



City of  
**Peterborough**

---

**To:** Members of the General Committee

**From:** Kyle Bruce, Airport Superintendent

**Meeting Date:** June 23, 2022

**Subject:** Peterborough Airport Master Plan Recommendations, Report ASIC22-010

---

## **Purpose**

A report to provide an overview of the recommendations and associated presentation for the Peterborough Airport Master Plan.

## **Recommendation**

That Council approve the recommendation outlined in Report IPSAIR22-010, dated June 23, 2022, of the Airport Superintendent as follows:

That the report and associated presentation be received for information.

## Budget and Financial Implications

The estimated capital costs associated with the recommendations outlined in the Peterborough Airport Master Plan are approximately \$80,900,000.00 over a 15-year horizon of the plan, as summarized in Table 1 – Summary of Capital Costs for Airport Master Plan Recommendations.

Future Council will determine the pace of investment and implementation timeline of the recommendations outlined in the Peterborough Airport Master Plan over a 15-year horizon based on infrastructure priorities.

**Table 1 – Summary of Capital Costs for Airport Master Plan Recommendations**

Category	Short-Term	Medium-Term	Long-Term
	2023-2027	2028-2032	2033-2037
Infrastructure Rehabilitation and Reconstruction	\$790,000	\$9,201,000	\$11,842,000
Servicing and Land Acquisitions*	\$25,150,000	\$1,147,000	\$600,000
Passenger Processing Facility Development**	\$2,847,333	\$0	\$0
Infrastructure Expansion	\$21,103,000	\$4,404,000	\$2,857,000
Airport Plans and Studies***	\$965,000	\$0	\$0
<b>Total – Per Planning Horizon</b>	<b>\$50,855,333</b>	<b>\$14,752,000</b>	<b>\$15,299,000</b>
<b>Total – All Planning Horizons</b>	<b>\$80,906,333</b>		

### Notes:

All costs in the summary table are in 2022 Canadian Dollars and have not been adjusted for inflation in the respective implementation years.

\*Approximately \$24,000,000 of the short-term capital requirements are dedicated toward servicing replacement and upgrades. This is identified as a need for the airport, existing water and sewer lines are due for replacement.

\*\*Passenger processing facility costs assume 33% investment by the City through P3 arrangement.

\*\*\*A \$500,000 budget is included to complete the federal zoning process.

Funding for capital projects will require further analysis. The budget implications could be substantially reduced if Provincial and/or Federal Grants can be obtained. Study and identification of various airport governance models could also provide opportunity for additional funding or partnership. A variety of the capital projects recommended in the Peterborough Airport Master Plan already reflected in the current capital budget forecasts, which is updated annually as part of the budget development process.

## **Background**

Council, at their meeting of November 23, 2021, passed a motion to update the Peterborough Airport Master Plan, identifying the airport as an important economic development tool for the creation of jobs.

The Airport Master Plan represents the blueprint for long-term development by guiding future expansion at the Peterborough Airport and outlining the business strategy to position the airport as an economic leader to meet future aviation demand and create employment.

Since the previous Airport Master Plan update in 2009, the Airport has experienced exceptional growth in fulfilling the business and development plans. As of 2022, it is estimated that the airport contributes over \$90 million to GDP annually with an estimated 507 positions directly employed by over 20 businesses at the airport.

### **Timeline for Development of the Airport Master Plan**

The industry standard for development of an Airport Master Plan typically requires a timeline of 10 to 12 months. Recognizing Council's request to have this project completed in a shorter period, additional studies are required to deliver various detailed elements of the Airport Master Plan and will be presented through the annual Capital budget process in future years.

### **Previous Studies**

In 2008, City Council recognized an opportunity for growth approving recommendations in a staff report PLPD08-044 regarding a \$7 million multi-year Airport Development Program (2008-2013). The first phase of the program was the creation of Skyway Drive allowing the airport to access new areas for growth. The second phase was the creation of the General Aviation Area and extension of Apron 1 to the North.

In 2009, LPS Consulting completed a Business Plan and draft Airport Master Plan. Within the year, Council adopted a series of further recommendations outlined in Report PLPD09-014 "Business Case for Infrastructure Development – Peterborough Airport".

This business case was used to apply for federal and provincial grants and highlighted high potential markets including Maintenance Repair and Overhaul, Engine Overhaul Facilities, Aviation Education, and Aerospace Manufacturing. A second recommendation was later passed to create an Airport Master Plan.

In 2010 an additional investment of \$21 million was made by the City of Peterborough, Provincial, and Federal governments to expand the existing 5000-foot-long runway to 7000 feet, create a new airport terminal, and prepare lots for private and commercial development. The operating surfaces were strengthened to allow for use by larger aircraft, such as the Airbus A320 and Boeing 737.

In 2013 a capital investment of \$6 million was made by the City to facilitate the relocation of Seneca College from Buttonville Airport; involving the partial extension of Taxiway Bravo, a new 2000 ft long cross wind runway with a parallel taxiway, and private aircraft parking apron.

In 2017 WSP completed the Strategic Development Plan, building on the previous plans including new business opportunities and land use planning. The Strategic Development Plan was adopted by Council through Report PLAIR18-002 dated February 5, 2017.

### **Airport Master Plan**

The Airport Master Plan defines the developmental concept for the airport that protects options for airport operations and future development over an extended period (15 years) to ensure the airport is positioned to embrace new opportunities while serving the needs of the City of Peterborough, region, aviation operators and the aerospace industry.

The primary objective of the airport master plan is to develop an attainable phased development plan concept that will satisfy the needs of the airport in a safe, efficient, economical, and environmentally sound manner.

Serving as a guide to decision makers, the plan is a description of the most appropriate development options regarding the most appropriate land use strategy, innovative revenue generation, facilities and services required to ensure the airport meets its strategic objective to be a regional economic driver through creation of jobs and opportunity.

### **Aviation Demand and Economic Impact**

The Peterborough Airport is part of the Southern Ontario Airport Network of 11 Airports and represents 55,300 jobs supported by the operations of these airports. The aviation industry is recovering from the global COVID-19 pandemic as passenger volumes and flights increase. The population of Southern Ontario in 2043 is expected to reach 15.5 million with a total of \$1 trillion of GDP. Regional growth is expected to drive aviation demand in Southern Ontario.

The Airport's economic impact to Gross Domestic Product (GDP) continues to grow increasing from \$41 million in 2009 to \$90 million in 2022, representing an annualized growth of approximately 9% per year. See Table 2 – Airport Economic Impact

**Table 2 – Airport Economic Impact**

		<b>2009</b>	<b>2016</b>	<b>2022<sup>1</sup></b>
<b>Jobs (FTE)</b>	Direct	251	382	507
	Indirect	171	246	87 <sup>1</sup>
	Induced		171	88 <sup>1</sup>
	<b>Total</b>	<b>422</b>	<b>799</b>	<b>682<sup>1</sup></b>
<b>GDP</b>	Direct	\$26,000,000	\$36,510,000	\$51,830,000
	Indirect	\$15,000,000	\$19,350,000	\$8,050,000 <sup>1</sup>
	Induced		\$18,180,000	\$30,460,000 <sup>1</sup>
	<b>Total</b>	<b>\$41,000,000</b>	<b>\$74,030,000</b>	<b>\$90,340,000<sup>1</sup></b>
<b>Labour Income</b>	Direct	N/A	\$33,290,000	\$43,540,000
	Indirect		\$12,070,000	\$5,280,000 <sup>1</sup>
	Induced		\$5,750,000	\$3,970,000 <sup>1</sup>
	<b>Total</b>	<b>N/A</b>	<b>\$51,110,000</b>	<b>\$52,790,000<sup>1</sup></b>
<sup>1</sup> Note: Change in Statistics Canada multipliers associated with COVID 19 for 2022. Fluctuation in staffing levels on airport between various employers with wage variations. Change in GDP is largely impacted by capital expenditures of on-site businesses.				

### Community and Stakeholders Engagement

The project team directly engaged with over 80 stakeholders representing 38 organizations including but not limited to Mayor and Council, other municipalities, NAV Canada, environmental agencies, off and on airport businesses, air operators, etc.

Online surveys through Connect Peterborough were targeted across the catchment area and provided a total of 623 residential and 16 business responses. The information received as part of the community and stakeholder engagement supported development of the Peterborough Airport Master Plan.

## **Business Development and Growth Strategies**

Business development strategies to achieve activity growth in Peterborough's General Aviation and Aerospace Sectors, create employment to close the annual cost revenue gap were prepared as part of the Peterborough Airport Master Plan. The following list was identified as key business strategies that have potential for success within the 15-year timeframe of the Master Plan.

### **a) Passenger Air Services and Passenger Facility Requirements**

Strategies for introduction of passenger air services include expansion of existing chartered air services, introduction of sun destination flights and introduction of scheduled passenger service through an Ultra Low Cost Carrier (ULCC) service utilizing a narrow-body aircraft with a targeted commencement of 2026.

The feasibility of passenger service was assessed and included as part of the public and stakeholder engagement. A catchment area for the airport was defined identifying a market of over 1.2 million potential air travellers. Dynamic shifts in the aviation industry including the introduction and expansion of Ultra-Low-Cost Air Carrier (ULCC) models and the expansion of destination charter flights now provide a new opportunity for the Airport to attract passenger services to the region. Regional passenger services were identified as a medium-term opportunity but could be accommodated at anytime over the short-term cycle.

Introduction of passenger services provide opportunity for the airport to generate new revenues, gain access to Federal Airport Capital Assistant Program (ACAP) funding and provide economic benefit to the region.

Low passenger and flight movement growth scenarios were assessed within the study; the following growth opportunities were identified over the short-term planning cycle of the master plan (1-5 years):

- The introduction of one weekly scheduled ULCC flight;
- Expansion of the existing boutique destination charter services; and
- Introduction of sun destination flights, 16 per year to southern destinations (i.e., Florida, Caribbean, Mexico);

Medium to long-term opportunities related to passenger service were identified as:

- Organic expansion of ULCC flights;
- Increasing destination charter services;
- Introduction of regional service (i.e., flights to Montreal); and
- Expansion of sun destination flights.

The existing Air Terminal building has a peak hourly capacity for 38 passengers and has been used by the Boutique Charters to date as a temporary solution for flights with approximately 130 passengers. There is an existing demonstrated short term need for a passenger facility.

A new Low-Cost Basic Passenger Processing Facility has been recommended as part of the Airport Master Plan. The facility is recommended at 1500 m<sup>2</sup> with an additional 560 m<sup>2</sup> of office space to accommodate a peak capacity of 340 passengers. Various concepts are being considered and include a main-floor warehouse style shared use space, second floor leasable space with funding through a public-private partnership.

Further study of the Passenger Processing Facility requirements has been recommended and would include detailed planning, costing, financials, etc.

## **b) General Aviation and Aerospace**

The Peterborough Airport currently supports a robust and healthy cluster of general aviation and aerospace organizations that provide important services within the domestic and international aviation industry. Organic business growth is anticipated to continue at the Peterborough Airport. The Master Plan has identified strong potential to support a wide range of general aviation and aerospace opportunities within the 15-year horizon of the study including:

- i. Electric Aircraft Support
- ii. Aerospace Research and Development
- iii. Aerospace Education
- iv. Recreational General Aviation
- v. Small Air Charter Services
- vi. Aircraft Maintenance Operators
- vii. Major Aerospace Manufacturing and Maintenance, Repair and Overhaul (MRO) Facilities
- viii. Fixed Based Operator
- ix. Supporting Flight Training Growth

## **Capital Costs of Infrastructure and Design Requirements**

The Peterborough Airport's primary Runway 09-27 is 7000 feet long by 100 feet wide and classified as non-instrument in accordance with Transport Canada TP312 4<sup>th</sup> Edition Aerodrome Standards and Recommended Practices. The runway is supported by a parallel taxiway spanning from the east end of the runway to the midpoint and two large aircraft parking aprons.

The primary runway, taxiways and aircraft parking surfaces were designed to accommodate Boeing 737 and Airbus A320 series aircraft, there are no proposed changes associated with the design aircraft.

Due to surrounding wetlands and ground conditions, the airport faces development constraints and a relatively limited area available for future development. Study included assessment of the following, as described below:

- a) Level of Service to the Primary Runway
- b) Widening the Primary Runway
- c) Servicing and Land Acquisitions
- d) Infrastructure Expansion
- e) Passenger Processing Facility Development
- f) Additional Airport Plans and Studies
- g) Infrastructure Rehabilitation and Reconstruction

The costs associated with recommendations are summarized in this report under the section Budget and Financial Considerations, Table 1 – Summary of Capital Costs for Airport Master Plan Recommendations.

#### **a) Level of Service Improvements to the Primary Runway**

The cost benefit of improving the level of service to Runway 09-27 was assessed as part of the study. A change in the level of service of the primary runway from non-instrument to non-precision should provide increased accessibility that could improve the airports competitive position to attract business and potentially enter new markets. Increasing the level of service would require the airport to adhere to all the latest standards including obstacle limitation surfaces, runway and taxiway grading, airfield visual aids (markings and lighting), and other requirements.

Improved weather data was used to analyze the benefit to airport availability of lowering the Minimum Decent Altitudes (MDA) associated with the Instrument Flight Procedures (IFPs) for Runways 09 and 27 at Peterborough Airport.

Improving the runway's level of service to non-precision would allow aircraft, during low visibility and inclement weather, to descend to an altitude of 250 feet above the runway; in the current runway environment, aircraft cannot descend lower than 500 ft (non-instrument).

The following definitions describe non-instrument and non-precision runways:

**Non-instrument:** a runway intended for the operation of aircraft using visual approach procedures, or an instrument approach procedure down to a height above aerodrome (HAA)/ height above threshold (HAT) not lower than 500 ft.

**Non-precision runway:** A runway served by visual and non-visual navigation aids that provides at least lateral guidance adequate for instrument approach procedure down to



a HAA/ HAT lower than 500 ft but not lower than 250 ft, and with an approach visibility not less than  $\frac{3}{4}$  Statute Miles (RVR4000).

The percentage of improvement in availability of changing the runways level of service from non-instrument to non-precision was determined to be an annualized increase of 1.62%.

Seasonally in the winter, availability would increase by 3.35% and 0.50% in the summer. The average usability of the runway's current conditions (non-instrument) was determined to be 96.83%. Improving the runways classification to non-precision classification would be result in an annualized improvement of 1.62%, to 98.45%.

The actual benefit realized is dependent on the nature of current and future airport users (i.e., time of day, time of year, flight frequencies, etc.).

Civil construction costs associated changing the primary runways level of service was estimated at approximately \$7 million to relocate existing portions of Bravo taxiway; additional costs would include obstacle removal, establishment of obstacle removal easements, relocation and replacement of airfield visual aids and in-field grading and drainage relocation.

Consultation with large airline operators determined that improving the level of service for runway 09-27 was not an absolute requirement, providing that weather analysis data could be used to support a viable business case to determine scheduled flight times within a range offering the most usability.

It is recommended that the City continue to monitor advancements in technologies and other changes within the short-term planning horizon of the Master Plan. If, for example, new Instrument Flight Procedure (IFP) design criteria is introduced and Transport Canada standards are revised, or if an Air Traffic Control Tower is commissioned, there may be opportunities to provide a Non-Precision level of service for Runway 09-27 without major infrastructure modifications.

### **b) Widening the Primary Runway**

Within the scope of the study, the project team investigated the requirement and associated costs with increasing the width of the primary runway. Consultations with stakeholders identified little demand for increasing the runway width above 30 meters (100 feet), and reconfirmed that the operational width is sufficient to support narrow body aircraft operations (Boeing 737 or Airbus A320 series).

The estimated costs for widening the runway to 45 meters (150 feet) is \$9.3 million.

### **c) Servicing and Land Acquisitions**

Costs related to servicing and land acquisitions include replacement and upgrade of the existing water services at the airport, water storage reserves for fire protection and a

new pumping station. Land acquisitions in the short term are targeted towards acquiring property for the extension of Taxiway Bravo.

#### **d) Infrastructure Expansion**

Infrastructure expansion in the short term, includes extension of Taxiway Bravo and continued preparation of the East Development Area located East of Airport Road.

The extension of Taxiway Bravo at the Peterborough Airport is an initiative that will mitigate risk, enhance safety, and improve efficiency of operations at the airport. Extension of the taxiway will require acquisition of properties, or a portion of, to the North of the runway. Section of these properties are being considered as a long-term development reserve for the airport.

Additional projects include various building and lot preparations to operationally support future operations and continue to facilitate growth at the airport.

#### **e) Passenger Processing Facility Development**

Capital costs associated with development of a passenger processing facility assume a 1/3 cost sharing partnership with private. Additional costs include access roads, parking lot and a pay for parking station.

#### **f) Additional Airport Plans and Studies**

Further studies recommended include an airport governance study, federal zoning process, Passenger Processing Facility Feasibility Study, Air Service Marketing, Re-Evaluation of Non-Precision Operations Study, and an Airport Master Plan Update.

#### **g) Infrastructure Rehabilitation and Reconstruction**

The capital costs for rehabilitation and reconstruction airside pavement infrastructure has been accounted for in the financial and forecasts including all runways, taxiways, and aprons.

## **Summary**

The Peterborough Airport Master Plan was developed in accordance with industry standards and includes a phased in development plan to position the airport by guiding future expansion and outlining the business strategy to position the airport as an economic leader to meet future aviation demand and create employment.

As of 2022, it is estimated that the airport contributes over \$90 million to GDP annually with an estimated 507 positions directly employed by over 20 businesses at the airport. The plan has identified business development and growth strategies that include a supporting capital plan to position the airport for continued growth with passenger

service being a new focus and key pillar in revenue generation. As a result of the restricted timeline of the study, further studies and analysis are recommended to further define identified capital requirements.

A final report and presentation will be delivered to council during the General Committee scheduled July 11, 2022.

Submitted by,

Jasbir Raina, CEng., M.Tech, MBA, PMP, MIAM  
Commissioner, Infrastructure and Planning Services

**Contact Name:**

Kyle Bruce  
Airport Superintendent  
Phone: 705-742-7777 Ext. 2171  
Toll Free: 1-855-738-3755  
E-Mail: [kbruce@peterborough.ca](mailto:kbruce@peterborough.ca)

**Attachments:**

Appendix A – 2022 Peterborough Airport Master Plan Presentation  
Appendix B – Capital Plan and Financials



# Peterborough Airport Master Plan Update

DRAFT | June 21, 2022

**HMAERO**  
AVIATION CONSULTING  
[www.hmaero.ca](http://www.hmaero.ca)

---

# Overview

---

1. Master Plan Update Process and Background
2. Airport Profile
3. Level of Service
4. Activity Forecast
5. Development Planning
6. Growth Strategies (Under Development)
7. Financials and Implementation Plan
8. Questions

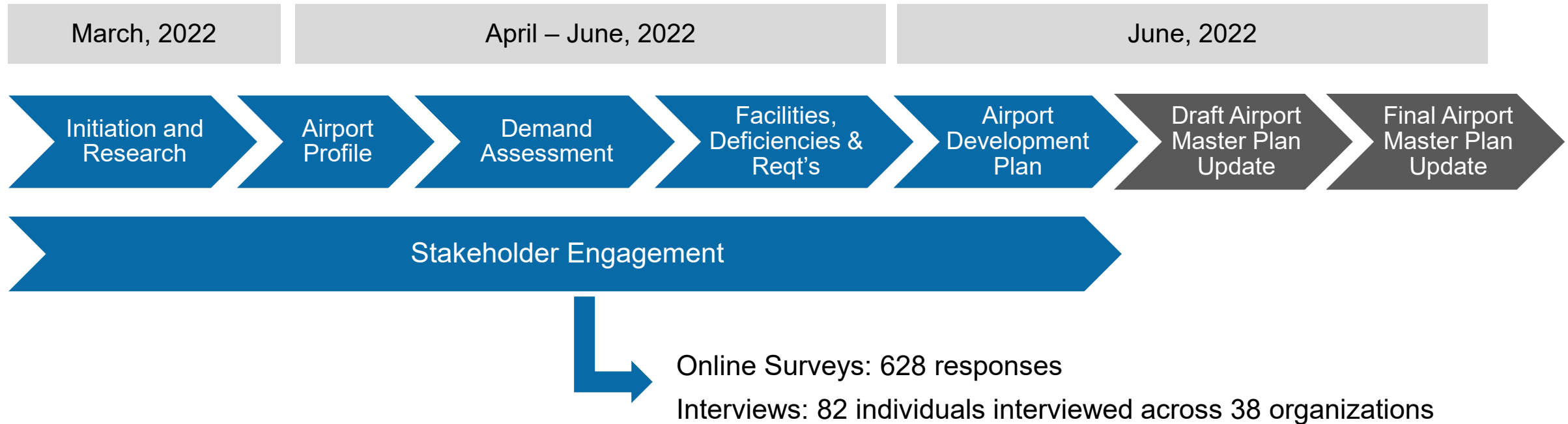




An aerial photograph of a campus, likely a university or research institution, is shown with a semi-transparent blue overlay. The image captures various buildings, parking lots, and roadways. The text "Master Plan Process and Background" is centered in white, bold font over the middle of the image.

# Master Plan Process and Background

# Master Plan Process



# Background and Objectives

- Study Update Prepared by HM Aero Staff in Close Coordination with the City of Peterborough
- 15-Year Study Time Horizon (2023-2037)
- 5-Year Planning Horizons
- Re-Examines Economic Benefits to the community
- Stakeholder Engagement and Opportunity Identification
- Activity Forecasts
- Infrastructure Assessment (NP Ops. and Rwy Width)
- Infrastructure Requirements & Strategies for Growth
- Guide Future Development – Cost Effective and Maximum Value



# Context Review

## Previous Studies

- 2009 Master Plan
- 2010 and 2015 Marketing Plan and Studies
- 2017 Strategic Plan

## Industry Review - Changes

- Passenger Air Service Markets
- Local Passenger Demand
- New Technologies
- Uncertain Future For Pickering
- Toronto Pearson Congestion

## Regulatory Context

- City, County, Townships (x2)
- Airport Outside City Limits
- Significant Investment – Benefits All
- Noise Exposure and Other Challenges





An aerial photograph of an airport terminal and surrounding infrastructure, including runways and taxiways. The image is overlaid with a semi-transparent blue filter. The terminal building is a large, rectangular structure with a central section and several wings. There are multiple parking lots and service areas around the terminal. The runways are visible as long, straight paths with dashed center lines. The surrounding area includes fields and some smaller buildings.

# Airport Profile

# Ownership and Operation

- Owned by the City of Peterborough
- Operated by Loomex Group through a contract
- Maintained as a Transport Canada-certified airport and subject to an extensive series of regulatory obligations – e.g., operational standards, infrastructure requirements, safety management
- Publicly available 24 hours per day, 365 days per year





# Infrastructure

- Runways: 2 – Capable of supporting regional airliners and corporate aircraft
- Taxiways: 9
- Aprons: 4
- Lighting to support nighttime operations on the primary runway
- GPS-based Instrument Approach Procedures
- Terminal building with a designed capacity of approximately 19 passengers
- Weather observation site
- Fleet of mobile equipment and maintenance facilities used to ensure year-round usability



# On-Site Aviation Businesses

- Airtech – Aircraft modifications and repairs – Fixed and Rotary Wing
- Flying Colours – Maintenance, repair, and overhaul services, completions and engineering services for business aircraft
- Kadex Aero Supply - Aircraft parts and supplies distributor
- Loomex Group – Airport operator/Training/Emergency Preparedness
- Stewart Aviation – Aviation fuel / corporate ground handling
- Seneca College - Aviation Post Secondary Education
- Toronto Avionics - Service facilities and sales for avionics equipment
- Vector Air – Hangar Operator/Aircraft Sales
- W.M. Aeroflight – Flight training

# Aircraft Operators

- Ontario Provincial Police, Royal Canadian Air Force, and air ambulance movements
- Flight training by Seneca College and W.M. Aeroflight
- Vacation Tours operated by Stewart Travel
- General Aviation Tenants (Local and Itinerant)
- Other GA/Corporate Users



# Stakeholder Engagement



## Online Surveys

- Resident Survey – 623 Responses
- Business Survey – 16 Responses
- Top Destinations – Caribbean (254), Florida (179), Western Canada (216)



## Online Public Open House

- April 25<sup>th</sup>, 2022
- Information about the project and engagement opportunities
- 8 Individuals Participated



## Stakeholder Interviews

- Direct outreach by HM Aero and City
- Interviews with Individuals / Organizations with Interest in, or knowledge of YPQ
- Mayor and Council, ASIC, Municipalities, Businesses, Tenants, NAV CANADA, Off-Airport, etc.



## Airline Consultations

- National, Regional, & Low Cost operators
- Representative Sample of Carriers Consulted
- Interest in Peterborough to Serve East GTA/ Durham/ Pboro etc.



## Economic Benefit

- In 2016, the airport directly generated \$74 Million in GDP, \$51 Million in labour income, and 382 jobs on airport
- In 2022, the airport directly generated \$90 Million in GDP, \$52 Million in labour income, and 507 jobs on airport
- Differences between 2016 and 2022 impacts attributable to changes in Stats Canada multipliers (COVID-19), fluctuations in employment by business types, and significant capital expenditures airport businesses

		2016	2022
<b>Jobs (FTE)</b>	Direct	382	507
	Indirect	246	87
	Induced	171	88
	<b>Total</b>	<b>799</b>	<b>682</b>
<b>GDP</b>			
<b>GDP</b>	Direct	\$36,510,000	\$51,830,000
	Indirect	\$19,350,000	\$8,050,000
	Induced	\$18,180,000	\$30,460,000
	<b>Total</b>	<b>\$74,030,000</b>	<b>\$90,340,000</b>
<b>Labour Income</b>			
<b>Labour Income</b>	Direct	\$33,290,000	\$43,540,000
	Indirect	\$12,070,000	\$5,280,000
	Induced	\$5,750,000	\$3,970,000
	<b>Total</b>	<b>\$51,110,000</b>	<b>\$52,790,000</b>





An aerial photograph of a campus or industrial site, overlaid with a semi-transparent blue filter. The image shows various buildings, parking lots, and roads. The text "Level of Service" is centered in white. 

# Level of Service



## Non-Precision Level of Service

- Airport currently has a non-instrument designation allowing for a minimum descent altitude of ~500 feet
- Improvement to non-precision could reduce MDA to 250 feet and thereby increase airport availability
- Strategies to achieve non-precision level of service were investigated and costs estimated



# Benefit – Improved Airport Availability

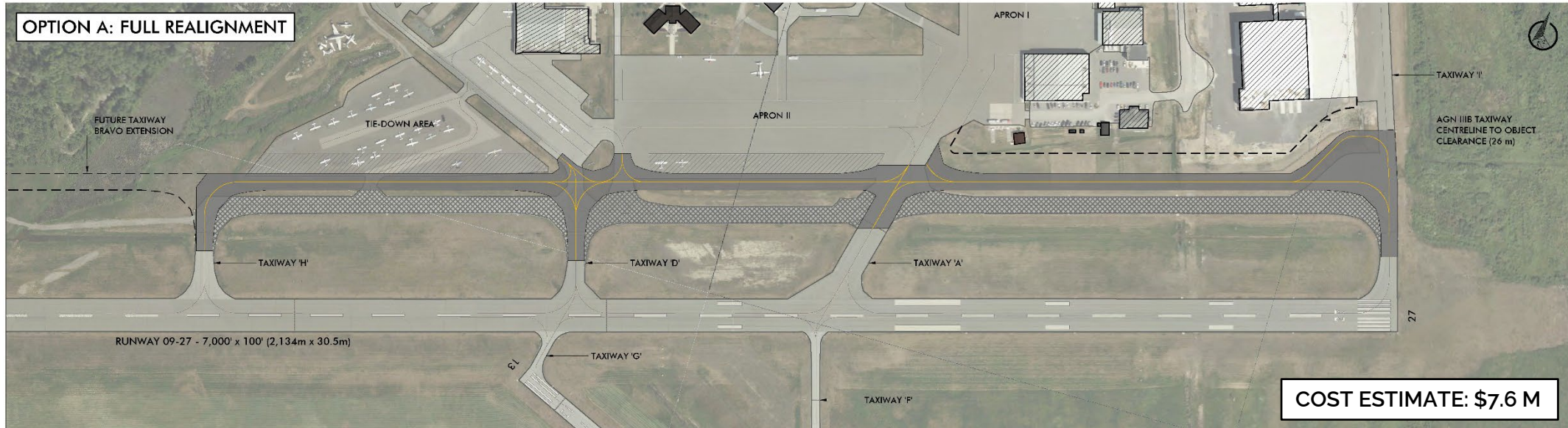
- Meteorological analysis conducted to determine the percent improvement in availability with change to non-precision
- Transport Canada recommends achieving 95% availability
- Current conditions (non-instrument): 96.83%
- Non-precision: increase availability to 98.45% (+1.62%) annually
- Winter season would benefit most from non-precision with availability increasing from 94.39% to 97.74% (3.35%). The summer season would improve by 0.50%
- Actual benefit realized would be dependent on nature of current and future airport users (i.e., time of day, time of year, flight frequencies, etc.)

HOUR (LST)	% Visual Flight Rules	% Non-Instrument (>= 500 Ft & 1.5 Mi)	% Non-Precision (>= 300 Ft & 1 Mi)	% Precision (>= 200 Ft & 0.5 Mi)
6:00	84.29%	91.72%	94.32%	96.15%
7:00	85.41%	92.87%	95.61%	96.89%
8:00	88.23%	95.29%	97.31%	98.42%
9:00	90.14%	96.25%	98.28%	99.14%
10:00	91.23%	97.32%	98.94%	99.61%
11:00	92.41%	97.60%	99.05%	99.69%
12:00	92.55%	97.55%	99.05%	99.78%
13:00	93.54%	97.50%	98.95%	99.75%
14:00	94.54%	98.22%	99.41%	99.92%
15:00	94.44%	98.44%	99.53%	99.92%
16:00	94.51%	98.72%	99.61%	99.97%
17:00	94.98%	98.61%	99.56%	99.83%
18:00	94.70%	98.39%	99.50%	99.75%
19:00	93.23%	98.01%	99.48%	99.75%
20:00	93.30%	97.42%	99.03%	99.42%
21:00	91.70%	96.64%	98.25%	99.39%
22:00	90.20%	95.46%	97.65%	98.75%
<b>YEAR</b>	<b>91.74%</b>	<b>96.83%</b>	<b>98.45%</b>	<b>99.19%</b>





# Cost – Taxiway Bravo Realignment



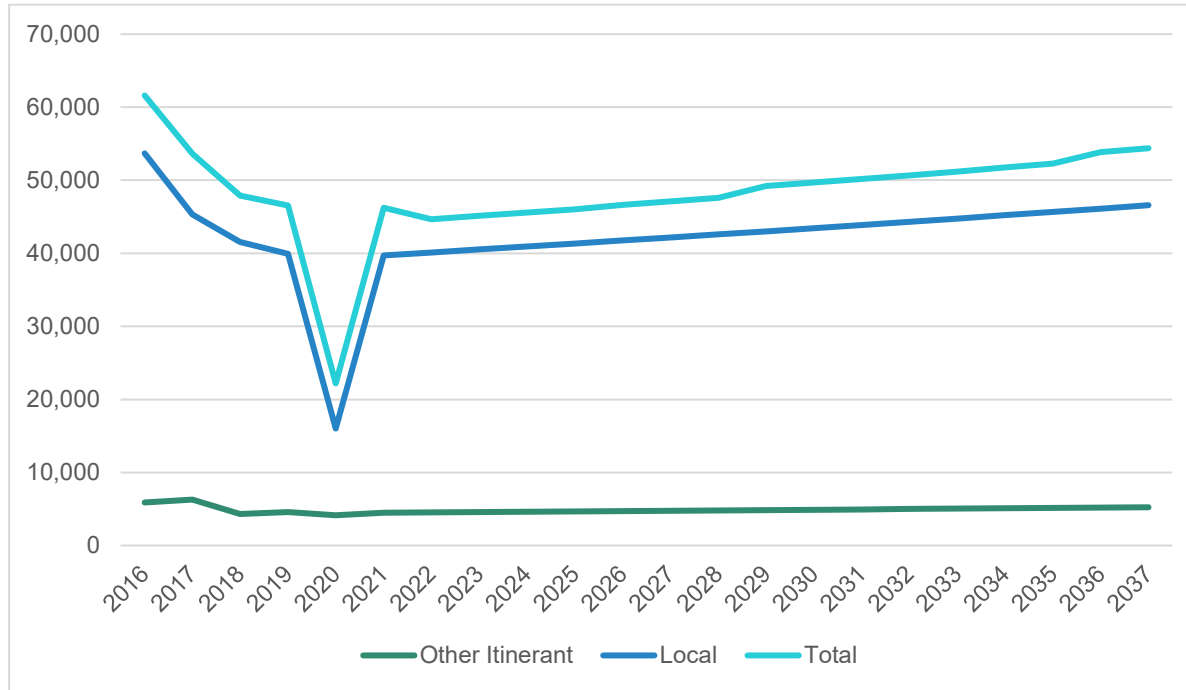




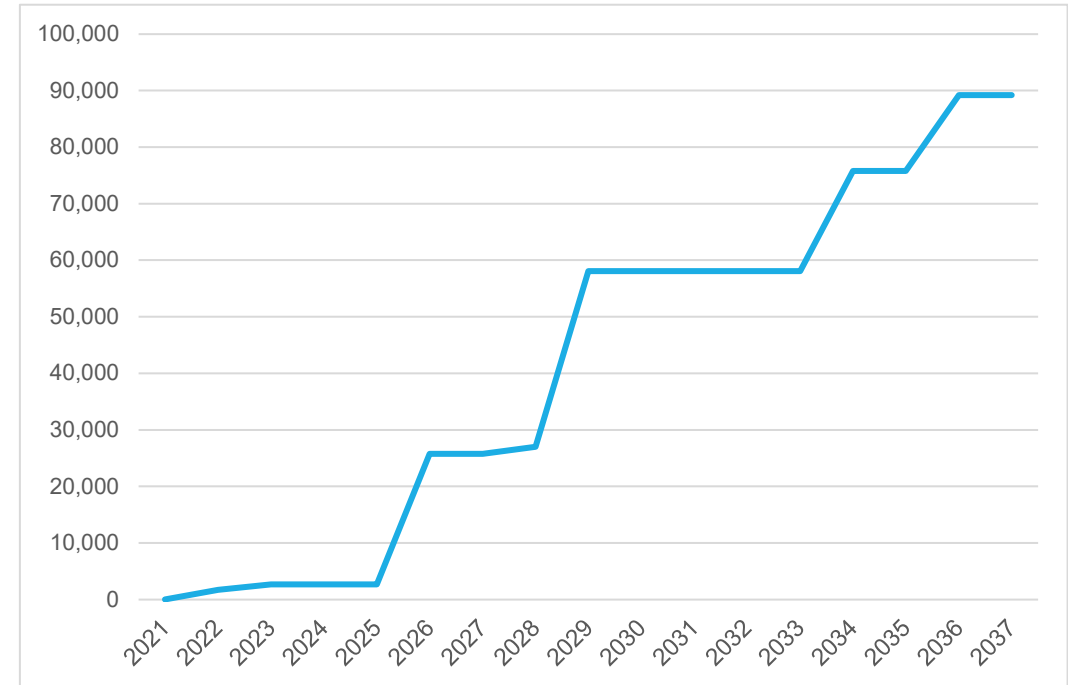
# Activity Forecast

# Activity Forecast

## Annual Aircraft Movements



## Annual Enplaned/Deplaned Passengers



- Forecast 1% Annual Growth for Other Itinerant and Local Traffic
- Air Carrier Movements Included in Total – Growth Based on Continued Boutique Charter Activity, New Charters Starting in 2026







# **Growth Opportunities and Infrastructure Requirements**

# Runway 09-27 Widening

- Master Plan investigated the requirement to widen Runway 09-27
- Runway 09-27 is currently 30m (100 ft.) wide – sufficient to satisfy Transport Canada standards for the design aircraft (Boeing 737)
- Consultations identified little demand from stakeholders, including prospective air carriers
- Cost estimate to widen the runway to 45m (150 ft.) is **\$9.3M**





# Air Service Development

- Vacation tours offered from Peterborough to a variety of locations in Canada and the US – plans for growth
- High potential to attract ULCC and sun destination service in the short term – regional service uncertain
- New passenger facilities or airfield infrastructure required to facilitate these services
- National, regional, and low cost, air operators included in consultation process to identify opportunities, constraints, and infrastructure requirements

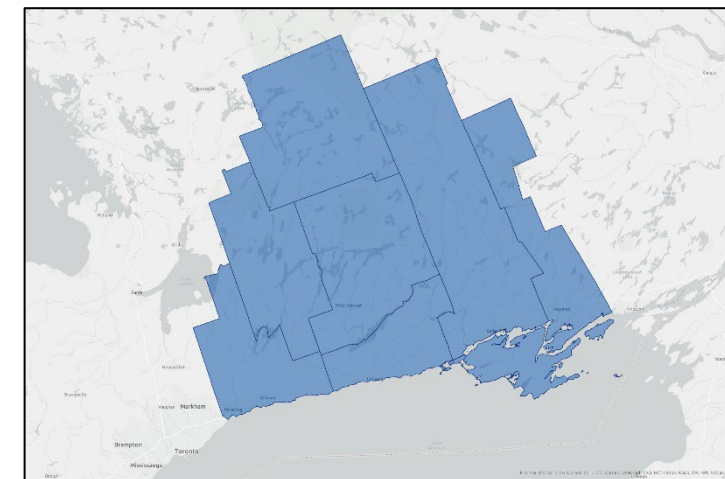




# Growth Opportunities



	Short Term (1-5 Years)	Medium Term (6-10 Years)	Long Term (11-15 Years)
<b>Passenger Air Services</b>			
<b>ULCC B737 Max 8/B737-800</b>	- 1 Per Week Service to YYC (2026)	- 2 Per Week Service to YYC (2029)	- 3 per week two destinations (2034)
<b>Boutique Charters B737-700</b>	- 11 per year to select destinations (2023)	- 16 per Year to Select Destinations (2028)	
<b>Caribbean/Mexico B737-800</b>	- 1 Per Week Service - 16 Week Charters to Caribbean and Mexico (2026)		- 2 Per Week Service (32 Week Charters - 1 Destination) (2036)
<b>Southern U.S. Charters (Florida) B737-800</b>	- 1 Per Week Service – 16 Week Charters to Florida (2029)		
<b>Sked Regional King Air 100</b>		- 1x Daily (Mon-Fri) 9 Seats (2029)	- 2x Daily (Mon-Fri) 9 Seats (2036)
<b>General Aviation and Aerospace</b>			
<ul style="list-style-type: none"> <li>- Flight Training Growth</li> <li>- Fixed Base Operator</li> <li>- Introduction of Unleaded Aviation Gasoline</li> <li>- Organic Growth – Existing Businesses</li> <li>- Aerospace Education Opportunities                             <ul style="list-style-type: none"> <li>- Shared Business Services</li> <li>- Research and Development</li> <li>- Recreational GA Growth</li> </ul> </li> <li>- Hybrid/Electric Aircraft Support                             <ul style="list-style-type: none"> <li>- Aircraft Maintenance</li> </ul> </li> <li>- Maintenance Repair and Overhaul Facilities                             <ul style="list-style-type: none"> <li>- Air Charter Services</li> </ul> </li> </ul>			



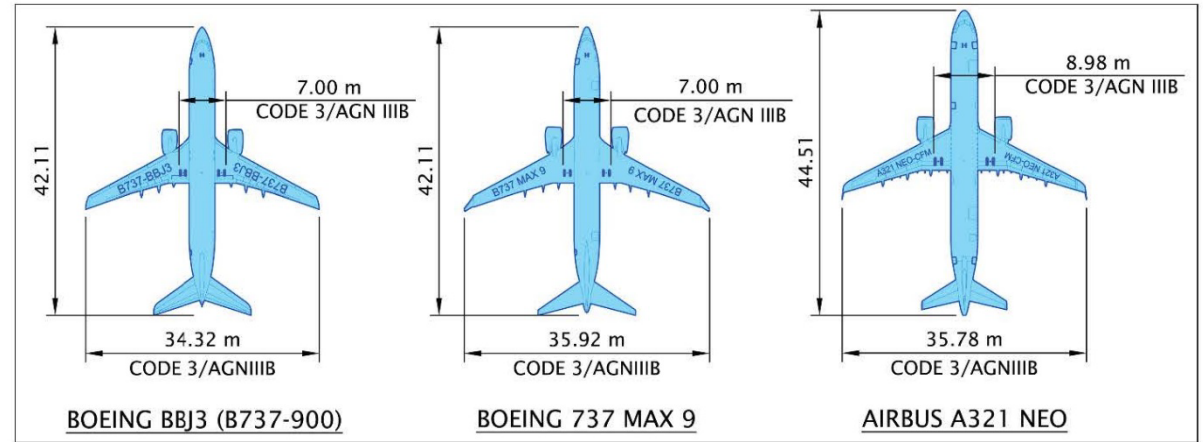
**YPQ Catchment Area**



**Pipistrel Alpha Electro**

# Infrastructure Assessment & Requirements

- Airport Role Shift – Charter Air Services and ULCC
- No Design Aircraft Change Required Within Horizon
- TP312 5<sup>th</sup> Edition Standards – Airside Elements
- IATA Airport Development Recommendations – Pax Facility
- General Aviation Area Expansion (Short Term)
- Southern Development Area
  - New GA Development Lots + Supporting Taxiways Aprons
  - Shared Public Use Facility – Septic and Well
  - Cardlock Avgas System
- Current Infrastructure – Fair to Good Condition
  - Rehabs Planned at Lifecycle End



Lot Type	Assumed Rate/Year	New Lot Absorptions		
		Short Term (1-5 Years)	Medium Term (6-10 Years)	Long Term (11-15 Years)
Airside Commercial	0.5	2	3	3
Airside Industrial	0.25	1	1	2
General Aviation	1	4	5	5
Groundside Commercial	0	-	-	-
<b>TOTAL</b>		<b>7</b>	<b>9</b>	<b>10</b>

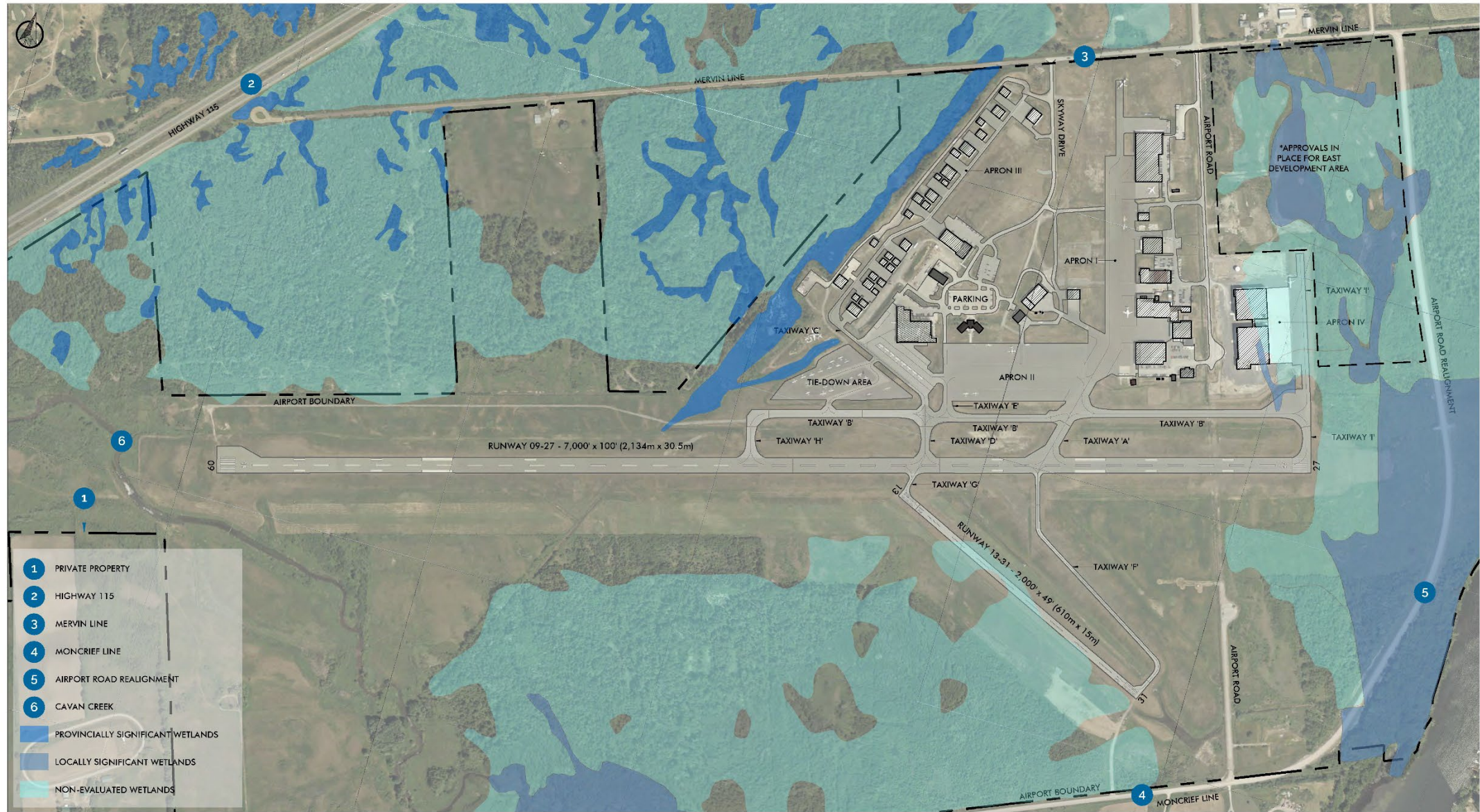


An aerial photograph of a large, undeveloped plot of land, possibly a school campus or industrial site. The image is overlaid with a semi-transparent blue filter. In the center, there are faint outlines of buildings and parking lots. A road with a dashed center line runs horizontally across the middle. The text "Development Planning" is centered in white, bold font.

# Development Planning

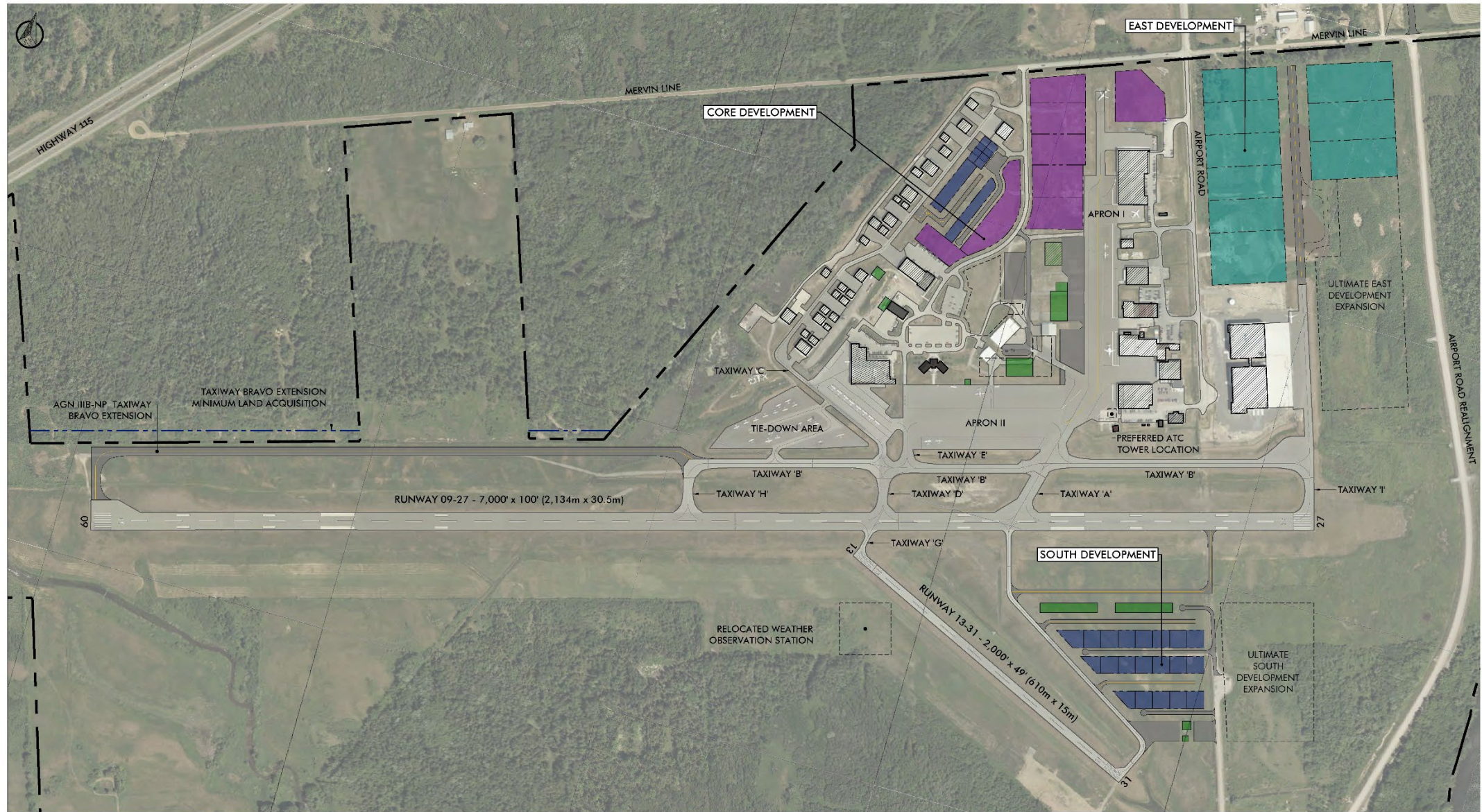


# Development Constraints



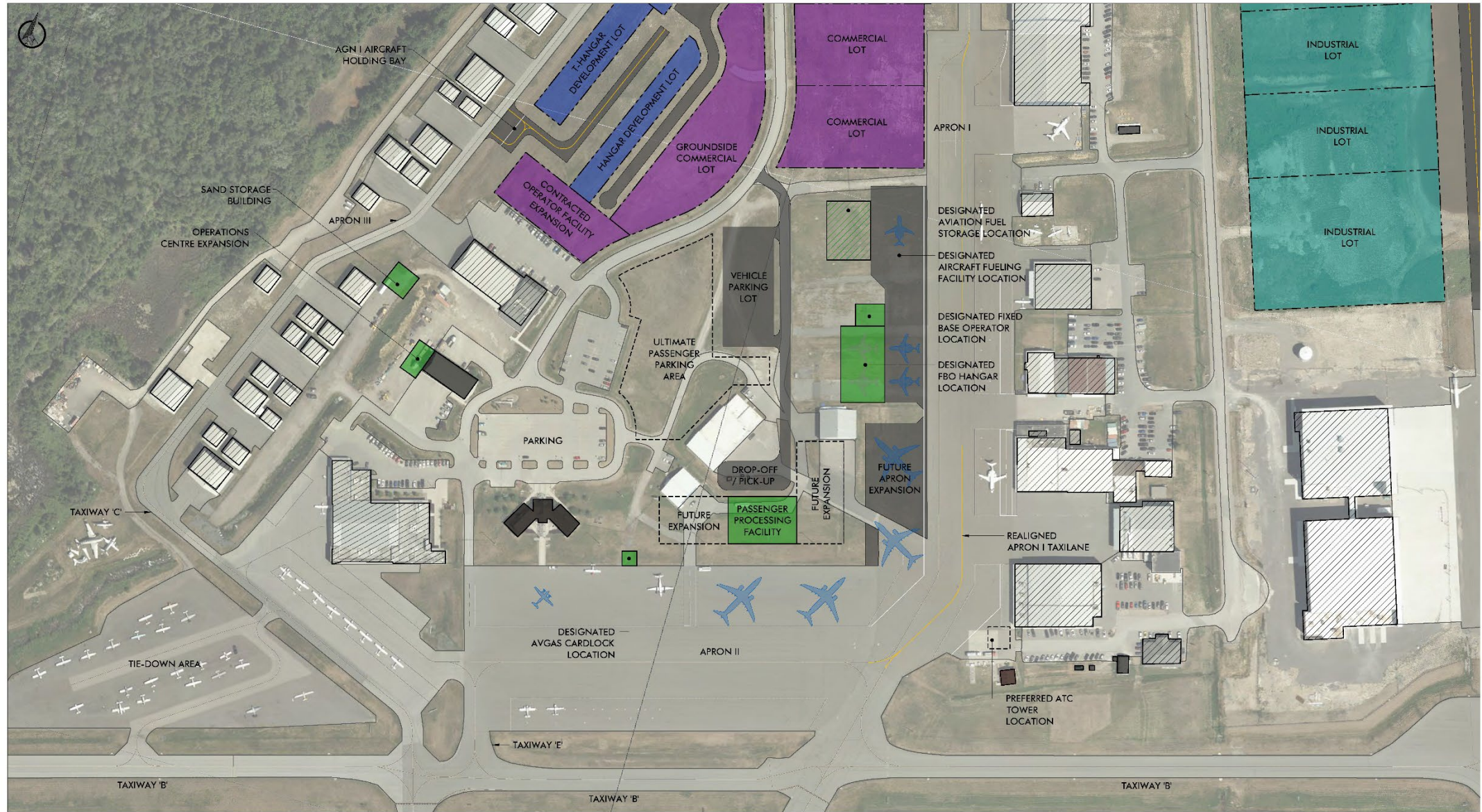


# Airport Development Plan



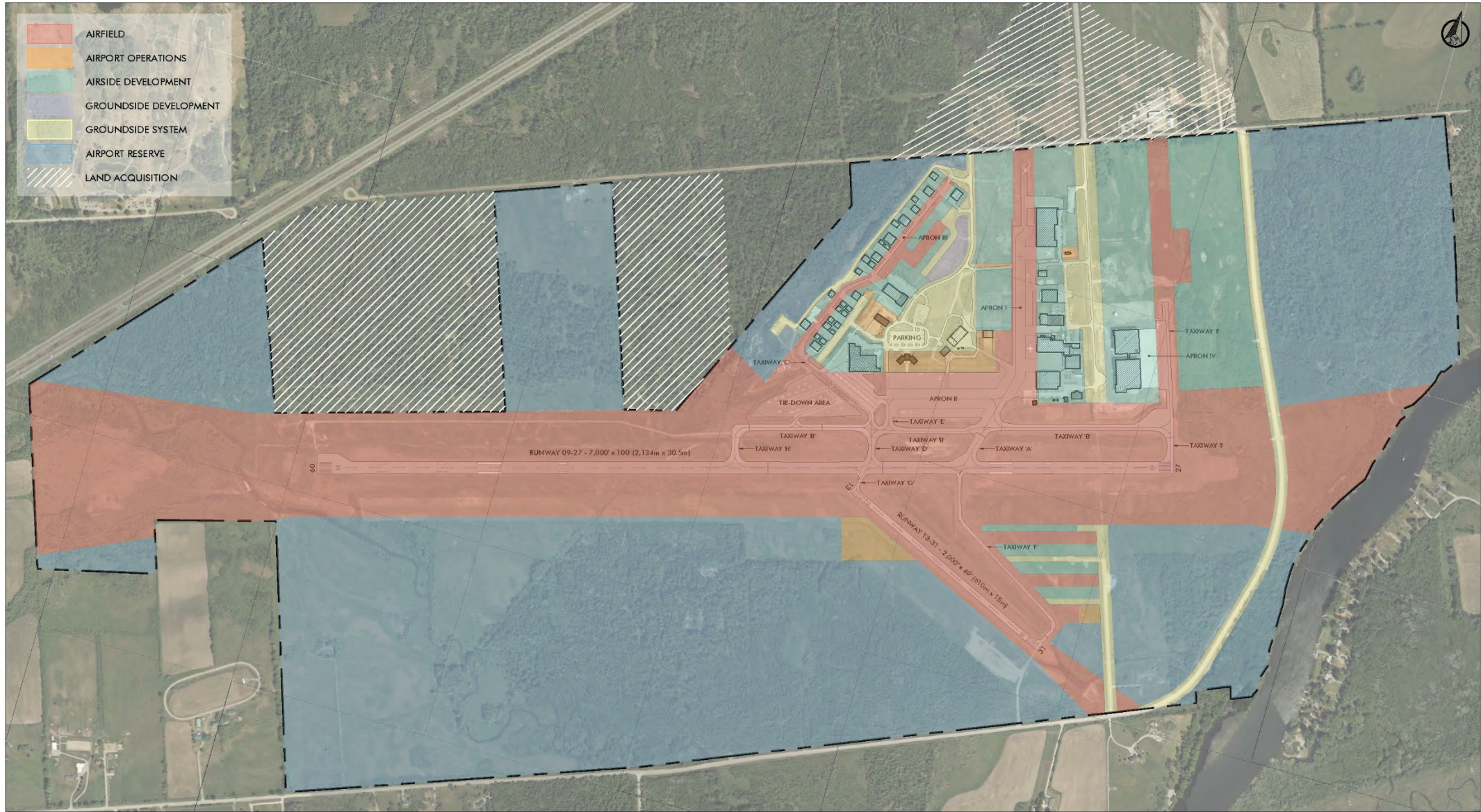


# Core Development Plan





# Land Use Plan





# Passenger Processing Facility Requirements

- Existing Air Terminal Building – 38 PHP Capacity
- 2022 Boutique Charters Utilizing Air Terminal Restaurant – Temporary Solutions (approx. 240 PHP)
- New Low-Cost **Basic** Passenger Processing Facility Recommended – 1,500 m<sup>2</sup> (340 PHP Capacity)
  - Main Floor Warehouse-Style Shared Use Space
  - Second Floor Leasable Space (560 m<sup>2</sup>)
  - Public-Private Partnership Potential
- Check-In, Secure Holdroom, Baggage Claim, Mixed Use Equipment Provisions for Carriers
- Further Feasibility Study Recommended – Detailed Planning, Costing, Financing, etc.







# Growth Strategies



# Future Growth Strategies

1. Passenger Air Services
  2. Unleaded Aviation Gasoline Support
  3. Electric Aircraft Support
  4. Aerospace Research and Development
  5. Aerospace Education
  6. Recreational General Aviation
  7. Small Air Charters/Corporate Aviation
- Aircraft Maintenance, Aerospace Manufacturing and MRO Facilities, Fixed Base Operator, Flight Training Growth
  - Organic Business Growth







# Financials and Implementation Plan



# Capital Plan

Category	Short-Term	Medium-Term	Long-Term
	2023-2027	2028-2032	2033-2037
Infrastructure Rehabilitation and Reconstruction	\$790,000	\$9,201,000	\$11,842,000
Servicing and Land Acquisitions	\$25,150,000	\$1,147,000	\$600,000
Passenger Processing Facility Development*	\$2,847,333	\$0	\$0
Infrastructure Expansion	\$21,103,000	\$4,404,000	\$2,857,000
Airport Plans and Studies**	\$965,000	\$0	\$0
<b>Total – Per Planning Horizon</b>	<b>\$50,855,333</b>	<b>\$14,752,000</b>	<b>\$15,299,000</b>
<b>Total – All Planning Horizons</b>			<b>\$80,906,333</b>

## Notes

All costs in the summary table are in 2022 Canadian Dollars and have not been adjusted for inflation in the respective implementation years.

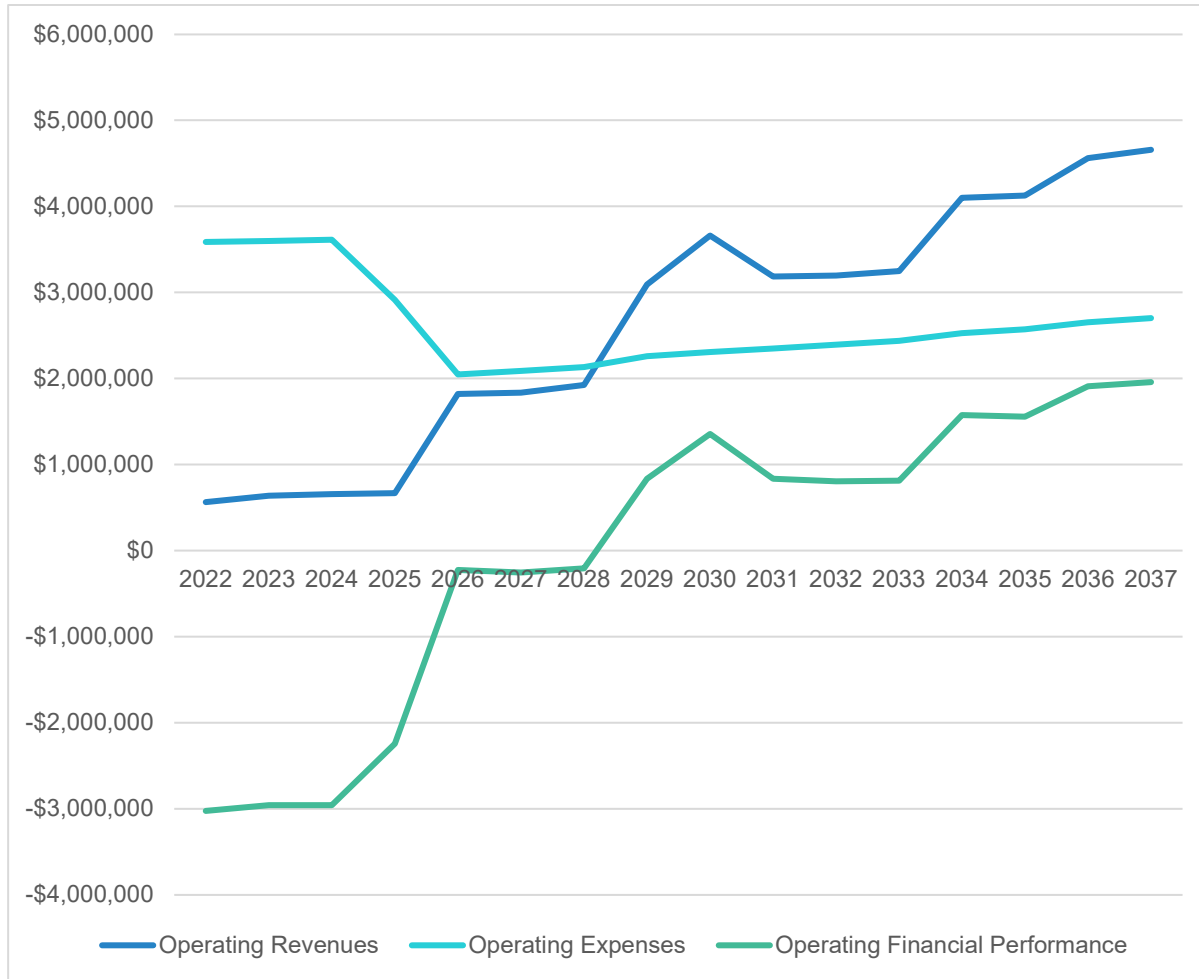
\*Passenger processing facility costs assume 33% investment by the City through P3 arrangement.

\*\*A \$500,000 budget is included to complete the federal zoning process.

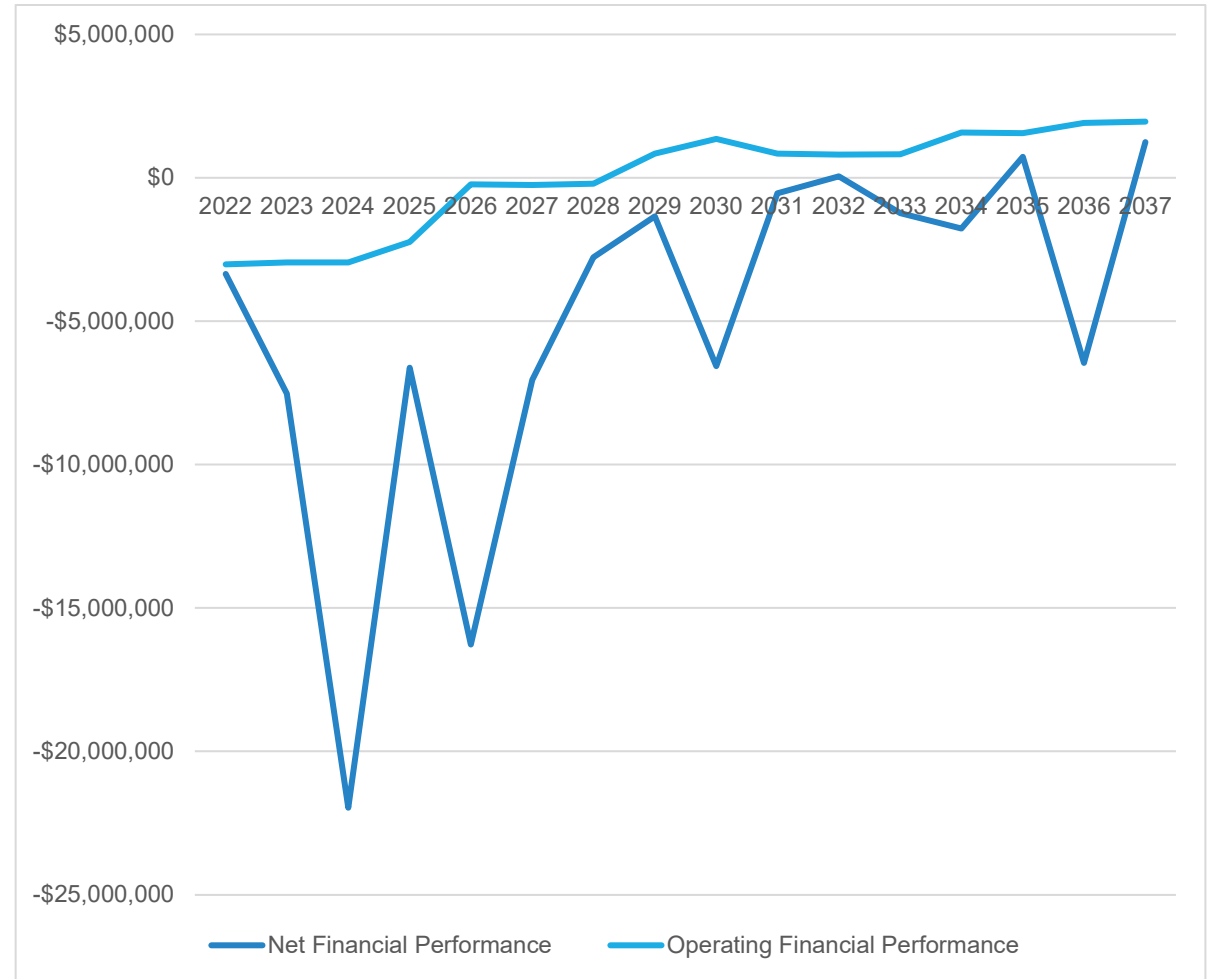
- Significant amount of investment required in short term for servicing expansions and upgrades (almost 50% of total capital required)
- Infrastructure expansion in short term mainly related to Taxi B extension and East Development Area preparations.
- Passenger processing facility costs access roads and parking and 1/3 of facility development costs.
- Comparator Airports:
  - Lake Simcoe Regional: Implementing **\$60M** Strategic Plan
  - Region of Waterloo International: Implementing **\$375M** 20-Year Master Plan (**\$60.8M** spent last 15 years)

# Financial Outlook

## Operating Performance



## Operating and Capital Performance



# Implementation Plan / Recommendations

## Recommended Master Plan Implementation Plan

	Short Term (1-5 Years)	Medium Term (6-10 Years)	Long Term (11-15 Years)
<b>Airside</b>	<ul style="list-style-type: none"> <li>LED Edge Lighting and Internal Roadway Lighting Upgrades (2023)</li> <li>Core Development – Apron III Aircraft Holding Bay (2023)</li> <li>Taxiway Bravo EA (2024)</li> <li>Taxiway Bravo Design (2025)</li> <li>Taxiway Bravo Extension (2026)</li> <li>General Aviation Area Lot Preparation (Ongoing)</li> </ul>	<ul style="list-style-type: none"> <li>South Development - Construct 3 x AGN I Taxiways (2028)</li> <li>General Aviation Area Lot Preparation (Ongoing)</li> <li>Core Development – FBO Facility Reserve (2030)</li> <li>Rehabilitate Runway 09-27 (2030)</li> <li>Rehabilitate Taxiway Alpha (2030)</li> <li>Rehabilitate Runway 13-31 (2031)</li> <li>Rehabilitate Taxiway Golf (2032)</li> <li>Rehabilitate Taxiway Charlie (2032)</li> </ul>	<ul style="list-style-type: none"> <li>East Development - Taxiway India Extension (2033)</li> <li>Rehabilitate Taxiway Bravo (2034)</li> <li>Rehabilitate Taxiway Delta (2034)</li> <li>Rehabilitate Taxiway Hotel (2034)</li> <li>Rehabilitate Taxiway Echo (2034)</li> <li>Rehabilitate Apron III (2035)</li> <li>Rehabilitate Apron I (2036)</li> <li>Rehabilitate Apron II (2036)</li> <li>Rehabilitate Taxiway Foxtrot (2037)</li> <li>General Aviation Area Lot Preparation (Ongoing)</li> </ul>





# Implementation Plan / Recommendations

	Short Term (1-5 Years)	Medium Term (6-10 Years)	Long Term (11-15 Years)
<b>Groundside</b>	<ul style="list-style-type: none"> <li>• Core Development – Apron III Access Road Construction (2023)</li> <li>• Emergency Access Road Development (2023)</li> <li>• Airport Pumphouse Generator Replacement (2023)</li> <li>• Water and Sewer – Design (2023)</li> <li>• Water and Sanitary Servicing Upgrades to Airport (2024)</li> <li>• Install Electric Vehicle Charging Stations (2024)</li> <li>• Airport Fire Regulation Requirements (2025)</li> <li>• Construct New Access Road and Parking Areas – Passenger Processing Facility (2025)</li> <li>• Procure Parking Lot Payment System (2025)</li> <li>• Core Development – Construct New Access Roads – Passenger Processing Facility (2025)</li> <li>• Core Development – Apron III Groundside Development Lot Preparation (2025)</li> <li>• Water Pumping Station Upgrades – Based on demand (2026)</li> </ul>	<ul style="list-style-type: none"> <li>• South Development – Prepare General Aviation Lots for Hangar Development (2028)</li> <li>• South Development – Construct Access Road and Parking (2028)</li> <li>• South Development – Prepare Lots for T-Hangars (2031)</li> </ul>	<ul style="list-style-type: none"> <li>• Core Development – Operations Centre Expansion (2036)</li> </ul>



# Implementation Plan / Recommendations

	Short Term (1-5 Years)	Medium Term (6-10 Years)	Long Term (11-15 Years)
<b>Air Terminal and Other</b>	<ul style="list-style-type: none"> <li>• Passenger Processing Facility Feasibility Study (2023)</li> <li>• Introduction of Unleaded Avgas (2023)</li> <li>• Airport Governance Study (2023)</li> <li>• Air Service Marketing (2023)</li> <li>• Airport Easements and Property Acquisition (2023-2025)</li> <li>• Core Development – Passenger Processing Facility Design or Design-Build P3 (2024)</li> <li>• Core Development – Sand Storage Shed (2025)</li> <li>• Federal Zoning Process (2023-2025)</li> <li>• Re-evaluation of Non-Precision Study (2026)</li> <li>• Airport Industrial Park East Development Area Preparation (2026-2027)</li> <li>• South Development – Weather Observation Station Relocation (2027)</li> <li>• Obstacle Limitation Surface Tree Cutting (Ongoing)</li> </ul>	<ul style="list-style-type: none"> <li>• Master Plan Update (2027)</li> <li>• South Development – Electrical Servicing (2028)</li> <li>• South Development – Establish Aviation Gas Cardlock System (2029)</li> <li>• South Development - Construct Tenant Services Building Apron Area (2029)</li> <li>• South Development - Construct Tenant Services Building (2029)</li> <li>• South Development – Provide Septic and Well Services to Tenant Services Building (2029)</li> <li>• Airport Fencing Replacement (2030)</li> <li>• Obstacle Limitation Surface Tree Cutting (Ongoing)</li> </ul>	<ul style="list-style-type: none"> <li>• Obstacle Limitation Surface Tree Cutting (Ongoing)</li> </ul>







**Thank You**

# Appendix B

**Peterborough Airport  
15-Year Pro-Forma Financial Analysis (DRAFT)**

	Year:	0	1	2	Short Term			Medium Term					Total	Total
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Medium Term	Long Term	
<b>Passenger Forecast (E/D) Movement Forecast</b>	0	1,688	2,653	2,653	2,653	25,787	25,787	26,993	58,082	58,082	58,082	259,322	387,972	
Air Carrier	0	14	22	22	22	158	158	168	1,344	1,344	1,344	5,544	9,280	
Other Itinerant	1.0%	4,495	4,540	4,585	4,631	4,678	4,724	4,772	4,819	4,867	4,916	24,583	25,837	
Local	1.0%	39,719	40,116	40,517	40,923	41,332	41,745	42,163	42,584	43,010	43,440	217,222	228,302	
<b>TOTAL</b>	<b>44,214</b>	<b>44,670</b>	<b>45,125</b>	<b>45,576</b>	<b>46,031</b>	<b>46,627</b>	<b>47,092</b>	<b>47,571</b>	<b>49,221</b>	<b>49,700</b>	<b>50,184</b>	<b>247,349</b>	<b>263,419</b>	
<b>Revenue (Existing)</b>														
Restaurant Rent	2%	\$0	\$0	\$17,000	\$18,041	\$18,401	\$18,769	\$19,145	\$19,528	\$19,918	\$20,317	\$20,723	\$101,623	\$112,200
Lease Revenue	2%	\$379,449	\$400,000	\$416,160	\$424,483	\$432,973	\$441,632	\$450,465	\$459,474	\$468,664	\$478,037	\$487,598	\$2,391,123	\$2,639,992
Advertising Revenue	2%	\$0	\$1,500	\$1,561	\$1,592	\$1,624	\$1,656	\$1,689	\$1,723	\$1,757	\$1,793	\$1,828	\$8,967	\$9,900
Parking Permits	2%	\$1,862	\$9,450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Charter Revenues		\$2,679	\$5,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Misc. Revenues	2%	\$10,549	\$1,575	\$1,639	\$1,671	\$1,705	\$1,739	\$1,774	\$1,809	\$1,845	\$1,882	\$1,920	\$9,415	\$10,395
Aviation Fuel Concessions	2%	\$42,352	\$46,000	\$47,858	\$48,816	\$49,792	\$50,788	\$51,803	\$52,840	\$53,896	\$54,974	\$56,074	\$274,979	\$303,599
Airport Landing Fees	2%	\$15,467	\$26,250	\$27,311	\$27,857	\$28,414	\$28,982	\$29,562	\$30,153	\$30,756	\$31,371	\$31,999	\$156,917	\$173,250
Airport Tie Downs	2%	\$19,293	\$15,000	\$15,606	\$15,918	\$16,236	\$16,561	\$16,892	\$17,230	\$17,575	\$17,926	\$18,285	\$89,667	\$99,000
Local Improvements	2%	\$61,195	\$56,935	\$59,235	\$60,420	\$61,628	\$62,861	\$64,118	\$65,400	\$66,708	\$68,043	\$69,403	\$340,346	\$375,770
Transfer From Pavement Reserve											\$500,000			
<b>Revenues (New)</b>														
Additional Fuel Concessions	Per L		\$4,675	\$4,675	\$4,675	\$33,575	\$33,575	\$35,700	\$71,100	\$71,100	\$71,100	\$320,100	\$470,500	
Landing Fees	varies		\$6,865	\$7,142	\$7,285	\$53,368	\$54,435	\$59,038	\$128,536	\$131,107	\$133,729	\$588,814	\$965,705	
Passenger Fees	\$20		\$9,751	\$9,751	\$9,751	\$257,868	\$257,868	\$269,928	\$580,824	\$580,824	\$580,824	\$2,593,224	\$3,879,720	
Land Leases	\$ 3.43		\$31,846	\$35,346	\$36,053	\$78,087	\$79,649	\$101,514	\$107,159	\$159,830	\$166,787	\$698,927	\$1,410,891	
Vehicle Parking Revenues	\$12		\$0	\$0	\$0	\$773,604	\$773,604	\$809,784	\$1,543,174	\$1,543,174	\$1,543,174	\$6,982,481	\$10,244,075	
<b>Total Gross Revenue</b>		<b>\$532,846</b>	<b>\$561,960</b>	<b>\$639,506</b>	<b>\$655,712</b>	<b>\$668,537</b>	<b>\$1,819,491</b>	<b>\$1,834,580</b>	<b>\$1,924,122</b>	<b>\$3,091,914</b>	<b>\$3,660,378</b>	<b>\$3,183,444</b>	<b>\$14,556,583</b>	<b>\$20,694,997</b>





**Rehabilitation Requirements**

Description	Cost	Short Term							Medium Term					Long Term					Total Short Term	Total Medium Term	Total Long Term
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037				
Runway 09-27 Rehabilitation	\$5,640,000									\$6,872,000								\$0	\$6,872,000	\$0	
Taxiway A Rehabilitation	\$320,000								\$390,000									\$0	\$390,000	\$0	
Runway 13-31 Rehabilitation	\$710,000									\$1,028,000								\$0	\$1,028,000	\$0	
Taxiway G Rehabilitation	\$40,000										\$52,000							\$0	\$52,000	\$0	
Taxiway C Rehabilitation	\$270,000										\$354,000							\$0	\$354,000	\$0	
Taxiway B Rehabilitation	\$1,910,000													\$2,569,000				\$0	\$0	\$2,569,000	
Taxiway D Rehabilitation	\$120,000													\$161,000				\$0	\$0	\$161,000	
Taxiway H Rehabilitation	\$160,000													\$215,000				\$0	\$0	\$215,000	
Taxiway E Rehabilitation	\$40,000													\$54,000				\$0	\$0	\$54,000	
Apron III Rehabilitation	\$350,000														\$482,000			\$0	\$0	\$482,000	
Apron I Rehabilitation	\$2,370,000															\$3,349,000		\$0	\$0	\$3,349,000	
Apron II Rehabilitation	\$2,970,000															\$4,197,000		\$0	\$0	\$4,197,000	
Taxiway F Rehabilitation	\$390,000																\$565,000	\$0	\$0	\$565,000	
<b>Total 15-Year Rehabilitation Costs</b>	<b>\$15,290,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,262,000</b>	<b>\$1,028,000</b>	<b>\$406,000</b>	<b>\$0</b>	<b>\$2,999,000</b>	<b>\$482,000</b>	<b>\$7,546,000</b>	<b>\$565,000</b>	<b>\$0</b>	<b>\$8,696,000</b>	<b>\$11,592,000</b>	

**Capital Infrastructure and Project Requirements**

Description	Cost	Short Term							Medium Term					Long Term					Total Short Term	Total Medium Term	Total Long Term
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037				
<b>Short Term (1-5 Years)</b>																					
Commercial and General Aviation Lot Prep	-	\$225,000	\$225,000	\$225,000	\$225,000	\$225,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$1,000,000	\$500,000	\$500,000
Obstacle Limitation Surface Tree Cutting	-	\$100,000	\$100,000	\$100,000	\$100,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$400,000	\$250,000	\$250,000
LED Edge Lighting and Internal Roadway Lighting Upgrades	\$340,000		\$340,000																\$340,000	\$0	\$0
Apron III Aircraft Holding Bay	\$300,000		\$300,000																\$300,000	\$0	\$0
Apron III Access Road Construction	\$170,000		\$170,000																\$170,000	\$0	\$0
Emergency Access Road Development	\$70,000		\$70,000																\$70,000	\$0	\$0
Airport Pumphouse Generator Replacement	\$290,000		\$290,000																\$290,000	\$0	\$0
Passenger Processing Facility Feasibility Study	\$50,000		\$50,000																\$50,000	\$0	\$0
Airport Governance Study	\$75,000		\$75,000																\$75,000	\$0	\$0
Air Service Marketing	-		\$50,000	\$150,000															\$200,000	\$0	\$0
Airport Easements and Property Acquisition Reserve	-		\$2,000,000	\$400,000	\$400,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000				\$3,200,000	\$1,000,000	\$600,000
Federal Zoning Process	-		\$100,000	\$100,000	\$300,000														\$500,000	\$0	\$0
Airport Water and Sewer Upgrade Design	\$800,000		\$800,000																\$800,000	\$0	\$0
Airport Water and Sewer Upgrades	\$15,250,000			\$15,250,000															\$15,250,000	\$0	\$0
Install Electrical Vehicle Charging Stations	\$60,000			\$60,000															\$60,000	\$0	\$0
Construct Passenger Processing Facility (P3)	\$2,223,333			\$2,223,333															\$2,223,333	\$0	\$0
Taxiway Bravo Environmental Assessment	\$500,000			\$500,000															\$500,000	\$0	\$0
Taxiway Bravo Extension Design	\$500,000				\$500,000														\$500,000	\$0	\$0
Airport Fire Regulation Requirements	\$1,800,000				\$1,800,000														\$1,800,000	\$0	\$0
Procure Parking Lot Payment System	\$70,000				\$75,000														\$75,000	\$0	\$0
New Access Roads and Parking - Pax Processing Facility	\$510,000				\$549,000														\$549,000	\$0	\$0
Sand Storage Shed	\$400,000				\$431,000														\$431,000	\$0	\$0
Taxiway Bravo Extension	\$5,000,000					\$5,519,000													\$5,519,000	\$0	\$0
Re-Evaluation of Non-Precision Operations Study	\$50,000					\$55,000													\$55,000	\$0	\$0
Airport Industrial Park East Development Area Preparation	-					\$6,250,000	\$6,250,000												\$12,500,000	\$0	\$0
Airport Water Pumping Station Upgrades	\$3,750,000					\$3,750,000													\$3,750,000	\$0	\$0
Weather Observation Station Relocation	\$100,000						\$113,000												\$113,000	\$0	\$0
																			\$0	\$0	\$0
																			\$0	\$0	\$0
<b>Medium Term (6-10 Years)</b>																			\$0	\$0	\$0
Airport Master Plan Update	\$75,000						\$85,000												\$85,000	\$0	\$0
South Development - Construct 3x AGN I Taxiways	\$1,360,000							\$1,577,000											\$0	\$1,577,000	\$0
South Development - Prepare GA Lots for Hangars	\$20,000							\$23,000											\$0	\$23,000	\$0
South Development - Access Road and Parking Areas	\$420,000							\$487,000											\$0	\$487,000	\$0
South Development - Prepare Lots for T Hangars	\$60,000							\$70,000											\$0	\$70,000	\$0
South Development - Electrical Servicing	\$50,000							\$58,000											\$0	\$58,000	\$0
South Development - Establish Avgas Cardlock	\$600,000								\$713,000										\$0	\$713,000	\$0
South Development - Construct Tenant Services Building	\$350,000								\$416,000										\$0	\$416,000	\$0
South Development - Construct Tenant Services Apron	\$520,000								\$618,000										\$0	\$618,000	\$0
South Development - Provide Septic and Well Services	\$75,000								\$89,000										\$0	\$89,000	\$0
Airport Fencing Replacement	\$250,000									\$305,000									\$0	\$305,000	\$0
																			\$0	\$0	\$0
																			\$0	\$0	\$0
<b>Long Term (11-15 Years)</b>																			\$0	\$0	\$0
Taxiway India Extension	\$1,290,000												\$1,693,000						\$0	\$0	\$1,693,000
Maintenance Building Expansion	\$470,000															\$664,000			\$0	\$0	\$664,000
																			\$0	\$0	\$0
																			\$0	\$0	\$0
<b>Total 15-Year Capital Costs</b>	<b>\$60,943,333</b>	<b>\$325,000</b>	<b>\$4,570,000</b>	<b>\$19,008,333</b>	<b>\$4,380,000</b>	<b>\$16,049,000</b>	<b>\$6,798,000</b>	<b>\$2,565,000</b>	<b>\$2,186,000</b>	<b>\$655,000</b>	<b>\$350,000</b>	<b>\$350,000</b>	<b>\$2,043,000</b>	<b>\$350,000</b>	<b>\$350,000</b>	<b>\$814,000</b>	<b>\$150,000</b>	<b>\$50,805,333</b>	<b>\$6,106,000</b>	<b>\$3,707,000</b>	
<b>Approved Projects</b>			\$860,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Additional Capital Requests Required</b>			\$3,710,000	\$19,008,333	\$4,380,000	\$16,049,000	\$6,798,000	\$2,565,000	\$2,186,000	\$655,000	\$350,000	\$350,000	\$2,043,000	\$350,000	\$350,000	\$814,000	\$150,000	\$50,805,333	\$6,106,000	\$3,707,000	