

MASTER
PLAN | VISION
2040



Master Plan Study Public Workshop #2

January 27-28, 2016



Raleigh-Durham Airport Authority

#rdu2040

Master Plan Study Progress



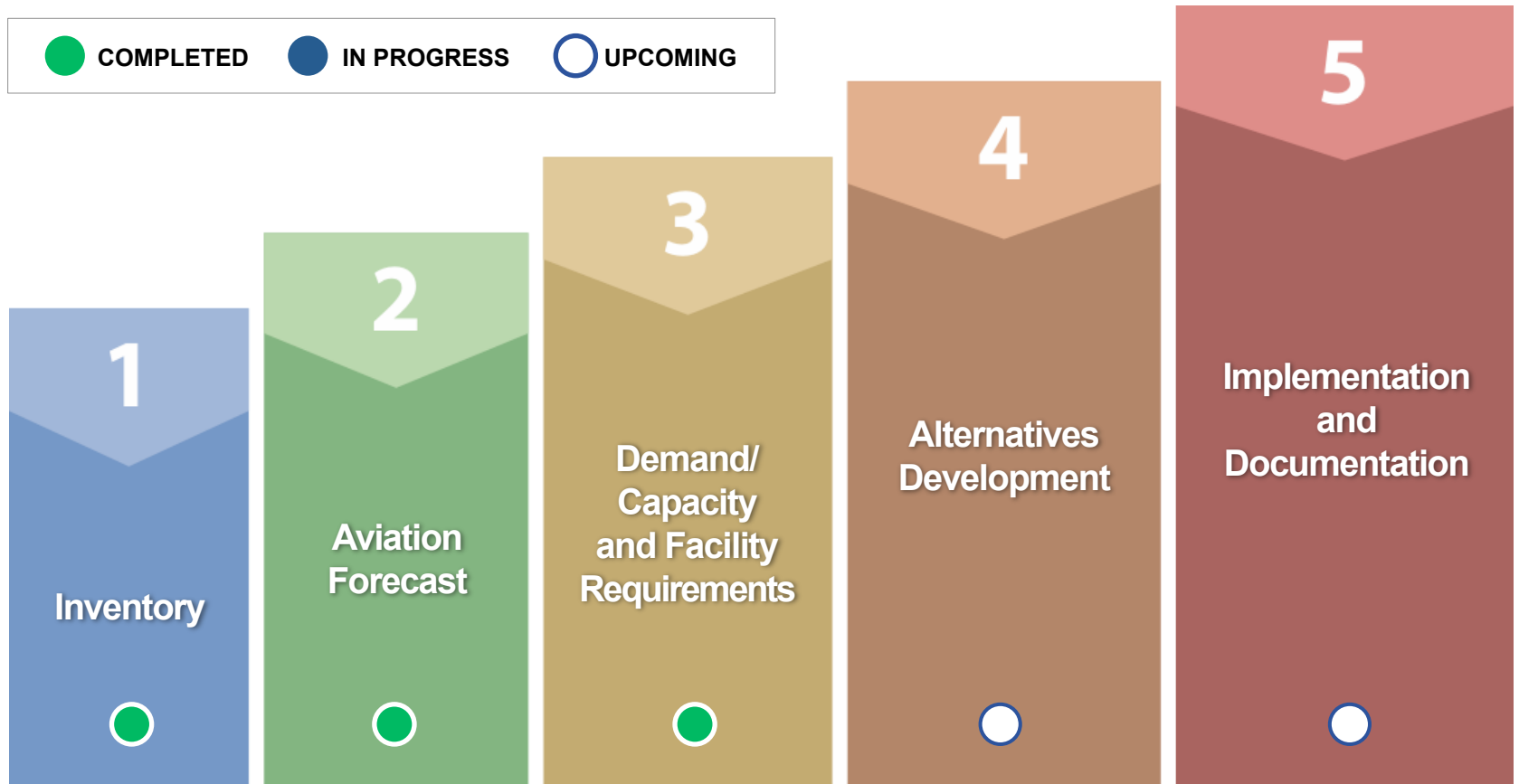
COMPLETED



IN PROGRESS

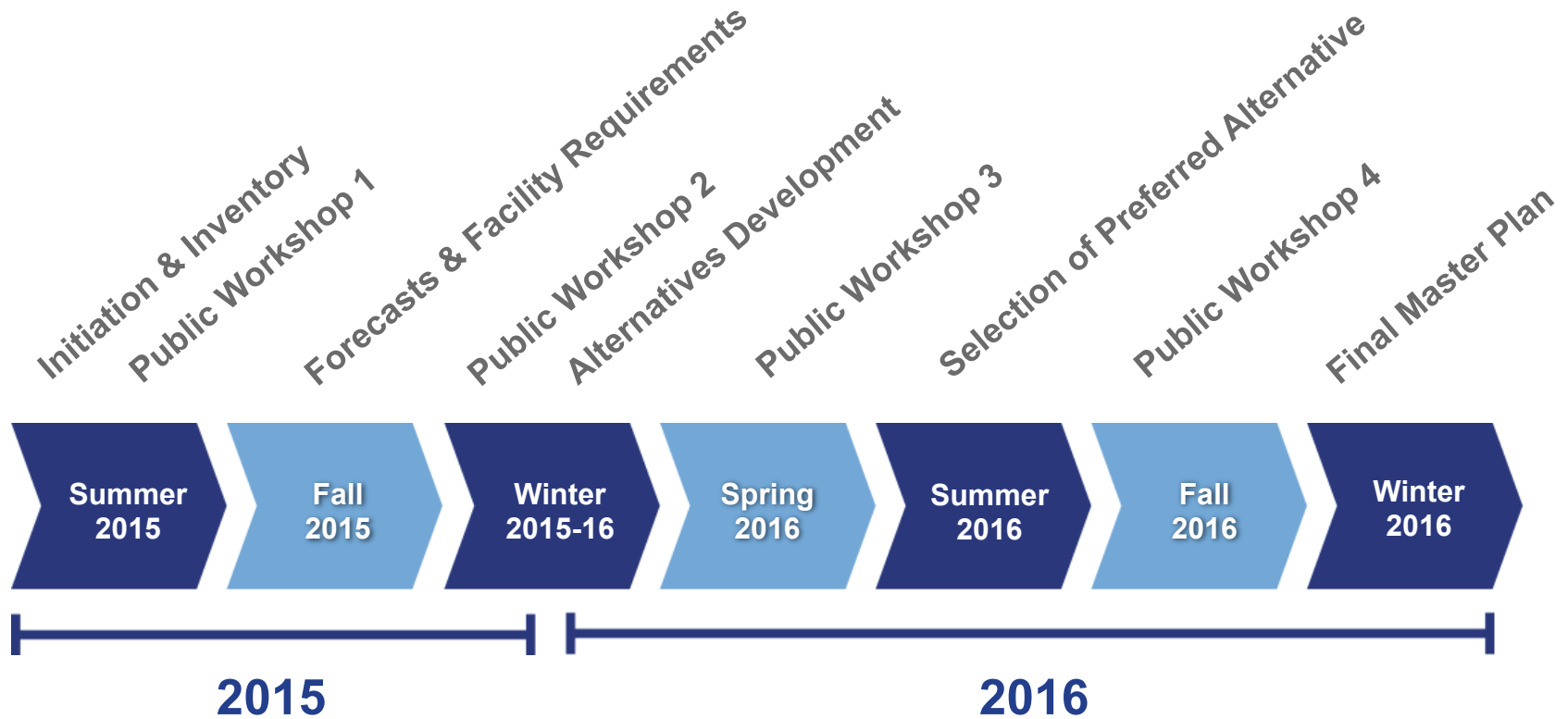


UPCOMING



CURRENT

Schedule



The project is following the defined 18-month schedule.

Master Plan Goals



Encompass improvements that will ensure the Airport's safety, efficiency, and capability to serve the community's aviation needs.



Optimize infrastructure and resources in an operationally, financially and environmentally sustainable manner.



Enhance the passenger and customer experience through long range development actions.

Master Plan Goals



Define development plans that are scalable to respond to variations in demand over the planning horizon.

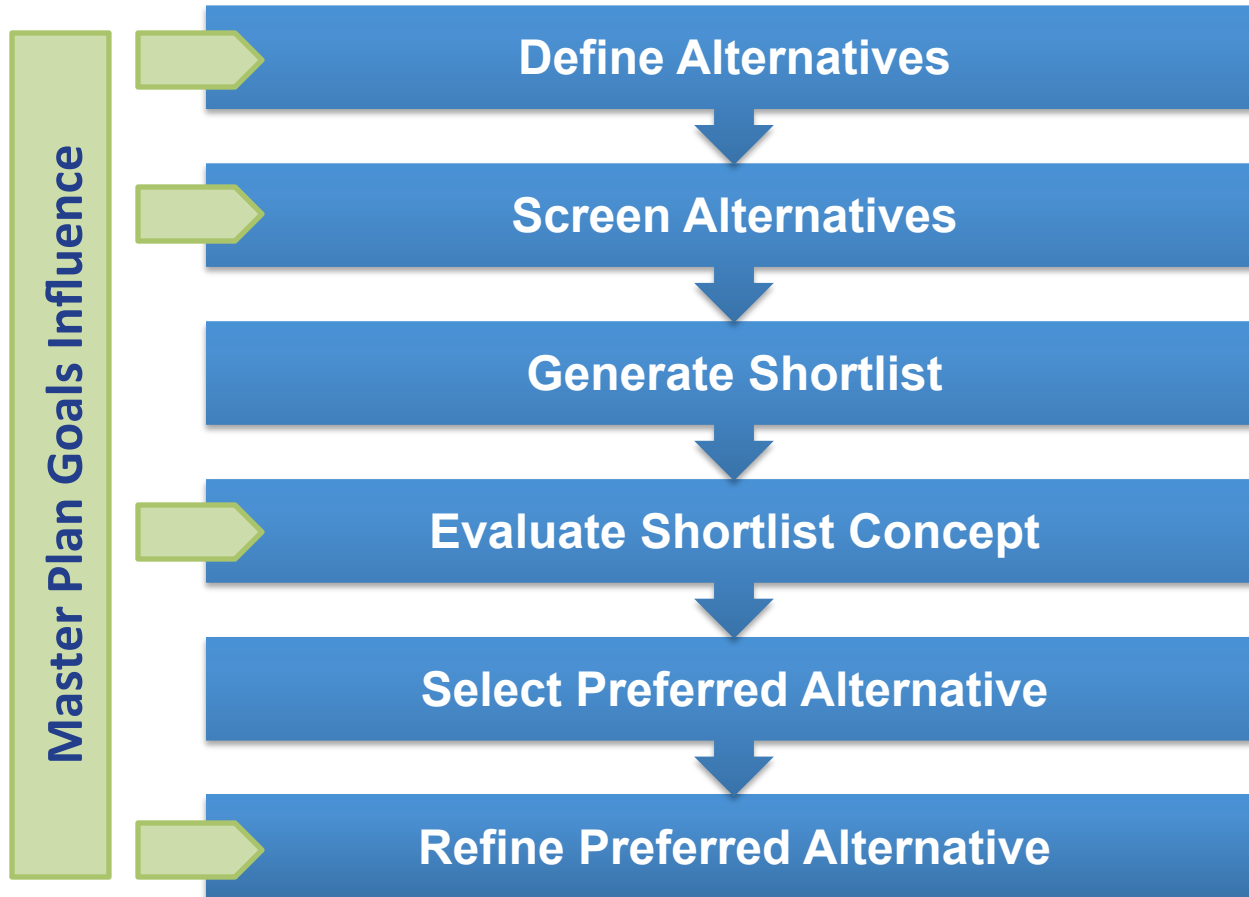


Preserve flexibility to adapt to emerging and future technologies.



Accommodate connectivity to various modes of transportation as components of Airport development plans.

Use of Goals in Alternatives Planning



Aviation Forecasts

Forecasts are projections of future levels of local demand for air travel to support master planning analyses.

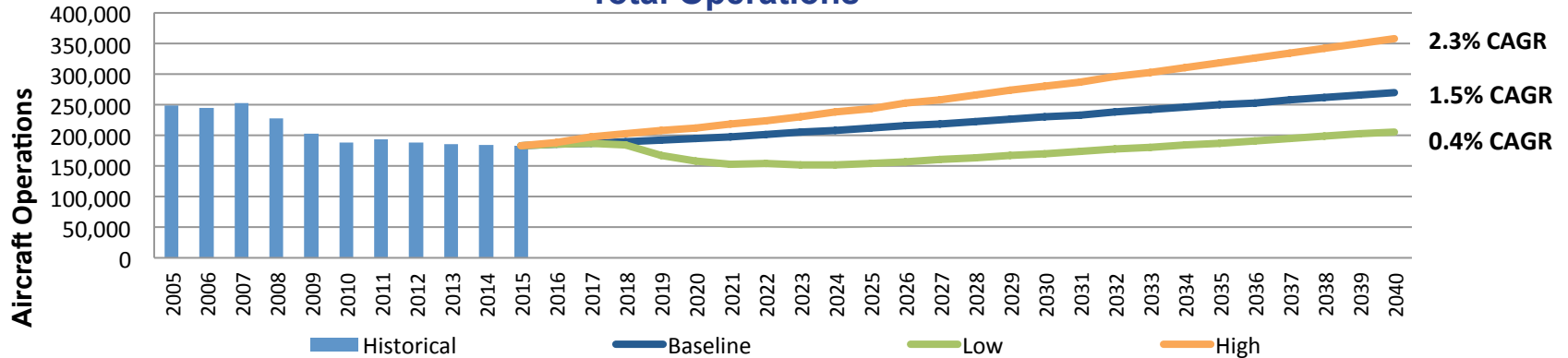
Forecast Scenarios

- ▶ **Baseline Forecast:** Most likely estimate of activity over the planning horizon, reviewed by FAA as part of planning process
- ▶ **High Forecast Scenario:** economic growth greater than forecast.
- ▶ **Low Forecast Scenario:** extended recession similar in scale to that experienced in 2007/2008

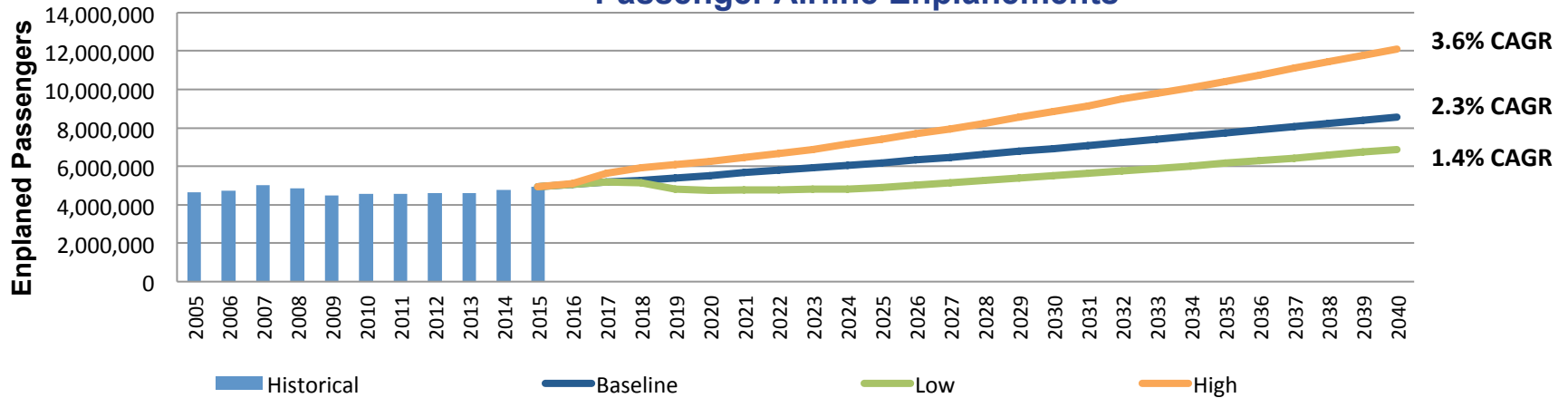
FAA Approval of Baseline Forecasts Received
December 2015

Aviation Forecasts

Total Operations



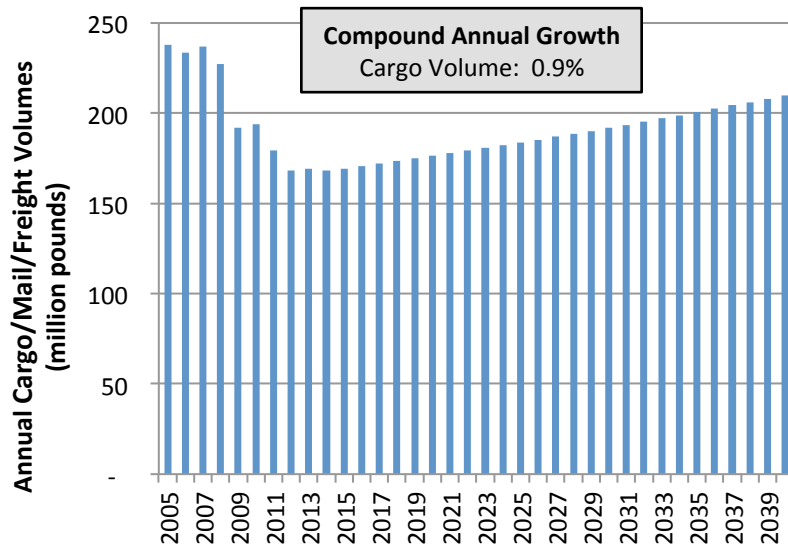
Passenger Airline Enplanements



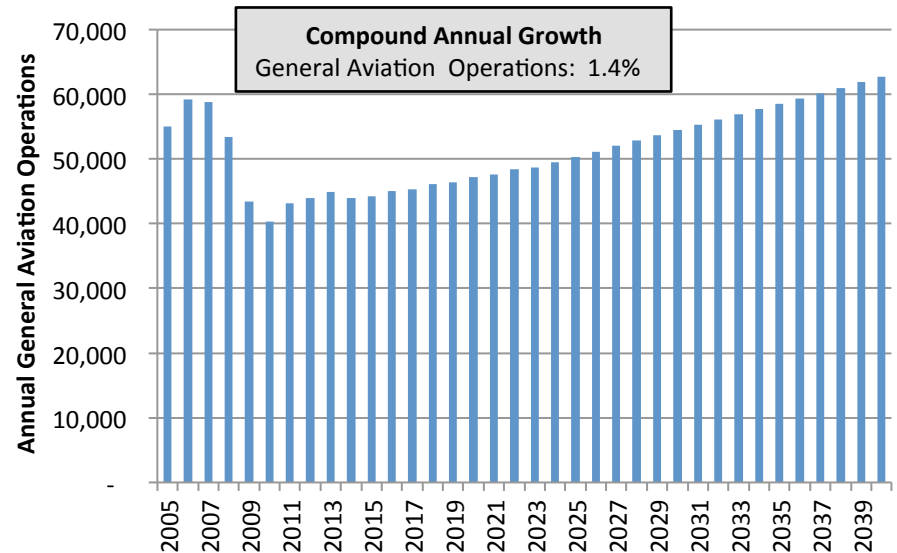
CAGR: Compound Annual Growth Rate

Aviation Forecasts

In addition to air carrier activity, forecasts are prepared for additional segments of activity at RDU.



Sources: Raleigh Durham Airport Authority, 2005-2015 (June); Ricondo & Associates, Inc. (analysis), August 2015.



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Demand/Capacity → Facility Requirements



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Analyses

- ▶ **Demand/Capacity Analysis**
 - Assess existing RDU facilities' ability to accommodate future demand
 - Identify capacity shortfalls and surpluses
- ▶ **Facility Requirements Analysis**
 - Defines facilities needed to safely and efficiently accommodate future demand
 - Provides building blocks for alternatives development phase
- ▶ **Specific Areas of Focus**
 - Airfield
 - Terminal
 - Landside
 - Support
 - General Aviation
 - Cargo

Analyses

► Methodologies

- Simulation modeling of complex facilities
- Other analytic tools (spreadsheet-based or other) to simulate demand patterns and growth relative to existing facilities
- Industry planning factors
- Quantitative and qualitative analyses

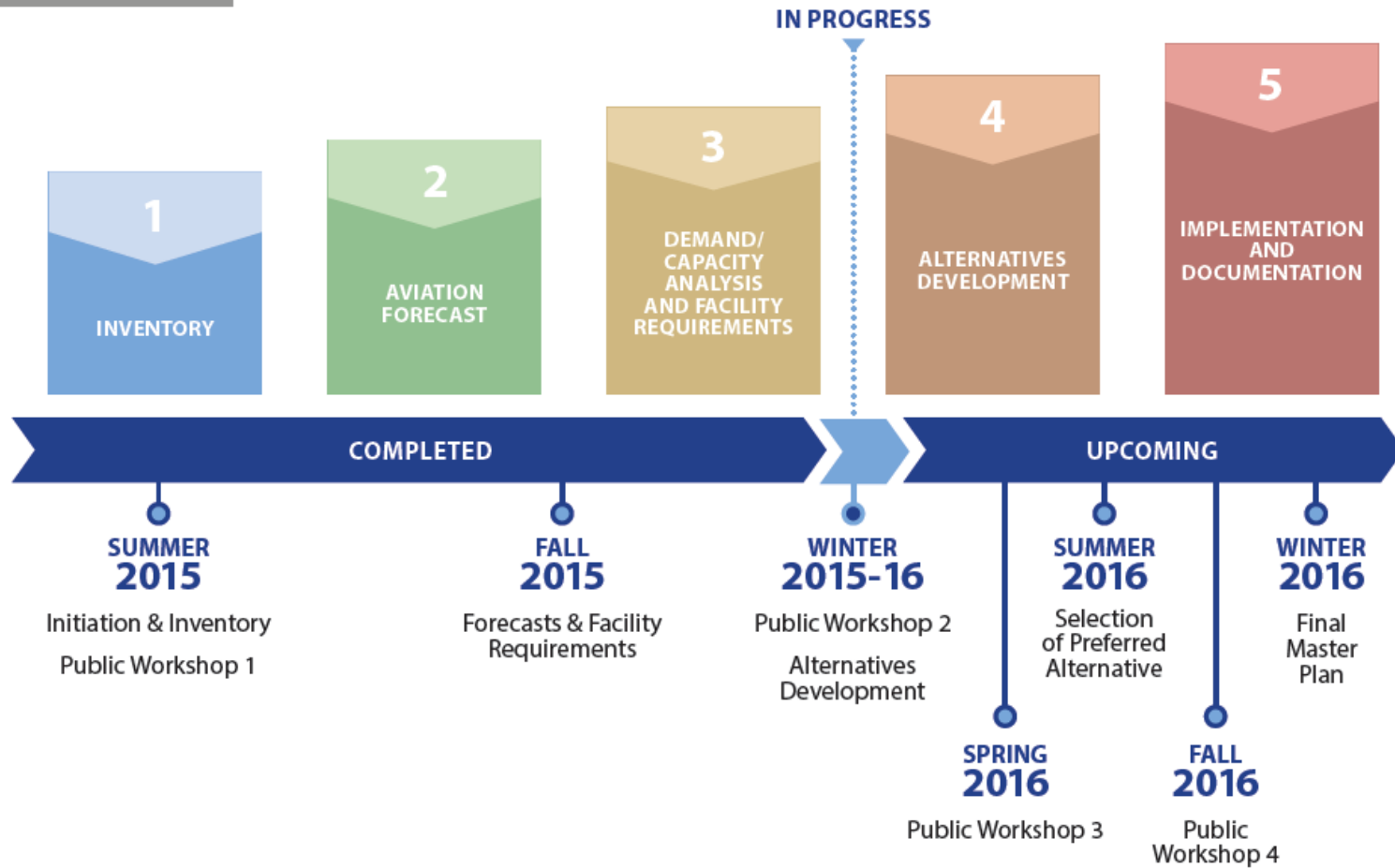
► Level of Service goals

- Terminal (IATA, *Airport Design Reference Manual*, 10th edition)
- Roadways and curbsides (ACRP, *Airport Curbside and Terminal Area Roadway Operations*)

Significant Conclusions to Date

- ▶ Airfield capacity adequate through 2040.
- ▶ Analysis of airfield operations needed to determine requirements for potential international service and for Runway 5L/23R reconstruction.
- ▶ Reconstruction of 5L/23R and related enabling projects must occur within 5 years, resulting in significant investment by the Authority.
- ▶ Additional gate capacity needed in both terminals (up to 23+ total gates) by 2040, depending on growth scenario.
- ▶ Immediate capacity improvements in FIS needed to accommodate peak international arrivals.
- ▶ Roadway and intersection improvements needed.
- ▶ Rental car facilities expansion required to accommodate growth.

Next Steps



Please Visit the Information Stations



Thank You