



Master Plan 2045 Strategic Workshop

Kelowna City Council
September 28, 2015

Workshop Overview

- ▶ Background
- ▶ Outline of Airport Plans
- ▶ Economic Situation
- ▶ Airline Industry Overview
- ▶ Preliminary Master Plan Findings
- ▶ Metrics for Benchmarking
- ▶ Strategic Survey Questions Discussion
- ▶ Quality Service Index
- ▶ Air Services

Background

Background

- ▶ Last Master Plan was developed in 2006.
 - ▶ Basis to *Drive to 1.6 Million Passengers Program* and *Flight 2020* projects
 - ▶ Covered 2006-2025 period

- ▶ Current review looks out to 2045.
 - ▶ 5-year Strategic Plan is part of the planning process

Consultation

- ▶ Master Plan 2045 is a three-phase initiative, programmed around stakeholder consultation.



Preliminary Draft provides initial findings and options.

Consultation

- ▶ A Communications Plan was established to guide stakeholder consultations.

Sample of Key Stakeholder Groups		
Airport Advisory Committee (AAC)	Agricultural Land Commission / Kelowna Agricultural Advisory Committee	TOTA / Tourism Kelowna
Airline Consultative Committee (ACC)	UBCO	Neighbors / Public
Airport Operations Committee (AOC)	Okanagan College	First Nations

Your feedback is essential to the development of the Master Plan 2045.

Current Status

- ▶ What has YLW accomplished in 10 years?
 - ▶ Reached 1.6 Million annual passengers in 2014.
 - ▶ 4,400 passengers per day
 - ▶ 210 aircraft arrivals and departures per day
 - ▶ Added nine new non-stop destinations.
 - ▶ Including Fort McMurray, Phoenix, Whitehorse, Cancun, Puerto Vallarta and Varadero

Since 2005, YLW has seen 1,430 more passengers and 16 more scheduled flight movements per day.

Current Status

- ▶ YLW's Contribution to the economy is *growing*.

Direct Impacts	2015	% Incr. vs. 2010 Economic Impact
Employment (person/yr)	1,411	9%
Wages (million \$)	83	19%
Output (million \$)	336	12%
GDP (million \$)	152	27%

Every additional daily, year-round scheduled B737 flight generates up to 38 full-time jobs at YLW.

Current Status

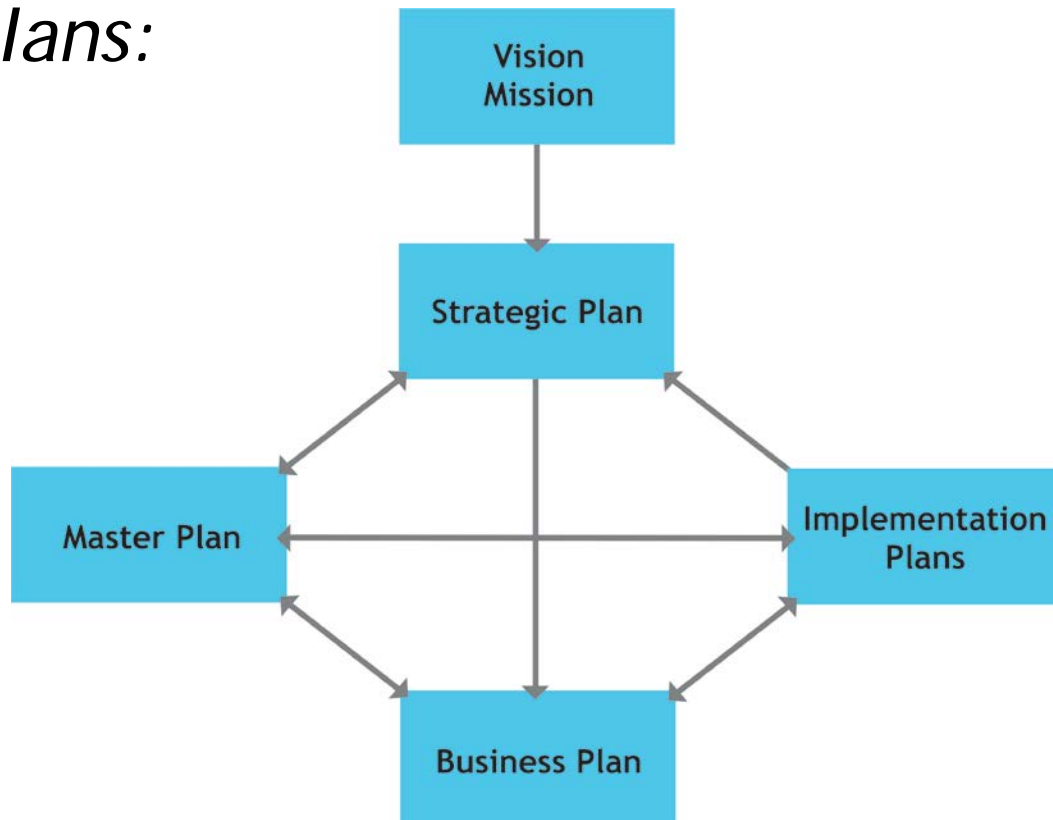
- ▶ Facilities have been added to accommodate and create opportunities for growth.
 - ▶ Runway extension to 8,900 feet
 - ▶ New Pre Board Screening checkpoint
 - ▶ International Arrivals facility
 - ▶ Larger parking lots and roadway improvements
 - ▶ North Apron and baggage system expansion (ongoing)

More is needed in the future...

Outline of Airport Plans

Overview of Airport Plans

The key plans:



Strategic Plan

- ▶ Establishes the overall direction, vision, mission statement, objectives and action plans
- ▶ Premised on competitive and SWOT analyses (strengths, weaknesses, opportunities, threats)
- ▶ Identifies potential air service market opportunities and target carriers

Airport Master Plan

The Master Plan will describe the optimum development options and the facilities and systems needed to meet strategic objectives and forecasted levels of passenger and aircraft activity, over a specified period of time.

YLW's Master Plan provides guidance to the aviation component of the Official Community Plan.

Master Plan Process

The process entails:

- ▶ Inventory of existing conditions.
- ▶ Forecasts of future demand.
- ▶ Comparisons of demand against the capacity of existing infrastructure.
- ▶ Order-of-magnitude cost estimates and timing of required improvements.
- ▶ Stakeholder consultations.

Implementation Plans

Implementation Plan detail the approach, initiatives and process for achieving an airport's overall objectives.

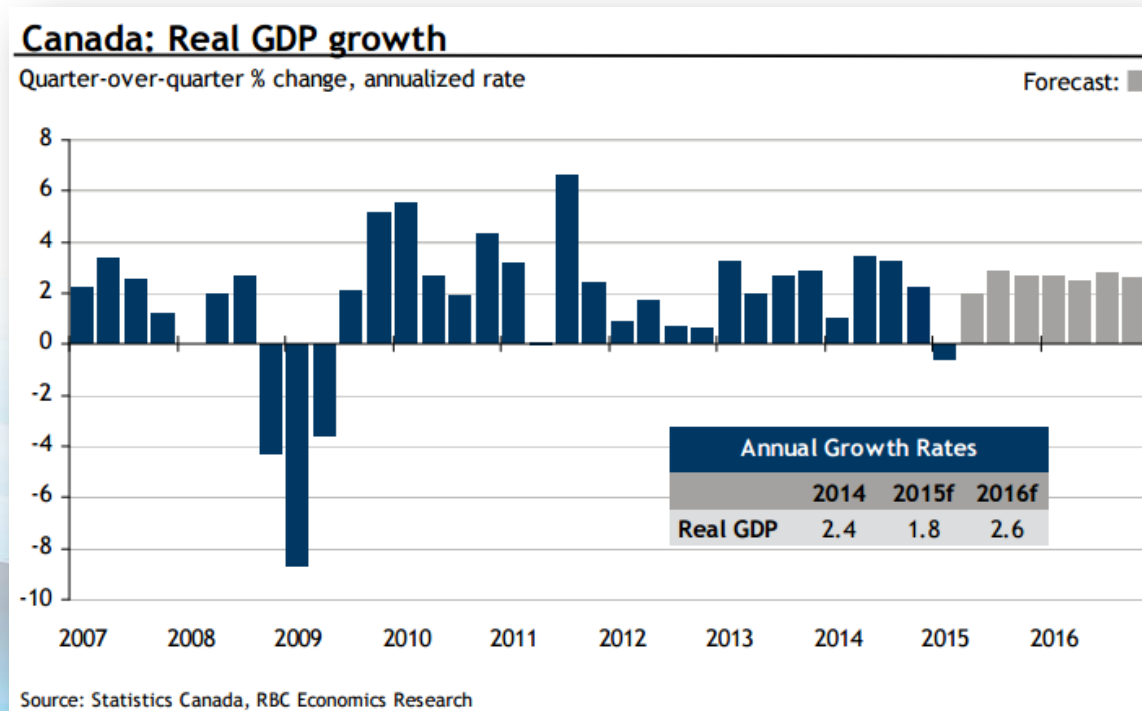
Specific plans may include:

- ▶ Financial Plan
- ▶ Capital Investment Plan
- ▶ Human Resources Plan
- ▶ Marketing Plan
- ▶ Commercial Plan
- ▶ Communications Plan

Economic Situation

National Economy Outlook

- ▶ 2015 has proved challenging for Canada's economy as low oil prices sapped investment and employment activity in the energy sector.
- ▶ Forecasted growth of 1.8% in Real GDP for 2015.



Provincial Economy Outlook

British Columbia - The leader of the pack

- ▶ B.C.'s economy likely to be on top of the provincial growth rankings in 2015.
- ▶ Forecast real GDP to grow by a solid 3.0% in 2015 and 3.1% in 2016.

British Columbia forecast at a glance

% change unless otherwise indicated

	2012	2013	2014F	2015F	2016F
Real GDP	2.4	1.9	2.9	3.0	3.1
Nominal GDP	2.3	3.2	4.7	4.5	5.3
Employment	1.6	0.1	0.6	1.2	1.4
Unemployment rate (%)	6.8	6.6	6.1	5.7	5.5
Retail sales	1.9	2.4	5.6	5.6	4.6
Housing starts (units)	27,465	27,054	28,356	31,500	29,300
Consumer price index	1.1	-0.1	1.0	0.9	2.3

Local Economy

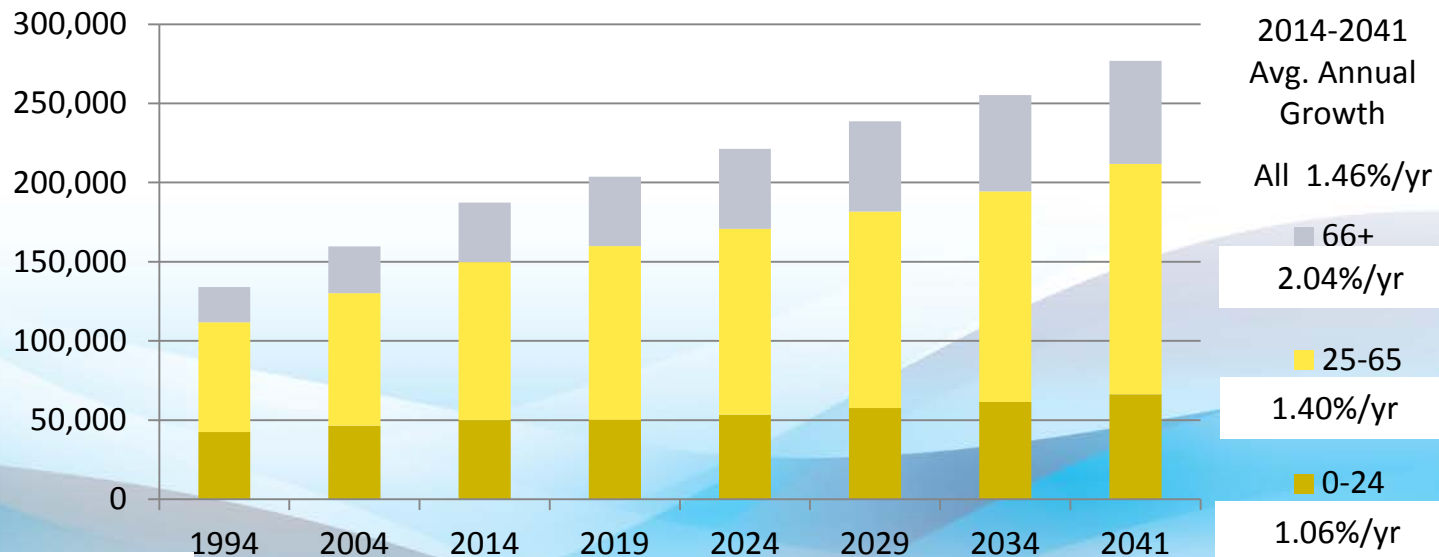
- ▶ Strong well-diversified economy.
 - ▶ Health care, education, construction, high technology, manufacturing, agriculture and tourism key drivers.
 - ▶ Household income and unemployment rates close to provincial average and follow provincial trends.
 - ▶ Moderate income growth forecast for B.C.

- ▶ Tourism in the Okanagan is a major industry.
 - ▶ Estimated 1.7 million tourists visited Kelowna in 2014.
 - ▶ Strong growth: Up 6% per year from 2006 to 2011 and 4.3% per year from 2011 to 2014.
 - ▶ Growth strongest in the summer vacation sector.
 - ▶ Only a quarter of tourists arrive by air.
 - ▶ Pursuing seasonal weekly European charters.

Regional Population Growth

► Population Growth – Major Factor

- Averaged 2.75% per year from 1986 to 2011, almost twice B.C. rate.
- Slowed greatly in past 3 years.
- Forecast to grow at 1.69% per year to 2019, slowing to 1.17% by 2040.
- Growth due to inward migration, but population is aging.



Source: BC Stats

Decline in Oil Prices

- ▶ Oil price (WTI) declined from over US\$100/barrel in mid 2014, to the current low price of \$43-47 (September).
- ▶ Oil price decline in USD has been somewhat offset by a decline in CAN\$ from US\$0.95 to approximately \$0.76.



Factors Influencing Price of Oil

- ▶ Price drop caused by over-supply of oil due to:
 - ▶ Increases in shale oil production in the US.
 - ▶ Saudi decision not to reduce output as price fell.
 - ▶ Slowing world economy & reduced demand, especially in China.
- ▶ Longer term price should increase to at least meet production cost.
 - ▶ Demand has increased with the fall in price.

Airline Industry Overview

Airline Industry Overview

- ▶ After a decade of massive losses, the airline industry is riding a five-year wave of profitability.
- ▶ 2014 net income of North American airlines, fueled largely by Canada and US airline performance, was more than \$12 billion.
 - ▶ North American airline profitability expected to increase an additional \$1 billion in 2015, as lower fuel expenses provide boost in earnings.

Industry Overview

- ▶ Since 2008, Airlines have deployed effective tactics, including mergers and acquisitions, fleet and network rationalization, capacity discipline and a strict focus on financial performance.
- ▶ Owing to network carrier capacity growth resulting from new aircraft, the domestic market is ripe for even higher growth than previously forecast.

Factors Driving Local Demand

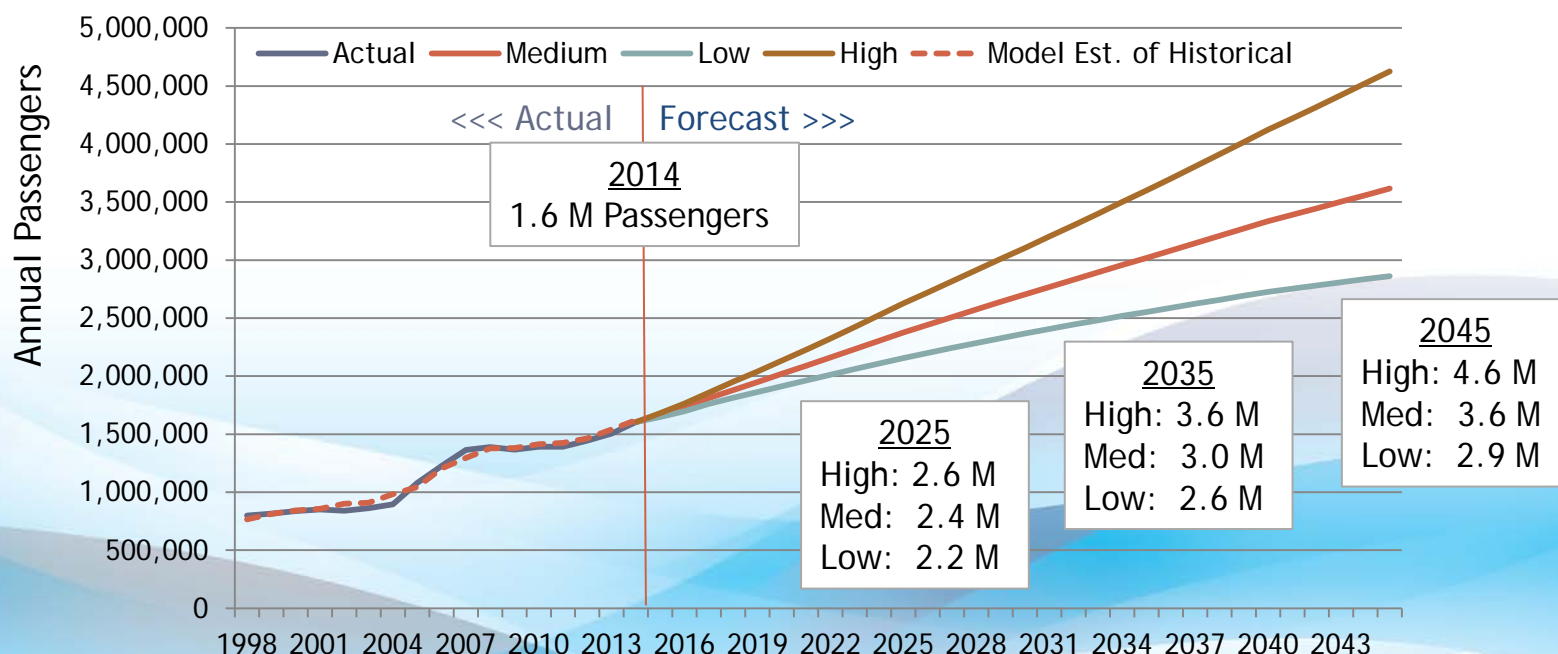
- ▶ Travel costs
 - ▶ Significant reductions in airfares in past 20 years.
 - ▶ Low-cost and ultra low cost carriers a driving force.
- ▶ Competition from nearby airports: Vancouver, Bellingham, Kamloops, Penticton
 - ▶ Overall 20% of area passengers use YVR (higher for international travellers).
 - ▶ Leakage will decrease as YLW's international service improves.
- ▶ Exchange rate
 - ▶ Recent fall in CAN\$ has discouraged US travel.

Preliminary Master Plan Findings



Air Traffic Forecasts - Passengers

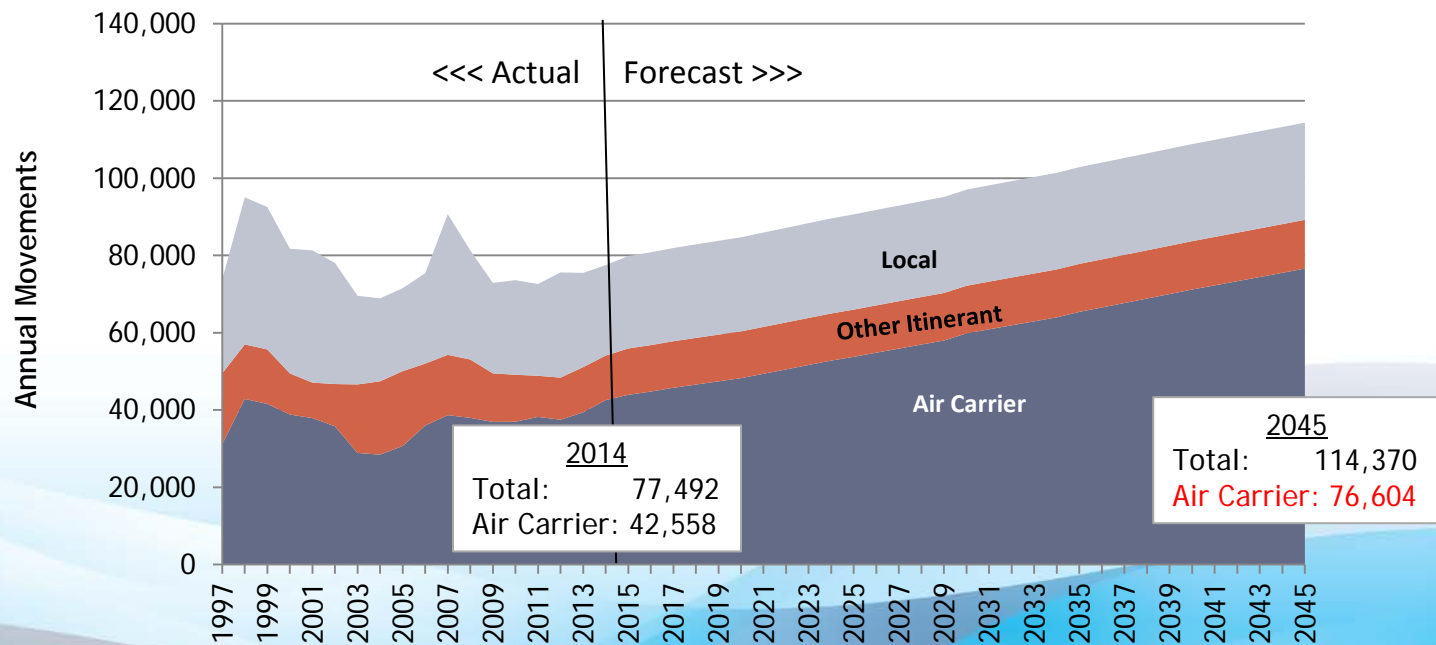
- ▶ YLW is expected to continue growing at approximately 3% per year to 2035, in spite of current slowdown.
- ▶ 2025 Medium range forecast, same as in last Master Plan.



Historical and Forecast Enplaned / Deplaned Passengers

Air Traffic Forecasts - Movements

- ▶ Slower growth, approximately 2% per year, will mostly come from air carrier services.
- ▶ Bigger planes are being used.



Historical and Forecast Aircraft Movements

Noise Exposure

- ▶ New aircraft are changing noise exposure.



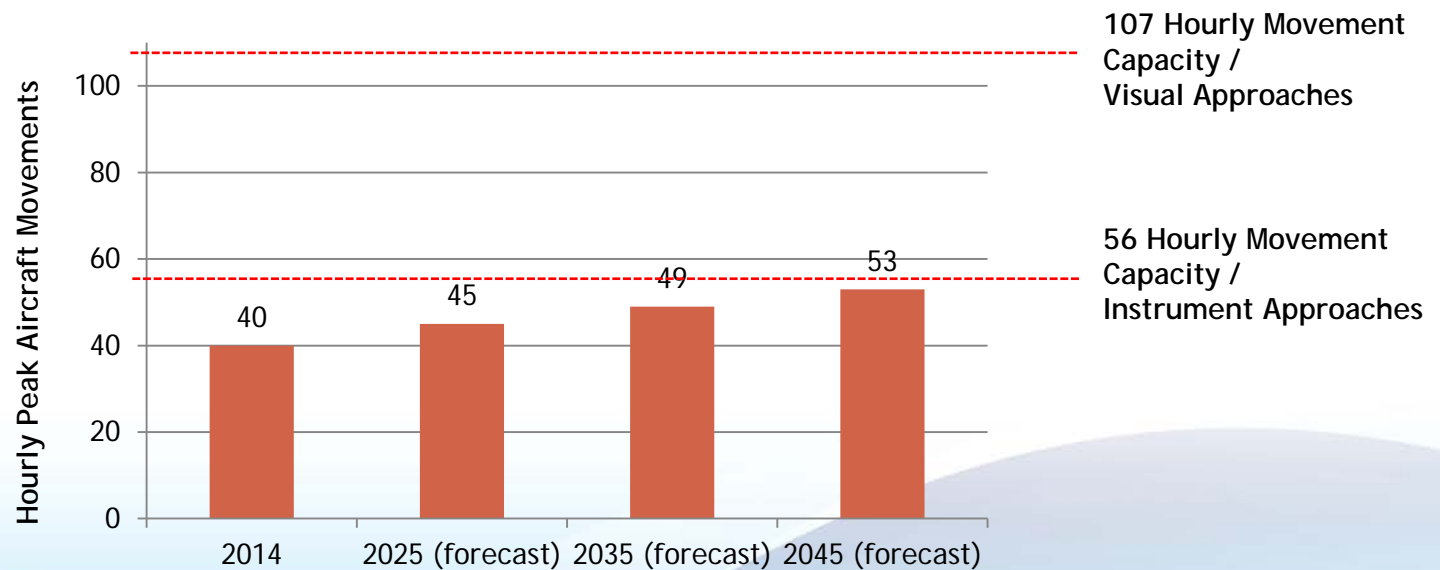
Previous 2025 Noise Contours in Master Plan 2025 (2005)



Forecast 2040 Noise Contours - Current Runway Length (2015)

We still need to protect future growth by maintaining existing OCP land use areas.

- ▶ YLW's runway capacity can meet demand:
 - ▶ Airspace efficiency has been improved.



Further gains can be achieved through technology improvements.

▶ Runway Length:

- ▶ Current runway length is sufficient for B767-300ER aircraft to fly non-stop to London and Frankfurt with full passenger load.



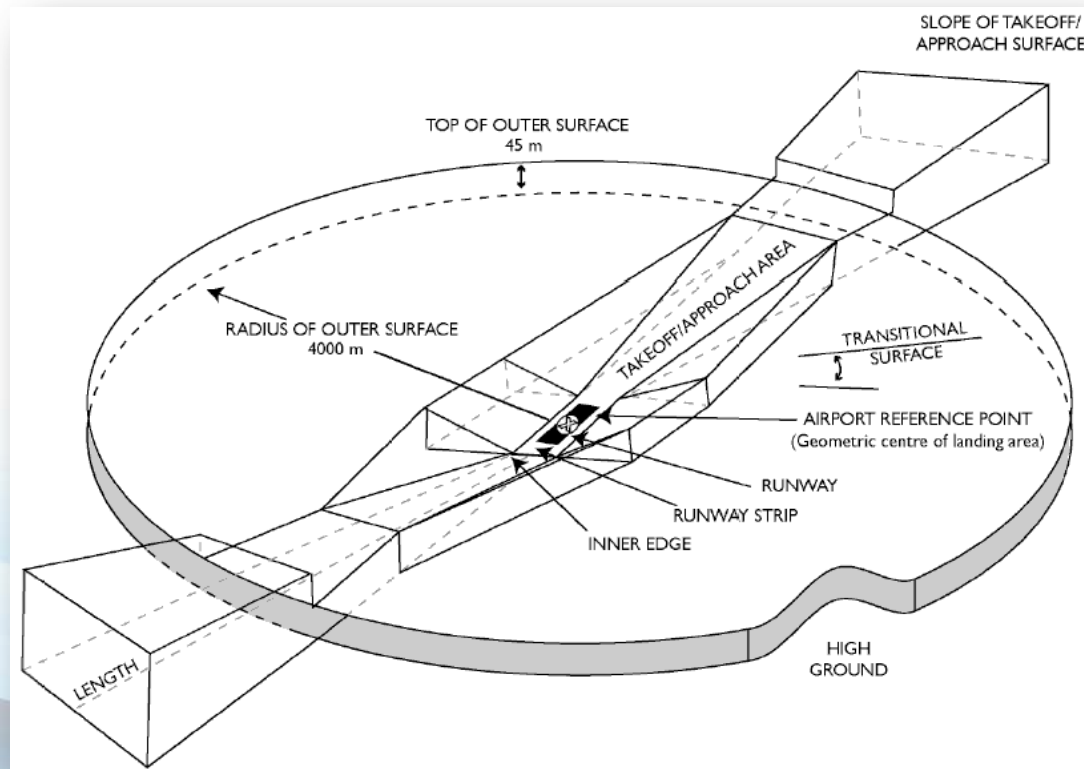
Inner Contour B767-300ER (4,300 nm)

Outer Contour B787-8 HI (5,700 nm)

Maximum Range for Take-off on Hot Days

Airfield

- ▶ New Canadian aerodrome standards:
 - ▶ This impacts zoning for clearances under and around approach surfaces.



Airfield

- ▶ Runway End Safety Areas (RESA) will also be needed under new standards:
 - ▶ Complicates land needed to accommodate current and future runway length.



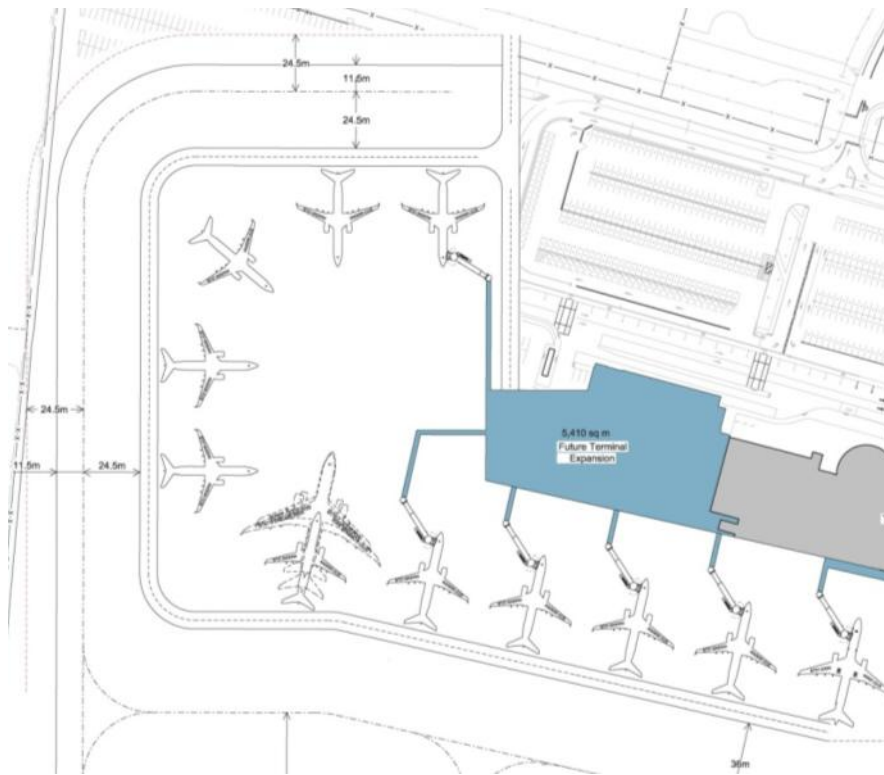
Air Terminal Building - Apron

- ▶ Beyond the current North Apron expansion:
 - ▶ Remote aircraft parking stands needed.

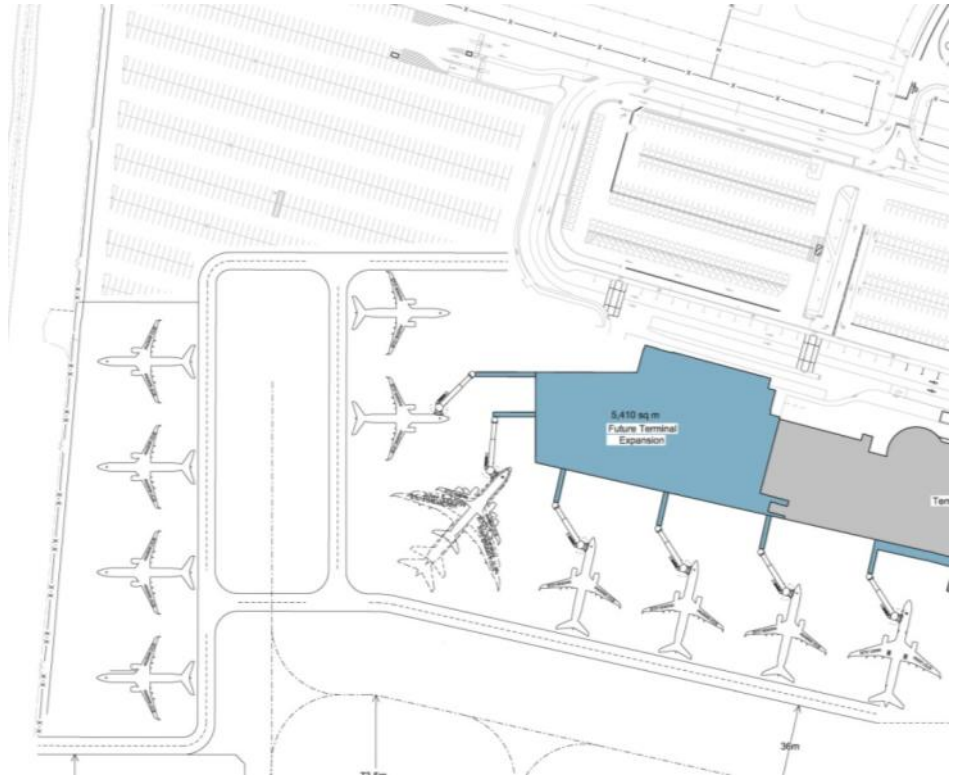
Planning Period	Incremental Stand Requirements	
	Terminal Stands	Remote Stands
2016-2020	0	0
2021-2025	0	2
2026-2030	0	1
2031-2035	0	1
2036-2040	1	0
2041-2045	0	1
Total Incremental Requirements	1	5

Air Terminal Building - Apron

► Preliminary Apron Expansion Options:



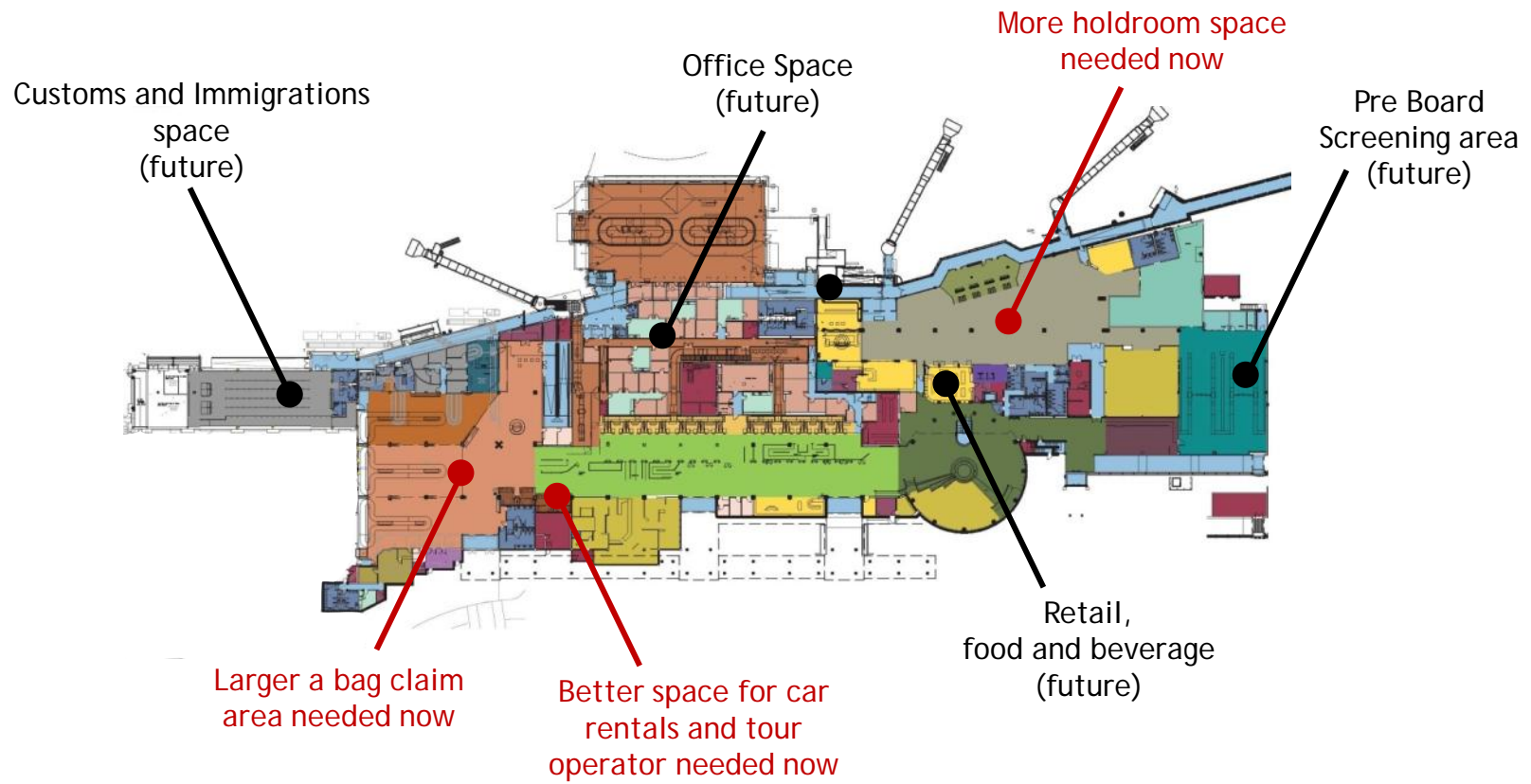
Option 1



Option 2

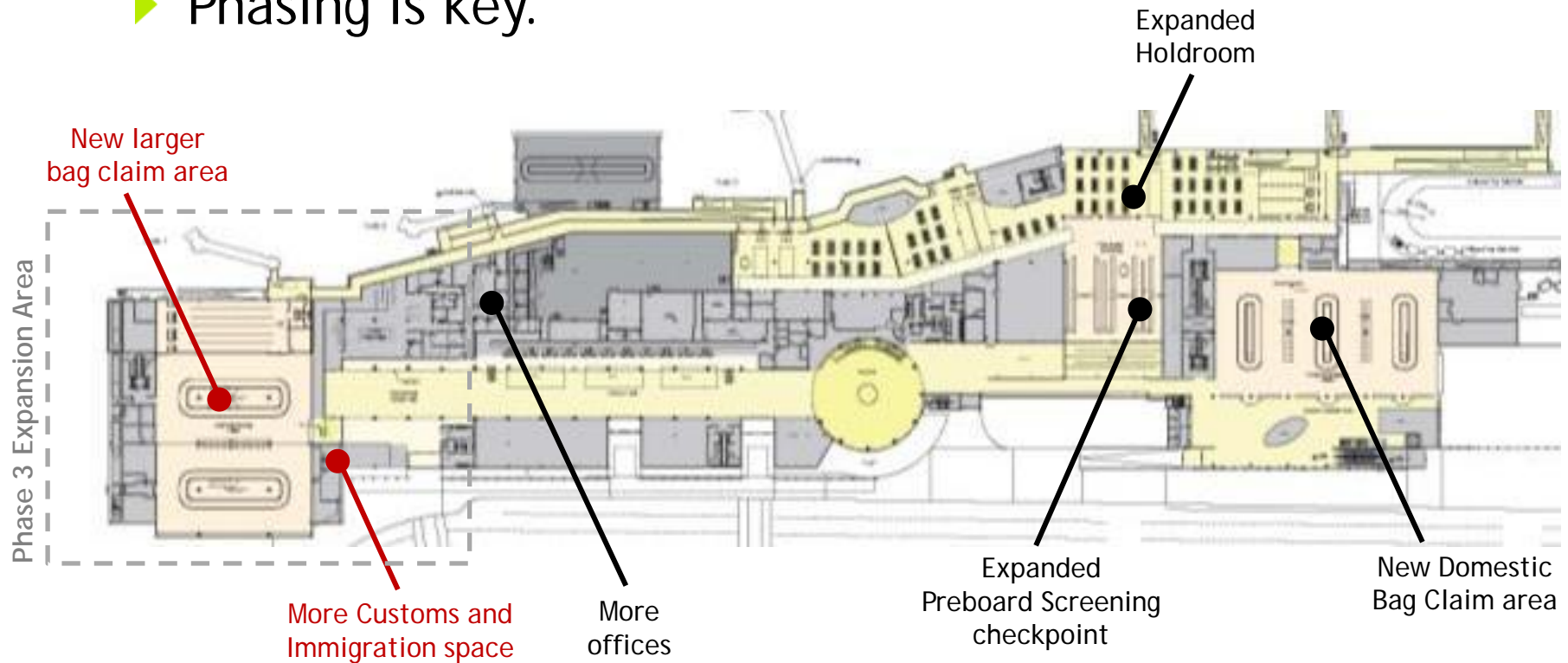
Air Terminal Building

► Areas that need to be addressed:



Air Terminal Building

- ▶ Long-term ATB expansion program (2010) addresses critical issues:
 - ▶ Phasing is key.



ATB Expansion Schematic Design (2010)

Access and Parking

- ▶ Recent strong traffic growth will continue to strain roads and parking facilities.
 - ▶ Current forecasts indicate that parking facilities will not meet demand in 5-10 years.
 - ▶ By 2045, 1,800 more parking stalls will be needed.
- ▶ A portion of the existing long-term lot will be needed for future apron expansion.
 - ▶ The lot will eventually need to be relocated to the south.

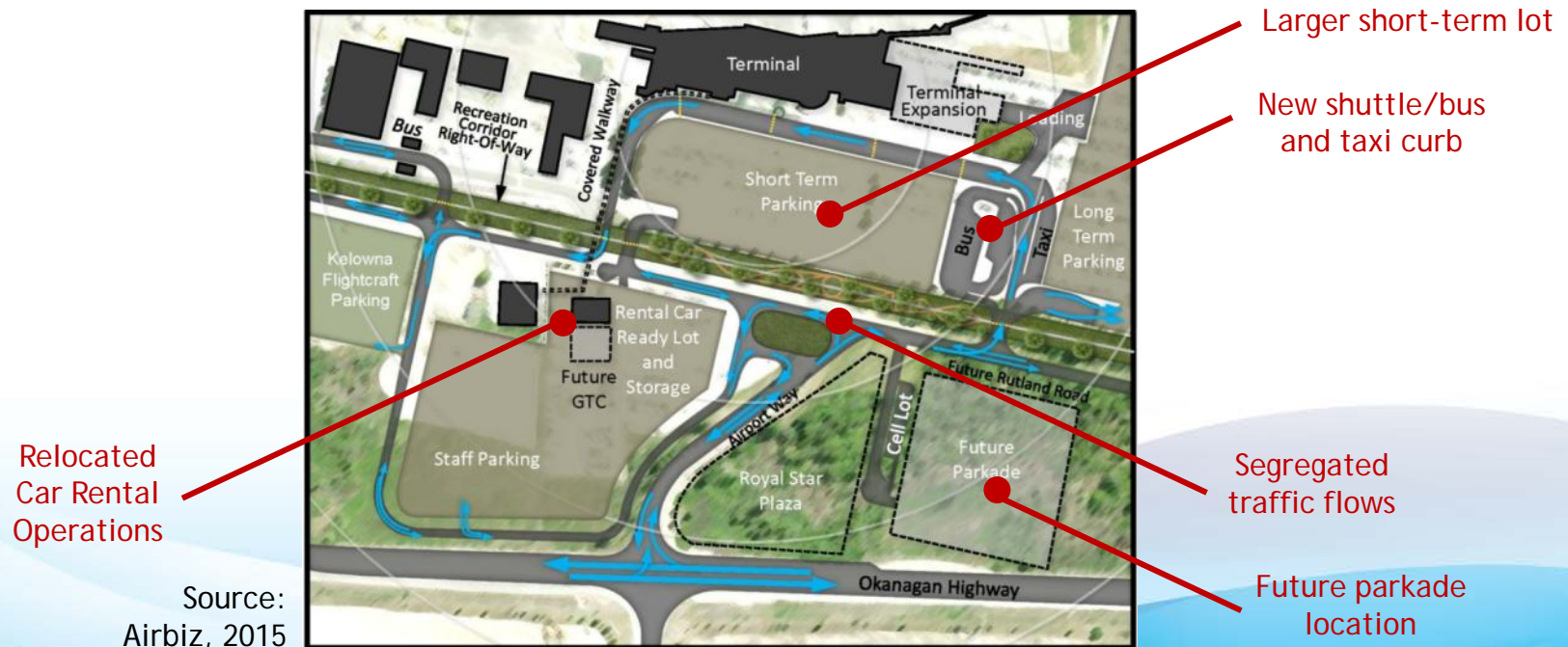
Trends in Ground Transportation

- ▶ Parking Products:
 - ▶ Valet (premium product)
 - ▶ Executive Parking Services (reserved stalls near terminal)
 - ▶ Value Parking Lots (on-site public parking)
 - ▶ Jetset (remote parking with shuttle)
 - ▶ Reservation Systems (on-line booking)

- ▶ Ground Transportation Services:
 - ▶ Taxi Ambassador Program
 - ▶ App-based transport companies (e.g. Uber/Lyft)
 - ▶ On-airport car sharing services (e.g. Zipcar)

Access and Parking

- ▶ YLW has already completed considerable groundside planning.



Preferred Groundside and Access Parking Development Option

Commercial Development Lands

- ▶ YLW's serviced airside commercial land inventory is close to saturation.
 - ▶ Very good highway commercial land still available.



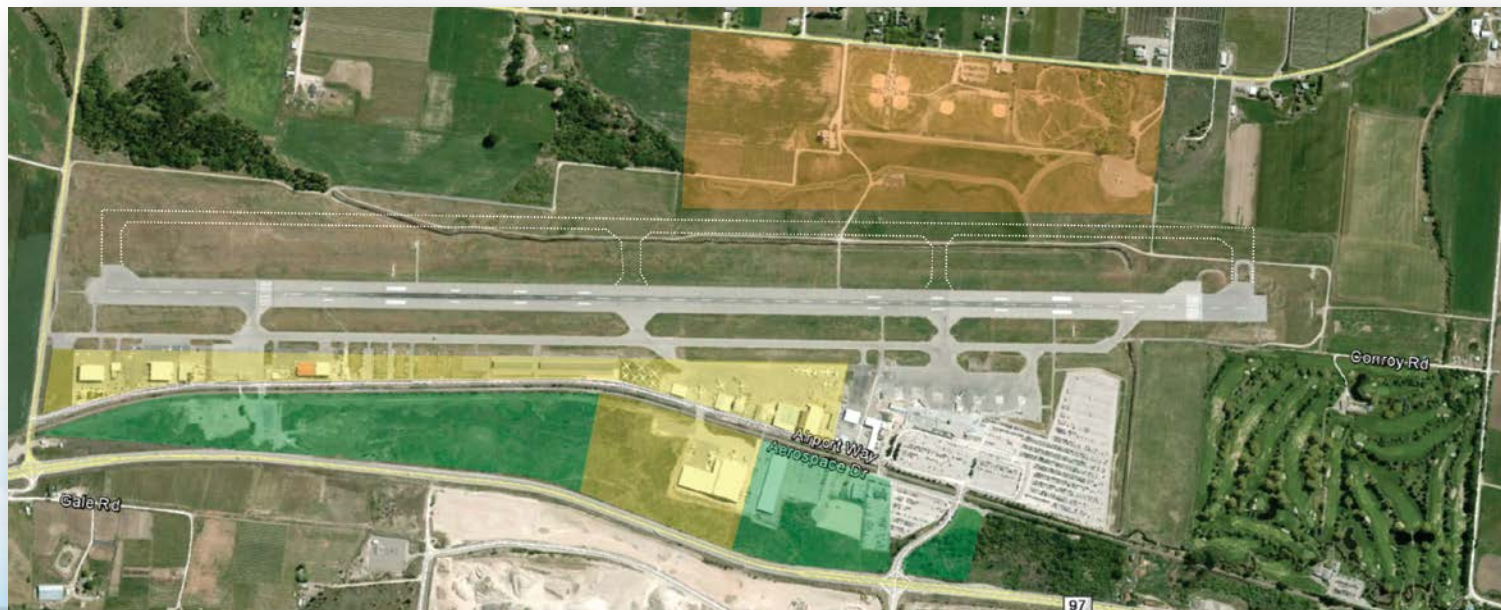
Existing Airside Commercial

Existing Groundside Commercial

Limited airside commercial land limits the benefits YLW provides to the region.

Commercial Development Lands

- ▶ East side land to focus on expanding YLW's role for aviation/aerospace industries:
 - ▶ Mill Creek, access and utilities.



- Existing Airside Commercial
- Future Airside Commercial

- Existing Groundside Commercial

Land Requirements

- ▶ Some additional land will be needed to accommodate growth:
 - ▶ Detailed analysis will be completed in Phase 2.



Summary

- ▶ YLW's current development strategy remains valid.
- ▶ Next phases of development need to address traffic growth:
 - ▶ Remote aircraft parking;
 - ▶ Terminal holdroom and bag areas; and
 - ▶ Parking lots.
- ▶ Changes to aerodrome regulations also need to be addressed:
 - ▶ Obstacle-free zones and Runway End Safety Area's (RESAs).

Summary

- ▶ More commercial development land is needed.
 - ▶ Services and access are needed.
- ▶ YLW will need to consider acquiring some adjacent land parcels to address long-term needs.

Metrics for Benchmarking

Metrics for Benchmarking

- ▶ Airport performance measures can be used for examining:
 - ▶ An airport's overall performance.
 - ▶ How an airport compares with its peer airports.
- ▶ Airports to be benchmarked should have fairly similar levels of traffic and types of air service.

Rating Airport Performance

Airports Council International Airport Service Quality survey has satisfaction ratings for:

- Access to airport and vehicle parking
- Check-in facilities & service
- Security service
- Way-finding in terminal
- Courtesy & friendliness of staff
- Terminal cleanliness and ambience
- Food, beverage and retail concessions
- Internet, business/executive lounge
- Washroom availability & cleanliness
- Comfort of waiting & gate areas
- CBSA/Customs/Immigration services
- Speed of baggage delivery service
- Overall satisfaction with airport

Source: ACI ASQ Airport Satisfaction Survey conducted at each airport each quarter - results include a comparison with other airports

Airports to be Benchmarked

- ▶ ACI QSI surveys are conducted for airports in Canada with between 0.5 and 2.5 million Enplaning/Deplaning (E/D) passengers.
- ▶ Classified medium sized airports in the U.S. with under 10 million E/D passengers for which ACI QSI surveys are conducted.

Canadian Airports	E/D Pax (2014)
Toronto/City	2,342,641
Victoria Intl	1,650,165
Kelowna	1,602,899
St John's	1,580,000
Québec	1,510,047
Saskatoon	1,484,615
Regina	1,262,577
Fort McMurray	1,075,682
Moncton	677,159

U.S. Airports	E/D Pax (2014)
Dallas Love Field	9.41M
San Jose Int	9.04M
Sacramento	8.83M
San Antonio	7.90M
Pittsburgh	7.85M
Cleveland Hopkins	7.46M
Indianapolis	7.31M
Cincinnati	6.62M
Columbus	6.33M
Jacksonville	5.23M
El Paso	2.78M
Grand Rapids	2.33M

Strategic Survey Discussion

YLW's Strategic Assessment Survey

- ▶ Stakeholders were asked questions regarding views and opinions on various strategic planning topics.
- ▶ A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis is a basic method of analyzing the environment that an organization faces.
 - ▶ Leads to the development of strategies to take advantage of a situation (strengths & opportunities) and to mitigate the risk (weaknesses and threats).

YLW's Greatest Strengths

- ▶ Strengths indicated by survey:
 - ▶ Level of Awareness to Safety and Security.
 - ▶ Strong Management Team and Community Involvement.
 - ▶ Commitment by the City.
 - ▶ Service Quality to Customers.
 - ▶ Convenient and Strategic Location.
 - ▶ Others?

YLW's Greatest Weaknesses

- ▶ Weaknesses indicated by survey:
 - ▶ Disconnect with private aviation tenants.
 - ▶ Real estate has limited expansion possibilities.
 - ▶ Residential build-up within airport proximity.
 - ▶ Not enough non-stop flights to popular destinations.
 - ▶ Traffic congestion to/from City.
 - ▶ **Others?**

YLW's Greatest Opportunities

- ▶ Opportunities indicated by survey:
 - ▶ Non-stop destination expansion.
 - ▶ Local Tourism and Okanagan population growth.
 - ▶ Embracing technology advancements that are taking place at larger airports.
 - ▶ Attracting more aviation industry to the airport.
 - ▶ **Others?**

YLW's Greatest Threats

- ▶ Threats indicated by survey:
 - ▶ Global and national economic situation
 - ▶ Federal government regulations
 - ▶ Limited job opportunities in region
 - ▶ US exchange rate differential increases
 - ▶ Potential for increased security measures/costs
 - ▶ Others?

YLW's Issues

- ▶ Issues are items that are having, or will have, an impact on the operations of our business that we need to address over the next five years.
- ▶ Based on your review of the SWOT, what are the key issues YLW needs to consider?

- ▶ Issues indicated by survey:
 - ▶ Economy - aviation travel is always dependent on a healthy economy.
 - ▶ Facility constraints during peak periods.
 - ▶ Approach capabilities during periods of bad weather in the winter.
 - ▶ Location's viability in 20 years, if Kelowna continues to grow.
 - ▶ Lack of jobs to attract residents.

YLW's Vision Statement

“To make YLW the best mid-sized airport in North America.”

YLW's Vision Statement

- ▶ Do you feel YLW is making progress towards achieving this vision?
 - ▶ Survey received an average rating of 3.9 out of 5.
 - ▶ Comments included:
 - ▶ Additional frequencies on current routes and new destinations are ideal and hope it continues.
 - ▶ The airport is run by a very professional and competent management team.
 - ▶ Current focus is too much on commercial airlines. Focus should also include enhancement of services for general aviation sector.

Core Values

- ▶ Survey's average Core Values rankings by most important (#1) to least important (#8), with respect to YLW achieving its vision statement:

Core Values	Avg Rank
Safety - we ensure that the safety & security of our customers, staff, facilities and environment is a primary concern in all aspects of doing business.	1.6
Customer Focused - we consider and balance the needs and views of our customers and stakeholders	2.3
Respectful and Fair - we believe there is strength in diversity. Each of us makes a contribution and we strive to ensure that all discussions and decisions are free from bias or favouritism.	5.5
Accountable - we take personal responsibility for the quality of our work and achievement of our objectives.	5.5
Commercially Focused and Fiscally Responsible Business Sustainability - we have a commercial operating philosophy and culture. We operate as a robust business maintaining a strategic focus on risk mitigation and financial strength.	6.0
Partnership - people are our most important resource; we work together to foster an open and cooperative environment that encourages teamwork, communication and mutual respect	6.5
Quality - we are motivated by customer expectations in providing quality facilities and services in a customer-sensitive & service-driven manner.	6.6
Team Players - we believe collaboration with others allows us to turn challenges into opportunities and achieve optimum results.	7.0
Ownership - we are committed to responsibly managing all of our assets to advance our region's environmental stewardship, social well-being and economic prosperity.	7.0
Leadership, Integrity and Innovation - we value leadership with integrity and innovation in support of our Vision. We champion innovation and entrepreneurship that drive efficiencies to create new value for our stakeholders.	7.0

Key Success Drivers

- ▶ Key Success Drivers (KSDs) are the factors necessary for YLW to successfully achieve its vision and mission.
- ▶ Survey's average ranking of KSDs by most important to least important:

Key Success Drivers	Avg Rank
Operate YLW in a safe, secure and sustainable manner	2.0
Optimize commercial and business development	3.3
Optimize the customer experience by leading a high performing airport team	4.1
Foster effective Stakeholder relationships	4.1
Ensure YLW has a knowledgeable, skilled and engaged workforce	4.2
Be financially sustainable and environmentally responsible	5.0
Renovate and expand airport infrastructure	5.1

Quality Service Index

Quality of Service Index (QSI)

- ▶ To fully assess the relative quality of air services at an airport, several elements need to be considered. The QSI:
 - ▶ Determines which routes are well served and which require improvements.
 - ▶ Allows quality of air services to be compared annually, and provides a benchmark for evaluating air service quality, relative to other Canadian airports.
 - ▶ System is flexible and can reflect the addition or removal of air services by airlines from year to year.

QSI Measurement Factors

- ▶ The QSI's index system model evaluates air services on a route-by-route basis to the top 25 destinations based on passengers, and assigns scores to each factor impacting the quality of service on the route.
- ▶ Overall QSI for airport is determined by a weighted passenger average.

QSI Measurement Factors

- ▶ **Flight stops:** recognizes desire for non-stop flights.
- ▶ **Flight frequency:** recognizes desire for multiple choices and convenience in flight times throughout the day/week.
- ▶ **Aircraft type:** recognizes preference for larger, faster jet aircraft.
- ▶ **Competition:** recognizes that having multiple carriers on a route leads to greater choices for consumers, and likely lower airfares.
- ▶ **Circuity:** recognizes that travellers prefer the most direct route to their destination.

QSI Route Scores and Overall For YLW



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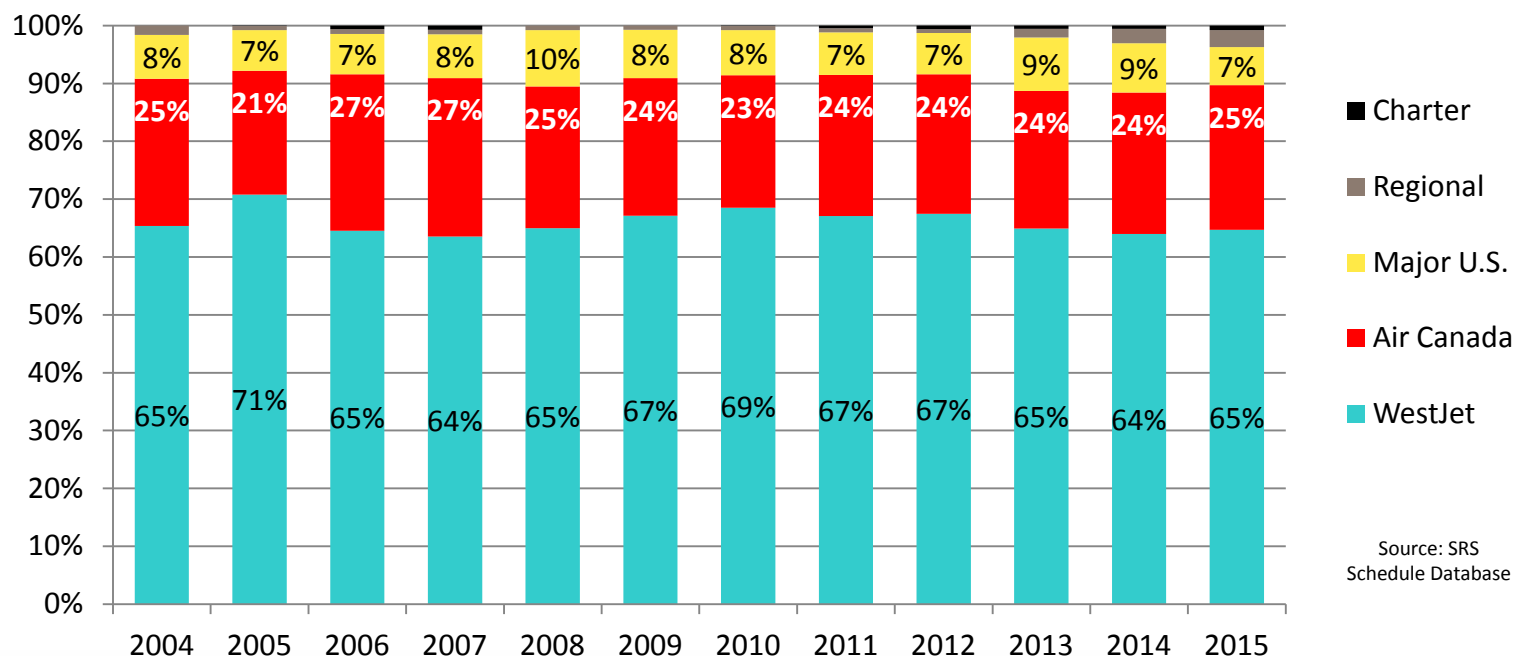
- ▶ Services to Calgary, Vancouver, Toronto have perfect scores.
- ▶ Edmonton has a score of 84 due to aircraft type used and only indirect service by AC.
- ▶ With new daily flights to Victoria in Oct, score increases from 55 to 70.5.
- ▶ The overall weighted QSI score is 82 (out of 100).
- ▶ Top routes are well served.

QSI Score Rank	Top 25 - City	Jan-Dec 2014 O/D Pax from OAG Database	% PAX	QSI Score (out of a 100)
				2014
1	Calgary	302,024	23.1%	100.0
2	Vancouver	270,498	20.7%	100.0
3	Toronto	95,402	7.3%	100.0
4	Edmonton	234,019	17.9%	84.0
5	Victoria	56,204	4.3%	70.5
6	Cancun	18,909	1.4%	69.9
7	Phoenix	21,300	1.6%	67.6
8	Puerto Vallarta	13,150	1.0%	67.2
9	Montreal	17,746	1.4%	62.9
10	Ft. McMurray	40,752	3.1%	61.9
11	Seattle/Tacoma	18,281	1.4%	58.7
12	Los Angeles	24,128	1.8%	55.3
13	Ottawa	15,101	1.2%	50.2
14	Winnipeg	22,720	1.7%	50.0
15	Kahului/Maui	9,533	0.7%	48.5
16	San Jose Cabo	9,576	0.7%	44.2
17	Saskatoon	17,705	1.4%	40.2
18	Regina	15,103	1.2%	39.8
19	San Francisco	10,243	0.8%	39.6
20	Las Vegas	39,651	3.0%	36.3
21	Whitehorse	11,134	0.9%	35.2
22	Ft. St. John	10,404	0.8%	32.6
23	Prince George	14,430	1.1%	21.3
24	Cranbrook	10,835	0.8%	16.5
25	Red Deer	10,180	0.8%	10.6

Air Services



Trends in Scheduled Services at YLW

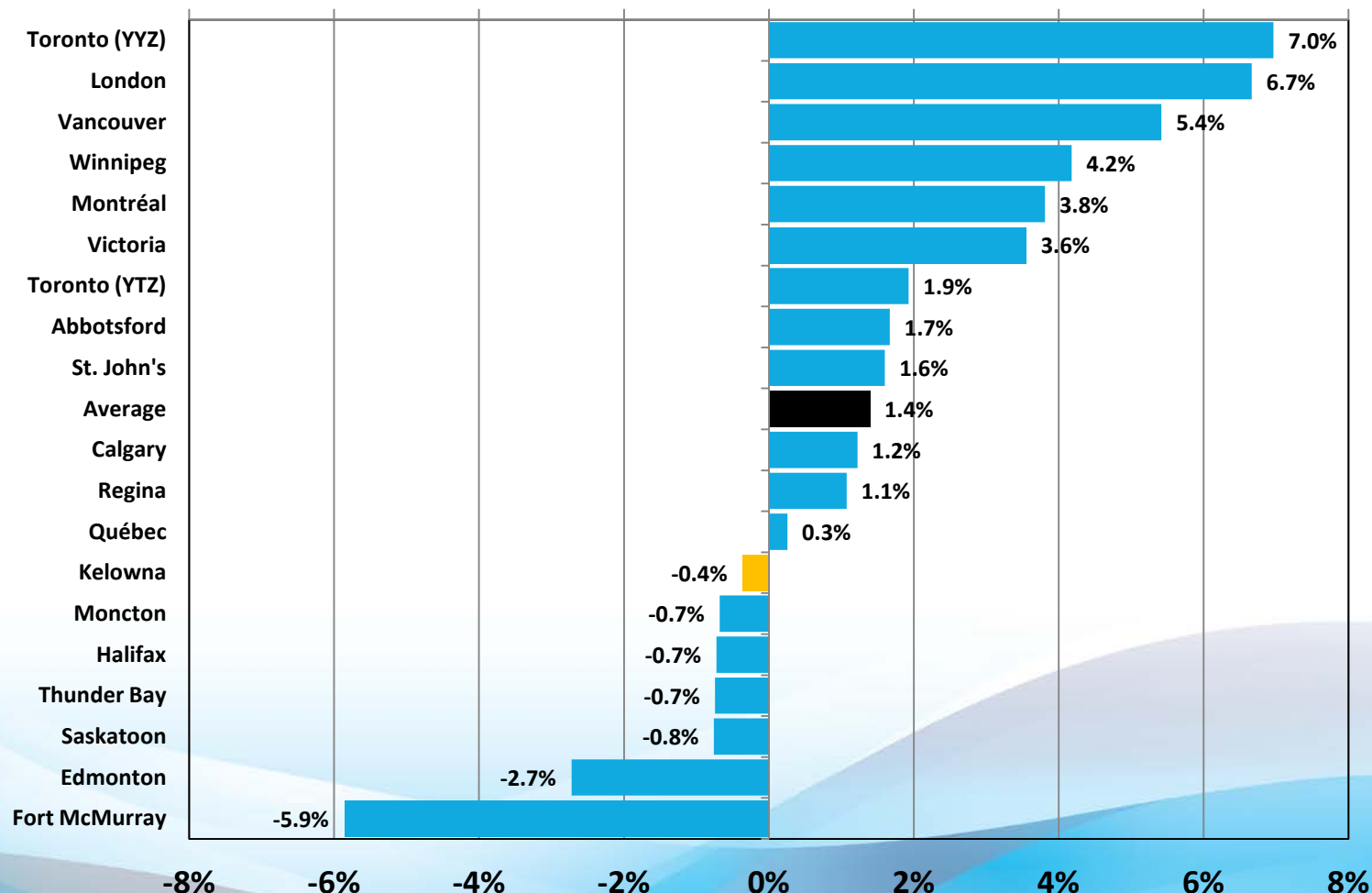


- ▶ Little change in market share of airlines over past 12 years:
 - ▶ WestJet 65%, Air Canada 25%, U.S. airlines 7-10%
- ▶ UA LAX service commenced late 2012, switched to SFO in Sept 2014 and suspended in April 2015.

Trends in Passenger Traffic - S1 2015

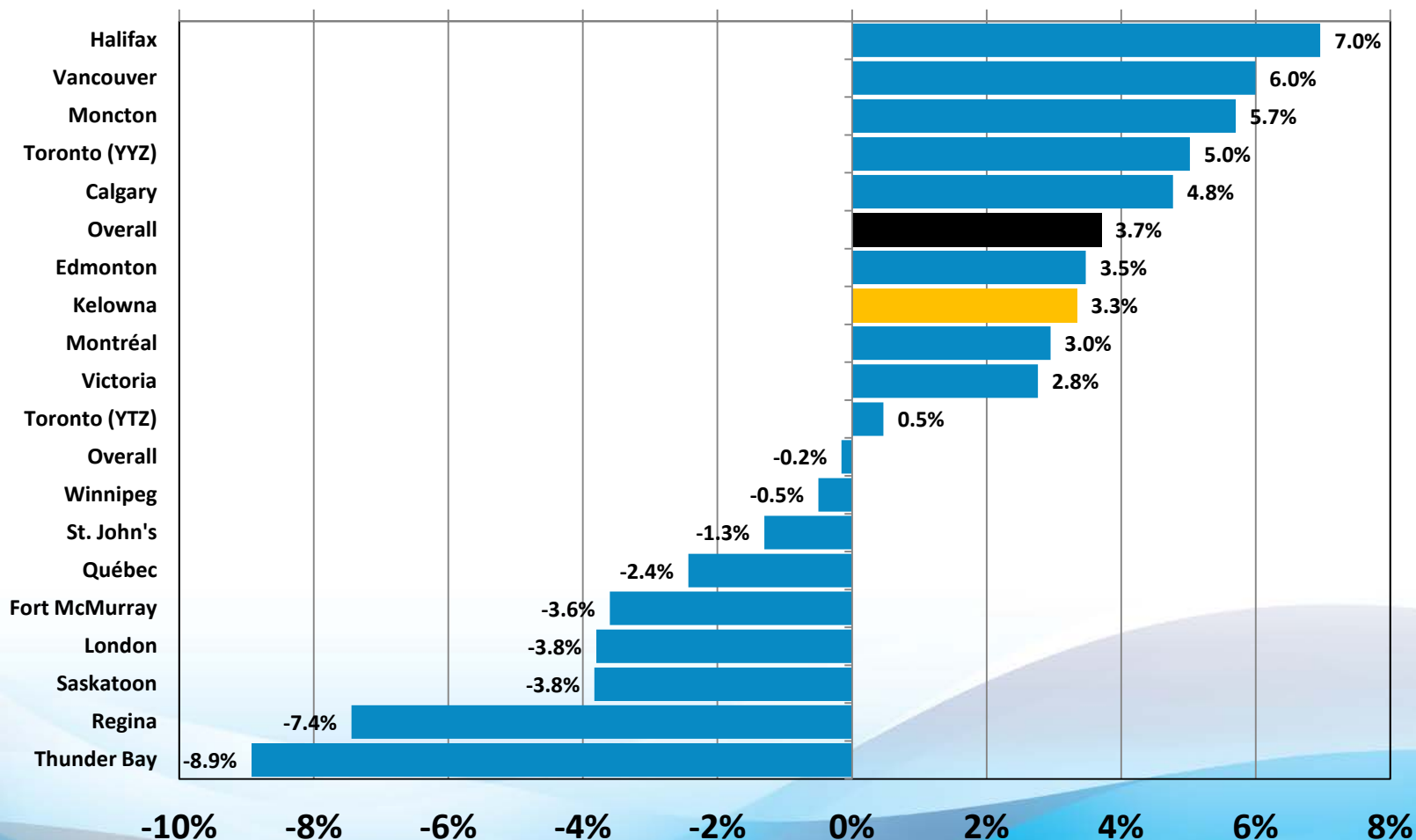


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Top 20 Airports in Canada - First half of 2015 % Change

Trends in Seat Capacity - S2 2015



Top 20 Airports in Canada - Second Half of 2015 % Change Outlook

Air Service - Peer Airports

Category	YLW	YTZ	YMM	YYJ	YQR	YXE	YQB	YYT
	Kelowna	Toronto City	Fort McMurray	Victoria	Regina	Saskatoon	Quebec	St. John's
# of Nonstop Destinations	18	20	9	14	21	20	28	21
Weekly Outbound Seats	20,774	43,501	14,335	22,424	16,725	18,272	20,867	19,837
# of Airlines	10	2	4	7	7	7	12	8

Air Service Development Priorities

- ▶ New ultra low cost carrier service.
- ▶ Domestic -daily flights (24/7/365) to Toronto.
- ▶ New regional tier three service to northern communities within B.C.
- ▶ Transborder service- Los Angeles, Chicago and Minneapolis-St. Paul.
- ▶ Charter service to a European destination.
- ▶ More leisure flights to sunspot destinations.

Next Steps

Next Steps: Your Feedback

- ▶ Your feedback from the survey will be used in the development of the Master Plan 2045.

- ▶ www.surveymonkey.com/r/YLWMASMASTERPLAN2045-1

- ▶ Additional consultations will be held in the region through to Spring 2016.

- ▶ Public Open House in February

- ▶ YLW will report on the consultation results in the Detailed Master Plan in Summer 2016.



Thank you!

Questions and Discussion