

**ADOPTED** as presented, **with the exception** of the woodlots, which is to come back to Council in the form of an administrative report for discussion purposes and that Council **BE PROVIDED** with the Master Plan maps that show the woodlots in detail including the existing woodlots, the buffer area and the open spaces together with the acreage of each one of those as well as a copy of the matrix where the environmentally significant lands were designated,

by Council at its meeting held November 7, 2011 [M319-2011]

AA

Windsor, Ontario, November 7, 2011

**REPORT NO. 12** of the  
**ECONOMIC DEVELOPMENT**  
**STANDING COMMITTEE**  
of its meeting held October 5, 2011

---

**Present:** - **Councillor Dilkens, Chair**  
**Councillor Sleiman**  
**Councillor Valentinis**  
**Councillor Marra**  
**Councillor Payne**

That the following recommendation of the Economic Development Standing Committee **BE APPROVED** as follows:

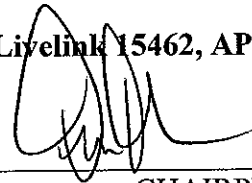
Moved by Councillor Marra, seconded by Councillor Sleiman,  
That City Council **APPROVE** the Windsor International Airport – Master Plan 2010;

That City Council **ENDORSE IN PRINCIPLE** the recommendations outlined in Windsor International Airport – Master Plan 2010, as listed in Appendix B (pages 6-14 of attached report).

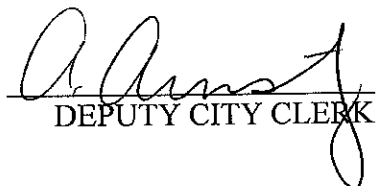
Carried.

Clerk's Note: The Report of the Project Administrator dated September 16, 2011 entitled "Windsor International Airport – Master Plan 2010" is attached as background information.

Liveline 15462, APM/9795



CHAIRPERSON



DEPUTY CITY CLERK

Notification			
Flavio Forest, P.Eng	Dillon Consulting	<a href="mailto:fforest@dillon.ca">fforest@dillon.ca</a>	519-948-5000
Pat Toal		<a href="mailto:pattitoal@gmail.com">pattitoal@gmail.com</a>	

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to support effective decision-making.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and reporting, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that data is used responsibly and ethically.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It stresses the importance of ongoing monitoring and evaluation to ensure that data management practices remain effective and aligned with the organization's goals.

6. The sixth part of the document provides a detailed overview of the data collection process, including the identification of data sources, the design of data collection instruments, and the implementation of data collection procedures.

7. The seventh part of the document discusses the various methods used to analyze data, such as descriptive statistics, inferential statistics, and qualitative analysis. It explains how these methods can be used to extract meaningful insights from the collected data.

8. The eighth part of the document focuses on the presentation and communication of data analysis results. It discusses the importance of using clear and concise visualizations and reports to effectively convey the findings to stakeholders.

9. The ninth part of the document addresses the ethical considerations surrounding data management and analysis. It emphasizes the need to protect individual privacy and ensure that data is used only for legitimate purposes.

10. The tenth part of the document provides a final summary and conclusion, reiterating the key points and the overall importance of data management in achieving organizational success.

11. The eleventh part of the document includes a list of references and a bibliography, providing sources for the information and data used throughout the document.

12. The twelfth part of the document contains a glossary of key terms and definitions, ensuring that all readers have a clear understanding of the terminology used in the document.

**THE CORPORATION OF THE CITY OF WINDSOR**  
**Economic Development Standing Committee - Administrative Report**

**MISSION STATEMENT:**

*"The City of Windsor, with the involvement of its citizens, will deliver effective and responsive municipal services, and will mobilize innovative community partnerships"*

<b>LiveLink REPORT #: 15462 APM/9795</b>	<b>Report Date: September 16, 2011</b> (PW#3153/lp-09/15/11:ebr)
<b>Author's Name: Tiffany Pocock</b>	<b>Date to Standing Committee:</b> October 5, 2011
<b>Author's Phone: 519 255-6100 ext. 6506</b>	<b>Classification #:</b>
<b>Author's E-mail:</b> tpocock@city.windsor.on.ca	

**To: Economic Development Standing Committee**

**Subject: Windsor International Airport – Master Plan 2010**

**1. RECOMMENDATION: City Wide:  Ward(s): \_\_\_\_\_**

- a) THAT City Council **APPROVE** the Windsor International Airport – Master Plan 2010;
- b) THAT City Council **ENDORSE IN PRINCIPLE** the recommendations outlined in Windsor International Airport – Master Plan 2010, as listed in Appendix B.

**EXECUTIVE SUMMARY:**

**2. BACKGROUND:**

In 2008, after the establishment of Your Quick Gateway (Windsor) Inc. ('YQG'), the City committed to develop a master plan for the airport lands to provide a vision for the future development of the vacant lands both for air traffic and land development.

Dillon Consulting was retained in late 2009 to compose a master plan for the Windsor International Airport that incorporated the ideas of all stakeholders including, but not limited to, the City, regional development agencies, YQG, airport tenants, local businesses and residents, surrounding property owners and environmental interest groups.

### **3. DISCUSSION:**

Attached as Schedule 1 is the 20-year Windsor International Airport Master Plan dated December 2010 which was endorsed by the Windsor Airport Steering Committee on March 29, 2011. For ease of reference, the Executive summary of the Master Plan is attached as Appendix B. The recommended master plan puts forth a balance framework for the future growth of the airport and its lands for employment and general aviation opportunities as well as respecting the existing three heritage wood lots shown in Appendix A (Figure 7-1 of the Master Plan). The lands have been divided into three main categories for development - aviation related activities, employment lands, and open space.

For aviation development, the land at the apex of the two runways is to be reserved for a future Airport Terminal Building (ATB) and its required aprons and taxiways. Also, included within this category is any land adjacent to the existing and future runways and taxiways is to be dedicated for the future aviation industries such as aviation MROs (Maintenance Repair and Overhaul), cargo logistics and private hangars.

Approximately 125 hectares of land is to be dedicated for open space which encompasses the three heritage wood lots located on the southeast corner of the airport property.

The remainder of the lands are to be dedicated as employment lands. Because the airport lands are ideally situated with access to rail and provincial highways, this dedication allows for the constantly changing opportunities that might be presented for emerging industries in the future. Additional studies will be required as development opportunities are presented. The master plan outlines the requirements and estimated costs to proceed forward in developing the airport land. Examples of these requirements are traffic studies, secondary plans, etc.

Also, summarized in the master plan report is a review of aircraft and passenger movement which utilize the airport infrastructure and facilities (both historical movement and future projected movement). This information will assist in determining the expansion needs of the current terminal or the construction of a new terminal as well as rehabilitation and construction of new aprons and taxiways. These investments will be required to meet customer demand and service to the traveling public as well as provide development opportunities to airlines and aircraft operators.

Upon approval of the master plan, Administration will proceed with the registration of zoning for the Windsor International Airport with Public Works Canada to protect the air space outside of airport lands that are used for the approaches to runways. Funding has been previously allocated for the zoning process and therefore, there will be no impact to the City's finances.

### **4. FINANCIAL MATTERS:**

CR 349/2008 approved an expenditure of \$150,000 to be earmarked for the Airport Land Use Master Plan which included engaging the services of a qualified consultant. The funds were approved under Windsor Airport Services Improvement project (#7059011). In 2009, Dillon Consulting with their subcontractor, LPS Aviation Inc was contracted to develop the Master Plan for the Windsor International Airport. The project is within its budgeted amount.

The intention of this report is to seek approval and endorse in principle the recommendations outlined in the Windsor International Airport – Master Plan 2010. If any additional funding is required in the future, Administration will come forward to Council for consideration.

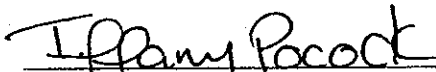
## 5. CONSULTATIONS:

The consultant was required to organize and facilitate sessions and meetings with stakeholders to identify needs, issues, priorities and possible initiatives; to inform and provide input into the Report's analysis, evaluations and recommendations. A Project Steering Committee and Technical Working Group comprised of stakeholders were established to provide input and direction on the Master Plan. Further, a public information session was held at Windsor International Airport on Monday May 30, 2011 ('PIC'). Stakeholders were invited to participate in the PIC including Councillors, municipal and airport staff, YQG Board members, airport tenants, ERCA, utility companies, NAV Canada, Transport Canada and the general public.

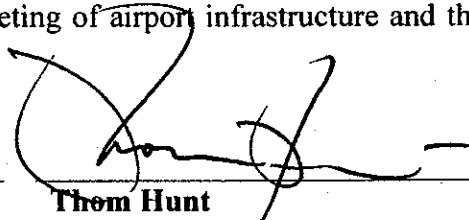
A summary of the community consultation process is outlined in Appendix F of the Final Report and Recommendations (attached as Schedule 1 to this report). Dillon Consulting and LPS conducted wide-ranging consultations by way of telephone interviews, personal interviews and finishing with a public meeting. Overall 35 stakeholders participated in the study by attending the public meeting and/or providing input to the consultant in some form.

## 6. CONCLUSION:

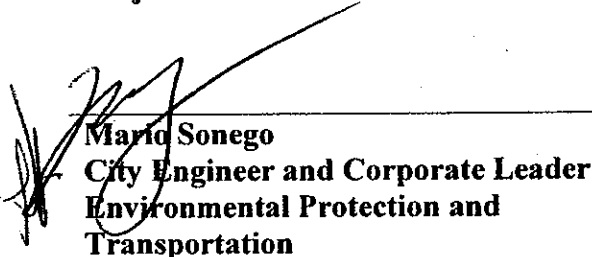
The Windsor International Airport Master Plan Report provides the data, related information and framework to assist in future development of the airport and the surrounding lands. As a working document, the Master Plan should be reviewed on an annual basis and updated to reflect changing market conditions and new development opportunities as they arise. The Windsor International Airport Master Plan Report will become an important resource to assist in the long term planning, development and capital budgeting of airport infrastructure and the surrounding airport lands over the next 20 years.



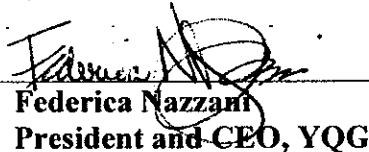
**Tiffany Pocock**  
Project Administrator



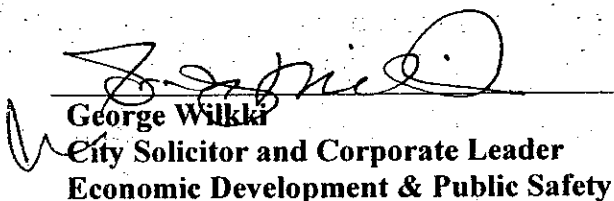
**Thom Hunt**  
City Planner / Executive Director



**Mario Sonego**  
City Engineer and Corporate Leader  
Environmental Protection and  
Transportation



**Federica Nazzari**  
President and CEO, YQG



**George Wilkie**  
City Solicitor and Corporate Leader  
Economic Development & Public Safety

TP/lp

**APPENDICES:**

**Appendix A – Figure 7-1 – Recommended Land Use Plan**

**Appendix B – Executive Summary of Master Plan 2010 – Windsor International Airport**

**Schedule 1 – Master Plan 2010 – Windsor International Airport enclosed for Mayor and Council only. Due to size, this document is available for viewing at the City Clerk's Office.**

**DEPARTMENTS/OTHERS CONSULTED:**

**Name: Poorvangi Raval, Financial Planning Administrator**

**Phone #: 519 255-6100 ext. 6343**

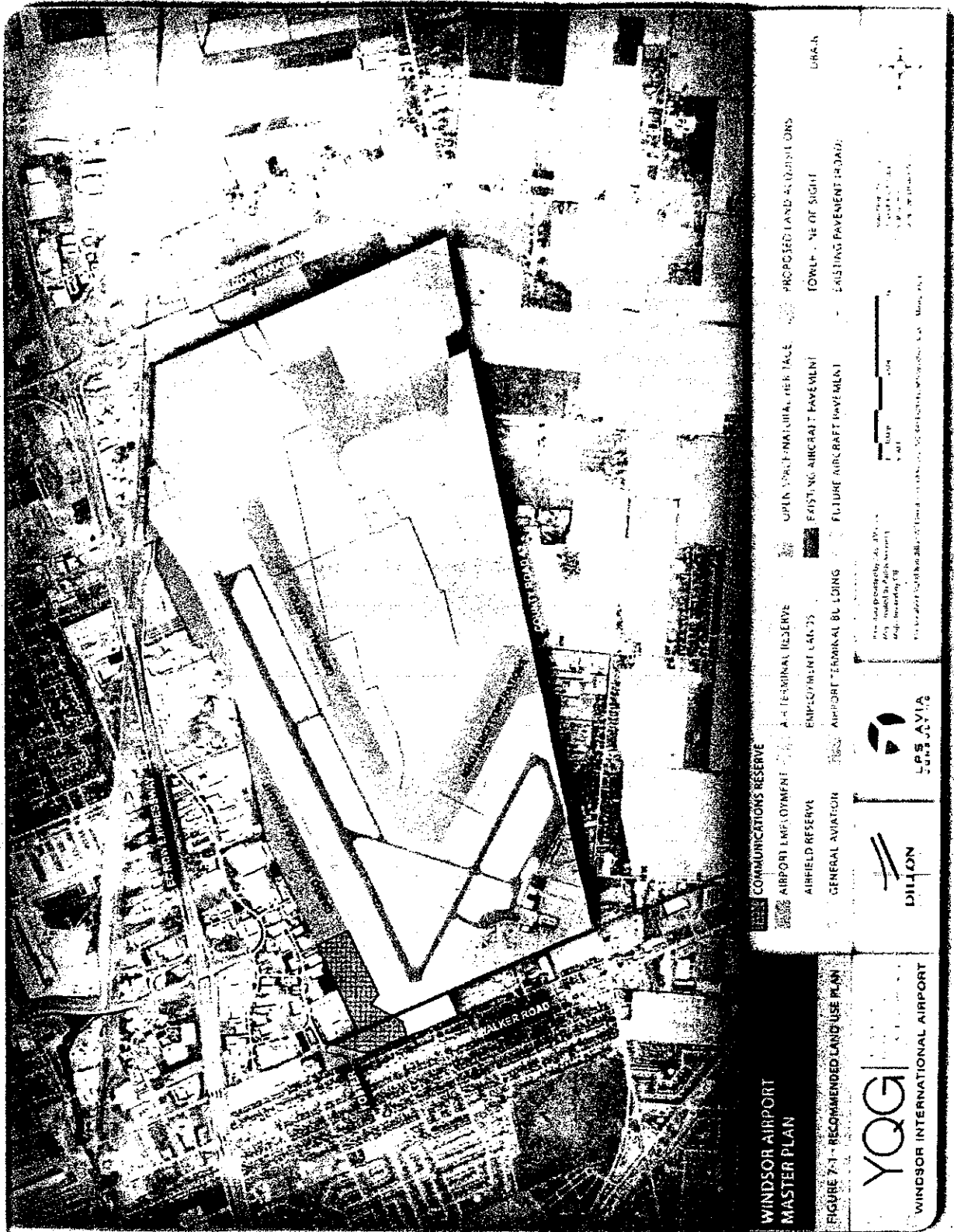
**Name: Victor Ferranti, Manager of Capital Budget and Reserves**

**Phone #: 519 255-6100 ext. 1732**

**NOTIFICATION :**

Name	Address	Email Address	Telephone	FAX
Flavio Forest, Dillon Consulting		fforest@dillon.ca	519-948-5000	

Figure 7-1 – Recommended Land Use Plan



## MASTER PLAN 2010 – WINDSOR INTERNATIONAL AIRPORT

**Executive Summary**

1. The Windsor International Airport is owned by the City of Windsor and operated by Your Quick Gateway (Windsor) Inc.(YQG), a wholly owned Federal share corporation of the City of Windsor under a long-term management agreement.
2. The Windsor International Airport Master Plan is the overall planning document that will guide the development of the Airport and assist the City and private sector in making land use decisions involving surrounding lands.
3. The Master Plan provides an in-depth profile of the physical conditions and capacities of the Airport's facilities and infrastructure and determines requirements to meet future needs and development potential, while recognizing the financial implications of improvements.
4. The goal of the Master Plan is to stimulate cost effective development on the Windsor International Airport lands through the short (2010-2015), medium (2016-2020) and long-term (2021-2031) planning horizons.
5. The Master Plan builds on the vision of YQG and the City to also facilitate long range planning and development on the surrounding lands that support and reinforce the City's investment in Windsor International Airport.
6. Windsor International Airport has the potential to be a driver of economic activity and support businesses and industries that rely on air transportation.
7. In order to attract increased economic activity to the Airport lands, additional capacity needs to be provided in terms of land available for development with appropriate access and municipal services.
8. The Master Plan addresses these issues and aims to identify lands required for airport related commercial development as well as identify areas for non-airport related employment uses on lands deemed surplus to the projected long-term needs of the Airport.
9. The Windsor International Airport property is approximately 813 hectares in size and is located within the Sandwich South Planning District in the City of Windsor, approximately 8 km south of the Windsor Downtown area.
10. The Airport is part of the Windsor-Essex Region, composed of the City of Windsor and the County of Essex. The Windsor-Essex Region has a strategic gateway location on the Canada/U.S. border. Its proximity to the Metro Detroit area and the location of important transportation infrastructure has allowed Windsor-Essex to be a central focus for NAFTA trans-border business activity.
11. The Windsor-Detroit gateway is the busiest commercial land border crossing in North America – with approximately 3.5 million trucks crossing each year.
12. From a strategic market perspective, the Windsor-Essex Region is centrally located within an 8-hour drive from almost half of the North American population. Detroit's market accounts for an additional 4.5 million people within 65 kilometres of the Airport and about 25 million people can be reached within 400 kilometres.
13. Windsor's strategic gateway location creates opportunities for cross-border, multi-modal business between Detroit/Windsor, the Windsor International Airport and the Sandwich South Planning District. The City of Windsor is a focal point for traffic flows into Canada from the Detroit/Chicago corridor. Windsor is part of the Continental Gateway Initiative, which focuses on developing a sustainable, secure and efficient multi-modal transportation system, including roads, rail, ports, airports, inter-modal facilities and border crossings.



14. The Sandwich South Planning District, which includes the Windsor International Airport, has the potential to become Ontario's primary western business gateway and a major multi-modal hub and logistics cluster for products entering and leaving Canada to the United States. The multi-modal hub links the Airport to Highway 401 and the Lauzon Parkway extension, the Ambassador Bridge, the 3<sup>rd</sup> International Crossing and Windsor-Essex Parkway, the Detroit-Windsor Tunnel, the Detroit-Windsor Truck Ferry, the Windsor Port, CP Rail and Canadian National Railway.
15. The portion of the Windsor International Airport lands being used for the operating airport are designated "Airport" in the City of Windsor Official Plan.
16. Over 250 hectares of lands on the Airport property located to the east of the operating airport are designated "Future Employment Area" in the Official Plan. These lands are being planned by the City to accommodate non-airport related employment and business park uses in support of the gateway and multi-modal hub concept.
17. Windsor International Airport currently includes an air terminal building, two runways, seven taxiways and two public aprons as well as air navigation facilities, aviation service facilities and other airport support uses. The core development area is located in the southwest quadrant of the Airport property.
18. The existing runways, taxiways and aprons require regular maintenance and periodic resurfacing.
19. The City of Windsor recently invested \$1.2 million in infrastructure improvements to the air terminal building. The objective of the project was to improve circulation, provide additional aircraft gates, and expand the capacity of the passenger departure lounge. The interior of the air terminal building was renovated to reflect a modern, up-to-date interior design. The grounds were landscaped in the spring of 2008 to create a strong first impression and recognize the Airport's commitment to protecting the environment.
20. A passenger capacity assessment of the existing air terminal building indicated that space is limited in the international arrivals and baggage hall which affects international processing standards. The terminal building has the capacity to process one international passenger flight at a time within the arrivals hall. This lack of space creates congestion for international flights. The check-in area and concourse are also comparatively undersized, and cannot accommodate multiple departing flights, causing passengers to queue in the concessions and vending area.
21. Regarding air cargo, the Windsor International Airport currently does not provide dedicated cargo services. Any cargo arriving or departing the Airport is handled either on the ramp or through a private/charter flight company on an ad-hoc basis. The Airport has a temporary hangar with a loading dock to accommodate low volumes of cargo.
22. Regarding future business, Windsor International Airport is exploring multiple opportunities for the Airport lands, including an inter-modal cargo transfer facility called a "Cargo Village" and a maintenance/repair/operations facility (MRO) for aircraft. The Cargo Village project includes a cargo transfer facility, forwarding, customs brokers, distributors, warehouses and trucking activities. It is intended that additional non-airport related businesses will develop in the adjacent business park and on surrounding lands in the South Sandwich Planning District.
23. The Cargo Village and MRO projects have far reaching implications for the City of Windsor by helping to "kick start" the development of the multi-modal hub and create new attendant employment opportunities for residents of Windsor-Essex. The Cargo Village's indirect economic benefits include an increase in passenger traffic activity and additional revenue for the Airport.
24. Developing passenger forecasts for Windsor International Airport is difficult because passenger choice of airport is highly sensitive to fare differentials. It is especially significant that travel to high volume Canadian destinations has often been considerably cheaper from Detroit than from Windsor. Services to Canada from

Detroit are often more direct than from Windsor and competition is stronger. These factors make the traffic volumes of any airport in a multi-airport region such as Windsor-Detroit problematic. Traffic depends primarily on the scheduling and pricing decisions of the airlines. It is difficult to quantify latent traffic and actual airport traffic volumes severely underestimate the market size. Therefore a passenger traffic market study is required to determine the true size of the Windsor-Essex market for the Windsor International Airport. There are no satisfactory statistics available to estimate this market in the absence of this type of study.

25. The Master Plan made the following recommendations regarding improvements and major upgrades to airport facilities:

#### Airfield System

##### Runways

- Land be reserved for extension of Runway 07-25 to 3,048m (10,000 ft.) in the event of regular use by B747-400 cargo aircraft and these aircraft have a requirement to carry higher loads over longer distances than may be undertaken with the current runway length.
- It is recommended that the Airport continue regular maintenance of runway facilities, particularly Runway 12-30.

##### Taxiways

- Land be reserved to allow future extension of Taxi 'H' to serve an extension of Runway 07-25 and to provide access to airside commercial land.
- Taxiway be constructed north of Runway 07-25 to provide access to the planned employment lands.
- Taxiway be developed on the east side and parallel to Runway 12-30 to provide access to the new south employment areas. This taxiway will also provide access for heavy aircraft to/from these employment lands to Runway 07-25.

##### Aprons

- Apron I be expanded in the vicinity of Taxi 'G' in the event parking is required on a regular basis for B747-400 cargo aircraft. This will protect the precision approach zoning surface supporting Runway 12-30.
- Land be reserved for westerly expansion of Apron III in the event passenger growth beyond the traffic forecasts is achieved.
- Land reserve be established in the infield adjacent to Taxi 'H' for ultimate development of a new apron and associated air terminal complex.

##### Capacity

- Due to the current and expected aircraft movement volumes at the Windsor International Airport, the current airside capacity is expected to meet the needs of the Airport for the planning horizon.
- Additional runways will not be required within the planning horizon as current capacity is adequate. The addition of taxiways paralleling Runways 07-25 and 12-30 will further increase the maximum throughput capacity of the runway system.

## Air Navigation Facilities

### Air Traffic Control Tower

- Land reserve be established in the infield near the intersection of Runways 07-25 and 12-30 for construction of a new control tower should this be required due to development of higher buildings and structures in certain portions of the infield.

## Air Terminal Building

### Current Air Terminal Capacity

- Estimated that departing passengers in the air terminal are currently experiencing LOS 'B' Level (Conditions of stable flow; high level of comfort); there is adequate space for travelers in pre-boarding security and departure lounge areas.

### Operational Deficiencies

- Passengers arriving on international flights are currently experiencing a LOS 'E' or lower during peak periods as the arrival and baggage hall is smaller than the recommended size, suggesting that unstable flow and capacity limiting conditions are present.
- Air terminal building requires a larger capacity for international and trans-border passengers arriving at Windsor International Airport.
- Immediate expansion program be undertaken to provide additional space for passenger check-in queuing, international and trans-border arrivals, related amenities and concessions.
- Current building configuration is not considered optimal as some functions meet or exceed space requirements.
- To achieve a better level of service, the air terminal building be modestly expanded from its current size of 4,716m<sup>2</sup> to 5,250m<sup>2</sup> along with some minor reconfigurations to optimize functional space assignment.

### Short-Term Requirements (2010 – 2015)

- Air terminal building ground floor area be expanded to a minimum of 5,800m<sup>2</sup> to serve the projected growth in peak passenger volumes in the short-term (to 2015). Some reconfiguration is also required to achieve an acceptable level of service.
- Areas requiring expansion include Check-in, Passenger Screening, Departures Holdroom, Domestic Arrivals and International Arrivals.
- Given the age of the air terminal building (opened in 1958), an engineering study of the complete building be undertaken to confirm the need, identify costs and develop the optimum strategy for making the required improvements.

### Medium-Term (2020) and Long-Term (2030) Requirements

- There is adequate space for significant air terminal expansion in both westerly and southerly directions as existing roads and parking can be realigned.
- Medium-Term and Long-Term expansion follow a westerly axis paralleling the current and future Apron III layout and that expansion proceed southerly towards the groundside to increase the overall width of the air terminal building.

### Access Roads and Parking

- The Lauzon Parkway Improvements Environmental Assessment study will confirm the preferred solutions for roadway improvements including the suitability of site access locations to the Airport lands.
- Complete traffic impact studies to confirm external roadway improvement measures to accommodate development.
- Parking study be undertaken immediately to determine current and future demand characteristics and requirements at the Airport.
- Additional lands be reserved in the general vicinity of the air terminal building to accommodate long-term parking growth.

### Utilities and Services

#### Water Supply

- Assessment of the Airport's existing on-site water distribution system be carried out to identify opportunities to modify/expand the existing system.

#### Stormwater Drainage

- Environmental studies of the woodlot and provincially significant wetlands be updated and compiled in a more comprehensive biological inventory for flora, fauna and aquatic species.
- Comprehensive functional stormwater management study be completed to identify an appropriate strategy for implementing the necessary runoff control and mitigating measures for the development of these lands, including the phased implementation of the stormwater management facilities.

### Electrical and Communications

#### Field Electrical Centre

- Engineering study be undertaken in the short-term to assess the existing systems, equipment and components in the field electrical centre to determine the life expectancy of the facility.

### Aircraft Services

#### Fuel Facilities

- Develop a bulk fuel storage facility on a lot in the employment lands located at the west end of Phelps Drive to permit both airside and/or groundside access for fuel tankers with minimal disruption to Airport operations.

#### De-icing Facilities.

- Designated de-icing area be established on Apron III as operations increase in the future.

### Airport Maintenance

#### Maintenance and Fire Hall Building

- As airport maintenance requirements increase, that consideration is given to constructing a new maintenance building at an alternate location, including consideration for combining this with emergency response services.

26. The Master Plan provided the following recommendations regarding improvements and major upgrades to general aviation facilities:

Air Cargo

- Develop air cargo facilities in two (2) phases along with a Cargo Village as recommended in Air Cargo Development Study (Lufthansa Consulting).
- Airside service road be constructed linking Apron III to Apron I, and Apron I to the north employment lands as required to support air cargo facilities development.

Cargo Village

- Develop cargo village in accordance with Air Cargo Development Study (Lufthansa Consulting).

Multi-Modal Port

- Lands be reserved for a multi-modal port with a configuration of roughly 235 ha.

Pre-Clearance Facility

- A pre-clearance facility could be located in or adjacent to the air cargo building. If it also serves truck traffic, it would need to be near in or adjacent to the Cargo Village.
- Sufficient land is also available in the Sandwich South area to accommodate a pre-clearance facility.

Aircraft Maintenance and Support

- Lands be reserved for the development of a maintenance, repair and overhaul facility in the airside employment lands.

Airport Business Park

- Lands be reserved for the development of a business park on the lands deemed surplus to the operating airport.

General Aviation

- Lands be set aside to attract new and expand existing general aviation uses.

Airport Related Commercial

- Lands be reserved within the infield area of the Airport property for major Airport related business and employment uses.
- Development of high structures in certain portions of the infield area may interfere with sight lines from the current air traffic control tower. All proposed infield development projects be subject to review by Airport management and if a sight line issue is identified, relocation of the air traffic control tower to a new infield location may be necessary in order for the development to proceed.

27. The Master Plan recommended a Development Plan to meet the current and future airside, air terminal and groundside requirements of Windsor International Airport. The plan allocates sufficient land to accommodate Airport growth beyond the planning horizon.

28. The Development Plan recommended certain projects along with the trigger points when each project will be required.

### Development Plan

Project	Phasing Trigger	ROM Cost	Refer. Sect.
<b>Airport Lands</b>			
Construct partial parallel taxiway north of Runway 07-25.	To provide access to new north employment lands, as demand develops.	\$ 10 million	5.1.2
Construct taxiway on the east side and parallel to Runway 12-30.	To provide access to the new south employment lands and access by heavy aircraft from these lands to Runway 07-25, as demand develops.	\$ 3.5 million	5.1.2
Expand Apron I in the vicinity of Taxi 'G' to accommodate Code E aircraft	To provide parking for B747-400 cargo aircraft as demand develops and Runway 12-30 requires precision approach zoning protection.	\$ 2 million	5.1.3
Maintain Runways to extend the life of these assets.	Short-term repaving of Runway 12-30 (2016).	\$ 1.5 million	5.1.1
Construct airside service road linking Apron III to Apron I, and Apron I to the north employment lands.	As required to support air cargo facilities developments.	\$210,000	6.2
Expand ATB to approximately 5,250m <sup>2</sup> to provide additional space for passenger check-in queuing, international and trans-border arrivals, related amenities, and concessions.	Immediate requirement to serve current peak hour passengers (TPHP) of 157.	\$2.0 million	5.3.3
Expand ATB to 5,800m <sup>2</sup> to meet projected growth in passenger traffic in the short-term.	Expansion anticipated in the short-term (5 years) to serve projected peak hour passenger (TPHP) growth to 253.	\$2.5 million	5.3.4
Prepare engineering study of the ATB.	Prepare prior to embarking on ATB improvement programs.	\$50,000	5.3.4
Complete drainage and pavement resurfacing of private groundside and airside roadways serving the Airport operations.	Short-term to medium-term need, subject to roadway conditions.	\$ 1.5 million	5.4.1
Prepare Airport parking study.	Immediate requirement to determine current and future demand characteristics and requirements for parking.	\$35,000	5.4.2
Prepare engineering study of the FEC.	Short-term requirement to assess the existing systems, equipment and components in the FEC and the life expectancy of the facility.	\$15,000	5.6.3
Construct a new maintenance building at another location on site, including consideration for combining this with emergency response services needs.	Medium-term, as maintenance requirements increase.	\$ 2.5 million	5.9.3
Develop a Secondary Plan/Official Plan Amendment to re-designate future employment area to permit employment uses including a Business Park and establish road and servicing network.	Short-term.	By City Planning & Eng. Depts.	6.6

Project	Phasing Trigger	ROM Cost	Refer. Sect.
Develop Phase I air cargo facility.	Immediate investment to foster air cargo development.	\$ TBD	6.3
Develop North Side Employment Lands.	Development of Phase II air cargo facilities, or shortage of general aviation development land.	\$ TBD	6.3
Develop South Side Employment Lands.	Development of large MRO and/or aerospace manufacturing on adjacent employment lands.	\$ TBD	6.8
Develop Cargo Village	Assemble as critical mass of related businesses develops on Airport lands in vicinity of each other	\$ TBD	6.3
Develop Multi-Modal Port.	Development of Multi-Modal Rail/Truck Facility.	\$ TBD	6.4
Complete a stormwater management (SWM) plan for the Airport lands and implement stormwater management measures.	Immediate need for SWM Plan. Short-term to longer-term implementation of SWM facilities in stages as development proceeds.	\$50,000 \$15.6 million	5.5.3 and 5.10
Protect and maintain environmental sensitive area adjacent the Airport Woodlot.	Immediate to short-term.	N/A	5.5.3 and 5.10
Complete environmental studies to confirm the significance of the natural environment and mitigating measures resulting from development impacts.	Short-term.	\$ TBD	5.5.3 and 5.10
<b>Surrounding Lands</b>			
Complete environmental assessment studies for County Road 42 and Lauzon Parkway.	Immediate.	\$ TBD	2.4.2
Implement the preferred road improvement alternatives arising from the above environmental assessment studies.	Short to medium-term.	\$ TBD	2.4.2
Complete traffic impact studies to confirm external roadway improvement measures to accommodate development.	Progressive studies as development opportunities arise.	\$ TBD	2.4.2
Confirm existing water distribution system capacity and associated improvements in the interim until trunk feeder mains are completed by WUC.	Immediate to short-term. Trunk watermain facilities from Banwell (North of EC Row) to Cabana (East of Howard).	\$ 26.3 million	5.5.1
Complete a sanitary servicing study to confirm the opportunities to expand the drainage area boundary for the trunk sanitary.	Medium-term.	\$ 50,000	5.5.2
Complete improvements to the Little River Pollution Control Plant, as required to meet sewage flow demands from the expanded service area.	Longer-term.	\$ TBD	5.5.2

29. The Recommended Land Use Plan shown on Figure 7.1 of the Master Plan addresses the short, medium and long-term development potential of the Windsor International Airport.
30. The Recommended Land Use Plan:
- Provides sufficient land to meet the long-term requirements of all essential aviation activities at Windsor International Airport;
  - Provides flexibility to accommodate targeted airport and non-airport related business investments that support the development of a strategic gateway and multi-modal hub centred on the Windsor International Airport and the Sandwich South employment area;
  - Ensures that land is developed for uses that are compatible with the safe and efficient operation of aircraft at the Windsor International Airport;
  - Ensures that land is developed in a manner that is compatible with the adjacent Community;
  - Guides the development of Windsor International Airport in a logical and orderly manner ; and
  - Protects the interests of the City as well as the tenants within boundaries of the Windsor International Airport property.