing Position Requirements

TICKETING	BASE YEAR 2022		PREFERRED FORECAST			
	Existing	Recommended	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
North Island (DL, UA)						
Agent	6	6	6	6	7	8
SSD	6	2	2	2	2	2
Vacant	8	-	-	-	-	-
<i>Subtotal</i>	<i>20</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>9</i>	<i>10</i>
South Island (AA, G4)						
Agent	11	6	7	7	8	8
SSD	2	1	1	1	1	1
Charter ¹	2	-	-	-	-	-
Vacant	1	-	-	-	-	-
<i>Subtotal</i>	<i>16</i>	<i>7</i>	<i>8</i>	<i>8</i>	<i>9</i>	<i>9</i>
Grand Total	36	15	16	16	18	19
Check-in Queue						
North Island (ft ²)	1,078	1,470	1,470	1,470	1,620	1,770
South Island (ft ²)	1,078	1,320	1,470	1,470	1,620	1,620
Total (sf)	2,156	2,790	2,940	2,940	3,240	3,390

1/ Charter activity was not included in the DDFS analysis

Source: Alliance, October 2022

TSA Passenger Security Screening Checkpoint (SSCP)

This category is dedicated to the TSA space for screening departing passengers. Demand calculations were based on the common use peak 30 minutes of the departing peak hour since all airlines will be utilizing a single consolidated checkpoint for passenger screening. Future planning requirements, as previously stated, are based on the TSA Checkpoint Requirements and Planning Guide (CRPG) published September 2021.

Currently there are three lanes providing screening for both PreCheck and standard passengers. Future requirements are based on the following planning guidelines and communication with local TSA:

- Passenger early arrival profile data provided by the “2019 Passenger Insights Study”
- A peak 30-minute demand of approximately 40% of the peak hour was calculated from each of the design day schedules when applying the passenger early arrival profiles
- Local TSA provided a passenger split of approximately 45% PreCheck versus 55% standard passengers.
- Average throughput of 150 and 100 passengers per lane per hour for PreCheck and standard passengers respectively.
- An additional 10% of the daily enplanement activity was added for employee and crew screening through the PreCheck lanes.
- To calculate lane requirements an industry acceptable maximum waiting time of 5 minutes and 10 minutes in the queue was assumed for PreCheck and Standard lanes respectively.
- A TSA guideline of 600 SF per lane was utilized for instances when lanes are not fully operational throughout the peak hour which equates to an IATA average LoS C of 12 SF per passenger.
- Two Ticket Document Checkers (TDC) per lane to provide stable passenger flow to the screening lanes.
- Screening area includes one required Private Screening Room (PSR) at 120 SF
- An exit corridor width of 15 feet.

Table 5.1-7 indicates that, when utilizing the assumptions outlined, the existing checkpoint number of lanes and associated screening area and queue is adequate until PAL 2 (2031) when an additional lane, associated screening area and queue space is required. The area assumptions utilized for sizing the screening area accounts for future TSA screening equipment such as their Checkpoint Property Screening System (CPSS) which includes Computed Tomography (CT) x-ray devices, proper divesting length, and a separate recomposure zone of approximately 20 feet in length.

The existing queue area provides two TDC for the current three-lane checkpoint which is four less than current TSA guidelines requiring two TDC per lane. Queue flow would benefit from additional TDC positions and consideration should be given for proper spacing of these podiums to facilitate passenger flow to the screening lanes.

Given the oversized exit lane width which ranges from 17 feet near the SSCP recomposure exit area to approximately 34 feet at its widest point, additional screening space for the fourth lane could be provided by expanding into the existing exit corridor. For the purposes of this analysis a more typical 15-foot width has been used.

Table 5.1-7: TSA Passenger Security Screening Requirements

SSCP ¹	BASE YEAR 2022		PREFERRED FORECAST			
	Existing	Recommended	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
Checkpoint Lanes						
PreCheck	1	1	1	2	2	2
Standard	2	1	2	2	2	2
Total Lanes	3	2	3	4	4	4
Checkpoint Area						
Screening Area ²	5,471	3,320	4,920	6,520	6,520	6,520
Exit Corridor	5,211	2,060	2,060	2,060	2,060	2,060
Total (ft²)	10,682	5,380	6,980	8,580	8,580	8,580
Checkpoint Queue						
PreCheck	-	600	600	1,200	1,200	1,200
Standard	-	600	1,200	1,200	1,200	1,200
Total (ft²)	2,088	1,200	1,800	2,400	2,400	2,400

1/Indicated areas exclude TSA office space

2/Area includes 1-120 SF PSR

Source: Alliance, October 2022

Passenger Gate Holdrooms

Holdrooms are based on the required mix of aircraft gates and the average seating capacity of each aircraft design group. These areas generally consist of the passenger seating area, the airlines podium and associated queue space, the loading bridge egress corridor, circulation and standing areas, and any additional square footage allowances for areas such as soft-seating or charging stations. The gate holdrooms are based on the mix of aircraft found in **Table 5.1-4**. Additional factors and assumptions include the following:

- An 80% load factor.
- An IATA "Optimum" (LoS "C") with 70% of the passengers seated at 21.6 square feet per passenger and the other 30% standing at 14.5 square feet was also utilized.
- A gate holdroom depth of 35 feet allows for the area to provide soft seating zones and a deeper queue area at the gate podiums.
- Whenever possible gate holdrooms are suggested to be configured in "shared" or "paired" layouts in order to take advantage of the adjacent gate holdrooms seating area. However, this is only achievable when no near simultaneous departures occur at the adjacent holdroom which is very dependent on airline scheduling patterns. For this analysis a 10% reduction factor for gates in a "paired" layout was utilized.

Based on the aircraft mix identified in the base schedule and the anticipated upgauging identified in the aviation forecast the existing gate holdroom area, as noted in **Table 5.1-8**, will reach capacity by PAL 1 (2026). Given the existing overall depth of approximately 37 feet, as compared to the 35 feet utilized for the analysis, and the existing gate holdroom seating areas which appear to be able to handle

additional seating capacity, the overall future seating requirements may be able to be satisfied with additional seats. An additional study will be required.

Table 5.1-8: Passenger Gate Holdrooms

GATE HOLDROOMS	BASE YEAR 2022		PREFERRED FORECAST			
	Existing	Recommended	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
ADG						
Medium Regional (CR2, ER4)	-	3,250	2,170	-	-	-
Large Regional (CR9, E75)	-	6,490	8,120	9,740	9,740	9,740
Narrowbody (319/320)	-	9,240	9,240	12,320	12,320	12,320
Total Lanes	19,708	18,980	19,530	22,060	22,060	22,060

Source: Alliance, October 2022

Baggage Claim Hall

This category represents the area occupied by the baggage claim devices and the retrieval area for active claiming. Baggage claim requirements are primarily based on the percentage of deplaned terminating passengers in a peak 20-minute period within the peak hour, the percentage of those passengers checking bags, and to a lesser extent the number of bags checked. Typically, there are two methods to calculate claim capacity, by passenger or baggage accumulation. Since most domestic passengers arrive at the claim device before their baggage, they will typically claim their bag on the first revolution of the device. This results in providing adequate linear claim frontage to accommodate the concentration of these peak passengers and their potential visitors. A typical industry planning standard is to assume all passengers will be no more than one person deep to be able to reach in/around to the claim device when the passenger's baggage is presented. This results in a LoS "C" planning ratio of 1.5 linear feet per claiming passenger. Additional factors and assumptions included:

- Assumed common use peak hour
- Load factors of 80%, 100% terminating passengers, with 70% of those claiming bags.
- A peak 20-minute average factor of 63%.
- Travel party size of 1.8 (2019 Passenger Insights Study)
- 35 square feet per linear foot of slope plate claim (includes device, retrieval area, and circulation within the positive claim area).

The existing baggage claim hall includes two sloped plate carousel claim devices with claim frontage of approximately 116 linear feet each for a total of 232 linear feet. This size, when using the assumptions outlined, is capable of supporting a typical Narrowbody aircraft with multiple flights by smaller regional type aircraft. The two existing devices and associated claim area, as presented in **Table 5.1-9**, will more or less be sufficient until PAL 4 (2041) when an additional device is required to support the future

peak arrival requirements. Expansion area is available between the two existing devices today accommodating an additional sloped plate device of equal length. When including this third device today, the existing resulting 36 square feet per linear foot of claim ratio is adequate to support the recommended claim area sizing now and throughout the planning horizon.

Table 5.1-9: Baggage Claim Requirements

BAGGAGE CLAIM	BASE YEAR 2022		PREFERRED FORECAST			
	Existing	Recommended	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
Claim Hall						
Claim Devices (Slope plate)	2	2	2	2	2	3
Claim Length Required (linear feet)	-	221	250	175	224	278
Claim Length Programmed (linear feet)	232	240	240	240	240	360
Claim Area¹ (ft²)	12,620²	8,400	8,400	8,400	8,400	12,600

1/Includes devices, queue/retrieval area, and circulation within the positive claim area

2/Total area includes future expansion area for an additional claim device which is currently being utilized for an art gallery space

Source: Alliance, October 2022

Restrooms

This category represents the area of public space allocated to passenger restroom facilities. The program has been divided between the landside pre-security and airside post-security portions of the terminal and related gated portions of the concourses.

The rationale for calculating the number of restroom locations, fixtures, and associated area by landside and airside followed that found in the ACRP Report 226, *“Planning and Design of Airport Terminal Restrooms and Ancillary Spaces”*. It is recommended that restroom locations should provide at a minimum as many fixtures for women as are provided for men. For the landside portion of the existing terminal, the ticketing and baggage claim restroom areas provide an equal split of fixtures between women and men as do the two locations within the airside concourse area. Existing landside square foot per fixture ratios averaged 98 square feet while the gated concourse locations averaged slightly over 81 square feet. Modern square-feet/fixture ratios are higher to account for increased circulation space within the restroom areas, grooming space, ledges for personal items, larger stalls for carry-on baggage, and wider chase space for easier accessibility. For the purpose of this analysis the following assumptions and guidelines were utilized for the landside (pre-security) portions of the terminal:

- A 40%/60% male/female ratio (2019 Passenger Insights Study)
- Total O&D peak hour volume and their visitors
- Approximately 118 average square feet/fixture plus 100 square feet for each family restroom.

For the airside (post-security) concourse locations, the following assumptions were utilized:

- 50% average peak 20-minute percent of peak hour
- 60% restroom utilization
- 40%/60% male/female ratio (2019 Passenger Insights Study)
- Approximately 118 average square feet/fixture plus 100 square feet for each family restroom, 128 square feet for Nursing Mother's Room, and 140 square feet for a Service Animal Relief Ara (SARA)

Based on the above factors and the calculation methods from ACRP Report 226 both the existing landside and airside number of total fixtures is adequate throughout the planning horizon. The airside however would benefit from one additional women's fixture by PAL 2 (2031). Existing square feet/fixture is below the recommended guidelines which consider the modern restroom design aspects as stated above. Although the existing terminal provides both an outdoor SARA and a pre-security Mamava lactation pod, the program provides additional space post-security within the concourse for both functions in order to enhance the passenger experience.

Ticket Lobby, Baggage Claim, and General Public Circulation

Terminal ticket lobby and baggage claim circulation areas represent the unobstructed clear paths from any seating area and vestibule leading up to the ticket counter queue lease lines and the positive claim area within the baggage claim hall. The existing ticket area provides a clear cross-circulation width of approximately 23 feet running the majority length of the ticket lobby. For this planning analysis a 20-foot corridor width has been utilized which is adequate for a facility of this size. The existing baggage claim general circulation area is approximately 32 feet in width. A more typical 15 feet was utilized for this analysis.

General circulation accounts for all other areas of the terminal that make up the public functions of the terminals and include areas such as vertical circulation elements, corridors, and any other architectural spaces that tie the functional public elements of the terminal together. Typical planning ratios range from 15% to 30% of the public serving spaces. The existing ratio of approximately 16% was used for this analysis.

Secure Concourse Circulation

This category represents the area beyond the security screening checkpoint areas and consists primarily of the central corridor of the concourse and adjacent egress stairs on the gate holdroom level including the fixed ramp links to the PBB. For future planning a 30-foot corridor width has been assumed (versus the existing 22 feet) which is a typical planning standard for a double loaded concourse (i.e., gate holdrooms on both side of the concourse) without moving walks. The future calculated area is based on the NBEG ratio or an area per equivalent concourse length determined by total gates. However, the actual amount of secure circulation will depend on the specific proposed concourse configuration(s) and whether they consist of gates on one or both sides of the corridor and whether gates wrap the ends of the concourse. As a result of the recommended 30-foot corridor width, a calculated square feet per NBEG ratio of approximately 2,226 square feet was utilized (versus the existing approximately 1,700 square feet/NBEG).

AIRLINE SPACE

This category of the terminal space program represents a major portion of the baggage handling functions of the terminal. It contains all the areas typically required and leased by the tenants to support their operations. The following paragraphs describe the requirements for these areas such as checked baggage screening, outbound baggage make-up, and inbound baggage handling.

TSA Checked Baggage Screening

Currently all checked baggage is being screened in the Explosive Detection System (EDS) Room located on the Apron Level. The room provides space for two semi-integrated CT-80 EDS machines capable of screening 200 bags per hour per machine with one capable of fully automated oversized baggage screening capabilities. At full operating capacity the existing screening area yields approximately 1,570 square feet per EDS unit. This factor includes the infeed and outfeed conveyors, manually roller tables, ETD screening tables and associated equipment, EDS units, circulation, and any office and storage rooms that support the baggage screening function. Additional factors and assumptions included:

- The existing baseline DDFS was analyzed for the “distributed” (when applying passenger early arrival profiles) common use peak hour in order to develop a peak 10-minute baggage flow which is typically used to calculate capacity.
- Checked bag per passenger ratio of 0.7.
- Calculations are based on the TSA’s formula for projecting peak 10-minute demand and subsequent number of EDS machines.
- A future ratio of 1,900 SF per EDS unit would allow for a more efficient orientation of the CT-80XL EDS machine rotated perpendicular and between the infeed and outfeed conveyors.

Current capacity as summarized in **Table 5.1-10** is adequate to handle future demand throughout the planning horizon.

Table 5.1-10: TSA Checked Baggage Screening Requirements

TSA CHECKED BAGGAGE SCREENING	BASE YEAR 2022		PREFERRED FORECAST			
	Existing ¹	Recommended	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
EDS Screening						
Assumed Number of Airlines	4	4	4	4	4	4
Number of EDS Units	2	1	2	2	2	2
Total Area (ft²)	3,319	1,900	3,800	3,800	3,800	3,800

¹Total area includes a small storage room across the corridor from the baggage screening room.

Source: Alliance, October 2022

Outbound Baggage Make-up

This category represents the area used for the accumulation, storage, and make-up of outbound baggage from the ticket counter and curbside check-in areas. This space typically consists of the make-up units, baggage train circulation and maneuvering lanes, and the tug/cart staging areas. Depending on the operational needs additional space may be added which includes lanes for two-way traffic, curb areas and walkways for ground handlers, and additional circulation which ties other areas of the make-up area together.

Requirements are calculated based on the number of total carts required to be staged adjacent to the makeup devices during the peak departure period and the area associated with those carts, the device(s), staging areas, and maneuvering area expressed as a square foot per cart ratio. The planned single make-up slope plate carousel is designed to accommodate eight concurrent flights during the makeup period each requiring on average two baggage carts. Additional factors and assumptions included:

- Baggage cart requirements are based on a 90-minute staging period prior to a flight's scheduled departure time.
- 50 seats per cart.
- Resulting planning ratios of 565 square feet per cart.

As indicated in **Table 5.1-11** below, the existing make-up room provides sufficient area throughout the planning horizon.

Inbound Bag Laydown

The inbound bag category represents the area that is used to deliver bags to the baggage claim devices. This area includes pier conveyors where the bags are off-loaded, work aisles, and bypass lanes. A planning ratio of 1,480 square feet per off-load area for the laydown area was used in the analysis. This does not take into account additional circulation space around the ends of the conveyor piers or any additional space resulting from the angled alignment of the existing piers.

Table 5.1-10 indicates the existing area is more than adequate throughout the planning horizon. Should larger Narrowbody aircraft and increased checked baggage occur in the future requiring additional carts, the existing area appears to allow for the extension of the conveyor piers to handle additional off-load capability.

Table 5.1-11: Outbound Baggage Makeup & Inbound Baggage Laydown Requirements

BAG MAKE-UP/ INBOUND LAYDOWN	BASE YEAR 2022		PREFERRED FORECAST			
	Existing	Recommended	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
Baggage Make-up						
Assumed Number of Airlines	4	4	4	4	4	4
Number of Carts	20 ¹	5	8	12	15	17
Total Area (ft²)	9,989	2,760	4,200	7,020	8,190	9,360
Baggage Laydown						
Number of Laydown Piers	3	2	2	2	2	3
Inbound Laydown Area (ft²)	8,576²	2,960	2,960	2,960	2,960	4,440

1/Based on existing CAD plans

2/Area includes expansion space for a future laydown pier

Source: Alliance, October 2022

CONCESSION SPACE

This category of the terminal space program represents all the areas devoted to commercial concessions that generate revenue for the Airport. In general, these include food/beverage, news/gift/sundry (business centers, shoeshine, specialty stores, etc.), rental car, and other revenue generating functions. These amenities provide the passenger with necessary services during the processing function and provide vital revenue to the airport.

There are two general planning rules to approximate overall concessions areas; one suggesting approximately eight to 12% of the public serving space be allocated to concessions, the other utilizing a ratio of square feet of concessions space per 1,000 annual enplanements. These areas typically include any space which the public has unrestricted access to. Of this area it is recommended that 80-90% of the total concessions area be allocated to the post security or airside portion the terminal. The remaining 10-20% is allocated to the non-secure or landside portion of the terminal. Due to the financial importance of the concession program, it is suggested that the Airport seek a concession planning specialist prior to determining a final airside/landside split.

The Airport has approximately 7% of the public area allocated to concessions revenue generating space, which is slightly below the typical 8-12% planning standard. The revenue generating area in the secure area of the terminal accounts for 71% of the total public concessions space with 29% located on the pre-security landside portion of the terminal. Utilizing a ratio of 13 square feet per 1,000 annual enplanements resulted in an average of approximately 9% concession space to public areas over the forecast horizon while also utilizing the existing split of landside to airside concessions space. The airport has concessions support to revenue area ratio of approximately 24%. This accounts for back-of-house (BOH) space such as food/prep/kitchen areas, storage, and other offices to support the public facing concessions space. The existing ratio is near the low end of the planning range of 25-35%. For this analysis a ratio of 25% has been used. Existing rental car space was assumed to remain constant throughout the planning horizon.

Assuming the same existing landside to airside concessions split, **Table 5.1-12** indicates the airside would benefit from additional storage space today and exceeding capacity by PAL 2 (2031).

As stated previously, while the rental car facilities will remain constant, **Table 5.1-12** indicates both landside and airside concessions will gradually increase in area over the planning horizon due to the assumptions previously stated. Excluding the rental car area, the landside concessions will exceed capacity by PAL 2 (2031). See **Appendix 12** for concessions space breakdown.

NON-PUBLIC SPACE

This category includes the BOH area that is not accessible to the public and generally consists of areas such as airport administration, airport police, and any other airport related offices and support space, restrooms, and circulation. Other areas include the building support spaces such as loading docks, maintenance, janitorial, storage and shops, mechanical/electrical/plumbing (MEP), IT/communications, and structural non-net portions of the building. These areas along with the functional areas of the terminal and related concourses combine to create the gross building footprint.

Airport Operations (Maintenance, Janitorial, Storage, Shops)

This category accounts for the building maintenance facilities and consists of shops, storage, office space, circulation, and janitorial space. Typical planning standards require 1-2% of the total functional areas. The existing ratio of 8.5% is due to the large maintenance room adjacent to the EDS baggage screening space. As such a more typical 2% was used.

Mechanical, Electrical, Plumbing, Communications

This category of the program includes all the utility support areas for the terminal and is generally a percentage of the enclosed functional areas of the terminal which typically ranges between 8-15%. The top end ratio of 15% was utilized and assumes the existing MEP areas have some additional capacity built in. Any future building expansion will need to evaluate whether additional MEP capacity will be required.

Building Structure (Structural/Non-Net/Void)

This portion of the program ties together all the previous functional elements of the program to provide a better estimate of the total gross building area. Unusable space or special structures often make up this category of the program and depending on how the gross areas are determined a factor of 2-5% is typically added for this category. The existing terminal gross area was taken from the airport terminal CAD drawings. All functional elements were then added together and subtracted from the overall gross area footprint to calculate the non-net area with a resulting ratio of approximately 4%. For the purpose of this analysis the existing ratio has been used.

PASSENGER TERMINAL FACILITY REQUIREMENTS SUMMARY

Table 5.1-12 summarizes the space program by year. The programmatic approach to sizing facility areas as previously described is commonly used as the first step during the planning and preliminary design of any expansion project. As a project proceeds through the design process functions such as ticketing, baggage areas, gate holdrooms, circulation areas, concessions, and other space-based requirements will often change as a result of the physical configuration of the design and cost

considerations. The demand requirements contained in **Table 5.1-12** are considered a minimum generic facilities requirement program that is recommended to support the design aircraft and their associated peak hour passenger activity levels. While projected demand is not expected to exceed current facility capacity throughout the planning horizon, individual spaces should be reviewed to determine the time at which their capacity shortfalls will occur. Industry best practice is to start planning for additional space which serves the public and baggage processing functions when demand reaches approximately 85% of existing capacity within the various areas of the terminal and related concourse areas. Crossing this capacity threshold triggers the need to begin planning, design, and the construction process to replace facilities in time to meet the growing passenger demand levels. **Table 5.1-13** indicates the point at which these trigger points will be met. A more detailed program breakdown is provided in **Appendix 12**.

Table 5.1-12: Summary of Terminal Facility Requirements

PROGRAM AREA	2022		PREFERRED FORECAST			
	Existing	Recommended	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
Public Space						
Circulation ¹	55,750	37,260	39,020	41,840	42,370	44,030
Ticket Lobby Queue	2,155	2,790	2,940	2,940	3,240	3,390
TSA Passenger Security Screening ²	15,221	9,030	11,230	13,430	13,430	13,430
Passenger Gate Holdrooms	19,708	18,000	19,530	22,060	22,060	22,060
Baggage Claim ³	14,397	9,270	9,300	9,490	9,600	13,660
Restrooms (pre/post security) ⁴	4,988	4,790	5,510	5,870	5,780	5,870
Other/Misc. Tenants ⁵	1,687	1,680	1,680	1,680	1,680	1,680
Subtotal (ft ²)	113,906	82,660	89,270	97,310	98,250	104,120
Airline Space						
Ticketing (counter, ATO)	7,086	3,850	4,060	4,060	4,480	4,690
TSA Checked Baggage Screening	3,139	1,900	3,800	3,800	3,800	3,800
Outbound Baggage Make-Up	9,989	2,760	4,200	7,020	8,190	9,360
Airside Operations/Storage	3,160	3,010	3,060	3,400	3,400	3,400
Inbound Baggage Claim Laydown	8,576	2,960	2,960	2,960	2,960	4,440
Inbound/Outbound Baggage Circ. ⁶	33,851	10,610	12,850	17,210	19,020	24,000
Baggage Service Offices (BSO)	268	270	270	270	270	270
Other Offices/Support (DGS)	2,778	2,800	2,840	3,160	3,160	3,160
Subtotal (ft ²)	68,847	28,160	34,040	41,880	45,280	53,120
Concessions						
Landside/Storage ⁷	9,568	7,820	8,090	8,760	9,090	9,210
Airside/Storage ⁸	6,487	6,300	6,940	8,600	9,390	9,690
Subtotal (ft ²)	16,055	14,120	15,030	17,360	18,480	18,900
Non-Public Space						
Non-Airline Tenant Space ⁹	1,979	1,980	1,980	1,980	1,980	1,980
Airport Administration	12,768	12,770	12,770	12,770	12,770	12,770
Restrooms/Circulation	7,119	4,130	4,580	5,200	5,450	6,030
Airport Operations ¹⁰	18,485	2,880	3,150	3,530	3,640	3,940
Building Operations/Systems ¹¹	53,249	30,290	33,200	37,450	38,820	41,810
Subtotal (ft ²)	93,600	52,050	55,680	60,930	62,660	66,530
Total Gross Area (ft ²)	292,408	176,990	193,960	217,480	224,670	242,670

1/Includes ticket lobby, concourse, baggage claim, general public circ., and public seating

2/Includes queuing, exit corridor, and TSA offices

3/Includes devices, retrieval areas, circulation, and meter & greeter area

4/Includes Family Room, Nursing Mother's Room, and SARA

5/Includes Global Entry Enrollment Center, US Mail Drop, and Meditation suite, info and displays

6/Includes cart storage and other GSE equipment parking

7/Includes rental car counters, queues, and associated offices, and concessions support spaces

8/Includes associated offices, and support spaces

9/Includes Airport Police, mail, and evidence process rooms

10/Includes maintenance, janitorial, storage, and shops

11/Includes loading dock, MEP, IT/Comms., and building structure (non-net/chase/void space)

Source: Alliance, October 2022

Table 5.1-13: Terminal Program Trigger Point Summary

PROGRAM AREA	2022		PREFERRED FORECAST			
	Existing	Capacity Threshold	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
General						
Annual Enplanements	545,789		601,424	745,378	814,090	840,018
Aircraft Gates/PBB	10	10	10	10	10	10
Aircraft Positions	13	12	12	12	12	12
Public Space						
Circulation	55,750	✓	✓	✓	✓	✓
Ticket Lobby Queue	2,155	✗	✗	✗	✗	✗
TSA Passenger Security Screening	15,221	✓	✓	⚠	⚠	⚠
# of Screening Lanes	3	✓	⚠	✗	✗	✗
Screening Area	5,471	✓	⚠	✗	✗	✗
Passenger Gate Holdrooms	19,708	⚠	⚠	✗	✗	✗
Baggage Claim	14,397	✓	✓	✓	✓	⚠
# of Devices	2	✓	✓	✓	✓	⚠
Restrooms (pre/post security)	4,988	⚠	✗	✗	✗	✗
Other/Misc. Tenants	1,687	⚠	⚠	⚠	⚠	⚠
<i>Subtotal (ft²)</i>	<i>113,906</i>	✓	✓	⚠	⚠	⚠
Airline Space						
Ticketing (counter, ATO)	7,086	✓	✓	✓	✓	✓
TSA Checked Baggage Screening	3,139	✓	✗	✗	✗	✗
Outbound Baggage Make-Up	9,989	✓	✓	✓	✓	⚠
Airside Operations/Storage	3,160	⚠	⚠	✗	✗	✗
Inbound Baggage Claim Laydown	8,576	✓	✓	✓	✓	✓
Inbound/Outbound Baggage Circ.	33,851	✓	✓	✓	✓	✓
Baggage Service Offices (BSO)	268	⚠	⚠	⚠	⚠	⚠
Other Offices/Support (DGS)	2,778	⚠	⚠	⚠	⚠	⚠
<i>Subtotal (ft²)</i>	<i>68,847</i>	✓	✓	✓	✓	✓
Concessions						
Landside/Storage	9,568	✓	✓	⚠	⚠	⚠
Airside/Storage	6,487	⚠	✗	✗	✗	✗
<i>Subtotal (ft²)</i>	<i>16,055</i>	⚠	⚠	✗	✗	✗
Non-Public Space						
Non-Airline Tenant Space	1,979	⚠	⚠	⚠	⚠	⚠
Airport Administration	12,768	⚠	⚠	⚠	⚠	⚠
Restrooms/Circulation	7,119	✓	✓	✓	✓	✓
Airport Operations	18,485	✓	✓	✓	✓	✓
Building Operations/Systems	53,249	✓	✓	✓	✓	✓
<i>Subtotal (ft²)</i>	<i>93,600</i>	✓	✓	✓	✓	✓
Total Gross Area (ft²)	292,408	✓	✓	✓	✓	✓

Legend

- ✓ Programmed area is less than existing
- ⚠ Programmed area is at or over 85% of capacity
- ✗ Programmed area is greater than existing

Source: Alliance, October 2022

5.1.5 Alternative Forecast Sensitivity Analysis

To gauge the effects of the Master Plan's alternate "High Scenario" forecast, outlined in Chapter 3 – *Forecast of Aviation Demand*, on future terminal gate and building area requirements an additional program and associated aircraft gate needs was developed. This "High" forecast scenario shown in **Table 5.1-14** includes increased enplanement and operations activity both annually and during the peak hour. The design day flight schedules developed for this scenario include the addition of a new airline, additional aircraft equipment up gauging, and increased RON activity due to a low-cost carrier base.

Table 5.1-14: High Scenario Annual and Peak Hour Activity Forecast Summary

	BASE YEAR 2022	HIGH FORECAST PLANNING YEARS			
		PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
Enplanements					
Annual	545,789	716,401	890,830	972,845	999,130
Peak Hour Passengers					
Enplaned	257	526	547	569	632
Deplaned	346	526	568	614	666
Total	492	837	987	1,048	1,112
Peak Hour % of Daily Activity					
Enplaned	11.8%	23.3%	19.5%	18.6%	20.1%
Deplaned	15.8%	23.3%	20.3%	20.0%	21.2%
Total	22.5%	37.1%	35.2%	34.2%	35.3%

Note: The total peak hour does not reflect the sum of the enplaned/deplaned peak hour components as each occurs in different hours.

Source: CMT, October 2022

Analysis of the schedules, while maintaining Common Use gating, indicates all gates are being utilized for active day flights by PAL 2 (2031) with 11 RON positions. As shown in **Table 5.1-15** both PAL 3 (2036) and PAL 4 (2041) require an additional Narrowbody gate totaling 12 gates and 12 RON.

Table 5.1-15: High Scenario Projected Gate Demand

		BASE YEAR 2022		HIGH FORECAST PLANNING YEARS			
				PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
Annual Enplanements		545,789		716,401	890,830	972,845	999,130
PMAD Departure Ops		26		30	37	37	38
Airplane Design Group (ADG)		Max Gauge ¹	Utilized Gauge	Recommended Gates			
II	Medium Regional	1	3	2	1	-	-
III	Large Regional	3	4	5	4	5	5
	Narrowbody	6	3	3	5	6	7
Total Contact Gates		10 ²	10	10	10	11	12
Total RON		13	9	11	11	11	12
Departures per Gate		2.6		3.0	3.7	3.4	3.2
Annual Enplanements per Gate ³		54,579		71,640	89,083	88,440	83,261

1/Represents the largest aircraft gauge in each design group, not necessarily the aircraft gauge currently being utilized at the gate

2/Existing Gate 9 includes two parking positions, Existing Gate 10 includes 3 parking positions

3/Values rounded

Source: CMT/Alliance, October 2022

The calculated overall building area requirements are still projected to be below current capacity. However, due to the increase in activity, certain areas of the terminal will reach capacity earlier in the planning horizon as summarized in **Table 5.1-16**. A more detailed space breakdown is provided in **Appendix 12**.

Table 5.1-16: High Scenario Terminal Program Trigger Point Summary

PROGRAM AREA	2022		HIGH FORECAST			
	Existing	Capacity Threshold	PAL 1 2026	PAL 2 2031	PAL 3 2036	PAL 4 2041
General						
Annual Enplanements	545,789		716,401	890,830	972,845	999,130
Aircraft Gates/PBB	10	10	10	10	11	12
Aircraft Positions	13	12	11	11	11	12
Public Space						
Circulation	55,750	✓	✓	✓	⚠	⚠
Ticket Lobby Queue	2,155	✗	✗	✗	✗	✗
TSA Passenger Security Screening	15,221	✓	⚠	⚠	⚠	⚠
# of Screening Lanes	3	✓	✗	✗	✗	✗
Screening Area	5,471	✓	✗	✗	✗	✗
Passenger Gate Holdrooms	19,708	⚠	⚠	✗	✗	✗
Baggage Claim	14,397	✓	✓	⚠	⚠	⚠
# of Devices	2	✓	✓	⚠	⚠	⚠
Restrooms (pre/post security)	4,988	⚠	✗	✗	✗	✗
Other/Misc. Tenants	1,687	⚠	⚠	⚠	⚠	⚠
Subtotal (sf)	113,906	✓	✓	⚠	⚠	✗
Airline Space						
Ticketing (counter, ATO)	7,086	✓	✓	✓	✓	✓
TSA Checked Baggage Screening	3,139	✓	✗	✗	✗	✗
Outbound Baggage Make-Up	9,989	✓	✓	⚠	✗	✗
Airside Operations/Storage	3,160	⚠	⚠	✗	✗	✗
Inbound Baggage Claim Laydown	8,576	✓	✓	✓	✓	✓
Inbound/Outbound Baggage Circ.	33,851	✓	✓	✓	✓	⚠
Baggage Service Offices (BSO)	268	⚠	⚠	⚠	⚠	⚠
Other Offices/Support (DGS)	2,778	⚠	⚠	⚠	⚠	⚠
Subtotal (sf)	68,847	✓	✓	✓	⚠	⚠
Concessions						
Landside/Storage	9,568	✓	⚠	⚠	✗	✗
Airside/Storage	6,487	⚠	✗	✗	✗	✗
Subtotal (sf)	16,055	⚠	✗	✗	✗	✗
Non-Public Space						
Non-Airline Tenant Space	1,979	⚠	⚠	⚠	⚠	⚠
Airport Administration	12,768	⚠	⚠	⚠	⚠	⚠
Restrooms/Circulation	7,119	✓	✓	⚠	⚠	⚠
Airport Operations	18,485	✓	✓	✓	✓	✓
Building Operations/Systems	53,249	✓	✓	✓	⚠	⚠
Subtotal (sf)	93,600	✓	✓	✓	✓	✓
Total Gross Area (sf)	292,408	✓	✓	✓	⚠	⚠

Legend

- ✓ Programmed area is less than existing
- ⚠ Programmed area is at or over 85% of capacity
- ✗ Programmed area is greater than existing

Source: Alliance, October 2022

5.1.6 Existing Terminal Apron Assessment

The existing apron accommodates both the concourse aircraft parking and associated taxiway/taxiway system extending from Taxiway F and Taxiway E. The total square acres of this apron area is approximately 19.8 square acres (862,579 square feet). As mentioned previously the apron area accommodates 13 aircraft parking positions served by 10 PBBs.

RON/HARDSTAND POSITIONS

While PAL 4 activity can technically be accommodated by existing gate infrastructure, there is little to no room for operational redundancy or flexibility to accommodate everyday operational deviations such as early arriving aircraft or flight delays, mechanical problems with aircraft or loading bridges, or weather diversions. Further, there is little opportunity to accommodate expanded service levels by existing carriers or new entrants to stimulate competition.

Additional RON/Hardstand positions would be beneficial to enhance operational resiliency. While there is no set formula to determine a required number of “spare” RON/Hardstand positions, planning for approximately 10 – 20% of maximum gate capacity is typical. This equates to 2-3 RON positions at SGF.

AIRCRAFT DEICING

To prevent contaminating the aircraft parking positions during existing deicing operations, aircraft must be pushed back into the apron taxiways on both sides of the concourse. This effectively blocks the flow of aircraft to and from the gates until deicing has concluded. During periods of heavy departure activity this can negatively impact aircraft maneuverability in and out of the terminal area.

The presence of residual deicing fluid on the apron in **Exhibit 5.1-3** illustrates the locations where off-gate deicing operations occur. The adjacent photo shows an aircraft being deiced after pushing back from Gate 5.

Relocating the deicing operation to a dedicated area that does not impede ground movements of adjacent aircraft is recommended. Up to four dedicated deicing positions should be considered in the long-term plan to accommodate the number of departures expected in the peak half-hour (1:15pm to 1:45pm).

Justification for additional apron area related to aircraft gate and RON parking will also be a function of the terminal expansion alternatives and future gate layouts discussed in the Terminal Alternatives chapter.

Exhibit 5.1-3: Aircraft Deicing Locations



Source: CMT

Chapter Six

Airport Alternatives

6.1 Introduction

This chapter presents the Non-Terminal Alternatives Development and Evaluation section of this Master Plan Update (MPU) that identifies and evaluates scenarios and alternatives needed to accommodate the facility requirements presented in Chapter Four. As an essential component in the planning process, this chapter will review alternatives that Springfield-Branson National Airport (SGF or Airport) could develop to meet the needs of airport users, satisfy future demand, and conform to Federal Aviation Administration (FAA) design standards.

The guidelines prescribed in FAA Advisory Circular (AC) 150/5070-6B, Change 2, *Airport Master Plans*, were utilized to ensure the elements and processes outlined by FAA were followed. Additionally, standards set forth in FAA AC 150/5300-13B, *Airport Design* (AC 13B), were applied to airfield design alternatives to identify compliance.

There are endless possibilities of scenarios and concepts that can be developed during the Alternatives Development and Evaluation phase. Therefore, professional judgment and experience have been applied to identify alternatives with the greatest potential for implementation. As such, the alternatives scenarios presented in this section are organized by facility type:

1. Airfield and Airspace
2. General Aviation (GA)/Corporate
3. Cargo/Maintenance, Repair, and Overhaul (MRO)
4. Support Facilities
5. Ground Access, Circulation, and Parking Requirements

An evaluation process analyzed alternatives, ultimately identifying a Preferred Development concept. The Preferred Development concept will be used in the development of the Airport Layout Plan (ALP).

6.2 Airfield and Airspace

The Facility Requirements chapter found that much of the SGF airfield complies with FAA design standards. Areas of opportunity to further enhance safety are as follows:

- 25' runway shoulders along both runways
- 200' x 200' blast pads on RWY 2 & 32
- Adjust the hold bars to 263' from the centerline
- Bring ROFA & RSA incompatibilities into compliance
- Address RPZ incompatibilities
- High-energy intersection mitigation
- Direct access from apron to runway mitigation
- Taxiway shoulders

6.2.1 Runway Design Standards

AC 13B sets forth design standards for runways and elements associated with runways, such as shoulders, blast pads, high-energy intersections, runway safety areas (RSAs), obstacle-free zones (OFZs), object-free areas (OFAs), clearways, and stop bars.

SHOULDERS AND BLAST PADS

Table 6.2-1 presents the runway design standards that are not consistent with AC 13B criteria based on the Runway Design Code (RDC) of Runways 14-32 and 02-20 and subsequently identifies the level of deficiency. In summary, Runways 14-32 and 02-20 do not comply with the runway shoulders and blast pads dimension requirements based on the critical aircraft and RDC of D-IV, as previously identified in this Master Plan Update.

Table 6.2-1: Runway Geometry Standards Evaluation

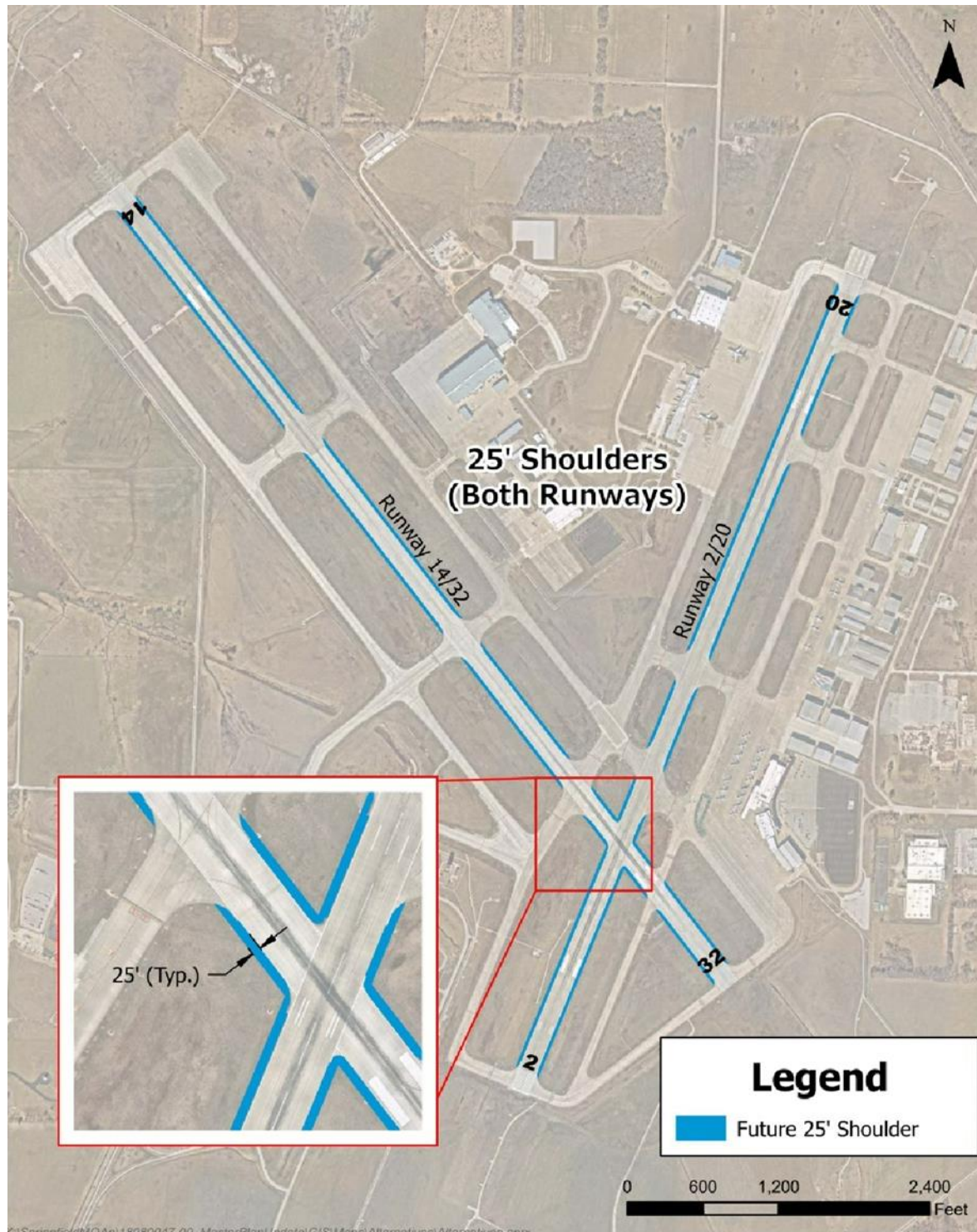
DESIGN ELEMENT	RUNWAY 14-32				RUNWAY 02-20			
	EXISTING		FUTURE		EXISTING		FUTURE	
	14	32	14	32	2	20	2	20
Runway Design Code	D-IV		D-IV		D-IV		D-IV	
Runway Width (ft.)	150		150		150		150	
Shoulder Width (ft.)	0		25		0		25	
Blast Pad Width (ft.)	200	0	200		0	200		200
Blast Pad Length (ft.)	200	0	200		0	200		200

Source: CMT, FAA AC 150/5300-13B

As detailed in Chapter 4 – *Airport Facility Requirements*, AC 13B indicates paved shoulders are required for runways accommodating Airplane Design Group (ADG) IV and higher and are recommended for runways accommodating ADG III aircraft. It is recommended that these blast pads and shoulders be

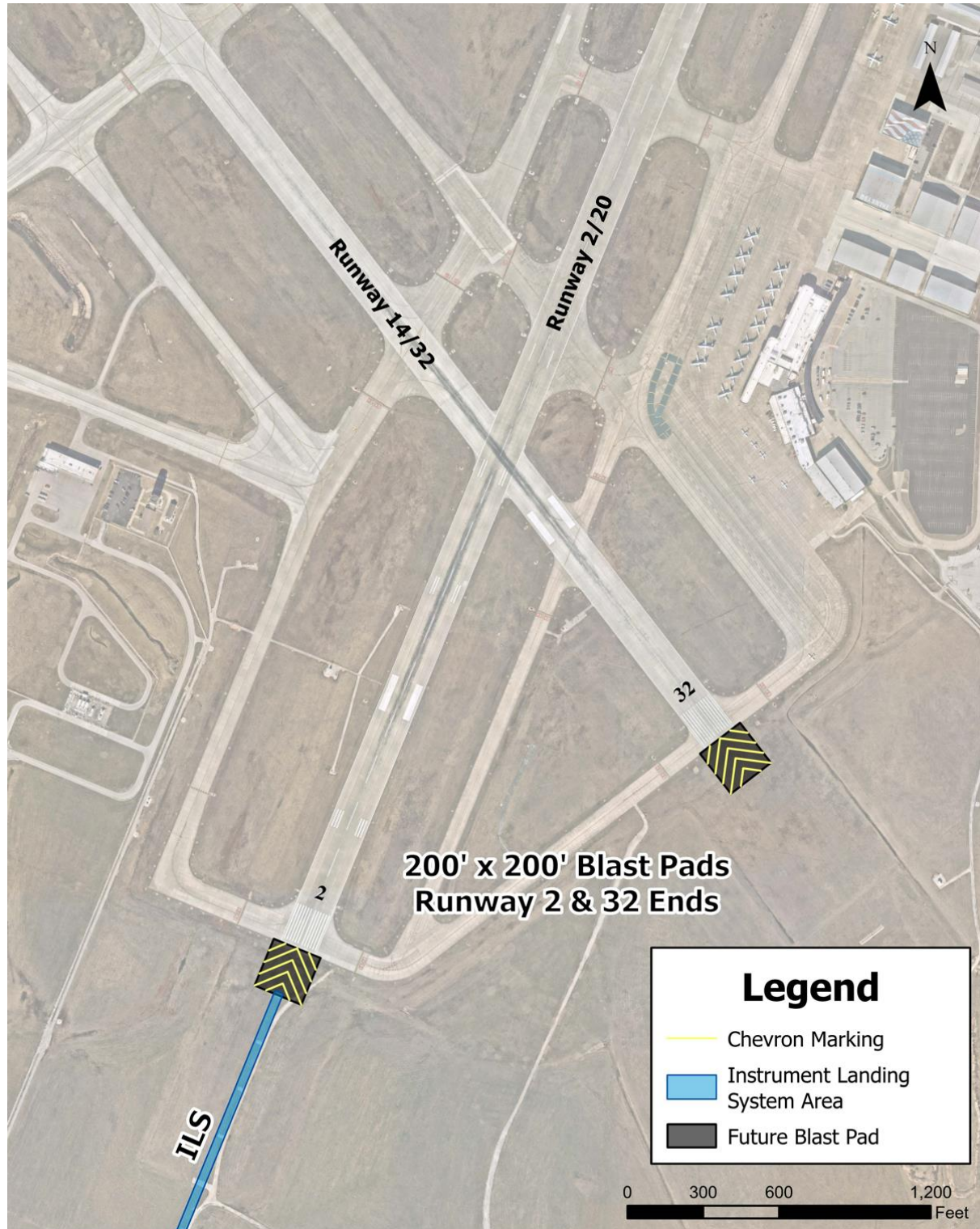
installed if resources are available during the next runway rehabilitation project. Exhibits 6.2-1 and 6.2-2 depict the recommended addition of shoulders and blast pads.

Exhibit 6.2-1: Addition of Runway Shoulders at SGF



Source: CMT (2022)

Exhibit 6.2-2: Addition of Blast Pads to Runways 02 and 32

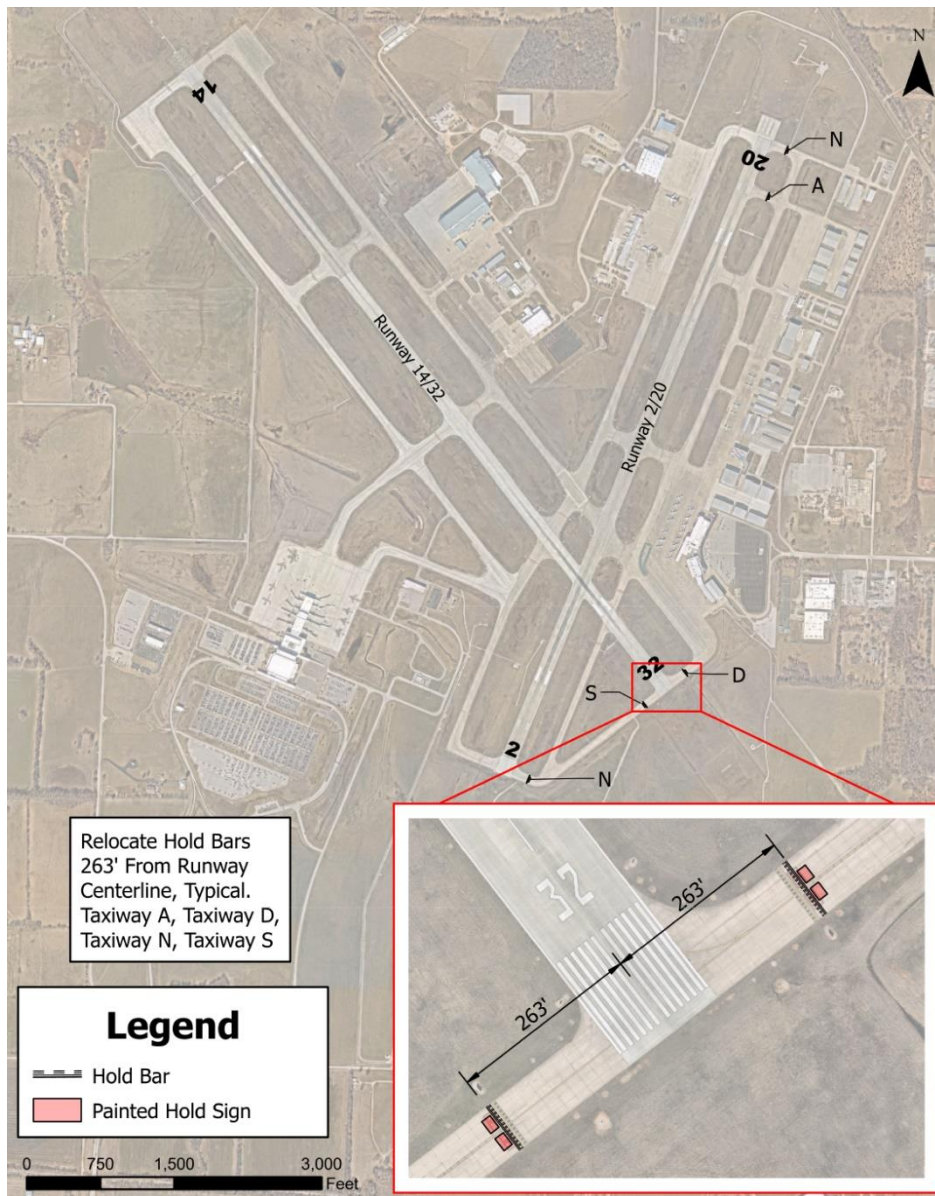


Source: CMT (2023)

HOLDING POSITION MARKINGS

Holding position markings generally identify the beginning of a Runway Safety Area (RSA) and require clearance before crossing. The holding position markings are to increase one (1) foot for every 100 feet above sea level from a base separation of 250 feet from the runway centerline. This means that the holding position markings at SGF need to be a minimum of 263 feet from the runway centerline. There are five instances of deficient markings, in which the separation is less than 263 feet, at approximately 240 feet. **Exhibit 6.2-3** flags the location of each deficiency.

Exhibit 6.2-3: SGF Holding Position Marking Deficiencies



Source: CMT (2022)

Bringing all stop bars to the compliant distance of 263' from the runway centerline is recommended.

6.2.2 Runway Protection Zones (RPZ)

RUNWAY 14 RPZ

Chapter 4 – *Airport Facility Requirements* identified an incompatibility within the Runway 14 RPZ, which is a portion of W Farm Rd 104 (see **Exhibit 4.2-7**). No action is recommended until such time that either the Airport or a surrounding municipality proposes to expand or relocate this roadway. However, the Airport should plan to acquire sufficient control over the portion of non-owned land in the future Runway 14 RPZ.

RUNWAY 32 RPZ

There are no incompatibilities identified for the existing or future Runway 32 RPZ.-

RUNWAY 2 RPZ

There are no incompatibilities identified for the existing Runway 02 RPZ.

RUNWAY 20 RPZ

Chapter 4 – *Facility Requirements* identified an incompatibility within the Runway 20 RPZ, which is a portion of W Willard Road (see **Exhibit 4.2-10**). No action is recommended until such time that either the Airport or a surrounding municipality proposes to expand or relocate this roadway.

RPZ INCOMPATIBILITIES

Given that the identified RPZ incompatibilities at SGF are public roads, mitigation or relocation can represent a challenge due to the extensive planning and resources required to relocate a portion of a busy road. Where practical, Airport owners should own sufficient property interests under the runway approach and departure areas to at least the limits of the RPZ. It is desirable to clear the entire RPZ of all above-ground objects. Where this is impractical, airport owners, as a minimum, should maintain the RPZ clear of all facilities supporting incompatible activities. It is recommended that the Airport monitor activities within each RPZ and continuously work with its neighbors to prevent any incompatible activities and future developments.

If either the Airport or a surrounding municipality considers alternatives to relocate any roads that impact an RPZ, a separate RPZ study will be required.

6.2.3 Runway Safety Areas and Runway Object Free Areas (RSA & ROFA)

As determined in Chapter 4 – *Facility Requirements*, there are several incompatible objects within the ROFA that are not considered “fixed-by-function”, such as wind cones, distance-measuring equipment (DME), localizer, and terrain.

SUPPLEMENTAL WIND CONES

Supplemental wind cones are allowed within the ROFA provided they are currently frangible mounted. SGF’s supplemental wind cones are frangible mounted. At such times when the wind cones need to be replaced, the FAA recommends that they be relocated outside of the ROFA, if physically possible within the supplemental wind cone siting criteria and if allowed by airfield geometry and topography.

DISTANCE-MEASURING EQUIPMENT (DME)

The DME antennas are located within the localizer equipment shelters within the ROFA. The shelters are recommended to be located 1,000 feet beyond the end of the runway and outside the ROFA.

LOCALIZER

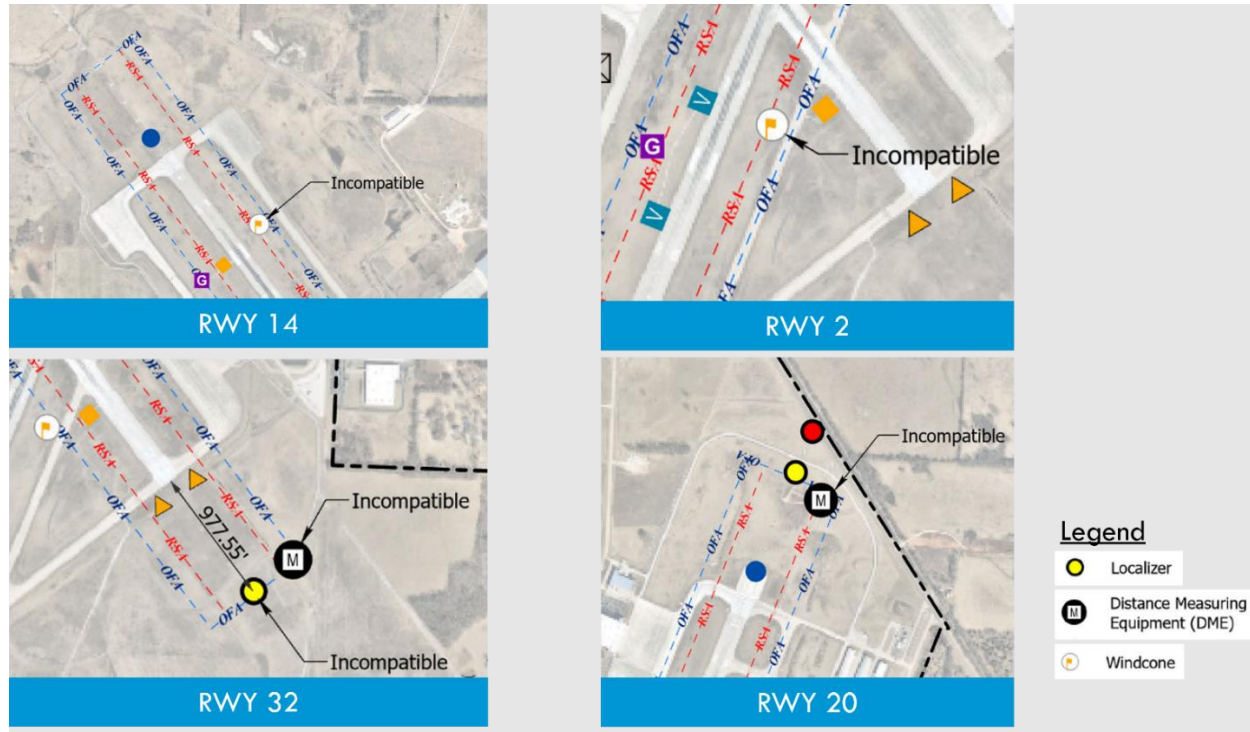
The Runway 14 localizer antenna, located off the end of Runway 32 within the RSA, is measured 977.55’ beyond the Runway 32 threshold. Just as with the DME equipment, it is recommended that the equipment is located 1,000’ beyond the end of the runway, outside of the RSA. The FAA (ATO and Airports) has formally documented the localizer antenna to initiate the budgeting process for FAA (ATO) to request funds and implement the relocation of the localizer antenna out of the RSA at a future date. The RSA Executive Project Summary is included as **Appendix 13**.

Exhibit 6.2-4 below shows the location of each RSA and ROFA incompatibility.

TERRAIN

Terrain off the end of Runway 32 within the ROFA penetrates the FAA’s 20:1 visual approach surface. One result of this penetration is the less-than-optimal one-mile visibility minimums for the Runway 32 instrument approach procedure. The high area of terrain is likely associated with an embankment above an FAA Technical Operations service line in the vicinity. Lowering the service line and grading the area is necessary to mitigate the visual approach surface penetration and request lower (3/4 mile) instrument approach visibility minimums. Further details about the feasibility of reducing the visibility minimums described above are provided in **Appendix 8**.

Exhibit 6.2-4: RSA & ROFA Incompatibilities at SGF



Source: CMT

To reasonably mitigate these incompatibilities in a way that is economically conscious, relocation of this equipment should be done when it has met its expected lifetime or needs repair.

6.2.4 Taxiway Design Standards & Geometry

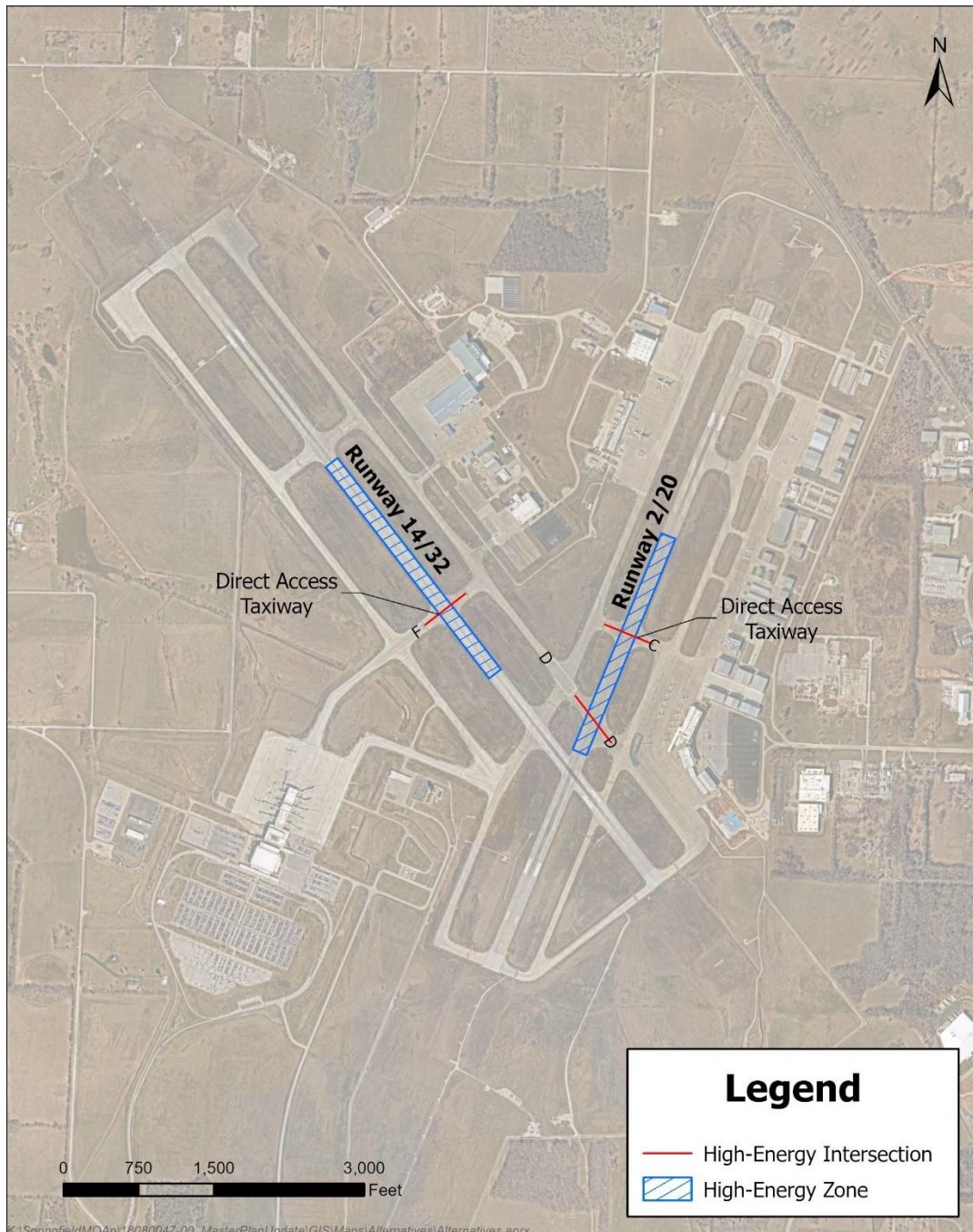
Taxiway design standards are set by the FAA and are a function of the size of aircraft that are intended to use the taxiway. Chapter 4 – *Airport Facility Requirements* identified four taxiway design standards that need to be addressed:

- High-energy intersections
- Direct access from apron to runway
- Taxiway width
- Taxiway shoulders

HIGH-ENERGY INTERSECTIONS AND DIRECT ACCESS FROM APRON TO RUNWAY

There are three high-energy intersections, intersections within the middle third of a runway, at SGF. Two of which are located on Runway 02-20 and one on Runway 14-32. These intersections could pose a problem as this section of the runway is where aircraft are typically traveling the fastest, and collisions are more likely to occur. **Exhibit 6.2-5** below shows the locations of those high-energy intersections.

Exhibit 6.2-5: High-Energy Intersections and Direct Apron to Runway Access at SGF



Source: CMT (2023)

The intersection on Runway 14-32 is located at Taxiway F. The southern crossing on 02-20 is at Taxiway D, and the northern crossing is at Taxiway C. Taxiway D is a full-length parallel taxiway to Runway 14-32, where the intersection with Runway 02-20 on the east side is currently marked on the airport diagram as a cautionary hot spot.

Further studies should be conducted to evaluate preferred alternatives to mitigate each high-energy crossing, ensuring the safe and efficient use of the airfield.

As shown in **Exhibit 6.2-5**, there are two instances where taxiways provide direct access from an apron to a runway. The first is Taxiway F that leads directly from the terminal apron to Runway 14-32. The second is the segment of Taxiway C on the east side of Runway 2-20 that leads from the General Aviation apron to the runway.

For Taxiway F, mitigation alternatives include removing the connector section between Runway 14-32 and Taxiway W or realigning the section of Taxiway F between the terminal apron and Taxiway W so that it no longer provides direct access to Runway 14-32. After coordination with the Airport, the realignment option was chosen so that the connector portion of Taxiway F could continue to serve as a runway exit.

For Taxiway C, the most feasible concept is to remove the section of pavement east of Taxiway N so that aircraft from the apron will need to make a turn onto Taxiway N before accessing the runway.

The recommended taxiway reconfigurations are shown on the Airport Layout Plan.

TAXIWAY WIDTH

All parallel taxiways at SGF are 75' wide and are designed for ADG-IV/TDG-5 aircraft, or aircraft with up to 171-foot wingspans, except the portion of Taxiway N south of Runway 14-32, which is 60' wide. This portion of Taxiway N can accommodate most ADG-IV aircraft, except those in which the cockpit to main gear (CMG) dimension and width of the main gear (MGW) exceed the values prescribed in AC 150/5300-13B, such as the B767-300F. Consideration should be given to widening this section of Taxiway N to comply with TDG 5 criteria.

More detailed aircraft operational and fleet mix data will need to be collected and assessed to justify pavement widths in the General Aviation areas when reconstruction is warranted.

TAXIWAY SHOULDERS

Existing taxiway shoulders at SGF consist of stabilized turf, whereas current FAA guidance calls for paved shoulders on taxiways accommodating ADG-IV and larger aircraft. In the past, FAA only recommended paved shoulders for ADG-IV taxiways. The Airport has requested and received FAA approval to omit paved shoulders on recent taxiway reconstruction projects where the result would be a non-continuous shoulder. Installation of paved shoulders should be considered during future taxiway projects.

6.2.5 Runway Extensions

RUNWAY 02 EXTENSION

Runway 02-20 is currently 7,003' with a planned 1,000-foot extension on the Runway 02 end reflected on the previous Airport Layout Plan (ALP) and is factored into the established airport overlay (AO) districts.

This extension would contribute to airfield resiliency, helping to mitigate the operational and safety impacts should Runway 14-32 be closed or unfavorable due to weather conditions.

In addition to relocating the MALSR approach lighting system, approximately 4.4 acres of RPZ property would need to be acquired to facilitate this extension. This is illustrated in **Exhibit 6.2-6**.

Appendix 10 provides an assessment of runway length needs at SGF.

RUNWAY 14 EXTENSION

As described in **Appendix 6**, *Parallel Runway Assessment*, the potential need exists for a primary runway length of up to 9,000' in the future beyond the planning period. Should this demand transpire sooner than anticipated, an alternative to constructing a new parallel runway is to extend existing Runway 14-32 from its current 8,000' to 9,000'.

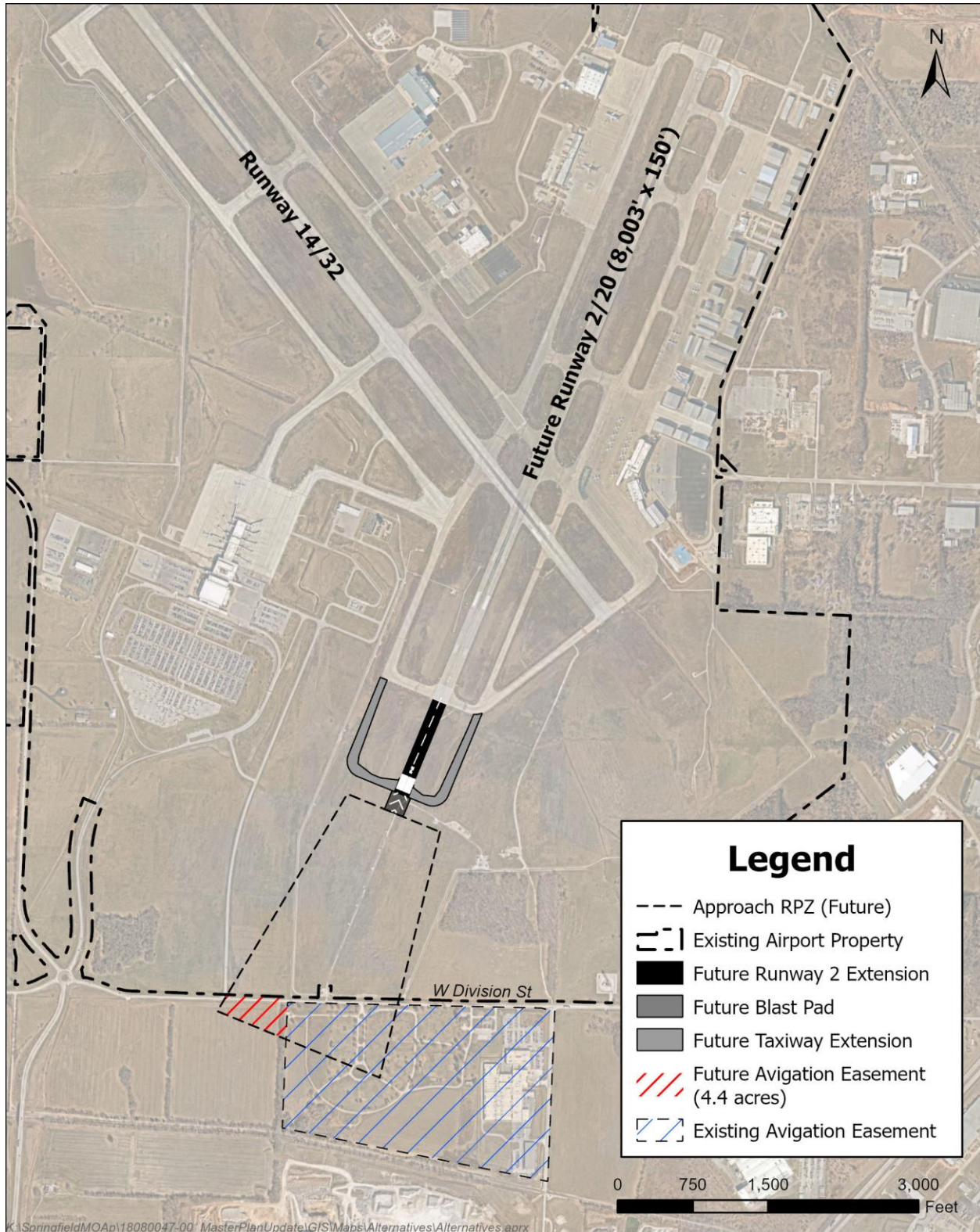
This extension would provide the ability to access a wider range of destinations while avoiding the large costs associated with constructing a new runway and taxiway system.

An extension to the Runway 14 end would require significantly less earthwork than constructing a new runway. However, other factors, such as relocating the MALSR, must be considered. Additionally, the established airport overlay (AO) districts were not created to account for an extension of Runway 14. As such, further evaluation would be required to analyze potential impacts to the communities northwest of SGF.

Approximately 2.6 acres would need to be acquired to facilitate this extension, as illustrated in **Exhibit 6.2-7**.

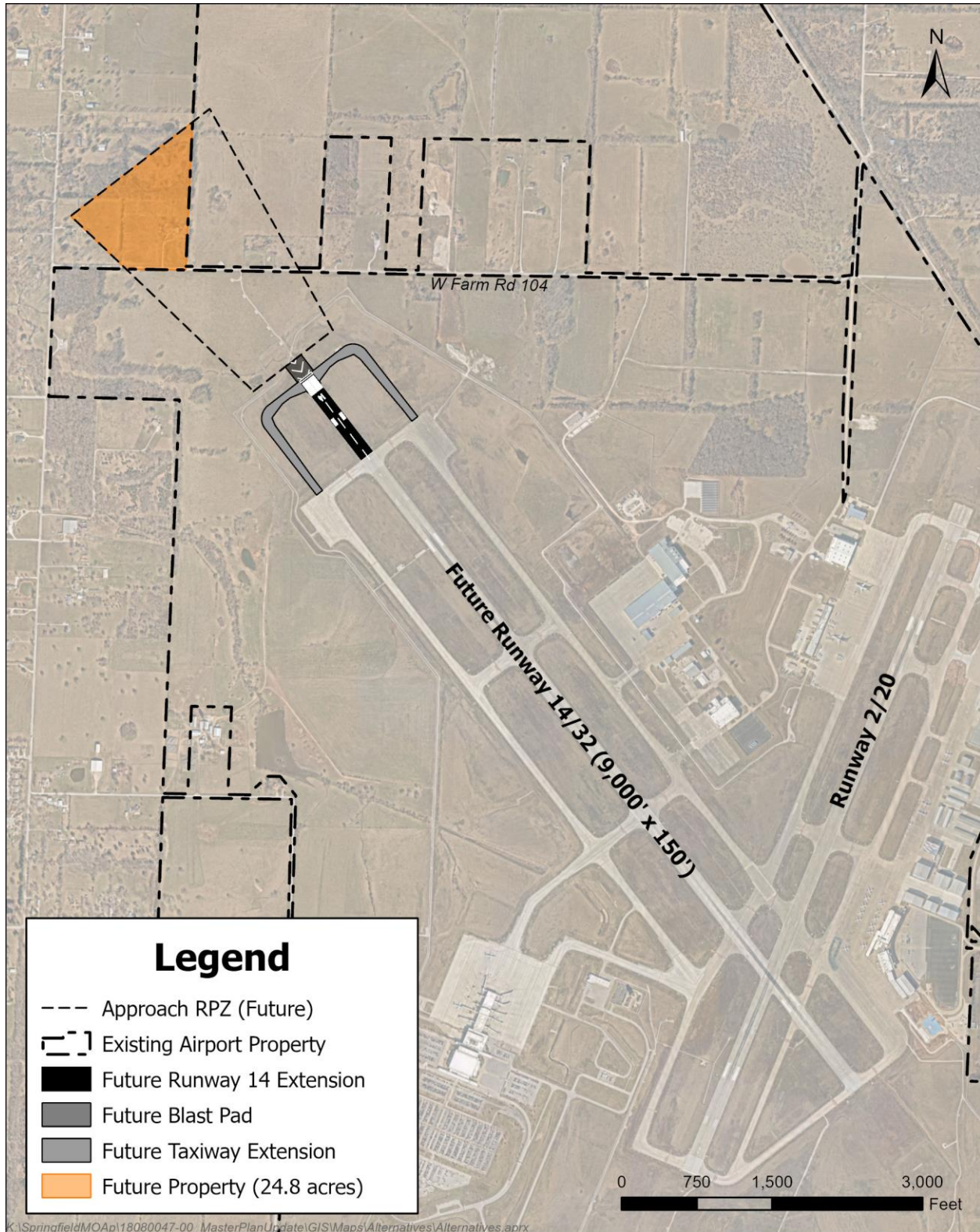
The Runway 14-end extension is not being carried forward as a recommended action in this Master Plan Update. However, it is recommended to reduce the Runway 14 visibility minimums from $\frac{3}{4}$ statute-mile to $\frac{1}{2}$ statute-mile, resulting in a larger RPZ. Further details about the feasibility of reducing the visibility minimums described above are provided in **Appendix 8**.

Exhibit 6.2-6: Runway 2 Extension RPZ Land Acquisition



Source: CMT (2023)

Exhibit 6.2-7: Runway 14 Extension RPZ Land Acquisition



Source: CMT (2023)

6.3 General Aviation (GA)/Corporate

SGF currently has a wait list of potential users, operators, and developers who are vying to get hangar space. Hangar wait lists are not always indicative of the actual demand for space at an airport. Chapter 4 – *Airport Facility Requirements* considered the wait list, approved demand projections, and other variables to isolate several capacity needs regarding GA/corporate hangar capacity, as summarized in **Table 6.3-1**.

Table 6.3-1: GA Capacity Needs

RESULT	EXISTING		PAL 1	PAL 2	PAL 3	PAL 4
GA Hangars Total Area (ft ²)	T-Hangar	90,945	96,925 (+1 10-unit Hangar)	103,902 (+1 10-unit Hangar)	109,882	117,855 (+1 10-unit Hangar)
	Box Hangar	340,815	355,067 (+ 1 140'x140' Hangar)	362,193	369,320 (+ 1 140'x140' Hangar)	376,446
GA Apron Total Area (yd ²)	106,372		-	-	-	+ 8,640

Source: CMT

The capacity needs determined by the Facility Requirements were paired with feedback collected throughout a series of stakeholder engagement meetings to create and evaluate GA/corporate development alternatives. This feedback included fleet modernization, fleet mix, and associated hangar sizing. It also reinforced the need to accommodate the thriving corporate community surrounding SGF through the expansion of corporate and charter services. The following sections and evaluation are focused solely on GA/corporate capacity alternatives.

6.3.1 Alternative 1 - Infill

Alternative 1 infills the existing GA/corporate footprint and is characterized by:

- Infill existing areas with 100' x 100' and 80' x 80' hangars,
- Addition of a 200' x 200' hangar
- Development of three (3) t-hangars to the north, adding 36 units,
- Demolition of West Kearney Terminal (after lease expiration in 2036) and construction of 6-unit executive hangar complex
- Demolition of existing barrel hangars and adjacent hangar for a 6-plex of 80' x 80' hangar units
- Preservation of land for future OTC expansion

This alternative infills available land to the maximum extent possible, satisfying and exceeding all capacity deficiencies. This alternative does not expand the overall GA footprint, possibly constraining private development interests in the future. Consideration needs to be given to existing pavement strengths and FAA design standards. The West Kearney Terminal Redevelopment is planned around utility infrastructure (i.e. a sanitary sewer line), limiting full development of that area. Alternative 1 is shown in **Exhibit 6.3-1**.

Exhibit 6.3-1: Alternative 1 – GA/Corporate



Source: CMT (2023)

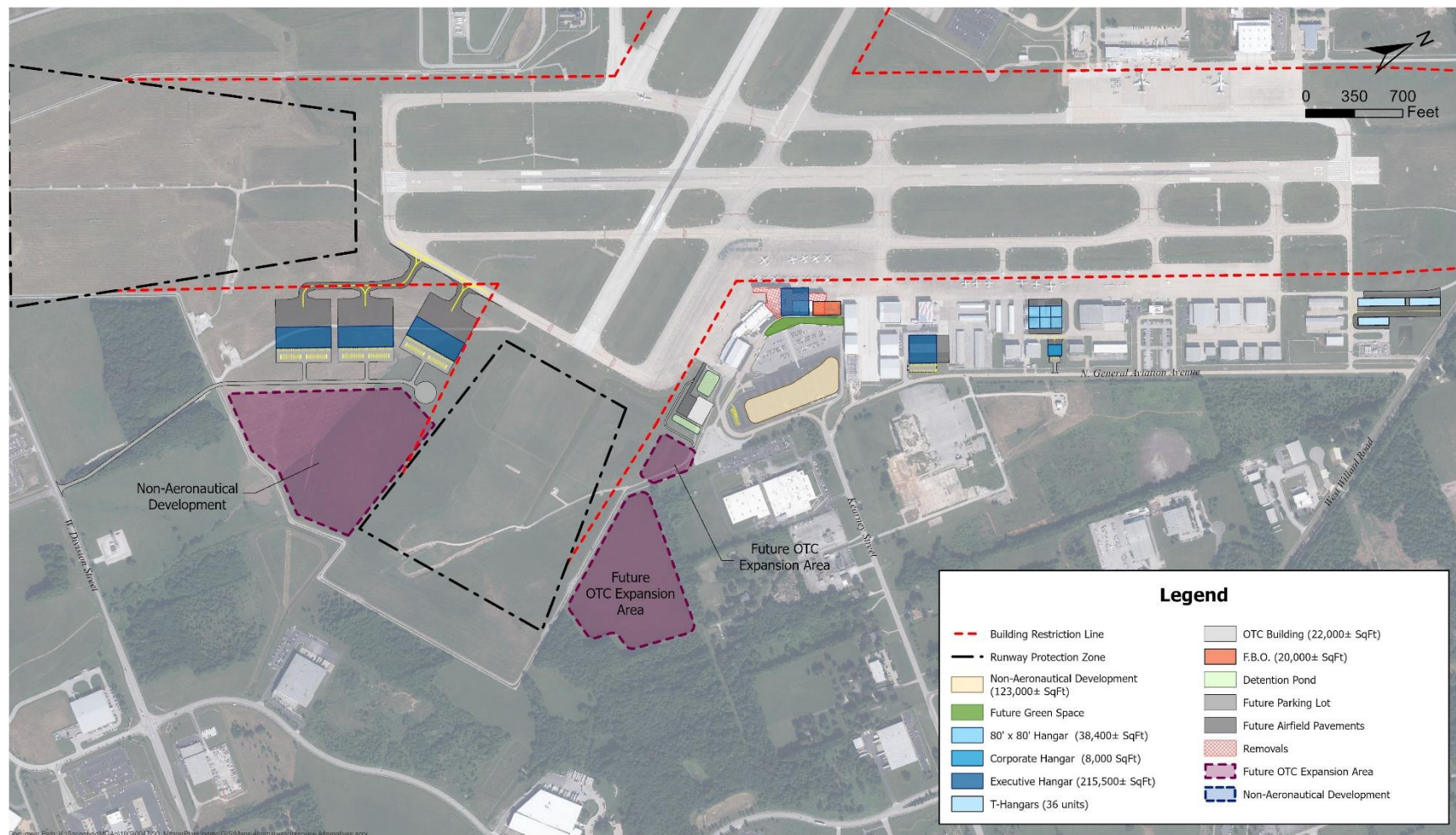
6.3.2 Alternative 2 – Corporate Hangar Campus

Alternative 2 is the same as Alternative 1, except the following:

- Demolition of West Kearney Terminal (after lease expiration in 2036) and construction of Fixed Base Operator (FBO) and associated 200' x 200' community hangar,
- Development of executive hangars along Taxiway S,
- Vehicle access off W Division Street and airport perimeter road

As with Alternative 1, this alternative satisfies capacity deficiencies throughout the planning period and introduces a large corporate aircraft campus on the southeast portion of the airfield. Airport officials and stakeholders indicated the West Kearney Terminal redevelopment strategy in Alternative 1 provided more hangar capacity, thus was more efficient. Alternative 2 is shown in **Exhibit 6.3-2**.

Exhibit 6.3-2: Alternative 2 – GA/Corporate



Source: CMT (2023)

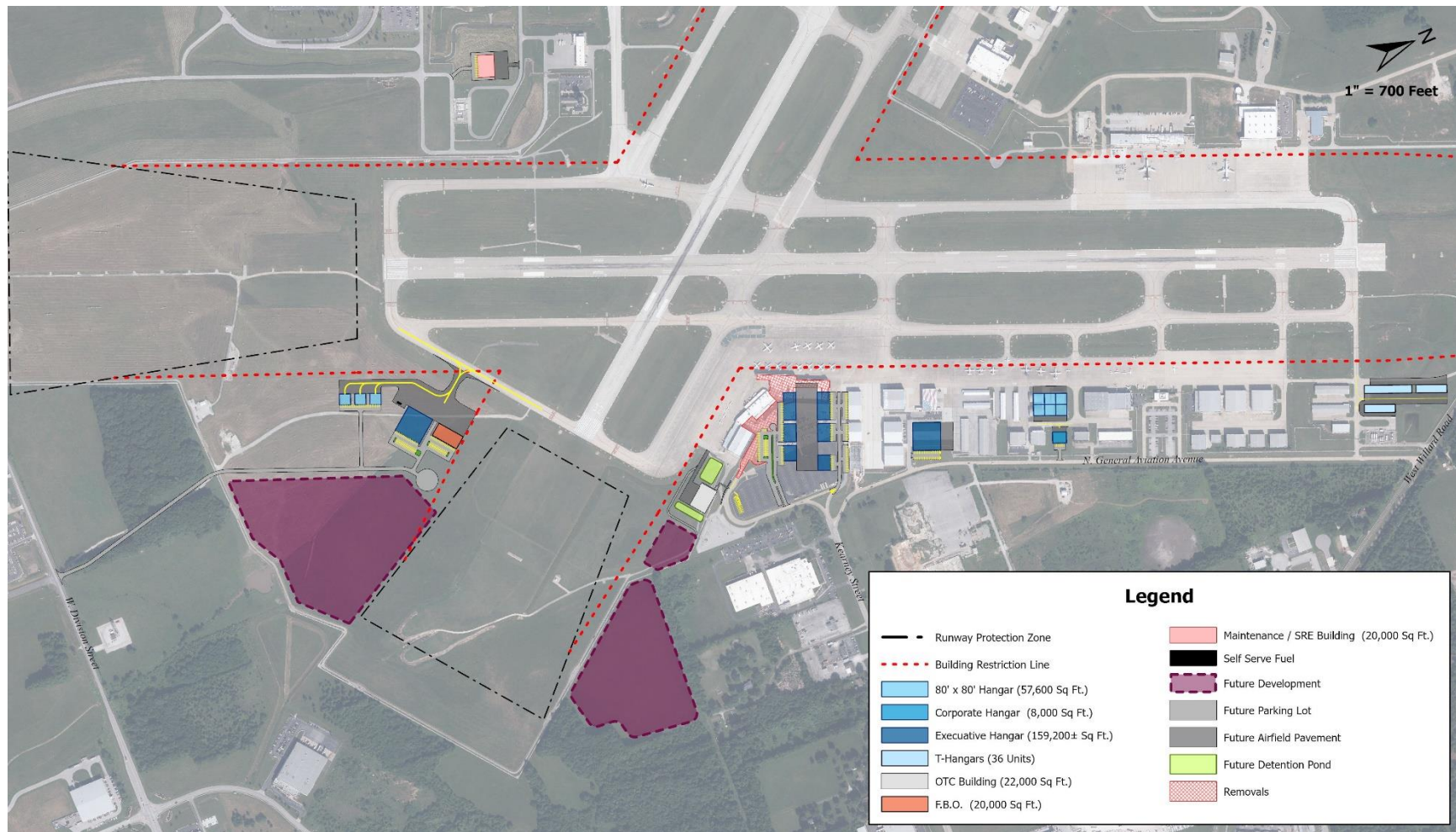
6.3.3 Alternative 3 – Satellite FBO

Alternative 3 is the same as Alternative 1, except the following:

- Develop FBO along Taxiway S with:
 - Community hangar
 - Tie-town space
 - Self-service fuel station
 - 80' x 80' box hangar complex
- Vehicle access off W Division Street and airport perimeter road
- Relocation of SRE west of midfield fuel farm

This alternative provides the same GA configuration on the northern half of the airfield as in Alternative 1. In contrast to the large corporate campus to the south, as shown in Alternative 2, this alternative introduces a satellite FBO and associated GA hangars. Alternative 3 is shown in **Exhibit 6.3-3**.

Exhibit 6.3-3: Alternative 3 – GA/Corporate



Source: CMT (2023)

6.3.4 GA/Corporate Alternatives Evaluation Summary

Table 6.3-2 shows the evaluation of each GA/corporate alternative.

Table 6.3-2: GA/Corporate Alternatives Summary

CRITERIA	ALT 1	ALT 2	ALT 3
	SCORE	SCORE	SCORE
Earthwork required			
Additional road infrastructure			
Non-aeronautical streams of revenue			
Fulfills hangar capacity requirements			
Provides flexibility for private development			
Land acquisition			

Source: CMT (2023)

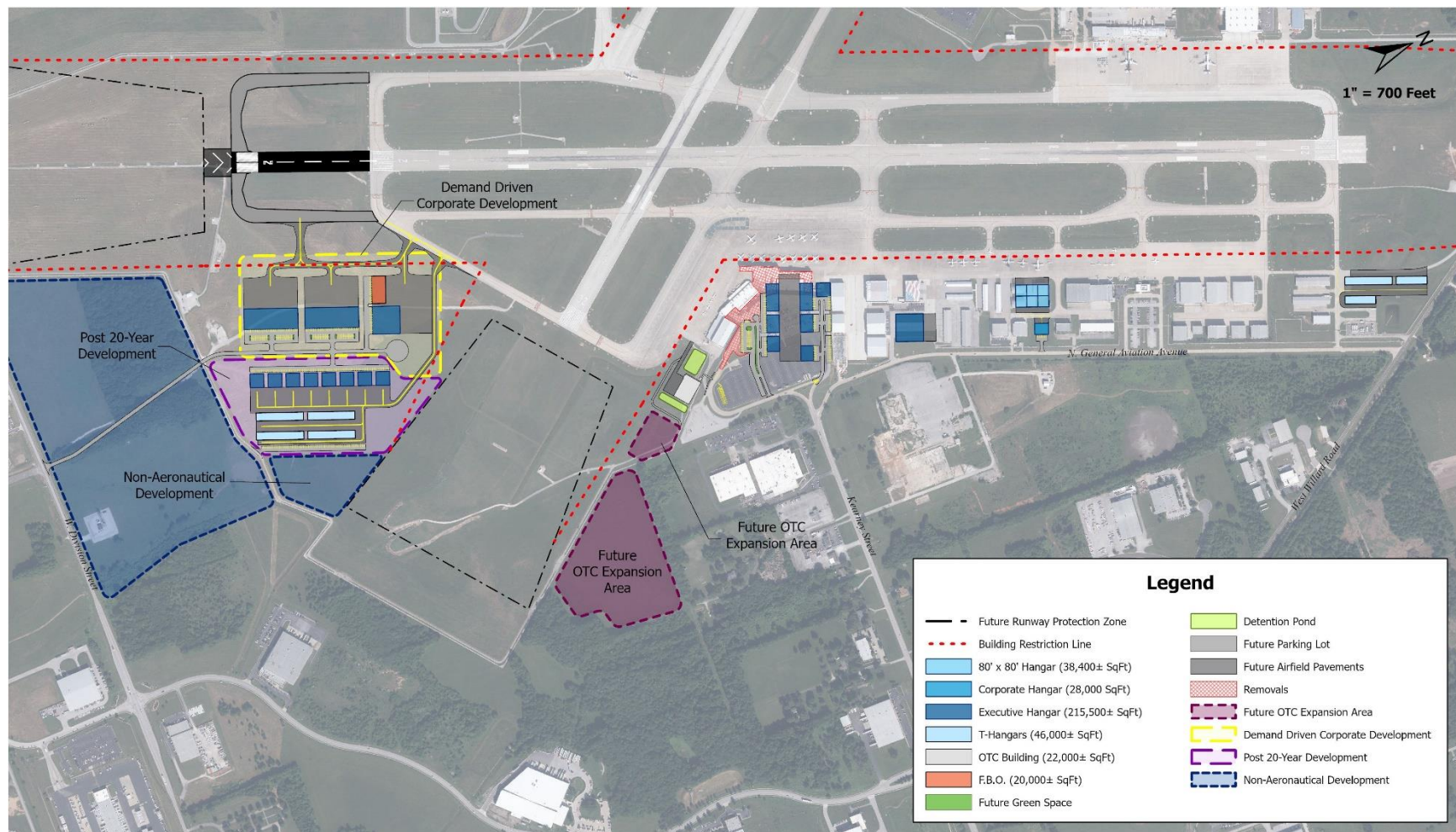
6.3.5 GA/Corporate Preferred Alternative

After presenting all three alternatives to airport officials and stakeholders, feedback was taken to create the preferred alternative, which is characterized by the following:

- Infill of existing areas with 100' x 100' and 80' x 80' hangars,
- Vehicle parking demands met via each hangar development,
- Addition of a 200' x 200' hangar on the north end of the airfield,
- Development of three (3) t-hangars to the north, adding 36 units,
- Demolition of West Kearney Terminal (after lease expiration in 2036) and construction of 7-unit executive hangar complex,
- Demolition of existing barrel hangars and adjacent hangar for a 6-plex of 80' x 80' hangar units,
- Preservation of land for future OTC expansion,
- Phased GA/Corporate development plan along Taxiway S, as shown in **Exhibit 6.3-5**, tying into Runway 2 extension. Phases can happen concurrently or sequentially, depending on demand and availability of funding:
 - Phase A: Demand-Driven Corporate Development
 - Corporate hangars
 - FBO
 - Community hangar
 - Phase B: Post 20-Year Development
 - T-hangars
 - 100' x 100' hangar complex
 - Phase C: Non-Aeronautical Development
- South GA/Corporate development vehicle access off W Division Street and airport perimeter road,
- Site security could be achieved either with a centralized security gate on the main access road or at the entrances to the individual parking lots as hangars are constructed.

The preferred GA/corporate development alternative is shown in **Exhibit 6.3-4**.

Exhibit 6.3-4: Preferred Alternative – GA/Corporate



Source: CMT (2023)

Exhibit 6.3-5: Rendering of Future GA/Corporate Development Concept Along Taxiway S



Source: CMT (2023)

6.4 Cargo/Maintenance, Repair, and Overhaul (MRO)

The preferred forecast presented in Chapter Three – *Forecast of Aviation Demand*, indicated that cargo operations have been on a growth trend and accounts for the addition of a third cargo operator at SGF within the planning period. As a compatible use with cargo operations, there has been a growing desire to consolidate and collocate MRO operations in the cargo corridor. This corridor is adjacent to the Aviation Classification Repair Activity Depot (AVCRAD). In discussions with military personnel and airport officials it was desirable to eliminate the southern entrance into the AVCRAD during this planning process.

Three alternatives were developed and evaluated for this corridor based on the following:

- Building and apron capacity to accommodate third cargo operator,
- Sufficient space for relocation and addition of MRO facilities,
- Infill of existing footprint,
- Southern AVCRAD entrance elimination,
- Earth work required,
- SRE facility alternatives (see Section 6.5.2).

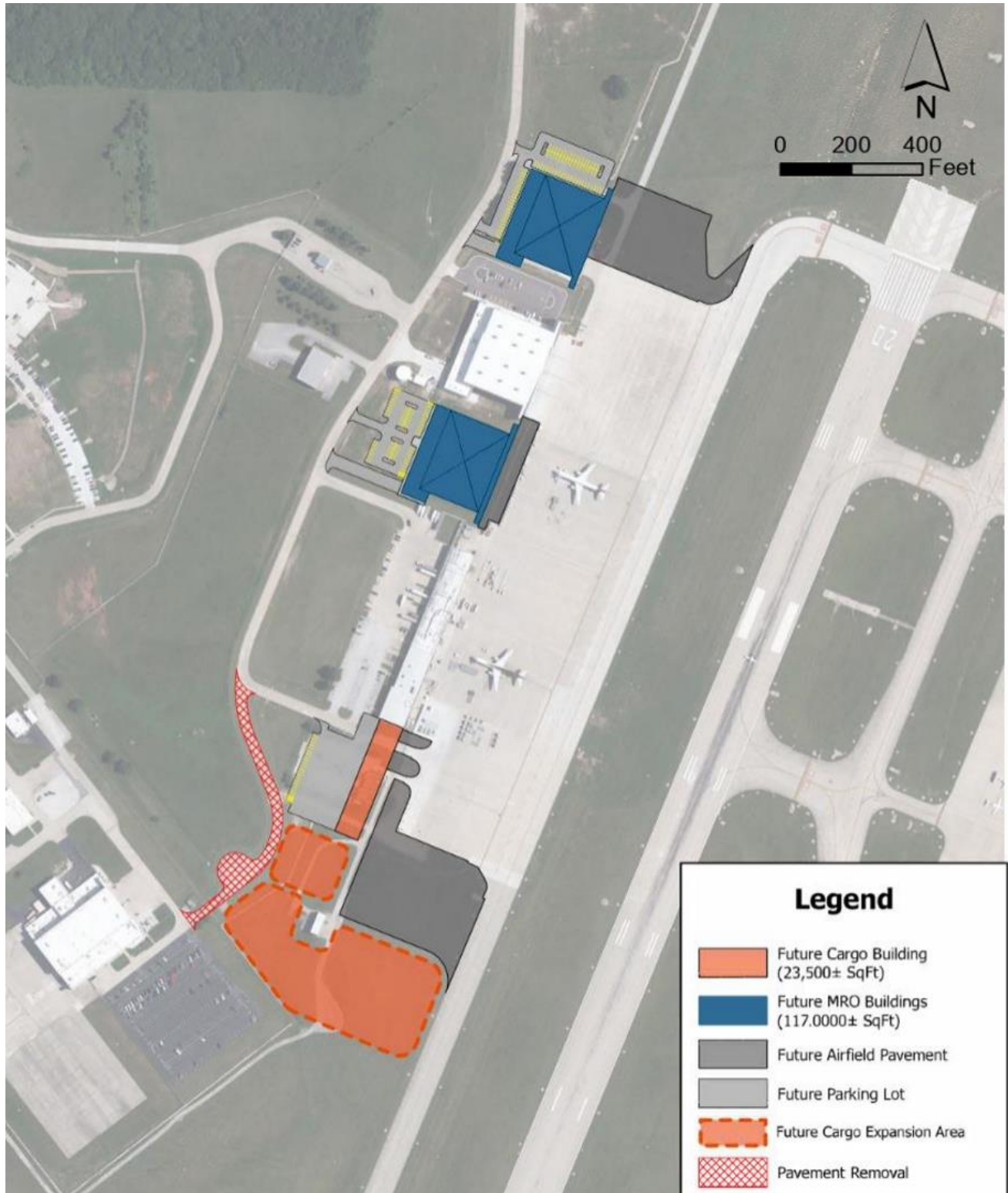
6.4.1 Alternative 1

Alternative 1 infills the existing cargo/MRO footprint and is characterized by the following:

- Cargo building and apron expansion to south of existing for third operator,
- Future cargo expansion area south of electrical vault,
- Relocation of Snow Removal Equipment (SRE) facility,
- Addition of two (2) MRO facilities,
- Removal of south entrance to Aviation Classification Repair Activity Depot (AVCRAD).

This alternative involves minimal expansion to the north. However, by planning for an MRO just north of the existing cargo facilities, additional cargo apron space is needed on the south, pushing the future cargo expansion area south of the electrical vault. In discussions with airport officials, it was indicated that it would be most desirable to keep all developments north of the electrical vault, as a southern development or relocation of the vault may be cost prohibitive. In addition to incompatibilities with the electrical vault, this alternative may introduce conflicts with the runway visibility zone (RVZ) and tower line-of-sight. Alternative 1 is shown in **Exhibit 6.4-1**.

Exhibit 6.4-1: Alternative 1 – Cargo/MRO



Source: CMT (2023)

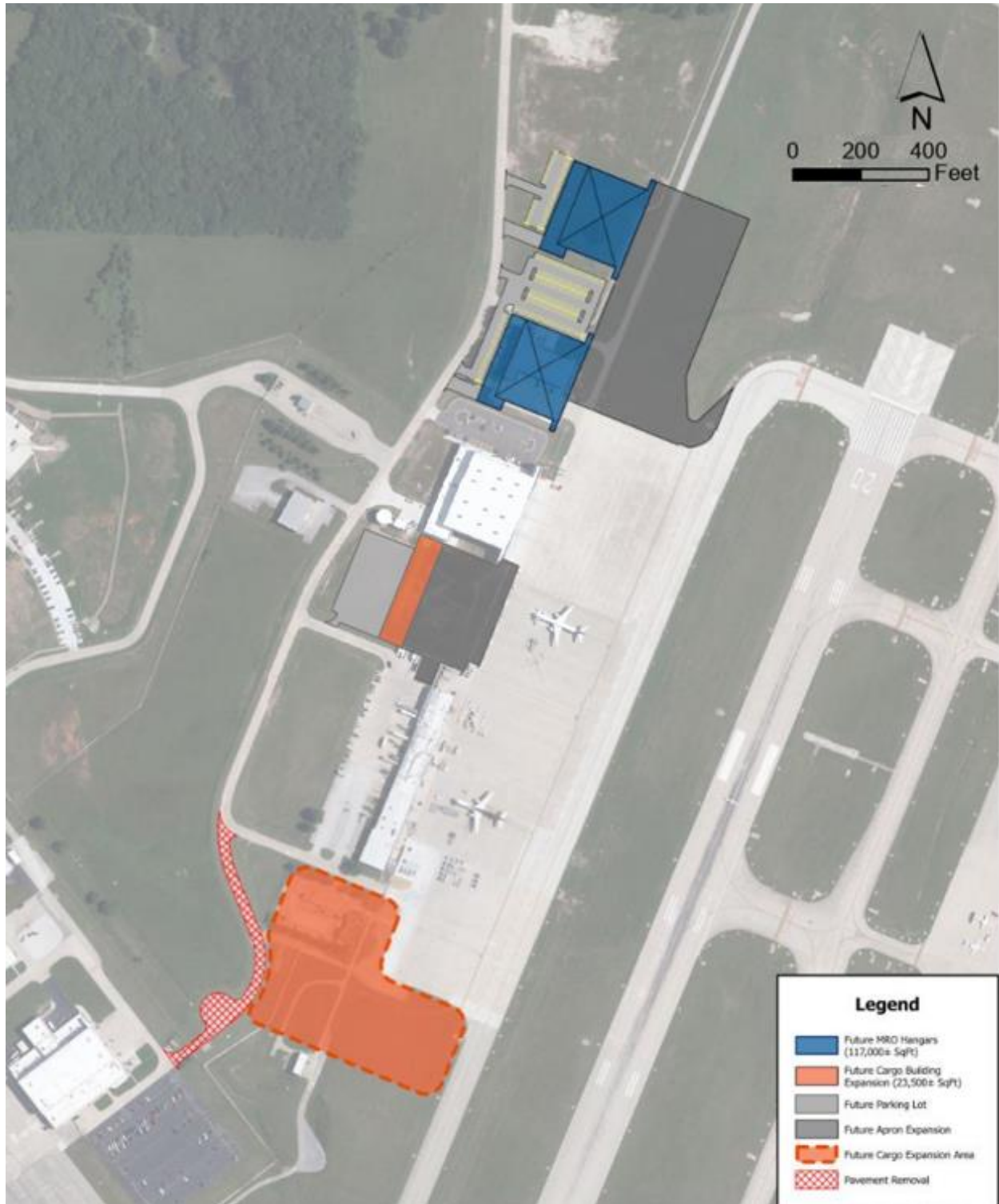
6.4.2 Alternative 2

Alternative 2 also proposes relocation of the SRE facility but shifts MRO development to the north. This alternative is characterized by the following:

- Cargo expansion northwest of existing cargo building to create more cargo apron depth
- Relocation of SRE facility
- Addition of two (2) MROs to the north of existing MRO
- Future cargo expansion area between electrical vault and existing cargo building
- Removal of south entrance to AVCRAD.

This alternative avoids potentially costly development surrounding the electrical vault, while still increasing capacity to serve a third cargo operator and two additional MROs, as shown in **Exhibit 6.4-2**.

Exhibit 6.4-2: Alternative 2 – Cargo/MRO



Source: CMT (2023)

6.4.3 Alternative 3

Alternative 3 proposes expansion of the existing SRE, pushing future development further north. This alternative is characterized by the following:

- Addition of two (2) MROs north of existing SRE facility,
- Expand SRE facility to 20,000 ft²,
- Cargo expansion directly north of existing cargo building
- Future cargo expansion area between electrical vault and existing cargo building,
- Removal of south entrance to AVCRAD.

In discussions with airport officials and stakeholders this alternative is the least desirable as the SRE is occupying prime real estate that could be planned/developed for MRO or cargo use. Additionally, this alternative pushes development further north, resulting in more earth work and additional environmental considerations. Alternative 3 is shown in **Exhibit 6.4-3**.

Exhibit 6.4-3: Alternative 3 – Cargo/MRO



Source: CMT (2023)

6.4.4 Cargo/MRO Alternatives Analysis

The three alternatives were evaluated based on satisfying capacity requirements, SRE facility alternatives, and earth work required. All three alternatives utilize land already owned by the sponsor. The biggest differentiators between the alternatives were the capacity/earth work implications of developments expanding too far to the north and south, and the location/relocation of the SRE facility.

Per the scoring criteria and discussions with airport officials, Alternative 2 is the preferred cargo/MRO alternative, as shown in **Exhibits 6.4-2 and 6.4-4**.

Table 6.4-1 provides a summary of the alternatives scoring.

Table 6.4-1: Cargo/MRO Alternatives Summary

CRITERIA	ALT 1	ALT 2	ALT 3
	SCORE	SCORE	SCORE
Building and apron capacity to accommodate third cargo operator			
SRE no longer impedes development			
Impact to electrical vault			
Possible Runway Visibility Zone incompatibilities			
Sufficient space for relocation/addition of MRO facilities			
Infill of undeveloped land within cargo corridor			
Earth work required			
Land Acquisition			

Source: CMT (2023)

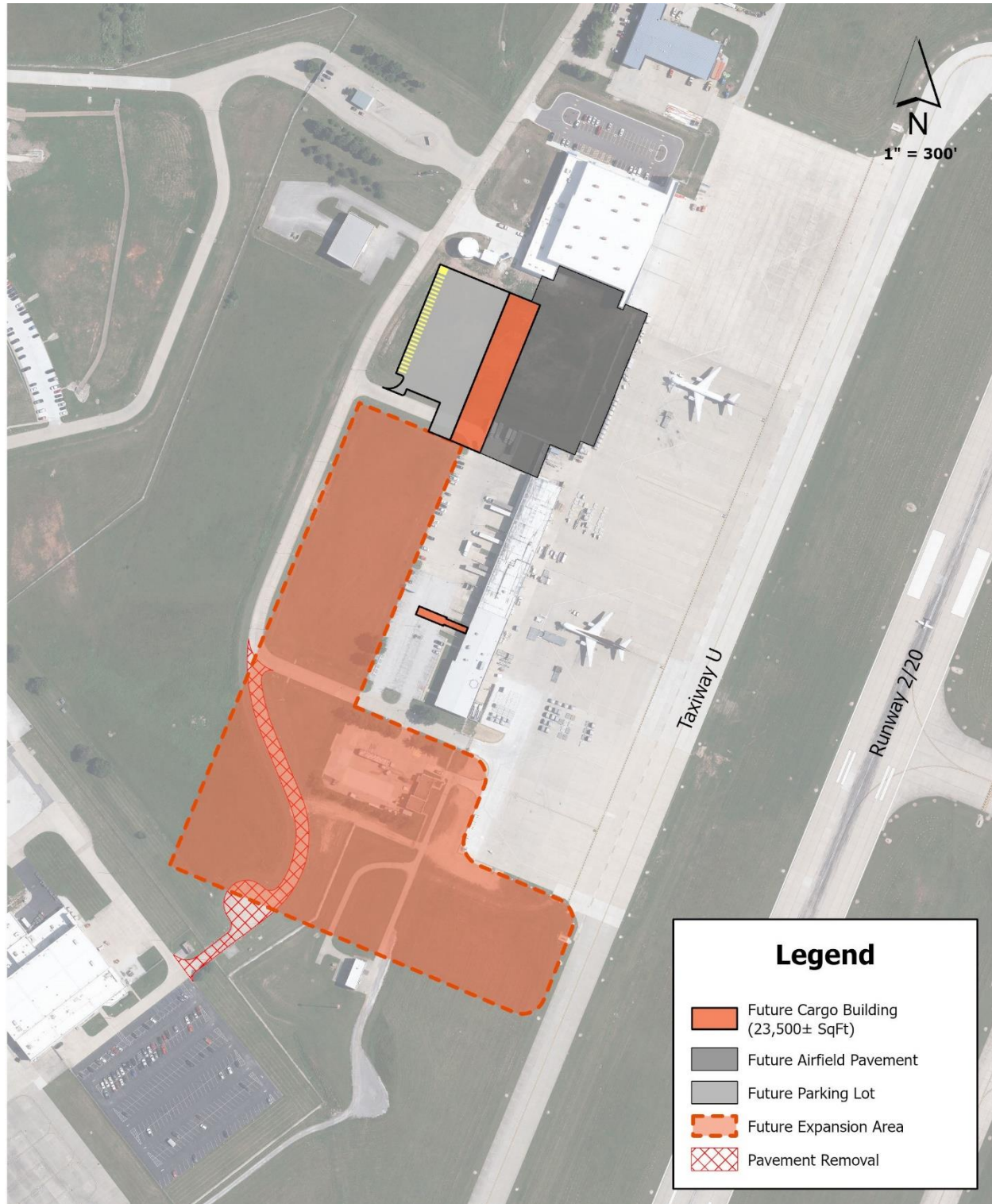
Further refinements to the Alternative 2 concept have been made to ensure that tails of aircraft parked on the future MRO facility aprons will not penetrate protected airspace surfaces. The adjusted layout is shown on the Airport Layout Plan and **Exhibit 6.4-5**.

Exhibit 6.4-4: Rendering of Preferred Cargo/MRO Alternative: Alternative 2



Source: CMT (2023)

Exhibit 6.4-5: Preferred Cargo/MRO Alternative



Source: CMT (2023)

6.5 Support Facilities

Table 6.5-1 summarizes the facility requirements isolated from the Airport Facility Requirements chapter. The following sections present alternatives generated for categories with capacity deficiencies. In addition to the sections isolated in Facility Requirements, this section also provides discussion on the impact these and other facilities may have on the existing Airport Traffic Control Tower (ATCT).

Table 6.5-1: Support Facilities Facility Requirements

CATEGORY	EXISTING	PAL 1	PAL 2	PAL 3	PAL 4
Fuel Storage: Jet A (gallons)	180,000	(+1) 30,000- gal tank	(+1) 30,000- gal tank	(+1) 30,000- gal tank	(+1) 30,000- gal tank
Fuel Storage: Avgas (gallons)	30,000	-	-	-	-
Aircraft Rescue and Firefighting (ARFF)	14,300 ft ² of building space	-	-	-	-
Airport Maintenance / Snow Removal Equipment (SRE) Storage (ft ²)	17,500	Construct 21,000 ft ² facility			

Source: CMT (2023)

6.5.1 Airport Traffic Control Tower (ATCT)

Per AC 13B, new airport development has the potential to affect the operations of an existing ATCT and must consider the following when planning and designing future airport development projects:

- Maintain an unobstructed LOS from the ATCT cab to all points on movement area pavement.
- Maintain the minimum angle of incidence from the ATCT cab to all points on the movement area at 0.80 degrees.
- Ensure new light sources (e.g., area lighting) do not obscure the controller's view of the movement area.
- Consider potential effects of threshold parallax as viewed from the ATCT when designing a new parallel runway.

Having been commissioned in 1978, the ATCT at SGF will be nearing 70 years old by the end of the planning period. As such, SGF must not only be aware of how planned development may impact its existing ATCT, but also plan for how it may impact a future ATCT.

To determine these impacts, it is prudent for the Airport to plan for a future ATCT location and the future land use of the existing ATCT. A Preliminary ATCT Siting Study is recommended to identify potential sites

on the airfield that should be preserved for relocation of the ATCT. FAA Order 6480.4B, *Airport Traffic Control Tower Siting Process*, defines the methods used to complete the ATCT siting process to foster a safe, secure, and efficient aviation system.

For site preservation purposes, two locations have been depicted on the Airport Layout Plan as potential candidates for ATCT relocation.

- Site 1 is in the vicinity of the existing ATCT as a relocation site if the future parallel runway is not constructed.
- Site 2 is to the west of the passenger terminal building as a relocation site if the future parallel runway is constructed.

6.5.2 Fuel Facilities

SGF has two primary fuel farms, with a third that services ground vehicles, such as rental cars. Jet A and avgas fuel demands are projected to meet the 3-day supply standard with the existing fuel tanks. The avgas tanks will meet the demands well past the planning period, but additional Jet A fuel tanks will be needed on a 5-day supply. This data shows that there is little room for any supply chain inconsistencies or abnormalities. No additional fuel capacity for ground vehicles is anticipated throughout the planning period. **Exhibit 6.5-1** shows the Midfield and GA Fuel Farm locations.

Exhibit 6.5-1: Fuel Farm Locations



Source: CMT (2023)

JET A

To provide SGF with a reliable amount of fuel (5-day supply) on hand, it is recommended that one (1) 30,000-gallon Jet A fuel tank is added during each PAL. In their current configurations, the GA Fuel Farm and Midfield Fuel Farm have combined capacity to accommodate three additional 30,000-gallon fuel tanks; two at the GA Fuel Farm and one at the Midfield Fuel Farm.

Infill of the current open fuel tank positions, starting with the open position at the Midfield Fuel Farm during PAL 1, is how this capacity should be fulfilled.

The location and use of the fourth Jet A tank, to be added in PAL 4, will be demand-driven may result in the following:

- Expansion of either the Midfield or GA Fuel Farms;
- Creation of a new fuel farm co-located with expanded GA facilities on the southeast side of the airfield;

- Introduction of sustainable aviation fuel (SAF) at SGF, as either an SAF-specific tank, or a Jet A/SAF blended tank; tank location dependent upon target market of fuel.

AVGAS

No additional fuel capacity is required for avgas through the end of the planning period. Avgas remains the only transportation fuel in the United States to contain lead, prompting development of alternative unleaded fuels. In alignment with FAA's Eliminate Aviation Gasoline Lead Emissions (EAGLE) initiative, should SGF transition to 94UL Unleaded Avgas, or other alternative unleaded aviation fuels, an additional tank may need to be installed. The GA Fuel Farm currently has capacity for up to two more avgas tanks to accommodate this transition.

6.5.3 Snow Removal Equipment (SRE) Storage & Ground Service Equipment Maintenance & Storage

To consolidate all SRE and airfield maintenance into one facility, a minimum of 21,000 ft² is required, which is 3,500 ft² larger than the existing facility. Three alternatives were presented to stakeholders to address this capacity deficiency with the following objectives:

- Provide 21,000 ft² facility,
- Minimize impact to future aeronautical development areas, and
- Have a centralized location.

In addition to the three primary alternatives, a fourth alternative was introduced and evaluated. This alternative is contingent upon relocation of the ATCT. **Exhibit 6.5-2** illustrates the location of each proposed alternative.

Exhibit 6.5-2: SRE Facility Alternative Locations



Source: CMT (2023)

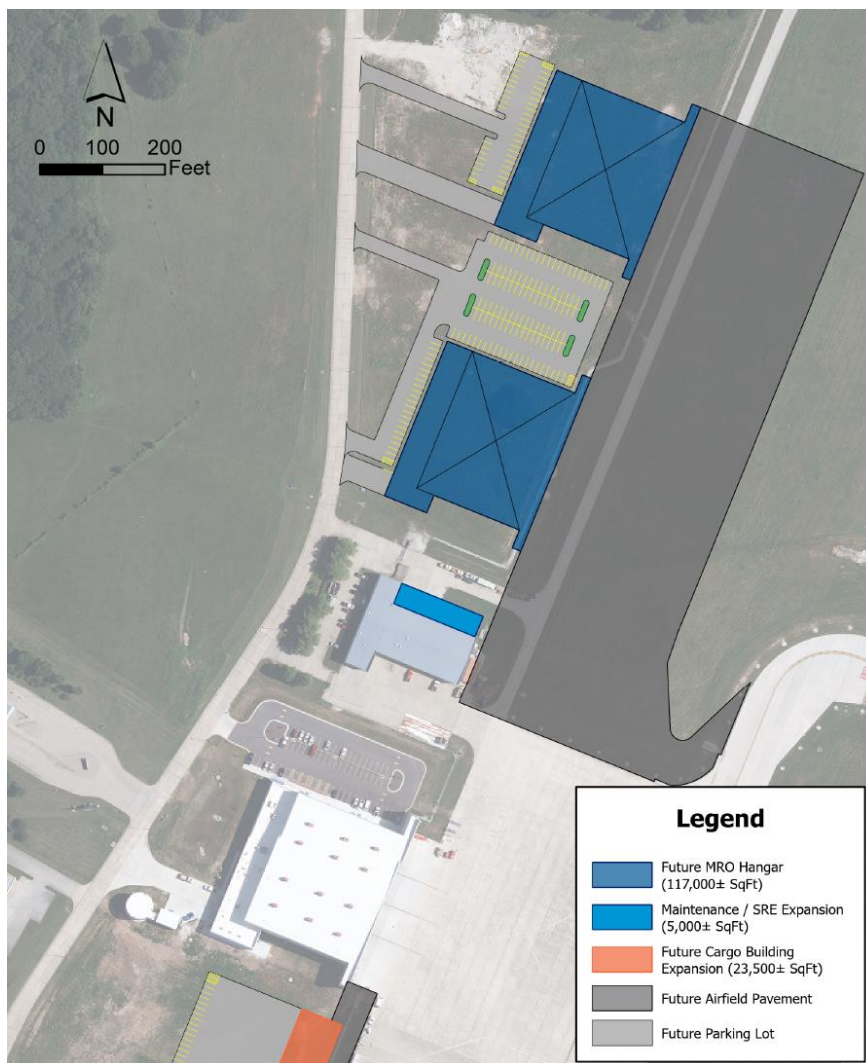
ALTERNATIVE 1 – EXPANSION OF EXISTING

Alternative 1 is the least intrusive and is characterized by the following:

- Expansion of existing facility to 21,000 ft²,
- Utilizes existing SRE facility footprint,
- Located in cargo/maintenance, repair, and overhaul (MRO) corridor,
- Fronts on prime aeronautical real estate.

In discussions with airport officials and stakeholders, this alternative was the least desirable due to its location on prime aeronautical property.

Exhibit 6.5-3: Alternative 1 – SRE Facility



Source: CMT (2023)

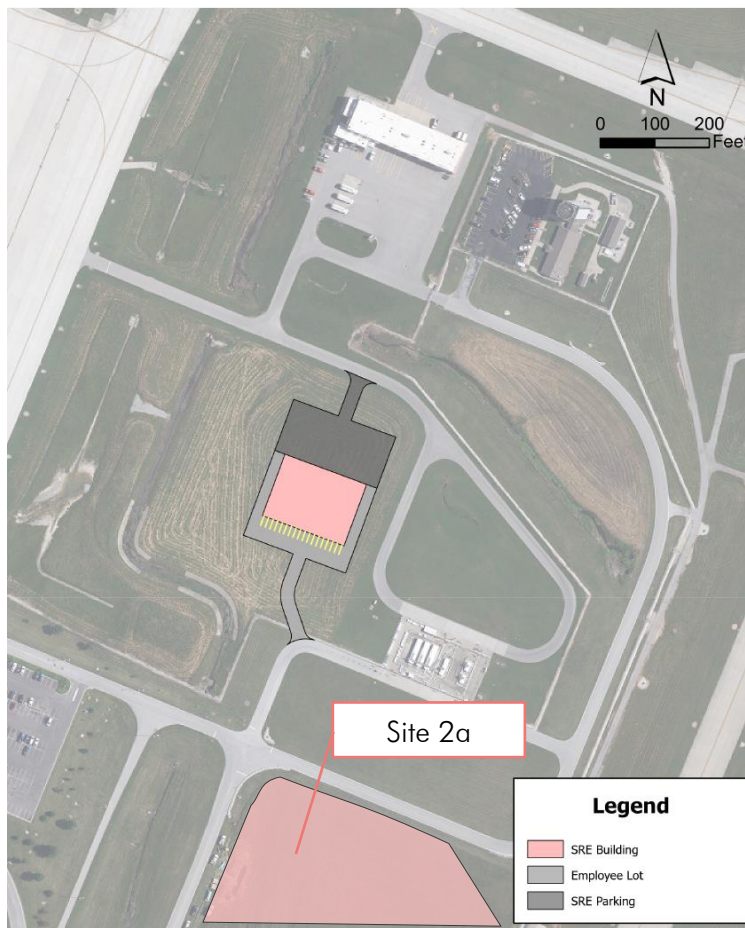
ALTERNATIVE 2 – RELOCATION TO MIDFIELD

Alternative 2 proposes relocation of the SRE facility to the midfield area, in the vicinity of the aircraft rescue and firefighting (ARFF) facility and the airport traffic control tower (ATCT). This alternative is characterized by the following:

- Construction of 21,000 ft² facility,
- Leverages existing roadways,
- Central location,
- Location not ideal for aeronautical development,

In discussions with airport officials and stakeholders the location proposed is prone to flooding, making it less desirable. Site 2a was proposed approximately 350 feet south of Alternative 2, and has the same characteristics as listed above, but does not have the same flood concerns. However, Site 2a is slightly less ideal due to its distance from the terminal.

Exhibit 6.5-4: Alternative 2 – SRE Facility



Source: CMT (2023)

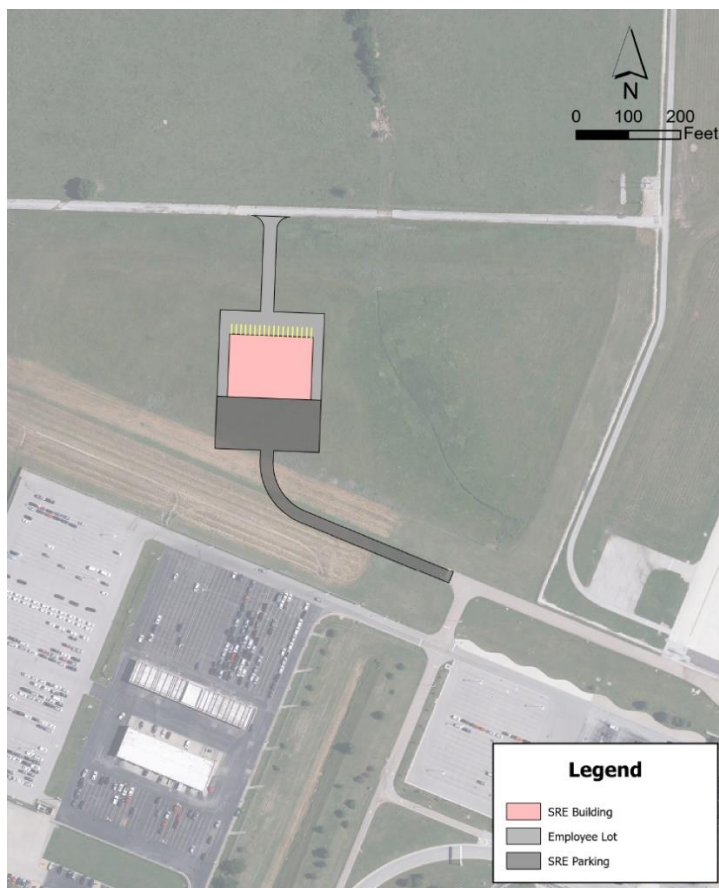
ALTERNATIVE 3 – RELOCATION TO TERMINAL

Alternative 3 proposes relocation of the SRE facility to west of the terminal apron. This alternative is characterized by the following:

- Construction of 21,000 ft² facility,
- Leverages existing roadways,
- Central location,
- Location not ideal for aeronautical development,
- Allows for future terminal apron expansion, if needed

In discussions with airport officials and stakeholders this location is preferred due to its proximity and access to the terminal, possibly alleviating current delivery and storage issues. Additionally, some maintenance operations could be consolidated into this facility, given its location. Consideration would need to be given to the roadway network to ensure proper circulation with passenger vehicles.

Exhibit 6.5-5: Alternative 3 – SRE Facility



Source: CMT (2023)

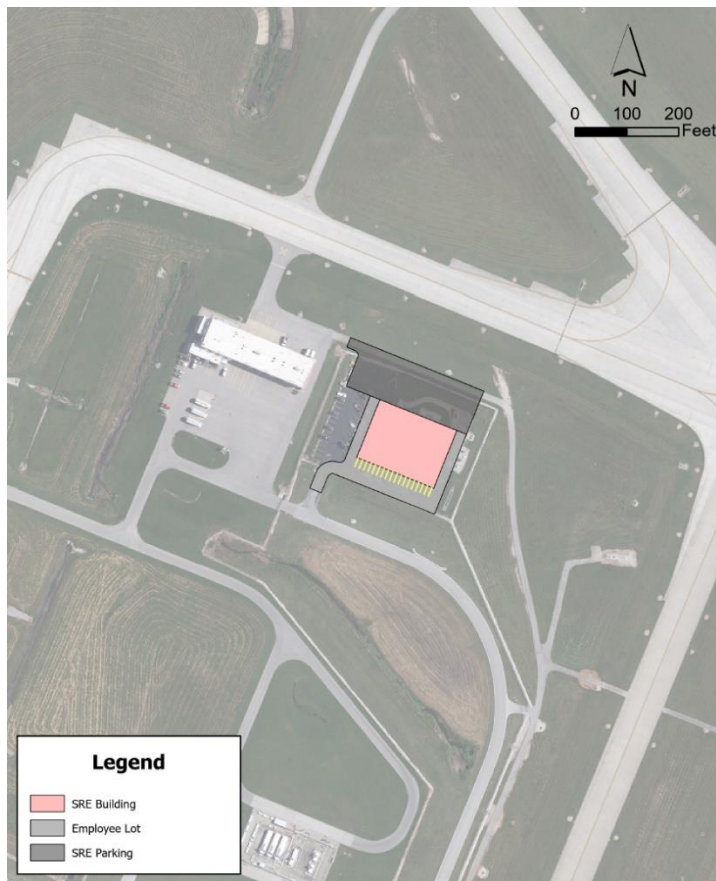
ALTERNATIVE 4 – RELOCATION OF ATCT

Alternative 4 proposes planning for the future land use of the existing ATCT, should ATCT relocation take place, by constructing an SRE facility at the current ATCT site. This alternative is characterized by the following:

- Construction of 21,000 ft² facility,
- Leverages existing roadways,
- Central location,
- Location not ideal for aeronautical development,
- Proximity to other ground operations (i.e., ARFF Facility)

This alternative is contingent in nature, thus would not satisfy immediate SRE capacity needs. However, this is a prime central location. Proximity to the ARFF facility helps consolidate large machinery to one area of the airfield.

Exhibit 6.5-6: Alternative 4 – SRE Facility



Source: CMT (2023)

SRE FACILITY ALTERNATIVES ANALYSIS

The three alternatives were evaluated based on satisfying capacity requirements, location, and environmental/land considerations. All three alternatives utilize land already owned by the sponsor. The biggest differentiators between the alternatives were the impact to aeronautical development and environmental considerations. **Table 6.5-2** provides a summary of the alternatives scoring.

Table 6.5-2: SRE Facility Alternatives Summary

CRITERIA	ALT 1	ALT 2	ALT 3	ALT 4
	EXPANSION SCORE	MIDFIELD SCORE	TERMINAL SCORE	ATCT SCORE
Satisfies Capacity Requirements: 21,000 ft ²				
Satisfies Capacity Requirements: Construction possible within planning period				
Centralized Location				
Minimal impact to future aeronautical development areas				
Environmental considerations				
Land Acquisition				

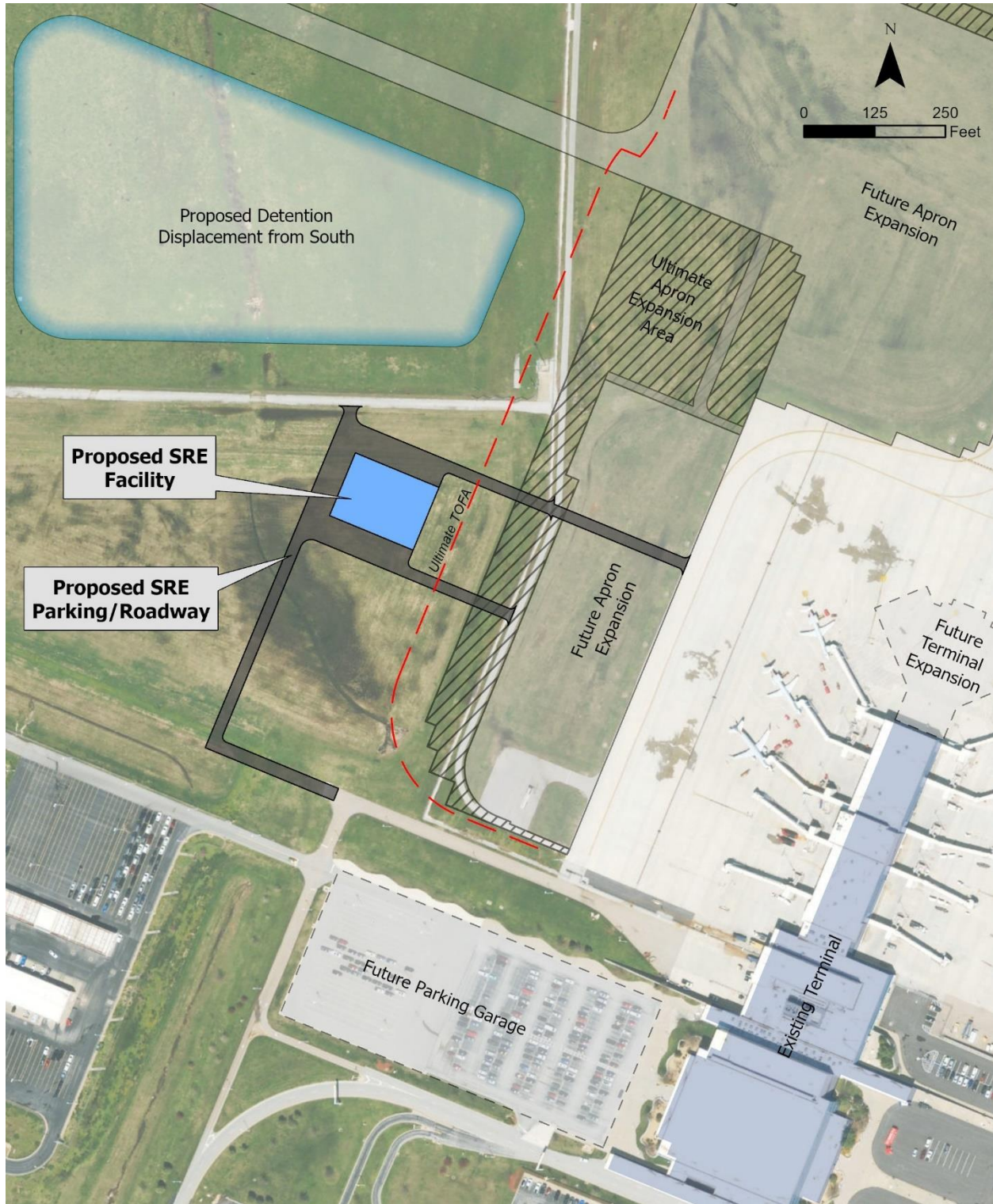
Source: CMT (2023)

Per the scoring criteria, Alternatives 2 and 3 have merit to serve as the preferred SRE facility alternative. After presenting all alternatives to airport officials and stakeholders, feedback was taken to create the preferred alternative, which yielded the following recommendations:

- Shift and reorient the Alternative 3 location (Alternative 3a) to improve airside/airfield access, minimize detention pond encroachment, and ensure the location does not impede future terminal apron expansion, as shown in **Exhibit 6.5-7**.

Required road improvements, environmental considerations, and final building configuration/vehicle circulation will be addressed during the project design phase.

Exhibit 6.5-7: Alternative 3a – SRE Facility



Source: CMT (2023)

6.6 Ground Access, Circulation, and Parking

Chapter 4 – *Airport Facility Requirements* isolated several capacity needs regarding vehicle parking, as summarized in **Table 6.6-1**. Parking improvements for GA and Cargo users are directly related to their respective facility alternatives and thus are not evaluated independently. The following section and evaluation are focused solely on commercial terminal parking alternatives.

Table 6.6-1: Vehicle Parking Capacity Needs

RESULT	EXISTING	PAL 1	PAL 2	PAL 3	PAL 4
Vehicle Parking: GA Users (Spaces)	110	Locate New Parking Spaces Based on New Hangar Locations			
Vehicle Parking: Cargo Users (Spaces)	70	+25 Based on New Facility			
Vehicle Parking: Commercial (Spaces)	2,630	+807	+1,362	+1,625	+1,725

Source: CMT

In addition to commercial terminal parking alternatives, this section addresses relocation of transportation network companies (TNC), such as Uber and Lyft.

6.6.1 Commercial Terminal Parking

As discussed in Chapter 4 – *Airport Facility Requirements*, the number of parking spaces at the midfield terminal for airline travelers needs to increase by over 65 percent by the end of the planning period, with airport officials currently reporting that the short-term parking lot is regularly at capacity.

Three alternatives were proposed to airport stakeholders to address these capacity concerns, while factoring in level of service (LOS) expectations outlined in FAA AC 150/5360-13A, *Airport Terminal Planning*. As illustrated in **Exhibit 6.6-1**, available land within the recommended 600-foot and 800-foot walking distances for optimal LOS has already been utilized for parking. SGF also currently has parking spaces beyond those distances; the first two alternatives address the capacity concerns through increased accessibility of those spaces to help increase utilization and LOS. The third alternative addresses capacity concerns through added infrastructure while increasing LOS and providing an additional stream of revenue.

Exhibit 6.6-1: Parking LOS at SGF



Source: CMT (2022)

ALTERNATIVE 1 – SHUTTLE SERVICES

One solution to access additional parking located further from the terminal and increase the LOS is to provide a shuttle service. This alternative can be phased in, starting with a manned shuttle vehicle and transitioning to an unmanned autonomous vehicle, as shown in **Exhibit 6.6-2**.

Exhibit 6.6-2: Autonomous Shuttle



Source: CMT (2023)

With SGF's level of passenger traffic, one or two shuttles to transport passengers between the terminal and nearby parking lots or other transportation hubs may be necessary. Further assessment would be required to determine the number of shuttles needed.

A typical autonomous shuttle vehicle used for public transportation could cost anywhere from \$200,000 to over \$1 million. This range considers various factors such as the size and capacity of the shuttle, the level of autonomy, and the type of power source (electric, hybrid, or gasoline).

This concept would utilize current parking positions at SGF with strategically placed pickup/drop-off stations. Shuttles would be called from designated staging/charging areas to retrieve passengers and take them to their destination. Ideally, shuttles will be most utilized by passengers parking 800' or more from the entrance of the terminal entrance, so the staging area should be placed to service those users quickly. The rear corners of the long-term parking lot are ideal locations for shuttle staging/charging stations as they would not occupy valuable parking spaces within the walkable LOS. These corners are

often underutilized by passenger vehicles and can easily be converted to house two shuttles while also being quickly accessible. Small pads just outside of the existing parking footprint could also be placed to house the shuttles as an alternative location to not infringe upon existing parking patterns and capacity.

Exhibit 6.6-3 below outlines the areas where the shuttle charging stations could be placed.

Exhibit 6.6-3: Possible Shuttle/TNC Staging Areas



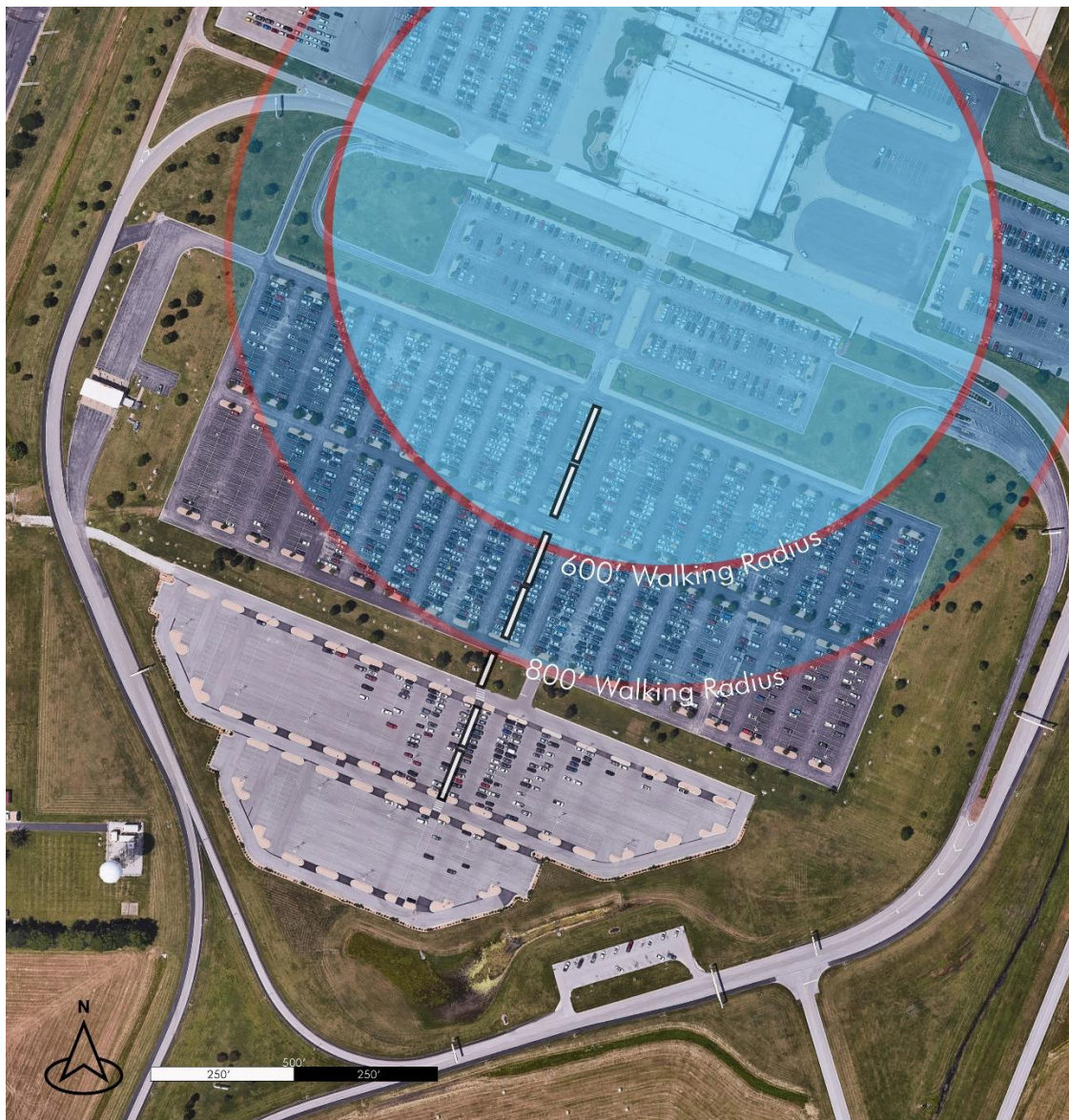
Source: CMT (2023)

It is worth noting that the cost of autonomous shuttle vehicles is expected to decrease as the technology becomes more widespread and production volumes increase. Additionally, operating costs for autonomous shuttles are typically lower than those for traditional vehicles due to lower fuel and maintenance costs, as well as reduced labor costs from not requiring a human driver.

ALTERNATIVE 2 – MOVING WALKWAY

The Moving Walkway concept is a series of covered conveyor belts to give people a higher LOS outside of the expected 600' to 800' walking radius, as illustrated in **Exhibit 6.6-4**. Assisting the walking times and ultimate LOS could bring a new value to further away parking.

Exhibit 6.6-4: Moving Walkway with Walking LOS Limits



Source: CMT (2023)

A recent study from Norfolk International Airport priced out four indoor 150' walkways at \$5 million for procurement. Applying that same estimate, this alternative could be assumed to be a well over \$10 million investment prior to ongoing maintenance and utility costs.

ALTERNATIVE 3 – PARKING GARAGE

A parking garage can provide additional parking spaces while increasing the LOS and providing an additional revenue stream. The cost and configuration of a parking garage with a total square footage to accommodate approximately 1,800 spaces (as dictated by forecasted demand), average-sized driving lanes, ramps, and pedestrian walkways would depend on the specific design, layout, and use. As a rule of thumb, parking garages typically require 325 to 400 square feet of space per stall to account for circulation, access, and safety features.

Applying these metrics to the desired number of spaces, it can be estimated that a parking structure at SGF would need to be between 585,000 and 720,000 square feet to fulfill the capacity demands by the end of the planning period. To provide the most efficient and versatile configuration, it is recommended to divide this square footage between levels and create a multi-story parking garage.

Three possible locations were proposed to airport stakeholders: on top of the existing short-term parking lot (south of terminal), rental car parking lot (west of terminal), and bus/taxi and employee parking lots (east of terminal), as shown in **Exhibit 6.6-5**.

Exhibit 6.6-5: Potential Parking Garage Locations



Source: CMT (2023)

The western garage location was preferred from a circulation, accessibility, and aesthetic standpoint. This leaves the other two locations open to still accommodate short-term, employee, bus, and taxi parking, with the potential to accommodate TNC and shuttle parking. Since the western location sits

atop existing rental car parking, it is reasonable to expect they will be relocated within the parking structure.

As a rough estimate, the construction cost of a parking garage can range from \$20,000 to \$50,000 per parking space, depending on the complexity of the design and the level of finishes. Using the estimate of \$30,000 per parking space (based on the parking construction expert), the construction cost of a 1,800-space parking garage would be approximately \$54 million. This estimate only covers the construction cost and does not include design and engineering fees, financing costs, or other related expenses. These additional costs can add significantly to the overall cost of the project.

A parking garage also provides the opportunity to install a rooftop solar panel development, helping to achieve possible cost-savings and to pursue new sustainability objectives. Any solar panel development at the airport would need to mitigate any ocular glint/glare to ATCT operations.

Alternately, the top of a parking garage may be able to accommodate a vertiport, following FAA Engineering Brief No. 105 design standards, to support advanced air mobility (AAM) aircraft. Thorough planning studies would be needed to determine feasibility of AAM at SGF and at the proposed location.

COMMERCIAL TERMINAL PARKING ALTERNATIVES ANALYSIS

The three alternatives were evaluated based on LOS provided, earth work and environmental considerations, level of protection provided to vehicles from the elements, and potential income. All three alternatives utilize land already owned by the sponsor. The biggest differentiators between the alternatives were the earthwork and environmental considerations, ability to satisfy future capacity requirements, potential income, and protection of vehicles from the elements.

Although it will require new infrastructure and a thorough environmental process, construction of a parking garage on the west side of the Midfield Terminal is the preferred parking alternative for SGF. A rendering of the preferred parking structure location is illustrated in **Exhibit 6.6-6**. In recent conversations with airport officials and understanding of available parking spaces per day, a parking feasibility study is recommended prior to proceeding with the preferred alternative. **Table 6.6-2** provides a summary of the alternatives scoring.

Table 6.6-2: Commercial Terminal Alternatives Summary

CRITERIA	ALT 1	ALT 2	ALT 3
	SHUTTLE	MOVING WALKWAY	GARAGE
	SCORE	SCORE	SCORE
Increased LOS	●	●	●
Satisfies Capacity Requirements	●	●	●
Earth Work	●	●	●
Protection from the Elements	●	●	●
Land Acquisition	●	●	●
Potential Income	●	●	●
Requirement of Environmental Assessment/NEPA	●	●	●

Source: CMT (2023)

Exhibit 6.6-6: Parking Garage Rendering



Source: Walker Consultants (2023)

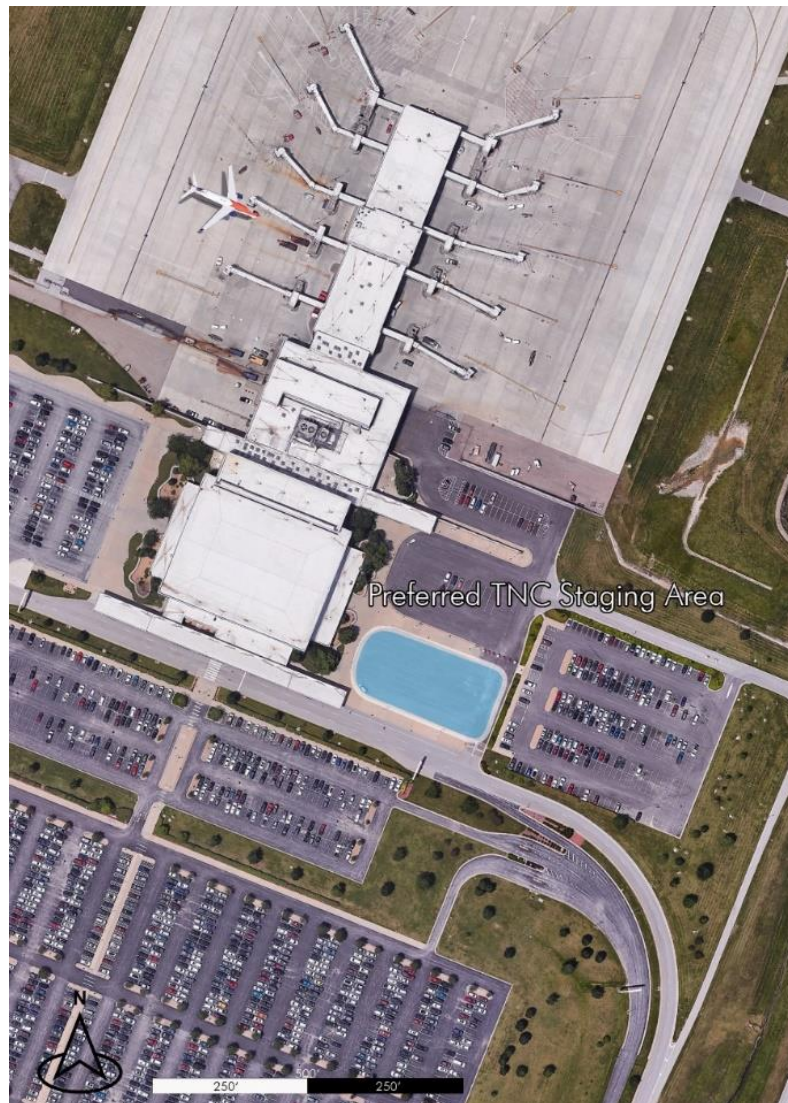
6.6.2 Transportation Network Companies (TNCs)

Transportation Network Companies (TNC), such as Uber or Lyft, and taxis have a steady demand at SGF and are increasingly becoming a more popular mode of transportation for travelers. Having adequate facilities to accommodate TNCs and those who utilize them is important.

To date, TNC staging has been directed to the West Kearney Terminal parking lot and often causes congestion, inefficiencies, and a lower LOS. Utilizing the existing taxi staging area directly east of the Midfield Terminal to include other TNCs would maximize the use of the currently underutilized pavements and increase the LOS for those utilizing the services.

The preferred TNC staging area is directly east of the terminal as illustrated in **Exhibit 6.6-7**.

Exhibit 6.6-7: Possible Shuttle/TNC Staging Areas



Source: CMT (2023)

Chapter Seven

Terminal Alternatives & Evaluation

7.1 Terminal Alternatives

The following sections describe the alternatives investigated for providing the necessary capacity increases to the existing terminal facility and its associated airside apron needs. These alternatives depict the Airport's 20-year terminal facility demand as described in Chapter 5 – *Terminal Facility Requirements*, and beyond.

7.1.1 Introduction

The goal of the Master Plan is to provide a roadmap for the future, part of which identifies and preserves land area for potential development. This is especially important for expanding the terminal area portion of the plan, which must be flexible and responsive to operational changes as they emerge over time. Competing land uses, such as those required for the landside, terminal, and airside portions of the plan, must be identified and planned accordingly for the systems to be balanced and safeguarded for future needs. This study developed and examined a total of three alternatives with various sub-alternatives, all of which are located within the existing terminal site.

The development of each alternative utilized industry-accepted planning parameters such as those identified in FAA AC 150/5300-13B and 14D, and ACRP Report 25, *Airport Passenger Terminal Planning and Design*, relative to the taxiway and taxilane dimensional criteria, aircraft parking depth and wingtip spacing, deicing pad layout, and concourse width and gate planning. While the base forecast identified no additional gate requirements during the 20-year planning horizon, it was prudent to look at ways to optimize the current terminal layout based on the deficiencies identified in the *Terminal Facility Requirements* chapter.

The following sections present an overview of the terminal alternatives and analysis process.

7.1.2 Terminal Apron Alternatives

The Existing Terminal Apron Assessment highlighted the need for:

- Additional apron dedicated to deicing operations and associated taxilanes (up to four positions). However, during Stakeholder Engagement meetings and interaction with the Airport, it was determined that additional apron serving as more than just a dedicated de-ice area, would be ideal.
- Additional apron area related to aircraft gate and remain overnight (RON)/hardstand parking (up to three positions).

The following sections present an overview of the three terminal apron alternatives. For all initial concepts, the use of ADG IV criteria was selected as both access taxiways feeding the terminal apron – Taxiways E and F – and the apron edge taxilanes currently meet ADG IV standards.

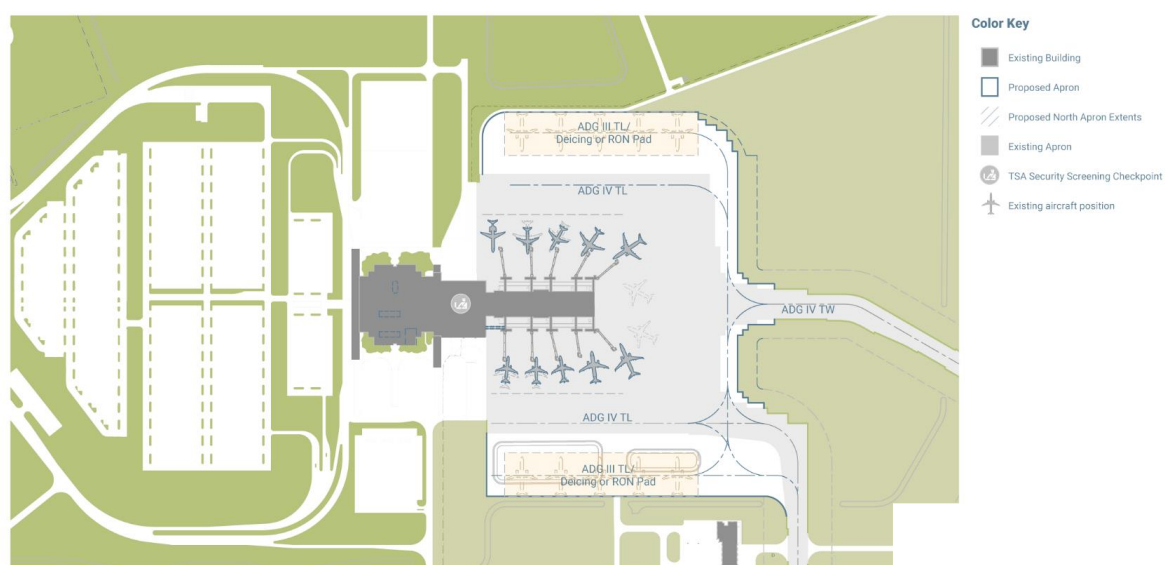
Terminal Apron Alternative 1

Terminal Apron Alternative 1 (see **Exhibit 7.1-1**) provides an additional apron for a dual Airplane Design Group (ADG) IV taxilane system into the terminal area on both sides of the existing concourse.

This pavement could also be marked for additional remain overnight (RON)/hardstand parking as well as a dedicated de-ice pad during the colder months. Currently, during cold weather operations aircraft are pushed back via tug from the gate into the taxilane area and deiced prior to departure. This may lead to situations where aircraft may have to wait on one another to complete deicing operations before taxiing from the terminal apron area. Having an area designated for deicing operations outside the taxilane object-free area (OFA) allows for an uninterrupted flow of aircraft taxi operations. Aircraft would be pushed back from the gate into the designated deice area and then taxi out under their own power. This could occur on either side of the concourse, although providing designated areas on both sides of the concourse would provide greater operational flexibility.

This alternative helps meet required aircraft parking capacity but provides limited to no aircraft gate use flexibility as the lead in lines do not get reoriented, apron/taxilane flexibility, apron/taxilane efficiency, effective utilization or apron capacity, ramp deicing opportunities, and ability to phase construction/modifications.

Exhibit 7.1-1: Terminal Apron Alternative 1



Site Alternative 1
1" = 300'-0" @ 11x17



Source: Alliance (2023)

Terminal Apron Alternative 2

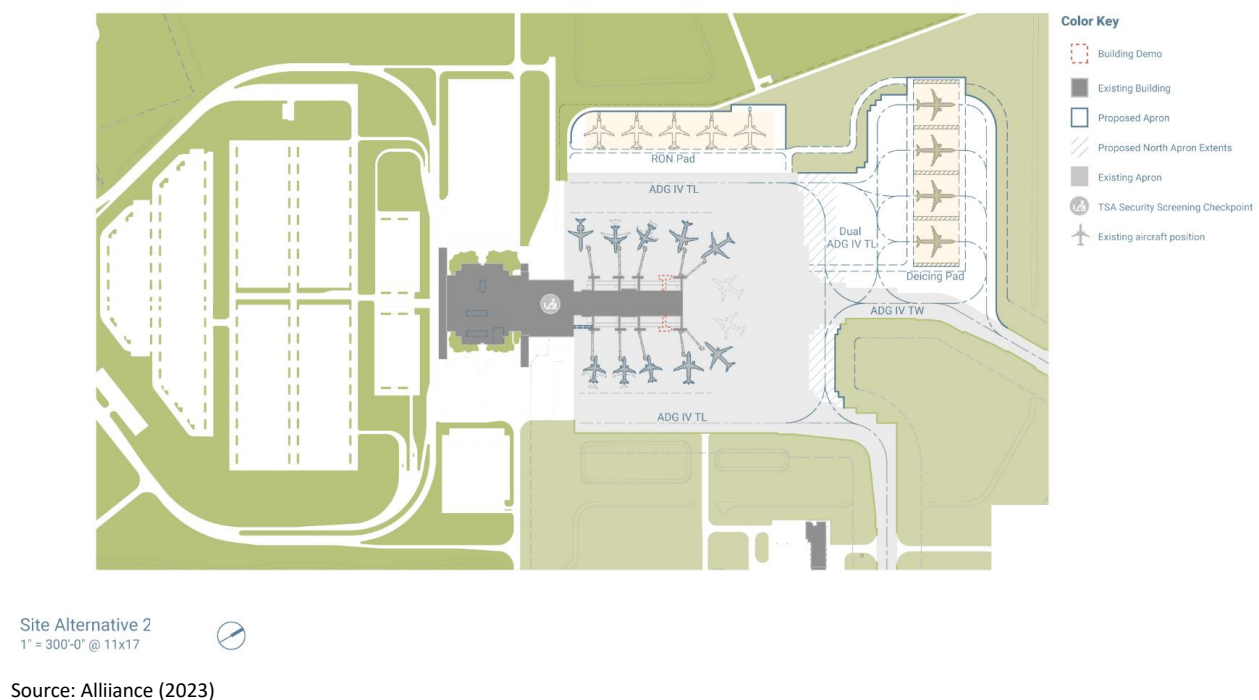
The Alternative 2 concept (see **Exhibit 7.1-2**) includes approximately 20,000 square yards of RON/hardstand apron to the west of the existing terminal apron. This space would accommodate up to five narrowbody aircraft. This RON/hardstand pad could double as a deicing area during colder months. In this scenario, tugs would push the aircraft from the gate back onto the pad. After deicing, the aircraft would power-out onto the taxiway.

Alternative 2 also contemplates construction of a dedicated pull-through deicing pad adjacent to the apron that would encompass approximately 49,000 square yards for up to four simultaneous narrowbody aircraft. Dual ADG IV taxiways off Taxiway F provide aircraft deice queue as well as staging to the west side concourse gates. This deicing location provides greater operational efficiency as aircraft flow through the deicing operation under their own power without the need for pushback tugs as would be required for the west pad.

The Alternative 2 concept shows both deicing options for space planning considerations, although it is not likely that both options would be constructed.

This alternative helps to meet required aircraft parking capacity, demonstrates a prudent utilization of the apron for aviation needs, provides ramp deicing opportunities, and can phase construction/modifications. It does lack in aircraft gate use flexibility and apron/taxilane efficiency.

Exhibit 7.1-2: Terminal Apron Alternative 2



Terminal Apron Alternative 3

Terminal Apron Alternative 3 (see **Exhibit 7.1-3**) extends the existing pavement further north to provide continuous dual ADG IV taxilanes north of the existing concourse expansion area down to Taxiway E.

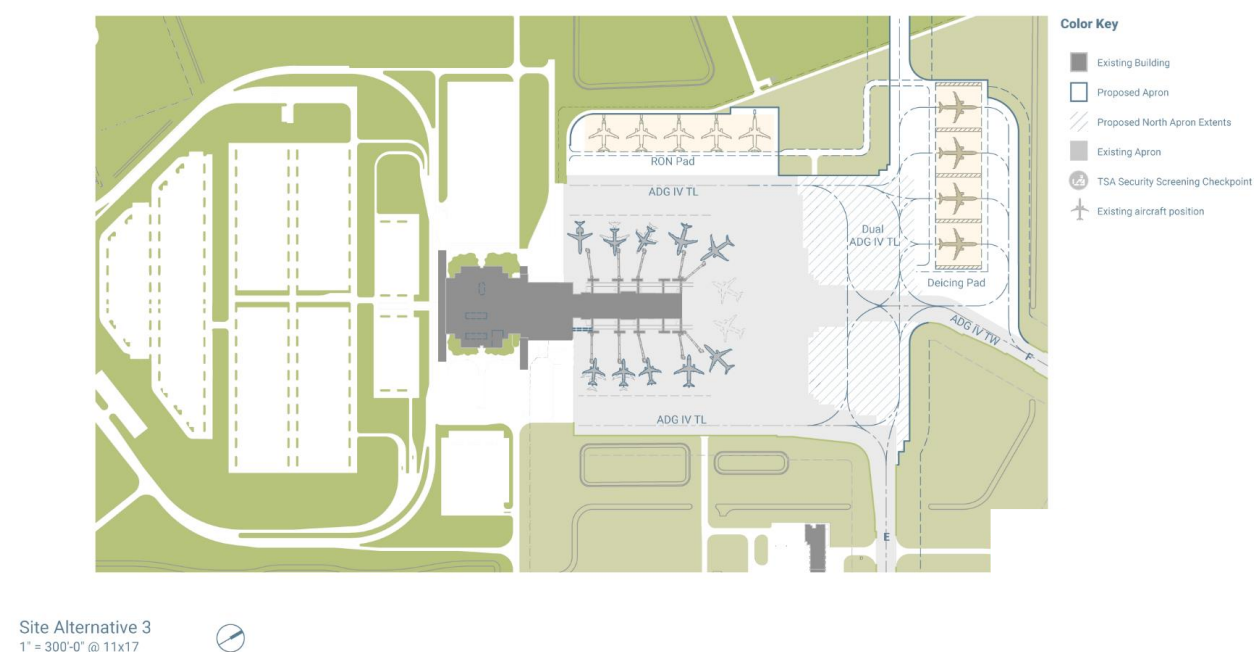
Alternative 3 carries over the RON/hardstand and deicing pad options from Alternative 2, which include approximately 20,000 square yards of RON/hardstand apron to the west of the existing terminal apron and a dedicated pull-through deicing pad adjacent to the apron that would encompass approximately 49,000 square yards.

Like Alternative 2, the Alternative 3 concept shows both options for space planning considerations, although it is not likely that both options would be constructed.

The orientation of Alternative 3 allows future terminal apron expansion in a phased manner. Initial apron expansion would be directly to the north, as indicated by the diagonal lines on **Exhibit 7.1-3**. Later phases could see expansion to the west and further to the north to include dedicated RON and/or deicing pads. Additionally, this could connect the terminal apron to the future Runway 02L/20R environment via a taxiway extension off the deice pad area.

This alternative fulfills all evaluation criteria and provides excellent apron/taxilane efficiency due to the addition of the dual taxilanes.

Exhibit 7.1-3: Terminal Apron Alternative 3



Source: Alliance (2023)

7.1.3 Initial Terminal Site Alternatives

The terminal alternatives planning process began with identifying potential areas for future terminal expansion within and beyond the existing site envelope, which is bound by Taxiway E, the Aircraft Rescue and Firefighting (ARFF) station, and the Airport Traffic Control Tower (ATCT) to the east; and Taxiway W and, to a lesser extent, Taxiway F to the north. Westward expansion opportunities are unconstrained. The three alternatives described below provide additional gate and holdroom capacity during and beyond the 20-year forecast horizon. The various concourse alignments and configurations were influenced by the terminal site envelope and the Airport's desire for a separate deicing pad facility to increase apron efficiency. Two major site expansion strategies were studied: linear and "node." Following this section, the Terminal Alternatives are presented in **Exhibits 7.1-4 through 7.1-9**.

TERMINAL SITE ALTERNATIVE 1

Terminal Building Elements

Terminal Alternative 1 (see **Exhibit 7.1-4**) provides a total of 12 bridged aircraft parking positions consisting of five large regionals (CR9, E75), one small narrowbody (B717), and six narrowbody aircraft (A319/320, B739). The layout retains the existing aircraft parking lead-in line arrangement while extending the concourse by approximately 230 feet. This linear expansion provides a wider concourse circulation corridor, additional gate holdroom space at Gates 9 and 10, a new concessions and restrooms node, and two new end gates for narrowbody-size aircraft. The plan also identifies areas for expansion beyond the 20-year planning horizon at ticketing, bag claim, additional concourse expansion, and a proposed U.S. Customs and Border Protection (CBP) Federal Inspection Services (FIS) international arrivals hall.

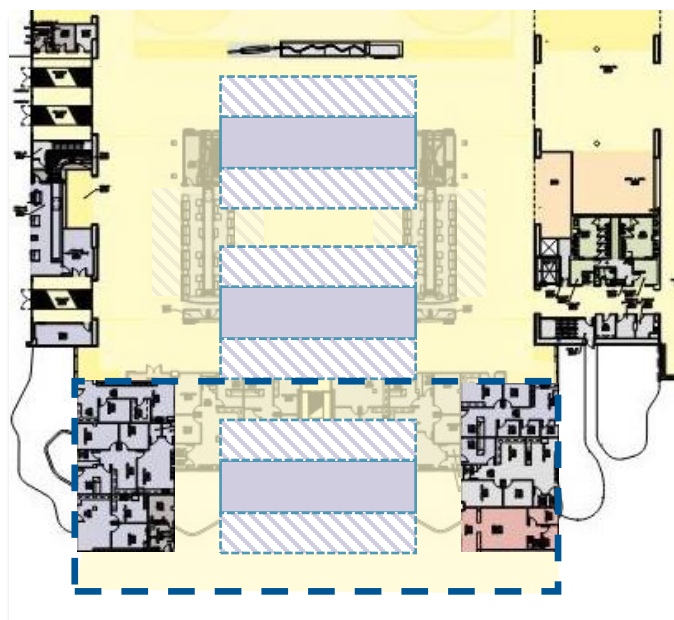
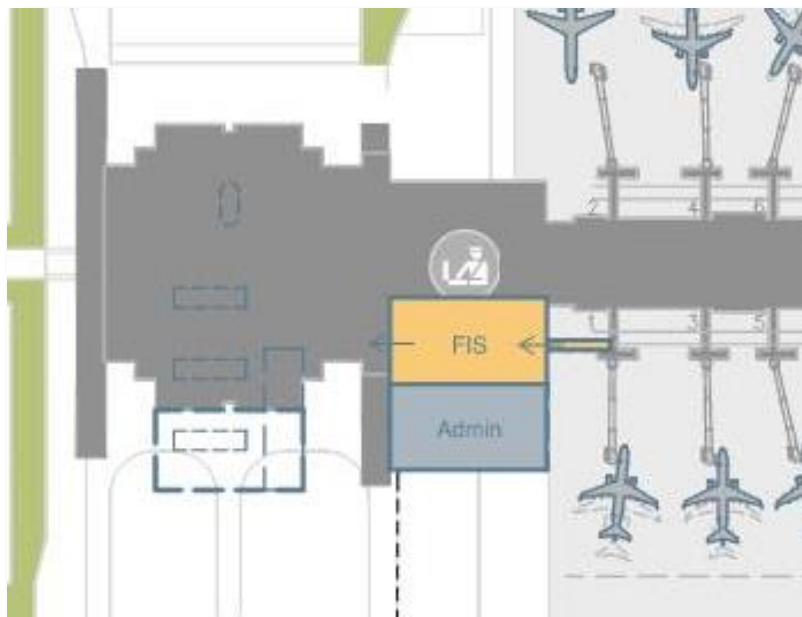


Figure 7.1-1

A 90-foot expansion of the existing ticketing hall to the east would provide ample space to rotate the two check-in islands ninety degrees and allow for a third check-in island. As **Figure 7.1-1** depicts, this would allow for increased queue and cross-circulation depth while providing passengers with enhanced line-of-sight to all counter areas as they enter the terminal. With the increased use of mobile check-in by passengers, airlines are continually assessing the efficiency of their check-in lobby space. For those airlines with self-service devices (SSD), trials have been conducted to implement self-bag tagging/bag drop, such as those by Alaska Airlines at its hub cities. Statistics provided by the airline indicate that three out of four

guests arrive at the airport with a mobile boarding pass. As a result, older-style SSDs are being replaced by smaller tablet-style devices capable of printing bag tags for self-tagging. Passengers then proceed to the traditional check-in counter to drop off their baggage with an agent. By spring 2024, Alaska's

conventional check-in counters, like many international airports, will transition to self-bag drop stations at their hub and focus on city airports where passengers will use biometric verification to drop their baggage after initial self-tagging. The bags will then be automatically inducted into the baggage makeup process. This process aims to reduce dwell and queue times at the check-in touchpoint. Traditional agent counters can be converted to self-bag drop stations while the queue would be set up to provide pods of self-bag tagging SSDs. Depending on each airline's layout, philosophies, and process, this may create the need for additional queue depth. The aim is typically to provide adequate SSDs dispersed within the queue area to eliminate the traditional snake queue and have no more than one or two passengers queuing at any device. While technology is ever-evolving, and more and more passengers are taking control of their check-in process, the need for human interaction will always be present. Therefore, space for the traditional agent check-in counter will still be needed now and in the foreseeable future. Additionally, space for a third baggage claim device between the two existing is currently provided for when demand warrants.



If the Airport decides to pursue international service, a building expansion extending from the existing administrative area will allow for a FIS arrivals facility. The current administration area would be renovated for the FIS, and the administration area would be relocated to the new building expansion, as depicted in **Figure 7.1-2**. Gate 1 would provide a sterile corridor off the fixed link pier into the new FIS arrivals area. While not shown in the overall layout, the TSA Security Screening Checkpoint (SSCP) and associated queue

area will need further study for future expansion capabilities. Options to repurpose part of the existing concourse exit corridor or TSA office and administrative areas could be explored.

Apron Elements

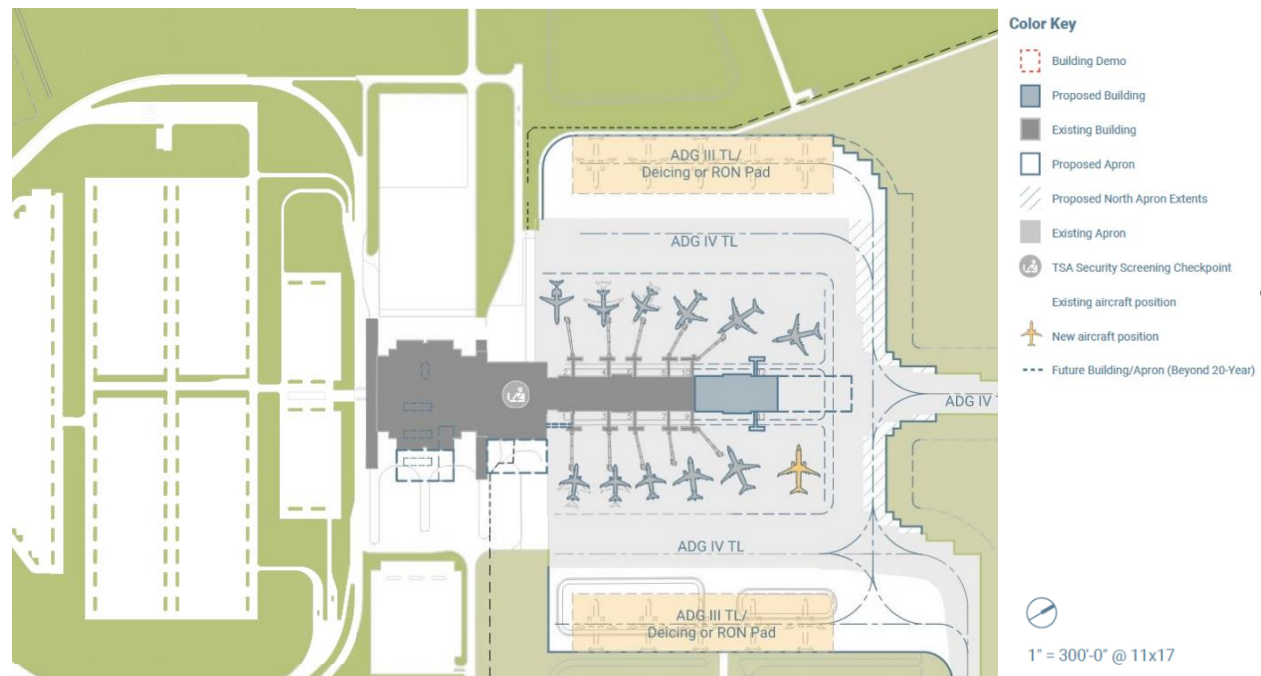
Terminal Alternative 1 incorporates Apron Alternative 1, as described below.

Apron Alternative 1 provides an additional apron for a dual Airplane Design Group (ADG) IV taxilane system into the terminal area on both sides of the existing concourse. This pavement could also be marked for additional remain overnight (RON)/hardstand parking as well as a dedicated de-ice pad during the colder months. Currently, during cold weather operations aircraft are pushed back via tug from the gate into the taxilane area and deiced prior to departure. This may lead to situations where aircraft may have to wait on one another to complete deicing operations before taxiing from the terminal apron area. Having an area designated for deicing operations outside the taxilane object-free area (OFA) allows for an uninterrupted flow of aircraft taxi operations. Aircraft would be pushed back from the gate into the designated deice area and then taxi out under their own power. This could occur on

either side of the concourse, although providing designated areas on both sides of the concourse would provide greater operational flexibility.

This apron alternative helps meet required aircraft parking capacity but provides limited to no aircraft gate use flexibility as the lead in lines do not get reoriented, apron/taxilane flexibility, apron/taxilane efficiency, effective utilization or apron capacity, ramp deicing opportunities, and ability to phase construction/modifications.

Exhibit 7.1-4: Terminal Alternative 1



Source: Alliance (2023)

TERMINAL SITE ALTERNATIVE 2A

Terminal Building Elements

Terminal Alternative 2A (see **Exhibit 7.1-5**) provides a total of 12 bridged aircraft parking positions consisting of five large regionals (CRJ, E75), one small narrowbody (717), and six narrowbody aircraft (319/320, 739). The layout retains the existing aircraft parking lead-in line arrangement up to gates 5 and 6, removes the fixed links at gates 7 and 8, and reorients the aircraft lead-in lines at gates 9 and 10. This allows for a more conventional straight-in aircraft parking arrangement and increased gate holdroom area between existing gates 5/9 and 6/10 by relocating gates 7 and 8 to the concourse expansion area. The 255-foot linear expansion provides a wider concourse circulation corridor, a new concessions and restrooms node immediately at the head of the new building expansion, and four new gates for 180+ seat large narrowbody aircraft. The plan also identifies the same areas as Alternative 1 for additional expansion beyond the 20-year planning horizon at ticketing, bag claim, additional concourse expansion, and a proposed FIS international arrivals hall. Future TSA SSCP expansion would also need additional considerations.

Apron Elements

Terminal Alternative 2A incorporates Apron Alternative 2, as described below.

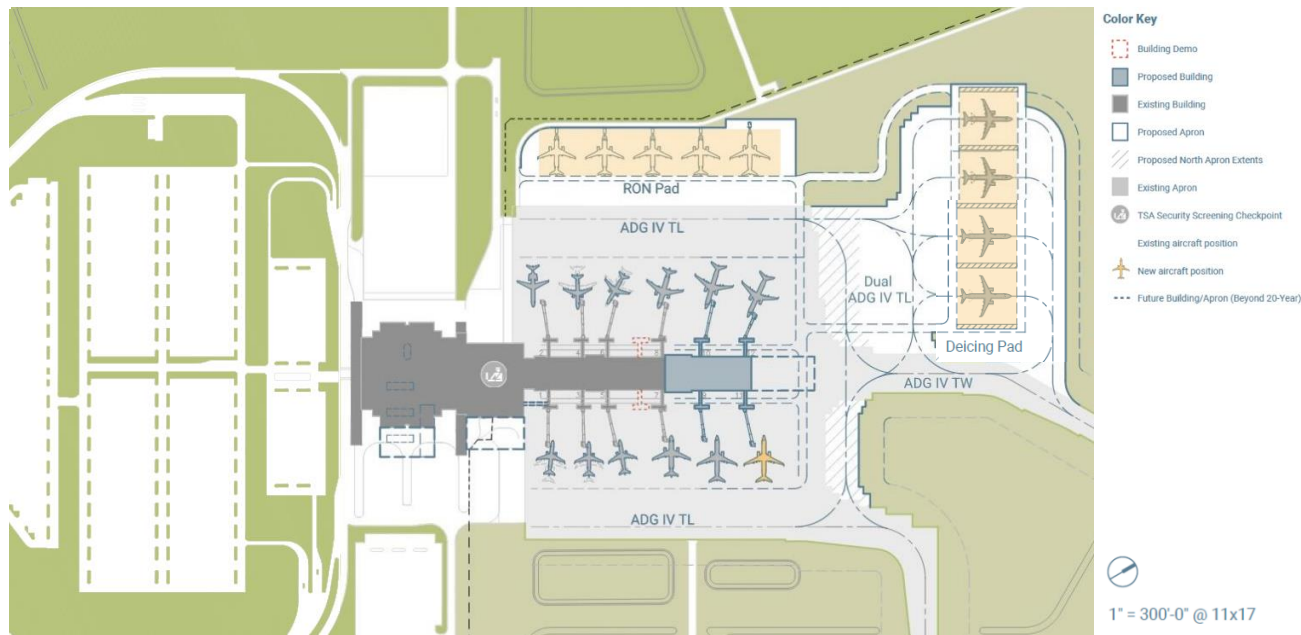
This concept includes approximately 20,000 square yards of RON/hardstand apron to the west of the existing terminal apron. This space would accommodate up to five narrowbody aircraft. This RON/hardstand pad could double as a deicing area during colder months. In this scenario, tugs would push the aircraft from the gate back onto the pad. After deicing, the aircraft would power-out onto the taxilane.

This concept also contemplates construction of a dedicated pull-through deicing pad adjacent to the apron that would encompass approximately 49,000 square yards for up to four simultaneous narrowbody aircraft. Dual ADG IV taxilanes off Taxiway F provide aircraft deice queue as well as staging to the west side concourse gates. This deicing location provides greater operational efficiency as aircraft flow through the deicing operation under their own power without the need for pushback tugs as would be required for the west pad.

The Alternative 2 concept shows both deicing options for space planning considerations, although it is not likely that both options would be constructed.

This alternative helps to meet required aircraft parking capacity, demonstrates a prudent utilization of the apron for aviation needs, provides ramp deicing opportunities, and can phase construction/modifications. It does lack in aircraft gate use flexibility and apron/taxilane efficiency.

Exhibit 7.1-5: Terminal Alternative 2A



Source: Alliance (2023)

TERMINAL SITE ALTERNATIVE 2B

Terminal Building Elements

The terminal components in Alternative 2B (see **Exhibit 7.1-6**) are unchanged from Alternative 2A.

Apron Elements

Terminal Alternative 2B incorporates Apron Alternative 3, as described below.

Terminal Apron Alternative 3 extends the existing pavement further north to provide continuous dual ADG IV taxilanes north of the existing concourse expansion area down to Taxiway E.

Alternative 3 carries over the RON/hardstand and deicing pad options from Apron Alternative 2, which include approximately 20,000 square yards of RON/hardstand apron to the west of the existing terminal apron and a dedicated pull-through deicing pad adjacent to the apron that would encompass approximately 49,000 square yards.

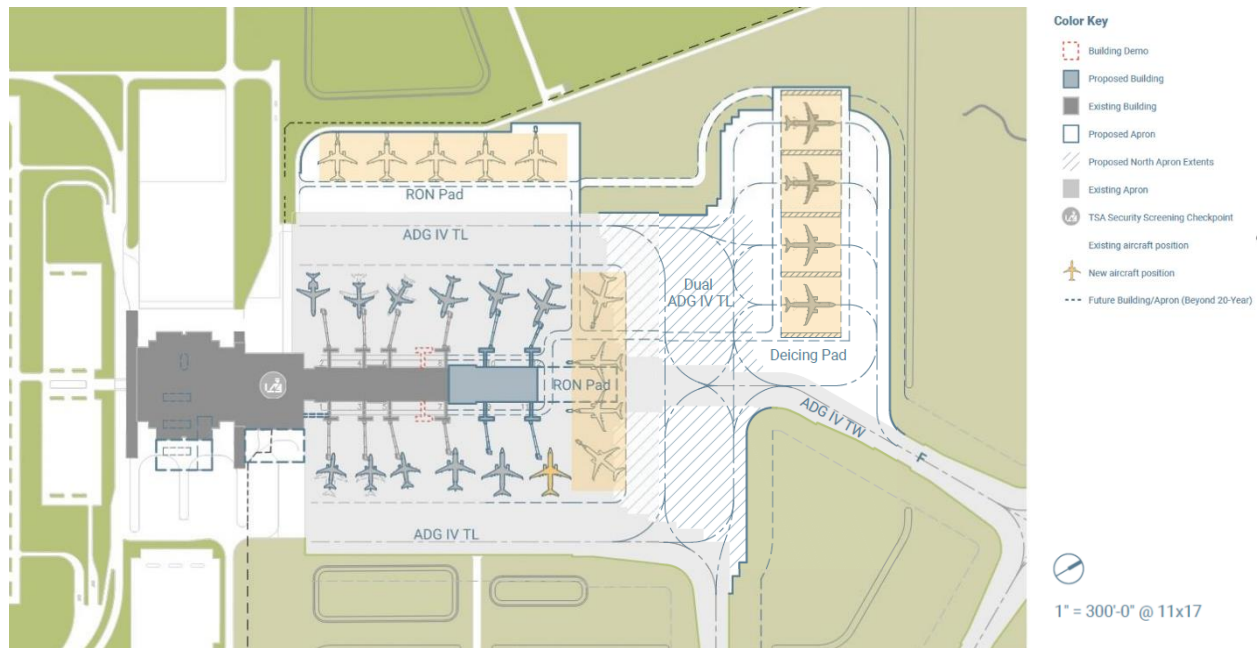
Like Alternative 2, the Alternative 3 concept shows both options for space planning considerations, although it is not likely that both options would be constructed.

The orientation of Alternative 3 allows future terminal apron expansion in a phased manner. Initial apron expansion would be directly to the north, as indicated by the diagonal lines on **Exhibit 7.1-5**. Later phases could see expansion to the west and further to the north to include dedicated RON and/or deicing pads. Additionally, this could connect the terminal apron to the future Runway 02L/20R environment via a taxiway extension off the deice pad area.

This alternative fulfills all evaluation criteria and provides excellent apron/taxilane efficiency due to the addition of the dual taxilanes.

This alignment establishes the site for the future build depicted in Alternative 2 Future.

Exhibit 7.1-6: Terminal Alternative 2B

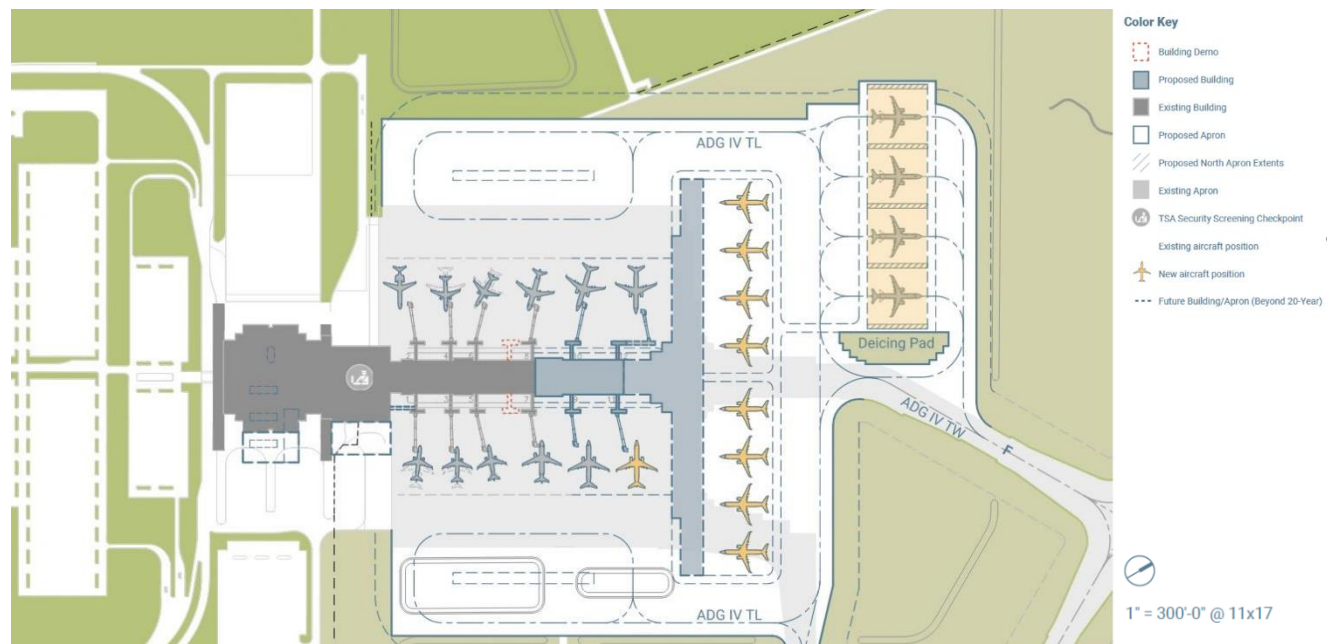


Source: Alliance (2023)

TERMINAL SITE ALTERNATIVE 2 FUTURE

Beyond the 20-year planning horizon, Alternative 2 Future (see Exhibit 7.1-7) provides a new central node at the end of the previous building, providing a larger amenity space for restrooms, Service Animal Relief Area (SARA), nursing mother's suite, retail, and food and beverage offerings. A new single-loaded concourse expands east and west approximately 565 feet from the central node, providing an additional eight large narrowbody gates for a total of 20 gated aircraft positions. Dual ADG IV taxilanes, both east and west of the existing concourse, provide increased aircraft maneuverability into and out of the existing concourse gate area.

Exhibit 7.1-7: Terminal Alternative 2 Future (Beyond 20 Years)



Source: Alliance (2023)

TERMINAL SITE ALTERNATIVE 3

Terminal Building Elements

Terminal Alternative 3 (see **Exhibit 7.1-8**) provides a total of 14 bridged aircraft parking positions consisting of five large regionals (CRJ, E75), one small narrowbody (B717), and eight narrowbody aircraft (A319/320, B737). The layout retains the existing aircraft parking lead-in line arrangement up to gates 5 and 6, removes the fixed links at gates 7 and 8, and reorients the aircraft lead-in lines at gates 9 and 10. This allows for a more conventional straight-in aircraft parking alignment while also creating an increased gate holdroom area between existing gates 5/9 and 6/10 by relocating existing gates 7 and 8 to the concourse expansion area. The 230-foot-node expansion provides a wider concourse circulation corridor, a new restroom node at the neck of the new concourse expansion, a central food and beverage area with views to all gates, and a bar with a potential outdoor patio area at the end of the node. Three relocated gates and three new 180+-seat large narrowbody aircraft gates radiate around the central node. The plan also identifies the same areas as Alternative 1 for additional expansion beyond the 20-year planning horizon at ticketing, bag claim, additional concourse expansion, and a proposed FIS international arrivals hall. Future TSA SSCP expansion would also need additional considerations.

Apron Elements

Terminal Alternative 3 incorporates Apron Alternative 3, as described below.

Terminal Apron Alternative 3 extends the existing pavement further north to provide continuous dual ADG IV taxilanes north of the existing concourse expansion area down to Taxiway E.

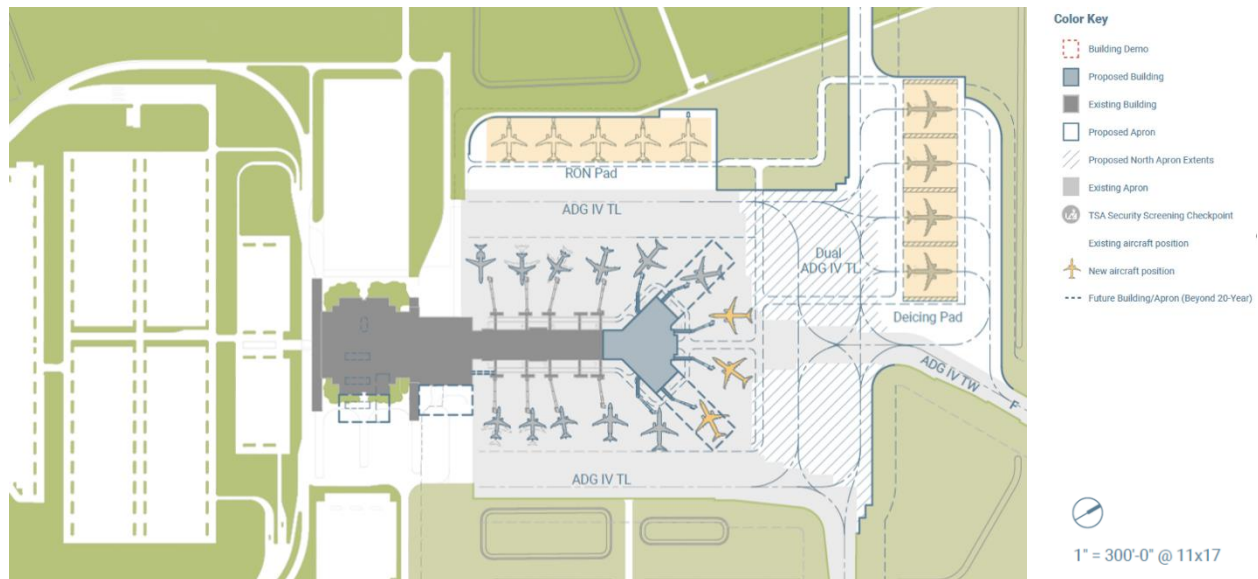
Alternative 3 carries over the RON/hardstand and deicing pad options from Apron Alternative 2, which include approximately 20,000 square yards of RON/hardstand apron to the west of the existing terminal apron and a dedicated pull-through deicing pad adjacent to the apron that would encompass approximately 49,000 square yards.

Like Alternative 2, the Alternative 3 concept shows both options for space planning considerations, although it is not likely that both options would be constructed.

The orientation of Alternative 3 allows future terminal apron expansion in a phased manner. Initial apron expansion would be directly to the north, as indicated by the diagonal lines on **Exhibit 7.1-7**. Later phases could see expansion to the west and further to the north to include dedicated RON and/or deicing pads. Additionally, this could connect the terminal apron to the future Runway 02L/20R environment via a taxiway extension off the deice pad area.

This alignment establishes the site for the future build depicted in Alternative 2 Future.

Exhibit 7.1-8: Terminal Alternative 3

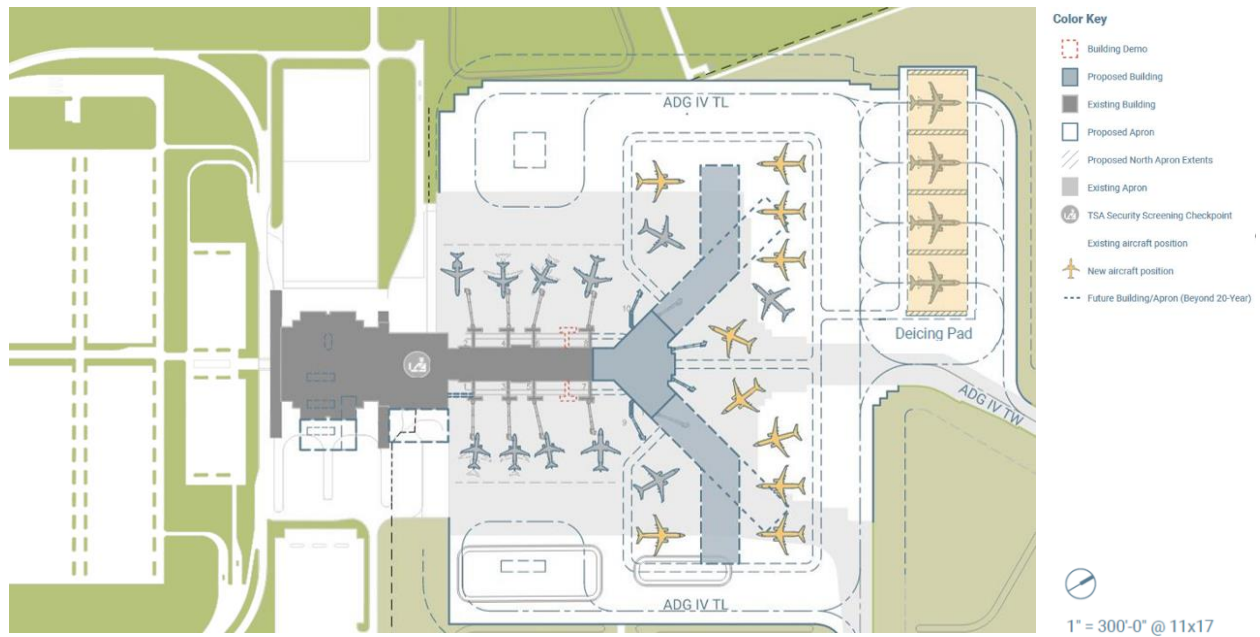


Source: Alliance (2023)

TERMINAL SITE ALTERNATIVE 3 FUTURE

Beyond the 20-year planning horizon, the future of Alternative 3 could expand in a variety of directions. The node could expand further into a "Y" configuration, become a "T" configuration like Alternative 2, or create a "gullwing" as depicted in **Exhibit 7.1-9**. Extending both east and west from the central node, two new 500-foot double-loaded concourses provide an additional seven large narrowbody gates for a total of 21 gated aircraft positions. Dual ADG IV taxiways, both east and west of the existing concourse, provide increased aircraft maneuverability into and out of the existing gate area.

Exhibit 7.1-9: Terminal Alternative 3 Future (Beyond 20 Years)



Source: Alliance (2023)

Larger versions of the initial Terminal Site Alternative exhibits are provided in **Appendix 14**.

7.1.4 Passenger Terminal Alternatives Attributes and Constraints

Table 7.1-1 provides an overall summary of the attributes and constraints of each terminal alternative developed for the Master Plan.

Table 7.1-1: Terminal Alternatives Attributes and Constraints

Alternative	Attributes	Constraints
Alternative 1	- Provides two additional large narrowbody bridged gates. - Maintains existing aircraft parking alignments. - Ability to expand concourse without loss of gates. - Maintains existing modularity of concourse. - Provides new restroom and concessions node. - Dual ADG IV taxilanes on both sides of the concourse - Dual RON pads on either side of the concourse, which could double as a dedicated de-ice pad during cold weather months. - Ability to expand existing terminal check-in lobby (beyond 20 years) without loss of capacity during construction. - Ability to add additional claim devices within the existing claim lobby. - Potential landside FIS for international arrivals - Expand existing end gate holdroom capacity. - Minimal additional apron expansion needed for concourse expansion	- Existing aircraft parking arrangement near end gates creates inefficient use of future apron aircraft parking layout. - Maintains use of PBB fixed links in the new expansion, reducing future gate and aircraft parking relocation flexibility - Maintaining the use of two separate de-ice pads. - De-icing requires aircraft pushback operations from the gate onto the pad. - Extensive grade fill on the east side of the concourse
Alternative 2 (2a & 2b)	- Relocate gates 7 & 9 and realign gates 9 & 10 for aircraft parking to create a more efficient apron parking layout. - Increases existing internal gate capacity with existing gate relocations. - Provides new gate holdroom space for two relocated and two new large narrowbody gates. - Provides new restroom and concessions node. - Ability to expand concourse without loss of gates. - Maintains existing modularity of concourse. - Provides RON pad west of the concourse. - Provides dedicated flow through the deice pad north of the concourse. - Provides dual ADG IV taxilanes north of the concourse, increasing aircraft maneuverability. - Ability to expand existing terminal check-in lobby (beyond 20 years) without loss of capacity during construction. - Ability to add additional claim devices within the existing claim lobby. - Potential landside FIS for international arrivals	- Requires removal and relocation of Gates 7 & 8 fixed links. - Maintains single ADG IV taxilanes on either side of the concourse. - Requires newer pavement for concourse expansion than Alternative 1 - Maintains use of PBB fixed links in the new expansion, reducing future gate and aircraft parking relocation flexibility - Longest walking distance to end gates of three alternatives. - Single-loaded concourse with future (beyond 20-year) expansion - Beyond 20-year expansion would create a single ADG IV taxilane north of the concourse without relocation of the de-ice pad
Alternative 3	- Relocate gates 7 & 9 and realign gates 9 & 10 for aircraft parking to create a more efficient apron parking layout. - Increases existing internal gate capacity with existing gate relocations.	- Requires removal and relocation of Gates 7 & 8 fixed links. - Maintains single ADG IV taxilanes on either side of the concourse.

• Provides new gate holdroom space for two relocated and four new large narrowbody gates. • New “node” expansion creates central concessions/bar and retail zone. • Ability to see all gate holdroom areas from the central concessions zone. • Ability to expand into double-loaded concourse in multiple directions with increased retail potential at the node. • Shortest walking distances to end gates. • Provides RON pad west of the concourse. • Provides dedicated flow through the deice pad north of the concourse. • Provides dual ADG IV taxilanes north of the concourse, increasing aircraft maneuverability. • Ability to expand existing terminal check-in lobby (beyond 20 years) without loss of capacity during construction. • Ability to add additional claim devices within the existing claim lobby. • Potential landside FIS for international arrivals	• Requires newer pavement for concourse expansion than Alternative 1 • Loss of end gates during future expansion • Beyond 20-year expansion would create a single ADG IV taxilane north of the concourse without relocation of the de-ice pad
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Source: Alliance (2023)

7.1.5 Evaluation of Terminal Apron Alternatives

Discussions with the Airport and Stakeholder group helped inform the basis for developing and defining the evaluation criteria to score the terminal apron alternatives. The six criteria and their associated definitions are presented below in **Table 7.1-2**.

Table 7.1-2: Terminal Apron Alternatives Evaluation Criteria and Definitions

Criteria	Definition
1. Meets required aircraft parking capacity	Provides required net gain in aircraft parking, gates, , and fleet mix size
2. Aircraft Gate Use Flexibility	Ability of the concept to provide flexibility of use in aircraft gates, apron, and supporting taxilane system for potential fleet mix changes & airline operations
3. Apron/Taxilane Efficiency	Improves taxiway/taxilane flows and minimizes pushback and potential jetblast conflicts
4. Effective Utilization of Apron Capacity	The concept demonstrates prudent utilization of the airport's apron for aviation needs such as GSE parking/storage, etc.
5. Ramp Deicing Opportunities	Provides a contiguous land envelope adjacent to the gates for remote deicing opportunities
6. Ability to Phase Construction/Modifications	Provides a feasible approach to construction phasing while maintaining existing operational capability (no loss of gates, services or utilities)

Source: Alliance (2023)

The evaluation for each alternative based on each criteria category is shown in **Table 7.1-3**.

Table 7.1-3: Initial Terminal Apron Alternatives Evaluation Matrix

Criteria Categories	Criteria Definition	SGF Alternatives Evaluation Matrix		
		Alternative 1	Alternative 2	Alternative 3
				
		SCORE	SCORE	SCORE
1 Meets Required Aircraft Parking Capacity	Provides required net gain in aircraft parking, gates and fleet mix size			
2 Aircraft Gate Use Flexibility	Ability of the concept to provide flexibility of use in aircraft gates, apron and supporting taxiway system for potential fleet mix changes & airline operations			
3 Apron/Taxiway Efficiency	Improves taxiway/taxiway flows and minimizes pushback and potential jetblast conflicts			
4 Effective Utilization of Apron Capacity	The concept demonstrates a prudent utilization of the airport's apron for aviation needs such as GSE parking/storage, etc.			
5 Ramp Deicing Opportunities	Provides a contiguous land envelope adjacent to the gates for remote deicing opportunities			
6 Ability to Phase Construction/Modifications	Provides a feasible approach to construction phasing while maintaining existing operational capability (no loss of gates, services or utilities)			
TOTAL ALTERNATIVE		-2	4	6
Scoring Scale: Highest Score = 1 Lowest Score = -1 Color Scoring Scale:  1 = Positive  0 = Neutral  -1 = Negative				

Source: Alliance (2023)

Alternative 3 fulfills all criteria categories and is the preferred Terminal Apron Alternative.

7.1.6 Evaluation of Initial Terminal Alternatives

Discussions with the Airport and Stakeholder group helped inform the basis for developing and defining the evaluation criteria to aid in the selection of the short-listed alternatives. The six criteria and their associated definitions are presented below in **Table 7.1-4**, followed by the initial scoring matrix results in **Table 7.1-5**.

Table 7.1-4: Terminal Alternatives Evaluation Criteria and Definitions

Criteria	Definition
1. Apron/Gate use flexibility and minimizes pushback/jet blast conflicts	Provides flexibility of use in aircraft gates and aprons for potential fleet mix changes, airline operations, & aircraft deicing opportunities. Improves taxiway/taxilane flows and minimizes pushback and potential jet blast conflicts.
2. Program efficiency and Passenger Level of Service (LoS)	Effective utilization of the terminal/concourse footprint provides the needs identified by the Airport and improves spatial LoS while maximizing airside gate holdroom capacity and minimizing impacts to walking distances.
3. Ability to increase near-term gate capacity	Provides the ability to increase near-term gate capacity while safeguarding long-term future expansion flexibility.
4. Construction phasing effectiveness with the ability for future expansion	Provides a feasible approach to construction phasing while maintaining existing operational capability (no loss of gates, services, or utilities). The alternative provides an ultimate expansion path well beyond the Master Plan forecast horizon that is achievable with minimal impacts.
5. Site utilization	The alternative demonstrates prudent utilization of the airport's land for an efficient terminal and apron footprint.

Source: Alliance (2023)

Table 7.1-5: Initial Alternatives Evaluation Matrix

Criteria Categories		SGF Alternatives - Evaluation Matrix		
		Alternative 1	Alternative 2	Alternative 3
		SCORE	SCORE	SCORE
1	Apron/Gate use flexibility & minimizes pushback/jetblast conflicts			
2	Program efficiency & Passenger Level of Service			
3	Ability to increase near-term gate capacity			
4	Construction phasing effectiveness with ability for future expansion			
5	Site utilization			
TOTAL ALTERNATIVE		0.0	2.0	3.0

Color Scoring Scale:

-  1 = Positive
-  0 = Neutral
-  -1 = Negative

Source: Alliance (2023)

7.1.7 Short-list Consolidated Terminal/Apron Alternatives

Based on initial feedback from the Airport regarding various constraints around Alternative 1 and the scoring results from the evaluation matrix, it was concluded both Terminal Alternatives 2 and 3 that incorporate the preferred apron concept would be retained for further development. This included providing initial high-level conceptual floor plan diagrams and three-dimensional massing of the proposed plans.

ALTERNATIVE 2

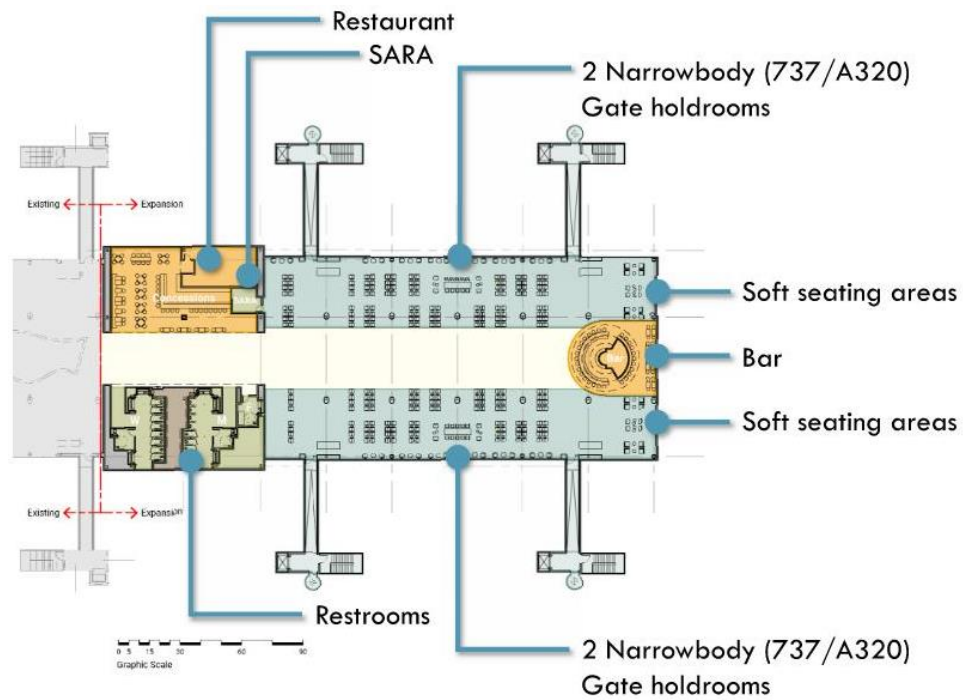
A high-level conceptual plan, as shown in **Exhibit 7.1-10** and **Exhibit 7.1-11**, depicts an overall layout of the expanded “linear” concourse. At 270 feet in length, the 27,900 square foot plan provides an area for a new amenity node consisting of a food and beverage concessionaire, an additional restroom block including a nursing mother’s suite and SARA, and four large narrowbody aircraft gates. Two contiguous gate holdroom areas on either side of the 30-foot wide concourse circulation corridor provide approximately 3,200 square feet per gate. With space for over 90 seats per gate area, the plan provides a layout for both traditional beam-style seating as well as areas for “soft” seating and high-top recharge bars. The end of the concourse provides an area for an additional open bar and seating zone for passengers as they await their flights. Four additional fixed sloped links with baggage elevators and egress stairs provide access to new passenger boarding bridges. Concourse flooring materials, as depicted in **Exhibit 7.1-12**, would include carpeted gate areas along with hard surfaces in high-passenger traffic areas.

Exhibit 7.1-10: Alternative 2 Aerial



Source: Alliance (2023)

Exhibit 7.1-11: Alternative 2 Floor Plan



Source: Alliance (2023)

Exhibit 7.1-12: Alternative 2 Interior 3D View



Source: Alliance (2023)

ALTERNATIVE 3

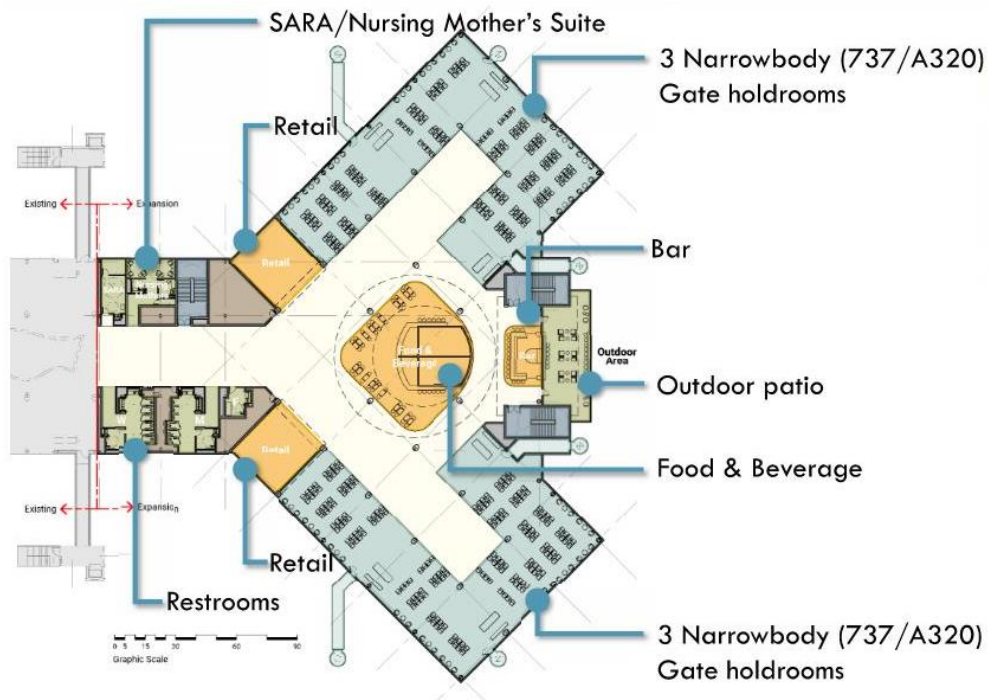
As shown in **Exhibit 7.1-13** and **Exhibit 7.1-14**, the plans depict an overall layout of the expanded concourse “node”. The 250-foot length, 45,370-square-foot plan provides an area for a new restroom node at the “neck” of the expansion, providing space for an additional restroom block, including a nursing mother’s suite and SARA. Additional retail space is provided adjacent to the restroom block on either side of the 30-foot concourse circulation corridor. At the center of the expansion is an open restaurant seating concept along with a bar and outdoor patio area at the end of the concourse. Three contiguous gate holdroom areas sized for large narrowbody aircraft, each with approximately 3,070 square feet of area, are located on either side of this main node, providing a total of six new gates. The layout provides space for over 90 seats at each gate area for both traditional beam-style seating as well as areas for “soft” seating and high-top recharge bars. For future expansion and aircraft parking realignment flexibility, the plan provides knockout panels along the building façade for connection to a passenger boarding bridge (PBB). Concourse flooring materials, as depicted in **Exhibit 7.1-15**, include carpeted gate areas along with hard surfaces in high-passenger traffic areas.

Exhibit 7.1-13: Alternative 3 Aerial



Source: Alliance (2023)

Exhibit 7.1-14: Alternative 3 Floor Plan



Source: Alliance (2023)

Exhibit 7.1-15: Alternative 3 Interior 3D View



Source: Alliance (2023)

The shortlisted terminal alternatives were presented to both the Airport and Stakeholder group during the final stakeholder engagement meeting in late April 2023. Based on feedback from the group, it became apparent that the Alternative 3 “node” layout provided greater flexibility for near-term and future building and ramp expansion.

With the desire for a flow-through style deice pad, any near-term pavement expansion at the end of the existing terminal could be used for additional close in RON/handstand parking or deicing activities prior to a future gate expansion. The slightly shorter Alternative 3 concept provides a central “node” for increased concessions, restrooms, and retail visibility while also enhancing passenger sight lines to their gates when seated in the central food & beverage area. The layout also allows for greater near-term gate capacity over Alternative 2. Additionally, the “node” concept is non-committal to any future expansion direction. Multiple incremental concourse expansion layouts beyond the 20-year planning horizon can be achieved, such as those depicted in **Exhibit 7.1-6**.

SGF is a beneficiary of a Congressionally Directed Spending (CDS) grant to expand the terminal apron to prepare for a future terminal expansion and minimize impact to service during that time. The nature of this grant is to expand the limits of the ramp commensurate with the preferred apron expansion alternative (Apron Alternative 3). However, the CDS grant will not cover the full pavement expansion to include the dedicated RON/handstand and/or deicing facilities as depicted.

Based on further dialogue with the Airport and FAA, the Apron Alternative 3 concept was refined to use smaller ADG III criteria for the independent dual taxilanes while maintaining ADG IV capability by providing a dependent ADG IV taxilane in the center. This allows for an overall reduction in the initial apron expansion phase footprint from approximately 38,300 SY to 27,500 SY (excluding future RON/handstand and/or deicing pad extensions) while still providing the desired operational flexibility and capacity. Further details about the Apron Alternative 3 refinement are presented in **Appendix 15**.

Chapter Eight

Land Use Compatibility Plan

8.0 Introduction

Effective land use planning at an airport encourages land uses considered “compatible” with aeronautical activities to be located around an airport and strives to guide “incompatible” land uses away from an airport. Land use planning aims to minimize noise exposure and safety hazards while safeguarding the airport's operations. There are two types of land use planning: on-airport and off-airport. It is the goal of both types of land use planning to promote land use compatibility between the land surrounding an airport and the aeronautical activities of an airport.

Commercial service airports have a vital role in the economic development of the community they serve, which is why their continuous development and growth are necessary to ensure the efficient economic growth of the local community. A proper Land Use Compatibility Plan will be critical for the continuous development and growth of SGF. It will allow the Airport to minimize the development of incompatible land uses, which may interrupt its ability to serve the community in the future.

This chapter of the Master Plan will review prior land use planning initiatives, documents, and zoning control mechanisms and evaluate whether existing land use controls currently provide sufficient compatible land use protection for SGF. The goals of this chapter are as follows:

- Provide an overview of a land use compatibility plan.
- Review existing land use initiatives and regulatory controls.
- Identify surrounding municipal limits.
- Identify the Airport Influence Area (AIA).
-
- Conduct high-level land use compatibility assessment.
- Develop Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis.
- Provide land use compatibility planning recommendations.

8.1 Overview of a Land Use Compatibility Plan

Airport sponsors should strive to promote compatible land uses around airports while encouraging incompatible land uses to be located away from airports. Identifying the types of land uses around an airport helps address potential airport compatibility impacts related to noise, safety, airspace protection, and aircraft overflight.

ECONOMIC CONTRIBUTION

Commercial service airports such as SGF provide a vital link to regional, state, and national transportation systems. This transportation link contributes to local and regional economies that, in turn,

promote and sustain the airport. SGF provides connections through commercial service and supports the regional and state economy as a cargo center with a large Foreign Trade Zone (FTZ) that regularly sees several large cargo aircraft operations daily. SGF also has a thriving General Aviation (GA) facility that supports and services many Springfield-headquartered businesses and local aviators. The National Guard also calls the airfield home as it houses one of the only Aviation Classification Repair Activity Depots (AVCRAD) to service military helicopters that, in turn, supply many jobs to the surrounding community.

As seen in the inventory chapter, Springfield and Greene County are on a growth trend in population and economic sectors. As the number of people and jobs continues to climb, so does the demand for air travel and land for residential development. While the increased demand for the airport is desired, the need for residential development is also growing- which is not expected near the airfield.

INCOMPATIBLE LAND USES

Incompatible land uses around airports can jeopardize the safety and efficiency of flying activities and the quality of life of the community's residents. Incompatible land uses can include wildlife attractants such as wetlands and landfills, cell towers and antennae transmitting signals that interfere with radio transmissions and navigational aids, lights that may be disorienting to a pilot, and tall structures including buildings and construction cranes that may impact an airport's airspace or instrument approach.

Common incompatible airport land uses comprise:

- Residential development
- Schools
- Community centers and libraries
- Hospitals
- Buildings used for religious services
- Tall structures
- Smoke and electrical signal generators
- Landfills and other bird/wildlife attractants

Residential development, particularly high-density development, is generally incompatible with airport operations due to aircraft noise impacts and safety reasons. Within an airport's noise impact areas, residential and public facilities such as schools, churches, public health facilities, and concert halls can be sensitive to high noise levels. They can affect the development of the airport.

Sometimes, the airport sponsor must purchase or protect sufficient land around the airport to prohibit infringing on incompatible land uses. Conversely, incompatibility may occur because an airport project has expanded near an existing residential neighborhood.

Land use decisions that conflict with aeronautical activity and airport facilities can result in undue constraints on an airport. To enable this sector of the economy to continue to expand, provide a wide variety of job opportunities for local citizens, and meet the needs of the traveling public, it is vitally essential that airports operate in an environment that maximizes the compatibility of the airport with off-airport development.

For SGF to meet its current and future needs and thereby continue contributing to the local and regional economies, the airport sponsor must develop appropriately and be as compatible as reasonably feasible with its neighbors and community.

COMPATIBLE LAND USES

Compatible land use planning encourages land uses more consistent with an airport environment, such as **industrial and commercial uses**, to be located around airports.

Most commercial and industrial uses, especially those associated with the airport, are good neighbors to airports and the community. These developments are often staffed by citizens of the community they work in. Land uses where the airport creates the demand are also compatible with land uses for SGF. These include:

- Motels/Hotels
- Restaurants
- Warehouses
- Shipping Agencies
- Aircraft-related industries
- Aeronautical-related companies
- Industries that benefit from access to the airport

Other uses that may be compatible with airports are:

- Large parks
- Conservatory areas and other open spaces
- Forestry services
- Landscape services
- Golf courses

These land uses are created for public purposes and are opportunities for local government bodies to provide facilities that serve another purpose to protect airport operations.

Large parks, conservation areas, and golf courses may be compatible, provided they do not impede the airport's mission and future expansion plans. National Environmental Policy Act (NEPA) considerations regarding Sections 4(f) and 6(f) should be considered when assessing locations of any compatible uses.

Section 4(f) properties include significant publicly owned public parks, recreation areas, and wildlife or waterfowl refuges, or any publicly or privately owned historic site listed or eligible for listing on the National Register of Historic Places.

Section 6(f) of the Land and Water Conservation Act requires that the conversion of lands or facilities acquired with Land and Water Conservation Act funds under the State Assistance program be coordinated with the National Park Service.

Agriculture is another land use compatible with airport operations so long as the service is not a wildlife attractant. Agricultural land use near an airport permits the property owner to efficiently use the land while providing an additional benefit to the community for airport protection.

AIRPORT MASTER PLAN AND LAND USE COMPATIBILITY PLAN

The SGF Airport Master Plan recognizes that state and local governments are responsible for land use planning, zoning, and regulation. For this reason, this document should be coordinated with local jurisdictions surrounding the airport to ensure that future airport development plans are considered in each jurisdiction's local comprehensive land use plan.

SPONSOR COMMITMENT

The airport sponsor is responsible to the extent reasonable for ensuring that land uses around the airport are compatible with existing and future airport operations. When the airport sponsor is a city and or county government, the government is also responsible for promoting its citizens' general welfare, including the health and safety of all residents.

An airport sponsor should initiate coordination efforts with surrounding communities to ensure that existing and future airport development is compatible with the land use plan for the area. This approach is in the airport's best interest as it will protect the development rights and growth of SGF well into the future.

8.2 SGF Land Use Compatibility Plan

A typical Land Use Compatibility Plan identifies four critical issues for evaluating the types of land uses to be considered compatible around airports:

- The impact of aircraft noise and noise compatibility planning.
- The potential for airspace conflicts from tall structures near an airport.
- The possibility of electronic interference with aviation navigation aids (NAVAIDS).
- The potential for interaction between aircraft and wildlife attractants.

As part of this Master Plan effort, this Land Use Compatibility Plan describes land use associated with Springfield-Branson National Airport and its surroundings.

The Land Use Compatibility chapter of this Master Plan has the following goals:

1. Review existing land use and regulatory controls (i.e., local municipal land use maps).
2. Complete a Land Use Compatibility Assessment by defining the Airport Influence Area (AIA).
3. Prepare land use recommendations.

8.2.1 Local Municipal Limits

This section aims to identify the municipalities and city limits of all the cities and counties surrounding Springfield-Branson National Airport. Four local municipal jurisdictions surround SGF:

- Springfield, Missouri
- Republic, Missouri
- Willard, Missouri
- Greene County, Missouri

Land use planning must identify the existing municipal zoning landscape surrounding SGF. **Exhibit 8.2-1** shows the location of the four municipalities in relation to SGF.

The exhibit below shows the location of all four municipalities surrounding SGF. However, some land use considerations evaluated in this chapter will affect only a few.

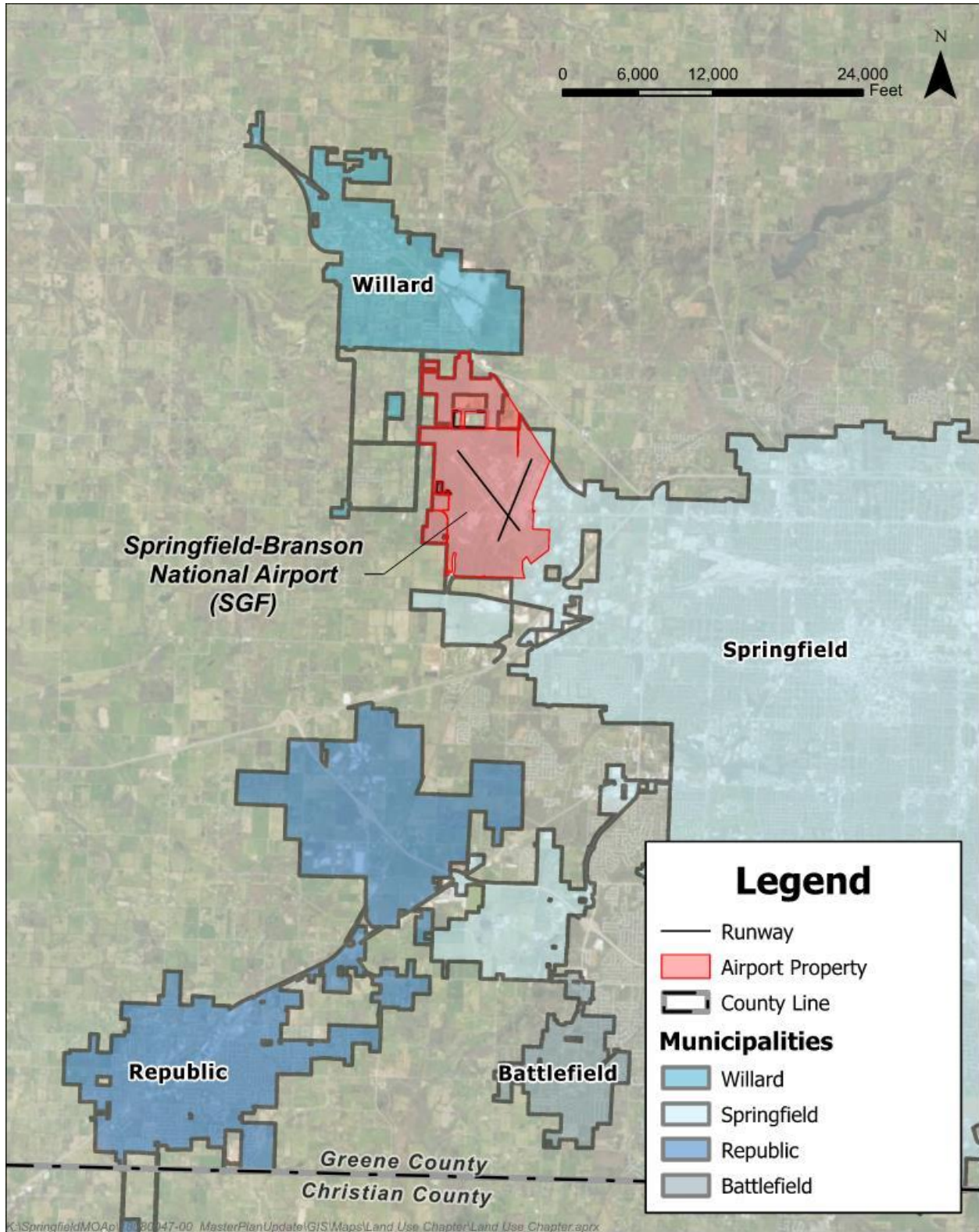
The City of Springfield completed a new Comprehensive Plan in early 2023, which is focused on placemaking- a form of planning focused on the design through city-beautification projects that blend the structure and function of the built environment. This new plan identifies areas around the airport as industrious and commercially focused.

The city of Willard, north of SGF and Springfield, has acknowledged the airport and zoning protection associated with the airfield in its 2019 Comprehensive Plan.

Greene County has acknowledged the impact of the airport on the county as well and included specific language recognizing the airport's need for protected zoning, and compatible land uses adjacent in their 2018 Land Use Plan.

The next step of this Land Use Compatibility Plan is to define the Airport Influence Area (AIA) to identify which of the municipalities shown in the exhibit below will be affected by the activities generated by SGF.

Exhibit 8.2-1: Local Municipal Limits



Source: CMT

8.2.2 Municipal Zoning

AIRPORT OVERLAY ZONE

Two airport overlay (AO) districts, AO-1 and AO-3, serve as an additional layer to regulate the development of noise-sensitive land uses, promoting compatibility between the Airport and the surrounding land uses and promoting the health, safety, and general welfare of property users.

The City of Springfield regulates the AO-1 district and includes all areas within 2,000 feet of any airport runway centerline extending 10,000 feet from both ends.

The AO-3 district includes all areas encompassing the airport zones defined in the Airport Zoning Law, Chapter 305 Revised Statutes of Missouri (RSMo), which is specific to Greene County. This law states that the areas encompassing the airport are designed to protect the existing and potential runways. **Exhibit 8.2-5** displays the AOs in relation to SGF.

The AO-1 district prohibits residential, public, and recreational uses, except as modified by the AO-3 district. While AO-1 prohibits the uses above, the AO-3 district allows for constructing single-family dwellings, including manufactured homes, on a lot or parcel of land of 10 acres or more. These uses may be permitted on a lot of fewer than 10 acres if they lawfully existed at the effective date of the zoning code, provided an aviation easement is granted to the city and noise level reduction (NLR) practices are installed during construction.

Structures and the accompanying landscaping in the AO districts must be at most 50 feet tall. This height restriction and allowable uses steer the area toward industrial use, with low-density and low buildings compatible with airport operations.

Any development within 1.5 miles of the ultimate end of any existing or planned runway shown on the most current ALP must obtain a Conditional Use Permit. In 2021, playfields were added as the only allowable conditional use in the AO districts. The Springfield-Branson National Airport Board shall review any Conditional Use Permit applications in the AO districts for potential impacts on the Airport and make its recommendation to the City's Planning and Zoning Commission. The Planning and Zoning Commission will recommend the matter to the City Council for final action.¹

The overlay districts protect the planned but unbuilt runway parallel to Runway 02-20 to ensure that further airport development is possible without outside influences.

The AO district is the most controlling factor for development near SGF as it statutorily allows for the airport to review and permit considering the impact on the airport and the interactions with protected airspace surfaces.

¹ City of Springfield, Missouri zoning regulations

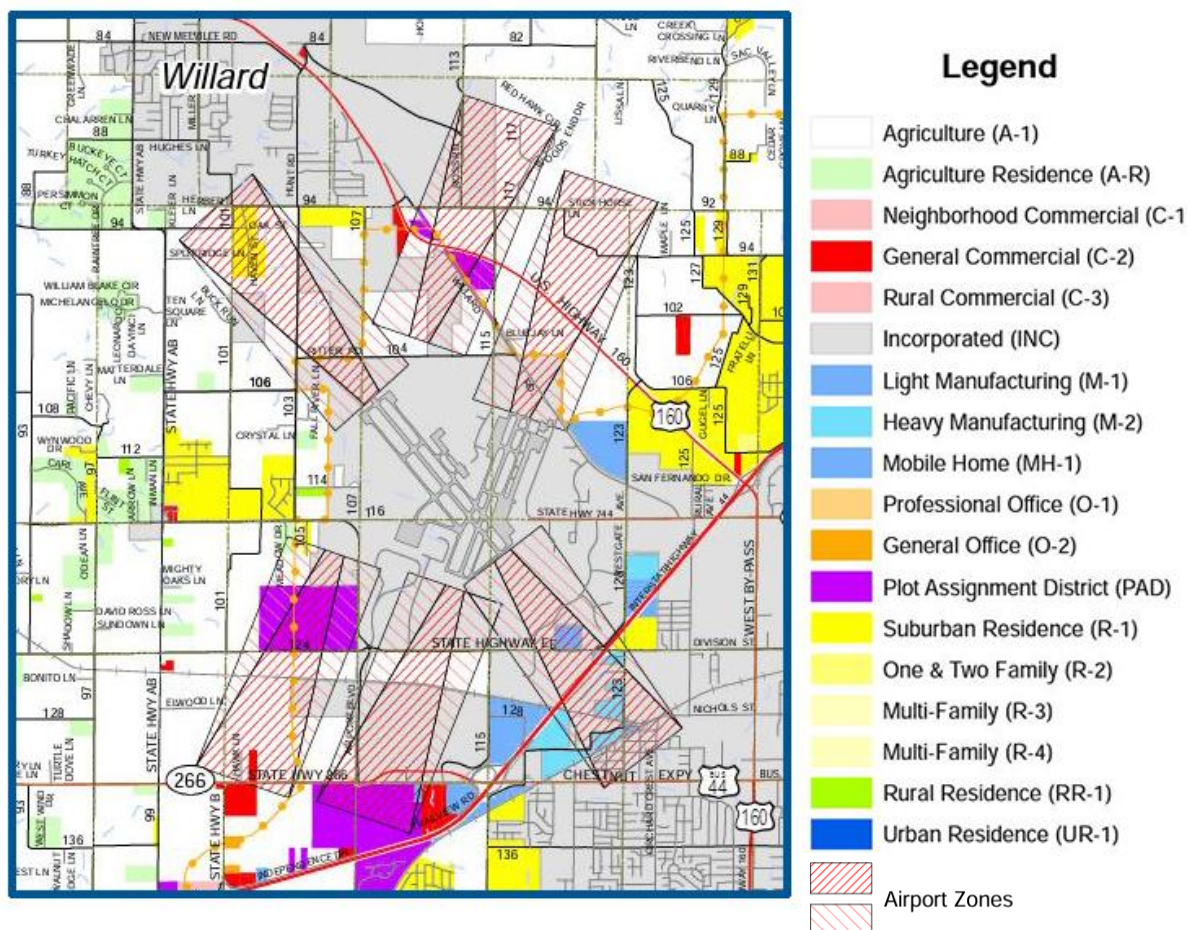
MUNICIPAL ZONING AND EXISTING LAND USES

To better visualize the relationship between the land's uses and the airport's interests, the Airport Overlay Zones have been compared to the zoning of the surrounding zoned entities.

While zoning does not always constitute land use- if regulated as intended, the land uses will match the desired zoning.

Exhibit 8.2-2 below shows the Airport Overlay Zones compared to the existing Greene County Zoning.

Exhibit 8.2-2: Greene County Zoning with Existing A-O Zones

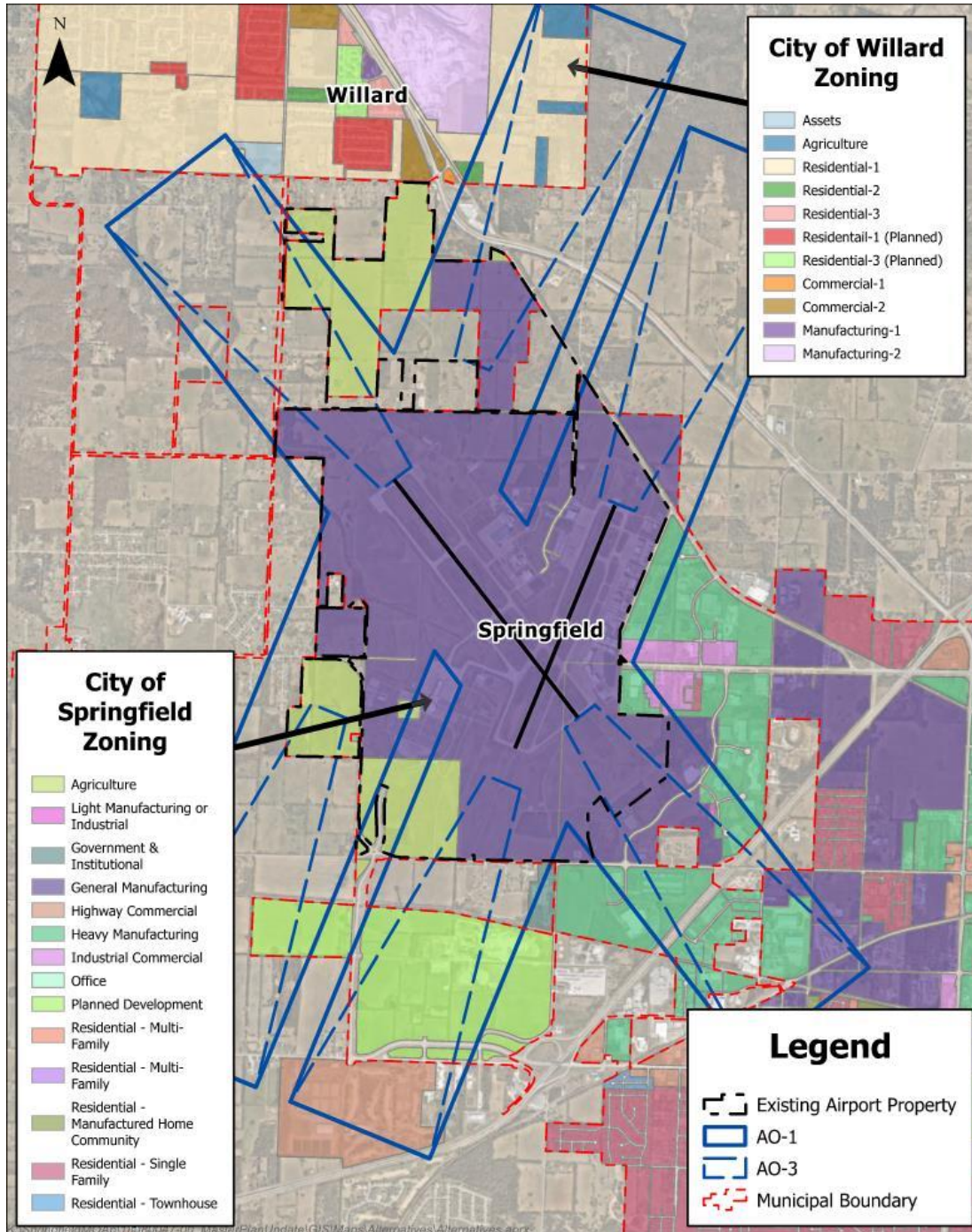


Source: <https://greencountymo.gov/files/file.php?id=1530>

As seen in the Greene County Zoning Map, the surrounding zoning is depicted as agricultural, with some tracts of Suburban Residential, Manufacturing, and Plot Assignment Districts (a flexible-use zoning district) scattered around the airport- and intersecting the Overlay Zones. The City of Springfield Zoning is shown in gray as "Incorporated" in this exhibit.

Exhibit 8.2-3 shows zoning with the A-O zones. The municipal zoning shows that various zones interact with the airport, primarily industrial near the airfield and phasing to commercial and residential towards the outskirts of the impact and overlay zones.

Exhibit 8.2-3: Springfield and Willard Zoning Compared to Existing A-O Zones

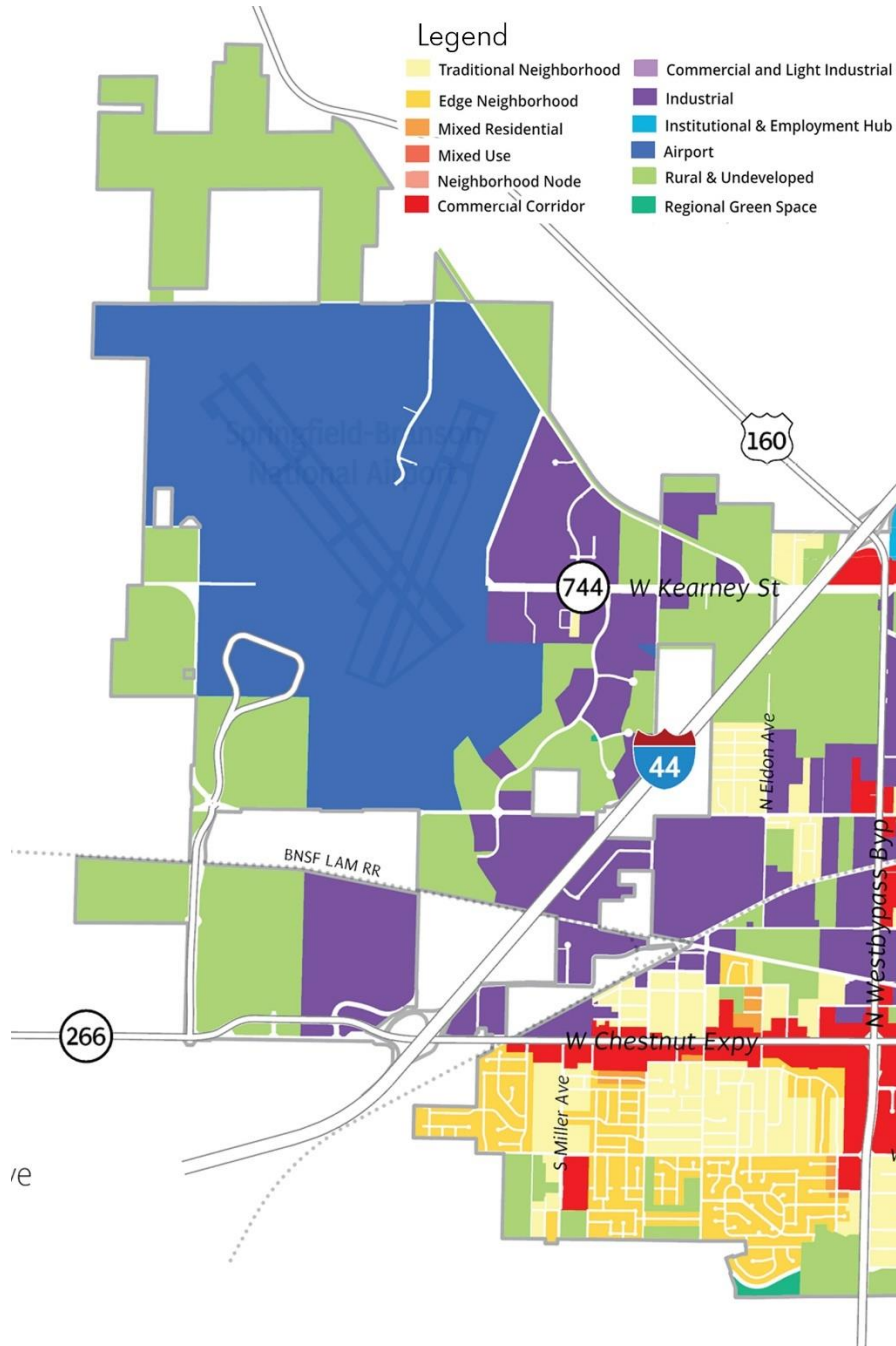


Source: <https://gisdata-cosmo.opendata.arcgis.com/>, <https://www.cityofwillard.org/maps.html>, CMT

Land use maps are often created in tandem with comprehensive plans, such as the map included within "Forward SGF," the comprehensive plan completed by the city of Springfield in 2022. This offers a snapshot of the current land use throughout the city. **Exhibit 8.2-4** is an excerpt of the entire land use

map to show the land use near the airport. The primary land uses are rural, undeveloped, and industrial, which are generally compatible with airport uses.

Exhibit 8.2-4: Existing Land Use Near SGF

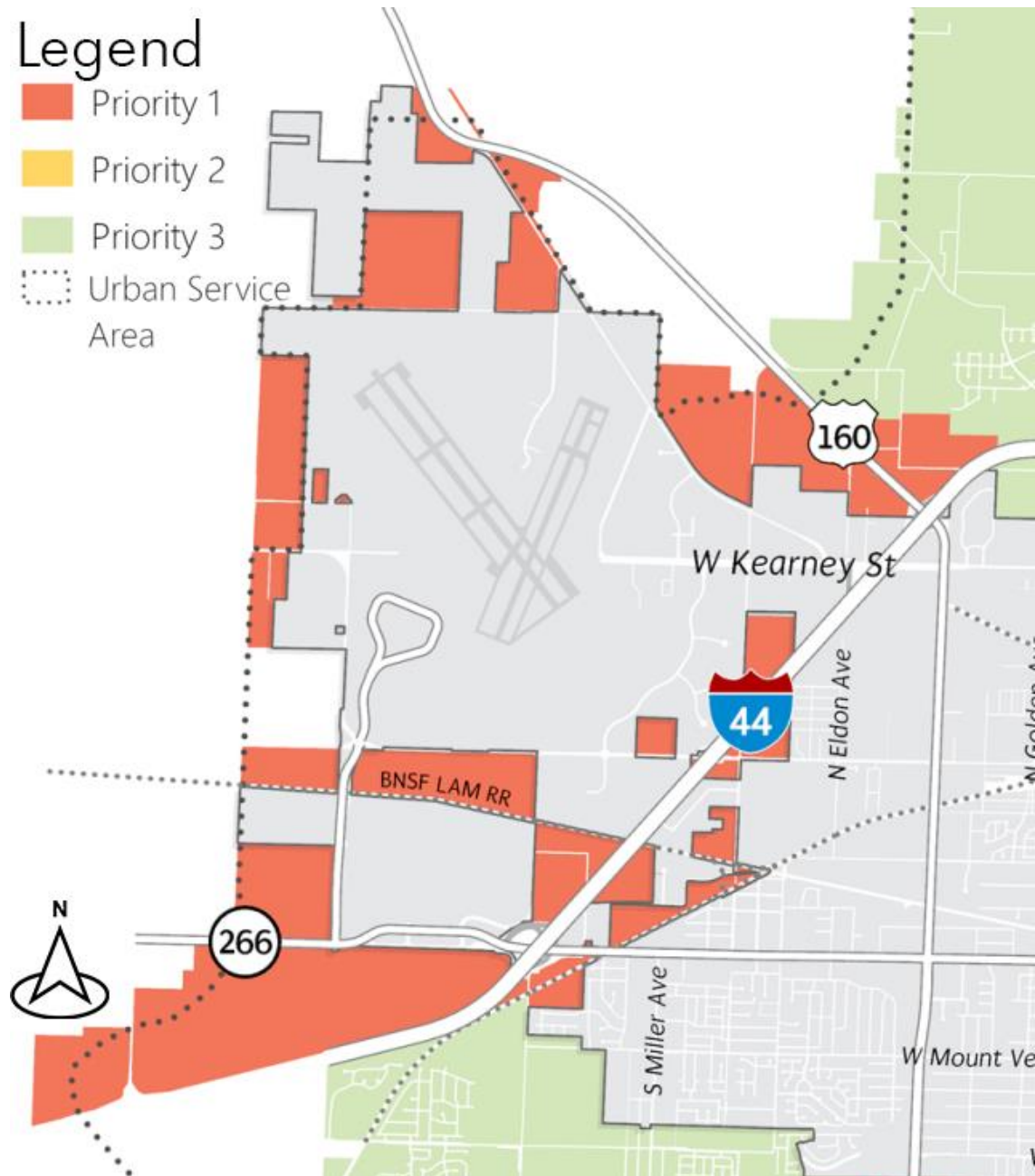


Source: Forward SGF Comprehensive Plan, 2023

The comprehensive plan also addresses an annexation plan for the city. Much of the land surrounding the airport has been identified in the plan as “priority one” land, meaning that it is easily developable

and relatively accessible to incorporate infrastructure connections. **Exhibit 8.2-5** below shows the “Forward SGF” annexation plan near the airport. Much of the land identified in this exhibit already receives urban city services, and some of the parcels are already publicly owned properties.

Exhibit 8.2-5: Forward SGF Annexation Plan



Source: Forward SGF Comprehensive Plan, 2023

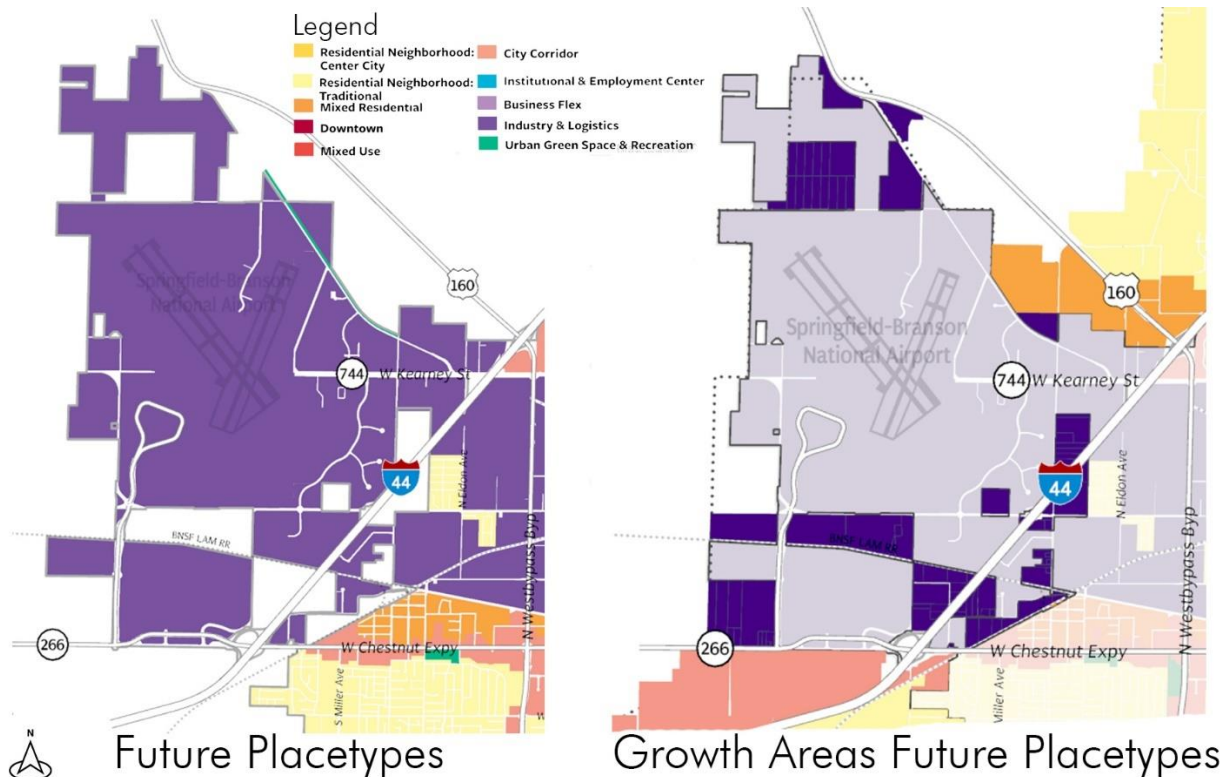
The Forward SGF Comprehensive Plan revolves around the idea of placemaking, where a sense of identity is created through intentional design based on various complementary land uses. These place types are a guiding principle as to how the community expects to develop moving forward. These place

types will have an impact on zoning practices and the determination of the compatibility of certain developments within the respective areas. The Airport and surrounding land uses within the city boundaries currently exist and are projected as the Industry and Logistics place type, which consists of light and heavy industrial uses such as manufacturing, packaging, warehousing, storage, transportation, commerce, and distribution.

The future growth area place types (the areas included in the annexation plan) have a complementary plan to the place types already outlined within the city boundaries. The place types are predominantly Industry and Logistics, with one bordering area to the east of runway 20 end identified as Mixed Residential. Any development proposals with residential land use near the airport must be carefully assessed before they are accepted to avoid and mitigate any conflicts with public health and safety.

Exhibit 8.2-6 below outlines the future place types and the Growth Area Future Place Types identified in the Forward SGF comprehensive plan. The Industry and Logistics place type is identified with the dark purple shade in both map excerpts; The Growth Areas Future Place Types map has muted colors over the existing city boundaries.

Exhibit 8.2-6: Forward SGF Future Place Types and Growth Area Future Place Types



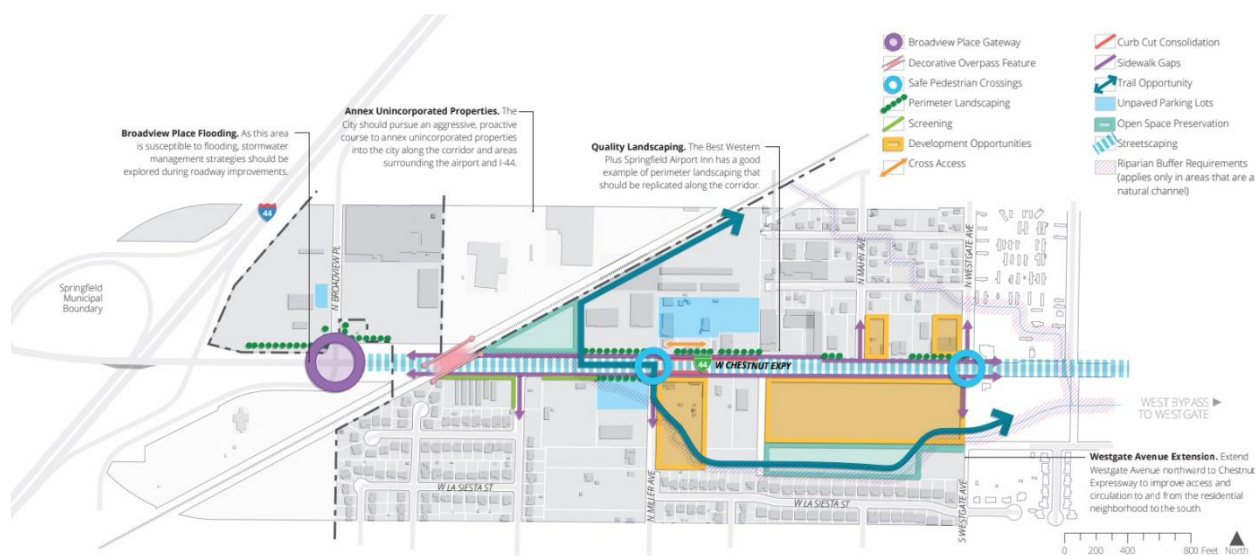
Source: Forward SGF Comprehensive Plan, 2023

Transitions between these place types are intended to be natural, intentional, and inviting. The comprehensive plan highlights the Airport in several instances as the first and last place that many visitors to the area see. It is regularly stated that the corridors the visitors and residents frequently travel,

particularly in the vicinity of the airport, should complement the community with elements such as improved landscaping, gateway signage, and public art to leave a lasting, positive image of the community. A sub-area plan within the comprehensive plan examines the Chestnut Expressway I-44 to Westgate, a heavily used route for air travelers driving into Springfield. The sub-plan calls for many streetscape improvements, including decorative overpass features, improved pedestrian and bicycle infrastructure, as well as landscaping opportunities. This sub-plan can support the connective efforts of unifying the pathway to the Airport as an organic blend from the commercial and suburban places to the industrious and logistical places.

Exhibit 8.2-7 below displays the Chestnut Expressway subarea plan.

Exhibit 8.2-7: Forward SGF Chestnut Expressway Subarea Plan



Source: Forward SGF Comprehensive Plan, 2023

8.2.3 Airport Noise Contours

Commercial service airports have a vital role in the economic development of the community they serve. However, along with these essential economic benefits, transporting people and products may also disturb those living or working near airports by exposing them to noise.

Over the last 40 years, the U.S. Federal Aviation Administration (FAA) has been working to reduce the number of Americans exposed to aviation noise around airport communities. By one measure, it has been a success: over the last four decades, the number of people in the U.S. exposed to aviation noise has dropped substantially, even as the number of flights has soared.

However, even with this success, aviation noise still concerns many communities. To promote ways to balance the benefits and adverse effects of aviation on airport communities, it is vital to identify the areas where noise generated by aeronautical activity is more prominent and work with local planners to avoid the development of residential communities in these areas. The FAA provides specific guidance that helps define exposure to individuals living or working on surrounding incompatible land uses.

Noise levels can be computed at individual locations of interest. To show how noise can vary over extended areas, metrics like day-night average sound level (DNL) are often drawn on maps regarding lines connecting points of the same decibel (dBA). The DNL noise metric is used to reflect a person's cumulative exposure to sound over 24 hours, expressed as the noise level for the average day of the year based on annual aircraft operations^{2 3}.

Noise compatibility or non-compatibility of land use is determined by comparing the aircraft DNL values at a site to those in the land use compatibility guidelines provided by the FAA. Special consideration must be given to noise-sensitive areas, including, but not limited to, noise-sensitive areas within national parks, national wildlife and waterfowl refuges, and historic sites, including traditional cultural properties. For proposed airport development and other actions near an airport, the FAA recommends providing noise exposure contours at the DNL 65-, 70-, and 75-dB levels (additional contours may be provided on a case-by-case basis)⁴.

Similar to topographical maps showing terrain elevation in an area, these noise "contours" help compare aircraft noise exposure throughout an airport community. The shape of noise contours depends on many factors but is influenced by whether more arriving or departing aircraft fly over an area. **Exhibit 8.2-8** shows an example of what a noise contour map looks like. Springfield-Branson National Airport has noise contours depicted on its Airport Layout Plan, which is discussed later in this chapter.

Exhibit 8.2-8: Noise Contour Map Example



Source: FAA Fundamentals of Noise and Sound

Aircraft noise contours were created using the FAA's Aviation Environmental Design Tool (AEDT) version 3E and existing aeronautical activity.

² https://www.faa.gov/regulations_policies/policy_guidance/noise/basics/

³ FAA AC 150/5020-1, Noise Control and Compatibility Planning for Airports

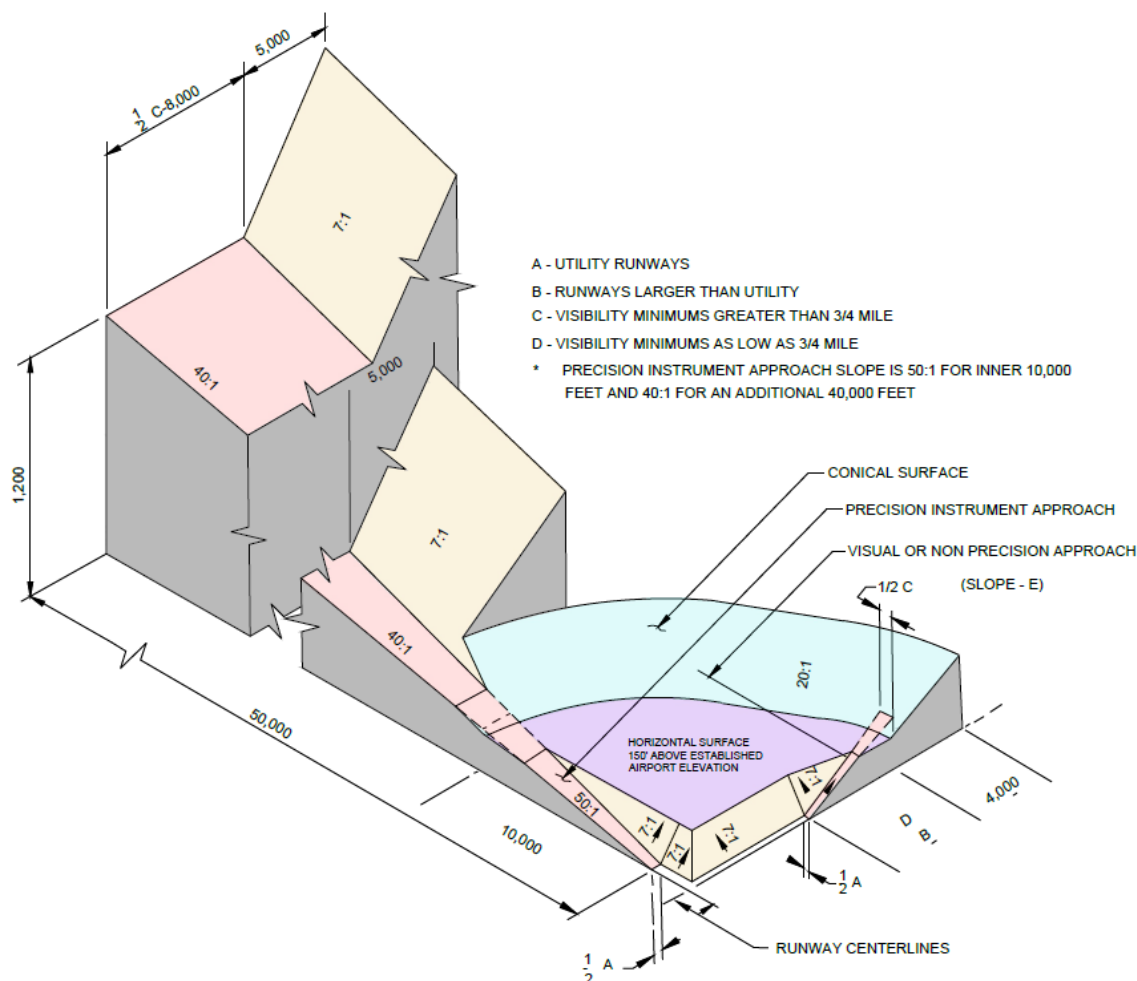
⁴ https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/apl/111-noise.pdf

Projected noise contours were developed by applying forecasted aircraft and assumed runway utilization statistics to the preferred alternative of a 9,000' parallel runway, along with the 1,000' addition to runway 2/20.

8.2.4 Airspace Protection – (FAR) Part 77 Surfaces

Regulations for airspace protection around a public-use civilian or military airport are specified in 14 CFR Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace (Part 77). The FAA uses these defined surfaces to identify obstructions to airspace around an airport facility. Part 77 surfaces are comprised of primary, approach, transitional, horizontal, and conical three-dimensional imaginary surfaces. **Exhibit 8.2-9** illustrates these surfaces in a general nature; their exact configuration varies based on the category and type of approach to the runway. Obstructions are defined as objects that penetrate these surfaces. Mitigation measures such as obstruction marking/lighting may be required for obstructions that are studied and not determined to be a hazard to air navigation.

Exhibit 8.2-9: Part 77 Surfaces



Source: FAA Part 77 Surfaces

FAR Part 77 regulations require project sponsors to notify the FAA of proposed structures within the airport airspace area. The requirements for filing an aeronautical study with the Federal Aviation Administration (FAA) for proposed structures vary based on a number of factors: site elevation, structure height, proximity to an airport, and frequencies emitted from the structure. The FAA will evaluate each proposed structure and determine “hazard” or “no hazard,” depending on the impacts on airport airspace.

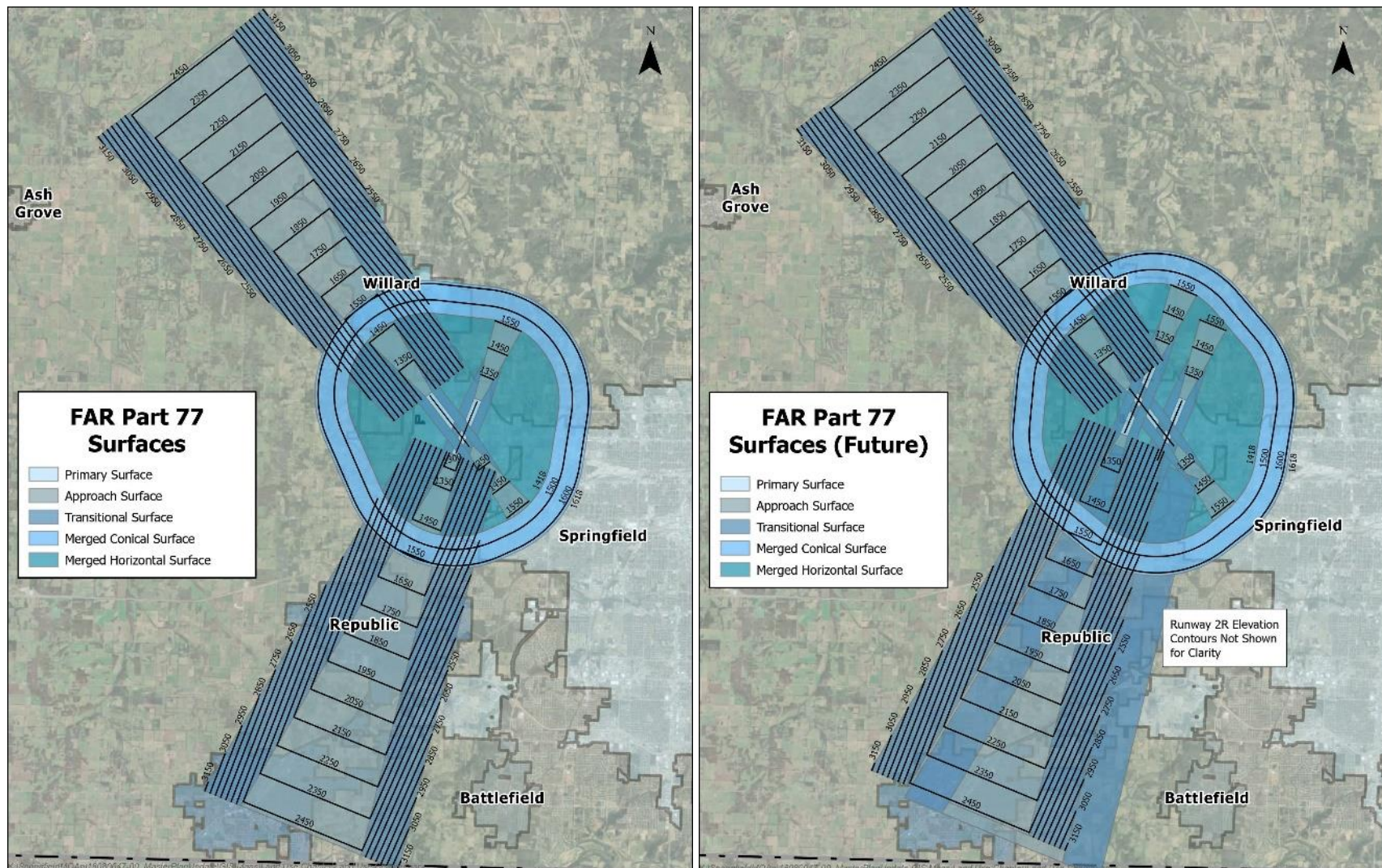
The height limitations imposed by Part 77 Surfaces should be considered by local planners from the different municipalities that surround SGF to be capable of restricting the development of any tall structure that may violate any Part 77 height restriction.

The Airport sponsor is responsible for coordinating compatible land development with the authorities from the municipalities in the immediate vicinity of SGF.

The future part 77 airspace has a larger footprint with the projected improvements. Obstructions can be assessed upon development activity, where mitigative actions can be determined on a case-by-case basis.

Exhibit 8.2-10 shows the existing and future Part 77’s outermost surface in relation to municipal boundaries. The exhibit shows that the municipalities affected by the outermost surface of Part 77 are Springfield, Republic, Willard, and Greene County.

Exhibit 8.2-10: Existing and Future Part 77 Surfaces at SGF



Source: CMT, 2023

8.2.5 Runway Protection Zones

The Runway Protection Zone's (RPZ) function enhances the protection of property and people on the ground. The FAA defines the RPZ as "an area at ground level before the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground." This is best achieved through airport owner control of the land area(s) within the RPZ. Power is preferably exercised through acquiring sufficient property interest in the RPZ and includes clearing the RPZ areas (and maintaining them clear) of incompatible objects and activities.⁵

RPZ land use compatibility is also often complicated by ownership considerations. Airport owner control over the RPZ land is emphasized to protect people and property. Although the FAA recognizes that the airport sponsor may not fully control land within the RPZ in certain situations, the FAA expects airport sponsors to take all possible measures to protect against and remove or mitigate incompatible land uses.

Compatible Land Use

Compatible land use within the RPZ is generally restricted to such land uses as agricultural and similar uses that do not involve congregations of people, construction of buildings, or other improvements that may be obstructions. Allowable activities in an RPZ include⁶:

- Farming activities meeting airport design clearance standards.
- Irrigation channels meeting the standards of AC 150/5200-33 and FAA/USDA manual, Wildlife Hazard Management at Airports.
- Airport service roads, as long as they are not public roads and are under the direct control of the airport operator.
- Underground facilities, as long as they meet other design criteria, such as RSA standards, as applicable.
- NAVAIDs and aviation facilities, such as equipment for airport facilities, are considered fixed by-function regarding the RPZ.
- Above-ground fuel tanks associated with backup generators for unstaffed NAVAIDS.

⁵ AC 150/5300-13B

⁶ FAA Central Region Airports Division – AIP Sponsor Guide – Airport Planning

8.2.6 Airport Influence Area (AIA)

EXISTING AIRPORT INFLUENCE AREA

The area in which the extent of the Airport's aeronautical operations impact the surrounding area is defined as the Airport Influence Area (AIA). The AIA comprises various sub-areas and zones, each with a unique purpose of land use control (i.e., height restriction zone, no residential development zones, etc.).

The SGF AIA will be comprised of the following elements:

- Airport Noise Contours
- Runway Protection Zones (RPZ)
- Airport Overlay Zone (A-O)

These elements have been put together into one exhibit to visualize their extent.

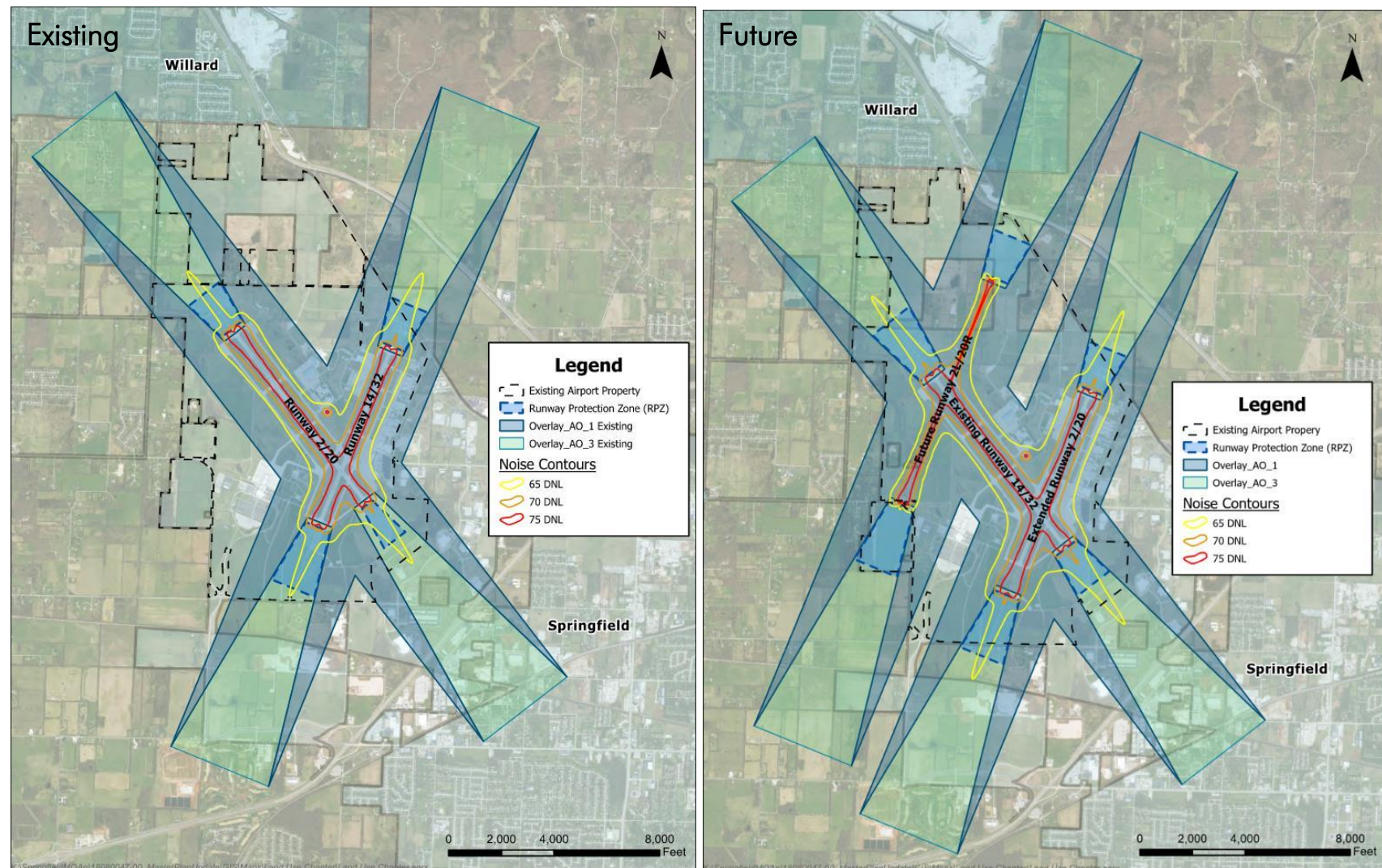
The Part 77 surfaces have been excluded from the influence area as the local zoning integrated with the Airport Overlay zoning provides an equal and or greater influence to development in the airspace.

FUTURE AIRPORT INFLUENCE AREA

The potential development of a parallel runway, as indicated in the Parallel Runway Appendix, and any other expanding development will leave a larger footprint influence than that which currently exists. A future analysis was conducted utilizing the same impacting factors as compared to the existing conditions.

Exhibit 8.2-11 show the existing and future noise contours, RPZs, and AO for SGF.

Exhibit 8.2-11: Existing and Future SGF Noise Contours, RPZs, and AO



Source: CMT

8.3 SGF Land Use Assessment

Section 5.3 identified the Airport's AIA. The AIA assessed the overall land use compatibility between SGF and the surrounding municipalities. The land use assessment included placing the AIA on top of the existing local zoning maps to determine if incompatible land is present. **Table 8.3-1** below shows compatible land uses in each influence area. As previously mentioned, while zoning does not always correlate to actual land use, it is a helpful tool for understanding the desired intentions of the municipalities. It can prove valuable compared to AIA to identify compatibilities and incompatibilities.

Tables 8.3-2 through 8.3-5 show the land use assessment per runway end completed using **Table 8.3-1**, which shows the recommended land uses for each Airport Influence Area.

Table 8.3-1: Compatible Land Uses in Each AIA

AIRPORT INFLUENCE AREAS	COMPATIBLE LAND USES
Runway Protection Zone	Agricultural land, parks, open spaces, low-density residential areas, commercial areas with limited height and intensity, recreational facilities, certain types of industrial uses with height restrictions
>= 65 DNL	Agricultural, Low-density residential areas, commercial areas, recreational facilities, industrial areas, open spaces, parks
AO-1	Prohibited uses include various residential uses, general public uses such as schools and gathering spaces, and recreational uses such as outdoor carnivals, stadiums, and drive-in theaters. Open space, industrious, and commercial uses would be the most compatible.
AO-3	Prohibited uses include hotels and motels or enclosed off-street parking facilities in a building or structure. Accessory off-street parking lots or facilities open to the sky are allowed. Allowed uses are single-family dwellings on 10 acres or more (or if they existed before the zone was established). Open space, industrious, and commercial uses would be the most compatible.

Source: <https://www.faa.gov>, CMT

RUNWAY 14 CORRIDOR

Table 8.3-2: Runway 14 Land Use Compatibility Assessment

AIRPORT INFLUENCE AREAS	EXISTING LAND USE	IS IT COMPATIBLE?
Runway Protection Zone	Airport Zone	Yes
	Agricultural	Yes
65 DNL	Agricultural	Yes
AO-1	Agricultural	Yes
	Airport Zone	Yes
AO-3	Single Family Residential	Yes
	Agricultural	Yes

Source: CMT

Table 8.3-2 shows that all uses within the Runway 14 corridor are compatible with the existing influence areas. While there are areas of low-density residential homes, they were built before the establishment of the AO zones and mostly appear to be generally on lots greater than 10 acres, meaning that as they currently sit, they are compatible.

RUNWAY 32 CORRIDOR

Table 8.3-3: Runway 32 Land Use Compatibility Assessment

AIRPORT INFLUENCE AREAS	EXISTING LAND USE	IS IT COMPATIBLE?
Runway Protection Zone	Airport Zone	Yes
65 DNL	Agricultural/Cemetery	Yes
	Industrial	Yes
AO-1	Airport Zone	Yes
	Agricultural/Cemetery	Yes
	Industrial	Yes
AO-3	Industrial	Yes
	Single Family Residential	Yes
	Commercial	Yes

Source: CMT

Table 8.3-3 shows that all uses within the Runway 32 corridor are compatible with the existing impact zones. If lots of less than 10 acres existed before the establishment of the AO, single-family dwellings could be built after granting an aviation easement to the city, and proper outdoor to indoor noise reduction practices are taken during construction.

RUNWAY 2 CORRIDOR

Table 8.3-4: Runway 2 Land Use Compatibility Assessment

AIRPORT INFLUENCE AREAS	EXISTING LAND USE	IS IT COMPATIBLE?
Runway Protection Zone	Airport Zone	Yes
	Agricultural	Yes
65 DNL	Airport Zone	Yes
	Agricultural/Cemetery	Yes
	Industrial	Yes
AO-1	Airport Zone	Yes
	Agricultural/Cemetery	Yes
	Industrial	Yes
AO-3	Agricultural	Yes
	Golf Course	Yes

Source: CMT

Table 8.3-4 shows that all uses within the Runway 2 corridor are compatible with the existing impact zones.

RUNWAY 20 CORRIDOR

Table 8.3-5: Runway 20 Land Use Compatibility Assessment

AIRPORT INFLUENCE AREAS	EXISTING LAND USE	IS IT COMPATIBLE?
Runway Protection Zone	Airport Zone	Yes
	Agricultural	Yes
65 DNL	Agricultural/Green Space	Yes
AO-1	Airport Zone	Yes
	Agricultural	Yes
AO-3	Agricultural	Yes

Source: CMT

Table 8.3-5 shows that all uses within the Runway 20 corridor are compatible with the existing impact zones.

FUTURE RUNWAY 2L/20R CORRIDOR

While the development of the future runway is outside the 20-year planning period, those at SGF have been preparing for the development since establishing the AO zones, thus protecting the land for the unbuilt runway with conditional uses allowed in the overlay zones.

Table 8.3-6: Runway 2L/20R Land Use Compatibility Assessment

RUNWAY	AIRPORT INFLUENCE AREAS	EXISTING LAND USE	IS IT COMPATIBLE?
2L	Runway Protection Zone	Agricultural	Yes
	65 DNL	Agricultural/Green Space	Yes
	AO-1	Agricultural	Yes
	AO-3	Industrial	Yes
		Agricultural	Yes
20R	Runway Protection Zone	Agricultural	Yes
	65 DNL	Agricultural	Yes
		Industrial	Yes
		Agricultural	Yes
	AO-1	Single-Family	Yes
		Agricultural	Yes
	AO-3	Industrial	Yes
		Single Family Residential	Yes

Source: CMT

Table 8.3-6 shows that all uses within the future Runway 2/20 corridor are compatible with the existing impact zones. Although the land uses are currently compatible, there are several residential lots that will need to be acquired to construct the runway. It is recommended to acquire these properties when the opportunities to do so arise.

8.4 SWOT Analysis

This section will conduct and evaluate a SWOT analysis to better identify and understand the Airport's operating environment from a land use perspective. The SWOT analysis shown in Table 8.4-1 is intended to provide the Airport with a review of the strengths, weaknesses, opportunities, and threats that can be used to frame land use potential and to ensure the aeronautical activities of SGF are safeguarded against incompatible land uses.

A SWOT analysis is an effective way to plan for a more successful future. To create a sustainable and prosperous airport or any system, it is imperative to continue to perform S.W.O.T analysis regularly. Every element in the evaluation above is fluid; as opportunities turn into strengths, it is equally possible for one of the strengths to become a threat.

Table 8.4-1: SWOT Analysis

	HELPFUL	HARMFUL
INTERNAL	<u>STRENGTHS</u> • Location/Access • Existing land uses around the Airport • Sectored uses of the airfield • Airport Overlay Zones	<u>WEAKNESSES</u> • Unowned parcels surrounded by Airport property • Lack of land use diversity
EXTERNAL	<u>OPPORTUNITIES</u> • Municipal operation with communicative planning efforts • Developable Airport owned land • Temporary land uses • Surrounding Land Potential	<u>THREATS</u> • Urban sprawl • Environmental conditions

Source: CMT

STRENGTHS

Location/Access

The **strengths** identified in the analysis were based on the regional location of the airfield. As Springfield grows, it increasingly becomes one of the most prominent locations in the four corners of Missouri, Kansas, Oklahoma, and Arkansas. The airfield's location, in comparison to the city of Springfield, protects the airport from dense neighborhoods and competing land uses.

Existing Land Uses Around the Airport

Industrious and agricultural uses primarily surround the area. With both land uses comes low-density development as well as low roof heights. This could be an opportunity as the farmland is often easily developable, and industrious uses are rarely concerned with airport-generated noise.

Sectored Uses of the Airfield

Many of the current uses of the airfield are grouped in general locations. This allows for better air traffic control and more condensed and focused improvements to specific divisions that utilize the airport.

Airport Overlay Zones

Possibly, SGF's greatest strength is the statutorily protected airport overlay zones. These zones have given the airport land use control over the surrounding areas by conditionally allowing certain land uses near the existing development as seen fit.

Actions

To uphold the current land use strengths of the Airport, it is advantageous to continue supporting zoning regulations that protect the airport's future development.

Preserve the sectionalism of the airfield by encouraging development adjacent to similar facilities.

WEAKNESSES

Unowned Parcels Surrounded by Airport Property

Several parcels on the north side of the airfield are currently utilized as residential homes. While supporting current airport operations, they must be purchased to develop a parallel runway. These properties should be monitored for acquisition opportunities, and utilizing an eminent domain approach should be the last option for attaining the property.

Limited Land Use Variety Surrounding the Airfield

The **weaknesses** identified in this assessment are primarily based on the environment near the airport. Although similar land uses are desired, it is advantageous to have some assortment of land uses that are still compatible. This minor weakness can quickly become a strength at SGF by capitalizing on key development opportunities.

Actions

- Acquire the encapsulated properties in a way that is non-displacing of existing residences if possible.
- Seek out unique and compatible development opportunities to incorporate at SGF.

OPPORTUNITIES

Integrated Community and Airport Planning Efforts

The **opportunities** identified in the analysis are based mainly on the land use immediately adjacent to the Airport. Since SGF is a city department, planning communication with the surroundings has benefited the airfield. With the most recent city comprehensive plan, the airport's needs were significantly addressed by considering compatible land use.

Developable Airport Owned Land

Large tracts of land surrounding the Airport are primarily open space. Whether the land is used agriculturally or unbuilt land, this land is potentially developable. It could support SGF through immediate airfield use or businesses that strengthen the economic network of the Airport.

Potential for Interim Land Uses

As the overlay district conditionally permits uses outside the airport property, this could also be used within the airport property. Temporary buildings or easily constructed and deconstructed structures could be placed with a defined timeline of existence, adding value to the land before permanent development occurs. As the parallel runway is not expected to be built within the planning period specified by this masterplan, that land could be used profitably for the airfield.

Surrounding Land Potential

The land around SGF is primarily green space and or agricultural lands, particularly on the north side of the airport property.

Actions

As mentioned, communicating with the surrounding municipalities to discuss potential interactions and coordinate development opportunities will continue to benefit SGF. Utilizing the open spaces seen on

airport property is an opportunity to increase the airport's land values and overall profitability and develop the community in tandem with the ideas outlined in the most recent comprehensive plan. Temporary uses should be explored to add value to the land while still leaving room for flexible airport growth in the future.

THREATS

Urban Sprawl

The **threats** identified in the analysis are based mainly on the operating environment around the Airport. As the population around SGF continues to grow, the threat of residential development conflicting with airport operations increases. This threat is often mitigated through the AO zones but could still pose concerns for the airport and homeowners alike if development pushes closer.

Environmental Conditions

Aside from all man-made threats to the airport, some environmental constraints threaten the airport's future. SGF has a stretch of protected wetlands and floodplains scattered amongst the airfield. Stormwater redirection and other best management practices are in place to help mitigate water issues, but porous soil conditions pose another concern: sinkholes. Sinkholes are common in the Ozark region and could harm development plans.

Nearby Contamination

Land just east of the GA facilities at 4811 West Kearney Street is the site of an active Brownfield cleanup from Litton Systems Inc.'s operations, which produced circuit boards from the 1960s up to 2008, when the structure was demolished. The site had been a concern for the U.S. Environmental Protection Agency since 1979, when an environmental impact investigation showed the operation was leaching copper and trichloroethylene in the soils and groundwater, contaminating the Springfield-Plateau aquifer and Ozark Aquifer. Mitigation has been in place to attempt to remediate the pollutant since 1994. It is currently owned by Northrop Grumman, which has been monitoring and trying to clean up the site since the 2000s. A sampling of the surrounding groundwaters was conducted in 2022 and showed some trends toward effective remediation. Testing every two years will continue until the site is deemed safe. While the site location is convenient for future airport development, it is incompatible until the pollution has been remediated.

Actions

Continued support of land use practices set in place will protect SGF from encroaching on sprawling neighborhoods.

Consider wetlands, floodplains, and soil conditions before any development activity near the airfield and avoid areas of known issues if possible.

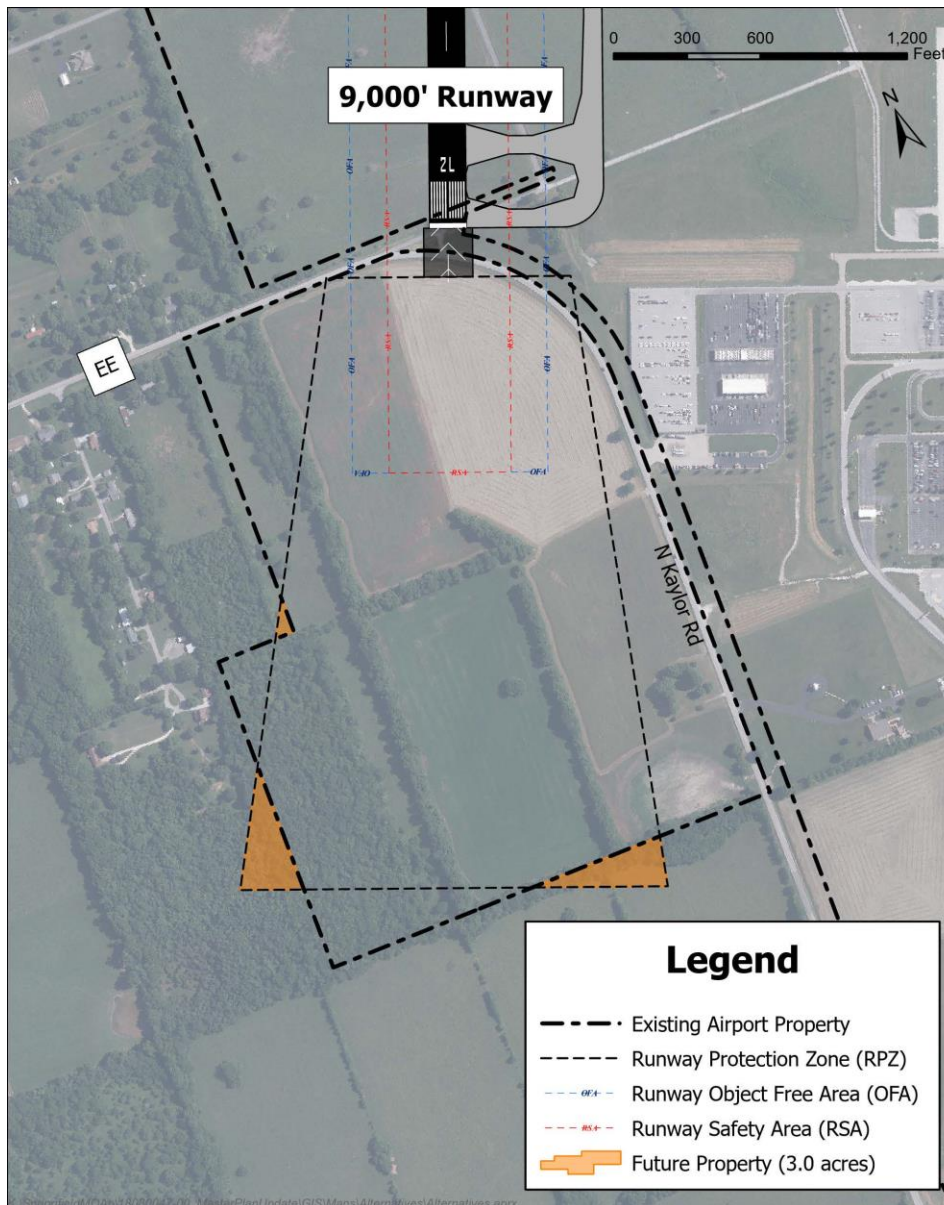
Monitor the status of the cleanup site and continue to embrace best practices when the airport interacts with polluted resources.

8.5 Additional Land Acquisition

The Parallel Runway Appendix presents and discusses the preservation or construction of a Parallel runway at various lengths. The preferred scenario includes the construction of a parallel runway at 9,000 feet, requiring additional land acquisition. This scenario would need approximately 3 acres of land to be acquired by the airport for the RPZ of the future runway to be fully protected and owned by the Airport.

Exhibits 8.5-1 show the required land acquisition.

Exhibit 8.5-1: Land Purchases Needed for a 9,000' Parallel Runway

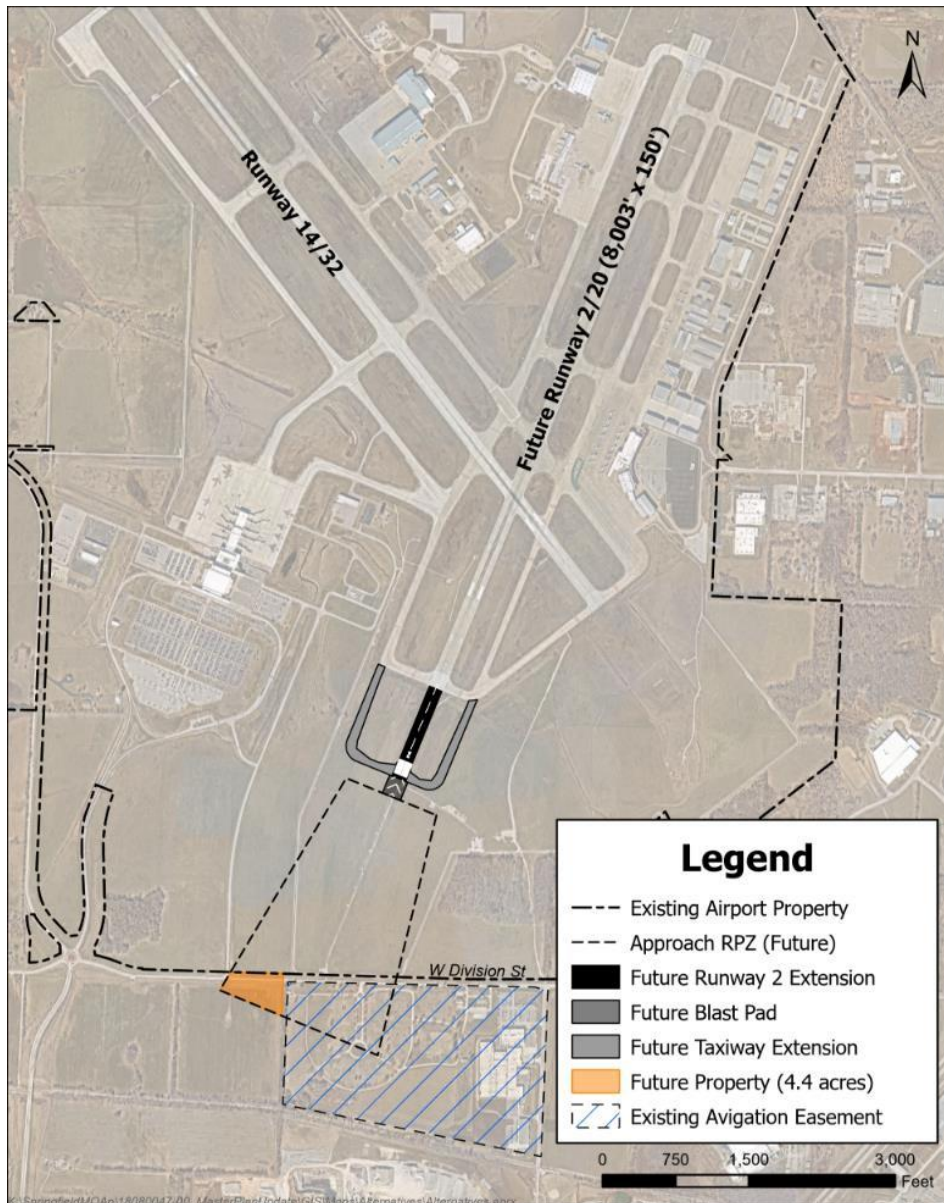


Source: CMT

As determined in the Alternatives Chapter, it is viable to add 1,000 feet of runway to the end of Runway 2 to give the runway a length of 8,003'. This extension will require 4.4 acres of land acquisition to protect the RPZ, in conjunction with an existing easement over the cemetery.

Exhibit 8.5-2 below shows the runway 2 extension and the land acquisition needed.

Exhibit 8.5-2: Runway 2 – 1,000' Extension and Land Acquisition

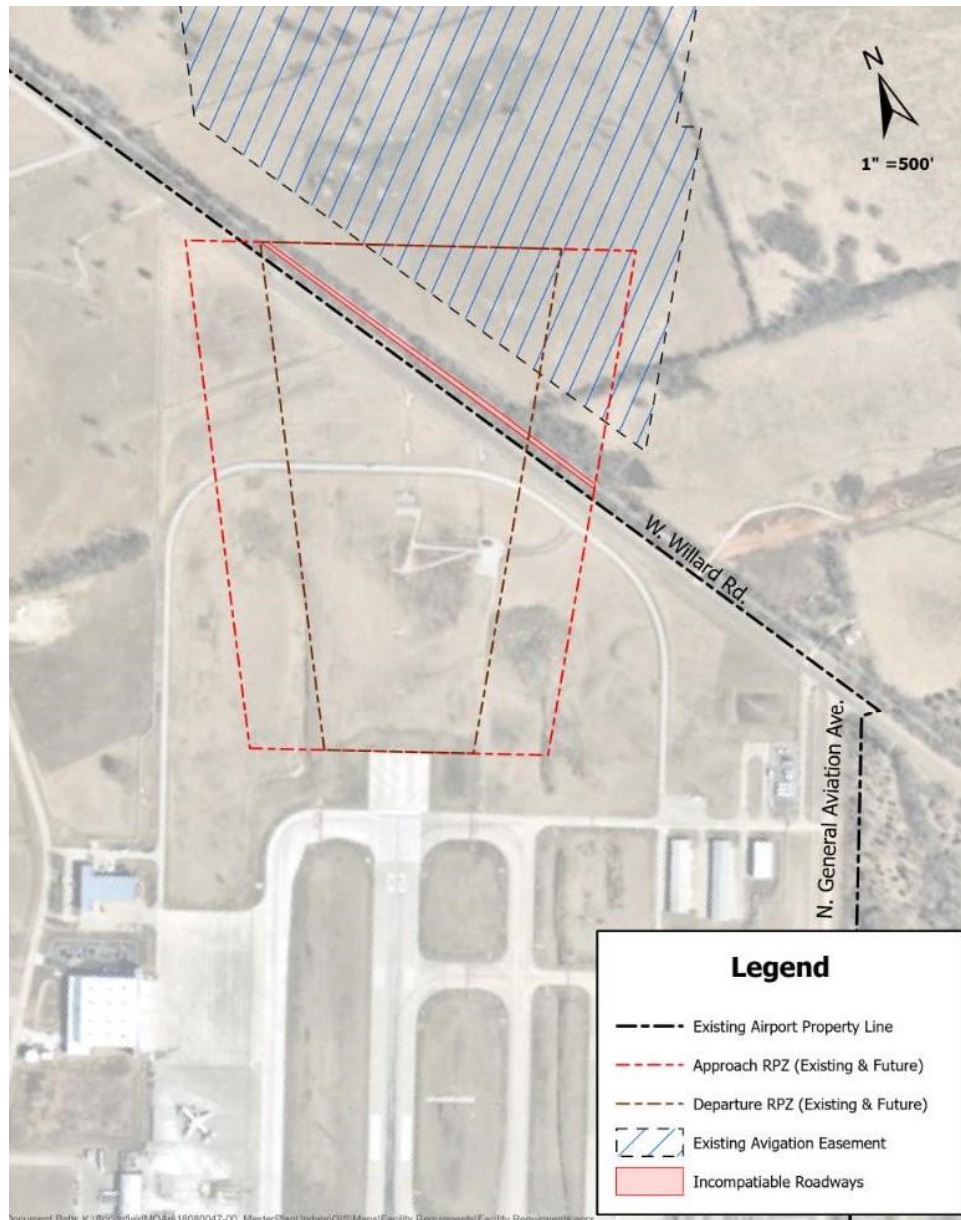


Source: CMT

Approximately 6 acres of the existing Runway 20 Protection Zone sits outside of Airport boundaries. Currently, the RPZ property is protected against incompatible development with existing easements.

Exhibit 8.5-3 shows the current extent of easements over RPZ property. While the acquisition of this property would be ideal in the long-term, the existing easements provide adequate protection.

Exhibit 8.5-3: Runway 20 end RPZ Land Acquisitions

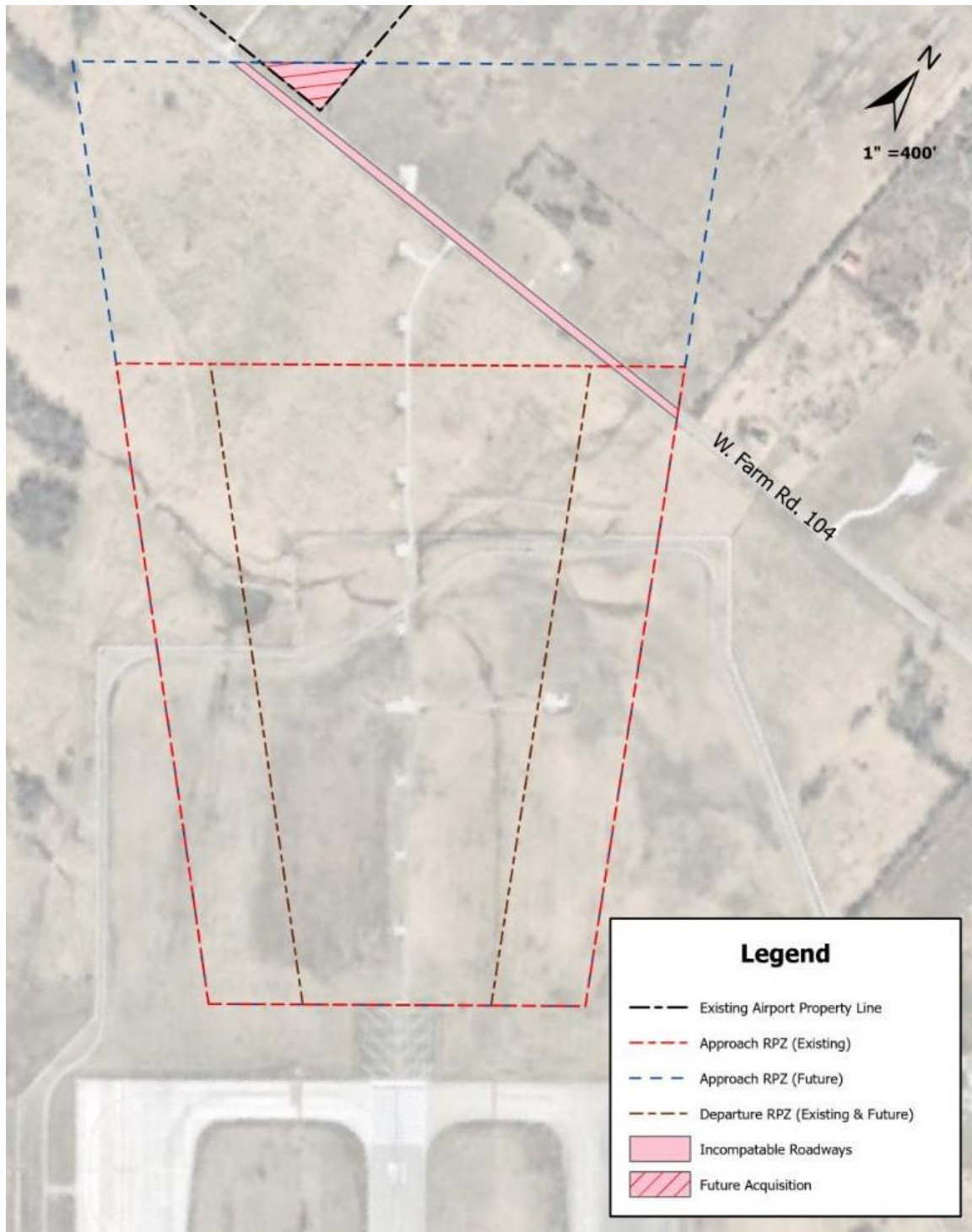


Source: CMT

With the visibility minimums of runway 14 changing from a $\frac{3}{4}$ mile approach to a $\frac{1}{2}$ mile approach, the RPZ will extend out an additional 800 feet. This will push the furthest edge of the RPZ just outside of the existing airport property boundary, requiring a .36-acre land acquisition. Fee simple acquisition may be a possible approach to acquiring the land, but rights by easement may be a more neighborly approach to the small section of land.

Exhibit 8.5-4 shows the land acquisition needed for the runway 14 RPZ once updated to a ½ mile approach.

Exhibit 8.5-4: Runway 14 end RPZ Land Acquisitions



Source: CMT

POTENTIAL NON-AERONAUTICAL LAND USE

As expected with most airports, the primary internal land use is aeronautical, but non-aeronautical uses can supply value to an airport. SGF currently hosts many non-aeronautical land uses that support the ever-growing aeronautical land uses. Current property extents and regulatory safety areas leading to unbuildable spaces comprise approximately four and a half square miles of SGF. Some areas are better suited for non-aeronautical land use due to their distances or connectivity to the runways. However, it is still important to incorporate appropriate land uses compatible with aeronautical uses.

Areas for potential non-aeronautical development can be seen in Exhibit **8.5-5**.

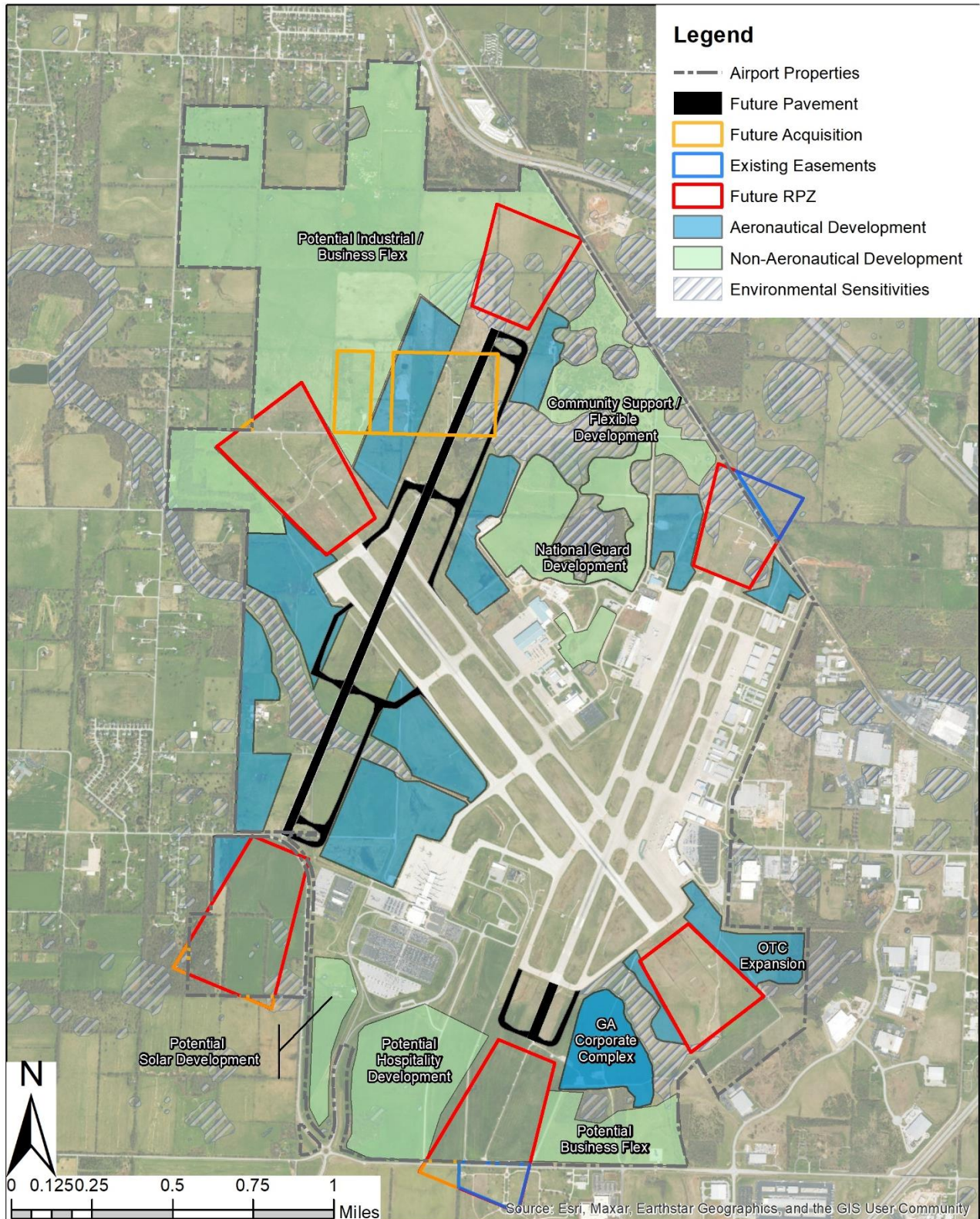
As identified in the most recent comprehensive plan, Forward SGF 2040, the place type around the airport is recognized as Industry and Logistics- which welcomes industrial, warehouse, and airport use as well as supporting uses such as parks and open space, agricultural, hospitality uses, maker spaces, schools, and personal storage and outdoor sale facilities. Many of these uses currently exist around the airport and support the airfield.

Specific uses, such as a targeted industrial manufacturer or warehouser, could support the airfield indirectly, or uses such as a hotel on airport property could give airport users a convenient option for lodging.

The areas closest to the runways are the most logical space for aeronautical development and can be extended away from the runways as demand drives growth. Areas on the periphery of the airfield and areas where aircraft taxiing and movement are cumbersome or inefficient should be reserved for non-aeronautical land uses. Areas within the Runway Protection Zones should be left as open spaces or for low-impact agricultural use.

As discussed in the Facility Requirements chapter, the National Guard is in preparation for an expansion of their facilities. A similar exercise with similar land use principles was conducted with the lens of their needs and has been incorporated in this land use assessment.

Exhibit 8.5-5: SGF Aeronautical and Non-Aeronautical Land for Possible Development



Source: CMT

Several tracts across Airport property have been identified as potential non-aeronautical developable land. These swatches of land would have difficult access to the airfield and be more valuable for non-aviation purposes. It can be assumed that aviation purposes will front the runways and the future runways. As discussed in previous chapters, sinkholes and flooding areas are recommended to avoid when developing as mitigation could have significant ecological impacts and be cost-prohibitive.

REASONS FOR DEVELOPING NON-AERONAUTICAL PROPERTY

There are several reasons for developing this property at SGF, including:

- Property that does not have access to the airfield and would otherwise be unproductive can be used to produce non-aeronautical revenue.
- With compatible development, non-aviation properties can buffer residential or otherwise incompatible land uses near the Airport.
- Increased level of customer service with restaurants, car rental locations, hotels, etc.
- Continued pursuit of financial sustainability in accordance with grant assurance

RECOMMENDED NON-AERONAUTICAL DEVELOPMENT OPTIONS

The Updated Business Plan for SGF has analyzed the vacant land on the North Side Parcel and South Side Parcel and recommended two primary options for developing non-aeronautical property: commercial real estate and solar energy. These are not mutually exclusive. That is, both types of development can occur at SGF.

- **Industrial Development** - Industrial zones near airports can foster the growth of aviation-related industries, such as aircraft manufacturing, component production, and logistics. This proximity can lead to efficient supply chains, reduced transportation costs, and enhanced collaboration between airport authorities and industrial businesses. Moreover, industrial developments often generate job opportunities, contributing to the local economy and providing a skilled workforce for the airport.
 - **Supply Chain Efficiency:** Proximity to industrial developments allows for streamlined supply chain operations. Airports heavily rely on efficient cargo handling and logistics services to handle freight and goods. Industrial developments near airports can facilitate seamless transportation and distribution of products, reducing delivery time and costs. This efficiency benefits the airport's cargo operations and the industrial businesses utilizing it for import and export activities.
 - **Collaborative Innovation:** Industrial developments near airports can foster cooperative innovation and knowledge sharing between airport authorities and industrial companies. The proximity enables more accessible communication and collaboration on research, development, and implementation of new technologies, processes, and practices. This collaboration can lead to advancements in aviation-related industries, improved operational efficiency, and adoption of sustainable practices.

- **Infrastructure Sharing:** Industrial developments can share infrastructure with airports, resulting in cost savings for both parties. For example, industrial facilities can utilize airport runways or taxiways for testing purposes or aircraft movements, reducing the need for separate dedicated facilities. Shared infrastructure can lead to increased efficiency, optimized resource utilization, and reduced capital expenditures for both airport and industrial businesses.
- **Skilled Workforce:** Industrial developments near airports can provide a pool of skilled workers already familiar with aviation-related activities. These developments can attract and retain a workforce with expertise in aircraft manufacturing, maintenance, logistics, and other aviation-related fields.
- **Hospitality Development** - Hospitality developments near airports are crucial in enhancing the travel experience and fostering economic growth. These establishments provide convenient accommodations for travelers, generate revenue for the airport, create employment opportunities, and contribute to the overall appeal of the airport as a travel hub.
 - **Convenience:** These developments provide convenient accommodations for passengers, airline crew members, and visitors who require overnight stays or extended layovers. The proximity of hotels and other hospitality establishments to the airport allows for easy access, reducing travel time and enhancing the overall passenger experience.
 - **Revenue Builder:** Hospitality developments can boost the airport's revenue through hotel occupancy taxes and lease agreements. They create employment opportunities for the local community, contributing to economic growth and job creation.
 - **Destination Creation:** Hotels near airports often offer conference and meeting facilities, catering to business travelers attending conventions or corporate events. This collaboration between the airport and hospitality sectors promotes teamwork, enhances the airport's attractiveness as a travel hub, and contributes to a positive first impression for visitors to the region.
- **Green Space and Agricultural Retention** - Retaining open green space and agricultural uses near an airport is crucial for environmental sustainability and enhancing quality of life. Preserving open space can be seen as a savings account for the airport as sprawl pushes towards SGF; the value of the land will increase for future development.
 - **Noise and Pollution Mitigation:** Open green spaces act as buffers, reducing the impact of aircraft noise on nearby communities and absorbing air pollutants generated by airport operations.
 - **Carbon Sink and Air Quality:** Green spaces serve as carbon sinks, helping to mitigate the environmental footprint of airports and improving overall air quality in the vicinity.
 - **Sustainable Land Management:** Preserving agricultural uses near airports promotes sustainable land management practices and contributes to local food production.

- **Aesthetic Appeal:** Agricultural lands and green spaces provide a visual contrast to the built environment of airports, enhancing the landscape and creating a sense of tranquility.
- **Recreational Opportunities:** Open green spaces near airports offer opportunities for recreational activities, allowing airport personnel and nearby communities to connect with nature.
- **Sense of Place:** Preserving agricultural heritage and open green spaces near airports fosters a sense of place and identity, contributing to the cultural fabric of the surrounding area.
- **Harmonious Coexistence:** Retaining green spaces and agricultural uses ensures a harmonious coexistence between aviation infrastructure and the natural environment, promoting a sustainable balance.
- **Solar farms:** Developing land with solar farms could bring increased land value to areas where known sinkholes exist and may not support the weight of a building, as well as preserve natural grasslands that could be harvested for hay.

8.6 Land Use Recommendations

As discussed in this chapter, small hub airports have a vital role in the economic development of the community they serve, which is why their continuous development and growth are necessary to support the efficient economic growth of the local community. An essential step that SGF needs to take to stay on the path of continuous growth is to continue coordinating the development of compatible land in its vicinity with local municipalities. In addition, the Airport is encouraged to preserve the current overlay zones that protect the parallel runway's future development and seek opportunities to develop critical sections of land for non-aeronautical uses.

The recommendations of this Land Use Plan are the following:

- Leverage the established Airport Overlay Zones, noise contours, and Runway Protection Zones to maintain control of noise generated by aeronautical activities and evaluate if the aeronautical activity may affect newly sprawling communities near the Airport.
- It is recommended that the Airport purchase the parcels that intervene with the proposed parallel runway and associated runway protection zones when the opportunity to do so arises.
- Embrace and support the placemaking ideas outlined in the "Forward SGF Comprehensive Plan."
- It is recommended that the Airport examines options for undeveloped areas for the airport and considers both aeronautical and non-aeronautical development that would work harmoniously with the airfield.
- Consider temporary land uses that can be easily constructed and removed for flexible airport growth.

To organize the actions that should be taken to pursue enhanced land use compatibility both on and off the airport, **Table 8.6-1** was created. This assessment places the topics discussed in the chapter through prioritization levels of low, medium, and high levels.

- **Red** represents a high-level priority
- **Yellow** represents a middle-level priority
- **Green** represents a low-level priority

These Actions were assessed based on stakeholder input and the necessity for airport growth; similarly to any planning approaches, these priorities are subject to change based on airport needs.

Table 8.6-1: Land Use Action Priorities.

Land Use Actions	Priority Levels
Airport Overlay Zone Protection and Municipal planning coordination	
Parallel Runway Land Acquisitions	
General Aeronautical Development	
General Non-Aeronautical Development	
Temporary Use Non-Aeronautical Development	
Greenspace/ Agricultural Retention	
Non-Aeronautical Development- Hospitality Development	
Non-Aeronautical Development- Industrial Development	

Source: CMT

Coordination with local municipalities is necessary to ensure that future airport development plans are considered in each jurisdiction's comprehensive land use plan. Local land use planners and airport planners should use it to evaluate new developments within an airport's surrounding area.

For operations to thrive in the future at SGF and for SGF to keep growing as an asset to the community, development must be responsibly implemented. Incompatible land uses around airports may jeopardize the safety and efficiency of flying activities and the quality of life of the community's residents.

Therefore, this Land Use Compatibility Plan provides the Airport with the tools to coordinate land development with local governments so that future land developments around the airport are compatible with aeronautical activity. Ultimately, the goal of the findings, recommendations, and coordination that stems from this plan is to allow the Airport to continue to benefit the community economically, provide a wide variety of job opportunities for local citizens, and meet the needs of the traveling public.

Chapter Nine

CIP & Implementation Plan

9.0 Introduction

The Capital Improvement Program (CIP) serves as a comprehensive roadmap for the strategic planning, prioritization, and implementation of infrastructure projects within an airport. It encompasses a range of capital investments and improvements aimed at enhancing the airport's operational efficiency, safety, capacity, and customer experience.

Airports are dynamic and complex environments that require ongoing maintenance and modernization to meet the evolving needs of passengers, airlines, and regulatory authorities. The CIP ensures that airports remain competitive, adaptable, and resilient in an ever-changing aviation industry.

The CIP is of vital importance to airports for several reasons:

- It enables systematic identification and evaluation of infrastructure needs and priorities. By conducting thorough assessments and engaging stakeholders, the CIP helps airports determine which projects should be pursued and in what order. This ensures that limited resources are allocated to the most critical and impactful initiatives.
- The CIP provides a framework for financial planning and resource allocation. It assists airport authorities in estimating project costs, securing funding from various sources, and establishing a sustainable budget. Effective financial management through the CIP is essential for maintaining fiscal responsibility and ensuring the timely execution of projects without undue strain on the airport's financial health.
- The CIP supports long-term planning and strategic decision-making. By aligning infrastructure improvements with the airport's overall vision and goals, the CIP enables airports to foster sustainable growth and respond to emerging trends and industry demands. It facilitates proactive measures to enhance the airport's capacity, functionality, and technological advancements, ultimately benefiting all stakeholders.

The following chapter describes the near-term, medium-term, and long-term physical development programs for SGF. The facility improvements identified in the previous chapters are necessary over the 20-year planning period to accommodate forecasted aviation demand and will be added to the Airport's CIP. The following Implementation Plan has been developed using 2023 dollars. Implementation of individual projects within their specific development years may require adjustments for inflation and specific funding resources available.

9.1 Capital Improvement Plan (CIP) and Schedule

The physical development program for the Airport has been separated into three planning phases, or planning activity levels (PAL):

- PAL 1: Short-term (0-5 years)
- PAL 2: Medium-term (6-10 years)
- PAL 3: Long-term (11-20 years) and demand-driven

The demand-driven planning phase included with the long-term projects represents a group of improvements that address capacity issues associated with potential future aviation demand but are still very speculative regarding the exact timing of the trigger point. While this group of projects has yet to be slotted into a program timeframe, estimated costs have been provided to understand the potential magnitude of the projects. As demand approaches the need for these improvements, it is recommended that a reevaluation be conducted to find the most appropriate improvement and a more specific timeframe for implementation.

It should also be noted that anything outside of the documented first years of the short-term CIP is an improvement or infrastructure upgrade that would be considered commensurate with a Planning Activity Level (PAL) as described in **Chapter 4 – Airport Facility Requirements** and **Chapter 5 – Terminal Facility Requirements** and would not necessarily be representative of a project implemented in a specific year.

9.1.1 Short-Term CIP (PAL 1)

The short-term CIP (PAL 1) will focus on airfield safety enhancements, commercial terminal area expansion and improvements, general aviation (GA) hangar capacity, and landside parking capacity.

Total development costs for projects identified in the short-term CIP are estimated at approximately \$107 million. **Table 9.1-1** provides a list of projects identified in the short-term CIP with total project costs. Also included is an anticipated detailed cost allocation table (federal, state, local participation) for the short-term CIP projects.

Table 9.1-1 – Short-Term (PAL 1) CIP Project Table

Project		Estimated Project Cost	Federal	State	Local*
2024					
Terminal	Terminal Apron Expansion - Phase 1	\$10,200,000	\$9,180,000	-	\$1,020,000
	Terminal Improvements (FY24 ATP Application) - PBB Replacement (5)	\$6,875,000	\$6,531,250	-	\$343,750
	Terminal Improvements - Terminal Flooring	\$3,900,000	-	-	\$3,900,000
	Terminal Building Entitlement Reimbursement	\$3,888,889	\$3,500,000	-	\$388,889
	Rental Car Electric Vehicle Charging Stations	\$1,100,000	-	-	\$1,100,000
	Parking Garage Feasibility Study	\$180,000	-	-	\$180,000
Cargo/MRO	Cargo Apron Reconstruction	\$9,620,000	\$8,658,000	-	\$962,000
GA	North T-Hangar Taxilane & Site Preparation	\$1,700,000	-	\$1,530,000	\$170,000
	Design and Install Improvements to Lester Jones Sewer Lift Station	\$1,300,000	-	-	\$1,300,000
2024 Total		\$38,763,889	\$27,869,250	\$1,530,000	\$9,364,639
2025					
Airfield	Taxiways N, D, S Reconstruction – Design	\$1,340,000			
	Taxiway D Reconstruction North of RY 14-32 RSA to Taxiway N – Construction	\$6,220,000			
	Taxiway N Reconstruction North of Taxiway D to Taxiway C – Construction	\$5,620,000	\$16,767,000	-	\$1,863,000
	Taxiway N Reconstruction Within RY 14-32 RSA and South of Taxiway D - Construction	\$3,480,000			
	Taxiway S and D Reconstruction Within Runway 14-32 RSA – Construction	\$1,970,000			
	Runway 14 Pavement Maintenance - Joint Seal and Slab Replacement on RY 14 End and RY 2-20	\$880,000	-	-	\$880,000
Other	Aviation Fuel System Modifications	\$900,000	-	-	\$900,000
Terminal	Terminal Improvements (FY25 ATP Application) - TBD	TBD	-	-	-
	Commercial Vehicle, Taxi, and TNC Parking Improvements	\$100,000	-	-	\$100,000
	Public Parking Electric Vehicle Charging Stations (\$300K through OTO MPO)	TBD	-	-	-
GA	Design and Install Improvements to GA Avenue Sewer Lift Station	\$400,000	-	-	\$400,000
2025 Total		\$20,910,000	\$16,767,000	\$0	\$4,143,000
2026					
Airfield	Taxiways N and S Reconstruction – Design	\$965,000			
	Taxiway S Reconstruction from RY 14-32 to Taxiway N – Construction	\$7,280,000	\$12,613,500	-	\$1,401,500
	Taxiway N Reconstruction from RY 14-32 to Taxiway S – Construction	\$5,770,000			
Terminal	Parking Garage - Design	\$3,240,000	-	-	\$3,240,000
2026 Total		\$17,255,000	\$12,613,500	\$0	\$4,641,500
2027					
Airfield	Reconstruct GA Apron – Design	\$350,000			
	Reconstruct GA Apron – Construction	\$3,538,889	\$3,500,000	-	\$388,889
2027 Total		\$3,888,889	\$3,500,000	\$0	\$388,889
2028					
Airfield	Construct New/Relocated SRE Facility	\$10,500,000	\$9,450,000	-	\$1,050,000
	Rehabilitate Runway 2-20 Lighting System	\$1,790,000	\$1,611,000	-	\$179,000
	Construct and Rehabilitate Perimeter Road	\$2,000,000	-	\$1,800,000	\$200,000
	Runway 32 OFA and Approach Grading Improvements	\$1,600,000	\$1,440,000	-	\$160,000
Terminal	Terminal "Node" Expansion - Design	\$4,000,000	\$3,000,000	-	\$1,000,000
GA	Corporate/GA Campus Site Development Phase 1 - Access Road & Taxiway	\$6,200,000	-	\$5,000,000	\$1,200,000
2028 Total		\$26,090,000	\$15,501,000	\$6,800,000	\$3,789,000
Short-Term Total		\$106,907,778	\$76,250,750	\$8,330,000	\$22,327,028

*5% local match for ATP; 10% local match for Entitlements, Discretionary, and BIL
Source: CMT

9.1.2 Medium-Term CIP (PAL 2)

The medium-term CIP is intended to be a list of projects that would be candidates for inclusion in the short-term CIP in future years. Specific years or priorities are not assigned to these projects to provide SGF with the flexibility to configure future short-term CIPs as future conditions permit. This project list includes a wide array of project types which includes airfield safety enhancement projects, terminal parking expansion, cargo campus expansion, and general aviation (GA) apron reconstruction and expansion.

Total estimated development cost for projects identified in the medium-term CIP equals approximately \$127 million. **Table 9.1-2** provide details of the projects identified in the medium-term CIP with total estimated project costs. Anticipated funding sources have been included, but funding levels and participation levels/eligibility in future federal and state regulations may be subject to change.

Table 9.1-2 – Medium-Term CIP (PAL 2) Project Table

Project		Estimated Project Cost	Federal	State	Local*
Medium-Term (2028-2033)					
Airfield	Taxiway N Reconstruction and Realignment	\$10,300,000	\$9,270,000	-	\$1,030,000
	Taxiway A and P Direct Access Mitigation at Taxiway N	\$3,160,000	\$2,844,000	-	\$316,000
	Taxiway R Reconstruction	\$1,630,000	\$1,467,000	-	\$163,000
	Runway 20 Runup Pad	\$2,250,000	\$2,025,000	-	\$225,000
Terminal	Parking Garage - Construction (~1,800 stalls)	\$54,000,000	-	-	\$54,000,000
Cargo/MRO	Cargo Campus Expansion North Apron Infill	\$4,800,000	\$4,320,000	-	\$480,000
GA	Delta Apron Reconstruction	\$4,800,000	\$4,320,000	-	\$480,000
	GA Apron Reconstruction East of Taxiway N	\$13,100,000	\$11,790,000	-	\$1,310,000
	GA Apron Reconstruction East of Taxiways T and R	\$11,900,000	\$10,710,000	-	\$1,190,000
	Corporate/GA Campus Site Development Phase 2	\$20,800,000	-	\$5,000,000	\$15,800,000
Medium-Term Total		\$126,740,000	\$46,746,000	\$5,000,000	\$74,994,000

*5% local match for ATP; 10% local match for Entitlements, Discretionary, and BIL

Source: CMT

9.1.3 Long-Term (PAL 3) & Demand-Driven CIP

The long-term CIP is a mixture of airfield pavement projects combined with terminal, cargo/MRO, and GA projects generated from the master planning process. The total estimated development cost for projects identified in the long-term CIP equals approximately \$292 million.

The demand-driven CIP focuses primarily on increasing airfield capacity through the construction of a future parallel runway as well as expanding capacity for GA/corporate users. Project timeframes, justifications, and funding sources will be reassessed at such a time that future aviation demand warrants the implementation of these projects. Total estimated development costs for the projects identified in the demand-driven CIP are approximately \$156 million.

Table 9.1-3 provides details on projects identified in the long-term and demand-driven CIPs with total estimated project costs.

9.1.4 Implementation Plan Summary

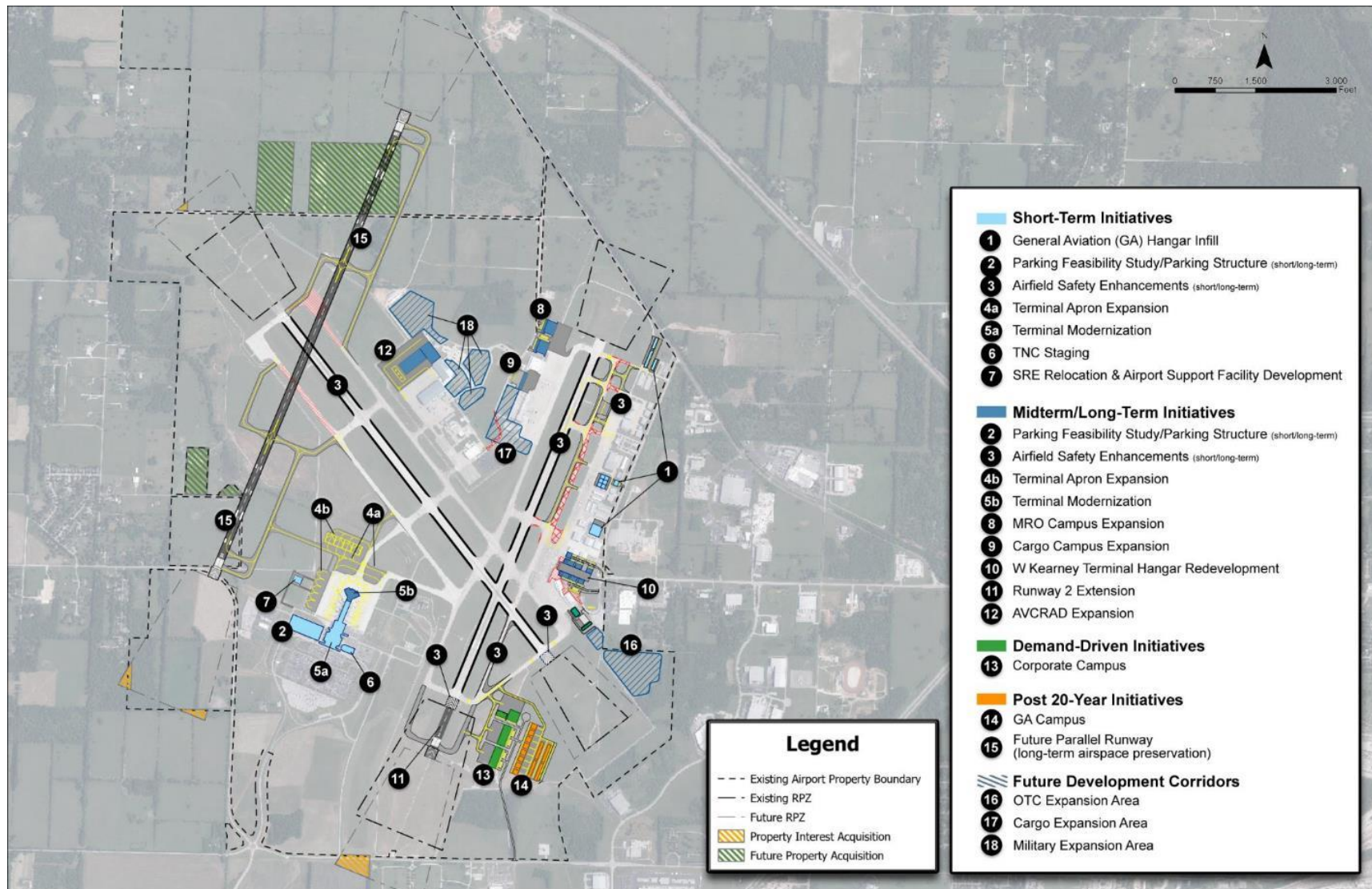
Exhibit 9.1-1 provides a visual summary of the CIP projects outlined in this chapter.

Table 9.1-3 – Long-Term (PAL 3)/Demand-Driven CIP Project Table

Project		Estimated Project Cost	Federal	State	Local*
Long-Term (2034-2042)					
Airfield	RY 2-20 and Connecting Taxiways Reconstruction with Addition of 25' Shoulders and 200'x200' Blast Pad	\$51,050,000	\$45,945,000	-	\$5,105,000
	Runway 2 1,000' Extension	\$11,900,000	\$10,710,000	-	\$1,190,000
	RY 14-32 Reconstruction and Addition of 25' Shoulders and 200'x200' Blast Pad	\$47,950,000	\$43,155,000	-	\$4,795,000
	Taxiway D Reconstruction West of RY 2-20	\$27,300,000	\$24,570,000	-	\$2,730,000
	Taxiway U Reconstruction North of RY 14-32	\$13,200,000	\$11,880,000	-	\$1,320,000
	Taxiway U Reconstruction South of RY 14-32	\$12,300,000	\$11,070,000	-	\$1,230,000
	Taxiway E Reconstruction	\$8,300,000	\$7,470,000	-	\$830,000
	Runway 32 MALS Installation	\$1,500,000	\$1,350,000	-	\$150,000
Terminal	Terminal "Node" Expansion - Construction	\$50,000,000	\$37,500,000	-	\$12,500,000
	Terminal Apron Expansion - Phase 2 (Deice Pad & RON)	\$32,000,000	\$28,800,000	-	\$3,200,000
Cargo/MRO	Cargo Apron Southern Expansion	\$4,750,000	\$4,275,000	-	\$475,000
	MRO Expansion Site Preparation	\$21,700,000	-	-	\$21,700,000
GA	W Kearney Redevelopment (post-2036) Site Development	\$9,900,000	-	-	\$9,900,000
Long-Term Total		\$291,850,000	\$226,725,000	\$ 0	\$65,125,000
Post 20-Year/Demand-Driven					
Airfield	Future Parallel Runway (taxiways, blast pads, perimeter fencing, perimeter roadway, ILS (no land acquisition or roadway relocation))	\$140,000,000	\$126,000,000	-	\$14,000,000
GA	Corporate/GA Campus Site Development Phase 3 (pavements and utilities)	\$16,300,000	-	\$5,000,000	\$11,300,000
Post 20-Year/Demand-Driven Total		\$156,300,000	\$126,000,000	\$5,000,000	\$25,300,000

*5% local match for ATP; 10% local match for Entitlements, Discretionary, and BIL. Source: CMT

Exhibit 9.1-1 – CIP Summary Map



Source: CMT

9.2 Financial Feasibility

The following section will provide information on the financial framework of the Airport, potential funding sources, and a detailed cost allocation analysis for projects identified in the short-term CIP.

9.2.1 Financial Framework

SGF is owned and operated by the City of Springfield, Missouri. The Airport's financial structure is designed to comply with Federal, State, and local law, as well as the terms and conditions of the existing lease and use agreements. References in this section to lease agreements, FAA grant program requirements, and various other agreements are not comprehensive or definitive and represent general concepts under which the Airport operates.

9.2.2 Funding Sources

The following funding sources may be utilized during the implementation of the Airport's CIP.

FEDERAL FUNDING

Airport Improvement Program (AIP)

The AIP is a cost-sharing program that assists in the development of a nationwide system of public-use airports by providing funding for airport planning and development projects, including runways, taxiways, aprons, land purchases, airport access roads, safety and security projects, and certain terminal development. Funds obligated for AIP are drawn from the Airport and Airway Trust fund, which is supported by ticket taxes, fuel taxes, and other similar revenues sources. AIP funding is administered through both entitlement and discretionary grant programs.

Entitlement

The entitlement program for primary commercial service airports is apportioned based on their annual passenger enplanement levels. SGF's annual entitlement is close to \$3.5 million.

Discretionary

Discretionary funds are distributed based upon a system of set-aside categories and national priority ratings. Airport projects must compete for these funds based upon their national priority, a value based upon both the type of project and airport. AIP funding can only be used on construction and planning related projects. AIP funding cannot be used for maintenance items, operating expenses or debt repayment. The federal share of eligible projects seeking AIP entitlement and/or discretionary funding is currently 90% for Small Hub Primary airports like SGF.

SGF was awarded over a combined \$5.5 million in discretionary funds in FYs 2022 and 2023 for an array of planning and design/construction projects.

Bipartisan Infrastructure Law (BIL) – Airport Infrastructure

The BIL provides a total of \$15 billion over five years for airport-related projects as defined under the existing Airport Improvement Grant and Passenger Facility Charge Criteria. This money can be invested into runways, taxiways, safety and sustainability projects, as well as terminal, airport-transit connections and roadway projects. The level of funding received by each airport per year is determined by the respective airport's NPIAS designation. In the case of SGF, the designation of "Small Hub" has resulted in almost \$11.8 million of BIL allocations over the past three years.

Fiscal Year	Annual Allocation ¹
FY 22	\$3,922,519
FY 23	\$3,927,011
FY 24	\$3,913,647
BIL Allocations Through FY 24	\$11,763,177

Bipartisan Infrastructure Law (BIL) – Airport Terminals Program (ATP)

The BIL also provides a total of \$5 billion over five years for competitive grants for airport terminal development projects that address the aging infrastructure of the nation's airports. These grants will fund safe, sustainable, and accessible airport terminals, on-airport rail access projects and airport-owned airport traffic control towers. Projects may also include multimodal development.

In FY 2024, SGF was awarded \$5.3 million in ATP funds for the improvement of the passenger terminal building by replacing up to five (5) passenger boarding bridges that have exceeded their useful life.²

Passenger Facility Charge (PFC) Program

The PFC Program allows commercial service airports to impose a fee against enplaning passengers for the purpose of funding approved projects at that airport. SGF is currently authorized by the FAA to collect the maximum allowable PFC of \$4.50 for every eligible enplaning passenger. This authorization ends in 2036.³

Airports electing to impose a PFC may use the revenues for one or more of the following:

- Pay all or part of the allowable cost of an FAA approved project
- Pay debt service and financing costs associated with bond issuance
- Combine PFC funds with Federal Grant funds (e.g. AIP) to accomplish an approved project
- Apply PFC funds to meet non-federal share of the cost of projects funded under the Federal Airport Grant Program

Eligible PFC projects must preserve or enhance safety, security, or capacity of the national air transportation system; reduce noise or mitigate noise impacts resulting from an airport; or furnish opportunities for enhanced competition between or among air carriers.

Congressionally Directed Spending (CDS)

This funding opportunity allows Members of Congress to request funds in the annual federal budget to be allocated for specific projects in their states and is an opportunity for eligible entities to obtain a one-

¹ <https://www.faa.gov/bil/airport-infrastructure>

² <https://www.faa.gov/bil/airport-terminals>

³ <https://www.faa.gov/sites/faa.gov/files/2024-04/arp-pfc-monthly-reports-airports-20240430.pdf>

time allocation of funds for projects. In FY 2023, SGF was awarded \$6,400,000 in CDS funds to expand the existing terminal ramp and apron to provide for terminal expansion.⁴

STATE FUNDING

The primary State funding agency for airports in Missouri is the Missouri Department of Transportation (MoDOT) Aviation team. MoDOT provides an additional funding source for all federally eligible aviation developments and may provide certain levels of funding for ineligible or low priority projects. In normal activities, MoDOT uses several funding options. Additional description of these options is as follows:

- **State Matching on Federal Fund Sources (AIP entitlement and discretionary funds)**

These funding options can be used to reduce the Airport Sponsor's total financial participation. Normally, funding percentages are 90% Federal Share, 5% State Share and 5% Local Share. These funding percentages can vary depending on the availability of State funds.

- **State-Local Funding Using General Revenue/Aviation Fuel Tax Funds**

MoDOT administers a cost-sharing program called the State Aviation Trust Fund (ATF). Funds for this program are provided from a tax on aviation fuel within the state, up to \$10 million per year. The program assists local airport sponsors in the planning, purchase, construction, or improvement of public-use airports. Under this cost-sharing program, eligible projects qualify for 90 percent state funding, with the remaining 10 percent representing the local sponsor's share. Like the AIP program, it is critical that the local match be secured to fully leverage available state participation.

- **State-Local Funding Using Loans**

MoDOT also maintains a Statewide Transportation Assistance Revolving (STAR) fund. The STAR fund provides loans to local entities for non-highway projects such as rail, waterway, and air travel infrastructure. The STAR fund can assist in the planning, acquisition, development, and construction of facilities for transportation by air, water, rail or mass transit; however, STAR fund monies cannot fund operating expenses.

LOCAL FUNDING

The balance of capital project costs, after consideration has been given to FAA grants, State, and other funding sources, must be funded through Airport resources. This direct payment of capital costs is accomplished using airport operating revenues or reserves. If bonds or other borrowings are used, they are also repaid by collecting rent, fees, and other charges. Revenue sources include hangar rent, fuel flowage fees, land leases, etc. If additional funds are required to cover local costs, SGF may choose to pursue other funding sources.

⁴ <https://www.appropriations.senate.gov/congressionally-directed-spending-requests-fy2023-chart>

BONDS

An airport sponsor may obtain the required local share of a project through bonds. SGF has bonding capacity through its ownership by the City of Springfield. The information included below is based on common industry standards and practices.

The airport sponsor will select the appropriate bond to acquire the necessary financing based upon the number of projects requiring local share monies and the type of airport. Airports typically use one of two types of bonds to fund capital development projects:

- **General Obligation (GO) Bonds** – Payments to the bondholders are secured by the full faith, credit, and taxing power of the issuing governmental entity. An advantage of general obligation bonds is that they are typically issued at a lower interest rate due to the governmental guarantee. However, there are typically limits on the amount of general obligation debt that can be incurred, and many states require voter approval before issuing general obligation debt. In addition, typically GO bonds can only be financed for 10-15 years, increasing the monthly payment.
- **General Airport Revenue Bonds (GARBs)** – The debt service from these bonds is paid solely from the revenue received from the facility that was constructed with the proceeds of the bonds. This type of financing presents an opportunity to construct facilities without increasing the debt burden of the airport, since the debt is backed solely by the revenue generated by the facility. Because these bonds are not backed by an additional government guarantee and are therefore perceived as a greater risk, they typically have interest rates that are higher than GO bonds. One advantage of GARBs is they typically can be financed for a greater amount of time (25–30-year terms) resulting in lower monthly debt payments.

9.3 Key Actions and Responsibilities

9.3.1 Project Development Tasks

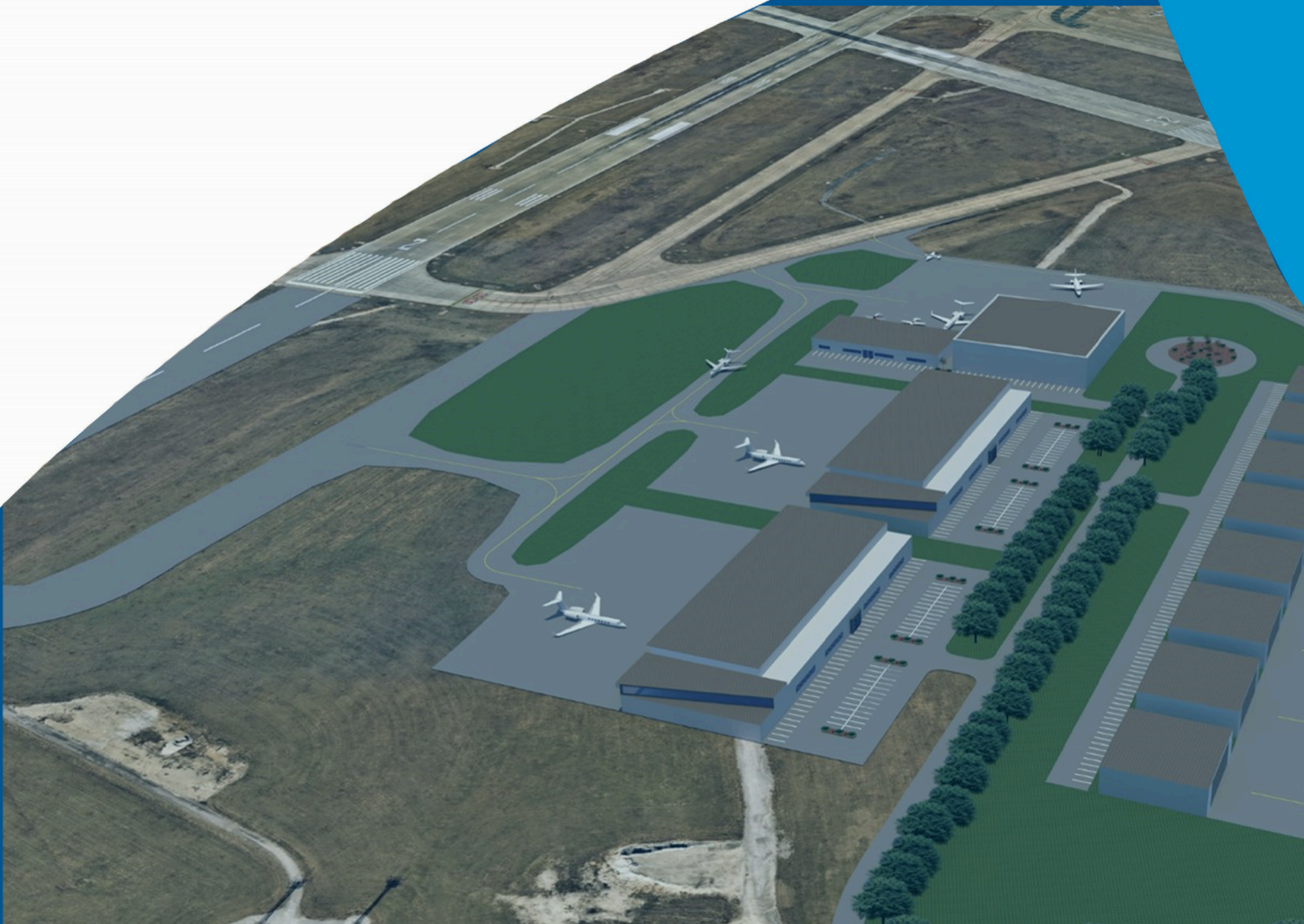
Capital improvements at airports require several steps to be completed prior to the initiation of construction activities. The following actions should be assessed to determine if they are required for each project and to what degree:

- **Sponsor Approval** – depending on agreements signed with air carriers and/or tenants, the Airport may be required to receive approval by the air carriers and/or tenants for the proposed capital improvement project.
- **Funding Applications** – the Airport or their representing engineering firm must submit federal and state applications for funding well in advance of the anticipated construction date. Federal funding for capital improvement projects at airports is extremely competitive.
- **Section 163 Determination** – recent changes in federal law have required the FAA to revisit whether FAA approval is needed for certain types of airport projects throughout the nation. The FAA retains authority to:

- Ensure safe and efficient operations of aircraft or the safety of people or property on the ground related to aircraft operations.
 - Regulate land or a facility that was acquired or modified using federal funding.
 - Ensure an airport owner or operator receives not less than fair market value (FMV) in the context of a commercial transaction for the use, lease, encumbrance, transfer, or disposal of land, any facilities on such land, or any portion of such land or facilities.
 - Ensure that an airport owner or operator pays not more than FMV in the context of commercial transaction for the acquisition of land or facilities on such land.
 - Enforce any terms contained in a Surplus Property Act instrument or transfer.
 - Exercise any authority contained in 49 U.S.C. § 40117, dealing with passenger facility charges (PFCs).
- **Environmental Documentation** – the Airport, under the National Environmental Protection Act (NEPA), and in accordance with FAA policies, must submit the necessary environmental documentation and receive approval by the appropriate agencies prior to federal funding being allocated to the proposed capital improvement project. Environmental documentation should be submitted early in the planning/design stage of a project due to the amount of time required to complete the environmental review process.
 - **Aeronautical Study Determination** – the FAA must formally approve the airspace for Airport development/improvement projects. The Airport must submit the necessary airspace information and receive approval from the FAA as part of the FAA’s grant assurances. Like environmental documentation, the airspace submittal should also be submitted early in the project planning/design stage due to the lengthy airspace review process.
 - **Land Acquisition** – the Airport must secure any additional land resources (fee simple or avigation easement) necessary for the proposed capital improvement project prior to construction beginning. The Airport should begin the land acquisition process as soon as practicable as this process can take anywhere from nine months to 2 or 3 years to complete depending on the level of complexity.
 - **Project Design** – this process involves the design of the proposed capital improvement project and typically takes between 36 and 60 weeks to complete depending on the level of complexity and the level of agency coordination.
 - **Agency Coordination Activities** – depending on the size and complexity of the proposed capital improvement project, coordination and permitting with several agencies may be required. The time to complete coordination and permitting efforts with agencies is dependent on specific project details.
 - **Public Coordination Activities** – depending on the size and complexity of the proposed capital improvement project (i.e., new runway or runway expansion), the Airport may need to complete a public outreach program to identify the benefits of the project and allow the public to provide critical feedback on potential impacts. The level of effort necessary to conduct a public outreach program is dependent on specific project details.



CMT





EXPLANATION TO COUNCIL BILL 2024-144 (LEE)

FILED: 07/02/2024

ORIGINATING DEPARTMENT: Public Works

TITLE: A special ordinance authorizing the City Manager, or designee, to enter into a Carbon Reduction Program Agreement with the Missouri Highways and Transportation Commission in the amount of \$355,200 for the purpose of accepting federal grant funds to be used to design an extension of the Fassnight Greenway multi-use trail near Bennett Street and to do those things necessary to obtain such funding and carry out the identified activities; approving a budget adjustment amending the Fiscal Year 2024-2025 budget of the Department of Public Works to appropriate said funds; and declaring that this Ordinance qualifies for approval in one reading under City Charter Section 2.16(25).

PURPOSE: To authorize the City Manager, or designee, on behalf of the City, to enter into a Carbon Reduction Program Grant Agreement with the Missouri Highways and Transportation Commission ("MHTC") for the purpose of accepting federal grant funds in the amount not to exceed \$355,200 for partial funding of designing an extension of the Fassnight Greenway multi-use trail near Bennett Street; to exercise any and all powers to obtain such funding and carry out the identified activities; and approving a budget adjustment amending the Fiscal Year 2024-2025 budget of the Department of Public Works in the amount of \$355,200 to appropriate the grant funds.

BACKGROUND INFORMATION: This Carbon Reduction Program ("CRP") Grant Agreement allows for reimbursement of up to 80 percent (\$355,200) of the estimated \$444,000 cost for preliminary engineering associated with the construction of a pedestrian and bike path along Bennett Street from Glenstone Avenue to Enterprise Avenue.

The required minimum local match of 20 percent (\$88,800) would be funded from the 1/8-cent Transportation Sales Tax – Walkability Program and is already budgeted.

Supports the following City Council Priorities:

- Quality of Place
- Economic Vitality
- Public Safety

REMARKS: Public Works recommends approval of this Council bill and budget adjustment.



Submitted By: Martin Gugel, Assistant Director of Public Works

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Maurice S. Jones, Deputy City Manager 7/17/2024

- Attachments:**
1. MHTC Bennett Trail_ord
 2. MHTC BennettMap_ExhA
 3. MHTC BennettAgree_ExhB
 4. MHTC BennettBA_ExhC

One-rdg. X
P. Hrngs.
Pgs. 19
Filed: 07-16-24

Sponsored by: Lee

First Reading:

Second Reading:

COUNCIL BILL 2024-144

SPECIAL ORDINANCE

AN ORDINANCE

1 AUTHORIZING the City Manager, or designee, to enter into a Carbon Reduction
2 Program Agreement with the Missouri Highways and Transportation
3 Commission in the amount of \$355,200 for the purpose of accepting
4 federal grant funds to be used to design an extension of the Fassnight
5 Greenway multi-use trail near Bennett Street and to do those things
6 necessary to obtain such funding and carry out the identified
7 activities; approving a budget adjustment amending the Fiscal Year
8 2024-2025 budget of the Department of Public Works to appropriate
9 said funds; and declaring that this Ordinance qualifies for approval in
10 one reading under City Charter Section 2.16(25).
11 _____
12

13 WHEREAS, the Infrastructure Investment and Jobs Act established the Carbon
14 Reduction Program (“CRP”) to provide funds for projects designed to reduce
15 transportation emissions; and
16

17 WHEREAS, the Missouri Highways and Transportation Commission (“MHTC”)
18 has determined the Fassnight Greenway is consistent with the goals of the CRP; and
19

20 WHEREAS, total preliminary engineering costs for the project are estimated at
21 \$444,000; and
22

23 WHEREAS, the CRP allows for reimbursement of up to 80 percent (\$355,200) of
24 the total estimated design and planning cost; and
25

26 WHEREAS, the required minimum local match of 20 percent (\$88,800) would be
27 funded from the 1/8-cent Transportation Sales Tax – Walkability Program and is already
28 budgeted.
29

30 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
31 SPRINGFIELD, MISSOURI, as follows, that:
32

33 Section 1 – The City Manager, or designee, is authorized to enter into a Carbon
34 Reduction Program Agreement with the Missouri Highways and Transportation
35 Commission (“MHTC”) in the amount of \$355,200, said agreement to be in substantial
36 conformity with “Exhibit B,” which is attached hereto and incorporated herein by this
37 reference, to cost share in the design of an extension to the Fasnigh Greenway multi-
38 use trail near Bennett Street, and to do those things necessary to obtain such funding
39 and carry out the identified activities.
40

41 Section 2 – City Council hereby authorizes the amendment of the budget of the
42 Department of Public Works upon the awarding of grant funds for Fiscal Year 2024-
43 2025 in the accounts and in the amounts shown on Budget Adjustment No. 011, a copy
44 of which is attached hereto and incorporated herein by reference as “Exhibit C.”
45

46 Section 3 – The City Council hereby finds that the budget adjustment made
47 above has been recommended by the City Manager.
48

49 Section 4 – The City Manager, or designee, is directed to cause the appropriate
50 accounting entries to be made in the books and records of the City.
51

52 Section 5 – City Council hereby finds and declares that this Ordinance may be
53 passed as a one-reading ordinance under City Charter Section 2.16(25) as it relates to
54 a contract for the acceptance of grant funds from a state or federal agency. Therefore,
55 this Ordinance shall be in full force and effect from and after passage.
56

57 Passed at meeting: _____
58

59 _____
60 Mayor
61

62 Attest: _____, City Clerk
63

64 Filed as Ordinance: _____
65

66
67 Approved as to form: Kyle Teltz, Assistant City Attorney
68

69
70 Approved for Council action: Jason A. Hage, City Manager

EXHIBIT A - Fassnacht Trail- Bennett



City of Springfield, Missouri GIS

0 0.05 0.1 0.2
mi

DISCLAIMER: All information included on this map or digital file is provided "as-is" for general information purposes only. The City of Springfield, and all other contributing data suppliers, make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the data for any particular use. Furthermore, the City of Springfield, and all other contributing data suppliers, assume no liability whatsoever associated with the use or misuse of the data.



CCO Form: FS37
Approved: 12/22 (MWH)
Revised: 03/24 (TLP)
Modified:

CFDA Number: CFDA #20.205
CFDA Title: Highway Planning and Construction
Award name/number: CRP - 5901837
Award Year: SFY2024
Federal Agency: Federal Highway Administration, Department of Transportation

**MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
CARBON REDUCTION PROGRAM (CRP) AGREEMENT**

THIS AGREEMENT is entered into by the Missouri Highways and Transportation Commission (hereinafter, "Commission") and the City of Springfield (hereinafter, "City").

WITNESSETH:

WHEREAS, the Infrastructure Investment and Jobs Act (IIJA), 23 U.S.C. §175 authorizes the funding of projects providing for the reduction of transportation emissions; and

WHEREAS, the Commission is the agency designated to receive and dispense such funds; and

WHEREAS, the Commission has determined that the Fassnight Greenway is consistent with the goals of the CRP funding; and

WHEREAS, the City has the resources to develop and provide such services.

NOW, THEREFORE, in consideration of the mutual covenants, promises and representations in this Agreement, the parties agree as follows:

(1) PURPOSE: The United States Congress has authorized, in 23 U.S.C. §175, funds to be used for activities for carbon reduction. The purpose of this Agreement is to grant the use of such funds to design an extension of the Fassnight Greenway multi-use trail near Bennett.

(2) SCOPE OF WORK: City shall provide engineering and design of a multi-use trail extension of the Fassnight Greenway in the Bennett area as more fully described in the attached Exhibit A which is incorporated herein by reference.

(3) REASONABLE PROGRESS POLICY: The project as described in this agreement is subject to the reasonable progress policy set forth in the Local Public Agency (LPA) Manual and the final deadline specified in Exhibit B attached hereto and incorporated herein by reference. In the event, the LPA Manual and the final deadline within Exhibit B conflict, the final deadline within Exhibit B controls. If the project is within a Transportation Management Area that has a reasonable progress policy in place, the project is subject to that policy. If the project is withdrawn for not meeting reasonable progress, the City agrees to repay the Commission for any progress payments made to the City for the project and agrees that the Commission may deduct progress payments made to the City from future payments to the City.

(4) INDEMNIFICATION: To the extent allowed or imposed by law, the City shall defend, indemnify and hold harmless the Commission, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the City's wrongful or negligent performance of its obligations under this Agreement.

(5) INSURANCE:

(A) The City is required or will require any contractor procured by the City to work under this Agreement:

(1) To obtain a no cost permit from the Commission's district engineer prior to working on the Commission's right-of-way, which shall be signed by an authorized contractor representative (a permit from the Commission's district engineer will not be required for work outside of the Commission's right-of-way); and

(2) To carry commercial general liability insurance and commercial automobile liability insurance from a company authorized to issue insurance in Missouri, and to name the Commission, and the Missouri Department of Transportation and its employees, as additional insureds in amounts sufficient to cover the sovereign immunity limits for Missouri public entities (\$600,000 per claimant and \$4,000,000 per occurrence) as calculated by the Missouri Department of Insurance, Financial Institutions and Professional Registration, and published annually in the Missouri Register pursuant to Section 537.610, RSMo.

(B) In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitution or law.

(6) AMENDMENTS: Any change in this Agreement, whether by modification or supplementation, must be accomplished by a formal contract amendment signed and approved by the duly authorized representatives of the City and the Commission.

(7) COMMISSION REPRESENTATIVE: The Commission's Southwest District

Engineer is designated as the Commission's representative for the purpose of administering the provisions of this Agreement. The Commission's representative may designate by written notice other persons having the authority to act on behalf of the Commission in furtherance of the performance of this Agreement.

(8) NONDISCRIMINATION ASSURANCE: With regard to work under this Agreement, the City agrees as follows:

(A) Civil Rights Statutes: The City shall comply with all state and federal statutes relating to nondiscrimination, including but not limited to Title VI and Title VII of the Civil Rights Act of 1964, as amended (42 U.S.C. §2000d and §2000e, *et seq.*), as well as any applicable titles of the "Americans with Disabilities Act" (42 U.S.C. §12101, *et seq.*). In addition, if the City is providing services or operating programs on behalf of the Department or the Commission, it shall comply with all applicable provisions of Title II of the "Americans with Disabilities Act".

(B) Administrative Rules: The City shall comply with the administrative rules of the United States Department of Transportation relative to nondiscrimination in federally assisted programs of the United States Department of Transportation (49 C.F.R. Part 21) which are herein incorporated by reference and made part of this Agreement.

(C) Nondiscrimination: The City shall not discriminate on grounds of the race, color, religion, sex, disability, national origin, age or ancestry of any individual in the selection and retention of subcontractors including procurement of materials and leases of equipment. The City shall not participate either directly or indirectly in the discrimination prohibited by 49 C.F.R. §21.5, including employment practices.

(D) Solicitations for subcontracts, Including Procurements of Material and Equipment: These assurances concerning nondiscrimination also apply to subcontractors and suppliers of the City. These apply to all solicitations either by competitive bidding or negotiation made by the City for work to be performed under a subcontract including procurement of materials or equipment. Each potential subcontractor or supplier shall be notified by the City of the requirements of this Agreement relative to nondiscrimination on grounds of the race, color, religion, sex, disability or national origin, age or ancestry of any individual.

(E) Information and Reports: The City shall provide all information and reports required by this Agreement, or orders and instructions issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Commission or the United States Department of transportation to be necessary to ascertain compliance with other contracts, orders and instructions. Where any information required of the City is in the exclusive possession of another who fails or refuses to furnish this information, the City shall so certify to the Commission or the United States Department of Transportation as appropriate and shall set forth what efforts it has made to obtain the information.

(F) Sanctions for Noncompliance: In the event the City fails to comply with the nondiscrimination provisions of this Agreement, the Commission shall impose such contract sanctions as it or the United States Department of Transportation may determine to be appropriate, including but not limited to:

1. Withholding of payments under this Agreement until the City complies; and/or
2. Cancellation, termination or suspension of this Agreement, in whole or in part, or both.

(G) Incorporation of Provisions: The City shall include provisions of paragraph (7) of this Agreement in every subcontract, including procurements of materials and leases of equipment, unless exempted by the statutes, executive order, administrative rules or instructions issued by the Commission of the United States Department of Transportation. The City will take such action with respect to any subcontract or procurement as the Commission or the United States Department of Transportation may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided that in the event the City becomes involved or is threatened with litigation with a subcontractor or supplier as a result of such direction, the City may request the United States to enter into such litigation to protect the interests of the United States.

(9) DISADVANTAGED BUSINESS ENTERPRISES (DBE): It is the policy of the U.S. Department of Transportation and the Commission that businesses owned by socially and economically disadvantaged individuals (DBE's), as defined in 49 C.F.R. Part 26, have the maximum opportunity to participate in the performance of contracts financed in whole or in part with federal funds.

(10) ASSIGNMENT: The City shall not assign, transfer or delegate any interest in this Agreement without the prior written consent of the Commission.

(11) LAW OF MISSOURI TO GOVERN: This Agreement shall be construed according to the laws of the State of Missouri. The City shall comply with all local, state and federal laws and regulations relating to the performance of this Agreement.

(12) VENUE: It is agreed by the parties that any action at law, suit in equity, or other judicial proceeding to enforce or construe this Agreement, or regarding its alleged breach, shall be instituted only in the Circuit Court of Cole County, Missouri.

(13) CANCELLATION: The Commission may cancel this Agreement at any time for a material breach of contractual obligations by providing the City with written notice of cancellation. Should the Commission exercise its right to cancel this Agreement for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the City.

(14) ACCESS TO RECORDS: The City and its contractors must maintain all records relating to this Agreement, including but not limited to invoices, payrolls, etc. These records must be available at no charge to the Federal Highway Administration (FHWA) and the Commission and/or their designees or representatives during the period of this Agreement and any extension, and for a period of three (3) years after the date on which the City receives reimbursement of their final invoice from the Commission.

(15) BUDGET: The City shall incur obligations in connection with the performance of the period only in conformity with the latest budget approved by the Commission as specified in Appendix A - Project Budget. This budget may be revised as necessary; however, no budget or revision shall be effective unless approved by the Commission's representative and FHWA.

(16) ELIGIBLE EXPENDITURES: No expenditure or charges shall be eligible for reimbursement that are contrary to the provisions of this Agreement or not required for the carrying out of the project.

(17) REIMBURSEMENT: The cost of the contemplated improvements will be borne by the United States Government and by the City as follows:

Any federal funds for project activities shall only be available for reimbursement of eligible costs which have been incurred by City. Any costs incurred by City prior to authorization from FHWA and notification to proceed from the Commission are **not** reimbursable costs. All federally funded projects are required to have a project end date. Any costs incurred after the project end date are not eligible for reimbursement. The federal share for this project will be **80** percent not to exceed **\$355,200**. The calculated federal share for seeking federal reimbursement of participating costs for the herein improvements will be determined by dividing the total federal funds applied to the project by the total participating costs. Any costs for the herein improvements which exceed any federal reimbursement or are not eligible for federal reimbursement shall be the sole responsibility of the City. The Commission shall not be responsible for any costs associated with the herein improvement unless specifically identified in this Agreement or subsequent written amendments.

(18) PROGRESS PAYMENTS: The City may request progress payments be made for the herein improvements as work progresses but not more than once every two weeks. Progress payments must be submitted monthly. All progress payment requests must be submitted for reimbursement within 90 days of the project completion date for the final phase of work. The City shall repay any progress payments which involve ineligible costs.

(19) PROMPT PAYMENTS: Progress invoices submitted to MoDOT for reimbursement more than thirty (30) calendar days after the date of the vendor invoice shall also include documentation that the vendor was paid in full for the work identified in

the progress invoice. Examples of proof of payment may include a letter or e-mail from the vendor, lien waiver or copies of cancelled checks. Reimbursement will not be made on these submittals until proof of payment is provided. Progress invoices submitted to MoDOT for reimbursement within thirty (30) calendar days of the date on the vendor invoice will be processed for reimbursement without proof of payment to the vendor. If the City has not paid the vendor prior to receiving reimbursement, the City must pay the vendor within two (2) business days of receipt of funds from MoDOT.

(20) PERMITS: The City shall secure any necessary approvals or permits from any federal or state agency as required for the completion of this project.

(21) INSPECTION OF CONTRACTOR'S RECORDS: The City shall assure that its contractors, and all subcontractors, if any, maintain all books, documents, papers and other evidence pertaining to costs incurred in connection with this Agreement. The City shall make such materials available at such contractor's office at all reasonable times during the contract period, and for three (3) years from the date of final payment under the contract, for inspection by the Commission, FHWA or any authorized representatives of the Federal Government and the State of Missouri. Copies thereof shall be furnished at no charge, upon request, to authorized representatives of the Commission, State, FHWA, or other Federal agencies.

(22) FINAL AUDIT: The Commission will perform a final audit of project costs. The United States Government shall reimburse the City, through the Commission, any monies due. The City shall refund any overpayments as determined by the final audit.

(23) AUDIT REQUIREMENTS: If the City expend(s) seven hundred fifty thousand dollars (\$750,000) or more in a year in federal financial assistance it is required to have an independent annual audit conducted in accordance with 2 CFR Part 200. A copy of the audit report shall be submitted to MoDOT within the earlier of thirty (30) days after receipt of the auditor's report(s), or nine (9) months after the end of the audit period. Subject to the requirements of 2 CFR Part 200, if the City expend(s) less than seven hundred fifty thousand dollars (\$750,000) a year, the City may be exempt from auditing requirements for that year but records must be available for review or audit by applicable state and federal authorities.

(24) FHWA APPROVAL: This Agreement is made and entered into subject to the approval of the FHWA.

(25) FEDERAL-AID PROVISIONS: Because responsibility for the performance of all functions or work contemplated as part of this project is assumed by the City, and the City may elect to construct part of the improvement contemplated by this Agreement with its own forces, a copy of Section II and Section III, as contained in the United States Department of Transportation Form Federal Highway Administration (FHWA) 1273 "Required Contract Provisions, Federal-Aid Construction Contracts," is attached and made a part of this Agreement as Exhibit C. Wherever the term "the contractor" or words of similar import appear in these sections, the term "the City" is to be substituted. The

City agrees to abide by and carry out the condition and obligations of "the contractor" as stated in Section II, Equal Opportunity, and Section III, Nonsegregated Facilities, as set out in Form FHWA 1273.

(26) FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT OF 2006: The City shall comply with all reporting requirements of the Federal Funding Accountability and Transparency Act (FFATA) of 2006, as amended. This Agreement is subject to the award terms within 2 C.F.R. Part 170.

(27) ACQUISITION OF RIGHT OF WAY: With respect to the acquisition of right of way necessary for the completion of the project, the City shall acquire any additional necessary right of way required for this project and in doing so agrees that it will comply with all applicable federal laws, rules and regulations, including 42 U.S.C. 4601-4655, the Uniform Relocation Assistance and Real Property Acquisition Act, as amended and any regulations promulgated in connection with the Act.

(28) CONFLICT OF INTEREST: The City shall comply with conflict of interest policies identified in 23 CFR 1.33. A conflict of interest occurs when an entity has a financial or personal interest in a federally funded project.

(29) MANDATORY DISCLOSURES: The City shall comply with 2 CFR 200.113 and disclose, in a timely manner, in writing all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have entered into this Agreement on the date last written below.

Executed by the City this _____ (date).

Executed by the Commission this _____ (date).

MISSOURI HIGHWAYS AND
TRANSPORTATION COMMISSION

CITY OF SPRINGFIELD

By _____

Title _____

Title _____

ATTEST:

By _____

Title _____

By _____

Secretary to the Commission

Title _____

Approved as to Form:

By _____

Title _____

ATTEST:

By _____

Commission Counsel

Title _____

Approved as to Form:

By _____

Title _____

Ordinance: _____

Appendix A - Project Budget

PHASE	FUND SOURCE	PRIOR	FY2024	FY2025	FY2026	FY2027	FUTURE	TOTAL
Engineering	Local	-	\$88,800	-	-	-	-	\$88,800
Engineering	CRP (FHWA)	-	\$355,200	-	-	-	-	\$355,200
Total Engineering		-	\$444,000	-	-	-	-	\$444,000
Total Programmed		-	\$444,000	-	-	-	-	\$444,000

Exhibit A – Scope of Work

All Preliminary Engineering activities for the Fassnight Greenway multi-use trail between Glenstone and Enterprise near Bennett.

Exhibit B – Project Schedule

Project Description: CRP-5901837

Task	Date
Execution of Programming Agreement	6/30/2024
Notice to Proceed for Engineering Services Agreement	9/1/2024
Preliminary and Right-of-Way Plans Submittal (if Applicable)	1/1/2025
Plans, Specifications & Estimate (PS&E) Submittal	4/30/2025
Plans, Specifications & Estimate (PS&E) Approval	5/30/2025

*Note: the dates established in the schedule above will be used in the applicable ESC between the sponsor agency and consultant firm.

**Schedule dates are approximate as the project schedule will be actively managed and issues mitigated through the project delivery process. The Award Date or Planning Study Date deliverable is not approximate and requires request to adjust.

Exhibit C - Required Contract Provisions
Federal-Aid Construction Contracts

DRAFTER'S NOTE: *Print Form 1273 from the following website and attach as Exhibit B* <http://www.fhwa.dot.gov/programadmin/contracts/1273.pdf>.

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit C

Budget Adjustment
011

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
46040	20	73020	416010	000000	00000	\$355,200	Carbon Reduction Program Federal Grant Revenues through the Missouri Highways & Transportation Commission
Net Revenue Adjustment						\$355,200	

Expenditures:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
46040	20	73020	508530	000000	00000	\$355,200	Designing an Extension of the Fasnigh Greenway Multi-Use Trail along Bennett Street from Glenstone Avenue to Enterprise Avenue
Net Expenditure Adjustment						\$355,200	

Fund Balance Appropriation:

Fund	Title	Amount

Explanation: To amend the FY2024-25 Budget by appropriating \$355,200 of federal Carbon Reduction Program grant funds for the partial funding of the design of an extension of the Fasnigh Greenway Multi-Use Trail along Bennett Street from Glenstone Avenue to Enterprise Avenue. City matching funds will be provided by the 1/8 Cent Transportation Sales Tax Walkability Program and is already budgeted.

Requested By:

Approved By:

Authorization:

Department Head _____ Date _____

Director of Finance _____ Date _____

City Manager _____ Date _____

Council Bill No. _____
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____



EXPLANATION TO COUNCIL BILL 2024-145 (MCCLURE)

FILED: 07/12/2024

ORIGINATING DEPARTMENT: Law

TITLE: A special ordinance calling an election on Tuesday, November 5, 2024, in the City of Springfield, Missouri, to submit to the qualified voters the question of whether to enact a city sales tax at the rate of three-quarters of one percent (3/4-cent), one-quarter for the purpose of funding public safety initiatives, to include funding the remaining obligation of the Springfield Police Officers' and Firefighters' Pension and increasing police officer and firefighter pay, with said one-quarter to not sunset, and two-quarters for the purpose of funding projects consistent with the City's comprehensive plan, to include capital improvements, community and neighborhood initiatives, and park projects, with said two-quarters to sunset after a period of ten years; and declaring an emergency pursuant to City Charter Section 2.12.

PURPOSE: Calling an election on Tuesday November 5, 2024, in the City of Springfield, Missouri, to submit to the qualified voters the question of whether to enact a city sales tax at the rate of three-quarters of one percent (3/4-cent), one-quarter for the purpose of funding public safety initiatives, to include funding the remaining obligation of the Springfield Police Officers' and Firefighters' Pension and increasing police officer and firefighter pay, with said one-quarter to not sunset, and two-quarters for the purpose of funding projects consistent with the City's comprehensive plan, to include capital improvements, community and neighborhood initiatives, and park projects, with said two-quarters to sunset after a period of ten years; and declaring an emergency.

BACKGROUND INFORMATION: At the election held on November 5, 2019, the qualified voters approved the continuation of a 3/4-cent sales tax for the sole purpose of funding the Springfield Police Officers' and Fire Fighters' pension system. By its terms, said tax will expire upon the earlier of five (5) years from the date of the commencement of collection of said tax, or said pension reaching a fully-funded (100%) status as determined by an independent actuarial study conducted for the pension board of trustees.

The pension, having not reached a full-funded (100%) status as determined by an independent actuarial study conducted for the pension board of trustees, will expire upon five (5) years from the date of the commencement of collection of said tax, which is March 31, 2025. City Council adopted Resolution 10752 on April 8, 2024, establishing the Citizens' Commission on Community Investment ("CCCI") and charging the same with evaluating and prioritizing the highest and best uses for local sales tax capacity upon expiration of said tax. City Council adopted Resolution 10762 on or about July 8, 2024, accepting the CCCI report to City Council.



Section 94.510, RSMo. authorizes the City to submit to the qualified voters the question of whether to enact a sales tax for the benefit of the City at a rate not to exceed one percent (1%). City Council, as recommended by the CCCI, desires to submit to the qualified voters the question of whether to enact a city sales tax at the rate of three-quarters of one percent (3/4-cent) as described herein.

If approved by the qualified voters, there will be no increase in the current sales tax level because collection of said tax would not commence until April 1, 2025. If not approved by the qualified voters, the City will experience an annual decrease in revenue of approximately \$45 million, which will necessitate budget cuts in order to continue funding the Springfield Police Officers' and Fire Fighters' pension system and leaves the City without a revenue source with which to fund competitive pay increases for police officer and firefighter pay.

Submitted By: Jordan Paul, City Attorney

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Jason Gage, City Manager 7/16/2024

Attachments: 1. 75c Ballot_Ord

34 accepting the CCCI report to City Council; and

35
36 WHEREAS, Section 94.510, RSMo. authorizes the City to submit to the qualified
37 voters the question of whether to enact a sales tax for the benefit of the City at a rate
38 not to exceed one percent (1%); and

39
40 WHEREAS, City Council, as recommended by the CCCI, desires to submit to the
41 qualified voters the question of whether to enact a city sales tax at the rate of three-
42 quarters of one percent (3/4-cent) as described herein; and

43
44 WHEREAS, if approved by the qualified voters, there will be no increase in the
45 current sales tax level because collection of said tax would not commence until April 1,
46 2025; and

47
48 WHEREAS, if not approved by the qualified voters, the City will experience an
49 annual decrease in revenue of approximately \$45 million, which will necessitate budget
50 cuts in order to continue funding the Springfield Police Officers' and Fire Fighters'
51 pension system and leaves the City without a revenue source with which to fund
52 competitive pay increases for police officer and firefighter pay.

53
54 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
55 SPRINGFIELD, MISSOURI, as follows, that:

56
57 Section 1 – An election is hereby called and ordered to be held in the City of
58 Springfield, Missouri, on November 5, 2024, for the purpose of submitting to the
59 qualified voters of the City the question of whether to enact a city sales tax at the rate of
60 three-quarters of one percent (3/4-cent), one-quarter for the purpose of funding public
61 safety initiatives, to include funding the remaining obligation of the Springfield Police
62 Officers' and Firefighters' Pension and increasing police officer and firefighter pay, with
63 said one-quarter to not sunset, and two-quarters for the purpose of funding projects
64 consistent with the City's comprehensive plan, to include capital improvements,
65 community and neighborhood initiatives, and park projects, with said two-quarters to
66 sunset after a period of ten years.

67
68 Section 2 – The ballot to submit the issue referenced in Section 1 shall be in
69 substantially the same form as the following:

70
71
72
73 OFFICIAL BALLOT
74 CITY ELECTION
75 CITY OF SPRINGFIELD, MISSOURI
76

77 Shall the City of Springfield, Missouri, enact a city sales tax at the rate of three-quarters
78 of one percent (3/4-cent), one-quarter for the purpose of funding public safety initiatives,
79 to include funding the remaining obligation of the Springfield Police Officers' and

80 Firefighters' Pension and increasing police officer and firefighter pay, with said one-
81 quarter to not sunset, and two-quarters for the purpose of funding projects consistent with
82 the City's comprehensive plan, to include capital improvements, community and
83 neighborhood initiatives, and park projects, with said two-quarters to sunset after a period
84 of ten years?

85
86 (Note: there will be no increase in the current sales tax level if the 3/4-cent sales tax is
87 approved.)

88
89 - → Yes - → No

90
91 INSTRUCTIONS TO VOTERS:

92
93 To vote FOR the question, complete the arrow opposite YES.

94
95 To vote AGAINST the question, complete the arrow opposite NO.
96

97
98 Section 3 – The Greene County Clerk is hereby authorized to conduct an election
99 in a manner consistent with the provisions of Chapter 115, RSMo.

100
101 Section 4 – The City Clerk is hereby authorized and directed to notify the Greene
102 County Clerk of the adoption of this Ordinance as soon as practicable, but no later than
103 5:00 p.m. on the tenth Tuesday prior to November 5, 2024, and to include in said
104 notification all of the terms and provisions required by Chapter 115, RSMo. or any other
105 law. The City Clerk is authorized to do all things necessary and convenient to ensure
106 that the question is properly submitted to the qualified voters on November 5, 2024.

107
108 Section 5 – If approved by the qualified voters, the following terms shall govern
109 the use of any revenue collected pursuant to this tax:

- 110
111 A. For the purposes of this tax, the term “public safety” means the police and fire
112 departments.
113
114 B. A citizens' advisory board shall be charged with reviewing and monitoring the
115 use of any revenue collected pursuant to this tax. Additionally, concerning the
116 use of any revenue dedicated to funding projects consistent with the City's
117 comprehensive plan, said board shall be charged with recommending
118 projects to City Council.
119
120 C. In appropriating the revenue dedicated to funding projects consistent with the
121 City's comprehensive plan, the following criteria should be considered:
122
123 i. Whether the project can be completed with no ongoing debt obligation.
124 ii. Whether the project is eligible for matching funds.
125 iii. Whether the project directly generates new sales tax or other revenue for

City services and infrastructure.

- iv. Whether the project creates jobs or increases economic growth.
- v. Whether the project is a catalyst that retains existing or attracts new City residents or businesses.
- vi. Whether the project improves livability for City residents or workers.
- vii. Whether the project is transformational and invests in the next generation.
- viii. Whether the project is a continuation of an existing or previous project.

Section 6 – City Council finds and declares, in accordance with City Charter Section 2.12, that this Ordinance qualifies as an emergency because it relates to the calling of an election and may be approved by the City Council on the same day as its introduction.

Section 7 – Severability Clause. If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this Ordinance. City Council hereby declares that it would have adopted the Ordinance and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

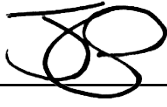
Section 8 – This Ordinance shall become effective immediately upon its passage.

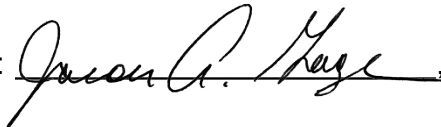
Passed at meeting: _____

Mayor

Attest: _____, City Clerk

Filed as Ordinance: _____

Approved as to form:  _____, City Attorney

Approved for Council action:  _____, City Manager



EXPLANATION TO COUNCIL BILL 2024-146 (CARROLL)

FILED: 06/05/2024

ORIGINATING DEPARTMENT: Public Works

TITLE: A special ordinance authorizing the City Manager, or designee, to enter into a Municipal and Cost Apportionment Agreement with the Missouri Highways and Transportation Commission in the not to exceed amount of \$939,000 to share costs associated with new sidewalks on East Sunshine Street; amending the Fiscal Year 2024-2025 budget for the Department of Public Works in the amount of \$939,000 to appropriate federal Transportation Alternative Program funds, Surface Transportation Block Grant – Urban funds and 1/4-cent Capital Improvement Sales Tax fund balance reserves for this project; and declaring that this Ordinance qualifies for approval in one reading under City Charter Section 2.16(25).

PURPOSE: Authorizing the City Manager, or designee, to enter into a Municipal and Cost Apportionment Agreement with the Missouri Highways and Transportation Commission (“MHTC”), to share costs associated with new sidewalks on East Sunshine Street; and amending the Fiscal Year 2024-2025 budget for the Department of Public Works in the amount of \$939,000 to appropriate \$626,000 of federal Transportation Alternative Program (“TAP”) grant funds, \$125,200 of federal Surface Transportation Block Grant-Urban (“STBG-U”) funds, and \$187,800 of 1/4-cent Capital Improvement Sales Tax fund balance reserves for this project; and declaring that this Bill qualifies for approval in one reading.

BACKGROUND INFORMATION: This Municipal and Cost Apportionment Agreement shares the estimated \$1,565,000 cost for preliminary engineering, right of way acquisition and easements, utilities, construction, construction engineering, inspection, and contingencies associated with the new sidewalks. The City will contribute \$782,500 (50 percent) of this cost. The City’s contribution will be funded 80 percent (\$626,000) from federal TAP funds and 20 percent (\$156,500) from 1/4-cent Capital Improvement Sales Tax fund balance reserves that are being budgeted with this Council bill.

Additionally, the proposed Agreement includes language that project cost overruns or cost underruns for the sidewalks will be shared 50/50 between the MHTC and City. For cost overruns up to \$313,000 (20 percent of the estimated \$1,565,000), the City’s 50 percent share (up to \$156,500) will be funded 80 percent (\$125,200) by federal STBG-U funds and 20 percent (\$31,300) by 1/4-cent Capital Improvement Sales Tax fund balance reserves that are being budgeted with this Council bill.

Overall, this provides that up to \$626,000 for this project may be funded by TAP funds, an additional \$125,200 may be funded by STBG-U funds, and \$187,800 may be funded by 1/4-cent Capital Improvement Sales Tax fund balance reserves and these



amounts are being budgeted with this Council bill. The City's 50 percent share of cost overruns beyond \$313,000, if any, would be funded from the 1/4-cent Capital Improvement Sale Tax from funds that are already budgeted.

As this Bill authorizes a contract with the state for the purpose of receiving grant money, we request that it be passed as a one-reading bill under City Charter Section 2.16(25).

Supports the following City Council Priorities:

- Quality of Place
- Public Safety
- Economic Vitality
- Fiscal Sustainability and Accountability

REMARKS: Public Works recommends approval of this Council bill and budget adjustments.

Submitted By: Martin Gugel, Assistant Director of Public Works

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Maurice S. Jones, Deputy City Manager 7/17/2024

Attachments:

1. MHTC E Sunshine Sidewalks_ord
2. MHTC East Sunshine Sidewalks Agree_Exh1
3. MHTC East Sunshine SidewalksBA_Exh2

One-rdg. X
P. Hrngs.
Pgs. 20
Filed: 07-16-24

Sponsored by: Carroll

First Reading: Second Reading:

COUNCIL BILL 2024-146 SPECIAL ORDINANCE

AN ORDINANCE

1 AUTHORIZING the City Manager, or designee, to enter into a Municipal and Cost
2 Apportionment Agreement with the Missouri Highways and
3 Transportation Commission in the not to exceed amount of \$939,000
4 to share costs associated with new sidewalks on East Sunshine Street;
5 amending the Fiscal Year 2024-2025 budget for the Department of
6 Public Works in the amount of \$939,000 to appropriate federal
7 Transportation Alternative Program funds, Surface Transportation
8 Block Grant – Urban funds and 1/4-cent Capital Improvement Sales
9 Tax fund balance reserves for this project; and declaring that this
10 Ordinance qualifies for approval in one reading under City Charter
11 Section 2.16(25).
12 _____
13

14 WHEREAS, East Sunshine Street is under the jurisdiction of the Missouri
15 Highways and Transportation Commission (“MHTC”); and
16

17 WHEREAS, new sidewalks are necessary to comply with the ADA Transition
18 Plan on Sunshine Street between Glenstone Avenue and Blackman Road; and
19

20 WHEREAS, the equal sharing of costs and coordination of construction provides
21 time and cost savings for taxpayers; and
22

23 WHEREAS, the cost for preliminary engineering, right of way acquisition and
24 easements, utilities, construction, construction engineering, inspection, and
25 contingencies associated with the new sidewalks is estimated at \$1,565,000; and
26

27 WHEREAS, the City will contribute fifty (50) percent of the cost, currently
28 estimated to be \$782,500, of which eighty (80) percent will be funded by federal
29 Transportation Alternative Program (“TAP”) funds (\$626,000) and twenty (20) percent
30 will be funded by 1/4-cent Capital Improvement Sales Tax balance reserves (\$156,500)
31 to be budgeted with this council bill; and
32

WHEREAS, all cost overruns or underruns will be evenly shared between MHTC and the City; and

WHEREAS, for any cost overruns up to twenty (20) percent of the preliminary estimate, \$313,000, eighty (80) percent of the City's share of cost overruns will be funded by federal Surface Transportation Block Grant – Urban ("STBG-U") funds and twenty (20) percent funded by 1/4-cent Capital Improvement Sales Tax balance reserves to be budgeted with this Ordinance; and

WHEREAS, for any cost overruns exceeding \$313,000 will be funded by 1/4-cent Capital Improvement Sales Tax funds that are already budgeted.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SPRINGFIELD, MISSOURI, as follows, that:

Section 1 – City Council hereby authorizes the City Manager, or designee, to enter into a Municipal and Cost Apportionment Agreement with the Missouri Highways and Transportation Commission in the not to exceed amount of \$39,000 to share costs associated with new sidewalks on East Sunshine Street in substantial conformity with "Exhibit 1" attached hereto and incorporated herein by reference.

Section 2 – The budget of the Department of Public Works for Fiscal Year 2024-2025 is hereby amended in the accounts and in the amounts shown on Budget Adjustment No. 010, a copy of which is attached hereto and incorporated herein by reference as "Exhibit 2."

Section 3 – City Council finds that the budget adjustment made above has been recommended by the City Manager.

Section 4 – The City Manager is directed to cause the appropriate accounting entries to be made in the books and records of the City. In the event additional funding is provided under this grant by the grantor, the Director of Finance is hereby authorized to adjust this appropriation by an amount not to exceed 20 percent.

Section 5 – City Council hereby finds and declares that this Ordinance may be passed as a one-reading Ordinance under City Charter Section 2.16(25) as it relates to a contract for the acceptance of grant funds from a state or federal agency. Therefore, this Ordinance shall be in full force and effect from and after passage.

Passed at meeting: _____

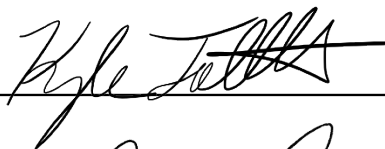
Mayor

Attest: _____, City Clerk

79 Filed as Ordinance: _____

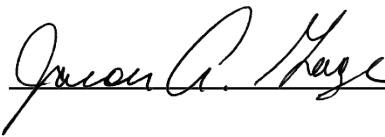
80

81

82 Approved as to form: , Assistant City Attorney

83

84

85 Approved for Council action: , City Manager

CCO Form: DE63
Approved: 12/17 (BDG)
Revised: 12/21 (BDG)
Modified:

Municipal and Cost Apportionment Agreement
Route: D
County: Greene
Job No.: 8S3153
Agreement No.: 2024-03-83588

**MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MUNICIPAL AND COST APPORTIONMENT AGREEMENT**

THIS AGREEMENT is entered into by the Missouri Highways and Transportation Commission (hereinafter, "Commission") and the City of Springfield, Missouri, a municipal corporation (hereinafter, "City").

WITNESSETH:

NOW, THEREFORE, in consideration of the mutual covenants, promises and representations contained herein, the parties agree as follows:

(1) IMPROVEMENT DESIGNATION: The public improvement designated as Route D, Greene County, Job No. 8S3153 shall consist of upgrading pedestrian facilities.

(2) IMPROVEMENT WITHIN CITY: The improvement within the City is located as follows:

Route D (Sunshine Street) from Business 65 (Glenstone Avenue) to Blackman Road in Springfield.

(3) EXTENT OF AGREEMENT: This Agreement shall apply only to the portion of the improvement lying within the city limits as they exist on the date this Agreement is executed by the City.

(4) LOCATION: The general location of the public improvement is shown on an attached sketch marked "Exhibit A" and made a part of this Agreement. The detailed location of the improvement is shown on the plans prepared by the Commission for the above-designated route and project.

(5) PURPOSE: It is the intent of this Agreement to outline the parties' responsibilities with respect to the construction and maintenance of those improvements to the State Highway System located within the City limits described in paragraphs (1) and (2) above and designated as Commission Job No. 8S3153. The parties' responsibilities with respect to the funding of said improvements are outlined further herein.

(6) PROJECT RESPONSIBILITIES: With regard to project responsibilities under this Agreement, the parties agree to contribute as follows:

(A) The Commission will be responsible for the preparation of detailed right-of-way and construction plans and project specifications. This includes design, letting of project, and inspection of project. The plans shall be prepared in accordance with and conform to Commission requirements.

(B) The Commission will acquire right-of-way as needed for the project in accordance with Commission requirements.

(C) The Commission will be responsible for letting the work for the herein improvement, which includes advertising the project for bids and awarding the construction contract. The Commission will solicit bids for the herein improvement in accordance with plans developed by the Commission, or as the plans may from time to time be modified in order to carry out the work as contemplated.

(D) The Commission will be responsible for construction of the herein improvements, which includes administration of the construction contract and inspection of the project work. The project shall be constructed in accordance with and conform to Commission requirements.

(7) PAYMENT RESPONSIBILITIES: With regard to payment responsibilities under this Agreement, the parties agree to as follows:

(A) The total project cost is estimated to be five million two hundred sixty two thousand dollars (\$5,262,000). The total project cost will include preliminary engineering, right of way acquisition, utilities, construction, construction contingencies, and inspection. Included in this total is the cost of new sidewalks along the project corridor, estimated to be one million five hundred sixty five thousand dollars (\$1,565,000). The cost of new sidewalks will include preliminary engineering, right of way acquisition, utilities, construction, construction contingencies, and inspection. The details of the estimated cost breakdown are listed in "Exhibit B", which is attached hereto and made part thereof.

(B) The City will be responsible for fifty percent (50%) of the cost of new sidewalks. The current estimate of the City's responsibilities for new sidewalks is seven hundred eighty two thousand five hundred dollars (\$782,500). The City agrees that the Commission may program eighty percent (80%) of the City's share of its responsibilities for new sidewalk, currently estimated to be six hundred twenty six thousand dollars (\$626,000) from Transportation Alternative Program (TAP) Funds, allocated by the Ozarks Transportation Organization in partial fulfillment of the City's obligation for payment for the project. The remainder of the City's contribution for new sidewalk shall consist of the twenty percent (20%) match for the City's TAP funds, currently estimated to be one hundred fifty six thousand five hundred dollars (\$156,500). The City shall remit a check in the amount of one hundred fifty six thousand five hundred dollars (\$156,500) to cover its share of estimated costs for the sidewalk no later than five (5) days prior to the Commission's advertisement of the project for bids. The check should be made

payable to the *Missouri Highway and Transportation Commission – Local Fund*. If the City fails to make any of the required deposits, the Commission is under no obligation to continue with the project.

(C) The Commission will be responsible for fifty percent (50%) of the cost of new sidewalks. The current estimate of the Commission's responsibilities for sidewalks is seven hundred eighty two thousand five hundred dollars (\$782,500). The Commission's responsibilities for the cost of new sidewalk will come from it's Southwest District Distributed funds.

(D) The City and Commission shall equally share responsibility for the balance of the cost of new sidewalks in excess of one million five hundred sixty five thousand dollars (\$1,565,000) and will share cost underruns based on pro rata share of the investment. The City agrees that the Commission may program eighty percent (80%) of the City's share of its responsibility for overruns, up to a maximum of one hundred twenty five thousand two hundred dollars (\$125,200) from Surface Transportation Block Grant – Urban (STBG-U) funds, allocated by the Ozarks Transportation Organization. The remainder of the city's responsibility shall consist of the twenty percent (20%) match for the City's STBG-U funds. Any overruns exceeding the maximum STBG-U allocation for overruns plus the local match shall be paid entirely by local funds.

(E) The Commission will be responsible for 100% of the remainder of the total project costs, currently estimated at three million six hundred ninety-seven thousand dollars (\$3,697,000).).

(F) If, at the time of the letting, the lowest responsive bid for the sidewalk work is higher than the estimated construction and inspection cost amount, the City, upon written notification from the Commission shall remit a check in the amount of its share of the difference between the estimated amount and the lowest responsive bid no later than one (1) day prior to the date of the Commission meeting wherein the subject bid will be considered for award or a later date set by the Commission in its sole discretion. In the event the Commission, in its sole discretion, extends the day the City payment is due, it shall notify the City of the new due date in writing, which shall be binding immediately upon the City's receipt of the written notice. The check must be made payable to the *Missouri Highways and Transportation Commission – Credit Local Fund*. The Commission, in its sole discretion, reserves the right to take action at the said Commission meeting and either reject all bids if the City fails to make the payment by the due date, or award the contract to the lowest responsive bidder contingent upon receipt of the additional funds from the City by the extended due date. If the Commission makes a contingent award of the contract and the City fails to make the required deposit(s) by the extended due date, the contingency of the contract award by the Commission shall be deemed unsatisfied, the award of the contract shall be deemed null and void and the Commission shall be under no obligation to continue with the project.

(8) COMMINGLING OF FUNDS: The City agrees that all funds deposited by the City, pursuant to this Agreement with the Commission, may be

commingled by the Commission with other similar monies deposited from other sources. Any deposit may be invested at the discretion of the Commission in such investments allowed by its Investment Policy. All interest monies shall be payable to the *Local Fund* and credited to the project. If the amount deposited plus any applicable credited interest with the Commission shall be less than the actual obligation of the City for this project, the City, upon written notification by the Commission, shall tender the necessary monies to the Commission to completely satisfy its obligation. Upon completion of the project, any excess funds or interest credited to the City shall be refunded to the City based on its pro rata share of the investment.

(9) RIGHT-OF-WAY USE: The City grants the right to use the right-of-way of public roads, streets, alleys and any other property owned by the City as necessary for construction and maintenance of said public improvement.

(10) CLOSE AND VACATE: The City shall temporarily close and vacate all streets or roads, or parts thereof, which may be necessary to permit the construction of the project in accordance with the detailed plans.

(11) RIGHT-OF-WAY ACQUISITION: Upon approval of all agreements, plans and specifications by the Commission and the Federal Highway Administration (FHWA), the Commission will file copies of the plans with the city clerk of the City and the county clerk of the county and proceed to acquire at its expense, at no cost or expense to the City, any necessary right-of-way required for the construction of the improvement.

(12) UTILITY RELOCATION:

(A) The Commission and the City shall cooperate to secure the temporary or permanent removal, relocation, or adjustment of public utilities or private lines, poles, wires, conduits, and pipes located on the right-of-way of existing public ways as necessary for construction of the improvement and the cost shall be borne by such public utilities or the owners of the facilities except where the City is by existing franchise or agreement obligated to pay all or a portion of such cost, in which case the City will pay its obligated portion of the cost.

(B) The Commission shall secure the removal, relocation, or adjustment of any public or private utilities located upon private easements and shall pay any costs incurred therein.

(C) It is understood and agreed by the parties to this Agreement that no city-owned utility facilities will require relocation or adjustment in connection with this improvement, but that should utility facilities be discovered at any time during development or construction of this improvement, relocation or adjustment of the same will be done and performed under a supplemental agreement covering the subject, and in accordance with Commission policy then in effect on division of costs for adjustment of utility facilities.

(D) In cases of public utilities owned by the City which must be moved, adjusted, or altered to accommodate construction of this improvement, and such city-owned utilities, poles, wires, conduits, and pipes are located within the present city limits and located on an existing city street, not state highway right-of-way, but being taken over by the Commission as a part of its highway right-of-way, the City will perform the necessary removal, adjustment, alterations and relocation, and the Commission will reimburse the City except as otherwise provided. The City shall perform the removal, adjustment, alterations and relocation in accordance with the detail plans, estimates of costs and bills of materials prepared by the City in accordance with Federal Aid Policy Guide, Title 23 CFR Subchapter G, Part 645, Subpart A (FAPG 23 CFR 645A), dated December 9, 1991 and any revision of it, and approved by the Commission's District Engineer, and shall perform all work and keep the records of the costs in accordance with FAPG 23 CFR 645A and its revisions. Upon the completion of any such work and on receipt by the Commission of the original and four copies of a bill for the actual costs incurred by the City in making any such removal, adjustment, alteration and relocation, the Commission shall reimburse the City for the actual cost necessitated by construction of this public improvement. The Commission's obligation toward the cost of any such removal, adjustment, alteration and relocation shall extend only to those costs incurred in accordance with FAPG 23 CFR 645A and its revisions.

(E) Should it be necessary to alter, relocate or adjust any city-owned utility facilities outside the present city limits on public right-of-way or on state highway right-of-way within or outside the city limits or within the right-of-way of a public way other than a city street or alley, the alteration, relocation, or adjustment shall be made by the City at its cost.

(F) The City agrees that any installation, removal, relocation, maintenance, or repair of public or private utilities involving work within highway right-of-way included in this project shall be done only in accordance with the general rules and regulations of the Commission and after a permit for the particular work has been obtained from the Commission's District Engineer or his authorized representative. Similarly, the City will allow no work on the highway right-of-way involving excavation or alteration in any manner of the highway as constructed, including but not limited to driveway connections, except in accordance with the rules and regulations of the Commission and only after a permit for the specific work has been obtained from the Commission's District Engineer or his authorized representative. The City shall take whatever actions that are necessary to assure compliance with this Subsection.

(13) LIGHTING

(A) The installation, operation, and maintenance by the Commission of any lighting system on the public improvement covered by this Agreement shall be only in accordance with the Commission's policy on highway lighting in effect at the time of any such installation and only to the extent the Commission then deems warranted. No street lighting system shall be installed or maintained by or for the City on the

improvement without approval of the Commission.

(B) The Commission will, at its cost and expense, install, operate, and maintain basic highway intersection or interchange lighting at warranted locations on the improvement. The construction, installation, and maintenance of any other or further lighting system on the public improvement covered by this Agreement shall be only in accordance with the Commission's policy on highway lighting in effect, and to the extent deemed warranted by the Commission, at the time of any such installation. No lighting system shall be installed or maintained by the City on the improvement without approval of the Commission.

(14) TRAFFIC CONTROL DEVICES: The installation, operation and maintenance of all traffic signals, pavement markings, signs, and devices on the improvement, including those between the highway and intersecting streets shall be under the exclusive jurisdiction and at the cost of the Commission. The City shall not install, operate, or maintain any traffic signals, signs or other traffic control devices on the highway or on streets and highways at any point where they intersect this highway without approval of the Commission.

(15) DRAINAGE: The Commission will construct drainage facilities along the improvement and may use any existing storm and surface water drainage facilities now in existence in the area. The City shall be responsible for receiving and disposing of storm and surface water discharged from those drainage facilities which the Commission constructs within the limits of highway right-of-way to the extent of the City's authority and control of the storm sewer facilities or natural drainage involved.

(16) PERMITS: The Commission shall secure any necessary approvals or permits from the Surface Transportation Board, the Public Service Commission of Missouri, or any other state or federal regulating authority required to permit the construction and maintenance of the highway.

(17) COMMENCEMENT OF WORK: After acquisition of the necessary right-of-way, the Commission shall construct the highway in accordance with final detailed plans approved by the Federal Highway Administration (or as they may be changed from time to time by the Commission with the approval of the FHWA) at such time as federal and state funds are allocated to the public improvement in an amount sufficient to pay for the federal and state government's proportionate share of construction and right-of-way costs. The obligation of the Commission toward the actual construction of the public improvement shall be dependent upon the completion of plans in time to obligate federal funds for such construction, upon approval of the plans by the FHWA, upon the award by the Commission of the contract for the construction, and upon the approval of the award by the FHWA.

(18) MAINTENANCE:

(A) Except as provided in this Agreement, upon completion of the public

improvement, the Commission will maintain all portions of the improvement within the Commission owned right-of-way. Maintenance by the Commission shall not in any case include maintenance or repair of water supply lines, sanitary or storm sewers (except those storm sewers constructed by the Commission to drain the highway), city-owned utilities within the right-of-way or the removal of snow other than the machine or chemical removal from the traveled portion of the highway.

(B) When it is necessary to revise or adjust city streets, the right-of-way acquired for these adjustments and connections will be deeded to the City.

(19) POLICE POWERS: It is the intent of the parties to this Agreement that the City shall retain its police powers with respect to the regulation of traffic upon the improvement contemplated. However, the City will enact, keep in force, and enforce only such ordinances relating to traffic movement and parking restrictions as may be approved by the Commission and as are not in conflict with any regulations for federal aid. The Commission shall not arbitrarily withhold approval of reasonable traffic regulations, signs, and markings which will permit the movement of traffic in accordance with accepted traffic regulation practices.

(20) RESTRICTION OF PARKING: Since the improvement is being designed and constructed to accommodate a maximum amount of traffic with a minimum amount of right-of-way, the City shall take whatever actions that are necessary to prevent parking upon the highway or any part of the area of the highway right-of-way within the limits of the improvement.

(21) OUTDOOR ADVERTISING: No billboards or other advertising signs or devices or vending or sale of merchandise will be permitted within the right-of-way limits of the project and the City shall take whatever actions that are necessary to enforce this Section.

(22) WITHHOLDING OF FUNDS: In the event that the City fails, neglects, or refuses to enact, keep in force or enforce ordinances specified or enacts ordinances contrary to the provisions in this Agreement, or in any other manner fails, neglects or refuses to perform any of the obligations assumed by it under this Agreement, the Commission may, after serving written request upon the City for compliance and the City's failure to comply, withhold the expenditure of further funds for maintenance, improvement, construction, or reconstruction of the state highway system in the City.

(23) FEDERAL HIGHWAY ADMINISTRATION: This Agreement is entered into subject to approval by the Federal Highway Administration, and is further subject to the availability of federal and state funds for this construction.

(24) INDEMNIFICATION:

(A) To the extent allowed or imposed by law, the City shall defend, indemnify and hold harmless the Commission, including its members and department

employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the City's wrongful or negligent performance of its obligations under this Agreement.

(B) The City will require any contractor procured by the City to work under this Agreement:

(1) To obtain a no cost permit from the Commission's District Engineer prior to working on the Commission's right-of-way, which shall be signed by an authorized contractor representative (a permit from the Commission's District Engineer will not be required for work outside of the Commission's right-of-way); and

(2) To carry commercial general liability insurance and commercial automobile liability insurance from a company authorized to issue insurance in Missouri, and to name the Commission, and the Missouri Department of Transportation and its employees, as additional named insureds in amounts sufficient to cover the sovereign immunity limits for Missouri public entities (\$600,000 per claimant and \$4,000,000 per occurrence) as calculated by the Missouri Department of Insurance, Financial Institutions and Professional Registration, and published annually in the Missouri Register pursuant to Section 537.610, RSMo.

(C) In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitution or law.

(27) AMENDMENTS: Any change in this Agreement, whether by modification or supplementation, must be accomplished by a formal contract amendment approved and signed by representatives of the City and Commission, respectively, each of whom being duly authorized to execute the contract amendment on behalf of the City and Commission, respectively.

(28) COMMISSION REPRESENTATIVE: The Commission's Southwest District Engineer is designated as the Commission's representative for the purpose of administering the provisions of this Agreement. The Commission's representative may designate by written notice other persons having the authority to act on behalf of the Commission in furtherance of the performance of this Agreement.

(29) CITY REPRESENTATIVE: The City's City Manager is designated as the City's representative for the purpose of administering the provisions of this Agreement. The City's representative may designate by written notice other persons having the authority to act on behalf of the City in furtherance of the performance of this Agreement.

(30) NOTICES: Any notice or other communication required or permitted to be given hereunder shall be in writing and shall be deemed given three (3) days after delivery by United States mail, regular mail postage prepaid, or upon receipt by personal or

facsimile delivery, addressed as follows:

- (A) To the City:
City of Springfield
City Manager
Jason Gage
840 Boonville Ave.
4th Floor
Springfield, MO 65802
417-864-1006
- (B) To the Commission:
Southwest District Engineer
Stacy Reese
3025 E. Kearney Street
Springfield, MO 65803
417-895-7689

or to such other place as the parties may designate in accordance with this Agreement.

(31) ASSIGNMENT: The City shall not assign, transfer or delegate any interest in this Agreement without the prior written consent of the Commission.

(32) LAW OF MISSOURI TO GOVERN: This Agreement shall be construed according to the laws of the State of Missouri. The City shall comply with all local, state and federal laws and regulations relating to the performance of the contract.

(33) VENUE: It is agreed by the parties that any action at law, suit in equity, or other judicial proceeding to enforce or construe this Agreement, or regarding its alleged breach, shall be instituted only in the Circuit Court of Cole County, Missouri.

(34) SOLE BENEFICIARY: This Agreement is made for the sole benefit of the parties hereto and nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the Commission and the City.

(35) AUTHORITY TO EXECUTE: The signers of this Agreement warrant that they are acting officially and properly on behalf of their respective institutions and have been duly authorized, directed and empowered to execute this Agreement.

(36) SECTION HEADINGS: All section headings contained in this Agreement are for the convenience of reference only and are not intended to define or limit the scope of any provision of this Agreement.

(37) AUDIT OF RECORDS: The City must maintain all records relating to this Agreement, including but not limited to invoices, payrolls, etc. These records must be available at all reasonable times at no charge to the Commission and/or its designees or

representatives during the period of this Agreement and any extension thereof, and for three (3) years from the date of final payment made under this Agreement.

(38) COMMISSION RIGHT OF WAY: All improvements made within the state-owned right-of-way shall become the Commission's property, and all future alterations, modifications, or maintenance thereof, will be the responsibility of the Commission, except as otherwise provided by this Agreement or a separate written agreement.

(39) NO INTEREST: By contributing to the cost of this project or improvement, the City gains no interest in the constructed roadway or improvements on Commission right of way whatsoever. The Commission shall not be obligated to keep the constructed improvements or roadway in place if the Commission, in its sole discretion, determines removal or modification of the roadway or improvements, is in the best interests of the state highway system. In the event the Commission decides to remove the landscaping, roadway, or improvements, the City shall not be entitled to a refund of the funds contributed by the City pursuant to this Agreement.

(40) ADDITIONAL FUNDING: In the event the Commission obtains additional federal, state, local, private or other funds to construct the improvement being constructed pursuant to this Agreement that are not obligated at the time of execution of this Agreement, the Commission, in its sole discretion, may consider any request by the City for an off-set for the deposited funds, a reduction in obligation, or a return of, a refund of, or a release of any funds deposited by the City with the Commission pursuant to this Agreement. In the event the Commission agrees to grant the City's request for a refund, the Commission, in its sole discretion, shall determine the amount and the timing of the refund. Any and all changes in the parties' financial responsibilities resulting from the Commission's determination of the City's request for a refund pursuant to this provision must be accomplished by a formal contract amendment signed and approved by the duly authorized representative of the City and the Commission.

(41) NO ADVERSE INFERENCE: This Agreement shall not be construed more strongly against one party or the other. The parties to this Agreement had equal access to, input with respect to, and influence over the provisions of this Agreement. Accordingly, no rule of construction which requires that any allegedly ambiguous provision be interpreted more strongly against one party than the other shall be used in interpreting this Agreement.

(42) ENTIRE AGREEMENT: This Agreement represents the entire understanding between the parties regarding this subject and supersedes all prior written or oral communications between the parties regarding this subject.

(43) VOLUNTARY NATURE OF AGREEMENT: Each party to this Agreement warrants and certifies that it enters into this transaction and executes this Agreement freely and voluntarily and without being in a state of duress or under threats or coercion.

(44) CANCELLATION: The Commission may cancel this Agreement at any time

for a material breach of contractual obligations or for convenience by providing the City with written notice of cancellation. Should the Commission exercise its right to cancel this Agreement for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the City.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have entered into this Agreement on the date last written below.

Executed by the City on _____(Date).

Executed by the Commission on _____(Date).

MISSOURI HIGHWAYS AND
TRANSPORTATION COMMISSION

CITY OF SPRINGFIELD

Chief Engineer

Deputy City Manager

ATTEST:

ATTEST:

Secretary to the Commission

City Clerk

APPROVED AS TO FORM:

Director of Finance

Commission Counsel

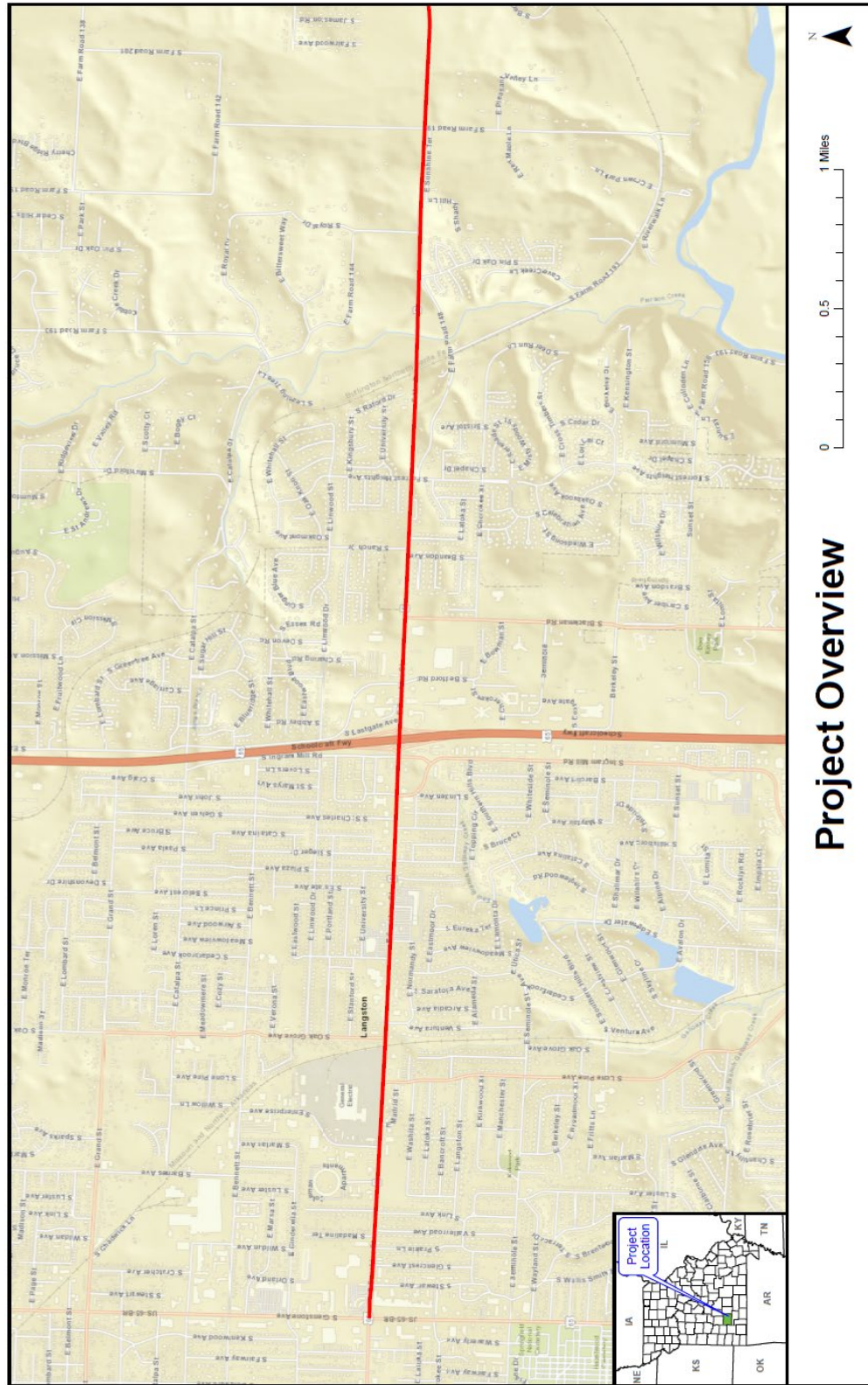
Contract Paralegal

APPROVED AS TO FORM:

Assistant City Attorney

Ordinance Number:_____

EXHIBIT A



Project Overview

Exhibit B

Project Name: East Sunshine Street Sidewalk

MoDOT Project Number: 8S3153

Description: Upgrade pedestrian facilities to comply with the ADA Transition Plan on Sunshine Street from Bus. 65 (Glenstone Avenue) to Blackman Road in Springfield.

Total Project Cost Estimate: \$5,262,000

Local Entity: City of Springfield

	Current Estimate Total Project Cost	Cost Participation Eligible – Sidewalk Cost
Preliminary Engineering	\$1,377,000	\$340,000
Right of Way Acquisition (including easements)	\$53,000	\$42,000
Utilities	\$66,000	\$18,000
Construction	\$3,370,000	\$928,000
Construction Engineering	\$396,000	\$237,000
Total	\$5,262,000	\$1,565,000

Project Responsibilities:

Design	MoDOT
Right of Way Acquisition	MoDOT
Letting	MoDOT
Inspection	MoDOT

Financial Responsibilities:

MoDOT SW District - Sidewalks	\$782,500	50%
TAP Funds – OTO Allocation to City for Sidewalks	\$626,000	40%
City - TAP Match (20%)	\$156,500	10%
Subtotal - Sidewalks	\$1,565,000	100%
MoDOT SW District – Other Roadway Project Costs	\$3,697,000	100%
Total Project Cost:	\$5,262,000	

How are overruns and underruns handled?

The City and Commission shall share responsibility for the balance of the sidewalk cost in excess of \$1,565,000 equally. The City may provide 80% of the City's share of its responsibility for overruns, up to a maximum of \$125,200 from STBG-U funds allocated by OTO. The remainder of the city's responsibility shall consist of the 20% match for the City's STBG funds. Any overruns exceeding the maximum STBG allocation for overruns plus the local match shall be paid for entirely by City funds. The Commission and City will share sidewalk cost underruns equally, with the City's share of underruns based on their prorated share of the investment.

The Commission will be 100% responsible for the balance of all other roadway project cost overruns, other than sidewalk costs, and will retain any roadway cost underuns.

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit 2

Budget Adjustment
010

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
46040	20	73020	416010	102001	00000	\$626,000	Transportation Alternative Program (TAP) Federal Grant Revenues through the Missouri Highways & Transportation Commission
46040	20	73020	416010	102001	00000	125,200	Surface Transportation Block Grant-Urban (STBG-U) Federal Grant Revenues through the Missouri Highways & Transportation Commission
Net Revenue Adjustment						\$751,200	

Expenditures:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
46040	20	73020	509110	102001	00000	\$626,000	East Sunshine Street New Sidewalks
46040	20	73020	509110	102001	00000	125,200	East Sunshine Street New Sidewalks
41090	20	73020	509110	102001	00000	187,800	East Sunshine Street New Sidewalks
Net Expenditure Adjustment						\$939,000	

Fund Balance Appropriation:

Fund	Dept	Title	Amount
41090	20	1/4-Cent Capital Imp. Sales Tax	(187,800)

Explanation: To amend the FY2024-25 Budget by appropriating \$626,000 of federal Transportation Alternative Program (TAP) grant funds, \$125,200 of federal Surface Transportation Block Grant - Urban (STBG-U) grant funds, and \$187,800 of 1/4-Cent Capital Improvement Sales Tax fund balance reserves for the partial funding of new sidewalks on East Sunshine Street per a Cost Apportionment Agreement with MoDOT.

Requested By:

Approved By:

Authorization:

Department Head _____ Date _____

Director of Finance _____ Date _____

City Manager _____ Date _____

Council Bill No. _____
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____



EXPLANATION TO COUNCIL BILL 2024-147 (LEE)

FILED: 06/25/2024

ORIGINATING DEPARTMENT: Finance

TITLE: A general ordinance amending Chapter 118 of the Springfield City Code, 'Vehicles for Hire,' Sections 118-31, 118-49, and 118-52, for the purpose of aligning City Code with current technology and state statute with regard to the use of electronic taximeters within the City of Springfield.

PURPOSE: To amend Springfield City Code Sections 118-31, 118-49, and 118-52 for the purpose of aligning City Code with current technology and state statute with regard to the use of electronic taximeters within the City of Springfield.

BACKGROUND INFORMATION: Since at least 2002, the State of Missouri has permitted the use of both mechanical and electronic taximeters per RSMo. 67.1800(18). If approved, this text amendment would align Springfield City Code with both state statute and current technology, and would allow for greater flexibility within the taxicab industry in Springfield.

Current Springfield City Code permits only the use of mechanical taximeters for fare calculation, which rely on electrical pulses from a device attached to the vehicle's transmission system; these mechanisms can be susceptible to variation based on environmental changes, such as the size of a vehicle's tires or wet road conditions. Further, such mechanisms cannot easily be installed on all types of vehicles, or easily transferred between vehicles, and there is no significant safeguard against manual adjustments of the rate.

However, with advancements in technology has come the advent of the electronic taximeter. Such taximeters use GPS technology, rendering them more reliable and less vulnerable to variation; they are also easily transferred between vehicles, as they are not connected to the vehicle's transmission. In addition, the electronic taximeter system allows for easier and more detailed recordkeeping via an electronic log, and only the owner is able to adjust rates. If approved, this text amendment will permit the use of electronic taximeters, in addition to mechanical ones, in the City of Springfield.

Feedback received from individuals within the industry in Springfield has been supportive of changing the Code to reflect advancements in technology and to allow for the full range of taximeter mechanisms permitted by the State of Missouri, and City Staff are also supportive of this proposed amendment.

Submitted By: Quincy Coover, Licensing Supervisor



Authorized for inclusion on the agenda pursuant to City Code section 2-33:
Collin Quigley, Deputy City Manager 7/15/2024

Attachments: 1. Taximeter Text Amendment_Ord

One-rdg. _____
P. Hrngs. _____
Pgs. 9
Filed: 07-16-24

Sponsored by: Lee

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-147

GENERAL ORDINANCE _____

AN ORDINANCE

1 AMENDING Chapter 118 of the Springfield City Code, 'Vehicles for Hire,'
2 Sections 118-31, 118-49, and 118-52, for the purpose of aligning
3 City Code with current technology and state statute with regard to
4 the use of electronic taximeters within the City of Springfield.
5 _____
6

7 WHEREAS, the State of Missouri has permitted the use of both mechanical and
8 electronic taximeters under RSMo. 67.1800(18); and
9

10 WHEREAS, current Springfield City Code permits only the use of mechanical
11 taximeters for fare calculation; and
12

13 WHEREAS, City Council desires that the Springfield City Code align with current
14 technology and state statute; and
15

16 WHEREAS, proper notice was given of a public hearing before City Council, and
17 said hearing was held in accordance with the law.
18

19 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
20 SPRINGFIELD, MISSOURI, as follows, that:
21

22 Section 1 – Chapter 118 of the Springfield City Code, 'Vehicles for Hire,' Article
23 II, 'Taxicabs, Courtesy Cars and Airport Limousines,' Division 1, 'Generally,' Section
24 118-31, 'Definitions,' is hereby amended to read as follows:
25

26 (Note: Language to be added is underlined, and language being removed is ~~stricken~~.)
27

28 **Section 118-31. Definitions.**
29

30 The following words, terms and phrases, when used in this article, shall have the
31 meanings ascribed to them in this section, except where the context clearly indicates a
32 different meaning:

33 *Airport limousine* means a public vehicle operating with a legal agreement with a
34 mass transit facility and using the mass transit facility as its departure or destination
35 point, and which is not licensed by the U.S. Department of Transportation or applicable
36 state agency if such license would exempt the vehicle from local regulation.

37 *Airport limousine fixed route.* An airport limousine shall be deemed to operate over
38 a designated fixed route where the destination and/or commencement of each trip is
39 from the same location.

40 *Color scheme* means the designation of the dome light color and any paint and/or
41 lettering to be placed on the doors of the taxicab or airport limousine, and the insignia or
42 logo of the taxicab or airport limousine company, and may consist of a description of the
43 paint of the entire taxicab or airport limousine.

44 *Courtesy car* means any vehicle operated to or from a motel or hotel which is
45 designed to carry patrons of the motel and hotel to or from fixed locations in the city, or
46 any vehicle used by an establishment arranging sightseeing or other similar tours for the
47 purpose of transporting patrons of such establishment without charge.

48 *Cruising* means the continuous or repeated operation of any taxicab along any
49 street or alley for the purpose of obtaining or picking up passengers.

50 *Director* means the director of finance, or his or her designee.

51 *Driver* means the person who is driving or who is in actual physical control of a
52 taxicab, transportation network vehicle, courtesy car, or airport limousine, whether as
53 owner or agent, servant or employee of an owner, or other designation.

54 *Driver's permit* means authorization by the city to a particular individual to operate
55 taxicabs, or airport limousines within the city upon meeting the criteria set forth in this
56 article.

57 *Immoral purpose* includes any of those acts prohibited by RSMo 567.010 et seq.,
58 as amended.

59 *Interest in taxicab, transportation network vehicle, or airport limousine company.* A
60 person shall be deemed to have an interest in a taxicab or airport limousine company
61 when he is a sole proprietor, partner or limited partner of the firm or business holding a
62 taxicab or airport limousine license under this article or which is required to obtain a
63 license under this article; has in his control, either through direct ownership or through
64 the ownership of a spouse or minor child, ten percent or more of the outstanding stock
65 of such taxicab or airport limousine company; or has a security interest in over 50
66 percent of the tangible assets of the firm or business.

67 *Licensee* means the holder of the taxicab or airport limousine company license.

68 *Owner and operator* mean any person who derives, or has the right to derive,
69 income directly or indirectly from the operation of one or more taxicabs, transportation
70 network vehicles, courtesy cars, or airport limousines.

71 *Permittee* means the holder of a transportation network company permit.

72 *Rate zone* means the area of the city to which a certain trip rate of an airport
73 limousine applies.

74 *Specialty passenger service* means the use of specialty passenger vehicles for the
75 transportation of passengers at special events or activities or for the transportation of
76 passengers in areas established by the city manager or his designee as special activity
77 areas.

78 *Specialty passenger vehicles* means buses, motorized trolleys or similar motor
79 vehicles equipped to transport five or more passengers in three or more rows of seats
80 and the design of which exhibits unique or unusual characteristics that add to the
81 ambiance of a special event or special activity area in which specialty passenger
82 service is being allowed.

83 *Taxicab* means all motor vehicles operated as public carriers of passengers for hire
84 over other than fixed routes, but shall not include transportation network vehicles.

85 *Taxicab company* means a person who owns controls or operates at least one
86 taxicab which transports passengers for hire.

87 *Taxicab owner* and *owner* mean any person who has any interest in the title of a
88 taxicab which is recognized under state law.

89 *Taximeter* means a ~~mechanical~~ meter instrument or device by which the charge for
90 hire of a taxicab, at a predetermined rate, is mechanically or electronically calculated
91 and registered, either for distance traveled in increments of one-tenth of a mile or for
92 waiting time in uniform intervals, or both, and upon which such charge shall be indicated
93 by means of figures which are electrically lighted each time the taximeter's flag is thrown
94 from the non-earning to the earning position.

95 *Transportation network company driver* means an individual who operates a motor
96 vehicle that is:

- 97 (1) Owned, leased, or otherwise authorized for use by the individual;
- 98 (2) Not a taxicab, courtesy car, or airport limousine; and
- 99 (3) Used to provide transportation network company services.

100 *Transportation network company* means an entity for which a permit has been
101 issued pursuant to this chapter and operating in the city that uses a digital network or
102 online-enabled application service to connect passengers to transportation network
103 company services including prearranged rides provided by transportation network
104 company drivers. A transportation network company is not deemed to own, control,
105 operate or manage the vehicles used by transportation network company drivers, and is
106 not a taxicab association.

107 *Transportation network company services* means transportation of a passenger
108 between points chosen by the passenger and prearranged with a transportation network
109 company driver through the use of a transportation network company digital network or
110 online-enabled application. Transportation network company services shall begin when
111 a transportation network company driver accepts a request for transportation received
112 through the transportation network company's digital network or online-enabled
113 application service, continue while the transportation network company driver transports
114 the passenger in the transportation network vehicle, and end when the passenger exits

the transportation network vehicle. Transportation network company service is not a taxicab or street hail service.

Transportation network vehicle means any vehicle used to provide a transportation network service including any time when a driver is logged onto the transportation network company's Internet-enabled application or digital platform showing that the driver is available to pick up passengers, when a passenger is in the vehicle, when the provider's dispatch records show that the vehicle is dispatched, or when the driver has accepted a dispatch and is en route to provide transportation network services to a passenger.

Transporting passengers for hire. A person transports passengers for hire if he provides transportation for passengers and derives therefrom, directly or indirectly, any financial benefit.

Vehicle permit means authorization by the city to the owner of the taxicab, or airport limousine to operate a particular vehicle as a taxicab, or airport limousine within the corporate limits of the city.

Waiting time means the time when a taxicab is not in motion, from the time of acceptance of a passenger to the time of discharge, but not including any time the taxicab is not in motion due to mechanical breakdown, traffic conditions or any cause other than the request, act or fault of a passenger.

Section 2 – Chapter 118 of the Springfield City Code, 'Vehicles for Hire,' Article II, 'Taxicabs, Courtesy Cars and Airport Limousines,' Division 1, 'Generally,' Section 118-49, 'Vehicle Equipment and Inspections,' is hereby amended to read as follows:

(Note: Language to be added is underlined, and language being removed is ~~stricken~~.)

Section 118-49. Vehicle Equipment and Inspections.

(a) *Required equipment.* Every taxicab and airport limousine shall have and maintain the following equipment:

(1) All appliances required by this Code and other ordinances of the city and the laws of the state for motor vehicles.

(2) Two doors affording direct entrance and exit to and from both the front and rear seats; provided, however, minivans may have one side door, which may be on the nondriver's side, as a means of direct entrance and exit from rear seats.

(3) An adequate light in the passenger compartment, controlled by a switch control in the passenger compartment.

(4) A speedometer in good working order.

(5) Cards containing the following:

a. A card located in the passenger compartment, not less than four inches by six inches in size, which shall have plainly printed thereon the name of the

- 156 taxicab or airport limousine company, its business address and telephone
157 number, and the current schedule of fares on file with the director as provided
158 in division 3 of this article to be charged for the conveyance of passengers.
- 159 b. A separate card provided by the director to be located in the passenger
160 compartment, not less than four inches by six inches in size, which shall have
161 plainly printed thereon the address and telephone number where the
162 customer may register complaints and comments about the taxicab or airport
163 limousine service, and a list of the rights of customers granted by this article.
- 164 (6) The vehicle permit issued by the director.
- 165 (7) A permanent device for affixing the daily log sheet.
- 166 (8) A side-view mirror attached to both the left and right sides of the vehicle.
- 167 (9) A card located in the passenger compartment on which there shall be the
168 statement that it is unlawful to refuse service to any member of the general
169 public when presently unoccupied except for the reason that such person is
170 intoxicated, is using profanity, is abusive, desires to use the service to commit
171 unlawful acts, presents an unreasonable risk of harm or injury to the driver, or
172 cannot pay. However, this provision shall not apply to courtesy cars.
- 173 (10) A display of the number assigned to the taxicab or airport limousine by the
174 taxicab or airport limousine owner or taxicab or airport limousine company
175 under whose license or permit the vehicle is operated which has each number
176 no less than one inch in height and readily discernible by any person sitting in
177 a seat intended for use by a passenger.
- 178 (11) For taxicabs, a taximeter as follows: A taxicab shall be equipped with a
179 taximeter of a size and design approved by the director and which conforms to
180 the following requirements:
- 181 a. Each taximeter must be driven direct from the taxicab transmission, ~~or~~
182 connected with the speedometer driving shaft to the taximeter head itself, or,
183 if electronic, equipped with a GPS application capable of measuring time and
184 distance in accordance with accuracy standards provided by the National
185 Institute of Standards and Technology (NIST).
- 186 b. Each taximeter must register upon visual counters the following miles:
- 187 1. Total miles.
- 188 2. Miles paid.
- 189 3. Number of units.
- 190 4. Number of trips.
- 191 5. Number of extras.
- 192 c. Each taximeter must be furnished with a tamperproof switch and system of
193 electrical distribution so that when the taximeter flag is in the vacant or
194 nonearning position the "vacant" sign on top of the taxicab will be lighted, and
195 when the meter flag is thrown to an earning position the fare indicator of the
196 taximeter will be lighted.
- 197 d. There shall be an electrical light or sign located on the top of each taxicab, of
198 a size and design approved by the director and which is connected to the
199 taximeter in the means prescribed in this article, so that such light or sign will

- be electrically lighted when the taxicab is vacant.
- (b) *Annual inspection.* Taxicabs and airport limousines shall be inspected annually by the director for all items of equipment required by the provisions of this section or other provisions of this article.
- (c) *Additional inspections; reinspections; issuance of inspection sticker.* All taxicabs and airport limousines involved in a motor vehicle accident in which over \$500.00 damage was done to such vehicle shall be required to be reinspected. Also, the city shall have access to any maintenance records of all taxicabs and airport limousines upon request and may order a reinspection at any time after the expiration of 30 days from the date of a previous inspection, provided there is reason to believe that the vehicle's operation does not comply with the provisions of this article or that the vehicle is dangerous or unsafe or is not being properly maintained or used. If the vehicle cannot be approved upon a reinspection, the director shall first order such vehicle's operation to be discontinued for a period of 15 days in which the owner of the vehicle may request a second reinspection. If the owner of the vehicle does not request the second reinspection or if the vehicle cannot be approved upon the second reinspection, the director shall revoke the license or permit corresponding to such vehicle. An inspection sticker shall be issued for each vehicle which passes the required inspection and shall be affixed on the vehicle by the city in a visible location.
- (d) *Inspection sticker required.* It shall be unlawful to operate a taxicab or airport limousine on the city streets without a current valid inspection sticker affixed thereto. The inspection sticker shall be valid for a period not to exceed one year from the date it is issued and shall not be transferred to any other vehicle.

Section 3 - Chapter 118 of the Springfield City Code, 'Vehicles for Hire,' Article II, 'Taxicabs, Courtesy Cars and Airport Limousines,' Division 1, 'Generally,' Section 118-52, 'Daily Log of Trips,' is hereby amended to read as follows:

(Note: Language to be added is underlined, and language being removed is ~~stricken~~.)

Section 118-52. Daily Log of Trips.

Every taxicab or airport limousine licensee shall provide at the beginning of each driver's tour of duty either a physical or electronic log sheet which is numbered in sequence. The driver shall maintain such log sheet by departure time, departure location, destination location, destination time and fare charged. The licensee shall collect such log sheets at the end of every driver's tour of duty and maintain such records for inspection by the director for a period of one year.

Section 4 – Savings Clause. Nothing in this Ordinance shall be construed to affect any suit or proceeding now pending in any court, or any rights acquired, or liability incurred, nor any cause or causes of action accrued or existing, under any act or ordinance repealed hereby, nor shall any right or remedy of any character be lost,

244 impaired, or affected by this Ordinance.

245
246 Section 5 – Severability Clause. If any section, subsection, sentence, clause, or
247 phrase of this Ordinance is for any reason held to be invalid, such decision shall not
248 affect the validity of the remaining portions of this Ordinance. City Council hereby
249 declares that it would have adopted the Ordinance and each section, subsection,
250 sentence, clause, or phrase thereof, irrespective of the fact that any one or more
251 sections, subsections, sentences, clauses, or phrases be declared invalid.

252
253 Section 4 – This Ordinance shall be in full force and effect from and after
254 passage.

255
256 Passed at meeting: _____

257
258 _____
259 Mayor

260
261 Attest: _____, City Clerk

262
263 Filed as Ordinance: _____

264
265 Approved as to form: Laura Vales, Assistant City Attorney

266
267 Approved for Council action: Jason A. Hays, City Manager
268
269



EXPLANATION TO COUNCIL BILL 2024-148 (HOSMER)

FILED: 07/02/2024

ORIGINATING DEPARTMENT: Health

TITLE: A special ordinance authorizing the City Manager, or designee, to accept a grant renewal in the amount of \$100,000 from the Missouri Children's Trust Fund for use by the Springfield-Greene County Health Department to continue operating the Family Connects Program; enter into necessary agreements to carry out the grant; and amend the Fiscal Year 2024-2025 budget in the amount of \$100,000 to appropriate the grant funds.

PURPOSE: Authorizing the City Manager, or designee, to accept a grant renewal in the amount of \$100,000 from the Missouri Children's Trust Fund for use by the Springfield-Greene County Health Department to continue operating the Family Connects Program that offers no-cost home visits to parents of newborns in Greene County, Missouri and to enter into necessary agreements to carry out the grant; and amending the Fiscal Year 2024-2025 budget in the amount of \$100,000 to appropriate the grant funds.

BACKGROUND INFORMATION: The Springfield-Greene County Health Department ("SGCHD") has the opportunity to accept \$100,000 in funding from the Missouri Children's Trust Fund ("CTF"), a Missouri non-profit corporation. The CTF funds will be used to support SGCHD's continued operation of Family Connects, a program that offers free newborn and postpartum health assessments for all families with newborns in Greene County. Through the Family Connects program, a trained nurse visits participants' homes to systematically assess family needs, provide supportive guidance, and link Greene County families to community resources, as needed and desired.

Previously, a CTF grant was accepted by Council on October 16, 2023 (Ordinance 27913) for funds in the amount of \$100,000.

This budget adjustment accepts the increase in funds and budgets the amount of \$100,000 in expenditures in the SGCHD Fiscal Year 2024-2025.

REMARKS: The Springfield-Greene County Health Department recommends approval of this Council bill and budget adjustment appropriating the grant funds.

Submitted By: Brad Stulce, Public Health Resource Manager

Authorized for inclusion on the agenda pursuant to City Code section 2-33:
Collin Quigley, Deputy City Manager 7/12/2024



- Attachments:**
1. Children's Trust Fund Grant_Ord
 2. Children's Trust Fund - Family Connects_BA

One-rdg. _____
P. Hrngs. _____
Pgs. 5
Filed: 07-16-24

Sponsored by: Hosmer

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024-148

SPECIAL ORDINANCE _____

AN ORDINANCE

1 AUTHORIZING the City Manager, or designee, to accept a grant renewal in the
2 amount of \$100,000 from the Missouri Children's Trust Fund for use
3 by the Springfield-Greene County Health Department to continue
4 operating the Family Connects Program; enter into necessary
5 agreements to carry out the grant; and amend the Fiscal Year 2024-
6 2025 budget in the amount of \$100,000 to appropriate the grant
7 funds.
8 _____
9

10 WHEREAS, the Springfield-Greene County Health Department ("SGCHD") has
11 the opportunity to accept \$100,000 in funding from the Missouri Children's Trust Fund
12 ("CTF"), a Missouri non-profit corporation; and
13

14 WHEREAS, this funding will be used to support the continued operation of
15 Family Connects, a program that offers free newborn and postpartum health
16 assessments for all families with newborns in Greene County, Missouri.
17

18 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
19 SPRINGFIELD, MISSOURI, as follows, that:
20

21 Section 1 – The City Manager, or designee, is hereby authorized to accept grant
22 funds in the amount of \$100,000 from the Missouri Children's Trust Fund for use by the
23 Springfield-Greene County Health Department to continue operating the Family
24 Connects Program and to execute those contracts necessary to carry out the intent of
25 this grant on forms approved by the City Attorney.
26

27 Section 2 – The Fiscal Year 2024-2025 budget of the Springfield-Greene County
28 Health Department is hereby amended in the accounts and in the amounts as shown on
29 Budget Adjustment No. 009, a copy of which is attached hereto and incorporated herein
30 by reference as "Exhibit A."
31

32 Section 3 – City Council finds that the budget adjustment made above has been
33 recommended by the City Manager.

34
35 Section 4 – The City Manager, or designee, is directed to cause the appropriate
36 accounting entries to be made in the books and records of the City. In the event
37 additional funding is provided under this grant by the grantor, the Director of Finance is
38 hereby authorized to adjust this appropriation by an amount not to exceed 20 percent.
39

40 Section 5 – This Ordinance shall be in full force and effect from and after
41 passage.
42
43

44 Passed at meeting: _____
45

46 _____
47 Mayor
48

49 Attest: _____, City Clerk
50

51 Filed as Ordinance: _____
52

53
54 Approved as to form: Mary B. Boyan, Assistant City Attorney
55

56
57 Approved for Council action: Jason A. Hays, City Manager

CITY OF SPRINGFIELD, MO
BUDGET ADJUSTMENT

Exhibit A

Budget Adjustment
009

Revenues:

Fund	Dept	Org	Account	P&G	Location	Amount	Description
27290	11	53590	416020	103246		\$ 100,000	Childrens Trust Fund grant extension for Family Connects Program
Net Revenue Adjustment						\$ 100,000	

Expenditures:

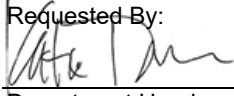
Fund	Dept	Org	Account	P&G	Location	Amount	Description
27290	11	53590	500110	103246		\$ 100,000	Childrens Trust Fund grant extension for Family Connects Program
Net Expenditure Adjustment						\$ 100,000	

Fund Balance Appropriation:

Fund	Title	Amount

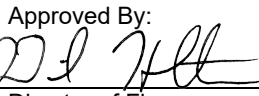
Explanation: To amend the FY2024-25 budget by appropriating funds from the Missouri Children's Trust Fund for the Family Connects program.

Requested By:



Department Head July 16, 2024
Date

Approved By:



Director of Finance July 16, 2024
Date

City Manager Date

Authorization:

Council Bill No. 2024-148
Ordinance No. _____
1st Reading _____
2nd Reading _____
Journal Imp No. _____



EXPLANATION TO COUNCIL BILL 2024-149 (HOSMER)

FILED: 07/12/2024

ORIGINATING DEPARTMENT: Law

TITLE: A general ordinance amending the Springfield City Code Chapter 2 “Administration” Article III “Officers and Employees” to add a new Section 2-95 “Appointed officer and employee code of ethics.”

PURPOSE: Enacting a new Section 2-95 “Appointed officer and employee code of ethics.”

BACKGROUND INFORMATION: At the election held on April 2, 2024, the qualified voters approved changes to Section 19.16 of the City Charter, including the requirement that “City Council shall enact, maintain, and review not less than every other year, a code of ethics applicable to all elected officials, appointed officers, board members, and employees of the City.”

A code of ethics applicable to all elected officials has been enacted and is maintained in Section 2-60 of the City Code and was recently reviewed by City Council at the council lunch held on June 11, 2024. A code of ethics applicable to all board members has been enacted and is maintained in Section 2-161 of the City Code and was recently reviewed by City Council at the City Council Lunch held on June 11, 2024.

City Council has not enacted or maintained a code of ethics applicable to all appointed officers and employees. This Council Bill will enact such a code of ethics and satisfy the new requirements of Section 19.16 of the City Charter.

Submitted By: Jordan Paul, City Attorney

Authorized for inclusion on the agenda pursuant to City Code section 2-33:
Jason Gage, City Manager 7/16/2024

Attachments: 1. Sec. 2-95 - Code of Ethics CB (002)

One-rdg. _____
P. Hrngs. _____
Pgs. 6
Filed: 16

Sponsored by: Hosmer

First Reading: _____

Second Reading: _____

COUNCIL BILL 2024- 149

GENERAL ORDINANCE _____

AN ORDINANCE

1 AMENDING the Springfield City Code Chapter 2 "Administration" Article III
2 "Officers and Employees" to add a new Section 2-95 "Appointed
3 officer and employee code of ethics."
4 _____
5

6 WHEREAS, at the election held on April 2, 2024, the qualified voters approved
7 changes to Section 19.16 of the City Charter, including the requirement that "City Council
8 shall enact, maintain, and review not less than every other year, a code of ethics
9 applicable to all elected officials, appointed officers, board members, and employees of
10 the City"; and
11

12 WHEREAS, a code of ethics applicable to all elected officials has been enacted
13 and is maintained in Section 2-60 of the City Code and was recently reviewed by City
14 Council at the City Council lunch held on June 11, 2024; and
15

16 WHEREAS, a code of ethics applicable to all board members has been enacted
17 and is maintained in Section 2-161 of the City Code and was recently reviewed by City
18 Council at the City Council lunch held on June 11, 2024; and
19

20 WHEREAS, City Council desires to enact and maintain a code of ethics applicable
21 to all appointed officers and employees.
22

23 NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF
24 SPRINGFIELD, MISSOURI, as follows, that:
25

26 Section 1 – That a new Section 2-95 "Appointed officer and employee code of
27 ethics." is enacted as follows:
28

29 "Section 2-95 Appointed officer and employee code of ethics.
30

31 *(a) Policy; objectives.*
32

33 (1) The public judges its government by the way employees conduct themselves.

(2) The people have a right to expect that every employee will conduct themselves in a manner that will tend to preserve public confidence in and respect for the government they represent.

(3) Such confidence and respect can best be promoted if every employee will uniformly:

a. Treat all citizens with courtesy, impartiality, fairness, and equality under the law; and

b. Avoid both actual and potential conflicts between their private self-interest and the public interest. This section shall not apply if the transaction involves the sale of city bonds, after public notice and competitive bidding, provided the bid accepted is the lowest qualified bid received.

(b) *Definitions.* The following definitions shall apply to this section:

Confidential information means all information whether transmitted orally or in writing which is of such a nature that it is not, at that time, a matter of public record or knowledge.

Councilmember means the Mayor and other members of the City Council.

Employee means a person appointed to a position in the City service for which the person is employed on a full-time or part-time basis, in a regular, contract, temporary, variable hour, seasonal, or intern position.

Financial interest means any interest which shall yield, directly or indirectly, a monetary or other material benefit (other than the duly authorized salary or compensation for his services to the city) to an official or employee.

Person means any firm, association, group, partnership, or corporation, or any combination thereof.

Personal interest means any interest arising from blood or marriage relationships or from close business or political association, whether or not any financial interest is involved.

Public body means any agency, board, body, commission, committee, department, or office of the city.

(c) *Fair and equal treatment.*

(1) *Impartiality.* No employee shall grant or make available to any person any consideration, treatment, advantage, or favor beyond that which it is the general practice to grant or make available to the public at large.

(2) *Use of public property.* No employee shall request, use, or permit the use of any publicly owned or publicly supported property, vehicle, equipment, labor, or service for the personal convenience or the private advantage of himself or any other person. This rule shall not be deemed to prohibit an employee from requesting, using, or permitting the use of such publicly owned or publicly supplied property, vehicle, equipment, material, labor, or service which it is the general practice to make available to the public at large or which is provided as a matter of stated public policy for the use of officials and employees in the conduct of official business.

(d) *Conflict of interest.* An employee shall not have a financial interest, direct or indirect, in any contract with the city, or be financially interested, directly or indirectly, in the sale to the city of any land, materials, supplies, or services, except on behalf of the city as an officer or employee. Any violation of this provision renders the contract or sale void.

(e) *Disclosure of interest in legislation.* An employee has a financial or other private interest in any legislation they work on shall disclose on the records of the city council or other appropriate authority the nature and extent of such interest and may work on such legislation provided the employee is not prohibited from doing so by some other provision of law. An employee may disclose on a continuing basis with respect to potential conflicts of interest in legislation by filing with the city clerk a record of their financial or private interests.

(f) *Representing private interests before city agencies or courts.*

(1) No employee shall appear on behalf of any third party's private interests before any agency of the city. They shall not represent any third party's private interests in any action or proceeding against the interests of the city in any litigation to which the city is a party.

(2) No employee shall, for a period of one year after the termination of service with the city, appear before any board, commission, committee, or agency of the city in relation to any case, proceeding, or application on which they personally worked on as part of their employment.

(g) *Gifts and favors.* No employee shall accept any valuable gift, whether in the form of service, loan, thing, or promise, from any person who to their knowledge is interested directly or indirectly in any manner whatsoever in business dealings with the city, nor shall any such employee accept any gift, favor, or thing of value that may tend to influence them in the discharge of their duties, or grant in the discharge of their duties any improper favor, service, or thing of value. Purchase of a meal for an employee shall not be a valuable gift. The prohibition against gifts or favors shall not apply to an occasional nonpecuniary gift, insignificant in value, or an award publicly presented in recognition of public service, or any gift which would have been offered or given if they were not an

employee.

(h) *Confidential information.*

(1) Except as allowed by law, no employee shall, without prior formal authorization of the public body having jurisdiction, disclose any confidential information concerning any other official or employee, or any other person, or any property or governmental affairs of the city.

(2) No employee shall use or permit the use of any confidential information to advance the financial or personal interest of themselves or any other person.

(i) *Political activity.* An employee shall not use the prestige of their position on behalf of any political party or candidate for elected office and to this end shall refrain from using their official title in support of or in opposition to candidates for political office or a political party, nor shall an employee use their official title in support of or opposition to legislation or other matters pending before governmental bodies other than the city or when the City Council has officially taken a position with respect to such matter.

(j) *Compliance with applicable laws.* An employee shall comply with the laws of the city pertaining to their employment, including the Charter, this Code, the Merit System Rules and Regulations, and any other law that applies to the conduct of the employee in their official duties.

(k) *Sanctions.* If the City Manager shall make a determination that the conduct of an employee has violated this section, the employee shall be subject to disciplinary action up to and including termination.”

Section 2 – Severability Clause. If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this Ordinance. City Council hereby declares that it would have adopted the Ordinance and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

Section 3 – This Ordinance shall become effective immediately upon its passage.

Passed at meeting: _____

Mayor

Attest: _____, City Clerk

Filed as Ordinance: _____

169

170

171 Approved as to form:  _____, City Attorney

172

173

174 Approved for Council action:  _____, City Manager



EXPLANATION TO COUNCIL BILL 2024-150 (CARROLL)

FILED: 06/26/2024

ORIGINATING DEPARTMENT: Economic Vitality

TITLE: A resolution approving the Mayor's appointment of five (5) members to the Tax Increment Financing Advisory Commission and acknowledging the appointments made by other taxing districts.

PURPOSE: To approve the Mayor's appointment of five members to the Tax Increment Financing Advisory Commission and acknowledge the appointments made by other taxing districts.

BACKGROUND INFORMATION: Section 2-241 of the Springfield City Code establishes the Tax Increment Financing Advisory Commission, which shall be governed by an eleven-member board in accordance with State law. The Mayor appoints six of the eleven members with the consent of the City Council. Of the six, one of the members appointed by the Mayor shall be a member of the City Council, one shall be from the Springfield-Greene County Library Board, and the remaining four members shall be from the public at large. The other five members of the Commission are appointed by Greene County (2), the affected school board (2), and the other affected taxing districts (1).

The Mayoral appointees serve four-year terms, which are staggered based on the expiration date of the former Commission members' terms. The other appointments may be made for a specific term or for a period to coincide with the Commission's consideration of a specific redevelopment plan or project.

The Mayor's appointments to the TIF Commission are as follows:

<u>Name</u>	<u>Representation</u>	<u>Term</u>
Callie Carroll	Springfield City Council	5/31/2027
Jim Schmidt	Springfield-Greene Co. Library Board	5/31/2025
Marshall Kinne	At Large	5/31/2027
Debra Yeager	At Large	5/31/2027
Aaron Rains	At Large	5/31/2027

The Greene County, affected school board, and other affected taxing districts appointments are as follows:



<u>Appointing Body</u>	<u>Name</u>	<u>Term</u>
Greene County	Bob Dixon	5/31/2027
Springfield R-12 School District	Travis Shaw	5/31/2027
	Cara Stassel	5/31/2026
Other Taxing Districts	Rob Rector	5/31/2027

REMARKS: Passage of this Resolution will approve the Mayor's appointments and acknowledge those appointments made by Greene County, the affected school board, and the other affected taxing districts. Staff recommends approval.

Submitted By: Matthew Schaefer, Senior City Planner

Authorized for inclusion on the agenda pursuant to City Code section 2-33:

Maurice S. Jones, Deputy City Manager 7/17/2024

Attachments: 1. TIF Commission Appointments_Res

One-rdg. X
P. Hrngs.
Pgs. 4
Filed 07-16-24

Sponsored by Carroll

COUNCIL BILL 2024-150 RESOLUTION

A RESOLUTION

1 APPROVING the Mayor's appointment of five (5) members to the Tax Increment
2 Financing Advisory Commission and acknowledging the appointments
3 made by other taxing districts.
4
5

6 WHEREAS, Section 2-241 of the Springfield City Code establishes the Tax
7 Increment Financing ("TIF") Advisory Commission, which shall be governed by an
8 eleven (11) member board in accordance with state law; and
9

10 WHEREAS, state law requires that the Mayor appoint six (6) of the eleven (11)
11 members with the consent of the City Council, while the remaining five (5) members of
12 the Commission are appointed as follows: two (2) by Greene County, two (2) by the
13 affected school board, and one (1) by the other affected taxing districts; and
14

15 WHEREAS, the Mayoral appointees serve four (4) year terms, with the terms
16 staggered based on the expiration of former Commissioners' terms, while the other
17 appointments may be made either for a specific term or for a period to coincide with the
18 Commission's consideration of a specific redevelopment plan or project; and
19

20 WHEREAS, the Mayor has recommended the appointment of Callie Carroll, Jim
21 Schmidt, Marshall Kinne, Debra Yeager, and Aaron Rains to the TIF Advisory
22 Commission; and
23

24 WHEREAS, Greene County has appointed Bob Dixon to the TIF Advisory
25 Commission; and
26

27 WHEREAS, the Springfield R-12 School District has appointed Travis Shaw and
28 Cara Stassel to the TIF Advisory Commission; and
29

30 WHEREAS, the other affected taxing districts have appointed Rob Rector to the
31 TIF Advisory Commission.
32

33 NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF
34 SPRINGFIELD, MISSOURI as follows, that:
35

36 Section 1 – The Mayor hereby appoints, and City Council hereby confirms such
37 appointment, of Callie Carroll to the TIF Advisory Commission as the representative of
38 Springfield City Council, with her term to expire on May 31, 2027.
39

40 Section 2 – The Mayor hereby appoints, and City Council hereby confirms such
41 appointment, of Jim Schmidt to the TIF Advisory Commission as the representative of
42 the Springfield-Greene County Library Board, with his term to expire on May 31, 2025.
43

44 Section 3 – The Mayor hereby appoints, and City Council hereby confirms such
45 appointments, of Marshall Kinne, Debra Yeager, and Aaron Rains to the TIF Advisory
46 Commission as at-large members, with their terms to expire on May 31, 2027.
47

48 Section 4 – City Council hereby acknowledges Greene County's appointment of
49 Bob Dixon to the TIF Advisory Commission, with his term to expire on May 31, 2027.
50

51 Section 5 – City Council hereby acknowledges Springfield R-12 School District's
52 appointments of Travis Shaw and Cara Stassel to the TIF Advisory Commission, with
53 their terms to expire on May 31, 2027, and May 31, 2026, respectively.
54

55 Section 6 – City Council hereby acknowledges the other affected taxing districts'
56 appointment of Rob Rector to the TIF Advisory Commission, with his term to expire May
57 31, 2027.
58

59 Section 7 – This Resolution shall be effective immediately upon adoption.
60

61 Passed at meeting: _____
62

63 _____
64 Mayor
65

66 Attest: _____, City Clerk
67

68 Filed as Resolution _____
69

70
71 Approved as to form: Laura Vales, Assistant City Attorney
72

73
74 Approved for Council action: Jason A. Hage, City Manager