



A. LIST OF ABBREVIATIONS

LIST OF ABBREVIATIONS

AC	Advisory Circular
ACAP	Airports Capital Assistance Program
AGL	Above Ground Level
AGN	Aircraft Group Number
AIF	Airport Improvement Fee
AIRAC	Aeronautical Information Regulation and Control
ANAC	Aeronautical Noise Advisory Committee
AOC	Airport Operations Centre
AOM	Airport Operations Manual
ARCAL	Aircraft Radio Control of Aerodrome Lighting
ARFF	Aircraft Rescue and Firefighting
ASDA	Accelerate Stop-Distance Available
ASL	Above Sea Level
ASV	Annual Service Volume
ATB	Airport Terminal Building
ATCT	Air Traffic Control Tower
AWIS	Aviation Weather Information Services
AZR	Airport Zoning Regulations
CAP	Canada Air Pilot
CARs	Canadian Aviation Regulations
CATSA	Canadian Air Transport Security Authority
CBP	Customs and Border Protection
CCME	Canadian Council of Minister of the Environment

CCR	Constant Current Regulators
CEF	Core Environmental Features
CFB	Canadian Forces Base
CFS	Canada Flight Supplement
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
CRFI	Canadian Runway Friction Index
DFO	Department of Fisheries and Oceans
DME	Distance Measuring Equipment
DP	Departure Procedures
E/D	Enplaned / Deplaned
ELC	Ecological Land Classification
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FBO	Fixed Base Operators
FEC	Field Electrical Centre
FSS	Flight Service Station
GA	General Aviation
GDP	Gross Domestic Product
GNSS	Global Navigation Satellite System
GRCA	Grand River Conservation Authority
GSE	Ground Support Equipment
GTA	Greater Toronto Area
GTAA	Greater Toronto Airports Authority
HBS	Hold Baggage Screening
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules

ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
IPU	Interruptible Power Unit
LDA	Landing Distance Available
LOS	Level of Service
MBCA	Migratory Bird Convention Act
MBR	Migratory Birds Regulations
MESP	Master Environmental Services Plan
MLW	Maximum Landing Weight
MNRF	Ministry of Natural Resources and Forestry
MTOW	Minimum Takeoff Weight
NAP	National Airports Policy
NAS	National Airports System
NATO	North Atlantic Treaty Organization
NavCan	NAV Canada
NDB	Non-Directional Beacon
NEF	Noise Exposure Forecast
NEP	Noise Exposure Projection
NHIC	Natural Heritage Information Centre
NHRM	Natural Heritage Reference Manual
OD	Origin Destination
ODALS	Omnidirectional Approach Lighting System
OIS	Obstacle Identification Surface
OLS	Obstacle Limitation Surface
PAPI	Precision Approach Path Indicator
PAX	Passengers
PBB	Passenger Boarding Bridges

PBS	Pre-Board Screening
PIC	Public Information Centre
PLC	Programmable Logic Controllers
PLR	Pavement Load Rating
POFZ	Precision Obstacle Free Zone
PPD	Peak Planning Day
PPS	Provincial Policy Statement
PSW	Provincially Significant Wetland
PTB	Passenger Terminal Building
RESA	Runway End Safety Areas
RILs	Runway Identification Lights
RNAV	Area Navigation
ROP	Regional Official Plan
ROW	Region of Waterloo
ROWIA	Region of Waterloo International Airport
RTMP	Regional Transportation Master Plan
RWY	Runway
SACDC	Sudbury Airport Community Development Corporation
SAR	Species at Risk
SARA	Species at Risk Act
SARO	Species at Risk in Ontario
SID	Standard Instrument Departure
SSALR	Simplified Short Approach Lighting System with Runway Alignment Indicator Lights
SWM	Storm Water Management
SWOT	Strengths, Weaknesses, Opportunities, Threats
TALPA	Takeoff and Landing Performance Assessment
TAMS	Tower Aircraft Movement Statistics

TODA	Takeoff Distance Available
TORA	Takeoff Run Available
TPIA	Toronto Pearson International Airport
TSU	Terrestrial Survey Unit
ULCC	Ultra-Low-Cost Carrier
VASIS	Visual Approach Slope Indicator System
VFR	Visual Flight Rules
VOR	VFR Omnidirectional Range
WNH	Waterloo North Hydro
YKF	International Air Transportation Association (IATA) airport code for Waterloo

EXPLANATION OF TERMS

Aerodrome	Any area of land, water or other supporting surface used or designed, prepared, equipped or set apart for use either in whole or in part for arrival and departure, movement or servicing of aircraft and includes any buildings, installations and equipment in connection thereof.
Aerodrome Beacon	Aeronautical beacon / light used to indicate the location of an aerodrome from the air.
Aerodrome Elevation	The elevation of the highest point of the landing area (runway).
Aerodrome Reference Code	A simple coding system used to interrelate and identify standards for various sizes of aerodrome facility that are suitable for the airplanes intending to operate at them. The code is composed of two elements – a code number (from 1 to 4) related to the airplane reference field length, and a code letter (from A to E) related to the aircraft wing span & outer main gear wheel span.
Aerodrome Reference Point	The designated point or points on an aerodrome normally located at or near the geometric centre of the runway complex that establishes the locus of the radius or radii of the outer surface (as defined in a Zoning Regulation).
Aerodrome Reference Temperature	The monthly mean of the maximum daily temperature for the hottest month of the year (the hottest month being that which has the highest monthly mean temperature).
Air Carrier	An aircraft operator, licensed under the National Transportation Act to transport persons, mail and/or goods by air, who has an official ICAO or Transport Canada designator.

Air Taxi	An air carrier providing on demand, public transportation of persons and property by aircraft. Generally operating small aircraft “for hire” for specific trips.
Air Traffic Control Tower (ATCT)	A central operations facility in the terminal air traffic control system, consisting of a tower, including an associated instrument flight rule (IFR) room if radar equipped, using air/ground communications and/or radar, visual signalling, and other devices to provide safe and expeditious movement of terminal air traffic.
Aircraft Movement	A take-off, landing, or simulated approach by an aircraft.
Airplane Reference Field Length	The minimum field length required for take-off at maximum certified take-off mass, sea level, standard atmospheric conditions, still air and zero runway slope, as listed in relevant airplane flight manuals prescribed by the certifying authority or equivalent data from the airplane manufacturer. Field length means balanced field length for airplanes or take-off distance in other cases.
Airport	An aerodrome for which an airport certificate is in force.
Airport Zoning Regulations	A regulation respecting a given airport pursuant to the Canadian Aeronautics Act. A zoning or legal instrument that will prohibit the erection of structures which would violate any of the defined obstacles limitation surfaces.
Airside	The movement area of an aerodrome, including adjacent terrain and buildings or portions thereof, where access is controlled.
Approach Minimums	The altitude below which an aircraft may not descend while on an IFR approach unless the pilot has the runway in sight.
Approach/ Take-off Path	The flight track aircraft follow when landing at or taking off from an aerodrome which translates to a quadrilateral area on the surface of the earth lying directly below the approach/take-off surface.
Apron (Ramp)	An area on the airside portion of an aerodrome, other than the manoeuvring area, intended to accommodate the manoeuvring and parking of aircraft, the loading and unloading of aircraft, and the general handling of flights and the associated aircraft, vehicles and passengers.
AWOS	A group of equipment used to automatically record weather conditions including cloud height, visibility, wind speed and direction, temperature, dewpoint, etc.
Circling Approach	A pilot initiated manoeuvre to align the aircraft with the runway for landing when flying a predetermined circling instrument approach under IFR.
Clearway	A defined rectangular area on the ground or water under the control of the appropriate authority selected or prepared as a suitable area over which an airplane may make a portion of its initial climb to a specified height.
Controlled Airspace	Airspace of defined dimensions within which air traffic control services are provided to IFR and VFR flights in accordance with the air space classification.
Control Zone	Controlled airspace of defined dimensions extending upwards from ground level to and including 3,000 feet above aerodrome elevation.

Design Aircraft	Most operationally demanding or critical aircraft, identified from among the aircraft an aerodrome is intended to service, used to determine the dimensions, bearing strength and other physical characteristics in the design of an aerodrome.
Displaced Threshold	A threshold not located at the extremity of a runway. Displaced thresholds are used when an obstacle in the final approach area intrudes into the specific obstruction clearance surfaces. Displacing the threshold provides the required obstacle free slope. The declared landing distance (LDA) which assumes a specified obstacle clearance plane is therefore measured from the displaced threshold; however there is no restriction to an aircraft actually landing on the useable runway prior to the displaced threshold. This portion of the runway is also available take-off or roll out.
Flight Service Station	An aeronautical facility providing mobile or fixed communications, flight information, search and rescue alerting, and weather advising services to pilots/other users.
Helipad	A designated area for the takeoff, landing, and parking of helicopters.
Instrument Approach	A series of predetermined manoeuvres for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually.
Instrument Flight Rules (IFR)	Rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.
Itinerant Movement	Movements proceeding to or arriving from another location, or leaves the aerodrome traffic circuit but returns without landing at another aerodrome. Excludes flights which are strictly passing through the control zone of the aerodrome.
Local Movement	A movement in which the aircraft remains in the circuit or in close proximity to the aerodrome, and will return to land at the aerodrome. Typically, this includes aircraft executing practice instrument approach procedures or touch-and-go training operations.
Low Level Airspace	All airspace within the Canadian Domestic Airspace below 18,000 feet ASL.
Low Level Airway	Within low level airspace, a route extending upwards from 2,200 feet ASL up to, but not including 18,000 feet ASL, and for which air traffic control is provided.
Navaid	A term used to describe electronic equipment used by pilots for air navigation purposes (i.e. NDB, VOR, DME, ILS).
Non-instrument Runway	A runway intended for the operation of aircraft using visual procedures or instrument procedures to circling minima only.
Non-Precision Approach	An instrument approach in which electronic azimuth information is only provided. No electronic glide path information is provided and obstacle assessment in the final segment is based on minimum descent altitude.

Non-Precision Approach Procedure	A standard instrument approach procedure in which no electronic glide slope is provided.
NOTAM	A notice containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.
Obstacle	Any fixed (whether temporary or permanent) and mobile object that could have an adverse effect on safe operation of aircraft in flight or on the ground, or otherwise a hazard to air navigation.
Obstacle Limitation Surface (OLS)	A surface that establishes the limit to which objects, including a parked or moving vehicle, may project into the airspace so that aircraft operations for which the airport is intended may be conducted safely and, includes a transitional surface, a take-off surface, an approach surface, and an outer surface. Any object, which penetrates an obstacle limitation surface, and is deemed to be a hazard to air navigation, must either be removed, lowered and/or marked and lighted.
Passenger Terminal Building (PTB)	An installation provided with facilities and services necessary for the loading and unloading of aircraft and in-transit handling of traffic (passengers, cargo and mail) which is moved by aircraft.
Precision Approach Path Indicator (PAPI)	A lighting system providing visual approach slope guidance to aircraft during a landing approach. It is similar to a VASI but provides a sharper transition between the coloured indicator lights.
Private Use Airport	Except in an emergency, a private use airport is not normally open to itinerant aircraft and therefore the operator's permission should be obtained prior to use.
Public Use Airport	An aerodrome available for use by the general public without requirement for prior approval of the owner or operator.
Registered Aerodrome	Aerodromes listed in the CFS, which are not certified as airports.
Reliever Airport	An airport to serve general aviation aircraft, which might otherwise use a congested air-carrier served airport.
Runway Identification Lights (RIL)	Two synchronized flashing lights, one on each side of the runway threshold, which provide rapid and positive identification of the approach end of a particular runway.
Runway End Safety Area	An area symmetrical about the extended runway centreline and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.
Runway End Safety Area	A defined surface symmetrical about the extended runway centreline and adjacent to the end of the strip intended to reduce the risk of damage to airplanes in the event of an overshoot, undershoot, or excursion from the runway.
Runway Gradient	The average slope, measured in percent, between the two ends of a runway.

Runway Incursion	Any occurrence at an airport involving the unauthorized or unplanned presence of an aircraft, vehicle, or person on the protected areas of a runway.
Runway Strip	A defined area including the runway and stopway, if provided, intended to reduce the risk of damage to aircraft running off a runway or to protect aircraft flying over it during take-off or landing operations.
Runway Visual Range (RVR)	An instrumentally derived value, in feet, representing the horizontal distance a pilot can see down the runway from the runway end.
Secondary Runway	A runway designed to serve less critical airplanes and not necessarily sufficient for all airplanes which the primary runway is intended to serve and is provided to take account of the effect of particular winds of high velocity.
Stop-and-Go	A procedure in which an aircraft lands, makes a complete stop on the runway, and then commences a take-off from that point. A stop-and-go is record as two operations (landing and take-off).
Stopway	A defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.
Taxiway	A defined path established for the taxiing of aircraft from one part of an airport to another.
Threshold	The beginning of that portion of the runway available for landing. In some instances the landing threshold may be displaced.
Touch-and-Go	An operation by an aircraft that lands and departs on a runway without stopping or exiting the runway. A touch-and-go is recorded as two operations: one operation for the landing and one operation for the take-off.
Unicom	A non-government communication facility, which may provide airport information at certain airports. Locations and frequencies of UNICOMs are shown on aeronautical charts and publications.
Visual Approach	An approach wherein an aircraft on an IFR flight path operating in VMC under the control of ATC and ATC authorization, may proceed to the airport of destination.
Visual Flight Rules (VFR)	Rules that govern the procedures governing flight using visual means (without instruments or using instruments for aiding in visual flight procedures).
Visual Meteorological Conditions	Conditions equal to or greater than the minima prescribed in Subpart 2 of CARs, Part IV, expressed in terms of visibility and distance from cloud.



B. INPUTS FOR THE MARKET TREND FORECAST

INPUTS FOR THE MARKET TREND FORECAST

The following table identifies various external forecasts that were used in the trend analysis.

Figure AB-1: External Forecasts of Key Variables

Source	Variable	Time Period	Growth Rate
FAA ¹	Real GDP U.S.	2013	1.7% p.a.
		2014	2.6% p.a.
		2015	3.0% p.a.
		2016	2.7% p.a.
		2017-2033	2.7% p.a.
IMF	Real GDP Canada	2013	2.0% p.a.
		2014	2.4% p.a.
	Real GDP U.S.	2013	2.1% p.a.
		2014	2.9% p.a.
BMO	Real GDP Canada	2013	1.5% p.a.
		2014	2.3% p.a.
	Real GDP U.S.	2013	2.2% p.a.
		2014	3.2% p.a.
CIBC	Real GDP Canada	2013	1.7% p.a.
		2014	2.4% p.a.
TD	Real GDP Canada	2013	1.6% p.a.
		2014	2.6% p.a.
Scotiabank	Real GDP Canada	2013	1.6% p.a.
		2014	2.4% p.a.
RBC	Real GDP Canada	2013	1.8% p.a.
		2014	2.9% p.a.
Bank of Canada	Real GDP Canada	2013	2.0% p.a.
		2014	2.7% p.a.
Global Insight	Real GDP U.S.	2013	2.2% p.a.
		2014	3.2% p.a.
		2015	3.2% p.a.
		2016-40	2.9% p.a.
	Real GDP Canada	2013	2.6% p.a.
		2014	2.7% p.a.
		2015	2.7% p.a.
		2016-40	2.2% p.a.

¹ "FAA Aerospace Forecasts, Fiscal Years 2013-2033", FAA.



C. STAKEHOLDER COMMITTEE & USER SURVEY

Region of Waterloo International Airport Airport Master Plan Study

Stakeholder Committee

Transport Canada

COPA – Local Flight 26 as well as National HQ

CBAA – Ontario Region

ATAC

NACC – Airline Association for AC, WJ, Transat, Jazz

Chambers of Commerce – KW, Cambridge, Stratford & Guelph

Waterloo Airshows Inc.

YKF Airport Operating Committee

Westjet

Bearskin

Sunwing

American Airlines

Local Ground Handling companies – Airways & GSI

YKF Aeronautical Noise Management Committee

Nav Canada

GTAA

Ontario Aerospace Council

Airport Business Advisory Committee

Facebook & Twitter followers

Region of Waterloo International Airport Airport Master Plan

Airport User Survey

A new Master Plan for the Region of Waterloo International Airport is being prepared and your insights are important to this process and the creation of an airport that better serves the Airport users, area residents and businesses. By taking a few minutes to complete this survey, you will help in preparing a plan that successfully addresses the needs for an enhanced Region of Waterloo International Airport.

Thank you for your time and support!

Name: _____		
Address: _____		
City: _____	Prov: _____	Postal Code: _____
Phone: _____	Email: _____	

Please answer the following questions about your use of aircraft transportation:

1. What is the make and model of your aircraft? _____
2. Is your aircraft stored at the Waterloo Airport? Please indicate the type of hangar and if you own it or lease space from the Airport or another tenant? _____
3. Do you require or desire additional Hangar space at the airport? ☐ Yes ☐ No

3. Please indicate the approximate number of take-offs per month from Region of Waterloo Airport:
_____ # per week or _____ # per month or _____ # per year
4. Aircraft usage: _____ % Business _____ % Pleasure
5. What is the average length of your trip?
☐ 1 day ☐ 1-2 days ☐ 3-5 days ☐ 5 or more

6. Which of the following facility upgrades do you feel are needed to support your use of the Region of Waterloo Airport?

- ☐ 08-26 Runway (length) ☐ Terminal area (Main Apron)
☐ 14-32 Runway (length) ☐ Other Aprons
☐ Better instrument approach ☐ Hangar Space

7. Are the current instrument approach procedures adequate?

☐ Yes ☐ No Please explain: _____

8. Is the existing Runway Length adequate for your requirements?

Runway 08-26 ☐ Yes ☐ No Runway 14-32 ☐ Yes ☐ No

9. Please provide any comments regarding the runway length.

10. Which of the following services would you like to see the Airport improve or enhance?

- ☐ Aviation Fuelling ☐ Fire and Rescue
☐ Aircraft Maintenance ☐ Flight Instructions, Aircraft Rentals / Charter
☐ General Aviation Facilities ☐ Restaurant

11. Please rate the following categories based on your experiences at the Region of Waterloo Airport

	<i>(poor)</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 (excellent)</i>
<i>Runway Orientation</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Runway Length</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Condition of Pavements</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Instrument Approaches</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Visual Aids</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Navigational Aids</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Hangar Space</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Hangar / Pad Lease Rates</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>FBO Services</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Apron Space</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<i>Air Traffic Control Services</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	

Based on the above categories, which should get the highest priority? _____

12. Do the airport services provided at the airport meet your needs? ☐ Yes ☐ No

Are there additional services that the airport can provide to better serve you?

13. Are deicing capabilities adequate for your needs? Would you like to see any improvements in regards to deicing? ☐ Yes ☐ No

14. How important do you feel the Airport is to the local community and businesses?

15. Please provide any additional thoughts or concerns regarding the facilities or future needs at the Region of Waterloo Airport.

Thank You!

Thank you for your response. Every survey response received will greatly help our efforts on helping the Airport plan for the future.

For more information about the Airport Master Plan, please visit www.waterloairport.ca

A large, stylized letter 'D' in a light blue color, positioned on the right side of the page. It is partially overlaid by a darker blue shape that forms the letter 'D' itself. The background is a solid blue color with some faint, light blue lines in the upper left corner.

D. PRESENTATION BOARDS (2016 PUBLICINFORMATION CENTRE NO. 1 & NO. 2)

Public Consultation Centre November 10, 2016



- Please sign in on the sheet provided.
- Browse display materials.
- Questions? Ask an Airport representative at one of the stations.
- Provide Your Feedback:
 - Online: Log on to engageregionofwaterloo.ca
 - Email Us: AirportMasterPlan@regionofwaterloo.ca

Visit waterloairport.ca/masterplan for more information.

Thank you for your involvement in this project.

About the Master Plan

The Master Plan is being developed to help guide the future of the Region of Waterloo International Airport (YKF) for the next 20 years (2016 - 2035).

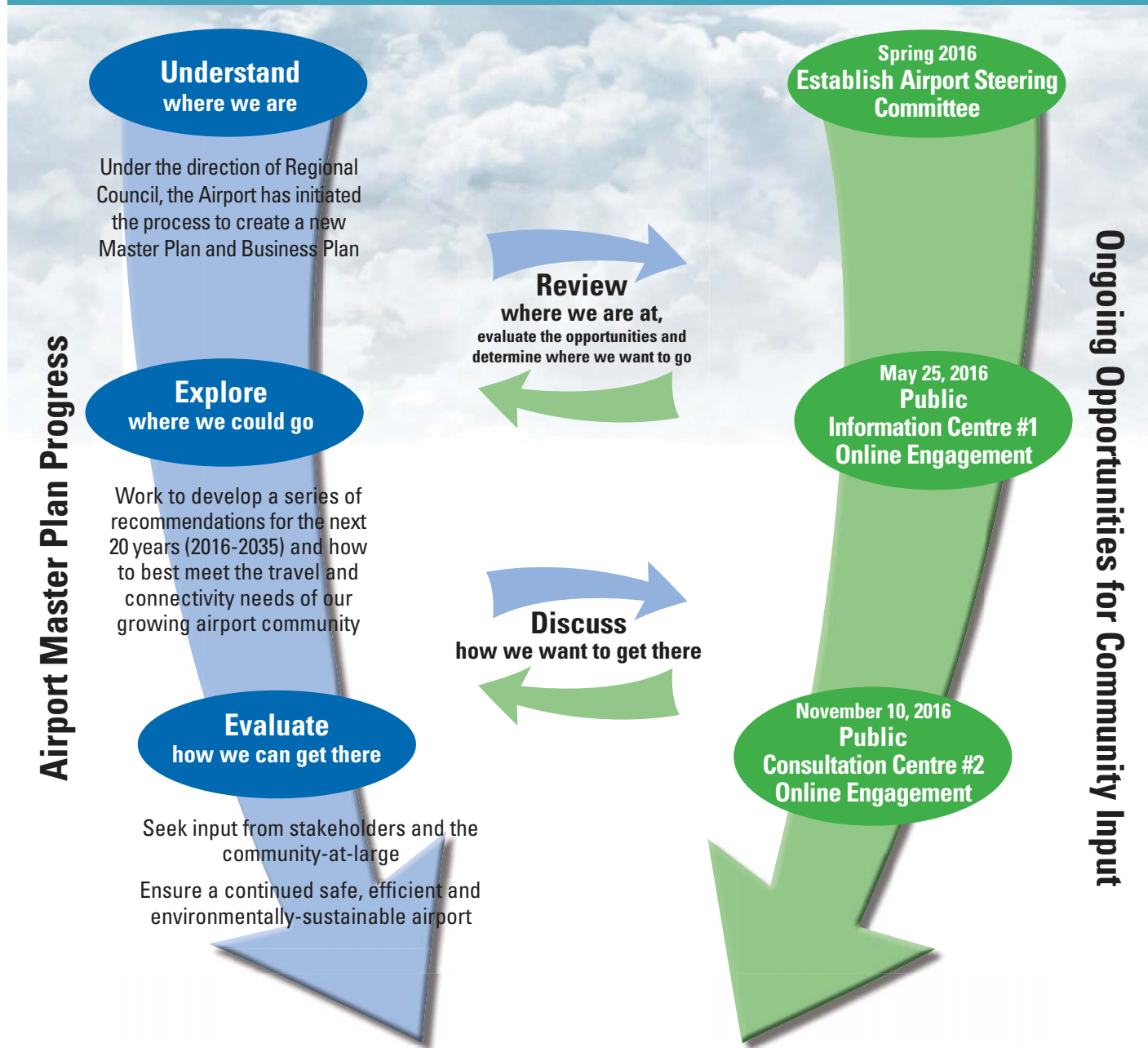
The plan will take into consideration the opportunities and challenges the Airport will face including how to best meet the travel and connectivity needs of our growing community.

The Airport Master Planning Process:

- Project Commencement - April 2016
- Public Information Centres
 - ◉ #1 - May 25, 2016
 - ◉ #2 - November 10, 2016
- Region of Waterloo Planning & Works Committee Update - Q1 2017
- Project Completion - Q1 2017



Master Plan Process



Q1 2017
Recommendation to Regional Council
Prepare a written plan with a series
of recommendations for implementation
starting in 2017



***The Region of Waterloo International Airport
will contribute to the economic prosperity
and competitive advantage of Waterloo Region
by connecting this innovative community
to the world.***

***This will be achieved through managed
growth, customer service excellence,
passenger convenience and community
responsiveness.***



Master Plan Goals

Under the direction of Regional Council, the Airport has initiated the process to update the Master Plan & Business Plan with specific direction to:

- Attract new air service
- Build out the Airport Business Park
- Protect for Future Growth
- Increase community awareness about noise mitigation measures
- Develop the Airport in conjunction with adjacent East Side Employment Lands



Airport Progress

Report Card

Regional Council Direction (June 2014 - Report E-14-087)		CURRENT STATUS		
Item	Description	Pending	In Progress	Completed
A	Maximize the existing capacity of the Airport		√	
	• WestJet adds 18% to Calgary Service = 16,780 additional seats (Feb 2015)			√
B	Attract additional passenger service to maximize the capacity of the existing Air Terminal Building		√	
	• WestJet Announcement Seasonal Orlando Service (July 2015)			√
	• Sunwing Seasonal Weekly Punta Cana Service (Dec 2016)		√	
C	Attract aviation-related businesses to the Airport's Aviation Business Park Development		√	
	• Chartright Air Group (Apr 2015)			√
	• NAV CANADA Ground-breaking on New Control Tower (June 2015)			√
D	Co-ordinate resources and strategies required for air service development and business attraction with the Regions broader economic development plans - including the East Side Lands		√	
	• YKF Economic Impact Awareness Campaign & Increased Pubic Consultation			√
	• Update 2013 Economic Impact Study (April 2016)			√
E	Consider additional opportunities to increase awareness concerning aeronautical noise and its mitigation			√
	• Restructured Aeronautical Noise Advisory Committee (Dec 2014)			√
	• Website Content Updated to Better Inform the Community			√
	• Installation of New Signs in Subdivisions Located in Proximity			√
F	Prepare a 2015-2024 Airport Capital Plan to reflect the plan for maximizing the existing Airport infrastructure			√
	• Airport Capital Plan Completed (Feb 2015)			√
G	Review of the Airport Master Plan, once approved, at regular intervals or upon the Airport achieving passenger and financial objectives	√		
H	Evaluate further actions, such as Federal zoning protections or designation of reserve lands to ensure opportunities for future growth	√		



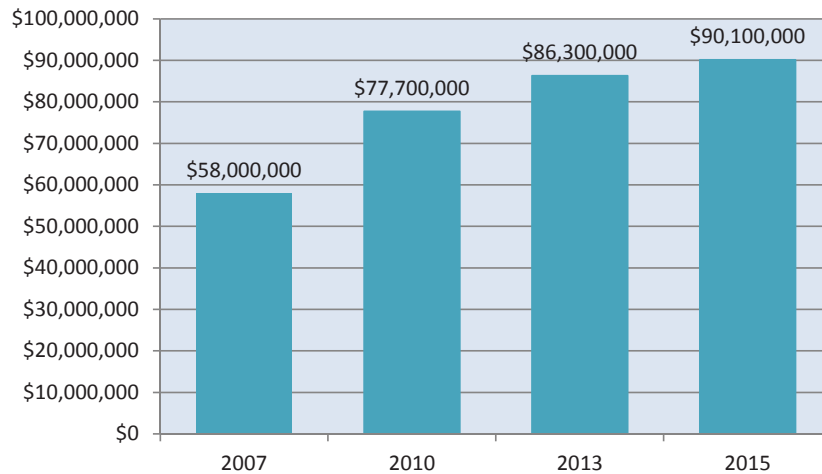
Region of Waterloo
INTERNATIONAL
AIRPORT

Airport Overview

Economic Impact

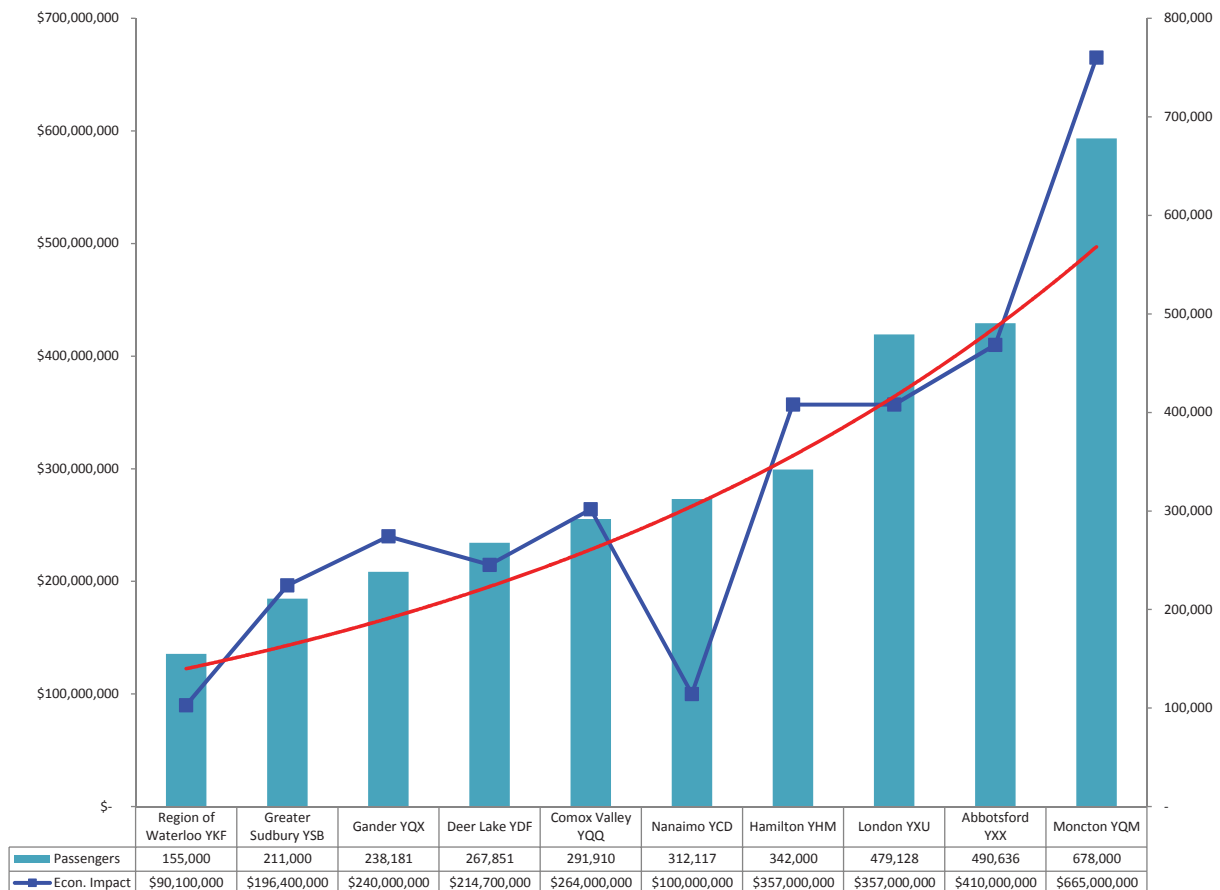
YKF Economic Impact 2007 to 2015

In 2015 the Airport contributed an estimated \$90 million to the Region's economy*



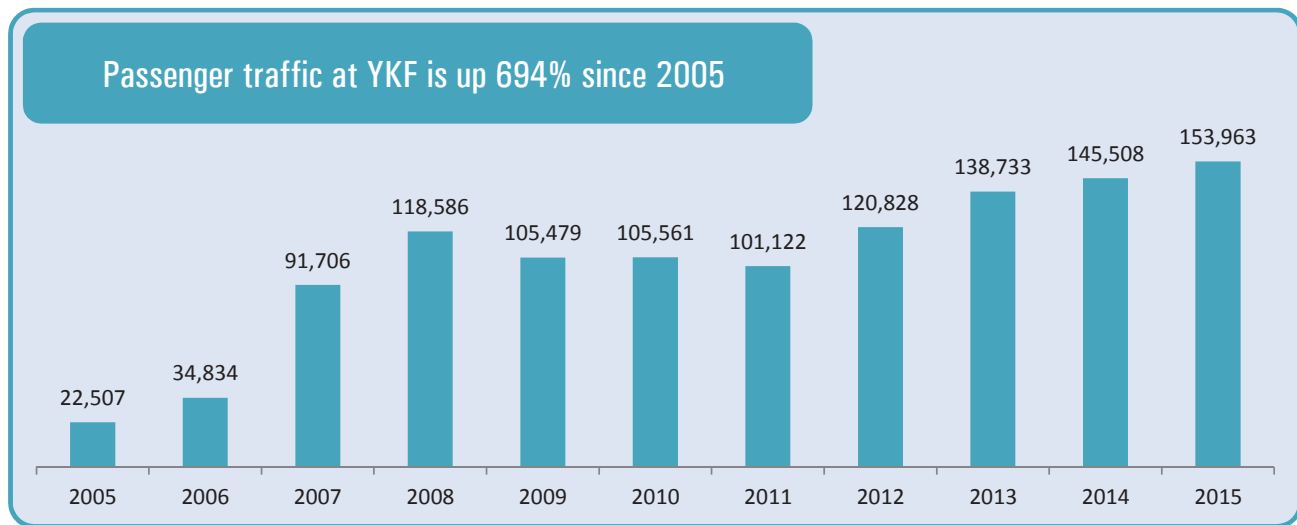
* Wilfrid Laurier University 2015 Economic Impact Study

Canadian Airports: Passenger Traffic & Economic Impact



Passenger Traffic

YKF Passenger Traffic 2005 to 2015



Source: Region of Waterloo International Airport

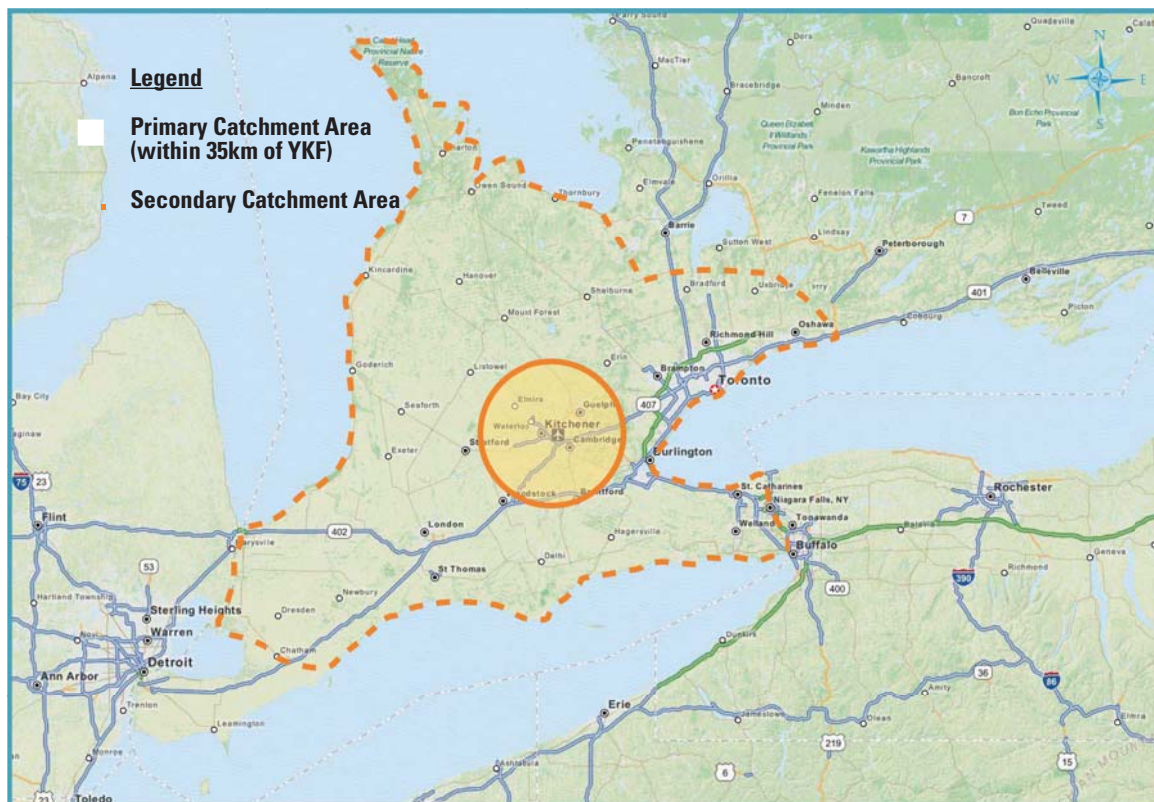
2016 Route Map



Where do YKF Passengers Come From

- The Airport's primary catchment area (within 35km of the Airport) represents a market of slightly over 2 million passengers annually:
 - **696,000** trips to Domestic destinations;
 - **746,000** trips to the U.S.; and
 - **589,000** trips to International and Sun destinations
- YKF only captures 4% of traffic from catchment area
- 87% of passengers use Toronto Pearson
- Approximately 31% of passengers at YKF come from outside catchment area

Region of Waterloo International Airport (YKF) Catchment Area Map



Airport Facts

- Aircraft always operate into the wind
- Region of Waterloo International Airport (YKF) is located in the busiest Canadian airspace: southwestern Ontario
- There are over 100,000 aircraft movements (take-offs or landings) annually
- In February 2016 Nolinor ceased operations from YKF
- In October 2016 American Eagle ceased operations from YKF
- There is no curfew in place for operations at YKF - we are open 24 hours a day
- With improved technology, aircraft today are 75% quieter than 50 years ago

Aircraft That Typically Fly From YKF



Boeing 737 Scheduled (136 Seats)

Daily WestJet flight to Calgary
Daily Service: 75,000 - 100,000
Annual Passengers



Boeing 737 Charter (189 Seats)

Weekly flights to Punta Cana,
Dominican Republic
Seasonal Once a Week Service:
10,000 Annual Passengers

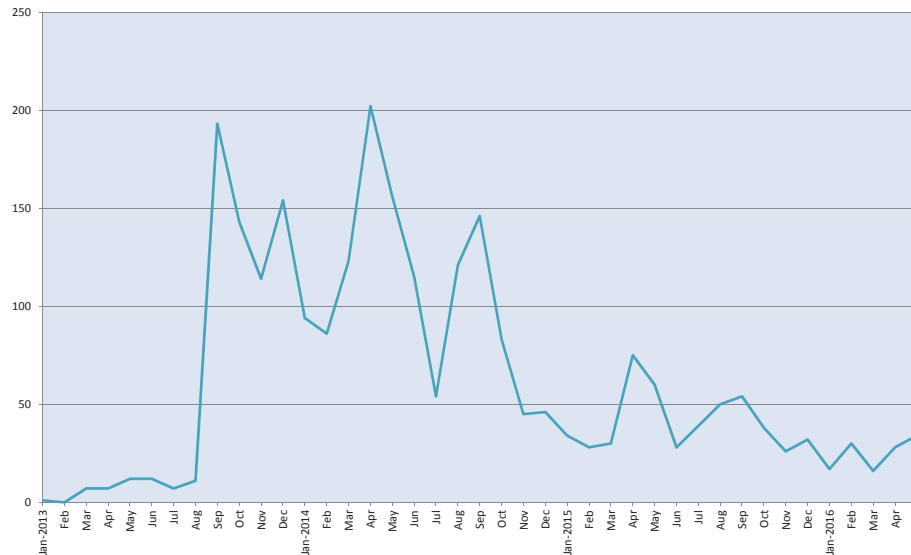


Dash-8 Q400 (74 Seats)

Daily Service: 40,000 Annual Passengers

Aircraft Noise & Land Use Planning

Noise Complaint Trends 2013 to 2016 (YTD)



- Noise warning clauses and signage have been implemented for new subdivisions in Kitchener and Woolwich in proximity to the Airport

Existing No Development Zone Plan



- Since 2000, no new residential development has been approved in the "No Development Zone" as depicted above



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INTERNATIONAL
AIRPORT

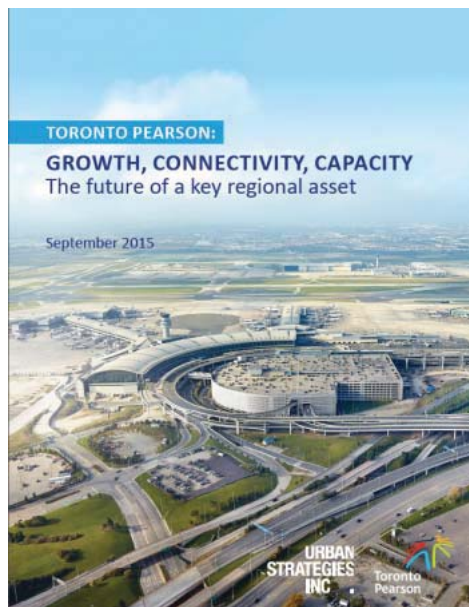
Planning for the Future

Growth, Connectivity & Capacity

***"Growth is coming.
The time to plan for it is now."***

Howard Eng, CEO, Greater Toronto Airports Authority

- By 2043 southern Ontario will be home to 15.5 million people & regional air travel volume is expected to reach more than 90 million passengers annually
- Air travel demand over the next two decades puts Toronto Pearson at roughly 65 million passengers annually by the mid 2030's with no signs of slowing down
- The creation of an integrated airport system is a possible solution
- There is also a future need to connect air travel passengers to airports
- What could this mean for YKF?...



GRCA Flood Plain & Environmental Features












GRCA Regulation Map



Source: GRCA Web-GIS Viewer (grims.grandriver.ca). Map produced May 2016. N.T.S.

Note: Components of the mapping are under review and subject to change.

Legend:

	Parcels - Assessment (MPAC)		Wetland (GRCA)
	Flood Plain (GRCA)		Regulation Limit (GRCA)
	Engineered		Slope Erosion (GRCA)
	Approximate		Slope Valley (GRCA)
	Estimated		Drainage - Poly (MNR)
	Roads-Addressed (MNR)		

Imagery Source: 2010 Ortho (ONT)

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Region of Waterloo
INTERNATIONAL
AIRPORT

The Master Plan

Airport Master Plan

**The Goal of this Master Plan is to prepare the
Region of Waterloo International Airport (YKF) for future
growth and development over the next 20 years (2016 - 2035).**

- This is an action-oriented, working document that identifies future development of the Airport in a practical, fiscally-responsible, and environmentally-sustainable manner.
- The plan is flexible. It allows for rapid changes in the aviation industry and additional commercial carrier service that could be available within the next 10-20 years.
- The plan has been developed to allow for a 'just-in-time' approach to potential development. It identifies a series of **triggers** and corresponding actions to allow for budgeting and long-term planning.
- **Triggers** are outlined and will be implemented to allow YKF to grow if-and-when the current and future demands dictate.
- **Triggers** are based on passenger volume at YKF; however, **triggers** may also be influenced by Toronto Pearson International Airport reaching or exceeding its capacity limits.
- Phases of development will only be implemented when measured criteria are met and growth at the Airport is required.
- As each pre-determined **trigger** point is reached, the Airport will seek approval from Regional Council before proceeding with the next phase of development.

**This approach will allow YKF to plan ahead
and the advantage of having development plans in hand when
predetermined levels of service have been achieved.**



Development Trigger #1

The Airport needs to plan now and prepare for potential future growth and development over the next 20 years.

Development will be influenced by actual growth in passenger traffic

Upon Approval of the Airport Master Plan by Regional Council in Spring 2017, the Airport will need to:

1. Protect for future growth:
 - Ongoing airport improvements to enhance safety and reliability
 - Zoning updates for Runway 14-32 and 08-26 extensions; possible 3rd runway
 - Environmental assessment for Runway 14-32 extension
2. Investigate federal, provincial and other funding opportunities to support new capital projects
3. Initiate an Air Terminal Expansion design to accommodate for potential passenger growth
4. Continue to build out the Airport's Business Park and develop in conjunction with the adjacent East Side Lands Development

Financial Implications for Trigger #1:

Estimated Region of Waterloo Capital Cost = \$1,462,000

Estimated Impact on an Average Household is \$22 per year

(Equal to the 2016 average cost per household of \$22 per year)

Forecast Assumptions:

Region of Waterloo capital cost is based on 50% funding from other sources

Costs and revenues have been adjusted for future inflation and expected growth in passenger traffic

Development Trigger #2

When the Air Terminal Building reaches its current capacity of 250,000 passengers annually, the Airport needs to prepare for the next stage of development which is to accommodate for 500,000 passengers annually.

The following activities need to be initiated:

1. Runway 14-32 should be extended (including taxiway & approach lighting)
2. Design Runway 08-26 to 8737' (including associated taxiways & approach lighting)
3. Assessment of land surrounding YKF and continue to protect for future growth
4. Review Shantz Station Road reconfiguration options
5. Design runway/taxiway/apron clearances and widths to accommodate AGN-IV aircraft
6. Design and construct Apron II expansion
7. Construct new Air Terminal Building for up to 500K passengers; associated apron expansion
8. Continue to develop existing serviced lands on Airport property based on demand

Financial Implications for Trigger #2:

Estimated Region of Waterloo Capital Cost = \$28,464,000

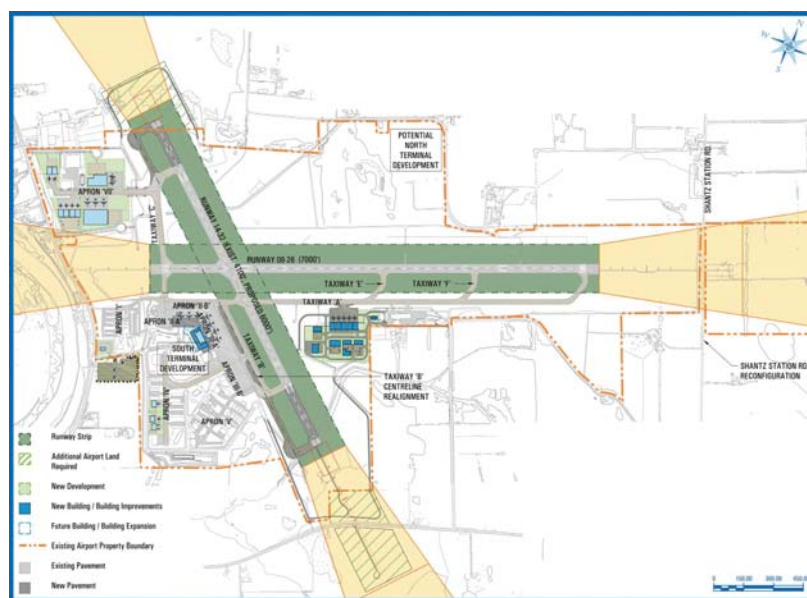
Estimated Impact on an Average Household is \$15 per year

(A \$7 per year decrease from the 2016 average cost per household of \$22 per year)

Forecast Assumptions:

Region of Waterloo capital cost is based on 50% funding from other sources

Costs and revenues have been adjusted for future inflation and expected growth in passenger traffic



Trigger #2 Airport Site Plan

Figure C-2

Development Trigger #3

When the Air Terminal Building reaches its current capacity of 500,000 passengers annually, the Airport needs to prepare for the next stage of development which is to accommodate for 1,000,000 passengers annually.

The following activities need to be initiated:

1. Runway 08-26 should be extended (including taxiway and approach lighting)
2. Construct new Air Terminal Building expansion for up to 1M passengers; associated apron expansion
3. Continue to develop existing serviced lands on Airport property based on demand

Financial Implications for Trigger #3:

Estimated Region of Waterloo Capital Cost = \$66,094,000

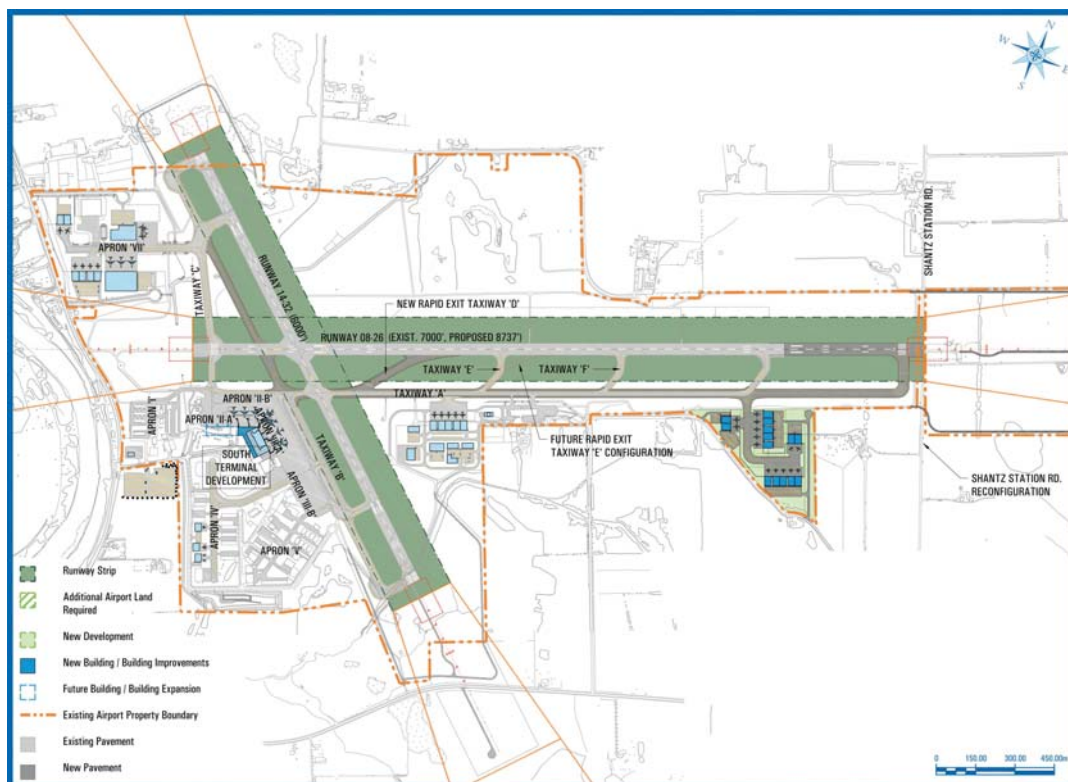
Estimated Impact on an Average Household is \$10 per year

(A \$12 per year decrease from the 2016 average cost per household of \$22 per year)

Forecast Assumptions:

Region of Waterloo capital cost is based on 50% funding from other sources

Costs and revenues have been adjusted for future inflation and expected growth in passenger traffic



Trigger #3 Airport Site Plan

Figure C-3

Development Trigger #4

When the Air Terminal Building reaches its current capacity of 1,000,000 passengers annually, the Airport needs to prepare for the next stage of development which is to accommodate for 1,500,000 passengers annually.

The following activities need to be initiated:

1. Construct new Air Terminal Building expansion for up to 1.5M passengers; associated apron expansion
2. Construct new landside configuration (roads & parking)

Financial Implications for Trigger #4:

Estimated Region of Waterloo Capital Cost = \$41,413,000

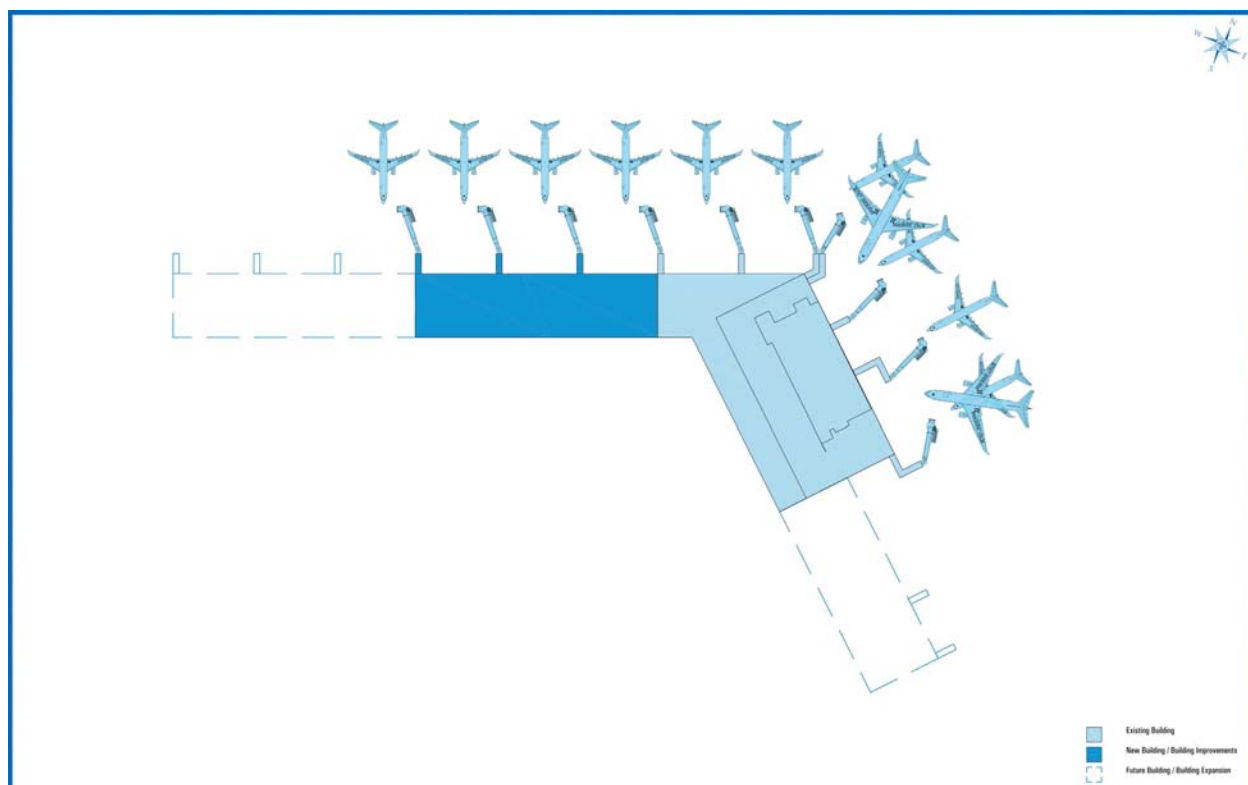
Estimated Impact on an Average Household is \$3 per year

(A \$19 per year decrease from the 2016 average cost per household of \$22 per year)

Forecast Assumptions:

Region of Waterloo capital cost is based on 50% funding from other sources

Costs and revenues have been adjusted for future inflation and expected growth in passenger traffic



Trigger #4 Terminal Plan

Development Trigger #5

When the Air Terminal Building reaches its current capacity of 1,500,000 passengers annually, the Airport needs to prepare for the next stage of development which is to accommodate for 2,500,000 passengers annually.

The following activities need to be initiated:

1. Construct new Air Terminal Building expansion for up to 2.5M passengers; associated apron expansion
2. Construct new parking structure

Financial Implications for Trigger #5:

Estimated Region of Waterloo Capital Cost = \$99,832,000

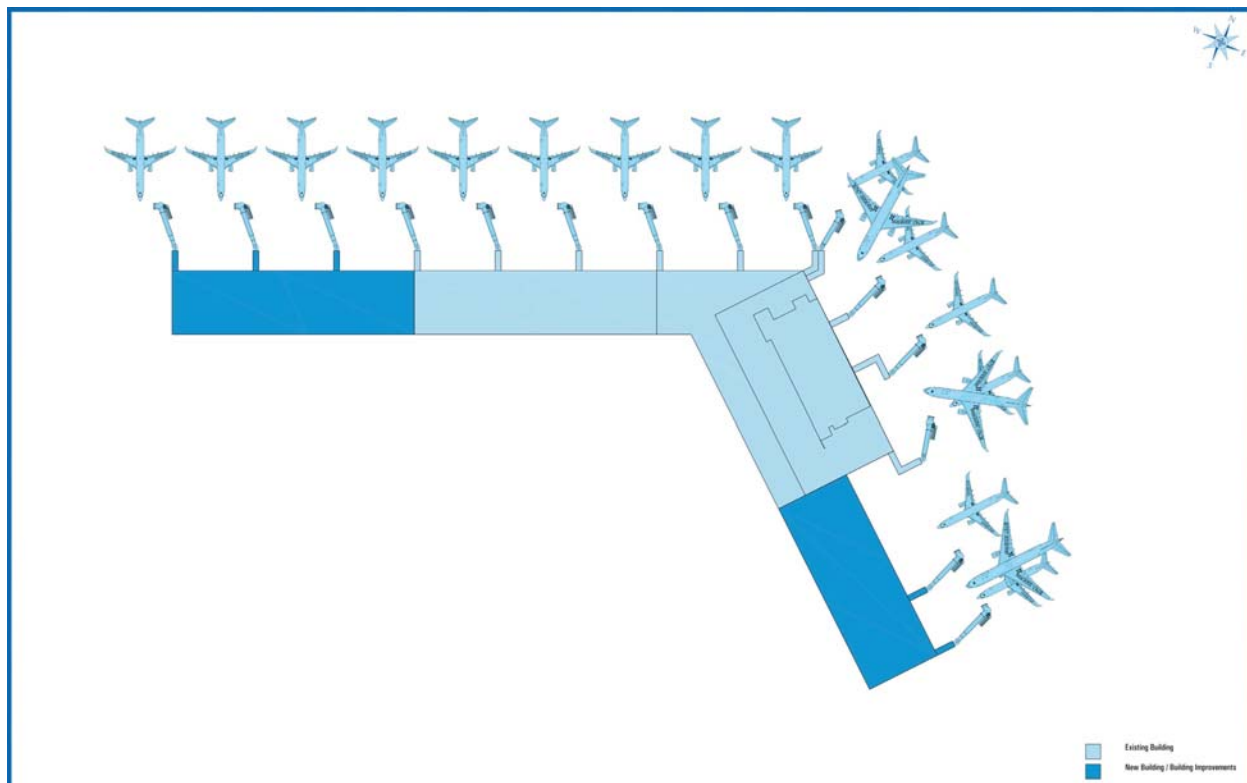
Estimated Impact on an Average Household is \$14 per year

(A \$8 per year decrease from the 2016 average cost per household of \$22 per year)

Forecast Assumptions:

Region of Waterloo capital cost is based on 50% funding from other sources

Costs and revenues have been adjusted for future inflation and expected growth in passenger traffic



Trigger #5 Terminal Plan

Next Steps and Timing

The Airport needs to plan now and prepare for potential future growth and development over the next 20 years.

This approach will allow YKF to have development plans in hand when predetermined levels of service have been reached.

The Airport Master Planning Process:

Project Commencement - April 2016

Public Information Centre #1 - May 25, 2016

Public Consultation Centre #2 - November 10, 2016

Next Steps:

Master Plan Submitted to Region of Waterloo Planning & Works
Committee - Spring 2017

Master Plan Submitted to Regional Council - Spring 2017

Upon Approval of the Airport Master Plan by Regional Council in Spring 2017, the Airport will need to begin to prepare for potential future growth and development over the next 20 years.





E. PUBLIC INFORMATION CENTRE NO. 1 & NO. 2 COMMENTS

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Information Centre #1 (May 25, 2016)

The following questions were posted to the Engage Region of Waterloo platform www.engageregionofwaterloo.ca to gather feedback during the first public consultation which took place May 25, 2016.

All comments received (PIC, online and through email) from May 25 through September 27, 2016 have been consolidated on to the Engage platform.

Q1. Do you have any general comments about the Airport Master Plan?

Overall Summary:

77 Comments:

- **55 positive (71%)** with specific reference to:
 - Important for careful planned growth of our region
 - Need to increase air service / destinations
 - Airport as an asset
 - Need for region-wide transportation connectivity
 - US Customs pre clearance
- **22 negative (29%)**
 - 14 mentioned noise specifically
 - 8 do not support the expansion of the airport in general

Individuals Comments:

1	I missed filling out a recent public input questionnaire concerning expansions to the Waterloo Airport that came through my mail, because I didn't think I had anything to add since the last one (I think in 2014). However, having spent this past Saturday visiting in Mississauga, I now have a significant comment. The noise situation was mentally disturbing and socially extremely disruptive. We went to a local park, thinking to get some fresh air and downtime with family members. However, with planes coming over us continually, without ceasing, not only could one not relax at all and were exhausted just from being there but we could not conduct any sort of conversation. Nobody could hear as a plane went overhead so the conversation paused, picked up for a few more sentences, paused, lost track, etcetera. It was such a negative experience that it has prompted me to contact your office. The quality of life in Waterloo Region would change significantly for the worse if the airport were to expand operations to one of the larger scenarios thus far presented. I don't know what the answers are in order to balance all interested parties as well as break even /make a profit, but the noise factor is an undeniable side effect of growth, and not an acceptable one.
2	I understand that you're planning another airport expansion. My question is, do these plans include moving your main runway a few degrees to the North or South so it doesn't point directly at Guelph ?? I'm sure if this is done when the runway is due to be rebuilt or expanded, the cost wouldn't be like starting over. The regular flights at 7 am and in the evenings should be reduced but frequency seems to be going up.
3	It would be appreciated if the airport would alter flights from Waterloo to Edmonton one week then Waterloo to Calgary the next. My family and I would fly more often.

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Information Centre #1 (May 25, 2016)

4	My wife and I really enjoy flying out of this airport (we love WestJet!). Living in Kitchener makes it so convenient and relatively stress free. We also really enjoyed Edelweiss' food service, but I'm wondering how long they will commit to being there with all their inactive time between the current flight schedule....I'm sure they would appreciate more flights. Keeping your car parking rates reasonable is wise as it will keep generating a steady source of income for you. I realize 'close to capacity' flights are probably required before considering adding additional flight times, but that would certainly allow more connectivity options for long distance flyers. Checking into the feasibility of more direct flights to vacation and tourist destinations would also be great, as people are definitely attracted to direct flights. I really hope the Region can keep our local airport viable and attractive enough to entice more frequent flyers. It is an extremely valuable commodity for our local community. Keep up the good work!
5	Would like to see a direct flight to a regional airport in Europe - Germany / France - as it will link our global residents to the EU. Why would we go to Toronto or Buffalo?
6	The region needs to expand the airport and improve transport to and from city hubs i.e. Cambridge, Guelph, etc. So much potential lost on NIMBY effect.
7	Keep options open. Please, please bring US & YOW connectivity service back so much nicer experience than YYZ.
8	DO NOT SPEND ONE MORE DIME !!!
9	<p>With American Airlines' imminent suspension of service between the Region of Waterloo International Airport and Chicago's O'Hare International Airport, it is evident that partnering with one of the major U.S. carriers is not a viable business model at this time. American's explanation was that the low Canadian dollar hurt profitability. However, the condition that would enable a high Canadian dollar is a high price for oil, which would also present a challenge for airlines on marginal routes. The combination of a strong Canadian dollar and low fuel prices is scenario which is not likely to occur in the next decade.</p> <p>While I have, on occasion, found American's service very convenient, it made most sense when flying to a destination that does not have nonstop service from Pearson. If you had to change somewhere, flying from Waterloo to Chicago and changing planes there was very convenient. On the other hand, for major U.S. cities such as Houston or Los Angeles, it made more sense to get a nonstop flight from Pearson. (Of course, it made sense to fly from Waterloo if Chicago itself was the destination.)</p> <p>Continuing subsidies to the airport and airlines may not make sense at this time. It may be more beneficial to the Region to redirect funds to provision of better ground transportation between Cambridge and Guelph, Waterloo and Guelph, and between Kitchener and Pearson.</p> <p>What options remain for Region of Waterloo International Airport?</p> <ol style="list-style-type: none"> 1. Focusing on destinations that make sense to serve with the very economical Bombardier Q400 (used by Porter Airlines) rather than focusing on regional jet service. 2. Investigating service that connects to a discount carrier. Service to Niagara Falls International Airport (IAG) would allow passengers to take advantage of inexpensive flights on Spirit Airlines and Allegiant Airlines. Service to Buffalo Niagara International Airport (BUF) would connect to JetBlue and Southwest as well as American, Delta and United. 3. Silicon Valley? Until Pearson becomes so busy that landing slots are unavailable, point to point nonstop service from Waterloo to additional distant destinations probably won't make sense. I presume the Region of Waterloo International Airport has done studies of where residents of the Waterloo Region and Guelph travel to most frequently, and why they choose to fly from Pearson, Billy Bishop, Buffalo, or wherever they fly from. The only distant final destination that might have unique links to the Waterloo Region is Silicon Valley. Perhaps there is enough traffic to justify a daily flight to San Francisco International Airport (SFO) or

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Information Centre #1 (May 25, 2016)

	<p>San Jose International Airport (SJC). San Francisco would have the advantage of connections for international flights to the far east, although most passengers flying to the far east would probably choose to fly from Pearson or Vancouver.</p> <p>4. Flights east? I'd love to have flights to Iceland, Ireland or the U.K., but I don't think those would be viable at this time. Even flights to Halifax (YHZ) or St. John's (YYT) probably don't make sense. Perhaps summer service to those destinations might make sense for an airline that provides winter service to southern vacation destinations in Florida and the Caribbean.</p> <p>5. Tactics that might make Waterloo airport more attractive than Pearson:</p> <ul style="list-style-type: none"> * iXpress bus service to the airport from Kitchener, Waterloo, Cambridge and Guelph * free or very inexpensive long term airport parking for ticketed passengers
10	<p>I'm a regular on ORD-YKF for 5 years. It's now cancelled due to no room at international terminal 5 at O'Hare-so I hear.</p> <p>Please consider getting US customs pre-clearance here.</p> <p>YKF is a fantastic facility and so so convenient. Don't want to go to Pearson or Buffalo just to come to KW area</p>
11	<p>Waterloo has lot of technology companies. If Waterloo Airport can be enhanced and part of traffic can be diverted to Waterloo International Airport from Toronto and transit can be developed between these cities, we can have entire region between Toronto and Waterloo grow..</p> <p>Every major business hub has a thriving international airport. We should aim to have multiple runways and plan much ahead so we can have larger planes land here.</p>
12	<p>Overflights need to stop. Large aircraft are still accelerating and loud enough that can be heard indoors from YYZ.</p> <p>Regional flights need to be mindful of people's sleep. Early morning and late evening flights should be absolutely curtailed and all flights need to be more appropriately routed so they are not overtop of residential neighborhoods.</p>
13	<p>Don't bring GRT service to the airport, there just isn't the demand, if someone paid a few hundred to get a flight or a charter flight they can shell out \$20 for an Uber.</p> <p>In the end I would only use the airport if the flights are cheaper than Toronto to be worth it. No need to make longer runways, we can barely get enough passengers to fill small planes to be worth the route.</p>
14	<p>The present infrastructure is satisfactory for the number of individuals flying through the airport. The issue is the ability to get to and from the airport. Should concentrate on transit connections and road improvements from Hwy 8. Maybe at the end of the study period the airport would be at the end of an east-west LRT line. The terminal should be expanded close to when the airport reaches current capacity (another 7-10 years). Most likely in ~20 years you could see ~750,000 passengers a year, assuming you find a replacement for AA and increase flights.</p> <p>I've tried to fly through the airport, but it is usually a lot more expensive (like 2X) then flying to YYZ, even including the cost of UP Express. Of all the hubs in the US ORD is one of the worst for punctuality and the terminals are really not that efficient or comfortable (but I would still try to have AA change their mind and retain their flights here). It would be good to have flights to better hubs. There are many comments about flights to SFO and I concur. BOS and PIT would be additional airports that the IT sector as well as education could use. I flew in this past Saturday and the flight was full (which is similar to my other experiences), so I don't think demand is the issue. I think that most people don't want to be limited to the couple of flights a day to a couple of location, they would want to have a number of flights to choose from to a number of locations, this is a supply issue. This makes YKF not top of mind when they are looking for tickets. Because</p>

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Information Centre #1 (May 25, 2016)

	<p>the airport is close to YYZ the most likely need is for flights to US hubs (EWR, ATL, CLT, CVG, MSP, IAD, etc) and YYC and YVR for business travelers, and Sun destination and east or west coast for leisure travelers. With better connects and an increase in frequency by passenger rail there really isn't that much need for flights to YUL or YOW.</p> <p>YHM has freight airlines so I don't think it would be productive to try to build this business at the airport. Additionally it seems that Newleaf and other ULCC are choosing YHM as their main SW Ontario airport because of proximity to the GTA, so it will be really difficult to get these carriers to come to YKF. Should instead concentrate on building market share with people in Guelph and North of KW.</p> <p>You also don't want the airport to get so busy that the pilot training schools and other business users at the airport can't get runway time. So I would suggest doing whatever is necessary to keep these businesses happy would be really productive.</p> <p>In short I would concentrate on getting a few (more than 3) really strong scheduled flights that you can guarantee full planes, keep cost low to attract new flights and businesses, improve connectivity to the airport from Guelph and points north of KW, invest in the infrastructure that current businesses need to succeed, add transit with buses now and eventually LRT, and plan for a terminal expansion sometime in the next 10 years. Oh, and I would forget those that complain about airport noise when they move to houses in the flight paths, it is their issue since the airport was there a long time before.</p>
15	<p>Plenty of detail in the "Where we are now" parts. Insufficient detail in the "Where we want to be" parts. I like the airport. I hope it continues to be successful. I hope it continues to use a fact- and data-based approach to drive decisions on topics from noise to service requests.</p>
16	<p>I liked the info on noise. I was sad to see the flights to Chicago end. I hope it can be replaced. I think we need careful growth of the airport. An integrated system is a good idea</p>
17	<p>The airport should focus on getting a more expansive flight network together by working with regional business. My company for instance averages about 250 flights a year and would love to have a regional option. Main hubs like Montreal, Charlotte, and Chicago, NY to go with Calgary would cover major Aerospace, Automotive and Oil companies. Throw in a direct to SF and you could get some serious business travel going.</p> <p>I also think it's wrong to cater to low cost airlines as they are not stable or profitable where business travel certainly is.</p>
18	<p>Focusing on low cost airlines to make domestic flights cheaper. More and more people from outside the city will be moving for work and may wish to fly back home to see friends and families, but only if its affordable.</p>
19	<p>More flights to tropical destinations. More flights in Canada.</p>
20	<p>Slides don't seem to address my concerns as a passenger:</p> <ul style="list-style-type: none"> - transportation to/from the airport (e.g. GRT bus connectivity) - connectivity to major destinations (with American Airlines gone, no US destinations at all AFAIK): a good and affordable flight to SFO, for instance, would be great for the tech industry
21	<p>In order to be a vital asset to the Waterloo regain you have to have a US carrier. As a business person I have been flying to the states several times a year since this service was first available on Delta Air Lines then for the past few years on American. The recent news that American will no longer be flying out of Waterloo is a major disappointment. Without US service I really don't have a need for this airport and now myself along with all other US passengers will have to travel to Toronto. This makes no economic or environmental sense having thousands of people travel this distance when the service could be available so close to home.</p>

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Information Centre #1 (May 25, 2016)

22	<p>Since there is no new plan yet, I will make my comments on the 2014 plan and process. Process. Firstly, I had concerns about the 2014 process. There were some meetings at which public discussion was shut down. People were offered the opportunity to give their comments privately, but this is not open or democratic. It is useful to hear what others have to say, and to be able to agree or disagree. Others may make very good points or arguments, which everyone can benefit from hearing. So I am hoping that this will not happen again for any new Airport Masterplan.</p> <p>Additionally, feedback about the takeoff routes (SIDs) was biased. The take-off paths (SIDs) for Options 1-3 are all right overhead my house. This take-off path was based on feedback from a meeting in Cambridge which people living in our areas did not attend because it was discussing a take-off path which did not affect us. So the feedback gained from this meeting was biased. So in any new airport plan, multiple SIDS should be implemented so that it 'shares' out the noise, which is done in many other airports and all reasonable people would agree is fair. Thus, just as everyone benefits, everyone shares the disadvantages too.</p> <p>Curfew. There is currently no curfew in place (so take-off and landing can occur at any time). Any new Airport expansion plan should include a curfew as is common in many airports. Particularly early morning flights should have a curfew e.g. not before 7.00 am.</p> <p>Financial viability. For the 2014 Masterplan, we had concerns about the financial viability (cost to citizens) of expanding the airport. We didn't think that a full or adequate financial plan has been presented. It was not clear that there will be sufficient passenger traffic and it was not clear that all costs had been included. I understand that the current new flight to Montreal is being subsidised from the City (which means by our taxes). So for any new plan, a thorough and inclusive cost analysis must be done, otherwise citizens will end up footing the bill. Our taxes will increase.</p> <p>Benefit. I will add that if my concerns regarding the process, the inclusion of multiple SIDs, the implementation of a curfew and that I am convinced that it is viable and will be used, then I would like to have the route to Montreal added and also one more route to the US, e.g. to another, more central hub than Chicago.</p>
23	<p>I hope we consider adding a non-stop flight to SFO. Many students from University of Waterloo would benefit from this, as well as recruiters that often travel back and forth (we are Canada's Silicon Valley, after all).</p>
24	<p>Please consider flights to the Caribbean e.g. Nassau</p>
25	<p>Looks good. I like the idea of an aviation business park. There was previous talk of extending the second runway to allow for larger jet traffic. I think this should be considered as part of the plan. Allegiant and Spirit are both terrible airlines to fly with. Perhaps trying to convince WestJet to have more destinations out of YKF would be better. Pushing them for flights to the San Francisco area would be good.</p>
26	<p>PLEASE CONSIDER A FLEABILITY STUDY ON RELOCATING THE AIRPORT FURTHER OUT TO BETTER SERVICE OTHER CITIES AND DRAW FROM A LARGER POPULATION BASE. THEN HAVE THE LAND REDEVELOPED INTO RESIDENTIAL HOMES DRAWING REVENUE FROM THE SALE OF THE LAND AND THE SUBSEQUENT REVENUE OF TAXES AND LOT LEVY'S ETC.</p>
27	<p>There should be a "guideline" which monitors the noise level of any airplanes which use the airport; commercial, training or cargo. i.e. Measure the noise level of each and every airplane which use the airport and designate them as acceptable or not acceptable for our airport.</p>
28	<p>What will the Region of Waterloo do to help people out in this area. It's not up to homeowner to get off planes to call in about.</p>

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Information Centre #1 (May 25, 2016)

29	<ul style="list-style-type: none"> - I live near the airport, I'm interested in seeing how proposed changes to the use of the airport will impact the noise profile - I'm interested in knowing how proposed changes to the airport will effect developing the land around the airport.
30	Is there a current use for the now-unused retail space inside the terminal building?
31	Keep up the good work
32	<p>Keep lands around the airport "available" for future expansion (Runway twinning & extension)</p> <p>Allow only light industrial development within 2 km of the end of the runway - No residential</p> <p>Plan for fail connection to Pearson (Hi-Speed 1/2 HR)</p>
33	I just hope for a favourable outcome for all parties.
34	I do not want more flights over Breslau. The airport is costing tax payers. It should not be allowed to expand until it runs without taxpayers' money.
35	Noise is a huge issue in Breslau. I do not want any more flights. I do not believe the economic impact is as positive as the slides portray. The last I heard is that the airport is actually costing each tax payer in the region. So I am paying for a service I don't use and is annoying. Before the airport is expanded needs to run without tax payers footing any portion of the bill.
36	<p>I attended the Public Information Centre regarding the Airport Master Plan on May 25, 2016 at the Waterloo Region Museum. I want to express the following thoughts:</p> <ul style="list-style-type: none"> - Expecting the Airport Master Plan being presented, I was surprised to hear that the Master Plan is still being developed and that only a Vision Statement is available at this time. I think that the invitation was somewhat misleading. I hope, however, that the opinions expressed by citizens during the meeting are considered, I did not hear enthusiasm for "managed growth" or "connecting this innovative community to the world". - It did not come as a surprise that the airport use is under capacity, without concrete plans for major changes. Considering that the Region still supports the airport financially, every effort should be made to decrease this burden to taxpayers. - While some information was provided about businesses in the airport, those businesses are small and do not lead to a large number of full-time positions. - I have personally attempted to fly from the airport to catch connecting flights. But my attempts have not worked out. Those flights were either extremely expensive or impractical due to scheduling difficulties. There is no personal benefit for me as a taxpayer to use the airport. - While I am not recall hearing the word "extension", I believe that is what is being considered, given that corporate clients and a "growing community" may express an interest. I heard more marketing hype from the presenters than genuine concerns to the public who owns the airport. I DO NOT SUPPORT AN EXTENSION UNTIL THE CAPACITY CONCERNS HAVE BEEN SOLVED. - While I am not personally affected by the noise level, I sympathize with people living closer to the airport. During visits to that area, especially Saturday mornings, I found the noise level to be unbearable, likely originating from the flight school. <p>Thank you for your attention to this matter.</p>
37	In response to your request for input into the master plan, I am providing the following. I am working with a local organization to establish a national training center in KW and it would extremely beneficial if there were flights from eastern Canada as well. I suspect the same need exists as it this region becomes the high region of Canada. Presumably this means attracting WestJet to initiate a new service perhaps to Montreal or Ottawa.

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Information Centre #1 (May 25, 2016)

38	<p>I think the Region should work hard at getting Porter Airlines to consider doing a trial service (one flight each way daily) between Waterloo Regional Airport and Toronto Island Airport. I used to fly Bearskin to Ottawa and hated their cramped planes; I would gladly fly to Toronto Island & catch a connecting flight to Ottawa on their planes! Also, think of all the other connections Porter has out of the Island Airport! I know there have been logistics sighted because of the short flight time and distance between the two airports, but I think some creative minds could solve that.</p> <p>If the Region could subsidize American Airlines flight to Chicago, do the same for Porter to get their interest!!</p> <p>I really think this would popular & successful.</p>
39	<p>I attended your presentation on the Airport Master Plan yesterday. I have lived in northern Cambridge, about 6 km from the airport, 7 years now and in Kitchener and Waterloo for most of my life prior to that. My main concern continues to be noise from aircraft flying overhead. Peace and quiet during sleep time at night and even on a Sunday during the day is a basic human need that is usually put last behind people's wants, luxuries and economics, just like environment protection or mitigating actions on climate change. it is unfortunate that people take basic needs for granted. I think a person would quickly remember what one's basic needs are if stranded away from luxuries of the modern world in the middle of a desert, the Himalayas or on a small island in the middle of the ocean with just the clothes they're wearing.</p> <p>Over the past 3 years, noise levels from aircraft landing at Toronto's airport, Hamilton's airport and Waterloo's airport have become very noticeable, frequent and irritating in northern Cambridge. Even in southern Kitchener where my parents live, aircraft noise has become more noticeable and frequent from the same airports. Explaining the reality of noise from aircraft to people is important but it doesn't change the fact that aircraft create a lot of noise. In my opinion, people usually justify their actions using reverse logic. For example, a person sets out their recycling box outside for collection, it is very windy so the wind blows the items from the recycling box all over the neighbourhood, contributing to littering. Most people, base on my experience, will say "it was the wind, it's not my fault". Instead, a person should realize that if it is very windy outside, I need to either secure the items in the blue box such that the wind does not blow it around or I wait until next week when the win may not be blowing so hard. Similarly, I find that people creating some effect, whether it be noise, polluting the air we breathe or spilling a chemical in a river, tend to expect receptors of these effects to deal with them instead of those causing the effect taking responsibility for their actions by putting preventive, restrictive or mitigation actions in place, accepting the fact that they are crating an adverse effect whether they like it or not.</p> <p>We live in a densely populated area and we all need to live together and that beings by respecting basic human needs first. I see no reason why there should not be a period of at least 8 hours each night when aircraft are simply not allowed to land or take off from an airport to respect the basic human right to sleep and some peace and quiet (except in case of emergency landings or for emergency services such as ambulance, firefighting, etc.). Another restriction should also be during daylight on at least one day a week such as a Sunday. The worst part is that on many days, the greatest number of passenger aircraft landing at Toronto's airport and the greatest amount of small aircraft (presumably mostly from the flying school) landing at Waterloo's airport occur very early in the morning, thus waking us up, or very late at night, not allowing us to fall asleep. Sometimes it's one small aircraft after another (perhaps 20 in an hour) passing over our houses as they approach Waterloo's airport. Sometimes it's combined with similar frequency of jets landing in Toronto. I cannot imagine how intolerable it will become if Waterloo's airport starts even more commercial aircraft. I almost never see WestJet fly over my house Cambridge but I have see the American Airlines jet fly a few hundred metres above my house as they have to turn in to the airport from</p>

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	<p>the east.</p> <p>In your presentation, you've shown that the number of noise complaints has decreased over the past few years. While some of this trend may be genuine, has it ever occurred to you that the decrease may also be the result of people getting tired of lodging a complaint all the time when there is little to no apparent change in the noise levels? Also, I have notice how more and more rushed everyone has become over the past few years, leaving even less time to lodge complaints for this or that. I could lodge a complaint every day but I have other things to do as well and if there is no apparent results, a person eventually tends to give up.</p>
40	<p>I am against expansion of the airport as the noise levels are already bad! Jets fly very low over homes and always when kids are going to bed approx. 7pm (and even later at times) on a regular basis. In addition to noise level increases, there will also be more pollutions! I will be voting against any councillor that is for this expansion and will make sure (by putting up flyers in my neighbourhood) that my neighbours know who supported the airport expansion!</p>
41	<p>Hello</p> <p>- I was not able to attend the general meeting held this week, but wanted to mention a thought. I would like to see more efforts to include air transportation that takes in the north western area of the province.</p> <p>Namely the Thunder Bay and, also, Winnipeg area.</p> <p>There are coverage for the West and to the East, but nothing to North Western Ontario.</p> <p>Those who do wish to travel there have only Toronto/Hamilton as departures with only WestJet and Air Canada offering flights. WestJet with limited times.</p> <p>There are many people who live in the region and beyond who would love some access.</p> <p>Especially students who attend local facilities/patients and families who come for medical treatments to Hamilton and locally here in Kitchener. Families of students would also be interested in visiting this region, as well as tourism to attend the 'draws', such a packages as St. Jacobs and theater.</p> <p>It is extremely difficult to travel out of this region without having to drive/hire a driver to get to Pearson/Billy Bishop, as you know, which is terrible for those who are unable or cannot drive themselves, have no ride and have to pay a high price for transportation.</p> <p>There are several communities in North Western Ontario ~ Sioux Lookout, Ignace, Thunder Bay, Winnipeg, Fort Frances, Vermilion Bay and surrounding areas.</p> <p>I do not believe it would be necessary to have any daily flights, but to have flights two or three times a week to Thunder Bay &/or Winnipeg would allow for people to plan on regular service.</p> <p>We would love to have more service out of this local airport. We simply do not wish to have pain and frustration of flying out of Toronto any longer, no matter the destination.</p> <p>I think Waterloo Airport is a real asset, a strong presence that can really forge ahead in years to come and make a real contribution to servicing the people of the region. There will be those from the GTA who will travel here, just to enjoy the simplicity.</p> <p>Thanks for the opportunity to comment.</p>
42	<p>What I need at WRAirport is a morning flight to Calgary or Edmonton by WestJet. I have grandkids in Yellowknife and have to get a connecting flight there, so a morning flight would let be able to get there in one day. As it is now the WestJet evening flight to one of those cities doesn't help me, and therefore I have to drive to Toronto airport-much more time and \$\$\$. Thanks.</p>
43	<p>To improve our investment environment, and take considerations of global economy center shift to Asia, I would like to see public transit between airport and downtown Kitchener and uptown Waterloo, and see</p>

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	airline toward Pacific, flying to Saskatchewan, Regina, Edmonton, Calgary, Vancouver, and Asia.
44	We need flights to Ottawa. Limit flights to take off and land between 7 am and 11 pm to appease people complaining about noise.
45	<p>Thank you for your ongoing work to improve and sustain YKF.</p> <p>I'm a student, born & raised in Waterloo, who now attends school in the US. YKF has become a vital link home for me, and I've flown via the airport >25 times in the past three years.</p> <p>Maintaining at least twice daily service on American Airlines is a crucial first priority to me. The link to Chicago is essential in terms of reaching a US and global network (OneWorld), and unfortunately is not something WestJet and Air Canada could match. It would be lovely to see JFK (PHL/CLT, if AA ends up consolidating either of them into significant domestic + international hub) service from the airport as well. While I appreciate the EMB-145, and wish it were a CRJ with business class, I would be even be happy to turboprop service by AA if required to maintain regular YKF links.</p> <p>WestJet expansion is also important. I hope Encore will eventually be persuaded to YOW and YUL links. Carrier diversification would be nice, with highest priority to Delta (strongest network into Canadian destinations), then United. I would also love to see a Porter expansion, though couldn't commit to using them (as I'm currently US based, and the refusal to reopen the YTO agreement means I'm outside their service range).</p> <p>Two small notes: I've been routinely disappointed with the security staff at YKF as compared to most other US & Canadian airports. They are often unkind, generally over zealous, and don't put forward a strong face for the airport.</p> <p>Second, flight scheduling. There was a brief period when the AA and Norliner flights departed at roughly the same time, which made security lines brutal just before the AA flight. I fly YKF because I know I can be from airport door to gate in less than 10 minutes (incl check in), and longer waits reduce the YKF value.</p> <p>Finally, I encourage you to keep actively expanding service. Folks who have knowingly purchase a house near the airport shouldn't be supported in NIMBY noise complaints.</p>
46	I say go ahead Cambridge, Kitchener and Waterloo is growing we need to expand a lot.

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47	<p>NO MORE TAXPAYER SUBSIDIES AT WATERLOO REGIONAL AIRPORT. IF THEY CAN'T DO IT ON THEIR OWN THAN LET THEM GO SOMEWHERE ELSE!!!! WHY DO WE HAVE TO SIGN UP AND LOG IN TO ENGAGE WATERLOO REGION THIS IS A JOKE!!! A VERY BAD JOKE!!!! STOP WASTING OUT MONEY!!! NOT ONE MORE DIME OF TAXPAYERS MONEY SHOULD BE WASTED ON THE WATERLOO REGIONAL AIRPORT!!!!!! IF IT IS SUCH A GREAT THING FOR BUSINESS PEOPLE IN THE AREA THAN LET THEM PAY FOR IT. NOTHING SHOULD BE DONE OR MONEY SPENT UNLESS IT COMES FROM USER FEE'S. LET THE PEOPLE WHO CAN AFFORD TO USE IT PAY FOR IT!!!!!! THIS WHOLE PROCESS IS A CUSTER F&%^UY AND YOU IDEA OF PUTTING THIS INFORMATION TO THE PUBLIC IS A JOKE AS THE TAXPAYERS ARE LEFT IN THE DARK UNTIL THE LAST MINUTE AND I SUSPECT THAT IS ON PURPOSE!!!! THE OTHER PROBLEM I HAVE IS HAVING THIS MEETING AT THE MUSEUM HAVING EVERYONE DRIVE ACROSS TOWN THROUGH LRT HELL. WHY ISN'T THIS AT REGIONAL HEAD QUARTERS????? PARKING IS NOT AN EXCUSE THAT FLIES WITH ME AS IT HAS NEVER SEEMED TO BE A FACTOR BEFORE!!!! ALSO GIVING THE PUBLIC 24 HOURS NOITCE IS UNACCEPTABLE!!!! YOUR COMMUNICATIONS SUCKS AND IS MEANT TO KEEP PEOPLE AWAY NOT INCLUDE THEM!!!! THIS COUNCIL AND EVERYTHING THEY DO IS A JOKE AND IT IS KILLING OUR COMMUNITY IN THE NAME OF LAGAICES FOR BLOATED EGO'S! JUST SAY NO TO THE AIRPORT MASTER PLAN AND EXPANSION AS THERE IS NOTHING WRONG WITH WHAT WE HAVE AND IT IS MORE THAN CAPABLE OF HANDLING MUCH MORE BUSINESS THE WAY IT IS RIGHT NOW! TIRED OF BEING TAX POOR!!!! Absolutely no more taxpayers money should be spent to expand the Waterloo Regional Airport. If local businesses like it so much let them pay for it as for me I am tired of paying taxes on things I cannot use!!!!STOP WASTING OUR MONEY SO YOU CAN FEEL GOOD ABOUT YOUR JOB.</p>
48	<p>The transit plan must include easy and fast transport from the airport to the central hub. Use France as a model as it is very efficient. For destinations from the airport, direct flights to the Caribbean region will be most utilized. The ability to get to major transit hubs at a cost effective price would be best. For example it costs \$100(ish) to rent a private car one way from Kitchener to Pearson. Flights for \$250 (ish) round trip would be very well utilized when traveling to other destinations.</p>
49	<p>I am currently not a user of this airport because it does not provide flights to the places I need or want to travel. I would however really like to use the airport because it is in a very convenient location. Please consider a flight to New York City, our residents love to visit the big apple and with over 8 million people from a business and economic perspective that will bring business here. Flights should be provided to Vancouver and at reasonable cost. I would be interested in Montreal, Las Vegas or Mexico. Continue with weekly flights to Orlando but expand the service from October - April. As for noise, we live in a growing city and people need to understand that. For the people who live near the airport, most of the homes are newer than the airport. It was known that you were moving near an airport and that's noise by association. I saw bring on more flights, lets make Kitchener a place that really moves and gets people using the airport. I think it's awesome we have an airport, I'd love to use it with more flight options.</p>
50	<p>Why do we need an airport? Most people in the region fly out of Toronto despite the local airport that is available to us. Also with the Go train and also plans to put in another Go line I see that more people will commute to Toronto to take flights. I think our region would be better served by taking the airport land and developing residential properties, would certainly raise more tax dollars and not have to subsidize a failing airport.</p>

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51	<p>Will you ever have plans to have planes shuttle people closer major cities like Ottawa, Montreal, and Quebec City without charging an arm and a leg to get there?</p> <p>Hate having to drive all the way into that dreaded Pearson when there's an airport right here. And taking the train I priced out from Kitchener - would cost me between \$4 & \$700 return which is totally absurd!!!! There should be cheaper way to travel if you are not able to drive those distances!!!!</p>
52	<p>It would be nice to have an early morning flight to Calgary so you have a chance to connect with a flight to other locations. The way is now you don't get to Calgary until 10:00 PM and I have to stay in a hotel over night and fly out the next day.</p>
53	<p>What about the noise and air pollution on communities that were paid by the residence premium pricing not to have that atmosphere</p> <p>And extreme high property taxes thank you</p>
54	<p>From the slides you can see the need for expansion</p>
55	<p>The only comments I'd like to add is that I read through the report that was made available at the Information Centre called Toronto Pearson: Growth Connectivity, Capacity - The future of a key regional asset and wanted to echo elements of what the report covered. I think it's very important that the future planning of the Region of Waterloo International Airport addresses the eventual capacity issues of Toronto Pearson and the remaining airports in Southwestern Ontario. I think it makes total sense to ensure that capacity as a whole in the region is used as efficiently as possible and that infrastructure links between these airports are improved or expanded on as required. I realize that is way easier to say then it is to plan and implement amongst various levels of government but I think that's a very important part of future planning.</p> <p>I can see a time where one will dread long travel/commute times to Toronto Pearson from Kitchener only to then have to go through a congested facility only because the flight they desired is only available from that airport. I realize that the Waterloo Airport will never have the diverse list of destinations that Toronto has (especially long haul routes) but I think that the current offering to Calgary (along with those from London and Hamilton) is a fine example of spreading out the demand for travel in this region to that particular destination amongst multiple airports instead of funneling everyone through one city & airport. I think more options like these (where appropriate & economical) would not only be more appealing for travellers but for airport operators as well allowing capacity to be properly allocated based on the size of the individual facility.</p>

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56	<p>I have lived in the east end of Kitchener for most of my life (60+ years) and for most of this time this airport was used by small aircraft which was of little bother to residents. However, the City of Kitchener continued expanding and building new residential subdivisions closer and closer to the river and the airport. Rather than working with the City of Kitchener to curtail its residential growth in this direction, or moving the airport to the northwestern part of Waterloo Region so that aircraft using the airport would be less likely to be flying over residential areas within the region, the Region of Waterloo decided to expand the airport so that larger, noisier aircraft would be using the airport, and more frequently, creating the noise situation that we have today for neighbouring residents. Then, a couple of years ago, it was made worse with the alteration of aircraft take-off and landing routes. Before any consideration is given to increasing the capacity of the airport it is necessary to put in place curfews so that there are no incoming nor outgoing flights for a minimum of 11 PM to 7 AM daily. No 24 hour use airport should be in such close proximity to residential neighbourhoods. With 4 larger airports in London (London International), Hamilton (John C. Munro Hamilton International), and Toronto (Pearson International, Billy Bishop Toronto Island) that can add more capacity and, except for Billy Bishop, are all serviced by more airlines (including both WestJet and Air Canada), why is expanding this airport even being debated at this time ? What is really required is high speed rail access between Waterloo Region and the other airports which would reduce air pollution in this region, improve the quality of life for more residents, and still provide an airport for small aircraft use, while also providing the service that all local residents and businesses desire to fly to any destination. Expanding the airport will require capital funds from taxes that the local residential and business property owners simply cannot afford. The politicians need to understand that tax money should be used to maintain and improve on services (landfill will need to be replaced in the next 25-50 years, water pipeline from one of the lakes will likely be required in the next 25-50 years, etc.) used by a majority of the property owners of the region rather than expanding on air service that is both unnecessary and used by a minority of residents. Although a key feature that users of this airport cite is the shorter line-ups for flight check-ins as well as for security checks, this will be lost as the capacity continues to increase. With even further expansion, this airport will begin to resemble other larger airports so security checks and flight check-ins will take longer and then where will be the advantage of this airport. We need to be sensible i.e. bigger is not better !</p>
57	<p>For the past 11 years, I have lived in a neighbourhood close to the airport and back onto conservation area. This airport was never for commercial use and the small planes and minimal air traffic never affected anyone. Now large jets are flying over our house and I am worried the increased air traffic will cause noise pollution. I back onto a quiet conservation area and that is why I bought the home and love the area. I am afraid this increased air traffic will destroy the peaceful, suburban area I love and also de-value my home. There definitely needs to be a time curfew as to when planes can take off and land and/or the planes need to take off/land in another direction, not into established neighbourhoods that have been here for over 50 years.</p>
58	<p>Don't let the few naysayers deter expansion of this airport - this is a must in our growing community. There is a huge population base in K-W, Cambridge, Guelph & the surrounding area - adding more destinations will keep the airline business and revenues here, not in Toronto. Everyone in our network of friends & business associates would love to fly from 'Home' instead of fighting traffic, parking, crowds, etc. at Pearson. Thanks for offering the Orlando flight last winter - this was a good start. Hopefully WestJet can fly there on Saturdays, as well, in the near future. Keep up the good work & please continue the growth.</p>

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59	What is wrong with the Airport as it is today? Why do we need to grow an airport that is located in very close proximity to residential housing which was there long before the airport expanded to accommodate large noisy aircraft? Why do we need to make an investment (likely being funded by taxpayers) to expand an airport that is only running at a little over 60% capacity (155,000 passengers when capacity is 250,000)? This airport was never meant to be an international airport, it was put in place as a small regional airport. If the airport continues to grow it will drive residents out of the region, causing property values and property taxes collected to drop. This region was well served by the Pearson, London (YXU) and even Hamilton (YHM) airports. Growing this region through business associated with expanding the YKF airport will come with huge consequences affecting many families whose homes have been established long before the YKF expanded. This region has much to offer without the airport expanding, please do not spoil this great region by adding more YKF air traffic.
60	I am against any expansion. Noise levels are already too loud and additional traffic will guarantee problems!
61	I would like to see more international flights at YKF. This is a great airport and adding more international flights is a good way for the airport to gain more exposure with travellers.
62	One thing that seems to be missing is transportation to and from the airport (although this is perhaps addressed in a transportation master plan, it would be nice to see here). If we are going to expand the airport, better access to the 401 and public transport should be considered.
63	In order for the airport to be successful it will continue to be important for good community relations to be maintained. The Breslau community must be considered when expansions of runways are being considered. We have lived approx. 1 mile from the end of the end of the secondary runway for 40 years. At this point we have no issues but know that this could change depending on what the future plans include. There were people living in this village before the airport was established. Please make sure we have ample opportunity to comment on future changes.
64	YKF has been thoughtfully designed to accommodate both personal and business travel. The direct flight to the well-connected Chicago airport has been a major contributor to the business flights. As Waterloo Region continues to grow as a leader in entrepreneurship and technology, I believe a direct flight to/from Silicon Valley would provide exceptional economic value to the community. This would ideally be San Francisco (SFO), with alternatives listed as San Jose (SJC) and Oakland (OAK). From personal experiences and polling family friends and colleagues, YKF's most important asset is the low-stress high-speed process through the terminal, especially for international travel. YKF's operations are eons ahead of Pearson's in terms of comfort. The most beautiful airport I have visited is Victoria, BC (YYJ). If YKF is planning for structural and aesthetic upgrades, I strongly recommend modeling it after YYJ's architecture and ambience, which is only slightly larger than YKF.
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	upgrades, I strongly recommend modeling it after YYJ's architecture and ambience, which is only slightly larger than YKF.
66	Noise is a huge issue in Breslau. I do not want any more flights. I do not believe the economic impact is as positive as the slides portray. The last I heard is that the airport is actually costing each tax payer in the region. So I am paying for a service I don't use and is annoying. Before the airport is expanded it needs to run without tax payers footing any portion of the bill.
67	<p>The Regional Government has tried and tried to buy itself an airline to no avail. We have paid for multiple Airlines to fly out of this area when the support from the travelers is not there.</p> <p>This has been proved by the lack of sold seats.</p> <p>The lack of concern for the noise that is generated is troubling, since we as a tax payer pay for the empty seats. Planes arrive and depart from the west with no concern for the taxpayers who endure the daily noise. It is not a cost of doing business.</p> <p>Toronto airport is 50 minutes away and cheaper to fly out of. Buffalo which I fly out of regularly is generally HALF the cost. We keep trying to compete by subsidizing Airlines hoping they will stay. They take our money and realize there is no market. They realize it why can't Government?</p> <p>Leave it as a small airport. The change that Regional Government wants and has tried to push through for the last 10 years is not working.</p> <p>Put the money somewhere where it is needed, like Regional Child Care, LRT, more trains to Toronto, amalgamation of the Tri cities.</p> <p>The list is long that could use a couple of million in funding. Stop trying to grow an area that is not used or needed.</p>
68	<p>I would love to see direct flights between Ottawa-KW, I would love to be able to fly between the two for school (UOttawa/UWaterloo) and for work (federal government of Canada). I (and others) would use this service half a dozen times a year, at least.</p> <p>I do like that there is service available between Vancouver-KW</p>
69	I would like to see an expansion of carriers at our local airport, especially domestic. Great for our local economy if passengers are using our hotels and restaurants, also great for industry. Increased noise does need to be considered, although I don't think it is that bad, but I don't live on the flight path.
70	Noise remains a huge issue for residents even farther away than Chicopee. Sleeping with windows open is still not an option for those with children (even after the departure of Nolinair this spring), aircraft fly so low over our house that it is not just the sound but also the vibration from the sound which causes a disturbance. Obviously, if this activity is to increase with a possible expansion to the airport we would not be happy. Further, is air quality a consideration of the Master Plan? Given that Waterloo Region has some of the poorest air quality in Southern Ontario (let alone Canada), does increased emissions from the take-offs (in particular) factor into planning for our future? With two children under the age of four and both requiring puffers on a daily basis, this is a HUGE concern!
71	I think that it would be great to expand the airport as YYZ will be to full in the future. I like the idea of not having to drive to Toronto in order to fly. I have never gone to a city that YKF flies to so I have always had to ply out of YYZ. I wish there was some way that there were flights to larger connecting airports in southern US or to other cities on the east and west coasts of Canada.
72	The business park seems like an excellent idea to bring more business into the region and to assert the region's legitimacy in the aeronautical field.
73	Please include flights to Newfoundland!

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74	Expansion is great for the region as it will likely yield more jobs etc. but you have to find a way to minimize the disruption to local residents who also contribute (significantly) to the region's income via property taxes etc. A simple curfew will do the trick.
75	The airport has become an integral part of the region and will become more so in the future. A planned growth is essential. I have used the airport to go to Chicago and Ottawa and enjoyed the ease in which I moved through compared to Pearson. Another 1-2 regular flights to hubs in the U.S. should be a priority. I also always thought much of the land between Kitchener/Cambridge and Guelph as potential industrial land with easy access to the 401 and with the coming of a new highway 7, will also make this area desirable for industry. An accessible relevant airport will only enhance this growth.
76	Due to the previous noise issues and the increased development on the east side of Kitchener, airport development needs to ensure proper steps are taken to protect citizens. Current NEF stats are limited, and don't include variations in planes. Part of the reason we ended up in the Nolinor mess is because no one bothered to redo an NEF for the Nolinor Plane. As a local resident, I have no issue with additional passenger traffic (and would even consider it advantageous given my proximity to the airport), but the airport needs to assure local residents they will not bring in freight or aging planes that create a noise burden inside our neighbourhoods. We don't need or want another Nolinor mistake.
77	Integrating the airport into the local transit network or diversifying the options for non-car users would be a good move to open up the airport to more of the population. Inclusion of an aircraft spotting area or park space near the airport would allow the public to engage positively with the operations at the facility. Attracting an additional domestic air carrier (Air Canada) would offer travellers a more diverse range of connections that may not be served by WestJet.
78	I believe a viable, flexible airport is important to the growth of our region. More should be done to bring additional passenger and freight service to the region. I live on the flight line for runway 08, and have no issue with noise. It bothers me the people buy a home near the airport then complain about the noise. Don't allow a minority of residence who made the choice to live near the airport limit growth.

Q2. Does the proposed new Vision for the Region of Waterloo International Airport reflect what is important to you? Do you have any ideas for how we can make it better?

Proposed New Vision: The Region of Waterloo International Airport will contribute to the economic prosperity and competitive advantage of the Region of Waterloo by connecting this innovative community to the world.

This will be achieved through managed growth, customer service excellence, passenger convenience, and community responsiveness.

Overall Summary:

38 Vision Comments:

- **33 (87%)** supported the proposed new Vision and / or airport overall with specific references to:
 - Increasing air service / destinations / global connectivity

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- Airport as an asset / a positive contribution to economic prosperity of region
 - Need to make airport self-sustaining / build on what we currently have
 - Continue to be a good corporate citizen
 - Maintain need for transparency
 - Need public transportation for airport connectivity
 - Need for US Customs pre clearance
- **5 (13%)** Did not support the Airport with specific references to:
 - noise impacts
 - health concern with jet fuel

Individuals Comments:

1	Providing public transit access to the airport would make it much more user friendly. Perhaps the ION/LRT could one day make it to the airport.
2	Need to connect more globally
3	I have a big vision for Waterloo Airport. So far, your vision statement tallies with the short-term goals at the airport. We have to be able to attract cheaper airlines to Waterloo airport. This will enable us to become more active in the airline industry. Of course, if we offer a stable cost we might attract even more airlines.
4	Yes - the vision reflects what is important
5	I support expansion of the local airport. I hate using Pearson so with options to fly east and south U.S. would be great. Those living nearby, you move close to an airport then complain? Perhaps what might also drive the growth is changing the land usage between Waterloo Region and Guelph to be mostly industrial I think would attract more business travel and perhaps attract a courier company. All this points towards more jobs and less Toronto traffic.
6	Definitely need better and expanded passenger service facility. When the WestJet flight gets in, the little passenger room becomes a mess (too small, too crowded). The delivery of luggage is even worse. There is no sufficient space for passengers waiting for their luggage and family/friends waiting in the same room. I cannot imagine how it would be if there were two similar jets departing or arriving at the same time. So, please plan for larger and more efficient passenger facilities. For example, the Niagara Falls (US) airport is small, but much nicer facilities than Waterloo.
7	With an encircling population of approximately 750,000 population (Waterloo Region, South Wellington County), there is a need to provide a wider selection of air travel options to the population (Ottawa, Calgary, Halifax, Toronto?, entry/connection point in USA(Chicago, Detroit). The population for general travel could support these flights. With the growing IT businesses growing in the region, the strong auto parts industries, and the universities there is also stone business need for flights to these basic locales. Conflicts with the residential areas? People knowingly knew of the airport location before purchasing the properties. Sometimes, it is the benefit of the whole over the benefit of the few. Let's grow our transport opportunities. There is the need and the demand to provide these travel options over Toronto. It would also to some degree lessen travel strain on the 401 to Toronto where air travellers now have to allocate two hours to travel to the airport in Toronto to meet timelines.

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8	As a frequent traveller to the US, I fly from YYZ simply because I don't want to deal with the hassles of dealing with US Immigration at my US connecting airport. Depending on where I'm connecting, bouncing through immigration can be anywhere from 30 minutes to 2 hours, which is too variable for efficient travel planning. Having US Pre-Clearance at YKF would make it an attractive alternative to YYZ for business travellers. This will help increase passenger volumes and will help keep a US carrier flying out of YKF.
9	Aircraft noise, especially general aviation/training flights, is a major problem in the region, and not just near the airport. The airport management and the Waterloo-Wellington Flight Centre do not seem to have much concern for the right of residents of the region to peace and quiet. They also do not seem to stick to their own curfew time of 11pm, as I often hear low-flying planes over my Uptown house close to midnight.
10	We will never be able to compete as an international airport, both in terms of destinations and price, so keep the few charter flights, allow other private charter companies to run and really focus on commercial goods movement (cargo and air freight) NOT THE REGIONAL PASSENGER FLIGHTS. I can say that my family and I have experienced NO benefit to any of services offered by the Airport, and for the life of me can not understand why we keep throwing tax payers money at trying to grow something that only benefits a relative few. Figure it out Council. PS as a family with two children under 4 that have severe asthma, someone should measure the relative health costs associated with the jet fuel pollution on a community that already has some of the worst air quality in Southern Ontario (if not Canada).
11	Even when AA flew out of YKF, it was faster to go to YYZ than connect in ORD. Affordable direct flights would be wonderful.
12	The direct flights into Chicago are great, and I use this route into Chicago for connections heading further west. A direct flight into an eastern hub (LGA, JFK, EWR) would be a great link for travellers into the eastern side of the continent.
13	Until you learn to attract and retain flights, this airport should be funded 0% by the taxpayer.
14	In or around the 'contributing to the economic prosperity' phrasing consider adding "...and meets the needs of citizens of the Region... or something to that effect. It would show an inclusive plan that considers the economic impacts and the social impact of the new plan
15	It is critical to position the airport as an economic driver
16	Build on current strengths and activities.
17	I don't understand the NIMBY's who complain about OUR airport! Afraid about fuel dumps during crashes? Really? That's what should drive our airports growth? I bet that constituent has no problem flying over the residential areas surrounding Pearson when he/she goes on vacation. So many local companies (See: Money brought into our region) rely on transit infrastructure. We should be putting more money/resources into the Airport, iON and GO Transit. We need those flights to Ottawa, Montreal, San Francisco, etc. Build better infrastructure to woo in more airlines (Covered walkway is one I would love to see locally). Maybe we can expand the runway as well, and get transatlantic flights as well.... Pearson keeps saying they are getting full, we could use the money here!
18	While Protecting it's neighbours from increased noise impact. Please do your best to have "quiet" aircraft come & go from our airport.
19	What about home owners on Fountain St. N about noise jet fuel smells. What about planes flying over house with full tanks of fuel. Jetliner & Airport Road

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20	Create awareness that YKF is available, and locals will use it, instead of driving to YYZ Fun Day and Air Shows help a lot encourage the breakfast diner so that people for the day New airlines or more frequent WestJet/American
21	It is obvious that you are on top of the future of our region
22	This new statement was revealing a new face on this airport & hope it succeeds. How it can be made better, the only way I think of is by being up front and open and admit to the public the truth of how to improve and just throw more money but to do what has to be done whether it easy or hard but work together with the community towards a favourable result.
23	Yes I strongly believe that the Region of Waterloo International Airport is an incredible asset to have and will very much contribute positively to the future of our communities and region as a whole. The convenience, customer service, and what the facility has to offer in terms of choice/destinations are important to me so I support the expansion and improvements in those areas. I do live near the airport so I do hear airplane noise but it does not bother me. That being said, I understand that others are more sensitive to airplane noise so I also support the community responsiveness portion of the vision statement as changes and improvements need to be fair to everyone.
24	I like the idea of expanding the airport. I don't like the fact that I have to pay more then it costs at Toronto and have less choice of where and when I can fly. To me there is no use expanding the airport unless you get the current flights flying more often for a more reasonable fee.
25	We would love to fly out of our local airport instead of having to fly out of Toronto all the time. Such a hassle at Pearson! Great idea adding the Orlando flight last winter. Would like to see more Florida options, Caribbean (TCI) & Las Vegas to name a few for possible future destinations. Noise not an issue for us - we have lived nearby in the Chicopee area for 30 years & are never bothered by the noise. In fact, it was great for our kids when they were youngsters as they loved to watch the planes - especially the stunt planes that used to practice in the summertime. All for expansion in our opinion!
26	We have lived near the airport for 45 years and the airport was here before we bought our farms, The planes come in right over our garden or house and never once have we wished the airport was not here. They are low enough we can read the numbers or markings on them. When we come home via West Jet from Calgary, we can see if one car is missing from our lane way as that means a daughter is on her way to the airport to pick us up. Yes, they are low as they go over our place on their way to land at the airport. At the time of the Sept 11 disaster and all planes were grounded for what seemed like ages, we REALLY felt lost without the sound we quite enjoy. We were disappointed when the plane to the far north recently quit using the airport. Our family is definitely are the opposite of NIMBYs and will continue feeling this way even if the airport grows a lot. The airport was here before we came 45 years ago and definitely before most of those who are now complaining. We wish you success in your future plans.
27	The airport is a golden asset. The Region must make a priority of building this asset into a self sustaining, integral piece of infrastructure. The sooner the better.
28	Many local residents enjoy a visit to Las Vegas. I would like to see a flight scheduled there on a regular basis. Once or twice a week would be ideal.

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29	<p>I am against airport expansion as the cost is to great!</p> <ol style="list-style-type: none"> 1. More jets means more pollution, what will be done to combat this? Pollution from jets and noise pollution levels are already high. 2. The area around the airport is already extremely built up with residential homes, what happens in the event of an emergency landing? Where will plan be dumping their fuel? Over residential homes? 3. Additional jet traffic will require an increase in the amount of emergency service personal prepared to handle emergencies at a very costly expense! 4. The city has allowed for tonnes of residential homes around the airport area, adding more jets will only cause additional conflicts 5. I will personally poster the homes in the area of the airport so residence know which council members supported the airport expansion at the expense of home owners in that area! 6. More of a statement then question, jets taking off at 7 pm are already extremely loud! In addition, at times jets land much later (sometimes as late as 11pm and 12pm) waking up residence in this area!!!!!!
30	<p>The Region should look at other municipalities that have installed signs in developments near their airports so that it's clear that you are entering/purchasing a home in an elevated noise area and consider doing the same here. You see this in some neighbourhoods in Toronto. People seem to forget that the Airport was there first.</p>
31	<p>YKF has been thoughtfully designed to accommodate both personal and business travel. The direct flight to the well-connected Chicago airport has been a major contributor to the business flights. As Waterloo Region continues to grow as a leader in entrepreneurship and technology, I believe a direct flight to/from Silicon Valley would provide exceptional economic value to the community. This would ideally be San Francisco (SFO), with alternatives listed as San Jose (SJC) and Oakland (OAK).</p> <p>From personal experiences and polling family friends and colleagues, YKF's most important asset is the low-stress high-speed process through the terminal, especially for international travel. YKF's operations are eons ahead of Pearson's in terms of comfort.</p> <p>The most beautiful airport I have visited is Victoria, BC (YYJ). If YKF is planning for structural and aesthetic upgrades, I strongly recommend modeling it after YYJ's architecture and ambience, which is only slightly larger than YKF.</p>
32	<p>We subsidize each carrier to the tune of millions. They get wooed by Council and money then try to make a go of it. Big and small airlines all realize there is no money to be made. If big corporations that are given millions to float them can't make it why does Council keep trying to push this plan?</p> <p>We have the growth but not the passenger base that is willing to pay more then Toronto flights and double the cost of flying out of Buffalo. It all comes down to dollars and cents, the business traveller worries about their time not money. The passenger base we need to float an airline is the social or vacation client and they typically go for price. I and my family can fly out of Buffalo to Orlando for half of what it costs here. It's an easy decision. However the greatest concern is noise. Flying west out of the airport creates ongoing noise issues with the tax base that subsidies the plane that creates the noise. Sure signs are up telling of noise issues for all new subdivisions, but Chicopee and Deer Ridge didn't sign up for this level of daily noise.</p>
33	<p>I completely endorse the proposed vision statement. One addition to the end of it may be something "while continuing to be a good corporate citizen sensitive to all stakeholder needs.</p>
34	<p>Add more flights to Ontario cities at reasonable costs and the public will come.too high a cost and they can drive. Volume can equal \$. \$ can dissipate volume if they are excessive.</p>

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35	Given the proximity of the airport to residence, minimal expansion, if any, should occur. There is no reason the airport can't add a few regional flights without pushing for moderate or high level growth. It's a waste of tax payers money and will only result in uproar.
36	<p>Please bring back flights to Ottawa and Montreal. There are many people in the Guelph area especially who are travelling to Ottawa regularly for business in the agri-food sector. I personally used Bearskin many times for flights to both cities for business and conferences. Flying from Toronto takes almost as long as driving to Ottawa.</p> <p>And I live in the take-off and landing zone just west of the airport and enjoy seeing and hearing the planes. They let me know what time it is! The early morning ones are not an issue.</p> <p>Please work to expand this airport.</p>
37	What I need at WRAirport is a morning flight to Calgary or Edmonton by WestJet. I think many people would benefit from this as these cities are gateways to the West. I have family in Yellowknife and have to get a connecting flight there, so a morning flight would let be able to get there in one day. As it is now the WestJet evening flight to one of those cities doesn't help me, and therefore I have to drive to Toronto airport-much more time and \$\$\$. I support expansion, with respect to the nearby homes. Thanks.

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

The following questions were posted to the Engage Region of Waterloo platform (www.engageregionofwaterloo.ca) to gather feedback during the second public consultation which took place on November 10, 2016.

All comments received (PCC, online and through email) from November 10, 2016 through January 14, 2017 have been consolidated onto the Engage platform.



HOME INFO PROFILE SIGN OUT HELP TOOLS



Admin Mode is On Turn Off

Welcome Michele

WATERLOO KITCHENER CAMBRIDGE



466

How do you think the Region of Waterloo International Airport should be funded as it grows? What would make you decide to fly from home?

Summary Responses (254) Survey

With that in mind, how should the Region fund operations as the airport grows?









	Response Percent	Response Count
Through fees from passengers who may also include people who reside outside Waterloo Region	39.8%	99
Through a combination of property taxes from residents in Waterloo Region and passenger fees (currently approx. \$22 per average household annually).	60.2%	150

If you could fly to a destination you wanted to visit from the Region of Waterloo International Airport, would you regularly choose to “fly from home” instead of going to another airport?

	Response Percent	Response Count
Yes	95.6%	241
No	4.4%	11

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

What are the factors you consider when making your decision to fly from home?

		Response Percent	Response Count
Price		85.3%	215
Frequency of service - how often a flight departs from the airport		74.6%	188
Aircraft type		12.3%	31
Airline reputation		31.7%	80
Frequent Flyer or Rewards Program		11.9%	30
Airport Experience		30.2%	76
Parking cost		39.7%	100
Other		25.0%	63

What cities are you most interested in flying to?

Answered : 230

Skipped : 24

▼ Hide Word Cloud

Canada Major US hub airports Calgary Chicago other S Caribbean Florida NYC San Vancouver New York Orlando Francisco
Edmonton Montreal Ottawa cities Europe All flights Los Angeles Tampa destinations Las Vegas Halifax Miami Quebec London Cuba Boston BC West atlanta St Mexico
UK USA coast Victoria

Do you have any general comments about the proposed Airport Master Plan? You can review the key messages in the introduction or follow the link to the poster boards for more information.

Overall Summary:

78 Comments:

- **60 comments (77 %) support growth with specific reference to:**
 - Value of airport outweighs costs however important to be cost competitive
 - Need to increase air service / destinations to be viable
 - Airport is an asset and important for local economy; planned growth necessary
 - Need for region-wide connectivity
- **18 comments (23 %) do not support growth with specific reference to:**
 - 8 mentioned noise specifically
 - 10 do not support expansion or agree with subsidizing

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

Individual Comments:

1	<p>A current, efficient and connected Airport can be a catalyst for the Region's success. Integrating sustainable features and infrastructure, cutting-edge business & research, and connecting it to transportation networks could define the Region's image and reputation.</p> <p>Realtors and homebuyers need to do their research before purchasing homes near the Airport. The Airport has been there for much longer than many of the neighbourhoods which are now located nearby. It's mind-boggling how people who purchase homes near the Airport then complain about plane noise. It's even more mind-boggling that they are given credibility. The Region and Municipalities need to start making decisions for the Region as a whole and for the long-term common good, and not basing decision-making on the loud voices of the few. The decision-making model used by Councils seems to be based on only a few factors like immediate financial costs and benefits, popularity of the decision, and the viewpoint of the few people who choose to show up at a public meeting. We know that the people who don't participate in public meetings, write in, call in, etc. are usually not opposed to things. That is, if people don't show up, it doesn't mean that they disagree. If the model was changed to assume that people who don't call in, write in, or show up at meetings, actually agree, things may look a bit different.</p>
2	Although the proposed expansion of the airport sounds good in theory, I personally feel very strongly that the various Costs to the Community will outweigh far more than the Benefits proposed.
3	Glad they're planning ahead for expansion. I would pay more in taxes to encourage more flight options but they need to be competitive. I will drive/taxi to TO, Hamilton, London, Buffalo for cheaper flights.
4	Good plan! Nice to see people planning ahead, preparing for expansion in advance before it is desperately needed and people are frustrated with poor service. Should do the same with highways!
5	We need more flights out of Kitchener Waterloo! We need to strengthen our partnership with WestJet and create relationships with companies like New Leaf. The possibilities are endless for our airport. I think we need a stronger management/leadership team overseeing current and new business as well as public relations for YKF.
6	Destination and costs must be competitive to Toronto prices.
7	I think it is a good plan, well thought out and necessary in order to increase service to our area.
8	Despite serving a metro area of over half a million people, you've lost many airline customers lately (American Airlines, Bearskin, Nolinor) and now offer very few flights. Your airline relations are very poorly managed and need to improve. You could offer such a valuable service and everyone here really does see the benefits of flying out of YKF rather than driving and dealing with Pearson. You need someone better at bringing new airlines to YKF and keeping them there. At the moment the airport does not offer enough value to support the cost of operation.
9	We need to work to make this airport viable. It is a gem!
10	We need more destinations.
11	People who live near the airport should not be allowed to dictate the future of the airport. This Not-In-My-Own-Backyard (NIMBY) attitude is destructive and negatively impacts our local economy. The Nolinor debacle should not be repeated. Of course people who live by the airport are entitled to an opinion and should be consulted but their voices should not be louder than the rest of ours who care about jobs and a strong local economy for all.
12	Semi-private funding to ensure region of waterloo residents are not paying more than the average \$22 a year for an airport that they have never used. Region of Waterloo residents are accustomed to travelling to Hamilton, Toronto or even Buffalo for domestic and international flights. If Region of Waterloo cannot compete with pricing, there is no incentive for residents to fly out of our local airport.

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

13	Extend Rwy 08-26 now with an ILS and better lighting on both ends. A third runway is not needed. 14-32 is fine now based on most common operating winds. Would Air Canada consider service to YYZ similar to what YXU has because the drive to YYZ is a miserable experience?
14	you need an airline with US city connections for the airport to be really useful
15	Responsible growth must be a key consideration/priority. Careful execution and management of increased air traffic is paramount so as to not negatively impact the residential areas in close proximity to the airport with bothersome noise pollution.
16	The growth of the airport (additional flights / noise) and how that will impact the surrounding residents needs to be taken into consideration
17	We have an International airport that's been crippled by a lack of access and unsuccessful routes. With the right access and connectivity there's ZERO reason to fly through PIA or Hamilton for points North and West of Waterloo Region, yet so many do. With regular GO Transit and GRT access for both employees of the airport and passengers, as well as sufficient parking for those outside of the core K-W areas the airport should become a flourishing transportation hub. Linking the airport to The Breslau GO Station, GRT's Victoria/King, Fairview, and Sportsworld Terminals should be a given, and plans made now so these functionalities are ready when the airport grows.
18	The main runway needs to be extended now to allow for heavier passenger and luggage loads on larger aircraft. Thusly the terminal needs to be enlarged as well as an increase in parking slots. These three things have got to be looked at first if you want to entice airlines to the area.
19	Go big! Make our region strong! support business in our community with a great airport
20	Improving the Airport should be the priority of waterloo region, it is essential for its growth
21	The airport is badly run, needs leaner management
22	I'm okay with the airport growing as long as it doesn't become disruptive to people who live in communities nearby - especially considering many of the homes are \$500,000+,
23	Have not seen it, no comments.
24	Can't Believe you let American Airlines walk away and not have a plan B
25	Expand the airport buildings and extend runways. Longer runways will allow aircraft to be higher over homes for reduced noise and better service for more carriers. Passenger & landing fee's will help offset taxpayer operation cost.
26	The airport needs to be able to accommodate ~250 passenger craft which requires upgrading the taxiway/runway width and PCN/ACN. Further, the arrivals area needs to be formalized as it is much too congested. RWY 14/32 needs to be extended to 7500+ft a 08/26 needs to be extended to 9000+ft along which proper approach lighting for 08 threshold.
27	The Airport needs to attract flights to USA feeder hubs and add light Freight handling. Also advertise character companies to local groups. Sometimes charters are cheaper!! Contact Executive Flight Centre in Calgary to manage the airport might be cheaper then current situation!!
28	You should have US immigration done at the airport
29	I strongly believe that a busy modern Airport facility is vital to our growing community. When we have flown from WRIA, we appreciate the simple fact that we are not sitting in traffic on the 401, we can park our vehicle without a large hit in the wallet, we get checked in quickly by people who actually are easy to deal with and we don't have to book a hotel room for early flights. As for those who constantly complain about the noise factor? I'm fairly certain that you knew the airport was there when you purchased your home. I actually enjoy having aircraft fly over every day.

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

30	We need an airport with scheduled and charter services that depart on weekends, to destinations attractive to travelers, Cancun, Punta Cana, Havana, Miami and Orlando. Courier companies would generate income
31	Keep aircraft sizes to current limits. Do not expand to support dual aisle aircraft. Follow the river on departure to the west. Don't let the small number of home owners in Hidden Valley impact the majority of the Homeowners under the flight paths in and out of YKF.
32	Whatever the city has done to scare off future business from large companies like Nolinor, American Airlines, etc. needs to stop. If the city wants to continue to build subdivisions up to the end of the runway, then noise complaints should simply not be accepted from the residents who chose to live there. YKF has a reputation in the industry for not being an airline welcoming airport, and that reputation needs to be worked on very hard to reverse and make airlines want to come here instead of Hamilton or Toronto. Most of the local citizens I talk to have no idea where they can even fly from our airport, and that includes back when we had three airlines operating here and they could go to places like Chicago. Something needs to be done to A) get some proper destinations we can fly to and B) make our city aware of where they can go to so they stop taking their business to Toronto.
33	Better access from 401 seems crucial. Better access from Waterloo would be nice.
34	Fly to many other places and bring competition
35	The focus seems to be on airport growth, but without the local demand. The airport should grow per demand for service, not simply to grow and destabilize as yet another airline loses too much money to continue operations here. Other methods of diversification could be freight/cargo, aerospace, training, military base. Pearson overflow is a viable source of new ridership.
36	Marketing is targeting an audience who already know about the services offered "from home". Broaden your reach.
37	I'm sure many people don't understand how important this airport is to the local economy. The \$90M it currently contributes means jobs for many people and higher productivity for many businesses around the region. The airport is an important piece of infrastructure much like access to the 401. The staged growth, linked to milestones at both YKF and YYZ makes a lot of sense as at some point in the not too distant future, the only additional flights YYZ will be able to add will be at times when no-one wants to fly. The experience flying out of YYZ (unpredictable travel time along the 401, long lines at check-in, security, and US Immigration) is terrible. I look forward to having regularly scheduled flights to a major US hub out of YKF again, hopefully soon...
38	I believe as our city grows, it makes sense that our airport follows in line with the growth. The Region of Waterloo Airport has always been a positive experience for our travels (albeit typically more expensive than Toronto) but way more convenient, friendly and far less chaotic.
39	Don't forget that this airport started life as a general aviation airport and that most of the movements are not airline.
40	I believe a thriving airport is the base of a strong community. The corridor to get to Toronto is already bad, and most certainly will get more difficult each year
41	I agree with the outlined masterplan and its connection to upgrades based up passenger service growth. I'm not sure that the planned outlined could handle the volumes being mentioned in the limited terminal footprint due to the proximity to other tenants and limited room to expand parking spaces as well.
42	I hope to see transit extend to the airport so there is a reliable way to get to a nearby transit hub without taking a cab
43	Scaled for phased growth is ideal. Ensure the needed land is available or annexed to support potential

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

	growth.
44	I would estimate that there is ~\$50-\$75 benefit on parking and ~\$50 benefit to travel to our local airport vs. Pearson. On top of that there is a reasonable amount of "value" for convenience, say another \$100, so to be competitive fairs need to be no more that ~\$200 than Pearson (or elsewhere). I feel that should be part of the consideration in looking for service opportunities from the airport. Some previous routes had been priced beyond that limit, which I feel reduced the popularity of those routes.
45	The waterloo airport is a terrible neighbour. Planes fly loudly over highly residential areas. I am very worried about the extra pollution and safety as planes rarely crash at airports (but the City has allowed tons of residential development all around the airport). I will pay out of pocket so all my neighbours are aware of which politicians support the airport!!
46	The region should not subsidize the airport at all or only minimally. If it can not be funded by the wealthy class of people that fly, then it should not be in existence.
47	Interested in seeing how the airport is going to attract additional airlines to be able to grow and apply the masterplan
48	This airport is very good and needs to be maintained, if not expanded. Flying from home is so much nicer and more convenient than flying from Toronto. It is sad that AA has pulled out. They were great.
49	As far as I'm concerned the airport should be considered the same as rapid transit or express ways and look to the future and how it can enhance our region
50	I think the focus needs to be on getting more flights. At least getting another company to have frequent flights to a hub like Chicago. Currently I can't use the airport as there is no way to get to a destination I want to go. I would much rather fly from Waterloo than Toronto
51	None and I am supportive of the airport's growth with more carriers.
52	My over arching concern would be the accessible aspects of the airport including assistance to and from gate, accessible signage, customer service and facilities.
53	Anticipating the growth of this airport, presumably to gateway cities for connecting flights to the rest other popular destinations.
54	The primary objective for the Region in relation to the airport should be to develop a rail link directly to Pearson that is quick (i.e. track upgrades in Georgetown area that will also benefit GO). The link needs a stop at Pearson, that is not going to Union then back to Pearson. This will provide a convenient link to air travel and all the benefits of increasing local air traffic. Long term the rail link could be used by passengers arriving at Pearson and continuing on to YFK then other destinations. We need to seriously consider the impact on climate change and reduce air travel, both for Pearson and YFK. For the Region to promote the lon and intensification while promoting air travel are opposite objectives (not to mention the high tech advances this region is developing to reduce travel).
55	Pickering has been trying for over 40 years to stop that airport while Waterloo is asking for increased usage of our existing airport. Can we please try to divert the attention (money) away from Pickering and have the feds invest in our region? There are significant cost savings associated with expanding an existing airport as opposed to building a new one. We want it...Pickering doesn't! We need to find out who (commercial users) would be using a Pickering site and bring them on side with moving their focus to Waterloo. Passenger traffic would increase once commercial users come on board. Also with the 407 and Metrolinx Pickering really isn't all that far away. So to comment on the Official Plan I would like to make shifting focus away from Pickering as a point to consider.

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

56	From a student and entrepreneurial perspective, California would be an incredibly popular location. There's so many people that go on co-op jobs there or go to work there afterwards. Additionally, I think there should be more emphasis on two parts: the connection with Pearson and business development in the area around the airport. For the Pearson connection, this airport could be a primary hub for select cities in the western half of North America that are common for people in Waterloo to travel to, and a rail transfer connection could be built between the airport and the future Breslau GO station, to enable a quick transfer to Pearson and Toronto if needed. The emphasis should definitely be on cities that are not possible to quickly connect via rail or bus, since airplanes have a larger environmental impact. For the business development, industries that require frequent access to the airport (in the tech industry, connections that take you to Vancouver - for transfers to China - or to California could be quite desirable) could be good candidates for being located on the road between Breslau / Hwy 7 and the Airport, which could build a case for transit development along this corridor to support the airport.
57	I am worried about the flight path for landing and taking off. Also, at what time of day and frequency would the planes be flying over residential areas.
58	Anxious for the airport to succeed and grow - it is vital to the growth and prosperity of the region.
59	The price difference between our airport and yyz is already significant so I don't think adding fee's to tickets is a good idea. Price is a big factor in choosing which airport to fly out of.
60	There should be signs in high noise areas reminding residents they bought homes in a high noise area (like they do near Toronto airport
61	Introduce a bus service that connects ION and the Kitchener VIA/GO station so that I (and others) can take public transit to the airport.
62	The region appears to be following a good mixed approach to funding and an appropriate staged approach to growth. Please don't be set off your plans by every vocal opponent of growth, especially when they have bought properties with the knowledge that an airport exists.
63	Did we not already have this discussion? I distinctly remember the citizens of this region voting to keep the status quo at the airport. Can someone explain why we're having this discussion again? Why the question isn't "do we need to expand the airport" but instead has become "here's how we're going to expand the airport". It seems the politicians inside Waterloo Region are determined to get what they want regardless of what the taxpayer thinks. But, since you're asking us our opinions (even though we know you're not going to listen): No. The Airport does not need expansion. The flights you have are crap. You can't seem to attract or retain flights we want. The cost to fly from this airport is outrageous. And the airport itself sits practically on top of a heavily populated area of the city. So unless you start talking about moving the airport. Start talking about implementing noise restriction measures (such as blackout times). Start taking about restricting plane type (because at this rate we don't trust you not to turn this airport into another cargo airport). And start talking about how you're actually going to attract and retain flights. The answer is no. We don't want your expansion plans.
64	When deciding to expand the use of the airport, I trust you will keep in mind the needs of the residents of Chicopee in ensuring flights only operate between 7 a.m. and 11 p.m.
65	I did not see anything that stood out that piqued my interest. Nothing innovative that would make Waterloo attractive.

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

66	The airport expansion is an expansion of noise and pollution into the properties of its neighbours without their consent. An airport that has a goal of reaching 500,000 passengers should have a goal of doing that from a location that is going to have a minimal impact on residents. The Master Plan should include a plan to move the airport to a more remote area away from residential homes. The cost of running the airport should be borne by its customers and not through the property taxes of the average resident, especially not the property taxes of residents that are living near the airport.
67	I do not believe the airport should expand for passenger service it is a money pit to do so. I especially don't think that tax payers should shoulder the cost of UNWANTED expansion. I also am seriously concerned about the noise and the AIR POLLUTION. Particulate matter floating down on all the Regions residents does not improve quality of life or make this a world class place to live. Air quality needs to be seriously considered as part of any proposed expansion. Check out the measures for air quality protection produced by City of Hamilton. Many attributable deaths to air pollution each year. This needs to be a priority.
68	The Region pays too much towards the airport. It should pay less.
69	The integration of the airport with the regional transportation network needs to be addressed. The lack of a connection to the airport with Grand River Transit is a huge block for travellers, especially for students. A taxi to the airport can cost around...
70	Destinations are important, but the pricing needs to be competitive. Sadly in the past while it is far more convenient to fly from KW, the prices are significantly higher - i don't park at Pearson (i get dropped off) so that doesn't factor in.
71	I found the material at the Nov 10 consultation very informative, and think the plan is very proactive. The plan has long term potential to provide economic benefits to Waterloo Region.
72	Flight paths must not travel over residential areas and overflights must be limited. To levy a tax on residents is unfair. The residents did not choose to build an International Airport in their back yard and to force them to pay for operations is akin to extortion. You need to look inwards: Reduce your costs, retract executive wages and bonuses, become more efficient. If you can't afford it, you shouldn't have it.
73	As usual, everybody is only concerned about economics and I haven't seen in the Master Plan any GENUINE controls in place for the increase in noise levels as the airport and air traffic grows. A plane turning a certain way to avoid certain areas in the region will do little. Aircraft today may be less noisy than in the past, but they are still too noisy when near the ground. Living in northern Cambridge and even at my parents' house in southern Kitchener, I've had to put up with the never-ending increase in aircraft noise from tiny little planes to the large jets from Toronto's, Hamilton's and Waterloo's airports, sometimes minutes apart, day and night. The American Airline jets used to fly incredibly low over my house, it was intolerable, and that was a couple of times a day or so. And you would expect one to deal with that 20 times a day or more? Everyone is concerned about passenger safety and making more money, and I have seen no controls in your Master Plan on genuine protection of the environment and people's long-term health (noise, increase in fumes from jet exhaust, etc.). Listening to aircraft noise in one's house is not my idea of a decent place to live. A person should have the basic environmental and human right to live in relative peace and quiet in their homes. If people were really concerned about people's well-being and one's right to a good night's sleep and a quiet day of the week such as Sunday, air traffic would simply not be allowed during the night and at least one day of the week. And claiming that we live in a busy air traffic corridor or that planes are loud but quieter than they used to be are just excuses. The greater the population density, the more important it is for all people to do their part in being considerate of everyone's basic environmental and human rights, not the other way around. Those that cause an effect (e.g. aircraft noise, spilling a chemical in a river) should be held accountable to mitigate their impacts on others instead of making excuses and expecting instead the receptors to somehow just deal with whatever effect the causer creates. Typical backwards human thinking.

Region of Waterloo International Airport Engage Region of Waterloo Feedback Summary Public Consultation Centre #2 (November 10, 2016)

	As long as people get to do what they want. Entitlement and the right to do what one wants is the overwhelming attitude of many people today. Many people give little to no thought about the effects their actions may cause on others and few have any sense of responsibility to reduce, eliminate or otherwise mitigate such effects. The only genuine way to mitigate noise effects from increased aircraft traffic is to eliminate aircraft traffic at least during certain times of the day and week
74	It is critical that the plan take into consideration the plans of other large airports in the GTA - particularly Pearson and Munro so that our plans may be economically viable and offer a sustainable future for our airport
75	As this airport continues to lose flights, I am thoroughly opposed to spending tax payer money to support this airport. All expansion funds/operating funds should come from passengers. If you can't generate enough revenue (and you operated at a loss this year) to support this master plan it should be scrapped. The region does not need a high capacity airport.
76	Be careful on your comments on potentially looking into additional DC charges as with your also looking at this as a potential for LRT funding you will make our region non-competitive for those looking to come, and too difficult for existing businesses to grow- as these tend to be forgotten about I am surprised you have not secured the lands for future growth, as this would and should be a priority even during this planning/discussion phase. This is not only a business enhancement items but is certainly a tourism item which tends to be overlooked in any of your discussions; and appears the general public do not have the full concept of the importance of the need for this airport to grow and be a strong regional outlet for use. With the major airports in Ontario together as a working group, I would think you would all come up with a business plan that works for waterloo airport as well as the others, and takes out the guessing that has many people concerned of if you are banking on something that could not materialize. Bottom line is the airport needs expansion. If we are going to continue to speak about being a world class region with many great demand generators, this will be a requirement, otherwise all the other strategic investments will not be fully realized
77	Don't like being woken up at night by planes - limit the hours
78	I would suggest that flight frequency and non-stop flight options seem to be the most common reason I hear why people chose to drive to Toronto and fly instead of from KW.



F. EXISTING AIR TERMINAL BUILDING SIMULATION REPORT

GREATER WATERLOO INTERNATIONAL AIRPORT TERMINAL BUILDING ASSESSMENT

26 JULY 2013



DRAFT

TERMINAL BUILDING ASSESSMENT

INTRODUCTION

Airbiz Aviation Strategies was tasked to undertake a functional review of the existing airport terminal building (ATB) at the Region of Waterloo International Airport using static and real-time modelling tools. The review will identify development constraints within the passenger terminal building and identify expansion opportunities.

Once the initial review is completed a terminal simulation will provide a real-time output of the ATB behaviour under existing and projected demand to assist in identifying bottlenecks and in optimizing the ATB development options.

The capacity and functional areas within this review include:

- Check-In Hall
- Pre-Board Screening
- Airside Holdrooms and Boarding Gates
- Baggage Reclaim
- CBSA Facilities (primary and secondary screening)

This draft report includes the constraints and opportunities assessment as well as the planning parameters utilized within the simulation model.



TERMINAL BUILDING ASSESSMENT

LEVEL OF SERVICE



IATA Level of Service

The International Air Transport Association (IATA) issues a series of planning documents pertaining to airport development. Within these documents they define Level of Service (LOS) *recommendations* that are generally considered as an industry standard. The benchmark assessments are general in nature, but do provide a basis to quantify acceptable levels of service within the terminal environment.

As set out in the IATA *Airport Development Reference Manual* 9th Edition 2004, Level of Service 'C' is defined as a minimum design objective. It denotes good service at a reasonable cost. Airbiz defines Level of Service Category "C" via 3 categories:

- Conditions of stable flow
- Acceptable delays
- Good level of comfort

YKF has defined a **level of service C** as the minimum benchmark for all of their terminal processors.

The complete table describing all categories from the IATA Guideline is shown on the right:

A - An excellent level of service; conditions of free flow; no delays and excellent levels of comfort; impact on queuing systems must be considered.

B - High level of service. Conditions of stable flow; very few delays and high levels of comfort;

C - Good level of service. Conditions of stable flow; acceptable delays and good levels of comfort;

D - Adequate level of service. Conditions of unstable flow; acceptable delays for short periods of time and adequate levels of comfort;

E - Inadequate level of service. Conditions of unstable flow, unacceptable delays and inadequate levels of comfort.

F - Unacceptable level of service. Conditions of cross-flows, system breakdowns and unacceptable delays; an unacceptable level of comfort.

These guidelines will be reviewed against the outcome of the simulation model.

TERMINAL ASSESSMENT CONSTRAINTS ANALYSIS

TERMINAL BUILDING ASSESSMENT CONSTRAINTS ANALYSIS



Legend:

- 1 crossflow
- 2 constrained queue area
- 3 constrained m/g area
- 4 constraint + crossflow
- 5 limited space from PBS queue area
- 6 limited space from PBS queue/ congestion possible
- 7 limited space from holdroom circulation/ congestion possible
- 8 possible underutilized seating
- 9 potential congestion area
- 10 washroom blocks present hard constraint in middle of building
- 11 limited area for HBS queue

hard constraint

soft constraint

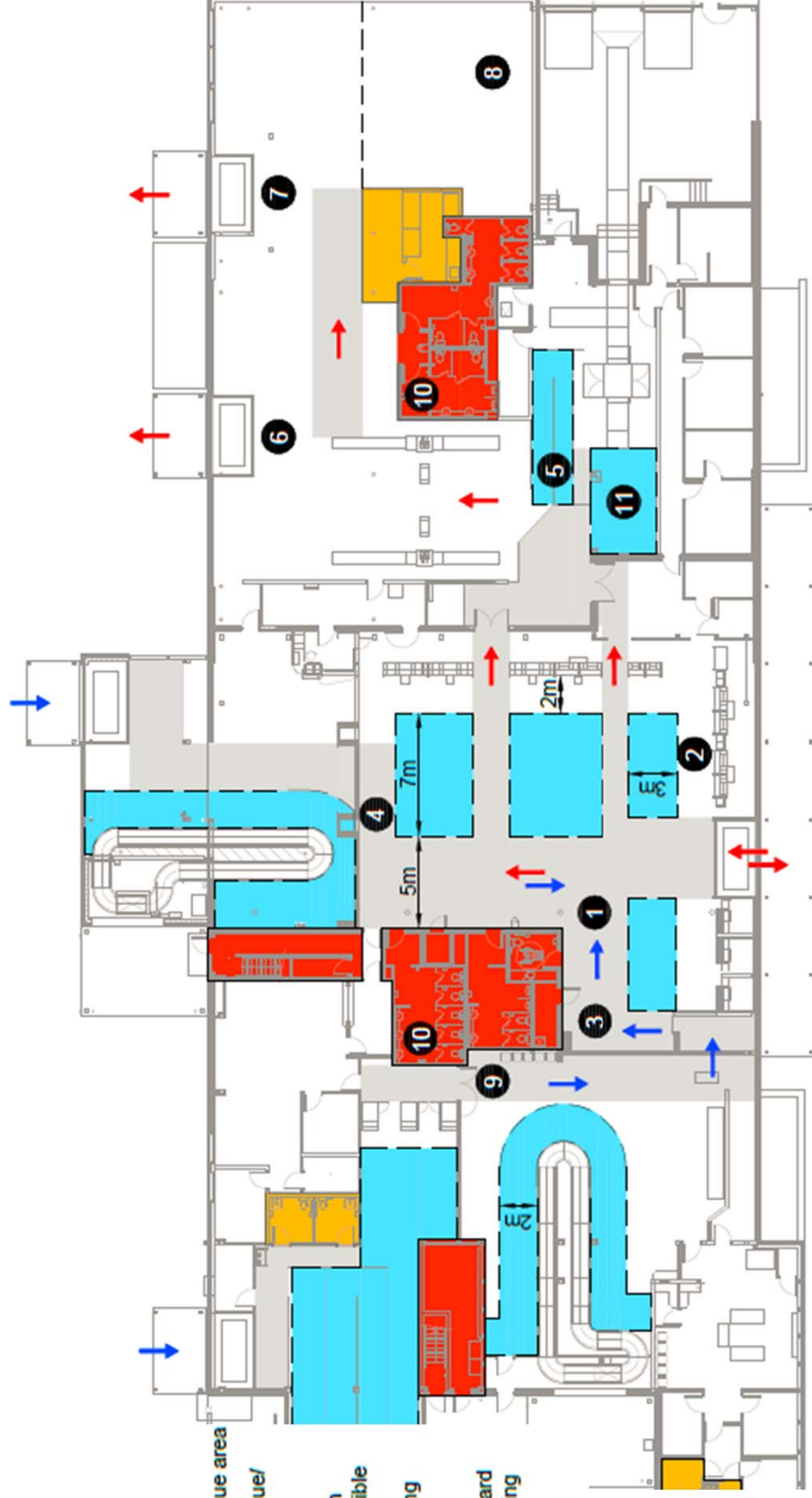
circulation

queue/ waiting area

Passenger Flow

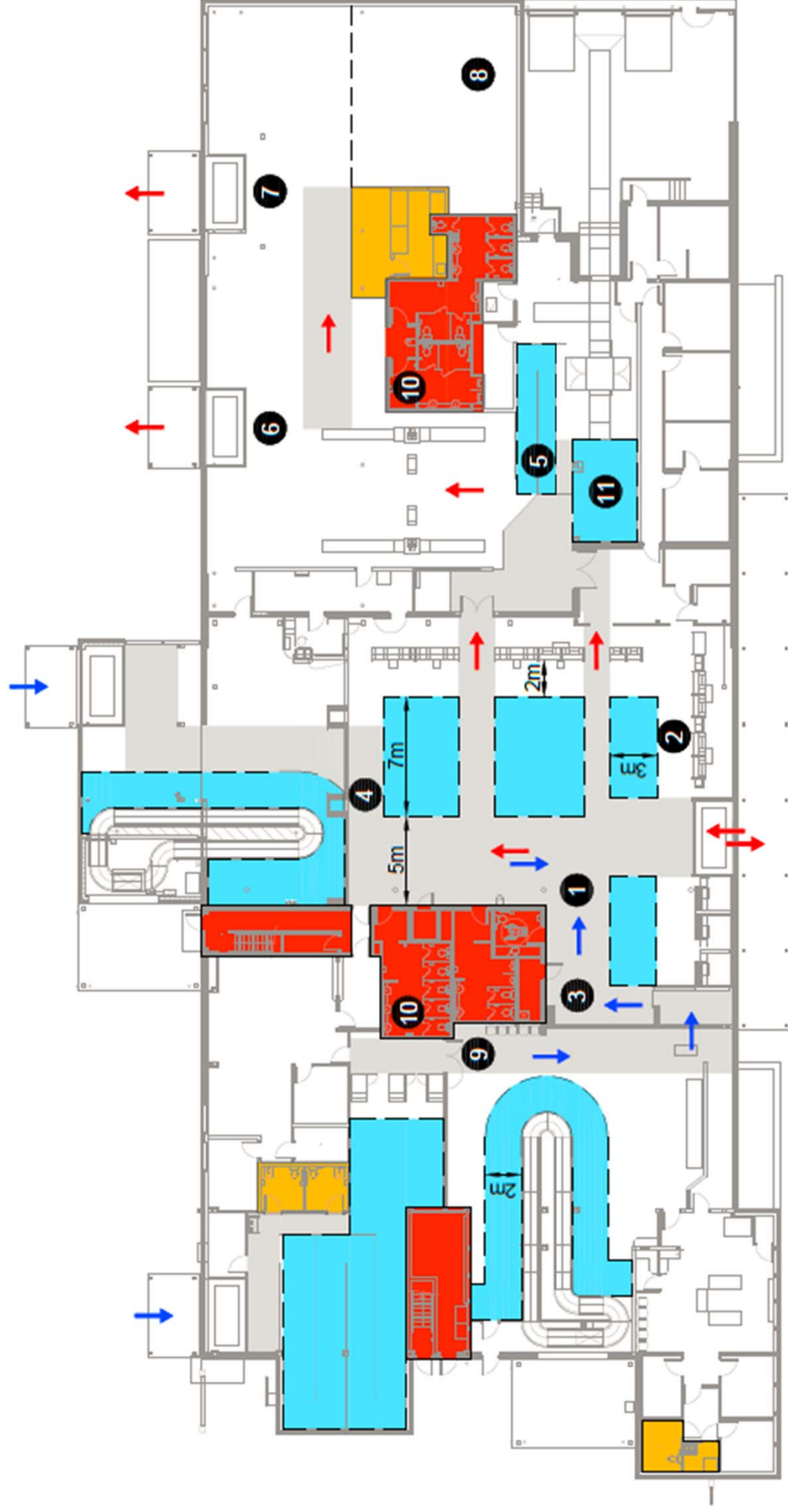
queue/ waiting area

queue/ waiting area

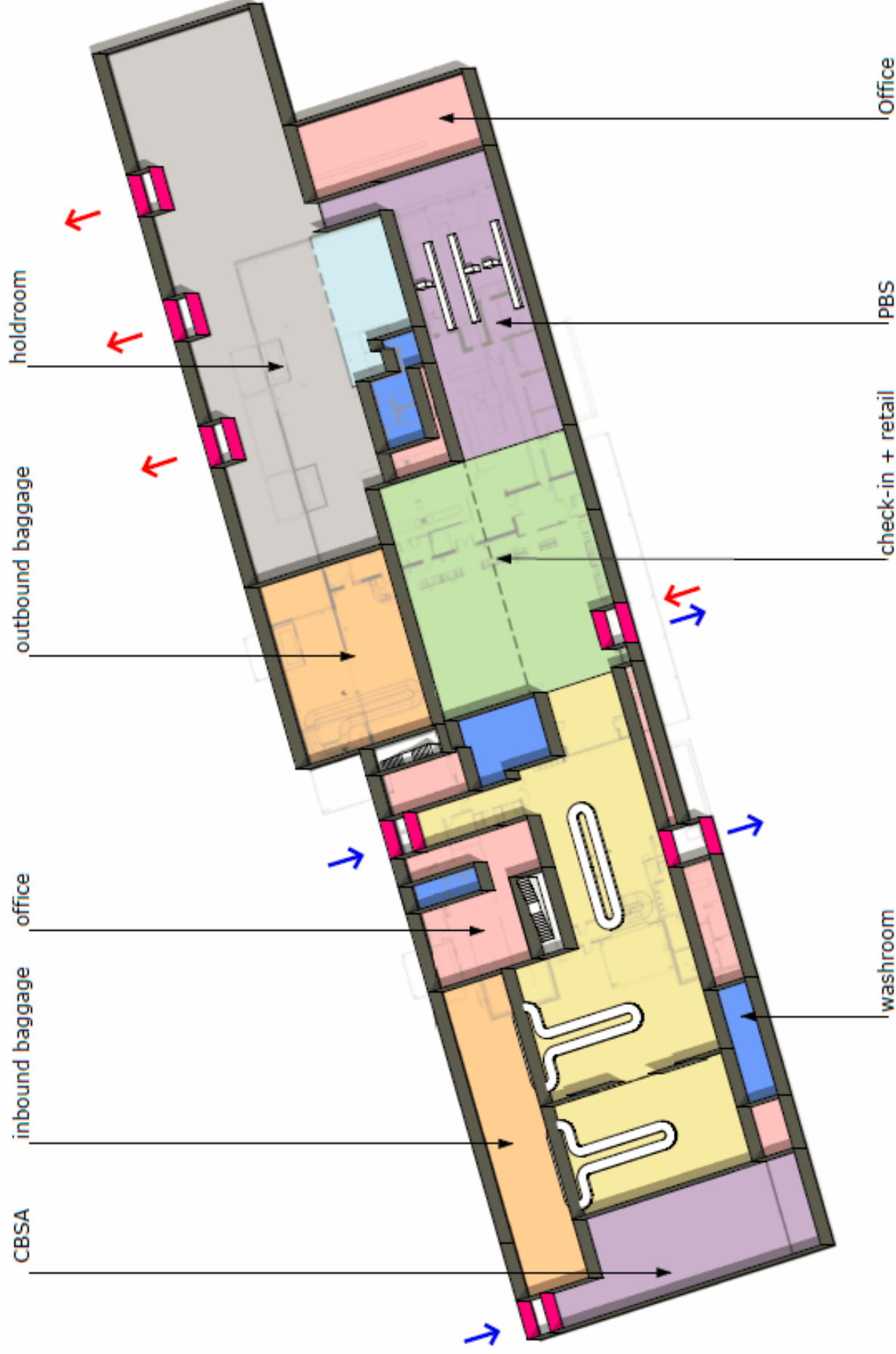




TERMINAL BUILDING ASSESSMENT CONSTRAINTS ANALYSIS



TERMINAL BUILDING ASSESSMENT DEVELOPMENT OPPORTUNITIES – SK1





TERMINAL BUILDING ASSESSMENT

DEVELOPMENT OPPORTUNITIES – SK1

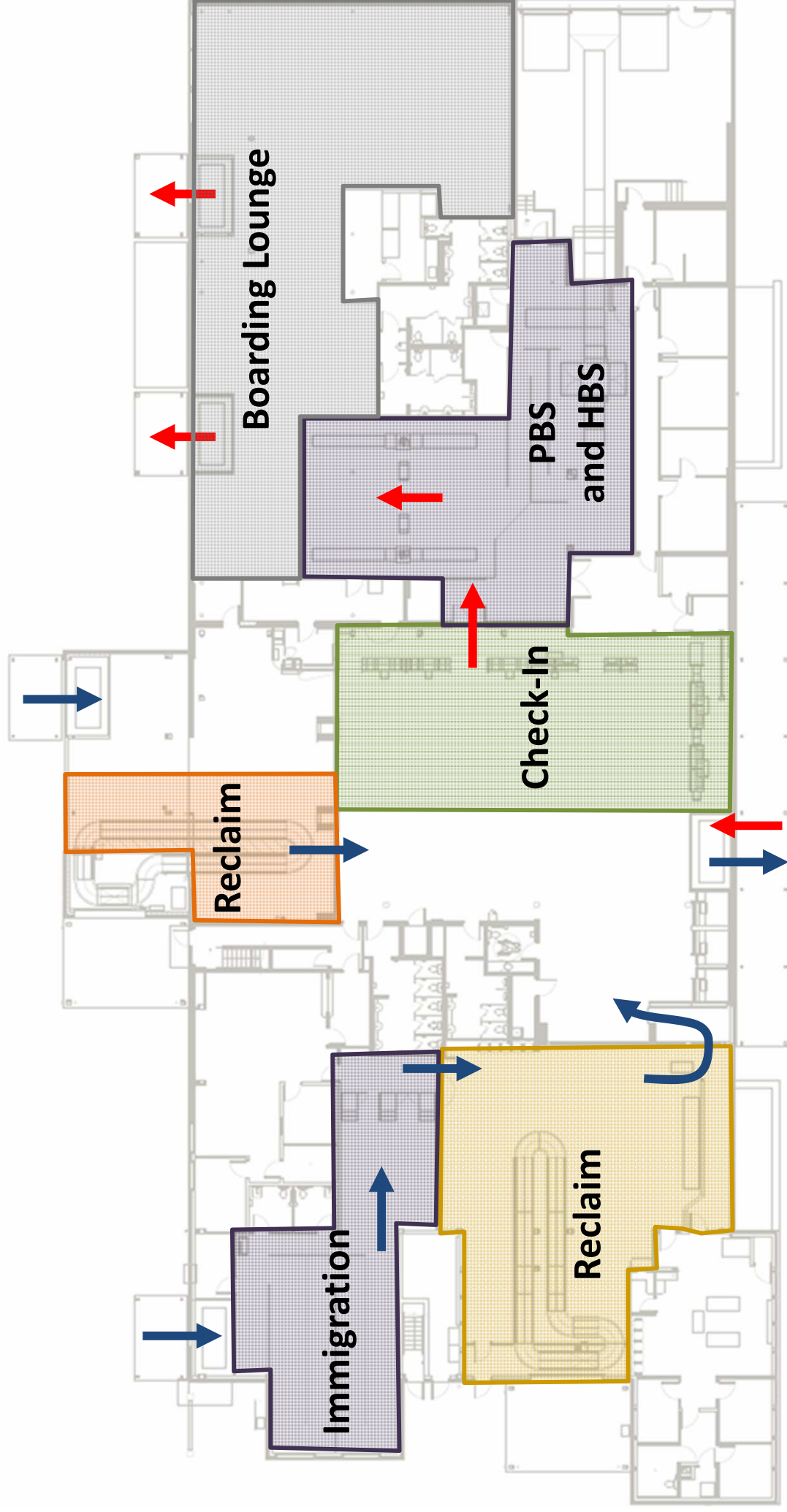
1. Check-In Hall to be remodeled with enhanced processing technologies (self service).
2. Additional Pre-Board Screening will require this area to be relocated.
3. Holdroom expansion towards the East until demand warrants the need for a second storey.
4. Domestic reclaim unit refitted as a outbound baggage area.
5. Reclaim should be centralized towards the West and developed with “swing” capabilities.



TERMINAL ASSESSMENT SIMULATION MODELLING



TERMINAL BUILDING ASSESSMENT TERMINAL LAYOUT / PASSENGER FLOWS



TERMINAL BUILDING ASSESSMENT SIMULATION PARAMETERS



GENERAL				
PASSENGERS PROFILE		INT/TB	DOM	SOURCE
Load Factor		90%		Airbiz
Passenger deplane rate per aircraft door (Arrival)		20 pax/min		Airbiz
Passenger to Meeter / Greeter Ratio		1 : 0.25		Airbiz
Meeter / Greeter arrival profile to terminal (Arrival)		30–10 min before STA	20–5 min before STA	Airbiz
% of passengers with bags		80%	66%	Airbiz
No. of bags per passenger		1.5 bags	1.0 bags	Airbiz
SECURITY		SOURCE		
Passenger throughput per channel		100 pax/hr		Airbiz
DEPARTURES				
% of passengers using Counters		100%	100%	Airbiz
% of passengers using Kiosks		-%	-%	Airbiz
% of passengers using online check-in		-%	-%	Airbiz
Counter transaction time		180 sec	150 sec	Airbiz
Kiosk transaction time		- sec	- sec	Airbiz
Boarding Calls	20 minutes before ETD	20%	20%	Airbiz
	15 minutes before ETD	80%	80%	Airbiz

TERMINAL BUILDING ASSESSMENT SIMULATION PARAMETERS



INTERNATIONAL – ARRIVALS		
IMMIGRATION		SOURCE
Conventional counter	100%	Airbiz
Kiosk (NEXUS)	-%	Airbiz
Conventional processing time	45 sec	Airbiz
Kiosk processing time	- sec	Airbiz
% of passengers requiring secondary screening	4%	Airbiz
Secondary screening processing time	15-20 min	Airbiz
BAGGAGE RECLAIM		SOURCE
Baggage delivery time	10–15 min after STA	Airbiz
CUSTOMS		SOURCE
% of passengers inspected by Customs (secondary)	5%	Airbiz
Customs processing time	5 sec	Airbiz
Customs secondary processing time	10 min	Airbiz
DOMESTIC - ARRIVALS		
BAGGAGE RECLAIM		SOURCE
Baggage delivery time	10–15 min after STA	Airbiz

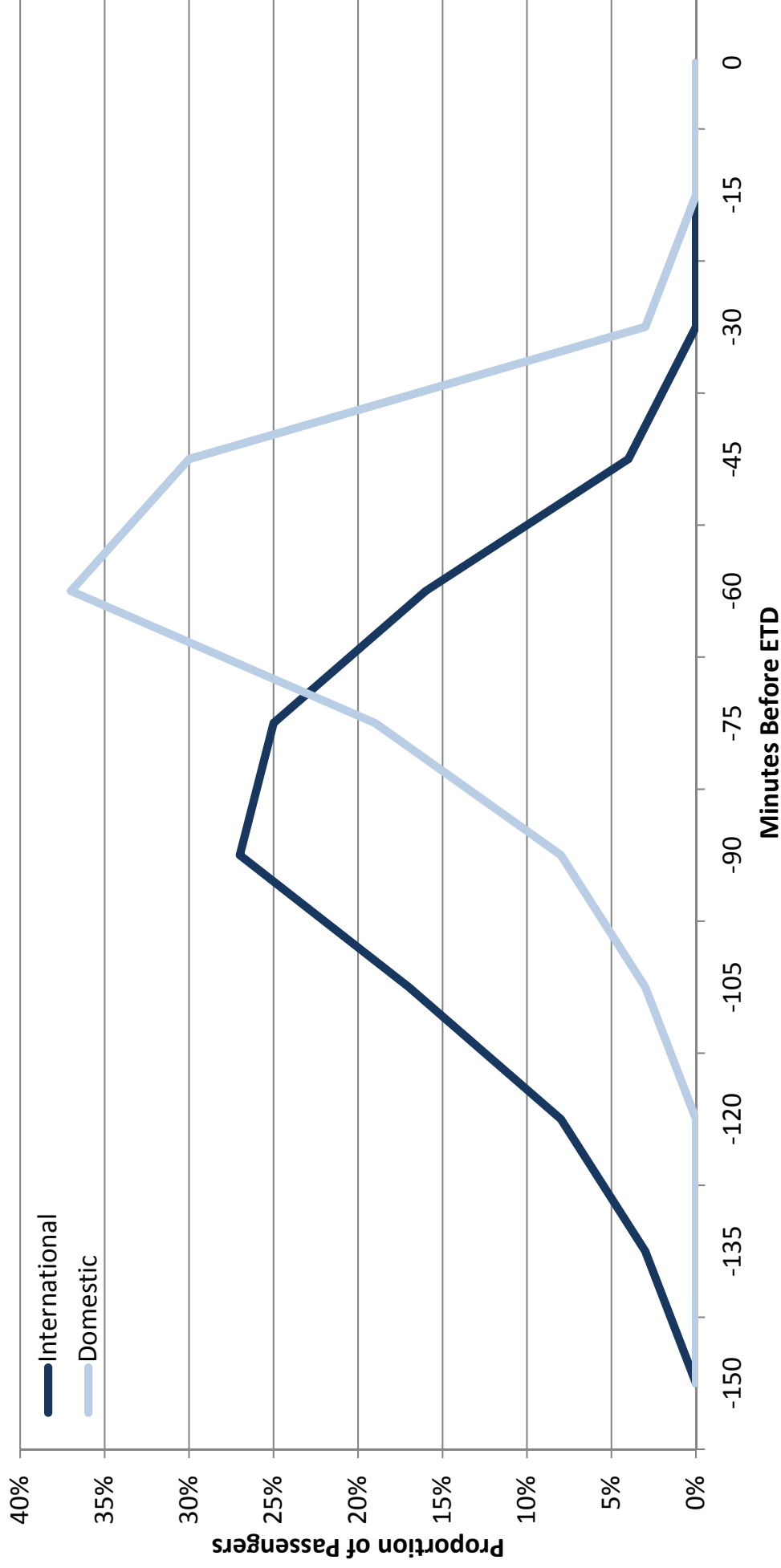
TERMINAL BUILDING ASSESSMENT

PASSENGER PRESENTATION PROFILE



The graph below illustrates the arrivals of passengers at the airport terminal building prior to a departure (international/transborder or domestic)

PASSENGER PRESENTATION PROFILES



TERMINAL BUILDING ASSESSMENT PLANNING DAY SCHEDULE



The table below illustrates a typical schedule for 2013, including a Sunwing charter flight. This schedule will be utilized within simulation model.

Aircraft Type	Airline	Callsign	Origin	Destination	Arrival	Departure	Seats
ER4	MQ	4297		ORD		06:30	50
SWM	JV	320		YOW		07:20	16
SWM	JV	321	YOW	YOW	08:30	10:15	16
SWM	JV	325	YOW	YOW	12:05	14:45	16
738	SW	506	CUN	CUN	15:05	16:05	189
ER4	MQ	4282	ORD	ORD	15:50	16:25	50
SWM	JV	329	YOW	YOW	15:55	16:30	16
SWM	JV	327	YOW	YOW	17:40	18:15	16
73W	WS	556	YYC	YYC	19:00	19:35	136
SWM	JV	323	YOW		19:25		16
ER4	MQ	4328	ORD		22:15		50

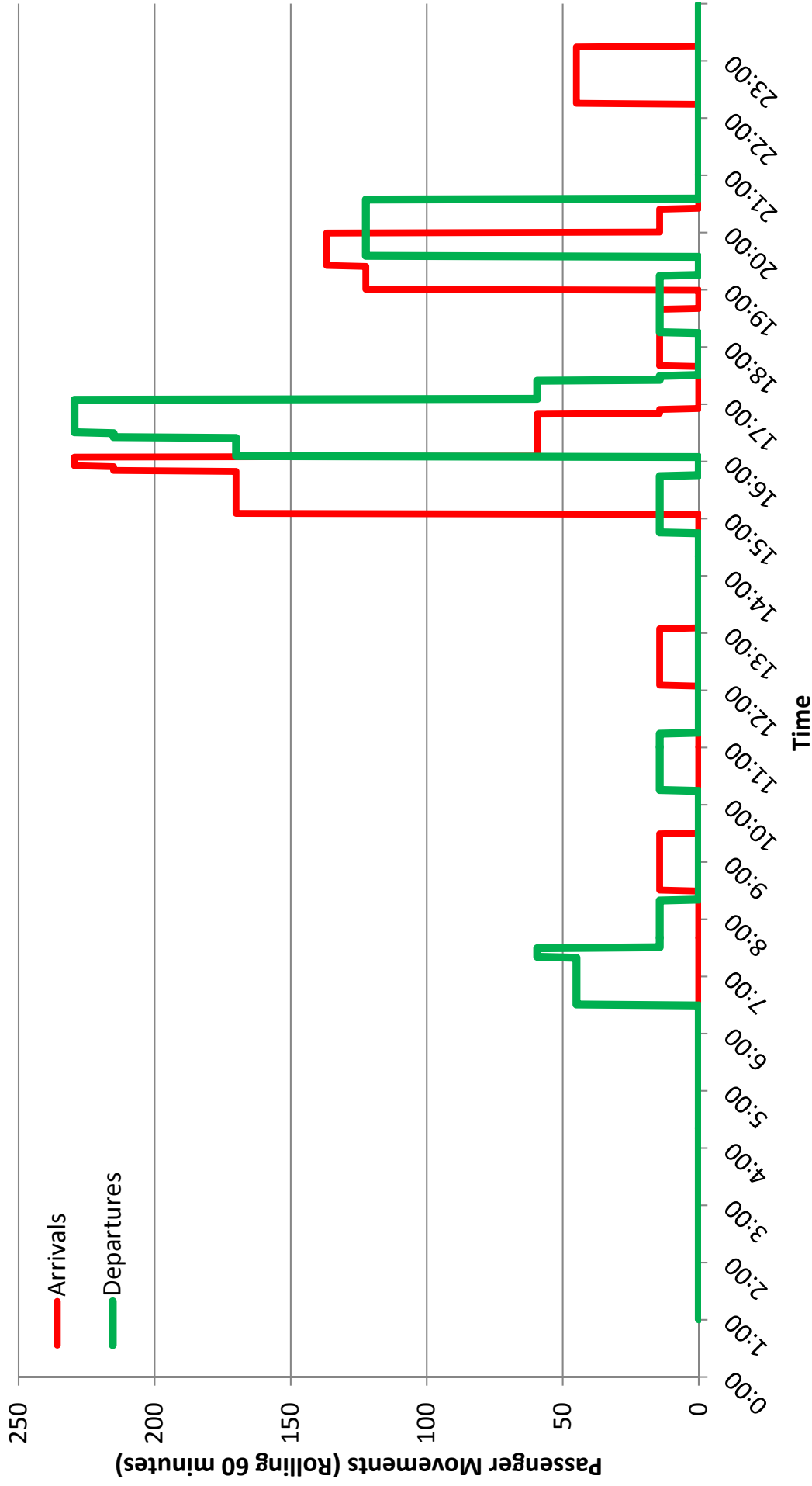
American Airlines®
American Eagle®



TERMINAL BUILDING ASSESSMENT PLANNING DAY SCHEDULE



The graph below illustrates arrival and departure passenger movements based on the typical schedule for 2013, including a Sunwing charter flight.



SIMULATION MODELLING

BASE CASE

TERMINAL BUILDING ASSESSMENT

BASE CASE – CHECK-IN HALL



The check-in hall was modelled under a generic counter assignment to assess the performance of the hall rather than that of the airlines.

Specifications

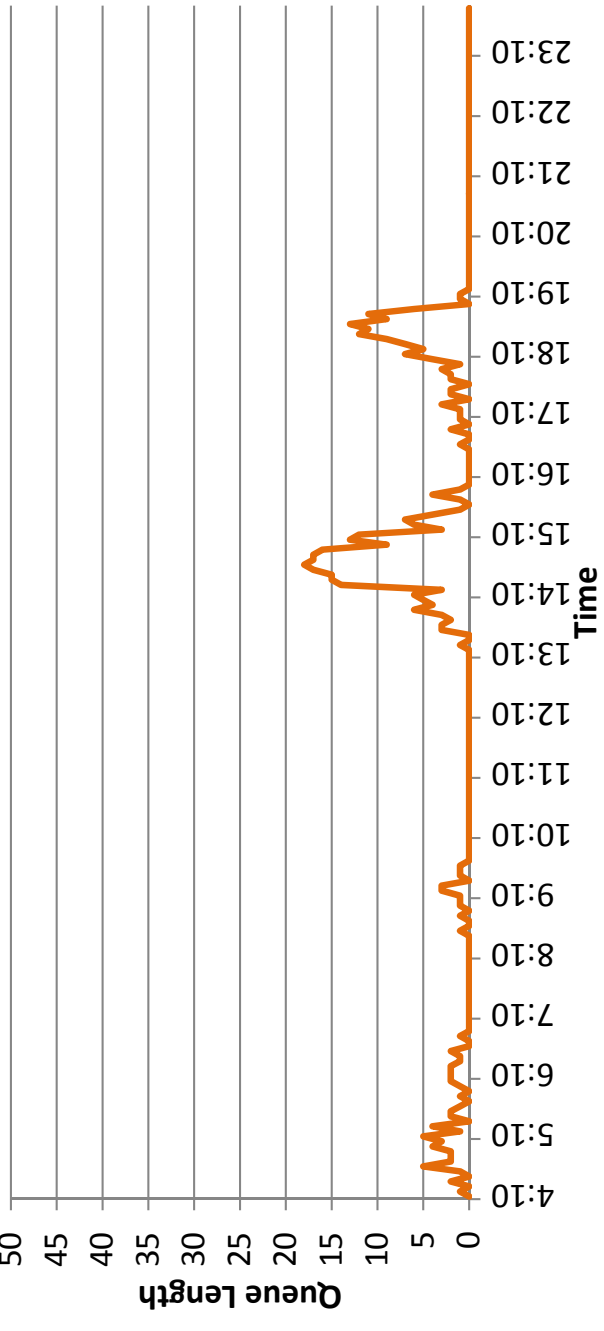
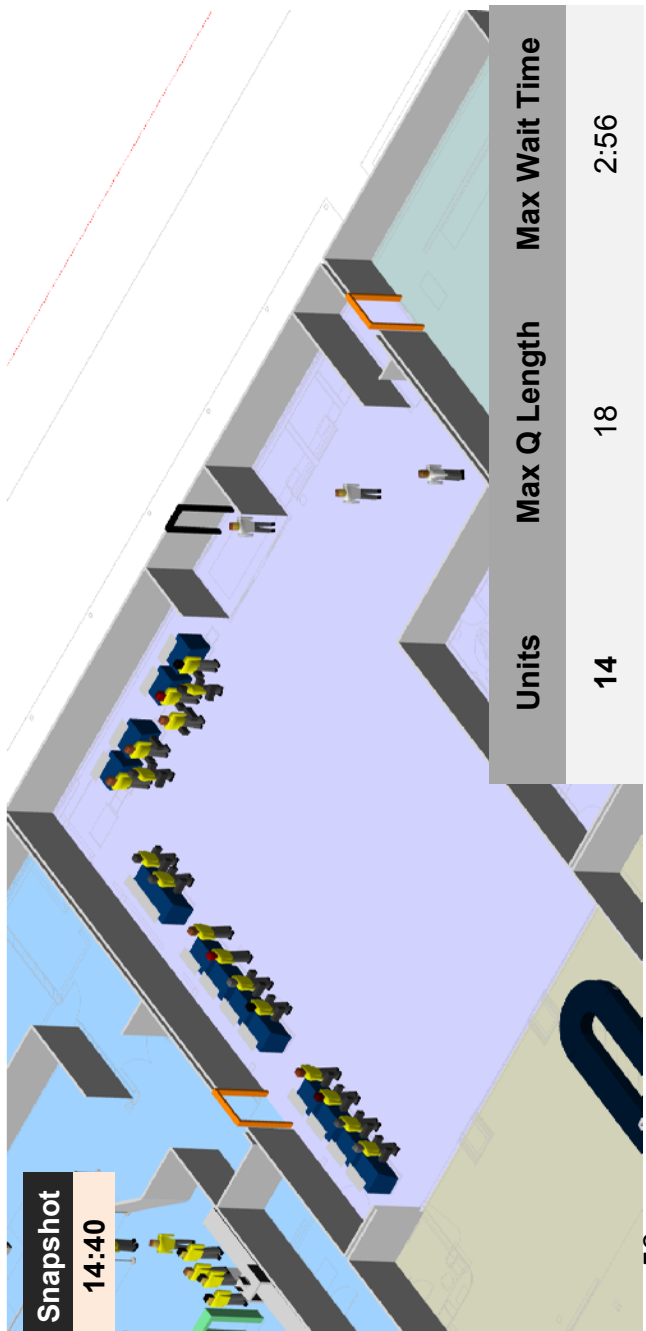
- 14 conventional counters
- No self-service kiosks

Performance

The simulation shows that under a scenario where all counters are staffed, a maximum queue of under 20 passengers and maximum wait time of under 3 minutes is experienced, which is excellent based on IATA waiting time recommendations.

Findings

- Queues and congestion will occur at counters where airline-specific demand exceeds capacity. Under staffing will also create queue scenarios.
- Implementation of enhanced processing technologies such as self-service kiosks would allow passengers to bypass conventional queues and proceed directly to the BHS drop and security screening.



TERMINAL BUILDING ASSESSMENT

BASE CASE – PASSENGER SCREENING



Baggage and Passenger Screening was modelled under the assumption that the passenger first drop their bag(s) at HBS (Hold-Bag Screening) and then join queue to PBS (Pre-Board Screening).

Specifications

- 1 HBS Unit
- 2 PBS Channels
- No Trusted Traveller Channel

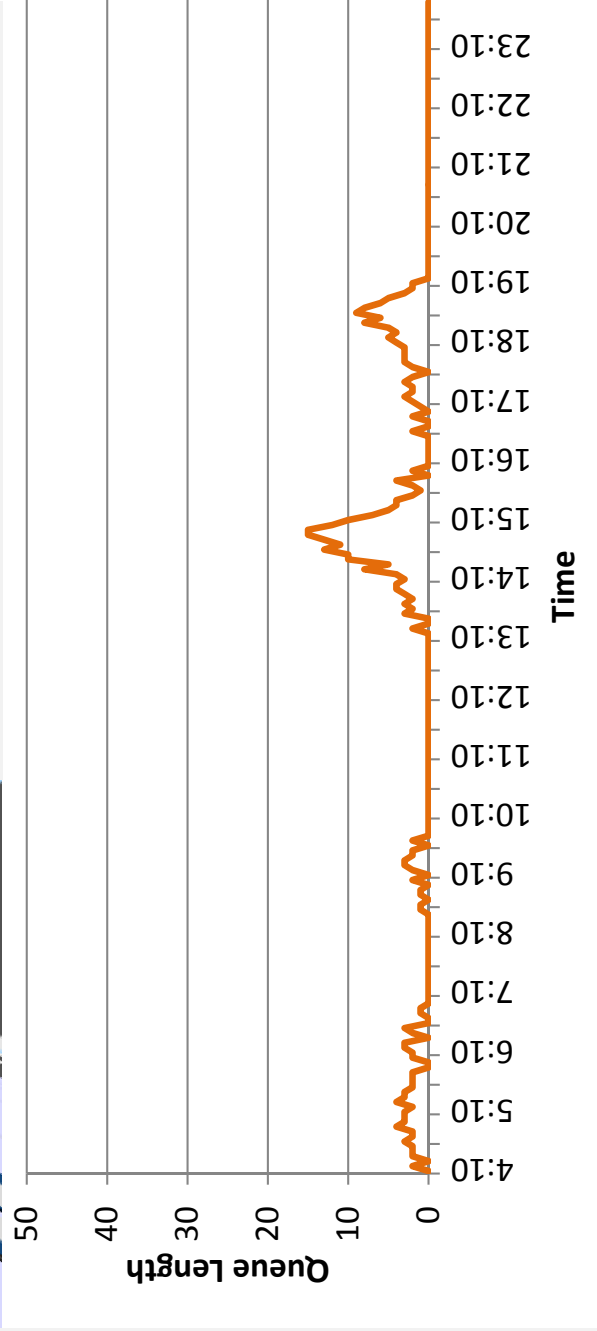
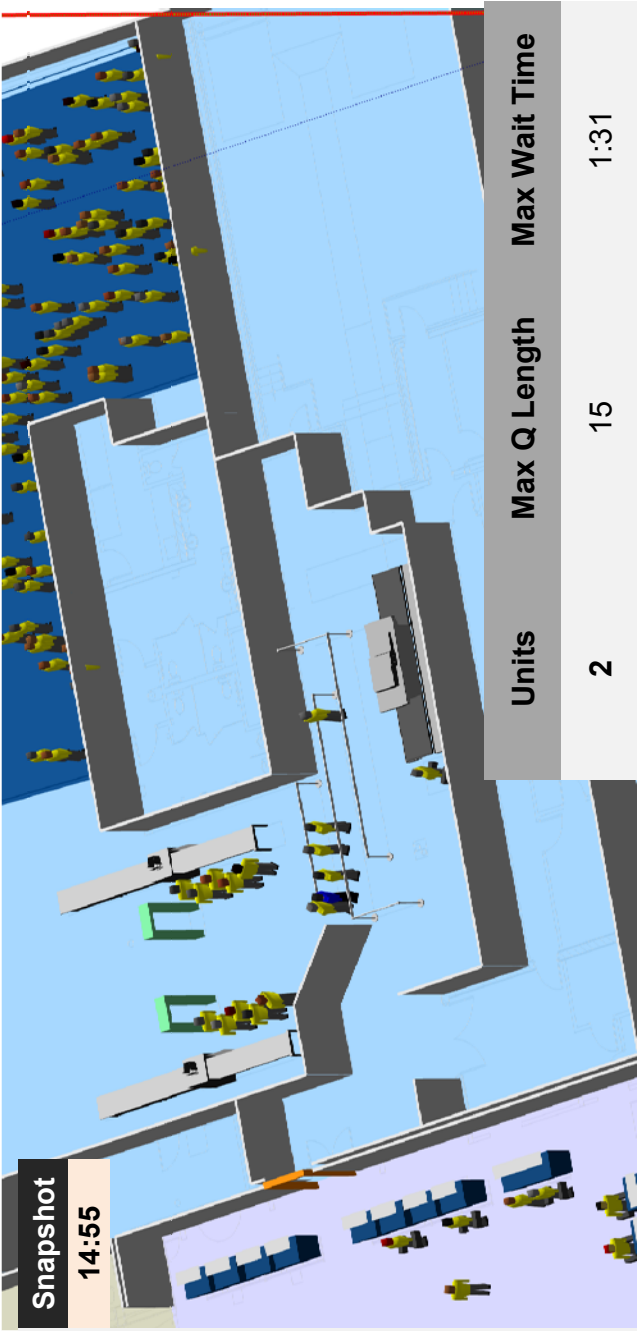
Performance

The simulation shows that under a scenario where all units are staffed, the maximum wait time is under 2 minutes up to divestment area of the security unit.

Findings

Queues and congestion are highly dependant on the arrival profile of passengers at the airport and the ability of CATSA to maintain a minimum throughput of 200 passengers per hour.

Additional congestion can occur if passengers drop their bag, then move back to the public areas of the terminal. These passengers will go directly to PBS once they decide to enter the holding area.



BASE CASE – DEPARTURE LOUNGE



The departure lounge is modelled using assumptions about the number of passengers within the concession area. Lower numbers of passengers in this area will increase congestion in the departure lounge.

Specifications

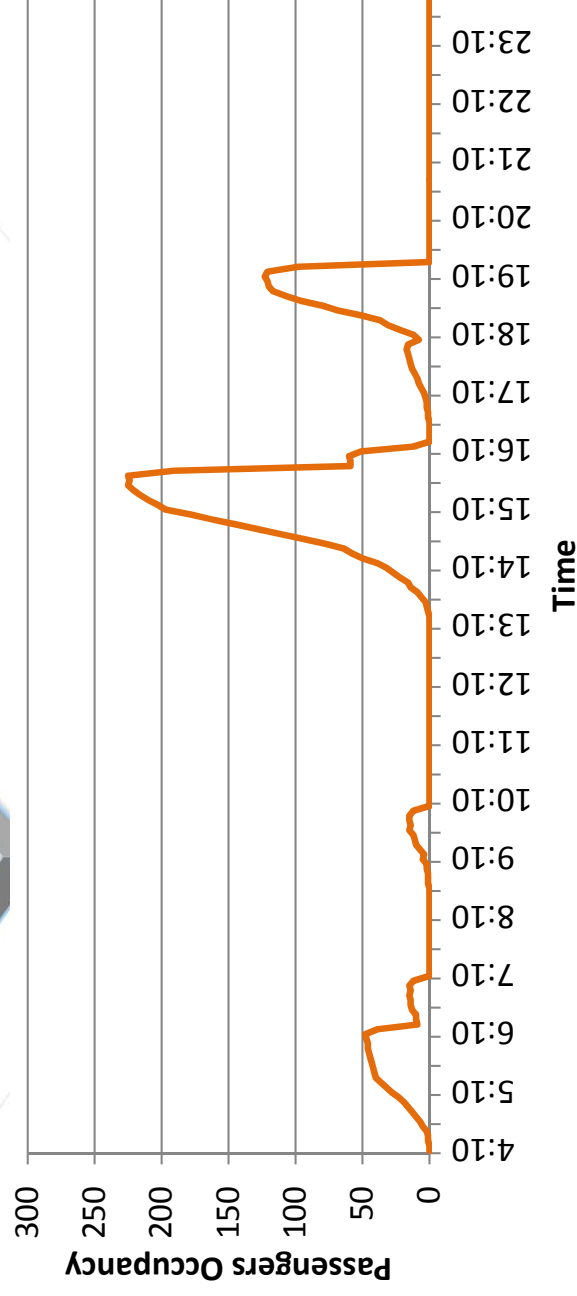
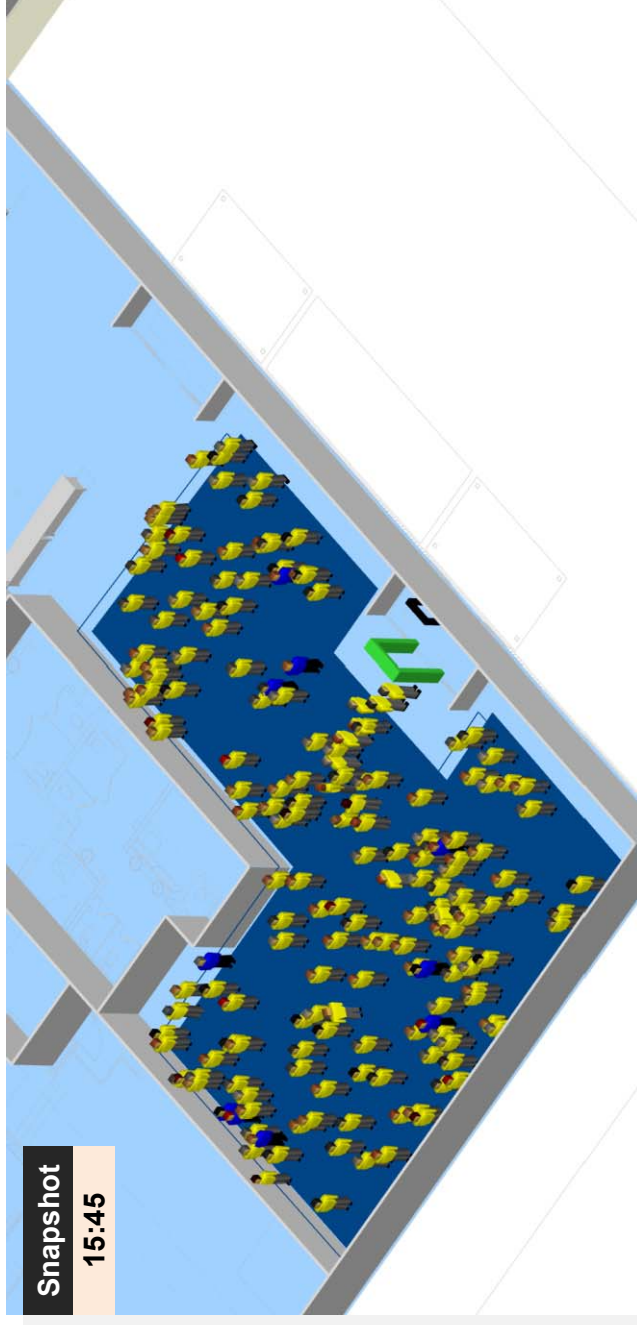
Approximately 300 m² area available including concession area.

Performance

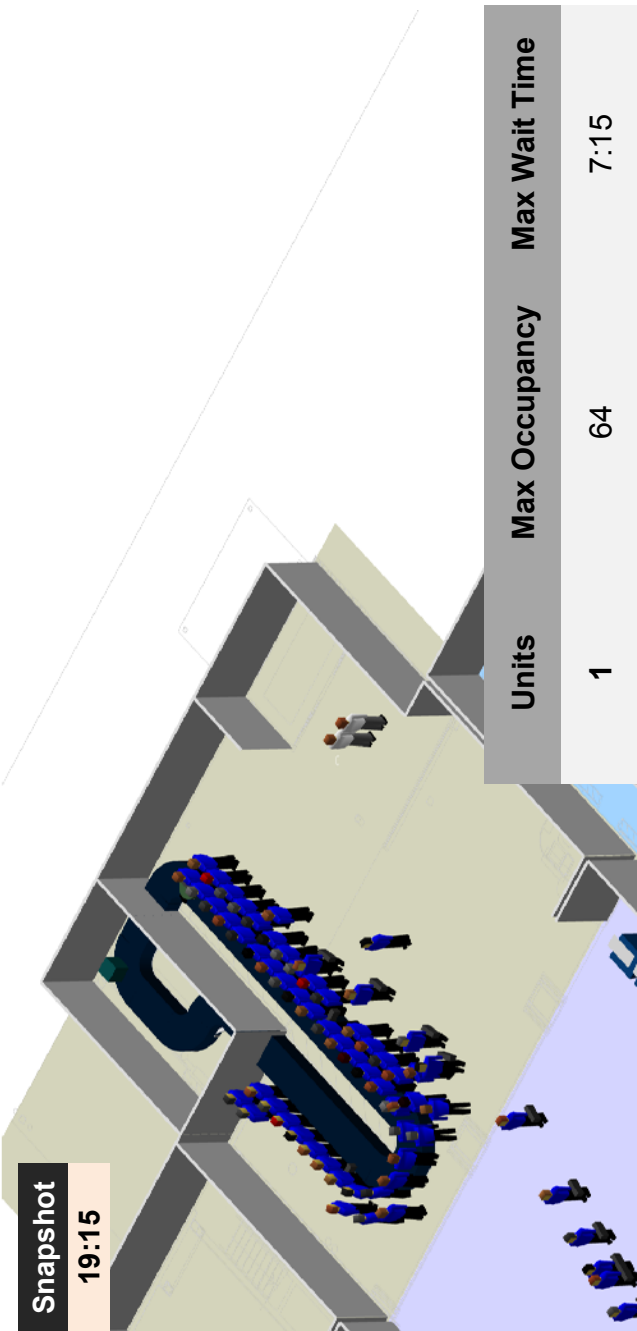
The departure lounge is generally providing a good level of service except in the afternoon when a seasonal sun charter is in operation (approximately 225 passengers). This equates approximately to a level of service “D” at the peak demand.

Findings

The departure lounge will experience significant congestion when concurrent narrowbody jets are departing. Departure delays or an increase in security screening demand could further increase occupancy congestion.



BASE CASE – DOMESTIC RECLAIM



The domestic reclaim area was modelled as per the existing layout.

Specifications

- 1 Reclaim Belt – approximately 18m long

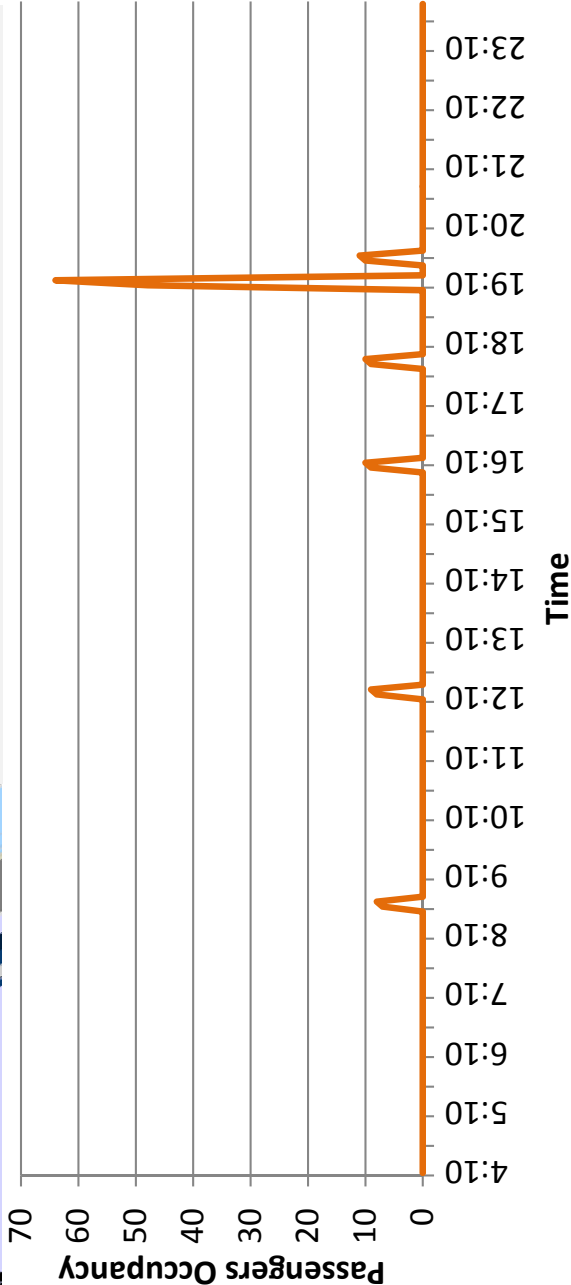
Performance

The arrival of a domestic narrowbody jet leads to significant occupancy in the vicinity of the domestic reclaim belt. This is due to passengers reaching the belt prior to their bags. Furthermore, meeters and greeters can get access to the area leading to increased occupancy.

Performance may vary based on the quantity of checked bags per flight.

Findings

As narrowbody jets become more prevalent, a longer reclaim belt with associated dwell space may be required. The timing of a revised belt may be dependant on the number of peak utilization events in a given day. At present peak utilization occurs on a limited basis.



TERMINAL BUILDING ASSESSMENT

BASE CASE – IMMIGRATION



The immigration process was modelled under a generic counter assignment without any Trusted Traveller system in place.

Specifications

3 conventional counters
No Trusted Traveller kiosks/line

Performance

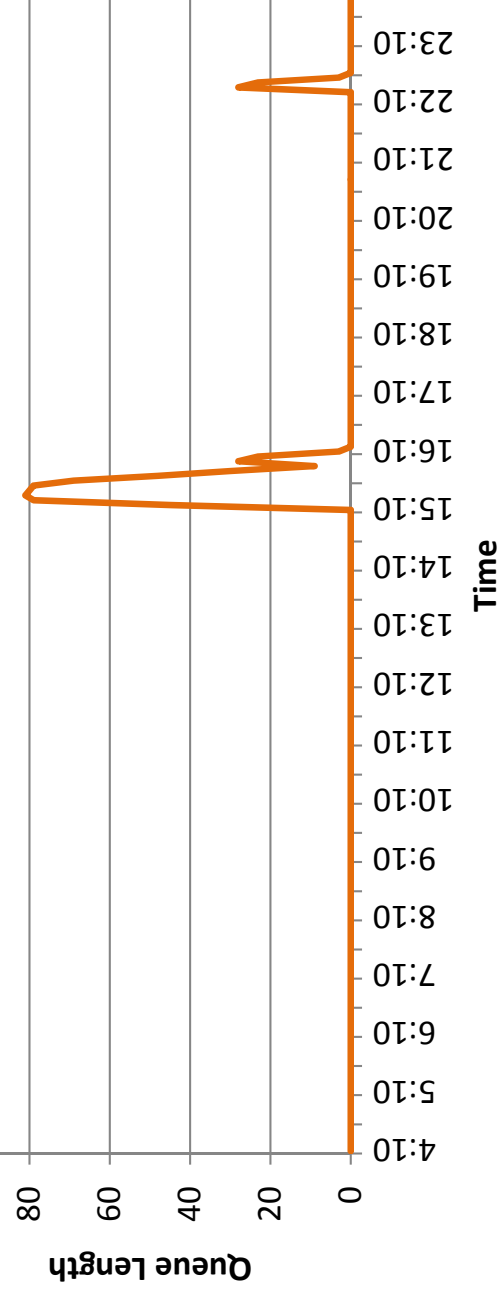
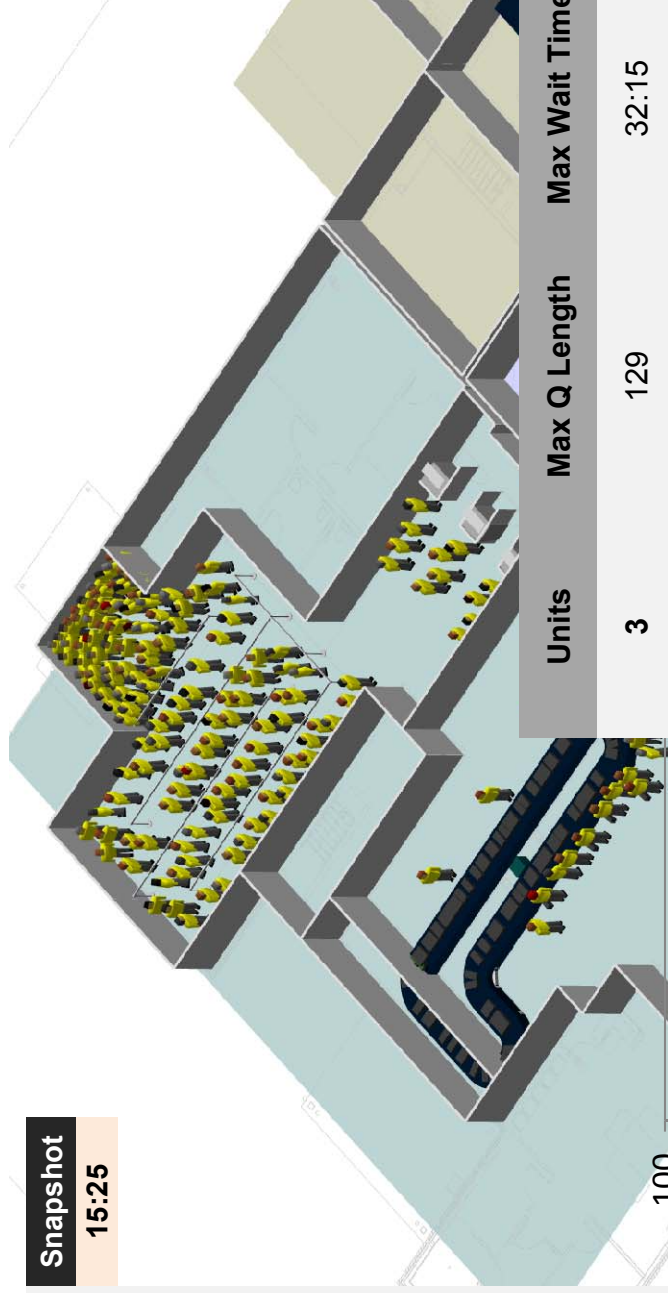
The simulation shows that under a scenario where all counters are staffed, a maximum queue of 129 passengers and maximum wait time of over 32 minutes is experienced, which is excessive based on IATA waiting time recommendations. It also highlights a lack of space to queue all passengers which may require operational considerations.

Findings

This area will experience significant congestion based on processing rates when narrowbody jets are operating. The introduction of ABC and/or Nexus kiosks would increase processing rates and allow passengers to bypass conventional queues. Queuing may still be an issue even with the introduction of self service products

Snapshot

15:25



BASE CASE – INTERNATIONAL RECLAIM



The international reclaim area was modelled as per the existing layout.

Specifications

1 Reclaim Belt – approximately 25m long

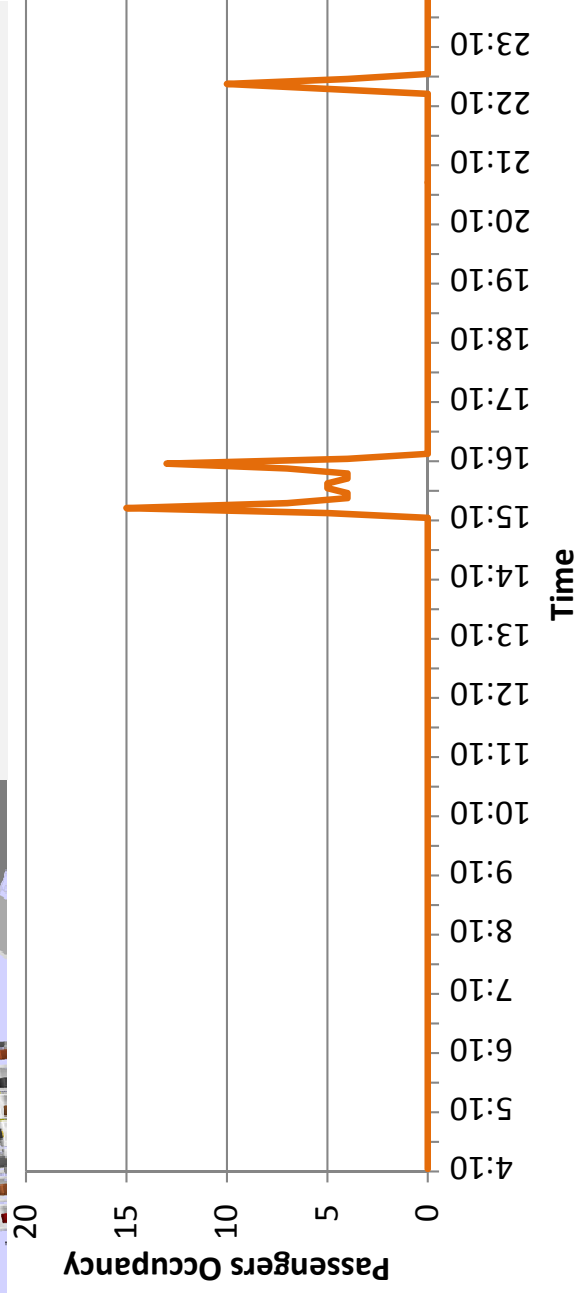
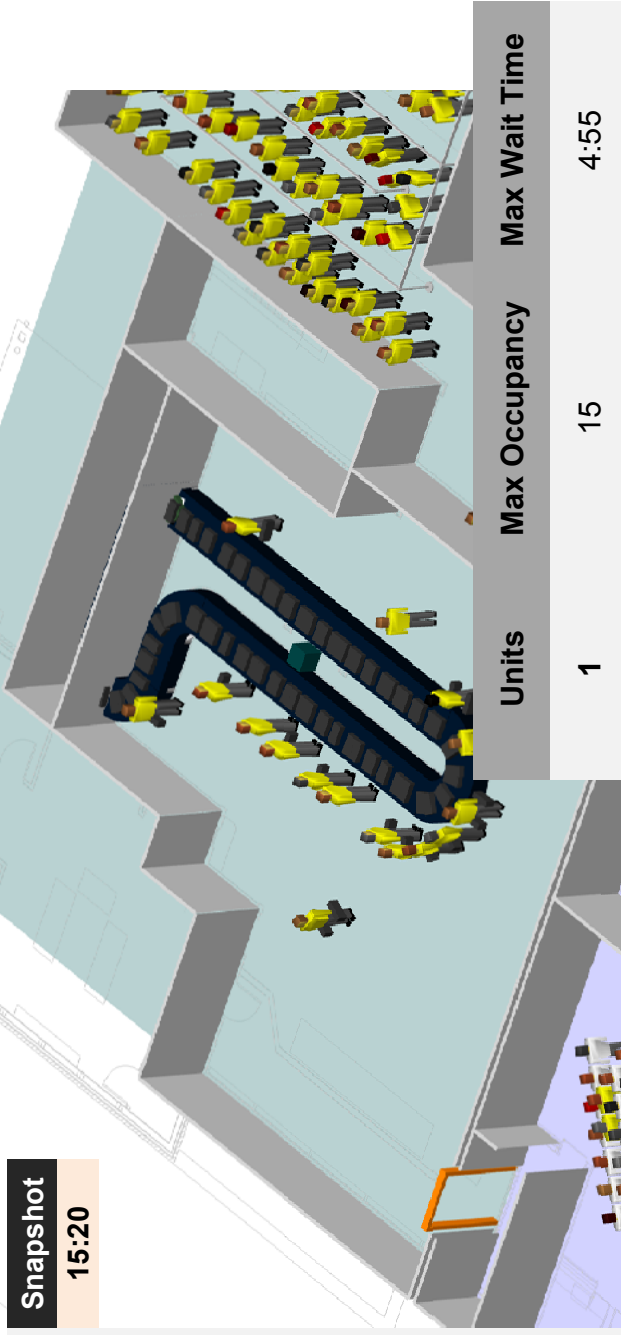
Performance

The arrival of a domestic narrowbody jet will lead to significant occupancy of the reclaim belt due to delays incurred at immigration.

Findings

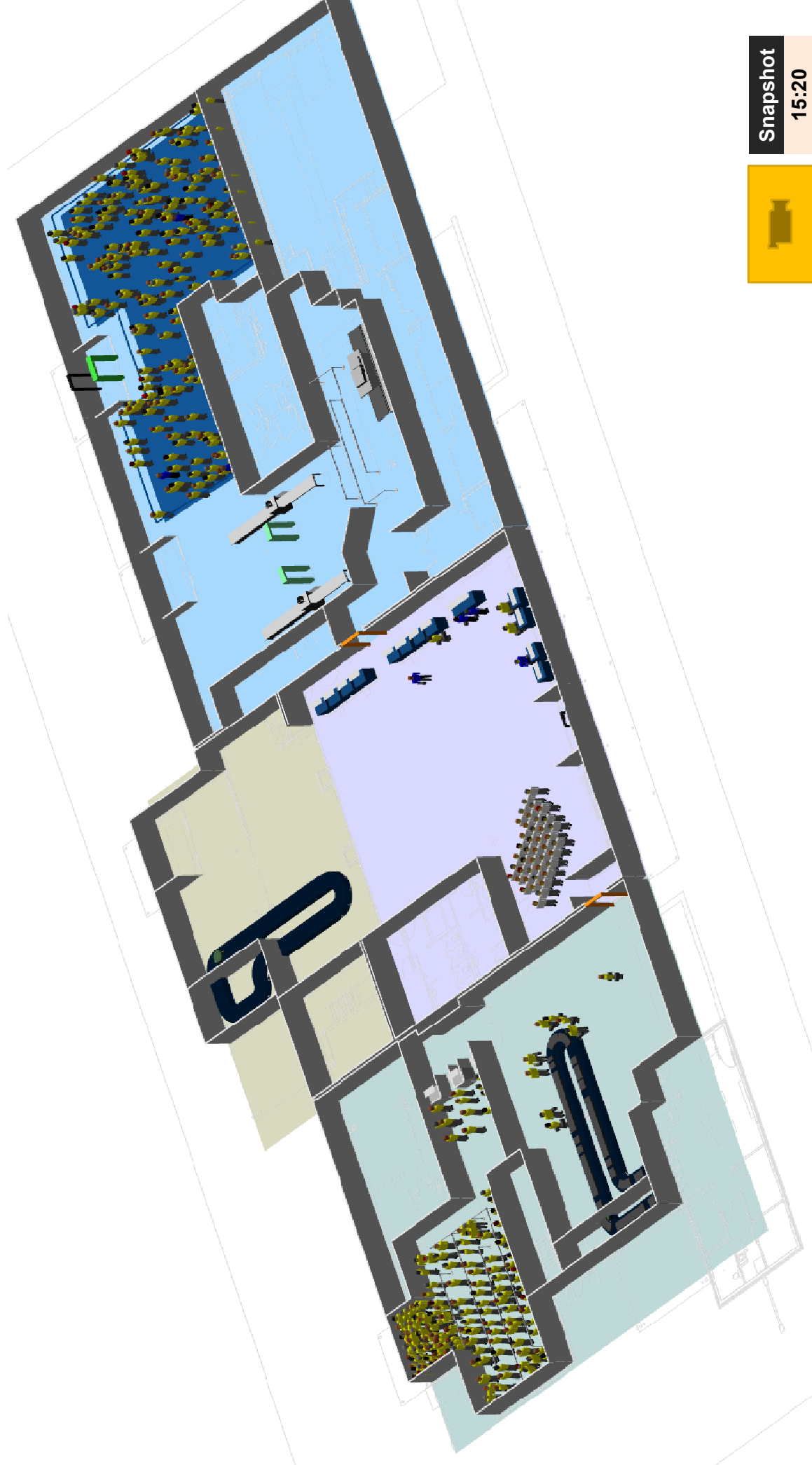
The key challenge at the international reclaim is the ability of the reclaim unit to cope with the baggage load that will develop as congestion increases at immigration. Should self service products be introduced at immigration then queue issues may arise, though the demand on baggage display may be reduced.

Any solution for the immigration process and international reclaim unit therefore needs to be considered as a combined system.





TERMINAL BUILDING ASSESSMENT BASE CASE – OVERALL VIEW

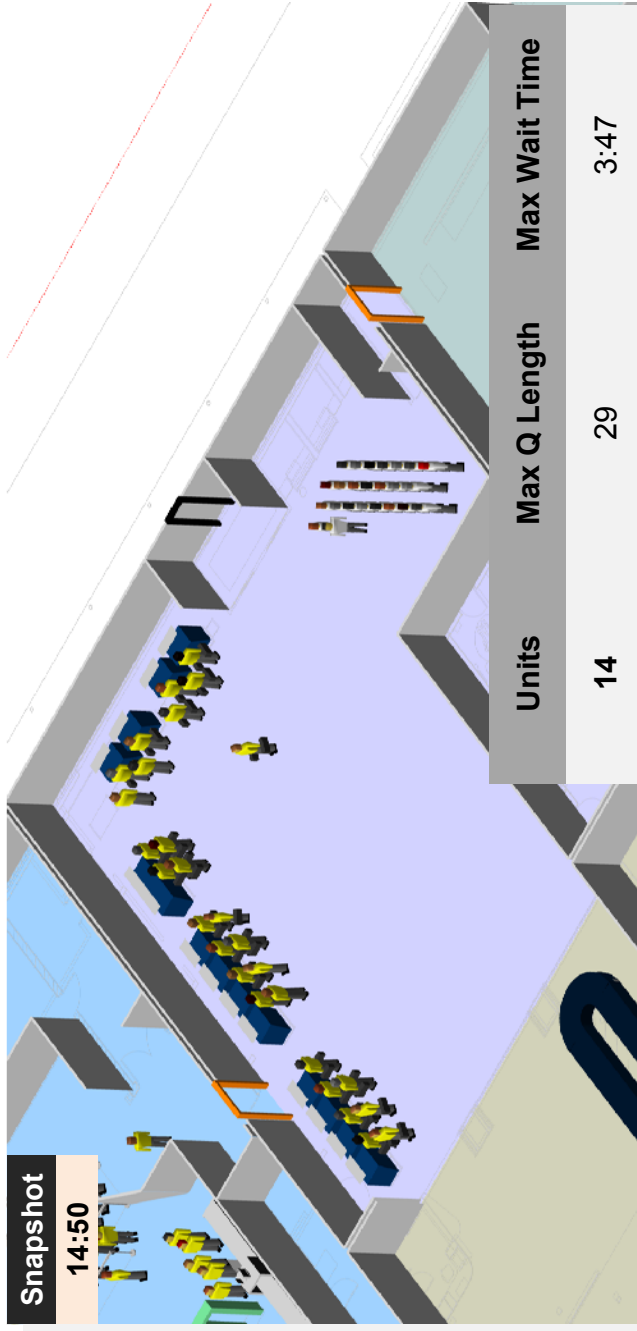


Snapshot

15:20

SIMULATION MODELLING STRESS TEST

STRESS TEST – CHECK-IN HALL



The check-in hall was modelled under a generic counter assignment to assess the performance of the hall rather than that of the airlines.

Specifications

14 conventional counters
No self-service kiosks

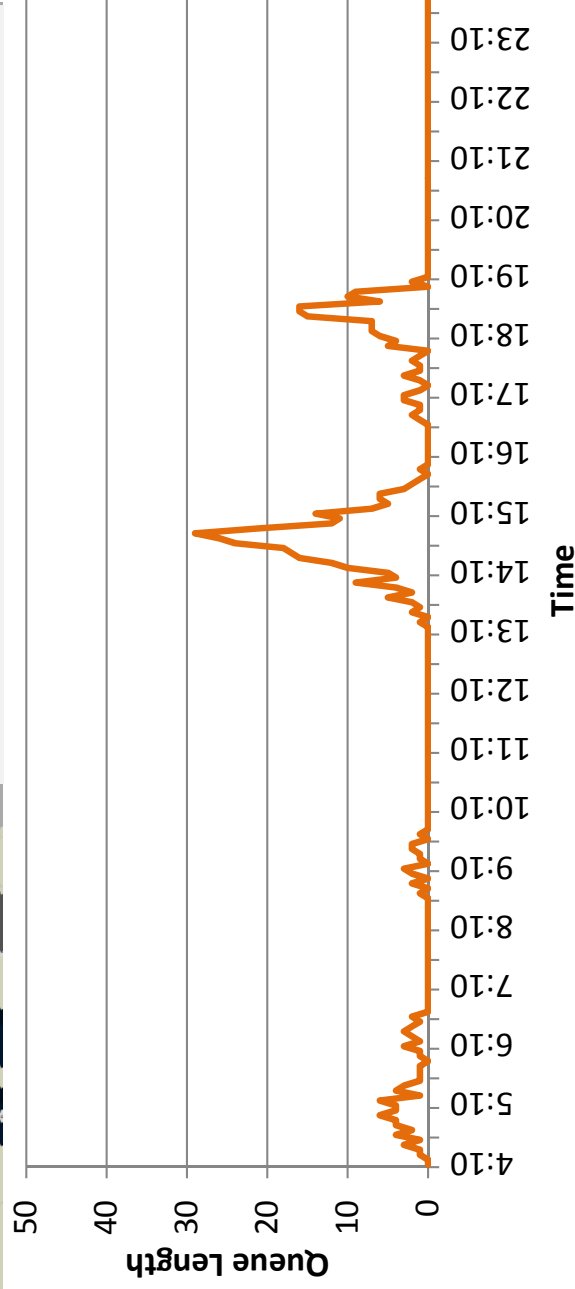
Performance

Under a scenario where all counters are staffed, a maximum queue of under 30 passengers and maximum wait time of under 4 minutes is experienced, which is excellent based on IATA waiting time recommendations.

Findings

Queues and congestion will still occur at counters where airline-specific demand exceeds capacity.

Implementation of enhanced processing technologies such as self-service kiosks would allow passengers to bypass conventional queues and proceed directly to the BHS drop and security screening.



STRESS TEST – PASSENGER SCREENING



Baggage and Passenger screening was modelled under the assumption that passenger first drop their bag at HBS (Hold-Bag Screening) and then queue to PBS (Pre-Board Screening).

Specifications

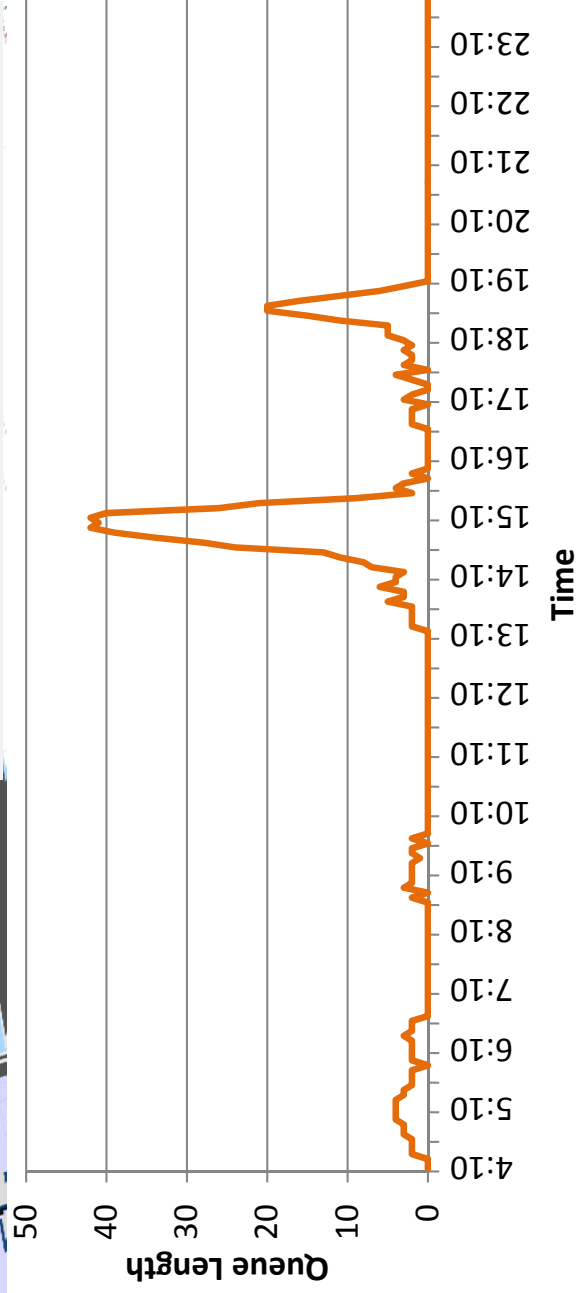
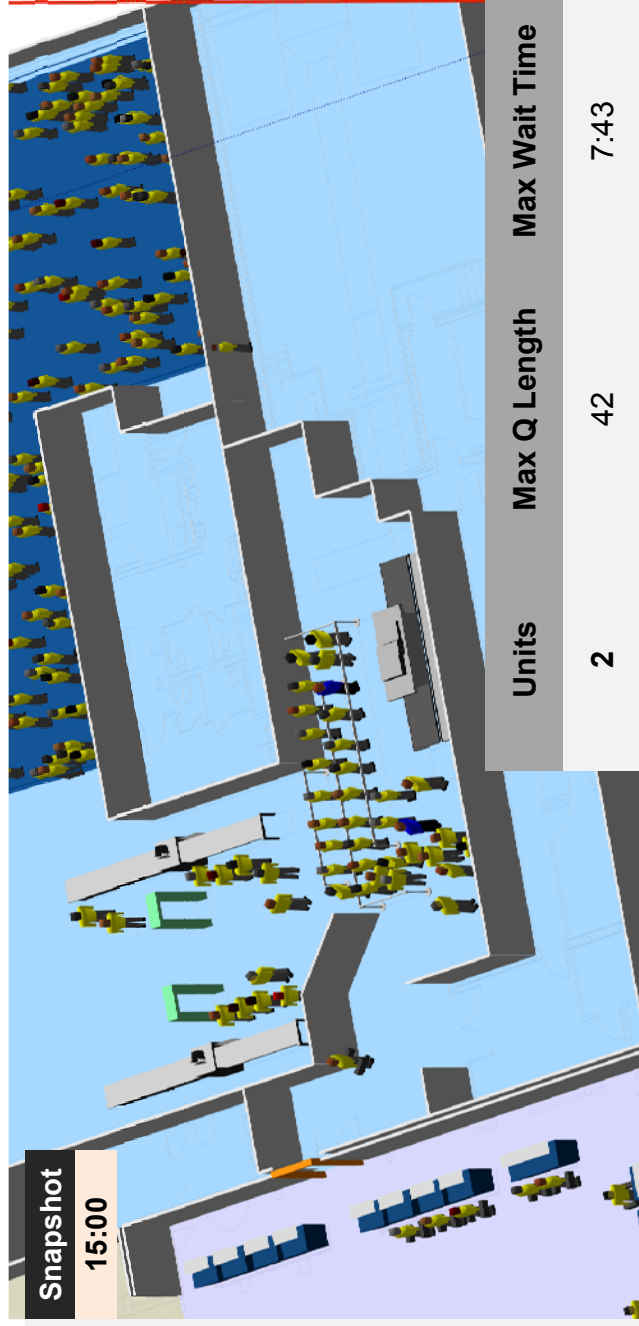
- 1 HBS Unit
- 2 PBS Channels
- No Trusted Traveller Channel

Performance

Under a scenario where all units are staffed, the maximum wait time is under 8 minutes up to divestment area of the security unit. The PBS queue now spills into the HBS unit area. This may affect the level of service of this processor and limit back flow to the public areas of the terminal.

Findings

Queues and congestion is highly dependant on the arrival profile of passengers at the airport and the ability of CATSA of maintaining a minimum throughput of 200 passengers per hour. This scenario shows that passenger screening is already running at capacity in the afternoon and evening.



STRESS TEST – DEPARTURE LOUNGE



The departure lounge is modelled using assumptions about the number of passengers within the concession area. Lower numbers of passengers in this area will increase congestion in the departure lounge.

Specifications

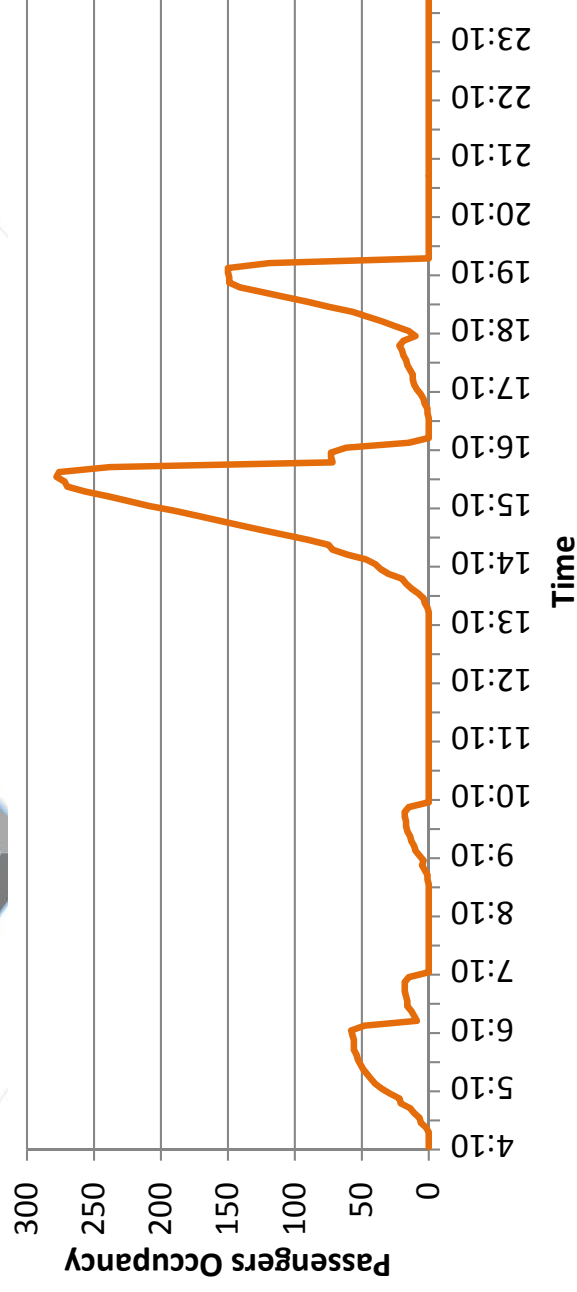
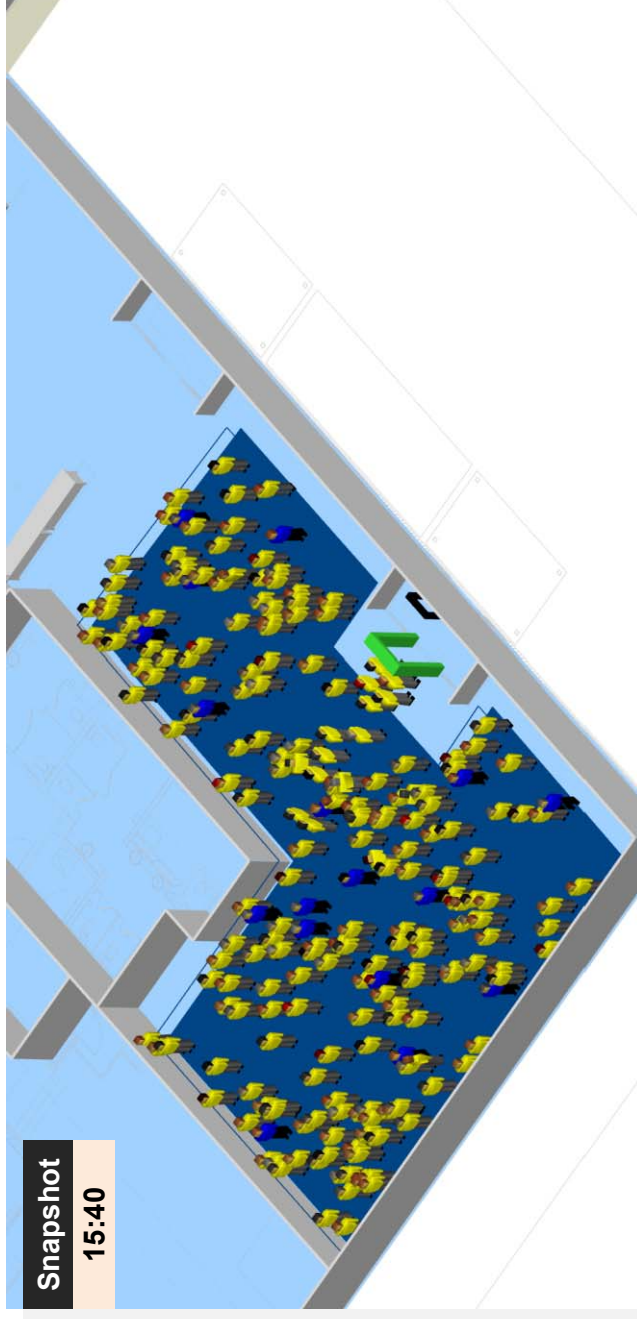
Approximately 300 m² area available including concession area.

Performance

The simulation shows that the departure lounge is generally providing a good level of service except in the afternoon when a seasonal sun charter is in operation (approximately 278 passengers). This equates approximately to a level of service “E” at peak.

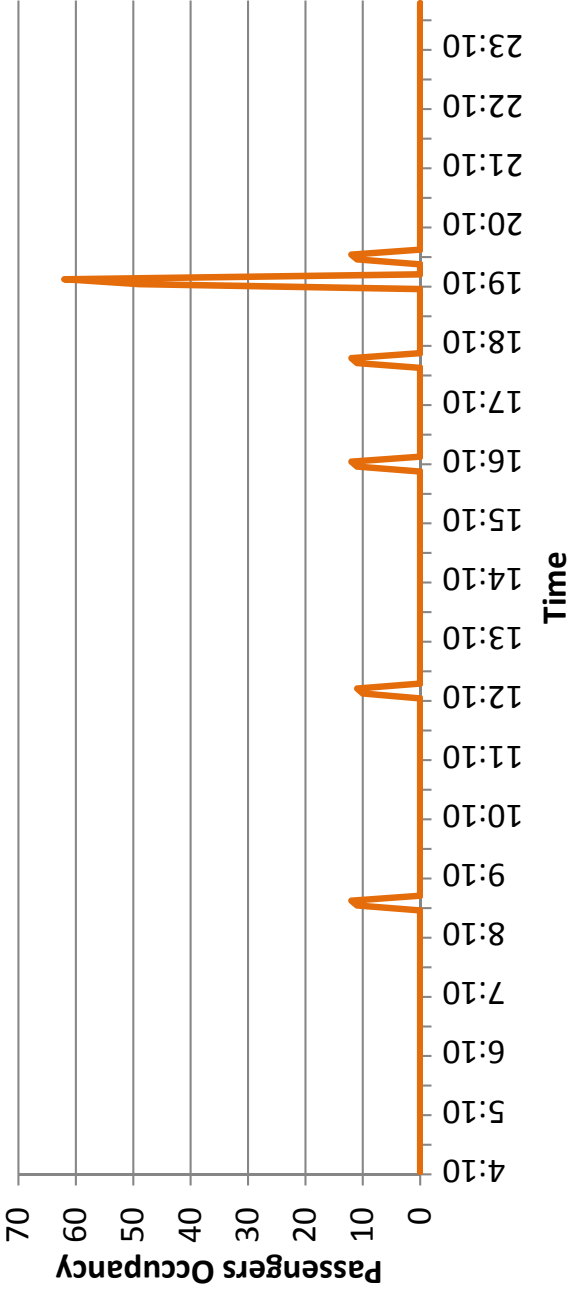
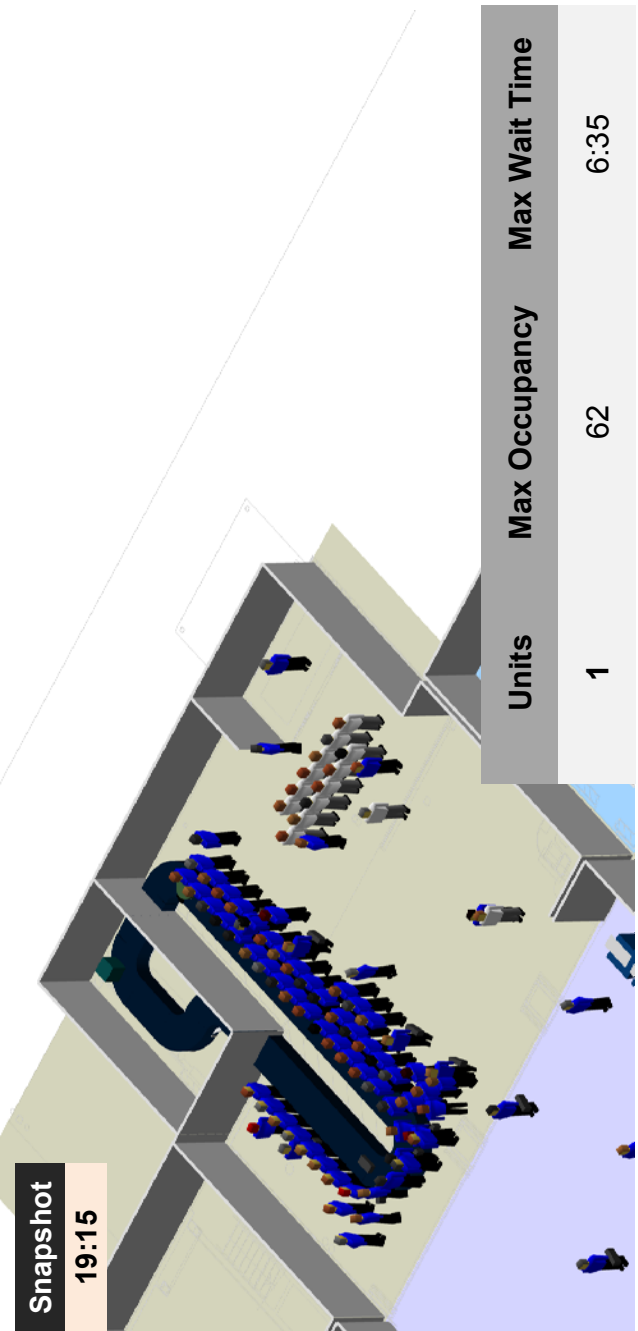
Findings

The departure lounge will experience significant congestion when more than one narrowbody jet is departing concurrently. Departure delays or an increase in security screening demand could further increase occupancy.



TERMINAL BUILDING ASSESSMENT

STRESS TEST – DOMESTIC RECLAIM



The domestic reclaim area was modelled as per the existing layout.

Specifications

- 1 Reclaim Belt – approximately 18m long

Performance

The arrival of a domestic narrowbody jet will lead to a significant occupancy in the vicinity of the domestic reclaim belt due to passengers reaching the belt prior to their bags. Furthermore, meeters and greeters have access to the area leading to increased occupancy.

Performance may vary based on the quantity of checked bags per flight. Results are generally similar to the base case as unloading rates from the aircraft meters the access to the reclaim area.

Findings

As narrowbody jets become more prevalent, a longer reclaim belt with associated dwell space may be required.

TERMINAL BUILDING ASSESSMENT

STRESS TEST – IMMIGRATION



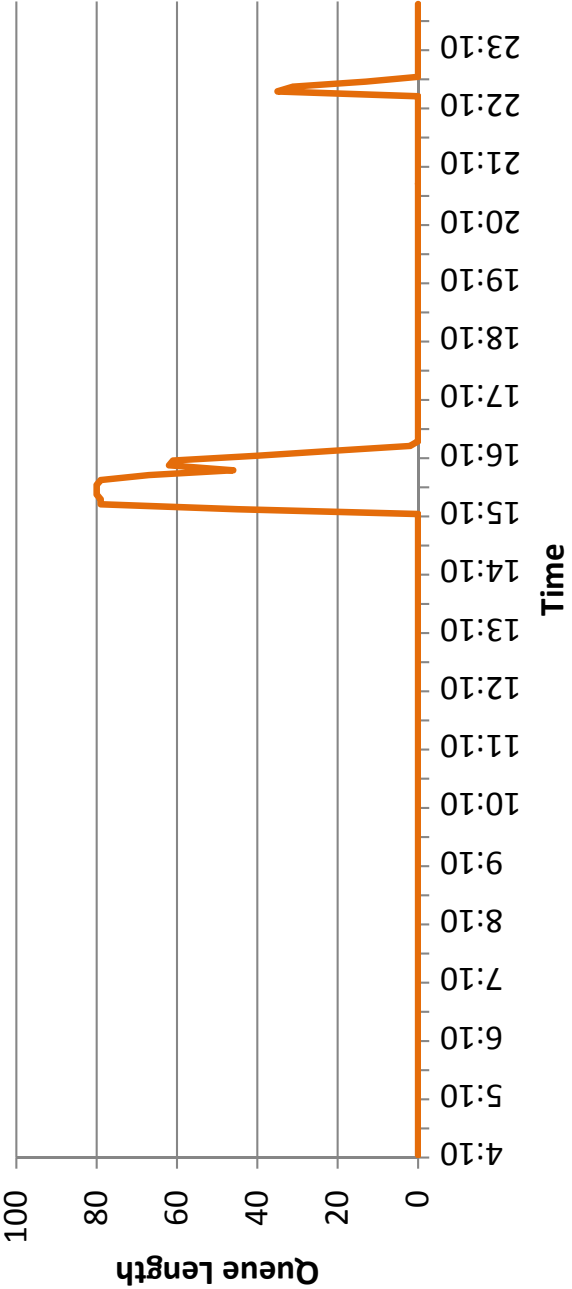
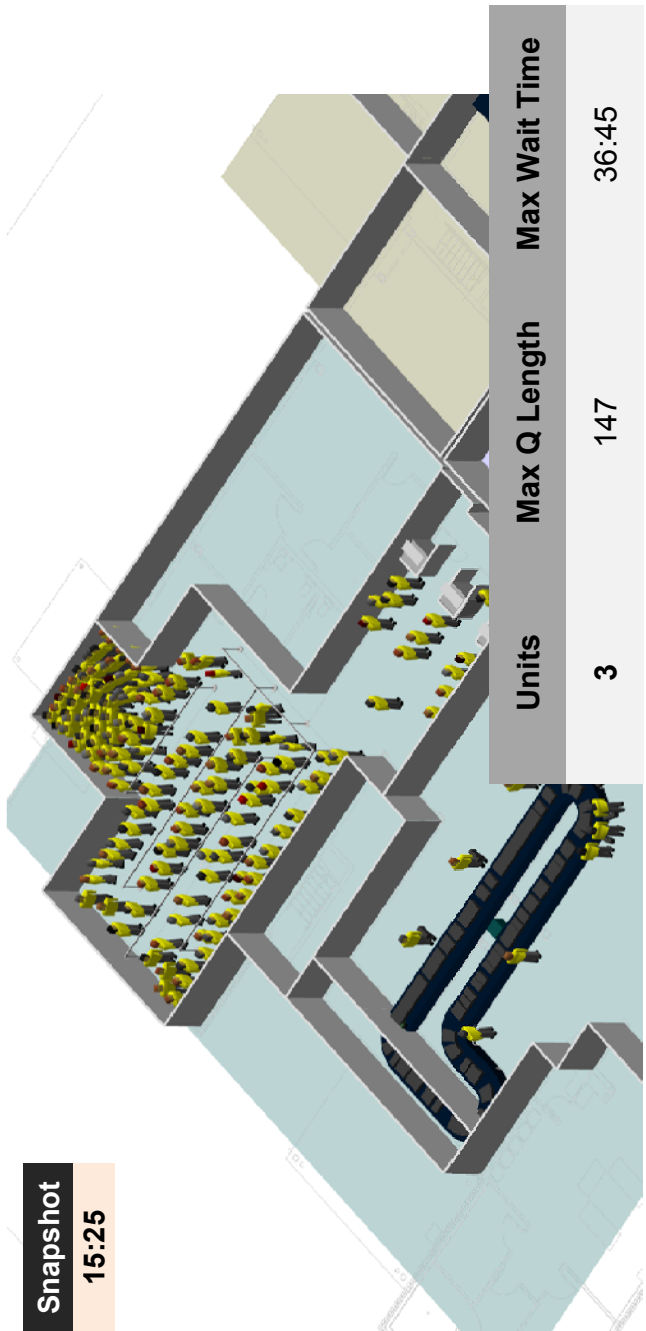
Snapshot
15:25

The immigration process was modelled under a generic counter assignment without any Trusted Traveller system in place.

Specifications
3 conventional counters
No Trusted Traveller kiosks/line

Performance
Under a scenario where all counters are staffed, a maximum queue of 147 passengers and maximum wait time of 36 minutes is experienced, which is excessive based on IATA waiting time recommendations. It also highlights a lack of space to queue all passengers which may require operational considerations.

Findings
This area will experience significant congestion based on processing rates when narrowbody jets are operating. Implementation of enhanced processing technologies such as ABC and/or Nexus kiosks would allow passengers to bypass conventional queues and proceed directly to the reclaim area.



STRESS TEST – INTERNATIONAL RECLAIM



The international reclaim area was modelled as per the existing layout.

Specifications

1 Reclaim Belt – approximately 25m long

Performance

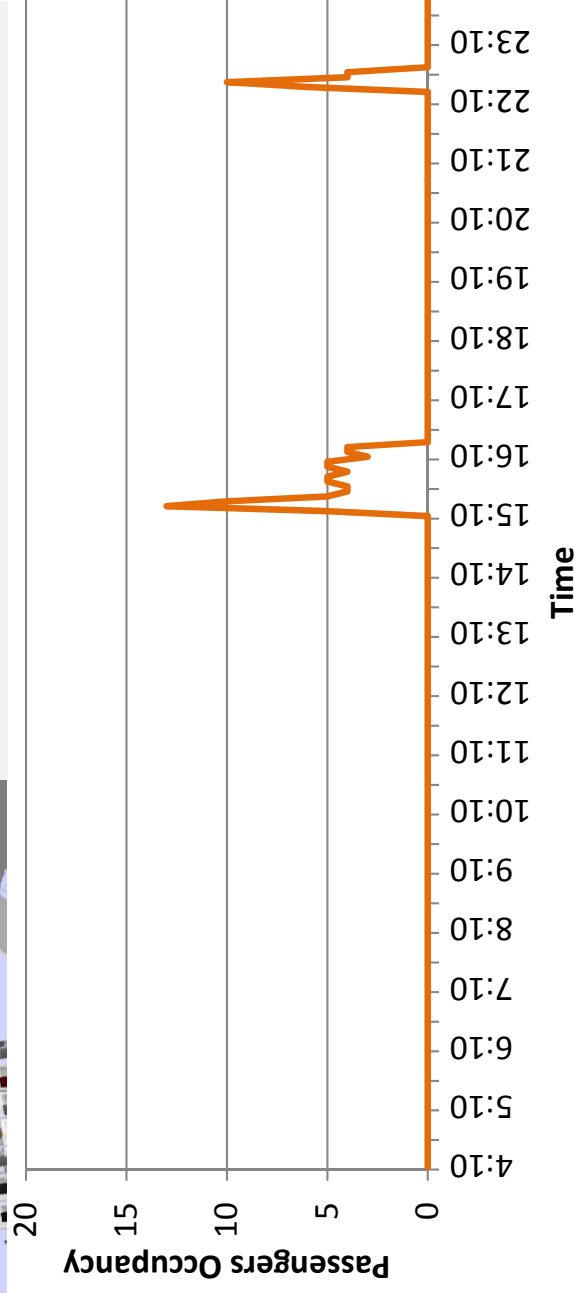
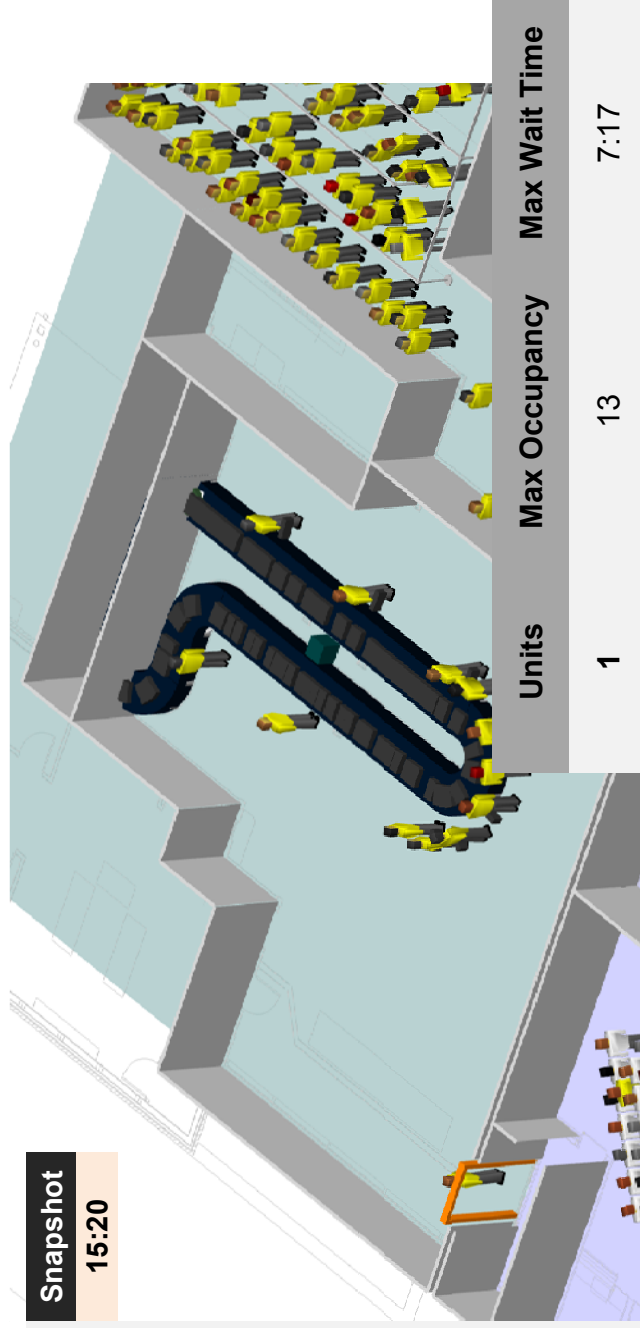
The arrival of a domestic narrowbody jet will lead to a significant occupancy of the reclaim belt due to delays incurred at immigration. Passenger occupancy in the vicinity of the international reclaim belt is therefore limited due to these delays.

Findings

The key challenge at the international reclaim is the ability of the unit to cope with the baggage load as a result of congestion at immigration. As throughput is increased at immigration through the introduction of Trusted Travellers channels or additional conventional channels, passenger occupancy near the international reclaim belt will increase.

Any solution for the immigration process and international reclaim unit therefore needs to be looked at as a combined system.

Snapshot
15:20





TERMINAL BUILDING ASSESSMENT STRESS TEST – OVERALL VIEW



Snapshot

15:25



TERMINAL BUILDING ASSESSMENT

OVERALL CONCLUSIONS

The simulation of the base case and stress test show that the existing terminal building performs well most of the time, but generally struggles when narrowbody jets (e.g. B737) are operating. As demand grows around periods where narrowbody jets are operating, the terminals individual processes will increasingly struggle to cope with the demand at the peak periods.

The **Check-In Hall** has the ability to process more passengers effectively through the introduction of self-service check-in technologies.

The **Passenger Screening** process is dependant on the CATSA throughput. Under consistent operations using both units, the demand can be met with acceptable queuing.

The **Departure Lounge** will become increasingly congested as demand increases near or during an already busy period.

The **Domestic Reclaim** provides insufficient dwell space and presentation length for narrowbody jet operations.

The **Immigration** process is struggling with narrowbody jet arrivals. Additional counters or Trusted Traveller Kiosks may offset some of the congestion which will in turn lead to increase occupancy near the **International Reclaim** which is currently at capacity because of the bag storage that result from congestion at Immigration.



G. KPMG WATERLOO SERVICE REVIEW REPORT



Report: CAO-IAU-15-06

Region of Waterloo

Office of the Chief Administrator

Internal Audit

To: Chair Sean Strickland and Members of the Administration and Finance Committee

Date: September 15, 2015

File Code: A32-40/RSR

Subject: **Service Review – KPMG’s Final Report**

Recommendation:

That the Regional Municipality of Waterloo hold a Public Input Meeting on Wednesday September 30, 2015 at 7:00 pm in the Regional Council chambers, for the purpose of hearing public feedback regarding the KPMG Service Review recommendations, as set out in Report CAO-IAU-15-06.

Summary: Nil.

Report:

Background:

On January 15, 2014, Regional Council adopted the following resolution regarding a potential Regional Service Review:

“Be it resolved that the Regional Municipality of Waterloo tender for and secure the services of a third party consulting firm to conduct a service review of all Regional services and programs, that this review be led by a subcommittee of Regional Council and the CAO and that the third party consulting firm report to Regional Council with the purpose of finding efficiencies in the delivery and overall service levels of Regional services and programs and that the CAO report back by the Summer of 2014 with a report detailing the scope of work and RFP for review.”

On June 25, 2014, Regional Council approved undertaking a Regional Service Review under the direction of the Audit Committee. The overall purpose of the Service Review is to ensure that the Region's services provide the best value to the community.

The Service Review addresses questions such as:

- Is the organization providing the desired level of service as efficiently as possible? Are there ways to provide the desired services more efficiently?
- What programs and services should the organization be providing?
- Because of changing circumstances, are there programs or services that the organization should no longer be providing?
- For those programs and services that the organization continues to provide, what "level of service" should be provided?
- Are there mechanisms of continuous improvement that could be implemented to improve the efficiency and effectiveness of service delivery on an ongoing basis?

The Service Review was designed around these questions and encompasses all Regional services with the exception of Waterloo Regional Police Service which is governed by the Police Services Board.

A Request for Proposal (RFP) was prepared in order to engage a consulting firm to undertake the Service Review. The RFP was reviewed by the Audit Committee, and issued in late July, 2014. Consultant submissions were evaluated in accordance with the Region's Purchasing By-law which included quality and price factors. The Evaluation Committee was comprised of the Audit Committee and several senior staff members.

Based on the recommendation of the Audit Committee, in October, 2014, the Region awarded the proposal to KPMG through the CAO's Office and advised Council (Report CA-14-011).

The Steering Committee for the project has consisted of the Audit Committee, two additional Regional Councillors and appropriate senior staff. The Steering Committee has provided oversight of the project, and has reviewed and provided input to draft documents at key milestones.

Methodology and Approach:

Summary of Key Project Tasks & Phases

The following is a summary of the key project tasks and phases. The Service Review was organized into five key phases, which are outlined below.

Phase One: Project Planning

The first phase of the project consisted of working with KPMG to refine the project approach. These activities took place in October and November, 2014. The overall goal of the service review is to determine whether the Region is providing the best value to the community, or how the Region could provide even better value. Specific project objectives include:

- Understand whether the Region is providing the desired level of service as efficiently and effectively as possible, and identify ways to enhance the efficiency and effectiveness of the Region's services.
- Identify whether there are any changes to the levels of service the Region should consider.
- Recommend mechanisms of continuous improvement that can improve the efficiency and effectiveness of Regional service delivery on an ongoing basis.

The project planning phase helped to clarify and document the project goals and objectives, project principles, scope and timing of the deliverables.

Phase Two: Service Profiles

The second phase of the study consisted of the development of an inventory of programs and services provided by the Region using the Municipal Reference Model. KPMG facilitated working group sessions with senior staff to ensure that the requested information required for the service profiles was understood by the affected Regional Staff. Service profiles were completed by March, 2015 for each of the seven departments and were made available on the Region's website and in the Councillor's Library.

Each service profile contains the following: service name and purpose, service description, service levels, financial and performance data and rationale for service level assessment and service data (i.e. mandatory, essential, traditional, other discretionary). Some of the information in the service profiles was provided by Regional staff; information was also provided by KPMG.

Phase Three: Benchmarking and Data Collection

The benchmarking, initial public engagement and data collection phase took place from January to March 2015.

This phase consisted of analyzing the municipal context within which the Region operates to determinate relevant factors that could influence the need for change.

Furthermore, the identification of leading practices allows for service delivery options to be informed by the experiences of comparable municipal organizations. This phase included the consultant surveying a number of comparator municipalities followed by the benchmarking of Regional services to identify opportunities for improved efficiency and effectiveness.

With input from KPMG and the Steering Committee, it was proposed that the initial public engagement and input to the Service Review would include the methods noted below. These public input opportunities were designed so that the input could inform both the Service Review and the Region's 2015-2018 Strategic Planning process.

- a) Public Survey – Through a competitive RFP (Request for Proposals) process the Region engaged Environics to conduct a statistically reliable phone survey. KPMG provided input regarding survey questions which has informed the Service Review. Data collected from the public survey was provided to KPMG for review and consideration as a part of the analysis phase of the Service Review.
- b) On-line Engagement – the Region hosted an on-line engagement forum to solicit broad public input regarding the Strategic Plan and the Service Review. The on-line forum encouraged responses to both open-ended questions and survey-type questions. Data collected from the online engagement was provided to KPMG for review and consideration as a part of the analysis phase of the Service Review.

This phase concluded with the preparation of KPMG's Service Review Interim report. The Interim Report includes a project overview and the service profiles. At the same time, staff provided a Service Review Update to A&F Committee (Report CAO-IAU-15-03).

KPMG's interim report included the following initial findings and observations:

“1. Corporate Support & Participation

Thus far in the project there has been comprehensive participation from all levels of the Region of Waterloo. The quality of information and insight provided from government officials has been high, resulting in reliable, thorough profiles of services. The preparation of service profiles is labour intensive and can cause the project to fall behind schedule. It is a compliment to Regional Staff and the Steering Committee that the service profiles were completed on time according to the master project schedule.

2. Benchmarking

With respect to the benchmarking against other regional governments, the Region compares well to its municipal peers. When benchmarked against Halton, Durham, Peel, York and Niagara, the Region typically ranks in the mid-range for FIR comparisons. The few services where the Region of Waterloo's costs were higher than its comparators (for example, child care, long term care, social service benefits) are still undergoing analysis to ensure completeness and accuracy.

3. Emerging Opportunities

At the mid point in the project, it is apparent that the Region of Waterloo is a well managed organization with good governance practices. Accordingly, it is necessary to indicate that there is no low hanging fruit to offer Council as easy wins for cost savings or improved service delivery. The low hanging fruit has been picked through by previous Councils and Regional leadership. The majority of opportunities appears to be transformational and will require some difficult decisions on the part of Council and the Region's corporate leadership team."

Phase Four: Analysis

In this phase, KPMG identified a list of over 90 potential opportunities for improvements in efficiency, effectiveness and/or service levels. The Service Review scope of work required KPMG to complete more in-depth analysis on 5 opportunities for improvement. KPMG worked with the Service Review Project Steering Committee and Council to identify the most promising opportunities for improvement (top five opportunities). KPMG then conducted a deeper analysis regarding these top opportunities for improvement. The deliverable from this phase was the development of recommendations that could improve the efficiency and effectiveness of Regional programs and services; recommendations of continuous improvement tools that could be implemented; and, possible changes to service levels that more effectively balance cost and benefits and any other opportunities for cost savings or cost recovery.

During this phase, additional public engagement took place in the form of online engagement via the Region's Strat Chat online forum. The public had the opportunity to review the completed service profiles and interim report and provide feedback to improve the efficiency and effectiveness of Regional programs and services, and changes to service levels. This information was collected and provided to KPMG for their consideration.

The analysis phase took place from April to July, 2015.

Phase Five: Final Report and Presentation

In this phase, KPMG summarized all of the work completed during the previous phases and developed a final report with an executive summary, project overview, approach & methodology, in-depth analysis of five opportunities, conclusion and prioritization of opportunities. KPMG's final report is included as Appendix 3 to this staff report. The final service profiles are not appended but are available separately on the Region of Waterloo's website for review by the public at:

<http://www.regionofwaterloo.ca/en/regionalgovernment/standingcommittees.asp>. This report, including KPMG's Service Review Final Report, will be posted on the Region of Waterloo's website for review by the public at:

<http://www.regionofwaterloo.ca/en/regionalgovernment/standingcommittees.asp>.

Opportunities for Improvement:

KPMG has noted in their Final Report that "the Region of Waterloo is a well managed organization with good governance practices. Accordingly, it is necessary to indicate that there is no low hanging fruit to offer Council as easy wins for cost savings or improved service delivery."

Phase 4 of the project included the analysis and identification of opportunities for improvement. Using the service profiles and its knowledge of leading practices in local government, KPMG identified a long list of opportunities for improved efficiency and effectiveness in the delivery of Regional services; some of which were already underway, and some required further analysis.

Each opportunity was evaluated using a range of criteria including:

- Operating Dollar (\$) Impact - Estimated impact on operating budget.
- Capital Impact - Estimated impact on capital requirements.
- Barriers To Implementation - Barriers, issues or obstacles to implementing the opportunity.
- Recent Reviews - Recent reviews or studies conducted that provide insights on the opportunity.
- Comparator Analysis - An assessment of service performance against comparable organizations, industry standards or leading practices.
- Strategic Program Alignment - The opportunity aligns with the objectives and values of the Region, the service, Official Plan and/or a council priority/ies.
- Client/ Customer Impact - The impact of the opportunity on the number of clients, customers and/or people and the extent of the impact.

The long list of opportunities was categorized into three groups:

1. Opportunities Underway or About to be Implemented (Appendix 1). These opportunities were either underway prior to the start of the Service Review or are shortly being initiated. Accordingly, there is limited value in considering these opportunities for further in-depth analysis by KPMG. These opportunities are listed in Appendix 1, along with a brief description of work underway or planned.

2. Opportunities Requiring Additional Investigation / Follow-up (Appendix 2). These opportunities are not candidates for further in-depth analysis by KPMG, but may warrant follow-up by staff to determine whether implementation is warranted in some other way. These opportunities are listed in Appendix 2 along with a brief description of the next steps and timing anticipated by Regional staff to further explore these opportunities.

3. Opportunities which do not merit further follow-up or action. These opportunities were rated “No Further Action” for the following reasons: another opportunity addresses the issue better, they would have too great an impact on clients, the barriers to implementation are too significant, or simply the ideas lack sufficient merit to pursue.

As noted under next steps, staff will report back to Council at appropriate milestones regarding the status of the opportunities noted in Appendices 1 & 2. In addition, staff will report annually on the status of all the opportunities listed in those appendices.

A working session with the Steering Committee took place to review each of the opportunities and determine the five opportunities most appropriate for more in-depth analysis. The Steering Committee selected the following opportunities as being the most appropriate for greater analysis (in no particular order):

- Review Employment Ontario contract.
- Consider sharing IT services with area municipalities.
- Review road maintenance compensation.
- Optimize Airport commercial value.
- Review child care service delivery.

Top Five Opportunities, Recommendations and Implications Regarding Implementation:

KPMG prepared a more detailed analysis for each of the top five opportunities as described in their Final Report (Appendix 3).

The following is a summary of each of the five opportunities, KPMG's recommendations and potential implications regarding implementation identified by Regional staff.

Opportunity #1: Review Employment Ontario Contract

Employment Ontario is a program administered by the Ministry of Training, Colleges and Universities (MTCU) and delivered by multiple contract agencies in each community. The Region has chosen to be one of 14 organizations delivering EO programs within Waterloo Region; it is under no obligation to remain one. The EO Program offers training and skills development, employment preparation, work experience, and job search initiatives. MTCU is the primary funder of the Employment Ontario program, but the MTCU funding does not fund the full cost of delivering the programs to meet specified targets. The Region of Waterloo has a contract with MTCU to provide employment services that expires March 31, 2016, and the Region subsidizes from property taxes the delivery of the program by approximately \$384,000 per year.

The majority of comparator regional governments do not deliver Employment Ontario services. Of the comparator regional governments that have been analyzed for this service review (Niagara, Peel, Halton, York & Durham), only the Region of Waterloo and Halton Region have any involvement with the direct delivery of Employment Ontario services.

KPMG's Recommendations:

Recommendation #1: That the Region of Waterloo not renew its contract for direct delivery of Employment Ontario services at the conclusion of the current contract (March 31, 2016).

Implications Regarding Implementation:

The Region of Waterloo is one of six Consolidated Municipal Services Managers (CMSM) operating Employment Ontario programs and services in Ontario. The combination of both Employment Ontario and Ontario Works Employment programs ensures that clients of Ontario Works, who do not typically fare well in other employment programs, are provided with access to the benefits of both programs while working with employment staff who understand the significance of the employment barriers OW clients face. Although a significant benefit, it limits client exposure to other programs that may well be equally beneficial. De-linking these programs presents an opportunity for the Region to work more closely and toward stronger partnerships with

other Employment Ontario providers that may well enhance opportunities for clients, enhance responsiveness, efficiency and effectiveness across the employment services continuum.

Currently, the Ontario Works Employment and Employment Ontario programs are integrated within the Community Services Department. Efforts will be required to separate the programs. This can very likely be achieved before the end of the current contract.

Impacts to the volume of Employment Ontario services available to clients will be minimal in that the early indication from the Ministry of Training Colleges and Universities is that the funding for services will remain within Waterloo region. There are 13 other Employment Ontario service providers through the region. This will mean that Ontario Works recipients will have to work with other program providers in order to obtain these services rather than have access to both programs in one location.

Opportunity #2: Shared IT Services

Currently most IT services with the region are delivered independently by the Region and the area municipalities. However, there are numerous examples of inter-municipal collaboration between the Region and the area municipalities, including the Waterloo Region Education and Public Network (WREPNET), shared Wireless Network Services, Traffic Signal pre-emption technology, the Service First Call Centre, Emergency Management Software, a joint web development group, and shared Vehicle Collision Reporting. Such initiatives are typically managed through the Inter Municipal IT Collaboration Group.

To evaluate opportunities for improved efficiency and effectiveness, KPMG analyzed data that was provided by the IT departments in the Region, City of Cambridge and City of Waterloo. Through this data analysis, KPMG identified three main candidates for migration to an IT shared services delivery model:

- Datacenter infrastructure services (excluding network and telecommunications).
- IT service desk.
- Deskside support services.

KPMG has indicated that a shared service delivery model for shared data centre and service desk/deskside support services could provide the following benefits:

- Currently, the Region of Waterloo (ROW), City of Waterloo, and City of Cambridge have their own data centers. In KPMG's experience, given the size

of these entities, they anticipate that the performance of these data centres will be less than optimal, i.e. they will likely have unused capacity or insufficient capacity to manage their needs. A shared model would allow both the ROW and the area municipalities to maintain a single data centre and save on operational costs while maintaining capacity for growth as required.

- The Region's IT service desk utilizes Information Technology Infrastructure Library (ITIL) practices which have not been adopted by City of Waterloo or the City of Cambridge helpdesks. A shared IT service desk could enhance the level of services as well as move to a common standardized IT Service Management (ITSM) software for cost sharing and savings.
- There are long term opportunities and benefits associated with a shared services model for business and IT applications (e.g. utilizing the same financial system, common application development and testing tools). Once a shared data centre and service desk/deskside support services is in place, it is much easier to develop the sharing of business and IT applications.

KPMG's Recommendation:

Recommendation #1: That the Region and interested municipalities (invite all area municipalities to participate) conduct a detailed review to further explore the feasibility of a shared data centre, and a shared service desk and deskside support service as a first step to expanded collaboration.

Implications Regarding Implementation:

As noted above, there are numerous examples of inter-municipal collaboration between the Region and the area municipalities through the Inter Municipal IT Collaboration Group comprised of the Region and the seven area municipalities. Implementation of a shared data centre and/or service desk could initially be discussed by this group to assess, on a more detailed basis, the interest, willingness and extent of opportunity for cost savings and/or service improvements. The Region is in the process of recruiting for a new Director of Information Technology Services, and this Director would facilitate this collaboration with the area municipalities. A shared data centre could be an excellent idea to consider if one of the partners was considering a major near term data centre investment. A consolidated data centre could then also incorporate requirements from other municipalities who might be planning their own investments in the medium term. The Region would undertake to include all area municipalities in future discussions. From a risk perspective, restructuring Help Desk and Desk Side potentially poses greater risks to front line service delivery, as these functions are the "face" of IT service in any organization. Any implementation challenges can cost users significantly in terms of service levels and confidence in IT as a whole. These services carry a major

burden/responsibility in terms of overall service delivery, and any changes in how they are delivered would need to be carefully considered.

Opportunity #3: Road Maintenance Compensation

The Region has historically directly delivered road maintenance services on Regional roads in the four Townships but has contracted with the three cities for road maintenance service on Regional roads within the urban areas. In the rural Townships, the Region operates its own road maintenance facilities. The result is that in the Townships there are two sets of equipment and work crews for either Regional roads or Township roads.

The Region is responsible for the maintenance of the regional roads within the three cities, but has chosen to contract much of the work to the cities. This avoids having two jurisdictions maintaining roads as in the Townships.

Between 2010 and 2014 the road maintenance agreement between the Region and the 3 cities provided payment for actual costs (plus 7%) of winter maintenance and a fixed price per km for summer maintenance. In the past year, the Region and the three cities signed a new five year agreement to cover the period from January 2015 to December 2019. Some of the key changes to the current agreement are as follows:

- Grass and weed control along Regional roads is excluded since it requires the cities to engage extra staff in the summer.
- The costs of direct supervision (e.g. forepersons) will be included in the costs to be paid by the Region.
- Incentives to the cities for efficient summer and winter operations based on agreed upon clauses.
- The agreement provides that the area municipalities will perform the following work on Regional roads:
 - Road patrolling.
 - Summer maintenance including surface maintenance (pothole repair), shoulder maintenance, street sweeping, spring cleanup, and right-of-way drainage including catch basin and manhole maintenance.
 - Winter snow and ice control.
 - Emergency response (e.g. accidents, washouts, spills, trees, debris, etc.).
 - Leaf pickup and disposal and any preventative maintenance as agreed to by the Region.
- The agreement also continues to exclude the following:

- Sign installation and maintenance.
- Line painting and crack sealing.
- Traffic control signal maintenance.

KPMG's Recommendation:

Recommendation #1: Restructure the road maintenance agreement based on the following principles to reduce the cost of road maintenance operations for the citizens of Waterloo Region:

- Establish the same rate structure for all participating area municipalities.
- Make the rate a combination of a fixed amount per km and a variable amount per km.
- The variable payment should be tied to the Environment Canada reported snowfall record.
- Municipalities should be able to manage expenses and retain any savings, subject to meeting the established service level.
- The above changes can be implemented in the short term with any municipalities that agree, or introduced as part of the next contract negotiation.
- That the Region explore with the Townships the desire to merge road operations by having the Region purchase services from the Townships – or sell services to the Townships.

Implications Regarding Implementation:

The current maintenance agreements between the Cities and the Region covers the period from January 2015 to December 2019. As noted by KPMG their recommendations can form part of the negotiations for a new maintenance agreement. Implementation will be dependent on agreements being reached with the Cities.

Integrating road operation and maintenance activities between the Region and one or more of the Townships would require the careful consideration of the following issues:

1. If one or more but not all of the Townships wished to consider operating and maintaining Regional Roads on the Region's behalf, potential savings may not materialize as the Region would still have to maintain and operate roads in one or more Townships (i.e. economies of scale would not be reached). The same could also be true if the Region were to assume operations and maintenance of roads activities for one or more but not all of the Townships.

2. Depending on how this was implemented, there would likely be labour collective agreement issues, and potentially impacts on management staff at the Region and / or the Townships that would have to be addressed.
3. There could be inefficiencies introduced between winter and summer work and required staffing levels that could negate any savings that might have been achieved either at the Township or Region level.

Opportunity #4: Optimize Airport Commercial Value

The Region of Waterloo International Airport (RWIA) provides access to air transport to the Region and is a strategic asset that supports economic development. The RWIA is an important economic and social driver in the Waterloo region. A recent study concluded that the RWIA's direct, indirect and induced economic impacts were approximately \$86 million during 2013.

KPMG's in depth analysis indicated the following:

- Based on a small sample of comparable airports, RWIA's cost base is in the mid-range while passenger traffic is at the low end.
- Revenue per passenger is comparable to airports in the small sample. Additional revenues can be generated through an increase in the Airport Improvement Fee but needs to be weighed against other policy objectives.
- Given available capacity, it is prudent to manage capital expenditures and defer expansions unless growth materializes.
- The RWIA may be able to find a partner to drive operational and strategic goals, but needs to test the market to determine appetite, terms and potential for risk transfer.
- The Region must determine the success criteria (from both a subsidy and net economic benefit perspective) for the RWIA and whether another operating or contracting model could better achieve the Region's objectives for the RWIA.

KPMG's Recommendations:

Recommendation #1: The opportunity for incremental cost optimizations and revenue increases exist. The Region should complete the master plan/business plan and present their approach to increasing revenue and managing both operational and capital expenses.

Recommendation #2: The Region should establish a net levy target for airport management to budget against to control operating and capital expenditures.

Recommendation #3: The Region of Waterloo should test the market for a range of private sector involvement to determine the level of interest from potential private sector partners to not only drive operational and strategic goals but also reduce the operational costs and impact on the property tax levy.

Implications Regarding Implementation:

The Airport's current Master Plan was completed in 2001. An update to the Master Plan commenced in 2013, and Council provided initial direction regarding the Master Plan in mid-2014. The initial direction, which will provide a framework for completing the Master Plan, included: optimizing the use of the existing capacity of the Airport; attracting new air service; development of the airport's business campus; protecting for growth; improving community interaction; and finding ways to assist in the development of the adjacent East Side employment lands. The Master Plan needs to be completed in order to guide growth and provide clarity to the community as to growth expectations.

The Master Plan will include an associated Business Plan which is expected to include cash flow projections and to establish financial and usage performance targets so that elements of the plan may be phased in as growth warrants. The Master Plan will also include a strategy for further developing the aviation-related campus (and potentially adjacent supporting uses), recommendations for attracting additional air services, as well as a review of existing facilities and options for future approach and runway configurations. Completion of the Master Plan will allow Federal zoning regulations (different from municipal land use zoning) to be amended in order to protect for any future growth that may be required. A target date of the end of 2016 is being recommended for a new Master Plan to be considered for adoption by Regional Council. Additional public consultation would precede such consideration.

The Airport Master Plan / Business Plan will identify opportunities for incremental cost optimization and revenue generation, and will propose a net levy target as recommended by KPMG. Staff will also continue to review operating and capital costs and revenue sources as part of the annual budget process. It should be noted that Council recently approved a reduction in the passenger fee for international flights as a way to stimulate air carriers to locate or expand their services at our Airport.

If Council chooses to proceed with recommendation #3 (testing the market for potential private sector involvement) staff would recommend that this occur following the completion of the Airport Master Plan / Business Plan in late 2016.

Opportunity #5: Child Care Service Manager

The Province is responsible for licensing of child care programs under the Day Nurseries Act (replaced by the Child Care & Early Years Act as of August 31, 2015). The Region of Waterloo is the “Service Manager” for child care. The Region is also a child care operator, providing child care services comparable to those providers it funds and manages. The Region operates 5 child care centres that serve 250 children. Each child care centre has attained the “triple gold” standard of the “Raising the Bar” program for the past 12 years and are accredited sites with the High Scope Curriculum. The Region also operates a licensed Home Child Care program with approximately 425 caregivers serving approximately 1,185 children.

There are approximately 3,805 children on the OneList Waterloo Region child care waiting list. Some of these are seeking priority for spaces in the future, when they expect to have their child, or when they expect to return to work (or school). Nonetheless, almost half of the families (1,692) are seeking immediate child care (811 infants, 468 toddlers and 413 preschoolers).

KPMG’s comparator analysis identified that some municipalities are moving to a pure Service Manager role. For example, the Region of Peel transitioned to a pure Service Manager role in 2012, closing the 12 Regional child care centres and purchasing a little over twice as many subsidized spaces from other agencies, with about 25% of the savings allocated to other priorities and enhancements to support community providers.

As indicated in KPMG’s Final Report, their analysis shows that \$2,500,000 could be freed up by purchasing the spaces provided in the Children’s Centres from the average purchased services non-profit agencies. While these funds could be taken as savings, provincial funding would likely reduce, off-setting the benefit for Regional taxpayers, but at an average cost of \$11,765 per space per year, these savings could fund the addition of approximately 200 extra fully subsidized child care spaces – further addressing the child care needs on the OneList Waterloo Region child care waiting list.

With respect to Home Child Care, KPMG is suggesting that there may be potential savings by replacing the services provided by the Region’s Home Child care program with similar services from another community agency in the Region. Given that such an agency does not exist today, KPMG recommends that the Region should work to encourage the creation of a community home child care agency as a first step. Similar to the circumstances with the Children’s Centres, any savings would have to be reinvested in additional service to avoid loss of provincial subsidy.

KPMG's Recommendation:

Recommendation #1: That the Region develop a detailed plan to phase out the five Regionally owned Children's Centres over a 5 year period, using the savings to expand the number of subsidized spaces available to be delivered by other childcare providers in the community.

Recommendation #2: That the Home Child Care operation should continue at present, with these changes over time:

- a) Home Child Care should be expanded in areas as required to support the transition plan for the Children's Centres.
- b) Encourage / facilitate the formation of a full service home child care agency in the community, serving all age groups.

Implications Regarding Implementation:

There are a number of potential implications that Council should consider regarding the recommendations. These relate to the Consolidated Municipal Service Manager (CMSM) role, the Region's role as a leader in supporting high quality Early Learning and Care services in the community and additional financial considerations.

1. The role of the Consolidated Municipal Service Manager involves a wide range of responsibilities, including directly operating services. Removing the 'lived experience' component of the CMSM role could place the Region of Waterloo at a disadvantage in understanding and supporting the broader system.
2. The Early Learning and Child Care system is currently at capacity and may not have the ability to accommodate this increase in spaces without significant investment in physical infrastructure to construct new buildings or renovate existing space. There is a shortage of Registered Early Childhood Educators across the Province of Ontario which has implications for availability of a trained labour force to support growth.
3. It is uncertain if demand exists to increase fee subsidy spaces by approximately 200. At the present time there is no waiting list for fee subsidy and demand has been somewhat stable for the past two years. Without the addition of new Provincial funding to support this growth adding 200 subsidized spaces will create additional funding pressures for the Region of Waterloo.
4. The directly operated Children's Centres have high quality ratings, provide service to high needs populations, and set benchmarks/best practices for other child care operators. All sites meet the exacting standards required to be accredited as demonstration sites for the HighScope curriculum approach to early childhood education. Only four other programs have achieved this standing

in the Province of Ontario and eleven across Canada. Benchmarking is an important factor in sustaining current levels of quality.

5. A caution should be noted that basing child care solely on cost has a negative effect on quality. High quality child care is more costly given the direct correlation between staff qualifications, salary levels, equipment and physical space. The economic and social benefits gained from high quality, accessible child care include: increased tax revenue and lower social assistance costs because more parents are working; local economic stimulus linked to child care's labour intensive nature; better outcomes for children and potential mitigation of cost associated with social support later in life.
6. Should any of the current funding allocations be reduced there will be an impact on the Provincial funding provided to the Region of Waterloo. This could result in further erosion and destabilization of the ELCC service system.

Next Steps and Timing:

KPMG's final report, including their findings and recommendations will be tabled at the Administration and Finance Committee Meeting on Tuesday September 15, 2015. KPMG will be present to answer Councillor's questions and provide any necessary clarifications regarding their findings and recommendations.

At a subsequent meeting, it is anticipated that Council would seek public input and comment on KPMG's recommendations. Following this public input, Council would ultimately make decisions regarding the recommendations provided by KPMG.

The proposed timeline for completing the Service Review is summarized in the table below.

Service Review Project Timeline:

Project Deliverable	Timing
KPMG Final Report, and accompanying staff report tabled at A&F Committee	September 15
Public Input Meeting – to seek public input regarding KPMG's recommendations	September 30 at 7:00 pm
Staff Report & Council Decision on Implementation Activities	Regional Council on October 21

Staff will also report back to Council at appropriate milestones regarding the status of the opportunities noted in Appendices 1 & 2. In addition, staff will report annually on the status of all the opportunities listed in those appendices.

Corporate Strategic Plan:

The Service Review is consistent with Focus Area 5.3: Ensure Regional programs and services are efficient and effective and demonstrate accountability to the public.

Financial Implications:

The Region's cost of the Service Review proposal is approximately \$300,000, which is being funded from the approved 2014 and 2015 budgets.

Other Department Consultations/Concurrence:

The Corporate Leadership Team has been involved in all phases of the Service Review Project and has specifically provided input into the key challenges and considerations for implementation for each of the Top Five opportunities.

Attachments:

Appendix 1: Opportunities Underway or About to be Implemented and Next Steps and Timing

Appendix 2: Opportunities Requiring Additional Investigation / Follow-up and Possible Next steps

Appendix 3: KPMG's Service Review Final Report

Prepared By: David Young, Manager, Internal Audit

Approved By: Michael L. Murray, Chief Administrative Officer