

Supplement to Planning Advisory Committee (PAC) Meeting #3

AVIATION DEMAND FORECASTS

Preface

This forecast supplement was prepared to communicate updates to forecast data that were made after PAC Meeting #3 in June. The changes result from refinement of the number of aircraft based at Hillsboro Airport in the base year of 2016. To maintain the project schedule, the forecast needs to be submitted to the Federal Aviation Administration (FAA) before the next scheduled PAC meeting in September. The amended forecasts in this supplement will be incorporated into the forecasts that FAA will be asked to review and approve. This supplement will become part of the meeting notes and will be available for public review.

What changed?

This supplement reflects changes to the number of Based Aircraft reported in 2016, the base year. When the study team collected and validated sources of information, two main registries were used. The first is the FAA Aircraft Registry, which is a list populated when aircraft owners register their aircraft with the FAA. Various data fields offer planners the ability to sort and filter information collected from aircraft owners about their aircraft in order to help identify if the aircraft is based at a specific airport. The second is the Oregon Department of Aviation Aircraft Registry, which asks for similar information including the name of their home airport. Planners cross-referenced these lists and disregarded any entries that didn't appear on both registries. Planners also conservatively disregarded entries that did not indicate an engine type, with the assumption that if no engine type was reported that it may not be a flyable aircraft.

With the Port of Portland's assistance in further vetting the aircraft entries and making visual confirmation, we identified an additional 28 aircraft to be added to the base year number. Thus, we are revising the number of based aircraft in 2016 accordingly:

Based Aircraft for 2016 presented in PAC Meeting #3:	326
Updated and verified Based Aircraft for 2016:	354

This change to the starting point will affect the component forecasts that comprise the forecast envelope and the Selected Based Aircraft Forecast. Similarly, there are minor changes to the Selected Operations Forecast as some component forecasts in the forecast envelope are tied to Based Aircraft projections.

Result of Change to Number of Based Aircraft

The Compound Annual Growth Rates remain unchanged. **In the judgment of the planning team, the change in the starting number of based aircraft does not change any of the underlying methodologies or relationships among the various inputs.** The total number of additional aircraft expected in 2036 increases by seven airplanes when applying the forecast

methodology to the revised 2016 based aircraft count. An increase in seven airplanes is well within the forecast envelope of the PAC Meeting #3 version so the increase is not considered significant. The changes to the Based Aircraft are shown in the table below.

Year	2016	2021	2026	2036	Total Aircraft Increase
Selected Based Aircraft Forecast					
PAC Meeting #3	326	350	370	410	84
Forecast Supplement	354	375	395	445	91
Change	+28	+25	+25	+35	+7

Result of Change to Operations Forecast

The change in Based Aircraft also affects the Operations forecast because the forecast envelope includes two projections that use Based Aircraft as a variable, although neither defines an upper or lower limit. The resulting change to the forecast numbers from applying this methodology is shown in the table below. **The impacts are very minor with a maximum change of 500 operations.**

Year	2016	2021	2026	2036	Total Operations Increase
Selected Operations Forecast					
PAC Meeting #3	197,763	208,600	221,100	247,400	49,637
Forecast Supplement	197,763	208,100	220,600	247,700	49,937
Change	--	-500*	-500*	+300	+300

*The decrease in operations while based aircraft increased, is due to a lower starting number of operations per aircraft (2016 operations/2016 based aircraft).

Forecast Findings

As of 2016, there were 354 aircraft based at the Hillsboro Airport. The majority of these are smaller single engine piston powered aircraft. There were 49 jet-powered aircraft, 35 helicopters, 17 turboprops and 25 multi-engine piston aircraft. By 2036, a total of 445 based aircraft are projected. This total is an average of six different methods employed. The overall annual growth rate in based aircraft is 1.15 percent.

The on-airport control tower tracks operations when they are open between 6 a.m. and 10 p.m. In 2016, there were 197,763 operations. Multiple forecasts of each operational type (local general aviation, itinerant general aviation, air taxi, and military) were developed. A single forecast for each operational type was selected, then combined. By 2036, total operations are forecast to grow to 247,700 for an annual growth rate of 1.13 percent.

Opportunity to Comment

Because the forecast numbers have changed, we are inviting PAC members to let us know if you have any questions, concerns, or comments with these changes. The FAA will consider this forecast over the summer and your comments will be welcome during that time. Please contact your facilitator Anne Pressentin at apressentin@enviroissues.com or at (503) 937-0206.