

Executive Summary

The Minnesota Department of Transportation Office of Aeronautics (MnDOT) commissioned an air service study (Tier 2 Study) in 2001 to assess the potential for growth and development of the smaller commercial service airports in the Minnesota and Wisconsin System of Airports. The Tier 2 Study, completed in June 2003, identified long-term opportunities for St. Cloud Regional Airport (the Airport), such as serving as a spoke in the mainline carrier networks, a reliever airport for Minneapolis-St. Paul International Airport, and a Minnesota National Guard headquarters and military training and deployment center, among other roles.

To prepare for these opportunities, it was recommended in the Tier 2 Study that the operators of the Tier 2 airports work to improve air service at their individual and collective airports; plan for the long-term development of facilities and land acquisition to support those facilities; and implement detailed business planning and property management systems. Representatives of the Metropolitan Airports Commission (MAC), the Metropolitan (Metro) Council, MnDOT, and the Tier 2 Steering Committee recognized that St. Cloud Regional Airport would be the logical site for an additional commercial service airport to serve the Minneapolis-St. Paul region. It was, therefore, recognized that the City of St. Cloud would need to act quickly to halt encroachment of residential and other incompatible land uses around the Airport in areas that may be needed for future Airport expansion. This Master Plan was initiated to identify areas required for potential long-term aviation development, prepare a plan for incremental expansion, and assist the City of St. Cloud in business and financial planning to support Airport development.

1. Goals and Objectives of the Master Plan

In preparing the Master Plan, a two-pronged approach was used to assess future Airport needs by (a) developing an implementable 20-year plan while (b) also anticipating needs to meet longer-term growth over the next 40- to 50-years so that aviation resources can be protected from encroachment by residential and other incompatible land uses. The following goals for the Master Plan were developed:

Goal 1: Protect for future Airport development

Goal 2: Prepare a plan for logical, incremental Airport development to serve near-term demand

Goal 3: Ensure that the planning process is accessible to the public and involves the various jurisdictions and stakeholders that have interest in the Airport

Goal 4: Support the City of St. Cloud in attaining capital funding

Goal 5: Identify opportunities and tools for revenue development

2. Aviation Activity Forecasts

Forecasts of enplaned passengers, air cargo, commercial and general aviation operations, based aircraft, aircraft fleet mix, and other aviation activity at the Airport were developed for 2004 through 2024. The forecasts form the basis for determining development needs at the Airport and the additional land that may be needed to accommodate future Airport development in an orderly fashion.

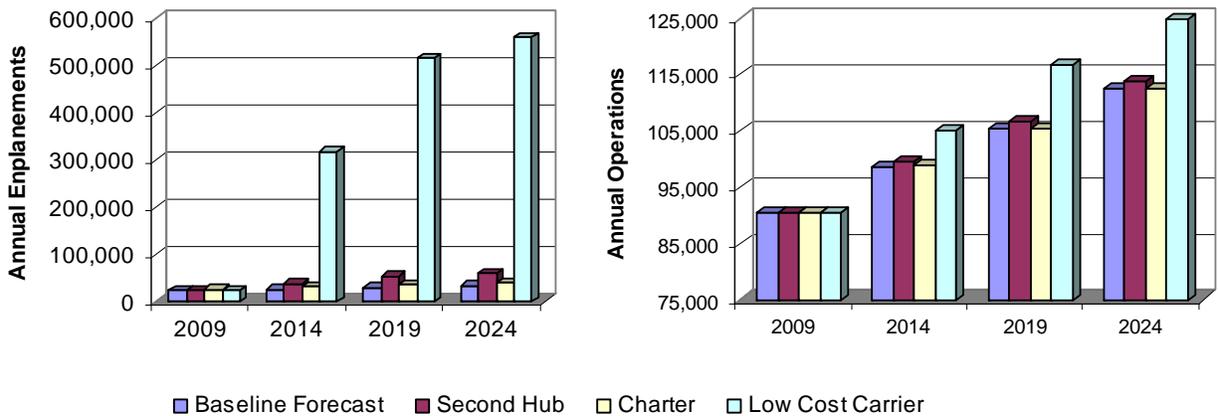
The development of aviation activity forecasts requires both careful analysis and subjective judgment, especially in the case of St. Cloud Regional Airport, where a high rate of population and economic growth is tempered by the Airport's proximity to the Minneapolis-St. Paul metropolitan area and Minneapolis-St. Paul International Airport. Historical aviation activity and trends, as well as industry, regional, and local factors that affect aviation activity at the Airport were analyzed and assumptions were made about these factors to forecast future activity.

A **Baseline Forecast** was developed based on growth conditions comparable to national conditions, with underlying assumptions that, through the forecast period, the Airport will remain a single carrier, single destination airport and no significant new local factors will affect the airport's growth. Three alternative demand scenarios were also developed to test the effect that a higher level of activity would have on facilities at the Airport. These alternative demand scenarios are described below.

- The **Second Hub Scenario** consists of the addition of regional jet service to another hub airport, such as Detroit Metropolitan Wayne County Airport—Northwest's second major northern U.S. hub—following the establishment of high-frequency service to Northwest's Minneapolis-St. Paul International Airport (MSP) hub. The synergy between these two airports could provide many domestic and international connecting opportunities at St. Cloud Regional Airport. In terms of aircraft fleet, Northwest would initially increase its Saab fleet and then convert to an all regional jet fleet by 2017.
- The **Charter Scenario** consists of the potential addition of charter jet flights (using aircraft such as the B-737 or MD-80 that seat approximately 150 passengers) to leisure markets. The seasonal charter service would begin with one flight per month during the 2005-2006 winter season. Seasonal flights to destinations such as Orlando and Laughlin, Nevada, would be added in subsequent years along with added frequency to each of these destinations.
- The **Low Cost Carrier Scenario** consists of the entry of a low cost carrier offering 10 to 15 daily jet flights providing point-to-point service to four new domestic markets based on a Southwest Airlines-type model. Operations were assumed to be conducted using medium-sized narrowbody aircraft, such as the B-737-700 (with approximately 145 seats). This low-cost carrier service was assumed to be initiated in 2012 with four flights per day to Chicago Midway Airport and four flights per day to Denver International Airports. Northwest is presumed to respond by adding service. By 2015, flights would be added to Phoenix, followed by the addition of flights to the Baltimore-Washington DC metropolitan area in 2018. By 2024, approximately 15 daily flights would be provided to these four new domestic markets.

Exhibit 1 illustrates the enplaned passenger and total operations forecasts under the various demand scenarios. In general, single-carrier service to one or two hubs, as anticipated under the Baseline Forecast and the Second Hub Scenario, represents steady, but slow, increases in numbers of passengers and operations at the Airport. The initiation of service by a low cost carrier at the Airport would be anticipated to invite a more aggressive response from Northwest, both with respect to the accelerated start-up of service to a second hub and the replacement of Saab aircraft with regional jets. The result of the competition would be an immediate and significant build-up of service at the Airport.

Exhibit 1



Sources: KRAMER aerotek, inc., and Ricondo & Associates, Inc. (forecasts)
Prepared by: Ricondo & Associates, Inc.

The assumptions underlying the various alternative scenarios included general growth, as identified in the Baseline Forecast, in general aviation activity based on national trends and consideration of flight school and military activity, including the addition of activity resulting from relocation of the Minnesota National Guard's helicopter operations to the Airport. The levels of general aviation and military operations do not fluctuate by forecast scenario.

Planning Activity Levels (PALs) and a Sensitivity Level (SL) were defined for the enplaned passenger and aircraft operations forecasts. The purpose of the PALs and SL is to guide Airport management in determining when, according to actual activity and not calendar years, Airport facilities would need to be expanded. By linking Airport expansion decisions to activity levels and not specific dates, the City can be flexible and responsive with regard to facility development. The PALs and SL represent benchmarks for expansion and correlate to the demand scenarios as follows:

- PAL 1 – Baseline Forecast 2009
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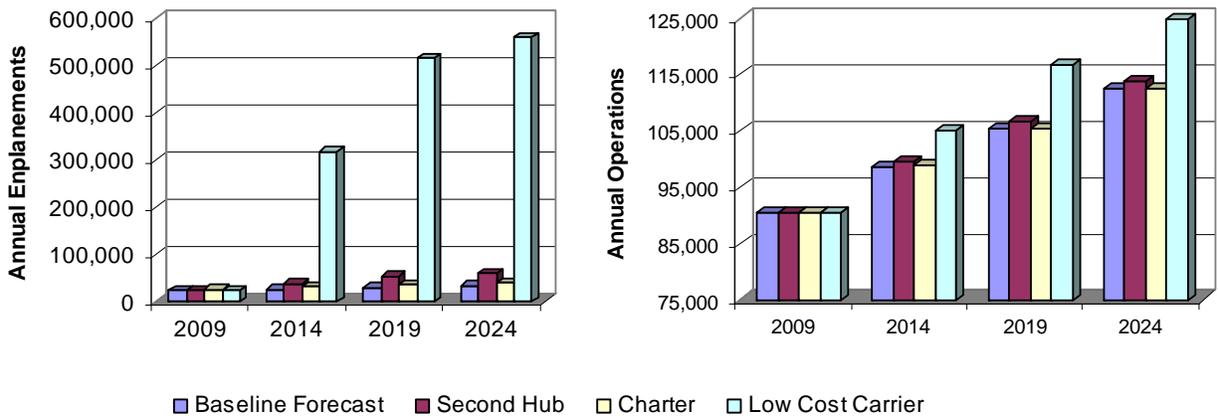
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3. Development Alternatives

As defined by Airport stakeholders, the Master Plan goals that are relevant to identifying a preferred Airport development plan include: protect for future Airport development beyond the 20-year planning period to an ultimate Airport development plan and prepare a plan for logical, incremental Airport development to serve near-term growth (typical 20-year Master Plan planning period).

Although demand for specific facilities was not established to define requirements for an ultimate plan, the Airport stakeholders agreed on the eventual need for a parallel runway to increase airfield capacity and property acquisition to support that development and provide a buffer zone between the ultimate Airport site and the surrounding area. Stakeholders desired an ultimate site and layout that could serve as a second commercial service airport for the region, accommodating numerous daily commercial passenger flights, general aviation growth, and collateral development to generate additional revenue. Thus, long-term development (i.e., the ultimate plan) alternatives were first identified and evaluated to ensure that near-term development would support and form the basis for ultimate development. Initially, 21 runway configuration alternatives were identified, evaluated, and refined to three primary alternatives and a no-action alternative. The alternatives included extensions to existing runways and a new parallel runway northwest or southeast of Runway 5-23 or northeast or southwest of Runway 13-31 at various critical separations. Ultimately, through several screening analyses, a preferred ultimate Airport Development Plan (ADP) was identified.

4. Recommended Airport Development Plan

The recommended Airport Development Plan, shown on **Exhibit 2**, represents, in conceptual form, all development that should be implemented if growth were to occur as forecast. The ADP can be considered a completed conceptual picture of the Airport at the end of the 20-year planning period. It should be noted that the ADP represents one vision of how facilities could be developed. Actual development may not mirror that shown on the ADP due to factors such as tenant preferences for facility configuration. However, the ADP serves as a guideline for the future Airport layout. The ADP was derived based on the ability to incrementally achieve the preferred ultimate plan development concept.

The ADP is characterized by the following:

- Airfield improvements include extensions to the Airport's two existing runways and development of a 4,200-foot general aviation training runway.
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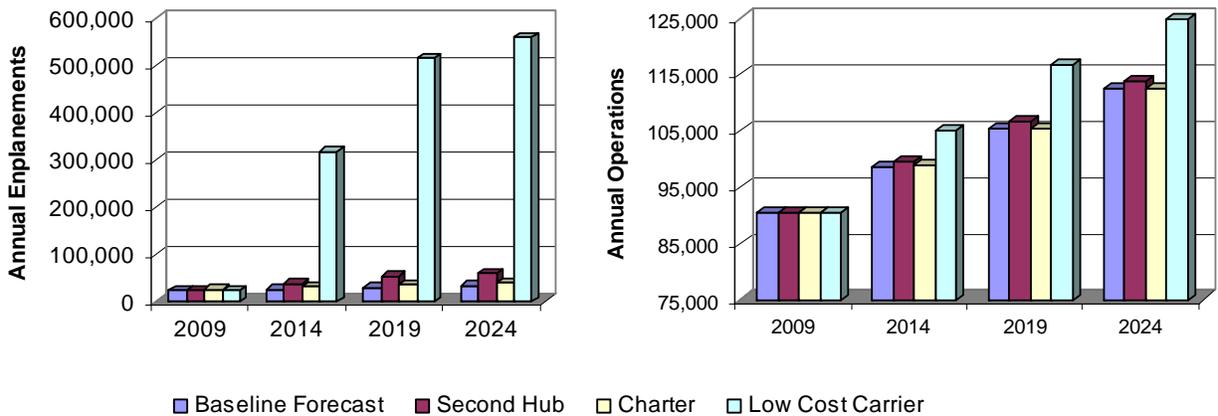
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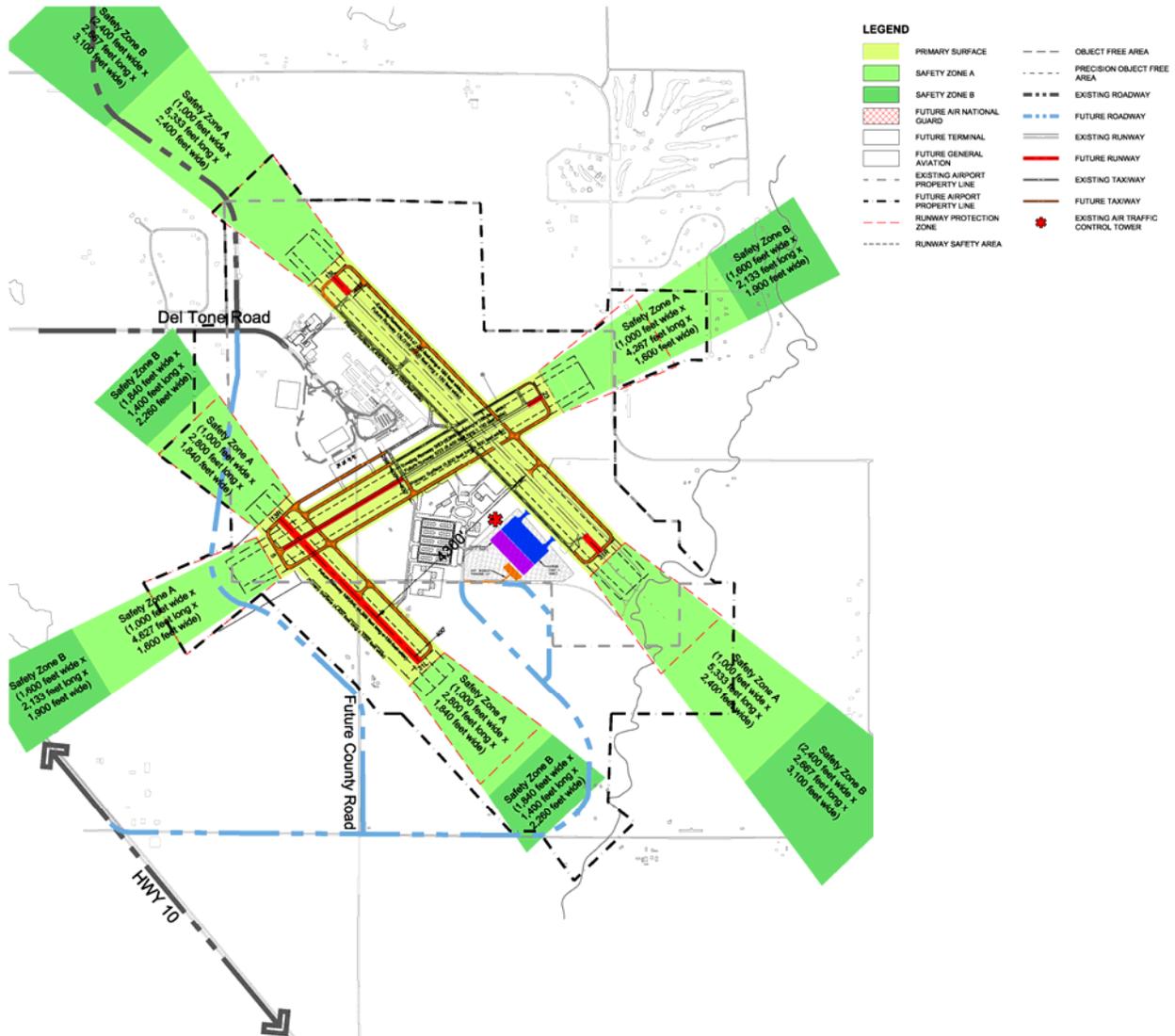
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Exhibit 2

Airport Development Plan



Source: Ricondo & Associates, Inc.
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The Ultimate Airport Development Plan will serve as the guide for land acquisition in order to protect the surrounding area for future Airport expansion. In addition, extension of the proposed general aviation training runway to 7,000 feet is included in the Ultimate ADP.

5. Development Timing

Implementation of the ADP should be based on demand and the need to provide additional capacity or replace facilities that are at the end of their useful lives. Ideally, the project elements should be implemented in sufficient time to accommodate growing demand, but not so early that facilities are underutilized and revenues do not materialize sufficiently to pay for the improvements. The ability to time implementation correctly requires an understanding of the factors that trigger the need for various project elements, ongoing monitoring of activity data, and an understanding of the length of

time it takes to complete projects under the Airport's and City's organization structure. Specific qualitative factors that should trigger implementation of various development elements of the ADP are illustrated in a simple decision tree on **Exhibit 3**.

In general, projects to support the Baseline Forecast would be implemented in the near-term (i.e., 2006 to 2013). These projects include land acquisition to support the ultimate ADP. Mid-term development could include projects to support the Second Hub or Charter Scenario operations, if either type of activity develops at the Airport, which would likely occur between 2011 and 2020. Finally, long-term development could support the Low Cost Carrier Scenario activity, including the development of terminal and associated landside facilities as well as extension of the crosswind runway and development of the 4,200-foot general aviation training runway.

6. Environmental Considerations

Environmental issues that could result from implementation of the ADP were quantitatively or qualitatively assessed to provide an indication of the type of environmental processing that may be required. Potential areas of impact associated with such development projects typically include consideration of areas exposed to significant levels of aircraft noise, as defined by exposure to 65 dBA day-night average sound level (DNL) and above; areas of potential land acquisition; and areas where the ground would be disturbed due to the development projects themselves. Exhibit 2 depicts the land acquisition and project footprint areas.

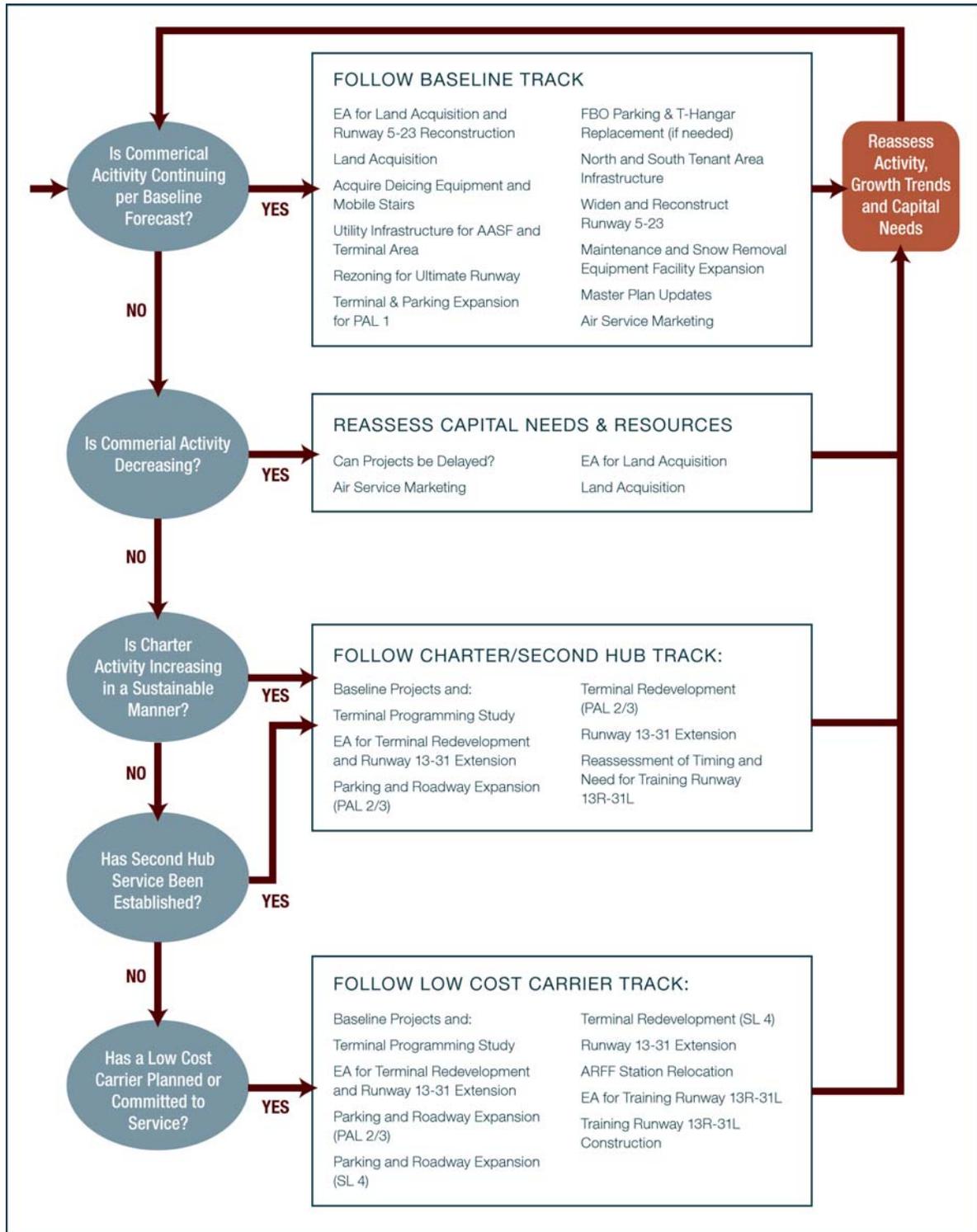
Exhibit 4 illustrates the existing (2004) and projected (SL 4) noise exposure contours, based on specific operational and physical conditions at the Airport. As shown, the DNL 65 noise exposure contours for both existing and future conditions are entirely within the Airport boundary and no homes, schools, or other noise-sensitive facilities would be affected.

Based on the development associated with ADP projects, the following potential environmental impacts have been preliminarily identified. More specific environmental analyses will be required when individual projects near the development stage and are submitted for environmental review.

- Social and induced socioeconomic impacts could result from acquisition and relocation of several residences around the Airport, as could changes to the surrounding roadway network, and these impacts would require consideration.
- Air quality analyses would likely be necessary to evaluate potential operational and construction impacts of projects, especially considering that St. Cloud is a maintenance area for carbon monoxide.
- Construction of individual ADP projects could affect storm water drainage, water wells, and wetlands at the Airport, and may require a National Pollutant Discharge Elimination System (NPDES) permit, Construction Stormwater Permits, review of Storm Water Pollution Prevention Plans (SWPPPs), a Section 404 (of the Clean Water Act) permit from the U.S. Army Corps of Engineers, and a permit from the Sherburne Soil and Water Conservation District.
- Department of Transportation Act, Section 4(f) lands evaluations would consider potential direct and indirect impacts to the Sand Prairie Wildlife Management Area.

Exhibit 3

Decision Tree

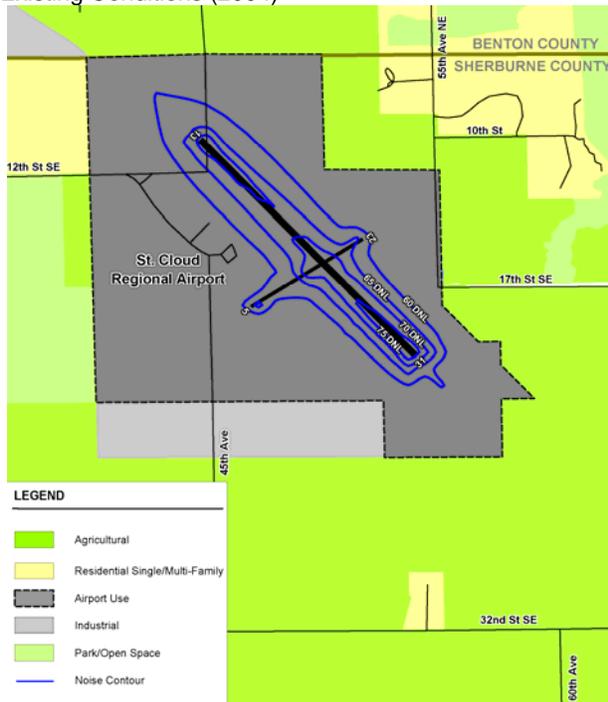


Source: Ricondo & Associates, Inc., December 2005
 Prepared by: Ricondo & Associates, Inc.

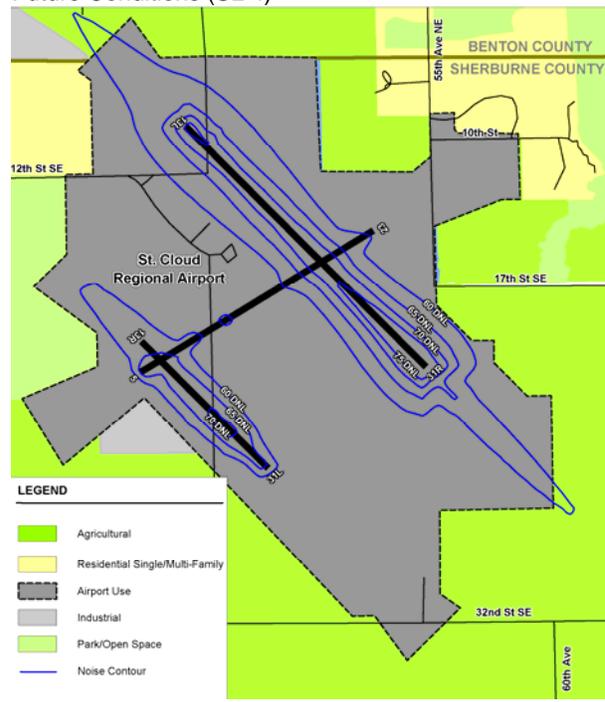
Exhibit 4

Noise Exposure Maps

Existing Conditions (2004)



Future Conditions (SL 4)



Source: Ricondo & Associates, Inc.
 Prepared by: Ricondo & Associates, Inc.

- The State Historic Preservation Office should be contacted regarding potential impacts to archaeological resources related to development in the vicinity of the Elk River, as well as the potential historical significance of any properties proposed to be acquired as part of the ADP.
- Potential fish, wildlife, and plant impacts may require various permits, such as a biological opinion if the project were to affect a federally protected species; an incidental take permit with a jeopardy/adverse modification biological opinion, and coordination with the Minnesota Department of Natural Resources given potential impacts to flora, fauna, and threatened and endangered species.
- Potential impacts to the Elk River floodplains from the grading of land and the approach lighting system associated with the extension of Runway 13L-31R should be considered.
- Farmland impacts are anticipated, as ADP projects would remove approximately 423 acres of farmland from production.

7. Financial Viability

The development projects recommended in the Master Plan would be funded from several sources. The City of St. Cloud will maximize the use of federal and State funds to leverage local investment. Potential funding sources include:

- Federal Grants-in-Aid under the Airport Improvement Program (AIP)
- Passenger facility charges
- Minnesota Department of Transportation, Airport Development Section grant programs
- State bond funds earmarked for property acquisition
- Third-Party Funds
- Local Funds

Additionally, a business plan was developed to provide a set of standards, financial tools, and action items to enable the City to better manage and develop the Airport, consistent with standard practices at similar airports.

8. Conclusion and Next Steps

Given regional conditions, St. Cloud Regional Airport has the potential to play a more significant role in the provision of air service in central Minnesota. However, it is essential that Airport management begin planning for this potential to position the Airport to accommodate growth when the time is right. To realize the Airport's potential, it is recommended that the City accomplish the following tasks in the near-term future (over the next five years):

- Complete the environment prerequisites for land acquisition.
- Secure federal, State, and other funding as soon as possible; acquire land necessary to implement the Master Plan recommendations; and establish the long-term configuration of the Airport.
- Establish appropriate land use and zoning restrictions necessary to protect the land from urban encroachment and development not compatible with commercial airport operations.
- Arrange for the services and equipment to be available on the Airport to attract charter airline service (ground handling and services equipment).
- Revise and update the Airport's air service development program to recognize the evolution of the airline industry in recent years. Implement the program to attract additional scheduled and charter air service while retaining the existing Northwest Airlink (Mesaba Airlines) service. Make at least eight sales calls per year to airline schedule and air route development departments.
- Position the Airport to take advantage of opportunities resulting from the Metropolitan Airports Commission's divestitures of less lucrative activities or activities that cannot be accommodated at MAC-run airports due to various constraints (e.g., land availability, capacity, congestion, etc.).
- Ensure that lease agreements with new tenants benefit the Airport enterprise in terms of revenues and needed support services.
- Support Statewide initiatives that would make State grants to the Airport more reliable.