



February 28, 2019

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RE: St. Cloud Regional Airport Air Transport Optimization Report

To Whom It May Concern,

Enclosed you will find the two required print copies of the final report:

Cite: [Minn. Stat.](#); [2017 Minn. Laws 1st Spl. Sess. Chap. 3 Art. 1 Sec. 2 Subd. 2\(a\)](#)

Topic: Report with recommendations based on the findings of the air transport optimization planning study for the St. Cloud Regional Airport.

If you have questions, please contact me at (320-252-5228) or pgartland@greaterstcloud.com.

Sincerely,

A handwritten signature in dark ink that reads "Patti Gartland".

Patti Gartland
GSDC President

CITY OF
ST.CLOUD
MINNESOTA



St. Cloud Regional Airport Air Transport Optimization Planning Study: **FINAL REPORT**

The City of St. Cloud,
The Greater St. Cloud Development Corporation &
the Counties of Benton, Sherburne, and Stearns

February 2019

Submitted by:



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Airport Management Consultants

In association with:

Ailevon Pacific Aviation Consulting
Mead & Hunt, Inc.

St. Cloud State University, School of Public
Affairs and the University of Minnesota
Extension
Public Solutions, Inc.



THE ST. CLOUD REGIONAL AIRPORT OPTIMIZATION STUDY

- **WHAT:** An Optimization Planning Study to develop strategic initiatives to move the Airport forward.
- **WHY:** To increase use of the Airport and further expand its economic impact on the region.
- **WHO:** The **Greater St. Cloud Development Corporation (GSDC)**, along with the **City of St. Cloud**, served as the administrators for a **Minnesota Department of Transportation (MnDOT)** grant which funded the study. As the result of a formal, national procurement process, stakeholders retained **a team of consulting experts** to conduct the study.
- **WHEN:** Over the past year a detailed and thorough review of all aspects of the Airport's operations and impact was conducted.
- **HOW:** The project team analyzed the Airport and its operations within the context of its relationship to the overall region and aviation market in general. The study was comprised of several complex components, summarized below:
 - Forming a **regional advisory committee** of public/private stakeholders which met approximately monthly to help define and assess the work tasks and goals of the project;
 - Gathering, collecting, and analyzing inventories of **historical, economic, financial, and airport-related data** and information;
 - Conducting **interviews** with a variety of stakeholders, aviation users, and relevant community members, business partners, and competitors;
 - Conducting a **benchmarking analysis** with airports comparable to STC and discerning patterns, trends, and best practices of peer airports;
 - Conducting an **organizational assessment** of the STC Airport's operations, policies, and structure;
 - Conducting a **financial review and analysis** of the Airport's operations and revenue, including the lease and terms of the Fixed Base Operator(s);
 - Conducting an **analysis of Air Service Development (ASD)** activities, including defining the STC regional service area, updating the STC passenger demand analysis, and researching ASD opportunities and constraints;
 - Conducting a regional **economic impact analysis**;
 - Conducting a **parking operations and policy analysis**;
 - Reviewing opportunities and constraints for **innovations and educational partnerships**;
 - Conducting an analysis of **governance model options** for the Airport's ownership and operation;
 - Conducting a review of the **STC facilities and land use** opportunities and constraints; and
 - Managing **communications and coordination** among a wide variety of stakeholders and Airport management.

KEY FINDINGS

1. **Significant economic impact.** The economic impact assessment performed by the project team found that the Airport contributes significantly to the regional economy, producing an overall economic impact of \$44.2 million in the Counties of Sherburne, Benton, and Stearns, as well supporting 289 jobs, with wages totaling more than \$17 million, and providing State and local taxes of \$2.3 million. This was twice the effect found in a 2012 study.
2. **Multiple opportunities to improve business operations and increase revenues.** The study found several opportunities to improve business operations and to help the fiscal situation of the Airport which is currently running an operating deficit. Primary strategies include instituting reasonable rates for parking, adjusting "rates and charges" and hangar rents to better align with industry norms, and revising the terms of the lease of the Fixed Based Operator which was found to be inconsistent with industry standards. Other strategies include investing in marketing and business development, particularly focusing on corporate fleets, GA activity, aviation educational opportunities, air service development, and non-aviation business development.

3. **Change governance models to create a business mindset and an Airport champion.** To thrive, the Airport must be run with a business mindset that pervades all operations and policies. Moreover, to achieve this mindset, the Airport needs a champion who has the Airport and its success as its sole focus. The most effective way to achieve this is through changing the Airport's governance model from being owned and operated by the City of St. Cloud (which manages the Airport as infrastructure within its Public Services department) to being operated by an independent, regional Airport Authority.

SUMMARY OF RECOMMENDATIONS

Develop a Business Mindset. Create a business mindset at the Airport for all operations and policies. The best strategy for doing this is to transition the Airport's governance model to an Authority.

Reducing the Deficit. The most important priority is for the Airport to operate in a financially self-sufficient manner. Currently, the Airport is operating at a loss, which is subsidized by the City, its operator. The 2017 deficit is estimated at \$767,000 and the projected 2018 operating deficit is estimated at \$873,000. The Airport's situation with the deficit is a long-standing issue and will not be remedied overnight. Stakeholders should be prepared to accept that there will likely be a need for a continuing operational subsidy for the immediate future.

Specific revenue enhancement strategies to achieve significant deficit reduction:

- **Parking Revenue** — Charge for parking to bring in a conservative estimate of \$60,000 - \$145,000 per year.
- **Enhanced FBO Operations and Services** — The Airport should be receiving greater remuneration from FBO related services; this is a key area of focus going forward.
- **Focus on Corporate GA to Increase Operations** — New tenants would result in increased revenue.
- **Modification to Rates and Charges** — Update current rates and charges to industry norms.
- **Land Parcel Aeronautical and Non-Aeronautical Use** — Work with a commercial real estate broker to market Airport land parcels.
- **Center for Excellence for Aviation Education** — Re-establishing aviation education programs at the Airport in conjunction with St. Cloud Technical Community College, St. Cloud State University, and the GSDC as key partners.
- **Increase Operations via Air Service Development Efforts with ULCCs** — 1) increase the frequency of existing flight destinations, and/or 2) add new destinations

Marketing, Business Development, and Staffing. Current Airport marketing and business development is extremely limited. It is vital for the Airport to increase its efforts in these areas; it may be necessary for the Airport to hire an additional staff member with expertise in marketing and business development.

Transition to an Authority Form of Governance. The Airport needs a governing body with a singular airport enterprise focus in order to foster an enterprise-wide business and customer service mindset, along with the policies and procedures to ensure financial stability and customer satisfaction. A transition to an Authority governance model would bring forth significant return in terms of stabilizing the Airport's finances and reducing the deficit, and it would also greatly assist in maximizing the Airport's overall economic impact to the region.

STC: An Important Regional Asset

While the main focus of the optimization study is to assess the current situation, within the historical context of Airport history and operations, and to prescribe viable strategies for improvement, it should also be noted that ***the Airport as it currently stands already serves as a valuable and important regional asset***, including generating \$44.2 million for the regional economy. Moreover, the potential for continued and increased growth, efficiency, and economic impact is great. Therefore, improvements to the Airport are vital investments to supporting and growing this powerful economic engine—which is a benefit to the entire region and all its inhabitants, including for those residents who don't directly use the Airport.

**St. Cloud Regional Airport
Optimization Planning Study: Final Report**

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St. Cloud Regional Airport Optimization Planning Study: Final Report

PART 1: INTRO & BACKGROUND

CHAPTER 1. EXECUTIVE SUMMARY

This executive summary provides a synopsis of key information of the St. Cloud Regional Airport Optimization Planning Study final report, highlighting the most important content and including significant findings, conclusions, and recommendations. Full details and additional insights are contained in the body of the report that follows.

INTRODUCTION

The Historical Context that Prompted the Study

Since the loss of regularly scheduled commercial service, the St. Cloud Regional Airport (STC) has struggled to maintain consistency and growth in operations, enplanements, and revenues. For the past several years, it has been difficult for the Airport to regain its momentum and move forward; as a result, the Airport operates at a deficit which is a significant percentage of its overall budget. However, this state of affairs should be understood within the context of the national picture of similar regional, non-hub airports. That is, STC is facing the same issues that all regional airports in the U.S. face, which include changes in the way airlines manage their route structures since 9/11 and the 2008 recession caused extensive consolidation within the industry.

Figure 1. St. Cloud Regional Airport



Aerial view of St. Cloud Regional Airport, St. Cloud, MN

As the Airport has struggled and its deficit increased, the business community—which depends on a vibrant transportation hub and the economic impact it generates—felt that the Airport’s operations and

opportunities for growth should be examined more formally. Community stakeholders sought a State grant from MnDOT to review and analyze the Airport and its operations in depth, with the goal of creating strategies to optimize STC's operations and regional economic impact, among other things. The specific language from the original RFP states that stakeholders were seeking consultant services to "complete a market based air transport optimization planning study and strategy plan for growing utilization, impact and stewardship of the St. Cloud Regional Airport." (**NOTE:** The original Request for Proposals for the optimization planning study can be found in **Appendix A.**)

The study, discussed below, has found that while the Airport has some very significant challenges ahead of it, all is not lost—to the contrary, there is certainly cause for optimism. The study identified several areas for increasing revenue in the short-term, mid-term, and long-term periods. These are viable options for the Airport that ought to be pursued by stakeholders to position the Airport for the future while it weathers the current cyclical downturn caused by industry dynamics—and which are exacerbated by STC's proximity to the nation's 17th largest hub, Minneapolis-St. Paul International Airport. While this current downturn cycle may be a long one, and the geography of the Airport's location cannot be changed, the community has good cause to remain optimistic as the Airport—even while struggling and operating with a deficit—contributes significantly to the regional economy.

Key Findings

Key findings of the study include:

1. **Significant economic impact.** The economic impact assessment performed by the project team found that the Airport contributes significantly to the regional economy, producing an overall economic impact of \$44.2 million in the Counties of Sherburne, Benton, and Stearns, as well as supporting 289 jobs, with wages totaling more than \$17 million, and providing State and local taxes of \$2.3 million. This is more than twice the economic impact found in a study conducted in 2012 and shows the vital importance of the Airport to the regional economy. Thus, it is important to note that the Airport enriches the lives and economy of the core three-County catchment area for everyone, even those residents who don't use the Airport directly. Moreover, the potential for the Airport to grow and contribute on an even greater level to the regional economy is significant.
2. **Multiple opportunities to improve business operations and increase revenues.** The study found several opportunities to improve business operations and to help the fiscal situation of the Airport which is currently running an operating deficit of approximately \$767,000 in 2017 (including tax revenue contributions and unallocated City services) and a projected operating deficit of \$873,000 in 2018. The details are discussed below, but primary strategies to improve operations include instituting reasonable rates for parking, adjusting "rates and charges" and hangar rents to better align with industry norms, and revising the terms of the lease of the Fixed Based Operator which was found to be inconsistent with industry standards. Other strategies include investing in marketing and business development, particularly regarding corporate fleets, GA activity, aviation educational opportunities, air service development, and non-aviation business development.

3. **Change governance models to create a business mindset and an Airport champion.** To thrive, the Airport must be run with a business mindset that pervades all operations and policies. Moreover, to achieve this mindset, the Airport needs a champion who has the Airport and its success as its sole focus. The most effective way to achieve this is through changing the Airport's governance model from being owned and operated by the City of St. Cloud (which manages the Airport as infrastructure within its Public Services department) to being operated by an independent, regional Airport Authority. Not only will an Authority be able to champion the Airport and bring a business mindset to its operations, but transitioning to an Authority governance model is also an issue of fairness for the City and region. In 2017, the City contributed approximately \$620,000 in tax revenue, approximately \$137,000 in unallocated City services, and approximately \$10,000 in other subsidies to support the Airport and keep it solvent. However, the benefits of the Airport, including its significant overall economic impact of \$44.2 million, are enjoyed by the entire region, particularly the Counties of Sherburne, Benton, and Stearns.

There is much to be done for the Airport and much the Airport does for the local and regional community. The current situation, while ultimately manageable in the long-term, did not arise overnight; therefore, it will not be possible to bring the Airport to financial health and fiscal self-sufficiency overnight either. Stakeholders and the community at large will need to take a long-term optimistic view of the Airport's prospects, while at the same time acknowledging that continued support to cover the deficit will be necessary for the foreseeable future while the Airport transitions its governance model and begins to implement and reap the benefits from the strategies recommended in this report.

STUDY OVERVIEW

Project Purpose and Goal

The St. Cloud Regional Airport (STC) is a significant and important transportation and economic asset in central Minnesota which provides commercial air service to leisure travelers to seasonal destinations, offers year-round services for General Aviation and corporate jets, and houses the Army National Guard's Army Aviation Support Facility. Given its economic and transportation importance, the Airport, its operators, and the local and regional business communities continue to seek to increase the Airport's vitality and impact to the region. These stakeholders have requested a study to research, analyze, and develop strategic initiatives to determine how best to move the Airport forward in maximizing return on investment.

Figure 2. St. Cloud Regional Airport – Passenger Holding Area



Inside the passenger holding area at the St. Cloud Regional Airport terminal facilities.

Specifically, the Greater St. Cloud Development Corporation (GSDC), along with the City of St. Cloud, served as the administrators for a Minnesota Department of Transportation (MnDOT) grant which funded the optimization planning study. As the result of a formal, national procurement process, stakeholders retained Steven Baldwin Associates (SBA) and a team of consulting experts to conduct a comprehensive and broad-based strategic planning study.

The objective of the study is to use a variety of analyses (e.g., economic, air service development, financial and organizational assessment, etc.), to develop strategies that increase use of the Airport and further expand its economic impact on the region.

The study is part of the stakeholders' on-going efforts to review the Airport and improve its market share, as well as improve other matters that factor into the overall financial and operational stability of the Airport. Stakeholders will use the information within this report to identify the strengths and weaknesses of the Airport and take appropriate action, where needed, to ensure the Airport 1) provides the optimum impact on the region and 2) serves business and leisure air travelers to the best of its capabilities.

The Project Team

At the onset, stakeholders outlined a wide range of work tasks desired to be completed during the course of the project. In order to accomplish this complex, multi-faceted assignment, Steven Baldwin Associates (SBA), as the lead consultant, brought together a diverse team of experts in a variety of fields including: academic research and economic modeling, technical operations, aviation consulting, and community engagement, as indicated below:

Table 1. Planning Study Consultants and Expertise

Name	Consultant Role	Consultant Expertise
Steven Baldwin Associates	Lead Consultant	Overall Project Leadership, Coordination, and Communication; Governance Review; Financial and Organizational Analysis
Ailevon Pacific Aviation Consulting	Sub-consultant	Air Service Development Analysis
Mead & Hunt	Sub-consultant	Benchmarking Analysis, Research, and Historical Context
St. Cloud State University, School of Public Affairs	Sub-consultant	Economic Impact Analysis and Parking Policy and Pricing Analysis
University of Minnesota Extension, Center for Community Vitality	Sub-consultant	Economic Impact Analysis and Parking Policy and Pricing Analysis
Public Solutions, Inc.	Sub-consultant	Communication & Community Engagement

This specific project team was developed to ensure 1) a local understanding of the Airport and its setting, and 2) that the stakeholders received the best available advisory services, by discipline, within the overall parameters of the study project.

Evaluation Activities

During the course of the study, the project team analyzed the Airport and its operations within the context of its relationship to the overall region and aviation market in general. The study was comprised of several complex components. A summary of these components, including the multiple and diverse work tasks the project team conducted, included:

- Forming a **regional advisory committee** of public/private stakeholders which met approximately monthly to help define and assess the work tasks and goals of the project;
- Gathering, collecting, and analyzing inventories of **historical, economic, financial, and airport-related data** and information;
- Conducting **interviews** with a variety of stakeholders, aviation users, and relevant community members, business partners, and competitors;
- Conducting a **benchmarking analysis** with airports comparable to STC and discerning patterns, trends, and best practices of peer airports;
- Conducting an **organizational assessment** of the STC Airport's operations, policies, and structure;
- Conducting a **financial review and analysis** of the Airport's operations and revenue, including the lease and terms of the Fixed Base Operator(s);
- Conducting an analysis of **Air Service Development (ASD) activities**, including defining the STC regional service area, updating the STC passenger demand analysis, and researching ASD opportunities and constraints;
- Conducting a regional **economic impact analysis**;
- Conducting a **parking operations and policy analysis**;
- Reviewing opportunities and constraints for **innovations and educational partnerships**;

- Conducting an analysis of **governance model** options for the Airport's ownership and operation;
- Conducting a review of the **STC facilities and land use** opportunities and constraints; and
- Managing **communications and coordination** among a wide variety of stakeholders and Airport management.

SUMMARY OF STUDY RESULTS

Important Findings, Conclusions, and Recommendations

Summarized below are some of the study's most important recommendations. Please note that detailed sections regarding study results and all other important findings, conclusions, and recommendations are found below in the full report.

- **Business Mindset.** Our most important conclusion and recommendation concerns creating a pervasive business mindset at the Airport for all operations and policies. The project team stated from the beginning of the process that for the Airport to thrive and grow it must be able to move to a stable financial footing and address its financial health. To achieve this, the Airport should be operated and governed with an enterprise-wide **business mindset** that looks to prioritizing the increase of revenues and the reduction of the deficit. The Airport's situation with the deficit is a long-standing issue and will not be remedied overnight. There are short-term, medium-term, and long-term tactics that can be implemented to address the deficit. However, specific tactics are not enough—the Airport should prioritize an overall strategic goal of having a business mindset in all its operations, activities, and policy making. Specific actions to take to increase revenue (and thus reduce the deficit) include adjusting rates and charges to be in line with industry norms and charging for parking; however, a business mindset must permeate all operations and policies as a long-term solution to addressing the deficit. Furthermore, the most compelling strategy for creating a comprehensive, enterprise-wide business mindset is to transition the Airport's governance model to an Authority. For that reason, the project team recommends moving to an Authority model for governance, discussed further below.
- **Reducing the Deficit.** The most urgent priority is for the Airport to operate in a financially self-sufficient manner. Currently, the Airport is operating at a loss, which is subsidized by the City, its operator, primarily through property and sales taxes and unallocated services. Using figures supplied by the City accounting office, the project team estimated the 2017 operating deficit to be approximately \$767,000 and projected the 2018 operating deficit to be approximately \$873,000. These deficit figures include the amount of unallocated services the City provided the Airport (which included, but is not limited to, police/security forces and firefighting personnel) as well as the difference between operating expenses and revenue.

In general, the priorities of the strategic planning process are to: 1) rid the Airport of its deficit (short- to medium-term goal); 2) develop revenue to cover matching funds to grants (medium- to long-term goal), and 3) develop additional revenue to cover non-grant funded capital improvements (long-term goal). It should be noted that these are aspirational goals that will not likely be realized immediately and so ***stakeholders should be prepared to accept that there will likely be a need for a continuing operational subsidy for the immediate future.*** (In the financial analysis section the project team recommends specific revenue enhancement strategies and projects operational budgets 10 years into the future to achieve significant deficit reduction.)

Various strategies of increasing revenues and reducing the deficit, include:

- **Parking Revenue.** A survey and analysis on parking demand, geographic origin of parkers, and an elasticity of demand found that \$5 per day for parking would be an acceptable charge to patrons and would conservatively bring in a range of approximately \$60,000 - \$145,000 per year based on projected 2018-2019 enplanements. However, due to the conservative nature of the analysis and assumptions regarding usage, the project team believes that greater revenue from parking than the study's estimate would likely be achieved without affecting existing or future passenger demand.
- **Enhanced FBO Operations and Services.** Analysis of FBO operations—and Airport revenue derived from the FBO—indicate that the Airport should be receiving greater remuneration from FBO related services. Remediation of this situation could include a renegotiation of the lease with the current FBO, with terms more favorable to the Airport and more in alignment with industry standards, among other options. A comparison with the lease terms of similar airports found that, at the Airport's current volume of goods and services, a lease with more equitable, industry-standard terms would bring in significant additional revenue.
- **Focus on Corporate Aviation to Increase Operations.** Somewhat related to but also distinct from the FBO issue is the need to focus on general aviation marketing and services for corporate fleets. With an enhanced current FBO, or a second FBO providing competitive services and fuel prices, there is a likelihood of expanding service for current corporate tenants as well as attracting new corporate tenants. New tenants would result in increased revenue for the Airport both directly through hangar rentals and indirectly through a percentage of FBO sales and other remunerations.
- **Modification to Rates and Charges.** In general, the Airport should increase revenue by reviewing and updating its current rates and charges (for a number of items in addition to the parking fees noted above). The analysis showed that certain items in the current rates and charges are not within industry standards and the terms should be adjusted accordingly. Moreover, greater effort should be made to record and collect landing fees from corporate and commercial aircraft, whereas current efforts and policies fall short.
- **Land Parcel Aeronautical and Non-Aeronautical Use.** The area surrounding the Airport is almost exclusively rural and agricultural, and not of particular interest to most retail businesses typically associated with being near an airport (e.g., gas stations, hotels, etc.). We recommend working with a commercial real estate broker to market Airport land parcels for their highest and best use, both aeronautical and non-aeronautical (which could potentially include—pending proper brokerage vetting—agricultural rental, warehouse facilities, seasonal storage for recreational vehicles, or personal self-storage).
- **Center for Excellence for Aviation Education.** The project team, in conjunction with the GSDC, convened representatives from several stakeholder groups, including local higher education institutions, to explore the possibility of re-establishing aviation education programs in the area. After a successful initial meeting, all parties expressed interest in continuing the exploration of creating a local Center of Excellence to house aviation educational programming. Consequently, the project team recommends creating an

Aviation Educational Consortium with the charge of continuing the investigation and potential establishment of an educational center for training in the three most viable programmatic focuses: 1) aviation management, 2) piloting, and 3) aviation mechanics and vocational technology. The creation of aviation educational programs could create additional revenue for the Airport through 1) leasing of airport space and facilities, 2) student flight training programs and associated activity, and 3) partnerships with airlines. Regarding the latter, some airlines have recently built educational training facilities at other university-supported or affiliated airports resulting in revenue streams (in significant amounts in some cases) for building and facility rental fees.

- **Increase Operations via Air Service Development Efforts with ULCCs.** As recommended in the Air Service Development (ASD) analysis, STC should invest resources in maintaining and expanding its relationship with Ultra Low-Cost Carriers (ULCCs), particularly its primary commercial carrier, Allegiant. By providing continued support for Allegiant flights and working to either 1) increase the frequency of existing flight destinations, or 2) adding new destinations to the existing Mesa and Punta Gorda routes, STC could increase the number of its operations and enplanements and therefore increase revenue. ***It is significant that STC is the only airport in Minnesota served by Allegiant;*** working with Allegiant, that fact should be advertised to the regional market (to increase awareness, visibility, and market share). Per the ASD recommendations, the relationship with Allegiant should be maintained and preserved at a minimum and expanded if at all possible. Furthermore, STC should consider attending industry ASD forums, such as the “JumpStart” and “Network” conferences, where for a reasonable fee an airport operator can schedule face time with airline representatives to make pitches for air service development. These pitches should be crafted by experienced ASD professionals and would necessitate engaging an ASD consultant on a limited basis. (Further info on the ASD analysis and recommendations can be found in the ASD section below.)
- **Marketing, Business Development, and Staffing.** Current Airport marketing and business development is extremely limited. Since marketing is about promoting the goods and services you already have and business development is about implementing strategic measures to create new business and development, both are vitally important to the Airport. To strengthen the Airport’s position, it is necessary to raise consumer awareness of the existence of the Airport and its current flights, chiefly because increased demand on the local level is key for airlines to consider investing in additional service. The Airport should be proactively promoting that it has service to Mesa, AZ (Allegiant), Punta Gorda, FL (Allegiant), and Nevada (Sun Country) to increase demand and thus increase revenues. There are numerous ways to organically market the Airport at low to no cost (e.g., public relations, press releases, electronic email newsletters, social media, internet and radio ads, etc.). It is vital for the Airport to increase its efforts in these areas; consequently, a designated amount of the budget should be devoted to marketing with the goal of annual increases in the marketing budget in order to increase air service. In fact, it may be necessary for the Airport to hire an additional staff member with expertise in marketing and business development. While this move would temporarily increase operational costs, the benefit of the investment would ideally be realized within the short-term. (Further info on the marketing analysis and recommendations can be found in the sections on ASD, benchmarking, and governance below.)

- **Transition to an Authority Form of Governance.** There are many benefits to an Authority form of governance, but one significant one is to have a governing body with a singular airport enterprise focus. This singular focus is necessary to foster a pervasive business and customer service mindset, along with the policies and procedures to ensure financial stability and customer satisfaction. Moreover, an Authority can serve as a guiding champion for the Airport. This ability to singularly champion the Airport is not within City resources to accomplish adequately, as the Airport is a sub-unit in one department of many City departments and for practical purposes regarded and maintained essentially as utilitarian infrastructure. But the Airport serves important functions far beyond mere infrastructure. For these reasons and others enumerated below in the body of the report, we recommend that the Airport transition to an Authority governance model. While there are costs in terms of time, resources, and funds associated with such a transition—including a comprehensive FAA approval process—the project team believes the investment is well worth it for STC and the communities it serves. A transition to an Authority governance model would bring forth significant return in terms of stabilizing the Airport’s finances, reducing the deficit (and eventually eliminating it), and spreading strategic input and support of the Airport over a greater regional area which is commensurate to the three-county area that benefits the most from the Airport’s significant economic impact.

In sections in the full report below, we make additional, detailed observations on findings and recommendations on all aspects of the STC airport including:

- Results and trends from the **benchmarking comparable analysis** with peer and aspirational airports which indicate, among other things, that the Airport should invest in marketing and have more favorable, industry-standard terms in its FBO lease
- Airport **organizational structure and staffing** needs
- Complete **Air Service Development (ASD)** analysis results
- Details of the new **economic impact study**, which identified the regional economic impact to be more than twice the amount found in the previous study conducted in 2012.

STC: An Important Regional Asset

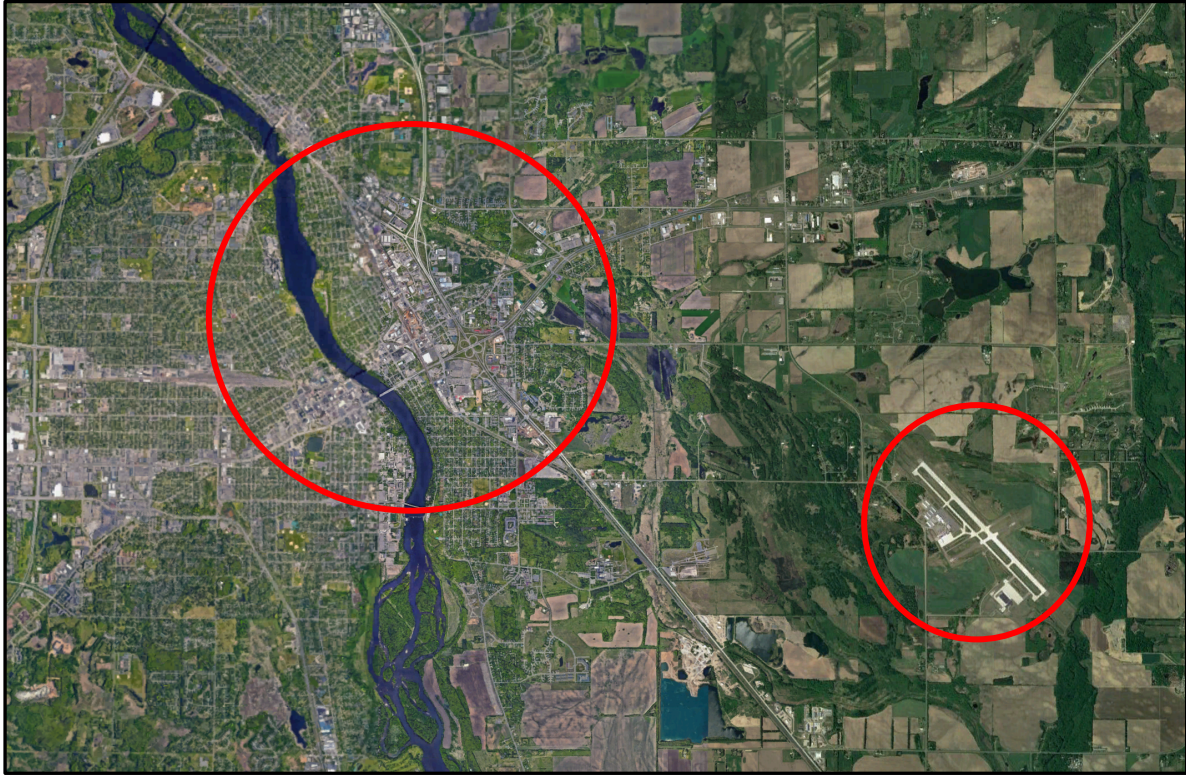
While the main focus of the optimization study is to assess the current situation, within the historical context of Airport history and operations, and to prescribe viable strategies for improvement, it should also be noted that ***the Airport as it currently stands already serves as a valuable and important regional asset.***

STC is not simply a small, non-hub airport; it is a full commercial service airport with one of the longest runways (7,500 ft.) of any non-hub airport in the State (ranking third behind Duluth and Rochester, respectively). In addition, capabilities include new and improved ramp construction, a control tower, and dual instrument landing system, all of which allow the Airport to accommodate the largest business aircraft as well as many air transport and military aircraft. Furthermore, the terminal and facilities at STC are impressive and top-notch for an airport of its size. These assets alone set the Airport into a higher class, positioning it as an extremely valuable local and regional resource.

Thus, while the report’s analysis and recommendations below focus on areas of improvement, the project team would also like to acknowledge and emphasize that there are many positive attributes to the Airport as is—including the \$44.2 million impact to the regional economy and related economic benefits. Moreover, the potential for continued and increased growth, efficiency, and economic impact

is great. Therefore, improvements to the Airport are vital investments to supporting and growing this powerful economic engine—which is a benefit to the entire region and all its inhabitants, including for those residents who don't directly use the Airport.

Figure 3. St. Cloud and St. Cloud Regional Airport



St. Cloud Regional Airport and its geographic position to the City of St. Cloud.

SECTION 2. PLANNING STUDY: BACKGROUND, PURPOSE, AND SCOPE

Background

In 2017, the Greater St. Cloud Development Corporation (GSDC) led efforts to attain \$250,000 from the Minnesota Legislature, appropriated through the MNDOT Aviation Fund, to complete a strategic planning and optimization study for the St. Cloud Regional Airport (STC). The goal of the comprehensive and broad-based study is to optimize the growth and development of the Airport and increase its economic impact on the region.

By the fall of 2017, the GSDC launched a national RFP process to secure a team of industry knowledge experts to conduct the study. As stated in the RFP, the study is a public-private collaboration including the GSDC, the City of St. Cloud and the Counties of Benton, Sherburne, and Stearns, with guidance and assistance provided by the Minnesota Department of Transportation Aeronautics (MNDOT).

In December 2017, the GSDC and its partners recommended, and the City approved, selection of Steven Baldwin Associates, LLC (SBA)—in association with Mead & Hunt, Inc.; Ailevon Pacific Aviation Consulting; the St. Cloud State University, School of Public Affairs; the University of Minnesota Extension; and Public Solutions, Inc.—to conduct the study.

Purpose

According to the RFP, the stated goal of the study is to determine “how best to move the region forward in maximizing return on investment by growing the utilization, impact, and stewardship of the St. Cloud Regional Airport with the completion of a comprehensive, market-based study and strategic plan.” In addition, the study addresses and promotes STC as a community asset both directly and indirectly to all stakeholders within the region and lays out a plan of action for the future of STC.

Scope

The study included several complex components as part of the scope of work. To achieve the goal of the study, a series of tasks were developed, including:

Project Task 1: Project Kickoff Meeting/Finalize Project Approach

- At these meetings the details of the project were reviewed and project objectives finalized.

Project Task 2: Form an Advisory Committee

- A regional advisory committee of public/private stakeholders was formed and met regularly to help assess and define the work tasks and goals of the project.

Project Task 3: Inventories: Collecting Historical/Airport/Economic Data

- The project team gathered, collected, and analyzed inventories of historical, economic, and airport-related data and information, and conducted a series of stakeholder interviews.

Project Task 4: Assessment, Completion, Presentation of Specific Work Tasks

- Conducted a benchmarking study with airports comparable to STC and an organizational assessment of the STC Airport’s operations, policies, and structure.
- Conducted an analysis of Air Service Development (ASD) activities, including defining the STC regional service area, updating the STC passenger demand analysis, and researching ASD opportunities and constraints.

- Conducted an economic impact study.
- Conducted a parking policy and operations study.
- Reviewed opportunities and constraints for innovative growth, including establishing and educational consortium to collaborate on a center for education.
- Conducted a review of governance model options for the Airport's ownership and operation
- Conducted other additional tasks.

Project Task 5: Ongoing Progress Reports to Advisory Committee

- Results of each of the above work tasks were presented to advisory committee members through a series of facilitated workshops.
- Take-aways were developed and distributed to all advisory committee members.

Project Task 6: Presentation of Key Findings to Officials & Stakeholders

Project Task 7: Draft & Final Report

Summary Details of the Study's Areas of Research and Analysis

A summary of each of the above-named tasks is provided below. Note that Part II of this report provides in-depth reports of the results and findings of the analyses of the areas under consideration.

1. Advisory Committee Formation and Input

Given the extensive list of desirable outcomes identified in the RFP, a Regional Airport Study Advisory Committee (RASAC) was formed to help assess and define the work tasks and overall goals of the project. The RASAC served as a guiding technical advisory and stakeholder engagement vehicle and was comprised of representatives from sponsors and partner participants, as well as others identified as key stakeholders. The RASAC consisted of 14 members who represented a cross-section of parties interested in the study and its outcomes. Committee member qualifications included relevant business- or aviation-related attributes, including economic development experience, business acumen, long-term local/regional residency, and/or expertise in a relevant area of study. To form the committee, SBA worked with the Planning Study Committee to recruit members and establish member participation. Specifically, GSDC asked the City and Counties to select individuals from their respective jurisdictions to participate on the RASAC. Table 2 below includes a list of committee membership.

Table 2. Advisory Committee Membership

Name First	Name Last	Title	Company / Organization
Roger	Bonn	Co-chair	Transportation Corps Air Service Working Group; Chair of the St. Cloud Regional Airport Advisory Board
Bill	Towle	Director	St. Cloud Regional Airport
Cathy	Mehelich	Economic Development Director	City of St. Cloud
Michael	Brethorst	City Administrator	City of Melrose in Stearns County
Lisa	Atkinson	Community Development Director	City of Melrose in Stearns County
John	Uphoff	Executive Director	Benton Economic Partnership
Dan	Weber	Assistant County Administrator	Sherburne County
Teresa	Bohnen	President	St. Cloud Area Chamber of Commerce
Julie	Lunning	Executive Director	Convention and Visitors Bureau
Rollie	Anderson	CEO	ATS - Anderson Trucking Service
Tom	Hammer	Owner	TJ Farms
Kurt	Otto	Vice President Operations, Specialty Division	CentraCare Health
Tosh	Brinkerhoff	CEO	Geringhoff
Scott	Bender	Managing Partner	Cold Spring Brewing
Julie	Carr	North Region Planning Program Coord. Transportation	MN DOT Aeronautics

The RASAC provided input and advisement throughout the course of the project and was conveyed regularly for each project task. The role of the committee was to serve as a sounding board to discuss, vet, and shape work tasks led by relevant members of the project team. Specifically:

- Provide local stakeholder input throughout the study's activities
- Serve as a sounding board to help shape study priorities and recommendations
- Review materials and provide input, feedback, and critiques of project tasks
- Serve as a liaison to groups members may represent, e.g., business community, STC users, etc.

2. Collection of Data Inventory

For operational, staffing, and organizational assessments, the project team compiled and analyzed an inventory of data, which included the collection and assessment of historical, airport, transportation, and economic data, as follows:

- **Historical Data.** This effort entailed collecting past documents, information, and data relevant to the project and work tasks. For the historical data the Project Team collected, organized, and catalogued the information and documents for clarity and context for the overall project.
- **Airport and Transportation Data.** The effort consisted of collecting relevant information about the Airport, including current operational and financial statistics, policies and procedures, tenant leases, rates and charges, structure and organization, strategic plans, master plans, statements of mission/vision/goals, previously conducted SWOT analyses and reports. This inventory also included a review and analysis of recent Airport and community planning initiatives including air traffic forecasts and other relevant information from the Airport's most recent Airport Master Plan update.

- **Economic Data.** This inventory consisted of collecting data and information regarding local and regional economic activity, including the quarterly economic activity report from the St. Cloud State University, School of Public Affairs (representatives of which are part of the Team).

In addition to the above, the project team also gathered and analyzed a wide range of additional information, data, reports, financial sheets and reports as relevant and related to all aspects of our review and analysis.

3. Operational Assessment and Benchmarking

A benchmarking of St. Cloud Regional Airport against similar sized regional airports provided a supporting element of the overall operational review of the Airport. In a related RASAC meeting, the project team presented the results and key takeaways from the benchmarking study and organizational assessment.

The establishment of the specific data points to benchmark as well as the list of five airports used for comparison was done in consultations with the RASAC and the Airport Director. The benchmarking analysis was conducted through direct interviews with the peer airports management as well as review of an airport's data set, as well as a desktop review of existing databases such as FAA-5100-126 CATS data and similar industry recognized and respected databases.

4. Marketing Opportunities

As part of the benchmarking study and operational assessment, the project team reviewed the City's marketing efforts of the Airport, particularly with regard to the low-cost carrier service by Allegiant and Sun Country and increasing awareness of the service and specific destinations. The project team also looked at local public relations efforts and processes around those efforts comparing them to both industry standards and the peer and aspirational airports in the comparative benchmarking analysis.

5. Staffing and Organizational Assessment

The project team conducted a thorough assessment of the Airport's current organizational structure and assessed it for adequacy of airport staffing, organizational structure, and resources. We also analyzed the likely future organizational structure based on projected needs and growth. The ideal is that the organizational structure and the staffing needs optimally align with the organization's ability to achieve its short and long-term strategic mission and goals. Any recommendations for change, where needed, were identified in such a manner that the changes are deemed necessary for overall efficiency and effectiveness of the Airport, its operations, and its financial stability.

6. Air Service Development Analysis

The project team conducted an analysis of Air Service Development opportunities that included:

- Researching ASD activities at STC to gather background and understanding regarding past ASD practices,
- Defining the passenger air service area for STC,
- Developing unconstrained destination and passenger enplanement forecasts for STC,
- Identifying and develop market constraints,
- Identifying best ASD opportunities and strategy for STC going forward, and
- Identifying cost necessary to support proposed ASD strategies.

7. Financial Review and Assessment

The project team undertook an analysis of the Airport's financial state, looking at a variety of financial data including rates and charges, FBO lease terms and anticipated yearly income, monthly fuels sales, monthly FBO sales sheets, comparison between the 1996 FBO lease and the 2014 FBO lease, a comparative study with comparable airport FBO leases, City-supplied financial data including balance sheets from the Airport Construction fund and the Airport Operating fund, City-supplied accounting of in-kind services, data from Annual Reports, hangar leases, and other revenue data. This financial review led to a more accurate ascertainment of the budget deficit which is covered by the City primarily through property taxes.

8. Economic Impact Study & Parking Policies Study

The project team prepared an updated economic impact study within a broad definition of the region. It is important to understand that actual real-dollar value that the Airport brings to the region, so that communities and taxpayers can appreciate the actual significant economic value the Airport brings to the region.

In addition to the economic impact study, the project team also prepared an analysis on the policies and pricing with respect to parking at the Airport, which included subtasks such as conducting a survey of travelers on their willingness to pay for parking at STC, and a comparison with other local and/or comparable airports on pricing policies and structures for their facilities.

9. Governance

The project team researched and analyzed airport governance models, and prepared a presentation for the RASAC and stakeholders on the state of the industry and possible options for governance models for STC. The analysis focused on recent trends in the industry and provided a synopsis of the various models of governance, including the benefits and limitations of each. The research presented included an overview of the FAA application process through which an alternative form of governance is typically formed and well as an overview of the particular options available to STC and recommendations on whether to form an authority and why, and which type would be best suited to the needs of STC.

10. Educational Opportunities – Center for Excellence in Aviation Education

In consultation with GSDC, the project team convened representatives from several stakeholders—including St. Cloud State University (SCSU), St. Cloud Technical Community College (SCTCC), St. Cloud Regional Airport (STC), St. Cloud Aviation (SCA)—to conduct an initial discussion and exploration regarding the viability and opportunities to reestablish a formal program in aviation education in the St. Cloud area.

Participants discussed the vision for creating an aviation education program for enhancing economic development and noted that SCSU and SCTCC are uniquely positioned to offer a meaningful program, especially working together. Key industry dynamics that support this include a well-known pilot shortage; however, pilot training is not the only option, as there is also a management and professional succession issue in the industry, as well as a need for additional trained and skilled technical/mechanical workers. Thus, the opportunity for aviation education is threefold:

- Pilot training
- Aviation management
- Technicians and mechanics

Discussion included changes in the industry since the previous aviation program at SCSU ended that might warrant a resurrection of a new program (changes such as the current pilot shortage, revisions in FAA requirements, and new market opportunities). Part of the meeting's purpose was to discuss the fundamentals of what would be needed to create a program in the most promising areas of aviation education.

11. Other Areas Considered

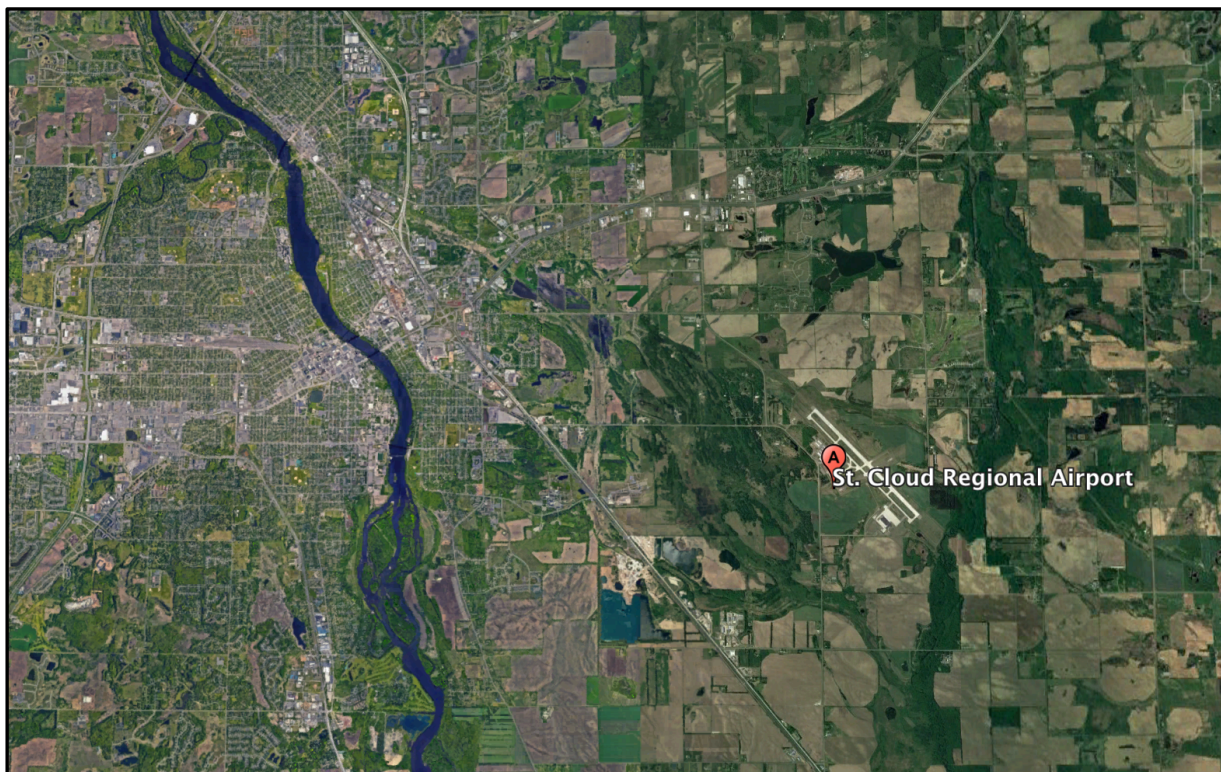
The project team investigated the opportunities and constraints of technology and innovations at STC. Original suggestions for this task had included the research and analysis of attracting activity related to Unmanned Aerial Systems (UAS) to STC. Initial investigations suggested that this is not a viable option at STC at this time as other partnerships for UAS research and activities are well underway in other locations in MN and elsewhere. As a result, the team investigated other potential areas of innovation (based in technology or otherwise) which might enhance operations and/or revenue at STC. This included a review of potentially re-establishing a commuter shuttle to MSP, which was found not to be viable when reviewed in the air service development analysis.

SECTION 3. THE AIRPORT AND THE COMMUNITY

Location

The St. Cloud Regional Airport is located at 1550 45th Ave. SE, in St. Cloud, Minnesota 56304, within the County of Sherburne and approximately six miles from the heart of downtown St. Cloud. The City is located 66 miles North West of Minneapolis, the largest city in Minnesota and home to the state's largest airport, the Minneapolis-St. Paul International Airport. See Figure 4. below for the location of STC in relation to St. Cloud.

Figure 4. STC Location



Source: Google Earth

The City of St. Cloud has a population of 67,344 residents within the City and approximately 194,418 within the metro area. The population growth of the region is represented by Sherburne County, which itself has more than doubled in population since 1990 going from 42,322 to 94,570 residents. Unemployment figures from the latest 2018 records indicate 2.5% unemployment within Sherburne County, this compares to Minnesota as a whole at 3.1% unemployment. Additionally, average median income of Sherburne County is recorded above the National and State averages sitting at \$78,081 (2016).

According to the St. Cloud 2017 Comprehensive Annual Financial Report (CAFR), the region is increasingly becoming a health care nexus with hundreds of medical specialists and expanding clinics. In addition to a strong economic environment, St. Cloud offers ample and diverse opportunities in education, recreation, and the arts. Supported by a strong business and industrial community, the City is also home to St. Cloud State University, the second largest university in Minnesota with more than

15,000 full-time equivalent students, and St. Cloud Technical and Community College, which offers more than 90 program options.

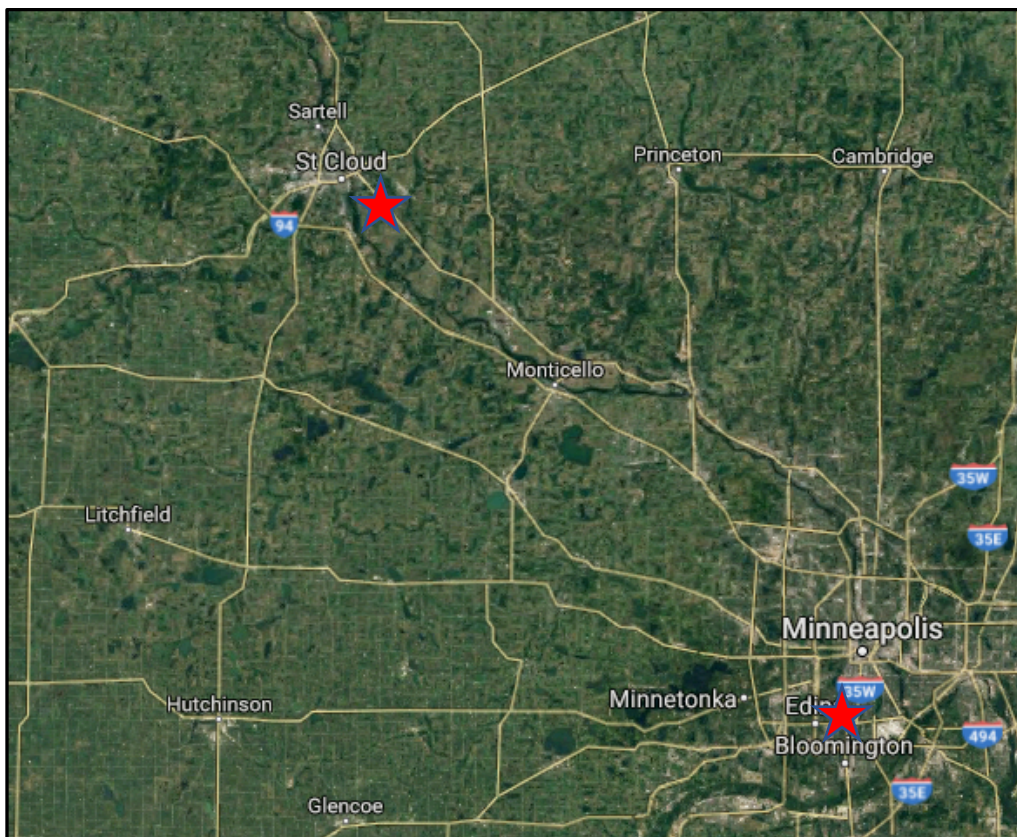
STC is a City-run airport that is organized as a Council-Mayor form of government under a Home Rule Charter. The Council consists of the Mayor and seven other members. Policy-making and legislative authority are given to the City through Minnesota statute. Elected Council members and the Mayor serve four-year staggered terms, with four ward Council members and the three at-large Council members.

The Mayor appoints a seven-member Airport Advisory Board to act in an advisory and review capacity regarding the operation of the Airport. Advisory Board members serve rotating terms. Ex-officio non-voting members are also appointed to the Board. The Fixed Base Operator(s) or designated representative must serve in an ex-officio capacity. Other ex-officio members are appointed one each by the Benton County Board, the Sherburne County Board, the Stearns County Board, the Haven Township Board of Supervisors, and one for each Commuter Service Company. Regular meetings are held on the second Monday of every other month on even months.

A total of seven full-time employees are currently employed at the Airport. They are assisted by the City for Aircraft Rescue and Firefighting (ARFF), law enforcement officers, human resources, information technology, finance, and other administration services. Part-time employees are employed by STC for seasonal operations.

The Airport serves the region by providing commercial service to two destinations, Phoenix-Mesa (AZA) in Arizona, and Punta Gorda (PGD) in Florida, both of which are flown by Allegiant. Passengers using STC are primarily vacation travelers within a 100-mile catchment radius of the airport. The proximity to the Minneapolis St. Paul International Airport (MSP) presents a challenge for STC to capture passengers within its catchment area, especially within the South Eastern region. Up to 7% of MSP's total originating traffic base is originating from STC's catchment area. This has resulted in STC struggling to compete with the larger hub which is located 79 miles away by car. See Figure 5 below for the location of St. Cloud and STC in relation to Minneapolis and MSP.

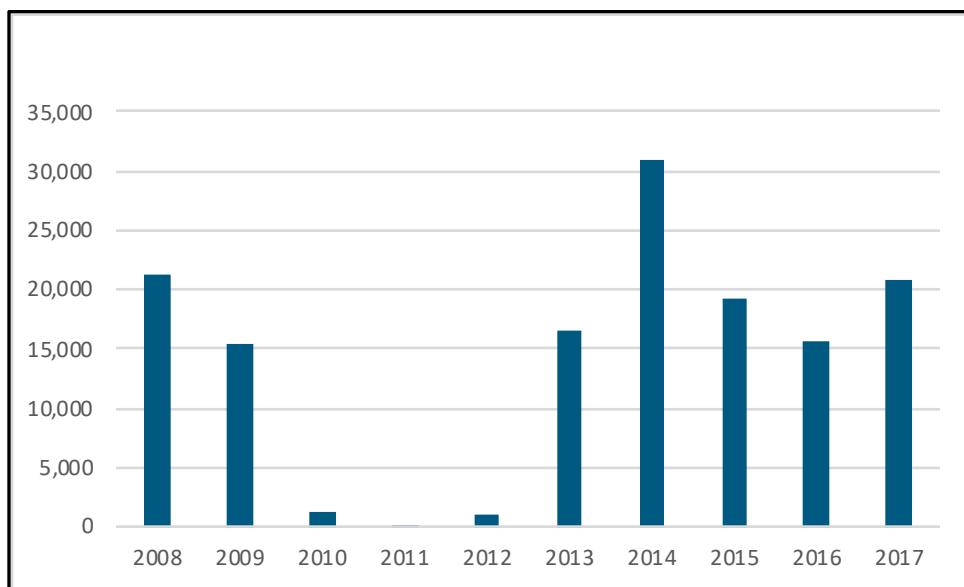
Figure 5. St. Cloud Regional Airport Location in Relationship to Minneapolis-St. Paul Int'l



Source: Google Maps

Enplanements

History has shown that the STC market for air service can sustain point-to-point flights; however, network carriers rely on using their hub and spoke model to gain value beyond the first point of flight. Low Cost Carriers (LCC) and Ultra Low-Cost Carriers (ULCC), such as Allegiant, have proven to be successful at STC because they evaluate service strictly on a point-to-point flight basis. The last 10-years of passenger enplanements for STC can be seen below in Figure 6.

Figure 6. STC Annual Enplanements

History of Air Service at St. Cloud

As far back as 1993, the Airport has provided commercial air service to the region. Prior to 1993, many of the aircraft flying at the current Airport, built in 1970, were general aviation or charter aircraft. The 1993 commercial flights were hosted by Northwest Airlink/Mesaba Airlines using 19-seat turboprop aircraft. These aircraft flew to Minneapolis and surrounding communities connecting St. Cloud to the air transportation network of the day. A total of 8,840 passengers used the service in 1993.

By 1996, Mesaba provided St. Cloud with larger 34-seat turboprop aircraft. The flights flew approximately three times a day and by 1998 the service transported 42,568 passengers to and from St. Cloud. Air service continued to grow into the early 2000s with nearly six flights per day leaving STC. That was up until 2009, when air service was canceled in October starting a nearly three-year cease in flights from STC.

Commencing in December of 2012, Allegiant began providing service to STC flying to Phoenix-Mesa Gateway Airport (AZA). Seasonal service to Punta Gorda Airport (PGD) was introduced by Allegiant in 2017. Allegiant continues to provide flights to these destinations on a seasonal basis from two to three times a week on Airbus and McDonnell Douglas aircraft.

From May 2014 to February 2015, United Airlines operated out of STC by providing service to the Chicago O'Hare International Airport (ORD) on 50-seat regional jets with two flights per day. This helped contribute to STC having the highest total passengers for a single year ever, at 59,705 in 2014. The Chicago service was short-lived due to less-than-desired passenger utilization of United's hub and spoke network to connect with other destinations through ORD, and other extenuating circumstances including low reliability of service which affected passenger utilization.

Currently, commercial air service continues on Allegiant to AZA and PGD. Flights are flown seasonally three times per week to AZA and two times per week to PGD. This service by Allegiant works well for the St. Cloud region for leisure travelers to access vacation destinations during primary travel times, but

has lacked in providing business travelers access to air transportation options that are optimal for them. Many businesses, as well as leisure travelers, within the region continue to travel to MSP for their business trips.

Additionally, Sun Country offers charter service on an approximately monthly basis to Laughlin/Bullhead Airport in Laughlin, Nevada (near Las Vegas). The service began in 2015 and has a very high load factor, often selling out weeks in advance.

SECTION 4. AIRPORT INVENTORY

Overview

Based upon its annual enplanements of 20,918 in 2017, the St. Cloud Regional Airport (STC or Airport) is classified by the Federal Aviation Administration (FAA) as a Primary Non-Hub airport. The Airport is ranked the 346th largest public use commercial service airport within the United States, and the 6th largest airport in the state of Minnesota. See Table 3 below of commercial Minnesota airports.

Table 3. Minnesota Commercial Airports

Airport	Code	City	2017 Enplanements	2017 FAA Overall Rank
Minneapolis-St Paul Int'l	MSP	Minneapolis	18,409,704	17
Rochester Int'l	RST	Rochester	143,675	204
Duluth Int'l	DLH	Duluth	122,726	216
Bemidji Regional	BJI	Bemidji	29,038	315
Brainerd Lakes Regional	BRD	Brainerd	21,383	341
St. Cloud Regional	STC	St. Cloud	20,918	346
Range Regional	HIB	Hibbing	15,377	372
Falls International-Einarson Field	INL	International Falls	15,278	373
Thief River Falls Regional	TVF	Thief River Falls	5,735	450

STC provides pilots with two runway options, known as runway 05/23 and runway 13/31. They are set up in a crosswind direction from each other to aid safe landings when the predominately winds from the west change direction. Runway 05/23 is 3,000 ft. long and in excellent condition per the FAA's rating system. Runway 13/31 is STC's longest runway at 7,500 ft and is rated in good condition. For comparison, Table 4 provides the length of other commercial airports within Minnesota.

Table 4. Minnesota Airport Runway Lengths

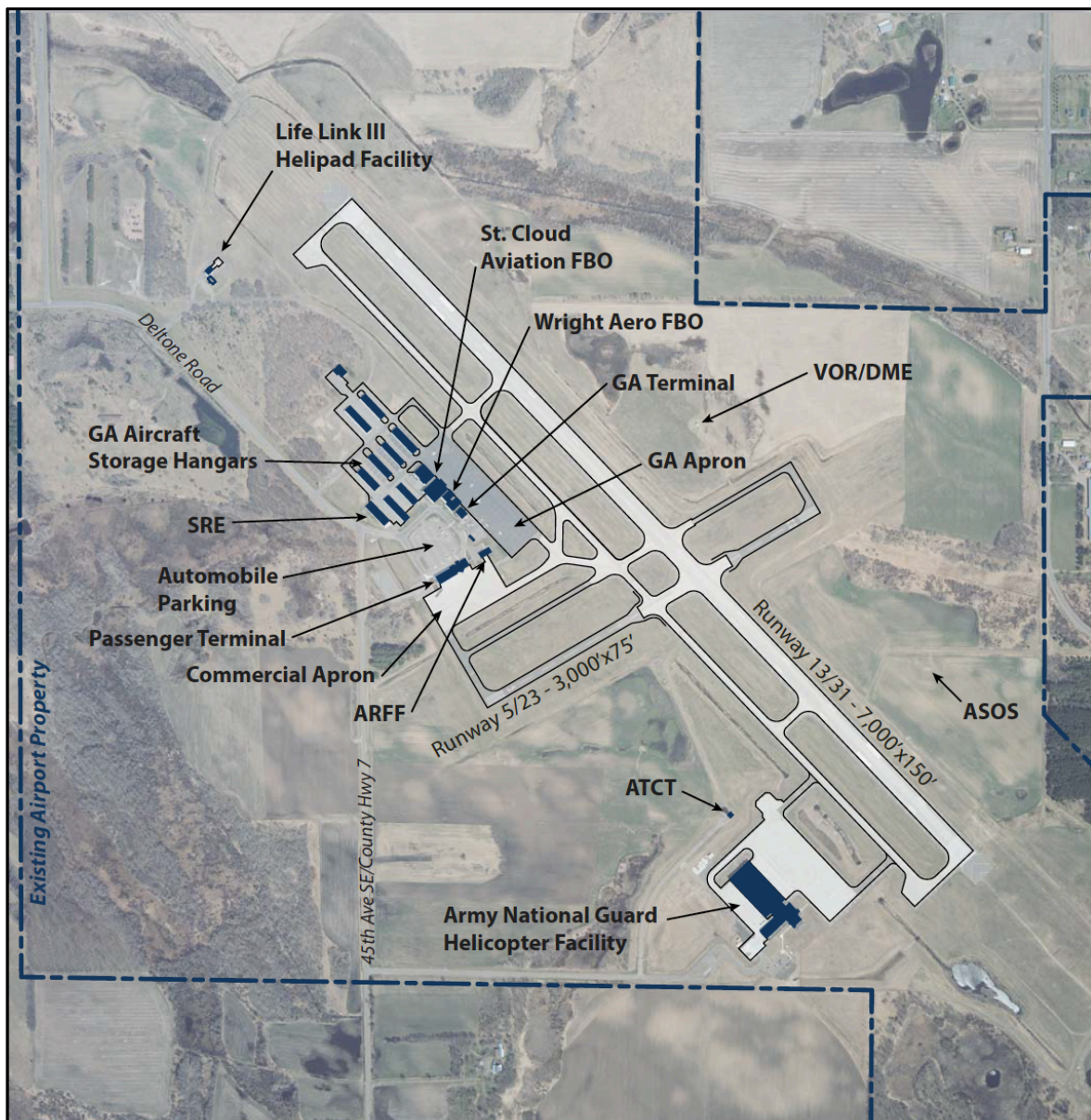
Airport	Code	City	Runway Length
Minneapolis-St Paul Int'l	MSP	Minneapolis	11,006 ft
Duluth Int'l	DLH	Duluth	10,162 ft
Rochester Int'l	RST	Rochester	9,034 ft
St. Cloud Regional	STC	St. Cloud	7,500 ft
Falls International-Einarson Field	INL	International Falls	7,400 ft
Brainerd Lakes Regional	BRD	Brainerd	7,100 ft
Bemidji Regional	BJI	Bemidji	7,004 ft
Range Regional	HIB	Hibbing	6,758 ft
Thief River Falls Regional	TVF	Thief River Falls	6,504 ft

As indicated above, STC's runway is the 4th longest in the state and is long enough to accommodate most large commercial air carriers and virtually any trans-Atlantic corporate aircraft.

The Airport consists of 1,414 acres of property, a large portion of which is dedicated to the runways and taxiways that allow for the safe and efficient use of the Airport by aircraft and pilots. The terminal is located on the northwestern side of the airfield, just north of the 05/23 runway and approximately half

way down the 13/31 runway, providing ease of access to both runways for commercial traffic. In 2009, STC unveiled a terminal expansion, bringing the facility to 19,000 square feet. This expansion added space for Transportation Security Administration (TSA) operations, equipment, and staff, as well as additional gate capacity for more than one airline. Figure 7 below illustrates the layout of the runways and facilities at STC.

Figure 7. Airport Facilities Inventory



Source: STC Master Plan

Fixed Base Operators

STC has two Fixed Based Operators (FBO), St. Cloud Aviation and Wright Aero. The facility locations for each can be seen above within Figure 7. Both FBOs share an owner and essentially operate as sister facilities.

Purchased by its current owners in 1988, **St. Cloud Aviation (SCA)** is a full-service FBO that provides avionics repair and installation as well as aircraft parts and maintenance for General Aviation (GA) operators. SCA also provides flight line services, including fuel, overnight hangars, ground power units, de-icing/anti-icing, airframe and engine inspection, ground handling, among other customer services. Other amenities are also provided by SCA for pilots to relax, plan their flights, and access the internet, etc.

Wright Aero, which opened in 1982, provides flight training and testing services. Its facility includes areas for a pilot supply shop, a flight simulator, and administrative rooms. Wright Aero owns and maintains a fleet of seven aircraft, five of which are training aircraft. Wright Aero also operates a charter fleet consisting of two aircraft, one is a multi-engine piston and the other a multi-engine turboprop aircraft.

General Aviation Terminal

In addition to the two FBOs, STC has a General Aviation terminal that provides GA aircraft and pilots a place to relax, plan, and use the facilities when traveling through STC. Other rooms in the GA terminal provide personnel offices and break rooms for employees of the FBOs. The GA terminal once served STC as a place for commercial departures and arrivals before the new facility was constructed.

National Guard

A major tenant of STC is the Army National Guard. The Guard established a helicopter base at STC in 2009 to operate three units: the 2nd General Aviation Support Battalion, the 211th Aviation Support Battalion, and the 834th Aviation Support Battalion. The Guard flies and maintains six UH-60 Blackhawk helicopters and six CH-47 Chinook helicopters to support their mission. Aircraft are housed in a 140,000 square foot facility located immediately south of the air traffic control tower.

NOTE: Regarding future plans for the military operations, a concerted effort was made to contact the Army National Guard to gather this information. However, the military is currently not publicly revealing its future plans. As a result, the report, like the Master Plan, assumes military operations stay at the same level going forward. As noted in the Master Plan, “Military operations are driven more by policy decisions than economic decisions, therefore military operations have been projected to remain consistent....” (Master Plan Update 2017, Section 2.4.6, page 2-26)

Based Aircraft

Based at the STC airport are single-engine aircraft, multi-engine aircraft, jets, and helicopters. In total, STC has 89 based aircraft. The aircraft are a mix of general aviation aircraft and military aircraft, as noted in the chart below. Commercial aircraft, such as those used by the airlines, also fly into and use STC, but are considered transient aircraft as opposed to based aircraft.

Table 5. STC Based Airplanes

STC Based Aircraft	
Single Engine (SE)	63
Multi Engine (ME)	4
Jet (J)	9
TOTAL FIXED WING: (SE + ME + J)	76
Helicopters (General Aviation)	1
Gliders	0
Military (Helicopters)	12
Ultra-Light	0
TOTAL ALL BASED CRAFT	89

Source: FAA Form 5010 (from 2017)

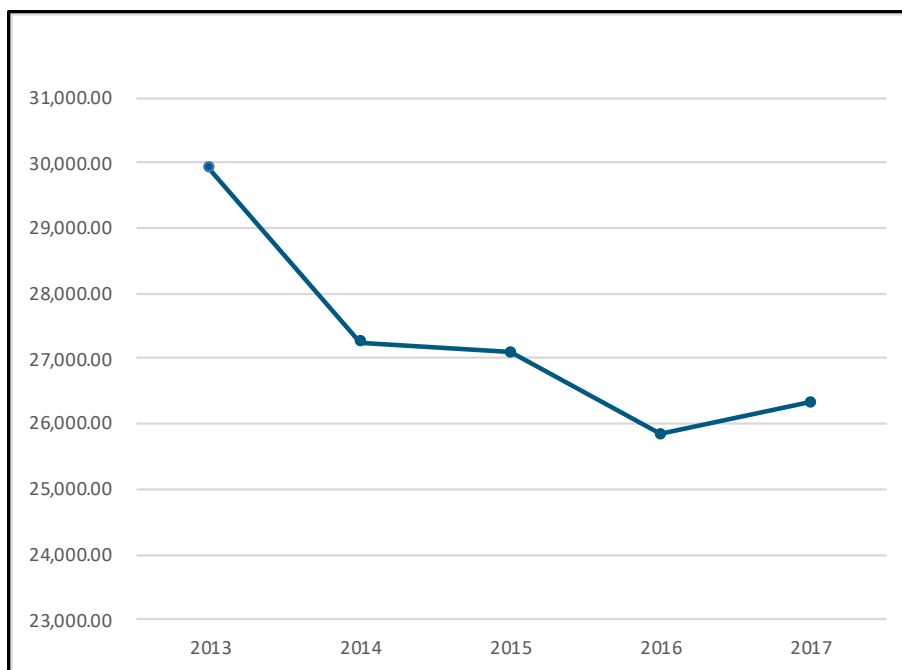
Annual Operations

Annual operations at STC have been somewhat steady since 2013 ranging from 25,838 to 29,889 operations. In recent years, STC is on a modest growth trend when including predicted 2018 operation numbers. Table 6 And Figure 7 below emphasize the changes in operations at STC.

Table 6. STC Annual Operations (Figures)

STC Operations	
Calendar Year	Total Operations
2013	29,889
2014	27,243
2015	27,097
2016	25,838
2017	26,320
2018*	27,296
Total:	161,409

Source: FAA Air Traffic Activity System, *2018 data estimate

Figure 8. STC Annual Operations (Chart)

The Airport is served by an air traffic control tower daily between 7:00 AM and 11:00 PM to safely control flights in and out of STC. Aircraft flying to STC under instrument flight rules have numerous options for landing, including; VHF Omnidirectional Range (VOR), Area Navigation (RNAV), and Instrument Landing System (ILS) approaches. When using the ILS 31 approach, aircraft can land in weather with only a half-mile visibility and a 200-foot cloud ceiling. Having these approach options that allow flights to fly in adverse weather contributes to STC successfully securing commercial flights. Additionally, the STC runways provide pilots with a high percentage of allowable wind coverage before exceeding allowable crosswind velocities, allowing the runway to be in use 99.85% of the time, representing a very reliable airport runway, even in adverse weather.

Fuel Storage Facilities

STC has five fuel storage and dispensing tanks which are owned by the FBO. The tanks range in size from 500 gallons to 12,000 gallons. The majority of fuel storage is devoted to Jet-A and Avgas, each respectively having a 12,000 gallon storage tank. Other tanks are for unleaded gasoline (500 gallons), road diesel fuel (500 gallons), and off-road diesel fuel (750 gallons). STC uses four tanker trucks to transport the fuel from the storage tanks to the aircraft for fuel dispensing.

Cargo

STC does not have scheduled air service cargo operations, and is considered an “on-demand” cargo airport. Currently, air cargo operators such as FedEx and UPS do not use St. Cloud Regional Airport, nor is future cargo service anticipated. According to the Master Plan Update (2017), while the FAA projects some on-demand air cargo activity to increase, it is not anticipated that cargo activity will require any land or facility dedication by the Airport through the duration of the 20-year Master Plan. (Master Plan Update 2017, Section 3.5, page 3-34). Overall, there is limited existing and projected air cargo activity at STC, which is not likely to change given STC’s proximity to a major cargo center and operations at MSP.

PART 2: ANALYSIS & RECOMMENDATIONS

SECTION 5. RESEARCH TASKS AND RESULTS OVERVIEW

The following sections detail the various research and analysis tasks the project team undertook in order to understand the Airport's operations, organization, and finances—a complex series of data and information which was utilized to derive the recommendations for strategic initiatives needed to optimize the Airport's growth and impact to the regional economy.

Part II sections include:

- Outreach
 - Regional Airport Study Advisory Committee (RASAC) Meetings
 - Stakeholder Input & Interviews
 - Coordination with City/Mayor and Council and the GSDC
 - Educational and Vo-Tech Opportunities
- Economic Impact Analysis
- Parking Policy and Pricing Survey and Analysis
- Air Service Development Analysis
- Benchmarking Study: Comparative Airport Analysis of Patterns, Trends, & Best Practices
- Governance Review
- FBO Review and Analysis
- Financial Review and Analysis

Detailed information on each of these research and analysis activities follows.

SECTION 6. OUTREACH

In order to successfully accomplish the goals of the study, the project team performed a significant amount of outreach to stakeholders soliciting input and feedback regarding primary project activities. This included:

- forming an advisory committee and conducting regular meetings for input on key aspects of key subtasks and presentation of progress,
- conducting interviews with a wide variety of stakeholders for insight, context, and perspective of Airport operations,
- coordination and communication with key stakeholders, particularly the GSDC, the City, and MnDOT, and
- coordinating with key stakeholders to initiate discussions regarding the viability of reinstituting aviation educational programs in the area.

Details of each of these outreach activities follow below.

Regional Airport Study Advisory Committee (RASAC) Meetings

In its efforts to gain community stakeholder input throughout the duration of the project, the project team formed the Regional Airport Study Advisory Committee (RASAC), in conjunction with the GSDC. Meetings for the RASAC were scheduled throughout the duration of the study to discuss and set project objectives, guide research, and oversee findings. RASAC members were chosen to include members from the Airport Board, the City of St. Cloud, the three core counties (Stearns, Benton, and Sherburne), the Chamber of Commerce, MnDOT, and local businesses, among other key stakeholders.

The topics of each RASAC meeting throughout 2018 included:

- January – Project Introduction
- February – Benchmark Analysis Study Overview
- March – Economic Impact and Parking Policy Studies Overview
- April – Benchmarking Analysis Results
- May – Air Service Development Analysis Overview
- July – Governance Overview
- September – Economic Impact Study & Parking Study Results

Below is an executive summary of each RASAC meeting held during the study:

January 2018 Executive Summary – Project Introduction

The first meeting of the advisory committee began with opening remarks by Mr. Brian Myres, Chair of the Board of Directors of the Greater St. Cloud Development Corporation, and Chair of the Executive Committee of the Planning Study. Following Mr. Myres' opening remarks, RASAC members introduced themselves and shared their perspectives on the St. Cloud Regional Airport (STC) and the importance of the Airport to the local region and its economy. The project team introduced themselves and reviewed the background and description of the study, along with the scope of work and proposed tasks. The committee was presented an overview of the tasks to complete including: an inventory of data, air service development, organizational review, benchmarking study, opportunities and constraints analysis, governance, and economic and

parking analysis. Afterward, the group also discussed other items related to the planning study, including the advisory committee purpose, duties, and responsibilities, as well as the year-long meeting schedule and proposed topics for RASAC meetings.

February 2018 Executive Summary – Benchmark Analysis Overview

Mr. Roger Bonn, chair of the Airport Advisory Board, provided a summary of STC business activities during the month of January and statistics from the Super Bowl. He noted that STC had 5,108 passengers within January flying to two destinations on Allegiant; moreover, a total of 90 aircraft flew into STC specifically for the Super Bowl. In addition, STC aviation sold 38,000 gallons of fuel, resulting in \$3,800 of revenue for the City. After Mr. Bonn's report, the project team provided an updated schedule for upcoming meeting topics and then facilitated a presentation and discussion regarding the comparative benchmarking analysis of peer airport operations. The project team guided the committee through the steps the benchmarking analysis would take to gather information, which included the goals, screening criteria, comparable airports considered, and comparable airports proposed to interview for data.

The proposed comparable airports included:

- Hagerstown, MD
- Trenton Mercer, NJ,
- Stillwater, OK
- Latrobe, PA
- Ogden, UT
- Appleton, WI

An initial list of the proposed measurement items concluded the discussion on the benchmarking analysis. A few of the items discussed included FBOs, organizational structure, operational statistics, fueling policies, rates & charges, minimum standards, business/corporate aviation, and marketing strategies.

March 2018 Executive Summary – Economic Impact and Parking Policy Studies Overview

After initial introductions and review of the agenda, the project team lead the economic analysis discussion, guiding the committee through the key elements of the economic impact study and airport parking study. The project team identified the typical functions of an economic impact study, which encompasses public/operational expenditures, fixed base operators (FBOs), commercial air service, general aviation, government operations, retail business, freight, and corporate flight departments. It was decided that the study area would encompass the three counties sponsoring the planning study (i.e., Sherburne, Stearns, and Benton), along with the eight surrounding counties, which include Wright, Meeker, Kandiyohi, Pope, Douglas, Todd, Morrison, and Mille Lacs. Advisory members were also informed that the parking study, in addition to gathering data about who uses the parking and numbers of cars parked, would also gather data about the public's willingness to pay for parking, and if so, at what price points (known as the "elasticity of demand"). Afterward, the project team reviewed updates regarding the Executive Committee composition and the upcoming stakeholder interviews. The meeting was concluded with a brief discussion of updates regarding the benchmarking study introduced at the February meeting.

April 2018 Executive Summary – Benchmarking Analysis Report

Mr. Myres began the meeting by reporting that the update of the Air Transportation Optimization Study delivered to the St. Cloud City Council on March 19th by the project team was well received. Mr. Myres reported that the City Council provided positive feedback from the council members present. Following this, the project team provided a task and project update to the committee, noting that nine stakeholder meetings were completed in March, and that by the end of April only two RASAC stakeholders would be left to be interviewed. In addition, the project team noted that Mr. Bill Towle, the Airport Director, had provided background and historical data of STC operations, including air service info for the air service development analysis. Subsequently, the project team then provided an overview of the benchmarking analysis results, highlighting key findings for STC. The team indicated that from the original six airports identified, only five responded within the constraints of the project timeframe, one of the alternate airports identified—namely, Ft. Collins/Loveland in Colorado—was contacted to participate.

The final list of participating airports included:

- **Stillwater Regional Airport** (SWO), Stillwater, OK (Similar to STC)
- **Ogden-Hinckley Airport** (OGD), Ogden, UT (Similar to STC)
- **Northern Colorado Regional Airport** (FNL), Fort Collins/Loveland, CO (Similar to STC)
 - (the alternative airport used in place of Hagerstown, MD)
- **Trenton-Mercer Airport** (TTN), Trenton, NJ (Aspirational for STC)
- **Arnold Palmer Regional Airport** (LBE), Latrobe, PA (Aspirational for STC)
- **Appleton International Airport** (ATW), Appleton, WI (Aspirational for STC)

A discussion among participants followed the presentation. The project team noted that the next steps would be to build correlations from the data, and at this point the team purposely did not want to draw any specific or premature conclusions.

May 2018 Executive Summary – Air Service Development Analysis Overview

The project team presented an air service opportunity analysis for the St. Cloud Regional Airport. Key findings included the need to continue to partner with Allegiant Air for air service, as well as exploring Orlando and Las Vegas as potential air service opportunities. In general, the geographic location of the Airport is a significant challenge as a result of its proximity to Minneapolis-St. Paul International Airport (MSP) which is approximately 80 miles by car. From the research, the project team found that there are a total of 17,500 daily passengers originating from MSP, and of that, 1,200 passengers are originating from within the St. Cloud catchment area. The team discussed the history of air service at STC, stating, as a result of failing to generate much “beyond” ORD traffic, United’s ORD-STC service lagged behind peers and United failed to capture any large share of the top O&Ds on ORD-STC. Given this history, legacy growth in air service at STC is a significant challenge. This helps explain why the focus for the best air service develop opportunities should be on ultra-low-cost carriers (ULCCs). In summary, the project team recommended the current ULCC at the Airport, i.e., Allegiant, as the best carrier partner for growth at St. Cloud. The team recommended continuing to develop the current Allegiant relationship as the best path forward. After the conclusion of the ASD discussion, the project team then provided a brief overview on other projects and initiatives of

the study, including the benchmarking study, the economic impact study, and the parking survey.

NOTE: There was no RASAC meeting held in June.

July 2018 Executive Summary – Governance Overview

The primary focus of the July meeting was governance. The project team presented on the topic, identifying the different models, and the intricacies of each. The team noted that Minnesota Chapter 360 of the Aeronautical Statute provides the ability to create an Authority governance or a joint powers board by local municipalities. The current options for STC to change its governance include: a modified City governance, an Authority, a joint powers board, or draft new legislation. The project team noted that changing a governance model is a highly complex process that requires a lot of information and parties working together. The team also stressed that changing the governance model alone does not guarantee success for the Airport.

Questions on the presentation followed. In response to some questions, additional details were provided on having a singularly-focused Airport Authority Board and the benefits. For example, an Authority could be set up to have a Board with minimum qualifications on experience; it can also act faster and more purposely for the benefit of STC. The project team also noted that a major area of potential opportunity for STC to expand is within its marketing efforts, regardless of governance change. The group identified that whatever is done needs to focus on what is best for STC to become financially stable and create positive economic impact for the region.

NOTE: There was no RASAC meeting held in August.

September 2018 Executive Summary – Economic Impact Study & Parking Study Results

The September RASAC meeting included a presentation on the results of both the economic impact study and the parking study. The project team reviewed the studies explaining the process and results. For the economic impact study, 500 passengers were surveyed. The results showed that the three-county economic impact of STC is \$44.2 million. STC also contributes to 289 employees, \$17.1 million in income, and \$2.3 million in state and local taxes. The parking study included surveys from 576 passengers. Respondents were asked a series of questions to understand their use of parking at STC and their willingness to pay for parking. Based on conservative predictions on the willingness to pay percentages, approx. \$70K per year in revenue would be produced for parking if the rate were set at \$5 a day. Alternative estimates included a look at when 70% are willing to park resulting in \$100K in revenue per year. And if 100% of the passengers were willing to pay to use parking, STC could generate approximately \$145K in revenue per year.

Stakeholder Input & Interviews

As an initial task of the study, which was part of the information collection and analysis, the project team met with stakeholders to solicit input on the study and the work at hand. Over the course of the study, the project team conducted a series of interviews and information-gathering discussions with a large variety of stakeholders, including: members of the RASAC advisory committee, City and County executives and staff representatives, Airport staff and Advisory Board members, Airport users and tenants, and community business members, among others. The list included, but was not limited to, the following stakeholders (listed alphabetically):

RASAC Members

- Rollie Anderson, Airport tenant and CEO of Anderson Trucking Service
- Teresa Bohnen, President, St. Cloud Area Chamber of Commerce
- Roger Bonn, Chair of the STC Airport Advisory Board
- Michael Brethorst, City Administrator, City of Melrose in Stearns County
- Tosh Brinkerhoff, CEO, Geringhoff
- Julie Carr, North Region Planner and Zoning Coordinator, MnDOT, Office of Aeronautics
- Tom Hammer, Owner, TJ Farms
- Julie Lunning, Executive Director, St. Cloud Area Convention and Visitors Bureau
- Cathy Mehelich, Economic Development Director, City of St. Cloud
- Kurt Otto, Vice President Operations, Specialty Division, CentraCare Health
- William Towle, Director, St. Cloud Regional Airport
- John Uphoff, Executive Director, Benton Economic Partnership of Benton County
- Dan Weber, Assistant County Administrator, Sherburne County

The Study's Executive Committee

- GSDC – Brian Myres, Executive Committee Chair
- City of St. Cloud – Mayor Dave Kleis
- Stearns County – Mike Williams, County Administrator
- Benton County – Jake Bauerly, Commissioner
- Sherburne County – Lisa Fobbe, Chair, Board of Commissioners

Additional stakeholders

- Jami Bestgen, VP of Sales and Marketing, Rotochopper
- Al Kremers, Director, DeZurik, Inc.
- Larry Logeman, Owner, Executive Express
- Bill Mavencamp, Jr., Owner/President, St. Cloud Aviation (FBO at STC)

The input and feedback about the Airport and usage of it provided a collective picture of the economic value and important impact that the Airport has to the community. However, the project team also saw that there was not a clear understanding among stakeholders of the stresses that regional airports such as STC are under due to changes in the aviation industry. This lack of understanding of the backdrop of constraints on STC, and airports in a similar situation, led to the conducting of a benchmarking study where similar airports were surveyed. A reoccurring theme among stakeholders was the desire for additional commercial air service options as well as that the current non-scheduled service would be fostered and improved. These expectations, which are not necessarily in alignment with the realities that constrain the Airport, also led to an air service development analysis being conducted.

Thus, the project team conducted a wide variety of stakeholder outreach efforts and then undertook multiple analyses to directly respond to the issues and concerns being received from a majority of stakeholders. These analyses also included an operational and financial review of the Airport, as well as a focus on educational opportunities as a potential future revenue stream. These analyses are discussed in depth in separate sections in this report below.

Coordination with Key Stakeholders: City/Mayor and Council, the GSDC, and MnDOT

To keep stakeholders apprised and updated throughout the study process, the project team also conducted ongoing meetings with the Mayor of St. Cloud and his administration, including City Council

members, regarding the study. Coordination included an initial meeting with the Mayor and City Council members at the beginning of the study to introduce them to the project, its overarching purpose and goals, and the various tasks to be undertaken—as well as to solicit input on study activities. As the study continued, the project team kept in close contact with the Mayor and City Administration as to the progress of various aspects and analyses, including the SCSU study on parking policies and pricing.

As the current owner/operator of the Airport, which ultimately has the ability and authority to decide to implement any of the recommendations of the final report, it was important to keep City Administration apprised of the study activities. Moreover, the project team worked closely with the City to obtain financial information regarding the Airport's operations which provided the data to inform some of the recommendations offered herein.

The project team also kept in close communication and coordination with the other primary administrator of the grant, the GSDC. Project team members worked closely with the GSDC members assigned to the study, namely Chair Brian Myres, President Patti Gartland, and Business Development Associate Leslie Dingmann, and conferred with them regularly to solicit input and provide project updates throughout the course of the study.

Educational Opportunities

In conjunction with the GSDC, the project team brought together representatives from several stakeholders—including St. Cloud State University (SCSU), St. Cloud Technical Community College (SCTCC), St. Cloud Regional Airport, and St. Cloud Aviation, among others—to conduct an initial discussion and exploration regarding the viability and opportunities to reestablish a formal program in aviation education in the St. Cloud area. Discussion included changes in the industry since the previous program ended that might warrant a resurrection of a new program (changes such as the current pilot shortage, changes in FAA requirements, and new market opportunities). All parties showed an interest in pursuing the topic and agreed that continued discussion and research was warranted.

The project team and participants discussed the vision for an opportunity for an aviation education program to enhance economic development, noting that SCSU and SCTCC are uniquely positioned to offer a meaningful program, especially working together. It was noted that, while there is a well-known pilot shortage in the industry, pilot training is not the only option for an educational program, as there is also a management and professional succession issue in the industry, as well as a need for additional trained and skilled technical/mechanical workers. Thus, the opportunity for aviation education is threefold:

- Pilot training
- Aviation management
- Technicians and mechanics

The project team noted that airlines are taking initiative to develop their own pipelines for pilots, investing in partnerships with universities and airports to create training programs. An example involving Delta was cited, where the airline recently announced a relationship with University of Minnesota at Mankato to create a workforce development partnership for creating career path opportunities for students (with a goal of creating 8,000 pilots within 10 years).

Part of the meeting's purpose was to discuss the fundamentals of what would be needed: namely, is there enough synergy between players to support a program, are there enough resources to support a

program, and is there a viable market for the program? It was also noted that in order to create a program, it would need a champion to move it into fruition. While outsiders can present the belief that a program could work in the area, it will take local champions to create the momentum to develop and sustain it. The meeting ended with all participants agreeing that discussions should continue and that the opportunity was something that needed to be seriously explored and fully vetted.

SECTION 7. ECONOMIC IMPACT ANALYSIS

Overview

An economic impact study was conducted in order to ascertain an updated and accurate figure for the economic impact that the St. Cloud Regional Airport brings to the local/regional economy. (The previous study was conducted six years ago and many factors of Airport operations, including air service, have changed significantly since that time.) The current study was conducted by project team members from the School of Public Affairs at St. Cloud State University, and the University of Minnesota Extension Center for Community Vitality.

The goal of the study was to estimate the economic contribution of the St. Cloud Regional Airport (STC). The results of the study showed that STC's total economic impact for the core three-county area of Stearns, Benton, and Sherburne is \$44.2 million. STC also contributes 289 employees, \$17.1 million in income, and \$2.3 million in state and local taxes. This overall figure of \$44.2 million is more than twice as much as the estimated total economic impact from the 2012 study.

The results of the current study took place within the context of previous economic impact studies for the Airport and Minnesota airports. Specifically:

- The most recent economic impact study was conducted in 2012 by the Economic Development Research Group (EDRG), finding that STC had a total economic impact of \$21.75 million in the core 3-county and 11-county catchment area. This represented \$4.58 million in direct impact and \$17.16 million in off-airport indirect impact.
- The University of Minnesota conducted a study of the economic impact of small & medium airports in Minnesota in 2011. In this study, the STC impact was not individually extrapolated, but the overall impact of all small and medium MN airports was found to be \$12.2 billion.
- **NOTE:** MNDOT is currently in the process of updating the statewide study and results should be ready in the latter half of 2019.

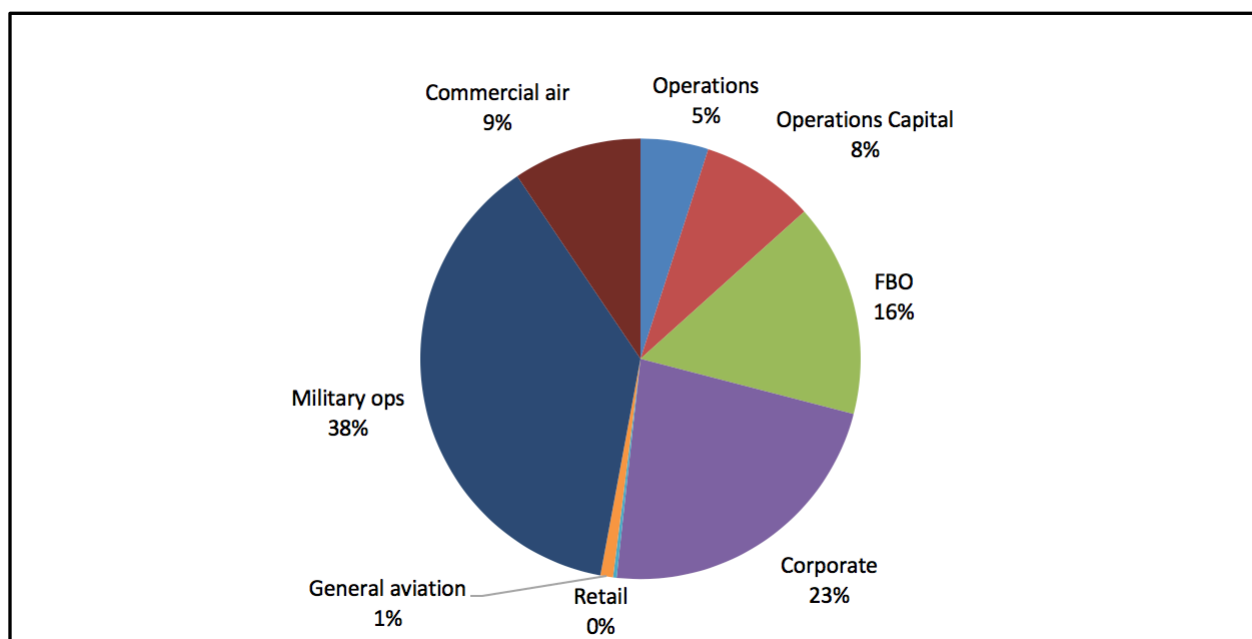
Project team researchers noted that it is a complex undertaking of quantitative calculation to derive the dollar value of the economic impact of the Airport, and that accurate calculation requires a significant amount of data. Some of the data inputs necessary for the current study which were collected included:

- Funds budgeted for maintaining and operating the Airport
- Spending on capital improvements at STC
- FBO operating and capital expenditures information
- Employment information for the Airport, FBO, military operation, retail establishment, TSA, and the commercial air service
- Numbers of aircraft operated and information about the range of activities engaged in by the FBO
- Number of enplanements and passenger load numbers for the commercial air service
- Corporate flight activity/metrics
- General aviation activity/metrics
- Expenditures of the military operation at STC
- Airport hangar activity
- Visitor expenditures

This data was gathered from a variety of sources including the Airport, the City, Airport vendors, and official FAA and MN state databases, among other sources.

In terms of the distribution of economic impact across various categories of STC operations, the study found that the largest sector was the military operations, which made a significant contribution of 38% of the overall economic impact. (It should be noted that the military category represented an area that wasn't looked at as closely in previous studies, and that may account for a large part of the difference between the 2012 study results of \$21.75 million and the 2018 results of \$44.2 million regarding the Airport's overall economic impact.) The results of the current economic impact study also underscore the importance of corporate operations, which was the second largest category at 23%. A chart delineating all categories is below.

Figure 9. Distribution of Economic Impact at STC



It is also important to note that General Aviation is equal to 1% of the overall economic impact for the region. Therefore, in terms of return on investment, it is worth much more to the region for the Airport to focus on and grow corporate operations as opposed to GA activity.

Study Catchment Areas

The study was conducted primarily within a core catchment area encompassing Stearns, Benton, and Sherburne counties. The project team noted that the addition of other counties within the region did not significantly affect the study results.

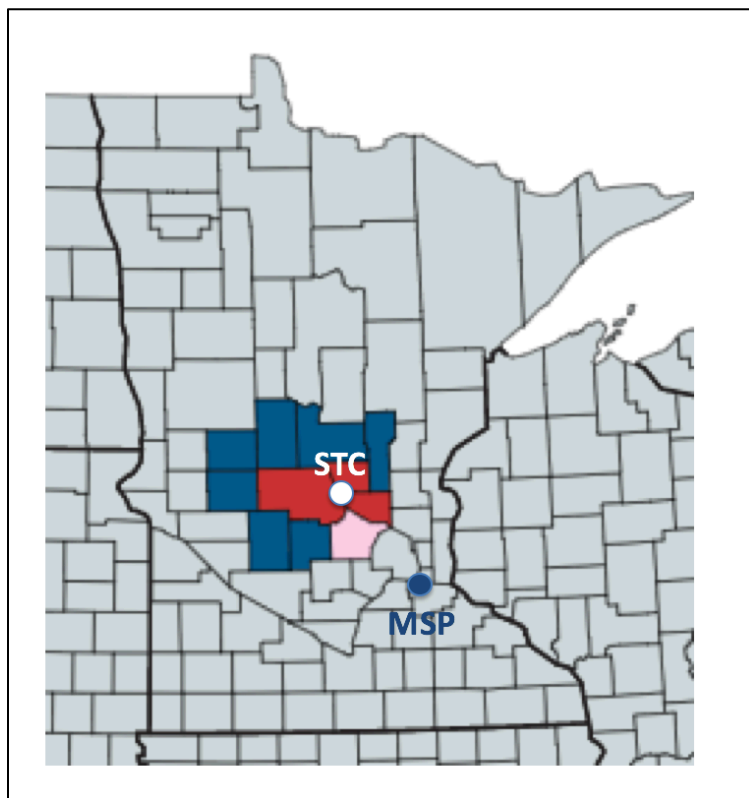
The three separate catchment areas reviewed for the study include:

- **3-County:** Benton, Sherburne, Stearns (i.e., the primary catchment area)
- **4-County:** Benton, Sherburne, Stearns, Wright
- **11-County:** Stearns, Benton, Sherburne, Wright plus Douglas, Kandiyohi, Meeker, Mille Lacs, Morrison, Pope, and Todd

A map of these counties is below.

Figure 10. Study Catchment Areas

- Red = 3-county core
- Pink = 4-county (3-county core plus Wright)
- Dark Blue = remaining counties for 11-county area



The economic impact did not vary significantly between the three different catchment areas (i.e., 3-county, 4-county, and 11-county). Researchers noted that one might imagine that adding counties to the catchment area would add to the economic impact. In contrast to this supposition, the purchase coefficients that go into estimating economic impact vary significantly (which means that when adding additional counties, some of the impact is syphoned out to the Twin Cities and not captured in the core catchment areas). Ultimately, increasing the catchment area did not make a significant quantitative difference in terms of total economic impact, as shown in Table 7 below.

Table 7. Comparison of Economic Impact Between the Three Catchment Areas

	3-County Core Catchment Area (Stearns/Benton/Sherburne)	4-County Area (Stearns/Benton/Sherburne/Wright)	11-County Extended Catchment Area
Output	\$44.2 million	\$43.1 million	\$43.2 million
Employment	289 employees	258 employees	282 employees
Income	\$17.1 million	\$16.7 million	\$16.6 million
State and Local Taxes	\$2.3 million	\$2.3 million	\$2.4 million

To give context to these results, a comparison to the 2012 study was researched. There were several differences between the studies; specifically, the 2012 study did not include the military, was not adjusted for inflation, and did not include property taxes. Table 8 below presents a comparison between the results of the two studies.

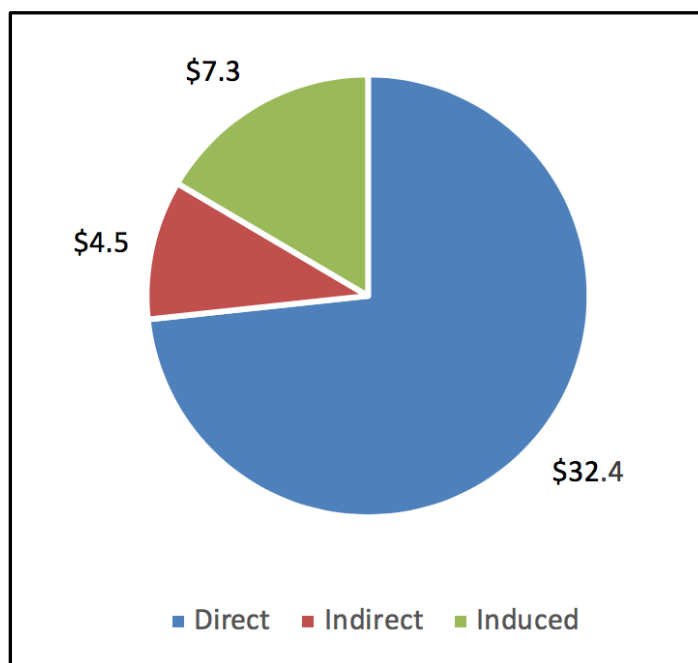
Table 8. Comparison Between 2012 and 2018 Economic Impact Studies

	3-County Core Catchment Area 2012 Study	3-County Core Catchment Area 2018 Study
Output	\$21.75 million	\$44.2 million
Employment	381 employees	289 employees
Income	\$10.11 million	\$17.1 million
State and Local Taxes	\$358,000	\$2.3 million

For the results for the three-county catchment area (i.e., \$44.2 million), the overall impact was calculated from direct, indirect, and induced effects of the total output. The definition of these three categories follows:

- **Direct impact** is equivalent to the **initial activity** in the economy. In this study, it is spending for operations and capital improvements related to the St. Cloud Regional Airport.
- The **indirect impact** is the summation of changes in the local economy that occur due to **spending for inputs** (goods and services) by the business directly impacted. Ripples related to the purchase of goods and services are indirect impacts. In this study, indirect impacts are those associated with spending related to the St. Cloud Regional Airport.
- The **induced impact** is the summation of changes in the local economy that occur due to **spending by labor** (such as purchasing housing, buying groceries, and going out to dinner). Primarily, in this study, the induced impacts are the economic changes related to spending by the St. Cloud Regional Airport's employees.

For the 2018 study for STC, direct impact was \$32.4 million, indirect impact was \$4.5 million, and induced impact was \$7.3 million. See the chart below:

Figure 11. Direct, Indirect, and Induced Effects of STC on Output in 3-County Area

Given that the military was the largest single category, researchers delineated the direct, indirect, and induced effect on the economic impact of the military operations at STC and compared those to the civilian operations. The direct was \$18.8 million for civilian and \$13.6 million for military; the indirect effect was \$4.1 million for civilian and \$340K for military; and the induced effect was \$4.6 million for civilian and \$2.7 million for military. See Table 9 below for details and totals:

Table 9. Impact on Output of Civilian and Military Operations at STC, 3-County Area, 2017

	Direct Effect	Indirect Effect	Induced Effect	Total Impact
Civilian	\$18.8 M	\$4.1 M	\$4.6 M	\$27.5 M
Military	\$13.6 M	\$340,000	\$2.7 M	\$16.6 M
Total	\$32.4 M	\$4.5 M	\$7.3 M	\$44.2 M

Study Methodology

Economic impact studies rely on computations of how outside dollars find their way into the airport study area to influence regional economic activity. An important source of outside dollars are visitors who use the commercial air service operated by Allegiant Airlines¹ at the St. Cloud Regional Airport. To estimate visitors' expenditures, a survey of STC airline passengers was administered over the period May 30 – August 11, 2018. In total, passengers on 20 outbound Allegiant flights at STC were surveyed over this period.²

Given that passengers commonly travel in groups at STC (the average number of people to whom each visitor's expenditures estimate applied was 2.4 people), the survey was administered to only one member of each group. A total of 500 visitor's surveys were completed over the survey period. **NOTE:** Another 576 parking surveys were also collected. The total 1,076 surveys collected represents a valid sample at the 95 percent confidence level with a margin of error of +/- 2.82%.

Survey Results

As noted, researchers surveyed 500 passengers within the air-side section of the terminal, past security, to ensure they were flying passengers. Survey participants were first asked if they were residents of Minnesota or visitors. This helped determine whether specific passengers would receive the economic survey or the parking survey, i.e., those from MN receiving parking surveys. Researchers noted that many of the survey respondents were MN "transplants" who had lived in the state in the past. The survey results reflected that many of these travelers stayed with family or friends and spent very little money on lodging. Expenditures per visitor group (with an average of 2.4 people) was \$541, or calculated per person, \$225 per visit. The market is primarily for leisure travel, with less than 3% of respondents identifying as business travelers.

Table 10 below summarizes the data obtained from the surveys.

¹ During the survey period, the only outbound flights with visitors were Allegiant flights to Mesa, AZ. These flights also included Minnesota residents who were flying to Arizona. Minnesota residents were not offered a visitor's survey.

² Two additional flights that were surveyed were Sun Country charter flights to Laughlin, NV. Passengers on the Sun Country flights were virtually all from Minnesota, so no visitor's surveys were collected on these outbound flights.

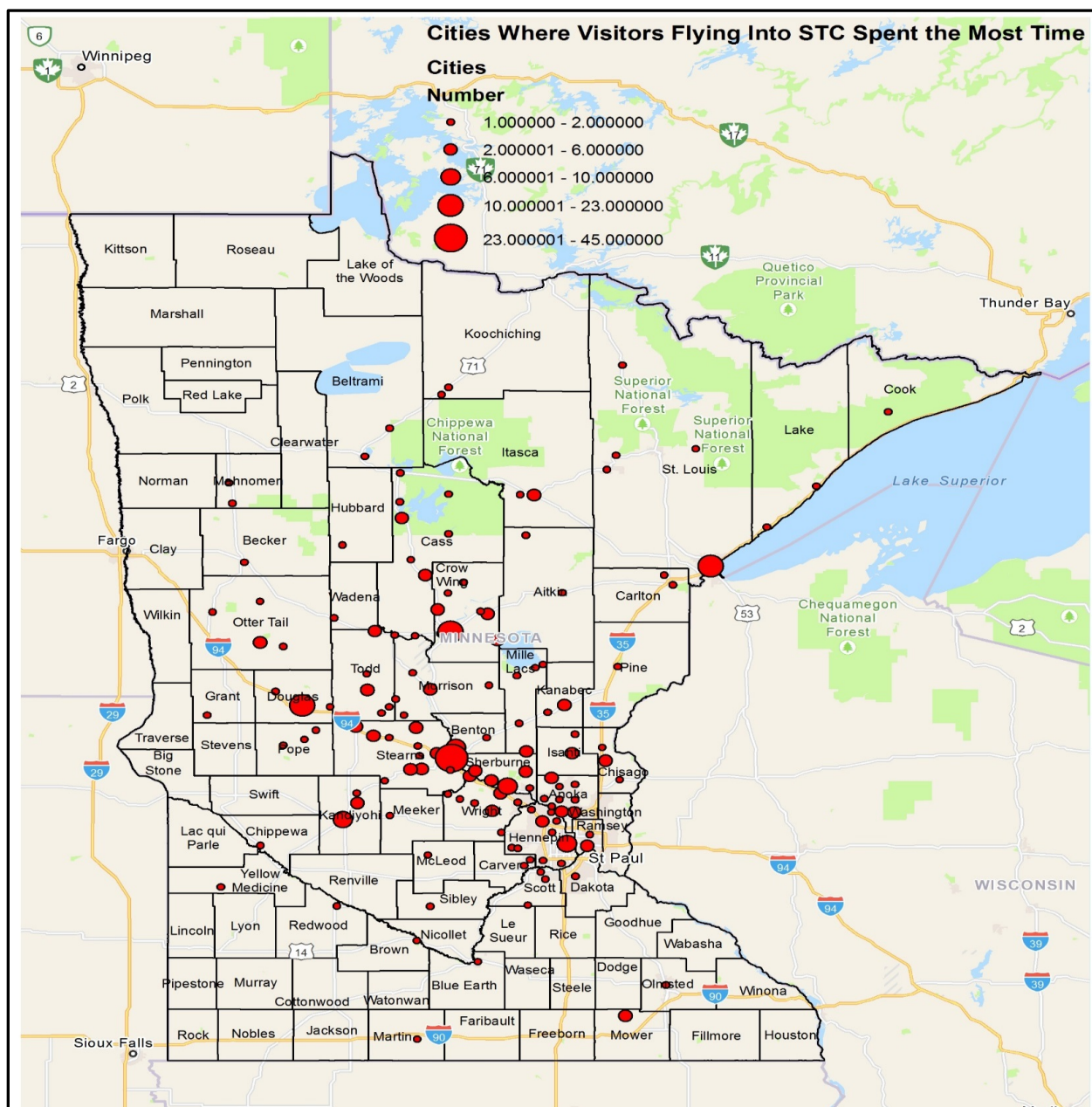
Table 10. Data Results from Airport Survey

Economic Impact Study – Results from Visitor’s Survey	
Total number of visitor surveys collected	500
Percentage of visitors who have previously flown on the Allegiant service to STC	63.6%
Percentage of visitors who regularly fly the Allegiant service to STC	44.2%
Average number of trips per year on Allegiant service to STC (for those who regularly use service)	2.27
Percent of visitors who stayed overnight in St. Cloud area (within 75 miles)	68.8%
Total expenditures in St. Cloud per surveyed visitor group	\$541
Average number of people included in each spending estimate of surveyed visitor group	2.4
Average spending by each person per visit: dining out	\$57
Average spending by each person per visit: groceries	\$27
Average spending by each person per visit: lodging	\$30
Average spending by each person per visit: shopping	\$41
Average spending by each person per visit: entertainment	\$21
Average spending by each person per visit: transportation	\$41
Average spending by each person per visit: other	\$8
Average total spending per person per visit	\$225
Average number of nights spent in St. Cloud area by each visitor	5.08
Average spending by each visitor, per day	\$44.31
Percentage of visitors who were flying for business	2.8%
Percentage of visitors who were flying for pleasure	87.6%
Percentage of visitors who were flying for other	9.2%
Percentage of visitors with primary reason for trip to visit family and/or friends	87.6%

The project team also plotted passenger distribution maps showing where passengers were travelling from and their eventual destinations. A large portion of respondents were traveling from the Brainerd Lakes and Duluth areas. (**NOTE:** Allegiant was formerly located in Duluth.)

See map below (Figure 12) of where travelers flying into STC spent the most time during their stay.

Figure 12. Data Results from Airport Survey



Study Conclusions

A summary of the results and conclusions of the economic impact survey and analysis include:

- The economic impact of St. Cloud Regional Airport on the output of the core catchment area of Stearns, Benton, and Sherburne counties was **\$44.2 million** in 2017.
- STC is responsible for the direct, indirect, and induced **employment of 289 people** in the three-county core catchment area.
- Incomes in the three-county area are **\$17.1 million higher** because of the presence of STC.

- An estimated **\$2.3 million in state and local taxes** are collected in the three-county area as a result of the economic activity generated at STC.
- The **military operation** of the St. Cloud Army Aviation Support Facility contributes **38%** of the economic impact on output of STC on the three-county core catchment area. The military operation also accounts for an estimated 47% of the direct, indirect, and induced income at STC.
- There is **relatively little difference** in the estimated impact of STC among the 3-county core catchment area, the 4-county study area (with Wright County included), and the 11-county extended catchment area.
- A visitor's survey of Allegiant Airlines passengers suggests **31%** of visitors who fly into STC do **not** spend a night in the St. Cloud area. Moreover, 69% of those who fly into STC spend at least one night within 75 miles of St. Cloud.
- The survey of STC visitors also shows passengers' willingness to travel to the Mesa Airport from **fairly long distances** to take the direct Allegiant flight to STC.
- 44% of Allegiant visitors to STC regularly fly the service.
- Average total spending in the St. Cloud area by each individual visitor is **\$225 per visit**.
- Only 3% of visitors on Allegiant fly for business, **88%** fly for **pleasure/leisure**.
- 88% of visitors indicate the primary reason they fly to STC is to visit family and/or friends.

Other Take-Aways and Recommendations

- This survey was conducted over the period of May 30 – August 11, 2018. Ideally, the survey would be year-long. The project team recommends that STC conduct an economic study again in five years and that it would ideally encompass a year-long time span in order to capture the seasonal flow of flights and passenger traffic.
- As policymakers and public officials consider future options for the St. Cloud Regional Airport, it is worth noting the considerable economic impact of the military operation at STC, as well as the relatively long distances that passengers are willing to travel upon landing at the Airport.
- The importance of STC in meeting Arizona residents' demand for pleasure travel to visit family and/or friends may create marketing opportunities for the Airport.
- The data also suggests other geographic areas in which former Minnesota residents have retired may be popular future destinations for commercial air service offered in St. Cloud.

Strategic goal: Given corporate activity represents 23% of all economic impact and General Aviation activity represents 1%, it is important to focus on and grow corporate operations.

NOTE: Appendix B. contains the full and final report of the economic impact study.

SECTION 8. PARKING POLICY AND PRICING ANALYSIS

Overview

As a key part of the planning study, the project team conducted a parking policy and pricing analysis to, among other things, measure commercial airline passengers' willingness to pay for parking at STC and to determine an optimal price point. In general, parking revenue is one of the top non-aeronautical revenue streams for airports. The parking study is summarized below.

The goals of the parking study were to:

1. Determine consumer responses to instituting a parking fee at STC (where currently parking is free)
2. Determine the optimal daily parking fee at STC (if a parking fee were to be charged)
3. Forecast annual parking revenue at STC under a range of assumptions
4. Determine passenger parking preferences at STC
5. Compare STC to other airports
6. Profile STC passengers from Minnesota (for demographic characteristics and spending patterns)

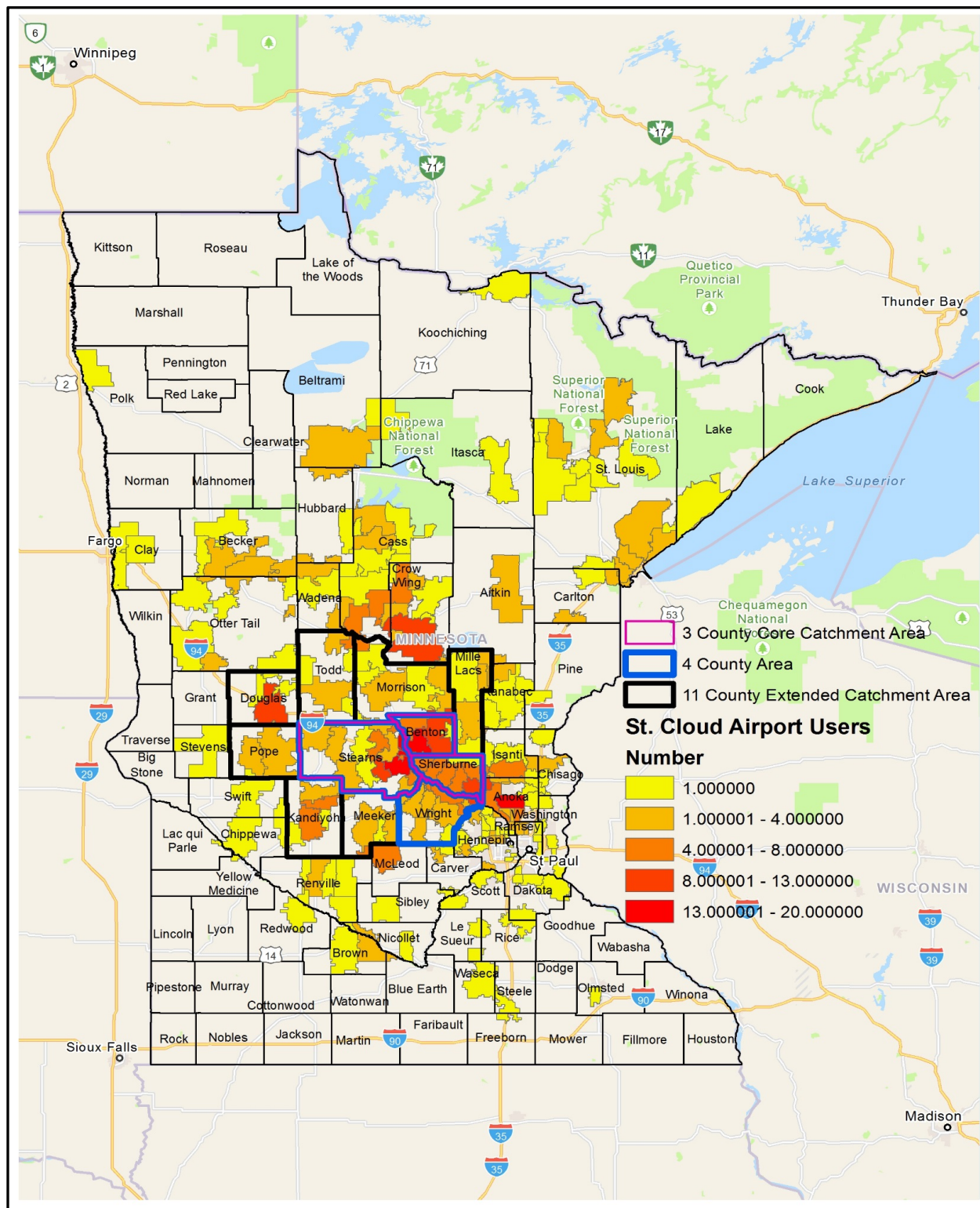
The parking study included surveys from 576 passengers. Passengers from a total of 22 outbound flights were surveyed from May to August of 2018. Twenty of these flights were Allegiant and two were Sun Country.

Two primary questions of the analysis included:

1. Regarding the first question of whether the passenger parked at the airport for this trip, 428 of the 576 passengers (75%) parked at the airport. Almost all (94%) of the remaining 25% of respondents who parked elsewhere received rides from family or friends and were dropped off at the airport.
2. Regarding the question, where did you travel from, 40% of respondents were from Stearns, Benton, Sherburne, or Wright counties. It should be noted that this study may help redefine STC's catchment area, having it extend well beyond the core three counties. Less than 10% of respondents identified as living within St. Cloud city limits.

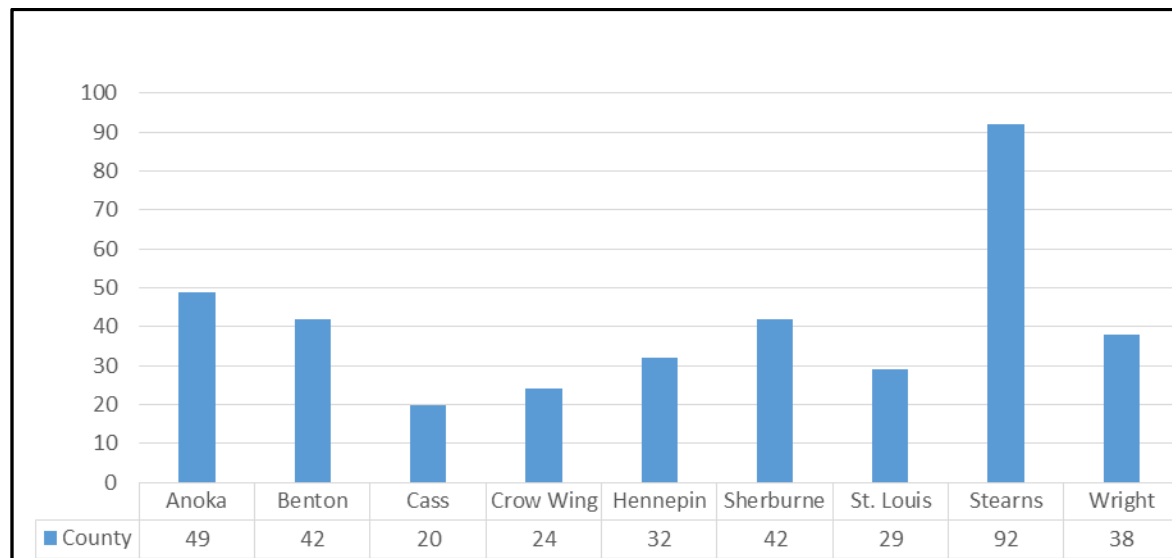
See map below (Figure 13) of the geographic distribution of survey respondents.

Figure 13. Distribution of Minnesota Residents who use STC



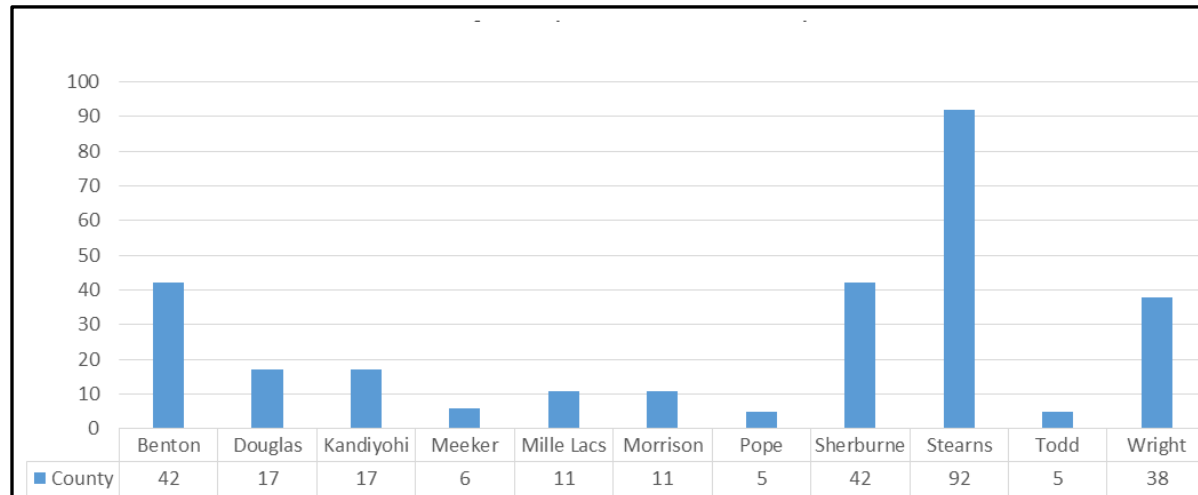
The counties with the most passengers are listed in the chart below (in alphabetical order). As shown, 214 of the 530 (about 40 percent) Minnesota residents who completed the parking survey are from Stearns, Benton, Sherburne, or Wright counties. But of the remaining most popular counties, few are from the other seven counties in the 11-county catchment area (i.e., Douglas, Kandiyohi, Meeker, Mille Lacs, Morrison, Pope, and Todd).

Figure 14. Most Popular Minnesota Counties of Residence for STC Passengers



A chart with the passenger numbers from the 11-county catchment area appears below. As noted, few STC passengers come from several of these counties. Only 13.6 percent of Minnesota passengers come from counties in the catchment area other than Stearns, Benton, Sherburne, and Wright.

Figure 15. STC Passengers from the 11-County Catchment Area



Passengers noted that they like the ease of travel out of STC, and they like the destination options; they also reported that STC is a friendly airport to travel through. Overall, they appreciate the service at STC.

STC's parking options include 287 paved parking spaces in the main lot, 40 paved parking spaces in an auxiliary lot, and an additional 239 spaces in a spillover area (currently this area is not paved, although it would need to be paved if parking fees were charged for this area). The parking areas are frequently at or near capacity many times throughout the year. The photo below reflects filled-to-capacity parking lots at STC on March 23, 2018.

Figure 16. STC Parking Lots March 23, 2018 (at capacity: 555 cars)



The project team noted that the scenario depicted in the photo above is not a one-time event. Capacity parking is most likely to happen when Allegiant has two flight departures and a Sun Country flight is also scheduled. One conclusion is that if STC transitioned to a paid parking structure, STC would have to pave the ground and gravel areas in order to justify charging for those areas. Survey respondents indicated that one impact of charging for parking would be that some people would no longer choose to park at STC. Thus, if some travelers find other means to the airport to avoid a fee, then charging a price creates some efficiencies and frees up much-needed parking spaces.

Regarding survey respondents' willingness to pay for parking, the team found that a calculation for the price elasticity of demand indicated that \$5.00 per day was the ideal price point for the willingness to pay questions. However, the project team believes this is a conservative estimate as some respondents

may have skewed their answers (i.e., claiming a desire not to pay for parking, but who may actually pay for parking rather than lose the convenience of self-driving). Also, this estimate may be conservative because not all price options were on the table. (That is, the survey asked about parking fees in increments of \$2, i.e., \$5 and \$7, and not \$6.) If demand exceeded available spaces with a parking fee policy, then the full parking lot scenario would continue to happen.

Additionally, it should be noted that those who travel two hours to STC don't have many choices in parking. Furthermore, the willingness to pay is relatively flat between \$4.00 - \$7.00. The project team recommends that STC consider correlating average lengths of stay and consider daily, weekly, and monthly rates.

Estimated Revenues

Based on conservative willingness-to-pay percentages (approximately 53%), charging \$5 per day for parking would produce approximately \$70K in annual revenue. If 70% were willing to pay to park, annual revenue would increase to approximately \$101K. In the case that 100% of passengers who currently park at the Airport were willing to pay to use parking, STC could generate approximately \$145K annually. Table 11 below shows the range of projected income based on percentages of current customers who park for free who would be willing to pay for parking.

Table 11. Annual Parking Revenue Projection for STC—Estimates from Alternative Willingness to Pay Percentages

Combined Projected Annual Parking Revenue: Estimates from Alternative Willingness to Pay Percentages	
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using 2017 enplanements (Willingness to Pay Percentage, Allegiant--52.5%; Sun Country—54%)	\$60,602
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--52.5%; Sun Country—54%)	\$69,205
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--70%; Sun Country—70%)	\$101,390
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--80%; Sun Country—80%)	\$115,770
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--90%; Sun Country—90%)	\$130,425
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--100%; Sun Country—100%)	\$144,855

Parking Revenue at Peer Airports: Comparative Analysis

The project team also conducted a comparative analysis of parking pricing at peer airports.

The project team researched parking data from a number of different comparison airports. Some of these comparison airports were identified in the initial months of the Airport study, others were selected because their communities have similar economic structure to the St. Cloud metropolitan area, others have similar size operations as STC, and others are of natural regional interest.

Table 12 below shows parking information for all Minnesota airports that have commercial air service. In all cases, the number of annual enplanements (for the year ending May 2018) is included in the table, to provide a scale of the airport compared to STC. The St. Cloud Regional Airport had approximately 20,000 enplanements over the year ending May 2018. This makes STC one of the airports in the comparison with the lowest commercial air activity.

Table 12. A Comparison of Parking Data for Commercial Minnesota Airports

Airport	Short-term Parking Fees	Long-term Parking Fees	Weekly Parking Fees	Annual Parking Revenue for 2017	Total Enplanements (Year ending May 2018)
Bemidji, MN	FREE	FREE	FREE		29,000
Brainerd, MN	FREE	FREE	FREE		21,000
Duluth, MN	\$3 for first hour, etc.	\$13/day	\$78/week	\$1,171,852	122,000
International Falls, MN	FREE	FREE	FREE		15,000
Hibbing, MN	FREE	FREE	FREE		15,000
Minneapolis-St. Paul, MN	\$3/hour/\$34 daily max	\$24/day (ePark); \$26/day (regular); \$15/day (value)		\$110,105,636	16,829,000
Rochester, MN	0-15 minutes FREE; 16-30 minutes--\$1; each additional half hour--\$1; \$9 daily max	\$9/day	\$54/week	\$641,756	165,000
St. Cloud, MN	FREE	FREE	FREE		20,000
Thief River Falls, MN	FREE	FREE	FREE		5,183

Many of the airports researched that operate on a similar scale of annual enplanements do not charge for parking. However, the airports to which STC might be said to aspire (including Appleton, Plattsburgh, and Trenton) all have paid parking. The annual parking revenue from these operations is considerable. For example, the annual parking revenues in Appleton, WI totaled \$2.4 million; revenues in Plattsburgh, NY were approximately \$1.6 million; and revenue in Trenton, NJ revenues totaled \$2.8 million.

Table 13. A Comparison of Parking Data from Similar Size Airports that Charge for Parking

Airport	Short-term Parking Fees	Long-term Parking Fees	Weekly Parking Fees	Annual Parking Revenue	Total Enplanements (Year ending May 2018)
Barnstable Municipal Airport, MA	First 30 minutes free; \$3 first hour, \$1 each additional hour; \$9 daily max	\$9/day; Overflow lot (when main lot is full), \$6/day	\$50/week	\$116,221 (2016)	20,000
Eau Claire, WI	Up to 2 hours FREE; \$5/day	\$5/day		\$159,864 (2017)	20,000
Muskegon, MI	First 30 minutes free; \$1/hr; \$10/day	\$7/day		\$89,047 (2017)	15,000
Owensboro, KY	Drop Off/Pick Up FREE; \$6.50/day	\$6.50/day		\$111,909 (2017)	19,000
Paducah, KY	\$7/day	Days 1-7, \$7/day; Days 8-14, \$4/day; Days 15-21, \$2/day; Days 22+, \$1/day		\$177,953 (2017)	20,000
Rhineland, WI	\$6/day	\$6/day		\$129,090 (2017)	24,000
St. Cloud, MN	FREE	FREE	FREE		20,000
Waterloo, IA	First three hours free, then \$1/hr. up to daily max of \$6	\$6/day		\$120,967 (2017)	23,000

Take-Aways and Recommendations

Charging for parking is a key recommendation of the optimization study. With a conservative estimate of approximately \$150,000 per year in revenues, this revenue would make a significant dent in reducing the deficit. The project team also believes that over time, the parking income would be greater than \$150K. As noted above, the willingness to pay may be higher given that most travelers do not come from the immediate area. Also, as operations increase with more frequent flights or new destinations, the volume of parking travelers will increase with the overall increase in volume of passengers.

NOTE: Appendix C. contains the full and final report of the parking policy and pricing analysis.

SECTION 9. AIR SERVICE DEVELOPMENT ANALYSIS

Overview

The potential for commercial air service growth at St. Cloud Regional Airport (STC) is significantly challenged by two primary factors: 1) geography (i.e., proximity to MSP) and 2) industry dynamics (including consolidation and the diminishing scope of regional airlines across the country). STC's best opportunities lie with the expansion of Ultra Low-Cost Carriers (ULCCs), point-to-point service to leisure destinations. It is important to recognize that the reestablishment of network carrier service to a regional hub is unlikely in the foreseeable future given prevailing market conditions.

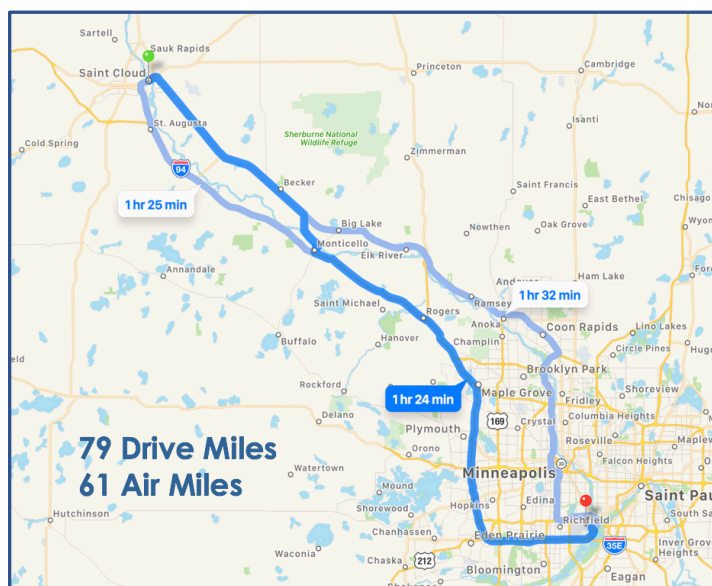
Key Findings: Key findings included the need to continue to partner with ULCCs for air service, particularly with the carrier currently at the Airport, i.e., Allegiant Air. It is important to maintain and develop the relationship with Allegiant, as well as explore Orlando and Las Vegas as potential air service opportunities. The focus for the best air service development opportunities should be almost exclusively on ULCCs such as Allegiant, Frontier, and Spirit. Growth for regional markets such as STC is centered around carriers flying to leisure destinations with low fares.

Challenge #1: Geography

St. Cloud Regional Airport's geography is fundamental to its air service story. STC is located 79 miles from Delta's Minneapolis/St. Paul (MSP) fortress hub. The drive time is just under 90 minutes. Delta is Minnesota's dominant carrier by a large margin. The carrier has a tight grip on business travel due to its frequent schedules to all top business markets from MSP.

Proximity to a major network carrier hub airport is problematic for any small community. STC is no exception. In most cases, carriers are unable to generate enough of a fare premium for passengers connecting on these short hops to justify the operation of the flight. As a result, Delta's network philosophy is that the interstate highway network is its feeder system for nearby markets such as STC. **(NOTE: exceptions to this occur in high population markets and in particular competitive situations.)**

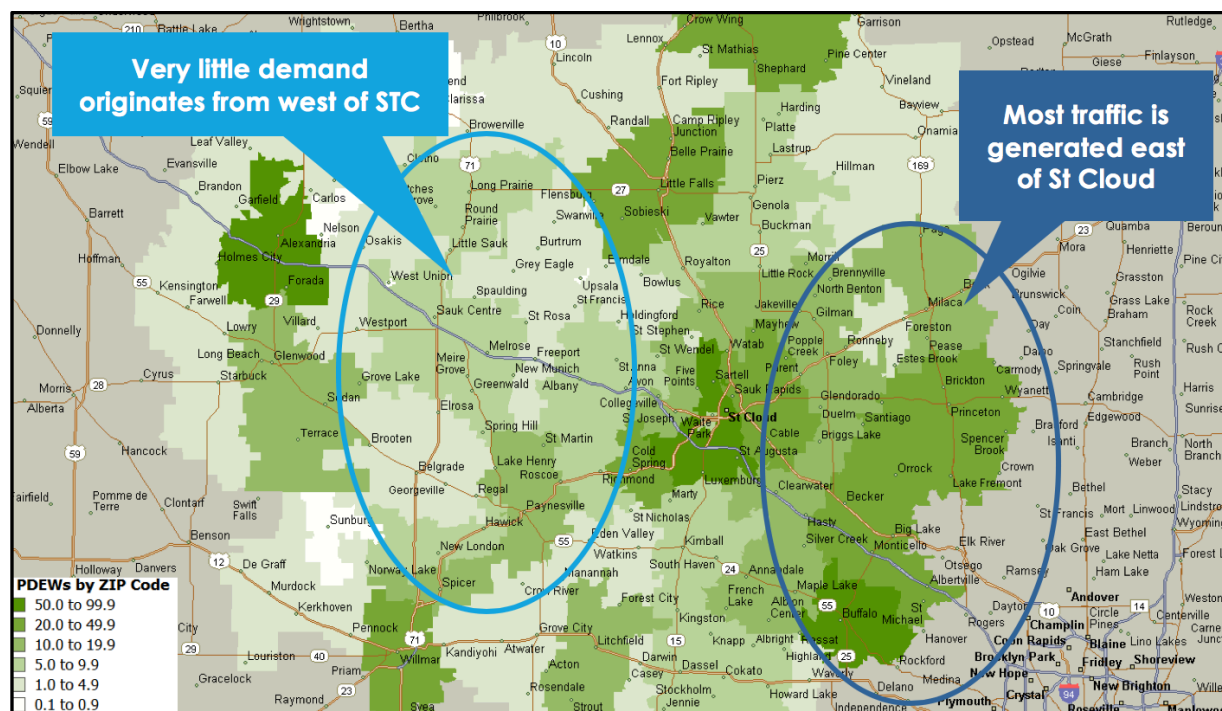
Figure 17. Geographic Challenge of Being in the Shadow of a Large Hub



Because Delta dominates Minnesota business travel, competitors are extremely challenged in the state. STC saw the impact of this on the United service to Chicago O'Hare (ORD). Customers gravitated to United for their Chicago travel; however, they continued to drive to MSP for other destinations due to convenience, price, and loyalty reasons. For the customer, the question came down to "Fly regional jet to ORD and connect to New York City or choose from 29 daily nonstops from MSP per day?" This dynamic ultimately threatens all potential hub-and-spoke markets from STC. Airlines are acutely aware of this dynamic and are unlikely to even consider such an opportunity without some significant long-term financial incentives from the community.

A comprehensive catchment analysis conducted using Airlines Reporting Corporation (ARC) Market Locator data shows that the STC primary catchment area offers strong air travel demographics. However, a significant portion of the MSP bookings—about 48% of the demand—are occurring to the southeast of St. Cloud. Very few bookings are occurring to the west of St. Cloud. According to recent industry and Department of Transportation figures, there are 17,500 daily passengers originating from MSP. Of these, 1,200 are originating from the St. Cloud catchment area. Moreover, 600 of the 1,200 St. Cloud catchment area trips originate from the southeast quadrant of the catchment area which is located closest to MSP. In order for STC to retain bookings from the southeast quadrant, passengers would need a compelling incentive, which presents a challenge. In the final analysis, network carrier demand generated in this region is unlikely to be recaptured from MSP due to its relative proximity to that airport.

Figure 18. Challenge of Catchment Area and STC Geographic Location Near MSP (ASD PPT Slide 12)



Source: MapPoint, Mead and Hunt Catchment STC Territory with Current Bookings

A significant share of catchment bookings are to the southeast of St. Cloud, favoring MSP drive diversion. Bookings were adjusted using DOT and O&D (airport origin and destination) data to devise a

map measuring originating traffic by zip code. In the map above, the more intense the shade of green, the higher the levels of originating daily traffic.

Challenge #2: Industry Dynamics

The U.S. airline industry has changed dramatically since de-regulation in the late 1970s. Three primary dynamics impact the potential for STC network carrier flying:

- **Consolidation.** Four major airlines (i.e., American, Delta, United, and Southwest), now control over 80% of the domestic seat share. There are simply fewer competitors in the marketplace, meaning fewer business models that could be a match for STC. Specifically, aircraft with 50 seats or fewer are not flown frequently, and airlines are phasing these aircraft out. Overall, the scope of regional airlines is diminishing across the country. Airlines are not using regional affiliates as much, and trends show that this lack of use will continue to diminish. By 2023, it is forecasted that less than 5% of Delta's capacity will be flown by regional affiliates. This trend puts more pressure on regional airport markets.
- **Pilot Shortage.** The aviation industry is in the midst of a major pilot shortage that is expected to last for decades. The net impact is that airlines will continue to up-gauge their fleets with larger aircraft. The corresponding reduction in small airplanes severely impacts the possibility of STC obtaining new network carrier service.
- **Fuel Prices.** Recent years have shown significant fluctuations in the price of jet fuel. High fuel prices disproportionately impact the flying costs of small aircraft. As a result, the size of the 50-seat and smaller regional jet fleet in the U.S. has shrunk by nearly 60% over the past decade. This impacts STC directly, as the 50-seat platform is likely the appropriate size aircraft for the demand portfolio.

While these dynamics, and others, negatively impact the potential for network carrier service at STC, there is one dynamic that offers some hope for STC. The emergence of the Ultra Low-Cost Carrier (ULCC) model on point-to-point leisure markets is a development the airport already enjoys. Given this, Allegiant's service to Phoenix-Mesa, AZ (AZA) and Punta Gorda, FL (PGD) is the most likely potential growth model for the airport.

Air Service Opportunities: The ULCC Point-to-Point Model and STC

In 2014, United initiated service to Chicago that proved unsuccessful for a variety of reasons. However, the use of that service by STC passengers and the success of the current Allegiant and Sun Country service show that local traffic will use the STC airport for nonstop flights to their final destination. However, the United service was clearly unsuccessful for the carrier. And United's Chicago hub is strategically the best possible hub for STC to be connected to, due to size and location. Other hubs are likely to perform even worse.

Allegiant's service has proven more successful in the tight parameters within which the carrier operates. Seasonal service to popular leisure destinations, such as Arizona and Southwest Florida, can be successful when operated by a carrier like Allegiant. Its model offers extremely low fares which stimulate demand and often draw from a wider region. Regional airports in the competitive shadows of a larger hub airport typically perform better when they offer unique destinations. In this case, the Phoenix-Mesa Gateway Airport (AZA) in Arizona and the Punta Gorda Airport (PGD) in Florida are served from STC, but not MSP.

Growth into other potential ULCC markets will more likely face direct competition with MSP and therefore reduce the likelihood of success. But some large markets, most likely to Orlando-Sanford (SFB) or Las Vegas (LAS), could potentially succeed from STC as well.

Due to market size and competitive strategy, it is unlikely any other ULCC or LCC would serve STC absent significant financial incentives. (Additionally, the lack of ESA funding is another obstacle for STC in offering up incentives to attract other ULCCs.) Moreover, any such effort would likely result in the withdrawal of Allegiant from the market. Thus, it is important to focus on, maintain, and expand the current ULCC relationship with Allegiant as a primary focus, and likewise for the existing relationship with Sun Country.

Summary

The St. Cloud market has good demographics to support air travel. However, the close proximity of the catchment area to MSP is a near fatal flaw in terms of Air Service Development in the current industry environment. Network carrier hub-and-spoke flying failed dramatically at STC in 2014 with service to Chicago on United. It is very unlikely that any other network carrier will consider adding STC in the future, absent some substantial risk-abatement effort by the community.

Allegiant is now the only carrier serving STC and will likely be the only carrier serving the airport into the foreseeable future.

The goal of improved air service to *viable* markets can be achieved with minimal investment from the Airport and community. Developing new service to markets such as Orlando-Sanford (SFB) and Las Vegas (LAS) will not require significant incentives in terms of cash outlays. Expansions to these destinations will, however, require a healthy staff relationship between the Airport and airline. It will also likely require some limited amount of engagement with an Air Service Development consultant to assist with analytical and relationship support for the carrier.

ASD Strategy and Recommendations

STC can achieve its most obtainable air service goals with limited resources allocated. As the ULCC incumbent, Allegiant is the top priority—and also the lease resource intensive for future service expansion. Below is the recommended ASD strategy, which is simple, limited, and inexpensive:

1. Allegiant is the top priority

- Focus on the existing relationship with Allegiant, including
 - Maintaining relationship with Allegiant staff
 - Attending the annual Allegiant air service conference
- Engage an ASD consultant on a limited basis to assist with conversations with Allegiant and analysis to increase frequency of current routes or expand into additional destinations

2. Other Carriers present a limited, secondary emphasis

- Maintain relationships with staff at other carriers
- Consider attending the JumpStart ASD conference, but maintaining a focus on ULCCs
- Engage an ASD consultant on a very limited basis for industry intelligence and to assist with communication with potential carriers

3. Increase Local Demand for Air Service

The most effective way to attract additional routes, destinations, or carriers is to increase the local demand for air service and competitive fare levels. By doing so, STC makes it more attractive for airlines to add service and flights.

4. Increase Awareness of the Airport and its Air Service

Additionally, there are numerous ways to organically market the Airport at a low cost (i.e., public relations, press releases, social media, radio ads, etc.). Overall, it is very important to raise consumer awareness of the existence of the Airport and its current flights. This is especially important as ULCCs are not included in flight/booking aggregation sites that many consumers use to compare prices and book flights (e.g., Travelocity, Expedia, etc.). Instead, consumers must go directly to an ULCCs website to research flights and fares.

Conclusion

Industry data suggests that there are some untapped opportunities for St. Cloud Regional Airport. Particularly since St. Cloud has a good population base and a high level of household income to support nonstop service.

United's short history showed that travelers in the STC area would use the service for nonstop travel to Chicago. However, passengers needing connections preferred nonstops from MSP rather than a connecting option from STC to ORD.

The Punta Gorda, FL service from STC is too new and not enough data exists to determine financial success. However, the Mesa, AZ service appears to be a fairly decent performer for Allegiant especially in the first quarter of the year. The goal would be to increase air service with Allegiant, striving for more frequent flights to current destinations as well as advocacy for new destinations. Regarding new destinations, Orlando-Sanford and Las Vegas appear to be the next best opportunities for STC. Both markets are large and are doing well relative to "fair share" versus the entire MSP catchment area.

Achievable air service goals can be reached with limited resources.

Overall, STC market-based opportunities lie with expanding the low-fare, point-to-point services offered by Allegiant. Network carrier connectivity is extremely challenged and should be deemphasized, as the reality of commercial service growth at STC is significantly challenged by geography and industry dynamics.

Other Take-Aways & Recommendations

- A second avenue for additional service is to pursue the current charter airline, i.e., Sun Country, for more frequent flights to the current destination or expanding into additional destinations; and also pursuing other similar charter services, for example Porter Airlines from Canada, etc.
- The nearest possibility of additional air service, which must be acknowledged as an extreme longshot, is to solicit a Boutique Air. Boutique Air is a commuter airline based in San Francisco, California which offers charter services as well as scheduled passenger services subsidized under the Essential Air Service program.

NOTE: Appendix D. contains the full PPT presentation slide-deck supporting the ASD analysis.

SECTION 10. Benchmarking Comparative Analysis

Introduction

St. Cloud Regional Airport is poised for growth and seeks to optimize future use of the Airport. To determine a feasible and reasonable approach to deciding how to optimize its operations, the project team conducted a comparative benchmarking study as part of its organizational assessment. The study goals were to:

- View STC from a fresh, external perspective
- Identify strengths, weaknesses, opportunities, and threats (informal SWOT analysis)
- Develop possible objectives for implementation
- Provide comparative data to help analyze how to best optimize STC
- Provide checks and balances for how local policies measure up to national standards

The benchmarking study considered the financial aspects of airport operations, the fixed based operators (FBOs), organizational structure, business and general aviation activity, air service development, marketing, economic impacts, and additional aviation services provided at the comparison airports.

To select the benchmark airports, the project team used the following initial screening criteria, which were presented to the Regional Air Service Advisory Committee for input:

- Metropolitan Statistical Area (MSA) population
- Air service: routes, enplanements, distance to hub airport
- Based aircraft: jets, multi-engine aircraft
- Primary runway length
- FBO(s)
- Educational institution(s)
- Other: military operations, air cargo, economic status

The initial screening results yielded 21 airports, which was too broad a sample for the most effective analysis. To reduce the field of comparison airports to a more appropriate number, the project team filtered the results to include airports providing similar air service as STC and which were close to a large hub. In addition, filtered results were cross-referenced to benchmark airports with cities previously studied by the Greater St. Cloud Development Corporation (GDSC). From the original six airports identified, only five responded within the constraints of the project timeframe, so the project team contacted one of the alternate airports identified—namely, Ft. Collins/Loveland in Colorado. This narrowed the field of comparison airports to three airports similar to STC, and three airports that have business practices to which STC may aspire, as follows:

- **Stillwater Regional Airport** (SWO), Stillwater, OK (Similar)
- **Ogden-Hinckley Airport** (OGD), Ogden, UT (Similar)
- **Northern Colorado Regional Airport** (FNL), Fort Collins/Loveland, CO (Similar)
 - (NOTE: this was the alternative airport used in place of Hagerstown, MD)
- **Trenton-Mercer Airport** (TTN), Trenton, NJ (Aspirational)
- **Arnold Palmer Regional Airport** (LBE), Latrobe, PA (Aspirational)
- **Appleton International Airport** (ATW), Appleton, WI (Aspirational)

After contacting and interviewing the participating airports and reviewing documentation they supplied, the team identified several common themes and trends:

- Every airport had found its own niche to focus on and excel at—some examples included growing business/corporate aviation, partnering with Ultra Low-Cost Carriers, and managing FBOs.
- Financial subsidy/surplus varies by airport—governance didn’t appear to have an effect on financials. Half of the airports required a subsidy and half generated a surplus.
- Most airports charged for parking—two of the six did not, one because of grant obligations requiring them not to, and the other because it had only recently established air service.
- There were a wide variety of governance models.
- Most airports understood the importance of their economic impact, although several had not conducted recent studies. Airports similar to St. Cloud had economic impacts in the range of \$70M – \$129M. Economic impacts of aspirational airports ranged from \$100M – \$670M.
- Marketing commitment and resources varied widely, with the range from “self-marketing” of zero dollars, up to a \$400K annual investment.
- Airports that focused on business/corporate aviation were experiencing high growth.
- All of the airports compete for air service with major airports within a 60-mile radius.

Below is summary of highlights of each of the six benchmarking participants. Following this airport-by-airport summary is a table summarizing the data collected.

Airport-by-Airport Highlights

Stillwater Regional Airport (SWO), Stillwater, OK (Similar)

- Stillwater is a similar airport to St. Cloud.
- Oklahoma City and Tulsa serve as the primary competition for SWO.
- SWO has 50,000 annual enplanements with a high percentage of business commuting to DFW through American.
- SWO currently has two flights daily, and management noted a third daily flight would likely be added.
- SWO does not charge for parking, but they will consider charging for parking after their parking lots are paved.
- SWO currently requires a \$700K annual subsidy, which is funded by the City of Stillwater.
- Oklahoma State University owned and operated the airport until 1979 when an Authority was created by city ordinance. The airport itself is a city department. The airport director and airport employees report to the city manager.
- SWO does not have many corporate tenants, but there is a rapidly expanding flight school at Oklahoma State University (OSU). OSU is adding 35 aircraft to their fleet this year. The airport

attributed this growth to the Envoy program which is a student incentive provided by Envoy (American's regional air carrier partner serving the DFW route) to encourage aviation professional pilot development.

- The airport has limited space for additional hangar development.

Ogden-Hinckley Airport (OGD), Ogden, UT (Similar)

- OGD is a similar airport to St. Cloud, and is 45 miles from Salt Lake City.
- OGD has 15,000 annual enplanements.
- Allegiant offers service to Phoenix/Mesa and maintains about a 90% load factor after six years of service.
- OGD has a \$2.5M budget requiring a \$600K annual subsidy.
- OGD is owned by the city.
- Due to their location bordering two counties, past discussions have occurred regarding alternate forms of governance, but no traction has developed.
- They have multiple corporate jets currently on the airfield and a large demand for hangar space, resulting in a 20-acre planned hangar development site.
- An Air Force base is located within five miles of the airport and generates additional traffic for OGD.

Northern Colorado Regional Airport (FNL), Fort Collins/Loveland, CO (Similar)

- FNL is considered a similar airport to St. Cloud.
- The airport is 45 miles from Denver.
- FNL is a city-owned and is governed by a seven-member airport commission. There has been much discussion of converting to an Authority, but is not allowed under current state law.
- The airport receives services from the City of Loveland such as Information Technology, Human Resources, and other ancillary support services. The City of Ft. Collins also provides FNL with Airport Rescue and Firefighting (ARFF) services.
- FNL has a robust business aviation market and has 260 airport tenants with a large majority being corporate. FNL does not capture Denver business users, but is working on multiple development areas.
- FNL lost Allegiant air service in 2012 as a result of not having an air traffic control (ATC) tower. Elite airways service to Rockford, IL failed as a result of reliability challenges. FNL is currently investing in a new, virtual, one-of-a-kind \$8M -10M ATC tower with construction beginning in 2019.
- FNL's economic impact was measured at \$129M in 2013.

Trenton-Mercer Airport (TTN), Trenton, NJ (Aspirational)

- Trenton Mercer is an aspirational airport for St. Cloud.
- Philadelphia is its primary competition.
- TTN has 300,000 annual enplanements. STC in comparison has about 20,000.
- TTN is a county-owned airport.
- TTN is served by two airlines offering 12 routes. Prior to the entrance of Allegiant and Frontier into the market, TTN did not have air service. TTN has a dense population which helps generate traffic and air service.
- Initially, some community members were resistant to the idea of larger aircraft due to noise concerns, but those concerns failed to materialize after service commenced.
- Parking is one of TTN's primary sources of income.

- TTN operates very efficiently with a \$5.6M budget and an additional \$3M annual surplus.
- TTN is not involved in any formal marketing.

Arnold Palmer Regional Airport (LBE), Latrobe, PA (Aspirational)

- Latrobe is an aspirational airport for St. Cloud.
- Pittsburgh is their primary competition for air service.
- Officially known as Arnold Palmer Regional Airport, Latrobe requires an annual subsidy of \$1.5M through a bond issue.
- LBE has 150,000 annual enplanements and is currently serving five routes through the ULCC Spirit.
- LBE's governance is an airport authority with prominent business leaders involved supporting air service and aviation business development.
- Management noted that Spirit commenced service in Pittsburgh and LBE was concerned this service would be a source of leakage from their service area; however, after a year and a half, the Pittsburgh service has proven to have had minimal effect on LBE passenger numbers.
- The airport has 60 total employees, compared to seven at STC. The reason for the larger employee numbers at LBE is because they provide "below the wing" support services such as ground handling, fueling, and deicing to the airlines. This is somewhat unusual for an airport to provide these services. However, this has proven to be a large revenue source for the airport.
- LBE also has an active business/corporate aviation operation (but not a significant presence of corporate jet fleets).
- LBE has a large FBO and a charter operation consisting of 25 aircraft with 80 pilots servicing the market.
- LBE provides an estimated \$100M total economic impact.
- An annual airshow is the primary marketing event for the airport.

Appleton International Airport (ATW), Appleton, WI (Aspirational)

- ATW is an aspirational airport for St. Cloud
- The airport is located 25 miles from Green Bay. Although in close proximity to Green Bay, ATW only loses 5% of their catchment area there. Primary competition for air service is actually Milwaukee and Chicago.
- ATW has 300,000 annual enplanements.
- Allegiant, United, and Delta all serve the airport.
- ATW has a \$13M budget with a \$500K annual surplus.
- An airport-owned FBO is the primary revenue source.
- ATW invests heavily in marketing.
- Parking is a secondary source of revenue.
- ATW is a county-owned airport with 21 employees, excluding the FBO.
- Challenges include the speed of contractual approvals which hampers airport business development.
- ATW is proactive in business/corporate aviation. Their business aviation sector has shown success with public/private partnerships. Gulfstream recently announced a \$40M on-airport expansion that will provide 200 additional jobs.
- ATW has 10 corporate tenants.
- The airport has seen positive results from hiring a Deputy Director of Airport Marketing. ATW invests approximately \$400K annually in marketing.

- Economic impact is \$676M with 3,200 jobs (direct and indirect) and \$150M in wages. By comparison, Green Bay generates a \$120M economic impact.

St. Cloud Regional Airport (STC), St. Cloud, MN

- STC has approximately 20,000 annual passengers.
- Its primary competition is Minneapolis-St. Paul International, the nation's 17th largest airport.
- STC has a \$1.1M budget and requires annual subsidies which reached \$767K in 2017 and an estimated \$873K for 2018. The budget deficit increased recently due to a change in FAA regulations which now require airport staff to be present during commercial service hours.
- The revenue sources include land leases and fuel flowage.
- The airport governance is the City of St. Cloud with an advisory board that provides input to the City Council.
- STC has a high demand for corporate aviation, but currently almost 100% of hangar space is occupied
- Air service includes Allegiant to two destinations (one seasonal) and Sun Country charter service to Laughlin near Las Vegas.

Below in Table 14 is a summary of the data and information acquired from each airport.

Table 14. Summary of Benchmarking Participant Data

Category	STC Cloud Regional Cloud, MN	St. St. Trenton Mercer Trenton, NJ	SWO Stillwater Regional Stillwater, OK	LBE Palmer Arnold Latrobe, PA	OGD Ogden- Hinckley Ogden, UT	ATW Appleton Int'l Appleton, WI	FNL Colorado Fort Collins/Loveland, CO
Airport Type	N/A	Aspirational for STC	Similar to STC	Aspirational for STC	Similar to STC	Aspirational for STC	Similar to STC
MSA Population	194,418	368,094	78,399	N/A	547,184	233,007	310,487
Runway (feet)	7,500	6,006	7,401	8,222	8,103	8,002	8,500
Property (acres)	1,400	1,200	1,850	1,000	750	1,700	1,050
GOVERNANCE							
Ownership	City	Mercer County	Authority / City	Authority	City	County	Commission
Employees	7	25	11.5	60	5	21	6
ARFF	City	Contract	City	Airport	City	6	Ft. Collins
Contract Positions	Seasonal PT	ARFF	N/A	N/A	N/A	Public Safety	N/A
Other Positions	HR, IT, Finance, Planning, LEO, Legal	LEO by County	LEO, HR, IT by City	Airport ground handling	N/A	Airport-owned FBO	Finance, IT, HR by Loveland
FINANCIAL							
Budget (Deficit/Surplus-Subsidy)	\$1.1M (-\$600K)	\$5.6M (+\$3M)	\$2.3M (-\$700K)	\$3.5M (-\$1.5M)	\$2.5M (-\$600K)	\$13M (+\$500K)	\$1.5M (-\$485K)
Revenue Sources	Land, Fuel, Landing	Parking, Land. (No Fuel Flowage)	(See Rate Schedule)	Land, Deicing, Turn	Land, Parking, Fuel, Landing	#1 FBO, #2 Parking, Landing, Fuel, Counter Rent	#1 Land, #2 Fuel. (Parking used to be #1)
Fuel Flowage	\$0.10/gal	\$0	\$0.20/gal	\$0.06/gal, \$0.09 AVGAS	\$0.055/gal	FBO fuel. \$0.05/gal for Gulfstream	6% FBO / 10% for private tenants
Landing Fee	\$0.66/1,000 lbs.	\$107	Variable	\$500/turn	\$0.75/1,000 lbs	N/A	N/A
Paid Parking	\$0 / day	\$8 / day	\$0 / day	\$0 / day	\$3.5 / day	\$8 LT, \$40/wk max.	\$5 / day
FBOs	1 FS	2 FS, 2 Training	3 Maintenance	2	3	1 FS, 1 LTD	1 FS
Notes	N/A	N/A	N/A	#15 Charter Operation	N/A	N/A	N/A
BUSINESS AVIATION							
Based Aircraft	89	132	70	105	241	71	263
Based Jets	9	18	0	33	8	4	14
Multi-Engine	4	11	5	9	25	17	12
Notes		Traffic to Europe; develop hangar sites	N/A	No large corporate demand	Large demand; 20 acre development	\$40M, 200 job Gulfstream expansion	Traffic to CA; robust corp. aviation traffic
AIR SERVICE							
Airlines	Allegiant	Allegiant, Frontier	American	Spirit	Allegiant	Allegiant, AA, DL, UA	(None)
Routes	AZA, PGA	12 total	DFW	5 total	AZA	10 total	(None)
Enplanements	20,000	306,667	50,000 (est.)	146,127	15,609	270,633	4,559
Distance to Hub (nm)	61	43	79, 75	28	28	25	45
Nearest Hub	MSP	PHL	TUL, OKC	PIT	SLC	GRB	DEN
Notes			Adding 3rd daily flight in 2018	Southern airways 9 pax commuters - not interested	Started in 2012	Just surpassed GRB; MKE and CHI primary competitors	Lost Allegiant in 2012; lack of ATCT. Will regain w/ new ATCT
MARKETING							
Budget	\$35K	(minimal)	\$50K	\$100K	\$20K	\$300K	\$30K
Marketing Notes	\$35K incl. \$25K reimbursed by MnDOT	Frontier markets; Allegiant and airport do not		Mktg through air show: 4 week campaign, 1.4M imprints		Budget incl: staff, commercial partnerships, expenses	Actively pursuing new service; airline meetings, data
ECONOMIC IMPACT / YEAR							
	\$30M / 2012	(unknown)	\$70M	\$100M (estimated)	(unknown)	\$676M / 2016	\$129M / 2013
OTHER NOTES							
		AASF on site, but not well used; aircraft moved to nearby base	OSU Flight School adding 35 aircraft; Envoy program	Airport Manager is willing to visit STC	Air Force Base is 5 miles away & drives additional air traffic	Econ. Impact of 3,200 jobs; \$150M in wage income	New "Virtual" ATCT to be constructed in 2019

Summary of Benchmarking Study Results

Opportunities

In order to thrive and grow, each airport found its own niche of services and opportunities. These niche services ranged from ground handling/deicing and corporate aviation services to flight school and military services. Playing to their strengths resulted in significant revenue for the airports. Regarding Fixed Base Operator services, ownership and what services the FBO provided varied according to local needs and markets.

STC can develop a niche through opportunities to provide low-cost air service to more destinations and with more frequent service; the airport can also focus on increasing corporate aviation operations.

Financial Subsidy/Surplus Varies by Airport

The airports generally (re)invest for growth. Of airports that receive annual subsidies, the subsidies range from \$485,000 to \$1.5 million. Most airports charge paid parking. If not, they had grant reimbursement obligations or air service that was only recently established.

STC has a budget of approximately \$1.1 million, and requires a significant annual subsidy, which was found to be steadily increasing (see the Financial Analysis section for more details). The primary operating revenue comes from fuel flowage, T-hangar rent, and land leases. Potential revenue increases can be realized by reviewing rates and charges (land, fuel, landing, etc.) and collecting auto parking revenue.

Governance

Airport governance among the study airports varies widely (city, city/county, authority), according to needs and state statutes.

STC is currently governed by the City of St. Cloud, with an Advisory Board that provides input to the City Council. While some states do not allow authorities, Minnesota does. This means that STC could move toward an airport authority if the regional communities agree. (For additional analysis on this topic, please see the Governance section.)

Economic Impacts

Similar airports demonstrate economic impacts ranging from \$70 million to \$129 million. Aspirational airports demonstrate impacts ranging from \$100 million to \$676 million.

Marketing

Airports exhibited a wide variety of marketing practices. Some airports conduct “self-marketing” with little to no dollar investment, and others contract with marketing providers and allocated up to \$400,000 in an annual marketing investment.

For STC, similar airports showed no apparent correlation by investment in marketing. STC’s current annual marketing investment is relatively low compared to similar airports. However, aspirational airports marketed more aggressively, viewing the investment as essential to future growth.

Business Aviation

Airports with a strong corporate presence are experiencing high growth. The demand has generated waiting lists for space and the need for new development areas. For St. Cloud, high demand for

corporate aviation is proven and no MAC reliever or competitor airport offers the facilities STC already has. The airport is currently undertaking a hangar area expansion project to provide additional land for prospective tenants.

Air Service

Hub competition cannot be ignored, but to successfully compete, the airport must find a complimentary or niche service. With a complimentary or niche service, the airport can find success in shadow of hub. STC's success with Allegiant Airlines, an Ultra Low-Cost Carrier, proves that a viable market exists for these types of niche vacation/leisure services, i.e., there is a viable market for direct, ultra-low cost air service within Central Minnesota.

Other Take-Aways & Recommendations

- STC should focus on increasing its corporate aviation activity, as this aspect (as opposed to general aviation activity) generates 1) higher revenue, 2) capital investment, and 3) jobs.
NOTE: An industry reference point typically cited is that every corporate jet that can be attracted to the airport can generate the comparable economic impact of 100 single-engine propeller-operated aircraft.
- Also regarding GA activity: From an air service perspective, general aviation revenue does not necessarily serve as a catalyst to develop air service.
- Current Airport marketing is extremely limited. Overall, it is very important to raise consumer awareness of the existence of the Airport and its current flights, chiefly because increased demand on the local level is key in order for airlines to be able to invest in additional service. It is vital for the Airport to increase its efforts in these areas and a modest amount of the budget should be devoted to it with the goal of annual increases.

NOTE: Appendix E. contains a more detailed final report regarding the benchmarking survey.

SECTION 11. GOVERNANCE REVIEW

Overview

At the beginning of the study, stakeholders stated an interest for a review of governance options available to the Airport. Even so, this review of governance options was not put forward as a main area of focus. However, during the course of the planning study, it became clear to the project team that a transition in governance models represents one of the most important and effective ways to move the Airport forward and to help achieve its financial stability and eventual self-sufficiency. Specifically, the team recommends a governance transfer from a City owned and operated Airport to an Authority governance model representing multiple stakeholders including the three core catchment Counties of Benton, Sherburne, and Stearns.

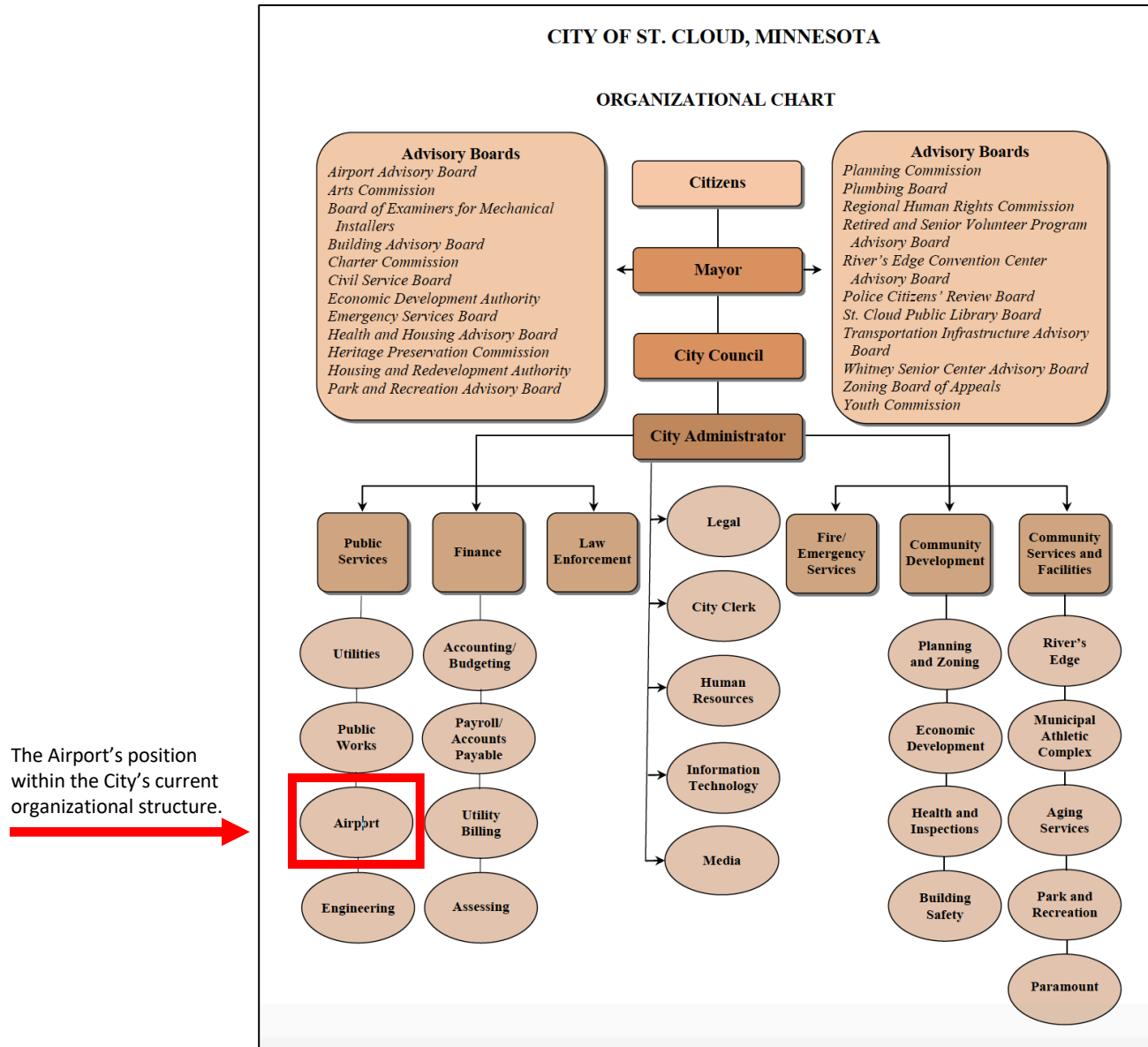
The project team has concluded that a governance transition must be at the forefront of recommended strategic initiatives because of the following primary reasons:

1. **Champion.** Currently positioned as a piece of infrastructure within a complex municipal structure, the Airport has no real champion to advocate for its unique needs and focus solely on its strategic goals. Subsequently, with the lack of a champion, the Airport is not able to develop the pervasive business mindset needed to achieve its greatest success. There needs to be a governing structure whose entire and sole focus is on the success of the Airport. An Authority model of governance can best accomplish this, and an Authority Board would serve as the champion of the Airport's needs. This needed championing of the Airport is not practical for the City to do. The City must function by balancing the needs of its many departments, not championing and raising up one department over the needs of the others. But that is exactly what the Airport needs and how it will best achieve its full potential, i.e., greater economic impact to the region as a whole.
2. **Fairness.** The current structure of ownership and operation is one where the City of St. Cloud bares all of the costs and responsibilities for the Airport, yet the region as a whole (particularly the core catchment area of Benton, Sherburne, and Stearns Counties) shares in the economic benefits, which are quite significant. The project team's economic impact study showed that the Airport provides an overall economic impact of \$44.2 million (including employment for 289 jobs, wage income of \$17.1 million, and State and local taxes of \$2.3 million). The City of St. Cloud should not have the burden of being the sole supporter of the Airport's deficit when the three counties also reap substantial economic benefits from the Airport. Essentially, the current model of governance presents an unfair arrangement. The future of the entire region—not just the City—depends on the success of the Airport; yet, currently, the City is the only entity underwriting the Airport's operating budget and deficit. Another issue of fairness is that the City is not poised to effectively grow the Airport by itself. However, STC needs and deserves a governing body that is solely dedicated to its success and growth.
3. **Formula.** There are a variety of methodologies that can be developed in order to support all parties who would be a part of an Authority governance model (e.g., the three core Counties and the City). That is, there are a multitude of ways to collectively address concerns over the fact that the Airport is currently operating at a deficit and for the regional partners to address those concerns. Collectively, the Counties and City could engage in a dialogue and craft a joint services agreement that would produce an acceptable and sustainable outcome for all parties. To do this, it is important to acknowledge that the deficit won't disappear overnight. However,

the project team is presenting a business plan that reduces the deficit over time. In the meantime, while a deficit remains, there are ways to develop cost-sharing formulas that are no more burdensome for the participating parties than what is occurring currently.

4. **Suitability.** In addition to the notion of fairness, and the imbalance between City support and regional gain, it should also be noted that the City is actually not well-suited to govern and operate the Airport. The City is a municipal governmental entity with multiple departments, each competing for support through City coffers. The Airport falls under the Public Services department and is categorized more or less as existing infrastructure. However, the important role that the Airport plays in the region is much larger than utilitarian infrastructure—it is an important economic engine and transportation hub. This framing of the Airport in its true role (i.e., as engine and hub, rather than infrastructure) necessitates a governing body that is well-suited to operating the facility. An independent, regional Authority is just such an entity. See Figure 19 below for the Airport’s position in the City’s organizational structure.

Figure 19. City of St. Cloud Organizational Chart



Below is an in-depth discussion of the multiple issues to review and consider in order for stakeholders to decide whether to pursue the process of a governance model transfer.

Summary

In the discussion below, various governance models are identified and their attributes discussed.

Chapter 360 of the Minnesota Aeronautical Statute provides the ability to create an *Authority* structure (with the option of a *Joint Powers Agreement*) by local municipalities. Current options for STC to change its governance model include: 1) remain as is, 2) maintain, but modify, the current City governance, 3) move to an Authority, 4) move to an Authority with a Joint Powers Agreement, or 5) pursue special legislation.

Changing a governance model is a highly complex process that requires a significant amount of information and investment; moreover, to succeed requires that all involved parties work closely together. It should be noted that changing the governance model alone would not guarantee success for STC. However, the project team recommends that the best course of action to secure more flights and decrease the financial deficit would be to transfer the Airport from a City owned and operated governance model to a shared three-County and City Authority model.

The benefits of operating under a singularly-focused Airport Authority model are multiple. An Authority would be set up to have a Board which meets criteria for qualifications or experience, and the Board could act faster, and more purposefully, for the benefit of STC. A major area of potential expansion for STC is within its marketing efforts, regardless of governance change; however, the marketing and business development would very likely find more success under the Authority model. Whatever model is chosen, the focus must be on what is best for the Airport to become financially stable and to create a positive and growing economic impact for the region as a whole.

Airport Governance Models Overview

The points of discussion for this section on governance include:

1. Trends in airport governance models
2. Benefits of available models
3. Process needed to change a governance model

Regarding the various forms of governance, virtually all major commercial service airports in the U.S. are publicly owned, and they are operated along distinct governance models as follows:

- Operated as a **governmental department** by a City, County, State or a combination of these public entities
- Operated as an **Authority or regional body**, either as
 - An **independent Authority** (joint and otherwise) reporting to an appointed governing Board
 - A larger, **multi-modal Authority** which may include port, road, and mass transit facilities
- Operated by **private sector** management (fairly rare)

Table 15 below distinguishes the types of governance models and gives examples of airports which are governed by each model.

Table 15. Types of Airport Governance

Virtually all major commercial service airports in the U.S. are publicly owned, and they are operated along distinct governance models:

Ownership	Administration	Examples
<i>PUBLIC: Government Entity</i>		
<ul style="list-style-type: none"> City County State 	Operated as a governmental department/unit	San Francisco Int'l, Los Angeles Int'l, Hartsfield-Jackson Atlanta Int'l, Chicago O'Hare Int'l, Miami Int'l, Philadelphia Int'l
<i>PUBLIC: Authority or Regional Body</i>		
<ul style="list-style-type: none"> Airport Authority (joint and otherwise) 	Operated as an independent authority reporting to an appointed governing board	Dallas Ft. Worth, Orlando, Dulles, Reagan, San Diego, Columbus, Cincinnati, Bradley/Hartford, Detroit Metro, Des Moines, Albany (NY)
<ul style="list-style-type: none"> Multi-modal Authority 	A larger authority which may include, port, road, and mass transit facilities	Oakland, Seattle-Tacoma, JFK/Newark/LaGuardia, Buffalo/Niagara, Boston, Portland
<i>Privately Held</i>		
<ul style="list-style-type: none"> Private sector management 	Contract management; FAA Privatization Program	Westchester (NY), Teterboro (NJ), Luis Muñoz Marín – San Juan International, Branson (MO)

The type of governance model chosen for an airport is important and affects significant areas of operation including receiving and paying back Federal grants, generating regional economic impact, and forming policies that promote best practices in airport management.

Many airports in the country are now governed by an Authority governance model, which overall is the most common form of governance. Very few airports are privately operated (approximately 1%). However, many City/County/State-operated airports still exist, as was most common in the early days of airport ownership and operation. As shown in Table 4-2 below, approximately 14 commercial service airports undertook governance transitions between 1993-2017, 12 of which transitioned to an Authority model.

Table 16. Airport Governance Transfer Between 1993 – 2017

AIRPORT	OPERATOR	ESTABLISHED
Greater Asheville Regional Airport (Asheville, NC)	Greater Asheville Regional Airport Authority	2017
Gerald R. Ford International Airport (Grand Rapids, MI)	Gerald R. Ford International Airport Authority	2016
Syracuse Hancock International Airport (Syracuse, NY)	Syracuse Regional Airport Authority	2014
Bradley International Airport	Connecticut Airport Authority	2013
Tulsa International Airport	Tulsa Airport Improvement Trust	2013
Des Moines International Airport	Des Moines Airport Authority	2011
Stewart International Airport (Newburgh, NY)	PANYNJ (Port Authority of New York and New Jersey)	2007
San Diego International Airport	San Diego International Regional Airport Authority	2003
Detroit Metropolitan Wayne County Airport	Wayne County Airport Authority	2002
Jacksonville International Airport	Jacksonville Airport Authority	2001
Pittsburgh International Airport	Allegheny County Airport Authority	1999
Harrisburg International Airport	Susquehanna Area Regional Airport Authority	1997
T.F. Green Airport (Providence)	Rhode Island Airport Corporation	1993
Albany International Airport (NY)	Albany International Airport Authority	1993

Although it is not particularly common to transition a governance model, it has been the trend of those choosing to do so to move to an Authority model.

Structure of Authority Boards

The structure of Authority Boards is typically a considerable matter of discussion for airports changing governance. How an Airport Authority is structured and who is on the Board are key questions for consideration, as is the acknowledgement of the airport's regional influence and importance. In fact, the word "regional" or "county" is often incorporated into the title of an Authority to reflect how important the regional impact is.

According to **Chapter 360 of the Minnesota Airport's Aeronautics Statute**, the Board of an Authority must consist of at least five members (called commissioners). And each governmental entity that sponsors and is a part of the Authority must be represented by at least one commissioner.

Additionally, Authority Board members must have qualifications to serve on the Board, specifically experience in related businesses such as aviation, law, finance, business (e.g., retail, restaurant, parking).

Determining to Transition Governance Models

Below are four broad-based questions to consider in order to determine whether a change in governance should be considered:

1. Is there a case for governance change (based on efficiency and performance, regionalism, or stakeholder interests)?
2. Are there lessons from governance models at other similar U.S. airports?
3. What are the legal, institutional, political, and financial opportunities for, and constraints against, change? (For an example of the importance of this, the Syracuse Hancock International Airport recently became an Authority and subsequently secured a \$40 million grant that would have been much more difficult, if not impossible, for the City—its previous operator—to obtain.)
4. What changes, if any, are recommended to the existing governance model?

NOTE: It is also important to recognize that the existing airport sponsor must be amenable to any changes in the governance model. A successful transition is generally not possible without cooperation from the current sponsor.

Considerations for Having an Authority

One of the primary advantages of an Authority is that it can be set up to have a Board that is solely airport focused. Board members must have some expertise that is beneficial to the airport and Board members without specific aviation knowledge can become knowledgeable over time about airports and practices.

There are general benefits to having an Authority style governance of an airport, including:

- The fact that an Authority allows for a policy-based Board focused solely on airport issues is a clear advantage over a municipal operation where an airport is managed as infrastructure rather than as a unique, independent asset.
- A singular focus on the airport encourages a business mindset and orientation which can facilitate fast, agile, and informed decision-making and implementation of policies and procedures by the Board.

- An Authority will have financial independence and separation from other governmental entities to oversee and establish independent budgets, rates and charges, investments, and debt management.
- An Authority will have greater flexibility in employee compensation, recruitment, and retention; procurement; special programs, such as air service and economic development; and non-aviation compatible development.
- An Authority will have a higher degree of political autonomy.
- A regional Authority will by definition include a greater number of regional interests and jurisdictions.
- An Authority will facilitate a business and hospitality management focus that is more conducive to customer service, economic development, and future air service development.

Benefits of an Authority

In addition to the general benefits to an Authority listed above, there are also benefits of an Authority that are specific to STC:

- **Will Provide a Singular Airport Enterprise Focus.** This allows more flexibility to develop policies and procedures specifically attuned to meet the needs of an increasingly competitive environment, as opposed to trying to comply with the City's broad-based general policies and procedures.
- **Will Strengthen Regional Coordination and Economic Contribution.** STC is a regional economic asset and being governed by an Authority Board with regional representation and participation will reinforce and strengthen its position as such.
- **Will Create a Stronger Platform for Economic Development.** A singularly business-focused organization with commercially-oriented policies will encourage a more entrepreneurial and business mindset in Airport operations. This will help increase revenue and reduce the deficit faster, a primary goal of Airport operations.

Success Drivers for Best-in-Class Airports

As illustrated in Figure 20 below, success drivers of best-in-class airports include: strategy alignment, financial sustainability, customer focus, strong and effective leadership, adequate resources, a strong commercial and business culture and mindset, and effective processes and systems. In general, Authority structures tend to best support the success drivers that produce best-in-class facilities.

Figure 20. Success Drivers for Best-in-Class Airport



- **Strategy Alignment** includes creating an empowered Board, developing clear vision and goals, ensuring stakeholder alignment, and having public accountability.
- **Financial Sustainability** includes developing a non-aeronautical revenue emphasis, creating innovative funding approaches, and developing competitive rate structures.
- **Customer Focus** includes having an air service emphasis, developing strong retail/food/beverage options, focusing on economic development, and establishing a strong “sense of place.”
- **Strong and Effective Leadership** includes developing management succession, empowering the workforce, and developing incentives for peak performance.
- **Adequate and Committed Resources** includes developing the ability to recruit and retain top talent, creating airport specializations, and building a motivated workforce.
- **Commercial and Business Culture/Mindset** includes creating a pervasive business culture, having a performance focus, and being innovative and competitive.
- **Effective Processes and Systems** includes being attuned to business needs, being nimble and adaptable to change, and enabling rapid decision making.

An Authority structure would be the governance model most conducive to helping STC develop these best-in-class attributes.

Stakeholder Interviews Regarding Governance Transfer

It is important that STC has a champion to drive initiatives for the Airport going forward. A significant number of STC stakeholders who were interviewed by the project team believe that transition to an Authority could “move the STC Airport to the next level,” and enable it to function as a more effective platform for future growth. In general, stakeholders believed that an Authority would accelerate economic drivers not only for STC, but for the entire region. (**NOTE:** This would most certainly be true since it has already been proven to be the case by the project team’s economic impact study.) Moreover, there was a general view that an Authority could help bring more focus on proactive economic development and customer service/hospitality than the current model.

Relevant Minnesota Law

Highlights of **Chapter 360 of the Minnesota Airport’s Aeronautics Statute** are listed below. This legislation states that local governmental units may establish an Authority (with the option of doing so through a Joint Powers Agreement when there is more than one entity sponsoring). The statute provides guidelines for the process to establish an Authority and the Joint Powers, as well as the provisions of respective agreements and the configuration of the Board, its powers, financial management, and budgeting, among other aspects.

Figure 21. Chapter 360 of the Minnesota Airport’s Aeronautics Statute

Category	Authority	Joint Powers Board
Process to establish	Governmental units may create an airport authority authorized to exercise its functions upon passage of a joint resolution by each of their governing bodies.	May be exercised and enjoyed by two or more municipalities, or by this state and one or more municipalities therein, acting jointly, either within or without the territorial limits of either or any of said municipalities and within or without this state or any municipality therein.
Provisions of agreements	Agreements would primarily pertain to intergovernmental arrangements at the behest of the new authority.	Each JP agreement shall specify the term; proportionate interest which each municipality shall have; privileges involved; and the proportion of preliminary costs of acquisition, establishment, construction, enlargement, improvement, and equipment, and of expenses of maintenance, operation, and regulation to be borne by each.
Board	The board shall consist of at least five commissioners. Each governmental unit that is a member of the authority shall be represented by at least one commissioner.	Municipalities acting jointly shall create a board from the inhabitants of such municipalities. The number to be appointed by each to be provided for by the agreement for the joint venture. Each member shall serve for such time and upon such terms as to compensation, if any, as may be provided for in the agreement.
Powers of Board	Generally broad powers including authority to issue debt.	Per agreement, however, more restricted particularly with regard to budgeting, taxation, issuing debt and property management.
Financial management/budgeting	Generally Independent.	Controlled by the joint venture municipalities, per agreement.

Per the statute, at the onset, the Authority agreements would be established between parties that pertain to intergovernmental arrangements. A Board would consist of at least five members (or commissioners), with at least one member designated by each participating governmental body. An Authority can issue debt and is generally independent financially. A Joint Powers Authority is also an option for municipalities, which would follow similar statute stipulations.

Governance Status of Minnesota Airports

For comparison and context, listed below in Table 17 are the governance status of a variety of Minnesota airports, which include governance by Authorities, municipalities, and commissions.

Table 17. Examples of Governance in Minnesota Airports (listed alphabetically)

Airport	Governance Model
Bemidji Regional (BJI)	Commission
Brainerd Lakes Regional (BRD)	Commission
Duluth International (DLH)	Authority
Falls International (INL)	City
Minneapolis – St. Paul International (MSP)	Commission
Range Regional (HIB)	Authority
Rochester International (RST)	Commission/Company
St. Cloud Regional (STC)	City
Thief River Falls Regional (TVF)	Authority

Overview of Governance Transition

Below we review the conclusions from the review of governance options for STC, specifically:

- To date, the current City governance model has provided a consistently sound and effective framework for the development of STC as a general aviation/commercial service airport. However, there are identifiable limitations to the current governance configuration, including those discussed above (i.e., Champion, Fairness, and Formula) as well as: 1) the Advisory Board does not have power to make decisions on its own, 2) the Airport Director reports to the Director of Public Services who reports to City Administrators and the Mayor, and 3) substantive action cannot be taken without City Council approval.
- As a remedy to these and other challenges, transition to a “single purpose” Authority representing the three-Counties and City (or some combination) would provide greater flexibility to develop Airport-specific, commercially-orientated policies and procedures. This would in turn better enable the Airport to compete with other airports, grow revenue, reduce its deficit, and grow into financial self-sufficiency in the future.
- Such a transition should be managed to ensure it is a “win” for all key stakeholders, specifically:
 - **City/Counties** – Long-term decreased economic contribution, with control retained of all Board appointments by joint sponsors
 - **Airport** – Single-purpose entity configured expressly to optimize results for Airport enterprise, providing a stronger business/commercial focus
 - **Airport Staff** – All employment and pension benefits should be preserved via agreements
 - **Regional Interests** – Increased regional Board representation
 - **Business Community/Economic Development** – Stronger business focus for Board appointments

Any transition of governance should be a “win” for all stakeholders, including the Counties/City, the Airport, Airport staff, regional interests, and business community/economic development interests. It should also be noted that the transfer process is somewhat technical and requires a significant amount of information gathering and parties working together, and does not guarantee the Airport’s overall success.

In summary, there are particular takeaways to help ensure success for a transfer, including:

- **Board representation:**
 - Having business expertise and background of its members
 - Having experience in related businesses: aviation, law, finance, business (e.g., retail, restaurant, parking)
 - Having the Board scaled to size and complexity of the Airport
 - To further ensure success, the Authority should have a list of minimum qualifications for Board membership and an onboarding process to ensure the competency of its members.
- **Roles for sponsor participants:**
 - Making a commitment to improving facilities and operations
 - Providing financial support, if needed
 - Streamlining governance and operation
- **Implementation procedures:**
 - Recognizing the time and resources necessary to effect change
 - Devoting the necessary amount of time on planning and defining goals and objectives (a successful outcome depends on this)

The Governance Transfer Process

The first step is to choose a governance model or decide if new legislation is required. Documentation would then be gathered to meet FAA obligations and an application developed for their approval. Ongoing communication between all parties, including the FAA, would be established to help ensure a successful process.

Overall, the transfer process includes 1) developing the governing documents; 2) addressing various FAA needs, including FAA sponsor/grant assurances, FAA requirements, fiduciary obligations, and other consultation needs; and 3) preparing an application and undertaking the process of submitting the application to the FAA, including rounds of review and revisions.

NOTE: In order to undertake a successful transition process, it is advised to establish a transition committee which in turn sets clear goals and objectives for the process and moves the process forward through regular structured discussions.

Below is an overview of the keys to a successful implementation of an FAA transfer application:

- A compelling justification for undertaking the transfer process
- Close collaboration between City and County administrations
- Building consensus among stakeholders, including Airport Board members, City and County administrations, Commissioners, Airport employees, the business community, and area legislators
- Establishing regular, on-going communication via regular stakeholder meetings and committing to the transparent sharing of information

It should be noted that the economic impact study prepared by the project team showed that the Airport is a valuable asset not just to the City but to the region as a whole. Therefore, the potential new sponsors must realize that fact, value it, and take that role of operating and championing the Airport to heart. ***Overall, the Airport's impact to the region far outweighs the investment that converting to an Authority governance model represents.***

Summary of Steps to Transition to an Authority

To summarize the above, here are the general steps needed to transition to an Authority:

1. Make a policy decision to form an Authority.
2. The involved parties need to agree to move forward toward this goal.
3. Create specific goals for the transition process and specify a timeline to create an Authority.
4. As part of the process of negotiating, build in protections for all parties (for example, perhaps include a reversionary clause where the Airport would return to sole City ownership if the operating deficit were not reduced or eliminated within a certain timeframe).
5. Submit an application to the FAA to approve the Authority.
6. Support and operate the Authority once approved.
7. Build in a process to evaluate and make changes to the Joint Powers Agreement, if needed, in the future.

Conclusion

Minnesota law enables Airport Authorities to be established and also provides an option to form an Authority through a Joint Powers Agreement. The project team recommends a move to an Authority model of government. The team also recommends forming a transition committee to explore this recommendation and to review the option of forming an Authority through a Joint Powers Agreement. The project team believes it is important for the Airport's long-term viability and self-sufficiency to move to an Authority model of governance.

To survive and thrive and to reach its highest potential, the Airport needs a champion to support it and look after its best interests. The current situation with the Airport as a sub-unit within a municipal department does not allow for that. The City simply does not have the resources to be the Airport's champion, nor is the City structured to do so. An Authority and its Board leadership would serve the important role as the Airport's champion, making policy and operational decisions based on what is best for the Airport and what best supports the Airport's growth and self-sufficiency.

However, in order to pursue this course of action, there will be costs in terms of funds as well as time and expertise. The process to assemble and submit an application to the FAA for approval to move to an Authority model is complex and time-consuming; moreover, its success depends on the guidance of an expert to shepherd the process. Funds will be needed to successfully undertake this process. Additionally, as the Airport is currently running a deficit, funds will be needed to support the Airport in the short-term until proposed strategic initiatives to increase revenue can be implemented and begin to bear fruit.

So while there are costs and risks associated with transitioning to an Authority governance model, the project team believes it is well worth it. In fact, the ability of the Airport to gain self-sufficiency can only come about with an entity that champions the Airport and brings a pervasive business mindset to all its operations and policies. That entity is an Authority and the project team believes that moving to that model of governance is the best chance the Airport has to fulfill its highest potential.

The bottom line is that stakeholders have a stark need to improve the Airport (specifically, the need to obtain financial self-sufficiency), and stakeholders must decide whether the best way to do that is with the current sponsorship of the City or outside of it. The project team can make an informed and educated recommendation that the governance model be changed to an Authority, but only the stakeholders can commit to move forward on that recommendation.

In making this decision, the project team stresses that all parties should recognize the importance of the Airport and its economic impact on the region. Consequently, all regional stakeholders should desire to safeguard the robust economic engine that the Airport has proven to be—and do everything in their collective power to increase the Airport’s impact on the region.

It cannot be overemphasized that the Airport is foundational to the region’s economic development. A transportation outlet to allow air travel in and out of the region efficiently and effectively is necessary to satisfy customer demand, attract businesses to the region, and bolster the economy. The current deficit to operate of the Airport is a small fraction of the overall economic benefit the Airport provides to the region. This fact should be utmost in all parties’ motivation to support and grow the Airport—which the project team believes can best be accomplished by transitioning to an Authority model of governance.

SECTION 12. FINANCIAL REVIEW AND ANALYSIS

Introduction and Background

This section of the report provides an overview of both the capital and operating finances at the Airport, with an emphasis on the latter, as discussed below. This section also presents 1) historical revenue and expense data, 2) forward-looking operational financial projections for the next 10 years, and finally, 3) observations and recommendations to improve upon the goal of financial self-sufficiency for the Airport over the long-term.

Financial Structure

The St. Cloud Regional Airport is an Operating Division of the Public Services Department of the City of St. Cloud, Minnesota government. The Public Services Department is one of several departments charged with delivering a broad range of services to St. Cloud citizens. The Public Services Department is responsible for the creation and financial monitoring of the private-sector agreements it maintains for the Airport in terms of leases, licenses, and occupancy permits—each of which represent sources of revenue used to offset Airport operating expenses. In addition to private-sector revenue, funding for Airport operations is also reliant on intergovernmental grants, City property and sales taxes, and Airport user fees, including passenger facility charges, or PFCs, as well as other Airport revenue from fees for goods and services.

The City utilizes a Fund Accounting System to monitor and track revenues and expenditures. The General Fund is the City's primary operating fund and accounts for all financial resources of the general government, except those required to be accounted for in another fund.

The City also maintains two Special Revenue Funds relevant to the Airport, including the Airport Operating Special Revenue Fund, and the Airport Construction Fund. These Funds together account for all activities involving the capital development, operation, and maintenance of the St. Cloud Regional Airport.

The Airport's financial results are reported within the composite financial statements of the City through the City's General Fund and also as a distinct Special Revenue Fund activity. Since STC has full-time employees assigned to it, the Airport generates significant financial activity; in fact, personnel expenses are the Airport's largest body of expenses. In general, the Airport functions as an operational division of the City.

The City's Finance Department acts as the fiscal agent for the Airport and is responsible for maintaining its budgetary records as well as its revenue and expenditure accounts. The City maintains discrete financial records to account for the itemized revenues and expenses of the Airport. The City's fiscal year (FY) runs concurrently with the calendar year (i.e., January 1st to December 31st) and utilizes a modified accrual basis of accounting for reporting financial results. Modified accrual accounting recognizes revenues when they become available and measurable and, with a few exceptions, recognizes expenditures when liabilities are incurred. The annual budget serves as the foundation of the City's financial planning and control. All departments of the City, including the Airport, are required to submit requests for appropriation to the City Administrator and Finance Director in June of each year. The Finance Department utilizes these requests to develop a proposed budget and the City Administrator presents this plan to the Mayor and City Council for review prior to September 15. The Council is required to hold public hearings on the proposed budget and to adopt a final budget no later than

December 31st of each year. The appropriated budget is prepared by fund, department, and program (as described in the STC 2014 Master Plan Update).

For purposes of this analysis, financial data from these categories are aggregated into broader functional areas as either revenue or expenses. Historical data is drawn upon from secondary data, i.e., the recently updated Airport Master Plan, City-provided financial data, or a combination of the two.

Forward looking projections are generated by applying historical financial data to increases in forecasted future activity and new business projected to occur at the Airport.

This analysis offers STC a baseline evaluation of revenues and expenses over the past six years and then presents a detailed forecast of operating revenues and expenses for the next 10 years.

Airport Construction Fund

The Airport Construction Fund is used to account for revenues and expenses associated with capital improvements at the Airport. Capital improvements generally include such items as the first-time development of Airport infrastructure and buildings, or upgrades to existing Airport infrastructure and buildings. By and large, projects undertaken within this fund are supported by State and Federal grants as well as grant matching funds by the City, typically between 2.5 to 10 percent of the total project cost. Table 18 provides a listing of FAA Airport Improvement Grants received by the Airport between 2009 and 2018. As noted, grants range in size from \$195,117 in 2016 to conduct an environmental study and rehabilitate the taxiway to \$3.4 million in 2015 to extend the length of the main runway. In the period reviewed (i.e., 2009 – 2018), the Airport received a total of almost \$10.5 million in FAA Airport Improvement grants for a wide variety of projects.

Table 18. FAA Airport Improvement Grant History

Year	Grant #	Project	Grant Amount	State Project #	State Fiscal Year	Final Grant Amount	Final State Contribution
2018	30	Construct Taxiway	\$ 1,242,178	A7301-126	2019	TBD	TBD
2017	29	Construct Taxiway, Reconstruct Taxiway, Rehabilitate Taxiway, Remove Obstructions (Non-Hazard)	\$ 1,562,449	A7301-123	2018	TBD	TBD
2016	28	Conduct Environmental Study, Rehabilitate Taxiway	\$ 195,117	A7301-122	2017	\$ 188,155	\$ 87,883
2015	27	Extend Runway	\$ 3,387,032	A7301-120	2016	\$ 3,249,652	\$ 524,061
2014	26	Acquire Snow Removal Equipment, Conduct Environmental Study	\$ 755,694	A7301-118	2015	\$ 752,308	\$ 41,794
2013	25	Extend Runway 13/31, Rehabilitate Runway 05/23	\$ 1,326,599	A7301-114	2014	\$ 1,262,533	\$ -
2012	24	Install Runway Lighting - 13/31, Rehabilitate Runway - 05/23, Update Airport Master Plan Study, Wildlife Hazard Assessments	\$ 681,357	A7301-110	2013	\$ 678,310	\$ -
2011	23	Acquire Snow Removal Equipment, Install Runway Lighting - 13/31, Update Airport Master Plan Study	\$ 526,350	A7301-107	2012	\$ 525,022	\$ -
2010	-	None Recorded	\$ -			\$ -	\$ -
2009	21	Improve Terminal Building	\$ 798,396	A7301-100	2010	\$ 1,258,394	\$ -
Total			\$ 10,475,172			\$ 7,914,374	\$ 653,738

In addition to FAA Airport Improvement grants, the Airport received grants from the Aeronautics division of the Minnesota Department of Transportation. Table 19 provides a listing of MnDOT Airport Improvement Grants received between 2009 and 2018. As noted, the grants ranged in size from approximately \$3,500 in 2011 for an electrical transformer to approximately \$820,000 in 2013 for a new

aircraft hangar. In total, during the time period (i.e., 2009 – 2018), the Airport received \$1.6 million in capital grants from MnDOT.

Table 19. State of MN Airport Grant History (Capital Grants)

<i>Year</i>	<i>Project</i>	<i>State Project #</i>	<i>Grant Amount</i>
2018	2018 Crack Seal	A7301-127	\$ 17,130
2017	St Cloud Air Transportation Optimization Planning Study	A7301-125	\$ 250,000
2017	Annual Pavement Crack Sealing	A7301-124	\$ 19,600
2015	Crack Sealing Pavement - CY2015	A7301-121	\$ 19,980
2014	Pavement Crack Sealing	A7301-119	\$ 19,600
2013	Runway De-icer and Storage Tank	A7301-117	\$ 40,144
2013	Operations Vehicle and Runway FME	A7301-116	\$ 28,833
2013	Security System Upgrades/5 gates included	A7301-115	\$ 122,880
2013	FBO HANGAR	A7301-113	\$ 818,891
2013	2013 CRACK REPAIR	A7301-112	\$ 17,150
2012	Environmental Assessment for Air Service	A7301-111	\$ 43,015
2012	2012 Crack Seal	A7301-109	\$ 17,149
2011	General Aviation Building Remodel	A7301-108	\$ 91,479
2011	Electrical Transformer for RW 31 MALSR	A7301-106	\$ 3,479
2011	2011 Crack Seal	A7301-105	\$ 17,149
2010	Slurry Seal	A7301-103	\$ 47,102
2010	2010 Crack Seal	A7301-102	\$ 17,149
2009	2009 Crack Seal	A7301-101	\$ 17,149
Total			\$ 1,607,879

Under normal conditions, year-over-year Construction Fund revenue may vary widely depending on the level of on-going capital improvements at the Airport. Fund revenue is contingent on the number and cost of projects, coordination of proposed projects with grant funding agencies, applicable capital grant funding formulas, and capital improvement priorities within the total availability of grant funds between airports.

STC Historical Airport Construction Fund revenue and expenses are presented in Tables 20 and 21 below:

Table 20. Historical Airport Construction Revenues

HISTORICAL CONSTRUCTION REVENUES	2013	2014	2015	2016	2017	2018 Projected
TAXES						
Current Property Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Delinquent Property Taxes	\$ 191	\$ 126	\$ 81	\$ 31	\$ 94	\$ 3
Mobile Home Tax	\$ 3	\$ 6	\$ 2	\$ 1	\$ 2	\$ 3
St. Cloud Area Local Sales Tax	\$ -	\$ -	\$ -	\$ -	\$ 507,877	\$ 2,567,043
Forfeited Tax Sale Confession	\$ 16	\$ 74	\$ 91	\$ 38	\$ 87	\$ -
Total Taxes	\$ 209	\$ 207	\$ 174	\$ 70	\$ 508,060	\$ 2,567,049
	\$ 209	\$ 207	\$ 174	\$ 70	\$ 508,060	\$ 2,567,049
INTERGOVERNMENT TRANSFERS						
Federal Grants Misc.	\$ 274,821	\$ 1,738,391	\$ 199,312	\$ -	\$ -	\$ -
Federal Grants Non-Capital	\$ -	\$ -	\$ -	\$ -	\$ 73,694	\$ -
Federal Grants Capital	\$ -	\$ -	\$ -	\$ 3,415,341	\$ 678,587	\$ 451,498
State Grants Misc.	\$ 435,979	\$ 496,314	\$ 136,253	\$ -	\$ -	\$ -
State Grants Non-Capital	\$ -	\$ -	\$ -	\$ -	\$ 84,414	\$ 169,705
State Grants Capital	\$ -	\$ -	\$ -	\$ 546,338	\$ 369,708	\$ 130,957
Stearns County	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Benton County	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sherburne County	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Local Governments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Airport Construction Project	\$ 17,150	\$ -	\$ -	\$ -	\$ -	\$ -
Airport Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,688
Total Intergovernmental Transfers	\$ 727,950	\$ 2,234,704	\$ 335,565	\$ 3,961,679	\$ 1,206,403	\$ 770,847
AIRPORT SERVICES & FEES						
Other Monies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Refunds and Reimbursements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Works Services Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Snow Removal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rent - Car Rental Agency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Scheduled Air Service Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Based Operator Rent	\$ -	\$ 8,000	\$ 48,000	\$ 48,000	\$ 48,000	\$ 48,000
T Hangar Rental Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Airport Rental Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Gas Commissions Airport (Fuel Flowage Fee?)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sale of Airport Supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Passenger Facility Charges	\$ 69,937	\$ 146,110	\$ 75,025	\$ 74,680	\$ 93,163	\$ 96,064
Badge Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramp Handling Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Airport Services & Fees	\$ 69,937	\$ 154,110	\$ 123,025	\$ 122,680	\$ 141,163	\$ 144,064
MISCELLANEOUS						
Sale of Merchandise Supplies	\$ -	\$ -	\$ -	\$ 131	\$ -	\$ -
Rent Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Property Damages - Insurance Recovery	\$ -	\$ -	\$ -	\$ 1,357	\$ -	\$ -
Rebates	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vending Machine Commissions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earned - Investments	\$ 19,338	\$ 1,626				\$ 7,623
Prior Year Voids (2014)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Miscellaneous	\$ 19,338	\$ 1,626		\$ 1,488		\$ 7,623
OTHER						
Payment for Recyclables	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer from Governmental Totals	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
From Fund Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sale of Fixed Assets (2013)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL CONSTRUCTION REVENUE	\$ 817,435	\$ 2,390,646	\$ 458,764	\$ 4,085,917	\$ 1,855,626	\$ 3,489,584

Table 21. Historical Airport Construction Expenses

HISTORICAL CONSTRUCTION EXPENSES	2013	2014	2015	2016	2017	2018 Projected
SERVICES & CHARGES						
Professional Services	\$ 95,147	\$ 56,948	\$ 12,668	\$ 78,748	\$ 47,211	\$ 229,091
Financial Fees & Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Communications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Postage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mileage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58
Training	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Meals and Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Publishing and Advertising	\$ 95	\$ -	\$ -	\$ -	\$ 156	\$ -
Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Electric Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Natural Gas Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Repair and Maintenance Supplies	\$ -	\$ 1,119	\$ -	\$ -	\$ -	\$ -
Repair and Maintenance Services	\$ 25,528	\$ 24,501	\$ 24,975	\$ -	\$ 86,815	\$ -
Rental	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dues and Subscriptions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Refuse Tipping Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Licenses, Permits, Filing Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Supplies	\$ 3,211	\$ 3,317	\$ -	\$ -	\$ -	\$ -
Total Services & Charges	\$ 123,981	\$ 85,884	\$ 37,643	\$ 78,748	\$ 134,182	\$ 229,149
CAPITAL OUTLAY						
Buildings and Improvements	\$ 597,456	\$ 1,042,368	\$ -	\$ -	\$ 235,798	\$ -
Improvements	\$ 238,672	\$ 1,321,927	\$ 204,537	\$ 4,017,615	\$ 1,494,826	\$ 1,437,026
Machinery, Equipment, and Radios	\$ 25,935	\$ 440,058	\$ -	\$ -	\$ -	\$ 160,285
Vehicles	\$ 39,011	\$ 354,993	\$ -	\$ -	\$ -	\$ -
Total Capital Outlay	\$ 901,074	\$ 3,159,346	\$ 204,537	\$ 4,017,615	\$ 1,730,625	\$ 1,597,311
OTHER						
Short-Term Debt Interest	\$ -	\$ 6,448	\$ 5,096	\$ 8,311	\$ 5,332	\$ -
Refunds & Reimbursements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cash Transfer	\$ -	\$ -	\$ -	\$ -	\$ 2,153	\$ -
Total Other	\$ -	\$ 6,448	\$ 5,096	\$ 8,311	\$ 7,485	\$ -
TOTAL CONSTRUCTION EXPENSES	\$ 1,025,055	\$ 3,251,679	\$ 247,276	\$ 4,104,675	\$ 1,872,291	\$ 1,826,460

To compare the construction fund revenues and expenses on a yearly level, please see Table 22 below.

Table 22. Yearly Construction Fund Revenue and Expenses Difference

	2013	2014	2015	2016	2017	2018 Projected
Construction Revenue	\$817,435	\$2,390,646	\$458,764	\$4,085,917	\$1,855,626	\$3,489,584
Construction Expenses	\$1,025,055	\$3,251,679	\$247,276	\$4,104,675	\$1,872,291	\$1,826,460
Difference	(\$207,620)	(\$861,033)	\$211,488	(\$18,758)	(\$16,665)	\$1,663,124

Airport Operating Special Revenue Fund

The Airport Operating Special Revenue Fund is used to account for revenues and expenses associated with day-to-day operation of the Airport, excluding Airport capital needs. In the case of STC, operating revenue is derived from a number of sources including City property and sales taxes, monies collected from the rates and charges applied to consumers at the Airport, tenant leases, and intermunicipal grants, including Maintenance and Operating (M&O) grants from MnDOT.

Table 6-6 provides a listing of MnDOT M&O grants between 2009 and 2018, which the Airport receives to help run their operations.

Table 23. State of MN Airport Operating Grant History

<i>Year</i>	<i>Amount</i>
2018	\$ 112,773
2017	\$ 106,591
2016	\$ 106,591
2015	\$ 106,591
2014	\$ 99,532
2013	\$ 90,484
2012	\$ 90,484
2011	\$ 90,484
2010	\$ 90,484
2009	\$ 90,484
Total	\$ 984,498

Below, Table 24 presents a historical summary of Airport Operating Special Revenue Fund revenue, whereas Table 25 presents fund operating expenses for the same timeframe.

Table 24. Historical Airport Operating Revenues

HISTORICAL OPERATING REVENUES	2013	2014	2015	2016	2017	2018 Projected
TAXES						
Current Property Taxes	\$ 470,420	\$ 470,567	\$ 615,924	\$ 615,523	\$ 616,586	\$ 617,000
Delinquent Property Taxes	\$ 4,617	\$ 2,671	\$ 4,839	\$ 2,272	\$ 2,181	\$ 3,000
Mobile Home Tax	\$ 211	\$ 180	\$ 255	\$ 209	\$ 225	\$ 200
Forfeited Tax Sale Confession	\$ 42	\$ -	\$ 4	\$ 195	\$ 56	\$ 100
Total Taxes	\$ 475,290	\$ 473,418	\$ 621,021	\$ 618,198	\$ 619,049	\$ 620,300
	\$ 475,290	\$ 473,418	\$ 621,021	\$ 618,198	\$ 619,049	\$ 620,300
INTERGOVERNMENT TRANSFERS						
Federal Grants Non-Capital	\$ -	\$ 750,000	\$ -	\$ -	\$ -	\$ -
State Grants Non-Capital	\$ 18,700	\$ 20,321	\$ -	\$ 5,049	\$ 3,667	\$ 11,965
Airport Maintenance	\$ 92,591	\$ 108,581	\$ 113,650	\$ 106,591	\$ 111,230	\$ 112,000
Airport Construction Project (2014)	\$ -	\$ 19,601	\$ -	\$ -	\$ -	\$ -
Stearns County	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -
Benton County	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -
Sherburne County	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -
Other Local Governments	\$ -	\$ 2,000	\$ -	\$ -	\$ -	\$ -
Total Intergovernmental Transfers	\$ 111,291	\$ 930,503	\$ 113,650	\$ 111,640	\$ 114,898	\$ 123,965
AIRPORT SERVICES & FEES						
Other Monies	\$ 875	\$ 4,641	\$ 5,284	\$ 3,422	\$ 2,459	\$ 2,767
Refunds and Reimbursements	\$ 1,353	\$ 217,000	\$ 12,229	\$ -	\$ 910	\$ -
Public Works Services Maintenance	\$ -	\$ -	\$ -	\$ 1,181	\$ 1,000	\$ 1,673
Snow Removal Fees	\$ 11,526	\$ 8,961	\$ 2,059	\$ 6,777	\$ 2,242	\$ 6,701
Rent - Car Rental Agency	\$ -	\$ -	\$ 4,869	\$ -	\$ -	\$ -
Scheduled Air Service Fee	\$ 1,974	\$ -	\$ 76,082	\$ 23,625	\$ 35,744	\$ 43,657
Fixed Based Operator Fee	\$ 21,534	\$ 23,084	\$ 23,061	\$ 23,061	\$ 23,061	\$ 23,061
T Hangar Rental Fee	\$ 95,619	\$ 104,434	\$ 107,525	\$ 110,092	\$ 117,705	\$ 115,260
Other Airport Rental Fee	\$ 37,860	\$ 126,865	\$ 84,818	\$ 82,683	\$ 72,260	\$ 75,000
Gas Commissions Airport	\$ 17,767	\$ 38,989	\$ 35,797	\$ 31,635	\$ 34,322	\$ 27,244
Sale of Airport Supplies	\$ 47	\$ 30	\$ 5	\$ 404	\$ -	\$ 102
Passenger Facility Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Badge Fee	\$ -	\$ -	\$ -	\$ 6,195	\$ 5,678	\$ 5,000
Ramp Handling Fee	\$ -	\$ -	\$ -	\$ 954	\$ 1,202	\$ 1,138
Total Airport Services & Fees	\$ 188,555	\$ 524,005	\$ 351,729	\$ 290,030	\$ 296,584	\$ 301,603
MISCELLANEOUS						
Contributions and Donations (2013)	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ -
Rent Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Property Damages - Insurance Recovery	\$ -	\$ 6,095	\$ -	\$ -	\$ 17,114	\$ -
Rebates	\$ -	\$ -	\$ -	\$ 3,149	\$ 351	\$ -
Vending Machine Commissions	\$ 227	\$ 267	\$ 255	\$ 220	\$ 229	\$ 207
Interest Earned - Investments (2013 & 2014)	\$ 3,093	\$ 354	\$ -	\$ -	\$ -	\$ -
Prior Year Voids (2014)	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ -
Total Miscellaneous	\$ 10,819	\$ 6,736	\$ 255	\$ 3,369	\$ 17,694	\$ 207
OTHER						
Payment for Recyclables	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer from Governmental Totals	\$ -	\$ -	\$ -	\$ -	\$ 42,553	\$ -
From Fund Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sale of Fixed Assets (2013)	\$ 300	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other	\$ 300	\$ -	\$ -	\$ -	\$ 42,553	\$ -
TOTAL OPERATING REVENUE	\$ 786,255	\$ 1,934,661	\$ 1,086,654	\$ 1,023,237	\$ 1,090,777	\$ 1,046,076

Table 25. Historical Airport Operating Expenses

HISTORIC OPERATING EXPENSES	2013	2014	2015	2016	2017	2018 Projected
PERSONNEL SERVICES						
Perm. Employee Regular	\$ 257,179	\$ 250,026	\$ 356,157	\$ 383,224	\$ 403,939	\$ 409,080
Perm. Employee Overtime	\$ 20,501	\$ 34,608	\$ 22,466	\$ 28,152	\$ 29,935	\$ 37,189
Temp. Employee Regular	\$ 6,318	\$ 19,678	\$ 3,897	\$ 1,330	\$ 2,036	\$ 1,314
Temp. Employee Overtime	\$ -	\$ 904	\$ -	\$ 48	\$ -	\$ -
Longevity	\$ 3,320	\$ 2,515	\$ 2,575	\$ 3,284	\$ 2,774	\$ 3,237
Sick Leave Payout	\$ 2,871	\$ 1,453	\$ 11,060	\$ 14,298	\$ 4,444	\$ 6,486
Misc. Payouts	\$ -	\$ -	\$ -	\$ 39	\$ 923	\$ 1,606
Work Study / Temporary Service (2014)	\$ 342	\$ 17,383	\$ -	\$ -	\$ -	\$ -
FICA Permanent Employees	\$ 17,143	\$ 17,629	\$ 23,688	\$ 25,841	\$ 27,088	\$ 27,286
PERA Coordinated Permanent	\$ 20,373	\$ 21,207	\$ 28,662	\$ 30,713	\$ 32,818	\$ 33,833
Medicare Permanent Employees	\$ 4,009	\$ 4,123	\$ 5,534	\$ 6,044	\$ 6,335	\$ 6,381
Medicare Temp. Employees	\$ 93	\$ 298	\$ 57	\$ 20	\$ 30	\$ 19
FICA Temp. Employees	\$ 399	\$ 1,276	\$ 242	\$ 85	\$ 126	\$ 81
Employer Paid Insurance	\$ 77,451	\$ 67,759	\$ 90,545	\$ 92,569	\$ 101,093	\$ 113,097
Retiree Insurance	\$ -	\$ -	\$ -	\$ 21,564	\$ 23,759	\$ 23,997
Unemployment Benefit	\$ 136	\$ 447	\$ 42	\$ -	\$ 96	\$ 11
Workers. Comp. Ins. Premiums	\$ 9,025	\$ 7,479	\$ 9,952	\$ 10,101	\$ 10,263	\$ 14,150
Total Personnel Services	\$ 419,160	\$ 446,786	\$ 554,876	\$ 617,312	\$ 645,659	\$ 677,768
SUPPLIES						
Office Supplies	\$ 2,123	\$ 2,480	\$ 3,131	\$ 1,658	\$ 497	\$ 868
Operating Supplies	\$ 3,285	\$ 8,339	\$ 8,212	\$ 8,484	\$ 20,205	\$ 10,881
Fuel	\$ 34,184	\$ 32,384	\$ 10,305	\$ 15,797	\$ 12,983	\$ 23,914
Chemicals	\$ 1,280	\$ -	\$ 371	\$ 307	\$ 477	\$ 1,090
Uniforms Clothing Allowance	\$ 438	\$ 374	\$ 1,251	\$ 1,785	\$ 871	\$ -
Repair and Maintenance Supplies	\$ 65,143	\$ 93,840	\$ 68,496	\$ 77,554	\$ 63,661	\$ 113,902
Total Supplies	\$ 106,453	\$ 137,418	\$ 91,765	\$ 105,585	\$ 98,694	\$ 150,655
SERVICES & CHARGES						
Professional Services	\$ 87,029	\$ 193,913	\$ 20,725	\$ 9,888	\$ 13,891	\$ 7,816
Financial Fees & Charges	\$ 1,002	\$ 1,139	\$ 2,397	\$ 1,634	\$ 2,110	\$ 2,208
Communications	\$ 12,456	\$ 14,196	\$ 22,245	\$ 24,665	\$ 22,638	\$ 24,620
Postage	\$ 972	\$ 1,148	\$ 1,053	\$ 866	\$ 961	\$ 721
Mileage	\$ 1,442	\$ 1,024	\$ 1,362	\$ 760	\$ 907	\$ 589
Training	\$ 12,837	\$ 6,321	\$ 8,404	\$ 12,258	\$ 7,252	\$ 10,039
Other Meals and Travel	\$ -	\$ -	\$ -	\$ -	\$ 536	\$ 70
Publishing and Advertising	\$ 12,928	\$ 10,972	\$ 7,916	\$ 944	\$ 14,669	\$ 6,377
Insurance	\$ 36,204	\$ 36,628	\$ 37,064	\$ 37,945	\$ 37,650	\$ 41,452
Electric Utilities	\$ 90,157	\$ 103,858	\$ 97,271	\$ 95,678	\$ 98,031	\$ 88,950
Natural Gas Utilities	\$ 32,574	\$ 42,445	\$ 29,258	\$ 19,649	\$ 22,542	\$ 22,339
Other Utilities	\$ 223	\$ 37	\$ -	\$ -	\$ -	\$ -
Repair and Maintenance Services	\$ 46,175	\$ 89,665	\$ 100,457	\$ 73,048	\$ 78,023	\$ 87,943
Rental	\$ 1,239	\$ 1,147	\$ 1,089	\$ 3,259	\$ 3,326	\$ 3,076
Dues and Subscriptions	\$ 3,674	\$ 5,271	\$ 7,296	\$ 7,488	\$ 8,032	\$ 9,916
Refuse Tipping Fees	\$ -	\$ 826	\$ 192	\$ 192	\$ 192	\$ 157
Licenses, Permits, Filing Fees	\$ 1,914	\$ 905	\$ 2,050	\$ 4,035	\$ 4,124	\$ 2,908
Total Services & Charges	\$ 340,827	\$ 509,495	\$ 338,779	\$ 292,309	\$ 314,884	\$ 309,181
CAPITAL OUTLAY						
Machinery, Equipment, and Radios	\$ -	\$ -	\$ -	\$ -	\$ 5,007	\$ -
Vehicles	\$ -	\$ -	\$ -	\$ -	\$ 35,393	\$ -
Furniture and Office Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Outlay	\$ -	\$ -	\$ -	\$ -	\$ 40,400	\$ -
OTHER						
Short-Term Debt Interest	\$ 5	\$ 4,480	\$ 2,887	\$ 2,649	\$ 2,280	\$ 2,278
Refunds & Reimbursements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1)
Remit Rev to Other Agencies (2014)	\$ -	\$ 1,006,200	\$ -	\$ -	\$ -	\$ -
Total Other	\$ 5	\$ 1,010,680	\$ 2,887	\$ 2,649	\$ 2,280	\$ 2,277
TOTAL OPERATING EXPENSES	\$ 866,445	\$ 2,104,379	\$ 988,307	\$ 1,017,855	\$ 1,101,918	\$ 1,139,881

The range of year-over-year variation in the Airport Operating Special Revenue Fund is significantly less than the Airport Construction Fund due to the maturity of the routine day-to-day operations of the Airport as it exists today.

Below in Table 26 is the difference between the operating revenue and operating expenses by year.

Table 26. Yearly Operating Fund Revenue and Expenses Difference

	2013	2014	2015	2016	2017	2018 Projected
Operating Revenue	\$786,255	\$1,934,661	\$1,086,654	\$1,023,237	\$1,090,777	\$1,046,076
Operating Expenses	\$866,445	\$2,104,379	\$988,307	\$1,017,855	\$1,101,918	\$1,139,881
Difference	(\$80,190)	(\$169,718)	\$98,347	\$5,382	(\$11,141)	(\$93,805)

Unallocated City Services

In addition to the two special revenue funds above, the City reports that it provides centralized services to the Airport on a pro-rata basis; however, these services are not allocated to either fund. The service categories and associated costs are presented in Table 27.

Table 27. Unallocated Central Services

Inter-Departmental Services	2013	2014	2015	2016	2017	2018 Projected
Airport Security-Police	\$ 17,666	\$ 78,434	\$ 29,962	\$ 20,336	\$ 23,458	\$ 21,528
Airport Fire Suppression	\$ -	\$ -	\$ 131,138	\$ 40,994	\$ 71,302	\$ 77,682
Legal Services	\$ 4,105	\$ 4,328	\$ 4,300	\$ 3,571	\$ 3,617	\$ 3,689
Engineering	\$ 1,299	\$ 1,308	\$ 1,327	\$ 1,378	\$ 1,460	\$ 1,489
Mayor and City Council	\$ 4,420	\$ 4,710	\$ 4,773	\$ 4,820	\$ 8,451	\$ 8,620
Finance	\$ 11,038	\$ 11,157	\$ 11,409	\$ 12,291	\$ 9,313	\$ 9,499
IT	\$ 7,847	\$ 7,809	\$ 8,123	\$ 9,293	\$ 9,516	\$ 9,406
Human Resources	\$ 2,884	\$ 2,622	\$ 2,857	\$ 3,041	\$ 1,948	\$ 1,987
Public Utilities-Airport Section	\$ 6,930	\$ 7,235	\$ 7,364	\$ 7,902	\$ 8,101	\$ 8,263
Total	\$ 56,189	\$ 117,603	\$ 201,253	\$ 103,626	\$ 137,166	\$ 142,163

***NOTE:** Salaries and benefits of non-airport department personnel; fire training costs for City fire dept. specific to airports.

To get a sense of the Airport's total operating surplus or deficit, see Table 28 below which brings together the Airport's operating revenue, operating expenses, unallocated inter-departmental services, and the City-provided taxes. As noted, for the years under consideration, i.e., 2013 through the present, the has been operating under a deficit of between approximately \$612K and \$873K.

Table 28. Estimated Airport Operating Surplus / (Deficit)

HISTORICAL OPERATING REVENUES	2013	2014	2015	2016	2017	2018 Projected
All Operating Revenue	\$ 786,255	\$ 1,934,661	\$ 1,086,654	\$ 1,023,237	\$ 1,090,777	\$ 1,029,040
Operating Expenses	\$ (866,445)	\$ (2,104,379)	\$ (988,307)	\$ (1,017,855)	\$ (1,101,918)	\$ (1,139,881)
Inter-Departmental Cost	\$ (56,189)	\$ (117,603)	\$ (201,253)	\$ (103,626)	\$ (137,166)	\$ (142,163)
Taxes	\$ (475,290)	\$ (473,418)	\$ (621,021)	\$ (618,198)	\$ (619,049)	\$ (620,300)
Total Operating Deficit	\$ (611,669)	\$ (760,739)	\$ (723,927)	\$ (716,442)	\$ (767,355)	\$ (873,305)

Opportunities to Improve Operating Revenue and Expenses

Expenses

The largest expense category within the Airport Operating Special Revenue Fund is for personnel services which is estimated at \$677,768 for 2018. These monies provide compensation and benefits for seven full-time equivalent positions at the Airport, including overtime, plus a small level (under \$2,000) of funding for temporary and/or seasonal employees. Personnel services accounts for approximately 60% of total Airport operating expenses. Upon review of the level of staffing from a practical matter, as well as in comparison with the peer airports discussed elsewhere in this report, the project team concludes that current staffing levels are low. To compensate, either additional investments in the workforce or additional contractual services will be necessary in order to pursue new categories of revenue enhancements going forward. Overall, there is little to no margin for reducing expenses in other categories while maintaining the Airport as a safe, reliable operation.

Revenue

The project team found that there are several areas for near-term revenue enhancement, as well as several strategies for longer-term revenue gains at the Airport. Short-term enhancements can be found by increasing the schedule of rates and charges at STC, while longer-term enhancements can be found by applying industry comparable standards to future modifications to tenant leases, and in particular, with the Fixed Based Operator. The current 20-year lease with the FBO, established in 2014, does not comport to the level or types of rates and charges applied by other airports in Minnesota, nor with the industry in general. For example, the FBO lease does not include a dedicated revenue stream to the Airport based on a percentage of gross sales. This and other matters should be corrected through the adoption of policies, rates, and charges for all commercial operators at STC that are akin to other similar airports and which comport to industry-wide standards.

Other near-term revenue enhancement strategies include modification to the Airport's general schedule of rates and charges, as well as adopting a "pay for parking" policy for Airport visitors and airline passengers, which as most airports constitutes a significant portion of their overall revenues.

Longer-term revenue enhancement strategies involve more frequent benchmarking of STC's rates and charges against comparable airports, correcting revenue deficiencies in existing leases as they come up for renewal, or otherwise, and attracting new aeronautical and non-aeronautical activity and tenants to the Airport. For this latter issue, it will be important to augment existing staff expertise with professional experience in marketing and business development, as discussed elsewhere in the report. This new staff member could help with many of these revenue increasing strategies including focusing on general aviation marketing and services for corporate jets and fleets. With an enhanced current FBO, or a second FBO providing competitive services and fuel prices, there is a likelihood of attracting expanded service for current corporate tenants as well as new corporate tenants. We also recommend working with a commercial real estate broker to market Airport land parcels for their highest and best use, both

aeronautical and non-aeronautical. Other revenue enhancement strategies discussed elsewhere in the report include expanding the frequency of flights to current destinations and/or adding new destinations in air service via Allegiant and/or other Ultra Low-Cost Carriers, and reinstituting aviation educational programs and earning revenue via a flight school training and/or rental from Airport hangars, buildings, or facilities.

Below in Table 29 is a summary of revenue enhancement strategies mentioned in this section.

Table 29. Revenue Enhancement Strategies for Airport Operations Summary

Period	Strategy				
	YEAR 1	YEAR 1	YEAR 2	YEAR 2	YEAR 3
Short-term (1 - 3 years)	RATES/CHARGES: Align rates and charges with industry norms (e.g., fuel flowage fees)	RENTS: Align hangar rates with industry norms PARKING: Charge for parking	MARKETING: Hire a staff member for marketing and business development	ASD: Add additional flight to a current destination	RENTS: Additional T-hangar and conventional/box hangar capacity
	YEAR 3	YEAR 3-5	YEAR 3-5	YEAR 4-5	YEAR 4-5
Medium-term (3 - 5 years)	LEASES: Apply industry standards to tenant lease modifications, especially the FBO	LEASES: Correct revenue deficiencies as leases come up for renewal	TENANTS: Attract new aero and non-aero tenants, with a focus on GA for corporate jets/fleets	LAND: Use broker to lease unused land parcels	ASD: Add ULCC new city destination
	Ongoing	Ongoing	Year 5	Year 6	Year 7
Long-term (5 - 10 years)	BENCHMARKING: Ongoing benchmarking of rates and charges of comparable airports	LAND: Work with commercial real estate broker to market Airport land parcels for their highest and best use	EDUCATION: Begin new aviation educational programs	EDUCATION: Develop partnership with airline to partner with new educational program	ASD: Add ULCC new flight to newest city destination

Rates and Charges

The City, on behalf of the Airport, periodically adopts rates and charges by ordinance. The most recent rates and charges were adopted December 2015 (Section 544 amendment of 2007 Code of Ordinances).

The Airport charges for Hanger and T-Hanger rentals on a monthly basis, landing fees, ramp overnight parking fees for aircraft, and other minor ancillary charges such a meeting room rentals. The Airport also collects a fuel flowage fee; however, that fee is not listed in Section 544 of the City's ordinances, but it is contained in the lease between the Airport and the Fixed Base Operator.

It is noted that the menu of Airport fees is dated, omits categories such as fuel flowage fees, and, in some instances, is unclear. Also, the project team found that while the rates and charges were last updated in December 2015 information on the City's website pursuant to the update contains errors. Information concerning landing fees is ambiguous as the general practice at the Airport is to collect landing fees from only transient "commercial" aircraft according to Airport personnel, as opposed to all aircraft as is suggested by the on-line fee schedule, which makes no distinction whether aircraft subject to the fee are based or transient. The published rate is: "Aircraft under 12,500 lbs. minimum landing fee \$14.00. Otherwise \$0.63 per 1,000 pounds."

The project team researched the methodology and amount of landing fees assessed at other similar airports in Minnesota, most notably the reliever airports operated by the Metropolitan Airport Commission (MAC). The MAC methodology was found to be easier to interpret and resulted in more revenue to the airport. For example, in recognition that collecting landing fees from small, based aircraft operators is often difficult, the MAC compensates for this by charging higher fuel flowage fees for 100LL aviation fuel sales, as this is the type of fuel is predominately used by smaller piston-powered aircraft; while on the other hand, the MAC charges lower fuel flowage fees, plus a landing fee, for all turbine-powered aircraft whether they are based or transient. For example, at the St. Paul Downtown Airport, a 12,500 maximum landing weight aircraft (e.g., King Air 200) would pay \$36.25 per landing, while the same aircraft would pay \$32.63 at Flying Cloud or Anoka County – Blaine Airport, based on MAC's 2018 rate schedule. In comparison, STC's published landing fees of a minimum of \$14.00 for aircraft under 12,500 lbs., and \$0.63 per 1,000 pounds gross landing weight for aircraft over 12,500 lbs., only calculates to \$7.86 for the same aircraft.

Table 30 provides a comparison of fuel flowage fees between MAC airports and airports from the benchmarking study, as of 2018:

Table 30. Fuel Flowage Fee Comparison (2019 figures)

Airport	100LL (Av Gas)	Jet A Fuel
St. Cloud Regional Airport	\$ 0.110	\$ 0.110
Anoka County - Blaine Airport	\$ 0.173	\$ 0.122
Downtown St. Paul Airport	\$ 0.173	\$ 0.122
Flying Cloud	\$ 0.173	\$ 0.122
Stillwater, OK	\$ 0.195	\$ 0.195
Latrobe, PA	\$ 0.060	\$ 0.090
Ogden, UT	\$ 0.070	\$ 0.055
Appleton, WI	N/A	\$ 0.050
Fort Collins/Loveland, CO	takes percentage of gross sales	

SBA recommends the City review the MAC methodology for landing, fuel flowage, ramp handling/aircraft parking and other commercially viable fees and implement a similar based fee structure at STC.

Fixed Base Operator(s)

There are two fixed based operators on the Airport. Wright Aero, Inc. is a limited service FBO that offers aircraft rentals, flight training, and charter flights to the public. It has been in operation since 1982 and generally provides its services through facilities leased by St. Cloud Aviation, a full service FBO on the field.

St. Cloud Aviation (SCA) was purchased by Robert Shadduck and William Mavencamp Jr. (also an owner of Wright Aero) in 1988. SCA provides avionics repair and installation, the sale of aircraft parts and maintenance to the general aviation community, and provides flight line services including: fuel, deicing, aircraft lavatory service, hotel reservations, car rental reservations, catering, overnight and long-term aircraft storage, ground handling, and other services. St. Cloud Aviation owns and operates the Airport's only fuel farm. St. Cloud Aviation employs approximately 20 full- and part-time personnel and is believed to be the second largest employer on the airport behind the Minnesota Air National Guard as the largest employer.

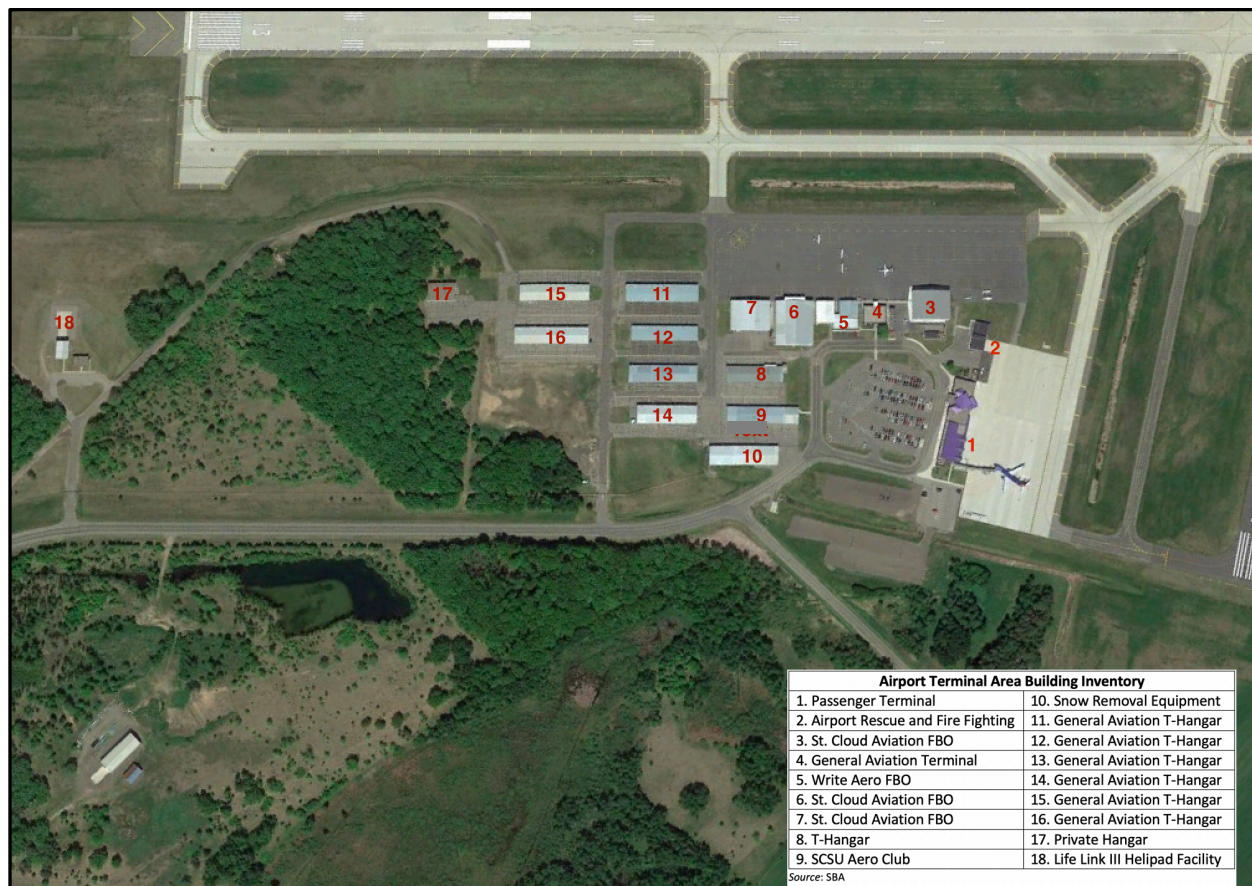
A detailed review of the SCA lease was performed in order to understand the return of revenue to the Airport for the commercial privileges provided therein. SBA found that the lease was lacking in revenue generation when compared to other FBO leases in Minnesota, including FBOs at Rochester International Airport, Duluth International Airport, as well as the commercial rates and charges policies of the reliever airports operated by the Metropolitan Airport Commission. Each of these airports charge commercial operators generally higher rates and fees, and also have established percentage of gross sales requirements, which STC does not. Other deficiencies were noted as well.

Remediation to this situation could include a renegotiation of the lease with the current FBO with terms more favorable to the Airport and more in alignment with industry standards, among other options. A comparison with the lease terms of similar airports found that, at the Airport's current volume of goods and services, a lease with more equitable, industry-standard terms would bring in significant additional revenue.

Hangar Management

There are six conventional aircraft hangars, eight general aviation T-hangars, and a helicopter facility within the terminal quadrant of the Airport. Figure 22, below, depicts the current Airport Terminal Area Inventory. The Airport is in need of re-numbering its buildings as some existing numbers are duplicative, or confusing; for example, there presently exists conventional Hangars 2 and 5 while also T-hangars 2 and 5. So for discussion within this chapter, buildings are referred to as indicated in Figure 6-1 below.

Figure 21. Airport Terminal Area Building Inventory



Buildings 3, 4, 5, 6, and 7 on Figure 6.1 are operated by Wright Aero, St. Cloud Aviation, or a combination thereof. As previously mentioned, the two firms at least partially share the same owners and all of these buildings are addressed under one lease between the Airport and St. Cloud Aviation (SCA). Specifics are as follows:

- **Building 3** is a conventional aircraft storage hangar owned by the Airport and leased to SCA under a long-term, 20-year, arrangement beginning in 2014.
- **Building 4** is the General Aviation Terminal also owned by the Airport and leased to SCA.
- **Building 5** consists of both office, training, and hangar space. It is owned and operated by Wright Aero and pays the Airport, through the SCA lease, a land lease equivalent to the footprint of the building. From within the facility, Wright Aero provides flight training services and testing services with offices on one side of the facility, while the other side is configured to house and maintain both flight training aircraft as well as aircraft available for charter.
- **Buildings 6 and 7** are traditional aircraft storage hangars owned by SCA which pays a ground rent to the airport for the space equivalent to the footprint of the buildings, according to the current lease.

Building 9 is an aircraft storage T-hangar capable of storing 10 aircraft; however, it is currently modified to accommodate only eight aircraft while allowing for a shop area in support of the Experimental Aircraft Association (EAA) activities. The hangar is owned and operated by the SCSU Aero Club which is

believed to have five aircraft located in the hangar. Three of the aircraft are believed to be owned by the club, while two aircraft owned by sub-tenants. As the building is owned by the Club, the Club pays rent for the land beneath the hangar pursuant to a lease with the Airport which runs from January 1, 2015 through December 31, 2029 (15 years). The leased area includes 12,534 sq. ft. for which the lessee is currently paying \$0.187 per sq. foot per year, while also increasing by 2% per year through the end of the lease term. The yearly rates, per the lease, are shown below in Table 31.

Table 31. Leave Revenue Projections 10 Years Out

Year	Rate	Annual Lease Amount
2015	\$0.180	\$2,256.12
2016	\$0.184	\$2,301.24
2017	\$0.187	\$2,347.27
2018	\$0.191	\$2,394.21
2019	\$0.195	\$2,442.10
2020	\$0.199	\$2,490.94
2021	\$0.203	\$2,540.76
2022	\$0.207	\$2,591.57
2023	\$0.211	\$2,643.40
2024	\$0.215	\$2,696.27
2025	\$0.219	\$2,750.20
2026	\$0.224	\$2,805.20
2027	\$0.228	\$2,861.31
2028	\$0.233	\$2,918.53
2029	\$0.238	\$2,976.90

The Lessee is responsible for utilities, while the Airport is responsible for the removal of snow and ice in and about the hangar facility.

A review of this lease, and consistent with the findings from the review of other leases on the Airport, indicates that the leased premises is the equivalent to land in sq. ft. as the building footprint itself. It does not accommodate any additional land around the building used for access and staging. This leasing practice is inconsistent with industry norms. The MAC, for example, includes with its land leases a formula that recognizes that a building is part of a “leasehold” that includes area **in and around** the building to support necessary operations—particularly in a situation such as this where the lease states the hangar is for “exclusive use” by the tenant. Likewise, the lease is void of any reference of the ability for the lessee to sub-lease space. All sub-leasing of space in a tenant owned or occupied building should be subject to the approval of the Airport. In an instance where it is merely convenient to sub-lease space, and it is not part of the lessee’s core purpose, the request for a sub-lease should **not** be approved and the proposed sub-tenant encouraged to occupy one of the Airport provided T-hangars for remuneration directly to the Airport. If the proposed sub-leasing is, however, core to the lessee’s operations, then the sub-lease generally should be approved; however, the Airport should derive a benefit in the form of a percentage of gross revenue from the sub-lease operations or some other agreed upon remuneration.

As it currently stands, the lessee subleases space in Hangar 9 at a rent that is under the market value that Airport itself rents out hangar space, thus undercutting the Airport's ability to maintain its (already below market) rate structure.

Buildings 8, 11, 12, 13, 14, 15, and 16 consist of aircraft storage T-hangars owned by the Airport.

Table 6-14, below, provides a detailed inventory of each T-hangar, total spaces, currently leased spaces, and the annual T-hangar fees generated for the Airport:

Table 32. T-Hangar Summary

T-Hangar Building #	Total Units	Vacant Units	Monthly Rental Amount	Rents Derived
8	8	0	\$ 133	\$ 12,768
11	10	0	\$ 154	\$ 18,480
12	10	0	\$ 141	\$ 16,920
13	9	0	\$ 141	\$ 15,228
13 - Heated Unit	1	0	\$ 175	\$ 2,100
14	8	0	\$ 169	\$ 16,224
15	10	0	\$ 141	\$ 16,920
16	9	2	\$ 169	\$ 14,196
16 - Oversized Unit	1	0	\$ 202	\$ 2,424
Total	66	2		\$ 115,260

It should be noted that T-hangar fees are the single largest source of operating revenue that exists at the Airport today.

Finally, the project team assessed the adequacy of STC's T-hangar rates in comparison with other regional airports, both in MN as well as airports in the benchmarking Peer Airport Comparable Analysis presented elsewhere in this report. Table 33 below shows benchmarking airports comparison rates.

Table 33. T-Hangar Benchmarking Comparison Rates

Benchmarking Airport	Monthly Rental Low	Monthly Rental High
St. Cloud	\$ 133	\$ 202
Stillwater, OK	\$ 200	\$ 200
Northwest, CO	\$ 213	\$ 262
Northern CO Regional Airport	\$ 213	\$ 279

Based on the review of peer airports, the project team found some abnormality in rate structures themselves; however, it should be noted that it is difficult to make precise "apples-to-apples" comparisons between smaller airports as the conditions and market forces for lease rates varies widely. It was, however, noted that STC maintains an abnormally high T-hangar occupancy rate of greater than 97%, with only two units available for rental at this time. This suggests both that STC's market demand for T-hangars is able to sustain higher fees without significant risk of losing clientele. As the remaining two units become leased in the future, the Airport will have to decide whether to build additional units,

increase fees as a means of managing existing inventory, or a combination of both measures. Either way, there is clearly an immediate need for increased hangar space and the project team recommends additional T-hangar and conventional/box hangar capacity within the short-term period.

Moreover, because of the below market rates currently being charged for hangar rents, the project team recommends higher than normal rent increases of 10% per year for five years until market rates are established. Afterwards, a standard cost of living increase of 3% per year could be used for increases. A sample schedule would be as follows:

- Current 2018 rent of \$202 (high end of the range)
- Proposed 2019 rent with 10% increase - \$146
- Proposed 2020 rent with 10% increase - \$161
- Proposed 2021 rent with 10% increase - \$177
- Proposed 2022 rent with 10% increase - \$195
- Proposed 2023 rent with 10% increase - \$214

Using this schedule of market valuation adjustment, hangar rents would be at market value by 2023 and rent increases that followed would follow a more typical cost of living increase. Of course, this sample calculation is for the low end of the current range, and the same type of formulation would need to be conducted for the high end of the range as well, until that value reaches markets rates, as follows:

- Current 2018 rent of \$133 (low end of the range)
- Proposed 2019 rent with 10% increase - \$222
- Proposed 2020 rent with 10% increase - \$244
- Proposed 2021 rent with 10% increase - \$268
- Proposed 2022 rent with 10% increase - \$295

Building 17 consist of a small box hangar of unknown floor area, however it was reported by Airport personnel as incapable of housing corporate jet sized aircraft in its current configuration. The hangar is owned by the Airport and leased as separate units to 1) “Hangar 15 LLC” for a monthly rent of \$600.00 and 2) “Dr. Bernie Erikson” for a monthly rent of \$325.00. The Hangar 15 LLC lease is exclusive of utilities and general maintenance, while the lease with Dr. Erickson does not stipulate maintenance or utility obligations. Both leases expire December 31, 2020.

Building 18 consist of a building and helipad pad in support of Life Link III operations.

Historical Operational Data

In this section, the project team present the results of our research into historical data points for the Airport which were needed to 1) provide a context for our overall analysis of operations and strategic planning, and 2) as a baseline from which to base future revenue projections. Below we present historical data for air carrier operations (also known as “landings”), passenger enplanements (as reported by the FAA, which are the official numbers and differ slightly from Airport records), and air taxi operations. After the historical data is presented, the future revenue projected based on growth of these past data is offered. The overall enterprise is to create a realistic and viable picture of how to increase revenue—from which specific sources—in order to reduce the deficit, with the ultimate goals to eventually move the Airport to complete financial self-sufficiency.

Historical Air Carrier Operations —Landings

Below in Table 34 are the historical numbers for air carrier operations, also known as “landings.” These numbers reflect the United flight to Chicago that flew for ten months from the Spring of 2014 to early 2015. Now that this service no longer runs, the carrier fleet consists of Allegiant flying to two destinations (Arizona and Florida) and Sun Country flying to one destination (Nevada).

Table 34. Historical Air Carrier Operations – Landings

Year	Carrier	Landings (Historical)
2013		
	Allegiant	100
	Sun Country	0
	Total	100
2014		
	United	450
	Allegiant	126
	Sun Country	0
	Total	576
2015		
	United	77
	Allegiant	109
	Sun Country	8
	Total	194
2016		
	Allegiant	106
	Sun Country	12
	Total	118
2017		
	Allegiant	148
	Sun Country	10
	Total	158
2018		
	Allegiant	140
	Sun Country	9
	Total	149

Historical Enplanements

Below in Table 35 are the historical numbers for enplanements as recorded by the FAA Terminal Area Data reports, which are recognized as the official numbers. Airport enplanement figures differ somewhat from these official FAA numbers, but typically only slightly.

Table 35. Historical Enplanements

Fiscal Year	Enplanements		
	Air Carrier	Commuter	Total
2001	-	22,044	22,044
2002	-	21,631	21,631
2003	-	19,825	19,825
2004	450	21,191	21,641
2005	-	23,041	23,041
2006	-	25,215	25,215
2007	951	25,471	26,422
2008	1,667	19,920	21,587
2009	1,669	14,056	15,725
2010	1,128	2,488	3,616
2011	292	-	292
2012	217	3	220
2013	12,271	-	12,271
2014	19,260	7,093	26,353
2015	17,010	6,398	23,408
2016	16,109	-	16,109
2017	18,914	-	18,914

Source: FAA Terminal Area Data (TAD) by Federal Fiscal Year

Historical Based Aircraft

Below in Table are the historical numbers for based aircraft, as sourced from the FAA.

Table 36. Historical Based Aircraft

Year	Based Aircraft
2001	85
2002	85
2003	85
2004	95
2005	103
2006	105
2007	105
2008	105
2009	105
2010	105
2011	107
2012	75
2013	78
2014	79
2015	92
2016	89
2017	89

Source: FAA

Historical Air Taxi

The historical numbers for the air taxi operations for 2017 were 508. Air taxi operations include landings and ramp handling and parking fees, but these revenue items are difficult to discern as they are not tracked separately by these names by the City. While the City in its revenue numbers does have an item listed as “ramp handling fee,” for the past five years this line item only shows a value for 2016, 2017, and 2018 and averages around \$1,100 per year. The City does not track landing fees as a separate line item, nor does it track parking fees for aircraft as a line item. If it did, this category would be further broken down into aircraft day parking fees and aircraft overnight parking fees. For the sake of forecasting, then, given there are no discernable figures for aircraft landing and parking fees, the project team will use a figure of \$100 for each air taxi operation, starting with the 2017 figure of 508 and increasing yearly based on a conservative percentage rate increase in operations.

Projected Revenue Forecasts

This section discusses future revenue forecasts for both the Airport Construction as well as Operating Special Revenue funds.

Operational Forecasts

Operational forecasts for STC were developed as part of the Airport Master Plan Update (MPU) in 2014. Included in the forecasts are projections regarding passenger enplanements, operations (i.e., landing or a takeoff), based aircraft, and others. It should be noted that the MPU included a more conservative scenario and a more aggressive or optimistic scenario; however, even the more conservative projections are significantly overstated to actual numbers incurred since the report was written. This is understandable since it would have been impossible to predict the loss of commercial air service so soon after its reinstatement at the Airport (i.e., the United service to Chicago lasted only 10 months spanning from the Spring of 2014 to early 2015). Moreover, a Master Plan Update, by design, is geared more toward the adequacy of facilities and capital needs rather than the financial status of the facility. For our purposes in this report, the project team focuses on a financial forecast, not a capital needs assessment.

This section evaluates forecast data as applied to rates and charges at the Airport in order to determine order of magnitude revenue forecasts. The primary approach is to determine the reasonableness of existing forecast data based on today's environment and establish revised forecasts where appropriate. In some instances where mid- to long-range forecasting would prove difficult to validate, a standard revenue growth rate of 3% year-over-year is applied as a means of determining future projected income.

Air Carrier Operations

Air carrier operations (i.e., commercial passenger airline) result in the following sources of revenue for the Airport under the current fee schedule practices for collecting revenue: "Per Turn Fee," which includes landing fee, parking fee, gate-use and hold-room fee, and fuel flowage fee. Currently, the Airport collects \$293.00 as a per turn fee from passenger air carrier operations.

In 2018, 149 air carrier landings, each resulting in a Per Turn Fee, occurred. In developing revenue projections through 2029, the project team applied the following assumptions to 2018 data, taking into consideration the state of the airline industry, the ASD analysis performed as part of this study, and goals regarding increased air carrier activity as stated earlier in this chapter. Specifically:

- A general 3% increase per year in fee structure
- A 3% year-over-year increase in non-scheduled charter operations
- Beginning in 2021, one additional regularly scheduled flight to an existing flight destination (12 landings)
- Beginning in 2023, one new scheduled destination city with twice weekly seasonal service (60 landings)
- Beginning in 2027, one new scheduled flight to an existing city with twice weekly seasonal service (60 landings)

Table 37 compares base year air carrier operations and revenue to forecast years through 2028.

Table 37. Air Carrier Operations

Year	Scheduled Air Carrier	Non-Scheduled Air Carrier	Per Turn Fee	Total
2018 Base Year	140	9	\$ 293	\$ 43,657
2019	140	9	\$ 302	\$ 44,967
2020	152	10	\$ 311	\$ 50,357
2021	152	10	\$ 320	\$ 51,867
2022	152	10	\$ 330	\$ 53,423
2023	194	10	\$ 340	\$ 69,292
2024	194	11	\$ 350	\$ 71,721
2025	194	11	\$ 360	\$ 73,872
2026	236	11	\$ 371	\$ 91,677
2027	278	12	\$ 382	\$ 110,867
2028	320	12	\$ 394	\$ 130,731

Enplanements

Various forms of revenue are generated for each enplaned passenger at the Airport. They include, on the capital side, Passenger Facility Charges (PFCs) which are currently set at the maximum allowed by the Federal government at \$4.50 per enplaned passenger, and FAA entitlement funds to be directed at airport capital improvements in the amount of \$7.80 per enplanement, but not less than \$1,000,000 per year. On the operational side, facility usage by passengers results in concession sales, vending, rental car facility usage charges and fees, and automobile parking fees, assuming a “pay for parking” policy is instituted. Presently, the Airport does not take a percentage of rental car fees, and the matter of a “pay for parking” policy was reviewed within the study and was found that most communities, nationally, rely on parking revenues in order to meet airport operating revenue needs—moreover, these funds constitute a significant portion of the airports’ operations.

A detailed analysis on automobile parking was performed as part of the parking study. The parking study analysis queried what the level of parking revenue might be if the Airport charged for parking, and further, assessed the optimum fee for parking should a “pay for parking” policy be adopted. The analysis conservatively estimated, based on 2017 data, that between \$61,000 to \$145,000 new revenue to the Airport could result from a “pay for parking” policy.

Because the analysis performed was conservatively stated, insofar it does not take into account survey bias, or that there are very limited alternatives if driving yourself to the Airport other than to park in the Airport provided spaces, it is likely that actual revenue derived from a pay-to-park policy would be higher than \$145,000 based on the same daily parking rate of \$5.00 per day. This higher estimate is derived by acknowledging that while some participants in the study indicated they would be less inclined to park at the Airport should a fee be charged, journey from residence (i.e., origin data) extracted from the Air Service Development study, confirmed that passengers using STC commute long distances in order to take advantage of the low cost carriers serving the Airport, and that in most cases, it would be more cost effective and convenient to drive to and park at the Airport rather than having a friend or family member make the round-trip twice.

For this category of projected revenue, the higher end of the revenue range is used in the budget forecast, of course assuming a pay policy will be adopted, resulting in conservative calculations of \$145,000 parking revenue in year 2018 data, or \$7.67 of parking revenue per enplaned passenger.

Given the above, revenue projections for core enplanement driven revenue are as follows:

Table 38. Enplanement Driven Revenue Forecast

Year	Enplanements	Passenger Facility Charges	FAA Entitlement Funding	Auto Parking
2019	20,065	\$ 90,293	\$ 1,000,000	\$ 153,899
2020	20,667	\$ 93,001	\$ 1,000,000	\$ 158,516
2021	22,823	\$ 102,703	\$ 1,000,000	\$ 175,052
2022	23,508	\$ 105,784	\$ 1,000,000	\$ 180,304
2023	29,589	\$ 133,150	\$ 1,000,000	\$ 226,947
2024	30,477	\$ 137,144	\$ 1,000,000	\$ 233,755
2025	31,391	\$ 141,259	\$ 1,000,000	\$ 240,768
2026	32,333	\$ 145,497	\$ 1,000,000	\$ 247,991
2027	38,679	\$ 174,053	\$ 1,000,000	\$ 296,664
2028	39,839	\$ 179,275	\$ 1,000,000	\$ 305,564

Air Taxi Operations

According to FAA data, 508 air taxi operations occurred at the Airport in 2017. Approximately one-half of the operations represent a landing. The Airport's financial records do not identify landing fees as a line-item; however, they do identify ramp handling fees projected at \$1,138 for 2018. These fees may or may not be attributed to air taxi operations; regardless, based on the Airport's published fee schedule, the revenue collected doesn't align with the FAA data. In light of this, as a defined category of revenue, it is estimated that a combined ramp handling and landing fees might average approximately \$100.00 per landing and would yield \$25,400 (2017). However, this also assumes all air taxi landings are able to be successfully collected. In reality, perhaps capturing 75% of these operations is a more likely scenario going forward.

Table 39 projects air taxi revenue based on 75% collection rate, average of \$100.00 per landing combined ramp and landing fees, and an activity growth rate of 3 percent annually.

Table 39. Forecast Air Taxi Revenue

Year	Air Taxi Landings @ \$100 ea.	Total
2018 Base year	254	\$ 25,400
2019	262	\$ 26,162
2020	269	\$ 26,947
2021	278	\$ 27,755
2022	286	\$ 28,588
2023	294	\$ 29,446
2024	303	\$ 30,329
2025	312	\$ 31,239
2026	322	\$ 32,176
2027	331	\$ 33,141
2028	341	\$ 34,135

While the collection of landing fees is not presently tracked as a separate line item in the Airport's operating revenue fund, it is recommended that a revised landing fee policy be adopted and that landing fees for all designated aircraft be collected either by the Airport or by arrangement with the FBO. Likewise, future landing fees should be accounted for as a separate line item in the Airport's revenue budget. As there is little or no historical data/record of landing weight of aircraft, or by aircraft

power-plant type, it is estimated that landing fees, properly administered through a revised program, might result in approximately \$200 per average day, or \$73,000 annually.

Table 40 projects landing fees based on this figure, compounded 3% per year for inflation, and 3% per year for increases in forecast aircraft activity (for a total of a 6% yearly increase):

Table 40. Forecast of Landing Fee Revenue

Year	Total
2018 Base Year	N/A
2019	\$ 73,000
2020	\$ 77,380
2021	\$ 82,023
2022	\$ 86,944
2023	\$ 92,161
2024	\$ 97,690
2025	\$ 103,552
2026	\$ 109,765
2027	\$ 116,351
2028	\$ 123,332

Based Aircraft

The Airport Master Plan projected the Airport's based aircraft inventory to increase to 123 aircraft by 2016, then further increasing to 159 by 2031. Here it is important to adjust the "base year" of the forecast and apply a linear rate of growth as projections in this category have not comported to actual numbers. Thus, the based aircraft forecast for financial forecasting is as follows:

Table 41. Forecast of Based Aircraft

	Single Engine	Multi Engine	Jet	Helicopter	Other	Total
2018 Base Year	63	4	9	1	12	89
2019	65	4	9	1	12	92
2020	67	4	10	1	13	94
2021	69	4	10	1	13	97
2022	71	5	10	1	14	100
2023	73	5	10	1	14	103
2024	75	5	11	1	14	106
2025	77	5	11	1	15	109
2026	80	5	11	1	15	113
2027	82	5	12	1	16	116
2028	85	5	12	1	16	120

While less robust than the previous Master Planning forecast, this forecast is notable insofar as it represents both a driver in Airport revenue, as well as the need for the Airport to more aggressively address based aircraft storage needs in the near future. Options exist to build new T-hangars, build new conventional hangars, recover the Aero Club hangar as a means of increasing existing airport T-hangar inventory, or a combination thereof. For operating revenue stream forecasts, it will be assumed that the Airport will combine these strategies such that the ratio of total aircraft storage fees to total based aircraft will remain relatively constant; that is, of the 89 based aircraft today 66 are stored in airport provided T-hangars which represents 74% of aircraft based at the Airport. Therefore, future 10-year

airport T-Hangar storage is estimated at 120 aircraft with 4-5 of these aircraft requiring housing in conventional as opposed to T-hangar.

In addition, current T-hanger rental rates at STC are low compared to the peer airports including in the Airport Comparable Analysis, with T-hangar rental rates beginning at approximately \$135 per month compared to approximately \$200 per month at peer facilities. Given this, the project team is recommending a 10% annual increase in T-hangar rents beginning 2019 and continuing to increase 10% annually for four additional years, followed by a 3% per year increase throughout the remainder of the forecast period.

Table 42 projects hangar needs for based aircraft at the Airport, while Table 43 projects Airport T-hangar revenue based on newly implemented rates and charges, and added T-hangar storage capacity. Potential rent from new conventional hangars is not considered based on current rental rates escalated for inflation and introduced into the budget forecast according to the timeline in Table 42.

Table 42. Forecast of Hangar Needs for Increase Based Aircraft

Year	Forecast Based Aircraft	T-Hangar Occuopancy	T-Hangar units (new)	Multi-Tenant Conventional Hangars (new)
2018 Base Year	89	66	-2	
2019	92	68	0	
2020	94	70	2	
2021	97	72	4	
2022	100	74	6	1
2023	103	76	8	
2024	106	79	11	
2025	109	81	13	
2026	113	84	16	
2027	116	86	18	1
2028	120	89	21	
Total	123	91	23	2

Table 43. Forecast of T-Hangar Rent

Year	Amount
2018 Base Year	\$ 115,260
2019	\$ 126,786
2020	\$ 139,465
2021	\$ 153,411
2022	\$ 168,752
2023	\$ 185,627
2024	\$ 191,196
2025	\$ 196,932
2026	\$ 202,840
2027	\$ 208,925
2028	\$ 215,193

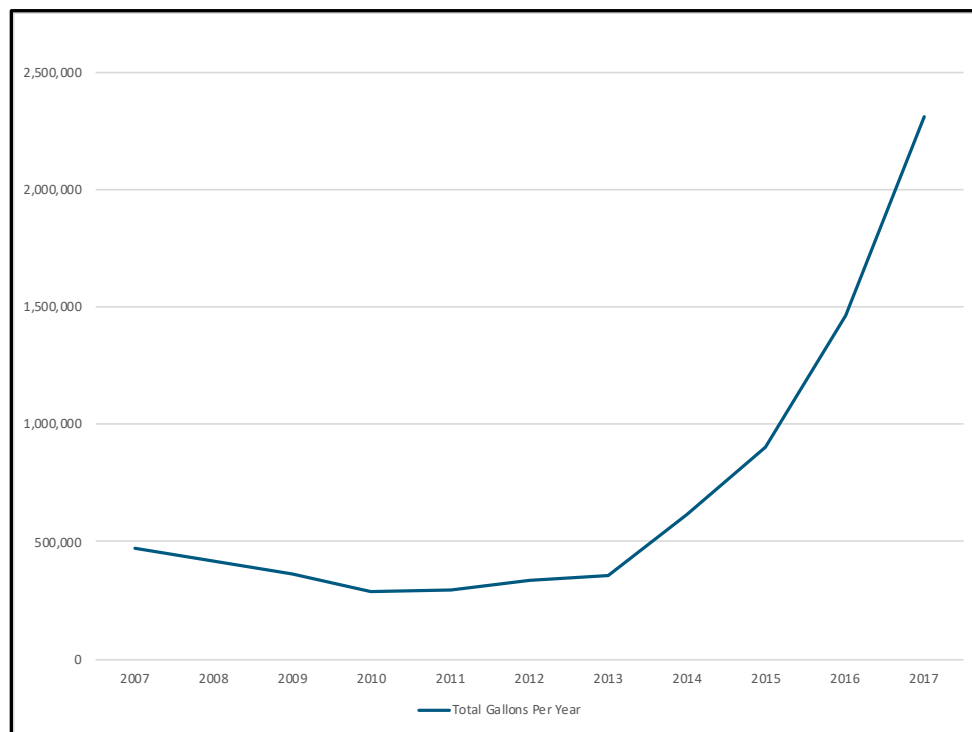
Fuel Flowage Fees

Like most airports in the United States, STC generally charges a “flowage” fee for each gallon of aircraft fuel dispensed from the Airport’s fuel farm, except for fuel for air carrier aircraft. In lieu of the fuel flowage fee (FFF), air carrier aircraft pay an “into plane” fuel handling fee to the FBO, and a “Per Turn Fee” to the Airport. The overall arrangement to accommodate air carriers is considered in the setting of the Per Turn Fee and the FFF policy.

Table 30, above, identified that the fuel flowage fees at STC are below market rates when compared to other Minnesota and non-Minnesota airports. The existing STC rates and charge will be used for forecasting future revenue below. As noted previously in this report, this is a revenue area that requires policy review and adoption of increased market-driven rates and charges.

Figure 23 indicates recent historical fuel sales at the Airport, with the upward trend primarily driven by the recent uptick in air carrier activity.

Figure 23. Historic Fuel Sales (in Gallons)



NOTE: STC subtracts the airline gallons from total Jet A when calculating a Fuel Flowage Fee since they do not charge the airline an FFF. (Rather, it is incorporated into their overall per turn fee, which is \$239.18.)

Fuel sales subject to the FFF, projected for 2018, are calculated by dividing total FFF revenue by the FFF to determine gallons of fuel sold subject to the FFF. Projected fuel flowage fees revenue for 2018 is \$27,244 which represents 247,672 gallons of fuel subject to the fee at a rate of \$0.11 per gallon.

Table 44 below represents projected fuel flowage fees based on the terms of the lease agreement with the FBO, as the operator of the fuel farm, including a rate of fuel sales growth at 3% year-over-year.

Table 44. Forecast Fuel Flowage Revenue

Year	Gallons	Fee	Total
2018 Base Year	247,672	\$ 0.11	\$ 27,244
2019	255,102	\$ 0.11	\$ 28,061
2020	262,755	\$ 0.12	\$ 31,531
2021	270,638	\$ 0.12	\$ 32,477
2022	278,757	\$ 0.12	\$ 33,451
2023	287,120	\$ 0.13	\$ 37,326
2024	295,733	\$ 0.13	\$ 38,445
2025	304,605	\$ 0.13	\$ 39,599
2026	313,743	\$ 0.14	\$ 43,924
2027	323,156	\$ 0.14	\$ 45,242
2028	332,850	\$ 0.14	\$ 46,599

Additional Observations

The project team found that the rental rates for land leases at the airport 1) compare significantly lower than land leases offered at the MAC reliever airports and 2) are applied unevenly, which is likely due to an administrative oversight. The land lease in the agreement with the Airport's FBO stipulates the land lease amount to be \$0.18 per sq. ft. in the base year (2014), then increasing 2% per year for the remainder of the lease; whereas the land lease for the SCSU hangar contains the same \$0.18 per sq. ft. formula, however the base year for that lease is 2015. This difference, by beginning the SCSU lease with the same 2015 land lease amount of the FBO, is financially inconsequential, however the variance in rates is indicative that a more stringent business mindset needs to pervade all Airport operations.

With regard to the rental rates themselves, it is observed that while the 2018 land lease rate is between \$0.191 and \$0.195, the land rental rate at three of the MAC airport's used as comparatives—including St. Paul, Flying Cloud, and Anoka—range between \$0.644 to \$0.755 for non-commercial users and \$0.479 to \$0.556 for commercial users not paying a percentage of gross revenues as well. Those also paying a percentage of gross revenues range between \$0.252 and \$0.377. Each rate is a minimum of twice the rate for land rent compared to STC while in some instances, nearly four times STC's rental rate.

It is recommended that STC review the Airport's leasing policies with regard to land leases, and, in addition to other income categories, update policies and rental rates applied to land leases, as well. For budgeting purposes, the team did not include projected future rates in its calculations as both instances, cited above, are included in long-term, i.e., 15 to 20 year, agreements.

Revenue Summary Before New Initiatives

Based on the assumptions leading in to each revenue category above, Table 45 provides a 10-year operational revenue forecast excluding tax subsidies for the Airport.

Table 46 presents airport operational expense forecast held at an annual increase of 2% per year with the exception of filling a position to assist the Airport with marketing and business development at an estimated \$80,000/yr. plus benefits.

Table 47 presents forecast inter-departmental (unallocated) costs associated with the Airport, now allocated to the cost of operating the Airport. It should be noted, not all of these costs would be accepted by the FAA if the Airport were profitable. As it is not, proper cost allocations can be developed in the future. The present deviation to FAA policy is minor in comparison to the Airport's financial status.

Table 48 presents the current and projected future operating deficit of the Airport prior to incorporating projected revenue from new initiative not already discussed above.

Table 45. Forecast Operating Revenue

OPERATING REVENUES	2018 Projected	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
INTERGOVERNMENT TRANSFERS											
State Grants Non-Capital	\$ 11,965	\$ 12,324	\$ 12,694	\$ 13,075	\$ 13,467	\$ 13,871	\$ 14,287	\$ 14,716	\$ 15,157	\$ 15,612	\$ 16,080
Airport Maintenance Grants	\$ 112,000	\$ 115,360	\$ 118,821	\$ 122,385	\$ 126,057	\$ 129,839	\$ 133,734	\$ 137,746	\$ 141,878	\$ 146,135	\$ 150,519
Total Intergovernmental Transfers	\$ 123,965	\$ 127,684	\$ 131,515	\$ 135,460	\$ 139,524	\$ 143,710	\$ 148,021	\$ 152,462	\$ 157,035	\$ 161,746	\$ 166,599
AIRPORT SERVICES & FEES											
Other Monies	\$ 2,767	\$ 2,850	\$ 2,935	\$ 3,023	\$ 3,114	\$ 3,208	\$ 3,304	\$ 3,403	\$ 3,505	\$ 3,610	\$ 3,719
Refunds and Reimbursements	-	-	-	-	-	-	-	-	-	-	-
Public Works Services Maintenance	\$ 1,673	\$ 1,723	\$ 1,775	\$ 1,828	\$ 1,883	\$ 1,939	\$ 1,998	\$ 2,057	\$ 2,119	\$ 2,183	\$ 2,248
Snow Removal Fees	\$ 6,701	\$ 6,902	\$ 7,110	\$ 7,323	\$ 7,543	\$ 7,769	\$ 8,002	\$ 8,242	\$ 8,489	\$ 8,744	\$ 9,006
Rent - Car Rental Agency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Scheduled Air Service Fee	\$ 43,657	\$ 44,967	\$ 50,357	\$ 51,867	\$ 53,423	\$ 69,292	\$ 71,721	\$ 73,873	\$ 91,677	\$ 110,867	\$ 130,731
Fixed Based Operator Fee	\$ 23,061	\$ 23,753	\$ 24,466	\$ 25,200	\$ 25,956	\$ 26,734	\$ 27,536	\$ 28,363	\$ 29,213	\$ 30,090	\$ 30,993
T Hangar Rental Fee	\$ 115,260	\$ 126,786	\$ 139,465	\$ 153,411	\$ 168,752	\$ 185,627	\$ 191,196	\$ 196,932	\$ 202,840	\$ 208,925	\$ 215,193
Other Airport Rental Fee	\$ 75,000	\$ 77,250	\$ 79,568	\$ 81,955	\$ 145,217	\$ 149,574	\$ 154,061	\$ 158,683	\$ 163,443	\$ 238,835	\$ 246,000
Gas Commissions Airport	\$ 27,244	\$ 28,061	\$ 31,531	\$ 32,477	\$ 33,451	\$ 37,326	\$ 38,445	\$ 39,599	\$ 43,924	\$ 45,242	\$ 46,599
Sale of Airport Supplies	\$ 102	\$ 105	\$ 108	\$ 111	\$ 114	\$ 118	\$ 121	\$ 125	\$ 129	\$ 133	\$ 137
Passenger Facility Charges	-	-	-	-	-	-	-	-	-	-	-
Badge Fee	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 5,970	\$ 6,149	\$ 6,334	\$ 6,524	\$ 6,720
Ramp Handling Fee	\$ 1,138	\$ 1,172	\$ 1,207	\$ 1,244	\$ 1,281	\$ 1,319	\$ 1,359	\$ 1,400	\$ 1,442	\$ 1,485	\$ 1,529
Landing Fees	-	\$ 73,000	\$ 77,380	\$ 82,023	\$ 86,944	\$ 92,161	\$ 97,690	\$ 103,552	\$ 109,765	\$ 116,351	\$ 123,332
Air Taxi Fees (not included in ramp or landing fees)	-	\$ 26,162	\$ 26,947	\$ 27,755	\$ 28,588	\$ 29,446	\$ 30,329	\$ 31,239	\$ 32,176	\$ 33,141	\$ 34,135
Auto Parking	-	\$ 153,899	\$ 158,516	\$ 175,052	\$ 180,304	\$ 226,947	\$ 233,755	\$ 240,768	\$ 247,991	\$ 296,664	\$ 305,564
Total Airport Services & Fees	\$ 301,603	\$ 571,781	\$ 606,668	\$ 648,732	\$ 742,197	\$ 837,256	\$ 865,487	\$ 894,384	\$ 943,047	\$ 1,102,794	\$ 1,155,906
MISCELLANEOUS											
Vending Machine Commissions	\$ 207	\$ 270	\$ 324	\$ 388	\$ 466	\$ 559	\$ 671	\$ 805	\$ 967	\$ 1,160	\$ 1,392
Total Miscellaneous	\$ 207	\$ 270	\$ 324	\$ 388	\$ 466	\$ 559	\$ 671	\$ 805	\$ 967	\$ 1,160	\$ 1,392
TOTAL OPERATING REVENUE FROM EXISTING SOURCES	\$ 425,776	\$ 699,735	\$ 738,506	\$ 784,581	\$ 882,187	\$ 981,525	\$ 1,014,179	\$ 1,047,651	\$ 1,101,049	\$ 1,265,700	\$ 1,323,896

Table 46. Forecast Operating Expenses

FORECAST OPERATING EXPENSES	2018 Projected	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PERSONNEL SERVICES											
Perm. Employee Regular	\$ 409,080	\$ 489,080	\$ 498,862	\$ 508,839	\$ 519,016	\$ 529,396	\$ 539,984	\$ 550,784	\$ 561,799	\$ 573,035	\$ 584,496
Perm. Employee Overtime	\$ 37,189	\$ 37,933	\$ 38,691	\$ 39,465	\$ 40,254	\$ 41,059	\$ 41,881	\$ 42,718	\$ 43,573	\$ 44,444	\$ 45,333
Temp. Employee Regular	\$ 1,314	\$ 1,340	\$ 1,367	\$ 1,394	\$ 1,422	\$ 1,450	\$ 1,479	\$ 1,509	\$ 1,539	\$ 1,570	\$ 1,601
Temp. Employee Overtime	-	-	-	-	-	-	-	-	-	-	-
Longevity	\$ 3,237	\$ 3,301	\$ 3,367	\$ 3,435	\$ 3,504	\$ 3,574	\$ 3,645	\$ 3,718	\$ 3,792	\$ 3,868	\$ 3,946
Sick Leave Payout	\$ 6,486	\$ 6,616	\$ 6,748	\$ 6,883	\$ 7,021	\$ 7,161	\$ 7,305	\$ 7,451	\$ 7,600	\$ 7,752	\$ 7,907
Misc. Payouts	\$ 1,606	\$ 1,638	\$ 1,671	\$ 1,704	\$ 1,738	\$ 1,773	\$ 1,809	\$ 1,845	\$ 1,882	\$ 1,919	\$ 1,958
FICA Permanent Employees	\$ 27,286	\$ 27,831	\$ 28,388	\$ 28,956	\$ 29,535	\$ 30,126	\$ 30,728	\$ 31,343	\$ 31,969	\$ 32,609	\$ 33,261
PERA Coordinated Permanent	\$ 33,833	\$ 34,510	\$ 35,200	\$ 35,904	\$ 36,622	\$ 37,355	\$ 38,102	\$ 38,864	\$ 39,641	\$ 40,434	\$ 41,243
Medicare Permanent Employees	\$ 6,381	\$ 6,509	\$ 6,639	\$ 6,772	\$ 6,907	\$ 7,046	\$ 7,186	\$ 7,330	\$ 7,477	\$ 7,626	\$ 7,779
Medicare Temp. Employees	\$ 19	\$ 19	\$ 20	\$ 20	\$ 21	\$ 21	\$ 21	\$ 22	\$ 22	\$ 23	\$ 23
FICA Temp. Employees	\$ 81	\$ 83	\$ 85	\$ 86	\$ 88	\$ 90	\$ 92	\$ 94	\$ 95	\$ 97	\$ 99
Employer Paid Insurance	\$ 113,097	\$ 115,359	\$ 117,666	\$ 120,019	\$ 122,419	\$ 124,868	\$ 127,365	\$ 129,912	\$ 132,511	\$ 135,161	\$ 137,864
Retiree Insurance	\$ 23,997	\$ 24,477	\$ 24,967	\$ 25,466	\$ 25,975	\$ 26,495	\$ 27,025	\$ 27,565	\$ 28,116	\$ 28,679	\$ 29,252
Unemployment Benefit	\$ 11	\$ 11	\$ 12	\$ 12	\$ 12	\$ 12	\$ 13	\$ 13	\$ 13	\$ 13	\$ 14
Workers. Comp. Ins. Premiums	\$ 14,150	\$ 14,433	\$ 14,722	\$ 15,016	\$ 15,317	\$ 15,623	\$ 15,935	\$ 16,254	\$ 16,579	\$ 16,911	\$ 17,249
Total Personnel Services	\$ 677,768	\$ 763,141	\$ 778,404	\$ 793,972	\$ 809,852	\$ 826,049	\$ 842,570	\$ 859,421	\$ 876,610	\$ 894,142	\$ 912,025
SUPPLIES											
Office Supplies	\$ 868	\$ 886	\$ 903	\$ 921	\$ 940	\$ 959	\$ 978	\$ 997	\$ 1,017	\$ 1,038	\$ 1,058
Operating Supplies	\$ 10,881	\$ 11,099	\$ 11,321	\$ 11,547	\$ 11,778	\$ 12,014	\$ 12,254	\$ 12,499	\$ 12,749	\$ 13,004	\$ 13,264
Fuel	\$ 23,914	\$ 24,392	\$ 24,880	\$ 25,378	\$ 25,885	\$ 26,403	\$ 26,931	\$ 27,470	\$ 28,019	\$ 28,580	\$ 29,151
Chemicals	\$ 1,090	\$ 1,112	\$ 1,134	\$ 1,157	\$ 1,180	\$ 1,204	\$ 1,228	\$ 1,252	\$ 1,277	\$ 1,303	\$ 1,329
Uniforms Clothing Allowance	-	-	-	-	-	-	-	-	-	-	-
Repair and Maintenance Supplies	\$ 113,902	\$ 116,180	\$ 118,503	\$ 120,873	\$ 123,291	\$ 125,756	\$ 128,272	\$ 130,837	\$ 133,454	\$ 136,123	\$ 138,845
Total Supplies	\$ 150,655	\$ 153,669	\$ 156,742	\$ 159,877	\$ 163,074	\$ 166,336	\$ 169,663	\$ 173,056	\$ 176,517	\$ 180,047	\$ 183,648
SERVICES & CHARGES											
Professional Services	\$ 7,816	\$ 7,973	\$ 8,132	\$ 8,295	\$ 8,461	\$ 8,630	\$ 8,802	\$ 8,978	\$ 9,158	\$ 9,341	\$ 9,528
Financial Fees & Charges	\$ 2,208	\$ 2,252	\$ 2,297	\$ 2,343	\$ 2,390	\$ 2,438	\$ 2,487	\$ 2,537	\$ 2,587	\$ 2,639	\$ 2,692
Communications	\$ 24,620	\$ 25,112	\$ 25,614	\$ 26,126	\$ 26,649	\$ 27,182	\$ 27,726	\$ 28,280	\$ 28,846	\$ 29,423	\$ 30,011
Postage	\$ 721	\$ 735	\$ 750	\$ 765	\$ 780	\$ 796	\$ 812	\$ 828	\$ 844	\$ 861	\$ 879
Mileage	\$ 589	\$ 600	\$ 612	\$ 625	\$ 637	\$ 650	\$ 663	\$ 676	\$ 690	\$ 703	\$ 718
Training	\$ 10,039	\$ 10,240	\$ 10,444	\$ 10,653	\$ 10,866	\$ 11,084	\$ 11,305	\$ 11,532	\$ 11,762	\$ 11,997	\$ 12,237
Other Meals and Travel	\$ 70	\$ 72	\$ 73	\$ 75	\$ 76	\$ 78	\$ 79	\$ 81	\$ 82	\$ 84	\$ 86
Publishing and Advertising	\$ 6,377	\$ 6,504	\$ 6,634	\$ 6,767	\$ 6,903	\$ 7,041	\$ 7,181	\$ 7,325	\$ 7,472	\$ 7,621	\$ 7,773
Insurance	\$ 41,452	\$ 42,281	\$ 43,127	\$ 43,990	\$ 44,869	\$ 45,767	\$ 46,682	\$ 47,616	\$ 48,568	\$ 49,539	\$ 50,530
Electric Utilities	\$ 88,950	\$ 90,729	\$ 92,544	\$ 94,395	\$ 96,282	\$ 98,208	\$ 100,172	\$ 102,176	\$ 104,219	\$ 106,304	\$ 108,430
Natural Gas Utilities	\$ 22,339	\$ 22,786	\$ 23,242	\$ 23,707	\$ 24,181	\$ 24,665	\$ 25,158	\$ 25,661	\$ 26,174	\$ 26,698	\$ 27,232
Repair and Maintenance Services	\$ 87,943	\$ 89,702	\$ 91,496	\$ 93,326	\$ 95,192	\$ 97,096	\$ 99,038	\$ 101,019	\$ 103,039	\$ 105,100	\$ 107,202
Rental	\$ 3,076	\$ 3,137	\$ 3,200	\$ 3,264	\$ 3,329	\$ 3,396	\$ 3,464	\$ 3,533	\$ 3,604	\$ 3,676	\$ 3,749
Dues and Subscriptions	\$ 9,916	\$ 10,114	\$ 10,316	\$ 10,523	\$ 10,733	\$ 10,948	\$ 11,167	\$ 11,390	\$ 11,618	\$ 11,850	\$ 12,087
Refuse Tipping Fees	\$ 157	\$ 160	\$ 163	\$ 167	\$ 170	\$ 173	\$ 177	\$ 180	\$ 184	\$ 188	\$ 191
Licenses, Permits, Filing Fees	\$ 2,908	\$ 2,967	\$ 3,026	\$ 3,086	\$ 3,148	\$ 3,211	\$ 3,275	\$ 3,341	\$ 3,408	\$ 3,476	\$ 3,545
Total Services & Charges	\$ 309,181	\$ 315,365	\$ 321,672	\$ 328,105	\$ 334,668	\$ 341,361	\$ 348,188	\$ 355,152	\$ 362,255	\$ 369,500	\$ 376,890
OTHER											
Short-Term Debt Interest	\$ 2,278	\$ 2,324	\$ 2,370	\$ 2,418	\$ 2,466	\$ 2,516	\$ 2,566	\$ 2,617	\$ 2,670	\$ 2,723	\$ 2,777
Refunds & Reimbursements	\$ (1)	\$ (1)	\$ (1)	\$ (1)	\$ (1)	\$ (2)	\$ (2)	\$ (2)	\$ (2)	\$ (2)	\$ (2)
Total Other	\$ 2,277	\$ 2,323	\$ 2,369	\$ 2,416	\$ 2,465	\$ 2,514	\$ 2,564	\$ 2,616	\$ 2,668	\$ 2,721	\$ 2,776
Total Operating Expenses	\$ 1,139,881	\$ 1,234,497	\$ 1,259,187	\$ 1,284,371	\$ 1,310,058	\$ 1,336,260	\$ 1,362,985	\$ 1,390,244	\$ 1,418,049	\$ 1,446,410	\$ 1,475,339

Table 47. Forecast of Unallocated Services

Inter-Departmental Services	2018 Projected	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Airport Security-Police	\$ 21,528	\$ 21,959	\$ 22,398	\$ 22,846	\$ 23,303	\$ 23,769	\$ 24,244	\$ 24,729	\$ 25,223	\$ 25,728	\$ 26,243
Airport Fire Suppression	\$ 77,682	\$ 79,236	\$ 80,820	\$ 82,437	\$ 84,085	\$ 85,767	\$ 87,483	\$ 89,232	\$ 91,017	\$ 92,837	\$ 94,694
Legal Services	\$ 3,689	\$ 3,763	\$ 3,838	\$ 3,915	\$ 3,993	\$ 4,073	\$ 4,154	\$ 4,238	\$ 4,322	\$ 4,409	\$ 4,497
Engineering	\$ 1,489	\$ 1,519	\$ 1,549	\$ 1,580	\$ 1,612	\$ 1,644	\$ 1,677	\$ 1,710	\$ 1,745	\$ 1,779	\$ 1,815
Mayor and City Council	\$ 8,620	\$ 8,792	\$ 8,968	\$ 9,148	\$ 9,331	\$ 9,517	\$ 9,708	\$ 9,902	\$ 10,100	\$ 10,302	\$ 10,508
Finance	\$ 9,499	\$ 9,689	\$ 9,883	\$ 10,080	\$ 10,282	\$ 10,488	\$ 10,697	\$ 10,911	\$ 11,130	\$ 11,352	\$ 11,579
IT	\$ 9,406	\$ 9,594	\$ 9,786	\$ 9,982	\$ 10,181	\$ 10,385	\$ 10,593	\$ 10,805	\$ 11,021	\$ 11,241	\$ 11,466
Human Resources	\$ 1,987	\$ 2,027	\$ 2,067	\$ 2,109	\$ 2,151	\$ 2,194	\$ 2,238	\$ 2,282	\$ 2,328	\$ 2,375	\$ 2,422
Public Utilities-Airport Section	\$ 8,263	\$ 8,428	\$ 8,597	\$ 8,769	\$ 8,944	\$ 9,123	\$ 9,305	\$ 9,492	\$ 9,681	\$ 9,875	\$ 10,073
Total	\$ 142,163	\$ 145,006	\$ 147,906	\$ 150,865	\$ 153,882	\$ 156,959	\$ 160,099	\$ 163,301	\$ 166,567	\$ 169,898	\$ 173,296

Table 48. Forecast of Airport Operating Surplus / (Deficit)

HISTORICAL OPERATING REVENUES	2018 Projected	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
All Operating Revenue	\$ 425,776	\$ 699,735	\$ 738,506	\$ 784,581	\$ 882,187	\$ 981,525	\$ 1,014,179	\$ 1,047,651	\$ 1,101,049	\$ 1,265,700	\$ 1,323,896
Operating Expenses	\$ 1,139,881	\$ 1,234,497	\$ 1,259,187	\$ 1,284,371	\$ 1,310,058	\$ 1,336,260	\$ 1,362,985	\$ 1,390,244	\$ 1,418,049	\$ 1,446,410	\$ 1,475,339
Inter-Departmental Cost	\$ 142,163	\$ 145,006	\$ 147,906	\$ 150,865	\$ 153,882	\$ 156,959	\$ 160,099	\$ 163,301	\$ 166,567	\$ 169,898	\$ 173,296
Airport Surplus / (Loss)	\$ (856,268)	\$ (679,769)	\$ (668,587)	\$ (650,655)	\$ (581,753)	\$ (511,694)	\$ (508,904)	\$ (505,894)	\$ (483,567)	\$ (350,609)	\$ (324,738)

New Revenue Opportunities

This section discusses the strategies proposed to reduce and eventually eliminate the deficit within the forecasted period through 2028.

While it is difficult to precisely forecast every dollar that would be a part of new revenue as a result of the strategies recommended above, the project team feels strongly that STC can overcome its operating deficit within the 10-year timeframe by 1) implementing the recommendations above with regard to rates and charges at the Airport, 2) implementing policies akin to other peer airports regarding commercial activities and practices, and 3) taking on a business mindset that focuses on the main strategies for new business development previously mentioned, including:

- **Parking**
 - This source of revenue is completely new as there is currently no charge for parking. We estimate conservative figures of approximately \$150,000 in Year 1 with a 3% yearly increase for most years and a larger increase in the mid- to long-range forecast period. Moreover, additional air service in terms of frequency of flights to existing destinations and/or a new destination would also increase parking revenue as a likely high percentage of those new passengers would make use of the onsite parking option.
- **New Hangar and FBO Development**
 - This strategy results in new revenue by 1) attracting new corporate aircraft users to base at the Airport that invest in the development of facilities, 2) Airport developed facilities that serve to attract new tenants, and/or 3) new or expanded FBO facilities that also serve to attract new users and tenants.
- **Additional Revenue from the Existing FBO**
 - As discussed above in the FBO section, the remuneration the Airport receives from the FBO under its current lease terms is significantly under market value and does not comport with industry norms. It is imperative that the Airport share of FBO-related revenue increase. Various strategies to accomplish this—and the exact amount of revenue increase associated with it—is currently under discussion with stakeholders and relevant parties. However, in very conservative estimates, the Airport should be receiving significantly greater revenue than it currently receives.
- **Additional Air Service Activity**
 - With the introduction of added marketing and business development expertise into the organization, Airport staff would be in a better position to work with existing and potential new carriers to expand air service beyond the conservative approach used to develop the financial forecast above. Each additional enplanement results in additional revenue to the Airport, resulting from increased Passenger Facility Charges, as well as likely parking revenue, and other revenue associated with commercial services (e.g., Per Turn Fee, fueling fees, etc.).
- **Aviation Education – Flight School**
 - With the potential revitalization of an aviation educational program in the area, the Airport would garner new revenue from the fees associated with a flight school, which could be quite substantial depending on initial enrollment figures.

- **Aviation Education – Building/Facilities Rental**
 - With the potential revitalization of an aviation education program, there could be associated building/facilities rental fees for classrooms and meeting rooms. Other airports have struck deals with airlines to train pilots which have resulted in substantial rental fees for onsite facilities.
- **Non-Aero Land Development**
 - With the addition of a new staff member with expertise in marketing and business development, the Airport would be in a position to actively pursue revenue from its land parcels. The staff member would need to work with a commercial real estate vendor to vet the highest and best use for Airport land parcels and to pursue development opportunities accordingly. **NOTE:** Initial research indicates that area market values for already developed warehouse-type structures are depressed and thus do not represent a significant source of income for land or structure rental; however, the development that occurs on the land would result in additional user fees, jobs, and taxes which would increase the Airport's overall economic impact to the area.

As the Airport develops and grows, additional sources of revenue not currently foreseeable would also arise and the Airport, if managed nimbly, would ideally seize on these as well. This is why the project team stresses that a business mindset is vital to improving the Airport's financial health, and why the move to an Authority governance model is viewed as so important. The Authority model, as discussed elsewhere in this report, would provide the most nimble and agile business operations and would offer the best operating model to create and leverage commercial opportunities.

SECTION 13. CONCLUSION

As the consultant team has been sharing insights, observations, and likely recommendations with the GSDC and advisory committee throughout the study, there has been building an excitement and urgency to transition as soon as possible from the study and recommendation stage to the action and implementation phase. However, actual movement to implementation is beyond the scope of the planning study and the consultant team.

Now that the final report is submitted, it is the proper time to transition to a new phase: from study observations to implementation of study recommendations. Activities along these lines would include deciding how to pursue the various options regarding revenue enhancement, creating an advisory committee to investigate the transition to a different governance model, establishing a working consortium to review the potential for establishing a center for educational excellence for training aviation pilots, managers, and mechanical technicians, etc.

However, the most important note we would like to end on is to reiterate and re-emphasize that there is a very compelling business case to be made at St. Cloud Regional Airport, which can overcome a range of challenges to growth and opportunity, including the immutable geographic reality of being a 90-minute drive from MSP, the largest airport in the state and the 17th largest in the nation. STC is a powerful economic engine to the region, generating \$44.2 million of economic activity into the region and supporting employment for 289 jobs resulting in increased income \$17.1 million. With this kind of importance and impact, it is certainly worth investing in growing the operations of the Airport, noting that its economic impact on the immediate three-county core catchment area of Stearns, Benton, and Sherburne Counties far outweighs its operating deficit.

APPENDIXES

- A. Original RFP for the Optimization Planning Study
- B. Economic Impact Analysis
- C. Parking Policy and Pricing Analysis
- D. Air Service Development (ASD) Analysis PPT
- E. Benchmarking Comparative Analysis

**St. Cloud Regional Airport
Optimization Planning Study
Final Report**

APPENDIX A:

Original RFP for the Optimization Planning Study

REQUEST FOR PROPOSALS

ST. CLOUD REGIONAL AIRPORT AIR TRANSPORT

OPTIMIZATION PLANNING STUDY

The City of St. Cloud is the fiscal host for a public-private collaboration that is seeking consultant services to complete a market based air transport optimization planning study and strategy plan for growing utilization, impact and stewardship of the St. Cloud Regional Airport. The public-private collaboration is comprised of The Greater St. Cloud Development Corporation (GSDC), Benton County, Sherburne County, Stearns County and the City of St. Cloud with guidance and assistance also provided by MN Department of Transportation Aeronautics (MnDOT) and MN Department of Employment and Economic Development (MnDEED).

The consultant(s) must possess knowledge and expertise in the following areas:

1. Economic and demographic research and analysis;
2. Air service; and
3. Markets and technology factors that have impact on air transport and related economic development

Interested consultants must submit proposals as described by this request no later than October XX, 2017.

Background Information

The St. Cloud Regional Airport (STC) is owned and operated by the City of St. Cloud. The airport is located four miles east of the St. Cloud Central Business District and approximately 75 miles northwest of the Minneapolis-St. Paul metropolitan area. STC is a significant asset in the central MN region and is essential to general aviation with 89 based aircraft. The airport serves private, commercial, corporate, cargo, and military operations. While STC is mostly used for general aviation, it is also served by one commercial airline (Allegiant Air) and periodic commercial charter service (Sun Country).

Covering 1,400 acres, the Airport features include two intersecting runways, associated taxiways, an airline terminal and support area, an Airport Rescue and Fire Fighting (“ARFF”) facility, Fixed Based Operators, Army Aviation Support Facility and an Air Traffic Control Tower.

The Airport is included in the National Plan of Integrated Airport Systems for 2017–2021, which categorized STC as a *primary commercial service* airport. As per the Airport’s *2015 Annual Report*, STC had 0 total passengers in calendar year 2011; 1,437 in 2012; 28,767 in 2013; 59,705 in 2014; and 34,454 in 2015.

Mesaba Airlines, operating flights for Delta Connection, ended service to Minneapolis/St. Paul on December 31, 2009. Allegiant Air began service to Phoenix on December 15, 2012. With the assistance of a federal grant and local business community contributions totaling more than \$1.3 million, SkyWest, operating flights for United Airline, provided twice daily service to Chicago O’Hare (ORD) for a 10 month period commence in May 2014 and terminating in the spring of 2015.

The Airport is vital to the development and economic growth of the City of St. Cloud and surrounding communities. According to a recent economic impact study, STC generates more than \$20 million in

annual economic impact for the area, not including commercial airline service. At the Airport itself, there are approximately 100 people working for the multiple tenants, which includes the Army Aviation Support Facility.

In 2016 and 2017, the Greater St. Cloud Development Corporation (GSDC) requested state funds to conduct an airport optimization planning study. The Greater St. Cloud Development Corporation is a private collaboration of approximately 250 regional business and community leaders within Benton, Sherburne, and Stearns counties in central Minnesota. The Minnesota Legislature appropriated funds for the study to the City of St. Cloud in 2017.

Project Description

The Minnesota Legislature has directed funding to the City of St. Cloud for an air transport optimization planning study for the St. Cloud Regional Airport. Minnesota Session Law describes the project as follows: *The study must be comprehensive and market-based, using economic development and air service expertise to research, analyze, and develop models and strategies that maximize the return on investments made to enhance the use and impact of the St. Cloud Regional Airport. By January 5, 2018, the city of St. Cloud shall submit a report to the Governor and the members and staff of the legislative committees with jurisdiction over capital investment, transportation, and economic development with recommendations based on the findings of the study.*¹

Purpose

The St. Cloud Regional Airport (STC) is a significant asset in the central MN region. Economic development and air service expertise is essential to research, analyze and develop models and strategies to determine how best to move the region forward in maximizing return on investment by growing utilization, impact and stewardship of the STC with completion of a comprehensive, market based study and strategic plan.

Study Committee and Administration

- The area counties (Benton, Sherburne and Stearns) are the intended primary benefactors of the study. County Administrators will coordinate participation and whatever review/approval process may be required with each County. The County Board Chair or designee for each county will serve on the Study Committee.
- The City of St. Cloud is fiscal host for the State funding and also owner of the subject asset (STC). The Mayor will serve on the Study Committee. STC Airport Director will provide relevant resource information if needed for the Study. As fiscal host, the City will provide project administrative services including procurement of services, contracting, and payment of grant funds to the firm selected for the assignment.
- The Greater St. Cloud Development Corporation (GSDC) has agreed to lead and serve as a neutral coordinator for completion of the study. GSDC Board Chair will serve on and Chair the Study Committee. GSDC President and designees will serve as the point of coordination between the engaged parties and the consultant(s).
- MnDOT and MnDEED will provide appropriate guidance and assistance to the Study Committee to assure a quality product result that meets the legislative intent and grant requirements.

Work Tasks and Analysis

1. Define and describe the STC aviation regional service area.

2. Review and analyze recent airport and community planning initiatives including air traffic forecasts and other pertinent information from the 2014 STC Master Plan.
3. Update the passenger demand analysis for STC Airport.
4. Benchmark the St. Cloud Regional Airport against other similar sized regional airports in the nation (with similar proximity to an international airport of significance).
5. Research air service market opportunities and strengths for STC. At a minimum this should include analysis of the relevant impact (value proposition) each opportunity is projected to have on the greater St. Cloud region and the various users and benefactors of STC (e.g. business and industry, urban and rural area residents, agricultural interests, economic development opportunities, aviation enthusiasts). Opportunities intended include, but are not limited to:
 - a. Business oriented O & D opportunities primarily, and secondarily on leisure and pleasure markets.
 - b. Assess opportunities to optimize business aviation and FBO services at the STC.
 - c. General aviation users and services, including development of forecasts for the 5-, 10-, and 20-year periods.
 - d. Airline travel opportunities, including market niche opportunities
 - e. Other aviation opportunities including the possibility of attracting meaningful levels of unmanned aerial aircraft (UAA) and UAA-related industries, e.g. air taxi, etc.
 - f. Aviation supply chain opportunities
 - g. Opportunities to serve as a general aviation “reliever airport” system in and around MSP
 - h. At a high level, examine the feasibility of a future “transportation hub” at the STC airport.
 - i. Existing air cargo opportunities and consideration of whether there might be additional cargo growth at STC Airport
 - j. Government air related activities and services
 - k. Tariff Free Trade Zones
 - l. Other related or relevant opportunities
6. Airport facility and land use planning including analysis of current and future land use and how it impacts capacities and characteristics of all modes of transportation.
7. Additional tasks and/or activities that substantially improve the results of the project may be outlined within the work plan deliverables description of the Proposal.
8. While a potential new governance structure (e.g. regional airport authority) is not intended to be part of the study scope, the study product is intended to serve as a dominant source for informing how best to move forward from a governance perspective.

Partner Involvement

Broad stakeholder engagement is an essential part of the study. The following partners are envisioned as active participants in the study:

- Counties of Benton, Sherburne & Stearns
- Logistic businesses within the greater St. Cloud region
- Chambers of Commerce, Downtown Council, St. Cloud Area Convention & Visitors Bureau and other business organizations within the region
- MN National Guard
- Northstar Rail Authority
- Great River Energy

- Metropolitan Airports Commission/MSP Airport
- Minnesota Department of Transportation Aeronautics
- Other entities as defined by the regional service area

Proposal Content

Project teaming, as necessary, is encouraged for this project. The Client recognizes the diversity of the study elements and is interested in obtaining the best available aviation and economic development advisory services by discipline within the overall framework of the study. Consultants must submit the following information:

1. A statement of the objectives, goals, and tasks to show or demonstrate the consultant's view and understanding of the nature of the project.
2. A detailed description of the Methodology, Work Plan Tasks and Analysis to be provided by the consultant(s).
 - a. This detailed work plan should identify the major deliverables including monthly progress reports, a draft report (include 6 paper copies and a digital document) and final report of the proposed study (include 6 bound paper copies, digital format and original document in editable format), as well as a timeline for completion of tasks.
3. An outline of the consultant's background and experience with examples of similar work done by the responder and a list of personnel who will conduct the project, detailing their training, and work experience.
4. Itemize cost detail for deliverables/tasks as outlined in the work plan. Task completion/deliverables will form the basis for project invoicing. Include cost detail such as hours of effort, hourly cost, travel expenses, etc.

Budget

The consultant services and all related expenses will be funded entirely from a State appropriation for the project of \$250,000.

Deliverables

The selected consultant/consultant team shall prepare a salient, business-oriented report (6 in print and in electronic form), both in draft and final forms, for the project. Ancillary progress reports, white papers, technical memos, presentations and other deliverables anticipated by the consultant throughout the course of the project should be identified in the consultant's proposal.

All project deliverables should serve to assist the Client in adopting key strategies and initiatives that will help lead to increased utilization of the Airport, attract additional air services, attract aviation related development at the Airport and/or within the region, and assist to leverage investment at the Airport to achieve maximum return on investment in terms of overall economic impact to the region. Consultant recommendations based on findings must be pragmatic and implementable. Finally, the consultant may be asked to assist in briefing elected officials and the state legislature regarding study progress/results.

Project Timelines

- | | |
|--|-------------------------------|
| ▪ RFP Issued | On or about October 10, 2017 |
| ▪ Proposal Submission Deadline | On or about October 31, 2017 |
| ▪ Consultant Selection | On or about November 28, 2017 |
| ▪ Kick-off Meeting with Stakeholders | On or about December 12, 2017 |
| ▪ Status Report to Governor & Legislature | January 5, 2018 |
| ▪ Present Final Report to Governor & Legislature | On or about September 1, 2018 |

Review of Submissions

The Study Committee described herein will review submittals, determine which consultant proposal submission(s) will be short-listed for interview consideration. Ultimate selection shall take into consideration both the qualifications of the firm(s) and the qualifications and experience of the personnel proposed for the assignment. It shall also consider the proposed approach to the assignment, the firm's experience and the proposed project manager's experience with recent relevant assignments, ability to meet the project schedule, and the proposed fee including the allocation of costs by task within the overall fee structure.

The lowest proposal will not necessarily be accepted. The Study Committee/Client reserves the right to award the contract, negotiate the specific terms of the contract, and make other adjustments as required in consultation with the successful bidder.

The Study Committee/Clients reserves the right to reject any or all proposals, to waive any nonmaterial irregularities or information in any RFP, and to accept or reject any item or combination of items.

Submissions

Proposers shall, at a minimum, address the following items in their proposals:

- Qualifications and relevant experience of the firm
- Key staff proposed for the assignment
- Project organization and proposed scope
- Project management and QA/QC plan
- Proposed project deliverables
- Proposed cost

Proposers must submit one (1) original print copy, six (6) additional print copies, and one (1) electronic copy via USB flash drive of their proposals. The original must be clearly marked. Submittals are to be delivered to:

Leslie Dingmann, Business Development Associate
Greater St. Cloud Development Corporation (GSDC)
501 West St. Germain Street, Suite 100
St. Cloud, MN 56301

Additional Information

Questions regarding the RFP may be submitted to:

Greater St. Cloud Development Corporation

Brian Myres/Board Chair, brian.myres@gmail.com, 320-260-6681

Patti Gartland/President, pgartland@greaterstcloud.com, 320-252-5228 or 320-260-2442

Leslie Dingmann/Business Development Associate, ldingmann@greaterstcloud.com, 320-252-5247 or 320-493-9003

Questions regarding the St. Cloud Regional Airport may be submitted to:

St. Cloud Regional Airport

Bill Towle, william.towle@ci.stcloud.mn.us, 320-255-7292, extension 3,

Lynn Hoff, lynn.hoff@ci.stcloud.mn.us, 320-255-7292

**St. Cloud Regional Airport
Optimization Planning Study
Final Report**

APPENDIX B:

Economic Impact Analysis



ST. CLOUD STATE UNIVERSITY

SCHOOL OF
PUBLIC AFFAIRS

RESEARCH INSTITUTE
720 Fourth Avenue South
St. Cloud, MN 56301-4498
tel 320.308. 4781

www.stcloudstate.edu/sopa/research-institute

St. Cloud Regional Airport Economic Impact Study

September 2018

Contact: Rich MacDonald
Interim Director
School of Public Affairs Research Institute
Stewart Hall 385
720 Fourth Ave S
St. Cloud, MN 56301-4498
ramacdonald@stcloudstate.edu
Phone: 320-308-4781
Fax: 320-308-2228

Background statement: In January 2018, Steven Baldwin Associates LLC was commissioned by the City of St. Cloud to conduct a comprehensive, market-based study and strategic plan on how to best move the St. Cloud region forward in maximizing its return on investment in the St. Cloud Regional Airport (STC) by growing utilization, impact, and stewardship of the airport. As part of this study, the St. Cloud State University School of Public Affairs Research Institute (SOPARI) was selected as a sub-contractor to i) measure the economic impact of STC and ii) conduct a parking study to, among other things, measure commercial airline passengers' willingness to pay for parking at STC. This economic impact study is the subject of this paper.

Description of St. Cloud Airport: The St. Cloud Regional Airport is a multi-use airport with commercial air flights, military operations, general aviation, and corporate flight operations. STC has little freight activity. Until January 2010, Delta Airlines operated several daily roundtrip flights out of STC that connected in the Minneapolis-St. Paul International Airport (MSP). Upon discontinuation of this service, STC spent an extended period with relatively little commercial passenger service. However, in 2014, United Express (operated by Sky West) introduced twice daily service to Chicago's O'Hare International Airport. This service lasted less than one year before being discontinued. Since that time, Allegiant Airlines (with year-round service to Mesa, AZ and seasonal service to Punta Gorda, FL) has accounted for the largest share of commercial air activity out of STC. Sun Country Airlines also offers several charter trips to Laughlin, NV each year.

STC has a considerable amount of general aviation activity, several corporate aircraft, 5 hangars, and is home to the St. Cloud Army Aviation Support Facility where subordinate units of the St. Paul-based 34th Combat Brigade (an Army National Guard unit) provide aviation capabilities for federal and state missions. UH-60 Black Hawk and CH-47 Chinook helicopters are operated out of this military installation. *St. Cloud Aviation*, the airport's FBO, in addition to owning and operating several aircraft, also is involved in a range of activities, including such things as aircraft maintenance, fuel and ramp services, aircraft rental, corporate plane operation, management services, and pilot supplies.

Methodology: This economic impact study uses quantitative data collected from a variety of operators at the St. Cloud Regional Airport. Some of these data are reported below, but a number of operators furnished information to SOPARI researchers on the condition that it not be made publically available. Among those who assisted with providing data used in the study are the airport administrative team¹, the Fixed Base Operator (*St. Cloud Aviation*), the National Guard (for the military operation at STC), JK Flyers (a restaurant that has a retail presence at the airport), and TSA. Employment information for Trego Dugan, the firm that provides service for the commercial air operations at STC, was imputed from information provided by airport administration. Colleagues at the Greater St. Cloud Development Corporation assisted SOPARI researchers in collecting data that are used in this study and Brigid Tuck, senior economic impact analyst, University of Minnesota-Extension, performed the quantitative economic impact calculations using IMPLAN software.

¹ A large amount of data was provided by Bill Towle, Airport Director, without whom this study would not be possible.

The data used in the study were for calendar year 2017.² Among the data inputs that are used to estimate the economic impact of the St. Cloud Regional Airport are:³

- Funds budgeted for maintaining and operating the airport.
- Spending on capital improvements at STC.
- FBO operating and capital expenditures information.
- Employment information for the airport, FBO, military operation, retail establishment, TSA, and the commercial air service.
- Numbers of aircraft operated and information about the range of activities engaged in by the FBO.
- Number of enplanements and passenger load numbers for the commercial air service.
- Corporate flight department activity.
- General aviation metrics.
- Expenditures of the military operation at STC.
- Airport hangar activity.⁴

Economic impact studies rely on computations of how outside dollars find their way into the airport study area to influence regional economic activity. An important source of outside dollars are visitors who use the commercial air service operated by Allegiant Airlines⁵ at the St. Cloud Regional Airport. To estimate visitors' expenditures, a survey of STC airline passengers was administered over the period May 30 – August 11, 2018. In total, passengers on 20 outbound Allegiant flights at STC were surveyed over this period.⁶ To increase survey response rates of STC passengers, SOPARI researchers received security clearance to administer surveys post-security at the airport. Two types of surveys were administered. Outbound passengers whose permanent residence is in Arizona were asked to complete a visitor's survey that was used in this study. Those outbound passengers whose permanent residence is Minnesota were asked to complete a parking survey, which is the subject of a different study.

Given that passengers commonly travel in groups at STC (the average number of people to whom each visitor's expenditures estimate applied was 2.4 people), the survey was administered to only one member of each group. A total of 500 visitor's surveys were completed over the survey period⁷. In addition, only passengers aged 18 or older were eligible to participate in the survey. The surveys were in paper form and passengers were incentivized to complete a survey by being given a bottle of water and a small snack. A sample of survey results can be found in the appendix to this study.

² Military data from the Minnesota National Guard use both state and federal expenditures at STC as an input. Both the state and federal governments use a fiscal year that is different from the calendar year, so state expenditures data for the military operation at STC is for the state fiscal year ending 6/30/17 and federal data are for the federal fiscal year ending 9/30/17.

³ This is not an exhaustive list of data inputs, but it does remind the reader that estimating economic impact requires a comprehensive set of data along with the cooperation of those who are responsible for generating the economic (and other) activity at the airport.

⁴ Readers will find a more detailed discussion of study methodology in the technical appendix.

⁵ During the survey period, the only outbound flights with visitors were Allegiant flights to Mesa, AZ. These flights also included Minnesota residents who were flying to Arizona. Minnesota residents were not offered a visitor's survey.

⁶ A copy of this survey appears in the appendix. Two additional flights that were surveyed were Sun Country charter flights to Laughlin, NV. Passengers on the Sun Country flights were virtually all from Minnesota, so no visitor's surveys were collected on these outbound flights.

⁷ Another 576 parking surveys were also collected. There were approximately 21,000 enplanements (which represents approximately 10,000 potential survey respondents) at STC over the year ending April 2018. The 1,076 surveys collected represents a valid sample at the 95 percent confidence level with a margin of error of +/- 2.82%.

Study Metrics: A sample of some of the information that is used to calibrate the quantitative estimates of economic impact at the St. Cloud Regional Airport is provided in this section. Some airport operators (including the FBO) provided information for the study with the condition that they not be reproduced in this report. Other metrics are publically available and found in this section.⁸

Commercial Airline Activity at STC in 2017

Allegiant Airlines and Sun Country Airlines operated commercial flights out of STC throughout the year in 2017. The majority of passenger traffic occurred on year-round flights to Mesa, AZ on Allegiant and their seasonal service to Punta Gorda, FL. The load factor on these operations was highest in March and lowest in May. The greatest number of landings occurred during the winter months at which time the most seats are available.⁹ Enplanements on Allegiant totaled 19,304 passengers in 2017.

TABLE 1—Allegiant Airlines Flight Activity at STC in 2017



IMAGE SOURCE: ALLEGIANT AIR



ALLEGIANT AIRLINES 2017 ACTIVITY REPORT

DATE	ENPLANEMENTS PASSENGERS	DEPLANEMENTS PASSENGERS	TOTAL PASSENGERS	LANDINGS	TYPE OF AIRCRAFT	AVAILABLE SEATS	Out Load Factor	In Load Factor	Total Load Factor
Jan-17	2,027	1,522	3,549	14	A319 (10), MD-83 (4)	2,224	91.14%	68.44%	79.79%
Feb-17	2,390	2,272	4,662	17	A319 (13), MD-83 (4)	2,692	88.78%	84.40%	86.59%
Mar-17	2,593	2,585	5,178	18	A319 (18)	2,808	92.34%	92.06%	92.20%
Apr-17	1,972	2,540	4,512	18	A319 (15), MD-83 (3)	2,838	69.49%	89.50%	79.49%
May-17	1,243	1,637	2,880	13	A319 (13)	2,028	61.29%	80.72%	71.01%
Jun-17	935	1,146	2,081	8	A319 (8)	1,248	74.92%	91.83%	83.37%
Jul-17	1,283	1,220	2,503	9	A319 (9)	1,404	91.38%	86.89%	89.14%
Aug-17	814	716	1,530	6	A319 (6)	936	86.97%	76.50%	81.73%
Sep-17	692	613	1,305	5	A319 (5)	780	88.72%	78.59%	83.65%
Oct-17	1,187	982	2,169	8	A319 (8)	1,248	95.11%	78.69%	86.90%
Nov-17	2,030	1,755	3,785	14	A319 (9), A320 (5)	2,334	86.98%	75.19%	81.08%
Dec-17	2,138	2,367	4,505	18	A319 (9), A320 (9)	3,078	69.46%	76.90%	73.18%
TOTAL	19,304	19,355	38,659	148		23,618	81.73%	81.95%	81.84%

Seating Capacity on MD-80's 166
 Seating Capacity on A319's 156
 Seating Capacity on A320's 177 (older)
 186 (newer)

Load Factor Year to Date **81.73%**

NOTES:

1/15/17 to 5/14/17 - Four Flights Per Week
 5/14/17 to 5/20/17 - Three Flights This Week
 5/24/17 to 8/12/17 - Two Flights Per Week
 8/19/17 to 9/30/17 - One Flight Per Week
 10/4/17 to 11/22/17 - Two Flights Per Week
 11/26/17 to 12/2/17 - Three Flights This Week (Thanksgiving)
 12/6/17 to 12/20/17 - Two Flights Per Week

November and December includes Arizona and Florida
 Two Flights Per Week, FL began 11/15/17

⁸ As previously noted, a more detailed treatment of information from the visitor's survey is found in the appendix.

⁹ In the table, the "Available Seats" column can be thought of as the seats available for enplanement. The aircraft that enplaning passengers board in STC is the same one from which passengers deplane. Therefore the available seats for enplanement and deplanement are necessarily equal.

Sun Country Airlines operated 9 outbound charter flights to Laughlin, NV out of STC in 2017. Two flights straddled the New Year in both 2017 and 2018. As can be seen below, these flights almost always sell out.

TABLE 2—Sun Country Airlines Flight Activity at STC in 2017



**SUN COUNTRY AIRLINES
2017 ACTIVITY REPORT**

DEPARTURE DATE		ENPLANMENT PASSENGERS	AVAILABLE SEATS
December	Thursday, 12/29/16 to Sunday, 1/1/17	159	159
January	Sunday, 1/29/17 to Thursday, 2/2/17	159	159
February	Friday, 2/24/17 to Monday, 2/27/17	159	159
April	Friday, 4/14/17 to Monday, 4/17/17	159	159
May	Sunday, 5/28/17 to Thursday, 6/1/17	140	159
June	Saturday, 6/24/17 to Wednesday, 6/28/17	157	159
August	Thursday, 8/3/17 to Sunday, 8/6/17	157	159
September	Monday, 9/18/17 to Friday, 9/22/17	159	159
November	Wednesday, 11/1/17 to Saturday, 11/4/17	159	159
December	Saturday, 12/30/17 to Wednesday, 1/3/18	159	159
TOTAL		1,567	1,590

Seating Capacity on B737-800's

159

There's always the crew, one Sun Country representative and one mechanic.

Load Factor Year to Date

NOTES:

Laughlin did not offer STC March, July nor October flights.

Next trip is scheduled for Sunday, 2/4/18-Thursday, 2/8/18.

Expenditures data at STC include annual operating expenditures information as well as those associated with capital improvements. During the study period, three capital projects were underway at STC—obstruction removal, pavement rehabilitation, and taxiway relocation design.

TABLE 3—St. Cloud Regional Airport Operating Expenditures in 2017¹⁰

Personnel Services	\$645,653
Supplies, Services, Charges	\$413,569
Capital Outlay (Machinery, Equipment, Furniture)	\$40,400
Debt Service	\$2,280
Other Expenses	\$0
Total Operating Expenses	\$1,101,902

Note: 7 airport employees in 2017

¹⁰ This table only provides expenditures data in aggregated sub-categories. More disaggregated data are available from the City of St. Cloud.

TABLE 4—St. Cloud Regional Airport Capital Expenditures, FY 2018

Total Project Payments Made to Date ¹¹	\$1,295,337
Balance Available, Encumbered Funds	\$1,074,271
Total Budgeted Expenditures, Capital Improvements	\$2,369,607

Note: Capital improvements include obstruction removal, pavement rehabilitation, taxiway relocation design.

More than 82 percent of itinerant¹² aircraft operations were general aviation activities in 2017 and another 12 percent were military. As can be seen in the next section, it is the nature of general aviation activities that much of their economic impact is captured by other airport operators (for example, through fuel purchases with the FBO, hangar fees, etc.). Consequently, it is difficult to separate out the economic impact of general aviation from other airport activities. While the spending of those who fly general aviation aircraft into STC generates an economic impact in the area, much of this works its way through the other airport operators.

TABLE 5—St. Cloud Regional Airport Total Operations Numbers in 2017**STC Aircraft Operations - 2017**

Month	ITINERANT					LOCAL			Total Operations
	AC	AT	GA	MIL	Total Itinerant	Civil	Military	Total Local	
Jan-17	31	38	512	103	684	432	112	544	1,228
Feb-17	39	42	846	155	1,082	876	152	1,028	2,110
Mar-17	35	27	834	138	1,034	788	84	872	1,906
Apr-17	36	32	977	153	1,198	692	148	840	2,038
May-17	27	51	1,264	138	1,480	1,090	36	1,126	2,606
Jun-17	24	60	1,514	122	1,720	1,052	42	1,094	2,814
Jul-17	17	54	1,454	177	1,702	1,114	85	1,199	2,901
Aug-17	14	39	1,316	160	1,529	1,158	84	1,242	2,771
Sep-17	13	48	1,044	159	1,264	1,006	6	1,012	2,276
Oct-17	18	31	928	182	1,159	693	130	823	1,982
Nov-17	28	19	772	148	967	740	74	814	1,781
Dec-17	36	36	687	205	964	694	70	764	1,728
Totals	318	477	12,148	1,840	14,783	10,335	1,023	11,358	26,141

Note: AC = Air Carrier; AT = Air Taxi; GA = General Aviation; MIL = Military; Itinerant = Non-local

¹¹ As of March 2018.

¹² Itinerant operations refer to those aircraft that either arrive at or depart from the airport from outside of the area.

TABLE 6—St. Cloud Regional Airport Military Operations Information¹³

With its 60 employees and 432 assigned personnel, the St. Cloud Army Aviation Support Facility has a major presence at STC.

Number of Aircraft Operated	9
Number of Employees	60
Minnesota National Guard Assigned Personnel at STC	432
STC Military Operation Federal Master Cooperative Agreement Expenditure	\$2,211,524
STC Military Operation State Expenditure	\$224,153
STC Military Operation Federal Expenditures	\$10,694,019
STC Military Operation Federal Tuition Assistance Benefit	\$51,206
STC Military Operation State Tuition Reimbursement Benefit	\$367,710

Note: Federal expenditures are for federal fiscal year 2017 (ending 9/30/17) and state expenditures are for state fiscal year 2017 (ending 6/30/17).

Study Area(s): An economic impact estimate of STC was last done by the Economic Development Research Group (EDR) in December 2012.¹⁴ Two different study areas were used in the EDR report: a “core airport catchment region” consisting of the three counties of Stearns, Benton, and Sherburne. The economic impact on a broader region was also estimated. This region—the “extended airport catchment region”—consists of the eleven counties of:

- Benton
- Douglas
- Kandiyohi
- Meeker
- Mille Lacs
- Morrison
- Pope
- Sherburne
- Stearns
- Todd
- Wright

The economic impact on these two study areas is also found below and, by request, we added one additional study area that adds Wright County to the smaller three county core area. IMPLAN, the software that is used to estimate the economic impact of STC, allocates direct expenditures at STC to the smaller 3-county area and then uses underlying regional input-output data to distribute these expenditures, along with other indirect and induced expenditures, across the larger study areas and across sectors. The next section of this report looks at the total, civilian, and military estimated economic impact of STC across these three different study areas.

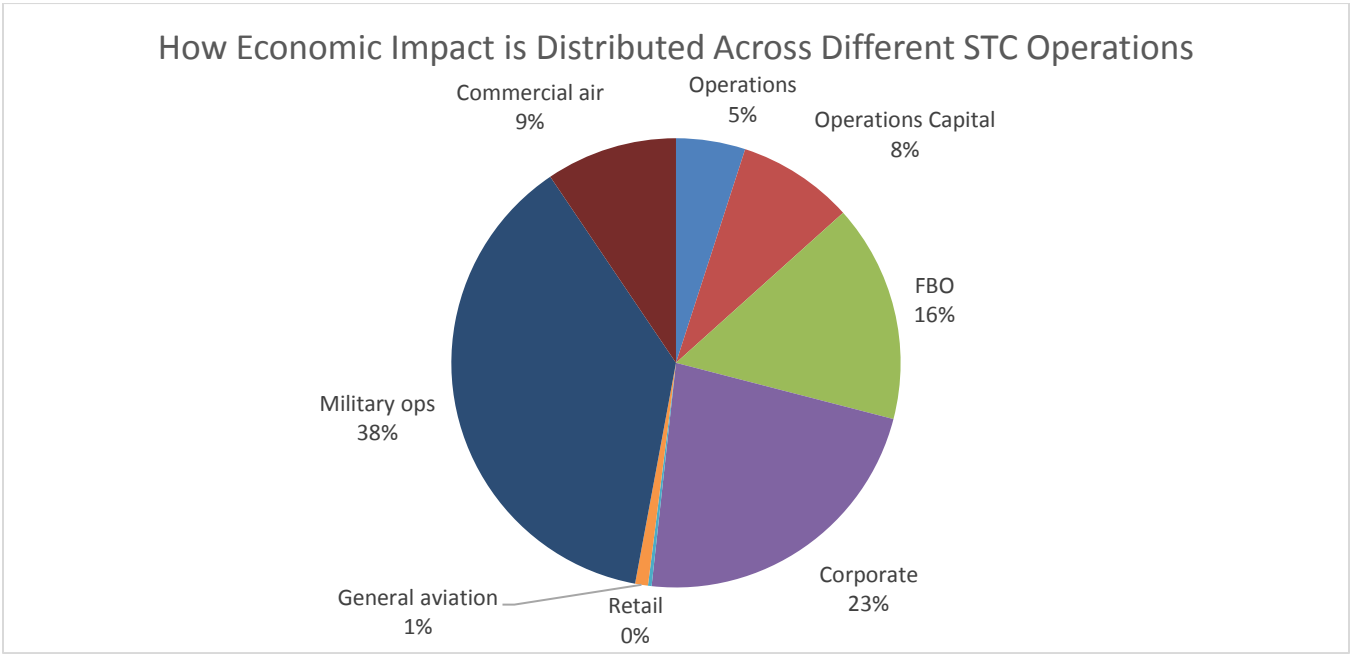
¹³ Some of the information found in Table 6 can be found at the Minnesota National Guard 2017 Annual Report at http://www.minnesotanationalguard.org/aboutus/assets/2017%20AR%20Master_FINAL.pdf

¹⁴ The study produced economic impact estimates of the St. Cloud Regional Airport for 2011.

Economic Impact of St. Cloud Regional Airport: The St. Cloud Regional Airport contributes direct employment, output, and income to the three county study area of Stearns/Benton/Sherburne counties. These **direct** activities lead to indirect expenditures (think of these as those that occur along a supply chain) when expenditures at STC are used to purchase non-labor inputs from regional vendors. These **indirect** expenditures have their own output, income, and employment effects on the region. The incomes that are earned by all of those who derive direct and indirect employment from STC are used to purchase a range of goods and services across the Central Minnesota region. These consumer expenditures—ranging from housing purchases to restaurant meals to financial services to health care expenditures—are **induced** as a result of the incomes that are earned by those who generate economic activity at the St. Cloud airport. In turn, the output, income, and employment that is derived from STC is distributed across a range of industries throughout the 3-county, 4-county, and 11-county study areas. A sample of this sectoral distribution for the three county area is shown below.

Since the military operations at STC have a major impact on airport activity, the effects of these operations on quantitative economic impact estimates is separated for the reader to see how civilian and military operations impact the regional economy. Of course, total economic impact estimates are also found below. One way to see how this total impact is distributed across a range of airport operations is through the following pie chart. The importance of military operations (accounting for an estimated 38 percent of the total impact) can be seen here.

CHART 1—Distribution of Economic Impact at STC



Note that the direct expenditures attributed to the military operation at STC are found in the table in the “study metrics” section of this report. While federal master cooperative agreement and state expenditures pay for maintaining and paying bills for the facility, including utilities, maintenance, security guard salaries, etc. the monies allocated as federal expenditures are more difficult to track. These monies are used for full-time and traditional National Guard members’ pay and allowances. They also pay for contracting and equipment. With 432 military personnel assigned to St. Cloud, a number of these National Guard members are likely to

live and spend their military earnings outside of the core 3-county area. Data that could be used to track these members are not available and there is no established procedure that can be used to assign the direct expenditures of these members other than to include it as the direct expenditures allocated to STC. As such, however, this may mean the estimated military impact is overstated. **By comparison, the 2012 STC economic impact study makes relatively little mention of the military operation at STC. In hindsight, it appears that study underestimated the military impact. With 60 employees, the St. Cloud Army Aviation Support Facility is the largest employer at STC and it does have a considerable impact on the regional economy.**

The Total Economic Impact of the St. Cloud Regional Airport on the Core Catchment Area

As was found by EDR in their 2012 study, the epicenter of the economic impact of the St. Cloud Regional Airport is the three county area of Stearns/Benton/Sherburne counties. Adding extra counties to the catchment area does little to generate additional economic output, income, and employment across the region.¹⁵

Using the language from the 2012 economic impact study, the table(s) below show the estimated economic impact of STC on the core catchment area of Stearns/Benton/Sherburne counties. **The St. Cloud Regional Airport's estimated contribution to output in the three county area was \$44.2 million in 2017.** It is responsible for **total employment of 289 people** in the three county area and generates a total of **\$17.1 million of labor income**. Its impact on **state and local taxes** is estimated to be **\$2.3 million**. By comparison, the estimated economic impact of STC in 2011 in the core catchment area was \$21.8 million in output, \$10.1 million in income, 381 employment, and \$358,000 in taxes.

TABLE 7—Total Economic Impact of STC on Stearns/Benton/Sherburne Counties

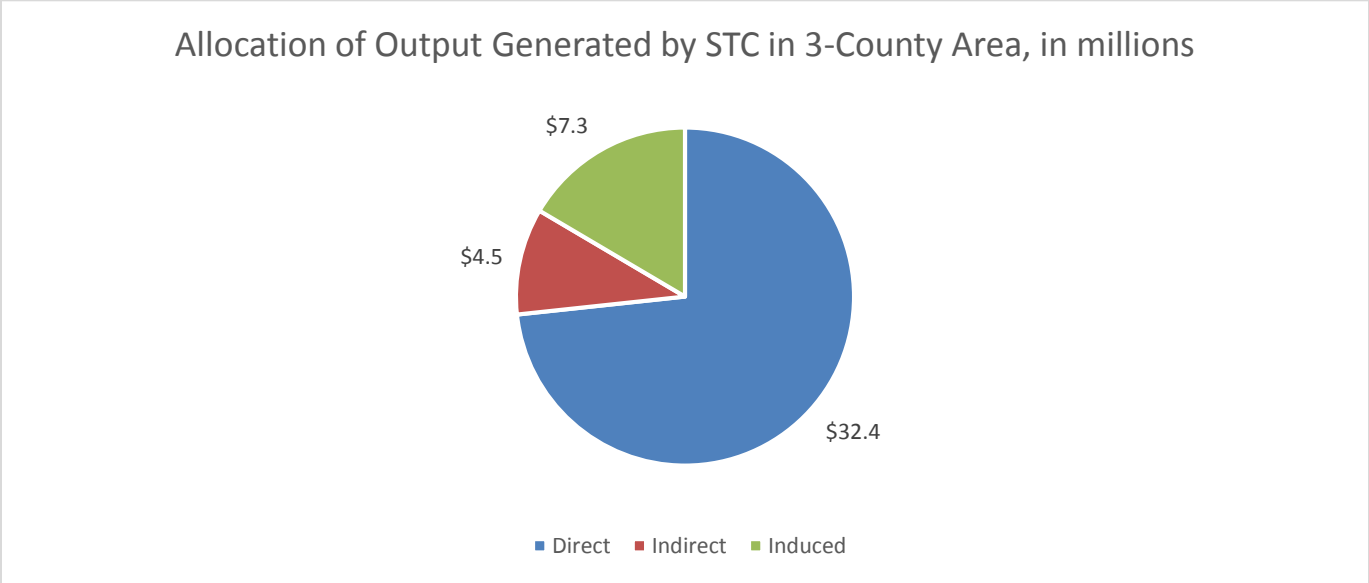
Output	\$44.2 million
Employment	289 employees
Income	\$17.1 million
State and Local Taxes	\$2.3 million

The headline number that is usually seen in economic impact studies is the \$44.2 million in output that is generated by STC. This is allocated as direct, indirect, and induced impacts as seen in the pie chart below. Most of the \$44.2 million is the result of a **direct output effect** from STC. The value of goods and services directly produced by STC is estimated to be **\$32.4 million** in 2017. Another **\$4.5 million** results from an **indirect impact** and **\$7.3 million** comes from an **induced impact**.¹⁶

¹⁵ In fact, IMPLAN actually estimates a (slightly) *smaller* impact of STC as the study area expands. This seemingly counterintuitive result—which has apparently been observed by IMPLAN users in other studies—while rare can occur when the induced effects are smaller in the larger regions. Since St. Cloud is a major retail, service, and educational hub, the IMPLAN model's regional purchase coefficients (the rate at which local purchases are made) are extremely high. Thus, for every dollar earned and spent by households, the majority stays in the three county region. Expanding the geographical region decreases the regional purchase coefficients, as workers in Wright County, for example, may choose to spend their incomes in the Twin Cities metro region to the south. Thus, more money leaks out of the economy and is not spent again in the region, decreasing the overall contribution. A special thank you to Brigid Tuck for providing this explanation.

¹⁶ The sectoral effects of these output measures are very similar to that which is shown for income below, so they are not included here.

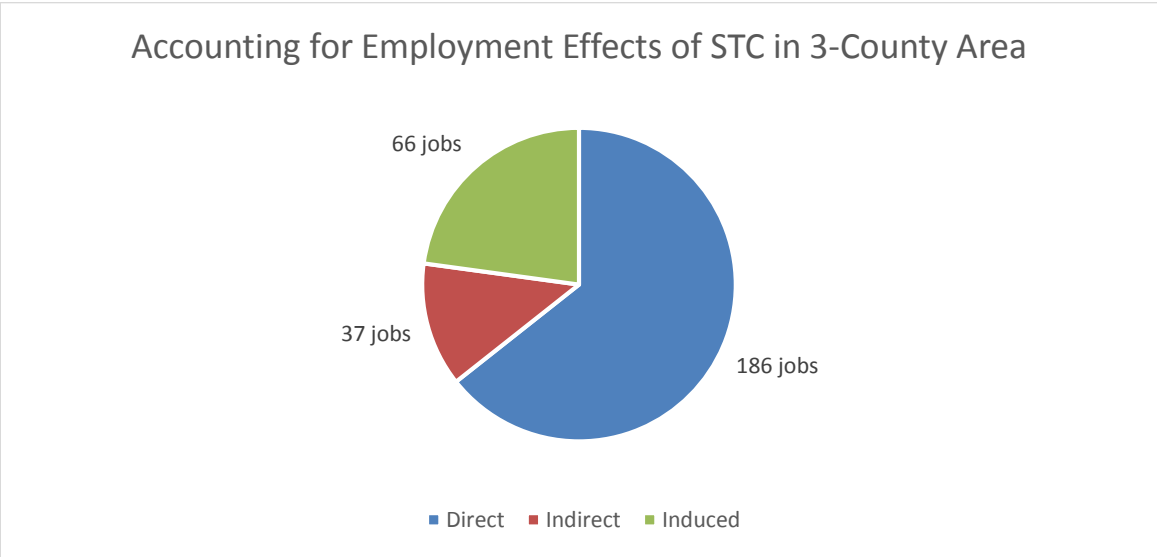
CHART 2—Direct, Indirect, and Induced Effects of STC on Output in 3-County Area



Employment Effects of STC on Stearns/Benton/Sherburne Counties

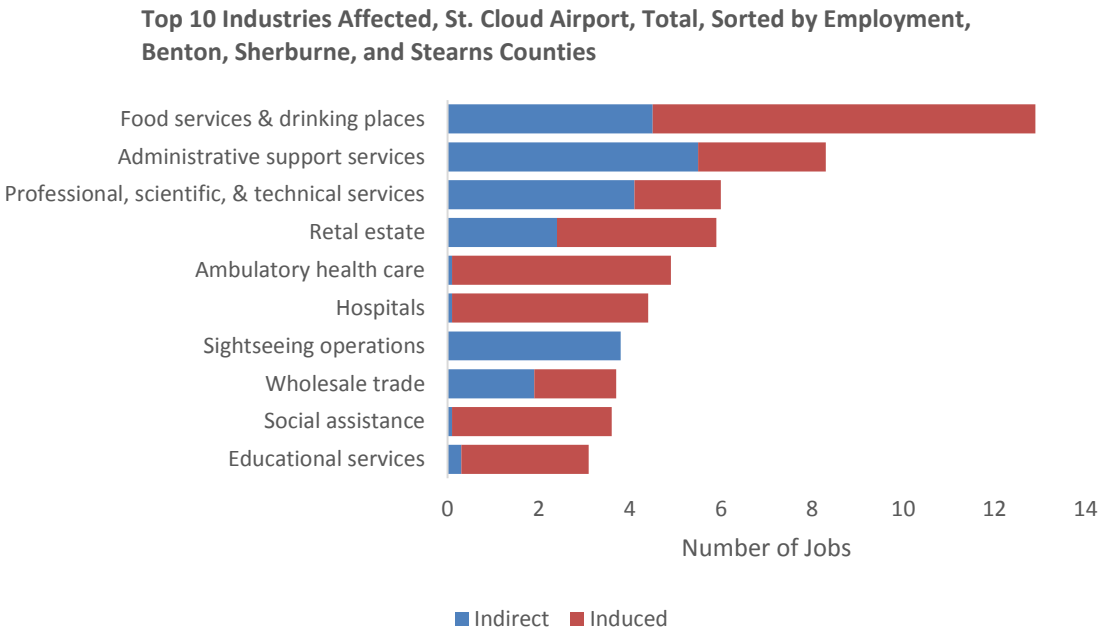
186 of the 289 people who are employed as a result of STC are estimated to be **directly** employed through airport activities. This includes operational employees of airport administration, FBO employees, corporate pilots, retail employees, TSA workers, employees of Trego Dugan (which services commercial air operations), and those who work at the military installation. The direct employment numbers also include IMPLAN estimates of off-airport employment that results from those who directly provide services to commercial air passengers (such as visitors to the area). IMPLAN also estimates the total number of workers who are employed to undertake capital improvements at STC. As shown in the table below, there are also **37** workers who are estimated to derive **indirect** employment from STC. Finally, **induced** employment—that which results from people who earn a direct or indirect income and spend it in the study area—is estimated to account for **66** workers.

CHART 3—Direct, Indirect, and Induced Effects of STC on Employment in 3-County Area



Most of the direct employment from STC is naturally in the air transportation sector of the regional economy. However, the indirect and induced employment impacts attributed to STC in the three-county core catchment area are distributed across a range of different sectors in the regional economy. The chart below shows the industries most impacted by these indirect and induced effects. Among other things, these include the hospitality sector, administrative support, real estate, health care, professional/scientific/technical, wholesale trade, educational services, and social assistance.

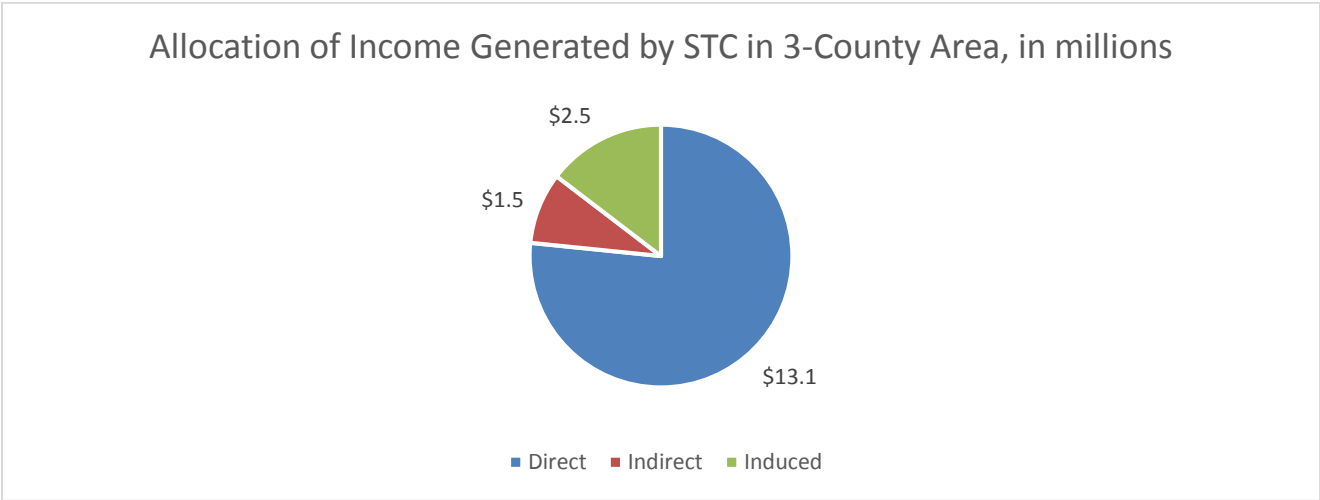
CHART 4—STC Indirect and Induced Impact on Employment, by Industry



Income Effects of STC on Stearns/Benton/Sherburne Counties

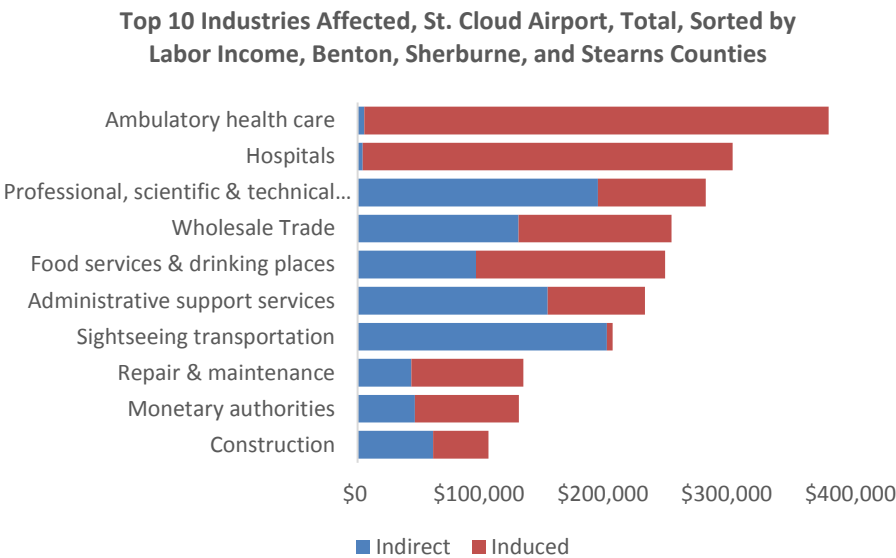
Similar to employment effects, the pie chart below shows how income is allocated to the three different effects across the core catchment area. \$1.5 million is estimated to result from an indirect effect of expenditures at STC and \$2.5 million is induced from the incomes that are earned at STC. The majority of income generated by STC, \$13.1 million, is a direct effect of the airport.

CHART 5—Direct, Indirect, and Induced Effects of STC on Income in 3-County Area



The top 10 industries that benefit from the incomes that are earned at STC are shown below. Among other things, those industries whose incomes are most impacted by these indirect and induced effects are health care, professional/scientific/technical, wholesale trade, food establishments, and construction.

CHART 6— STC Indirect and Induced Impact on Income, by Industry



Economic Impact on Output of Civilian and Military Operations at STC, 3-County Area, 2017

We have already noted that the military operation at STC is estimated to contribute more than one-third of the economic impact of STC on the three county area of Stearns/Benton/Sherburne counties.¹⁷ The table below separates the total impact into civilian and military estimates.

TABLE 8— Impact on Output of Civilian and Military Operations at STC, 3-County Area, 2017

	Direct Effect	Indirect Effect	Induced Effect	Total Impact
Civilian	\$18.8 M	\$4.1 M	\$4.6 M	\$27.5 M
Military	\$13.6 M	\$340,000	\$2.7 M	\$16.6 M
Total	\$32.4 M	\$4.5 M	\$7.3 M	\$44.2 M

The estimated impact on output of the St. Cloud Army Aviation Support Facility at STC is \$16.6 million in 2017 and the non-military (civilian) operations account for \$27.5 million of economic impact. As noted earlier, this means the non-military operations at STC are responsible for 62 percent of the airport’s impact on output in the core catchment area while the military operations have a 38 percent share of STC’s impact.

As shown in the table below, the military operations at STC account for 47 percent of the estimated income that is generated by STC in the Stearns/Benton/Sherburne area. A large share of this is in the direct impact of

¹⁷ Recall from an earlier footnote the possibility that the military operation’s economic impact at STC could be overstated because of an inability to track the residences and spending patterns of the 432 Minnesota National Guard personnel who are assigned to St. Cloud.

salaries that are earned by those who are employed at the St. Cloud Army Aviation Support Facility as well as the 432 Minnesota National Guard personnel who are assigned there.

TABLE 9—Impact on Income of Civilian and Military Operations at STC, 3-County Area, 2017

	Direct Effect	Indirect Effect	Induced Effect	Total Impact
Civilian	\$6.0 M	\$1.4 M	\$1.6 M	\$9.0 M
Military	\$7.1 M	\$115,200	\$879,100	\$8.1 M
Total	\$13.1 M	\$1.5 M	\$2.5 M	\$17.1 M

The industries most affected through the indirect and induced labor incomes from the military operation at STC are shown for the 3-county study area below. These industries are similar to what was seen in the previous chart for the total impact on income of STC.

CHART 7— STC Indirect and Induced Impact of Military Operations on Income, by Industry



Impact on Employment of Civilian and Military Operations at STC, 3-County Area, 2017

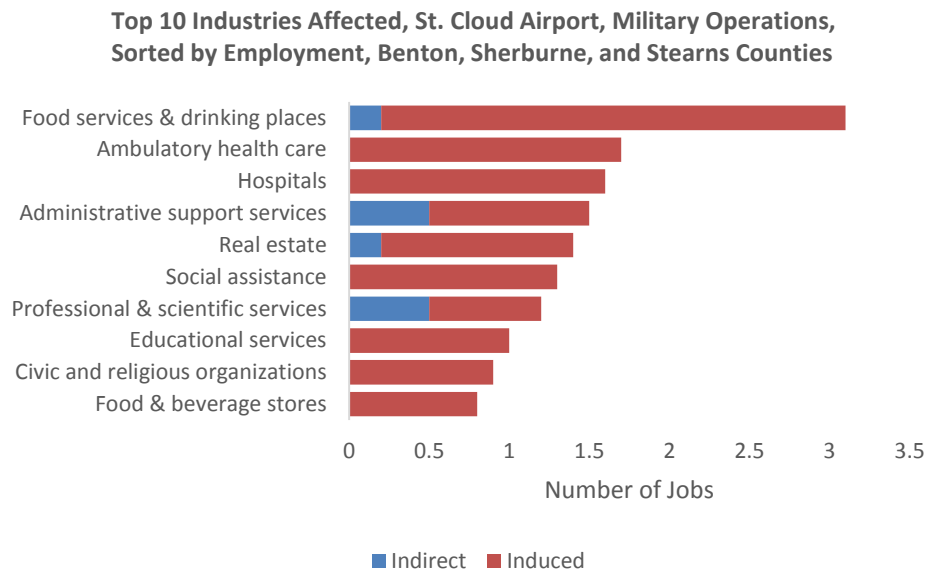
Finally, the impact of military and civilian operations at STC on the number of jobs in the 3-county region is seen below. This includes direct employment at the military installation as well as those who work in the various non-military jobs at STC. Consistent with the limited indirect effect on output of the military operation, there are few jobs indirectly created by the St. Cloud Army Aviation Support Facility, but there are an estimated 23 area jobs that are created from the induced spending by those who earn military incomes at STC.

TABLE 10—Impact on Employment of Civilian and Military Operations at STC, 3-County Area, 2017

	Direct Effect	Indirect Effect	Induced Effect	Total Impact
Civilian	126	34	43	203
Military	60	3	23	86
Total	186	37	66	289

The sectoral impact of indirect and induced employment from the military operation is also very similar to the sectoral impact on total employment that was seen above. Food and beverage stores and civic and religious organizations now make the list of the 10 most impacted industries.

CHART 8--STC Indirect and Induced Impact on Employment of Military Operations, by Industry



Economic Impact of STC on the Broader Study Areas

As noted earlier in this report, the estimated economic impact of STC on broader study areas is largely unchanged from the 3-county estimates. Stearns/Benton/Sherburne counties are the primary beneficiaries of the economic activity that is generated at the St. Cloud Regional Airport. Since any detailed analysis of the economic impact of STC on broader geographic areas essentially replicates what was seen in the earlier section on the core 3-county catchment area, this section is limited to tables that quantify the impact of the 4-county study area (which includes Wright County) and the 11-county extended catchment area. For example, the estimated economic impact of STC on the 4-county study area is mostly unchanged from the impact of the core catchment area. The total output impact across the 4 counties is estimated to be \$43.1 million¹⁸ with an employment impact of 258 workers. The impact on regional income is \$16.7 million and \$2.3 million state and local taxes are estimated to be collected in this broader study area as a result of STC.

TABLE 11—Economic Impact of STC in 4-county study area (Stearns/Benton/Sherburne/Wright), 2017

Output	\$43.1 million
Employment	258 employees
Income	\$16.7 million
State and Local Taxes	\$2.3 million

¹⁸ It appears that adding Wright County to the analysis actually *reduces* the economic impact of STC. As was explained in a previous footnote, this can result from the way IMPLAN applies regional multipliers to spending estimates in different counties. However, including Wright County—where some Minnesota National Guard members assigned to St. Cloud probably live—presumably improves the accuracy of the estimated impact of the military operation at STC.

Moving to the 11-county extended catchment area also yields little difference in quantitative estimates of economic impact. The table below shows an output impact of \$43.2 million and an employment impact of 282 jobs. STC stimulated incomes of \$16.6 million in the study area and tax effects are estimated to total \$2.4 million. Note that this finding of little variation in economic impact between the core and extended catchment areas is largely consistent with the findings of the 2012 economic impact study for STC. For example, enlarging the study area from 3 to 11 counties only increased the estimated output from \$21.8 million to \$23.5 million in that study.

TABLE 12--Economic Impact of STC in 11-County Extended Catchment Area--2017

Output	\$43.2 million
Employment	282 employees
Income	\$16.6 million
State and Local Taxes	\$2.4 million

The final table in this section consolidates the total economic impact estimates of STC over the three different study areas examined in this report. As was previously noted, there is relatively little difference among the three study areas in terms of economic impact as Table 13 clearly shows.

TABLE 13—Comparison of Estimated Economic Impact of STC in Three Study Areas

	3-County Core Catchment Area (Stearns/Benton/Sherburne)	4-County Area (Stearns/Benton/Sherburne/Wright)	11-County Extended Catchment Area
Output	\$44.2 million	\$43.1 million	\$43.2 million
Employment	289 employees	258 employees	282 employees
Income	\$17.1 million	\$16.7 million	\$16.6 million
State and Local Taxes	\$2.3 million	\$2.3 million	\$2.4 million

Concluding Remarks: This study has estimated the economic impact of the St. Cloud Regional Airport (STC) on the 3 county area of Stearns/Benton/Sherburne counties. The economic impact across the broader geographical regions of Stearns/Benton/Sherburne/Wright and the 11-county STC study area is also estimated. In addition to using a range of airport operational data to calibrate the economic impact model, the study also uses visitor expenditures data from a survey of 500 commercial air passengers at STC. Among the findings of this study are that:

- The economic impact of St. Cloud Regional Airport on the output of the core catchment area of Stearns, Benton, and Sherburne counties was \$44.2 million in 2017.
- STC is responsible for the direct, indirect, and induced employment of 289 people in the 3-county core catchment area.
- Incomes in the 3-county area are \$17.1 million higher because of the presence of STC.
- An estimated \$2.3 million in state and local taxes are collected in the 3-county area as a result of the economic activity generated at STC.
- The military operation of the St. Cloud Army Aviation Support Facility is estimated to contribute 38 percent of the economic impact on output of STC on the 3-county core catchment area. This military operation also accounts for an estimated 47 percent of the direct, indirect, and induced income at STC.
- There is relatively little difference in the estimated impact of STC among the 3-county core catchment area, the four county study area (with Wright County included), and the 11-county extended catchment area.
- A visitor's survey of Allegiant Airlines passengers suggests 31 percent of visitors who fly into STC do not spend a night in the St. Cloud area. Sixty-nine percent of those who fly into STC spend at least one night within 75 miles of St. Cloud.
- The survey of STC visitors also shows passengers' willingness to travel to the Mesa Airport from fairly long distances to take the direct Allegiant flight to STC.
- Forty-four percent of Allegiant visitors to STC regularly fly the service.
- Average total spending in the St. Cloud area by each visitor is \$225 per visit.
- Only 3 percent of visitors on Allegiant fly for business, 88 percent fly for pleasure.
- 88 percent of visitors indicate the primary reason they fly to STC is to visit family and/or friends.

As policymakers and public officials consider future options for the St. Cloud airport, it is worth noting the considerable economic impact of the military operation at STC as well as the relatively long distances that passengers are willing to travel upon landing at the airport. The importance of STC in meeting Arizona residents' demand for pleasure travel to visit family and/or friends may create marketing opportunities for the airport. It also suggests other geographic areas in which former Minnesota residents have retired may be popular future destinations for commercial air service offered in St. Cloud.

Appendix

Technical Appendix: Definitions and Terms

Special models, called input-output models, exist to conduct economic impact analysis. There are several input-output models available. IMPLAN (IMPact Analysis for PLANning, Minnesota IMPLAN Group) is one such model. Many economists use IMPLAN for economic impact analysis because it can measure output and employment impacts, is available on a county-by-county basis, and is flexible for the user. IMPLAN has some limitations and qualifications, but it is one of the best tools available to economists for input-output modeling. Understanding the IMPLAN tool, its capabilities, and its limitations will help ensure the best results from the model.

One of the most critical aspects of understanding economic impact analysis is the distinction between the local and non-local economy. The local economy is identified as part of the model-building process. Either the group requesting the study or the analyst defines the local area. Typically, the study area (the local economy) is a county or a group of counties that share economic linkages. In this analysis, there are three study areas. The first is the St. Cloud Metropolitan Statistical Area (MSA) of Benton and Stearns counties, along with Sherburne County. The second is the Economic Development Planning Region 7W, consisting of Benton, Sherburne, Stearns, and Wright counties. The third is the catchment area of Benton, Douglas, Kandiyohi, Meeker, Mille Lacs, Morrison, Pope, Sherburne, Stearns, Todd, and Wright counties.

A few definitions are essential in order to properly read the results of an IMPLAN analysis. The terms and their definitions are provided below.

Output

Output is measured in dollars and is equivalent to total sales. The output measure includes significant double counting. Think of airplane fuel, for example. The value of the fuel is counted when it is sold from the supplier to the FBO. It is counted once again when the FBO sells the fuel to the commercial airline. It is counted a third time when the airline ticket is sold. The value of the fuel is built into the price of each of these items and then the sale of each of these items are added up to get total sales (or output).

Employment

Employment includes full- and part-time workers and is measured in annual average jobs, not full-time equivalents (FTEs). IMPLAN includes total wage and salaried employees, as well as the self-employed, in employment estimates. Because employment is measured in jobs and not in dollar values, it tends to be a very stable metric.

Labor Income

Labor income measures the value added to the product by the labor component. So, in the airplane fuel example, when the fuel is sold to the commercial airline, a certain percentage of the sale goes to the FBO for its labor. Then when the commercial airline sells a ticket to a passenger, it includes some markup in the price for its labor costs to fuel the plane. These individual value increments for labor can be measured, which amounts to labor income. Labor income does *not* include double counting.

Direct Impact

Direct impact is equivalent to the initial activity in the economy. In this study, it is spending for operations and capital improvements related to the St. Cloud Regional Airport, as detailed in this report.

Indirect Impact

The indirect impact is the summation of changes in the local economy that occur due to **spending for inputs** (goods and services) by the business directly impacted. For instance, if employment at an airport increases by 100 jobs, this implies a corresponding increase in economic activity. As the airport increases sales, it must also purchase more inputs, such as electricity, fuel, and equipment. As the airport increases purchases of these items, its suppliers must also increase production, and so forth. As these ripples move through the economy, they can be captured and measured. Ripples related to the purchase of goods and services are indirect impacts. In this study, indirect impacts are those associated with spending related to the St. Cloud Regional Airport.

Induced Impact

The induced impact is the summation of changes in the local economy that occur due to **spending by labor**. For instance, if employment at the airport increases by 100 jobs, the new employees will have more money to spend to purchase housing, buy groceries, and go out to dinner. As they spend their new income, more activity occurs in the local economy. Induced impacts also include spending by labor generated by indirect impacts. So, if an airport employee purchases services from a local tax preparer, spending of the tax preparer's wages would also create induced impacts. Primarily, in this study, the induced impacts are the economic changes related to spending by the St. Cloud Regional Airport's employees.

Total Impact

The total impact is the summation of the direct, indirect, and induced impacts.

Input-Output, Supply and Demand, and Size of Market

Care must be taken when using regional input-output models to ensure they are being used in the appropriate type of analysis. If input-output models are used to examine the impact of an industry so large that its expansion or contraction results in major supply and demand shifts causing the prices of inputs and labor to change, input-output can overstate the impacts. It is not likely the St. Cloud Regional Airport has an impact on national input prices. Hence, the model should reliably estimate the impacts.

St. Cloud Regional Airport Visitors Survey

Spring/Summer 2018

This survey should take only a few minutes to complete. **Please complete only one survey per family/group.**
Thank you!

SECTION 1: AIRPORT VISITORS SURVEY

Please only answer this section if you were a visitor to the St. Cloud area on this trip.

1. Other than this trip, have you flown out of the St. Cloud airport before? ☐ Yes ☐ No
2. Do you regularly fly out of the St. Cloud airport (STC)? ☐ Yes ☐ No
 - a. If yes, how often do you fly out of STC? _____ times per year
3. What is your primary purpose for flying out of STC? ☐ Business ☐ Pleasure ☐ Other
4. Why did you choose the St. Cloud airport today? (please check all that apply)
☐ Location ☐ Ticket cost ☐ Convenience ☐ Destination options ☐ Free Parking
☐ Ease of TSA screening ☐ Other _____
5. Did you stay overnight in the St. Cloud area (within 75 miles of STC) on this trip? ☐ Yes ☐ No
6. How long did you stay in the St. Cloud area? _____ nights
7. In what city did you spend most of your time on this trip? _____
8. Approximately how much did your group (or you, if you are travelling alone) spend during your visit to the St. Cloud area?

Dining out	\$ _____	Entertainment	\$ _____
Groceries	\$ _____	Transportation	\$ _____
		(excluding air ticket)	
Lodging	\$ _____	Other	\$ _____
Shopping	\$ _____		
9. How many (including you) are included in your spending estimate? _____ # people
10. How many people (including yourself) in your group are in the following age categories?
____ 0-12 years ____ 13-17 years ____ 18-25 years ____ 26-40 years ____ 41-59 years ____ 60 plus years
11. Which one of the following best describes your group (Check only one please)
☐ Alone ☐ Couple/Partner ☐ Family ☐ Friends ☐ Family and friends ☐ Business associate ☐ Other

12. Was the primary reason for your trip to the St. Cloud area to visit family and/or friends? ☐ Yes ☐ No

13. Which, if any, of the following places did you visit during your stay in the St. Cloud area (please check all that apply)?
- ☐ Crossroads Mall ☐ Downtown St. Cloud ☐ Herb Brooks National Hockey Center ☐ Lake George Municipal Complex ☐ Lake Wobegon Regional Trail University ☐ Municipal Athletic Complex ☐ Munsinger/ Clemens Gardens ☐ Paramount Center for the Arts ☐ Pioneer Place ☐ Quarry Park & Nature Preserve ☐ River's Edge Convention Center ☐ St. Cloud State University ☐ St. John's/St. Benedict's University ☐ Stearns History Museum
14. Please indicate what you enjoyed most about your visit to St. Cloud
-
-
-

SECTION 2: GENERAL INFORMATION

15. What is the zip code of your primary residence? _____
16. What is your gender? ☐ Female ☐ Male
17. Which of the following is your age group?
- ☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65-74 ☐ 75 and older
18. What is the highest level of school you have completed?
- ☐ Less than high school ☐ High school graduate ☐ Some college credit/no degree
☐ Trade/Technical/Vocational training ☐ Associate's degree ☐ Bachelor's degree
☐ Graduate or Advanced degree
19. What is your race/ethnicity?
- ☐ White ☐ Hispanic/Latino ☐ Black/African American ☐ Native American/American Indian
☐ Asian/Pacific Islander ☐ Other
20. What is your current employment status?
- ☐ Employed for wages ☐ Self Employed ☐ Out of work and looking for work ☐ Out of work but not currently looking for work ☐ Homemaker ☐ Student ☐ Military ☐ Retired ☐ Unable to work ☐ Other
21. What is your household annual income?
- ☐ Less than \$20,000 ☐ \$20,000 - \$34,999 ☐ \$35,000 - \$49,999 ☐ \$50,000 - \$74,999
☐ \$75,000 - \$99,999 ☐ \$100,000 - \$150,000 ☐ Over \$150,000

Key Metrics Used from Visitor's Survey

Total number of visitor's surveys collected	500
Percentage of visitors who have previously flown on the Allegiant service to STC	63.6%
Percentage of visitors who regularly fly the Allegiant service to STC	44.2%
Average number of trips per year on Allegiant service to STC (for those who regularly use service)	2.27
Percent of visitors that stayed overnight in St. Cloud area (within 75 miles)	68.8%
Total expenditures in St. Cloud per surveyed visitor	\$541
Average number of people included in each spending estimate of surveyed visitors	2.4
Average spending by each person per visit: dining out	\$57
Average spending by each person per visit: groceries	\$27
Average spending by each person per visit: lodging	\$30
Average spending by each person per visit: shopping	\$41
Average spending by each person per visit: entertainment	\$21
Average spending by each person per visit: transportation	\$41
Average spending by each person per visit: other	\$8
Average total spending per person per visit	\$225
Average number of nights spent in St. Cloud area by each visitor	5.08
Average spending by each visitor, per day	\$44.31
Percentage of visitors who were flying for business	2.8%
Percentage of visitors who were flying for pleasure	87.6%
Percentage of visitors who were flying for other	9.2%
Percentage of visitors with primary reason for trip to visit family and/or friends	87.6%

Descriptive characteristics of those who completed the visitor's survey: As noted, there were 500 visitor's surveys completed during the survey period. Descriptive statistics for those who filled out the survey appear in the table below. For example:

- **Females** were *more likely* than males to fill out the survey.
- A disproportionately large share of survey respondents were **aged 55 or older**.
- About **84 percent** have educational attainment **above high school**.
- Nearly all of the passengers are **white**.
- About **34 percent** of visitors are **retired** and another **57 percent** were either **employed or self-employed**.
- Income is fairly evenly distributed across survey respondents, although approximately **50 percent** have annual household income at or **above \$75,000**.

Descriptive Statistics for Visitor's Study

Gender	
Female	292
Male	182
NA	26

Age	
18-24	27
25-34	43
35-44	74
45-54	64
55-64	113
65-74	102
75 and older	54
N/A	23

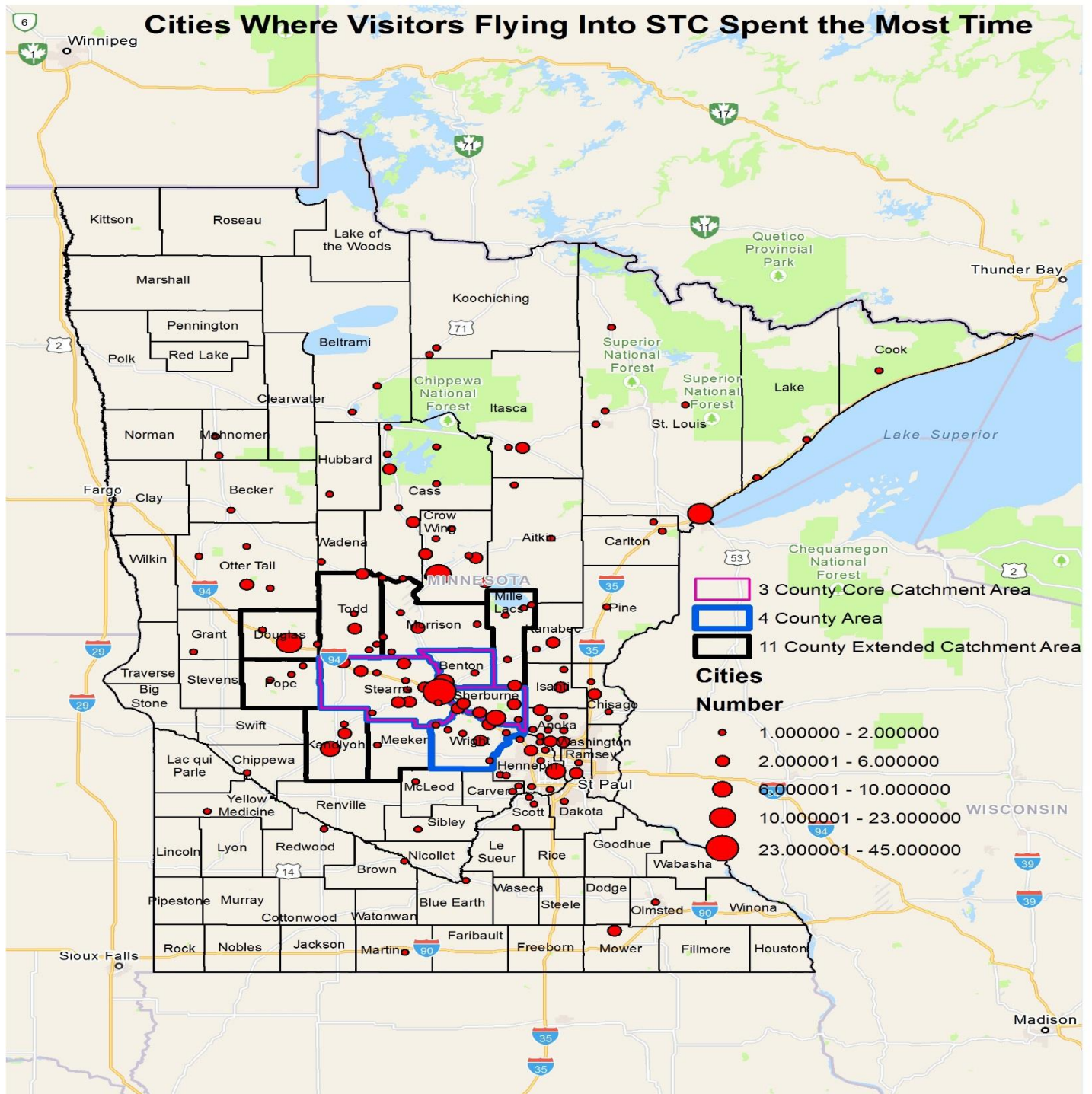
Education	
Less than high school	5
High school graduate	70
Some college credit/no degree	98
Trade/Technical/Vocational training	63
Associate's degree	42
Bachelor's degree	115
Graduate or Advanced degree	82
NA	25

Race/Ethnicity	
Asian/Pacific Islander	1
Black/African American	5
Hispanic/Latino	20
Native American/American Indian	3
White	437
Other	6
NA	28

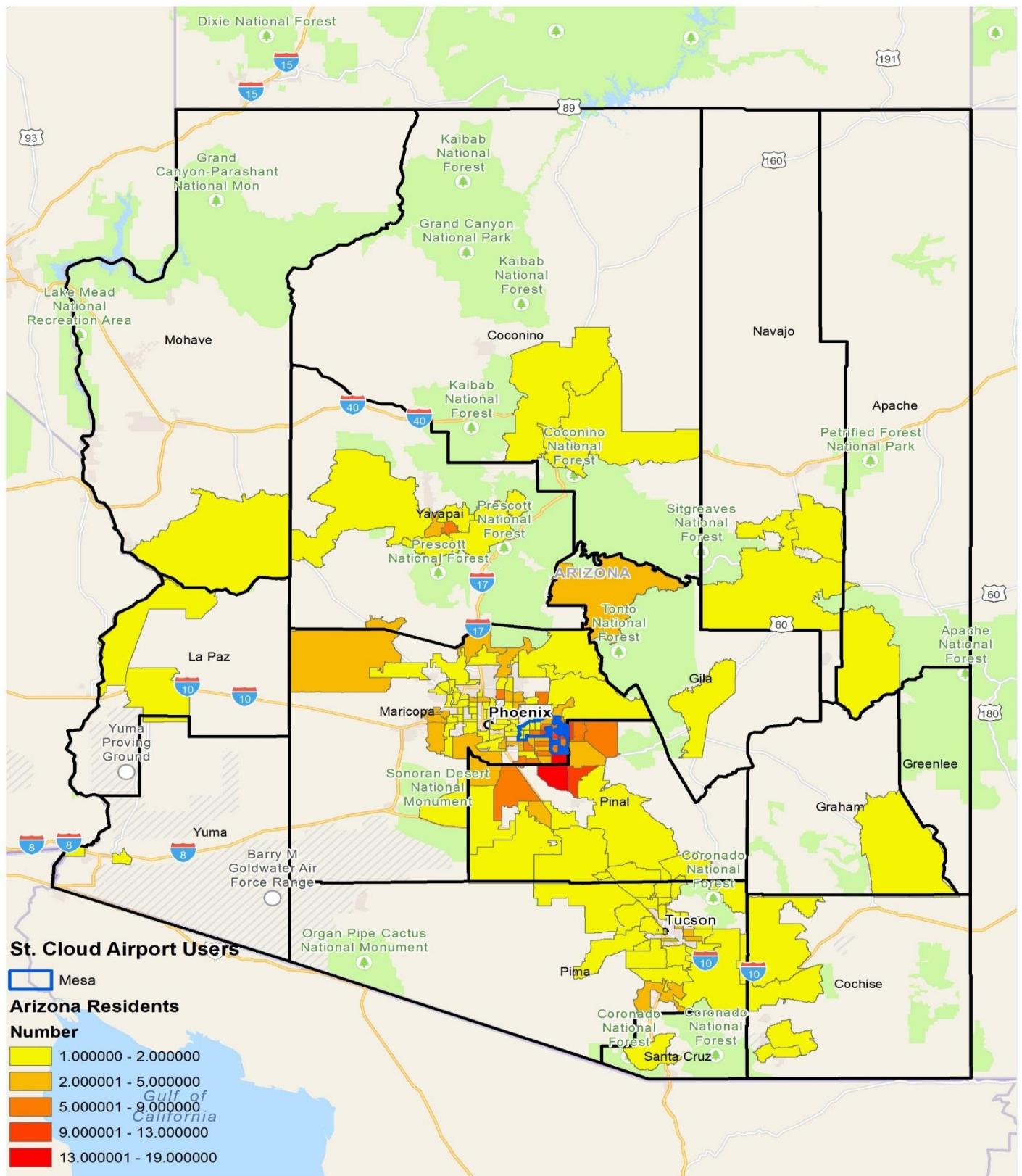
Employment Status	
Employed for wages	229
Homemaker	6
Military	1
Out of work and looking for work	6
Out of work but not currently looking for work.	2
Retired	159
Self Employed	44
Student	13
Unable to work	7
Other	6
NA	27

Income	
Less than \$20,000	23
Between \$20,000 and \$34,999	46
Between \$35,000 and \$49,999	55
Between \$50,000 and \$74,999	99
Between \$75,000 and \$99,999	73
Between \$100,000 and \$150,000	87
Over \$150,000	59
NA	58

As noted earlier, 31 percent of visitors to STC report that they didn't stay overnight in the St. Cloud area. Passengers were asked to identify the Minnesota city in which they spent the most time. From this response, a heat map was created to indicate the cities to which passengers to STC were travelling. As can be seen, a large number of visitors spent most of their time in places like Brainerd, Duluth, Minneapolis, St. Paul, Maple Grove, and Pine River. As can be seen in the accompanying map, a large share of visitors spent most of their time outside of the 11-county extended catchment area.



Visitors were asked to identify the zip code of their permanent residence. A map of Arizona shows the willingness of Allegiant passengers to travel relatively long distances to fly out of the Mesa airport to STC. For example, the drive from Tucson (where a number of visitors identified their permanent residence) to Mesa takes nearly two hours.



Acknowledgments

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**St. Cloud Regional Airport
Optimization Planning Study
Final Report**

APPENDIX C:

Parking Policy and Pricing Analysis



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St. Cloud Regional Airport Parking Study

September 2018

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Background statement: In January 2018, Steven Baldwin Associates LLC was commissioned by the City of St. Cloud to conduct a comprehensive, market-based study and strategic plan on how to best move the St. Cloud region forward in maximizing its return on investment in the St. Cloud Regional Airport (STC) by growing utilization, impact, and stewardship of the airport. As part of this study, the St. Cloud State University School of Public Affairs Research Institute (SOPARI) was selected as a sub-contractor to i) measure the economic impact of STC and ii) conduct a parking study to, among other things, measure commercial airline passengers' willingness to pay for parking at STC. This parking study is the subject of this paper.

Methodology: This parking study draws heavily on data collected from a survey of STC airline passengers over the period May 30 – August 13, 2018. In total, passengers on 22 outbound flights at STC were surveyed over this period. To increase survey response rates of STC passengers, SOPARI researchers received security clearance to administer surveys post-security at the airport. Two types of surveys were administered. Outbound passengers whose permanent residence is in Arizona were asked to complete a visitor's survey that was used, among other things, to measure visitor expenditures for use in the STC economic impact study. Those outbound passengers whose permanent residence is Minnesota were asked to complete a parking survey, which is the subject of this study.

Given that passengers commonly travel (and park) in groups at STC (the average group size for those completing the parking survey was 1.98 and the median group size was 2), the survey was administered to only one member of each group. A total of 576 parking surveys were completed over the survey period¹. In addition, only passengers aged 18 or older were eligible to participate in the survey. The surveys were in paper form and passengers were incentivized to complete a survey by being given a bottle of water and a small snack. A sample of the parking survey can be found in the appendix to this study.

The majority of those surveyed at STC were on Allegiant flights to Mesa, AZ. The Allegiant flights to Mesa represented 20 of the 22 outbound flights that were surveyed. There were typically a similar number of passengers on these Allegiant flights who were from Arizona as there were from Minnesota. The other two flights that were surveyed were Sun Country charter flights to Laughlin, NV. Passengers on the Sun Country flights were virtually all from Minnesota, so the only surveys collected on these outbound flights were parking surveys. Where appropriate, the data analyzed in the main body of this study is separated by Allegiant and Sun Country flights.

Descriptive characteristics of those who completed the parking survey: As noted, there were 576 parking surveys completed during the survey period. Descriptive statistics for those who filled out the survey appear in the table below. For example:

- **Females** were *more likely* than males to fill out the survey.
- A disproportionately large share of survey respondents were **aged 55 or older**.
- About **78 percent** have educational attainment **above high school**.
- Nearly all of the passengers are **white**.
- There is about an equal number of respondents who are **employed** as those who are **retired**.
- Income is fairly evenly distributed across survey respondents, although approximately **45 percent** have annual household income at or **above \$75,000**.

¹ Another 500 visitor's surveys were also collected. There were approximately 21,000 enplanements (which represents approximately 10,000 potential survey respondents) at STC over the year ending April 2018. The 1,076 surveys collected represents a valid sample at the 95 percent confidence level with a margin of error of +/- 2.82%.

TABLE 1--Descriptive Statistics of those who completed the Parking Survey

Gender	
Female	338
Male	227
NA	11

Age	
18-24	39
25-34	25
35-44	59
45-54	87
55-64	146
65-74	156
75 and older	58
N/A	6

Education	
Less than high school	4
High school graduate	124
Some college credit/no degree	102
Trade/Technical/Vocational training	81
Associate's degree	74
Bachelor's degree	102
Graduate or Advanced degree	85
NA	4

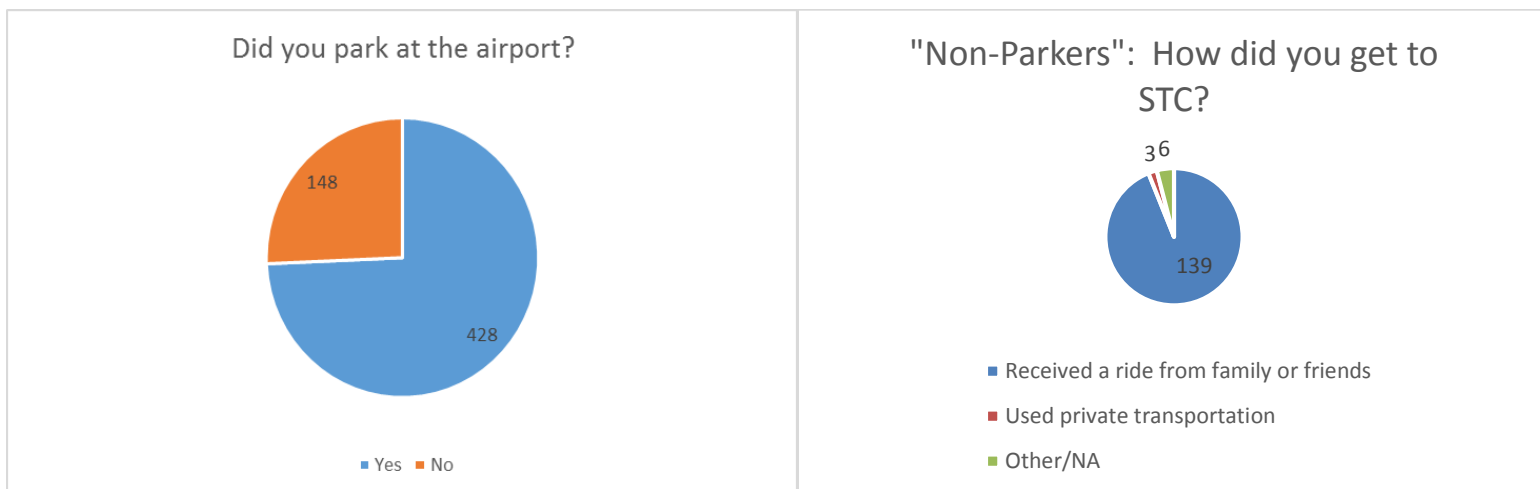
Race/Ethnicity	
Asian/Pacific Islander	1
Black/African American	1
Hispanic/Latino	9
Native American/American Indian	3
White	538
Other	8
NA	16

Employment Status	
Employed for wages	228
Homemaker	6
Military	3
Out of work and looking for work	3
Out of work but not currently looking for work.	6
Retired	229
Self Employed	67
Student	17
Unable to work	7
Other	5
NA	5

Income	
Less than \$20,000	32
Between \$20,000 and \$34,999	46
Between \$35,000 and \$49,999	70
Between \$50,000 and \$74,999	119
Between \$75,000 and \$99,999	99
Between \$100,000 and \$150,000	92
Over \$150,000	67
NA	51

Distinguishing between those who parked at the airport and those who didn't: Of those who completed the parking survey, 428 actually parked at the airport. The remaining 148 respondents either received a ride from family or friends (this accounted for 139 of these “non-parkers”) or used private paid transportation or some other means to get to STC.

CHART 1—Parkers vs. Non-Parkers at STC

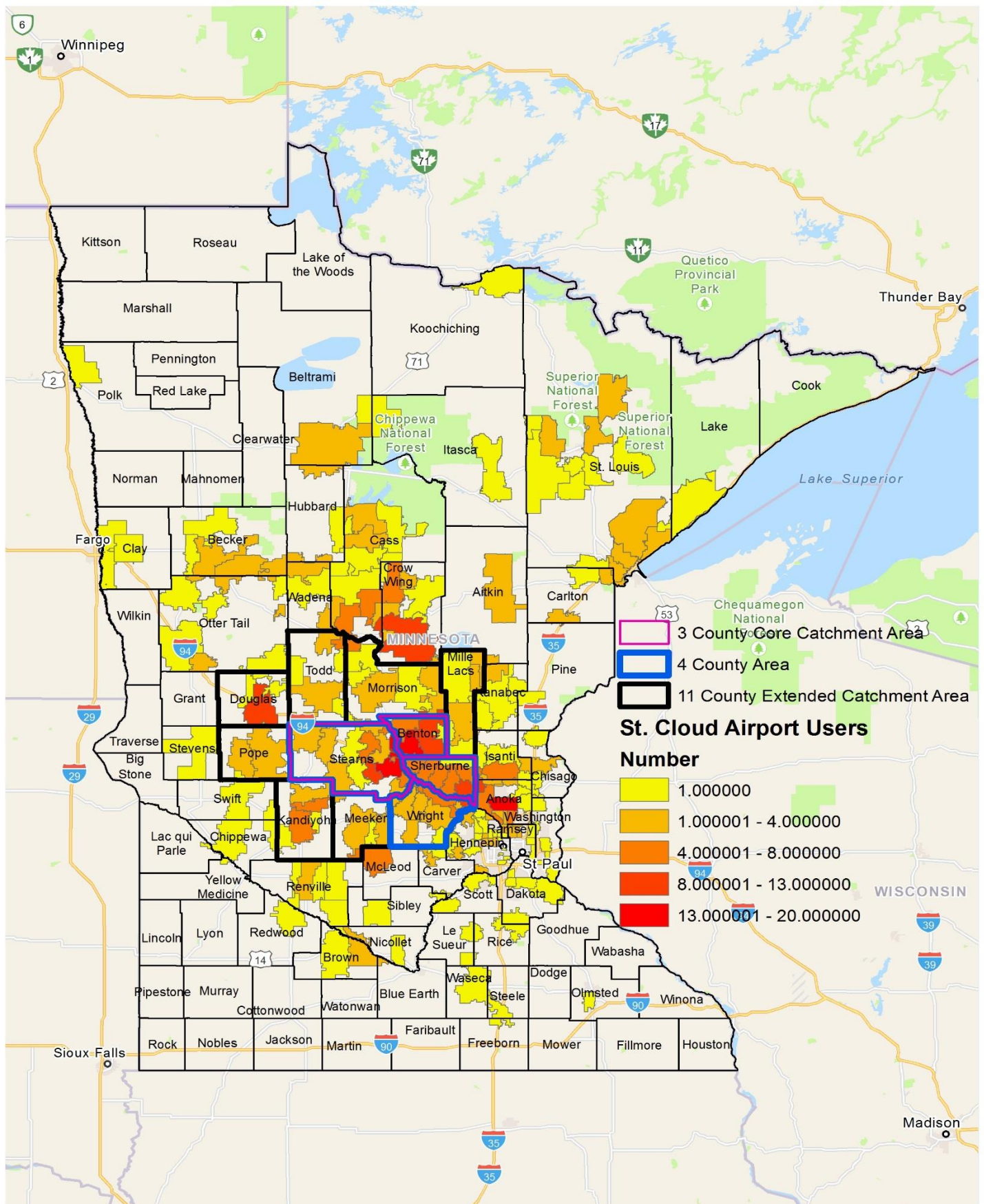


Permanent residence of those who completed parking survey: Of the 576 parking survey respondents, 530 indicated their permanent residence is in a Minnesota zip code.² As can be seen in the map on the next page, the distribution of the Minnesota residents who used STC is wide ranging. This heat map identifies the frequency distribution of the 530 Minnesota responses by zip code. While the traditional 11-county catchment area is well represented in this map, it is worth noting that 244 (representing **46 percent**) of those surveyed report **permanent residence outside of this 11-county area**. In addition, only 46 respondents (**8.7 percent**) indicated they were from the 56301, 56303, or 56304 zip codes that represent **St. Cloud city limits**.³ In addition to asking the zip code of the respondent’s permanent residence, they were also asked to identify the county in which they live. As is suggested by the map, many Minnesotans are travelling from fairly long distances to use STC.

² The other 46 responses were distributed as Wisconsin (12); South Dakota (1); North Dakota (2); Nebraska (1); Nevada (1); Arizona (22); NA (7). Note that in collecting surveys, those who indicated a permanent residence in Arizona, but who spent the summer months in Minnesota (often referred to as “snow birds”) were asked to complete a parking survey. These persons are not typical “visitors” in the traditional sense and would skew visitors’ expenditures numbers had they been included in the visitor’s survey.

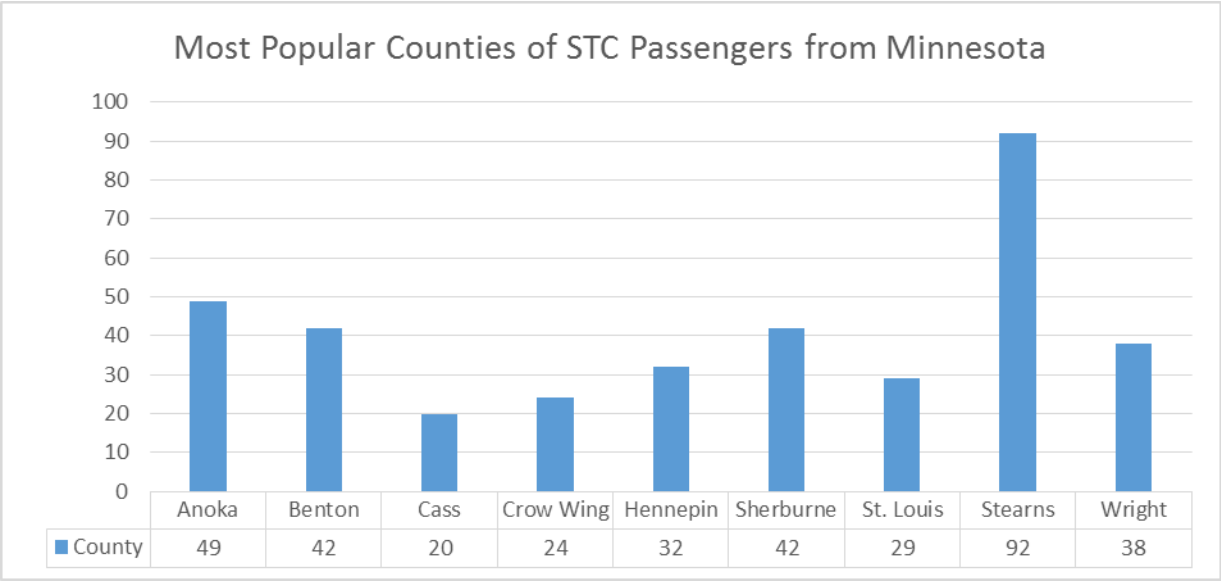
³ We also separately asked parking survey participants to identify if they lived within St. Cloud city limits. Sixty-nine respondents indicate they live within St. Cloud city limits. The difference between what is reported in the zip code item and that which is found in the dedicated survey question (a difference of 23) can be attributed to such things as students/dependents who live in St. Cloud but have permanent residence elsewhere. It is also likely that some respondents simply made a mistake in identifying themselves as St. Cloud residents. For example, 17 of the respondents who indicated they live within St. Cloud city limits identify either Cold Spring, Sartell, Sauk Rapids, or Waite Park as their permanent residence zip code. The difference in these two measures of St. Cloud residency shouldn’t obscure the important point that very few of those who use STC commercial air service actually live in St. Cloud.

MAP 1—Distribution of Minnesota Residents who use STC



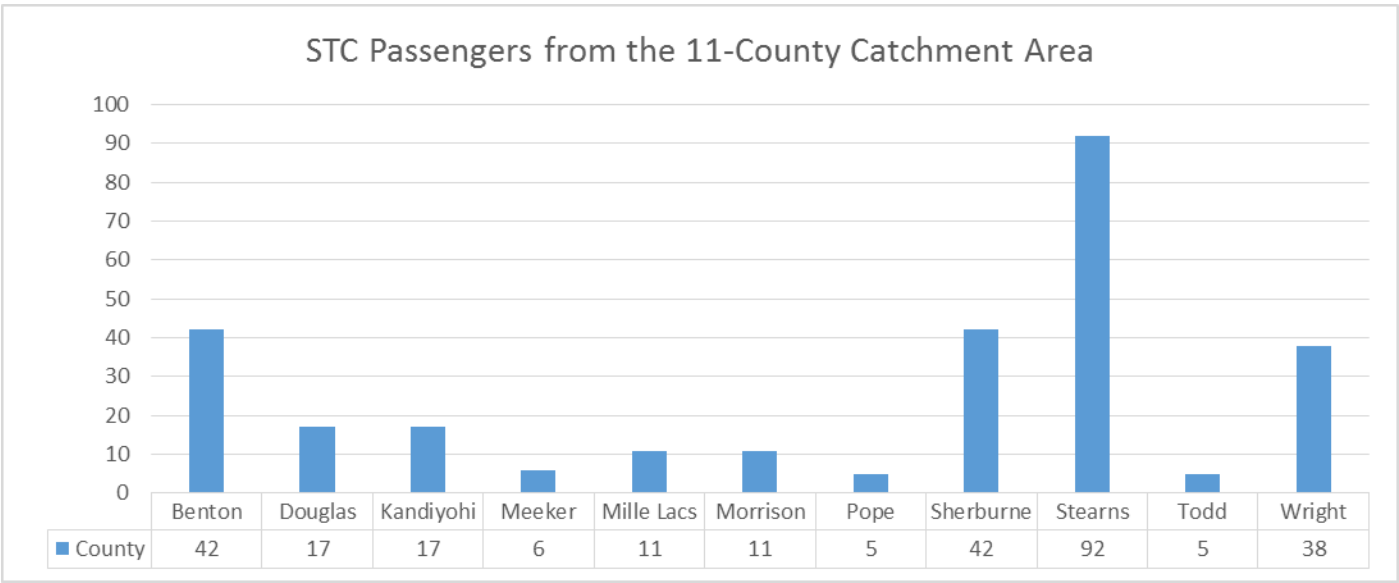
The counties with the most passengers are listed (in alphabetical order) in the chart below. As can be seen, 214 of the 530 (about **40 percent**) Minnesota residents who completed the parking survey are from **Stearns, Benton, Sherburne, or Wright counties**. But of the remaining most popular counties, **none** are from the other seven counties in the catchment area.

CHART 2—Most Popular Minnesota Counties of Residence for STC Passengers



A chart with the passenger numbers from the 11-county catchment area also appears below. As noted, few STC passengers come from several of these counties. **Only 13.6 percent** of Minnesota passengers come from **counties in the catchment area other than Stearns, Benton, Sherburne, and Wright**.

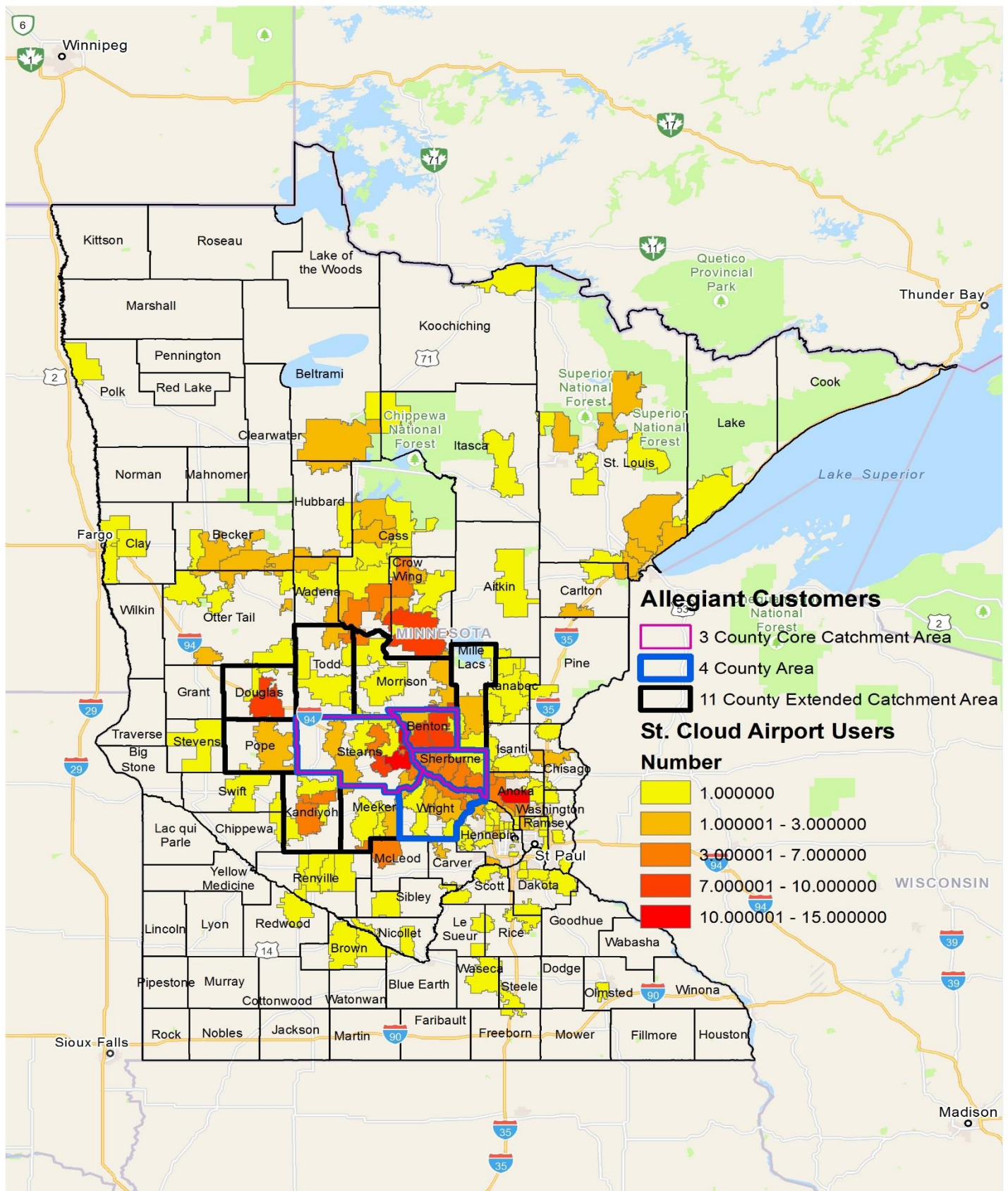
CHART 3—STC Passengers from the 11-County Catchment Area



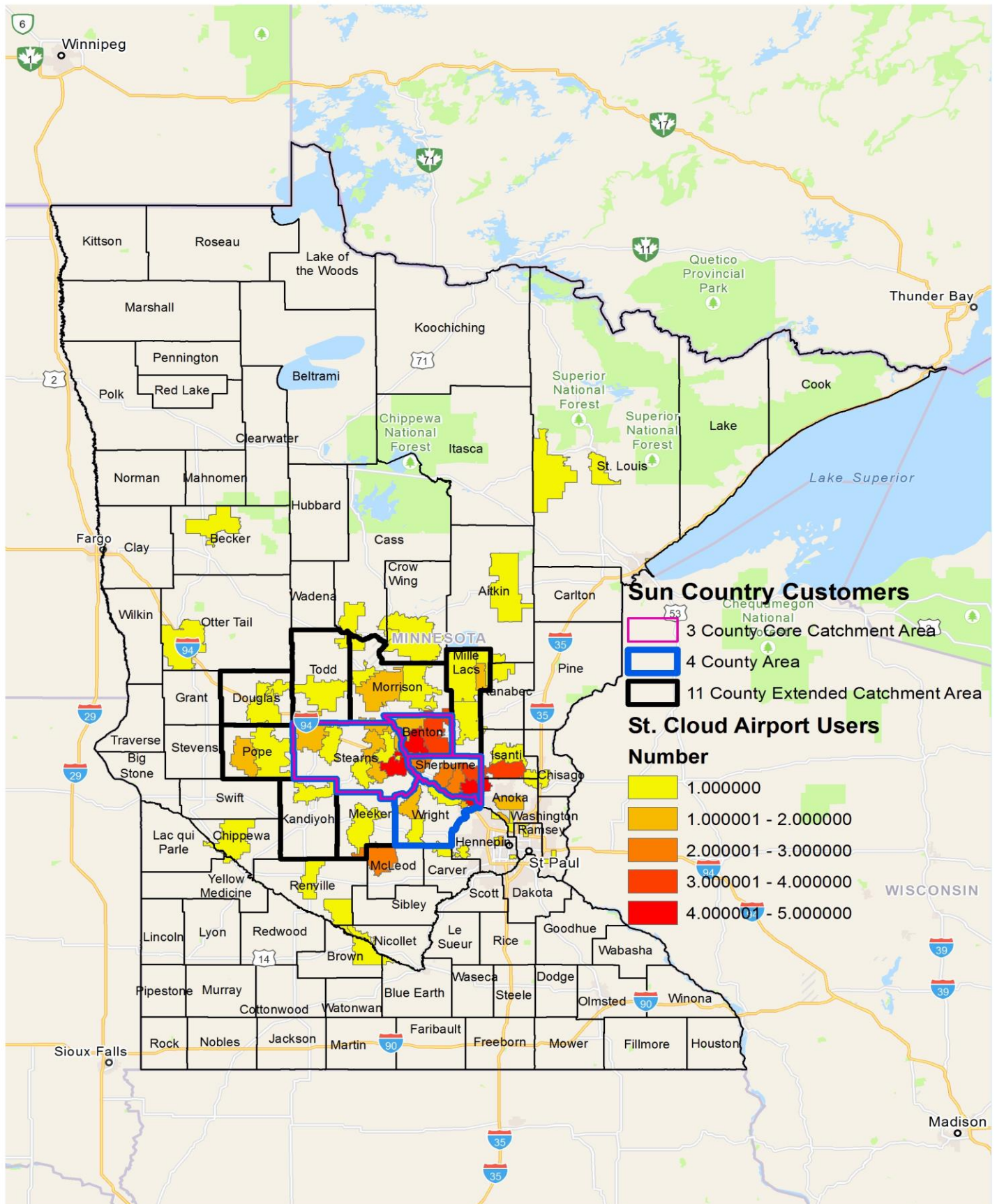
Looking at the difference between passengers that fly Allegiant and those that fly Sun

Country out of STC: Twenty of the surveyed flights were of Allegiant passengers and 2 were from Sun Country's charter service to Laughlin, Nevada. The maps on the following two pages look at any visual differences in the distribution of passengers between these two services. While Allegiant draws its passengers from a wider geographic range, it is clear that many passengers on Sun Country also come from outside Stearns/Benton/Sherburne/Wright.

MAP 2—Minnesota Counties of those who use Allegiant at STC



MAP 3—Minnesota Counties of those who use Sun Country at STC



An analysis of the demand for parking at STC: Several questions in the parking survey are designed to measure various factors that capture the demand for parking by commercial air passengers at STC. Parking is currently free at the St. Cloud Airport. There are 287 paved parking spots available for the use of commercial air customers in the main lot at STC and another 40 paved parking spaces in an auxiliary lot. During the busiest periods for the airport, hundreds of other spots in an adjacent field are utilized for parking.⁴ The photo below shows airport parking at full capacity. Note that there are cars parked on the grass as well as in spots that are not intended for parking. On days during the winter months when Allegiant flights to/from Mesa and Punta Gorda occur within the same time window (and when a Sun Country charter flight is also in operation), STC is “fully parked”. During the spring/summer months in which the parking survey was administered (and there were no seasonal flights to Punta Gorda), parking use at STC was commonly in the range of 50-100 (although this number increased when Sun Country flights occurred on June 24 and August 13).

STC Parking Lot on March 23, 2018 (555 Cars)⁵



⁴ If this field were to be paved, its capacity would be 239 cars. As it is currently used, fewer than 239 cars can actually park there since proper spacing between vehicles is not always observed.

⁵ Photo provided by Bill Towle, STC Airport Director.

Estimating the demand for parking at STC: All 576 parking survey respondents were asked to express their willingness to pay for parking at STC. Since parking is currently free at the St. Cloud Regional Airport, it is natural for survey participants to show reluctance in their willingness to pay for parking, so the survey item was set in a context in which parking was not free at other regional airports. Survey respondents were asked:

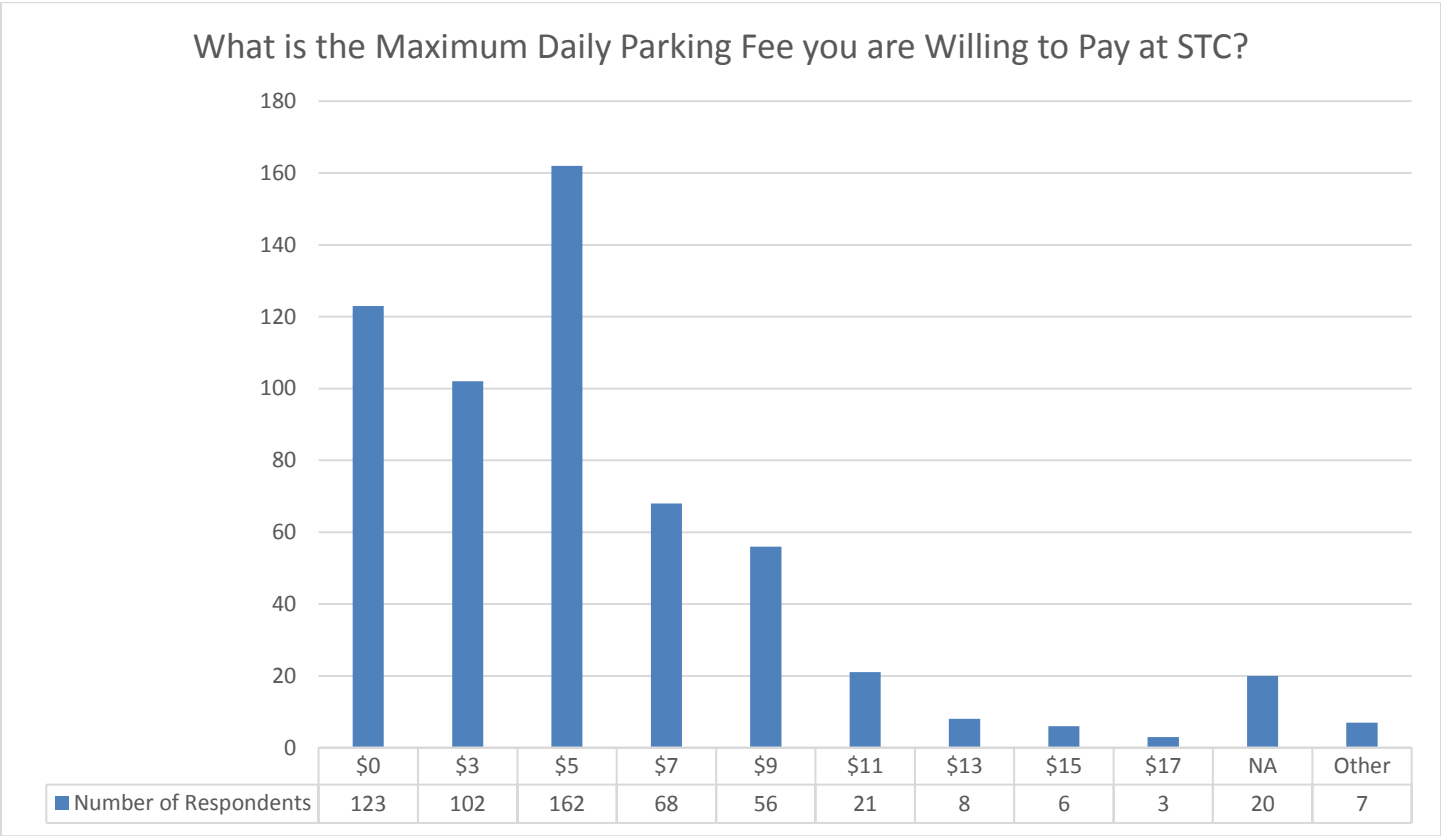
Considering that maximum parking fees at three other Minnesota airports are as indicated in the box, what is the **maximum** daily parking fee you would be willing to pay at STC if it helped enhance the passenger experience, improved the quality of airport parking, and improved the operational sustainability of the St. Cloud airport? (please select only one answer)

Maximum Parking Fees		
MSP	\$26/day	\$182/week
Rochester	\$9/day	\$54/week
Duluth	\$13/day	\$78/week

☐ \$0 ☐ \$3 ☐ \$5 ☐ \$7 ☐ \$9 ☐ \$11 ☐ \$13 ☐ \$15 ☐ \$17 ☐ Other _____

The distribution of responses to this question is seen below. While 123 passengers indicated an unwillingness to pay for parking, another 431 passengers were willing to pay some positive price.

CHART 4—Willingness to Pay for Parking at STC

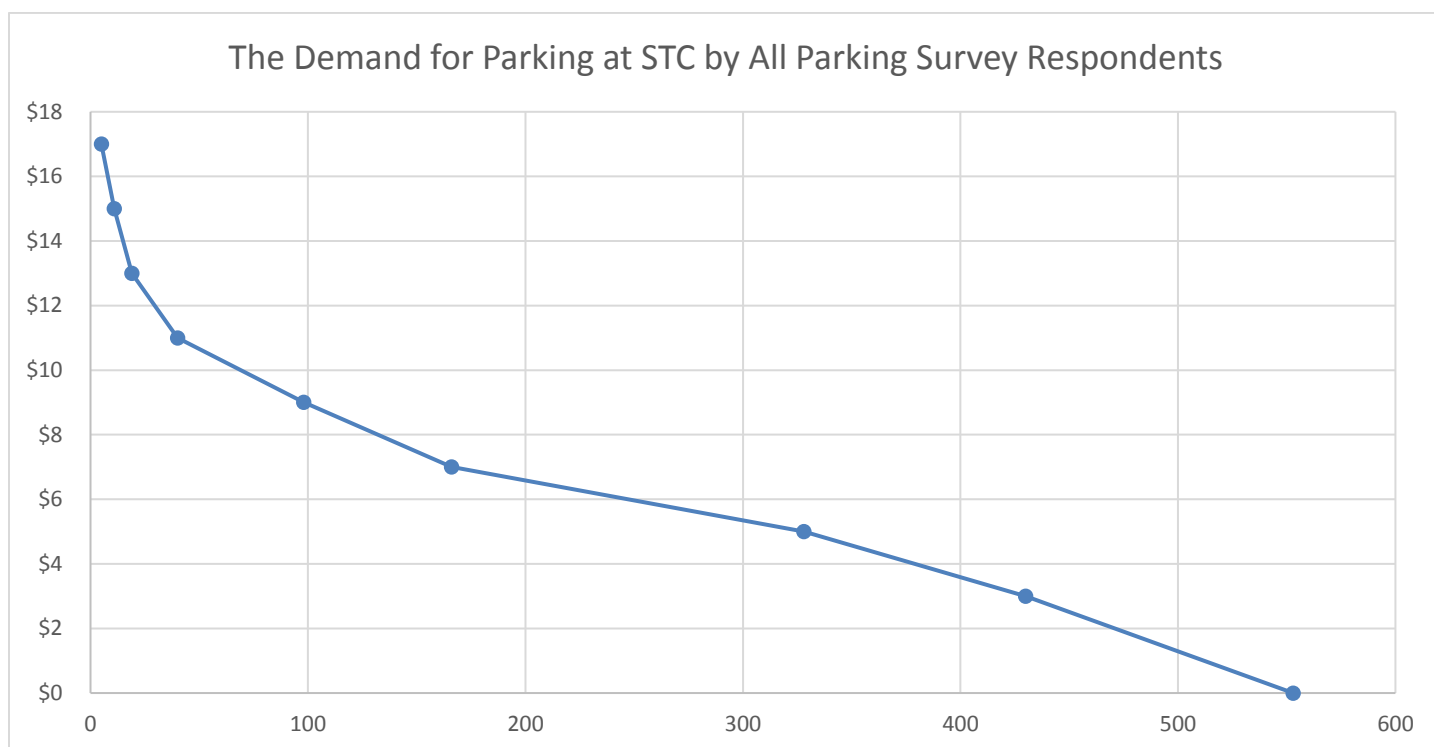


These data were used to construct a demand schedule, from which a demand curve was created. The point price elasticity of demand computation that is found in the right column of the demand schedule is used to determine the optimal price that should be charged as a daily parking fee *if it were determined that this is an option that airport officials wished to pursue and there was a desire to maximize parking revenue*. As the daily parking fee (the price) declines, the price elasticity of demand for parking at STC falls (in absolute value terms). The point at which the price elasticity of demand turns from elastic (the absolute value of the price elasticity is greater than one) to inelastic (the absolute value of the price elasticity is less than one) is the **price at which parking revenues would be maximized** if a daily parking fee were charged. In the demand schedule above, this price is **\$5 per day**.

TABLE 2—Demand Schedule for Parking at STC; Calculation of Price Elasticity of Demand

Demand Schedule for Parking at STC by All Parking Survey Respondents		
Price	Quantity Demanded	Point Price Elasticity of Demand
\$0	553	
\$3	430	-0.36
\$5	328	-1.01
\$7	166	-1.43
\$9	98	-2.66
\$11	40	-2.89
\$13	19	-2.74
\$15	11	-5.45
\$17	5	-10.2

CHART 5—Demand Curve for Parking at STC by all Parking Survey Respondents

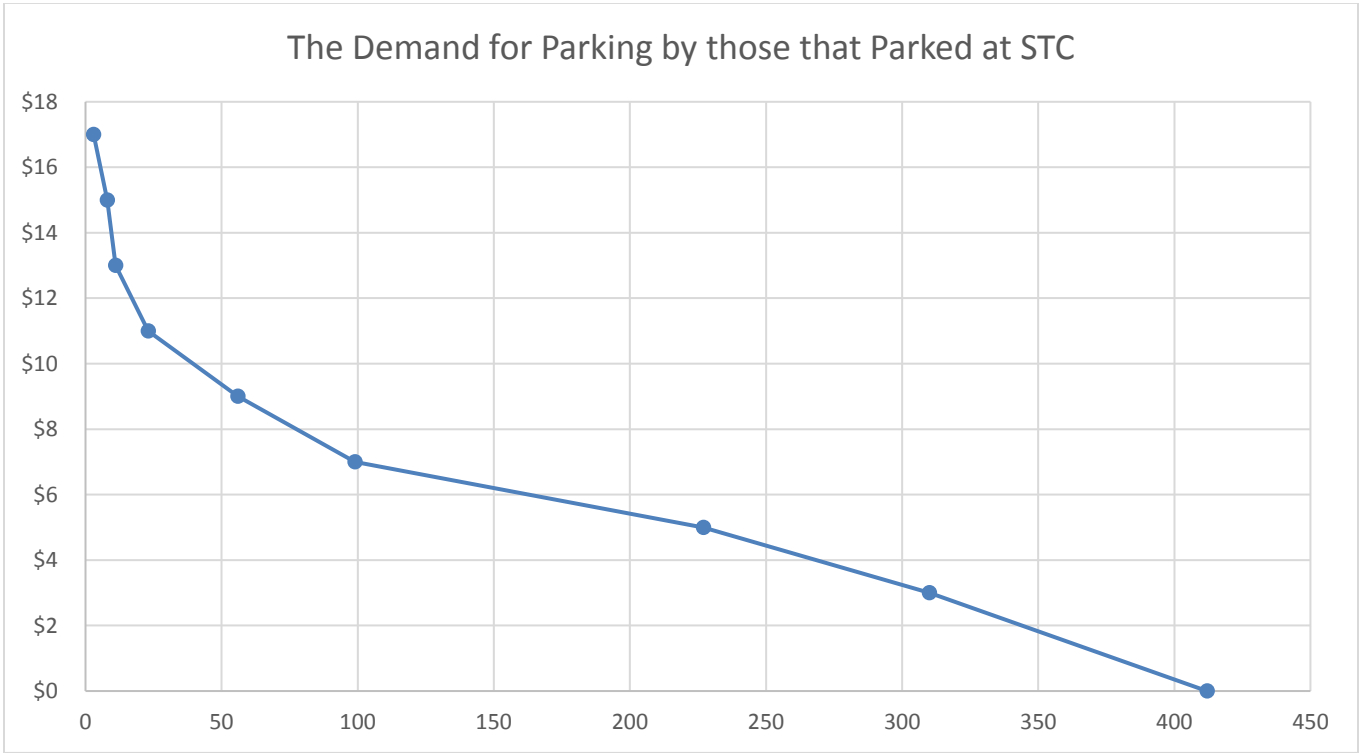


The above demand schedule reflects the willingness to pay for parking for *all* of those who filled out a parking survey, including those who didn't actually park at the airport. Do the results of the survey change if we look only at those who actually parked at STC? The demand curve and schedule for airport parkers only is found below. While the numbers in the demand schedule are different, the demand curve and the price elasticity calculations are largely the same as found above. For **those who parked at STC** and completed a parking survey, **parking revenues would be maximized if a parking fee of \$5 per day** was charged to those commercial air customers that park at STC.

TABLE 3—Demand Schedule for STC Airport Parkers; Calculation of Price Elasticity of Demand

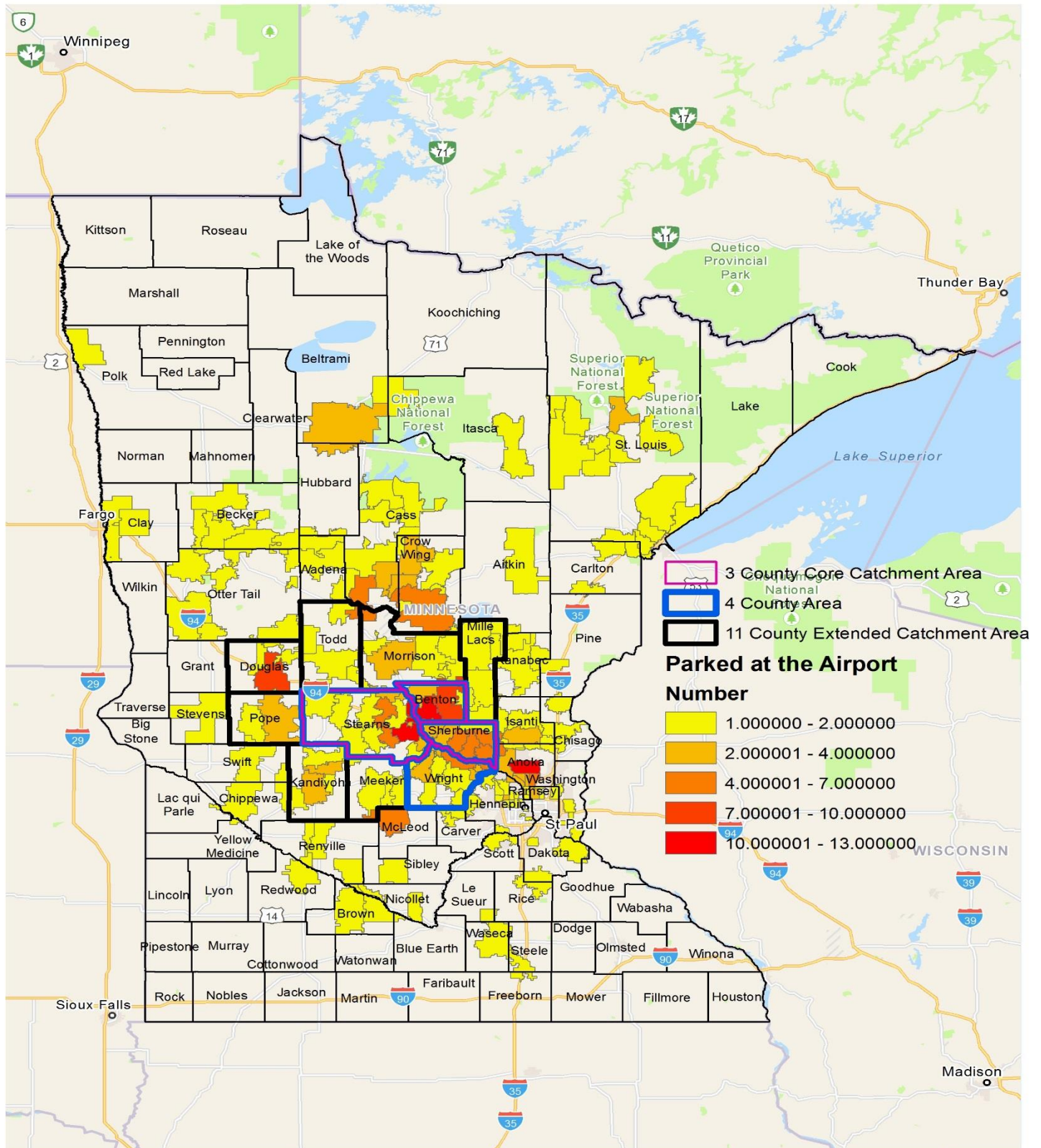
Demand Schedule for Parking by those who Parked at STC		
Price	Quantity Demanded	Point Price Elasticity of Demand
\$0	412	
\$3	310	-0.49
\$5	227	-0.91
\$7	99	-4.53
\$9	56	-3.46
\$11	23	-7.89
\$13	11	-7.09
\$15	8	-2.81
\$17	3	-14.17

CHART 6—Demand Curve for Parking by those who Parked at STC



A map of the geographic distribution of those who park at STC is also included below. Comparing this map to that which is found on page 5 confirms that the overall distribution of all parking survey respondents is very similar to that of those who parked at the airport.

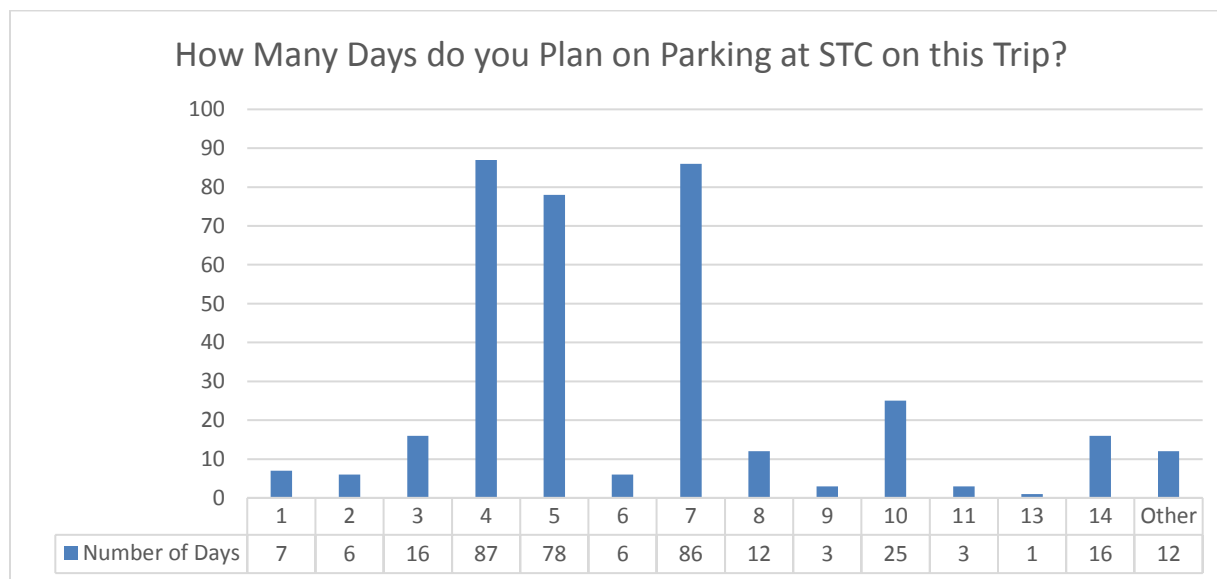
MAP 4—Distribution of Minnesota Residents who Parked at STC



Forecasting the annual revenue that could be earned if a parking fee were charged at STC:

The figure below shows survey responses of 358 STC parkers who were asked how many days they intended to park at STC.⁶ As can be seen, the most common frequencies of parking length are 4, 5, and 7 days. This represents the most common number of days that elapse between Allegiant flights to/from STC as well as the 4 day length (which may require 5 days of parking) of the Sun Country charter flight.⁷

CHART 7—Number of Days Parked at STC on this Trip



To forecast total annual parking revenues at STC, we compute the total number of cars that were parked by i) Allegiant passengers and ii) Sun Country passengers by those who completed the parking survey during the sample period and parked at the airport. From this estimate, we project the total additional cars that would have been parked had every passenger group participated in the survey. From this we are able to obtain estimates of the total number of cars parked at STC over the 22 flights in the sample. We then adjust for those survey respondents who parked at the airport and expressed willingness to pay \$5 or more for a daily parking fee at STC. For example, to forecast parking revenues from Sun Country passengers, we weight the total number of estimated cars parked by Sun Country passengers who are willing to pay \$5/night by the average number of days each Sun Country passenger parks at STC (survey results suggest this number is 4.59 days) and then multiply this number by a \$5 per day parking fee. This number is then used to adjust for what the numbers would be for an entire year (in 2017 there were nine total Sun Country flights) of Sun Country operations out of STC. The results suggest **total parking revenues from Sun Country passengers would equal \$7,023 per year** if a \$5 per night parking fee was implemented at STC (see table on next page).

⁶ A question asking parking survey respondents how many days they intended to park was introduced on the fourth flight surveyed, so the sample for this question is somewhat smaller than that of all parkers.

⁷ The survey only allowed respondents to choose up to 14 days of parking. The “other” responses in the table typically represent parking length in excess of 14 days. For example, there were 4 people parking 21 days, another parking for 22 days, and two parking for 30/31 days.

TABLE 4—Annual Parking Revenue Projection for Sun Country Passengers—Conservative Estimate

Sun Country Flight Summary	
Number of Annual Sun Country Flights	9
Average Parkers per Sun Country Flight	63
Percentage of Sun Country Passengers Willing to Pay at Least \$5/night for Parking	54%
Projected Number of Sun Country Parkers per Flight Willing to Park at \$5/night	34
Average Days Parked per Sun Country Flight	4.59
Assumed Daily Parking Price	\$5
Projected Parking Revenues per Sun Country Flight	\$780
Projected Annual Parking Revenues from Sun Country Flights	\$7,023

A similar procedure is used to compute the potential annual parking revenues from Allegiant customers. The calculation is made more difficult by the fact that on any outbound Allegiant flight there are visitors (who aren't expected to park overnight) as well as those who parked at STC. Once the share of passengers who completed the parking survey and parked on an outbound Allegiant flight is estimated, this number is adjusted to account for those who didn't complete the survey. Ultimately, a calculation is made of how many cars were parked relative to the 2,968 enplaned passengers that flew out of STC on an Allegiant flight from 5/30/18 – 8/11/18. This is then adjusted to account for those Allegiant passengers who indicated a willingness to pay \$5/night or greater for parking. The total number of parked cars by Allegiant customers is then estimated for an entire year (using the 2017 number of enplaned passengers—19,304). This is then multiplied by the average number of days parked by Allegiant passengers who parked at STC (calculated to be 7.26 days) and the result is multiplied by \$5 to derive an estimate of the potential annual parking revenues that could be earned from Allegiant customers at STC.⁸ Noting the normal uncertainties associated with any forecast model (especially when there is no history of charging airport parking fees), the figures in the table on the next page represent a conservative estimate of what the parking revenue structure might look like at STC if a **\$5 per day parking fee** were implemented.

⁸ Of course, this is conditioned on the share of parking passengers relative to visitors on Allegiant flights being unchanged over the full year. This seems unlikely since the winter months are likely to see a larger share of Allegiant passengers accounted for by vacationing Minnesotans. In this way, the forecast of annual parking revenues at STC is underestimated. However, there may also be adjustments made by those who park at STC who decide to get a ride to/from the airport by family or friends once a fee is charged (see the next section of the report). The average number of days that customers park at STC once a daily fee is charged may also decline.

TABLE 5—Annual Parking Revenue Projection for Allegiant Passengers—Conservative Estimate

Allegiant Airlines Flight Summary	
2017 Total Allegiant Enplanements	19,304
Total Estimated Number of Allegiant Parkers During Sample Period	433
Percentage of Allegiant Passengers Willing to Pay at Least \$5/night for Parking	52.5%
Projected Number of Allegiant Parkers Willing to Pay at Least \$5/night for Parking over Sample Period	227
Projected Annual Number of Allegiant Parkers Willing to Pay at Least \$5/night for Parking	1,476
Average Days Parked per Allegiant Parker over Sample Period	7.26
Assumed Daily Parking Price	\$5
Projected Parking Revenue from Allegiant Parkers during 2,968 Enplanements over Sample Period	\$8,240
Projected Annual Parking Revenues from Allegiant Flights	\$53,579

The projection of \$53,579 of potential annual parking revenues from Allegiant customers combined with the \$7,023 calculation in the Sun Country table yields a **projected annual parking revenue total of \$60,602 at STC**. This is a **very conservative estimate with relatively little downside risk**. It incorporates passengers’ stated willingness to pay for parking along with their average number of nights parked given that passengers do not currently have to pay for parking. Assuming a daily parking fee would be charged at STC, passengers’ expectations will likely adjust and they will realize a \$5/day fee for parking is a fairly modest charge given what is observed elsewhere. We note below that relatively few of those who park at STC would change airports if a parking fee were to be charged. Most of those survey respondents who appear to be unwilling to pay for parking indicate they would use family/friends to get to STC. Given the relatively long distance that many passengers drive to get to STC, the strategy of being driven to STC by family/friends may not make economic sense when parking fees are a relatively modest \$5/day.

TABLE 6—Annual Parking Revenue Projection for STC—Conservative Estimate

Combined Projected Annual Parking Revenue—Conservative Estimate	
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented	\$60,602

Forecasting potential annual parking revenues at STC using different assumptions: The previous section produced a low-risk, annual parking revenue estimate for STC under the assumption that parking activity at STC under a paid parking model would proceed precisely as predicted by the key parameters of the parking survey. It also uses historical passenger data for 2017. This section of the study alters some of these assumptions and incorporates anticipated passenger numbers for 2018-19. It is followed by a sensitivity analysis that utilizes actual parking revenue information from other airports. The important conclusion from this exercise is that **there is considerable upside potential in generating parking revenues in excess of what is seen in the conservative estimate.** However, this conclusion relies significantly on one additional consideration: (as is apparent in the responses from the parking survey discussed in the next section), if a paid parking system is implemented at STC, it has to be for **all** parking spots used by commercial air passengers. STC cannot allow commercial air passengers to park for free in the non-paved spillover lot (this lot is used frequently during the period of high passenger volume in the winter months) if a parking fee is charged in the paved main lot. This means this spillover lot will either need to be i) paved, striped and subject to parking fees (or some other alternative used to charge fees in this lot) or ii) closed to parkers.

One thing that is not discussed at length in this report is the possibility that the structure of the demand for parking at STC varies by season and/or across traveler destinations. Are commercial customers willing to pay higher daily parking fees at STC in the winter months? Are average nights parked longer for STC passengers in the winter months? Does the price elasticity of demand differ between Punta Gorda and Mesa passengers? What is the relative mix of visitors and Minnesota residents on Allegiant Airlines in winter months? Do airport parkers travel from the same distances to use STC in the winter months? These questions can only be answered by extending the survey activity at STC to capture passenger information during other times of the year.

In generating alternative estimates of potential parking revenues, the following assumptions are now made:

- i) Allegiant Airlines is offering an additional 936 seats to Mesa out of STC in the 2018-19 season (through April 2019) compared to 2017-18. The Punta Gorda destination will have 558 additional seats. This report has used calendar year 2017 (the last year for which complete passenger data are available) to generate passenger estimates for the forecast model, so the comparisons to the 2018-19 season are imperfect. Since the total Allegiant enplanement number used to generate the conservative parking revenue forecast estimate uses 2017 data, and since the Punta Gorda flights out of STC did not begin until November 2017, the January – March numbers in 2017 do not include the Punta Gorda enplanements that were experienced in the first three months of the year (there was also one Punta Gorda flight in April), so it is reasonable to assume higher passenger traffic out of STC going forward. Over a 12 month period ending April 2019, Allegiant Airlines is expected to offer 26,280 seats on flights out of STC. The passenger load factor on Allegiant’s flights out of STC averaged 81.73 percent in 2017. But this figure was dragged down by below normal load factors in November and December, which coincided with the introduction of the new seasonal service to Punta Gorda. By comparison, the average passenger load factor in 2016 was nearly 89 percent. As traveler awareness of the Punta Gorda service increases and the passenger load factor for this service inevitably increases, it is reasonable to assume the ratio of enplanements to available seats will rise relative to what was seen in 2017. Consequently, assuming a load factor of 85.2 percent (which is a simple average of the 2016 and 2017 load factors), and applying this to the 26,280 seats Allegiant is expected to offer in 2018-19, gives us **an assumed number of 22,391 Allegiant enplanements to use for an alternative parking revenue forecast model.**

- ii) The conservative estimate uses a decimal number for average days parked. However (with the exception of the first couple of hours parked in a new parking day) airport parking systems commonly use a whole number concept to determine parking fees. **So, someone parking for the Allegiant average of 7.26 days will likely actually pay for 8 days of parking. Similarly, Sun Country parkers are likely to pay for 5 days of parking (and not 4.59 days that is the average from the passenger survey)**
- iii) The assumption that 52.5 percent of Allegiant parkers were willing and able to pay \$5 per day to park (and 54 percent of Sun Country parkers are willing to pay that fee) is based on a survey of passengers who did not have to pay for parking at STC. It is natural for some of these passengers to express an unwillingness to pay a price for something that has always been free. This means **the share of those who are willing to pay at least \$5 per day to park is likely to be artificially low.** We note that many parkers travel from long distances to get to STC and few indicate they would change airports if they had to pay for parking. Consequently, the **alternative forecast model assumes 70 percent of STC parkers would willing to pay \$5 or more as a daily parking fee.**

This now allows us to generate an alternative (and possibly realistic) annual parking revenue forecast—one that:

- i) assumes 2018-19 expected commercial flight data out of STC and a revised load factor
- ii) incorporates a whole number concept for number of days parked
- iii) assumes a higher percentage of passengers are willing to pay \$5 per day.

TABLE 7—Annual Parking Revenue Projection for Sun Country Passengers—Alternative Estimate

Sun Country Flight Summary—Alternative Parking Revenue Forecast Model	
Number of Annual Sun Country Flights	9
Average Parkers per Sun Country Flight	63
Percentage of Sun Country Passengers Willing to Pay at Least \$5/night for Parking (alternative assumption)	70%
Projected Number of Sun Country Parkers per Flight Willing to Park at \$5/night (alternative computation)	44
Average Days Parked per Sun Country Flight (alternative assumption)	5
Assumed Daily Parking Price	\$5
Projected Parking Revenues per Sun Country Flight	\$1,100
Projected Annual Parking Revenues from Sun Country Flights	\$9,900

TABLE 8—Annual Parking Revenue Projection for Allegiant Passengers—Alternative Estimate

Allegiant Airlines Flight Summary—Alternative Parking Revenue Forecast Model	
2018-19 Total Allegiant Enplanements (alternative assumption)	22,391
Total Estimated Number of Allegiant Parkers During Sample Period	433
Percentage of Allegiant Passengers Willing to Pay at Least \$5/night for Parking (alternative assumption)	70%
Projected Number of Allegiant Parkers Willing to Pay at Least \$5/night for Parking over Sample Period (alternative computation)	303
Projected Annual Number of Allegiant Parkers Willing to Pay at Least \$5/night for Parking (alternative computation)	2,286
Average Days Parked per Allegiant Parker over Sample Period (alternative assumption)	8
Assumed Daily Parking Price	\$5
Projected Parking Revenue from Allegiant Parkers during 2,968 Enplanements over Sample Period (alternative computation)	\$12,120
Projected Annual Parking Revenues from Allegiant Flights (alternative computation)	\$91,490

This alternative estimate—based on higher STC passenger traffic, increased load factors, a whole number for average parking days, and a higher assumed percentage of passengers willing to pay \$5/day for parking—yields an annual parking revenue forecast of \$101,390.

TABLE 9—Annual Parking Revenue Projection for STC—Alternative Estimate

Combined Projected Annual Parking Revenue—Alternative Estimate	
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented	\$101,390

Note the sensitivity of the parking revenue forecast to the percentage of passengers who are willing to pay \$5 per day to park at STC. Allowing this percentage to vary (assuming projected passenger traffic for 2018-19, 8 days average length of parking for Allegiant passengers and 5 days for Sun Country passengers) yields different estimated annual parking revenues at STC. **These parking revenue projections therefore vary in a range of \$60,602 - \$144,855. The next section looks at some comparable numbers from other airports to validate that, given growing commercial passenger numbers, the annual parking revenue that can be expected at STC is likely to exceed \$100,000.⁹**

TABLE 10—Annual Parking Revenue Projection for STC—Estimates from Alternative Willingness to Pay Percentages

Combined Projected Annual Parking Revenue—Estimates from Alternative Willingness to Pay Percentages	
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using 2017 enplanements (Willingness to Pay Percentage, Allegiant--52.5%; Sun Country—54%)	\$60,602
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant-52.5%; Sun Country—54%)	\$69,205
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--70%; Sun Country—70%)	\$101,390
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--80%; Sun Country—80%)	\$115,770
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--90%; Sun Country—90%)	\$130,425
Total Projected Annual Parking Revenue at STC if \$5 Daily Parking Fee is Implemented, using projected 2018-19 enplanements (Willingness to Pay Percentage, Allegiant--100%; Sun Country—100%)	\$144,855

Parking at other airports: Table 11 on the next two pages highlights parking information from a number of different comparison airports. Some of these comparison airports were identified in the initial months of the airport study, others were selected because their communities have similar economic structure to the St. Cloud metropolitan area, others have similar size operations as STC, and others are of natural regional interest. The table also shows parking information for all Minnesota airports that have commercial air service. In all cases, the number of annual enplanements (for the year ending May 2018) is included in the table, so that the reader can gain an understanding of the scale of the airport compared to STC. The St. Cloud Airport had approximately 20,000 enplanements over the year ending May 2018. This makes STC one of the airports in the table with the lowest commercial air activity.

Many of the airports in the table that operate on a similar scale of annual enplanements do not charge for parking. However, the airports to which STC might be said to aspire (including Appleton, Plattsburgh, and Trenton) all have paid parking. The annual parking revenue from these operations (which is provided in the table) is considerable. For example the annual parking revenues in Appleton, WI totaled \$2.4 million and were approximately \$1.6 million in Plattsburgh, NY. Trenton’s parking revenues were \$2.8 million.

⁹ Table 10 also produces a forecast of estimated annual parking revenues using the alternative assumption of 2018-19 passenger loads using the willingness to pay percentage of 52.5% for Allegiant.

TABLE 11--A Comparison of Parking Information from other Airports

Airport	Short-term Parking Fees	Long-term Parking Fees	Weekly Parking Fees	Annual Parking Revenue	Total Enplanements, year ending May 2018	Other
<i>Appleton, WI</i>	First 30 minutes free; \$2 for 60 minutes; additional dollar per half hour; max--\$13	\$7/day	\$38/week	2017-- \$2,384,457	298,000	Payment is self-service using credit card, cash machine, or Parkmobile
<i>Barnstable Municipal Airport, MA</i>	First 30 minutes free; \$3 first hour, \$1 each additional hour; \$9 daily max	\$9/day; Overflow lot (when main lot is full), \$6/day	\$50/week	2016-- \$116,221	20,000	Managed by Republic Parking
<i>Bemidji, MN</i>	FREE	FREE	FREE		29,000	
<i>Brainerd, MN</i>	FREE	FREE	FREE		21,000	
<i>Cedar Rapids/Iowa City, IA</i>	\$12/day	\$7/day		2017-- \$5,228,412	577,000	Managed by Republic Parking
<i>Dubuque, IA</i>	FREE	FREE	FREE		38,000	
<i>Duluth, MN</i>	\$3 for first hour, etc.	\$13/day	\$78/week	2017-- \$1,171,852	122,000	Free Cell Phone Parking Lot; Parking services outsourced; Corporate parking rates available
<i>Eau Claire, WI</i>	Up to 2 hours FREE; \$5/day	\$5/day		2017-- \$159,864	20,000	
<i>Fargo, ND</i>	\$1 per 30 minutes/\$18 per day	\$8/day	\$48/week	2017-- \$2,571,257	401,000	economy lot-- \$6/day; \$36/week
<i>Fort Collins, CO</i>	\$5/night	\$5/night		2017-- \$13,595	NA	Payment kiosk outside terminal front door, pay in advance.
<i>International Falls, MN</i>	FREE	FREE	FREE		15,000	
<i>Hagerstown, MD</i>	FREE	FREE	FREE		23,000	
<i>Hibbing, MN</i>	FREE	FREE	FREE		15,000	Oversized vehicles require permission
<i>Hilton Head, SC</i>	0-2 hours; FREE; 2-24 hours/\$10	\$8/day		FY 2017-- \$16,692	23,000	Managed by Republic Parking
<i>Latrobe, PA</i>	FREE	FREE	FREE		142,000	
<i>Meridian, MS</i>	Daily Parking—FREE; Overnight, \$2	\$2/day		2017-- \$32,430	21,000	
<i>Minneapolis-St. Paul, MN</i>	\$3/hour/\$34 daily max	\$24/day (ePark); \$26/day (regular); \$15/day (value)		2017-- \$110,105,636	16,829,000	

<i>Muskegon, MI</i>	First 30 minutes free; \$1/hr; \$10/day	\$7/day		2017--\$89,047	15,000	
<i>Ogden, UT</i>	\$3.50/day	\$3.50/day		2017--\$37,000	22,000	Parking pay station in terminal
<i>Owensboro, KY</i>	Drop Off/Pick Up FREE; \$6.50/day	\$6.50/day		2017--\$111,909	19,000	
<i>Paducah, KY</i>	\$7/day	Days 1-7, \$7/day; Days 8-14, \$4/day; Days 15-21, \$2/day; Days 22+, \$1/day		2017--\$177,953	20,000	
<i>Plattsburgh, NY</i>	0-3 hours FREE;	\$8/day	\$8/day	2017--\$1,584,490	124,000	Managed by Republic Parking
<i>Rapid City, SD</i>	0-30 minutes FREE; \$2/hour/\$10 daily max (P1); 0-30 minutes FREE; \$1/half-hour/\$12 daily max (P2)	\$10/day (P1); \$12/day (P2)	\$60/week (P1); \$84/week (P2)	2017--\$1,439,398	287,000	Managed by Republic Parking
<i>Rhineland, WI</i>	\$6/day	\$6/day		2017--\$129,090	24,000	
<i>Rochester, MN</i>	0-15 minutes FREE; 16-30 minutes--\$1; each additional half hour--\$1; \$9 daily max	\$9/day	\$54/week	2017--\$641,756	165,000	Managed by Republic Parking
<i>St. Cloud, MN</i>	FREE	FREE	FREE		20,000	
<i>Sioux Falls, SD</i>	\$1/first hour; \$2/hour after; \$14/day max	\$8/day; \$7/day (economy lot)	\$35/week (economy lot)	2017--\$4,851,758	543,000	Parkmobile reservations available
<i>Stillwater, OK</i>	FREE	FREE	FREE		24,000	
<i>Thief River Falls, MN</i>	FREE	FREE	FREE		5,183	\$5 fee for plug in service
<i>Trenton Mercer, NJ</i>	\$2/hr/\$8 max	\$8/day		2017--\$2,809,262	369,000	Credit card only and credit/cash options
<i>Waterloo, IA</i>	First three hours free, then \$1/hr up to daily max of \$6	\$6/day		2017--\$120,967	23,000	
<i>Yakima, WA</i>	\$1 for 1-2 hours	\$10/day		20175--\$288,803	70,000	Managed by Republic Parking; Cell phone lot available

It is tempting to compare annual parking revenues at these higher activity airports to STC and interpolate what the revenues might be for St. Cloud Regional Airport's smaller scale operation. Care needs to be exercised in making these comparisons since parking fees differ from what is proposed in this study and the ratio of parkers to passengers is not the same across all airports. But, the results are nonetheless suggestive.

For example, the Plattsburgh (NY) airport (which generates considerable cross-border traffic from Canada) reports \$1.6 million of annual parking revenues with 124,000 annual enplanements. Were STC to have a similar parking revenue outcome for its 20,000 enplanements, the annual parking revenues at STC would be \$260,000. A similar comparison to Appleton suggests a potential of \$160,000 annual parking revenues at STC and the comparison to Trenton is \$150,000 of parking revenues. If the STC parking revenue structure were to look similar to the Duluth airport, approximately \$200,000 of annual parking revenues would be earned. Rochester (MN) and Yakima airport comparisons yield a lower revenue outlook. A comparison to Rochester suggests \$78,000 of parking revenues at STC and Yakima has a similar prediction (with \$82,000). These figures all suggest the \$60,602 conservative estimate is a floor, below which annual parking revenues are unlikely to fall---with considerable upside potential to earn annual parking revenues in excess of \$100,000 at STC.

Comparison of annual parking revenues at similar size airports (that charge parking fees) is also instructive. In **Table 12 below**¹⁰, the reader can see that these **airports are all on a similar scale of enplanements and all have more than \$100,000 of annual airport parking revenues** (with the exception of Muskegon, MI, which only had 15,000 enplanements over the year ending May 2018). Many of these airports charge a similar daily parking rate to that which would maximize revenue at STC. The Owensboro Airport is particularly interesting since it has a similar number of enplanements and has Allegiant as its primary commercial service. Its parking revenue was nearly \$112,000 in 2017.

TABLE 12--A Comparison of Information from Similar Size Airports that Charge for Parking

Airport	Short-term Parking Fees	Long-term Parking Fees	Weekly Parking Fees	Annual Parking Revenue	Total Enplanements, year ending May 2018	Other
<i>Barnstable Municipal Airport, MA</i>	First 30 minutes free; \$3 first hour, \$1 each additional hour; \$9 daily max	\$9/day; Overflow lot (when main lot is full), \$6/day	\$50/week	2016-- \$116,221	20,000	Managed by Republic Parking
<i>Eau Claire, WI</i>	Up to 2 hours FREE; \$5/day	\$5/day		2017-- \$159,864	20,000	
<i>Muskegon, MI</i>	First 30 minutes free; \$1/hr; \$10/day	\$7/day		2017-- \$89,047	15,000	
<i>Owensboro, KY</i>	Drop Off/Pick Up FREE; \$6.50/day	\$6.50/day		2017-- \$111,909	19,000	
<i>Paducah, KY</i>	\$7/day	Days 1-7, \$7/day; Days 8-14, \$4/day; Days 15-21, \$2/day; Days 22+, \$1/day		2017-- \$177,953	20,000	
<i>Rhinelander, WI</i>	\$6/day	\$6/day		2017-- \$129,090	24,000	
<i>St. Cloud, MN</i>	FREE	FREE	FREE		20,000	
<i>Waterloo, IA</i>	First three hours free, then \$1/hr up to daily max of \$6	\$6/day		2017-- \$120,967	23,000	

¹⁰ The information in Table 12 is just a subset of the entries in Table 11.

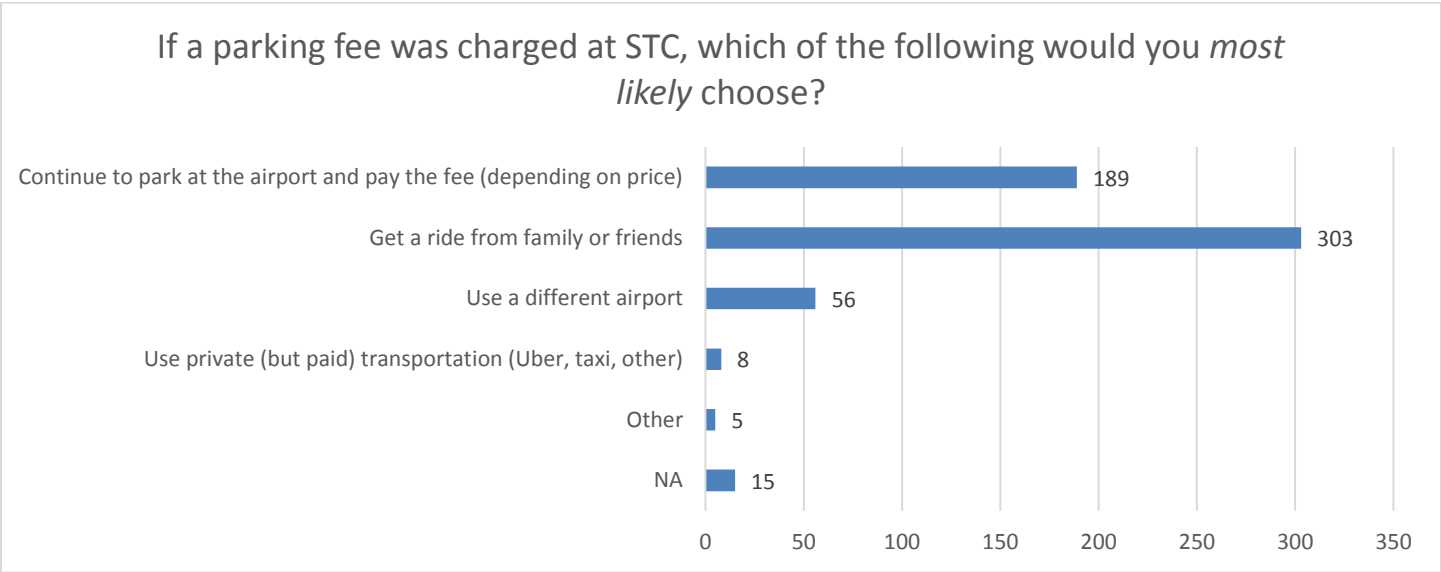
Several of the airports in Table 11 outsource parking to a vendor who manages collection of parking fees as well as the fee collection infrastructure. Many of the airports use self-service machines to manage parking. Note that some airports have differential rates for short-term parkers and sometimes allow for free parking for short periods of time. Some airports cap weekly fees at a discount from the sum of daily rates.

Additional characteristics of the demand for parking at STC: In addition to collecting survey information on whether passengers parked at STC, their willingness to pay, and the average number of days they planned to park, several other questions were asked to help obtain information of how passengers might respond if a parking fee were charged and how they feel about different parking characteristics.

One particularly important question asked:

- If there was a fee to park at the St. Cloud Airport, which one of the following would you *most likely* choose?
- ☐ Continue to park at the airport and pay the fee (depending on price)
 - ☐ Use private (but paid) transportation (Uber, taxi, other)
 - ☐ Get a ride from family or friends
 - ☐ Use a different airport
 - ☐ Other, please specify _____

CHART 8—What would Passengers do if a Parking Fee were Charged?



The good news from this table is that relatively few survey respondents (**less than 10 percent**) would change airports. However, this may cause passengers to choose not to park at STC. Nearly **53 percent** of parking survey respondents indicate they would **get a ride from family and friends** (and nearly **one-third** indicate they would pay the price). Some of this is, of course, a natural reaction of passengers to being charged for something that has always been free. The results of the willingness to pay survey indicate that a large share of passengers (324 passengers, representing over 56 percent) are willing to pay at least \$5 per day to park at STC. It is worth noting that when we adjust for those who actually parked at STC (428 survey respondents), a larger share of passengers (40 percent) expressed that they would continue to park STC.

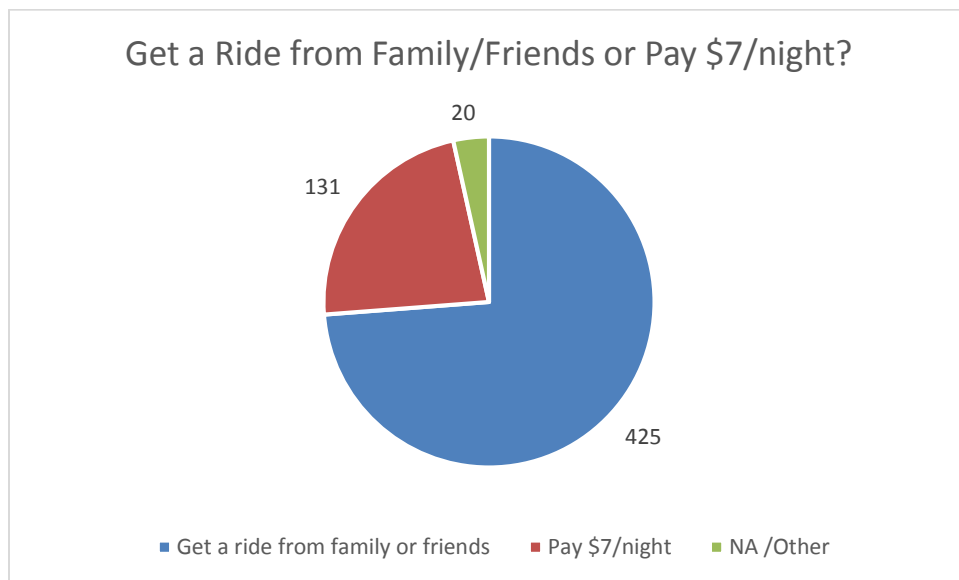
Passengers were also asked:

If you were given a choice of paying \$7 per night to park at the St. Cloud Airport or getting a ride from family or friends, which would you choose?

- ☐ Pay \$7 per night ☐ Get a ride from family or friends

In hindsight, of course, it would have been ideal to use a price of \$5 per night to park at STC, but this revenue-maximizing price was unknown when the survey was developed. Economic theory would suggest that (as long as the cost of accessing transportation help from family/friends is no more than \$7 per night), no more than 162 passengers (this is the sum of quantities demanded at a price of \$7 or higher from the initial demand schedule) should be willing to select the \$7/night option. This is what is observed. Only 131 indicate a willingness to pay \$7/night and 425 survey respondents indicate they would use family or friends.

CHART 9—Get a Ride from Family/Friends or Pay \$7/night?



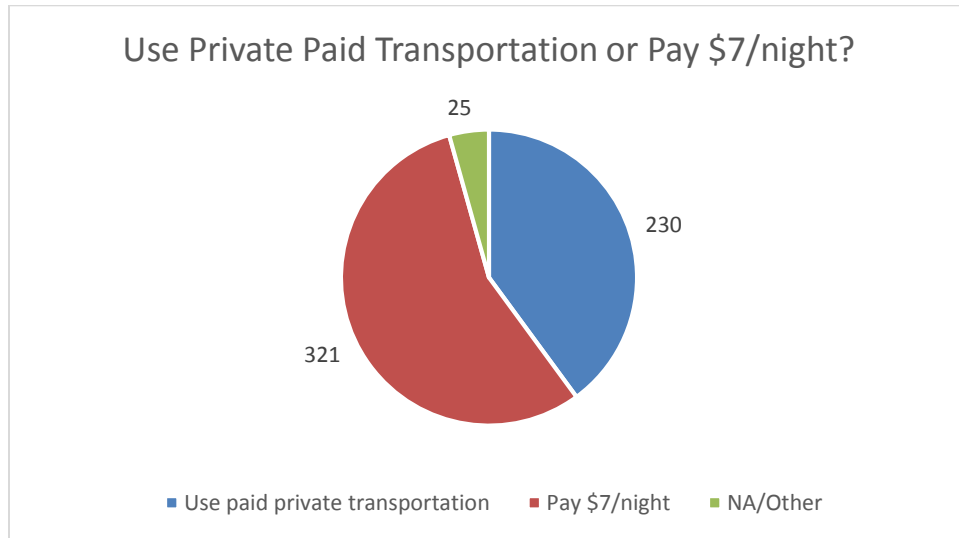
We also asked:

If you were given a choice of paying \$7 per night to park at the St. Cloud Airport or using a private (but paid) transportation service (such as Uber, taxi, etc.), which would you choose?

- ☐ Pay \$7 per night ☐ Use a private transportation service

Given the long distances that many people travel to get to STC, the cost of using a transportation service may be higher than the overall cost of paid parking. It comes as no surprise that a greater share of surveyed passengers would be willing to choose paid parking at \$7/night than use private transportation. 321 respondents indicate a willingness to pay \$7/night and 230 would use paid transportation instead.

CHART 10—Use Private Paid Transportation or Pay \$7/night?



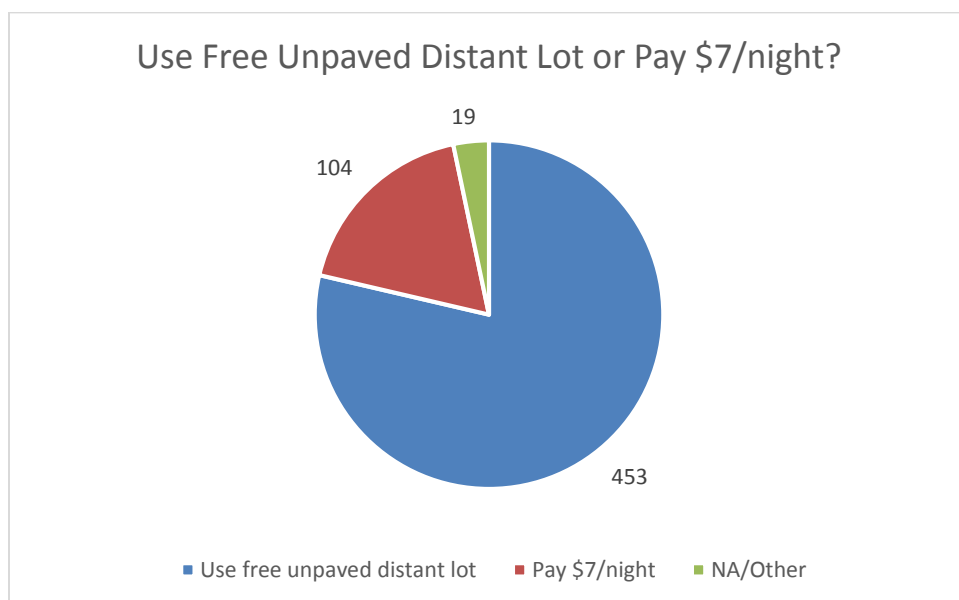
Our next question about parking preferences was:

If you were given the choice of paying \$7 per night to park at the St. Cloud Airport in a paved prime spot that was just steps from the terminal or parking for free in an unpaved more distant lot (that was still within walking distance), what would you choose?

☐ Pay \$7 per night ☐ Use the free distant lot

Very few respondents would be willing to pay \$7/night instead of parking in an unpaved distant lot (that was still walking distance). **Should STC decide to adopt a paid parking system that only included a fee for existing paved lots, most passengers would choose the unpaved lot (if this option were made available).**

CHART 11—Use Free Unpaved Distant Lot or Pay \$7/night?



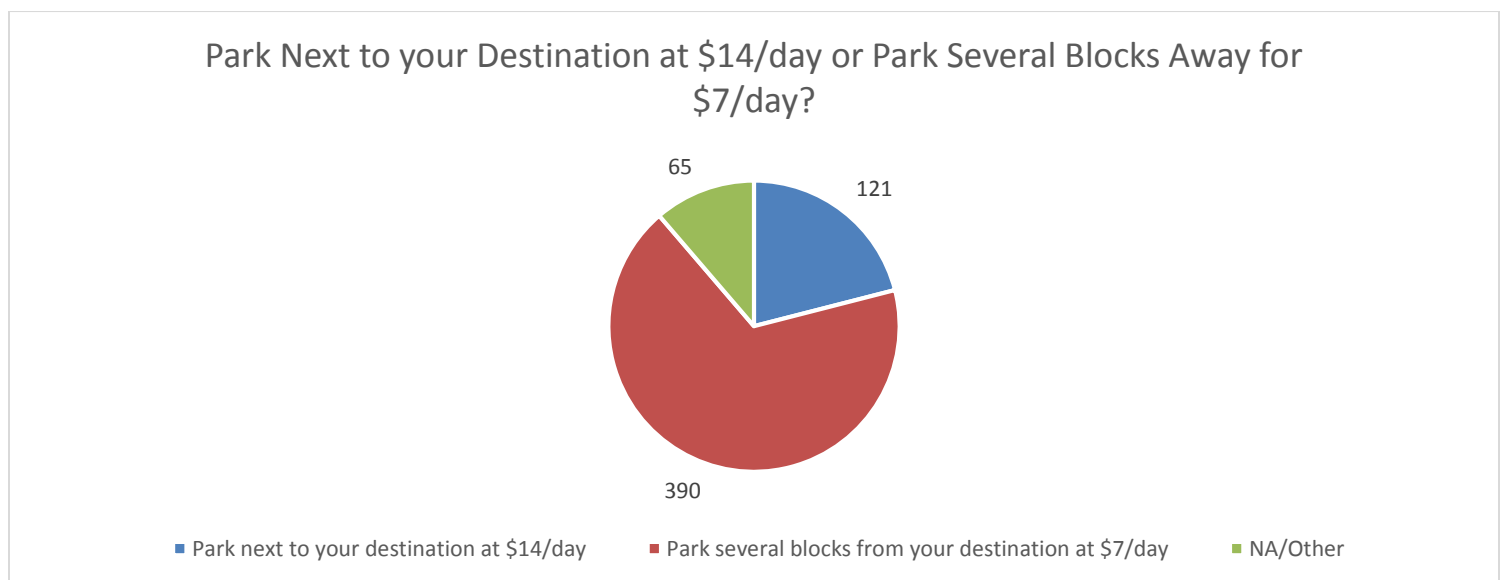
Along the same lines as the previous question, we tried to get a feel for peoples’ preferences in terms of proximity of parking to their destination. We asked:

When parking in cities, which of the following do you usually prefer?

- ☐ Parking next to your destination at \$14 per day
- ☐ Parking several blocks away from your destination at \$7 per day

Most of those who filled out the parking survey prefer to pay a lower parking fee and walk several blocks to their destination. This seems consistent with other responses to the parking survey—STC passengers prefer free parking, but if this is not available, the majority prefers the lowest price in a set of options that examine parking amenities.

CHART 12—Destination Proximity Parking Preferences



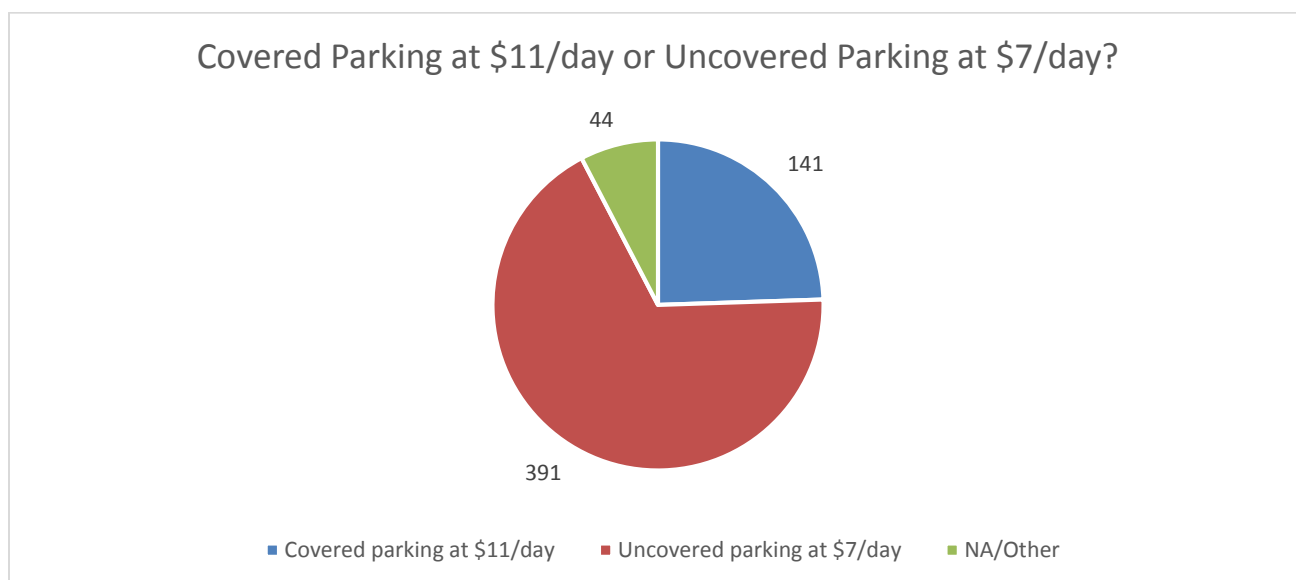
The final question of the survey examined whether people are willing to pay a daily premium of \$4 to park in covered parking. It should be noted that the option of covered parking may be more attractive in the winter months, so a survey in January/February may yield different conclusions, but STC passengers largely appear to be unwilling to pay a premium for covered parking (although 141 respondents--nearly 25 percent) do favor covered parking. The question that was asked was:

When given the choice between covered and uncovered parking, which of the following would you choose?

- ☐ Uncovered parking at \$7 per day ☐ Covered parking at \$11 per day

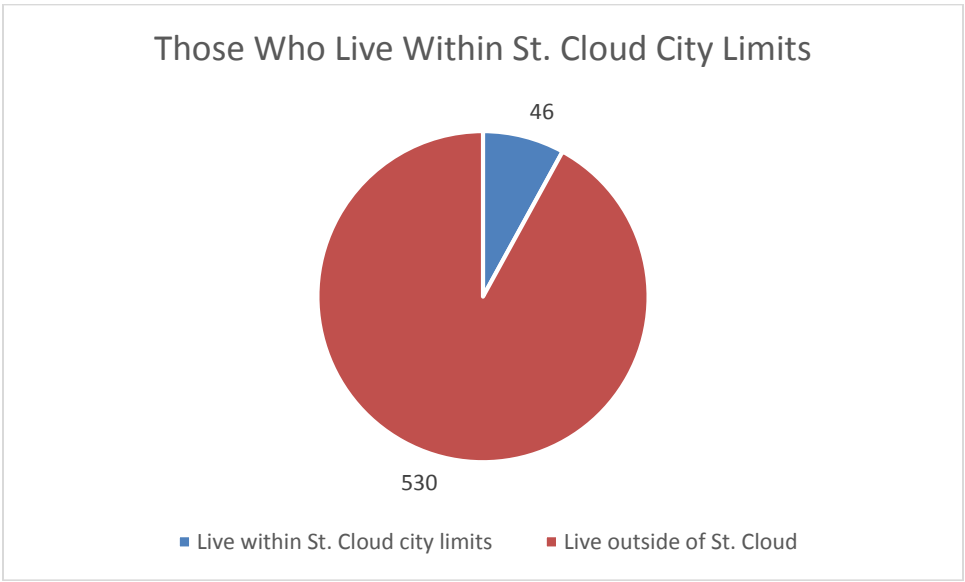
A pie chart of the response is as follows:

CHART 13—Covered or Uncovered Parking?



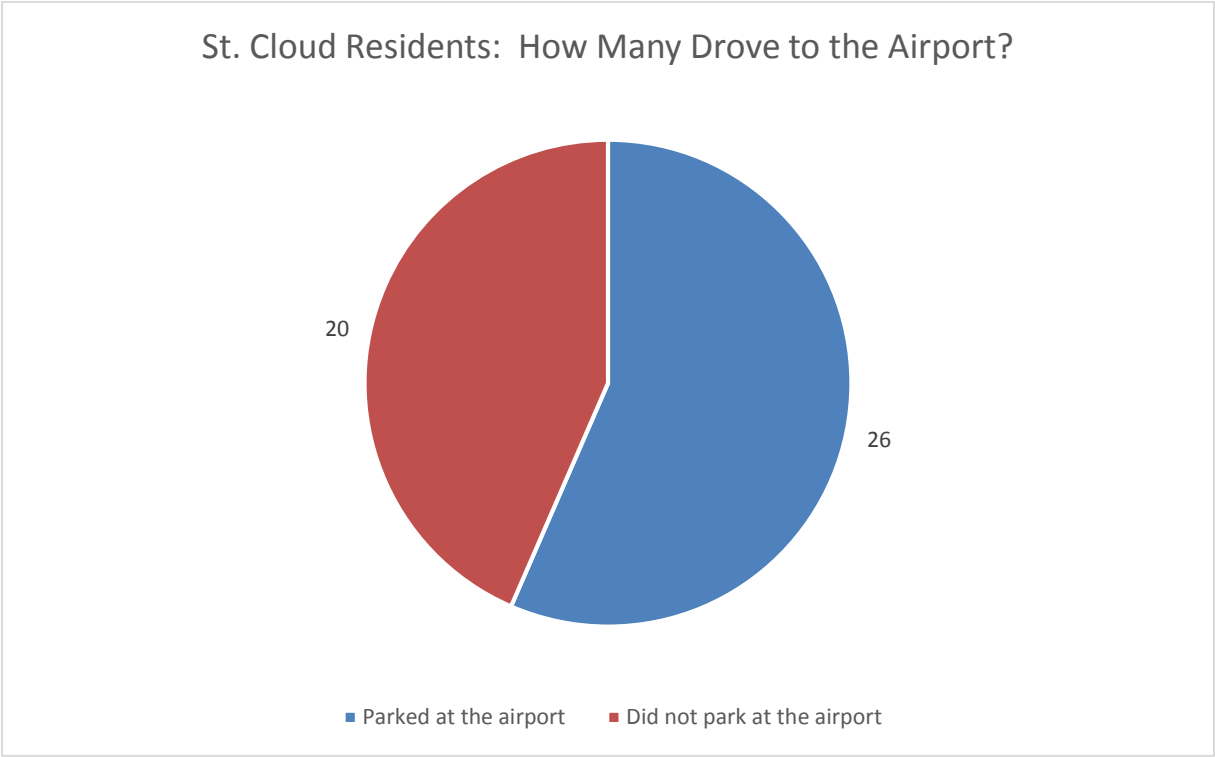
A special note about those completing the survey from St. Cloud: We have already indicated that very few STC passengers live within St. Cloud city limits. In fact, several of those who answered “yes” to the survey question asking them if they live within St. Cloud city limits are actually from the neighboring cities of Sartell, Waite Park, Sauk Rapids, and Cold Spring. There are only 46 passengers who identify zip codes 56301, 56303, and 56304 as their permanent residence.

CHART 14—Surveyed Passengers that Live Within St. Cloud City Limits



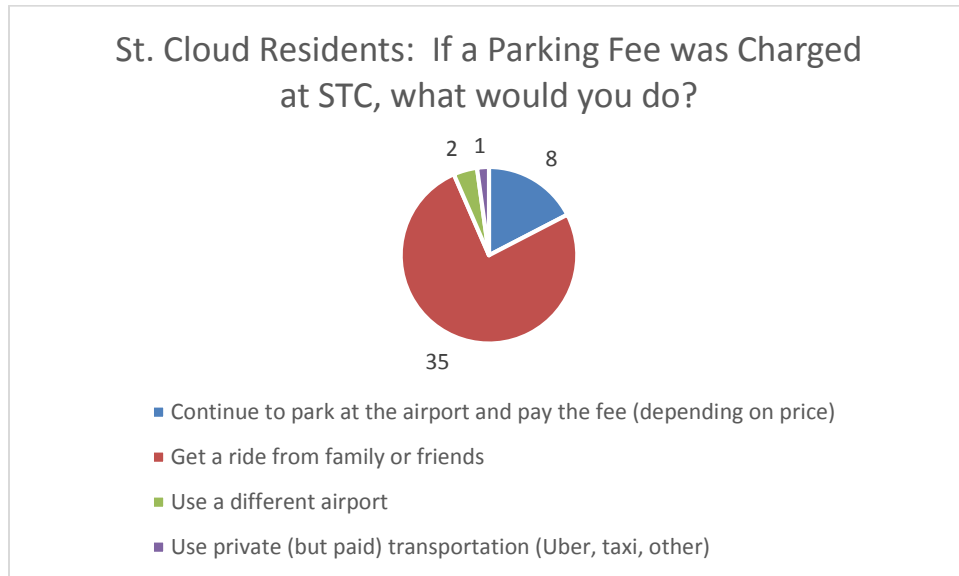
Only 26 (about 57 percent) of the 46 parking survey respondents who live in St. Cloud actually drove to the airport.

CHART 15—Of those who Live in St. Cloud, How Many Drove to STC?



Of the 46 St. Cloud residents who used STC, only 8 of them indicated that would continue to park and pay the fee if a paid parking system was implemented at STC. Most of them would simply get a ride from family/friends. Note that only 2 respondents indicated they would use a different airport.

CHART 16—What would St. Cloud Residents do if a Parking Fee was Charged at STC?



Concluding remarks: This study has used responses from a survey of 576 commercial air passengers at St. Cloud Regional Airport to examine a number of issues related to parking at STC. Among the findings of the study are that:

- Relatively few Minnesota permanent residents who use STC commercial air service live within St. Cloud city limits.
- About 40 percent of Minnesota residents who use STC for commercial air service are from the counties of Stearns/Benton/Sherburne/Wright.
- Relatively few STC passengers live in 7 of the counties of the traditional catchment area: Douglas, Kandiyohi, Meeker, Mille Lacs, Morrison, Pope, Todd counties.
- Passengers' demand for airport parking, as captured in a willingness to pay survey item, suggests the optimal daily price to charge for parking is \$5/day if airport leaders wish to maximize parking revenue.
- It is conservatively estimated that annual parking revenues of \$60,602 per year could be earned at STC with current rates of commercial air enplanement. This annual parking revenue estimate is likely to be a floor, below which annual parking revenues won't go.
- Alternative estimates of annual parking revenues suggest if \$5/day is charged to park at STC, revenues would top \$100,000. This conclusion is reached by looking at realistic future passenger traffic and is supported by experiences at other similar airports.
- Passengers typically prefer receiving a ride to the airport from family or friends over paying \$7 per night for parking. They also tend to prefer free parking in a distant lot over paying for parking that is closer to the terminal. STC passengers tend to prefer lower-priced uncovered parking over covered parking and are willing to walk a distance to save money on parking.

This study has made little attempt to estimate the cost—administrative, enforcement, maintenance, technology, etc.—of implementing a paid parking system. Any decision to adopt paid parking at STC would have to take such costs into consideration. Nevertheless, the willingness of Minnesota residents to travel considerable distances to use commercial air service at STC—and the increased volume of passenger traffic that occurs during peak travel times in the winter—does suggest a paid parking model could increase the efficiency of parking allocation at the St. Cloud Airport.

Appendix

St. Cloud Regional Airport Parking Survey Spring/Summer 2018

This survey should take only a few minutes to complete. **Please complete only one survey per family/group.**
Thank you!

SECTION 1: AIRPORT PARKING SURVEY

Please answer this section of the survey if you either drove or received a ride to STC from your primary residence.

1. Do you live within St. Cloud city limits? ☐ Yes ☐ No

2. Please indicate in which of the following counties in the St. Cloud area your primary residence is located. If you do not live in one of the listed counties, please choose "Other" and indicate the county and state of your primary residence.
 - ☐ Benton
 - ☐ Douglas
 - ☐ Kandiyohi
 - ☐ Meeker
 - ☐ Mille Lacs
 - ☐ Morrison
 - ☐ Pope
 - ☐ Sherburne
 - ☐ Stearns
 - ☐ Todd
 - ☐ Wright

 - ☐ Other county of residence (County and State) _____

3. How many people are in the group you are travelling with today? (answer 1 if you are travelling alone)

4. Did you park at the airport today? ☐ Yes ☐ No

5. If you answered "yes" to the previous question, how many days do you plan on parking at STC on this trip? _____
 - ☐ I did not park at the airport

6. If you did NOT park at the airport today, how did you get to STC?
- ☐ Used private (but paid) transportation (Uber, taxi, other)
- ☐ Received a ride from family or friends
- ☐ Other, please specify _____
- ☐ I parked at the airport
7. If there was a fee to park at the St. Cloud Airport, which one of the following would you *most likely* choose?
- ☐ Continue to park at the airport and pay the fee (depending on price)
- ☐ Use private (but paid) transportation (Uber, taxi, other)
- ☐ Get a ride from family or friends
- ☐ Use a different airport
- ☐ Other, please specify _____
8. Considering that maximum parking fees at three other Minnesota airports are as indicated in the box, what is the **maximum** daily parking fee you would be willing to pay at STC if it helped enhance the passenger experience, improved the quality of airport parking, and improved the operational sustainability of the St. Cloud airport? (please select only one answer)
- | | | |
|-----------|----------|------------|
| MSP | \$26/day | \$182/week |
| Rochester | \$9/day | \$54/week |
| Duluth | \$13/day | \$78/week |
- ☐ \$0 ☐ \$3 ☐ \$5 ☐ \$7 ☐ \$9 ☐ \$11 ☐ \$13 ☐ \$15 ☐ \$17 ☐ Other _____
9. If you were given a choice of paying \$7 per night to park at the St. Cloud Airport or getting a ride from family or friends, which would you choose?
- ☐ Pay \$7 per night ☐ Get a ride from family or friends
10. If you were given a choice of paying \$7 per night to park at the St. Cloud Airport or using a private (but paid) transportation service (such as Uber, taxi, etc.), which would you choose?
- ☐ Pay \$7 per night ☐ Use a private transportation service
11. If you were given the choice of paying \$7 per night to park at the St. Cloud Airport in a paved prime spot that was just steps from the terminal or parking for free in an unpaved more distant lot (that was still within walking distance), what would you choose?
- ☐ Pay \$7 per night ☐ Use the free distant lot
12. When parking in cities, which of the following do you usually prefer?
- ☐ Parking next to your destination at \$14 per day
- ☐ Parking several blocks away from your destination at \$7 per day
13. When given the choice between covered and uncovered parking, which of the following would you choose?
- ☐ Uncovered parking at \$7 per day
- ☐ Covered parking at \$11 per day

SECTION 2: GENERAL INFORMATION

14. What is the zip code of your primary residence? _____
15. What is your gender? ☐ Female ☐ Male
16. Which of the following is your age group?
- ☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65-74 ☐ 75 and older
17. What is the highest level of school you have completed?
- ☐ Less than high school ☐ High school graduate ☐ Some college credit/no degree
☐ Trade/Technical/Vocational training ☐ Associate's degree ☐ Bachelor's degree
☐ Graduate or Advanced degree
18. What is your race/ethnicity?
- ☐ White ☐ Hispanic/Latino ☐ Black/African American ☐ Native American/American Indian
☐ Asian/Pacific Islander ☐ Other
19. What is your current employment status?
- ☐ Employed for wages ☐ Self Employed ☐ Out of work and looking for work ☐ Out of work but not currently looking for work ☐ Homemaker ☐ Student ☐ Military ☐ Retired ☐ Unable to work ☐ Other
20. What is your household annual income?
- ☐ Less than \$20,000 ☐ \$20,000 - \$34,999 ☐ \$35,000 - \$49,999 ☐ \$50,000 - \$74,999
☐ \$75,000 - \$99,999 ☐ \$100,000 - \$150,000 ☐ Over \$150,000

Acknowledgments

A special thank you to all of those who helped make this study possible. Many helpful suggestions were provided by Steve Baldwin and Penny Perkins from Steven Baldwin Associates LLC, who also funded the study (from monies allocated to the City of St. Cloud by the Minnesota legislature). King Banaian, Dean, SCSU School of Public Affairs, provided guidance throughout the study. Brigid Tuck, Senior Economic Impact Analyst, University of Minnesota Extension, assisted with early drafts of the survey instrument. Leslie Dingmann, Denise Weiss, and Alvaro Plachejo from the Greater St. Cloud Development Corporation helped with the electronic design of the survey database, assisted with data entry, and collected data from a number of airport passengers and stakeholders. St. Cloud Airport Director, Bill Towle, was invaluable throughout this study as was airport secretary, Lynn Hoff. David Wall from SCSU's geography department provided GIS assistance to create maps. Nicholas L. Gross Kotschevar contributed valuable research as SOPARI's graduate assistant. Former SOPARI graduate assistant, Natalie Hughes, collected survey responses from airport passengers, as did Tracey MacDonald. The primary author of this report is Rich MacDonald, SOPARI Interim Director, who is solely responsible for any errors and omissions found within.

**St. Cloud Regional Airport
Optimization Planning Study
Final Report**

APPENDIX D:

Air Service Development Analysis PPT

STC Air Service Opportunity Analysis

St. Cloud Regional Airport Air Transport Optimization Planning Study

May 2018



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How do we evaluate what level of air service can STC support?



1

What data can we use, and how does it shed light on the St. Cloud story?

2

What does regional aviation demand look like today, and how has it grown?

3

What industry dynamics are shaping the future?

4

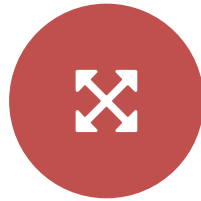
What air service opportunities have the greatest potential for STC?

What data do we use and how do we use it?



Data assessment

Parse & evaluate demand data



Today's regional demand

Assess demand from a 'bottom up' approach



Industry dynamics

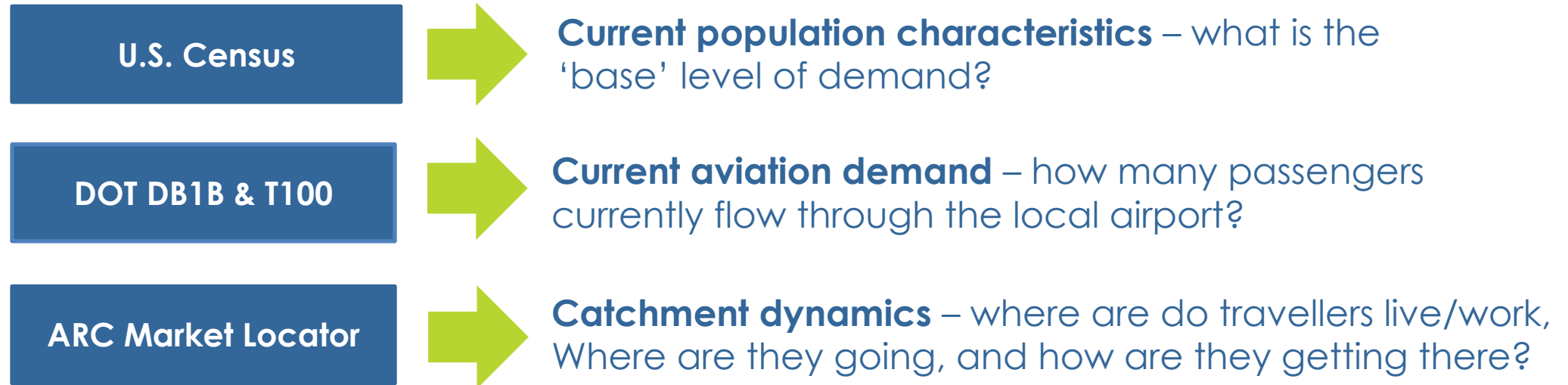
Validate demand with a 'top down' approach



STC Opportunities

Identify STC air service priorities

What data do we use?

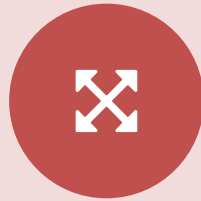


Regional market priorities



Data assessment

Parse & evaluate demand data



Today's regional demand

Assess demand from a 'bottom up' approach



Industry dynamics

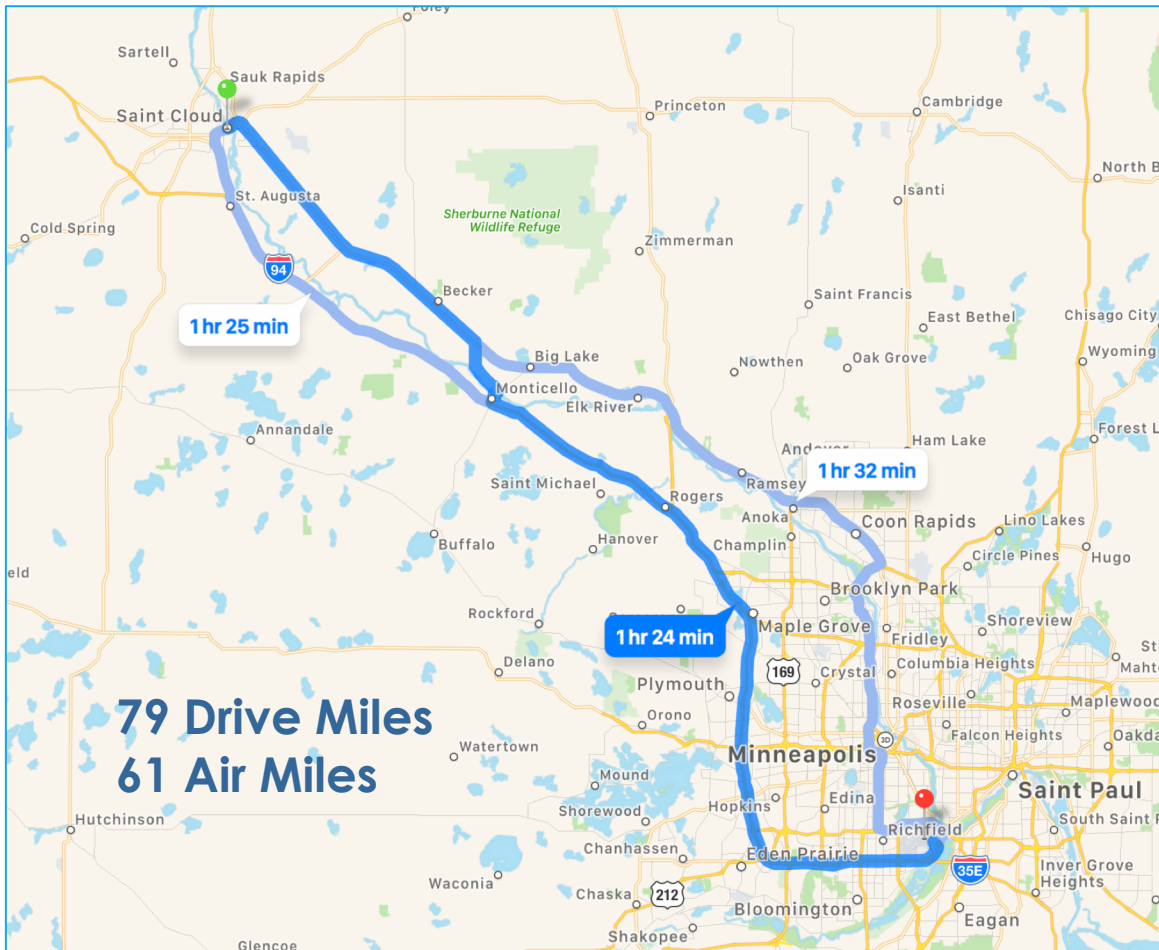
Validate demand with a 'top down' approach



STC Opportunities

Identify STC air service priorities

St. Cloud's geography is fundamental to its air service story

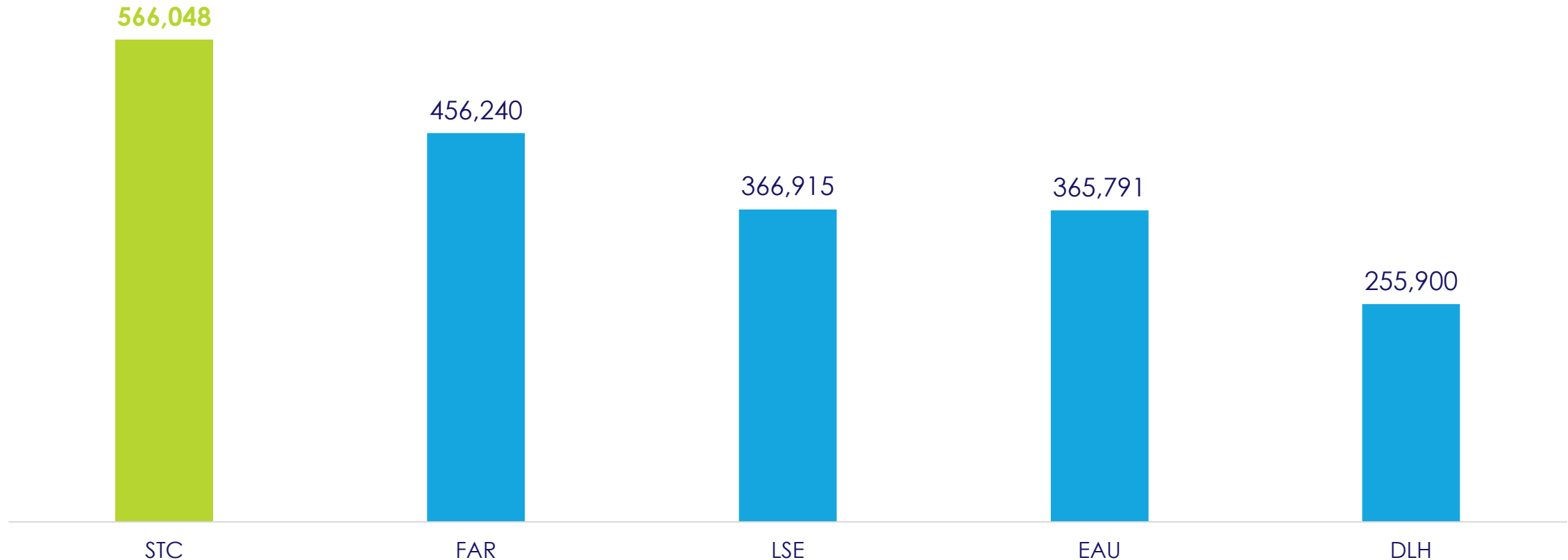


- Proximity to a major network carrier hub airport is problematic for any small community.
- Delta's network philosophy is that the interstate highway network is its feeder system for close-in markets.
 - Exceptions to this occur in high population markets and in particular competitive situations.

Because Delta dominates Minnesota business travel, competitors are extremely challenged in the state. We saw the impact of this in the United service to Chicago O'Hare. Customers gravitated to United for their Chicago travel. However, they continued to drive to MSP for other trips for convenience, price and loyalty reasons.

St. Cloud Catchment is more populated than regional peers

POPULATION IN ESTIMATED CATCHMENT TERRITORIES



Source: ARC Data, US Census

St. Cloud also has higher Household Income (HHI) levels

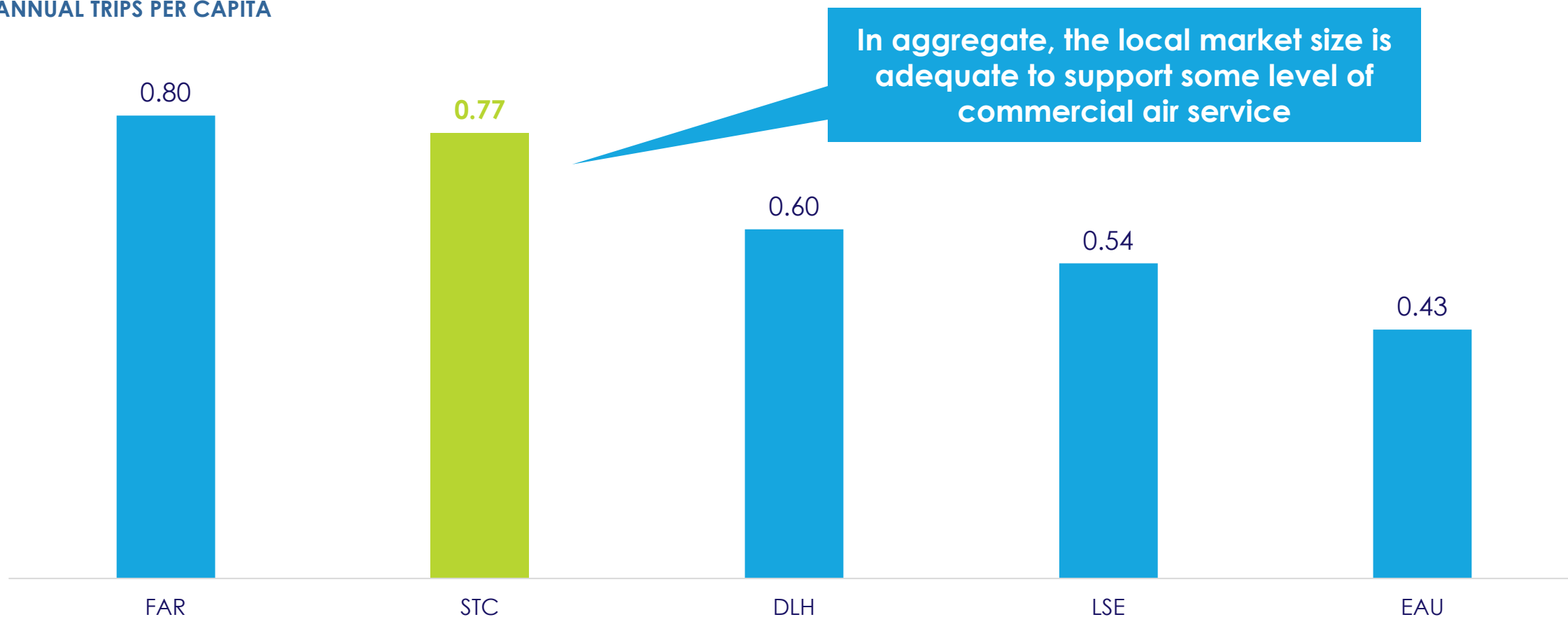
AVERAGE HOUSEHOLD INCOME LEVELS



Source: US Census, Diio Mi Demographics

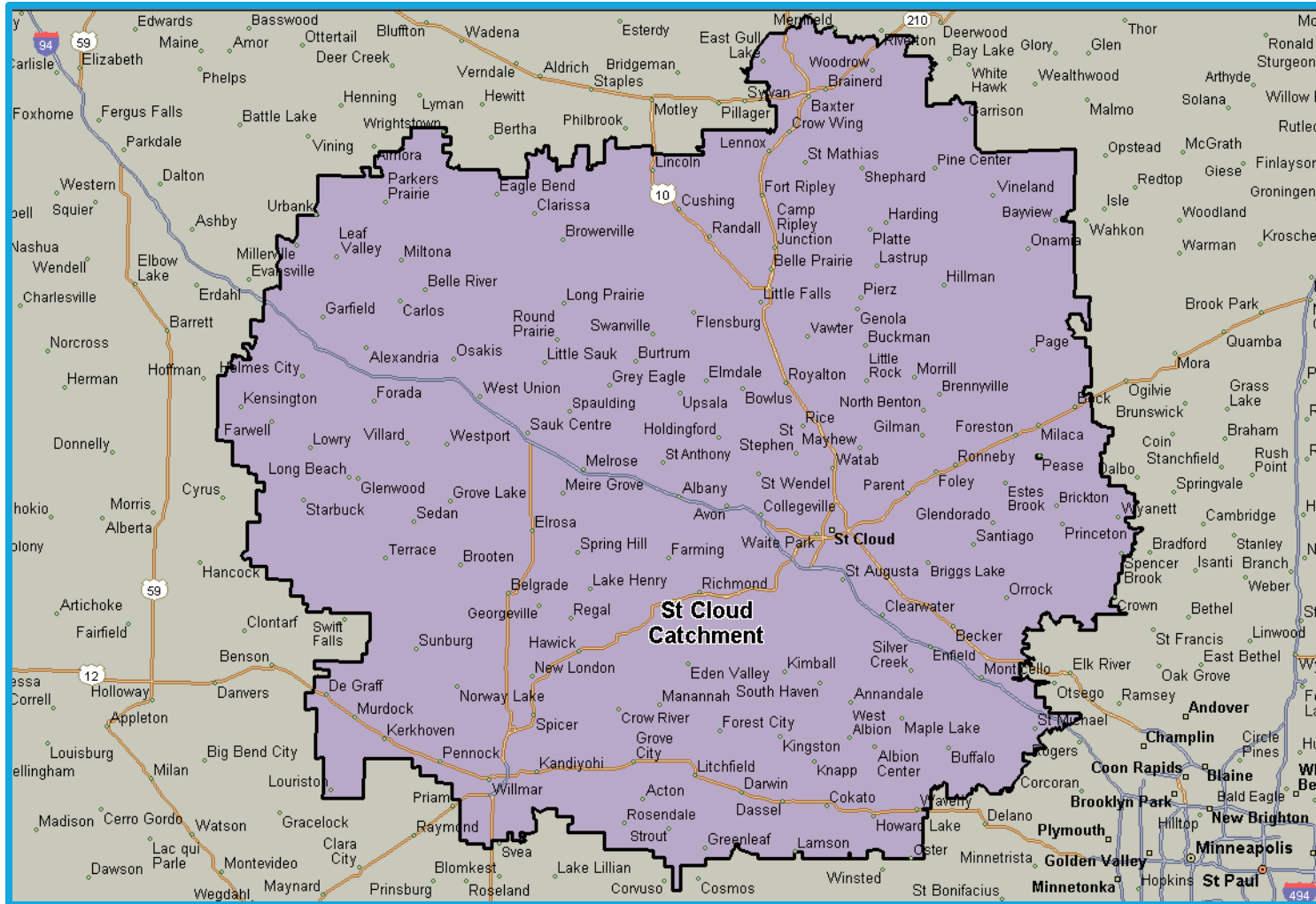
As a result, St. Cloud has a strong level of annual air trips per capita despite not having an airport with significant levels of service

ANNUAL TRIPS PER CAPITA



Source: US Census, ARC Data

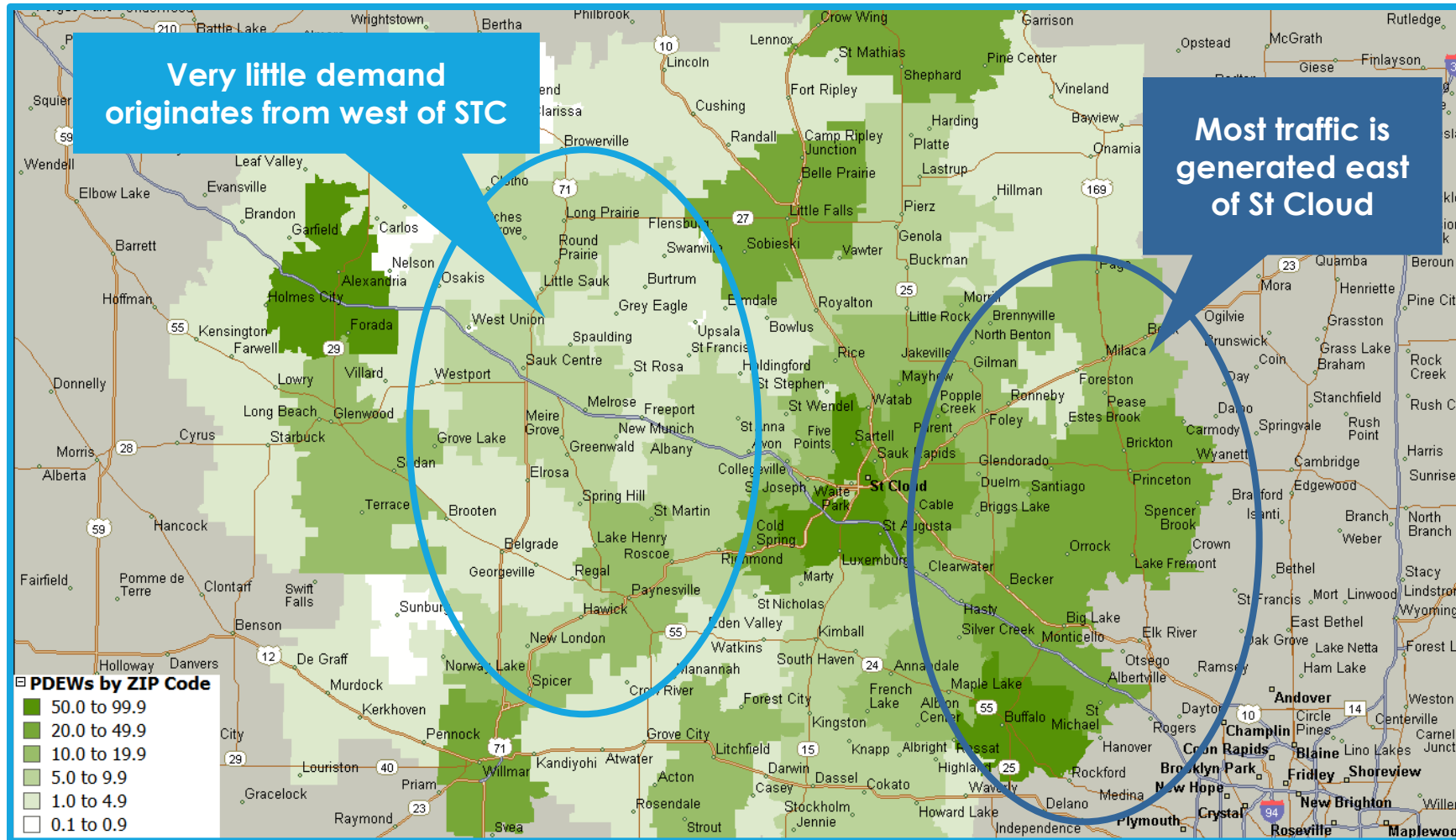
St Cloud (STC) Catchment Area



- The slight difference between the 2011 and the present catchment area was the inclusion of Brainerd, MN in the St Cloud Catchment Territory
- Why include Brainerd?
 - We believe that, given the type of service that STC would likely be trying to attract, Brainerd originating traffic would use STC

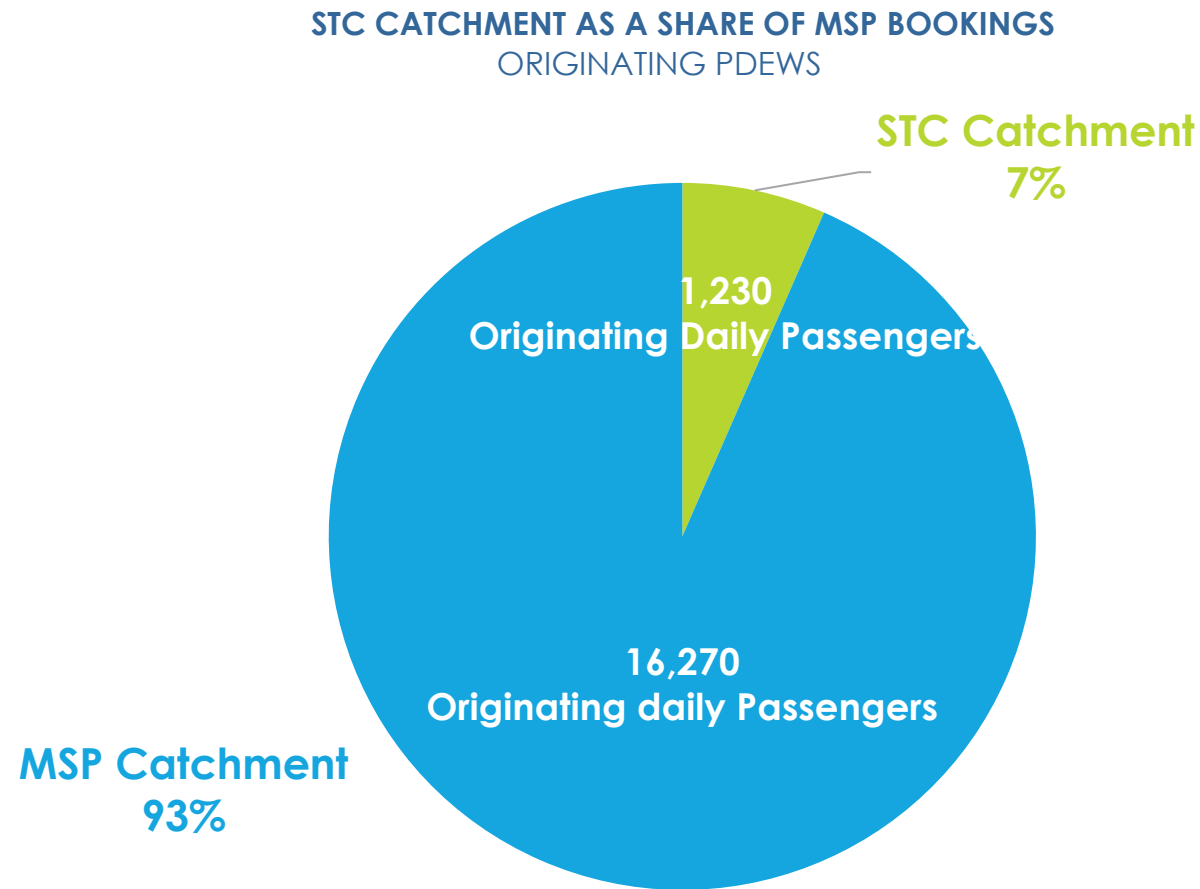
Source: MapPoint, Mean & Hunt Catchment STC Territory 2011

A significant share of catchment bookings are to the southeast of St. Cloud, favoring MSP drive diversion



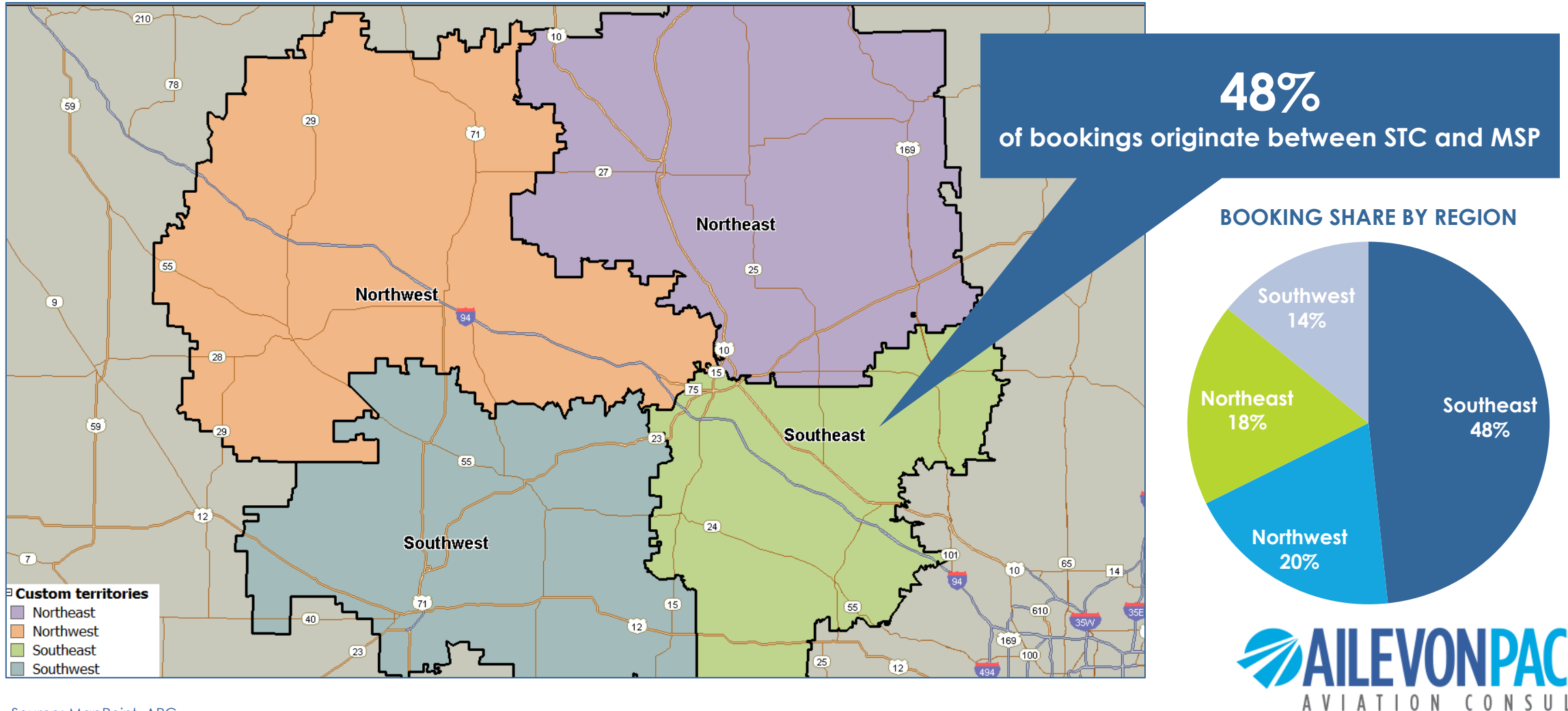
- ARC bookings were adjusted using DOT O&D data to devise a map measuring originating traffic by zip code
- The more intense the green shade, the higher levels of originating daily traffic
- The estimated demand is over 1,200 originating daily passengers

The St. Cloud catchment produces about 7% of MSP's total originating traffic base on an annual basis



Source: ARC & DOT

But nearly half of that is booked from the area southeast of STC



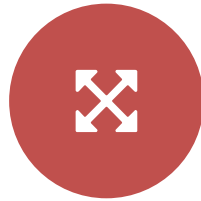
Source: MapPoint, ARC

Industry dynamics shape the opportunities



Data assessment

Parse & evaluate demand data



Today's regional demand

Assess demand from a 'bottom up' approach



Industry dynamics

Validate demand with a 'top down' approach

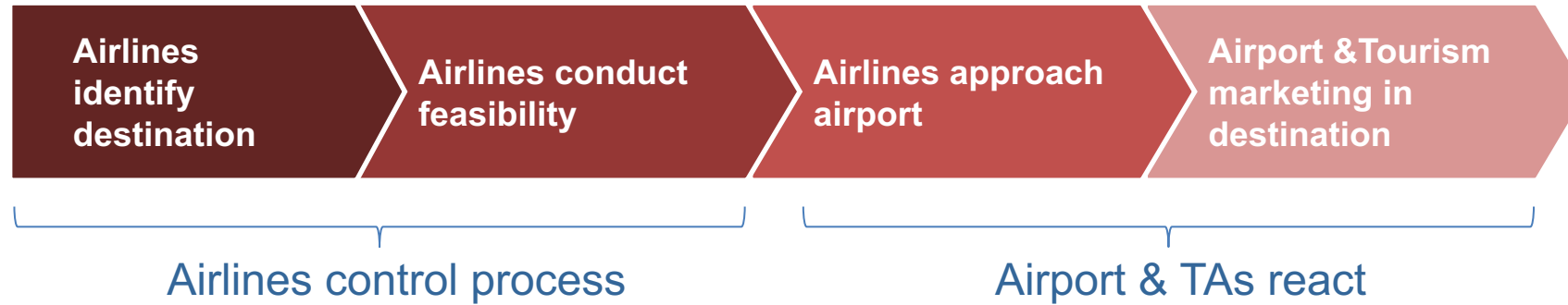


STC Opportunities

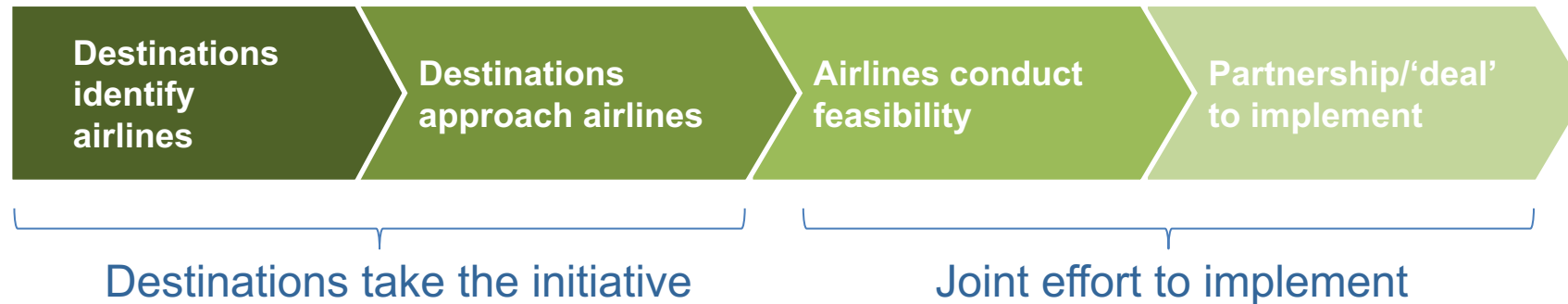
Identify STC air service priorities

Evolution of route development

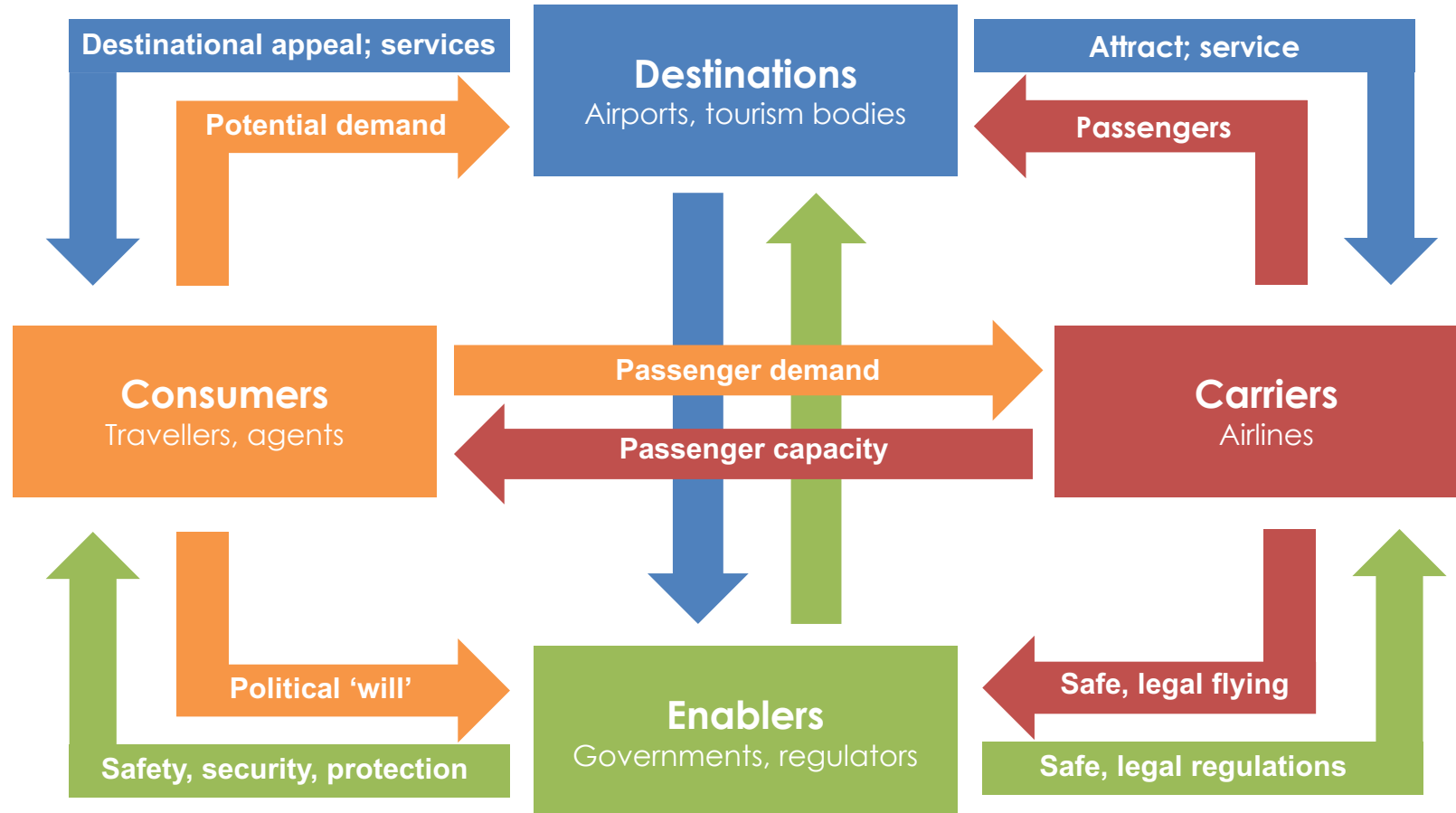
Then...



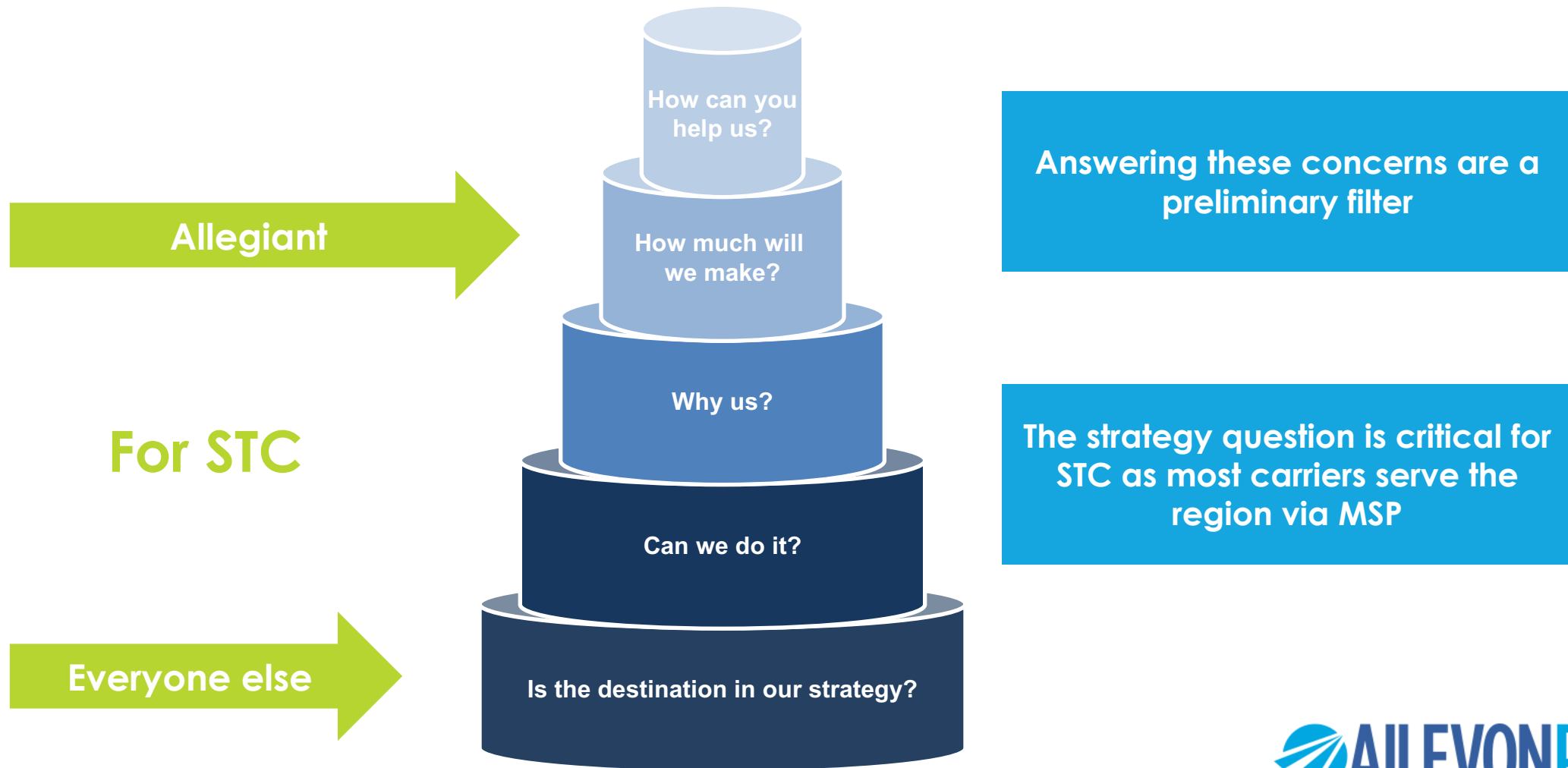
Now...



Stakeholders in the business development process



Airline perspective on potential new markets, including STC



Consolidation has changed the landscape



2001

...

2007

2008

2009

2010

2011

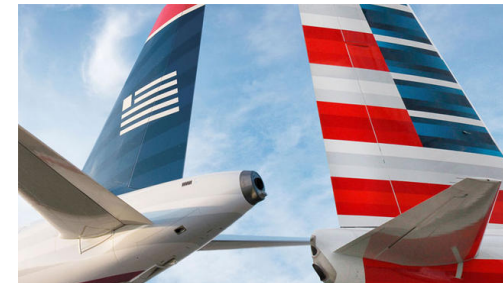
2012

2013

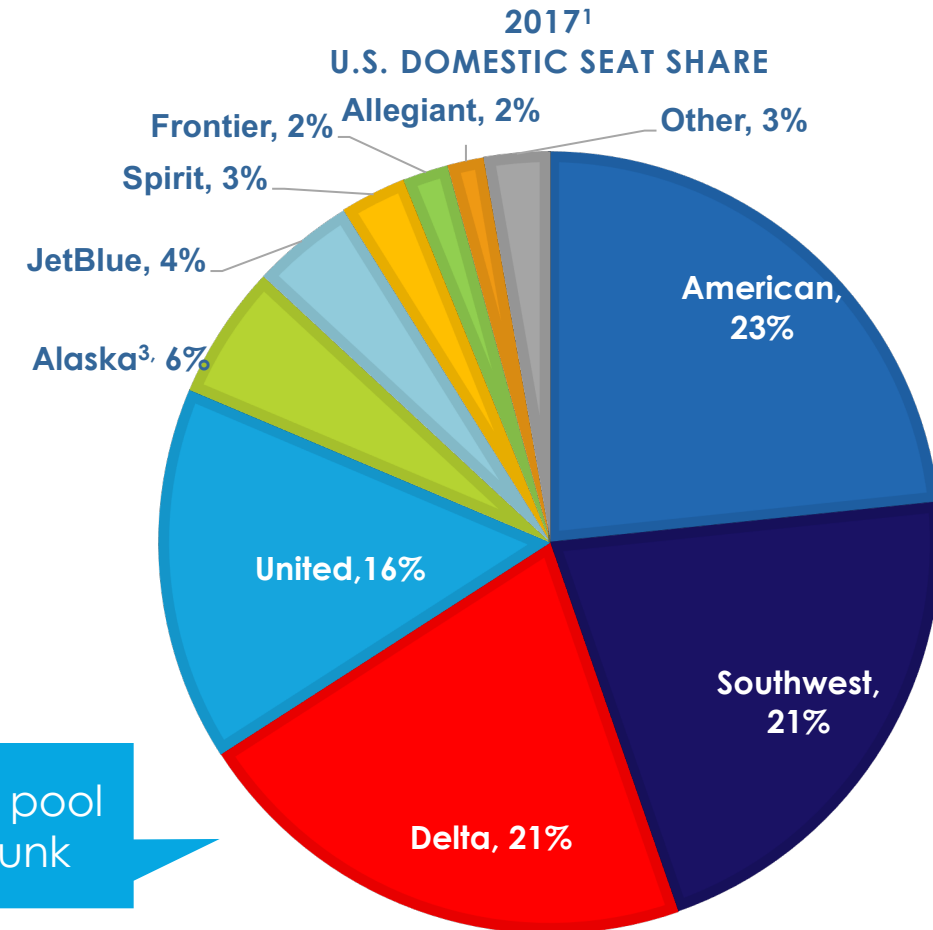
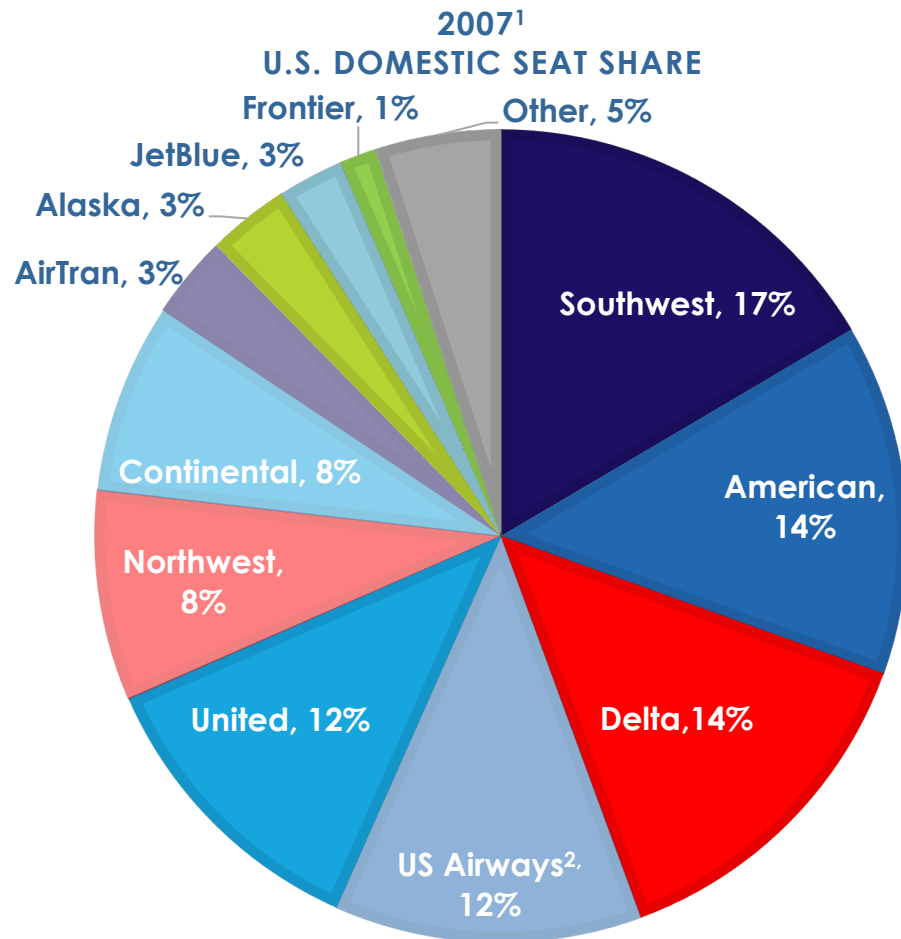
2014

2015

2016

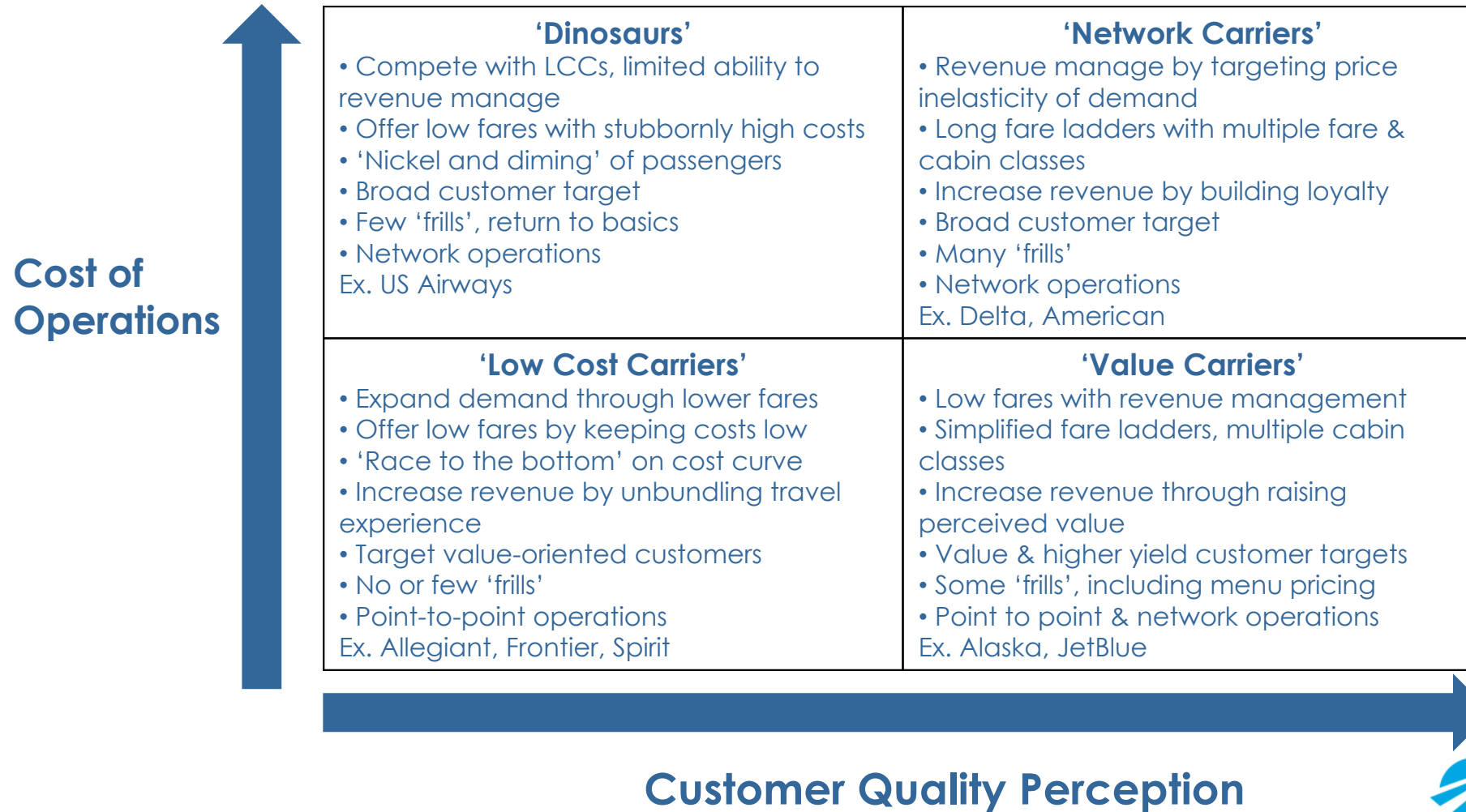


Top four U.S. carriers have grown from 57% to 81% domestic share

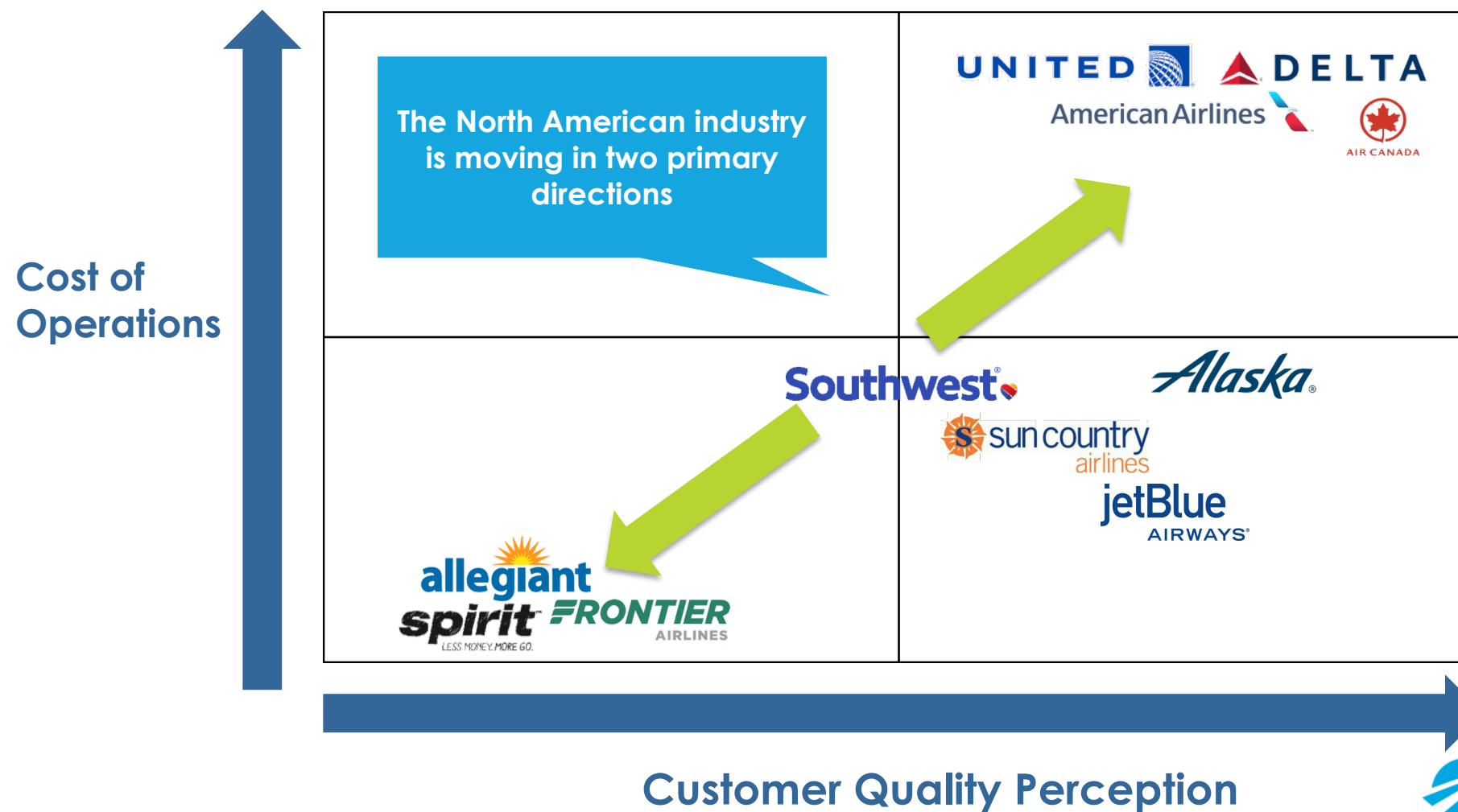


Potential carrier pool
for STC has shrunk

Framework for carriers



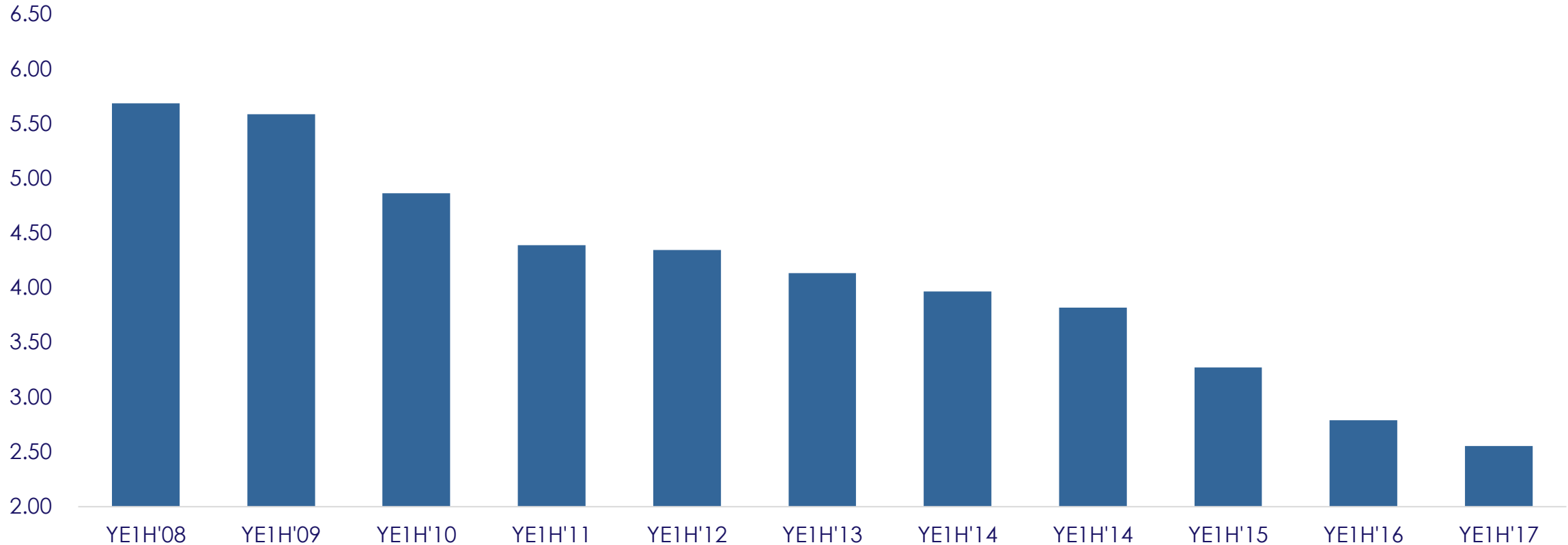
Placing the North American carriers



Rapid retirement of small regional aircraft impacts STC opportunities

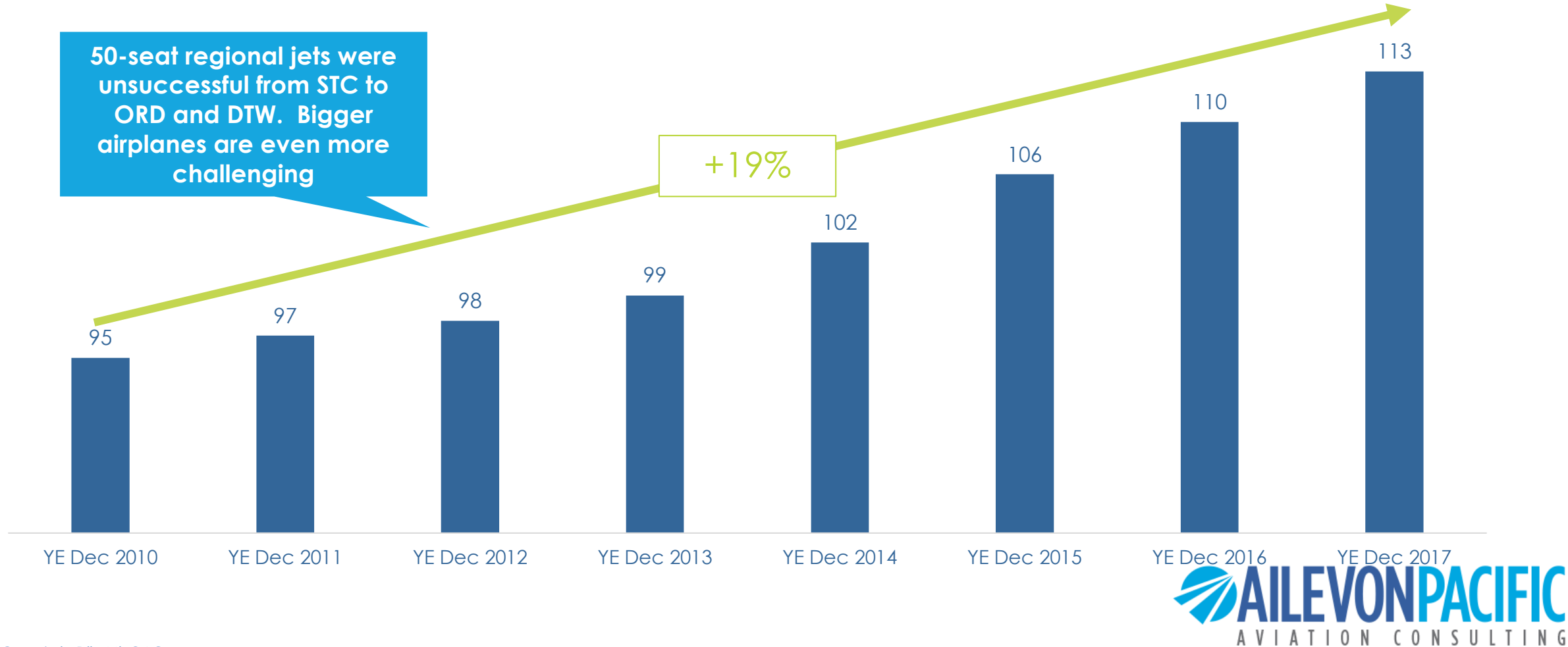
REGIONAL JETS WITH 50 OR FEWER SEATS

Scheduled block hours (millions)



The industry has been gravitating towards larger aircraft

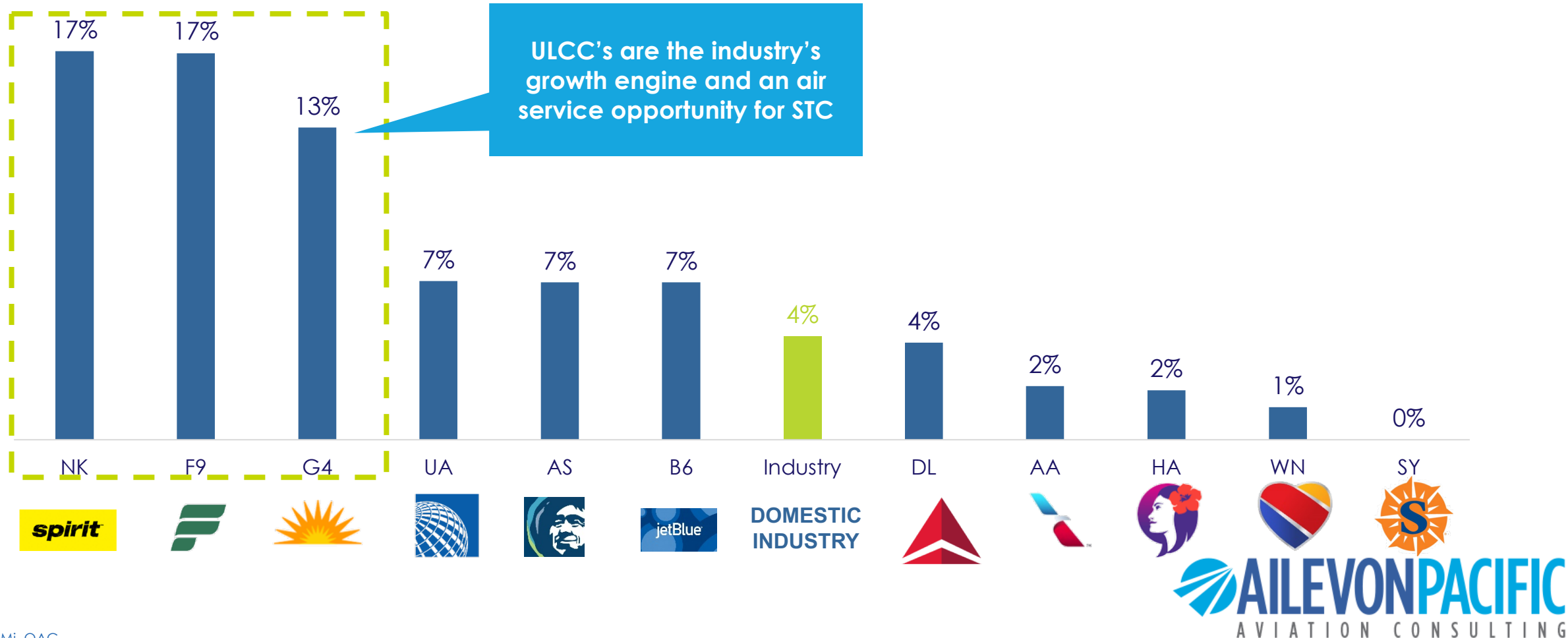
DOMESTIC SEATS PER DEPARTURE



Source: APAC analysis, Diio Mi, OAG

U.S. Ultra Low Cost Carriers (ULCCs) experiencing double digit growth

YR/YR CAPACITY CHANGE BY CARRIER (SEATS)
(Summer 2018 v Summer 2017)



Source: Diio Mi, OAG

STC priorities should be established in the context of history



Ended Delta Connection service in the STC-MSP market in December 2009



Began service to Phoenix-Mesa in December 2012. Limited Orland-Sanford seasonal service was run from December 2013 to April 2014. Seasonal Punta Gorda, FL service began in November 2017.



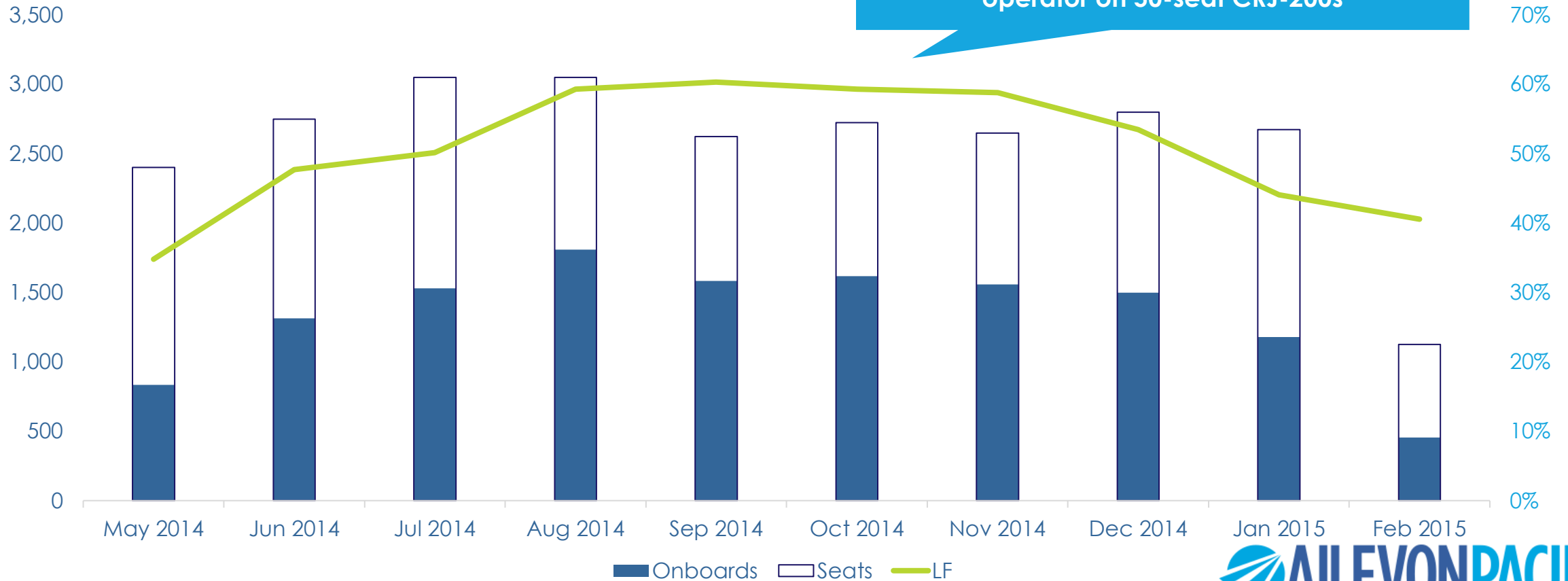
SkyWest-operated United Express service to Chicago O'Hare for 10 months beginning in May 2014 under a revenue guarantee program

Recent history indicates a significant structural challenge to legacy hub service from STC



Recent Chicago service failed due to prevailing industry dynamics

UA ORD-STC LOAD FACTOR PERFORMANCE
By Month

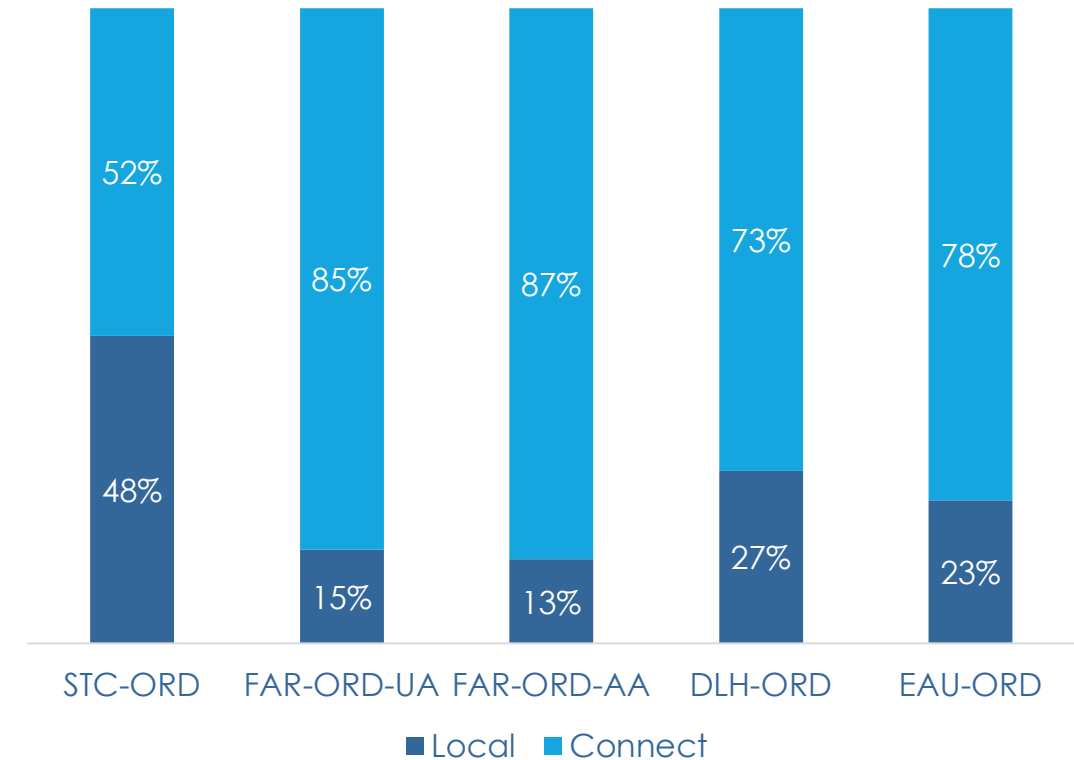
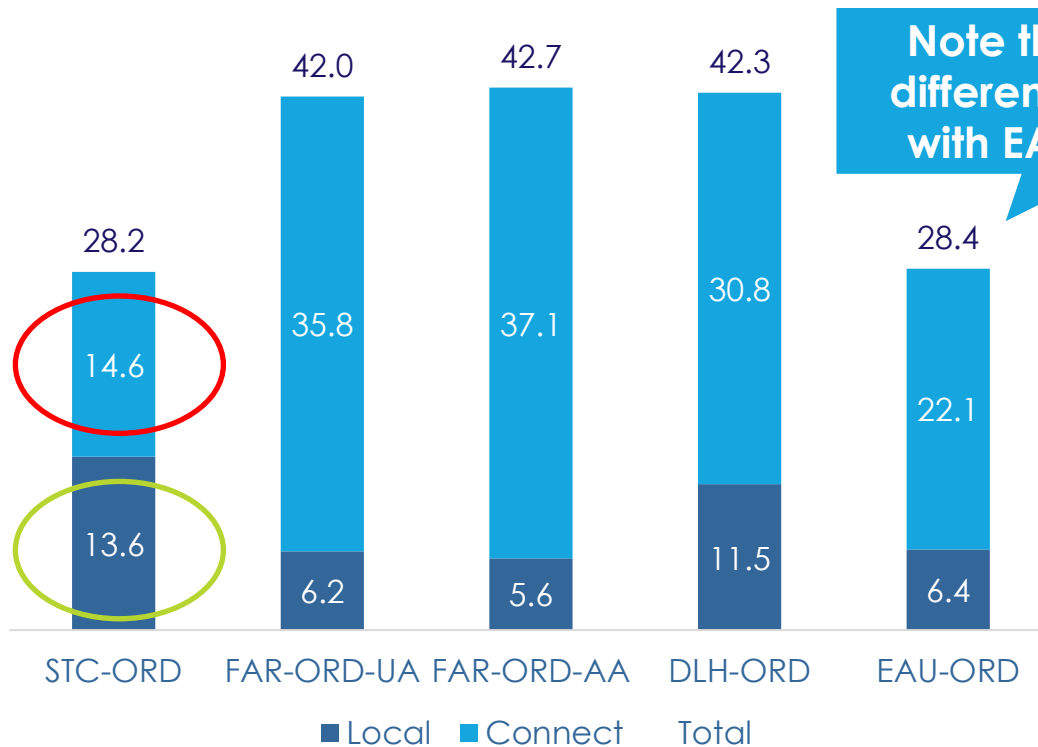


Source: T100

ORD-STC met or exceeded expectations in the local market but failed miserably in the beyond “flow” or connect markets

ONBOARD PASSENGER COMPOSITION PER DEPARTURE
(3Q2014)

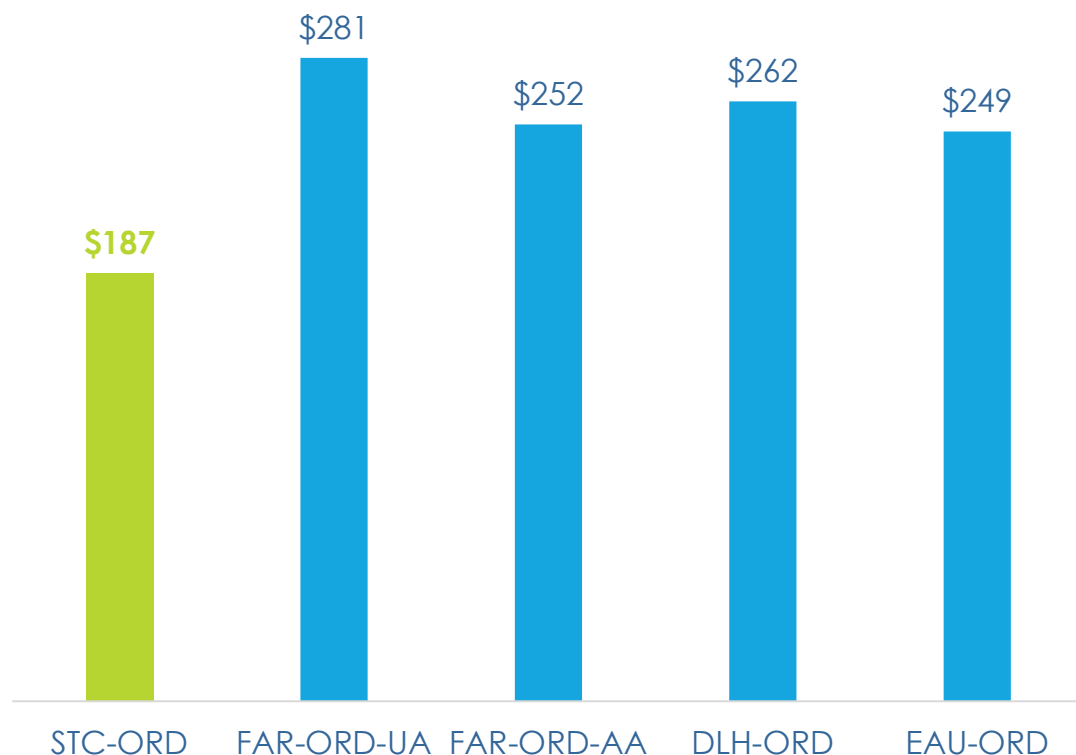
LOCAL v FLOW
(3Q2014)



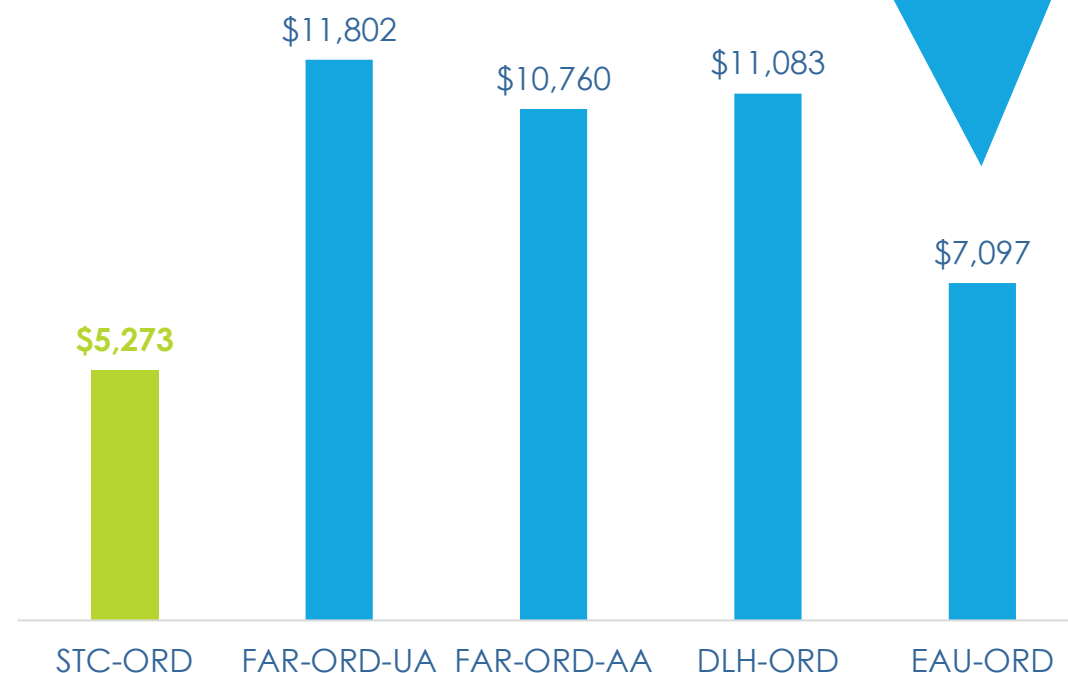
Source: DOT

As a result of failing to generate much “beyond” ORD traffic, UA’s ORD-STC service lagged behind peers

O&D FARES
(3Q2014)



O&D REVENUE PER DEPARTURE
(3Q2014)



EAU with the same traffic was generating 35% more revenue over a shorter stage length

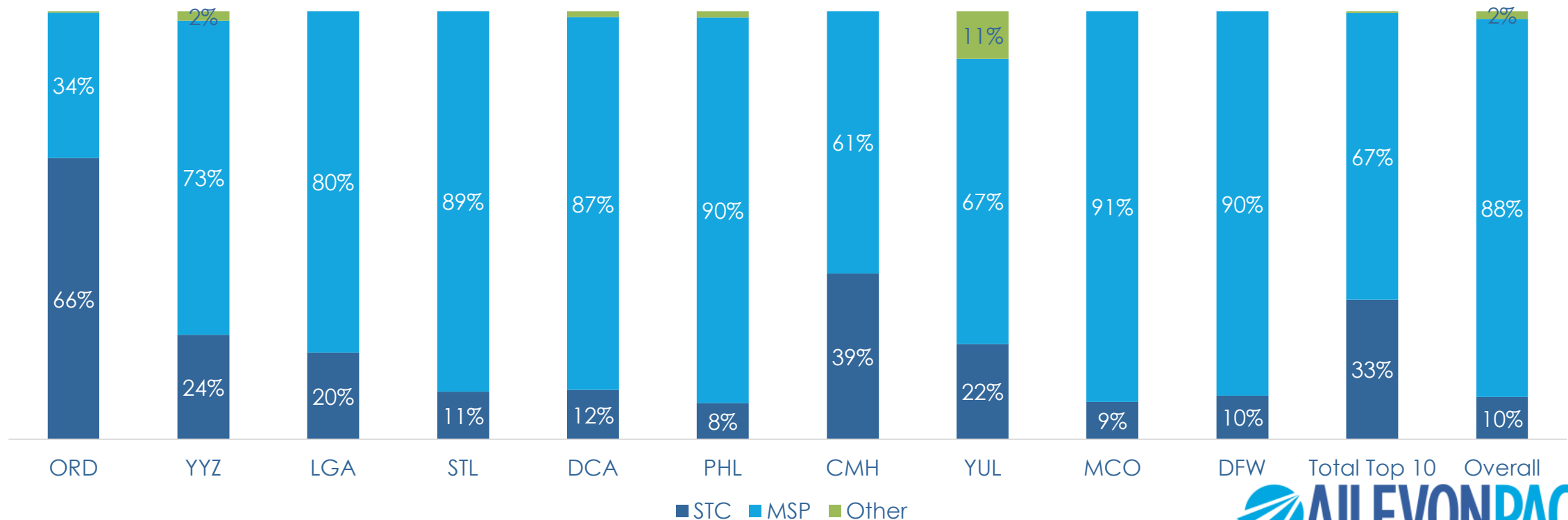
Source: DOT

United failed to capture any large share of the top O&Ds on ORD-STC

STC TOP 10 UNITED O&Ds LEAKAGE (May 2014-Jan 2015)

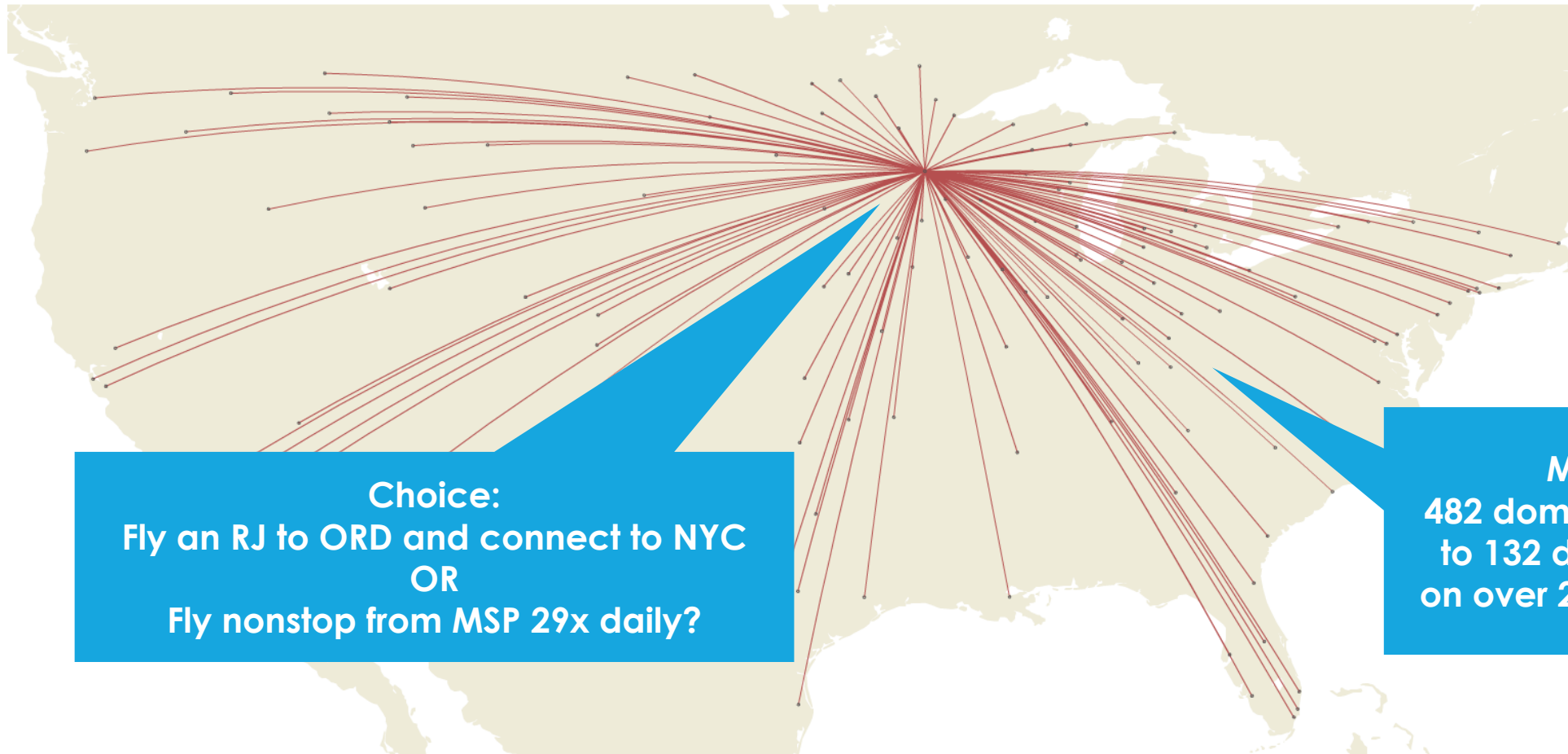
United captured 66% of the bookings in STC going to ORD, but in all other markets except two, the capture rate was <25%

Overall UA captured only 10% share of all O&Ds in the STC region. Success would require about 15% share for 2 ORD flights



Source: ARC

STC's permanent challenge is proximity to MSP



Choice:
Fly an RJ to ORD and connect to NYC
OR
Fly nonstop from MSP 29x daily?

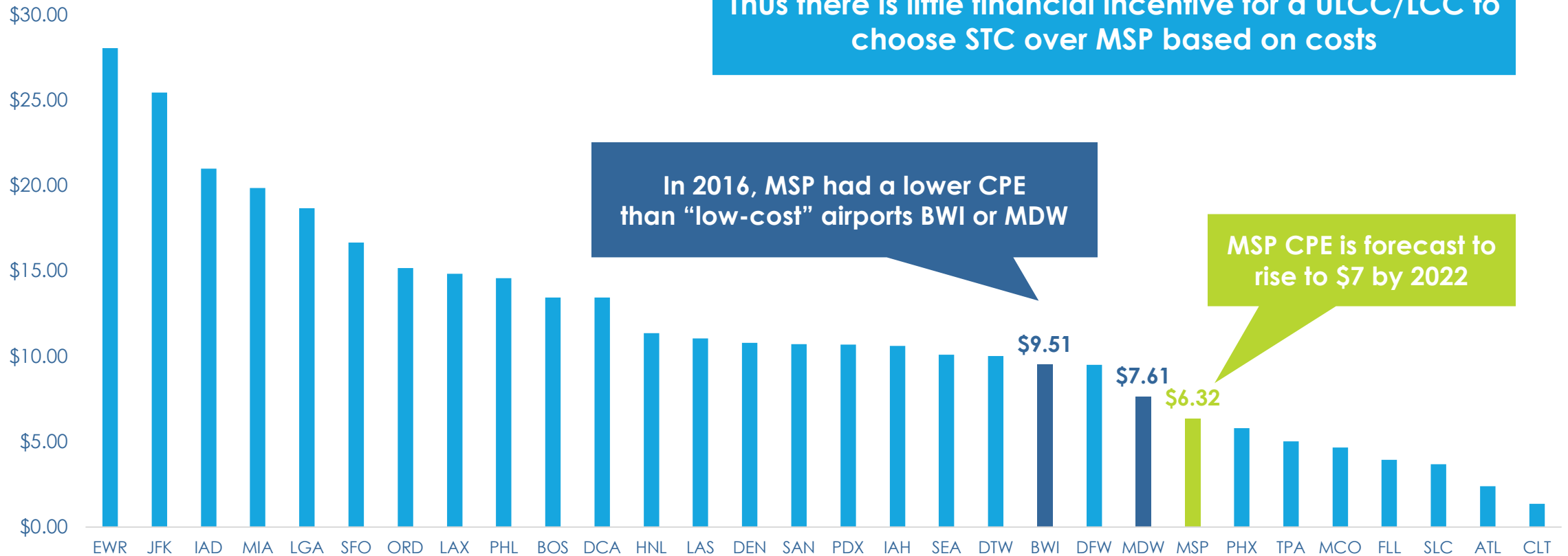
MSP All carriers:
482 domestic daily departures
to 132 domestic destinations
on over 20 million annual seats

Source: Diio Mi, OAG



MSP is a relatively low-cost airport for airlines from which to operate

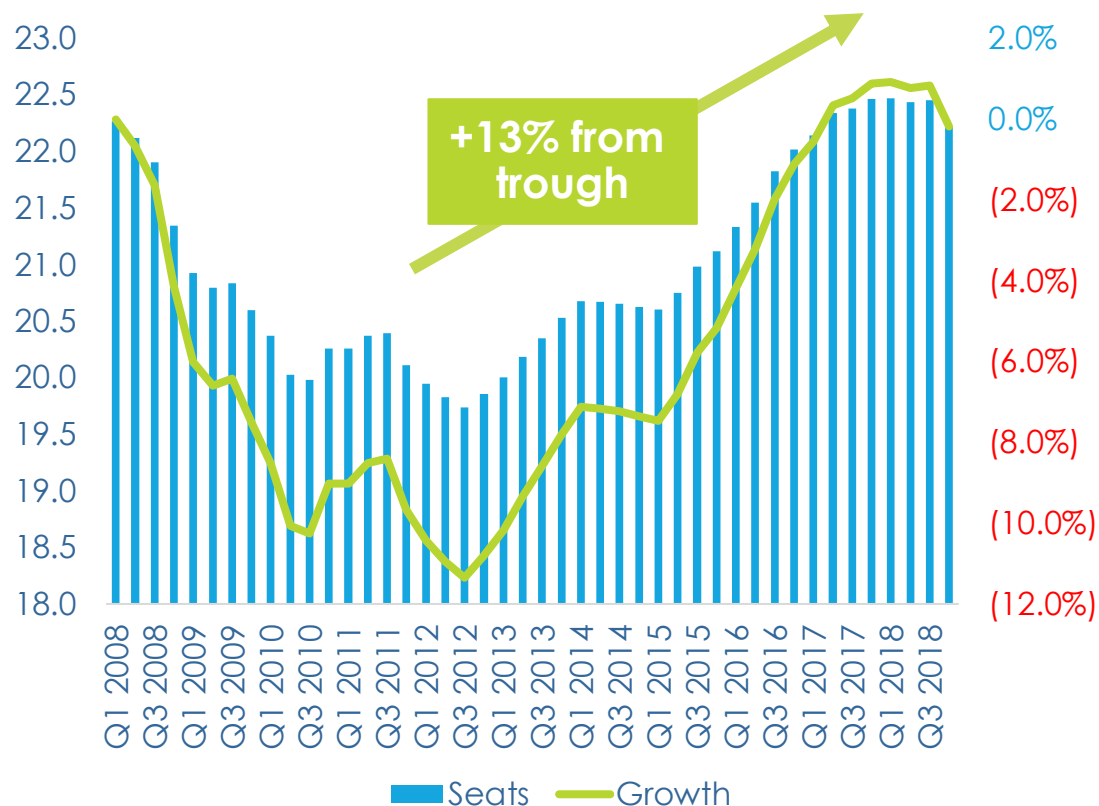
COST PER ENPLANEMENT BY HUB YEAR 2016



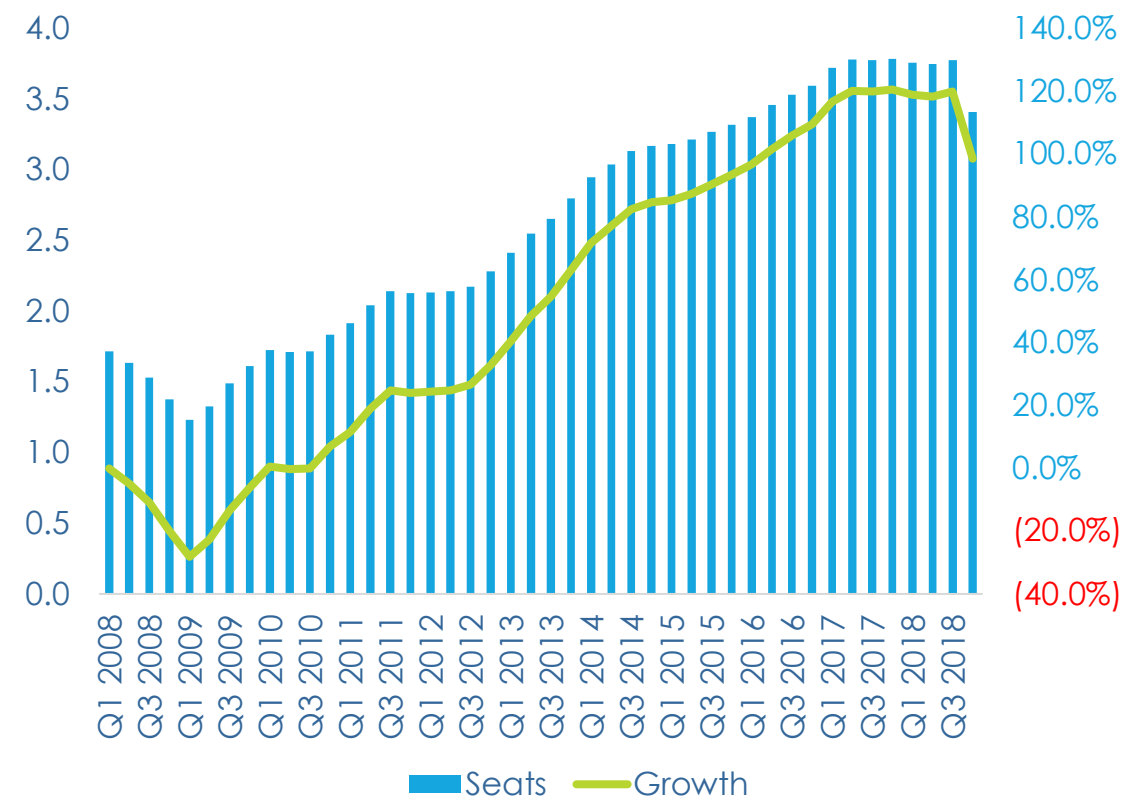
Source: DW CONSULTING

While total capacity at MSP has been flat, LCC/ULCC capacity has grown over 100% since 2008

MSP ANNUAL CAPACITY & GROWTH FROM BASE
(4Q Rolling)



MSP LCC/ULCC CAPACITY & GROWTH FROM BASE
(4Q Rolling)



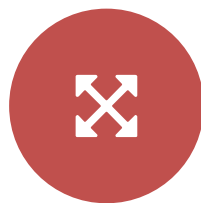
Source: Diio Mi, DOT

Community priorities



Data assessment

Parse & evaluate demand data



Today's regional demand

Assess demand from a 'bottom up' approach



Industry dynamics

Validate demand with a 'top down' approach



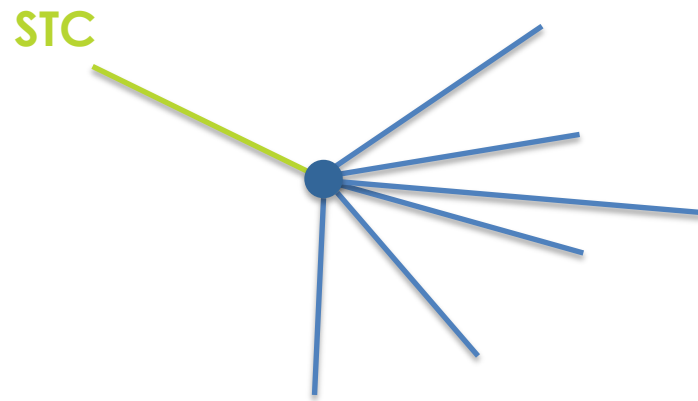
STC Opportunities

Identify STC air service priorities

Evaluation of opportunities breaks down to two primary segments

Network Carrier Hub & Spoke

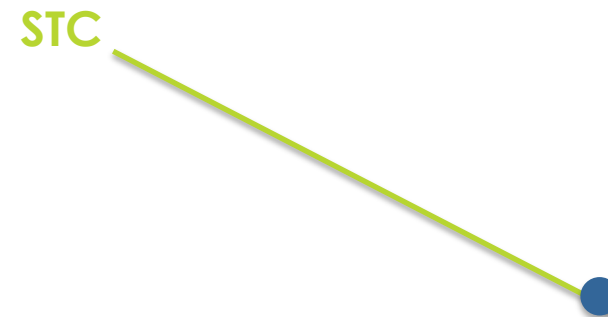
Value to the network is the most critical evaluation factor.



Beyond markets provide the value

LCC/ULCC Point-to-Point

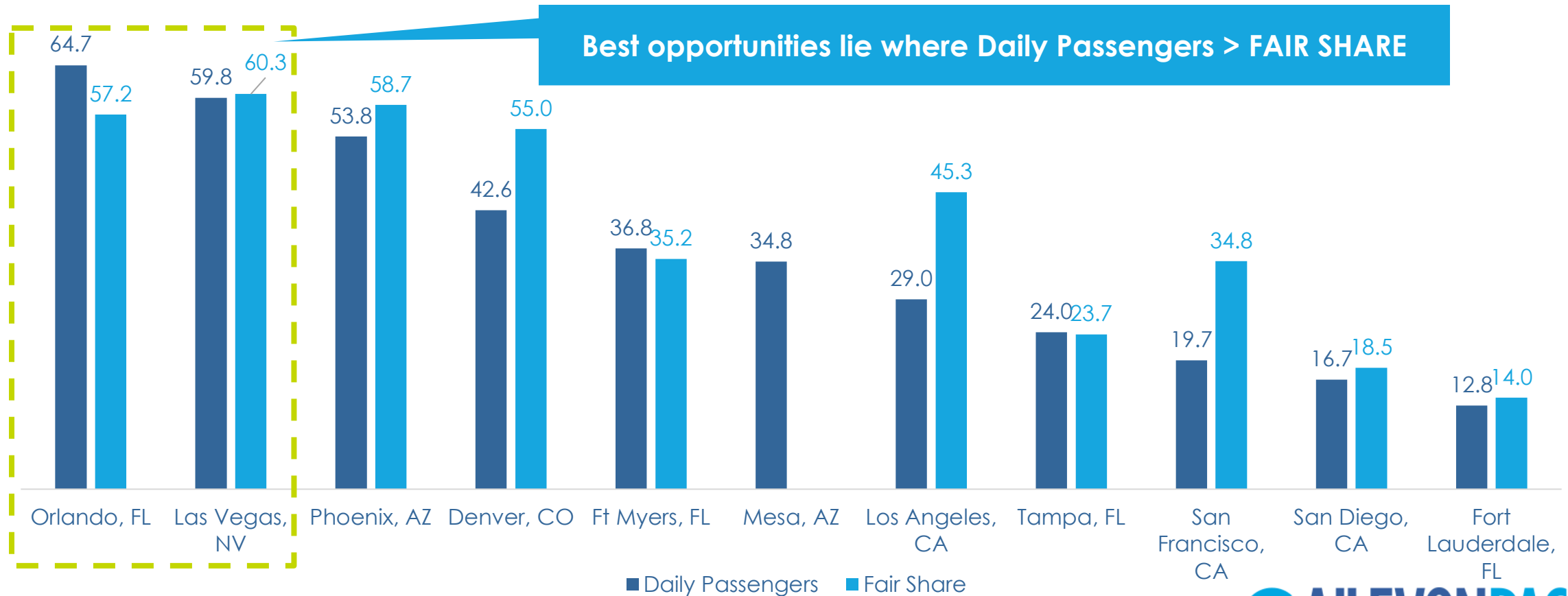
Evaluation is strictly made on point-to-point flight basis



Single destination provides the value

United O'Hare experience and current Allegiant service show that local traffic will use the STC airport for nonstop flights

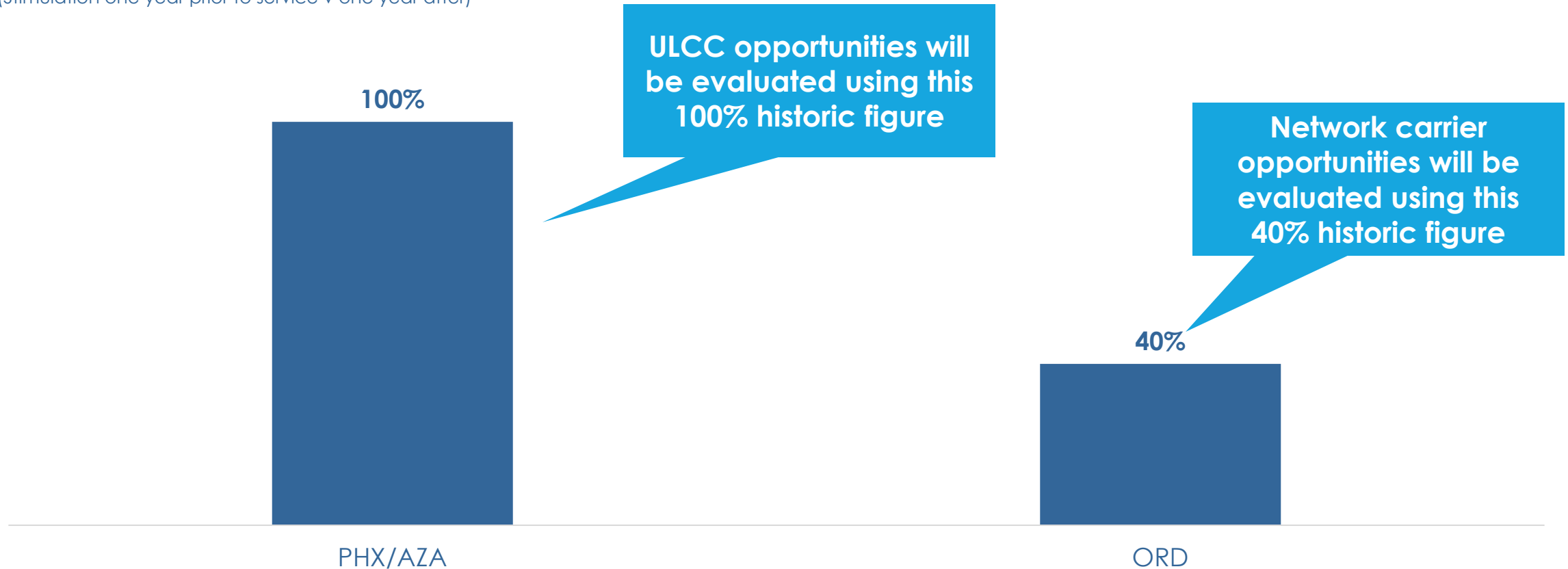
ESTIMATED ST CLOUD MARKET SIZES v FAIR



While the sample size is small, we estimate PHX/AZA was stimulated by 100% and ORD by 40% in the first year of service

HISTORICAL STIMULATION STC CATCHMENT AREA

(Stimulation one year prior to service v one year after)



Top 25 STC catchment markets and estimated market sizes

Rank	Airport	Estimated Daily Passengers	Historic Stimulation	Estimated Market Size	Daily Forecast STC Capture
1	MCO	64.7	100%	129.5	50.5
2	LAS	59.8	100%	119.5	46.6
3	PHX	53.8		53.8	
4	DEN	42.6	40%	59.7	39.4
5	RSW	36.8	100%	73.5	28.7
6	ORD	36.6	40%	51.3	33.8
7	DFW	31.0	40%	43.5	28.7
8	ATL	30.9	40%	43.3	28.6
9	LAX	29.0	0%	29.0	2.9
10	SEA	26.1	0%	26.1	2.6
11	TPA	24.0	100%	48.0	18.7
12	BOS	20.4	0%	20.4	2.0
13	SFO	19.7	0%	19.7	2.0
14	DCA	19.6	0%	19.6	2.0
15	BWI	18.1	0%	18.1	1.8
16	BNA	17.8	0%	17.8	1.8
17	LGA	17.4	0%	17.4	1.7
18	PDX	16.8	0%	16.8	1.7
19	MIA	16.8	0%	16.8	1.7
20	SAN	16.7	0%	16.7	1.7
21	IAH	15.4	0%	15.4	1.5
22	CLT	14.1	0%	14.1	1.4
23	PHL	13.3	0%	13.3	1.3
24	FLL	12.7	100%	25.5	2.5
25	JFK	9.9	0%	9.9	1.0

Conservatively applying historic stimulation rates yields Estimated Market Size. However, some traffic will still leak to MSP based on “QSI” factors. (See following slide for QSI definition)

Orlando and Las Vegas are the most immediate opportunities, but markets will depend on higher stimulation. DEN is a possibility under a less-likely ULCC model

What is QSI?

Quality of Service Index

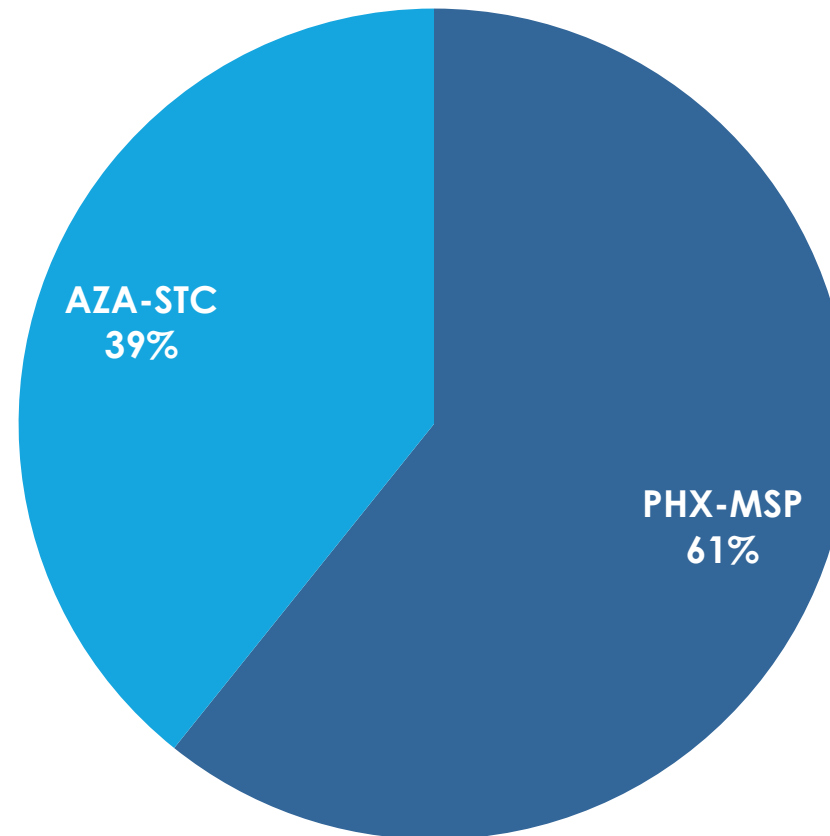
- QSI is a method to make qualitative analyses more quantitative
- QSI assigns relative values to the likelihood of consumer behavior options
- Airlines use QSI analyses extensively to predict passenger behavior
- QSI theory goes that when choosing among Schedule options:
 - Passengers prefer non-stop itineraries over connections
 - Passengers prefer larger aircraft over smaller aircraft
- QSI theory generally assumes “all other things being equal”
- QSI “models” exist to help people perform complex QSI analyses

STC's QSI challenge is that in virtually every manner, MSP offers a higher “quality of service”. STC competes best on nonstop flights on large aircraft, where MSP has no advantage.

ULCCs/Allegiant Air

Allegiant AZA service is currently capturing 39% of the STC catchment area demand for Phoenix/Mesa

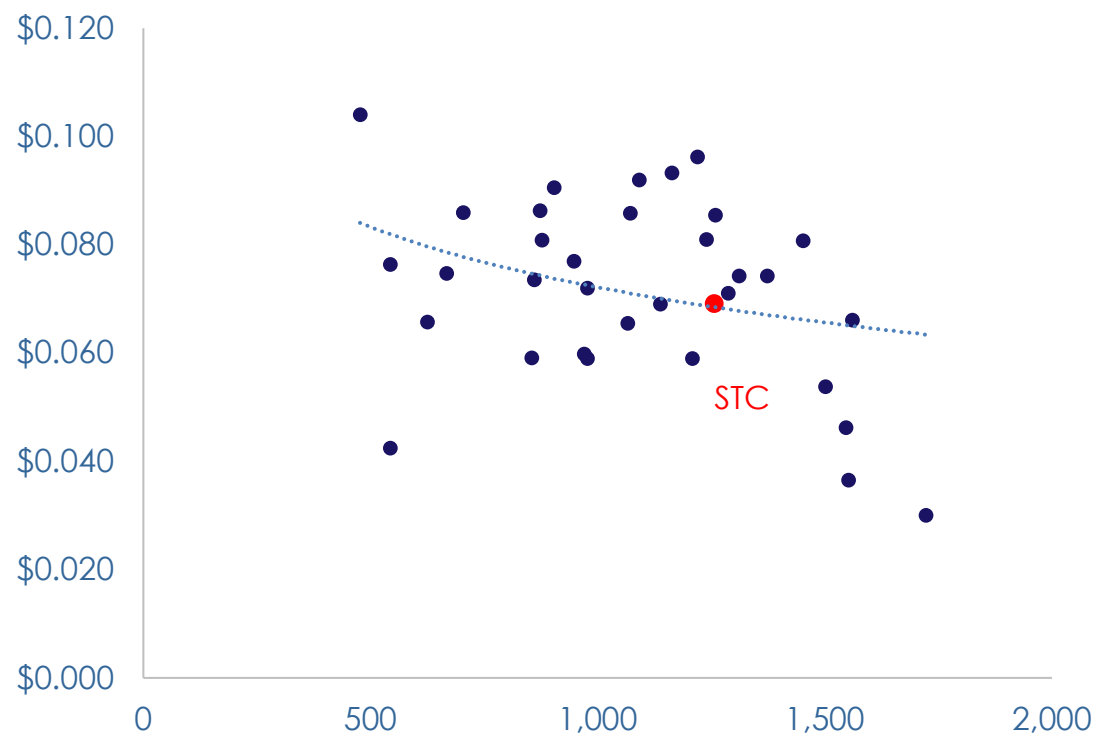
PHX/AZA CAPTURE BY STC IN STC TERRITORY
(YE 4Q2017)



Allegiant's AZA-STC service is stronger in the first quarter than annually relative to other AZA markets

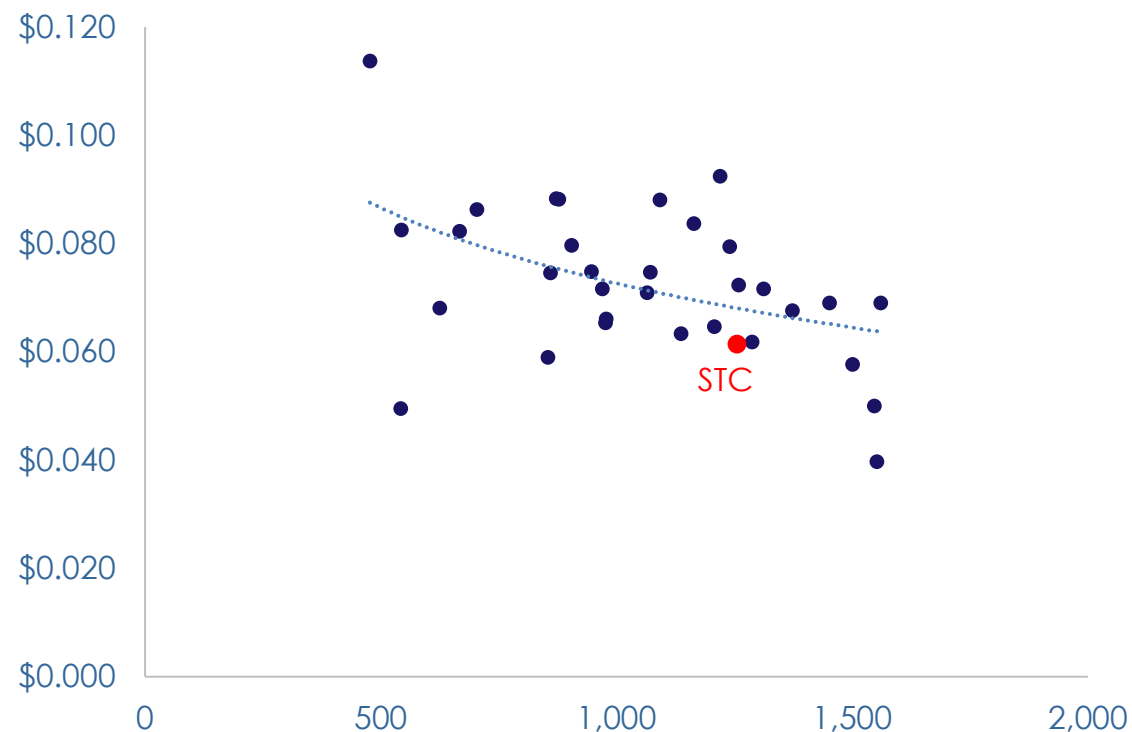
AZA RASM CURVE 1Q2017

(Ex-Ancillary Revenue)



AZA RASM CURVE YE4Q2017

(Ex-Ancillary Revenue)

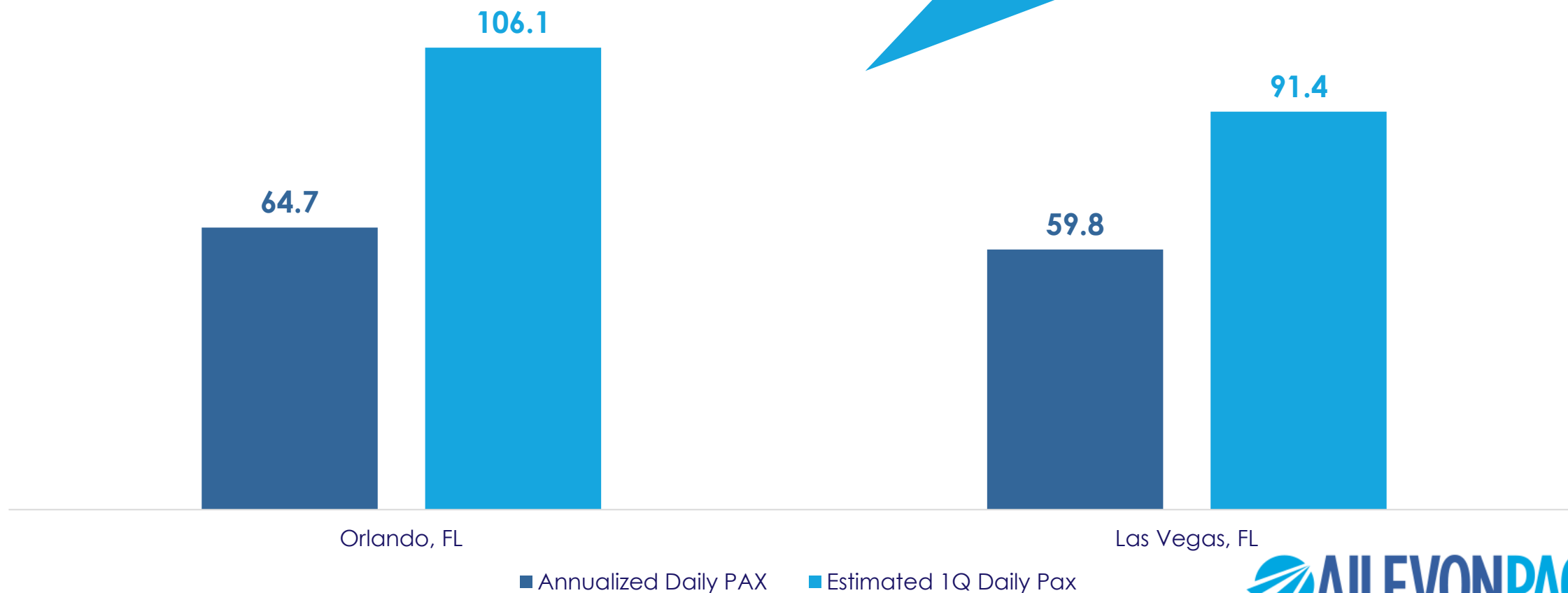


Source: ARC, Diio Mi, DOT

Orlando and Las Vegas are the best opportunities for STC

STC TERRITORY LAS AND MCO ESTIMATED DEMAND

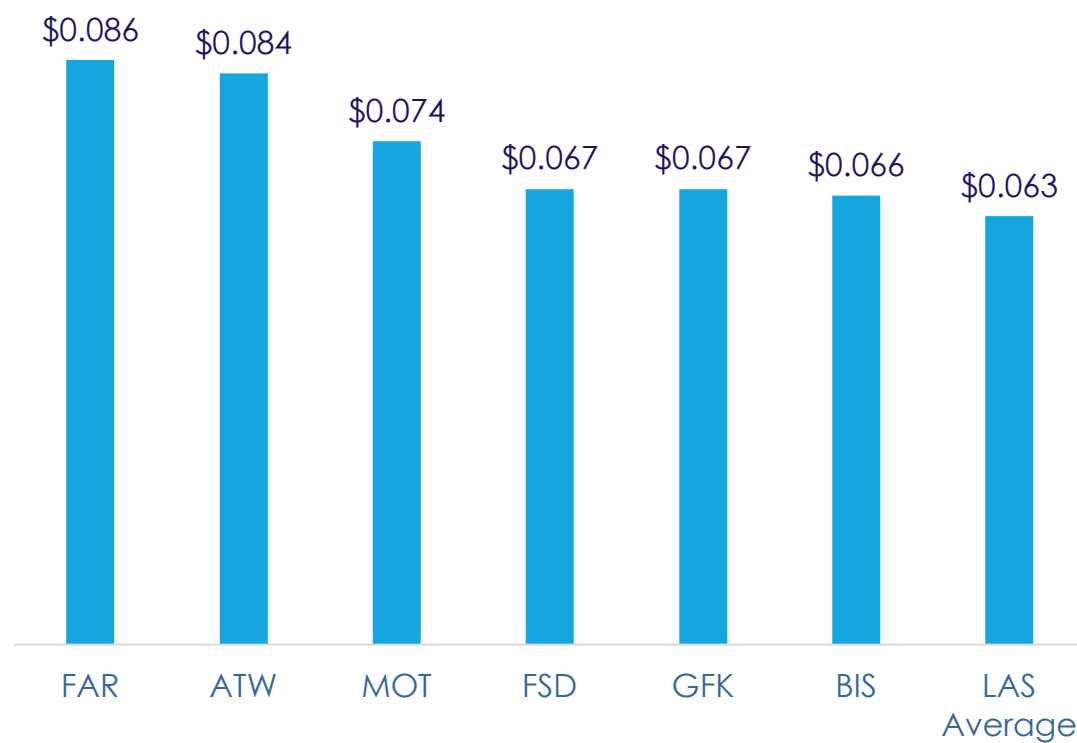
These numbers constitute about 8% of MSP demand



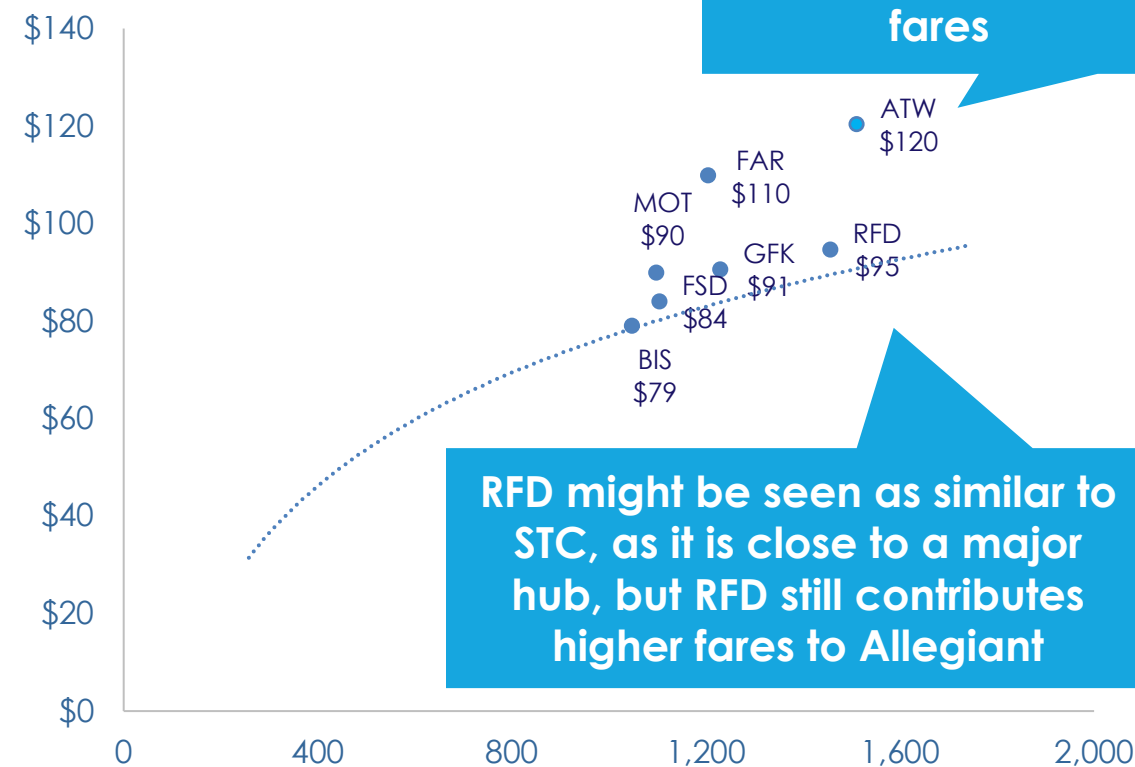
Source: ARC, Diio Mi, DOT

Northern tier airports perform well to LAS with higher than average stage length-adjusted unit revenue & fares

ALLEGiant PEER MARKET SLA RASM-LAS
(YE 4Q2017)



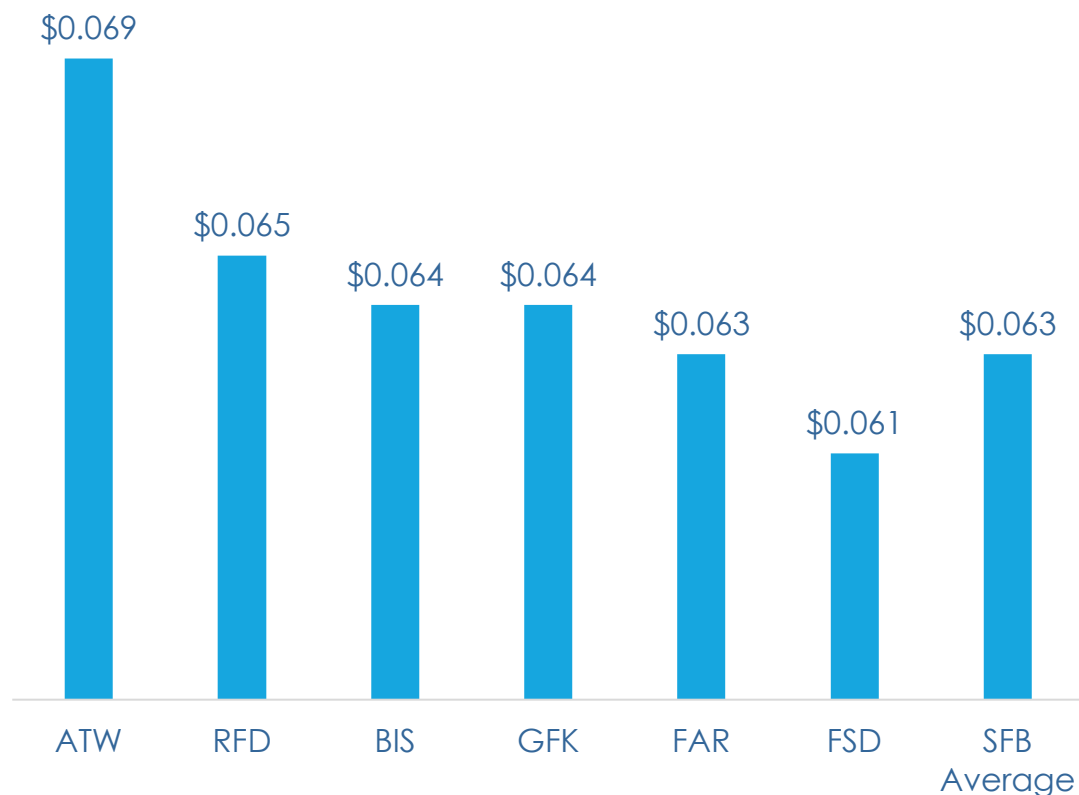
ALLEGiant AVERAGE FARES-LAS
(YE 4Q2017)



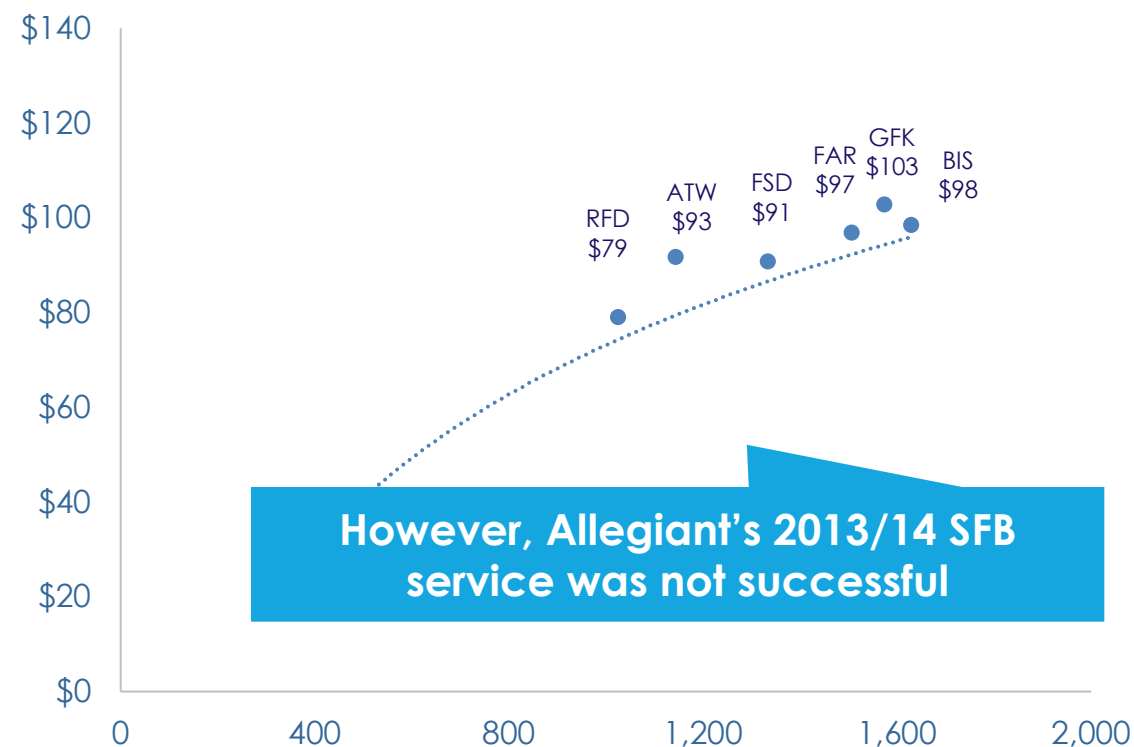
Source: ARC, Diio Mi, DOT

SFB-Orlando is similar to LAS, strong revenue for Upper Midwest markets

ALLEGiant PEER MARKET SLA RASM-SFB
(YE 4Q2017)

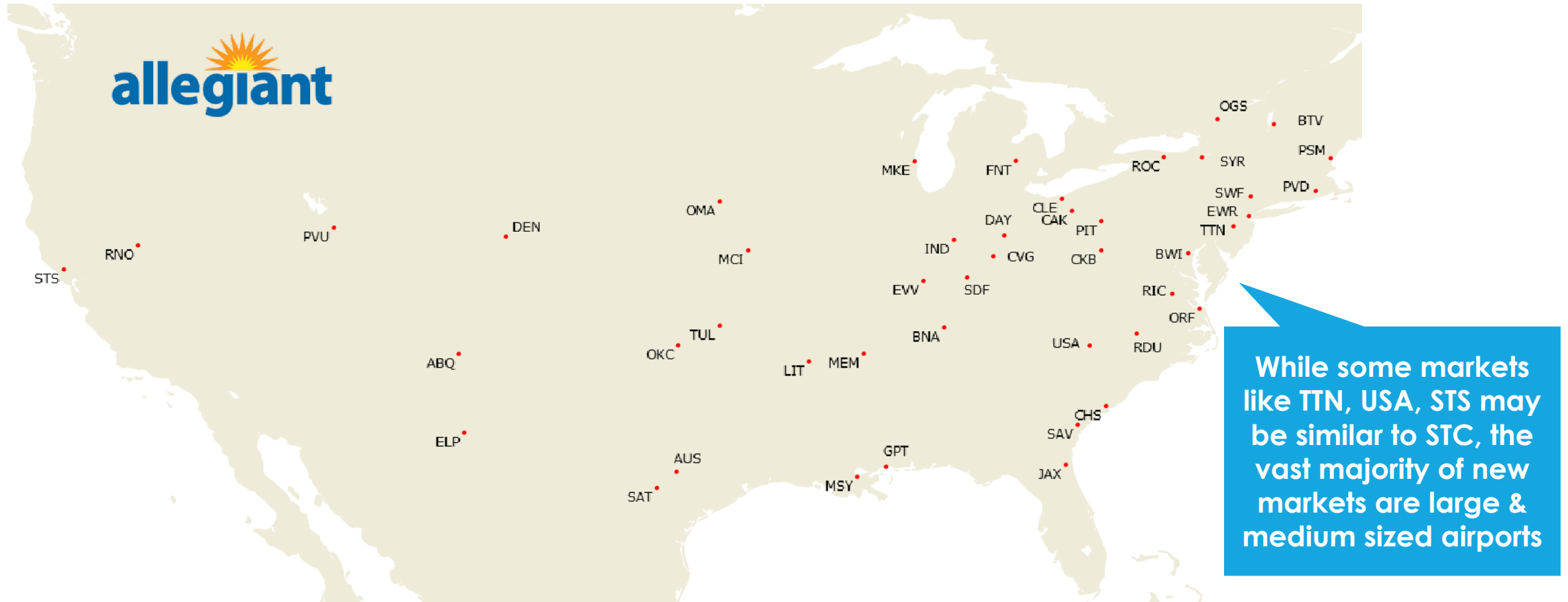


ALLEGiant AVERAGE FARES-SFB
(YE 4Q2017)



Source: ARC, Diio Mi, DOT

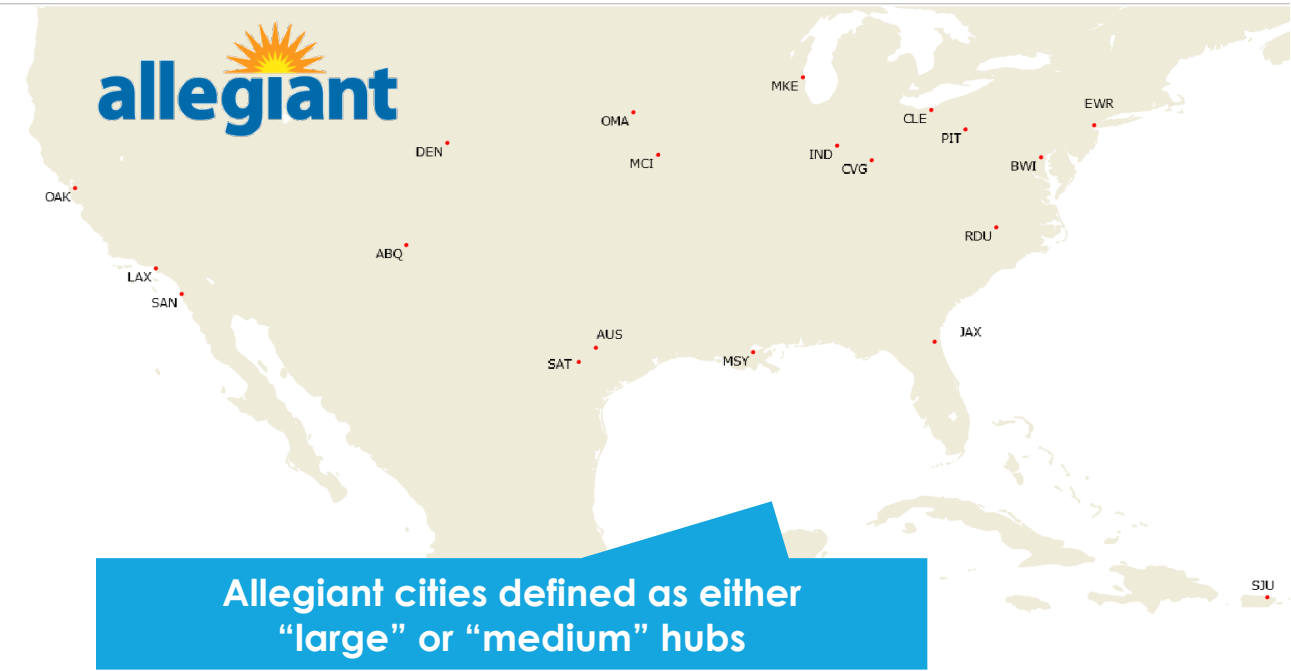
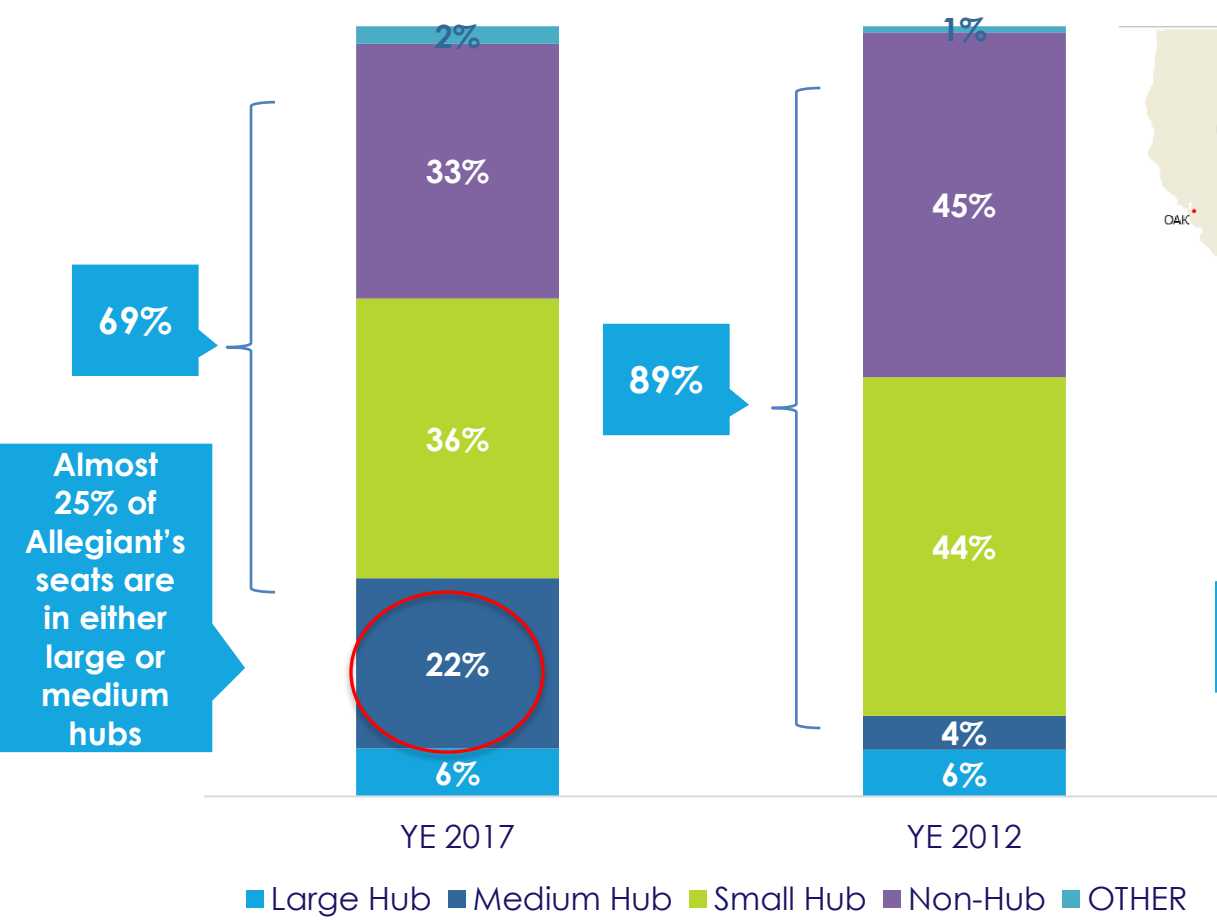
While small markets remain Allegiant's core, growth has been focused on larger O&Ds, indicating a tougher environment for STC



Source: ARC, Diio Mi, DOT

Most Allegiant's recent growth has been at airports as defined by the FAA as "Medium Sized Hubs"

HUB TYPE AS A % OF TOTAL SEATS



Source: ARC, Diio Mi, OAG, Includes only "outstation" growth & excludes main Allegiant bases

Other LCC/ULCC opportunities

- **Southwest's strategy is to dominate MID-TIER airports like BNA, STL, MCI, AUS, etc. and have a strong presence in top-tier airports and regions like NYC, BOS, WAS & CHI etc.**
 - Smaller markets do not play a role in such a strategy.
 - Southwest has a significant presence at MSP.
- **Frontier and Spirit have indicated they do not currently see near-term STC opportunities.**
 - This is partially a result of Allegiant's STC position as well as their presence at other regional airports.
 - Both carriers serve MSP.
- **Sun Country could offer long-term growth potential.**
 - But carrier's presence at MSP is more likely to be a hinderance than a help.
 - Potential market opportunities are consistent with Allegiant.

For the purposes of this analysis, opportunities that apply to Allegiant could also apply to the carriers listed above.

Legacy Airlines

American's opportunities would lie with DFW & ORD



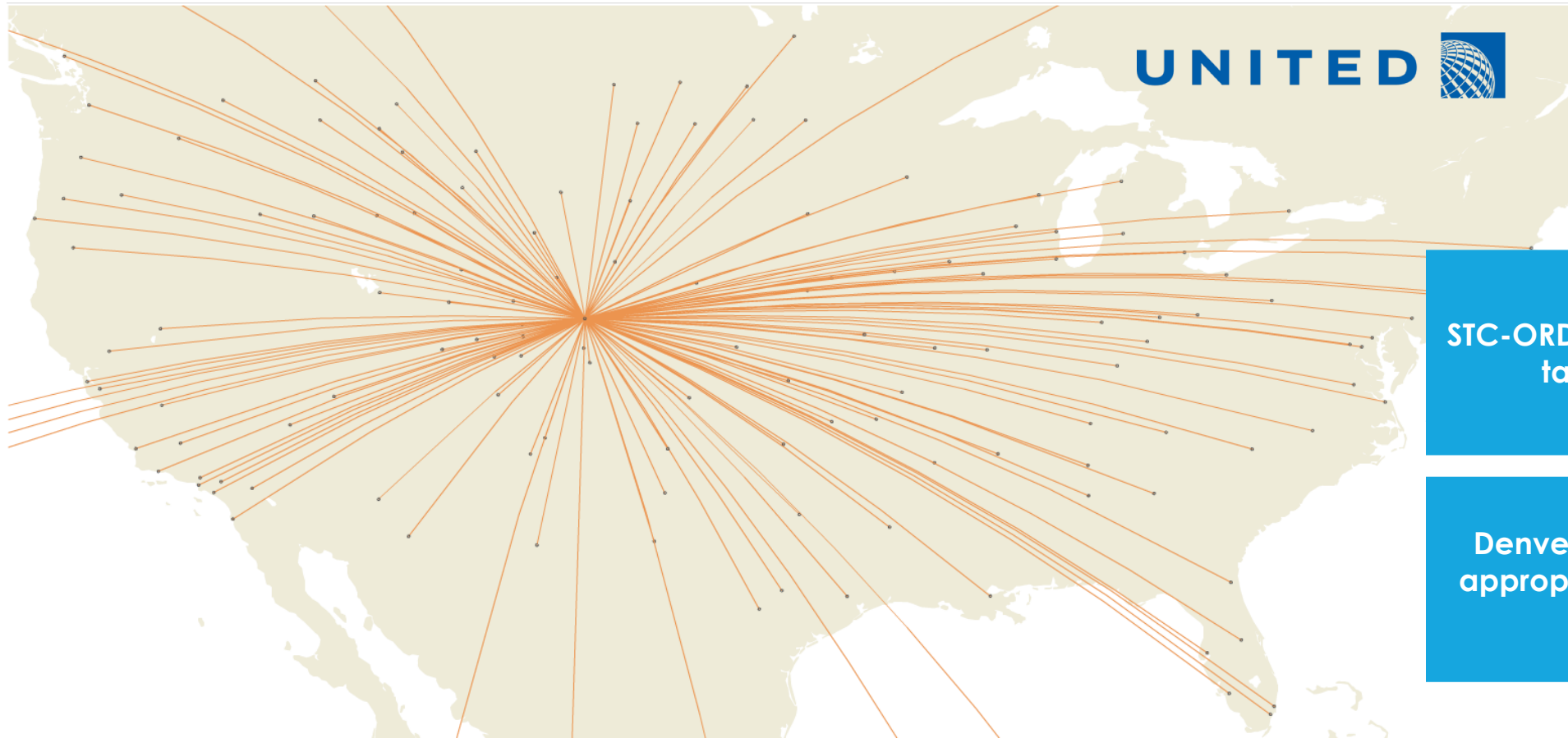
There is no reason to think
ORD on AA would be
anymore successful than
ORD was on UA

DFW has about 30
originating daily passengers
but is about 30% smaller
than STC-ORD is today

A 900 mile flight on a 50 seat
high CASM RJ is not an
attractive addition for
American Airlines

Source: ARC, Diio Mi, OAG, DOT

For United, DEN appears to offer an opportunity, given that LAS & PHX would be two of the top connecting O&Ds



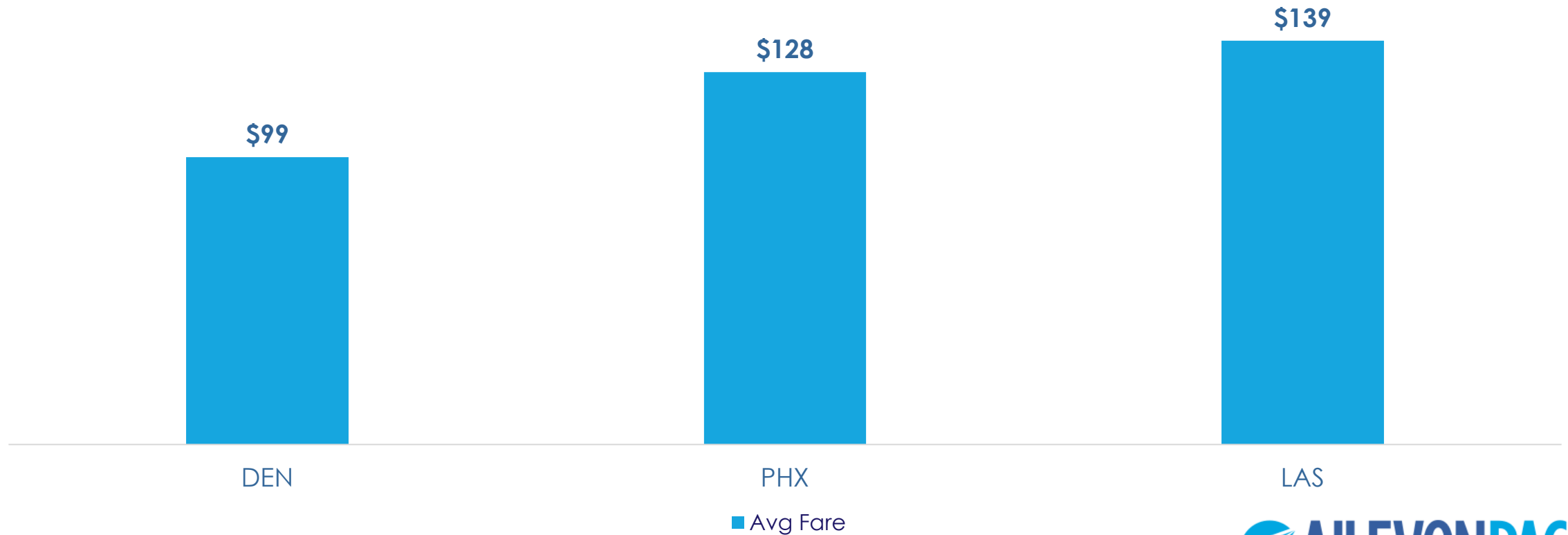
STC-ORD is certainly off-the-table for United

Denver (DEN) is the most appropriate hub after ORD for United

Source: ARC, Diio Mi, OAG

But MSP fares to DEN, LAS & PHX are already very low, making DEN service very unattractive for United Airlines

AVERAGE FARES FROM MSP
(YE 4Q2017)



Source: ARC, Diio Mi, DOT

Air Service Development Strategy

- STC can achieve its most obtainable air service goals with limited resources allocated.
- As the ULCC incumbent, Allegiant is the top priority.
 - And also the least resource intensive.

Recommendations

Allegiant

- Maintain staff relationship
- Attend annual Allegiant Conference
- Engage ASD consultant on a limited basis to assist with Allegiant conversations and analysis

Other carriers

- Maintain staff relationship
- Consider attending JumpStart with a focus on ULCCs
- Engage ASD consultant on a very limited basis for industry intelligence and to assist with communication with potential carriers

The ASD strategy is simple, limited and inexpensive

Conclusion

- ARC data suggests that there are some untapped opportunities for St. Cloud Regional Airport.
 - St. Cloud has a good population base and a high level of HHI to support nonstop service.
- United Airlines' short history showed that travelers in the STC area would use the service for nonstop travel to Chicago.
 - But connecting traffic preferred nonstops from MSP rather than a connecting option from STC over ORD.
- Punta Gorda, FL service is too new and not enough data exists to determine financial success.
 - However, Mesa, AZ appears to be a fairly decent performer for Allegiant especially in the first quarter.
- Orlando and Las Vegas appear to be the next best opportunities for STC.
 - Both markets are large and are doing well relative to “fair share” versus the entire MSP catchment area.
- Achievable air service goals can be achieved with limited resources.

STC market-based opportunities lie with expanding the low-fare, point-to-point services offered by Allegiant. Network carrier connectivity is extremely challenged and should be deemphasized.

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**St. Cloud Regional Airport
Optimization Planning Study
Final Report**

APPENDIX E:

Benchmarking Comparative Analysis

St. Cloud Regional Airport Benchmarking Analysis

Prepared for

**St. Cloud Regional Airport
Optimization Planning Study**

Prepared by



In association with



November 2018

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Attachments

Benchmarking Matrix

Introduction

St. Cloud Regional Airport (STC) is poised for growth and seeks to optimize future use of the airport. To determine a feasible and reasonable approach to deciding how to optimize its operations, the Airport pursued a benchmarking study. The study goals were to:

- View STC from an external perspective
- Identify strengths, weaknesses, opportunities and threats (informal SWOT analysis)
- Develop possible objectives for implementation
- Provide checks and balances for how local policies measure up to national standards

The benchmarking study Mead & Hunt conducted considered the financial aspects of airport operations, the fixed based operators (FBOs), organizational structure, business and general aviation activity, air service development, marketing, economic impacts, and any additional aviation services provided at the comparison airports.

To select the benchmark airports, Mead & Hunt used these initial screening criteria, which was presented to the Regional Air Service Action Committee:

- Metropolitan Statistical Area (MSA) population
- Air service: routes, enplanements, distance to hub airport
- Based aircraft: jets, multi-engine aircraft
- Primary runway length
- FBO(s)
- Educational institution(s)
- Other: military operations, air cargo, economic status

The initial screening yielded 21 airports, too broad a sample for the most effective analysis. To reduce the field of comparison airports to a more appropriate number, Mead & Hunt filtered the results to include ones providing similar air service and closest to a large hub. In addition, filtered results were cross-referenced to benchmark airports with cities previously studied by the Greater St. Cloud Development Corporation (GDSC). This narrowed the field of comparison airports to three airports similar to STC, and three airports that have business practices to which STC may wish to aspire.

Summary of Study Results

Opportunities

Each airport found its own niche. These niche services ranged from ground handling/deicing and corporate aviation services to flight school and military services. Playing to their strengths resulted in significant revenue for the airports. Regarding Fixed Base Operator services, ownership and what services the FBO provided varied according to local needs and markets.

STC can develop a niche through opportunities to provide low-cost air service and services focused on Corporate general aviation.

Financial subsidy/surplus varies by airport

The airports generally (re)invest for growth. Of airports that receive annual subsidies, the subsidies range from \$485,000 to \$1.5 million. Most airports charge paid parking. If not, they had grant reimbursement obligations or newly established air service.

STC has a \$1.1 million budget, which requires a \$600,000 annual subsidy. The primary operating revenue comes from land leases and fuel flowage. Potential revenue increases can be realized by reviewing rates and charges (land, fuel, landing, etc.) and collecting auto parking revenue.

Governance

Airport governance among the study airports varies widely (city, city/county, authority), according to needs and state statutes.

STC is currently governed by the City of St. Cloud, with an Advisory Board that provides input to City Council. While many states do not allow authorities, Minnesota does. This means that STC could move toward an airport authority if the regional communities agree.

Economic Impacts

Similar airports demonstrate economic impacts ranging from \$70 million to \$129 million. Aspirational airports demonstrate impacts ranging from \$100 million to \$676 million.

Marketing

Airports expressed a variety of marketing practices. Some of the airports conduct “self-marketing” and others contract with marketing providers, up to \$400,000 in annual investment.

For STC, similar airports showed no apparent correlation by investment in marketing. STC’s current annual marketing investment is relatively low compared to similar airports, however. Aspirational airports marketed more aggressively, viewing the investment as essential to future growth.

Business Aviation

Airports with corporate presence are experiencing high growth. The demand has generated waiting lists for space and the need for new development areas. For St. Cloud, high demand for corporate aviation is proven and no MAC reliever or competitor airport offers the facilities STC already has. The airport is currently undertaking a hangar area expansion project to provide additional land for prospective tenants.

Air Service

Hub competition cannot be ignored, but to successfully compete, the airport must find a complimentary or niche service. With a complimentary or niche service, the airport can find success in shadow of hub. STC’s success with Allegiant Airlines, an ultra-low cost carrier, proves that a viable market exists for

these types of niche vacation/leisure services, i.e., there is a viable market for direct, ultra-low cost air service within Central Minnesota.

Airport Profiles

St. Cloud Regional Airport (STC)

St. Cloud, MN

Financial

STC operates a \$1.1 million budget and requires \$600,000 in an annual subsidy. Its primary revenue sources are land and fuel flowage. STC collects fuel flowage

Fixed Base Operators (FBOs)

One FBO provides fuel services at STC. STC collects fuel flowage fees of \$0.11 per gallon for all types of fuel dispensed, and a landing fee of \$0.66 per 1000 lbs.

Governance

STC is owned and operated by the Department of City of St. Cloud and has an Advisory Board that provides input to City Council. STC employs a staff of seven and one seasonal part-time employee. Human resources, information technology, finance planning, law enforcement and legal are supported by the City, but reside out of the airport department. The City also provides aircraft rescue and firefighting (ARFF) services.

Business Aviation

There is a high demand for corporate aviation at STC. The airport is working on development area to meet demand, which is generated in part because no MAC reliever or competitor offers STC facilities.

Air Service

Allegiant provides air service with routes to AZA and PGA, with 20,000 enplanements annually. Sun Country charter service.

Marketing

STC has a budget of \$35,000 per year, of which Minnesota Department of Transportation reimburses \$25,000.

Trenton Mercer Airport (TTN)

Trenton, NJ

Financial

TTN has an annual operating budget of \$5.6 million. TTN's annual net revenue of \$3 million includes Federal Aviation Association (FAA) and other capital improvement program funding sources. The primary and single highest revenue source is paid parking. Rates are \$2/hour up to \$8/day. TTN uses a varying land lease rate structure. Additionally, Frontier leases space in the airport terminal. TTN does not impose

a fuel flowage fee, but charges \$107 per landing on average. Signature Flight Support provides airline fueling.

Fixed Base Operators (FBOs)

There are four FBOs on the airport. Of these, Signature Flight Support and Flight Serve are full-service FBOs. The additional FBOs, ATP and Infinity, provide instructional flight training.

Organizational Structure

TTN is a county-owned airport. The Manager reports to the Deputy County Administrator who, in turn, reports to the County Administrator. The assistant manager has five six direct reports: Maintenance Supervisor, Safety Officer, Financial Manager, Noise Manager, and Parking Manager. There are roughly 25 total airport employees excluding aircraft rescue and firefighting (ARFF) personnel (contracted) and law enforcement officers (provided by Mercer County). The county employs additional personnel in the summer months for mowing operations.

TTN believes staff salaries are competitive, including: Manager, \$130,000; Assistant Manager, \$87,000; Maintenance / Safety Officers, \$85,000; Financial Manager, \$55,000; and the Noise Manager, \$70,000.

TTN has not recently discussed nor considered becoming an airport authority.

Business Aviation

TTN benefits in its proximity to New York and other large eastern metropolitan areas. Population is dense, and corporate users are capable of staging at TTN to fly to Europe. The airport leases land to developers for corporate flight facilities.

Air Service

Allegiant and Frontier Airlines provide low-cost serve to 12 markets, and they enplane over 300,000 annually. Dense population serves to provide traffic at TTN. At roughly 50 miles, Philadelphia (PHI) is not far away, but users choose TTN for its convenience and difference in parking. PHI charges roughly \$20/day for onsite parking and high rates for shuttle parking. The Trenton / Mercer County area is home to several technology companies that have many high salary jobs, which TTN believes drives the commercial traffic at the airport.

Marketing

From a marketing standpoint, TTN is not as involved as peers of its size. Allegiant provides marketing for the routes it serves. Frontier is also active in marketing the routes it provides. TTN believes that the low-cost service and convenience it offers is marketing in itself for the airport.

Economic Impact

The airport has not recently completed an economic impact study.

Army Aviation Support Facility (AASF)

TTN is home to an AASF. The Army National Guard recently moved its personnel and equipment (helicopters) to a nearby base, so the facility is no longer well-used.

Arnold Palmer Regional Airport (LBE)

Latrobe, Pennsylvania

Financial

LBE's annual operating budget is \$3.5 million. The Airport requires an annual subsidy of \$1.5 million for bond issuance / capital improvements. Land lease rates are inexpensive at \$0.80 per square foot, intentionally, to promote hangar development and growth.

The airport does not charge for parking, but the commissioners would like to collect that revenue. The greatest challenge in instituting paid parking is repayment of federal grant monies collected for parking lot improvements. If LBE desires to charge for parking, which generates airport revenue, the airport would need to repay the original \$4 million federal grant investment. Parking lot capacity is roughly 1,200 stalls but exceeds capacity during spring break by an additional 600 vehicles.

The airport charges \$500 per turn for scheduled service. In addition, the airport provides aircraft deicing and charges the airlines. The charge for deicing is an undisclosed amount.

Fixed Base Operators

There are two FBOs on the airport, of which neither is truly full service. L.J. Aviation is the #15 ranked largest charter operation in the country. It has 25 aircraft, 80 pilots and is growing. LBE does not offer any self-fueling. LBE collects fuel flowage fees of \$0.09/gallon for Avgas.

Organizational Structure

LBE operates as an airport authority with the executive director reporting to the board. Former LBE board members have included Arnold Palmer and RK Melon. The board members are determined by election.

A total of 60 employees work for the airport, which includes five in administrative positions and seven in maintenance / ARFF. The remainder provide ground handling for the airlines, which is unique to LBE. The airport does not have any contracted positions.

The airport feels it is competitive within its regional market for compensation for administrative positions. The airport executive director (\$100,000+) has four direct reports, including: Director of Operations, \$60,000+; Director of Finance, \$65,000; Director of Grants, \$55,000; and Director of Public Safety, \$60,000.

Business Aviation

Roughly a half-dozen businesses run corporate flight operations through LBE. While there are no shovel-ready hangar sites immediately available for a prospective business tenant, there also is no immediate demand.

Air Service

LBE air service has been very successful, especially considering its proximity to Pittsburgh International Airport. In 2010, the airport only had periodic charter service to Atlantic City when Spirit Airlines announced service at LBE. In its first year, Spirit accounted for more than 60,000 enplanements while providing service to MYR, MCO, and FLL.

Today, LBE records over 146,000 in annual enplanements. Spirit has since initiated service at PIT in hopes of attracting millennial passengers from the metropolitan area who may not be traveling to LBE for the low-cost service. The airport feels this has only had a minor impact on its passenger traffic.

An initial challenge when starting service was accommodating large aircraft in a terminal sized for the 34-passenger Saab 340 turbo prop. The airport has elected not to undertake a terminal expansion project, estimated to cost \$12 to \$15 million, because it is nervous about Spirit Airlines being the sole carrier serving the airport.

While Spirit provides service to five destinations, LBE would like to see additional service at its airport, including destinations to the Southwest or West, or a second low-cost carrier like Allegiant Airlines. Small commuter, nine-passenger aircraft service has been considered in the past, but is not considered to be a successful, sustainable service for LBE.

Marketing

LBE was awarded a \$200,000 Small Community Air Service Development Program (SCASDP) grant in 2012 to support the new Spirit service. Today the airport focuses its marketing resources on hosting an annual airshow. Approximate value of the marketing has been estimated at more than \$100,000. The air show attracts more than 100,000 people and is advertised through two weeks of TV commercials and four weeks of radio commercials. Sponsors financially support the event and other forms of social media are used to further promote the event. The marketing campaign generates an estimate 1.4 million imprints. The airport actively participates in the airshow by providing narrated ground handling operations demonstrations.

Economic Impact

While a formal Economic Impact Study has not been conducted for LBE in recent years, the airport estimates its annual influence to be roughly \$200,000,000 on the region. Rental cars collect over \$1 million in annual revenue, of which LBE collects \$100,000. The FBO collects in excess of \$600,000 annually as well.

The airport feels that the annual \$1.5 million subsidy is a fantastic investment in the regional economy given the large impact the airport generates and would continue to be worthwhile even if the impacts were estimated to be far less.

LBE has fully supported the investment required to develop and support air service, because, “in order to make money, you need to invest money.”

Other

Gabe Monzo, current director and 35-year employee of LBE, would be willing to speak with the STC RASAC if he is provided with an airline ticket.

Northern Colorado Regional Airport (FNL)

Fort Collins / Loveland, CO

Financial

The airport has an operating budget of \$1.5 million, requiring an annual subsidy of \$485,000. The primary sources of revenue are land leases and aviation fuel flowage fees. When airline service existed, airline revenue, including parking and concessions, was the top revenue source for the airport, which reduced its annual subsidy to \$170,000.

Fixed Based Operator

FNL has one full-service FBO required by airport minimum standards to provide flight training, aircraft maintenance, rentals, and other services. The airport collects 6% gross per gallon revenue on fuel sold through the FBO. Pricing is considered very competitive. While no other publicly-available fueling option is available to users, a few tenants own and maintain individual systems. Those tenants conduct through-the-fence operations and FNL collects 10% net per gallon in fuel flowage for those private fuel systems.

Organizational Structure

FNL is jointly owned by the Cities of Fort Collins and Loveland, Colorado, but exists as a separate department within the City of Loveland. It employs a total of six persons at the airport. ARFF services are provided on the field by a local rescue and firefighting authority – the jurisdiction of which extends from Loveland.

The airport manager reports to the City Manager of Loveland as well as a seven-member airport commission, consisting of appointees from Loveland and Fort Collins. Each city appoints three members each, while one member is a joint appointee between cities. Loveland provides HR, IT and financial services to the airport.

The airport has had frequent discussions about becoming an authority because of the split services provided by multiple jurisdictions. Colorado state law prohibits the formation of an airport authority to collect a tax levy, however. An Intergovernmental Agreement dated June 7, 2016 established the decision-making authority of the Northern Colorado Regional Airport Commission as it relates to the cities of Fort Collins and Loveland.

Three deputy positions report to the airport manager (\$112,000 salary): Assistant Director of Operations and Maintenance, \$72,000; Business Manager / Executive Assistant, \$53,000; and Business Development and Planning, \$62,000. FNL offers some of the highest salaries for its size in relationship to other airports in Colorado.

Business Aviation

The Fort Collins – Loveland area has over 10 corporate tenants whose business is headquartered in the region. This contributes to a significant amount of large / business aviation traffic. In addition, roughly half of the airport's total activity is from itinerant users. Much of the traffic originates from the California / San Francisco Bay area.

FNL attracts corporate traffic from roughly a 30-mile radius, stopping well short of the northern Denver metropolitan area. Other Denver area airports, such as Rocky Mountain Metropolitan Airport handle the area's business traffic. Boulder is FNL's primary competition.

There is a large demand for hangar space at FNL. The airport is currently developing a 2-acre site and will need additional space in the future. Business aviation growth and increasing demand for space at the airport drove the establishment of a Business Development and Planning position.

Air Service

FNL was among the first cities served by Allegiant. Allegiant routes were considered successful, but the airline pulled out in 2012. Reasons cited for the discontinuation of service included slight declines in passenger activity in addition to the lack of an air traffic control tower (ATCT). FNL's proximity to DEN was less of a concern than the lack of an ATCT, which was a safety concern for Allegiant. FNL is the busiest airport without an ATCT in the state, and the airport is currently working on developing a new facility. Construction is planned for 2019. The ATCT will be a "remote" facility, operating on a combination of video surveillance and radar. The project, estimated to cost between \$8 – \$10 million, is being funded through the state of Colorado.

Elite Airways also initiated service at FNL with a route to Rockford, Illinois (RFD). While the route appeared popular initially, airline performance hampered the reliability of the route and passenger utilization dropped.

FNL intends to pursue and is today working toward additional service in the future. The airport is optimistic in landing new service after the ATCT project is complete and says, "it will happen."

Marketing

The airport has an annual marketing budget of roughly \$30,000 set aside for air service consulting.

Economic Impact

The State of Colorado provided an Economic Impact Study for FNL in 2013 that identified a \$129 million per year impact. The study included the impacts of scheduled air service provided by Allegiant.

Other

FNL is centrally located among two MSAs: Fort Collins – Loveland, population 310,487; and Greeley, population 294,932. The airport considers both MSAs part of its general service area.

Appleton International Airport (ATW)

Appleton, WI

Financial

The airport's annual operating budget is \$13 million, and ATW generates over \$500,000 for Outagamie County each year. The top two revenue sources for the airport are an airport-owned and operated FBO and parking. Parking rates are \$8 per day for long-term, up to a maximum charge of \$40 per week. Short-term parking is \$13 per day. The airport also receives revenue from land leases: \$0.11-0.13 per square foot for general aviation, and \$0.24 per square foot for commercial tenants.

ATW also receives airline-generated revenue in the form of fuel flowage fees, landing fees, and airline ticket office / counter rent.

Fixed Base Operator

The airport owns and operates the only FBO on the airfield, Platinum Flight Center. While airport ownership and operation is relatively new, the operation is successful and continues to attract additional corporate traffic into ATW each year.

Gulfstream Corporation is the only other entity at ATW that offers fuel. The airport collects \$0.05 per gallon in fuel flowage fee for its permitted use.

Organizational Structure

ATW is owned by Outagamie County and employs a total of 21 full-time employees, excluding those of Platinum Flight Center. The airport is a department of the county and receives IT and HR support. The airport director reports to the County Executive and a five-person airport/economic development board that meets twice per month. Deputy positions that report to the airport director are: finance and administration; operations and maintenance; and marketing. The airport contracts public safety duties, consisting of a chief, deputy chief, and six ARFF personnel. Airport parking is contracted and consists of 1.5 full-time employees. Recent improvements in ATW's parking automation system has reduced labor required to operate airport parking.

ATW desires to become an airport authority, but Wisconsin Statutes do not allow that type of governance. The approval process for new hires, agreements, and contracts approval is "painfully slow."

Business Aviation

Ten corporate flight departments operate out of ATW, the most notable tenant being Gulfstream Corporation. This year, Gulfstream announced \$40 million of additional investment in its operation at ATW that will ultimately create over 200 jobs. Groundbreaking will occur in June.

Demand for additional corporate hangar sites suitable for development remains high at the airport. T-hangar space is limited, too, with only one current vacancy.

Air Service

While ATW is located less than a 45-minute drive from Green Bay Austin Straubel Airport (GRB), it does not directly compete against its neighbor as may be perceived. A recent leakage study revealed that ATW's main competitors include Milwaukee (43 percent) and Chicago (25 percent), with only 4.5 percent of its catchment area leaking to GRB. For the 2017 calendar year and the first time in its history, ATW surpassed GRB in annual enplanements. 2018 passenger activity is already up 19 percent for January and 13 percent for February. Most recently, American Airlines has increased its daily flights operating out of ATW to three times daily and United started service to DEN.

Marketing

Outagamie County first invested in a dedicated, full-time aviation marketing position in 2007, and has grown commercially each year since. The airport invests nearly \$400,000 in marketing each year through: public-private partnerships, personnel, and miscellaneous marketing costs. The airport believes this is a very important and worthwhile investment.

Economic Impact

The State of Wisconsin conducted a study in 2016 that quantified the total economic impact of ATW as \$676 million. The airport contributed over 3,200 jobs and \$147.9 million in wage income for the region. Of note, neighboring airport GRB's impact was one-fifth that of ATW.

Ogden-Hinckley Airport (OGD)

Ogden, UT

Financial

OGD is a City-owned airport with an annual operating budget of \$2.5 million. The City of Ogden provides an annual subsidy of \$600,000 to support the airport. Land leases provide the single greatest source of revenue. The airport has many based aircraft and has 250 hangars from which it receives revenue. The airport receives \$35,000 in revenue each year from vehicle parking. The airport's daily parking rate is \$3.50 per day.

The airport charges a landing fee of \$0.75 per 1,000 lbs., and a fuel flowage fee of \$0.055 per gallon for Commercial Airlines and \$0.07 for General Aviation. A café used to be within the airport terminal; however, the space is currently unoccupied. The airport does not receive any rent within its terminals from airlines and/or rental cars.

Fixed Base Operator

OGD is home to a total of three FBOs. They provide complimentary roles: aircraft mechanical services, aircraft fueling and a jet center. The airport provides FBO fueling only.

Organizational Structure

The airport is owned and operated by the City of Ogden. The airport employs a total of five full-time employees and one part-time ARFF person. The airport manager reports to the City's Director of Community and Economic Development who, in turn, reports to the Mayor. The airport manager

supervises four airport employees: Manager, \$80,000-100,000; Operations Supervisor, \$50,000-60,000; Operations Assistant, \$40,000-50,000; Lead Worker, \$30,000-35,000; and Clerical, \$30,000-40,000. An onsite fire station provides ARFF services for the airport.

Alternative forms of governance have been discussed for OGD in the past; however, they have yet to gain traction. The airport sits on the boundary of two counties and primarily benefits three total cities. The total metropolitan statistical area for OGD is 650,000.

Business Aviation

Roughly 20 corporate jets are based in OGD, and the airport captures roughly 25 percent of the Salt Lake City area. Most recently, the airport has leased between one and two new hangar sites per month and is looking into development of a new 18- to 20-acre industrial site. OGD has recently recruited two new businesses: an air ambulance business that owns 80 total aircraft, and a business that updates avionics for military aircraft.

Air Service

Allegiant Airlines started service at the airport five years ago to Phoenix-Mesa (AZA), and the route was popular from the start. While OGD is only 45 miles from Salt Lake International Airport (SLC), it is substantially cheaper for Allegiant's operation. The airport offers good access to the interstate highway system that attracts travelers from the SLC area. The AZA route has held an overall 91 percent Passenger Load Factor (PLF) over the last five years.

Marketing

The airport received a Small Community Air Service Development Program grant in 2012 for marketing for Allegiant. Currently, the airport spends roughly \$20,000 in marketing each year and receives part-time marketing services as part of a retainer from the City.

Other

Each airport is unique and needs to find its niche within the overall aviation system to be successful.

Hill Air Force Base is located roughly 5 miles from OGD. The base is home to F16, F22, F35, and Warthog aircraft and attracts four of the top six military contractors in the country in servicing its base, which increases additional air traffic into OGD.

Stillwater Regional Airport (SWO)

Stillwater, OK

Financial

Stillwater Regional Airport is a city-owned airport with a \$2-million total operating budget. It currently receives \$1.6 million in revenue each year and has \$2.3 million in expenses, excluding capital expenditures. The airport has \$4.9 million in capital improvements programmed in 2018. Grant monies received for the improvements will be 90 percent federal, 5 percent state, and 5 percent local.

Land lease rates are \$0.20 per square foot for airside and \$0.16 per square foot for landside. Other additional airport charges are detailed on the *Stillwater Regional Airport Authority 2017-2018 Rates and Charges* sheet attached.

The airport does not charge for parking as air service is relatively new and growing. The airport has five total lots. It's fifth lot is unpaved and considered overflow, and the airport will consider charging for parking once all lots are paved.

Fixed Base Operator

The Stillwater Center provides general services for the airport, and three additional maintenance shops are located onsite, which is a bit unusual.

SWO owns and maintains the only airport fuel farm. It purchases fuel wholesale and sells it to the FBO. This arrangement provides nearly \$1.2 million in annual revenue, as the airport charges \$0.20 per gallon in fuel flowage fees for both AVGAS and JetA. The flowage fee is higher than other airports, but the airport also incurs higher expenses in the operation and maintenance of the facility.

Organizational Structure

Oklahoma State University operated SWO up until 1979 at which time the Stillwater Regional Airport Authority was formed by City Ordinance. The airport employs a total of 11-1/2 fulltime equivalent employees as a City Department. All employees report to the City Manager, except for the airport director, who reports to the authority. As a department of the City, the airport receives HR, IT, and law enforcement support.

A five-member, City-appointed board comprises the authority. The board currently comprises individuals with business, economic development and aviation backgrounds.

The City acts as the sponsor of SWO to receive federal grants.

Airport positions and respective salary ranges include: Director, \$88,000; Assistant Director, \$75,000; Operations Coordinator, \$55,000-60,000; Operations / Maintenance, \$26,000-33,000; and Clerical, \$30,000.

Business Aviation

SWO has a large and increasing demand for hangar development. There are over 30 individuals on a waiting list to lease land and/or hangar space. The airport is challenged to develop a new site because of other competing Capital Improvement Program initiatives (\$4.9 million in 2018 alone). SWO believes this to be a critical need for not only its airport, but many other airports located in Oklahoma and across the country.

Primary corporate tenants include a helicopter and Agra-business software company.

Air Service

SWO worked hard and invested a lot of money into securing scheduled service with American Airlines. Securing the daily service was a concerted effort between the airport, City, University, alumni groups, and area businesses. Over \$600,000 was offered in marketing, advertising, and in-kind services, in addition to a Minimum Revenue Guarantee (MRG) provided by the City.

Daily service to Dallas has been going strong for over five years now, and American will be adding a third daily flight soon. The airport captures a good portion of central Oklahoma air travelers. Catchment area population is 195,000. Of travelers that use other airports, its primary competition includes Oklahoma City (65 percent) and Tulsa (35 percent). The airport currently invests about \$50,000 each year in air service marketing.

Economic Impact

A recent study performed by the state estimates the annual economic impact of SWO to be \$70 million per year.

Other

The Oklahoma State University Flight School has been a SWO tenant for over 65 years and is rapidly expanding. It is adding 30 to 35 aircraft to its fleet in the upcoming year. Envoy Airlines' hiring program for Sophomore student pilots has been a big boost to the school's aviation program.

<https://www.envoyair.com/pilots/> The Envoy program is a five-year contract that allows students to earn 1,100 hours towards the 1,500-hour requirement for new commercial airline pilots prior to graduation. It also provides a starting salary of \$60,000 for pilots committing to its program.

BENCHMARKING MATRIX

IDENTIFIER	STC	TTN	SWO	LBE	OGD	ATW	FNL
AIRPORT	St. Cloud Regional	Trenton Mercer	Stillwater Regional	Arnold Palmer	Ogden-Hinckley	Appleton Int.	Northern Colorado
CITY	St. Cloud	NJ	Stillwater	Latrobe	Ogden	Appleton	Fort Collins / Loveland
STATE	MN	NJ	OK	PA	UT	WI	CO
Airport Type	N/A	Aspirational	Similar	Aspirational	Similar	Aspirational	Similar
MSA Population	194418	368094	78399	N/A	650000	233007	605419
Runway (feet)	7500	6006	7401	8222	8103	8002	8500
Property (acres)	1400	1200	1850	1000	750	1700	1050
GOVERNANCE							
Ownership	City	Mercer County	Authority / City	Authority	City	County	Commission / City
Employees	7	25	11.5	60	5	21	6
ARFF	City	Contract	City	Airport	City	6	Loveland
Contract Positions	Seasonal PT	ARFF	N/A	N/A	N/A	Public Safety	N/A
Other Positions	HR, IT, Finance, Planning, LEO, Legal	LEO by County	LEO, HR, IT by City	Airport ground handling	N/A	Airport-owned FBO	Finance, IT, HR by Loveland
FINANCIAL							
Budget (Surplus / Subsidy)	\$1.1M (-\$600K)	\$5.6M (+\$3M)	\$2.3M (-\$700K)	\$3.5M (-\$1.5M)	\$2.5M (-\$600K)	\$13M (+\$500K)	\$1.5M (-\$485K)
Revenue Sources	Land, Fuel, Landing	Parking, Land. (No Fuel Flowage)	(See Rate Schedule)	Land, Deicing, Turn	Land, Parking, Fuel, Landing	#1 FBO, #2 Pkg, landing, fuel, counter rent	#1 Land, #2 Fuel. (Pkg used to be #1)
Fuel Sold	950K gal Jet A; 50K gal 100LL	N/A	350K gal Jet A; 140K gal 100LL	1.8M gal Jet A; 65K gal 100LL	600K gal Jet A; 400K gal 100LL	N/A	850K gal Jet A; 150K gal 100LL
Fuel Flowage	\$0.11/gal	N/A	No flowage as airport-owned fuel farm. Airport sets price = cost + \$0.20/gal	\$0.09/gal Jet A, \$0.06/gal 100LL	\$0.055/gal Commercial; \$0.07/gal General Aviation	FBO fuel. \$0.05/gal for Gulfstream.	6% gross FBO / 10% net for private tenants
Landing Fee	\$0.66/1000lbs	\$107	Variable	\$500/turn	\$0.75/1000lbs	N/A	\$0.85/1000lbs
Paid Parking (\$ / day)	\$0	\$8	\$0	\$0	\$3.50	\$8 LT, \$40/wk max.	\$5
FBOs	1 FS	2 FS, 2 Training	3 Maintenance	2	3	1 FS, 1 LTD	1 FS
Notes	N/A	N/A	N/A	#15 Charter Operation	N/A	N/A	N/A
BUSINESS AVIATION							
Based Aircraft	89	132	70	105	241	71	263
Based Jets	9	18	0	33	8	4	14
Multi-Engine	4	11	5	9	25	17	12
Notes		Traffic to Europe. Develop hangar sites	N/A	No large corporate demand.	Large demand; 20 acre development.	\$40M, 200 Job Gulfstream expansion	Traffic to CA. Robust corp. aviation traffic
AIR SERVICE							
Airlines	Allegiant	Allegiant, Frontier	American	Spirit	Allegiant	Allegiant, AA, DL, UA	(None)
Routes	AZA, PGA	12 total	DFW	5 total	AZA	10 total	(None)
Enplanements	20000	306667	50000 (est.)	146127	15609	270633	4559
Distance to Hub (nm)	61	43	79, 75	28	28	25	45
Nearest Hub	MSP	PHL	TUL, OKC	PIT	SLC	GRB	DEN
Notes			Adding 3rd daily flight in 2018.	Southern airways 9 pax commuters - not interested	Started in 2012.	Just surpassed GRB. MKE and CHI primary competitors.	lost Allegiant in 2012; lack of ATCT. Will regain w/ new ATCT
MARKETING							
Budget	\$35K	(minimal)	\$50K	\$100K	\$20K	\$300K	\$30K
Marketing Notes	\$35K incl. \$25K reimbursed by MnDOT	Frontier markets; Allegiant and airport no marketing.	N/A	Mktg through air show. 4 week campaign, 1.4M imprints.	N/A	Budget incl: staff, commercial partnerships, expenses	Actively pursuing new service. Airline meetings, data.
ECONOMIC IMPACT / YEAR							
	\$30M / 2012	(unknown)	\$70M	\$100M (estimated)	(unknown)	\$676M / 2016	\$129M / 2013
OTHER NOTES							
		AASF on site, but not well used. Aircraft moved to nearby base.	OSU Flight School adding 35 aircraft. Envoy Program.	Airport Manager is willing to visit STC.	Air Force Base 5 miles away drives additional air traffic.	Econ. Impact of 3200 jobs, \$150M in wage income.	New "Remote" ATCT to be constructed in 2019.

