



# Working Paper Two

Renton Airport Advisory Committee (RAAC), February 2015

Master Plan

Renton Municipal Airport/  
Clayton Scott Field

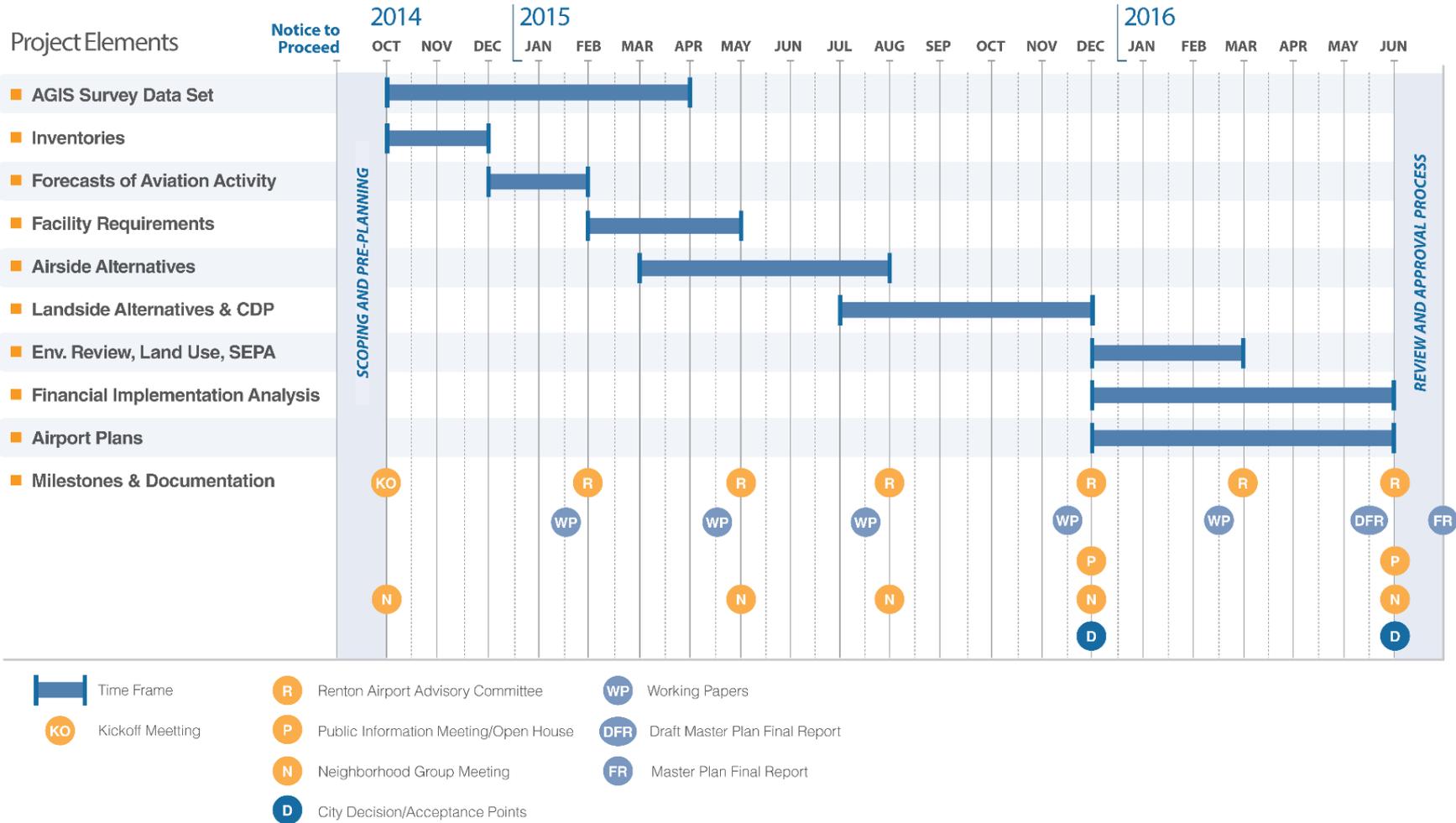
## Consultant Team

- Mead & Hunt
  - Ryan Hayes
  - Brodie Ayers
- McFarland Architects & Planners
  - Mark McFarland
- Synergy Consultants, Inc.
  - Mary Vigilante
- Six other specialty firms

## Planning Process

- **Project Kickoff and Inventory**
- **Forecasts of Aviation Activity**
- **Facility Needs/Requirements Determination**
- **Alternatives Analysis**
- **Environmental Review, Land Use, SEPA**
- **Implementation Plan**

# Project Schedule



## Public Outreach Update

- ➔ Background information and working papers on website
- ➔ Comment form on website
- ➔ Email sign up form on website
- ➔ Kennydale neighborhood briefing completed in January

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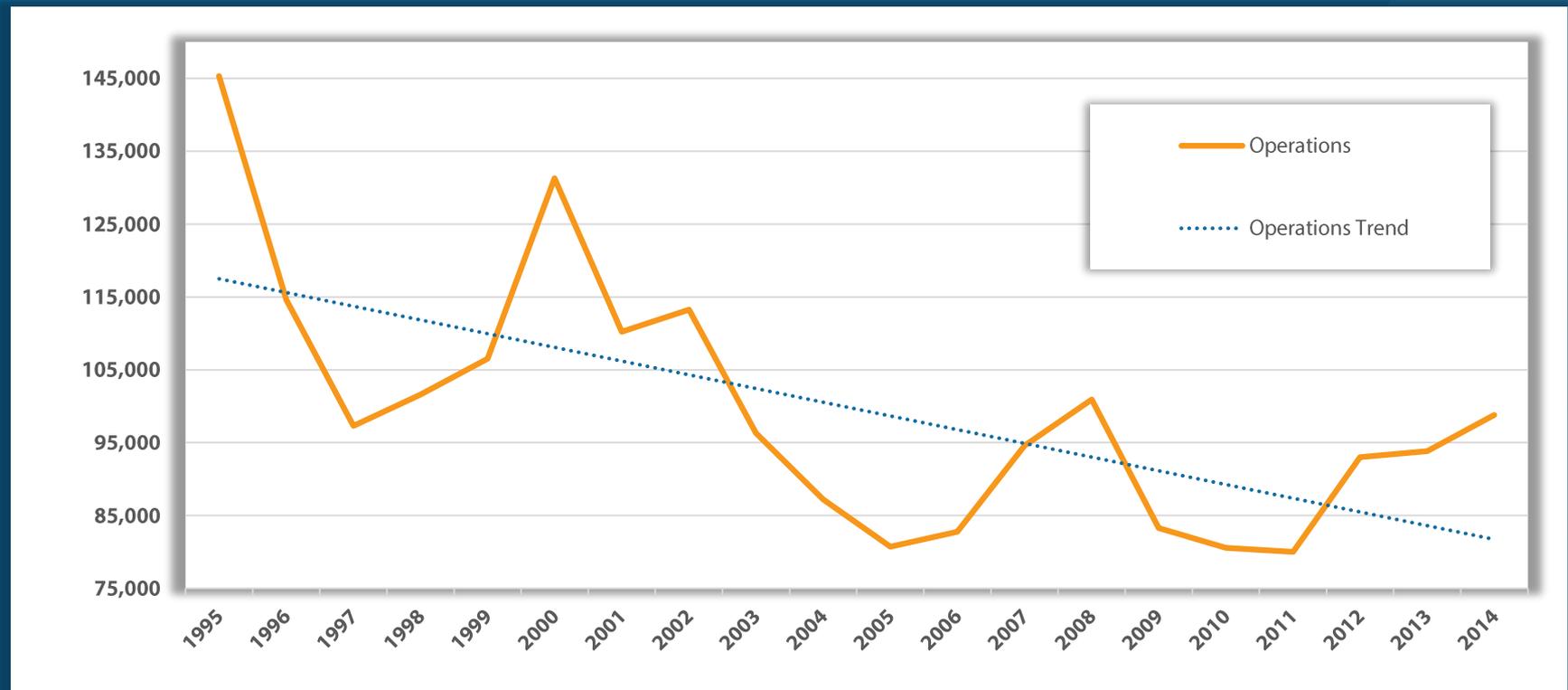
# DRAFT Forecasts of Aviation Activity Chapter

- ➔ **Conditions and Assumptions**
- ➔ **Historic and Existing Airport Activity**
- ➔ **Aviation Activity Forecasts**
- ➔ **General Aviation Based Aircraft Forecasts**
- ➔ **Critical Aircraft Analysis and Forecasts of Operations by Runway Design Code (RDC)**
- ➔ **Summary**

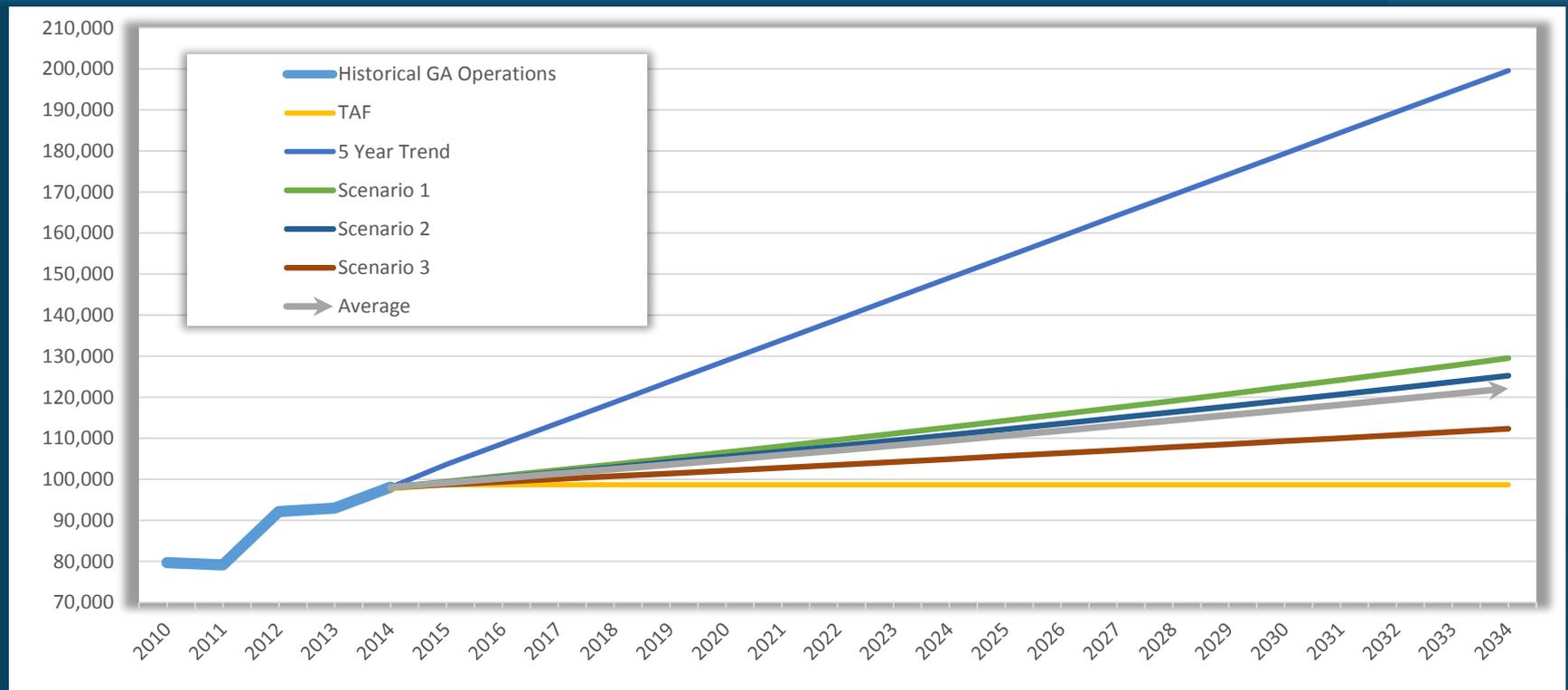
# Conditions and Assumptions

- ➔ **Regional General Aviation Trends and Projections**
  - **FAA Terminal Area Forecast (TAF)**
  - **Washington State Long-term Air Transportation Study**
- ➔ **National General Aviation Trends and Projections**
  - **FAA Aerospace Forecasts Fiscal Years 2014-2034**
  - **General Aviation Aircraft Manufacturers Association (GAMA)**
- ➔ **Regional Socioeconomic Conditions**
  - **Population, Income and Employment**

# Historical and Existing Airport Operations



# General Aviation Operations Forecast



# Summary of Total Operations by Aircraft Type

Aircraft Type	2014	2019	2024	2029	2034
<b>Boeing 737s</b>	<b>485</b>	<b>624</b>	<b>624</b>	<b>624</b>	<b>624</b>
<i>Aircraft per Month</i>	<i>40</i>	<i>52<sup>2</sup></i>	<i>52<sup>2</sup></i>	<i>52<sup>2</sup></i>	<i>52<sup>2</sup></i>
<b>General Aviation</b>	<b>98,072</b>	<b>103,603</b>	<b>109,446</b>	<b>115,618</b>	<b>122,139</b>
<i>Single Engine Piston</i>	<i>88,755</i>	<i>93,761</i>	<i>99,049</i>	<i>104,365</i>	<i>110,536</i>
<i>Multi-Engine Piston</i>	<i>1,471</i>	<i>1,554</i>	<i>1,642</i>	<i>1,734</i>	<i>1,832</i>
<i>Turboprop</i>	<i>2,452</i>	<i>2,590</i>	<i>2,736</i>	<i>2,890</i>	<i>3,053</i>
<i>Business Jet</i>	<i>3,923</i>	<i>4,144</i>	<i>4,375</i>	<i>4,625</i>	<i>4,886</i>
<i>Helicopter</i>	<i>1,471</i>	<i>1,554</i>	<i>1,642</i>	<i>1,734</i>	<i>1,832</i>
<b>Military</b>	<b>259</b>	<b>259</b>	<b>259</b>	<b>259</b>	<b>259</b>
<b>Total</b>	<b>98,816<sup>1</sup></b>	<b>104,486</b>	<b>110,329</b>	<b>116,501</b>	<b>123,022</b>

# Critical Aircraft Analysis

- ➔ **FAA Definition of Critical (Design) Aircraft:**
  - **The most demanding aircraft with at least 500 annual operations that operates, or is expected to operate, at the Airport.**
- ➔ **Current Critical Aircraft:**
  - **B-II, King Air 200**
- ➔ **Future Recommended Critical Aircraft:**
  - **D-III, Boeing 737**

# Summary of Operations by RDC

RDC	2014	2019	2024	2029	2034
A-I, B-I	92,087	97,256	102,728	108,510	114,620
A-II, B-II	4,405	4,965	5,245	5,538	5,482
C-I, C-II	1,285	1,358	1,435	1,515	1,600
D-I, D-II	494	522	555	584	615
C-III, D-III (737s)	485	624	624	624	624
C-III, D-III (GA)	21	21	22	23	25
<b>Total</b>	<b>98,816<sup>1</sup></b>	<b>104,486</b>	<b>110,329</b>	<b>116,501</b>	<b>123,022</b>

# Representative Aircraft by RDC



**RDC A-I**  
Single Engine Aircraft - 2 to 6 Seats  
Boeing Bonanza  
Cirrus SF22  
Cessna 172



**RDC B-I**  
Twin-Prop Aircraft - 4 to 10 Seats  
Piper 21-310 Navajo  
Deedl Dancin' 50  
Cessna 414



**RDC B-II**  
Twin-Turboprop/Business Jet/Small Cabin Aircraft - 6 to 12 Seats - includes most commercial turboprop aircraft.  
Citation Excel/XLS  
Deedl King Air 200  
Pilatus PC-12



**RDC C/D-I**  
Business Jets - 6 to 12 Seats  
Lear 45  
1124 Westwind  
Hawker 400



**RDC C/D-II**  
Commercial/Business Jet - 6 to 70 Seats  
Bombardier CRJ-200  
Bombardier CRJ-600 Challenger  
Embraer ERJ-145

**RDC C/D-III**  
Large Commercial/Business Jet - up to 180 Seats  
Boeing 737/900  
Bombardier CRJ-700 Global Express  
CRJ-900



Representative Aircraft not to scale.

# Forecasts Summary

Operations	2014	2019	2024	2029	2034
<b>Boeing 737</b>	<b>485</b>	<b>624</b>	<b>624</b>	<b>624</b>	<b>624</b>
<i>Aircraft Per Month</i>	40	52	52	52	52
<b>General Aviation</b>	<b>98,072</b>	<b>103,603</b>	<b>109,446</b>	<b>115,618</b>	<b>122,139</b>
<i>Single Engine Piston</i>	88,755	93,761	99,049	104,635	110,536
<i>Multi-Engine Piston</i>	1,471	1,554	1,642	1,734	1,832
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<b>Military</b>	<b>259</b>	<b>259</b>	<b>259</b>	<b>259</b>	<b>259</b>
<b>Total Operations</b>	<b>98,816<sup>1</sup></b>	<b>104,486</b>	<b>110,329</b>	<b>116,501</b>	<b>123,022</b>
<b>Local Operation</b>	<b>55,881</b>	<b>59,557</b>	<b>62,888</b>	<b>66,406</b>	<b>70,123</b>
<b>Itinerant Operations</b>	<b>42,935</b>	<b>44,929</b>	<b>47,441</b>	<b>50,095</b>	<b>52,899</b>
<b>Based Aircraft By Type</b>					
<i>Single Engine Piston</i>	243	256	269	284	299
<i>Multi-Engine Piston</i>	8	9	9	9	10
<i>Turboprop</i>	8	8	9	9	10
<i>Business Jet</i>	5	5	6	6	6
<i>Helicopter</i>	10	11	11	12	12
<b>Total</b>	<b>274<sup>2</sup></b>	<b>289</b>	<b>304</b>	<b>320</b>	<b>337</b>

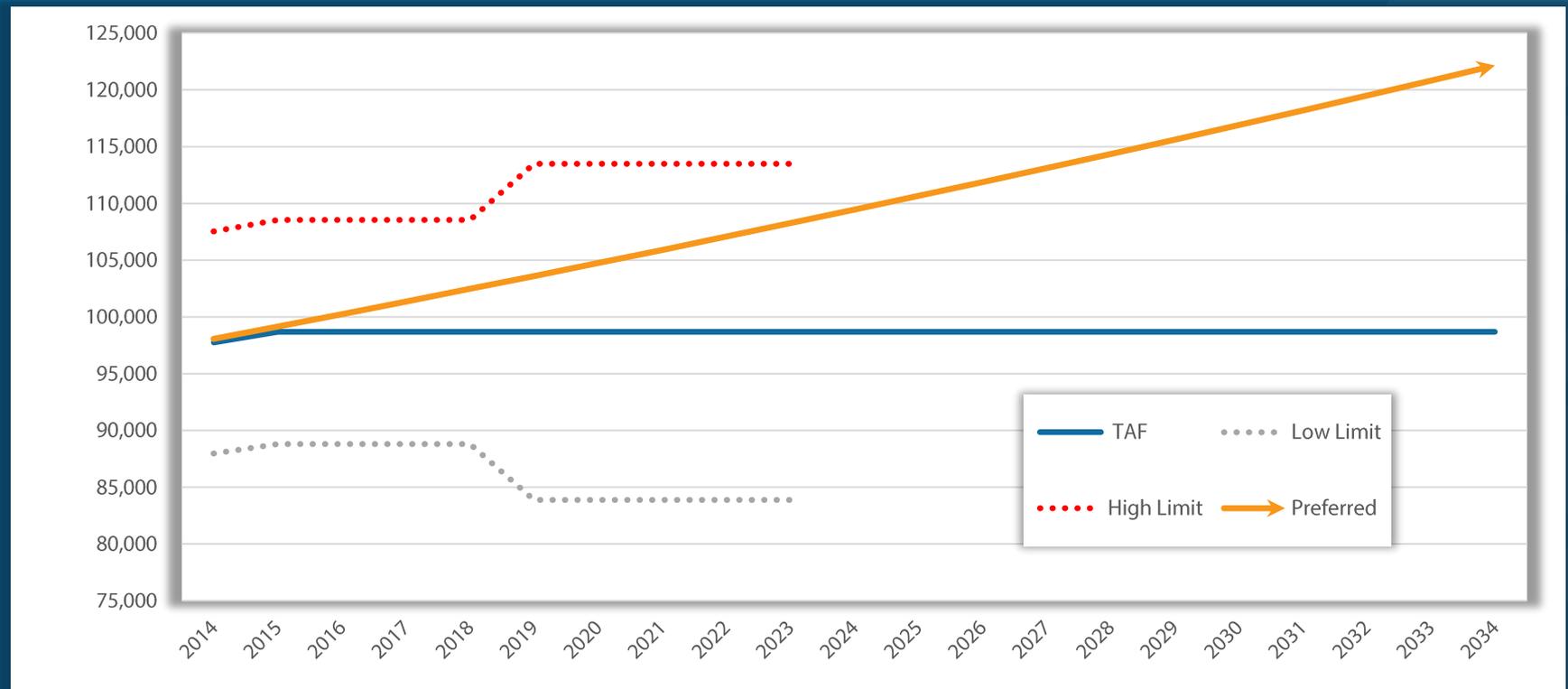
# FAA TAF and Airport Forecast Consistency

## → Forecasts differ by less than:

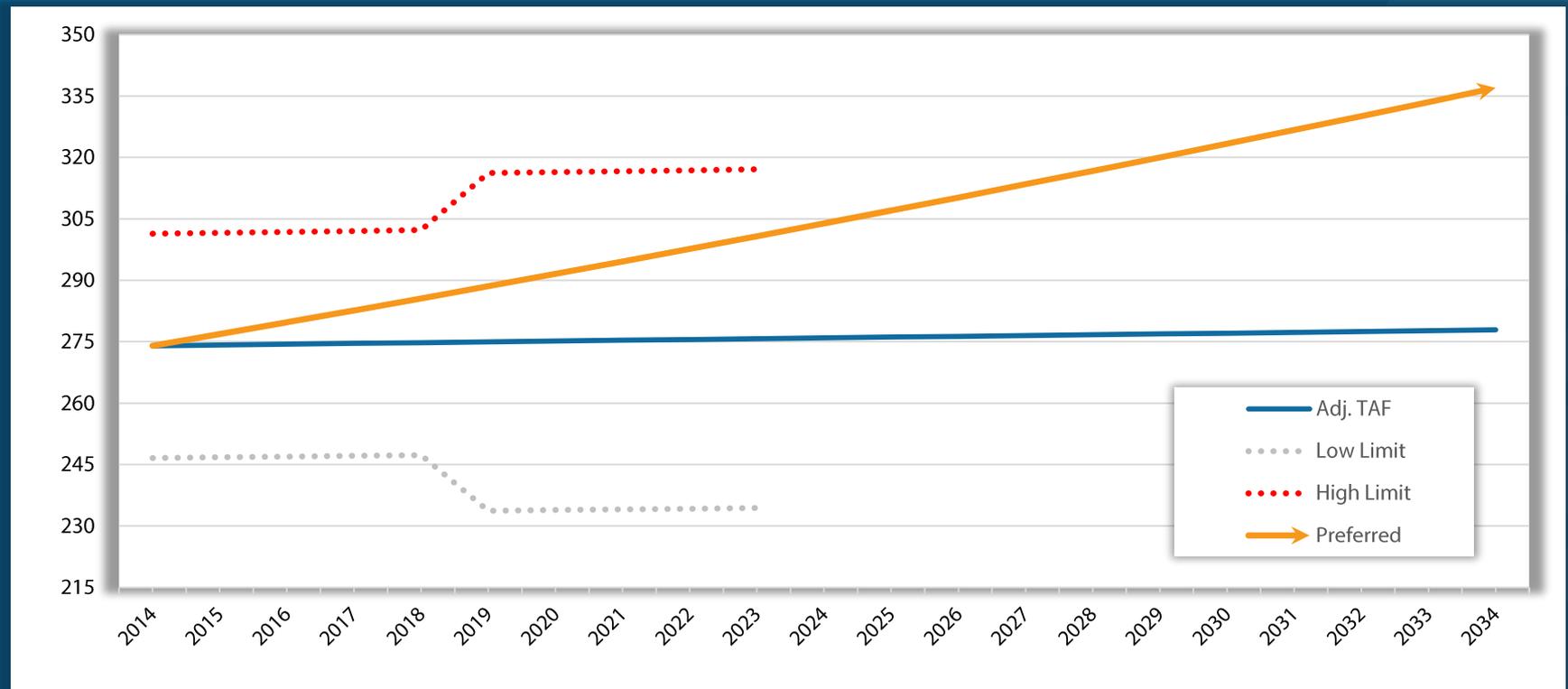
- 10 percent in first 5-years
- 15 percent in first 10-years

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# TAF and GA Operations Forecast



# TAF and Based Aircraft Forecast



## Master Plan Next Steps

- ➔ **FAA Forecasts Approval**
- ➔ **Facility Needs/Requirements Determination**
- ➔ **Preliminary Alternatives Analysis**
- ➔ **Ancillary Elements**
  - **AGIS Survey and Data acquisition including updated aerial photography**
  - **Sustainability Incorporation**
- ➔ **Publication of Working Paper Three**
- ➔ **Next RAAC Meeting (May 2015)**



# Thank You!

- Master Plan
- Renton Municipal Airport/  
Clayton Scott Field



# Questions & Comments

Master Plan

Renton Municipal Airport/  
Clayton Scott Field