



Kelowna International Airport

Master Plan 2045

Presentation to City Council

September 19, 2016



SNC • LAVALIN

YLW Master Plan 2045

Presentation Overview

- Our Progress and Current Status
 - Review of Master Plan 2045 Study Components
 - Stakeholder and Public Consultation
- Key Findings
 - Highlights and Recommendations
 - Next Steps and Timing



YLW Master Plan 2045

Our Progress and Current Status

- Updated air traffic forecasts
- Completed two internal YLW workshops and one consultant integration workshop
- Refined analysis and detailed recommendations
- Completed stakeholder and public consultations



YLW Master Plan 2045

Master Plan Study Components: At-a-Glance



Air Traffic Analysis and
Forecasting: Air Traffic and
Passenger Growth



Apron and Aircraft
Parking (Infrastructure)



Airside System:
Runways and Taxiways



Air Terminal Building



Airport Economic Impacts



Public Roads, Access
and Vehicle Parking



New Regulatory Requirements



Commercial Land Development:
Airside and Groundside



Potential Land Acquisition Areas



Noise Contours and Other
Environmental Considerations

Stakeholder and Public Consultation

Timeline and Process: Three-phase Approach

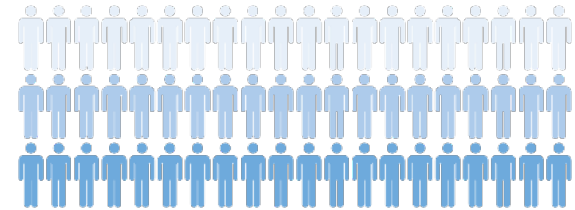
Stakeholder and public feedback was considered in all three phases of the YLW Master Plan 2045



Stakeholder and Public Consultation Outreach Summary

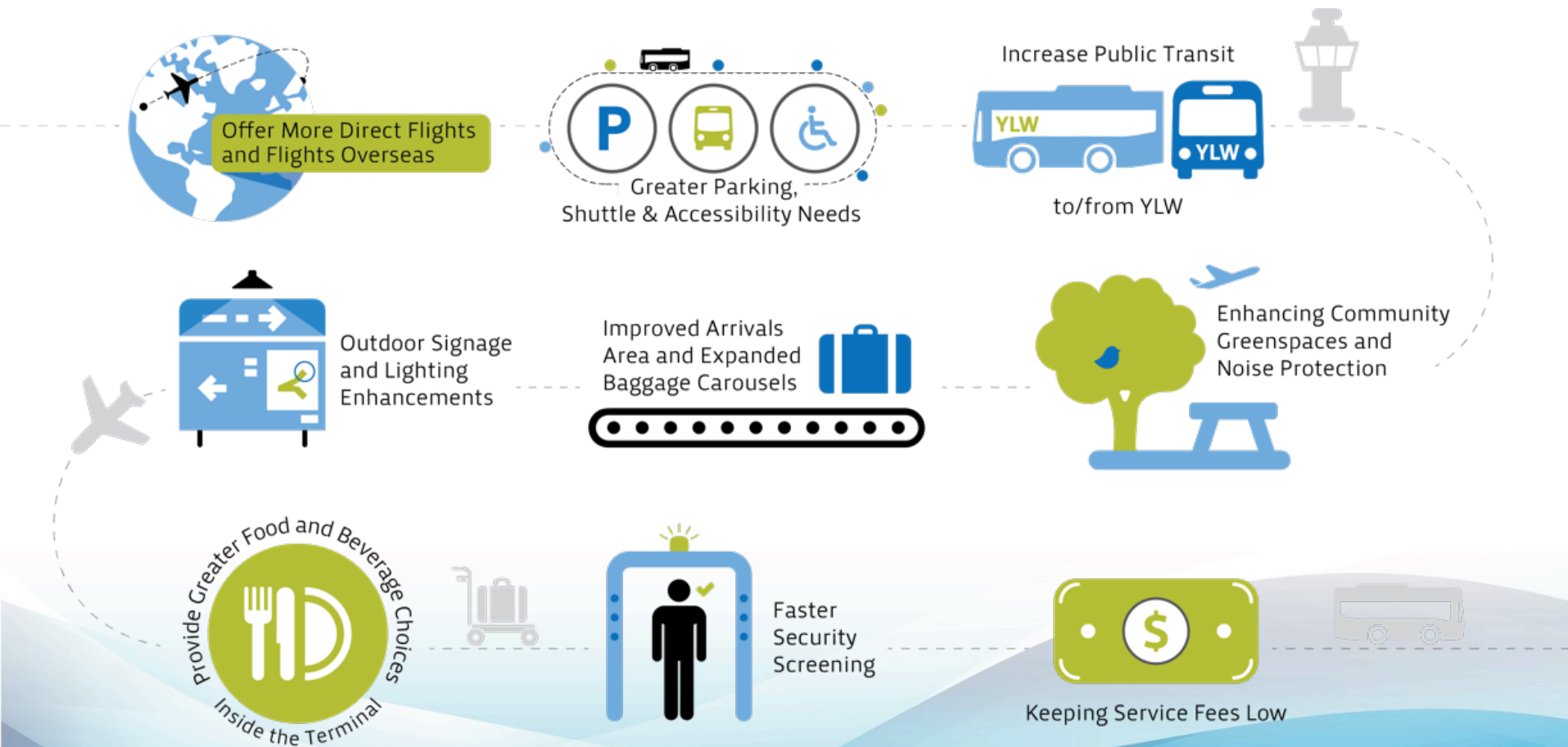
- Stakeholder meetings included the City and our Committees, Business and Government Partners, Chambers of Commerce, Regional Districts, Neighbouring Municipalities, and Aboriginal and First Nations Partners
- Two public open houses were also held in 2016 (Feb 27 and Aug 20)
- Print, online and social media awareness and engagement also completed
- Over 10,000 hits to Master Plan webpage
- To date, over 300 surveys completed, and over 100 were submitted online (33.4%)

Over
25 Workshops and
Presentations
Completed



Over
300 
Feedback Forms Received

Stakeholder and Public Consultation Feedback Priorities



Key Findings

Master Plan Findings

YWL's current development strategy remains valid



YWL generates significant direct economic impacts over **1,400 jobs** and a GDP of **\$152 million**



Passenger traffic is forecast to increase from **1.6 to 3.5 million** passengers by 2045

Aircraft movements are forecast to **increase by approximately 50%**
- most will come from air carriers



Current Official Community Plan (OCP) zoning should be preserved
- **a future OCP amendment may be required**



New aerodrome regulations will impact planning

Current **runway capacity and length** are sufficient to meet future demand



Apron will require **five new remote aircraft parking stands** and **one new terminal gate stand** by 2045



Air terminal building will require an **expanded departure lounge** and **baggage claim** areas

Current roadways and parking facilities require **reconfiguration and expansion**



More commercial land (on YWL land) is required

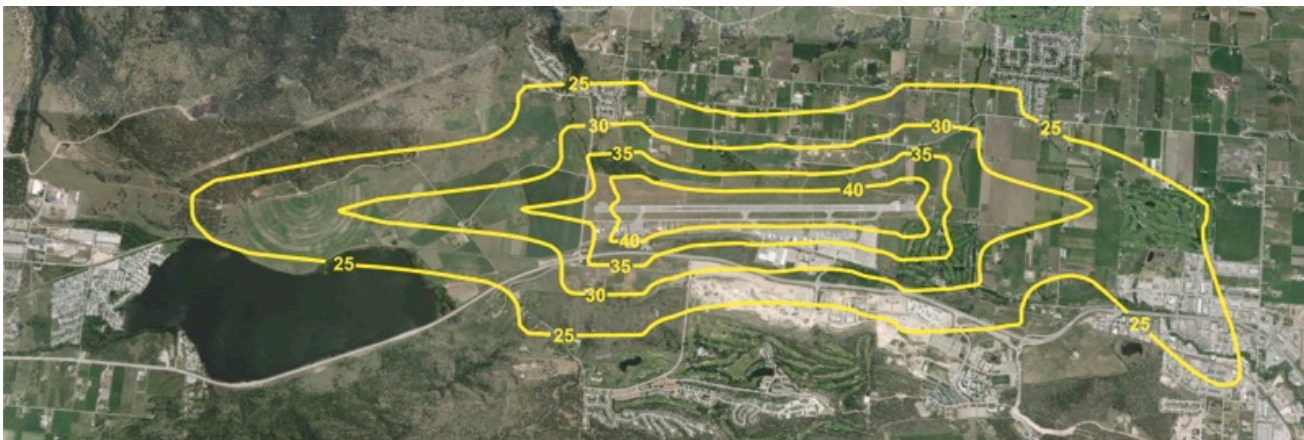


Additional land (off YWL property) is required in addition to the golf course acquisition

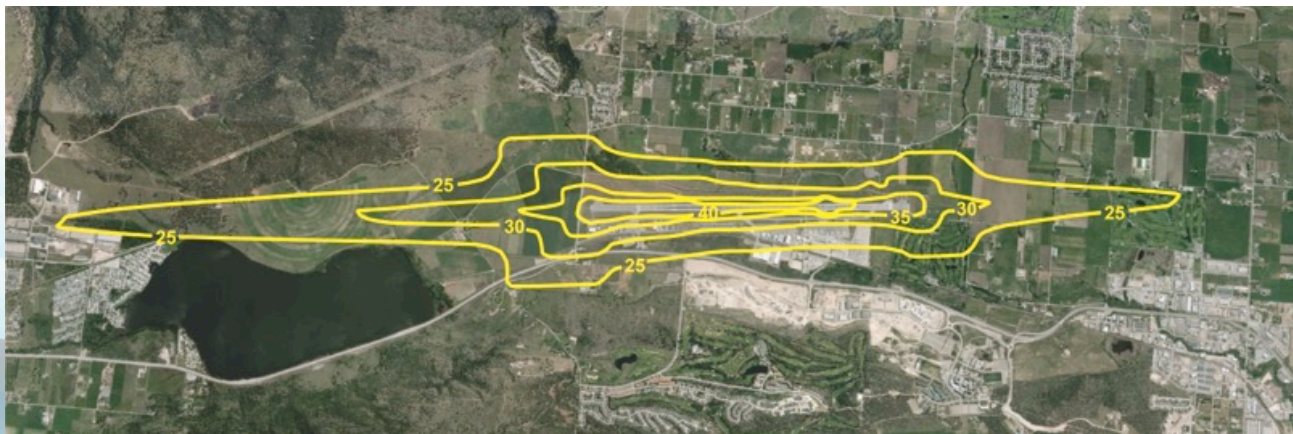
Highlights of YLW Master Plan 2045

Noise Exposure

2025 Noise Exposure Forecast



2045 Noise Exposure Forecast



Highlights of YLW Master Plan 2045

Kelowna 2030 OCP

Recommendation:

- Maintain existing land use protections around the airport to prevent future encroachment of incompatible development
- Align current Official Community Plan (OCP) wildlife protection and habitat enhancement objectives to consider airport-specific operational requirements
- Request removal of Agricultural Land Reserve (ALR) situated within YLW boundaries from Agricultural Land Commission (ALC)
- Review YLW Aeronautical Zoning (i.e. height restrictions under approach/departure paths) based on recommended runway protection

Highlights of YLW Master Plan 2045

Environment

Recommendation:

Mill Creek

- Retain existing Mill Creek channel and locate any future airside projects east of the runway beyond the Creek
- Regionally coordinate management and control strategies for Mill Creek

Glycol Collection

- Develop a glycol collection system that allows waste water treatment prior to being discharged into downstream receiving waters or sewer system

Highlights of YLW Master Plan 2045

Runway Length

- Protect for Non Precision Runway for larger aircraft such as the B767 A330; and newer B787, A350
- Short-term: Implement Runway End Safety Areas (RESA)
- Longer-term: Extended Runway within airport boundaries
- up to maximum 10,000 ft length



Highlights of YLW Master Plan 2045

Runway Length

Recommended Layout



Highlights of YLW Master Plan 2045



Apron and Aircraft Parking

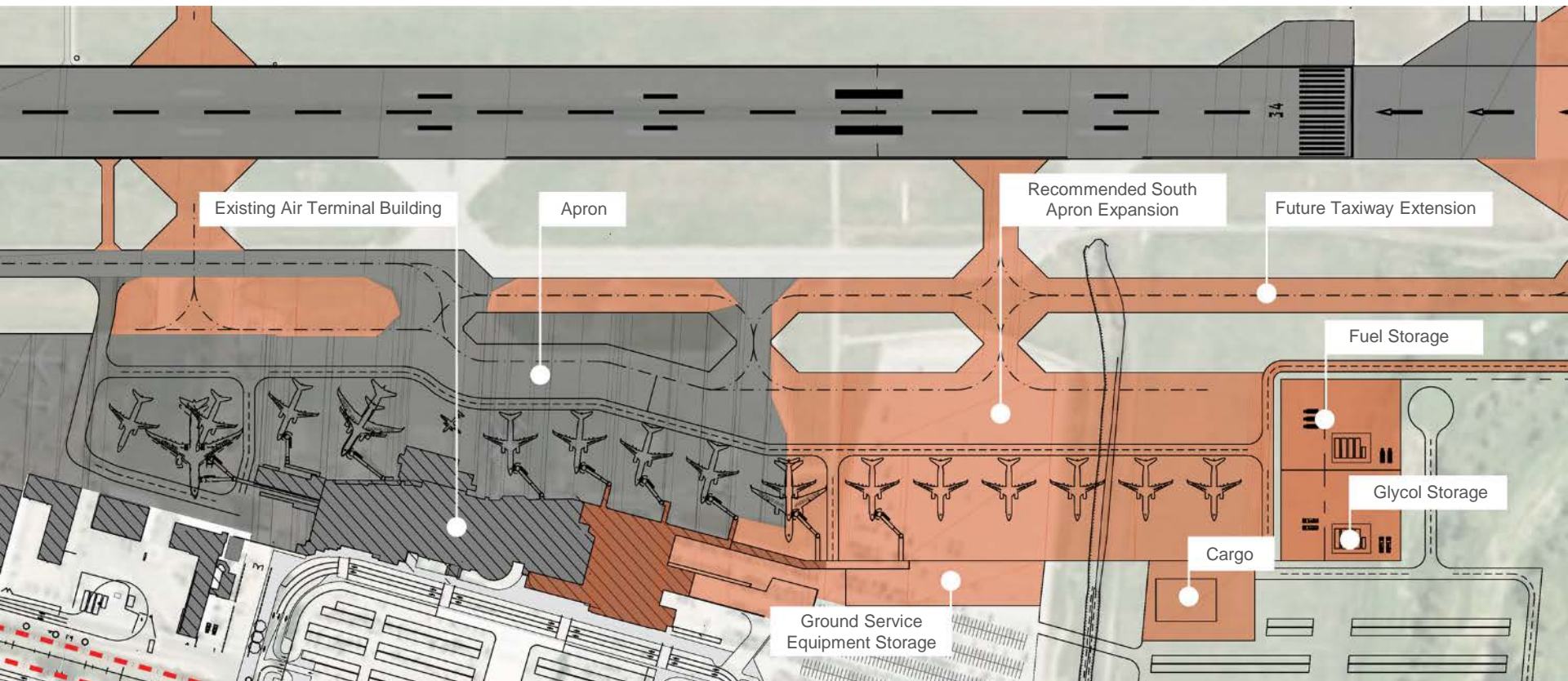
Recommendation:

- Add one to two terminal gates by 2036 - 2040
- Add two to three remote parking stands by 2025
- Five total needed by 2045

Highlights of YLW Master Plan 2045

Apron and Aircraft Parking

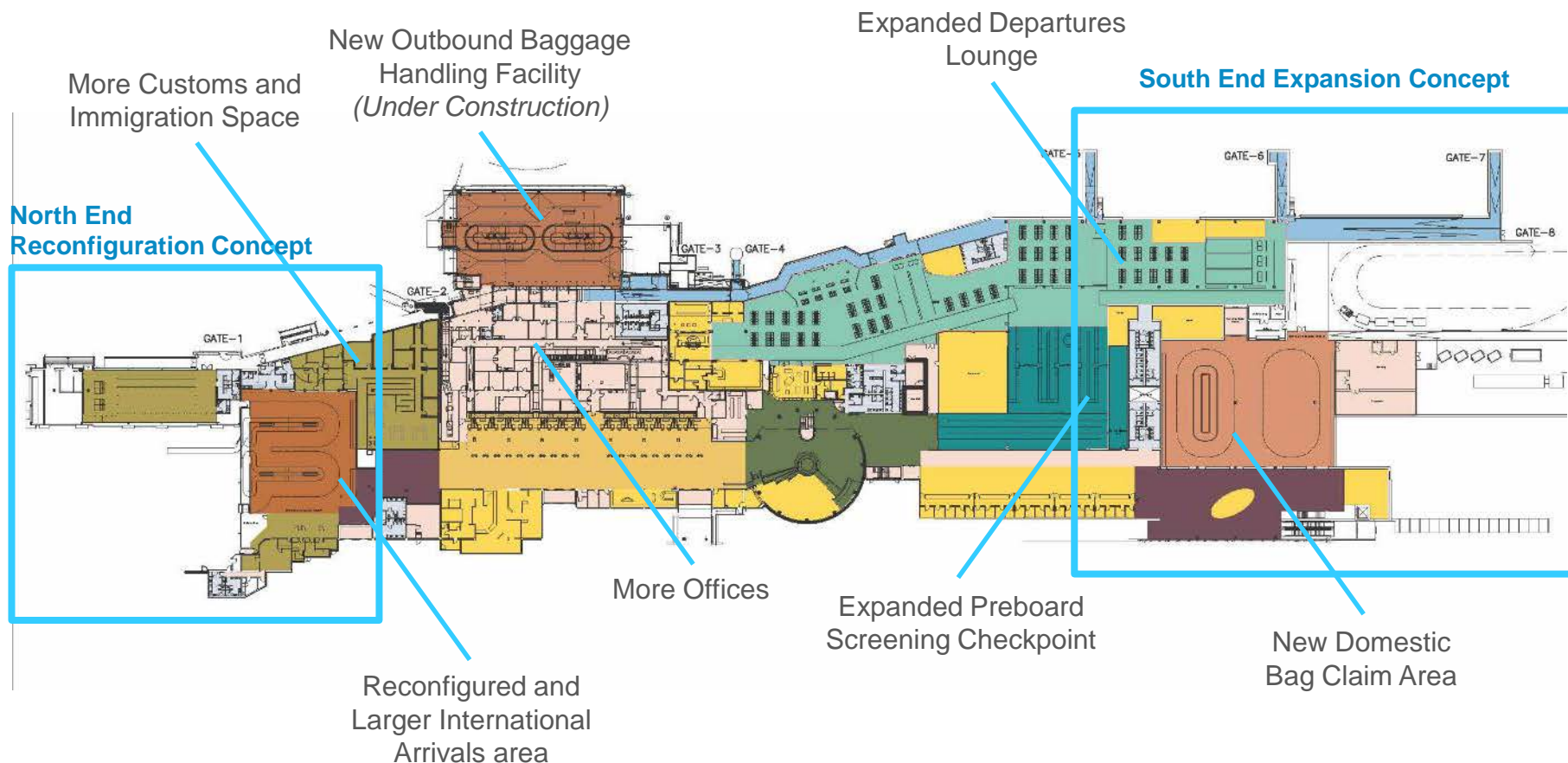
Recommended Layout



Highlights of YLW Master Plan 2045

Air Terminal Building

Recommended Layout



Source: Dialog and SNC-Lavalin

* Details of future layouts are at the discretion of the airport

Highlights of YLW Master Plan 2045

Air Terminal Building

Terminal Demand-Capacity

	Note	Existing, Incl. New Bag Make Up /HBS (m2)	Updated ATB Functional Program Requirements (m ²)					
			2016	2020	2025	2030	2035	2045
Enplaning								
Departures Concourse Area (incl. check-in queue)		1,447	756	854	968	1,031	1,151	1,321
Check-in Counters (excl. queuing)		175	124	138	152	166	179	195
Preboard Screening Checkpoint		457	429	429	572	572	572	715
Departures Lounge (Usable)	1	793	969	1,105	1,274	1,375	1,544	1,770
Departures Lounge (Underutilized)	1	396						
Concessions, including storage		1,104	1,113	1,358	1,601	1,824	2,041	2,451
Bag Make-up/HBS		1,042	448	511	589	636	714	819
ATO Support/Airline Offices		648	612	712	819	928	1,346	1,553
Deplaning								
Domestic Bag Claim	2	595	691	1,012	1,012	1,012	1,012	1,012
International/Transborder Bag Claim	2	248	321	321	642	963	963	963
CBSA PIL, Secondary and Support		488	371	455	594	632	688	688
All								
Arrivals Lobby Landside		294	236	276	299	305	313	348
Car Rentals/Tour Operators		44	263	320	363	388	401	453
Total All Spaces		7,731	6,333	7,491	8,885	9,832	10,924	12,288
Demand less than 95% of Capacity								
Demand within 95% and 110% of Capacity								
Demand > 110% of Capacity								

Highlights of YLW Master Plan 2045

Car Parking and Roads

Recommendation:

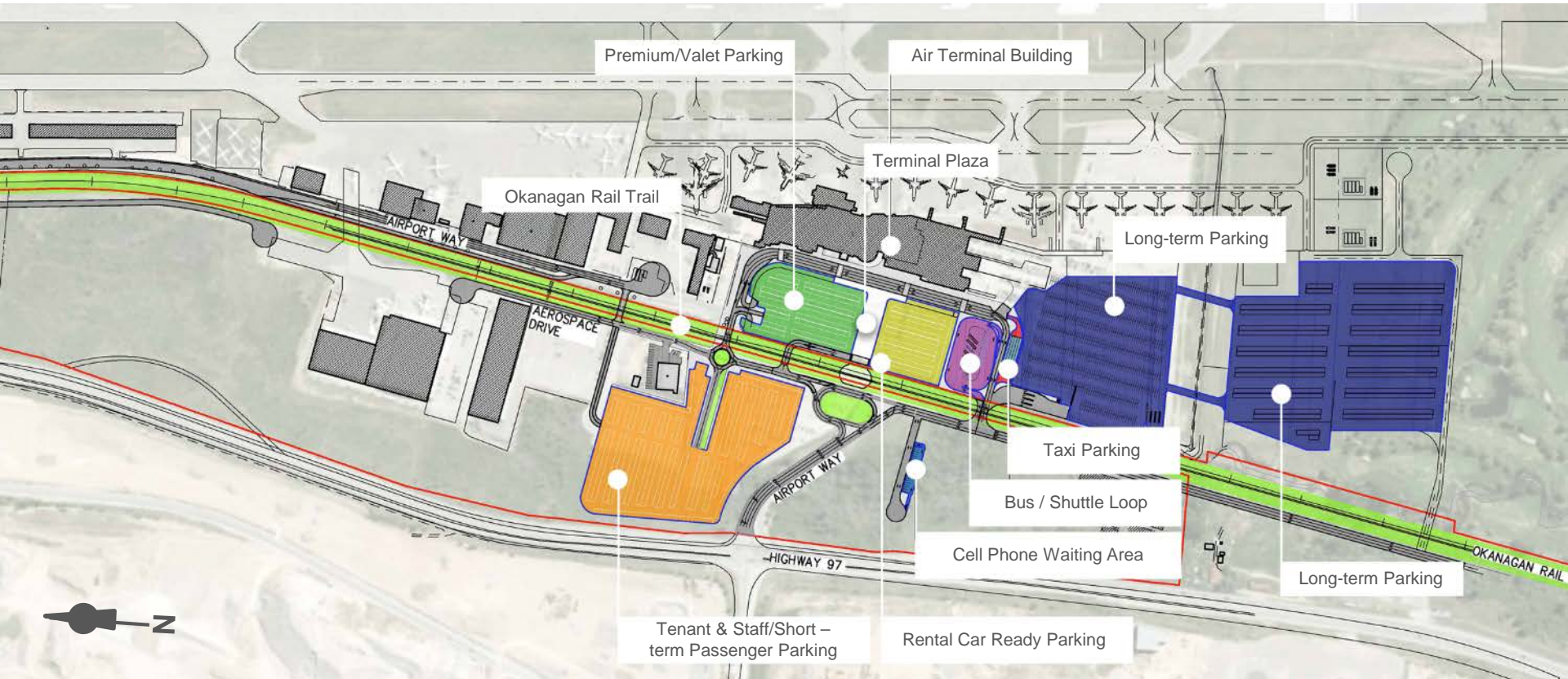
- Reconfigure road network accessing the terminal, segregate terminal traffic
- Progressive upgrade to Highway 97 / Airport Way intersection
- Develop dedicated bus/shuttle loop
- Expand short and long-term parking lots, and car rental lot
- Create terminal plaza

Master Plan analysis has identified that a parkade is not required

Highlights of YLW Master Plan 2045

Car Parking and Roads

Recommended Layout

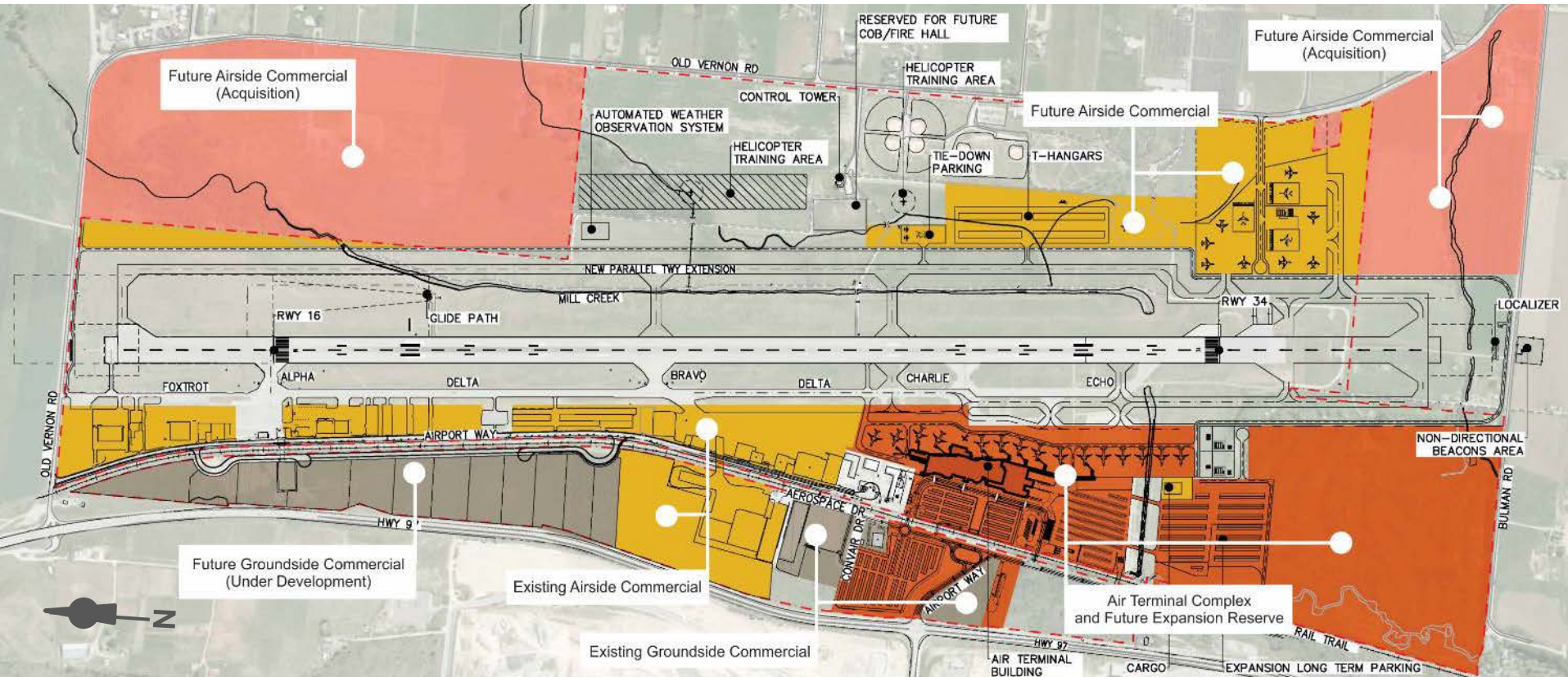


Source: Airbiz, 2015

Highlights of YLW Master Plan 2045

Commercial Land Development

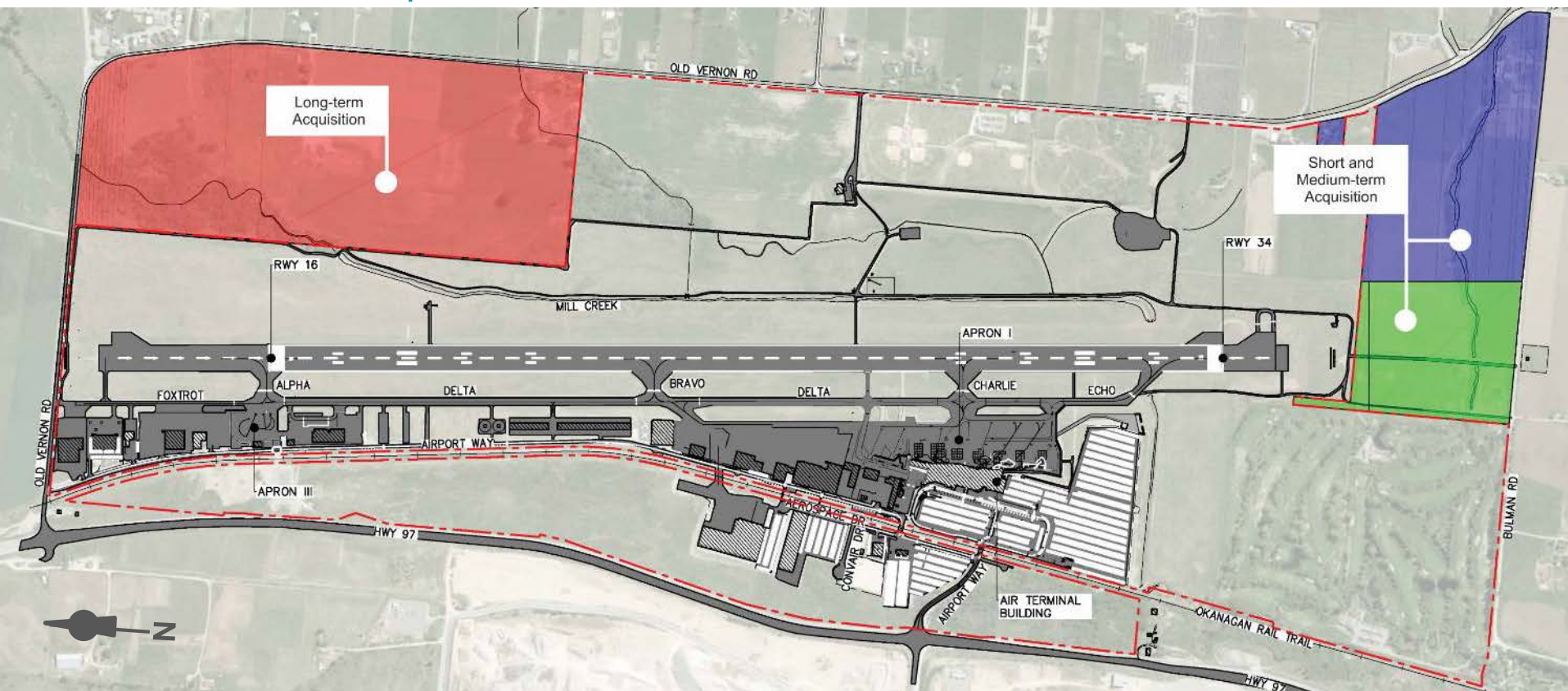
Recommended Layout



Highlights of YLW Master Plan 2045

Land Acquisition

Recommended Acquisition



Next Steps

- Council Feedback – 7 October 2016
- Finalize Stakeholder Consultations – 7 October 2016
- Finalize Master Plan 2045 Document – Late October/November 2016
- Presentation to Council for Master Plan 2045 Endorsement – November 2016