Samantha Peterson

From: Samantha Peterson
Sent: Wednesday, April 13, 2022 12:23 PM
To: benjamin.J.mello
Cc: LUCAS Sarah; PECK Heather; cathy.rb.clark@aviation.state.or.us; W. Matt Rogers; David Miller; Brandy Steffen
Subject: Aurora State Airport - Request for formal review of Draft Chapter 3 - Aviation Activity Forecasts
Attachments: Aurora State Airport - FAA Request for Review Draft Chapter 3 - Aviation Activity Forecasts.pdf

Good afternoon Ben,

Century West and ODAV are submitting a formal request for FAA review of draft Chapter 3 – Aviation Activity Forecasts. We have included a memorandum outlining the information including copies of PAC comments and public input.

Could you provide us with an estimated date of when we could anticipate to see your review comments?

Thank you,

Samantha Peterson | Aviation Planner/Project Manager
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Memo

To:	**Ben Mello, FAA SEA-ADO**
From:	**Century West Engineering**
Date:	**4/13/2022**
Project:	**Aurora Airport Master Plan**
Re:	**Aurora State Airport – Request for FAA Review of the Draft Aviation Activity Forecasts Chapter**

Draft Chapter 3 (Aviation Activity Forecasts) for the Aurora State Airport Master Plan has been completed and reviewed by Oregon Department of Aviation (ODAV) staff. ODAV review comments were incorporated in the draft chapter provided to the Aurora Planning Advisory Committee (PAC) on February 25, 2022. The content was presented in PAC Meeting #2 on March 1, 2022, and in a public Open House immediately following. A subsequent PAC work session on April 5, 2022 was held to further conversations with the PAC.

The PAC and the public were notified of the opportunity to provide comments on the draft chapter and the comment period closed on April 12, 2022. We have included the six letters received for your consideration. You may also find the meeting summary for PAC Meeting #2 on the project website. Meeting summary notes for the work session are still in development, but the full recording is also on the project website. Additionally, we have included public comments to date from the project website to ensure full transparency between ODAV, CWE, and FAA.

One issue that has been raised during the discussion of the forecast is regarding the use of Traffic Flow Management System Counts (TFMSC) data and the FAA Terminal Area Forecast (TAF) in the development of aviation forecasts. It would be beneficial to confirm FAA guidance on the appropriate use of these data sources in developing aviation activity forecasts.

Consistent with our FAA-approved airport master plan scope of work, we request that the FAA complete the formal review of the draft Aviation Activity Forecasts (Chapter 3) for the Aurora State Airport Master Plan.

Let us know if you have questions or require clarification on the information and analysis included in the chapter. Please let us know when you anticipate FAA review of the chapter to be completed.

Taxiway A at A4 – Source: Century West Engineering

Chapter 3
Aviation Activity Forecasts

COVID-19 STATEMENT (JANUARY 2022)

This forecast was prepared at the end of the second full year of the COVID-19 pandemic. The disruption of airport activity experienced throughout the U.S. airport system related to COVID-19 since 2020 is unprecedented and has led to significant declines in activity that are not consistent with recent historical trends. It is acknowledged that not all elements of general aviation activity have been affected equally. Some segments of personal air travel have demonstrated resilience, partly in response to the heavily impacted commercial airline industry.

Although the limits of the current industry-wide disruption have yet to be defined, it is believed that the underlying elements of demand within general aviation will remain largely intact until all public health constraints are fully addressed and economic conditions gradually return to normal.

Federal Aviation Administration (FAA) forecast approval will be based in reference to the data and methodologies used and the conclusions at the time the document was prepared. However, consideration must still be given to the significant impacts of COVID-19 on aviation activity. As a result, there is lower than normal confidence in future growth projections.

FAA approval of the forecast does not provide justification to begin airport development. Justification for future projects will be made based on activity levels at the time the project is requested for development, rather than this forecast approval. Further documentation of actual activity levels reaching the planning activity levels will be needed prior to FAA participation in funding for eligible projects.

Introduction and Overview

This chapter provides a summary of historical aviation activity and new aviation activity forecasts for the 2021-2041 Aurora State Airport (Airport) - Airport Master Plan. The most recent aviation activity forecasts approved by the Federal Aviation Administration (FAA) for Aurora State Airport were developed in the 2012 Airport Master Plan and the 2019 Constrained Operations Runway Justification Study.

The aviation activity forecasts have a base year of 2021 (calendar year), the last year of complete data available when the forecasts were prepared. The forecast covers a 20-year period with reporting intervals at every five years. Multiple forecasting methodologies are used in this analysis and the models that provide the most valid outlooks are presented for comparison.

Aviation activity forecasts help determine if existing airport facilities are sufficient or will need to be modified to handle future demand (aircraft operations and based aircraft). The FAA Seattle Airports District Office (ADO) reviews the preliminary forecasts for rationality and comparison to the FAA Terminal Area Forecast (TAF). FAA forecast approval is a critical step in the airport master planning process since the projected activity will determine applicable design standards and other planning criteria.

The chapter is organized around the following sections:

- Introduction/Overview, FAA Forecasting Process;
- Key Activity Elements;
- Historical Data, Historical Forecasts, and Airport Events;
- Based Aircraft Forecasts;
- Aircraft Operations Forecasts;
- Peak Activity Forecasts;
- Design Aircraft; and
- Forecast Summary.

The overall goal is to prepare forecasts that accurately reflect current conditions, relevant historical trends, and provide reasonable projections of future activity, which can be translated into specific airport facility needs anticipated during the next 20 years and beyond. Aurora State Airport is currently capable of accommodating a full range of general aviation (GA) activity in both Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC). Aircraft use includes business class jets and turboprops, a wide variety of piston-engine aircraft, and helicopters.

The forecast methodologies presented in this chapter are consistent with the Airport's role as an urban general aviation airport and they do not anticipate a change in the Airport's functional role, such as the initiation of commercial passenger or cargo service.

The forecasts are unconstrained and assume the Oregon Department of Aviation (ODAV) will be able to make the facility improvements necessary to accommodate the anticipated demand, unless specifically noted. ODAV will consider if any unconstrained demand will not or cannot be reasonably met through the evaluation of airport development alternatives later in the master plan.

The historical development of landside facilities at Aurora State Airport, including aircraft hangars, has occurred both on and off ODAV-owned property. These facilities and the based aircraft they accommodate are identified as "inside the fence" or "Through-The-Fence (TTF)." All off-airport facilities/users with direct access to the runway-taxiway system have TTF access agreements with ODAV.

This airport master plan will address needs for existing and future facilities that are, or would be under the direct ownership and management of ODAV. However, the activity generated by all aircraft that rely on TTF access to airfield facilities, are included in the Airport's based aircraft count and the aircraft operations data compiled by the air traffic control tower (ATCT). This activity will be included when evaluating runway-taxiway and related facility needs.

FEDERAL AIRPORT SYSTEM

As described in Chapter 2, Aurora State Airport is included in the federal airport system, referred to as the National Plan of Integrated Airport Systems (NPIAS). The NPIAS currently includes 3,304 public-use airports in all 50 states. Fifty-seven of Oregon's 97 public-use airports are included in the NPIAS.

Aurora State Airport is designated a **"National" Nonprimary General Aviation** airport. The role of National airports in the NPIAS is defined as follows:[1]

> *"National airports (84) are located in metropolitan areas near major business centers and support flying throughout the nation and the world. National airports are currently located within 31 states. They account for 13 percent of total flying at the studied general aviation airports and 35 percent of all flights that filed flight plans at the airports in the four new categories. These 84 airports support operations by the most sophisticated aircraft in the general aviation fleet. Many flights are by jet aircraft, including corporate and fractional ownership operations and air taxi services. These airports also provide pilots with an alternative to busy primary commercial service airports. There are no heliports or seaplane bases in this category.*
>
> *Criteria Used to Define the New National Category (all numbers are annualized):*
>
> *1) 5,000+ instrument operations, 11+ based jets, 20+ international flights, or 500+ interstate departures; or*
> *2) 10,000+ enplanements and at least one charter enplanement by a large certificated air carrier; or*
> *3) 500+ million pounds of landed cargo weight."*

Available data indicate that Aurora State Airport has consistently met or exceeded the FAA's "11+ based jet" and around 5,000+ instrument operations criterion established for National airports since the early 2000s.

Aurora State Airport, and nearby Portland-Hillsboro Airport (19 miles northwest) are the only FAA-designated National Airports located in Oregon.

STATE AIRPORT SYSTEM

As described in Chapter 2, Aurora State Airport is designated a **Category II – Urban General Aviation Airport** in the 2019 Oregon Aviation Plan (OAP v6.0). The definition for Category II airports is:

> *"These airports support all general aviation aircraft and accommodate corporate aviation activity, including piston and turbine engine aircraft, business jets, helicopters, gliders, and other general aviation activity. The most demanding user requirements are business-related. These airports service a large/multi-state geographic region or experience high levels of general aviation activity. The minimum runway length objective for Category II airports is 5,000 feet."*

Oregon currently has a total of 11 Category II airports, which includes one public-use heliport (Portland Downtown Heliport). The distribution of Category II airports throughout Oregon is a reflection of the state's physical geography, population centers, and the underlying market conditions required to support the full range of GA activity common to this type of airport.

More than half (6 of 11) of Oregon's Category II airports are located within 30 nautical miles of Aurora State Airport. The concentration of Category II airports in the Portland Metro area is consistent with the region's overall population and economic characteristics.

1 2021-2025 NPIAS Report, Federal Aviation Administration (9/30/2020)

FAA Forecasting Process

The FAA provides aviation activity forecasting guidance for airport master planning projects. *FAA Advisory Circular (AC) 150/5070-6B, Airport Master Plans*, outlines seven standard steps involved in the forecast process:

1. Identify Aviation Activity Measures: The level and type of aviation activities likely to impact facility needs. For general aviation, this typically includes based aircraft and operations.
2. Previous Airport Forecasts: May include the FAA Terminal Area Forecast (TAF), state or regional system plans, and previous master plans.
3. Gather Data: Determine what data are required to prepare the forecasts, identify data sources, and collect historical and forecast data.
4. Select Forecast Methods: There are several appropriate methodologies and techniques available, including regression analysis, trend analysis, market share or ratio analysis, exponential smoothing, econometric modeling, comparison with other airports, survey techniques, cohort analysis, choice and distribution models, range projections, and professional judgment.
5. Apply Forecast Methods and Evaluate Results: Prepare the actual forecasts and evaluate for reasonableness.
6. Summarize and Document Results: Provide supporting text and tables as necessary.
7. Compare Forecast Results with FAA's TAF: Follow guidance in FAA Order 5090.5, *Field Formulation of the National Plan of Integrated Airport Systems and Airport Capital Improvement Program*. In part, the Order indicates that forecasts should not vary significantly (more than 10%) from the TAF. When there is a greater than 10% variance, supporting documentation should be supplied to the FAA. The aviation demand forecasts are then submitted to the FAA for their approval.

Key Activity Elements

As noted above, GA airport activity forecasting focuses on two key activity segments: based aircraft and aircraft operations (takeoffs & landings). Detailed breakdowns of these activity segments include:

- Aircraft fleet mix;
- Peak activity;
- Distribution of local and itinerant operations; and
- Determination of the design aircraft (also referred to as the critical aircraft).

The design aircraft represents the most demanding aircraft type or family of aircraft that uses an airport on a regular basis (a minimum of 500 annual takeoffs & landings per year). The design aircraft is used to establish a variety of FAA design categories, which then establish design standards for airfield facilities. FAA airport design standard groupings reflect the physical requirements of specific aircraft types and sizes. Design items, such as runway length evaluations, are determined by the requirements of current/future design aircraft. The activity forecasts also support the evaluation of several demand-based facility requirements including runway and taxiway capacity, aircraft parking, and hangar capacity.

Table 3-1 describes the data sources used in this chapter.

FAA Forecast Terminology

Aircraft Operation
A count of a takeoff, landing, or touch-and-go. Each time an aircraft touches the runway to takeoff or land, it counts as an operation.

Aircraft Approach Category (AAC)
Classification of an aircraft by approach speed, with A being the slowest and E being the fastest.

Airplane Design Group (ADG)
Classification of an aircraft by its size (wingspan and tail height) with I being the smallest and VI being the largest.

Airport Reference Code (ARC)
Used to determine facility size and setback requirements. The ARC is a composite of the AAC and ADG of the critical aircraft.

Based Aircraft
Aircraft that are stored at the Airport,[1] either full-time or seasonally (more than half a calendar year).

Design Aircraft
The most demanding aircraft, or family of aircraft (in terms of size and/or speed) generating at least 500 annual operations at an airport. The design aircraft is used to establish the applicable ARC (for existing and forecast activity).

General Aviation (GA)
Aviation activities conducted by recreational, business, and charter users not operating as airlines under FAR Part 121, Part 135, or military regulations.

Air Taxi
Aviation activities conducted by on-demand or scheduled operators certified under FAR Part 135. The majority of air taxi activity is conducted with aircraft also operated by general aviation users.

Itinerant Operation
An operation that originates at one airport and terminates at a different airport. For example, an aircraft flying from the Airport to another airport.

Local Operation
An operation that originates and terminates at the same airport. For example, an aircraft takes off from the Airport, remains near the airport to practice flight maneuvers, and then lands at the Airport. Touch-and-go operations occur in the airport traffic pattern and they are categorized as local operations.

Touch-and-Go
A maneuver where an aircraft lands and takes off without leaving the runway. A touch-and-go is counted as two aircraft operations.

1 Includes aircraft located on ODAV-owned property and aircraft located on privately-owned property that have TTF access.
Source: Century West Engineering, FAA and industry terminology.

TABLE 3-1: FORECASTING DATA SOURCES

Source	Description
Air Traffic Control Tower (ATCT) Airport Operations Data	The FAA database provides aircraft operations counts for equipped airports. For Aurora State Airport, ATCT reports are available from late 2015 through 2021. The 6-year period (2016-2021) of full year data provides a reliable historical indication of basic activity, adjusted to reflect specific conditions, to provide a baseline for new aircraft operations forecasts at the Airport. The FAA standard ATCT activity categories are not specific to aircraft types, but do break out local and itinerant operations. Itinerant operation counts are logged for air carrier, general aviation, air taxi, and military aircraft. Local operation counts are logged for civil and military aircraft. The Aurora ATCT manager also provided additional first-hand observations about the mix of air traffic, and common operational factors not captured in ATCT data for the Airport.
FAA National Based Aircraft Inventory Program	The FAA National Based Aircraft Inventory Program database assigns all eligible active civilian aircraft to individual airports, as reported and verified by airport owners. Aircraft reported by more than one airport are researched by airport management, with the final resolution approved by FAA. Inactive and other aircraft that do not meet FAA criteria may be listed, but they are not included in the airport's current "validated count." The FAA requires airport owners to update their counts periodically to reflect changes in activity. The accuracy of based aircraft counts at individual airports has improved significantly with more consistent airport verification and reporting. The current level of verification was not common in previous master plan data.

(Continued)

TABLE 3-1: FORECASTING DATA SOURCES

Source	Description
FAA Terminal Area Forecast (TAF)	The current FAA TAF, published in May 2021, provides forecasts for operations and based aircraft at the Airport. The forecasts are based on overall growth rates assigned by FAA and do not necessarily correspond to the previous master plan, or other existing forecasts. The master plan's recommended based aircraft and operations forecasts will be compared to the TAF as part of the FAA forecast review/approval process.
FAA National Aerospace Forecast	The 2021-2041 Aerospace Forecast is a national-level forecast of aviation activity. The Aerospace Forecast helps guide local forecasts by serving as a point of comparison between local and national trends.
Traffic Flow Management System Counts (TFMSC)	The TFMSC includes data collected from FAA instrument flight rules (IFR) flight plan filings. This activity is categorized by aircraft type and it provides airport origin-destination and time of day information for all flights, including flights that occur when the Aurora State Airport control tower is closed. The advantage of the TFMSC data is its degree of detail and insights into the more demanding aircraft operating at the Airport, such as jets and turboprops, that regularly file IFR flight plans. TFMSC data is the most reliable indicator of business aviation activity at the Airport, which is critical in documenting activity required for design aircraft designation and the operations fleet mix.
Socioeconomic Data	Socioeconomic data is provided by data vendor Woods & Poole, Inc. (W&P). Population data are provided by the Portland State University - Population Research Center (PRC). The PRC produces the annual population estimates and long term forecasts for Oregon and its counties and cities, as well as the estimates by age and sex for the state and its counties. These estimates are used by the state and local governments, various organizations, and agencies for revenue sharing, funds allocation, and planning purposes. The 2020-2065 PRC population forecast is the primary resource for evaluating changes in local area population during the master plan 20-year planning horizon. The W&P datasets for Marion and Clackamas Counties were used for this analysis. The W&P data provides 124 data categories with historical records from 1970 to 2019 and forecasts through 2050. Data categories considered include population, employment, earnings and income, and gross regional product.
State Aviation System Plans	The Oregon Aviation Plan (OAP v6.0) is the current state aviation system plan for Oregon, adopted in 2019. OAP v6.0 includes facility data, activity forecasts, system-wide minimum standards and performance measures for Oregon's public-use airports.
Previous Airport Planning	The 2012 Aurora State Airport Master Plan Update provides is the most recent FAA-approved airport layout plan (ALP) drawing for the Airport. The 2019 Constrained Operations Runway Justification Study provided updated aviation activity forecasts and airside facility requirements assessments related to the critical aircraft. Both planning documents were prepared prior to the COVID-19 pandemic.
Fixed Base Operator (FBO)	Historical fuel flowage data provided to airport management by the Airport tenants providing aircraft services was reviewed. This information was consulted when developing aircraft operations forecasts.

Source: Century West Engineering

National General Aviation Activity Trends

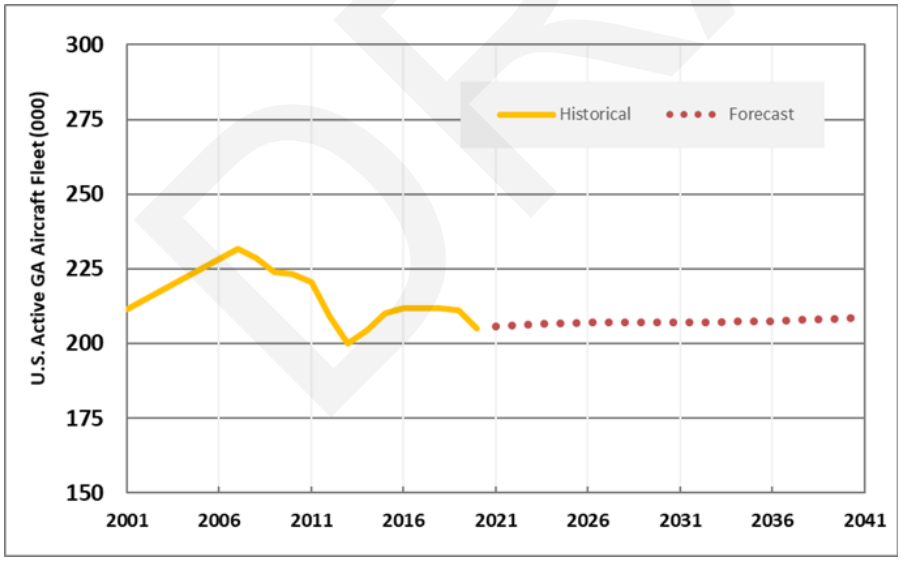
The first two decades of the 21st Century have presented numerous challenges for the GA industry. On a national level, most measures of GA activity declined sharply during the Great Recession, rebounded, then declined again at the outset of the COVID-19 pandemic.

Aircraft manufacturing, for example, hit a low point in 2010 after several years of growth, then rebounded and experienced relatively stable year-over-year growth through 2019. The COVID-19 pandemic abruptly slowed worldwide deliveries of GA aircraft in 2020 (-9.7%) compared to 2019. Deliveries of business jets, turboprops and helicopters in 2020 experienced double-digit declines, while piston airplanes declined by less than 1%. 2021 year-to-date deliveries (through the third quarter) are showing signs of recovery: year-to-date, third quarter deliveries are up 13% above 2020 totals for the same period.

The FAA performs an annual assessment of U.S. civil aviation through its FAA Aerospace Forecast. The 20-year forecasts are updated annually by evaluating recent events and established trends affecting a wide range of commercial and GA segments. Broad economic conditions and current forecasts are examined in order to provide reasonable expectations for aviation within the broader U.S. and global economy. The FAA forecasts examine in detail several key aviation industry indicators including fuel prices, production and supply; aircraft manufacturing trends; aircraft ownership trends; fleet and pilot attrition; flight training trends; advances in fuel, engine, avionics, and airspace technology (ADS-B NextGen, etc.); and on-demand air travel. This array of factors is reflected in the FAA's overall assessment of future U.S. aviation activity. The most recent forecast (released in 2021) has factored in the impacts of the COVID-19 pandemic in both historical data and forecasts.

As depicted in **Figure 3-1**, the active U.S. GA fleet has fluctuated within a slight overall decline since 2001. This trend coincides with other GA industry trends including annual aviation fuel consumption, hours flown, IFR enroute air traffic, operations at towered airports, active pilots, etc. The most recent downward trend, attributed to the pandemic, reflects a sharp decline in 2019 and 2020 data. The FAA 2021-2041 forecast predicts that the active GA aircraft fleet will grow at an average annual rate of approximately 0.1% between 2020 and 2041 (forecast assumptions summarized below).

FIGURE 3-1: U.S. GA FLEET



Source: FAA Long Range Aerospace Forecasts (FY 2021-2041)

Although the FAA maintains a modestly favorable long-term outlook for general aviation, many of the activity segments associated with piston engine aircraft and aviation gasoline (AVGAS) consumption are not projected to return to "pre-Great Recession" levels within the 20-year forecast.

Key takeaways from the FAA 2021-2041 Aerospace Forecast Highlights are summarized below:

Positive Activity Indicators

- Turbine aircraft (turboprop, turbojet, helicopter) fleet and hours flown will grow;
- Sport and Experimental aircraft fleet and hours flown will grow;
- Piston Rotorcraft fleet and hours flown will grow;
- Jet fuel consumption will grow;
- The number of active Sport, Airline Transport, Rotorcraft Only, and Instrument rated pilots will grow;
- GA Enroute IFR air traffic will grow; and
- GA Operations at towered airports will grow.

Negative Activity Indicators

- Fixed-wing Piston aircraft fleet and hours flown will decline;
- AVGAS consumption will decline; and
- The number of active Private and Commercial pilots will decline.

Neutral Activity Indicators

- Overall GA fleet net growth is nearly flat over the next 20 years.

The cited measures of national general aviation activity (positive, negative, neutral) are intended to reflect the broad expectations defined by FAA, which have varying relevancy to Aurora State Airport. For example, Van's Aircraft, a leading aircraft kit manufacturer located at the Airport, reports nearly 11,000 aircraft kits have been completed and flown, with thousands more kits currently under construction. It is apparent that this manufacturing activity has directly affected activity at Aurora State Airport. A significant, and growing percentage of the single-engine aircraft based at the Aurora State Airport are kit aircraft, certified by FAA in the experimental category.

It is recognized that trends experienced at individual airports often deviate from system wide trends, and generally reflect localized factors. In its current forecast, the FAA expects general aviation to experience modest growth overall. The FAA's annual growth assumptions for individual general aviation activity segments are summarized in **Table 3-2**.

TABLE 3-2: FAA LONG RANGE FORECAST ASSUMPTIONS (U.S. GENERAL AVIATION)

ACTIVITY COMPONENT	FORECAST AVERAGE ANNUAL GROWTH RATE (2021-2041)
Aircraft in U.S. Fleet	
Single Engine Piston Aircraft in U.S. Fleet	-0.9%
Multi-Engine Piston Aircraft in U.S. Fleet	-0.4%
Turboprop Aircraft in U.S. Fleet	0.6%
Turbojet Aircraft in U.S. Fleet	2.3%
Experimental Aircraft in U.S. Fleet	1.4%
Sport Aircraft in U.S. Fleet	4.0%
Piston Helicopters in U.S. Fleet	0.9%
Turbine Helicopters in U.S. Fleet	1.6%
Active GA Fleet (# of Aircraft)	0.1%
Active Pilots in U.S.	
Sport Pilots	2.7%
Private Pilots	-0.4%
Commercial Pilots	-0.1%
Airline Transport Pilots	0.7%
Instrument Rated Pilots	0.4%
Student Pilots (Indicator of flight training activity)	-- (See note 1)
Active GA Pilots (All Ratings, Excluding Student Pilots)	0.2%
Hours Flown in U.S.	
Fixed Wing Piston Aircraft	-0.7%
Fixed Wing Turbine Aircraft	2.6%
Rotorcraft Piston Aircraft	1.9%
Rotorcraft Turbine Aircraft	2.1%
Experimental Aircraft	2.7%
Light Sport Aircraft	4.5%
Total GA Fleet Hours	1.0%
Fuel Consumption in U.S.	
AVGAS (Gallons consumed - GA only)	-0.3%
Jet Fuel (Gallons consumed – GA only)	2.4%

Source: FAA Long Range Aerospace Forecasts (FY 2021-2041)
1. Change in FAA certificate expiration; now excluded from forecast

Recent Events Summary

This following section briefly summarizes several events that contribute to the current airport activity levels and the development of new forecasts.

HANGAR CONSTRUCTION

Aurora State Airport has experienced significant growth in aircraft hangars and support facilities over the last 10 years. The majority of this activity has occurred off airport property with developments that have TTF access agreements with ODAV.

TABLE 3-3: HANGAR DEVELOPMENT SUMMARY

Hangar Inventory (Square Feet) Includes On-Airport and Off-Airport (TTF) Development	
2012	833,000
2021	971,100
Net Change	138,100 (+17%)
CAGR	1.72%

Century West Engineering using Google Earth Imagery
CAGR: Compounded Annual Growth Rate

Historical aerial photography was reviewed to approximate the net increase in building square footage based on visible roof area. Most of the activity involved new construction, although removal of older hangars also occurred. The net increase in hangar square footage between 2012 and 2021 translates into a compound annual growth rate (CAGR) of 1.7%. This indicator verifies physical improvements that have contributed directly to airport activity since the last master plan. A summary of the hangar evaluation is provided in **Table 3-3**.

AVIATION FUEL VOLUMES

Operator-reported fuel delivery data for aviation gasoline (AVGAS) and jet fuel flowage fees reported to ODAV, were reviewed for the 2016-2021 period. As indicated in **Table 3-4**, annual volumes for both fuel grades have fluctuated over the six-year period, which appears to be related to a combination of factors. As with other indicators influenced by COVID-19 and other transitional events, the fluctuations do not reveal a reliable trend that can be used to predict future activity. However, the recent historical fuel data does confirm the significant activity generated by (locally-based and transient) turbine aircraft at Aurora State Airport.

The data demonstrates a relatively consistent split between jet fuel and AVGAS volumes. During this period AVGAS, fluctuated between 8 and 13% of total fueling volume at Aurora State Airport. The Airport's recent proportional splits between fuel grades are consistent with current national aviation fuel consumption trends, which reflects typical piston and turbine aircraft utilization and common aircraft requirements (e.g., fuel consumption rates, varying aircraft fuel capacities, aircraft range, etc.).

TABLE 3-4: FUEL FLOWAGE (GALLONS)

	2016	2017	2018	2019	2020	2021	Total
Jet Fuel	933,527	896,058	1,050,306	929,453	893,989	1,055,344	3,769,806
AVGAS	107,900	134,397	150,515	117,445	79,196	92,808	481,553

Source: Oregon Department of Aviation

FLIGHT TRAINING

Aurora State Airport currently accommodates two locally-based flight schools (Willamette Aviation and Aurora Flight Training Academy) with a combined fleet of 20 piston fixed-wing aircraft for training and rental.

The Aurora ATCT manager estimates that 40 to 45% of the total aircraft operations at Aurora State Airport are related to flight training, noting that "Aurora State is so dynamic in its day-to-day operations and highly dependent upon the weather. This percentage may be higher in the summer months." Flight training activity is recorded as either local and itinerant operations by the ATCT. The activity mix is consistent with historical ATCT operations counts and is reflected in the 2021 baseline operations total.

In addition to the locally-based flight training fleet, flight training operators from other airports, both in the Portland Metro region and beyond the local area, routinely operate at Aurora State Airport. A search of pilot schools on the FAA.gov webpage (https://av-info.faa.gov/PilotSchool.asp) identifies four flights schools at three nearby airports (Hillsboro, Troutdale, and Newberg).

FIXED BASE OPERATORS (FBO)

Aurora State Airport currently has two full service fixed base operators (Atlantic Aviation and Willamette Aviation Services) offering fuel, aircraft hangar and parking space, and aircraft maintenance services for a full range of general aviation and business aviation users. The current level of service reflects the Airport's ability to support the local based aircraft fleet and attract transient aircraft, including business aviation users in a highly competitive market.

CHANGES IN DATA SOURCES AND METHODOLOGY

Several improvements in data sources, verification and methodology have occurred since 2012. The changes provide a more accurate definition of airport activity than presented previously. These changes, described below and previously in Chapter 2, are incorporated into the 2021 airport activity data that is the baseline for new 20-year aviation activity forecasts.

The updated data provides a more accurate picture of current activity at Aurora State Airport, and therefore the ability to develop more reliable long-term aviation activity forecasts. However, it is important to recognize that the recent improvements in data accuracy reduces the ability to draw definitive conclusions when comparing to previously-reported estimates or forecasts. As a result, it is recommended that the new aviation activity forecasts be reviewed using consistent data sources and the assumptions defined in each forecast model, rather than a comparison to previous forecasts.

BASED AIRCRAFT COUNTING METHODOLOGY

The FAA's method of monitoring an airport's based aircraft fleet has improved in recent years. Airport owners are now required by FAA to regularly update their locally-based aircraft totals through verification and submittal of validated counts through the FAA National Based Aircraft Inventory Program (www.basedaircraft.com). The coordinated reporting eliminates duplicated (aircraft counted at more than one airport) and inactive aircraft. The regular reporting also allows more opportunities to review and validate aircraft. Inactive aircraft can be added to an airport's validated count when reactivated in the FAA's system.

In late 2021, the ODAV State Airport Manager reviewed the based aircraft count for Aurora State Airport, previously updated in 2018. The evaluation was completed in consultation with the FAA Seattle Airports District Office in December 2021, and resulted in a new validated count of 281 based aircraft. The previous count was 349 based aircraft 2018. The reduction in the Airport's based aircraft total reflects a more precise verification of aircraft and removal of previously-counted aircraft located at two private heliports adjacent to Aurora State Airport.

The 2022 validated based aircraft count included the following adjustments to the previous inventory:

- Added new aircraft not previously entered (or assigned to the Airport) in the database;
- Removed aircraft that could not be physically verified on site;
- Removed aircraft that were also reported by other airports and could not be verified on site for 6+ months per year;
- Removed aircraft without current FAA registrations or airworthiness certificates; and
- Removed aircraft (21 helicopters) located at the nearby Columbia Helicopters Heliport (FAA Identifier: OR68) and the HTS Aurora Heliport (FAA Identifier: OR24).

Based on FAA facility criteria, it was determined that the two private heliports operate independently from Aurora State Airport since their aircraft do not require access to the runway-taxiway facilities. Historically, these aircraft have been included in previous master plan forecasts and data sets. Based on current FAA guidance, the off-airport aircraft at OR68 and OR24 will not be reflected in baseline data or new master plan forecasts for Aurora State Airport. In addition to the adjustment in based aircraft numbers, the Airport's ATCT aircraft operation counts were adjusted to reflect the separation of on- and off-airport activity. Additional information on ATCT operations adjustments is provided later in this chapter.

The current split between aircraft located on airport property and on adjacent privately-owned property with TTF access agreements was verified in the updated validated count. Both on-airport and TTF aircraft are included the Airport's FAA validated counts since they all rely on the runway-taxiway system for their flight operations.

The new validated based aircraft count for the Airport was approved and accepted by FAA in January 2022. The FAA requires the January 2022 validated count (281) to serve as the common baseline for all based aircraft forecast models in the master plan. Other existing FAA data sources reporting based aircraft (5010-1 Airport Record Form, Terminal Area Forecast, etc.) will be updated for consistency with the current validated count.

TABLE 3-5: BASED AIRCRAFT AND FLEET MIX

Aircraft Type	On-Airport	TTF	Total
Single Engine	45	175	220
Multi Engine	1	14	15
Jet	3	33	36
Helicopter	1	9	10
Total	**50**	**231**	**281**

Source: National Based Aircraft Inventory – January 2022

The January 2022 validated based aircraft count for Aurora State Airport is summarized in **Table 3-5**. The summary includes a breakdown of aircraft by types, consistent with FAA data reporting. Additional information on aircraft types and categories is provided on the following page. The FAA National Based Aircraft Inventory Program report (January 2022) for the Airport is provided in **Appendix 6**.

Single-Engine Piston (SEP) and Turboprop (SETP)

SEP aircraft have one piston-powered engine. SETP aircraft have one turbine powered engine used to drive the aircraft's propeller. Both or these types of aircraft are generally smaller and often used for flight training and recreational flying but may be used for municipal business trips. Depending on weight and operator certification, these aircraft generally require only one pilot. Single-engine piston and turboprop aircraft are included in the "Single Engine" category on the FAA 5010-1 Airport Master Record Form and the FAA National Based Aircraft Inventory Program.

Multi-Engine Piston (MEP) and Turboprop (METP)

MEP/METP aircraft have two or more engines and are typically larger than SEP/SETP aircraft. Multiple engines make the aircraft more capable and require additional flight instruction beyond what is needed to operate an SEP/SETP aircraft. MEP aircraft are primarily used for personal travel, flight training, and business aviation. METP aircraft are used extensively in business aviation. Most MEP/METP aircraft may be operated with one pilot, but some larger aircraft may require two pilots. MEP/METP aircraft are included in the "Multi Engine" category on the FAA 5010-1 Airport Master Record Form and the FAA National Based Aircraft Inventory Program.

Jets

Jet aircraft have one or more turbofan/turbojet engines instead of a piston or turboprop engine. These aircraft range in size from small, four-passenger business jets to the largest airliners. They can generally fly faster and at higher altitudes than piston and turboprop aircraft, providing service capabilities (range, speed) comparable to commercial airliners. Some civilian jets are certified for single-pilot operation, although the majority of jet models require two pilots.

Helicopter

Helicopters have one or more rotors mounted above the cabin for lift and propulsion. Helicopters are commonly used for aerial firefighting, law enforcement, emergency response, medical evacuation (MEDVAC), flight training, and aerial inspection (pipeline, forestry, aerial agriculture, etc.). Helicopters may be piston- or turbine-powered, and depending on the complexity of the model, can be operated by one pilot or two.

Other

Some aircraft that are included in the categories noted above may further categorized by FAA based on their design category or type certificate.

- Experimental aircraft refer to kit airplanes built by users or third parties other than the original manufacturer. Experimental aircraft share many characteristics with SEP aircraft; the key differentiator is how and where the aircraft is assembled. These aircraft are commonly included in the "Single Engine" category in FAA airport records (5010, Based Aircraft Inventory), rather than "Other."
- Sport aircraft (also referred to as Light Sport Aircraft, or LSA) are airplanes that have a specific weight and maximum speed in level flight. Sport aircraft require less training and a less strict medical certificate to pilot the aircraft. These aircraft are listed in the "Single Engine" category in FAA 5010 airport records.
- Gliders are unpowered aircraft that are towed into flight and use thermal uplift to sustain altitude. Powered gliders are equipped with engines and are capable of takeoff without the aid of tow plane. These aircraft are listed in the "Gliders" category in FAA 5010 airport records.
- Ultralight aircraft weigh less than 155 pounds and do not require the pilot operating the aircraft to have a private pilot's license or medical certificate. These aircraft are listed in the "Ultralights" category in FAA 5010 airport records.

Source: Century West Engineering, FAA and industry terminology.

ANNUAL AIRCRAFT OPERATIONS

The addition of an ATCT at Aurora State Airport in October 2015 provides actual counts of aircraft takeoffs and landings during the 13 hours (0700 to 2000 hours) of daily operation. Overall aircraft operations data presented in the last master plan were estimated and supplemented with limited instrument flight plan data. The ability to accurately estimate aircraft operations is greatly improved with actual data accounting for the majority of flight activity.

As described in Chapter 2, the 2021 baseline aircraft operations total was developed using actual air traffic control tower counts, with two specific adjustments. First, an adjustment was made to account for aircraft activity occurring during non-ATCT operating hours (2000 to 0700). Based on methods described in Chapter 2, off-hours IFR activity was estimated to account for 14% of annual operations, and off-hours and supplemented with activity was estimated to be 5% of annual operations. Combined, total estimated off-hours operations accounted for 6.4% of 2021 activity.

A second adjustment was made to eliminate helicopter operations for the two adjacent private heliports. The movement of these aircraft in and out of the Airport's controlled airspace is captured in the operations counts for the Aurora State Airport, although they do not actually takeoff or land on the Airport. ATCT operations counts do not distinguish between fixed-wing aircraft and helicopters. However, based on ATCT manager estimates, the off-airport helicopter activity accounts for 2 to 3% of total ATCT-logged operations for the Airport. A reduction of 3% was applied to the ATCT operations counts to account for the helicopter flight activity associated with the two adjacent heliports.

Detailed breakdowns of VFR and IFR operational splits were developed from these data, for use in forecasting future activity.

Table 3-6 summarizes adjusted annual aircraft operations for Aurora State Airport for the historical period (2016-2021). For consistency in data, the adjustments described above were applied retroactively to the historical years coinciding with the operation of the air traffic control tower.

TABLE 3-6: AURORA STATE AIRPORT HISTORICAL ATCT DATA (ADJUSTED)

	Annual Aircraft Operations					
	2016	2017	2018	2019	2020	2021
Itinerant						
Air Taxi	2,194	2,319	2,121	1,670	1,129	2,006
General Aviation	32,174	33,502	35,665	33,638	31,621	36,390
Military	265	199	277	107	38	79
Subtotal	**34,633**	**36,020**	**38,063**	**35,415**	**32,788**	**38,475**
Local						
General Aviation	16,191	25,075	28,011	30,453	36,333	37,488
Military	139	129	245	34	19	65
Subtotal	**16,330**	**25,204**	**28,256**	**30,487**	**36,352**	**37,553**
Total	**50,963**	**61,223**	**66,320**	**65,902**	**69,140**	**76,028**

Source: Century West Engineering developed using FAA OPSNET Data

INSTRUMENT FLIGHT PLAN (TFMSC) DATA

A 10-year summary of instrument flight plan data at Aurora State Airport is provided in **Tables 3-7 and 3-8**. The FAA TFMSC provides detailed, aircraft-specific data for flight plan filings and aircraft movements. While air traffic control tower data is the best gauge of overall airport activity, the TFMSC data provides a reliable measure of flight activity needed to document the Airport's design aircraft operations. The 2012 airport master plan update identified the current and future design aircraft to be a high performance jet included in Airport Reference Code C-II (ARC-C-II). This finding was confirmed in the data review contained in the 2019 Constrained Operations Runway Justification Study, and it continues to be justified based on the review of current TFMSC aircraft operations data.

TABLE 3-7: AURORA STATE AIRPORT INSTRUMENT FLIGHT OPERATIONS

Historical TFMSC IFR Operations by Aircraft Design Group (ADG)											
ARC	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average
A-I	2,402	2,656	2,436	2,502	2,764	2,780	3,456	2,492	2,162	2,180	2,583
A-II	422	504	1,150	1,618	1,904	2,144	2,136	1,186	970	1,314	1,335
A-III	14	6	2	4	4	10	6	2	0	4	5
A-IV	0	0	0	0	0	0	0	0	0	0	0
B-I	1,510	1,394	1,444	1,208	1,220	1,152	1,162	1,220	1,030	1,072	1,241
B-II	2,104	2,140	2,080	2,436	3,100	2,958	2,994	3,702	3,382	3,846	2,874
B-III	0	0	0	2	0	2	6	8	2	0	2
B-IV	0	0	0	0	0	0	0	0	0	0	0
C-I	366	384	520	438	342	310	276	294	172	256	336
C-II	502	558	514	448	544	596	576	400	404	318	486
C-III	18	10	6	8	0	14	50	54	10	0	17
C-IV	0	0	0	0	0	0	2	0	0	2	0
C-V	0	0	0	0	0	0	0	0	0	0	0
D-I	2	8	18	0	4	10	8	4	2	12	7
D-II	4	0	4	0	2	6	2	8	26	80	13
D-III	6	10	4	2	6	8	4	0	4	6	5
D-IV	0	0	0	0	0	0	0	0	0	0	0
D-V	0	0	0	0	0	0	0	0	0	0	0
Unknown	458	394	382	396	512	382	376	472	448	568	439
Total	**7,808**	**8,064**	**8,560**	**9,062**	**10,402**	**10,372**	**11,054**	**9,842**	**8,612**	**9,658**	**9,343**
C & D Aircraft	**898**	**970**	**1,066**	**896**	**898**	**944**	**918**	**760**	**618**	**674**	**864**

Source: FAA TFMSC Report - 2/2/2022 (Aurora State Airport)

TABLE 3-8: HISTORICAL TFMSC ACTIVITY BY ARC (SELECT JETS)

Jet Aircraft with Maximum Certificated Takeoff Weight of More than 12,500 Pounds and Select Jet Aircraft over 60,000 Pounds														
	ARC	Aircraft Based at Aurora State Airport	Aircraft Designator	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average Annual Operations
Cessna 550 Citation	B-II	x	C550	212	134	164	226	262	158	212	174	138	146	183
Cessna 560 Citation	B-II	x	C560	366	498	466	590	694	774	708	632	546	574	585
Cessna 680 Citation	B-II	x	C680	64	56	68	72	66	90	140	150	140	240	109
Falcon 20	B-II	x	FA20	94	86	28	14	98	74	76	68	66	74	68
Falcon 2000	B-II	x	F2TH	2	14	6	4	6	4	40	134	124	334	67
Falcon 50	B-II	x	FA50	16	32	108	228	320	332	276	286	216	270	208
Falcon 900	B-II		F900	180	148	48	10	56	82	70	110	32	24	76
Hawker Horizon	B-II		HA4T	2	2	2	0	0	0	0	2	2	6	2
Phenom 300	B-II	x	E55P	14	106	98	96	88	130	56	80	256	398	132
Bombardier Global Express*	B-III		GLEX	18	10	4	8	0	14	50	52	10	0	17
Hawker 800	C-I	x	H25B	224	212	316	118	42	28	34	22	8	30	103
Lear 31	C-I		LJ31	4	2	0	0	6	54	92	110	32	22	32
Lear 45	C-I	x	LJ45	116	156	180	236	242	212	112	140	124	190	171
Lear 55	C-I		LJ55	0	2	0	0	2	0	4	2	0	0	1
Lear 60	C-I	x	LJ60	2	4	10	82	36	14	30	16	6	10	21
Astra 1125	C-II		ASTR	178	152	164	114	160	162	96	14	0	4	104
Cessna 650 Citation	C-II	x	C650	94	92	120	144	122	126	104	68	68	42	98
Cessna 750 Citation	C-II		C750	60	76	92	94	102	100	108	92	84	38	85
Challenger 300	C-II	x	CL30	32	102	72	74	78	104	88	80	62	52	74
Challenger 600	C-II	x	CL60	126	122	36	12	68	82	64	60	96	72	74
Embraer ERJ 135	C-II		E135	0	4	6	0	2	2	0	0	0	0	1
Galaxy 1126	C-II		GALX	8	10	16	0	2	4	0	4	2	2	5
Gulfstream 150	C-II		G150	2	0	0	2	2	6	80	24	4	2	12
Lear 75	C-II		LJ75	0	0	0	0	4	10	12	0	2	6	3
Lear 35	D-I		LJ35	2	8	18	0	4	6	8	4	0	10	6
Gulfstream IV/G400*	D-II		GLF4	4	0	4	0	2	6	2	8	26	80	13
Gulfstream V/G500*	D-III		GLF5	6	10	4	2	0	4	2	0	4	6	4
Gulfstream VI/G600*	D-III		GLF6	0	0	0	0	6	4	2	0	0	0	1
Total				**1826**	**2038**	**2030**	**2126**	**2470**	**2582**	**2466**	**2332**	**2048**	**2632**	**2255**
	B-II			950	1076	988	1240	1590	1644	1578	1636	1520	2066	1429
	B-III			18	10	4	8	0	14	50	52	10	0	17
	C-I			346	376	506	436	328	308	272	290	170	252	328
	C-II			500	558	506	440	540	596	552	342	318	218	457
	D-I			2	8	18	0	4	6	8	4	0	10	6
	D-II			4	0	4	0	2	6	2	8	26	80	13
	D-III			6	10	4	2	6	8	4	0	4	6	5
Operations by AAC C and D Jets				858	952	1038	878	880	924	838	644	518	566	810
Operations by ADG II and III Jets				1478	1654	1506	1690	2138	2268	2186	2038	1878	2370	1921

Source: Century West Engineering developed using FAA TFMSC Data
Notes: 1. * Maximum Takeoff Weight (MTOW) exceeds 60,000 pounds

TERMINAL AREA FORECAST

The current FAA Terminal Area Forecast (TAF) for Aurora State Airport, published May 2021, provides historical and forecast data for the period 1990-2045. Current and historical TAF based aircraft and operations data for the Airport share many of the data collection issues described earlier. Accordingly, the historical TAF activity data for Aurora State Airport are not considered accurate enough to draw reliable conclusions related to current activity data. Historical (2000-2020) TAF based aircraft and annual aircraft operations data are presented in **Figures 3-2 and 3-3**. The 2021 baseline activity levels for based aircraft and operations are depicted for reference.

FIGURE 3-2: HISTORICAL TAF – BASED AIRCRAFT

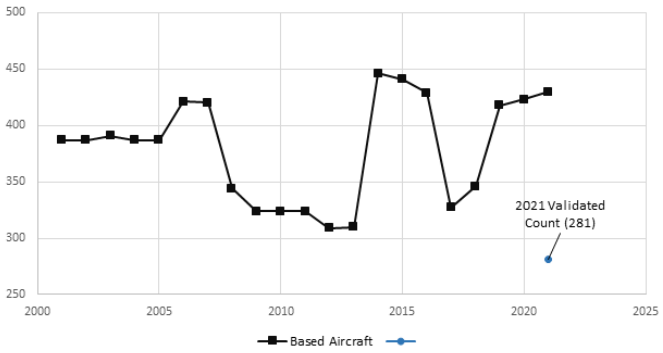
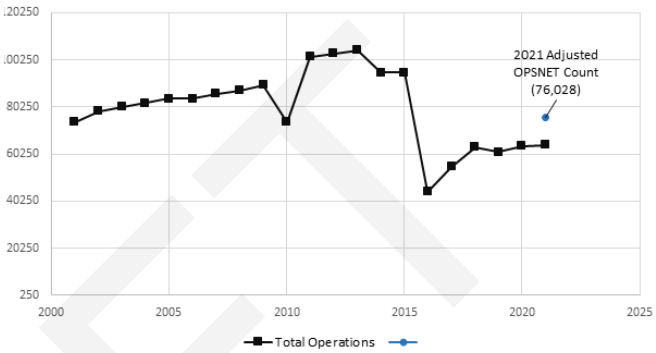


FIGURE 3-3: HISTORICAL TAF – ANNUAL AIRCRAFT OPERATIONS



Source: FAA TAF 2000-2045 (Aurora State Airport) www.taf.faa.gov

SUMMARY OF RECENT ACTIVITY FORECASTS

The two most recent aviation activity forecasting efforts specific to Aurora State Airport were prepared in the 2012 Airport Master Plan Update and the 2019 Constrained Operations Runway Justification study. The 2012 master plan used a 2010 base year with forecasts extending to 2030. The 2019 runway study used a 2018 base year with forecasts extending to 2038. The 2019 forecast was designed to be a minor update of the master plan forecast with updated evaluations focused on the design aircraft and its associated runway length requirements. The 2019 forecast was also the first forecast supported by actual air traffic control tower operations counts. Both forecasts were prepared in the pre-COVID era. Understanding these previous forecasting efforts provides context for the forecasting efforts to be developed as part of this planning process.

2012 Aurora State Airport – Airport Master Plan Update

The preferred based aircraft forecast projected an increase from 354 to 464 aircraft over the 20-year planning period. This forecast translates into a 1.36% average annual growth rate and a net increase of 110 aircraft. The preferred aircraft operations forecast projected an increase from 90,909 to 124,386 annual operations over the 20-year planning period. This forecast translates into a 1.58% average annual growth rate for the forecast period. The forecast identified the existing and future design aircraft as high performance medium business jets (IAI Astra and Cessna Citation X), both of which have Airport Reference Code C-II (ARC C-II) designations.

2019 Aurora State Airport – Constrained Operations Runway Justification Study

The preferred based aircraft forecast projected an increase from 349 to 561 aircraft over the 20-year planning period. This forecast translates into a 2.4% average annual growth rate and a net increase of 212 aircraft. The preferred aircraft operations forecast projected an increase from 66,153 to 112,200 annual operations over the 20-year planning period. This forecast translates into a 2.68% average annual growth rate for the forecast period. The forecast identified the existing and future design aircraft as ARC C-II medium business jet.

FAA Terminal Area Forecast

The 2020-2045 Terminal Area Forecast (TAF) of based aircraft and aircraft operations for the Airport was described earlier in the chapter. The TAF based aircraft forecast projects an increase from 346 to 554 aircraft over the 26-year forecast period (2019-2045). This forecast translates into a 1.09% average annual growth rate and a net increase of 208 aircraft. The TAF aircraft operations forecast projects an increase from 61,127 to 69,063 annual operations over the 26-year period. This forecast translates into a 0.47% average annual growth rate for the forecast period. The recommended master plan forecasts will be compared to the current TAF as part of the FAA review and approval process. Significant deviations from the TAF must be adequately documented for FAA forecast approval.

Oregon Aviation Plan V6.0 Model

The current Oregon Aviation Plan (OAP v6.0) was adopted in 2019 and provided long term aviation activity forecasts for all general aviation airports in the state. The OAP v6.0 relied on FAA TAF data for the 2015 baseline and its forecast horizon was 2015-2035.

The OAP v6.0 preferred based aircraft forecast annual growth rate was 1.1%. For Aurora State Airport, this model translated into increase from 346 to 421 based aircraft over the 20-year forecast period (+75 aircraft). The preferred aircraft operations forecast annual growth rate was 0.9%. For Aurora State Airport, this model translated into increase from 94,935 to 113,231 annual operations over the 20-year forecast period.

COMMUNITY PROFILE

Historical population and economic data for the region was presented in Chapter Two. Long term population and economic forecasts are summarized in **Tables 3-9 and 3-10**. These data are used by local government to project future demand for services, housing, and to effectively manage growth as required by the State of Oregon land use planning law. The forecast population and economic growth within the service area for Aurora State Airport is expected to contribute to increased aviation demand the master planning horizon.

Table 3-9 summarizes the 2021 Portland State University - Population Research Center (PRC) population forecast for the 2021-2041 period that corresponds to the Airport Master Plan. The county and statewide population forecasts for the local area generally project higher rates of annual growth over the next five years, followed by a slowing that accelerates near the end of the forecast horizon. The PRC forecast growth in Clackamas County and in Aurora exceed the projected statewide growth rate; the forecast growth in Marion County trails the forecast statewide growth rate. The Aurora urban growth boundary (UGB) population forecast projects annual growth averaging above 2% over the 20-year forecast.

TABLE 3-9 : FORECAST POPULATION

	2021	2026	2031	2036	2041
Oregon	4,266,560	4,542,741	4,761,243	4,960,026	5,130,713
CAGR:	-	1.26%	0.94%	0.82%	0.68%
Marion County	347,182	373,010	387,806	399,722	409,506
CAGR:	-	1.45%	0.78%	0.61%	0.48%
Clackamas County	425,316	441,763	464,902	487,724	509,796
CAGR:	-	0.76%	1.03%	0.96%	0.89%
Aurora UGB	1,133	1,193	1,357	1,524	1,695
CAGR:	-	1.04%	2.61%	2.35%	2.15%

Source: PSU Population Research Center (PRC), 2021

Table 3-10 summarizes the current Woods & Poole Economics forecast gross regional product (GRP) for Marion and Clackamas County for the 2021-2041 period that corresponds to the Airport Master Plan. GRP measures the market value of all goods and services produced in the defined region. As indicated in the data, strong GRP growth is forecast over the long term, with a similar slowing near the end of the forecast horizon.

TABLE 3-10: FORECAST GROSS REGIONAL PRODUCT

	2021	2026	2031	2036	2041
Marion County (millions)	$16,761	$18,397	$20,107	$21,874	$23,688
Percent Change	-	9.76%	9.29%	8.79%	8.29%
					CAGR: 1.7%
Clackamas County (millions)	$21,172	$23,348	$25,652	$28,067	$30,590
Percent Change	-	10.28%	9.87%	9.42%	8.99%
					AAGR 1.9%

Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright 2021. Woods & Poole does not guarantee the accuracy of this data. The use of this data and the conclusion drawn from it are solely the responsibility of Century West Engineering, Inc.

Current Aviation Activity

Current based aircraft and annual aircraft operations data for use in developing new aviation activity forecasts are presented in **Tables 3-11 and 3-12**. The 2021 baseline totals will be applied to all 2021-2041 master plan forecast models.

TABLE 3-11: BASELINE BASED AIRCRAFT (JANUARY 2022)

Aircraft Type	On-Airport	TTF	Total
Single Engine	45	175	220
Multi Engine	1	14	15
Jet	3	33	36
Helicopter	1	9	10
Total	**50**	**231**	**281**

Source: National Based Aircraft Inventory – January 2022

TABLE 3-12: BASELINE AIRCRAFT OPERATIONS (2021)

	2021
Itinerant	
Air Taxi	2,006
General Aviation	36,390
Military	79
Subtotal	**38,475**
Local	
General Aviation	37,488
Military	65
Subtotal	**37,553**
Total	**76,028**

Source: Century West Engineering developed using FAA TFMSC Data

2021-2041 Aviation Activity Forecasts

BASED AIRCRAFT

Seven based aircraft forecasts were developed based on a variety of models. The average annual growth rates for the models ranged from 0.1% to 1.7%. Four of the models were discarded after review and additional analysis determined limited applicability. The remaining three models were determined appropriate for comparison. These models are presented in **Table 3-13** and depicted in **Figure 3-4**. These forecast models are applied to the 2021 based aircraft baseline data presented earlier in the chapter.

Historical Hangar Development Trend Model – This model was developed based on an assessment of the Airport's hangar development trend since the last master plan was completed. The evaluation was performed by measuring the total area of on-airport and TTF hangar building footprints in August 2012 and June 2021 as observed in Google Earth imagery. Hangars were measured as whole; non aircraft storage spaces (operations, aircraft maintenance, equipment storage, etc.) located within the structures have not been removed from the measurements. A linear rate (1.7% CAGR) of increase in hangar space was calculated for the nine-year period. Details of the net change in airport hangar area are described in Chapter 2. The rate was applied to baseline based aircraft total and projected out for the 20-year planning period. The model assumes that actual hangar development was demand driven, not speculative and that the buildings constructed as hangars are used for aircraft storage, not general storage. The model results in a CAGR of 1.7%.

Federal Contract Tower (Oregon) TAF Model – The FAA TAF forecast presented in the "Summary of Recent Activity Forecasts" section of the chapter was developed specifically for the Aurora State Airport facility. This model also uses the FAA TAF Query Data, but reflects the forecast for the larger group of Oregon airports with federal contract air traffic control towers. The operational similarities of this group of Oregon airports provides a broader assessment of activity.

This model applies the Oregon Federal Contract Tower TAF forecast annual growth rates for total based aircraft to the Airport's baseline based aircraft count, and projected out for the 20-year planning period. The model is non-linear and year-over-year growth rates vary. The model assumes that the Airport's based aircraft fleet growth will be in line with state growth for airports with FAA contract air traffic control towers. The model results in an average annual growth rate of 1.1%.

National Aerospace Forecast (Weighted Airport Fleet Mix) Model – This model applies the National Aerospace forecast growth rates for each aircraft type to the Airport's existing fleet mix and projects out for the 20-year planning period. The linear projection assumes steady growth that does not change year-over-year during the 20-year forecast. The models accounts for growth differences between aircraft types by weighting rates with the Airport's fleet mix distribution. Aircraft types were summed to get total projected counts for each forecast year. The model assumes that the Airport's based aircraft fleet will grow in parallel to the national fleet. The model results in an average annual growth rate of 0.2%.

RECOMMENDED BASED AIRCRAFT FORECAST SUMMARY

The recommended based aircraft forecast for the 2021-2041 Aurora State Airport Master Plan is the **Oregon Federal Contract Tower TAF Model**. The model provides a reasonable projection of growth that also aligns toward recent hangar construction trends at the Airport, while outpacing very modest national general aviation fleet growth expectations.

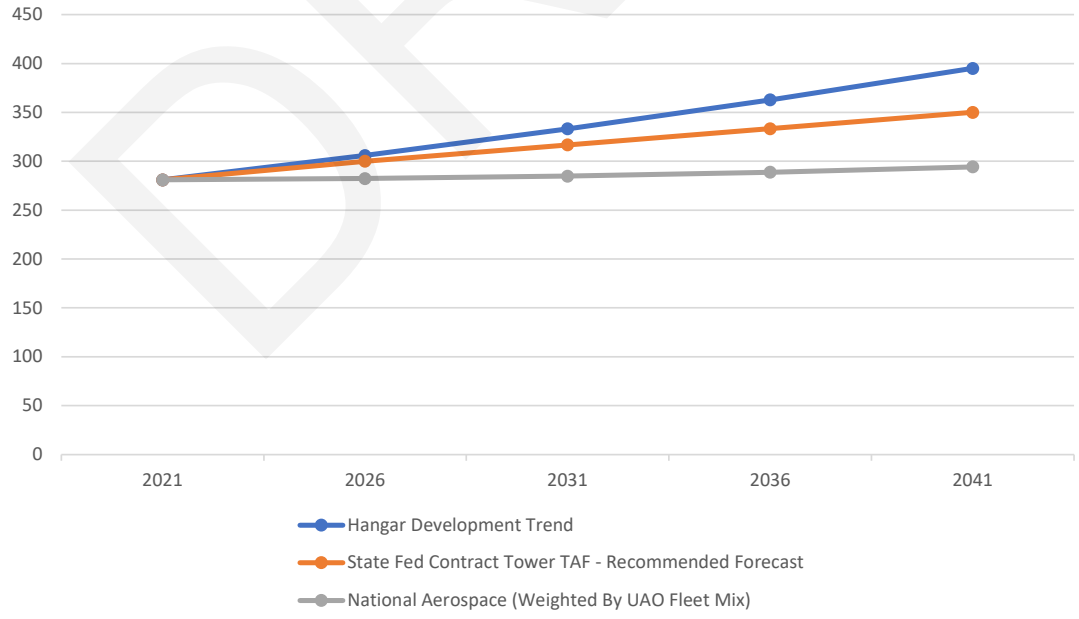
The recommended forecast results in a net increase of 69 based aircraft over the planning period, which reflects an average annual growth rate of **1.1%**. The forecast exceeds the FAA's most recent NPIAS forecast for the region (0.9% CAGR) and the OAP v6.0 long-term forecast rates for Oregon's based aircraft fleet (1.1% CAGR). The based aircraft forecast models presented for consideration, including the recommended model, are summarized in **Table 3-13** and depicted on **Figure 3-4**.

TABLE 3-13: FORECASTS OF BASED AIRCRAFT

Based Aircraft Forecast Models	CAGR	2021	2026	2031	2036	2041
Historical Hangar Development Trend Model	1.7%	281	306	333	363	395
Federal Contract Tower (Oregon) TAF Model - Recommended Forecast	**1.1%**	**281**	**300**	**317**	**333**	**350**
National Aerospace Forecast (Weighted By the Aurora State Airport Fleet Mix) Model	0.2%	281	282	285	289	294

Source: Century West Engineering

FIGURE 3-4: BASED AIRCRAFT FORECASTS



Source: Century West Engineering developed using FAA TFMSC Data

Discarded Models

National Aerospace Forecast (Combined Rate) Model – This model applies the *National Aerospace Forecast FY 2021-2041* growth rate for entire fleet to the Airport's baseline based aircraft count, and projected out for the 20-year planning period. The linear projection assumes steady growth that does not change year-over-year during the 20-year forecast. The model projects fleet growth as a whole, not by individual aircraft type. The model results in an average annual growth rate of 0.1%. The model was discarded in favor of a weighted version of the National Aerospace forecast, as it does not account for aircraft fleet mix.

Northwest Mountain Region Federal Contract Tower TAF Model – This model also uses the FAA TAF Query Data subsets for federal contract air traffic control towers described earlier. The model is based on the TAF forecast for the group of airports located in the FAA's Northwest Mountain Region. As with the Oregon contract tower model, the operational similarities of this group of airports provides a broad assessment of activity. This model applies the FAA's Northwest Mountain Region Federal Contract Tower TAF forecast annual growth rates for aircraft classifications to the Airport's baseline based aircraft counts (using the same classifications) over the 20-year period. The model uses the same assumptions as State TAF contract tower models, but uses regional forecast rates. The model results in an average annual growth rate of 1.1%. This model was discarded in favor of the similar and more locally-based state TAF model.

National Federal Contract Tower TAF Model – This model also uses the FAA TAF Query Data subsets for federal contract air traffic control towers. The model is based on the TAF forecast for all similarly grouped airports in the federal contract tower system. As with the other FAA contract tower models, the operational similarities of this group of airports provides a broad assessment of activity. This model applies the FAA's National Federal Contract Tower TAF forecast annual growth rates for aircraft classifications to the Airport's baseline based aircraft counts (using the same classifications) over the 20-year period. The model uses the same assumptions as State TAF contract tower models but uses national TAF forecast rates. The model results in an average annual growth rate of 1.3%. This model was discarded in favor of the similar and more locally-based state TAF model.

Oregon Aviation Plan v6.0 Model – This model applies OAP v.6.0 operations growth rate to the Airport's baseline based aircraft count and projects out 20 years. The linear projection assumes steady growth that does not change year-over-year during the 20-year forecast. The model results in an average annual growth rate of 1.1%. This model was discarded based on its reliance on historical TAF data and pre-COVID activity assumptions in place when the forecast was created.

Based Aircraft Fleet Mix

Table 3-14 summarizes the current and forecast fleet mix for the planning period. The based aircraft fleet mix at Aurora State Airport is expected to become slightly more diverse as it is anticipated that as single-engine piston aircraft are retired over time, a portion are likely be replaced by LSA or experimental kit aircraft, following national trends. The addition of locally based turbine-engine aircraft (turboprop, jet, helicopter, etc.) is also anticipated based on the FAA's long term general aviation fleet forecast which reflects continued adoption of turbine engine technology.

TABLE 3-14: FORECAST BASED AIRCRAFT FLEET MIX

	CAGR	2021	2026	2031	2036	2041
Single Engine*	0.9%	216	229	240	250	259
Multi Engine Piston	0.0%	6	6	6	6	6
Turbo Prop	1.1%	13	14	15	15	16
Jet	2.3%	36	40	45	50	56
Helicopter	1.4%	10	11	11	12	13
Total Based Aircraft	**1.1%**	**281**	**300**	**317**	**333**	**350**

Source: Century West Engineering
*Includes Experimental/LSA

AIRCRAFT OPERATIONS

Eleven aircraft operations forecasts were developed based on a variety of models. The average annual growth rates for the models ranged from 0.5% to 3.6%. Five of the models were discarded after review; the remaining models are presented in **Table 3-15** and depicted in **Figure 3-5**. These forecast models are applied to the 2021 aircraft operations baseline data presented earlier in the chapter.

Historical Tower Counts Trend – This model uses the full six years (2016-2021) of adjusted ATCT airport operations data available to establish a best-fit linear trend line for the period. The model assumes steady linear growth year-over-year. Itinerant and local splits were based on 2021 operations counts. The model is limited by the short period from which to develop meaningful trend and operational events experienced during the COVID-19 pandemic may be disproportionately reflected in the resulting trend projection. The model results in an average annual growth rate of 3.6%.

TFMSC Historical Trend (20-year) – This model uses 20 years (2001-2021) of TFMSC instrument flight plan data for the Airport to establish a trend line for the period. Itinerant and local splits were based on 2021 operations counts. Operational impacts experienced during the COVID-19 pandemic appear to dampen the overall trend. This model yields a reasonable correlation between the historical data to the derived trend line (R-squared = 0.72). The model results in an average annual growth rate of 2.3%.

Marion County Population Correlation – Socio-economic indicators (population, employment, and gross regional product) for several local defined areas were compared to the Airport's adjusted ATCT operations counts (2016-2021). Ultimately Marion County Population was chosen as the most representative model as the county showed good correlation across the three indicators (population being the highest at R-squared = 0.93) and is the most focused area in which the airport is located. Clackamas County Population was also 0.93, but the airport isn't located in the county and employment correlation was on the low end of the range, so it wasn't chosen over Marion County. PSU PRC population forecast annual growth rates were applied to baseline operation counts for the 20-year period. The model assumes that operations will continue to mirror population growth in Marion County. Itinerant and Local split based on 2021 operations counts. The model results in an average annual growth rate of 2.9%.

National Aerospace Forecast Operations (Airports with ATCT) – This model applies the *National Aerospace Forecast FY2021-2041* "Total Combined Aircraft Operations at Airports with FAA and Contract Traffic Control Service" forecast 2021-2041 growth rates for all aircraft categories to the Airport's baseline operation counts and projects out 20 years. Resulting operations by aircraft type were summed to get total operations for each year in the forecast. Aircraft categories were combined into Local and Itinerant totals based on the splits from baseline. The model assumes that the Airport operations will mirror national trends. The model results in an average annual growth rate of 0.8%.

Federal Contract Tower TAF Non-Hub Models – The FAA TAF for non-hub airports with federal contract air traffic control towers provides a reasonable model for projecting annual aircraft operations at Aurora State Airport based on the model's focus on airports with similar facilities and operational characteristics. The TAF models for general aviation operations are primarily based on time-series analysis. The FAA notes that the average decrease in 2020 general aviation operations was significantly less than commercial operations or commercial enplaned passengers. Three models were developed for varying geographic levels (national, regional, and state). Based on the review of each model, the projection for Oregon contract towers was determined to be most applicable for further consideration (see below). The national and regional federal contract tower models, although producing similar growth rates, were discarded in favor of the Oregon model. The TAF model based on Oregon contract tower airports is recommended for further consideration, and it is summarized below.

Federal Contract Tower TAF State (Oregon) Model – This model applies the Oregon Federal Contract Tower TAF forecast annual growth rates for aircraft classifications to Aurora State Airport's baseline operations counts (using the same classifications) over the 20-year period. The model is non-linear and year-over-year growth rates vary. The model assumes that the Airport's operations will mirror state trends. The model results in an average annual growth rate of 0.6%.

Discarded Models

National Aerospace Forecast (Hours Flown) Model – This model applies the "Active General Aviation and Air Taxi Hours Flown" forecast 2021-2041 single growth rate to the Airport's baseline operation counts and projects out 20 years. Aircraft categories were combined into Local and Itinerant totals based on the splits from baseline. The model assumes that the Airport operations will mirror national trends. The model results in an average annual growth rate of 1.0%. This model was discarded since the individual aircraft categories presented in the FAA forecast are not detailed in ATCT activity counts used to develop the baseline aircraft operations total.

Northwest Mountain Region Federal Contract Tower TAF Model – This model applies the FAA's NW-Mountain Region Federal Contract Tower TAF forecast annual growth rates for aircraft classifications to the Airport's baseline operations counts (using the same classifications) over the 20-year period. The model uses the same assumptions as State TAF contract tower models but uses Northwest Mountain Region TAF forecast rates. The model results in an average annual growth rate of 0.5%. This model was discarded in favor of the similar and more locally based state TAF model.

National Federal Contract Tower TAF Model – This model applies the FAA's National Federal Contract Tower TAF forecast annual growth rates for aircraft classifications to the Airport's baseline operations counts (using the same classifications) over the 20-year period. The model uses the same assumptions as State TAF contract tower models but uses national TAF forecast rates. The model results in an average annual growth rate of 0.7%. This model was discarded in favor of the similar and more locally-based state TAF model.

National Aerospace Forecast (Hours Flown) Model – This model applies the "Active General Aviation and Air Taxi Hours Flown" forecast 2021-2041 single growth rate to the Airport's baseline operation counts and projects out 20 years. Aircraft categories were combined into Local and Itinerant totals based on the splits from baseline. The model assumes that the Airport operations will mirror national trends. The model results in an average annual growth rate of 1.0%. This model was discarded since the individual aircraft categories presented in the FAA forecast are not detailed in ATCT activity counts used to develop the baseline aircraft operations total.

Oregon Aviation Plan v6.0 Model – This model applies OAP v.6.0 operations growth rate to the Airport's baseline operations count and projects out 20 years. The linear projection assumes steady growth that does not change year-over-year during the 20-year forecast. The model results in an average annual growth rate of 0.9%. This model was discarded based on its reliance on historical TAF data and pre-COVID-19 activity assumptions in place when the forecast was created.

RECOMMENDED AIRCRAFT OPERATIONS FORECASTS SUMMARY

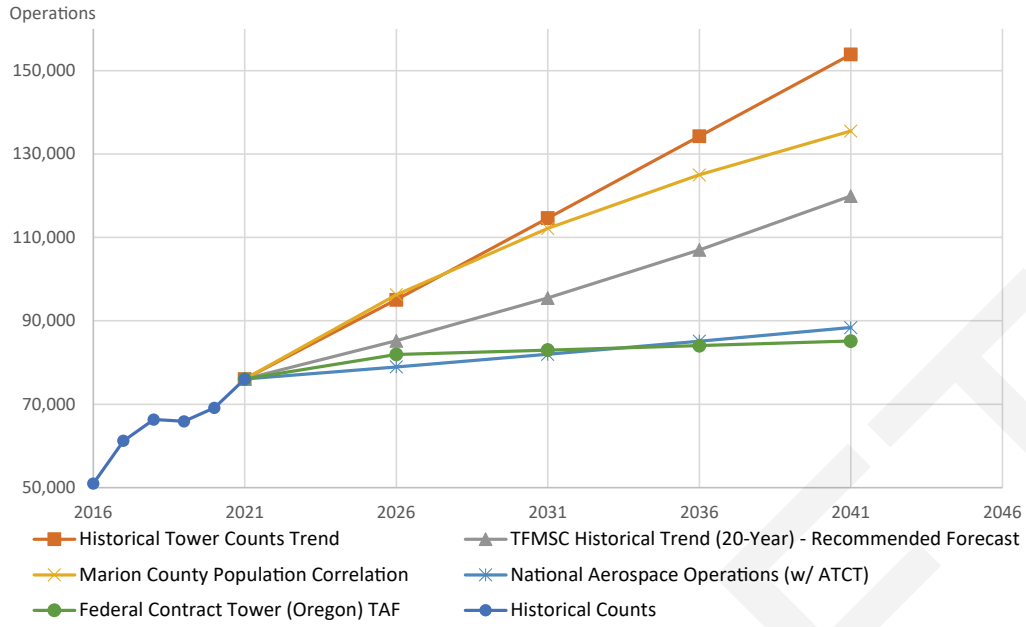
The FAA TFMSC Historical Trend Model is the recommended aircraft operations forecast for the 2021-2041 Aurora State Airport Master Plan. The extended period of TFMSC data provides a reliable indication of the Airport's growth in flight activity that is not exceedingly influenced by intermittent events. The TFMSC data also provides a stable measure of activity that is not affected by adjustments to baseline activity data. This model projects an average annual growth rate in operations of 2.3% over the planning period. The aircraft operations forecast models are included in **Table 3-15** and depicted in **Figure 3-5**.

TABLE 3-15: AIRCRAFT OPERATIONS FORECAST MODELS

	CAGR	2021	2026	2031	2036	2041
Historical Tower Counts Trend	3.6%	76,028	95,039	114,646	134,254	153,862
TFMSC Historical Trend (20-Year) - Recommended Forecast	**2.3%**	**76,028**	**85,201**	**95,480**	**107,000**	**119,909**
Marion County Population Correlation	2.9%	76,028	96,244	112,162	124,981	135,506
National Aerospace Forecast Operations (w/ ATCT)	0.8%	76,028	78,939	81,966	85,114	88,388
Federal Contract Tower (Oregon) TAF	0.6%	76,028	81,924	82,972	84,046	85,151

Source: Century West Engineering developed using FAA TFMSC Data

FIGURE 3-5: OPERATIONS FORECAST MODELS



Source: Century West Engineering developed using FAA TFMSC Data

AIRCRAFT OPERATIONS FLEET MIX AND SPLITS

Single-engine piston aircraft currently account for approximately 80% of airport operations, followed by helicopters, jets, turboprops, and multi-engine piston aircraft. It is expected that the mix of air traffic at Aurora State Airport will shift slightly during the 20-year planning period to include more turbine aircraft (jets, turboprops, and helicopters) based on current trends in aircraft manufacturing and the composition of airport users.

It is anticipated that the expected decline in older conventional single-engine piston aircraft will be partly offset by growth in experimental and sport aircraft. The aircraft operations fleet mix forecast is summarized in **Table 3-16**. Activity splits (local, itinerant, etc.) for forecast operations are summarized in **Table 3-17**.

TABLE 3-16: OPERATIONS FLEET MIX

Aircraft Type	2021	2026	2031	2036	2041
Total Airport Operations	**76,028**	**85,201**	**95,480**	**107,000**	**119,909**
Single Engine*	60,823	67,650	75,143	83,674	92,929
Multi Engine Piston	760	767	764	642	600
Turbo Prop	3,041	3,578	4,297	5,029	5,995
Jet	5,322	6,390	7,638	9,095	10,792
Helicopter	6,082	6,816	7,638	8,560	9,593
Fleet Mix Percentages					
Single Engine*	80.0%	79.4%	78.7%	78.2%	77.5%
Multi Engine Piston	1.0%	0.9%	0.8%	0.6%	0.5%
Turbo Prop	4.0%	4.2%	4.5%	4.7%	5.0%
Jet	7.0%	7.5%	8.0%	8.5%	9.0%
Helicopter	8.0%	8.0%	8.0%	8.0%	8.0%

Source: Century West Engineering
*Includes LSA/Experimental Operations Fleet Mix

TABLE 3-17: LOCAL AND ITINERANT ACTIVITY

Aircraft Operations	2021	2026	2031	2036	2041
Itinerant					
Itinerant Air Taxi	2,006	2,248	2,519	2,823	3,164
Itinerant GA	36,390	40,790	45,721	51,246	57,439
Itinerant Military	79	79	79	79	79
Itinerant Total	**38,475**	**43,117**	**48,319**	**54,149**	**60,682**
Local					
Local GA	37,488	42,019	47,096	52,786	59,162
Local Military	65	65	65	65	65
Local Total	**37,553**	**42,084**	**47,161**	**52,851**	**59,227**
Total Operations	**76,028**	**85,201**	**95,480**	**107,000**	**119,909**

Source: Century West Engineering developed using FAA ATCT Data

Operational Peaks

Activity peaking is evaluated to identify potential capacity related issues that may need to be addressed through facility improvements or operational changes. The Peak Month represents the month of the year with the greatest number of aircraft operations (takeoffs and landings). The peak month for most general aviation airports occurs during the summer when weather conditions and daylight are optimal. This also coincides with the busiest time of year for flight training and recreational flying. This level of peaking is consistent with recent fuel delivery records for the Airport and the annual distribution of TFMSC data.

Peak Day operations are defined by the average day in the peak month (Design Day) and the busy day in the typical week during peak month (Busy Day). The Design Day is calculated by dividing peak month operations by 30.5. For planning purposes, the Busy Day is estimated to be 50% higher than the average day in the peak month (Design Day x 1.5), based on common activities generating significant surges in flight activity.

The peak activity period in the Design Day is the Design Hour. For planning purposes, the Design Hour operations are estimated to account for 20% of Design Day operations (Design Day x 0.20).

The operational peaks for each forecast year are summarized in **Table 3-18**. This level of peaking is consistent with the mix of airport traffic and is expected to remain relatively unchanged during the planning period. These measures of activity are considered in the facility requirements analyses when calculating runway/taxiway capacity and transient aircraft parking requirements.

TABLE 3-18: AIRCRAFT OPERATIONS PEAKING

	2021	2026	2031	2036	2041
Total Based Aircraft	**76,028**	**85,201**	**95,480**	**107,000**	**119,909**
Peak Month Operations (11%)	8,363	9,372	10,503	11,770	13,190
Design Day Operations (Average Day in Peak Month)	274	307	344	386	432
Busy Day Operations (Assumed 150% of design day)	411	461	517	579	649
Design Hour Operations (Assumed 20% of design day)	55	61	69	77	86

Source: Century West Engineering

Design Aircraft

The design aircraft (or critical aircraft) represents the most demanding aircraft, or family of aircraft, using an airport on a regular basis and determines the appropriate Airport Reference Code (ARC) and airport design standards for airport development.

The existing and future design aircraft identified in the aviation activity forecasts corresponds to Airport Reference Code C-II (ARC C-II)

- 2021 TFMSC data indicates that Approach Category C and D aircraft operations exceeded the minimum of 500 annual operations required for Design Aircraft designation. While neither approach category alone reached the operations threshold, collectively they exceed the threshold and represent the most demanding family of high performance jet aircraft.
- Airplane Design Group II or larger aircraft operations also exceeded the 500 operations threshold required for Design Aircraft designation.
- Each element of the ARC is independently justified through current activity levels, and the ARC C-II designation most accurately represents this segment of aircraft activity.
- Specific facility requirements, such as runway length requirements will be derived from the composite of Approach Category C and D jet aircraft reflected in FAA runway length planning tables.

Table 3-19 summarizes FAA technical criteria used to determine the applicable ARC for aircraft based on physical characteristics; representative aircraft are also depicted.

TABLE 3-19: AIRPORT REFERENCE CODE (ARC)

Aircraft Approach Category	Aircraft Approach Speed knots	Airplane Design Group	Aircraft Wingspan
A	less than or equal to 91	I	less than or equal to 49’
B	92 to 121	II	50’ to 79’
C	122 to 141	III	80’ to 118’
D	142 to 166	IV	119’ to 171’

A-I (small) 12,500 lbs. or less

Beech Baron 55
Beech Bonanza
Cessna 182
Piper Archer

B-I (small) 12,500 lbs. or less

Beech Baron 58
Beech King Air C90
Cessna 402
Cessna 421

A-II, B-II (small) 12,500 lbs. or less

Super King Air 200
Pilatus PC-12
DCH Twin Otter
Cessna Caravan

ARC - B-II Greater than 12,500 lbs.

Super King Air 300, 350
Beech 1900
Cessna Citation
Falcon 20, 50

A-III, B-III Greater than 12,500 lbs.

DHC Dash 7, Dash 8
Q-200, Q-300
DC-3
Convair 580

C-I, D-I

Lear 25, 35, 55, 60
Israeli Westwind
HS 125-700

C-II, D-II

Gulfstream II, III, IV
Canadair 600
Canadair Regional Jet
Lockheed JetStar

C-III, D-III

Boeing Business Jet
Gulfstream 650
B 737-300 Series
MD-80, DC-9

C-IV, D-IV

B - 757
B - 767
DC - 8-70
DC - 10

Source: Century West Engineering

Military Activity

Air traffic control tower counts for the Airport average 248 annual military operations since 2016, although the volume has decreased to less than 150 annual operations over the last two years. Occasional military use with helicopters or small fixed-wing aircraft in support of emergency response, search and rescue, and flight training activities would be consistent with activity (Oregon Army National Guard, etc.) experienced at other Oregon general aviation airports. Military flight activity at the Airport is projected to remain at current levels, with a static projection of 144 annual operations during the planning period. Forecast military activity is included in **Table 3-20**.

Air Taxi Activity

Air taxi activity includes for-hire charter flights, medevac flights, and some scheduled commercial air carriers operating under FAR Part 135. Air taxi activity at Aurora State Airport is forecast to increase at the same rate as itinerant general aviation operations. Forecast air taxi activity is included in **Table 3-20** (forecast summary).

Forecast Summary

A summary of the based aircraft and annual aircraft operations is presented in **Table 3-20**. These forecasts project slight to modest growth over the 20-year planning period that is consistent with FAA's long-term expectations for general aviation in the region. Based aircraft are forecast to increase at an average annual rate of 1.1% between 2021 and 2041. Aircraft operations are forecast to increase at an average annual rate of 2.3% between 2021 and 2041. The forecasts reflect the Airport's ability to attract and accommodate both locally based and transient aeronautical activity from a diverse group of users, including flight training, recreational aviation, personal travel, and business aviation.

TABLE 3-20: FORECAST SUMMARY

Activity	CAGR	2021	2026	2031	2036	2041
Based Aircraft						
Single Engine*	0.9%	216	229	240	250	259
Multi Engine Piston	0.0%	6	6	6	6	6
Turbo Prop	1.1%	13	14	15	15	16
Jet	2.3%	36	40	45	50	56
Helicopter	1.4%	10	11	11	12	13
Total Based Aircraft	**1.1%**	**281**	**300**	**317**	**333**	**350**
Aircraft Operations						
Itinerant						
Itinerant Air Taxi	2.3%	2,006	2,248	2,519	2,823	3,164
Itinerant GA	2.3%	36,390	40,790	45,721	51,247	57,439
Itinerant Military	0.0%	79	79	79	79	79
Itinerant Total	**2.3%**	**38,475**	**43,117**	**48,319**	**54,149**	**60,682**
Local						
Local GA	2.3%	37,488	42,019	47,096	52,786	59,162
Local Military	0.0%	65	65	65	65	65
Local Total	2.3%	37,553	42,084	47,161	52,851	59,227
Total Operations	**2.3%**	**76,028**	**85,201**	**95,480**	**107,000**	**119,909**
Aircraft Operations Fleet Mix						
Single Engine*	2.1%	60,823	67,650	75,143	83,674	92,929
Multi Engine Piston	-1.2%	760	767	764	642	600
Turbo Prop	3.5%	3,041	3,578	4,297	5,029	5,995
Jet	3.6%	5,322	6,390	7,638	9,095	10,792
Helicopter	2.3%	6,082	6,816	7,638	8,560	9,593
Total Operations	2.3%	76,028	85,201	95,480	107,000	119,909
Operations By C-II (Critical Aircraft)	3.1%	318	370	432	503	586
Operations by AAC C & D	3.1%	672	659	768	895	1,042
Operations by ADG II & III	3.1%	4,250	2,761	3,216	3,747	4,364
Instrument Operations	2.3%	9,658	10,823	12,129	13,592	15,232

Source: Century West Engineering
*Includes Experimental/LSA

TERMINAL AREA FORECAST (TAF) COMPARISON

The recommended based aircraft and aircraft operations forecasts are compared to the current TAF as required for FAA review in **Table 3-21**.

TABLE 3-21: AIRPORT PLANNING AND TAF FORECAST COMPARISON

Activity	Year	Airport Forecast	TAF	"AF/TAF (% Difference)"
Passenger Enplanements				
Base yr.	2021	0	0	0.0%
Base yr. + 5yrs.	2026	0	0	0.0%
Base yr. + 10yrs.	2031	0	0	0.0%
Base yr. + 15yrs.	2036	0	0	0.0%
Commercial Operations				
Base yr.	2021	2,006	1,191	68.4%
Base yr. + 5yrs.	2026	2,248	1,731	29.9%
Base yr. + 10yrs.	2031	2,519	1,848	36.3%
Base yr. + 15yrs.	2036	2,823	1,973	43.1%
Total Operations				
Base yr.	2021	76,028	64,035	18.7%
Base yr. + 5yrs.	2026	85,201	65,371	30.3%
Base yr. + 10yrs.	2031	95,480	66,303	44.0%
Base yr. + 15yrs.	2036	107,000	67,262	59.1%

Source: Century West Engineering
Note: TAF data is on a U.S. government fiscal year basis (October through September).

Next Steps

The draft aviation activity forecasts will be submitted to the FAA Seattle Airports District Office (ADO) for formal review following presentation and discussion of the chapter in Planning Advisory Committee (PAC) Meeting 2.

Upon FAA approval of the forecasts, the current and future design aircraft will be used in subsequent master plan technical evaluations and definition of airport design standards and airspace planning standards. These designations will include the appropriate design criteria, including Airport Reference Code (ARC) and Taxiway Design Group (TDG) to be used in the 2021-2041 Airport Master Plan.

The approved aviation activity forecasts will be used to evaluate the aeronautical facility requirements for the Airport in the following chapter (Chapter 4 – Facility Requirements). The facility requirements evaluation will quantify current and future facility needs in general terms and volume.

EXHIBIT A
PAC COMMENTS RELATED TO FORECASTS
(SIX LETTERS INCLUDED)

April 12, 2022

Sent via email to:

Martha Meeker, Chair, and Oregon Aviation Board — *aviation.mail@aviation.state.or.us*
Betty Stansbury, Aviation Director — *betty.stansbury@aviation.state.or.us*
Sarah Lucas, Aviation Planner — *Sarah.LUCAS@odav.oregon.gov*
Oregon Department of Aviation

Benjamin Mello, Airport Capacity Program Manager — *Benjamin.j.mello@faa.gov*
Federal Aviation Administration Seattle Airports District Office
FAA Northwest Mountain Region Airports Division

RE: Comments on Draft 2022 Aurora State Airport Master Plan Chapters 1-3

Dear Chair Meeker, Director Stansbury, members of the Oregon Aviation Board, Manager Mellow and Aviation Staff:

The City of Wilsonville is a jurisdiction impacted by the operations of the Aurora State Airport and adjacent through-the-fence private properties that are conducted under the auspices of the Oregon Department of Aviation (ODAV) and the Federal Aviation Administration (FAA). The City of Wilsonville has been an active participant for over 20 years in relation to the Aurora State Airport, including serving on the Planning Advisory Committees (PAC) of the Aurora State Airport Master Plan process in 2011/12 and 2022. The City has sought to collaborate with local governments and state agencies to comply with Oregon public-process and land-use laws and engage in coordinated planning.

The following comments review general, structural problems and issues of concern with the current 2022 Draft Aurora State Airport Master Plan and process, and also catalog a set of specific questions pertaining to Chapters 1-3.

1. **Failure to Provide Public Notice of Public Comment Opportunity on Draft Master Plan Chapters 1-3**

ODAV failed to publish any kind of public notice of the public comment opportunity on 2022 Draft Master Plan Chapters 2 through 3 that has a due date of April 12. Rather, notice of the opportunity to comment and the deadline for public comments was only provided verbally by ODAV and consultant during the April 5 PAC Work Session meeting. This kind of public engagement failure is endemic to how ODAV operates in general, and specifically during the 2022 Aurora State Airport Master Plan process.

Rhetorically speaking, how are members of the public to be aware that there is a public comment opportunity if no public written notice is published or advertised in advance of the comment deadline?

2. Reference and Reliance on Invalid 2012 Aurora State Airport Master Plan Taints Current 2022 Draft Master Plan.

During the past 10-years-plus, the City has seen ODAV act without due regard to Oregon land-use and public-process procedures and laws in relation to implementing the invalid Aurora State Airport Master Plan of 2011/2012. The City has been forced by ODAV to file administrative appeals with the state Land Use Board of Appeals (LUBA) and to file lawsuits in state Circuit Court and subsequently file appeals to the Oregon Court of Appeals and Oregon Supreme Court to force the agency to comply with Oregon law. The City and other parties have been successful in various cases seeking judicial remedies to correct unlawful land-use actions by ODAV and county seeking Airport expansion.

On June 16, 2021, the Oregon Court of Appeals ruled that ODAV misapplied state land-use laws in approving the contentious 2012 Aurora State Airport Master Plan; see *Schaefer v. Oregon Aviation Board,* 312 Or App 316 (2021). The Court reversed and remanded to LUBA the decision on the master plan, finding that LUBA erred in excluding the prior critical 2011 master plan work from the record; in erroneously finding that the master plan did not propose airport development on an Exclusive Farm Use (EFU) zoned land; and also erroneously finding that any proposed new uses at the Aurora State Airport are considered rural uses for land-use purposes.

The City of Wilsonville together with the City of Aurora, 1000 Friends of Oregon, Friends of French Prairie and Aurora Planning Commission Chair Joseph Schaefer filed an appeal with the court in March 2021 regarding a LUBA decision that dismissed their appeal challenging the legality of the 2012 master plan. LUBA ruled in December 2020 that it did not have jurisdiction to hear the appeal as land-use decisions of the Department of Aviation's adoption of 'findings of compatibility' and approval of the 2012 Master Plan.

The Oregon Aviation Board, acting contrary to advice from the Oregon Attorney General's Office, elected in September 2021 to appeal the Court of Appeals ruling to the Oregon Supreme Court. Acting in judicially lightning-fast time, on Dec. 9, 2021, the Oregon Supreme Court dismissed an appeal by ODAV and others that resulted in upholding the June 16, 2021, decision by the Court of Appeals, which declared that ODAV misapplied state land-use laws in approving the contentious 2012 Aurora State Airport Master Plan.

The Supreme Court denied review of the Court of Appeals decision that reversed and remanded a December 2020 Land Use Board of Appeals (LUBA) decision approving the master plan, finding that LUBA erred in excluding the prior critical 2011-12 master plan work from the record; in erroneously finding that the master plan did not propose airport

development on Exclusive Farm Use (EFU) land; and also erroneously finding that any proposed new uses at the Aurora Airport are considered rural uses for land-use purposes.

The 10-year-long controversy over the 2012 Aurora State Airport Master Plan originated with a confusing, convoluted process over several years, resulting in an invalid master plan that ignored Oregon public-process and land-use laws. Rather than seek to work with the impacted local communities adjacent to the Airport, ODAV pressed forward with airport expansion efforts contrary to state law, including an unsuccessful attempt in September 2018 to seek legislative permission for a $37 million grant application to the FAA to extend the Airport runway.

And now, after all of this effort at obfuscation by the agency, ODAV staff have finally confirmed what the Oregon Attorney General's Office communicated in March 2021 And acknowledged that there is NO Valid 2012 Aurora State Airport Master Plan — "the State Aviation Board *did not approve* the 2012 Master plan" (emphasis added):

> **From:** PECK Heather <heather.peck@odav.oregon.gov>
> **Date:** April 5, 2022 at 12:10:29 PM PDT
> **To:** LUCAS Sarah <Sarah.LUCAS@odav.oregon.gov>, ben.williams@liturgica.com, brandy.steffen@jla.us.com
> **Cc:** benjamin.j.mello@faa.gov
> **Subject: Re: Comments in advance of PAC Work Session today**
>
> Thank you again, for your comments and we will include them in the record, files and forward to the FAA.
>
> For clarification however, while you are correct that the State Aviation Board did not approve the 2012 Master plan, the FAA did approve the methodology, the data as related to the forecast, the forecast and the final ALP, as also signed and dated by the FAA.
> Kind Regards,
> Heather
>
> HEATHER PECK
> OREGON DEPARTMENT OF AVIATION
> PLANNING & PROGRAMS MANAGER
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By definition, a master plan that is not adopted by the governing body Oregon Aviation Board remains an unapproved draft plan. Thus, ODAV now concedes after losing in the judicial process the absence of a valid 2012 Aurora State Airport Master Plan that was never adopted by the Oregon Aviation Board. As an invalid plan without adopted findings and conclusions, for all practical purposes the 2012 Aurora State Airport Master Plan is an unapproved draft without any standing in law.

The current 2022 Draft Aurora State Airport Master Plan Chapters 1 through 3 reference on over 20 occasions the invalid 2012 Aurora State Airport Master Plan. By referencing a

nonexistent master plan—or more precisely an invalid draft plan—the new 2022 Draft Master Plan becomes tainted.

The only remedy in this instance is remove all references to the invalid, draft 2012 Aurora State Airport Master Plan from the 2022 Draft Aurora State Airport Master Plan. As the next Section 2 discusses, a pertinent question is What Prior Version of the Aurora State Master Plan is valid? Based ODAV's actions—or inaction—it would appear that the 1976 Master Plan is the current, adopted and codified appropriately version.

3. ODAV "Packs the PAC" with Self-Serving Financial Interests Benefiting from Taxpayer-Funded Airport Expansion.

As the City called-out earlier at the start of new master plan process, ODAV's composition of the Master Plan Planning Advisory Committee (PAC) is "packed" with self-serving special interests that benefit from taxpayer-funded expansion of the Aurora State Airport. A review of the PAC members listed on p 1-5 shows that:

- 19 PAC members (59%) represent vested financial interests that have expressed a desire for increased development and expansion of the Airport;
- 7 PAC members (22%) are local governments and public-interest organizations that have expressed issues of concern regarding operations of the Airport'
- 6 PAC members (19%) are neutral state and tribal-government agencies.

As an agency funded primarily by a state tax on aviation fuel, ODAV itself is a financial beneficiary of Airport runway extension and expansion plans that result in increased use and sales of aviation fuel.

ODAV omitted two key state agencies from the PAC—Oregon Department of Agriculture and Oregon Department of Environmental Quality. Each agency is charged with a mission and areas of responsibility that would have benefitted ODAV's Airport master planning effort. The Department of Agriculture could advise on the rural agricultural farming traded-sector component of the regional economy of French Prairie surrounding the Airport, and DEQ could advise on issues of environmental pollution that the Airport emits.

Certainly having a wide representation of various stakeholders is beneficial to the master plan process; however, stacking the PAC with pro-Airport expansionists could appear as though ODAV has manipulated the new 2022 Aurora State Airport master planning process from the outset to ensure that a majority of the PAC members would favor Airport expansion. In a similar fashion, one could surmise that ODAV ensured that local community and public-interest voices would be overwhelmed by being a minority of the PAC membership.

4. ODAV Appears to Manipulate Federal Process to Trump State Law.

The citation above from ODAV staff indicates that while "the State Aviation Board did not approve the 2012 Master plan, the FAA did approve the methodology, the data as related to the forecast, the forecast and the final ALP, as also signed and dated by the FAA." This statement reveals the agency's motive to seek to use a *federal* decision/document as a method to evade *state* land-use and public-process procedures and laws.

That is, in Oregon statutes, a state agency must apply to the land-use jurisdiction for an exception to zoning land uses. In this instance, ODAV is to apply to Marion County for a goal exception to the County Comprehensive Plan that includes adoption of the airport map, assumed to the ALP, or FAA Airport Layout Plan. As was noted at the April 5 PAC Work Session meeting by Matthew Crall, Planning Services Division Manager for the Oregon Department of Land Conservation and Development, ODAV must comply with Oregon land-use laws requiring the agency like any other party apply for a goal exception to the county comprehensive plan that includes adoption of the airport map.

On March 30, 2022, the Oregon Court of Appeals reversed and remanded an October 2021 LUBA determination that a private-property development project near the Airport was exempt from the state's land-use process. LUBA erroneously found Marion County did not need to grant exemptions to state land use goals involving the preservation of farmland, adequate public facilities, and urbanization.

The Court of Appeals ruled in *Schaefer v. Marion County,* 318 Or App 617 (2022), that the rezoning from Exclusive Farm Use (EFU) to an airport use would have to go through state land-use procedures. To do so, a map that includes the expansion of the airport development would have to be adopted by Marion County, which the Court of Appeals determined has not been done since 1976.

The Court of Appeals opinion goes on to say, "The statute itself does not modify the procedure for expanding the airport boundary." *(Id.* at 634). That means the Airport's boundaries cannot be expanded just because ODAV says so in the Airport Master Plan. Rather, the agency must effectuate the proposed Master Plan and follow the law like other parties without assuming that ODAV has an FFA trump card to play that allows the agency to bypass state land-use laws.

The 2022 Draft Aurora State Airport Master Plan Chapter 2, p 2-4, states that "Several planning studies have been completed through the Airport's history, including FAA-funded master plans in 1976, 1988, and 2012." Based on a lack of changes to the Marion County Comprehensive Plan, ODAV failed to apply for a Comprehensive Plan goal exception or Airport ALP Map for any Aurora State Master Plan update conducted in 1998 or 2012. As the Court of Appeals found in *Schaefer v. Marion County,* the last Comprehensive Plan update for the Aurora State Airport Master Plan occurred in 1976. "The 1976 Aurora State

Airport Master Plan, including its airport layout plan, which is a map of the airport, is part of the Marion County Comprehensive Plan." *(Id.* at 620).

Thus, ODAV is unable to use or reference an FAA-approved ALP Map that the agency has failed to gain an exception for in the Marion County Comprehensive Plan. The last such Master Plan to have been done correctly is the 1976 Aurora State Airport Master Plan.

5. Goals of the Draft Master Plan Do Not Relate to the Output of the Plan.

In discussing the "Goals of the Airport Master Plan," ODAV indicates that the "primary goal of the master plan is to provide the framework and vision needed to define future facility needs at Aurora State Airport." The Goals enumerated raise a number of questions, and also demonstrate the Draft Master Plan fails to meet the "primary goal" of "future facility needs" at the Airport.

- Goal 6 states "identify potential environmental and land use requirements that may impact development." What are some examples of both environmental and land use requirements in this context?

- Goal 8 indicates that the Master Plan is to "Develop an Airport Layout Plan to graphically depict proposed improvements" and "Prepare a supporting Capital Improvement Plan." This goal raises a number of questions, including will there be a new ALP created as part of this process? If not, why? What ALP will be used? When was it created? Was there an opportunity for public input on the ALP?

  Furthermore, as is discussed later, the "supporting Capital Improvement Plan" (CIP) falls far short of the actual infrastructure needs at the Airport. The CIP portion of Chapters 2 and 3 demonstrate a lack of compliance with Oregon regulations for major new, urban-level development in terms of infrastructure planning and financing, especially in high-value EFU ag lands.

- Goal 9 seeks to "Provide recommendations * * * to remove barriers to appropriate growth at the Airport – What are some examples of recommendations to improve land use and zoning oversight to "remove barriers to appropriate growth at the airport"? How is "appropriate growth" measured in this context?

  - How specifically will potential environmental and socioeconomic impacts be measured, weighed or evaluated in the context of 'future development' at the airport?

  - Was the utilization of federal funds to construct projects (air traffic control tower) identified in an un-adopted master plan legal?

6. ODAV's Permissive Attitude Towards Overweight/Oversized Aircraft at Aurora State Airport Creates Constrained Operations.

The 2022 Draft Master Plan cites on multiple occasions the 2019 Constrained Operations Runway Justification Study that "indicated in excess of 500 annual operations," p 2-18. Chapter 3, Aviation Activity Forecasts, is largely based on the 2019 Aurora State Airport Constrained Operations Runway Justification Study, which determined that aircraft operating at the Airport experienced 645 constrained operations in 2018. It should be noted that this number was based on pilot surveys that were *not validated* against flight plans, and did not take into consideration that ODAV's practice of allowing an increasing number of oversized aircraft to operate at the Airport was the major factor driving the number of constrained operations.

Further, that number of 645 purported constrained operations in 2018 represents a 33% increase over that reported in the unapproved 2012 Master Plan, in spite of a 24% reduction in Total Operations since 2010. That increase can only be attributed to ODAV's practice of allowing an increasing number of oversize jets to operate at the Airport which drives the increase in constrained operations.

Thus, the 2022 Draft Master Plan *never* discusses that the constrained operations are caused by ODAV's very actions of granting permission for overweight/oversized aircraft to use the Aurora State Airport. A public records request of ODAV by the City of Wilsonville reveals over a hundred waivers have been granted by ODAV over the past 10 years 2012-2021 to aircraft that are overweight or oversized for the Aurora State Airport runway, also thereby creating a public safety issue.

The Aurora State Airport runway is 5,003 feet and has a strength rating of 45,000 pounds. ODAV has regularly granted permission for aircraft with manufacturer-specified minimum runway lengths at maximum takeoff weight that exceed 6,000 feet and have a maximum takeoff weight of 70,000 pounds. ODAV regularly provides overweight waivers to a Global Express aircraft that has a maximum takeoff weight of 92,500 pounds, a minimum takeoff distance of 6,170 feet and weighs 50,200 pounds when empty. In addition to creating situations that create constrained operations, ODAV creates long-term pavement maintenance problems and public safety concerns by regularly granting permission for overweight and oversized aircraft to use the Airport.

Additionally, the 2019 Constrained Operations Runway Justification Study appears to use a faulty methodology and inaccurate data to arrive at conclusions. For instance, the Minimum Takeoff Distances listed for the four jets listed in the 2022 Draft Master Plan with the most constrained operations are higher than the published Minimum Takeoff Distances from the aircraft manufacturers. The Falcon 50, which had the single largest number of reported constrained operations in 2018 at 160, is shown on p 16 of Chapter 1 to have a Minimum

Takeoff Distance of 5,413 feet when, the published manufacturer's specification is 4,935 feet.

Moreover, in the 2019 Constrained Operations Runway Justification Study data listing annual operations and constrained operations, the Falcon 50 is shown to have had 226 (p 1-16) operations at Aurora in 2018, of which 160 (p 1-18) were constrained. That is almost 71% constrained operations for a jet with manufacturer's minimum takeoff distance shorter than the runway at Aurora.

Compounding questions on the accuracy of the data presented in the 2019 Constrained Operations Runway Justification Study, the Falcon 900 is listed on p 1-16 as having 68 operations at Aurora in 2018, of which 75 were reported from the survey (p 1-18) to be constrained. That is to say, the aircraft is reported to have 110% of the operations constrained, which seems to be mathematically impossible.

We also note that operations flight data of the 2019 Constrained Operations Runway Justification Study and the 2022 Draft Master Plan tables of TFMSC activity operations often do not match for the two plans' years 2012 – 2018. It seems odd for FAA historical TFMSC activity operations data to vary so substantially over a two-year period between 2019 and 2022. For example:

Aircraft: Falcon 50	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
2022 Draft Master Plan	16	32	108	228	320	332	276
2019 Constrained Operations Study	10	18	96	220	310	316	276
# Variance	6	14	12	8	10	16	0
% Variance	60%	78%	13%	4%	3%	5%	0%

Aircraft: Falcon 900	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
2022 Draft Master Plan	180	148	48	10	56	82	70
2019 Constrained Operations Study	180	144	48	8	54	80	68
# Variance	0	4	0	2	2	2	2
% Variance	0%	3%	0%	25%	4%	3%	3%

Data sources:
2022 Draft Master Plan, Chapter 3, Table 3-8: Historical TFMSC Activity by ARC (Select Jets), p 3-14
2019 Constrained Operations Runway Justification Study, TFMSC IFR Data - Select Jet Aircraft Operations Table, p 1-16

Furthermore, the Draft Master Plan fails to acknowledge ODAV's financial benefit for providing permission for overweight/oversized aircraft to use the Airport. ODAV's primary funding source is a tax on aviation fuel, of which increased sales benefit the ODAV financially. Thus, ODAV has a motivation to increase the number of constrained operations

in order to justify a longer runway that allow aircraft to take on more fuel, and thereby benefit ODAV financially. ODAV is artificially producing the conditions that create constrained operations by granting permission for overweight/oversized aircraft to use the Aurora State Airport. Based on the public-records review, if the agency did not grant these permissions, the number of constrained operations would be insignificant.

7. ODAV's Push for Urban-Level Development to Expand Aurora State Airport's Footprint Is Contrary to State Law.

ODAV's effort to expand the Aurora State Airport's footprint through an extended runway and new through-the-fence nearby private properties rely on the conversion of surrounding EFU ag farmland and result in new development and increased activity. The agency's effort to extend the Airport runway is well documented, including prior desire for longer runway in the now invalid 2012 Master Plan, 2018 legislative request to apply for $37 million in FAA funds for runway extension, and 2019 Constrained Operations Runway Justification Study.

Airport expansionists ODAV and private developers appear to have elected to not follow Oregon land-use law procedures that call for seeking a Goal exception and Comprehensive Plan amendment to accommodate both public- and private-sector EFU land conversion for development. The Court of Appeals has ruled now in two separate but related cases cited above, *Schaefer v. Oregon Aviation Board,* 312 Or App 316 (2021) and *Schaefer v. Marion County,* 318 Or App 617 (2022), pertaining to land-use procedures by public entities—ODAV and Marion County—and private developers. In both lawsuits, the Court of Appeals reversed and remanded to LUBA the base case for review with compliance with Oregon public process and land-use laws that require Goal exception and Comprehensive Plan amendment.

Oregon land-use law calls for urban-level development that includes new pavement, public and commercial structures, increased jobs and automobile traffic, etc., to be sited in cities that provide municipal governance and public utility infrastructure, including domestic water service, wastewater/sewage processing, stormwater treatment facilities, appropriate surface transportation infrastructure, including safe roadways and alternative bike/ped facilities. Oregon land-use law disfavors urban-level activities outside of cities that occurs in unincorporated county, prime EFU lands, such as the situation with the Aurora State Airport. The 2022 Draft Master Plan fails to address this core issue of compliance with Oregon land-use law and the corresponding need for municipal governance and public infrastructure.

While ODAV may seek to claim that the new 2022 Draft Master Plan deals only with the limited amount of public agency-owned land at the Airport, considerable amount of the Master Plan directly addresses issues associated with adjacent and nearby private-property development that is dependent on a proposed public-use finding of the Master

Plan that is to facilitate EFU land conversion. The Landside Facilities section of Chapter 2, pp 2-37 – 2-39, "includes the landside facilities (depicted in Figure 2-12) designed to support airport operations, including aircraft storage and maintenance. This section of the existing conditions analysis includes a discussion of General Aviation (GA) Terminal Areas and 'Through-The-Fence' (TTF) development, hangars/airport buildings, airport surface roads, vehicle parking, airport fencing, and utilities."

Neither the Landside Facilities section, pp 2-37 – 2-39, nor the Airport Vicinity Zoning/Land Use section, p 2-23, present any analysis for how ODAV is to comply with Oregon land-use law and local zoning ordinances to implement plans for Airport expansion. In a similar manner, the 2022 Draft Master Plan provides no analysis regarding needed public utility infrastructure to support proposed new developments of runway extension and Airport through-the-fence commercial properties.

By advancing Master Plan objectives to lengthen the Aurora State Airport runway and increase the conversion of nearby high-value EFU lands to airport use to accommodate new commercial developments, ODAV is violating a key tenant of Oregon land-use law. The agency appears to rely on the limited FAA federal airport master plan process to evade Oregon land-use law procedures for Airport development.

8. ODAV's Airport Master Plan Fails to Meet Oregon State Standards for Urban-Level Development.

In Oregon, urban-level development plans that propose major new development and infrastructure improvements such as a new air traffic control tower, runway extension, aircraft hangers, public-service facilities, commercial office space and the like that impact land-use zoning, surface transportation facilities, environmental resources, surface and groundwater, emergency-response services, etc. devote considerable study to needed public infrastructure utilities to accommodate new development. The 2022 Draft Aurora State Airport Master plan spends a paltry eight pages on key infrastructure components that directly impact public safety and environmental quality.

Chapter 2 section "Applicable Planning Studies/Documents," p 2-16 through p 2-23, covers in a cursory manner crucial infrastructure issues of public concern, including

- Applicable Planning Studies/Documents, including the Marion County Comprehensive Plan, Marion County Rural Transportation System Plan (RTSP), City of Aurora Transportation System Plan (TSP), Oregon Aviation Plan, Oregon Resilience Plan and 2019 Constrained Operations Runway Justification Study.

- Environmental Data

- Environmental Screening/NEPA Categories, including Air Quality, Biological Resources, Hazardous Materials, Solid Waste and Pollution Prevention, Natural Resources and Energy Supply, Water Resources,

- Local Surface Transportation

- Area Land Use/Zoning, including Airport Vicinity Zoning/Land Use.

The 2022 Draft Master Plan Chapter 2, p 2-16 through p 2-23, reveals a host of environmental problems and issues of public health and safety concerns without addressing mitigation or remediation for infrastructure shortcomings:

- Unsafe public utilities:

    - "[A]bove ground storage tank fueling facility and one recently decommissioned fueling facility with underground storage tanks located on ODAV-owned property that are planned to be removed. There are also other privately-owned facilities surrounding the Airport property that have their own fueling facilities.

    - "Water at the Airport is provided from a system of wells. In the early 2000s, with the assistance of Marion County, the Aurora Airport Water Control District was created to address major fire and life safety needs for privately-owned land adjacent to ODAV property at the Airport. The system included an underground tank system, a pump house, underground water pipes, fire hydrants, and numerous connections for fire sprinkler systems.

    - "Sanitary sewer is provided by individual and shared drain field/septic tank systems. There are at least nine individual drain fields located on ODAV owned property that are shared for both aviation related uses on both private and publicly owned land.

    - "The Airport's stormwater system is made up of a network of edge drain, culverts and surface drainage features which generally flow to the east, west, and south sides of the Airport. Most of the stormwater runoff originating on ODAV-owned property and airfield facilities like the runway, taxiway, and apron flows to the west side of the Airport."

    The Draft Master Plan fails to note that DEQ data appears to indicate that the NPDES (National Pollution Discharge Elimination System) permit for ODAV;'s Aurora State Airport discharge into Mill Creek-Pudding River watershed expired June 30, 2017. Is this information still current? If so, does the Master Plan recommend that ODAV come into compliance with environmental laws?

- Air Pollution:

- "The Aurora State Airport property falls within a census block where all air quality-related environmental hazard indexes are between the 24th and 73rd percentile nationwide. The Airport property scores within the 51st percentile for diesel particulate matter, the 73rd percentile for PM2.5 levels, the 24th percentile for ozone summer seasonal average of daily maximum eight-hour concentrations in the air, the 51st percentile for cancer risk from the inhalation of air toxics, and the 69th percentile nationwide for other respiratory hazards exposure."

- Water Pollution:

  - "Many of the surface waters in the vicinity of the Aurora State Airport property are contaminated and listed on the DEQ 303(d) list. Contaminated surface waters in the vicinity of the Airport include:

    - "A segment of the Pudding River east of the Airport is on the 303(d) list of impaired waterways for guthion, water temperatures, and dieldrin. It is impaired for fish and aquatic life, fishing, and public and private domestic water supplies.

    - "The entire Mill Creek-Pudding River sub-watershed (1st–4th order streams) is listed on the 303(d) list for benthic macroinvertebrates bioassessments and inorganic arsenic. It is considered impaired habitat for fish and aquatic life, fishing, public and private domestic water supplies, and recreational contact with the water.

    - "A segment of the Molalla River that intersects the Pudding River east of the Airport is not a 303(d)-listed waterway but is listed by the EPA's 'How's My Waterway' tool as impaired for fishing due to flow regime modification.

    - "The segment of the Willamette River that the Molalla River flows into north of the Airport is also a 303(d)-listed waterway. It is listed for the following factors: noxious aquatic plants, aldrin, benthic macroinvertebrates bioassessments, temperatures, 4,4'-DDE, 4,4'DDT, dieldrin, and PCBs. It is considered impaired for aesthetic quality, boating, fish and aquatic life, fishing, and public and private domestic water supply.

  - "Compromised waters in the vicinity of the Airport property include critical habitat for federally threatened Upper Willamette River Chinook and steelhead populations. These waters also flow downstream to additional critical habitat areas for other species of federally listed fish species in the Columbia River."

  What is the role of ODAV, FAA and the Aurora State Airport in creating these adverse environmental conditions? How does Airport septic and stormwater

pollution figure into the water pollution issues cited above? Where is the arsenic coming from and what are the ppm compared to the US Environmental Protection Agency (EPA) tolerances?

The Draft 2022 Master Plan also fails to note that the EPA and the Oregon Department of Environmental Quality (DEQ) are reported to be testing locations at the Aurora State Airport for known or suspected use of 'forever chemicals' of per- and poly-fluorinated substances or PFAS, where growing evidence points to their adverse health effects, including some cancers. ODAV elected to omit DEQ from the PAC.

- Endangered species impacts:
  - "[T]he Molalla River (three miles northeast of the Airport), the Pudding River (0.85 mile east of the Airport), and Mill Creek (0.75 mile southeast of the Airport) are designated as habitat for Chinook salmon (federally threatened; state classified sensitive critical), Pacific lamprey (federal species of concern; state classified sensitive vulnerable), and steelhead (federally threatened; state classified sensitive vulnerable) based on records of historic sightings.
  - "Sub-watersheds surrounding the Airport are considered Essential Fish Habitat (EFH) for Chinook and coho salmon. Federal agencies are required to consult with the National Oceanic and Atmospheric Administration (NOAA) Fisheries regarding any action authorized, funded, or undertaken that may adversely affect EFH. Stormwater runoff from the Airport property flows into the Chinook and steelhead critical habitat areas as well as the Chinook and coho EFH areas."
- Airport Vicinity Zoning/Land Use:
  - "The Airport is generally surrounded by Marion County Exclusive Farm Use (EFU) districts, and a few parcels of Acreage Residential (AR) and Industrial (I) located in the immediate vicinity of the property.
  - "The intent of the EFU zone (Marion County Code 17.136) is to provide and preserve the continued practice of commercial agriculture. It is intended to be applied in areas composed of tracts that are predominantly high-value farm soils. EFU zone generally prohibits the construction, use, or design of buildings and structures except for facilities used in agricultural or forestry operations, replacing or restoring a lawfully established dwellings, supporting exploration of geothermal or mineral resources, or supporting agri-tourism destinations and events."

    ODAV's mission to expand the footprint of the Aurora State Airport with a runway extension and additional through-the-fence commercial operations,

> located in prime EFU ag land of French Prairie, would appear to contradict the intent of both Oregon and Marion County's EFU zone, which "prohibits the construction, use, or design of buildings and structures except for facilities used in agricultural or forestry operations."

The 2022 Draft Master Plan provides no analysis of surface transportation impacts of Airport-related operations on area roads. In effect, by advocating for Airport expansion without any infrastructure recommendations to accommodate new development, ODAV is externalizing Airport-related costs onto local roads of Clackamas and Marion Counties and City of Aurora without providing compensation for mitigation. The Draft Master Plan merely notes a couple of relevant transportation plans, including the Marion County Rural Transportation System Plan and the City of Aurora Transportation System Plan, while ignoring the adjacent Clackamas County Transportation System Plan and the Oregon Department of Transportation (ODOT) Region Two/Mid-Willamette Valley Council of Governments Regional Transportation Plan.

The short Local Surface Transportation section indicates that the "Airport is located between Interstate 5 and State Highway 99E. Interstate 5, which is an essential north-south commerce link for the western United States, runs west of the Airport providing access to the Portland metro area. Access to the Airport is also provided by Highway 551 (Canby *(sic)* Wilsonville-Hubbard Highway) from the north and south, Arndt Road from the east and west, and Airport Road from Aurora. Keil Road is located south of the Airport and provides additional airport business access from Highway 551 and Airport Road. State Highway 99E, accessible to the Airport via Ehlen Road off of Highway 551 and Airport Road, provides access to the nearby communities of Canby, and Oregon City." Highway 551 (mislabeled as Canby-Hubbard Highway; actual label is Wilsonville-Hubbard Cut-off) is an ODOT facility, as is Highway 99E and I-5 and the nearby at-capacity I-5 Boone Bridge; segments of Arndt Road, Airport Road and Ehlen Road fall under jurisdiction of Clackamas and Marion Counties.

So while acknowledging the roadways of other jurisdictions that provide access to Airport, the 2022 Draft Master Plan fails to provide any analysis of Airport-related traffic on these roads or impacts to these surface transportation facilities. How do businesses at the Airport use these roads? What is the traffic volumes and capacity of area roadways to accommodate new development at the Airport? None of these questions are answered the Draft Master Plan.

In a similar manner, the 2022 Draft Master Plan provides no strategies to mitigate the impacts of Airport expansion onto local roads, nor potential resources to fund needed roadway improvements to accommodate increased activities at the Airport. For example, the Draft Master Plan cites on p 2-6 "that there are 2,672 direct, indirect and induced jobs at the Airport." Assuming that there are hundreds or thousands of

employees working at public and private employers at the Aurora State Airport, the Draft Master Plan provides no traffic analysis and no origination/destination trip data to determine impacts to surface transportation facilities. Given that there is no public transit service nor sidewalks nor shoulders on roads in the vicinity of the Airport, anyone who works at the Airport must drive in an automobile. So while the 2022 Draft Master Plan is shaping up to recommend runway extension and "through-the-fence" Airport expansion

The 2022 Draft Master Plan acknowledges a host of environmental resource degradation and public safety issues and transportation plans, but then does nothing to address these issues in terms of analysis or mitigation recommendations. On its face, the 2022 Draft Master Plan fails the test for an Oregon land-development master plan.

9. ODAV's Failure to Accurately Communicate to FAA Status of Prior FAA-funded 2012 Aurora State Airport Master Plan Violates FAA Grant Assurances that Should Result in an FAA Finding of Noncompliance that Results in a Denial of Future Funding.

As a component of obtaining the nearly $1 million FAA grant to fund the new 2022 Aurora State Airport Master Plan effort, ODAV made assurances in writing to FAA that all grant procedures were followed to produce a previous final, adopted 2012 Aurora State Airport Master Plan that would qualify agency to receiving funding for a new master plan. However, ODAV now admits that there is no valid, final adopted 2012 Aurora State Airport Master Plan, which is contrary to the grant assurances provided by ODAV to FAA.

The 2020 Draft Master Plan, p 2-42, states:

> "As a recipient of both federal and state airport improvement grant funds, the airport sponsor is contractually bound to various sponsor obligations referred to as 'Grant Assurances', developed by FAA and the State of Oregon. These obligations, presented in detail in federal and state statute and administrative codes, document the commitments made by the airport sponsor to fulfill the intent of the grantor (FAA or state) required when accepting federal and/or state funding for airport improvements. *Failure to comply with the grant assurances may result in a finding of noncompliance and/or forfeiture of future funding."* (Emphasis added).

The 2020 Draft Master Plan, p 2-43, states:

> "Consistency with Local Plans (Assurance #6)
>
> "*All projects must be consistent with city and county comprehensive plans, transportation plans, zoning ordinances, development codes, and hazard mitigation plans.* The airport sponsor should familiarize themselves with local planning

> documents before a project is considered *to ensure that all projects follow local plans and ordinances."* (Emphasis added).

As has been demonstrated and ODAV has conceded, there is no valid adopted Aurora State Airport Master Plan 2012, and neither the Master Plan nor its ALP were submitted to Marion County for amendments to the Comprehensive Plan. Thus, ODAV has failed to follow through on Grant Assurance #6, Consistency with Local Plans.

ODAV also fails to the test to fulfill FAA Grant Assurance #2, Compatible Land Use, which states in 2020 Draft Master Plan, p 2-44:

> "Compatible Land Use (Assurance #21)
>
> "Land uses around an airport should be planned and implemented in a manner that ensures surrounding development and activities are compatible with the airport. Aurora State Airport is located in unincorporated Marion County."

As Figure 2-8: Zoning Map on p 2-22 illustrates, the Aurora State Airport is located in unincorporated Marion County in high-value agricultural land zoned EFU. Oregon land use law seeks to protect EFU lands; ODAV's master-plan analysis seeks to convert EFU lands near Airport into an Airport use, contrary to state law, without a goal exception process that the agency has not pursued.

Thus, there is a question if ODAV has complied with FAA Grant Assurance #2, Compatible Land Use, by failing to ensure that "surrounding development and activities are compatible with the airport." By definition, EFU agricultural land is not compatible with Master Plan development proposals to extend runway and convert nearby EFU lands into Airport use.

ODAV's failure to meet FAA Grant Assurance #6 that "All projects must be consistent with city and county comprehensive plans" and potential lack of compliance with FAA Grant Assurance #21, Compatible Land Use, should prompt the FAA to take action. The appropriate remedy in this situation for ODAV'S failure to comply with one or more of the grant assurances is for FAA to issue a finding of noncompliance that results in the forfeiture of future funding.

10. Chapter 2, "Existing Conditions Analysis," Omits Key Information Needed to Determine Actual Site Conditions.

The 2022 Draft Master Plan cites on p 2-6 the OAP to indicate that there are 2,672 direct, indirect and induced jobs at the Airport. However, this information does not disclose how many jobs are there specifically at the Airport? This kind of data would tend to support the need for municipal governance and the provision of city utilities and transportation alternatives, all of which are missing at Airport.

Chapter 2 contains contradictory information: p 2-6 states that there are 281 aircraft based at the Airport; however, Figure 2-2 states that there are 396 'based aircraft.' What accounts for the difference here?

In a similar fashion, Figure 2-2 shows 94,935 annual operations; however, the Baseline is shown as 76,028 operations. Is Figure 2-2 incorrect?

The text on p 2-10 states that the based aircraft does not include helicopters; however, Figures 2-5 and 3-8 shows 10 helicopters contributing to the 281 based aircraft at the airport. Which is correct?

How many gallons of jet fuel is stored on ODAV property? Has ODAV accounted for any underground fuel-storage tanks? Are there any documented leaks in the underground storage tanks located on ODAV property?

If the 2019 Constrained Operations Study concluded that a runway extension of 7888' was justified, why was the recommendation only for 6002'?

What is the level of accuracy expected from the survey conducted in the 2019 Constrained Operations Study?

Page 2-20 states that Columbia Helicopter is identified by EPA as a RCRA Corrective Action Site. What does that mean exactly? What was found there? Were there any fines? Is the site in compliance now?

Page 2-22 raises the question if FAR Part 77 overlay airspace extend over any part of the city of Wilsonville? Why is the FAR 77 overlay not included inside the Wilsonville corporate limits on figure 2-8?

Figure 2-8 does not properly identify city of Wilsonville zoning, it would appear to be a generic categorization. That should be noted, or changed.

Page 2-23, where exactly are the two areas of residential property that are located under the primary, approach, or transitional surfaces?

Is pavement condition a consideration in allowing operations that exceeding weight limits? Who approves such requests? Are all requests granted? How many requests are granted versus denied? Please provide numbers.

Does a runway expansion cause the RPZ to impact other residential homes not currently impacted?

Should the utilities section on page 2-39 address fire and police protection?

What are some examples of 'FAA noncompliance' as described on p 2-41?

11. Chapter 3, Aviation Activity Forecasts, Raises Questions that Are Unanswered.

Chapter 3 lists Annual Aircraft Operations only for the years 2016 thru 2021; however, the same chapter uses 2012 thru 2021, for example Aurora State Airport Instrument Flight Operations. The same, consistent set of years should be used for all data tables and analysis, 2012 thru 2021. In consistent use of comparison years does not provide for the public to be able to determine accurate data, and could be interpreted as agency data/process manipulation.

Page 3-8, if the number of active commercial and private pilots will decline as indicated, how will operations increase? This appears to be contradictory information.

Is there a decibel level that should not be exceeded in residential areas near GA airports?

How many of the total aircraft operations are touch-and-go landings? That is, many members of the public suspect that ODAV is "artificially" inflating the operations count by including pilot training touch-and-go landings, each of which counts as two operations (touching down to runway and then lifting off of runway).

How many of the based aircraft are seasonal – that is, located at Airport more than half the calendar year? How is seasonality measured and through what process? Are there multiple surveys in a year?

12. ODAV's Prior Master Plan Historical Forecasting Track Record Consistently Over Estimates the Projected Number of Based Aircraft and Operations.

A review of prior ODAV master plan work in comparison to current data used in the 2022 Draft Master Plan demonstrates a historical track record of a high rate of error and most often overestimating the forecasted number of based aircraft, fleet mix and operations. Wide divergence between projections estimated 10 years ago and those of 2022 provide substantial reason to doubt the accuracy or validity of new 2022 Master Plan projections.

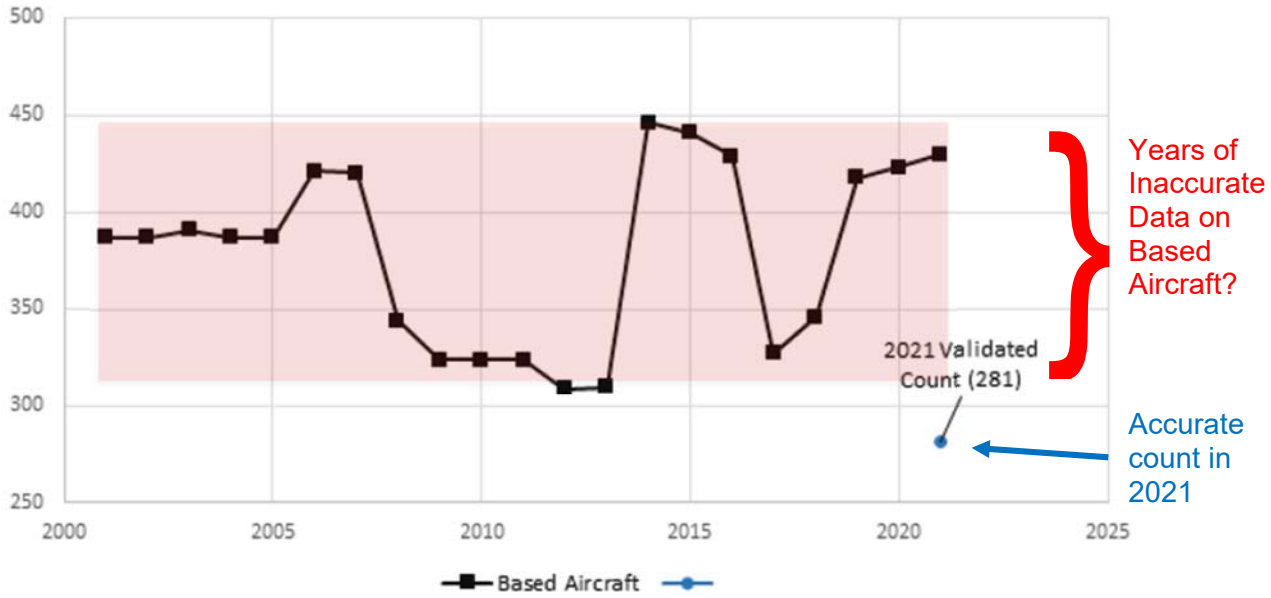
When comparing the 2012 Aurora State Airport Master Plan Based Aircraft and Fleet Mix Forecast compared to the new Draft 2022 Aurora State Airport Master Plan, the prior forecast for total based aircraft was off by 44%—overestimating the total number of Based Aircraft. Additionally, most of the Fleet Mix Forecast was also off substantially:

2012 and 2022 Master Plans Forecast of Based Aircraft and Fleet Mix Forecast: 2020/2021 Timeframe

	Year	Single Engine	Multiengine Piston	Turboprop	Jet	Helicopter	Other	Total
2012 Master Plan	2020	288	25	20	33	34	5	405
2022 Draft Master Plan	2021	216	6	13	36	10	0	281
# Variance		72	19	7	-3	24	5	124
% Variance		33%	317%	54%	-8%	240%	—	44%

ODAV's historical track record of overestimating the number of Based Aircraft at the Aurora State Airport is reflected in this graph in the new 2022 Draft Master Plan, p 3-15. Only when ODAV conducted an actual inventory of Based Aircraft in 2021 with a "Validated Count" of 218 did the public learn the actual number of Based Aircraft was substantially lower than ever previously reported or estimated.

FIGURE 3-2: HISTORICAL TAF – BASED AIRCRAFT



Source: FAA TAF 2000-2045 (Aurora State Airport) www.taf.faa.gov

When projecting out an additional 10 years to 2030 timeframe, the 2012 forecast margin of error increases by a third—increasing the over-estimate from 44% to 65%—compared to the 2022 forecast. The 2012 Master Plan projected a total 464 based aircraft by 2030, while the new 2022 Master Plan projects 281 based aircraft by 2031, representing a 65% overestimate compared to the new 2022 estimate.

2012 and 2022 Master Plans Forecast of Based Aircraft and Fleet Mix Forecast: 2030/2031 Timeframe

Comparison by Plan of Based Aircraft	Year	Single Engine	Multiengine Piston	Turboprop	Jet	Helicopter	Other	Total
2012 Master Plan	2030	316	27	26	47	43	5	464
2022 Draft Master Plan	2031	240	6	15	15	16	0	281
# Variance		76	21	11	32	27	5	183
% Variance		32%	350%	73%	213%	169%	—	65%

Data sources:
2012 Master Plan Table 3J. Based Aircraft and Fleet Mix Forecast, p 3-22
2022 Draft Master Plan Table 3-14: Forecast Based Aircraft Fleet Mix, p 3-19

The point here is that the prior 2012 Master Plan Based Aircraft and Fleet Mix Forecast was substantially off the mark on most counts. As listed below with the Operations Forecast, it appears that overestimating is common problem with Aurora State Airport Master Plans.

When comparing the 2012 Aurora State Airport Master Plan Operations Fleet Mix Forecast compared to the new Draft 2022 Aurora State Airport Master Plan, the prior forecast overestimated operations by 40% compared to the new 2022 estimate.

2012 and 2022 Master Plans Forecast of Operations Fleet Mix Forecast: 2020/2021 Timeframe

	Year	Single Engine	Multiengine Piston	Turboprop	Jet	Helicopter	Total
2012 Master Plan	2020	37,218	7,444	11,697	15,951	34,028	106,338
2022 Draft Master Plan	2021	60,823	760	3,041	5,322	6,082	76,028
# Variance		-23,605	6,684	8,656	10,629	27,946	30,310
% Variance		-39%	879%	285%	200%	459%	40%

When projecting out an additional 10 years to 2030 timeframe, the 2012 forecast margin of the Operations Fleet Mix continues a pattern of overestimating total operations and mis-estimating the fleet mix operations count.

2012 and 2022 Master Plans Forecast of Operations Fleet Mix Forecast: 2030/2031 Timeframe

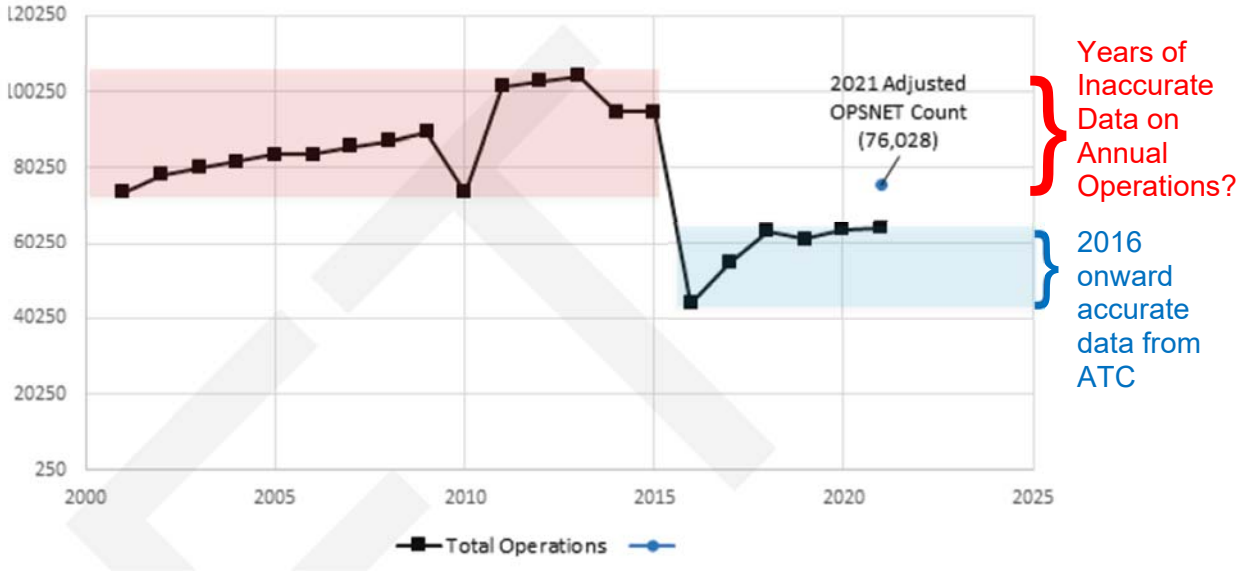
	Year	Single Engine	Multiengine Piston	Turboprop	Jet	Helicopter	Total
2012 Master Plan	2030	37,316	8,707	14,926	22,389	41,047	124,386
2022 Draft Master Plan	2031	75,143	764	4,297	7,638	7,638	95,480
# Variance		-37,827	7,943	10,629	14,751	33,409	28,906
% Variance		-50%	1040%	247%	193%	437%	30%

Data sources:
2012 Master Plan Table 3Table 3M. Operations Fleet Mix Forecast, p 3-29
2022 Draft Master Plan Table 3-16: Operations Fleet Mix, p 3-22

ODAV's historical record of inaccurate, over-estimated Operations count at the Aurora State Airport is reflected in this graph in the new 2022 Draft Master Plan, p 3-15. Only when the Aurora State Airport Air Traffic Control Tower opened in 2015 did accurate operational data become available that showed ODAV's gross overestimation of prior years' annual aircraft operations.

Additionally, despite having FAA Operations Network (OPSNET) Traffic Counts datasets that show 69,742 total operations in 2021 (2022 Draft Master Plan Table 2-6: OPSNET Airport Traffic Counts, p 2-10) ODAV inexplicably inflated the annual aircraft operations count by 6,286 or 9%, providing an even higher starting point for forecast operations.

FIGURE 3-3: HISTORICAL TAF – ANNUAL AIRCRAFT OPERATIONS



The highly inaccurate 2012 Aurora State Airport Master Plan Based Aircraft and Fleet Mix Forecast and Operations Fleet Mix Forecast compared to new Draft 2022 Draft Aurora State Airport Master Plan does not provide confidence in aviation forecasting. This becomes even more so when the Draft 2022 Draft Aurora State Airport Master Plan opts to ignore data contained in the recent 2019 Constrained Operations Study.

13. 2022 Draft Master Plan Ignores Recent 2019 Forecast Operations.

The new Draft 2022 Master Plan appears to ignore ODAV/FAA compiled operational flight data and forecast developed in the 2019 Constrained Operations Runway Justification Study for the Aurora State Airport, funded with a $70,000 ODAV grant. The Draft Master Plan does not justify or explain why the 2022 Draft Master Plan's forecasts vary so considerably from the previously FAA-approved 2019 Constrained Operations Runway Justification Study.

The forecast of operations variance between the new 2022 Draft Master Plan and the already approved FAA 2019 Constrained Operations Runway Justification Study starts with a 6% or 4,315 increase in 2021 and escalates to a differential of 58% or 44,033 annual operations by 2041.

It seems implausible that an FAA-approved aviation operations forecast conducted in 2019 just two years prior to the 2021 baseline date of the 2022 Draft Master Plan could be so utterly incorrect as forecast in the 2022 Draft Master Plan. A more plausible explanation is that ODAV is continuing an established pattern of overestimating operations forecast that result in a decision to extend the runway and expand the Airport's through-the-fence footprint onto prime EFU ag land.

The comparison of Forecast Operations between the new 2022 Draft Master Plan and the 2019 Constrained Operations Runway Justification Study demonstrates a significant variation from the Study's just-published forecast. Rhetorically speaking, if we can't rely on the 2019 forecast, why would we trust the 2022 forecast?

2022 Master Plan and 2019 Constrained Operations Study Forecast of Operations

	2021	2026	2031	2036	2041
2022 Draft Master Plan, p 3-23	76,028	85,201	95,480	107,000	119,909
Constrained Operations Study, p 1-14	71,713	72,706	73,939	74,788	75,876
# Variance	4,315	12,495	21,541	32,212	44,033
% Variance	6%	17%	29%	43%	58%

Data sources:
2022 Draft Master Plan Table 3-16: Operations Fleet Mix, p 3-22
2019 Constrained Operations Runway Justification Study, p 1-14

14. Draft Master Plan Fails to Account for Federal and State Effort to Reduce Climate-Changing Carbon and Greenhouse Gas (GHG) Emissions.

Finally, the 2022 Draft Master Plan makes NO effort to address the highly relevant issue of federal and state effort to reduce climate-changing carbon and greenhouse gas (GHG) emissions. In fact, by advocating for Airport runway extension and increase in fuel flowage that benefits ODAV's coffers, the agency is directly contradicting Oregon Governor's Office Executive Order 20-04 on Climate Action "Directing State Agencies to Take Actions to Reduce and Regulate Greenhouse Gas Emissions" that directs DEQ to develop strategies that "Cap and Reduce Greenhouse Gas Emissions."

The 2022 Draft Master Plan documents that over 4.2 million gallons of fuel have been sold at the Airport between 2016 and 2021 (Table 3-4: Fuel Flowage (Gallons)). Based on a standard conversion factor of 22.38 pounds of CO2 produced by burning a gallon of diesel fuel, the Airport has emitted an estimated 95 million pounds of CO2 during this timeframe. The 2022 Draft Master Plan anticipates generating additional CO2 by advocating development without addressing remediation or reduction strategies.

One of the major reasons stated during OAB meetings and PAC meetings by OAB members, ODAV staff and aviation interests in support of Aurora State Airport runway extension is to increase the sale of aviation fuel so that a larger class of aircraft may takeoff from the airport with full tanks of gas. Again, note that the tax on aviation fuel is the primary source of operational revenue for ODAV. Thus, the agency itself has a direct pecuniary interest in advocating for increased aviation-gas fuel sales that would accompany expansion of the Aurora State Airport, seemingly in direct conflict with the Governor's Executive Order on Climate Action.

The City of Wilsonville appreciates consideration of our comments and looks forward to ODAV and FAA responses to the issues of concern and questions raised regarding the 2022 Draft Master Plan Chapters 1-3. Thank you for your time and consideration.

Sincerely,

Mark Ottenad, Public/Government Affairs Director
City of Wilsonville

Exhibits:

A. December 13, 2021: Mayors of the Aurora State Airport Communities—Aurora and Wilsonville—Letter to The Honorable Kate Brown, Governor of Oregon, c/o Staff of the Office of the Governor, RE: Issues of Public Concern with Oregon Department of Aviation's Aurora State Airport Master Planning Process

B. August 4, 2021: City of Wilsonville Mayor Julie Fitzgerald Letter to Martha Meeker, Chair, Oregon Aviation Board, and Betty Stansbury, Aviation Director, RE: Public Disenfranchisement by the Oregon Aviation Board for the Proposed 2021-22 Aurora State Airport Master Planning Process

C. July 6, 2021: City of Aurora Mayor Brian Asher and City of Wilsonville Mayor Julie Fitzgerald letter to The Honorable Ron Wyden, U.S. Senator, and The Honorable Jeff Merkley, U.S. Senator, RE: Request for Your Intervention in Ensure Proper Award of FAA Grant Funds to the Oregon Department of Aviation for Aurora State Airport Master Plan Update

D. June 17, 2021: Representative Courtney Neron, HD-26, and Representative Susan McLain, HD-29, letter to Martha Meeker, Chair, Oregon Aviation Board, Betty Stansbury, Aviation Director, RE: 2021 Aurora State Airport Master Planning Process

E. June 14, 2021: City of Wilsonville Mayor Julie Fitzgerald Letter to Martha Meeker, Chair, Oregon Aviation Board, and Betty Stansbury, Aviation Director, RE: Concerns with Proposed 2021-22 Aurora State Airport Master Planning Process

F. August 8, 2018: Clackamas County Board Chair Jim Bernard and City of Wilsonville Mayor Tim Knapp letter to the Governor, Senate President and House Speaker: RE: Request to Cancel Oregon Department of Aviation application to Federal Aviation Administration (FAA) for funds to extend the Aurora State Airport runway

cc: Members of the Oregon Congressional Delegation: Senator Wyden, Senator Merkley, Congressman Schrader

Office of Governor Kate Brown

Members of the Oregon Legislature: Speaker Rayfield, Senate President Courtney, Representative McLain, Representative Courtney Neron

Leading Oregon Gubernatorial Candidates Christine Drazan, Tina Kotek, Bud Pierce, Tobias Read, Bob Tiernan, Betsy Johnson

FAA Northwest Mountain Region administrators: Director Fernuik, (Acting) Manager Seattle Airports District Office Manager Ferrell, Planning & Programming Branch Manager Schaffer, Safety & Standards Branch Manager Ritchie

Mayors of the Aurora State Airport Area Communities

Aurora Wilsonville

December 13, 2021

The Honorable Kate Brown, Governor of Oregon
c/o Staff of the Office of the Governor — *Submitted via email to:*
Gina Zejdlik, Chief of Staff — *gina.zejdlik@oregon.gov*
Amira Streeter, Policy Advisor–Climate, Energy and Transportation — *amira.streeter@oregon.gov*
Annie McColaugh, Director–Federal Affairs — *annie.mccolaugh@oregon.gov*
Jason Miner, Policy Director–Natural Resources — *jason.miner@oregon.gov*
Leah Horner, Director–Regional Solutions — *leah.horner@oregon.gov*
Jody Christensen, Mid Valley Regional Solutions Coordinator — *jody.christensen@oregon.gov*

RE: Issues of Public Concern with Oregon Department of Aviation's Aurora State Airport Master Planning Process

Dear Governor Brown:

We write to you as the elected leaders of the communities located in closest proximity to the Aurora State Airport to express our profound disappointment at the Oregon Department of Aviation's biased handling of the Aurora State Airport Master Planning process. Our communities bear the brunt of impacts of the airport's operations, and yet the Aviation Department appears to be discounting our concerns and is primarily responsive to vested financial interests at the airport.

This observation is true in general, as Department of Aviation staff and board members indicate meeting constantly with private-sector airport interests, while rarely meeting with local community members, city councilors and staff. Multiple communications from officials at the Cities of Aurora and Wilsonville to the Aviation Department over the past several years are generally ignored and not responded to.

The Cities of Aurora and Wilsonville, along with other Planning Advisory Committee (PAC) members to the Department of Aviation's Aurora State Airport Master Planning process such as 1000 Friends of Oregon and Friends of French Prairie, seek to raise significant issues of public concern. This federally funded master plan has gotten off to a rocky start in a manner that demonstrates the Department's apparent bias and inability at providing fair public processes that meet Oregon's standards for meaningful public engagement.

We are concerned that the Department of Aviation is again making similar mistakes as it did with the 2011 or 2012 Aurora State Airport Master Plan process that both the Oregon Supreme Court and the Oregon Court of Appeals found in 2021 violated Oregon land-use and public-process laws. We request that the Governor's Office demonstrate decisive leadership that provides confidence to local-government officials that federal and state planning processes are

conducted in a legal and ethical manner above reproach, which at this time appears questionable.

A primary concern pertains to the extremely lopsided membership composition of the Planning Advisory Committee (PAC). The Department of Aviation has stacked the Planning Advisory Committee with self-dealing financial interests at the Airport that benefit from taxpayer-funded Airport operations and capital improvements. A review of the PAC membership demonstrates that well over half of the PAC membership is comprised of entities with direct pecuniary interest in furthering airport expansion at taxpayer expense.

The same pro-airport expansion entities are represented multiple times on the PAC. Two associations placed on the PAC are composed of a majority of Airport financial interests:

- The attorney for the Aurora Airport Improvement Association represented at the June 3, 2021, Oregon Aviation Board meeting that most of the businesses at the Aurora State Airport belonged to the Aurora Airport Improvement Association.
- In a similar manner, most of the same airport entities are also members of Positive Aurora Airport Management association, a local airport operations management group.

By all appearances, the process and committee composition has the appearance of a "tick the box" exercise in public involvement. This leaves us to conclude that the outcome is predetermined and that the inevitable result will lead to airport expansion regardless of the impacts on safety, the environment and surrounding infrastructure.

Another key problem is that the Department of Aviation has omitted two key state agencies as PAC members: Department of Agriculture and Department of Environmental Quality (DEQ). The Aurora State Airport is located in the heart of the Oregon's best "foundation farmland" of French Prairie, which hosts some of Oregon's foremost traded-sector ag producers, nurseries and food processors. Real-estate speculation and uncontrolled urban-level development—as are occurring at the Aurora State Airport area—are harmful to this prime ag-sector economic cluster. By excluding the Department of Agriculture from the public process, the Department of Aviation continues a trend of excluding parties that may provide valuable information or may question the Aviation agency's objectives.

We read in the media that the US Environmental Protection Agency (EPA) indicates that 750 Oregon sites could expose residents to 'forever chemicals' of per- and poly-fluorinated substances or PFAS, where growing evidence points to their adverse health effects, including some cancers. In Oregon, the state Department of Environmental Quality (DEQ) is testing locations including the Aurora State Airport for known or suspected PFAS use. Again, the Department of Aviation's exclusion of DEQ demonstrates an on-going pattern of discriminatory conduct.

We understand that the Governor's Office Executive Order 20-04 on Climate Action "Directing State Agencies to Take Actions to Reduce and Regulate Greenhouse Gas Emissions" (GHG)

directs DEQ to develop strategies that "Cap and Reduce Greenhouse Gas Emissions." We are concerned that representatives of the Governor's Office appointed to the Oregon Aviation Board and Department of Aviation staff simultaneously are advocating for major expansion of the Aurora State Airport that results in substantial increases in aviation-gas fossil-fuel consumption and GHG emissions, contrary to the Executive Order on Climate Action.

One of the major reasons stated by aviation interests for Aurora State Airport runway extension is to increase the sale of aviation fuel so that a larger class of aircraft may takeoff from the airport with full tanks of gas. We note that the tax on aviation fuel is the primary source of operational revenue for the Department of Aviation. Thus**,** the Department of Aviation has a direct pecuniary interest in advocating for increased aviation-gas fuel sales that would accompany expansion of the Aurora State Airport, seemingly in direct conflict with the Governor's Executive Order on Climate Action.

Additionally, DEQ data appears to indicate that the NMPDES (National Pollution Discharge Elimination System) permit for the Department of Aviation's Aurora State Airport discharge into Mill Creek-Pudding River watershed expired June 30, 2017. We understand that area residents have expressed concerns for surface-water, ground-water and well-water quality due to prospective airport run-off pollutants, unregulated septic systems and potential ground water pollution. Cumulatively, these all appear to be good reasons from the Department of Aviation's perspective to exclude DEQ from Airport planning efforts.

The Department of Aviation's tightly controlled master planning process fails to meet the test for meaningful public engagement. The Zoom meeting format used by the Department of Aviation does not list or show all participants in the meeting and provide clear labeling of names and affiliations. It is unclear to the public who is attending the meetings and who or what entity that participants represent. At the November 16, 2021, PAC meeting, it was difficult to ascertain from many of the name labels who was attending in what role. Names and affiliations of all PAC members and staff/consultants should be clearly evident.

Additionally, some PAC members were allowed to have two representatives participate in the meeting, while some PAC members were ignored and not allowed to participate in the meeting. These elements indicate a failure of meaningful public process.

The facilitators for the PAC meeting used a series of unscientific "polls" to gauge participants' thoughts or perspectives; however, it was unclear who was participating — was it PAC members, Aviation staff and consultants, and/or the public? Moreover, the facilitators interpreted the results of the poll that may or may not be an accurate reflection of the participants involved.

The Department of Aviation states that "As the airport sponsor, ODA staff will be the final decision-making authority. They will decide what is included in the Master Plan." Setting aside the fact that this pronouncement at the start of a "public involvement" process sends a message that is contrary to Oregon's Statewide Planning Goal Number 1, we believe this is false

information; only the appointed body *(i.e.,* the Oregon Aviation Board) can legally approve a master plan. The failure of the Aviation Board to adopt the 2011 or 2012 Aurora State Airport Master Plan was a centerpiece for the Oregon Supreme Court's affirmation of the Court of Appeal's decision against the Department of Aviation for failure to comply with Oregon law.

During the November 16, 2021, PAC meeting, aviation consultants indicated that they would consider nearby external "outside the fence" proposed urban-level developments in the Airport master-planning process — implying that such proposed developments would favor Airport expansion. However, the consultants gave no indication of reviewing such information in light of Oregon's EFU land-use laws, nor the potential reality of such proposed developments ever actually occurring. Additionally, consultants gave no indication of considering the "negative" aspects of proposed developments outside the Airport, such as increased surface-transportation impacts/traffic congestion and potential mitigation, increased land-speculation harming the ag industry, and increased pollution and environmental impacts.

The Department of Aviation has allowed and promoted the dissemination of false information about the seismic resilience of the Aurora State Airport. At the October 6, 2021, Oregon Aviation Board planning session and at the November 16, 2021, PAC meeting, misinformation about the seismic conditions of the Aurora State Airport area was provided without rebuttal. At the October meeting, the Aviation Board had considerable discussion on resilience, and the importance of selling the resilience concept to the public and government officials as a component of building support for state and federal funds for the Aurora State Airport expansion. Aviation Board Chair Meeker indicated a desire to improve "lines of communication" between the Governor's Office and airport businesses to promote resilience.

Contrary to statements that depict the Aurora State Airport as a crucial facility for the projected 9.0 Cascadia Subduction Zone Earthquake, the Aurora State Airport is listed at the lowest-level of Tier 3 airports in the Oregon Resilience Plan. The Tier designations "indicate the priorities for making future investments." In other words, the Department of Aviation is effectively targeting one of the lowest priority airports to prepare for recovery in the Oregon Resilience Plan for potentially one the largest airport capital improvement projects ever planned by the state.

With respect to the airport's ability to withstand a Cascadia Subduction Zone Earthquake, reports by the Oregon Department of Geology and Mineral Industries (DOGAMI) show that the Aurora State Airport is located in an area subject to major potential damage in a projected 9.0 Cascadia Subduction Zone Earthquake. The "Mid/Southern Willamette Valley Geologic Hazards, Earthquake and Landslide Hazard Maps, and Future Earthquake Damage Estimates," DOGAMI publication IMS-24, shows that the Aurora State Airport specifically is located in an area:

- Rated High for Ground Shake Amplification
- Rated High for Amplification Susceptibility
- Rated Moderate to High for Liquefaction Susceptibility

The same deep, fine soils that make the French Prairie area such exemplary foundation farmland also mean these soils are subject to amplification and liquefaction. As a result of such an earthquake, the airport runway would likely be unserviceable for a long period of time (6-12 months) post-earthquake. Rather than allow aircraft to take off or land due to an inoperable runway, the most likely role of the Aurora State Airport will be to accommodate vertical take-off and landing of heavy-lift helicopters with locally-based Columbia Helicopters and Helicopter Transport Services, neither of which require a runway extension to operate.

In all of our years of government service, we have never seen a state agency act with such disregard to the concerns of the local communities, and appropriate and fair public process. We request your intervention now to provide for an unbiased process that produces trust-worthy results. We believe that if the Department of Aviation were to comply with—rather than seek to evade—the letter and spirit of Oregon's land-use and public-process laws, judicial intervention to set a course correction would not be a necessary remedy that must be pursued by local governments and concerned citizens.

Again, we appreciate your time and consideration of these important issues, and we look forward to your response. Thank you.

Sincerely,

Brian Asher, Mayor
City of Aurora

Julie Fitzgerald, Mayor
City of Wilsonville

Enc:

- Letter from Cities of Aurora and Wilsonville to Sen. Lee Beyer and Rep. Susan McLain, Co-Chairs Joint Committee on Transportation, RE Request for Public Hearing on HB 2497 – Proposed Legislation to Create Transparent Public Process for State Aviation Department Agency Communications and Coordination with Local Governments and Communities on Aurora State Airport Issues of Concern, March 11, 2021
- Aurora State Airport in Relation to The Oregon Resilience Plan and DOGAMI Earthquake Susceptibility Maps – 2019

cc: Oregon Aviation Board
Senator Ron Wyden
Senator Jeff Merkley
Congressman Kurt Schrader
Congresswoman Suzanne Bonamici
House Speaker Tina Kotek
Senate President Peter Courtney
Representative Susan McLain (HD 29)
Representative Courtney Neron (HD 26)
Representative Christine Drazan (HD 39)
Senator Bill Kennemer (SD 20)
Metro Council President Lynn Peterson
Metro Councilor Garrett Rosenthal
Clackamas County Board of County Commissioners
Marion County Board of County Commissioners
FAA Mountain Region staff
Heather Fernuik, Director
Chris Schaffer, Planning & Programming Manager
Warren Ferrell (Acting) Manager, Seattle Airports District Office

March 11, 2021

Senator Lee Beyer, Co-Chair — *Sen.LeeBeyer@oregonlegislature.gov*
Representative Susan McLain, Co-Chair — *Rep.SusanMcLain@oregonlegislature.gov*
Joint Committee on Transportation — *patrick.h.brennan@oregonlegislature.gov*
Oregon Legislative Assembly

RE: Request for Public Hearing on HB 2497 – Proposed Legislation to Create Transparent Public Process for State Aviation Department Agency Communications and Coordination with Local Governments and Communities on Aurora State Airport Issues of Concern

Dear Co-Chairs Beyer and McLain and Members of the Committee:

We are writing to you as the elected leaders of two cities each located near the Aurora State Airport to request your support this legislative session in resolving a decade's-long controversy between the Oregon Department of Aviation (ODA) and our communities regarding the agency's uncooperative attitude with respect to the Aurora State Airport Master Plan and management of the airport.

At the request of the Aurora and Wilsonville City Councils, Representative Courtney Neron (HD-26) has introduced HB 2497 as a "process bill" that does not dictate predetermined results. Rather, the proposed legislation creates an open transparent, public process to establish formal channels of intergovernmental communication and coordination between the state Aviation agency and directly impacted local governments, which has been sorely lacking over the past 10 years.

We believe that ODA circumvented Oregon public-process laws regarding the purported adoption of the *2012 Aurora State Airport Master Plan.* Ever since we began disputing what we view as an illegal process, the state agency has been virtually unresponsive to our local communities. We are alarmed about the agency's efforts to promote increasingly urbanized levels of activity in unincorporated county territory of high-value EFU farmland without inviting meaningful public input and without supporting public infrastructure — all contrary to Oregon Goals for citizen-involvement and land-use planning. The PSU Oregon Solutions' *Aurora State Airport Assessment Report* commissioned by the legislature in 2018 found a host of agency management troubles, improper influence and poor public engagement and communications problems regarding ODA's operations and planning at the Aurora State Airport.

HB 2497 also provides for updating the controversial *2012 Aurora State Airport Master Plan* that has been the subject of significant community concern and litigation, conducting a much-needed environmental assessment of current airport pollution levels, and planning for eventual annexation of the airport by the City of Aurora to provide municipal governance and urban services.

We respectfully request that the Joint Committee on Transportation provide a public-hearing opportunity for HB 2497 as a way to prepare a roadmap forward for resolving the 10-year-long Aurora State Airport conflict between the state agency and local communities. To date, *the only open public forum* on ODA's efforts to expand the Aurora State Airport was held by the Wilsonville City Council in November 2018 that drew 200 attendees.

Sincerely,

Brian Asher, Mayor
Mayor@ci.aurora.or.us

Julie Fitzgerald, Mayor
Mayor@ci.wilsonville.or.us

cc: Senate President Peter Courtney; House Speaker Tina Kotek; Gina Zejdlik, Governor's Chief of Staff

Aurora State Airport in Relation to The Oregon Resilience Plan and DOGAMI Earthquake Susceptibility Maps - 2019

The Oregon Resilience Plan

Reducing Risk and Improving Recovery for the Next Cascadia Earthquake and Tsunami

Report to the
77th Legislative Assembly

from
Oregon Seismic Safety Policy
Advisory Commission (OSSPAC)

Salem, Oregon
February 2013

Air Transportation

The state of Oregon has an extensive aviation system that provides valuable transportation options for the public, ranging from small airports in remote regions of the state to large commercial service airports. Ninety-seven public-use airports provide support to the economic health and vitality of Oregon and contribute to the quality of life for its citizens and visitors.

- Fifty-seven public-use airports are partially supported by FAA and included in the National Plan of Integrated Airport System (NPIAS).
- Sixteen public-use airports are either owned by other municipalities or are privately owned.
- Over 400 private airports and landing strips are located within Oregon.

The 2007 Oregon Aviation Plan established five categories of airports, based on the definitions outlined within the National Plan of Integrated Airports System (NPIAS), the design criteria outlined by the Airport Reference Code (ARC), and the facilities inventory.

CATEGORY I: COMMERCIAL SERVICE AIRPORTS

These airports support some level of scheduled commercial airline service in addition to a full range of general aviation aircraft. This includes both domestic and international destinations.

CATEGORY II: URBAN GENERAL AVIATION AIRPORTS

These airports support all general aviation aircraft and accommodate corporate aviation activity including business jets, helicopters, and other general aviation activity. The primary users are business related and service a large geographic region, or they experience high levels of general aviation activity.

CATEGORY III: REGIONAL GENERAL AVIATION AIRPORTS

These airports support most twin and single engine aircraft, may accommodate occasional business jets, and support regional transportation needs.

CATEGORY IV: LOCAL GENERAL AVIATION AIRPORTS

These airports primarily support single engine, general aviation aircraft, but are capable of accommodating smaller twin-engine general aviation aircraft. They also support local air transportation needs and special use aviation activities.

CATEGORY V: REMOTE ACCESS AND EMERGENCY SERVICE AIRPORTS

These airports primarily support single-engine, general aviation aircraft, special use aviation activities, and access to remote areas; or they provide emergency service access.

The following list identifies airports within each category that have the potential to maintain or quickly restore operational functions after a major earthquake. The Transportation Task Group arranged these 29 airports into a tier system to indicate the priorities for making future investments. Tier 1 (T1) is comprised of the essential airports that will allow access to major population centers and areas

considered vital for both rescue operations and economic restoration. Tier 2 (T2) is a larger network of airports that provide access to most rural areas and will be needed to restore major commercial operations. Tier 3 (T3) airports will provide economic and commercial restoration to the entire region after a Cascadia subduction zone event.

Category I	Category II	Category III	Category IV	Category V
*Redmond (T1)	Scappoose (T2)	Tillamook (T2)	Mulino State (T3)	Independence State (T3)
PDX (T1)	Troutdale (T3)	Roseburg (T1)	Albany (T3)	Siletz Bay State (T2)
Salem (T1)	Hillsboro (T2)	Bandon State (T2)	Lebanon (T3)	Cape Blanco State (T2)
Eugene (T1)	Portland Heliport (T3)	Grants Pass (T3)	Florence (T3)	
Rogue Valley Medford (T1)	Aurora State (T3)		Creswell (T3)	
Klamath Falls (T1)	McMinnville (T3)		Cottage Grove State (T3)	
	Newport (T2)		Myrtle Creek (T3)	
	Corvallis (T3)		Brookings (T2)	

*Primary emergency response airport for FEMA Region X: Redmond municipal airport, centrally located in central Oregon, is ideally situated to be the primary FEMA emergency response airport.

Figure 5.16: Oregon Airports (Source: Oregon Department of Aviation)

The Portland International Airport (PDX) is one of Oregon's vital transportation network links. As the state's major airport, PDX will play a key role in re-establishing our economy by facilitating the movement of people, goods, and services after a major statewide emergency event. Other airports in Oregon will also play a vital role during the post-disaster emergency response and initial recovery phase. During the emergency response, for example, displaced residents, injured people, and the elderly may need to be evacuated by means of airports; and airports will also provide a staging area for needed supplies (such as water, food, medical supplies, and materials for temporary housing). Until highway and rail transportation can be fully restored, air transportation, along with ships off the coast, will be the lifelines for Oregon's citizens.

Oregon Transportation Resiliency Status

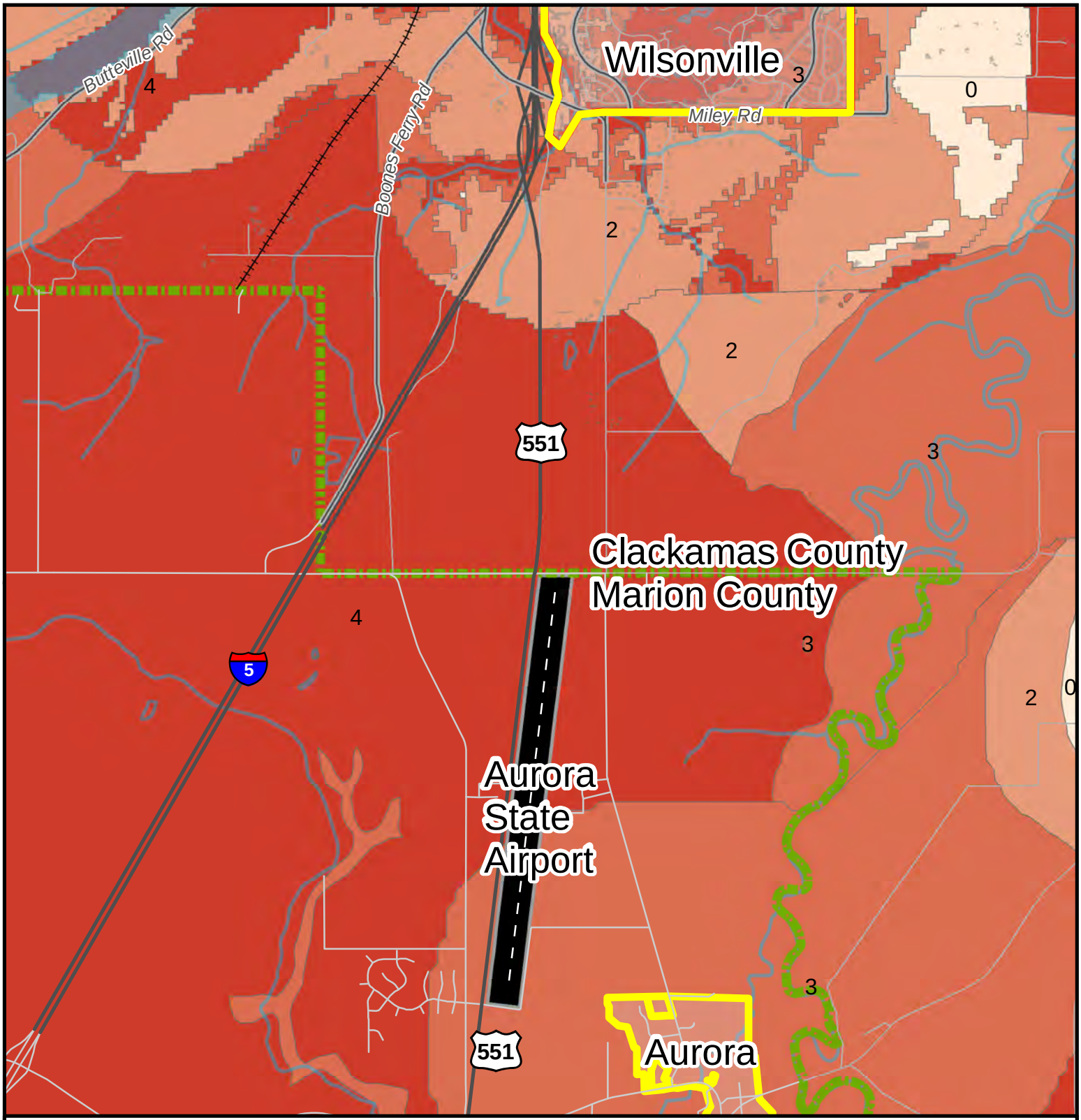
***Key to the Table**

TARGETS TO ACHIEVE DIFFERENT LEVELS OF RECOVERY:	
Minimal: (A minimum level of service is restored, primarily for the use of emergency responders, repair crews, and vehicles transporting food and other critical supplies.)	R
Functional: (Although service is not yet restored to full capacity, it is sufficient to get the economy moving again—e.g. some truck/freight traffic can be accommodated. There may be fewer lanes in use, some weight restrictions, and lower speed limits.)	Y
Operational: (Restoration is up to 90% of capacity: A full level of service has been restored and is sufficient to allow people to commute to school and to work.)	G
ESTIMATED TIME FOR RECOVERY TO **60%** OPERATIONAL GIVEN CURRENT CONDITIONS:	S
ESTIMATED TIME FOR RECOVERY TO **90%** OPERATIONAL GIVEN CURRENT CONDITIONS:	X

Comparison of Target States and Estimated Time for Recovery

Infrastructure Facilities	*Event Occurs*	*0 – 24 hours*	*1 – 3 days*	*3 – 7 days*	*1 – 4 weeks*	*1 – 3 months*	*3 – 6 months*	*6 – 12 months*	*1 – 3 years*	*3+ years*
Central Oregon Zone										
▶OREGON STATE HIGHWAY SYSTEM										
State Highway System - Tier 1 SLR [1)]			R	Y	G			S	X	
Roadways			R	Y	G/S		X			
Bridges			R	Y	G		S	X		
Landslides			R	Y	G			S	X	
State Highway System - Tier 2 SLR			R		Y	G			S	X
Roadways			R		Y	G/S		X		
Bridges			R		Y	G		S	X	
Landslides			R		Y	G			S	X
State Highway System - Tier 3 SLR				R		Y	G		S	X
Roadways				R		Y	G/S		X	
Bridges				R		Y	G		S	X
Landslides				R		Y	G		S	X
State Highway System - Other Routes					R		Y	G	S	X
Roadways					R		Y	G	X	
Bridges					R		Y	G	S	X
Landslides					R		Y	G	S	X
▶AIRPORTS & AIR TRANSPORTATION										
Tier I - Oregon Airports System										
Redmond Municipal Roberts Field Airport - FEMA		R	S		Y	G	X			
Klamath Falls Airport		R	S		Y	G	X			
FAA Facility			R	Y	G					
▶OREGON RAIL TRANSPORTATION										
UPRR										
CA/OR State Line to Bieber Line Jct. (Klamath Falls)			Y	G	S	X				

Infrastructure Facilities	*Event Occurs*	*0 – 24 hours*	*1 – 3 days*	*3 – 7 days*	*1 – 4 weeks*	*1 – 3 months*	*3 – 6 months*	*6 – 12 months*	*1 – 3 years*	*3+ years*
Bieber Ln Jct. (Klamath Falls) to Chemult (Shared			Y	G	S	X				
Chemult to Eugene					Y	G	S	X		
BNSF										
CA/OR State Line to Bieber Line Jct. (Klamath Falls)		G	S	X						
Chemult to Redmond		G	S	X						
Redmond to O.T. Jct. (connection with UP at Columbia			Y	G	S	X				
►**OREGON PUBLIC TRANSIT**										
Admin & Maintenance Facilities [2)]						R	Y	G	S	X
Local Area Paratransit On-Demand Service (critical				R	Y	S	G	X		
Local Area Paratransit On-Demand Service (full						R	Y	G	S	X
Local Roadway Fixed Route Service (emergency				R	Y	S	G	X		
Local Roadway Fixed Route Service (regular						R	Y	G	S	X
Intercity & Commuter Bus [4)]						R	Y	G	S	X
Willamette Valley Zone										
►**OREGON STATE HIGHWAY SYSTEM**										
State Highway System - Tier 1 SLR [1)]			R	Y	G			S	X	
Roadways			R	Y	G		S	X		
Bridges			R	Y	G			S	X	
Landslides			R	Y	G			S	X	
State Highway System - Tier 2 SLR			R		Y	G			S	X
Roadways			R		Y	G	S	X		
Bridges			R		Y	G			S	X
Landslides			R		Y	G			S	X
State Highway System - Tier 3 SLR				R		Y	G		S	X
Roadways				R		Y	G	S	X	
Bridges				R		Y	G		S	X
Landslides				R		Y	G		S	X
State Highway System - Other Routes					R		Y	G	S	X
Roadways					R		Y	G	S	X
Bridges					R		Y	G	S	X
Landslides					R		Y	G	S	X
►**AIRPORTS & AIR TRANSPORTATION**[5)]										
Tier I - Oregon Airports System										
Portland International Airport (PDX) (Tier 1)		R			Y	S		G	X	
Salem McNary Field		R			Y	S		G	X	
Eugene Mahlon Sweet Filed		R			Y	S		G	X	
Rogue Valley International Medford		R			Y	S		G	X	
Roseburg Regional Airport		R			Y	S		G	X	
Tier III Oregon General Aviation Airport System										
Troutdale			R		S	Y		G		X
Portland Heliport			R		S	Y		G		X
Aurora State			R		S	Y		G		X
McMinnville Municipal			R		S	Y		G		X
Corvallis			R		S	Y		G		X



The City of Wilsonville, Oregon

Clackamas and Washington Counties

Liquefaction Susceptibility

0 1 2 3 4 5

Lower → Higher

County Boundary

City Limits

Aurora State Airport Area Earthquake Liquefaction Susceptibility

0 **Miles** 0.5

WILSONVILLE OREGON

M:\projects\2018\100918_Liq\Liq.mxd

Summary: This map shows liquefacction susceptibility for Oregon calculated following the methods of FEMA's 2011 HAZUS-MH MR4 technical manual. The map was prepared in support of a series of ground motion and ground failure maps for a scenario Magnitude 9.0 Cascadia Subduction Earthquake developed by the Oregon Department of Geology aand Mineral Industries. The scenario maps were prepared for the Oregon Sesimic Safety Policy Advisory Commission for its use in preparing a report to the 77th Oregon Legislative Assembly entitled " The Oregon Resilience Plan; Reducing Risk and Improving Recovery for the Next Cascadia Earthquake and Tsunami".

OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
INTERPRETIVE MAP SERIES 24

GEOLOGIC HAZARDS, EARTHQUAKE AND LANDSLIDE HAZARD MAPS, AND FUTURE EARTHQUAKE DAMAGE ESTIMATES FOR SIX COUNTIES IN THE MID/SOUTHERN WILLAMETTE VALLEY INCLUDING YAMHILL, MARION, POLK, BENTON, LINN, AND LANE COUNTIES AND THE CITY OF ALBANY, OREGON

APPENDIX E:
MARION COUNTY

CRUSTAL EARTHQUAKE SCENARIO DETAILS FOR MARION COUNTY

Crustal Earthquake Scenario: A magnitude 6.9 earthquake on the Mount Angel Fault.

For the magnitude 6.9 earthquake on the Mount Angel Fault scenario, we defined the fault source using the "deterministic seismic source" option within HAZUS-MH (Figure E1) (FEMA, 2003b). The fault and earthquake event were chosen by examination of USGS (2004) data and data in the Geomatrix Consultants, Inc. (1995) *Seismic Design Mapping, State of Oregon* report prepared for the Oregon Department of Transportation. In general, a likely worst-case scenario was selected. Figure E1 has the location of the fault, shown as the dark line, and the census tracts within Marion County. Figure E2 displays the peak ground acceleration (PGA) for the crustal scenario.

Scenario Name	Mount Angel M6.9
Type of Earthquake	Source
Fault Name	Mount Angel Fault
Historical Epicenter ID #	67
Probabilistic Return Period	NA
Longitude of Epicenter	−122.83
Latitude of Epicenter	45.05
Earthquake Magnitude	6.90
Depth (km)	0.00
Rupture Length (km)	30.69
Rupture Orientation (degrees)	0.00
Attenuation Function	Project 2000 West - Non Extensional

Crustal Earthquake Scenario Ground Motion Map

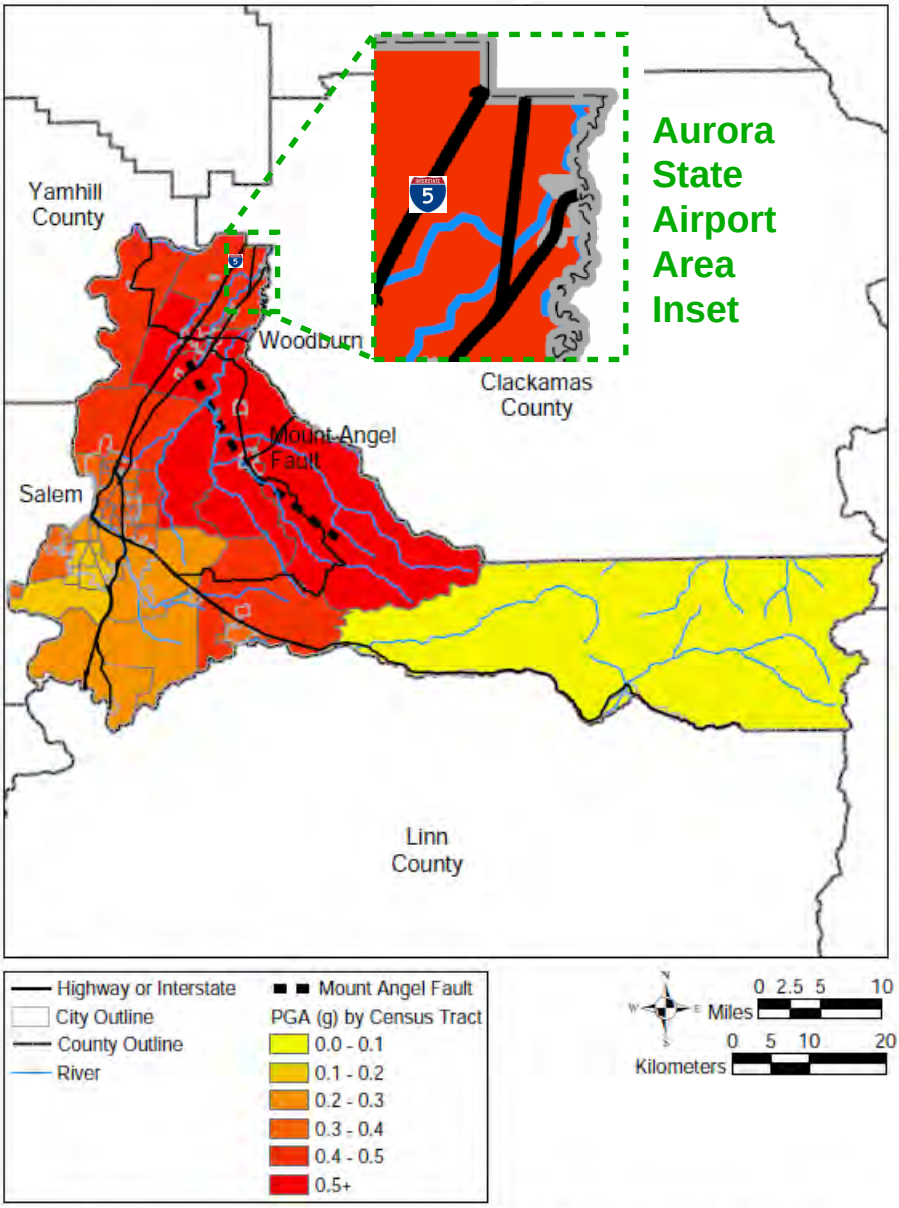


Figure E2. Peak ground acceleration (PGA) by census tracts map for the crustal earthquake scenario, Marion County, Oregon (FEMA, 2003b)

GEOLOGIC HAZARD MAPS

Relative Ground-Shaking Amplification Susceptibility Map

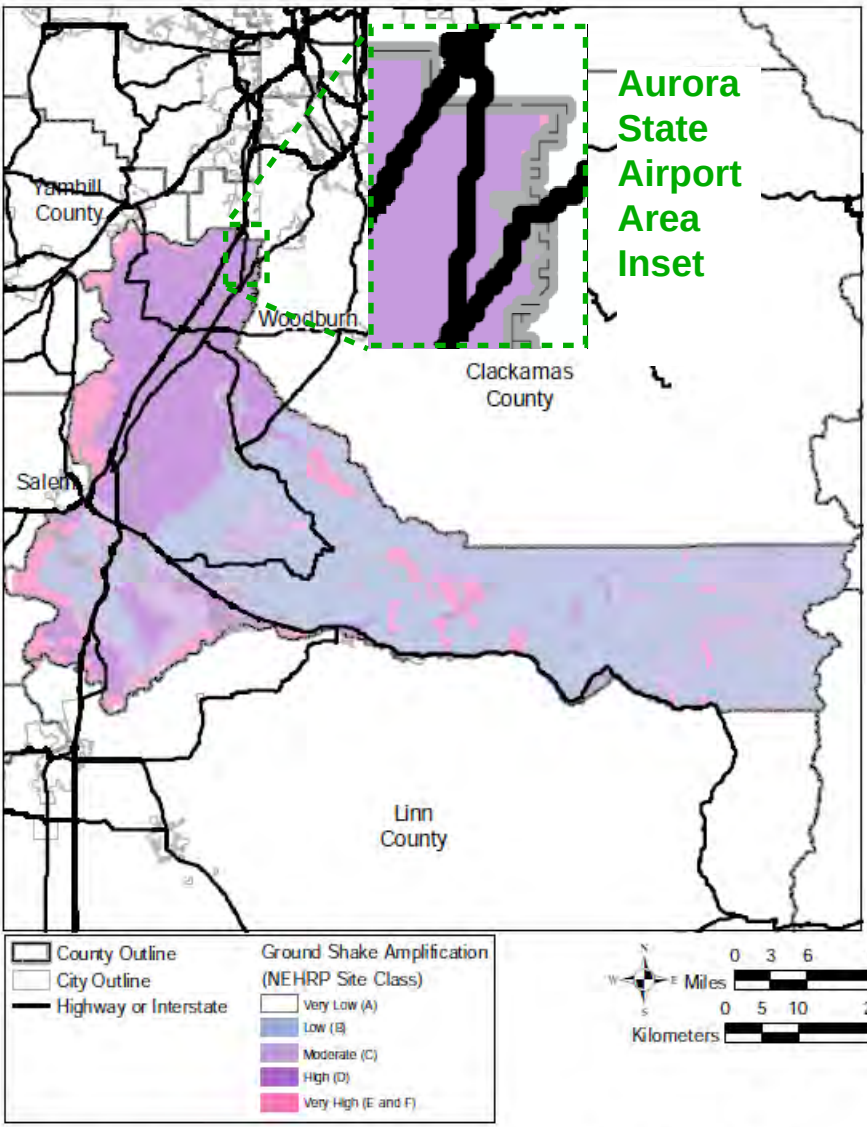


Figure E5. Relative ground-shaking amplification susceptibility map for Marion County, Oregon.

Relative Amplification Hazard Map

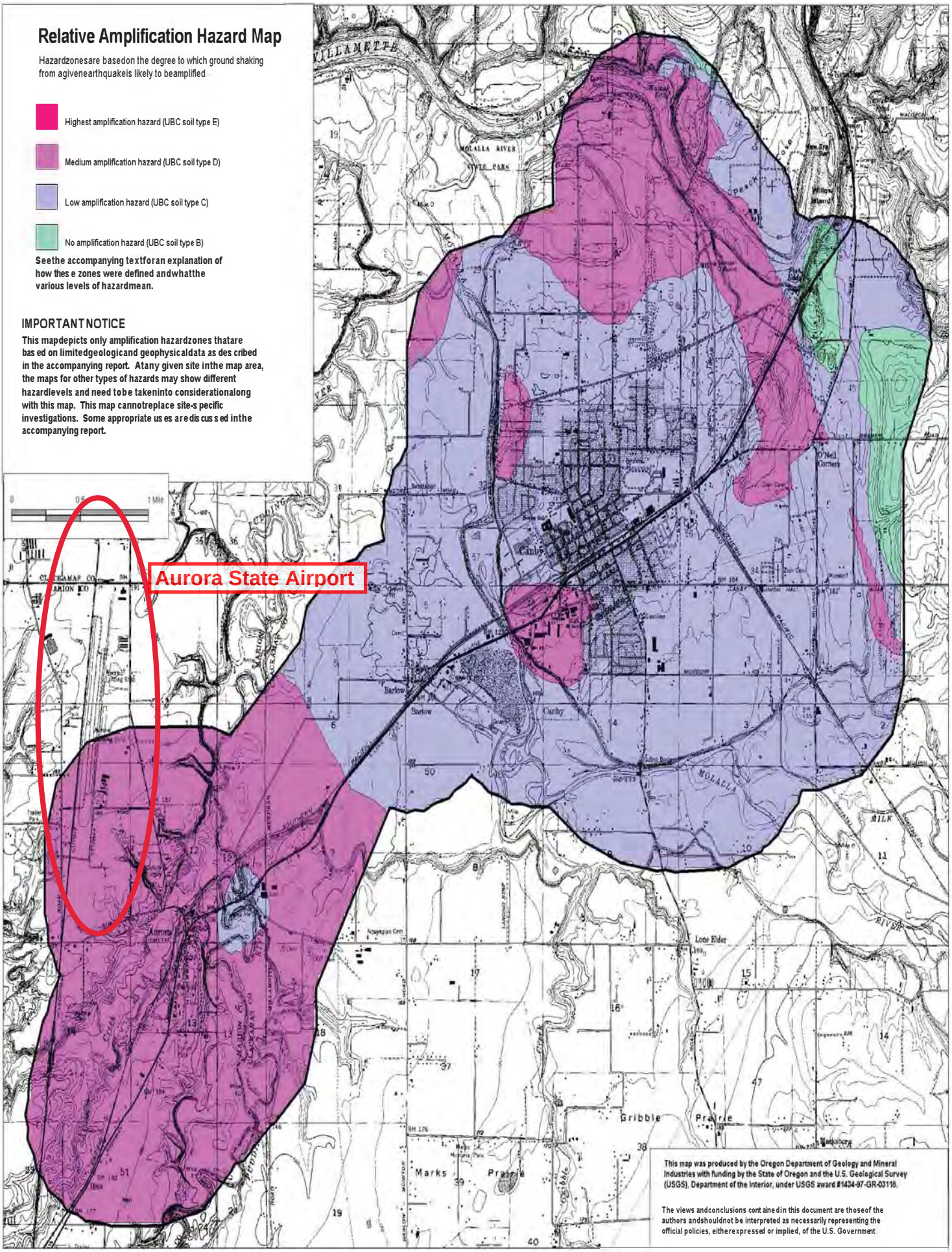
Hazard zones are based on the degree to which ground shaking from a given earthquake is likely to be amplified

- Highest amplification hazard (UBC soil type E)
- Medium amplification hazard (UBC soil type D)
- Low amplification hazard (UBC soil type C)
- No amplification hazard (UBC soil type B)

See the accompanying text for an explanation of how these zones were defined and what the various levels of hazard mean.

IMPORTANT NOTICE

This map depicts only amplification hazard zones that are based on limited geological and geophysical data as described in the accompanying report. At any given site in the map area, the maps for other types of hazards may show different hazard levels and need to be taken into consideration along with this map. This map cannot replace site-specific investigations. Some appropriate uses are discussed in the accompanying report.



This map was produced by the Oregon Department of Geology and Mineral Industries with funding by the State of Oregon and the U.S. Geological Survey (USGS), Department of the Interior, under USGS award #1434-97-GR-03118.

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
JOHN D. BEAULIEU, STATE GEOLOGIST

Canby-Barlow-Aurora Urban Area

Relative Earthquake Hazard Maps
for Selected Urban Areas in Western Oregon

By Ian P. Madin and Zhenming Wang

CANBY-BARLOW-AURORA

Relative Earthquake Hazard Map

Hazard zones are based on the combined effects of ground shaking amplification, liquefaction, and earthquake-induced landsliding.

- Zone A -- Highest hazard
- Zone B -- Intermediate to high hazard
- Zone C -- Low to intermediate hazard
- Zone D -- Lowest hazard

See the accompanying text for an explanation of how these zones were defined and what the various levels of hazard mean.

IMPORTANT NOTICE

This map depicts earthquake hazard zones that are the result of combining the maps of individual hazards and are based on limited geologic and geophysical data. These hazards and data are described in the accompanying report. At any given site in the map area, site-specific data could give results that differ from those shown on this map. This map cannot replace site-specific investigations. Some appropriate uses are discussed in the accompanying report.

This map shows areas that are relatively more or less hazardous due to local geological conditions within a community. For a complete understanding of the earthquake hazard, see also GMS-100, Earthquake Hazard Maps for Oregon.

0 0.5 1 Mile

Aurora State Airport

This map was produced by the Oregon Department of Geology and Mineral Industries with funding by the State of Oregon and the U.S. Geological Survey (USGS), Department of the Interior, under USGS award #1434-97-GR-03118.

Relative Hazard Map of Earthquake-Induced Landslides

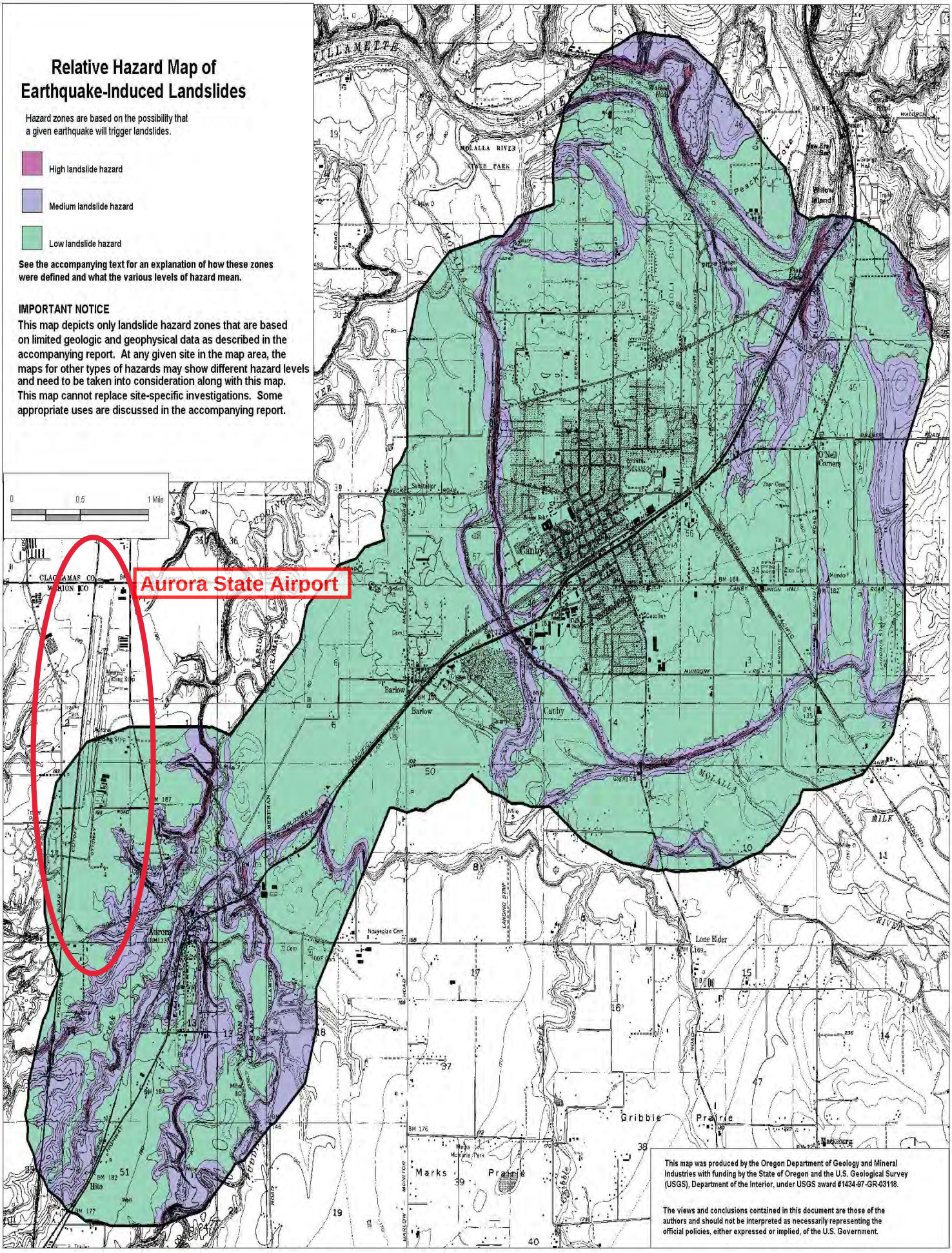
Hazard zones are based on the possibility that a given earthquake will trigger landslides.

- High landslide hazard
- Medium landslide hazard
- Low landslide hazard

See the accompanying text for an explanation of how these zones were defined and what the various levels of hazard mean.

IMPORTANT NOTICE

This map depicts only landslide hazard zones that are based on limited geologic and geophysical data as described in the accompanying report. At any given site in the map area, the maps for other types of hazards may show different hazard levels and need to be taken into consideration along with this map. This map cannot replace site-specific investigations. Some appropriate uses are discussed in the accompanying report.



This map was produced by the Oregon Department of Geology and Mineral Industries with funding by the State of Oregon and the U.S. Geological Survey (USGS), Department of the Interior, under USGS award #1434-97-GR-03118.

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
JOHN D. BEAULIEU, STATE GEOLOGIST

Canby-Barlow-Aurora Urban Area

IMS-8

Relative Earthquake Hazard Maps
for Selected Urban Areas in Western Oregon

By Ian P. Madin and Zhenming Wang

CANBY-BARLOW-AURORA

Relative Liquefaction Hazard Map

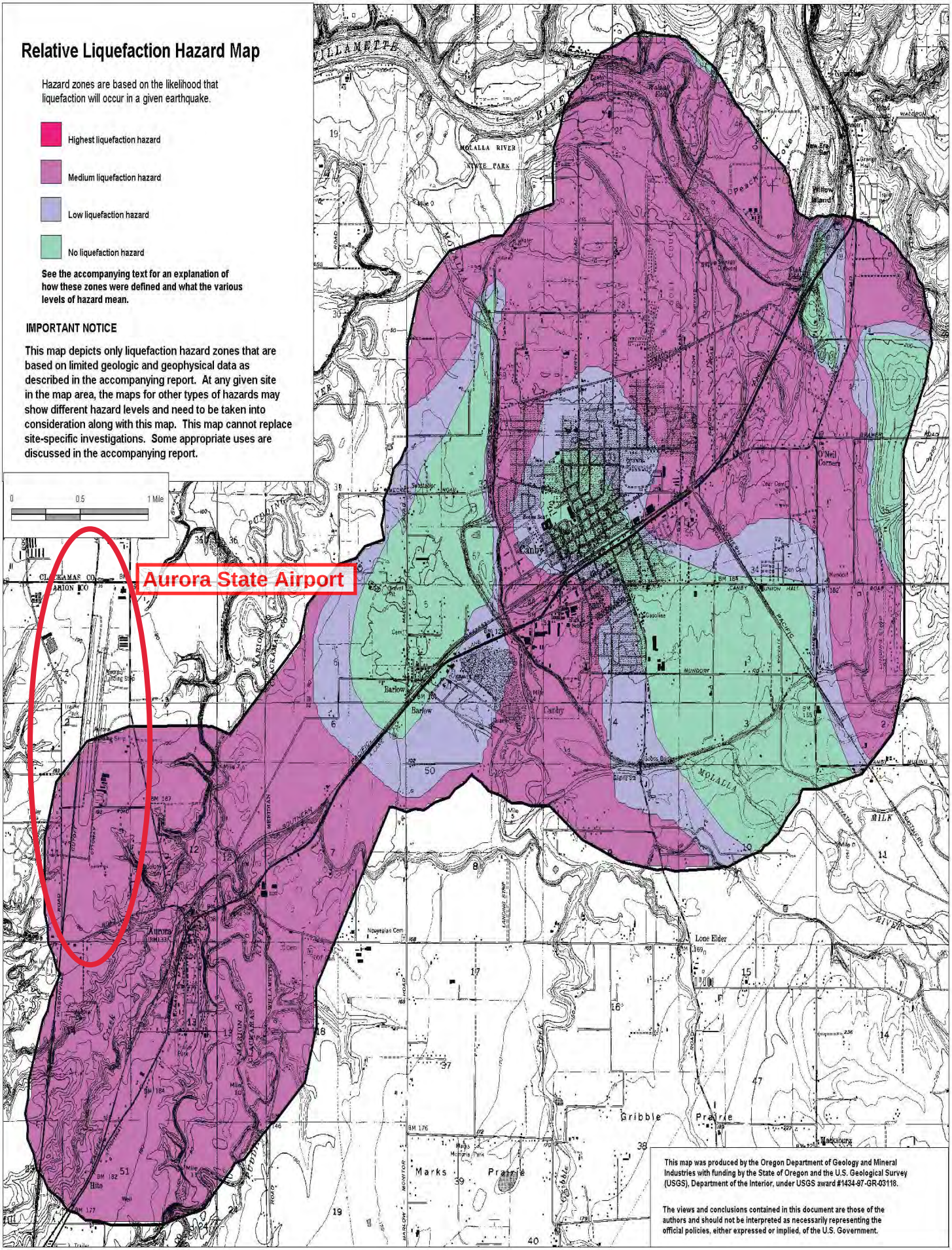
Hazard zones are based on the likelihood that liquefaction will occur in a given earthquake.

- Highest liquefaction hazard
- Medium liquefaction hazard
- Low liquefaction hazard
- No liquefaction hazard

See the accompanying text for an explanation of how these zones were defined and what the various levels of hazard mean.

IMPORTANT NOTICE

This map depicts only liquefaction hazard zones that are based on limited geologic and geophysical data as described in the accompanying report. At any given site in the map area, the maps for other types of hazards may show different hazard levels and need to be taken into consideration along with this map. This map cannot replace site-specific investigations. Some appropriate uses are discussed in the accompanying report.



This map was produced by the Oregon Department of Geology and Mineral Industries with funding by the State of Oregon and the U.S. Geological Survey (USGS), Department of the Interior, under USGS award #1434-97-GR-03118.

August 4, 2021

Sent via email to:
aviation.mail@aviation.state.or.us
betty.stansbury@aviation.state.or.us
cathy.rb.clark@aviation.state.or.us

Martha Meeker, Chair
Oregon Aviation Board
Oregon Department of Aviation
3040 25th Street SE
Salem, OR 97302

RE: Public Disenfranchisement by the Oregon Aviation Board for the Proposed 2021-22 Aurora State Airport Master Planning Process

Dear Chair Meeker and Aviation Board Members:

I listened with pronounced disappointment to Aviation Board members and staff conversations concerning the proposed new Aurora State Airport Master Plan, following public testimony, at the last public Oregon Aviation Board (OAB) meeting on July 15, 2021.

The majority of the meeting discussion was devoted to efforts by airport business interests to pressure the OAB into filing an appeal of the Court of Appeals decision—finding several errors and violations of state law by the Aviation Department in the adoption of the 2011 or 2012 master plan—to the Oregon Supreme Court.

As we saw today in *Schaefer v. Oregon Aviation Board,* 313 Or App 725 (2021), the Court of Appeals roundly rejected the appeal by the airport business interests of the Court's reversal and remand of the Land Use Board of Appeals decision that upheld the flawed master plan.

What was not discussed at the July 15 OAB meeting was citizen testimony, once again, requesting a more balanced and inclusive Planning Advisory Committee (PAC) for this new master plan update. In fact, the only discussion we heard on this topic was a rhetorical question by Board Member Granato to Chair Meeker asking, even if the parties requesting a seat at the table were not granted one, couldn't they still attend all the meetings? The response from Chair Meeker response was a delighted, why of course they could!

Citizens have repeatedly asked to be equitably represented with a balance of seats on the Planning Advisory Committee. Instead, they are effectively told by OAB that they can silently attend and sit at the back of the room. This action demonstrates more of the same attempts by the OAB to hear only from those they wish to hear from, to the exclusion of the greater community public interest.

The PAC does *not* need a representative for every airport business, to the exclusion of those citizens whose lives and properties will be most impacted by the proposed airport expansion and runway extension. At the June 3 and July 15 OAB meetings, the attorney for the Aurora Airport Improvement Association indicated that she represented all or a vast majority of

businesses at the airport; the appointment of an Association representative satisfies any and all needs for airport business representation on the PAC.

We are still disappointed that the Aviation Department still has not responded to my letter of June 14, 2021, and prior City of Wilsonville communication attempts to the Department.

Thank you for your consideration.

Sincerely,

Julie Fitzgerald
Mayor, City of Wilsonville

Enc. (1)
cc: Members of the Oregon Congressional Delegation:
- Senator Ron Wyden
- Senator Jeff Merkley
- Congressman Kurt Schrader

Aurora Mayor Brian Asher
Members of the Oregon Legislature:
- Speaker Tina Kotek
- Senate President Peter Courtney
- Representative Susan McLain (HD 29)
- Representative Courtney Neron (HD 26)
- Representative Christine Drazan (HD 39)
- Senator Bill Kennemer (SD 20)

Clackamas County Board of County Commissioners
Charbonneau Country Club
Aurora-Butteville-Barlow Citizens Planning Organization
Friends of French Prairie
1000 Friends of Oregon

Presentation Slides from July 15, 2021, Oregon Aviation Board Meeting

This slide shows the lopsided composition of the PAC that seats a majority of vested airport financial interests to advise on Aurora State Airport Master Planning process.

Planning Advisory Committee (PAC) Membership: To Date

AABC/TLM Holdings - Ted Millar
AAIA - Bruce Bennett
Aurora ATC - TBD
Aurora CTE, Inc - Bill Graupp
City of Aurora - Brian Asher
City of Canby - TBD
City of Wilsonville - Julie Fitzgerald
Clackamas County - Tootie Smith
Columbia Helicopters - Rob Roedts
DLCD - Matt Crall

Lynx Aviation, FBO - Tristan Dorian
Marion County - Danielle Bethell
Marion County Planning Dept. – Austin Barnes
ODA - Tony Beach, Airport Manager
ODOT - Naomi Zwerdling
Oregon Aviation Board - John Barsalou
Oregon Farm Bureau - Mary Anne Cooper
PAAM - Tony Helbling
Governor's Office - Regional Solutions - Jody Christensen
Vans Aircraft - Rian Johnson
Willamette Aviation, FBO - David Waggoner

Wilsonville Chamber of Commerce - Kevin O'Melley

This slide appears to show how community organizations and public interest groups may be relegated to a "second class" Citizens Advisory Committee (CAC).

Citizen Groups Requesting to Participate as PAC/CAC Member(s)

Charbonneau Country Club - TBD
Deer Creek Estates - TBD
Prairie View Estates - TBD
Aurora-Butteville-Barlow CPO - TBD
1000 Friends - TBD
Friends of French Prairie - TBD
Seismic/Wildfire/Emergency Management –DEOM – TBD
Local Farmer's Representative - TBD

July 6, 2021

The Honorable Ron Wyden, U.S. Senator
The Honorable Jeff Merkley, U.S. Senator

RE: Request for Intervention in Ensuring Proper Award of FAA Grant Funds to the Oregon Department of Aviation for Aurora State Airport Master Plan Update

Dear Senators Wyden and Merkley:

We write to you collectively, representing the local communities of over 27,000 residents in closest proximity to the Aurora State Airport (Airport), to request your assistance. The update to the Airport Master Plan provides an opportunity for improved relations among the Airport and the communities it directly impacts. This must be an integral goal of the pending master plan update. It is vital that the Scope of Work for the update be sufficient to carry out this goal. We are, however, concerned that the presently proposed Scope of Work is inadequate to achieve that goal or to bring the Airport into land use compliance. We therefore respectfully request that your offices intervene on our behalf with the Federal Aviation Administration (FAA) Northwest Region to either place on hold or add specific conditions to the award of a pending grant to the Oregon Department of Aviation (ODA) for the Airport Master Plan update in order to provide ODA with the opportunity to adopt a Scope of Work appropriate to the task.

We support and agree with the FAA's requirement that a new master plan for the Airport is past due and necessary, but the Scope of Work proposed by ODA is inadequate and does not comply with key elements of federal and state law and public processes. Rather, ODA's proposed Scope of Work for this new update is based on the legally flawed and, we contend, never legally adopted 2011 or 2012 Master Plan, as noted in more detail below. Furthermore, ODA has already publicly announced an intent to complete the new plan in as short a time frame as possible and with as little environmental due diligence and traffic analysis (air and ground) as possible. This is all being done at the urging of private airport businesses with significant speculative financial stakes in a major Airport expansion.

We believe that the legal status of the 2011 or 2012 Airport Master Plan is invalid due to failure to comply with Oregon public process and land use laws. In June, the Oregon Court of Appeals agreed. The court reversed and remanded Land Use Board of Appeals (LUBA), in our favor, for admission of critical evidence that had not been produced and reconsideration of key legal issues in accordance with the Court's direction.

As summed-up by the Salem *Statesman Journal* on June 23, 2021:

> "Oregon's aviation authority tried to circumnavigate the state's land-use system in adopting a plan to extend the runway at Aurora State Airport, the state's Court of Appeals determined.
>
> "The state's Land Use Board of Appeals' decision to uphold the aviation board's plan was flawed because "there is no evidence in the record to support LUBA's erroneous findings" in the case, the court said in reversing and remanding the body's decision.
>
> "The court said that the Land Use Board of Appeals "misunderstood its task" and mistakenly relied on testimony from Department of Aviation staff and associated businesses around the airport when making its decision."

CITY OF AURORA
21420 Main Street | Aurora, OR 97002
503-678-1283 | www.ci.aurora.or.us

CITY OF WILSONVILLE
29799 SW Town Center Loop E | Wilsonville, OR 97070
503-682-1011 | www.ci.wilsonville.or.us

As a result of the apparent undue influence of private businesses and jet owners, ODA has consistently demonstrated a failure to follow the law, including the FAA Grant Assurance around land use compliance, nor the capacity and an unwillingness to undertake appropriate public processes, we believe that it is imperative that the FAA ensure that ODA rigorously follows the FAA Grant Assurance requirements regarding land use, which previously did not happen.

On June 3, 2021, the Oregon Aviation Board (the Board) approved, without any documentation, accepting nearly $1 million of FAA grant funds to update the Airport master plan. There was no staff report, no resolution of adoption, and no proposed Scope of Work provided to the Board. The Board voted to accept the FAA grant to perform the master plan update but has delayed awarding the consultant's contract to do that work because of the omission of the proposed Scope of Work and the then pending Court of Appeals decision.

As necessary as a new master plan is, it is equally necessary that it be updated correctly. We obtained the proposed Scope of Work in response to a public records request. Among other things, the Scope of Work does not consider the impact of the Court of Appeals decision or pending LUBA and judicial review proceedings. Additionally, ODA has stacked the new Master Plan Public Advisory Committee with a clear majority of vested financial aviation and commercial interests, to the exclusion of impacted neighborhood associations, property owners, and conservation and public interest organizations. A momentary pause in funding the master plan update may help provide ODA with the incentive necessary to ensure an adequate Scope of Work and to provide all stakeholders a seat at the table.

Thank you for your time and consideration of our request. The favor of a response would be most appreciated.

Sincerely,

Brian Asher, Mayor
Mayor@ci.aurora.or.us

Julie Fitzgerald, Mayor
Fitzgerald@ci.wilsonville.or.us

encl: Media reports and Summary on the Oregon Court of Appeals decision on *Schaefer v. Oregon Aviation Board*, 312 Or App 316 (2021).

cc: Oregon Department of Aviation

SUMMARY OF COURT OF APPEALS RULING ON AURORA AIRPORT MASTER PLAN

prepared by Ben Williams, Friends of French Prairie

1. The 2012 Master Plan was not properly approved and adopted.
Therefore the current 2012 Master Plan is invalid and cannot be updated, requiring a new master plan!

…it is impossible to tell from the 2012 Master Plan what material was added and what was removed after 2011. LUBA erred in concluding that the 2012 Master Plan includes the 2011 Master Plan… the board never formally approved or adopted the 2012 Master Plan after October 27, 2011.

2. The master plan was never adopted into Marion County's Comprehensive Plan, and achieving compliance in itself does not provide an exemption from statewide planning goals.
Therefore airport master plans must comply with statewide planning goals to be valid!

The Master Plan proposes airport development on EFU land… LUBA misunderstood its task… But the question is not what the [Aviation] board's development plans are; the question is what development the Master Plan proposes, and whether that development is consistent with the MCCP and the goals... the Board of Commissioners "acknowledges and supports" the 2012 Master Plan… is not a determination, formal or otherwise, of the plan's compliance with the MCCP.

3. The airport and the proposed development (runway extension) are not rural uses.
Therefore, ORS statutes cannot be misapplied to achieve desired outcomes!

ORS 836.640 does not apply… LUBA misconstrued the statute… The text does not suggest that the legislature intended any section of ORS 836.642 to affect how land use requirements apply to the programs or uses of land at the identified airports; to the contrary, it explicitly makes the programs subject to "applicable statewide land use requirements.

4. The development proposed (runway extension) permits service to a larger class of airplanes.
Therefore, airport sponsors may not misrepresent FAA regulations for their benefit!

LUBA adopted the reasoning in the response briefs and concluded, without elaboration, that the improvements contemplated by the 2012 Airport Plan do not permit service to a larger class of airplanes… an upgrade to design standards for a greater ARC or a longer runway to serve planes with greater MTOW [Maximum Take Off Weight] is an expansion or alteration that permits—authorizes—service to a larger class of airplanes. Accordingly, the Master Plan proposes an alteration or expansion of the airport that permits service to a larger class of airplanes.

Summary of the Ruling [*Schaefer v. Oregon Aviation Board, 312 Or App 316 (2021)]*

To summarize, LUBA erred in excluding the 2011 Master Plan—the Master Plan document that was before the board on October 27, 2011—from the record; in holding that the 2012 Master Plan did not propose airport development on EFU land; in relying on ORS 836.642 to conclude that proposed new uses at the Aurora State Airport are rural uses for land-use purposes; and in determining that OAR 660-012-0065(3)(n) applied.

Reversed and remanded.

Court of Appeals Sides with Opponents of Aurora Airport Expansion

BY TYLER FRANCKE, CANBY NEWS -

JUNE 16, 2021

https://canbyfirst.com/court-of-appeals-sides-with-opponents-of-aurora-airport-expansion/

The Oregon Court of Appeals handed down a sweeping ruling Wednesday in favor of the cities of Aurora and Wilsonville, the land-use advocacy groups Friends of French Prairie and 1000 Friends of Oregon and others who had joined together to oppose further expansion of the Aurora State Airport.

Airport opponents hailed the ruling as a "sweeping victory" in their battle to stop a proposed 1,000-foot runway extension that supporters say is needed to safely accommodate the numbers and classes of aircraft currently using the airport.

But opponents fear the runway extension and other planned upgrades will bring larger, louder aircraft — and more of them.

Most recently, the complicated land-use case has centered on the 2012 Aurora Airport Master Plan, which is a necessary prerequisite to the expansion, and which — opponents discovered in 2019 — may have never been formally adopted by the Oregon Department of Aviation.

Aurora airport supporters, along with the state aviation board itself, maintained that the plan was approved in October 2011 — but were unable to produce any minutes, final orders or other records verifying this.

An audio recording of the October 2011 meeting — which Friends of French Prairie President Ben Williams obtained through a public records request — appeared to confirm opponents' suspicions that the master plan was never given a final stamp of approval.

The board attempted to skirt the issue in a controversial meeting held on Halloween 2019 in Sunriver, in which it attempted to formalize its version of events by approving a statement saying it had "adopted the Master Plan at its October 27, 2011, meeting."

Opponents challenged the move to the Oregon Land Use Board of Appeals, or LUBA, which dismissed the case last year, saying it did not have jurisdiction.

But the Court of Appeals disagreed, saying LUBA wrong on both the law and procedure. What's more, the court sided with appellants on the matter of the master plan, concluding "the board never formally approved or adopted the 2012 Master Plan after October 27, 2011."

The decision sends the case back to LUBA, which will now have to decide the original appeal on the merits, with no shortage of input from the appellate court. The Aviation Board and Oregon Department of Aviation may also appeal the ruling to the Oregon Supreme Court.

Opponents hailed Wednesday's ruling as a long-awaited vindication of their claims that airport backers had ignored public input, established procedure and even state law in their efforts to push through the expansion.

"This decision is a major victory for Oregon land use, affirming that even a state agency cannot create methods to circumvent the state land-use system, especially by trying to do so through

simply asserting without proof compatibility with a county comprehensive plan," Williams said in an email.

"It specifically negates the Department of Aviation's attempt to claim it was not expanding onto [exclusive farm use] land when its own master plan for Aurora shows it does, and further negates their attempt to argue that increasing the airport classification will not bring in larger aircraft when that, in fact, is precisely what airport classifications are designed to do."

"The city was right on the issues and right to act to preserve citizens' role on land use in Oregon," said Aurora Mayor Brian Asher. Aurora Planning Commission Chair Joseph Schaefer and the city had been the first to enter the fray, before being joined by Wilsonville and the Friends groups. "The decision agrees with everything we have long been saying without being heard. We have now been heard."

Wilsonville Mayor Julie Fitzgerald also weighed in a statement to *The Canby Current*, saying the June 16 decision validated her city's longstanding concerns that "the controversial 2012 Aurora State Airport Master Plan does not comply with state land-use laws."

"This ruling mandates that the state aviation agency should seek to pilot for a pending new 2021-22 Aurora State Airport master plan update a transparent, fair and equitable public process in accordance with Oregon land-use laws," she said.

"The city looks forward to the Department of Aviation balancing the new master plan advisory committee with representatives of local-area community planning organizations, homeowners associations and other conservation/public-interest organizations so as to avoid having a majority of vested airport financial interests."

But airport backers appeared unfazed by the setback.

"Supporters and businesses of the airport are still looking into the court's ruling and how it impacts the long-planned safety improvements," Friends of the Aurora State Airport spokesman Dylan Frederick said. "Regardless, the ruling doesn't distract our airport or our businesses from doing what we've always done best: conducting work that is mission-critical to local communities.

"It has long been the mission of the Aurora State Airport to be the safest and most emergency-ready general aviation airport in the state. We will keep striving toward that every day."

Aviation board accepts grant funding for Aurora plan update

By Corey Buchanan, Woodburn Independent

June 15 2021

https://pamplinmedia.com/wbi/152-news/511984-409065-aviation-board-accepts-grant-funding-for-aurora-plan-update

Improvement association lawyer asks board to move forward with disputed runway extension project rather than update plan

The Oregon Aviation Board accepted 100% funding from the Federal Aviation Administration to complete an Aurora Airport master plan update during a meeting on June 3.

However, the board agreed to wait to hire a contractor for the update until the Oregon Court of Appeals makes a decision this month on whether to uphold a Land Use Board of Appeals ruling that dismissed complaints from the city of Wilsonville and other entities about the most recent airport master plan update in 2012.

Along with the unanimous vote to accept the funding, the meeting included a plea from attorney Wendie Kellington with the Aurora Airport Improvement Association, which represents businesses and pilots at the airport, asking the board to greenlight a 1,000-foot runway extension — the main source of controversy for the past decade — without completing the master plan update. The Wilsonville government has vigorously opposed the runway extension project as well as the process that led to its addition to the 2012 plan.

She relayed a message from an airport pilot saying the extension is crucial for ensuring safe flights there. She indicated the state hasn't reciprocated the considerable investments the private sector has put into the airport.

"Isn't it worth a discussion that this runaway extension doesn't need yet another alternatives analysis and really what we need to do is move forward?" she said.

OAB Chair Martha Meeker said she understood Kellington's concern about safety, but that the department and board had no choice: They must complete the master plan update to receive FAA grant funding for airport projects.

"The bottom line is the ODA can't pay for the extension unless we have FAA money. End of story," she said.

Kellington also suggested that the master plan update likely will lead to another legal challenge from groups that oppose the extension, such as the cities of Wilsonville and Aurora and Friends of French Prairie.

Meeker and ODA Director Betty Stansbury noted that the majority of master plan updates are not legally challenged while Meeker indicated that a letter Stansbury sent early in her tenure stating that the 2012 master plan update had not been finalized (she later reversed her stance) precipitated the current litigation.

"Litigation is the exception rather than the norm," Stansbury said. "We will do everything we can to do it right and limit the potential for litigation."

Stansbury also said during the meeting that she doesn't expect the Oregon Supreme Court to take up the current airport litigation if the OCOA decision is appealed.

While the runway extension project likely will be delayed at least until after the master plan update and a subsequent environmental assessment is finalized, Stansbury expressed motivation to move quickly on a tree removal project, which Kellington said pilots also desire to improve safety.

"Those trees shouldn't be there. I will personally direct efforts to get them down as quickly as we can," she said.

The city of Wilsonville will have a seat on an advisory committee for the plan update that will have 22 other members. The department hopes to complete the update by the end of 2022.

Oregon Court of Appeals reverses Aurora Airport ruling

By Corey Buchanan, Wilsonville Spokesman

June 17 2021

https://pamplinmedia.com/wsp/134-news/512473-409771-oregon-court-of-appeals-reverses-aurora-airport-ruling

The Land Use Board of Appeals will take on the case again after initially dismissing it.

After appealing an unfavorable opinion levied by the Oregon Land Use Board of Appeals, the cities of Wilsonville and Aurora — and other groups that have objected to planning efforts at the Aurora State Airport — received the validation they wanted from the Oregon Court of Appeals.

The court not only reversed LUBA's decision to dismiss the case and remanded it for another examination by the land use body, but documented deficiencies in the 2012 airport master plan update in a decision released Wednesday, June 16. The court determined that the master plan was changed following its purported adoption in 2011 and that, contrary to LUBA's ruling, projects added to the plan would encroach on agricultural land.

Along with the cities of Wilsonville and Aurora, 1000 Friends of Oregon (with Friends of French Prairie) and Aurora Planning Commissioner Joseph Scheader, filed the litigation to contest the Oregon Aviation Board's 2019 decision to adopt the findings of compatibility and compliance with statewide planning goals, which essentially validated the plan update. The Oregon Department of Aviation and Oregon Aviation Board defended the case.

Despite the decision, the legal process will likely continue as LUBA now must revisit its original case while taking the OCOA's findings into account.

The city of Wilsonville has concerns about a runway extension project that could lead to more flights flying into the airport — potentially exacerbating noise and traffic — while the city of Aurora wants the airport to be annexed into its jurisdiction. The mayors of both cities rejoiced in the ruling in separate press releases.

"The Court of Appeals decision validates the city of Wilsonville's long-stated concerns that the controversial 2012 Aurora State Airport Master Plan does not comply with state land-use laws," Wilsonville Mayor Julie Fitzgerald said. "This ruling mandates that the state aviation agency should seek to pilot for a pending new 2021-22 Aurora State Airport master Plan update a transparent, fair and equitable public process in accordance with Oregon land-use laws."

"The city was right on the issues and right to act to preserve citizens' role on land use in Oregon," said city of Aurora Mayor Brian Asher. "The decision agrees with everything we have long been saying without being heard. We have now been heard."

On the other hand, ODA Director Betty Stansbury did not comment on the decision and said starting the new master plan update, which will begin soon, is her primary focus. The Federal Aviation Administration stipulated restarting the process as a requirement for the department to receive grant funding.

Bruce Bennett, the owner of Aurora Aviation and intervenor in the case, said the decision was disappointing but felt that it was based on technicalities and wouldn't considerably affect airport planning moving forward. He also felt that LUBA had a better understanding of land use law than the OCOA.

"Projects will continue to be done," he said. "There's not a huge change coming."

In its opinion, LUBA ruled that the ODA did not have to simultaneously comply with the Marion County Comprehensive Plan and statewide planning goals. This point alone nullified many of the arguments established by petitioners. The body also said it lacked jurisdiction in the case.

The OCOA disagreed with LUBA's opinion regarding county and statewide law.

"The agency respondents do not explain, and we do not perceive, how ODA's ability to deem the draft plan compatible with the MCCP (Marion County Comprehensive Plan) affects the board's obligation to "adopt findings of compatibility with the acknowledged comprehensive plans of affected cities and counties and findings of compliance with applicable statewide planning goals when it adopts the final facility plan," OCOA's ruling reads.

Though she knew the restarting of the master planning process was imminent months ago, city of Wilsonville Attorney Barbara Jacobson has said the local government decided to appeal LUBA's decision in large part because they felt that it would create a dangerous precedent where local control usurps state law. OCOA's ruling also states that Marion County didn't perform an analysis of the master plan's compliance with its own laws, but simply acknowledged and supported the plan.

"If LUBA's ruling would have been allowed to stand the kind of approval Marion County did for this master plan means any county could have done a resolution for any airport without any analysis and skipped over land use planning goals and analysis, which would have been really bad land use law," Jacobson said.

While LUBA did not include the original master planning document (which has yet to be produced) for the record for the case, the OCOA disagreed with that decision and expressed that the plan had been modified between the time the document was approved and when it was sent to the Federal Aviation Administration. Wilsonville has long argued this point and Jacobson said that LUBA would not need to include the document, if it exists, in the record when it revisits the case.

"That document indisputably was substantially modified after Oct. 27, 2011, by -- for example -- identifying a different development option as the preferred alternative (for the runway extension) and omitting some of the discussion and documentation relating to the original preferred alternative," OCOA wrote.

The ruling also objected to LUBA's conclusions that future projects at the airport should be considered "rural" rather than urban use and that projects listed in the plan would not extend onto land zoned for exclusive use. It asserted that LUBA must now examine whether the document complies with Marion County agricultural land policies.

"We've contended for years that the long-term consequence of the intended expansion, meaning the 35 acres of ag land, would set all the other ag land south of Keil Road and north of Ellen Road up for rezoning as commercial or light industrial aviation-related development," Friends of French Prairie President Ben Williams said.

Finally, the court rejected defendants' argument that projects in the master plan did not need to comply with certain land use goals because projects were not expansionary, i.e. would not "permit service to a larger class of airplane." Jacobson said the airport had already brought in larger planes but that improvements will make that easier and potentially more prevalent. Airport proponents have advocated for the runway extension to improve flight safety.

What this ruling means for the current master planning process remains to be seen. However, the city of Wilsonville, Rep. Courtney Neron, D-Wilsonville, and Rep. Susan McLain, D-Hillsboro, have already voiced displeasure about the composition of the advisory committee that will help oversee the update, which has fewer citizen interest groups and more business interests involved in the process than during the controversial 2011 update. Officials have posited that business interests have undue influence over airport planning.

"I don't have a high level of confidence," Williams said about the potential for an improved planning process. "What has happened so far looks very much like starting the same troubled process that began in 2009 all over again."

He also felt that the prospect for legal battles to continue after the completion of the new plan update was highly likely.

Stansbury said she did not close the door on the possibility of amending committee representation.

"We tried to get a balanced group that represented all types of interest in the airport and surrounding communities," she said. "We tried to include agriculture and education, Marion County, Clackamas County, the cities of Wilsonville and Aurora; we tried for a broad representation. If there needs to be any tweaks to that I'll consider Rep. Neron and Rep. McLain's letter."

The Spokesman could not reach attorneys representing airport businesses, which intervened in the case, for comment.

Charbonneau Country Club wants placement on Aurora Airport committee

By Corey Buchanan, Wilsonville Spokesman

June 22 2021

https://pamplinmedia.com/wsp/134-news/512842-410217-charbonneau-country-club-wants-placement-on-aurora-airport-committee

The homeowners association says it will bear the consequences of decisions made.

Local organizations, including the Charbonneau Country Club homeowners association, are lobbying the Oregon Department of Aviation to reserve spots for them on a committee that will oversee the upcoming Aurora State Airport master planning process.

Friends of French Prairie, an organization focused on farmland preservation, and the Aurora-Butteville-Barlow Community Planning Organization have joined CCC in sending letters to ODA Director Betty Stansbury asking for inclusion on the Planning Advisory Committee for the formulation of the master plan update. The committee will advise the planning effort but doesn't have decision-making power.

The department is undergoing the effort after the Federal Aviation Administration stipulated that it needed to do so to receive federal grants. The process will include assessing current and future facility needs.

Last week the city of Wilsonville, Rep. Courtney Neron, D-Wilsonville, and Rep. Susan McLain, D-Hillsboro, raised concerns that the proposed committee wouldn't have representation from community groups. The committee is also slated to have a higher percentage of business-interest representatives than the committee that advised the 2012 master plan, which has faced legal challenges from the city of Wilsonville, Aurora and others for the past two years. Stansbury told the Spokesman last week she was open to tweaking committee representation but hadn't decided yet.

Charbonneau has a strong contingent of folks who have aired concerns about noise and pollution from the airport and vehemently disagree with plans for expansion, especially a proposed and long-disputed runway extension project. The CCC also said they're concerned about property values, traffic and road construction.

"The greatest number of people, approximately 3,000 residents (1,627 residences), live in our well-planned and popular community less than 9,000 feet from the north end of the Aurora Airport runway. Take-offs and landings are increasingly disruptive to the quality of life in our community, local roads are increasingly congested and concerns about air and water pollution are increasing among area residents," CCC homeowners association president Gary Newbore wrote in a letter. "For these facts alone, Charbonneau's strong voice should be heard regarding proposed changes that impact the quality of their lives, health or property values, and the effect on our 13 neighborhood homeowners associations. We will be the ones who will live with the consequences of the decisions made about the future of the Aurora State Airport and the use of federal taxpayer funds to make changes at this airport."

As currently proposed, the cities of Wilsonville, Canby and Aurora are included in the committee along with Clackamas and Marion counties, seven businesses, the business-affiliated Aurora Airport Improvement Association and Positive Aurora Airport Management groups, the

Wilsonville Area Chamber of Commerce, four state agencies and the North Marion School Board.

Along with CCC, McLain and Neron also wanted Deer Creek Estates (a mobile home park in Aurora) to be involved in the process.

"While we appreciate that the department has accounted for business and economic interests with nine representatives, we believe the nearby communities of Charbonneau and Deer Creek Estates, community planning organizations (CPOs), conservation and land-use groups, seismic safety, wildfire and emergency management experts need to be included in the Public Advisory Committee (PAC) representation, as well," Neron and McLain wrote in a letter to Stansbury. "We note their absence in the current PAC composition and hope you will consider adding their diverse perspectives to the process."

Appeals court halts efforts to extend runway at Aurora Airport

Bill Poehler, Salem Statesman Journal

June 23, 2021

https://www.statesmanjournal.com/story/news/2021/06/23/oregon-appeals-court-halts-efforts-extend-runway-aurora-airport/5312110001/

Oregon's aviation authority tried to circumnavigate the state's land-use system in adopting a plan to extend the runway at Aurora State Airport, the state's Court of Appeals determined.

The state's Land Use Board of Appeals' decision to uphold the aviation board's plan was flawed because "there is no evidence in the record to support LUBA's erroneous findings" in the case, the court said in reversing and remanding the body's decision.

The court said that the Land Use Board of Appeals "misunderstood its task" and mistakenly relied on testimony from Department of Aviation staff and associated businesses around the airport when making its decision.

The airport, located just outside the Aurora city limits, is the third busiest in Oregon and one of 28 the state owns.

For years, the state and associated businesses advocated to extend the runway to 6,004 feet from its current 5,004 feet, arguing it wouldn't be used for allowing bigger aircraft, but would allow the planes that currently use it to fly out with larger fuel loads.

The appeal of the December 2020 ruling by LUBA was brought by Aurora planning commission chair Joseph Schaefer, who was joined by land-use advocacy groups and the cities of Aurora and Wilsonville, against the state's Department of Aviation and the Aviation Board. Several businesses that are based out of the airport joined the case on the state's side.

The Court of Appeals reversed LUBA on issues including:

- The airport's 2011 master plan was not in the state or LUBA records.
- The expansion can't be justified solely because the airport is in a rural area.
- The board incorrectly construed state law by saying the proposed changes wouldn't allow a larger class of airplane and that the plan complies with the state's land-use goals.

"It is a pretty important case because it does talk about the relationship of this state agency and (the associated businesses). It is remarkable," said Edward J. Sullivan, former legal counsel to Gov. Bob Straub and professor in planning and land use law at Willamette, Lewis & Clark and Portland State.

The plan that was never completed

The case stems from the Department of Aviation starting a new master plan for the airport in 2009.

In 2011, the state's aviation board adopted the new master plan. But the Federal Aviation Administration rejected the "displaced threshold" option for the runway extension in that plan, and the master plan was modified in 2012.

The state applied to the Federal Aviation Administration for over $30 million in 2018 to extend the airport without it being in the most recently legally adopted master plan, which came in 2000. It wasn't awarded the funds.

In 2019, the Aviation Board voted to adopt the findings from the 2012 airport plan after Department of Aviation director Betty Stansbury backtracked on a letter in which she stated the plan had not been submitted for adoption.

The 2012 master plan was never formally approved or adopted by the Oregon Aviation Board, the Court of Appeals found, rejecting that the 2019 adoption was a component of the final decision.

In its December opinion, LUBA excluded the 2011 master plan from the record and found the 2012 master plan did not propose development on exclusive farm use.

But the Court of Appeals found that LUBA "misunderstood its task" and relied on testimony from associated businesses that the state did not intend to extend the runway on land zoned for farm use.

"There's all this stuff trying to undercut the land-use system. At least this time these guys got called out on it," said Ben Williams, president of land-use advocacy group Friends of French Prairie, one of the petitioners in the case.

The state argued that the master plan was not a land-use decision, and that component would be determined later by Marion County.

As the 2012 master plan was not properly adopted, Williams said, the airport will be required to have a new master plan.

Oregon Department of Aviation planning and projects manager Heather Peck told the Marion County commissioners in May the state is at the beginning of updating the Aurora Airport master plan and will be seeking money for that.

The Court of appeals found that airport development is not an allowed use on land zoned for farm use.

What's next?

With the decision, LUBA is required to reconsider its 2020 decision and determine whether the master plan complies with Oregon's agricultural lands policies.

The Department of Aviation and the Oregon Aviation Board have 35 days, until July 14, to file a notice of intent to appeal the ruling to the Oregon Supreme Court.

"The grounds for taking something up to the Supreme Court, is it just merely wrong or is it important and wrong? If a party who did not prevail tries to take it up they bear that burden," Sullivan said.

"I would say that maybe 1 out of 20 cases is accepted for review. It's a hard sell."

It's unclear whether the defendants will appeal.

“Supporters and businesses of the airport are still looking into the court’s ruling and how it impacts the long-planned safety improvements,” the Friends of Aurora Airport, which represents business interests involved as defendants in the case, said in a statement.

“Regardless, the ruling doesn’t distract our airport or our businesses from doing what we’ve always done best — conducting work that is mission-critical to local communities. It has long been the mission of the Aurora State Airport to be the safest and most emergency-ready general aviation airport in the state. We will keep striving toward that every day.”

Unless the Supreme Court takes the case and overturns the latest ruling, the long-sought runway extension has to go back to the drawing board.

“We won round two with a knockout,” Williams said.

June 17, 2021

Sent via email to:

Martha Meeker, Chair, Oregon Aviation Board — *aviation.mail@aviation.state.or.us*
Betty Stansbury, Aviation Director — *betty.stansbury@aviation.state.or.us*
Oregon Department of Aviation

RE: 2021 Aurora State Airport Master Planning Process

Chair Meeker and Director Stansbury:

As the State Representative for one of the impacted communities and as Chair of the Joint Committee on Transportation, we write to you with both appreciation for the task at hand and with counsel for a smooth and inclusive process aligned with Oregon Land Use Goal 1 for Citizen Involvement and Goal 2 for Land Use Planning.

We appreciate that on June 3, 2021 the Aviation Board approved acceptance of an FAA AIP Grant for funding of the Aurora State Airport Master Plan update. This aligns with proposed legislation introduced in the 2021 session (HB 2497) that, among other provisions, would have required the Department to develop a new master plan update for the Aurora State Airport. We are pleased to see that the Department is advancing the new master plan update in a timely manner without the need for legislative mandate. As legislators, we hope to look to the work you are embarking on as a model for how a master planning process should proceed.

We believe the State Master Plan process should create an inclusive table for a comprehensive conversation. Best standards and practices must make sure that those that are part of the dialogue feel heard and respected. Thoughtfully adding diverse voices from impacted communities will assist in this goal and show the Oregon Department of Aviation is committed to hearing all voices. Community impact, environmental impact, economic impact and emergency preparation, must be part of the robust planning and conversation and planning. Effective collaboration will result in a resilient, strategic, and functional airport plan that is responsive to its state and local roles.

It is our sincere hope and expectation that the Oregon Department of Aviation will incorporate additional components of HB2497 relative to public engagement and collaborative state and local intergovernmental planning throughout the process, in order to ensure the best possible service to our communities, honor existing land use goals, produce an agreeable outcome, and avoid the need for future legislation.

Elected leaders of Aurora and Wilsonville, located closest to the Aurora State Airport facility and

flight paths, have indicated their concerns to the legislature regarding the need for the Department to consider important issues impacting local communities. The mayors of Aurora and Wilsonville seek to discuss land-use planning, surface transportation impacts, public infrastructure provision, agriculture-sector effects, environmental concerns and quality-of-life issues pertaining to noise and overflights with the Department. The new master-planning process is a logical place for such conversations and we hope that the Department will take full advantage of the opportunity to improve agency communications in a public forum.

While we appreciate that the Department has accounted for business and economic interests with nine representatives, we believe the nearby communities of Charbonneau and Deer Creek Estates, community planning organizations (CPOs), conservation and land-use groups, seismic safety, wildfire and emergency management experts need to be included in the Public Advisory Committee (PAC) representation, as well. We note their absence in the current PAC composition and hope you will consider adding their diverse perspectives to the process.

Being mindful of the PSU Oregon Solutions' "Aurora State Airport Assessment Report", commissioned by the legislature in 2018 that found a number of issues relative to agency planning efforts and public engagement, we anticipate that the Oregon Department of Aviation has plans to correct these issues. It is our sincere hope that the Department moves forward with an understanding of the importance of conducting an open public process for the Aurora State Master Plan that engages local communities and all stakeholders.

Given the amount of public interest and significant issues of local concern regarding the Aurora State Airport, we request that the Department undertake a transparent, inclusive and comprehensive public process with model structure that complies with Oregon's Land Use Planning Goals.

Thank you for your consideration of our concerns and expectations. We stand ready to support the process and we welcome further dialogue with the Oregon Department of Aviation throughout the phases of planning and implementation.

Sincerely,

Representative Courtney Neron, HD-26

Representative Susan McLain, HD-29

June 14, 2021

Sent via email to:
aviation.mail@aviation.state.or.us
betty.stansbury@aviation.state.or.us

Martha Meeker, Chair, Oregon Aviation Board
Betty Stansbury, Aviation Director
Oregon Aviation Board
Oregon Department of Aviation
3040 25th Street SE
Salem, OR 97302

RE: Proposed 2021-22 Aurora State Airport Master Planning Process

Dear Chair Meeker and Director Stansbury:

Several members of Wilsonville City staff attended the June 3, 2021 Oregon Aviation Board meeting, wherein the board accepted the FAA's AIP Grant for the funding of a new comprehensive Aurora State Airport Master Plan update. Needless to say, Wilsonville is pleased to hear that an updated Master Plan will be done, using what you both stated will be an all-inclusive and transparent process.

What Wilsonville is not pleased to see, however, is the proposed composition of the Master Plan Public Advisory Committee (PAC), which appears to be packed with self-serving special interests. In the past, both Wilsonville and Aurora, the two host communities located closest to the Aurora State Airport, have found the Department's lack of responsive communications and unwillingness to consider important issues impacting the local communities extremely troublesome. During this new Master Plan process, the mayors of Aurora and Wilsonville certainly hope to have an open dialogue with you concerning land-use planning, surface transportation impacts, public infrastructure provision, ag-sector effects, environmental concerns, and quality-of-life issues pertaining to noise and overflights. While we are hoping this will be an open, fair, and transparent process, it is not getting started that way. Wilsonville, its citizens, and its constituents are extremely concerned about the lopsided representation of vested financial interests in the proposed composition of the proposed PAC.

ODA has certainly accounted for airport business interests, with 10 representatives that constitute the majority of the PAC. The PAC, however, lacks any representation from other important members of the area community, including the nearby HOAs of Charbonneau, Prairie View Estates, and Deer Creek Estates, as well as public-interest bodies, including community planning organizations (CPOs) such as Aurora-Butteville-Barlow CPO and conservation/land-use groups, including 1,000 Friends of Oregon and Friends of French Prairie. A fair and open process requires equitable representation of both sides of any given interest. Therefore, we ask that you please add the above participants to equitably counter balance all of the airport special interest groups and also think about removing some of the duplicative special interest members. If Wilsonville is going to find this to be a fair and open process, there need to be voices on the PAC without direct financial interests at stake in expanding airport operations and extending the runway.

It is interesting to compare the composition of the proposed PAC for this 2021 Master Plan to the last go-around:

Composition of Proposed 2021-22 Public Advisory Com (PAC):

- 10 business interests reps – 43%
- 6 local gov't reps – 26%
- 5 state gov't reps – 21%
- 1 federal gov't rep – 5%
- 1 public interest rep – 5%
- **0 citizen interest reps – 0%**

Composition of 2010-12 Planning Advisory Com (PAC):

- 6 business interest reps – 38%
- 5 local-gov't reps – 31%
- **4 citizen interests reps – 25%**
- 1 state gov't rep – 6%

At the June 3 Board meeting there were several statements made about trying to push this Master Plan through in 18 months or less, rather than the standard 24-month time frame. There was also a discussion of whether an environmental assessment of any kind could be avoided. Rushing this Plan and avoiding the critical environmental work is not a good idea if ODA is hoping to avoid future litigation.

Cumulatively, between ODA's packing the PAC with airport special interests and rushing the Master Planning process, we are getting a negative sense of déjà vu. I attach, for your reference, a letter written by some of the PAC members from the last 2010-12 Master Plan, who expressed "grave concerns" that participation in the process was not intended to be meaningful:

> "As local-government and community-organization members of the Planning Advisory Committee (PAC) to the Aurora State Airport Master Plan, we have grave concerns that our participation in the process is not intended to be meaningful.
>
> * * * * *
>
> "[W]e are very concerned that the Aurora Airport master planning process is being rushed on a condensed schedule—reduced by one-third from the original timeline—without adequate discussion of issues at the PAC level in order to satisfy preconceived outcomes of a few special interests that may be detrimental to the greater public good.
>
> * * * * *
>
> "This is not the meaningful public-input practice that the Federal Aviation Administration (FAA) recommends for stakeholders in the master-planning process."

On a final note concerning the June 3, 2021 meeting, it was surprising to find that at a meeting that did not advertise or invite public testimony, an attorney who claimed to represent all of the airport businesses was allowed to present a lengthy argument about how a Master Plan

update was not needed, nor was any environmental assessment, but rather ODA should instead focus on getting that runway extended now. Fortunately, Chair Meeker clearly articulated that ODA has no funds to do so without going through the FAA's required Master Plan update first. That being said, providing the lawyer for one side of the Aurora State Airport controversy unfettered time to lobby the Board appears to demonstrate, once again, ODA's apparent airport expansion bias, as opposed to advancing a fair and equitable Master Plan process.

As this new and hopefully more open and transparent process begins, we are especially mindful of the PSU Oregon Solutions' "Aurora State Airport Assessment Report," commissioned by the legislature in 2018, that found a number of problems with agency planning efforts and public engagement. We anticipate and expect that the Department's leadership intends to correct these deficiencies and understands the importance of conducting an open public process for the Aurora State Airport Master Plan that engages local communities and all stakeholders.

I understand one of your Board members expressed concern that the new Master Plan update might just generate more protracted litigation. We certainly hope not. Given the great amount of public interest and significant issues of local concern regarding the Aurora State Airport, we expect that the Department will, in fact, seek to undertake an open, transparent public process for all interests, that is not rushed and that complies with Oregon's Planning Goals, specifically Goal 1 Citizen Involvement and Goal 2 Land Use Planning.

Thank you for your consideration.

Sincerely,

Julie Fitzgerald
Mayor, City of Wilsonville

Enc. (1)

cc: Oregon Aviation Board
Members of the Oregon Congressional Delegation:
Senator Ron Wyden
Senator Jeff Merkley
Congressman Kurt Schrader
Aurora Mayor Brian Asher
Members of the Oregon Legislature:
Speaker Tina Kotek
Senate President Peter Courtney
Representative Susan McLain (HD 29)
Representative Courtney Neron (HD 26)
Representative Christine Drazan (HD 39)
Senator Bill Kennemer (SD 20)
Clackamas County Board of County Commissioners

Members of the Planning Advisory Committee to the Aurora State Airport Master Plan

Charbonneau Country Club • City of Wilsonville • Clackamas County
Deer Creek Estates • Friends of Marion County

Mark Gardiner, Chair
State Aviation Board
Oregon Department of Aviation
3040 25th St. SE
Salem, OR 97302-1125

September 14, 2010

RE: Request for meeting to discuss Aurora State Airport master planning process and role of the Planning Advisory Committee

Dear Mr. Gardiner:

As local-government and community-organization members of the Planning Advisory Committee (PAC) to the Aurora State Airport Master Plan, we have grave concerns that our participation in the process is not intended to be meaningful. We see serious deficiencies in how the process is being conducted by the consultant, W.H. Pacific, and we seek to resolve these issues of concern.

In a nutshell, we are very concerned that the Aurora Airport master planning process is being rushed on a condensed schedule—reduced by one-third from the original timeline—without adequate discussion of issues at the PAC level in order to satisfy preconceived outcomes of a few special interests that may be detrimental to the greater public good. It seems fairly clear that the consultant intends to march steadily through construction of 'chapters' of the master plan, according to a predetermined timetable, regardless of whether or not there has been adequate discussion at the PAC of the issues. This is not the meaningful public-input practice that the Federal Aviation Administration (FAA) recommends for stakeholders in the master-planning process.

The FAA is quite clear, as outlined in the document 'Airport Master Plans,' AC 150/5070-6A, that **stakeholders must have an early opportunity to meaningfully comment before major decisions are made.** Stakeholders in the master-planning process have been asked to enunciate their individual goals, but there has been no discussion on how to integrate these into establishing the 'strategic role' and the 'study goals' as outlined by the FAA. ODA and consultant W.H. Pacific have specifically rejected the establishment of a 'vision' for the Airport as a starting point, something several members of the PAC requested at the outset of the process.

We observe from the conduct of ODA that installation of an air traffic control tower is being actively pursued prior to development of the new master plan and without consultation with the PAC. The fact that ODA is acquiring funds to build a control tower in the absence of any cost estimate and without first conducting planning demonstrates a serious lapse in judgment. ODA has indicated that concurrent to the master plan update, the agency has contracted for an air traffic control tower siting study; again an issue that the PAC should discuss has been arbitrarily removed the planning process.

Further, it seems clear that the role of the PAC has been deliberately marginalized. The forecast of future activity at the airport has apparently been compiled and is about to be sent to the FAA for

approval without any advance discussion with the PAC. It is notable that there is no accurate information available on current activity levels, since there are no records of landings and take-offs. Any methodology used to generate undocumented current activity numbers to use as a starting point for future usage projections surely should require very close scrutiny. But the PAC has not been given that opportunity for review and discussion.

Despite the absence of any discussion of the 'strategic role' and 'study goals' and any review of the activity forecast with the PAC, the process developed by the consultant, under the direction of ODA, appears to be one of justifying the preconceived idea that runway expansion and strengthening is required at Aurora Airport. The Scope of Work, dated June 19, 2009, states on page 3 that consultant "W.H. Pacific will prepare a letter on behalf of ODA to request statements [presumably from large jet operators] to *help justify* an extension" of the runway (emphasis added). This would seem to clearly demonstrate an intent that undermines any pretense of a meaningful process.

We are not aware of any impact analysis based on a forecast of future activity that was developed. In short, this appears to leave the simplistic assumption that if the demand can be somehow justified, then it must be supplied, no matter the impacts. Common sense tells us that increasing the size and types of airplanes, and the increase in the frequency of their use, will have impacts. Going from a general aviation airport with mostly small, propeller-and-piston-engine light-airplane and smaller jets under 45,000 pounds to an airport catering to larger, heavier turbine-engine jet aircraft calls for a serious, reasoned analysis of impacts.

The Aurora State Airport is located in the French Prairie area of "foundation farmland," which the Oregon Department of Agriculture indicates contains Oregon's highest-quality agricultural soils, and has been able to co-exist with its neighbors as a small-aircraft airport. However, the airport is within a mile of the Portland Metro Urban Growth Boundary and dense residential development to the north. There are serious traffic-congestion problems on roads around the airport and on nearby Interstate 5 at the Boone Bridge "bottleneck" over the Willamette River. As the FAA document 'Airport Master Plans' makes clear, the regional setting of the airport must be examined "because the impact of airport planning decisions can extend well beyond the airport property line." What will be the impacts of this greater development at the airport be on noise, pollution, the surrounding farm lands, off-site surface transportation facilities including the interstate highway, and nearby residential areas? What, if any, mitigation should occur?

While the PAC's role has been marginalized, ODA plans to select interviewees outside of the PAC and master-planning process who will be asked to give their views on at least one of the major master-planning issues. The Scope of Work, page 8, states that "up to 20 people [will be interviewed] regarding future activity at the airport." That is a critical task. Who are these people and how has ODA directed the consultant to choose them? What meaningful process is there for the PAC in this regard? Again, there has been no discussion by the consultant with the PAC on this matter.

The Scope of Work, page 5, lists the main areas under which data will be collected. Under Item E, Environmental Inventory, there is no mention of collecting data on noise and traffic impacts on nearby communities and on their transportation infrastructure, key aspects listed by the FAA on page 123 with the title 'Environmental Overview for Master Plan Purposes,' FAA AC 150/5070-6B. Nor

is there any discussion in the Scope of Work of National Environmental Policy Act (NEPA) requirements and whether or not an Environmental Impact Statement (EIS) is required. The Scope of Work states that noise contours will be developed, but only to show existing conditions and those five years into the future. As the activity forecasts will be generated for five years, 10 years and 20 years into the future, the noise contours should be developed for the same time periods.

We are very concerned that the Aurora Airport master planning process is being rushed through on a condensed schedule without adequate discussion of the issues at the Planning Advisory Committee level in order to satisfy the preconceived outcomes of a few special interests. This is not the meaningful, due process input the FAA intended in their Master Plan process.

We respectfully request that a meeting be arranged at the earliest opportunity for the undersigned with you, the Acting Director of ODA, the consultant, and appropriate representatives of the FAA to discuss these concerns. Furthermore, we request that this letter be memorialized as a part of the record of the Aurora Airport Master Plan update. Too many issues of previous inside dealings connected with ODA's handling of matters at the Aurora Airport have recently come to light, and it is important that now, under new management direction, ODA not be a part of a process that lacks meaningful input, good planning, and transparency.

We thank you for your time and consideration.

Respectfully submitted by the undersigned members of the Planning Advisory Committee to the Aurora State Airport Master Plan.

Tony Holt, Chair, Civic Affairs Committee
Charbonneau Country Club

Jim Bernard, Commissioner
Clackamas County Board of Commissioners

Steve Hurst, Councilor
City of Wilsonville City Council

Rick Kosta, President
Deer Creek Estates Homeowners' Association

Roger Kaye, President
Friends of Marion County

CLACKAMAS COUNTY
2051 Kaen Road
Oregon City, OR 97045

WILSONVILLE OREGON
29799 SW Town Center Loop E
Wilsonville, OR 97070

August 8, 2018

Honorable Kate Brown
Governor
900 Court Street, Suite 254
Salem, OR 97301-4047

Honorable Peter Courtney
Senate President
900 Court St. NE, S-201
Salem, Oregon 97301

Honorable Tina Kotek
House Speaker
900 Court St. NE, Rm. 269
Salem, Oregon 97301

RE: Request to Cancel Oregon Department of Aviation application to Federal Aviation Administration (FAA) for funds to extend the Aurora State Airport runway

Dear Governor Brown, President Courtney and Speaker Kotek:

We have just learned that the Oregon Department of Aviation ("ODA") intends to apply today for federal funding for a $33 million project to extend the runway by 1,000 feet of the Aurora State Airport. As the elected leaders of Clackamas County and the City of Wilsonville, we believe that this application is premature until the proposed project undergoes the required public-involvement process to assess potential impacts of a major airport expansion and mitigation strategies to address those impacts. We therefore request your assistance to table the pending application by ODA as referenced in a July 27, 2018, letter to the Senate President and House Speaker.

In June 2010 ODA agreed to exclude Clackamas County and the City of Wilsonville from the Intergovernmental Agreement on the Coordination of Growth Management and Transportation Issues ("IGA") pertaining to the Aurora State Airport. The IGA contained an exhibit showing a "gerrymandered" Aurora Airport Impact Area map where the 10,000-foot impact area from the airport runway intentionally excludes lands under the jurisdiction of the County and City.

The subsequent 2012 Aurora State Airport Master Plan failed to follow state law in terms of public process and resulted in an Oregon Aviation Board decision to extend the runway that was contrary to the findings and conclusions in the plan. A project of this magnitude with potential, substantial impacts to nearby surface transportation facilities, area quality-of-life, and a vital agricultural economic cluster requires a robust public-input process. Due to a lack of public review of the proposed runway extension, neither impacts nor mitigation strategies have been considered.

The County and City have a valid public interest in protecting the welfare of our residents and businesses. We respectfully request that the proposed ODA grant application to the FAA be withdrawn and a new IGA be drawn-up that includes all of the local jurisdictions in the airport impact-area and the Oregon Department of Transportation. Furthermore, we call for a new Aurora State Airport master plan to be developed that meaningfully engages the public. We can state unequivocally that the County and City are committed to working with all of the stakeholders surrounding the Aurora State Airport in an open and transparent manner. Thank you for your time and consideration.

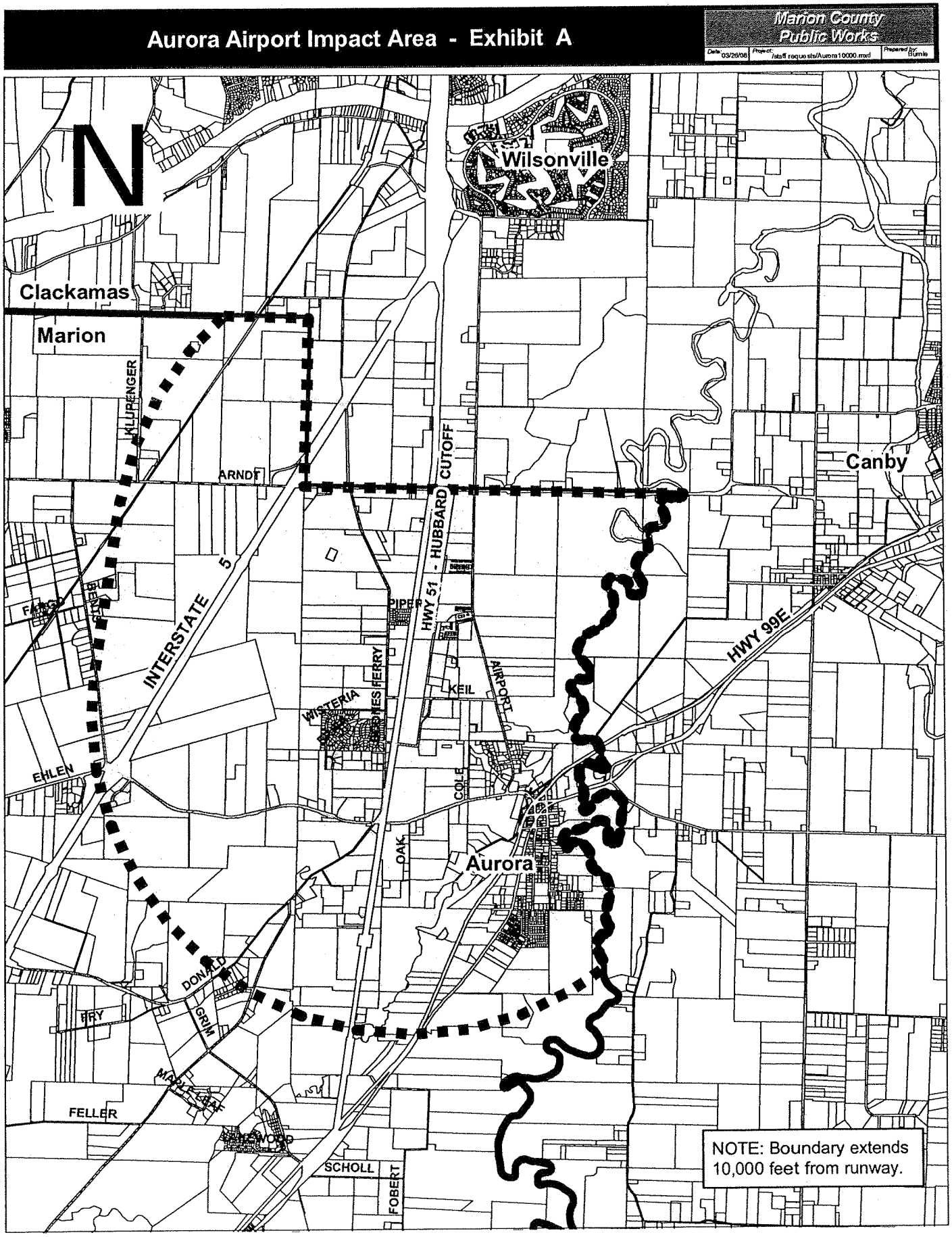
Sincerely,

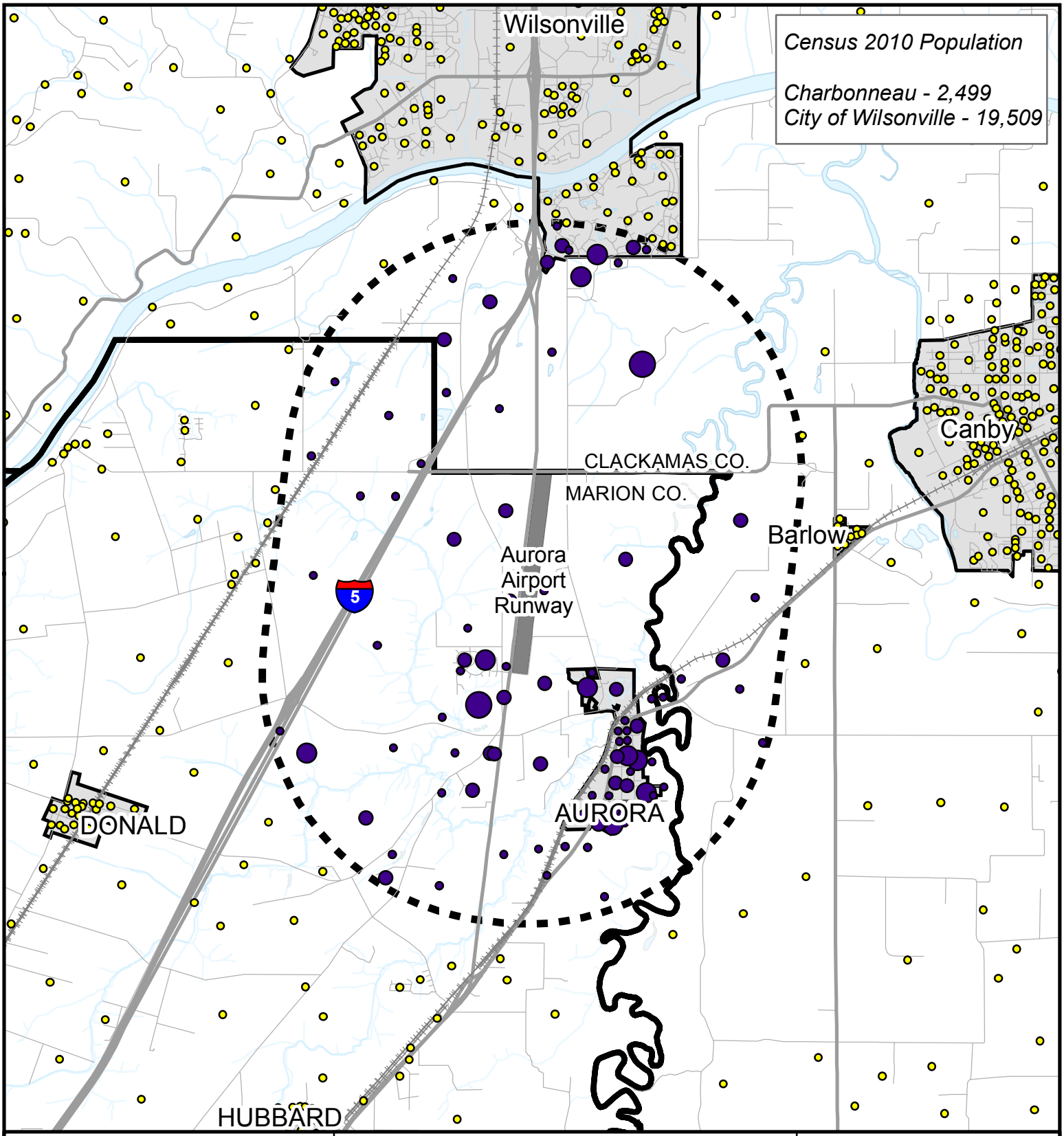
Jim Bernard, Chair
Clackamas County Board of Commissioners

Tim Knapp, Mayor
City of Wilsonville City Council

Enclosures (6)

cc: FAA—Randall Fiertz, NW Mountain Region Airports Div. Director; Joelle Briggs, Seattle Office Dist. Manager
ODA—Martha Meeker, Oregon State Aviation Board Chair; Brian DeForest, Interim Director


Aurora Airport Impact Area - Exhibit A
Marion County Public Works
Date: 03/26/08
Project: Staff requests/Aurora10000.mxd
Prepared by: Stumle
N
Wilsonville
Clackamas
Marion
Canby
Aurora
KILDRENGER
ARNDT
CUTOFF
HUBBARD
HWY 51
INTERSTATE 5
HWY 99E
PIPER
FERRY
KEIL
AIRPORT
WISTERIA
COLE
OAK
EHLEN
DONALD
GRIM
FELLER
SCHOLL
FOBERT
NOTE: Boundary extends 10,000 feet from runway.



The City of Wilsonville, Oregon

Clackamas and Washington Counties

Aurora Airport

Census 2010 Population
in 10,000 Ft. Radius = 2978

10,000 Feet from Runway

Census Block Centers

Wilsonville 183
Aurora 860
Rural Clackamas County 623
Rural Marion County 1312

Population 2010

- 0 - 22
- 23 - 64
- 65 - 138
- 139 - 346
- 347 - 579

WILSONVILLE GIS Geographic Information Systems

3/17/2015

0 **Miles** 1

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CLACKAMAS COUNTY

BOARD OF COUNTY COMMISSIONERS

PUBLIC SERVICES BUILDING
2051 KAEN ROAD | OREGON CITY, OR 97045

November 3, 2009

Mr. Gregg Del Ponte
Acting Administrator
Oregon Department of Aviation
3040 25th SE
Salem, OR 97302-1125

Honorable Jim Meirow, Mayor
City of Aurora
21420 Main Street
Aurora, OR 97002

Honorable Patti Milne, Commissioner
Marion County Commission
Courthouse Square
555 Court Street N.E.
P.O. Box 14500
Salem, OR 97309-5036

Dear Director Del Ponte, Commissioner Milne and Mayor Meirow:

Consistent with our discussion concerning the Aurora Airport over the last several years, we are formally requesting that Clackamas County be added to the Aurora Airport Intergovernmental agreement as currently written.

With the commencement of the Aurora Airport Master Plan, the timing is good to have all of the local governments adjacent to the Aurora Airport at the table to discuss issues related to the Aurora State Airport planning and development.

We appreciate your favorable consideration of our request to join the Aurora Airport Intergovernmental agreement.

Sincerely,

CLACKAMAS COUNTY BOARD OF COMMISSIONERS

Lynn Peterson, Chair
On Behalf of the Clackamas County Board of Commissioners

LAP/sp/kjb

City of
WILSONVILLE
in OREGON

29799 SW Town Center Loop E
Wilsonville, Oregon 97070
(503) 682-1011
(503) 682-1015 Fax Administration
(503) 682-7025 Fax Community Development

November 20, 2009

Mr. Gregg Del Ponte, Acting Administrator
Oregon Department of Aviation
3040 25th SE
Salem, OR 97302-1125

Honorable Patti Milne, Commissioner
Marion County Commission
P.O. Box 14500
Salem, OR 97309-5036

Honorable Jim Meirow, Mayor
City of Aurora
21420 Main Street
Aurora, OR 97002

RE: **Request to Join Aurora Airport Intergovernmental Agreement**

Dear Director Del Ponte, Commissioner Milne and Mayor Meirow:

Consistent with our discussions concerning the Aurora Airport over the last several years, we are formally requesting that the City of Wilsonville be added as a partner jurisdiction along with Clackamas County to the April 2008 "Intergovernmental Agreement on the Coordination of Growth Management and Transportation Issues" pertaining to the Aurora Airport area ("Aurora Airport Intergovernmental Agreement").

With the commencement of the Aurora Airport Master Plan process, the timing is good to have all of the local governments adjacent to the Aurora Airport at the table to discuss issues related to the Aurora State Airport planning and development.

We appreciate your favorable consideration of our request to join the Aurora Airport Intergovernmental Agreement. Thank you for your time and consideration.

Sincerely,

Tim Knapp
Mayor

cc: Honorable Lynn Peterson, Commission Chair, Clackamas County

Marion County
OREGON

Rec'd 6/22/10 SCL

(503) 588-5212
(503) 588-5237 - FAX

June 21, 2010

Commissioner Lynn Peterson
Clackamas County
Board of Commissioners, Chair
2051 Kaen Road
Oregon City, Oregon 97045

Mayor Tim Knapp
City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, Oregon 97070

Dear Lynn and Tim:

On behalf of Marion County, the Oregon Department of Aviation and the City of Aurora, I would like to present to you an updated, revised, and signed Intergovernmental Agreement regarding communications relating to the Aurora State Airport.

Over the past couple of years we have built strong working relationships that have allowed us to successfully face challenging issues that are of mutual interest to each of our individual jurisdictions. Maintaining open channels of communication will be critical as we continue to work together and face new challenges.

This revised agreement requires the signing jurisdictions to communicate with Wilsonville and Clackamas County about land use actions that affect the airport or are impacted by the airport.

As we all know, the state will begin the master plan process for the Aurora Airport with the first PAC meeting on July 22, at 6:00 p.m. in Charbonneau. We would like to invite you attend a meeting with Marion County, the City of Aurora and the Department of Aviation prior to that meeting. Please let me know your availability and we will schedule the meeting.

Please do not hesitate to contact me if you have any questions or suggestions.

Sincerely,

Patti Milne
Commissioner

cc: James Meirow, City of Aurora
Doug Hedlund, Oregon Department of Aviation

INTERGOVERNMENTAL AGREEMENT ON THE COORDINATION OF GROWTH MANAGEMENT AND TRANSPORTATION ISSUES BETWEEN CITY OF AURORA, MARION COUNTY, AND THE OREGON DEPARTMENT OF AVIATION

This Agreement is entered into by and between the City of Aurora ("Aurora"), Marion County ("Marion County"), and the Oregon Department of Aviation ("ODA"), pursuant to ORS 190.003 to 190.110, which allows units of government to enter into agreements for the performance of any or all functions and activities which such units have authority to perform.

RECITALS

WHEREAS, the Aurora Airport Impact Area ("Impact Area") – Exhibit A is expected to experience substantial population and employment growth by the year 2050; and

WHEREAS, anticipated growth within the Impact Area will affect land areas within the jurisdictional boundaries of the City of Aurora, Marion County, and the State of Oregon Department of Aviation; and

WHEREAS, Aurora, Marion County, and the ODA wish to coordinate growth management and transportation related development processes and decisions within the Impact Area to ensure an appropriate opportunity is given for affected parties to review and address anticipated impacts; and

WHEREAS, to achieve this coordination, Aurora, Marion County, and the ODA are interested in identifying the Impact Area and establishing a process for coordination and cooperation; and

WHEREAS, Statewide Planning Goal 2 - Land Use Planning, requires that local government comprehensive plans and implementing measures be coordinated with the plans of affected governmental units and that local government, state and federal agency and special district plans and actions, relating to land use, be consistent with the comprehensive plans of cities and counties and regional plans adopted under ORS Chapter 197; and

WHEREAS, OAR 660, Division 12 requires coordination of state, regional and local transportation system plans establishing a coordinated network of transportation facilities to serve state, regional and local transportation needs; and

WHEREAS, ORS Chapter 836 and OAR 660, Division 13 requires planning and coordination of local, state and federal agencies to encourage and support the

continued operation and vitality of Oregon's airports and recognizes the interdependence between transportation systems and the communities on which they depend.

NOW, THEREFORE, Aurora, Marion County, and ODA agree as follows:

AGREEMENT

I. Purpose

The parties agree that they are mutually interested in and will work together to:

A. Establish and amend, as necessary, the Aurora Airport Impact Area ("Impact Area") as identified on Exhibit "A" attached to this Agreement.

B. Identify and resolve issues and concerns related to transportation and growth management in and around the Impact Area for the benefit of the parties as well as affected adjacent landowners, airport users, and other interested parties.

C. Coordinate on growth management and transportation development decisions within the Impact Area.

D. Encourage and support the continued operation and vitality of the Aurora Airport and recognize the interdependence between air and ground transportation systems within the Impact Area and the communities on which they depend.

E. Provide notice and an opportunity to comment on land and transportation developments within the Impact Area which may reasonably affect the parties.

F. Nothing in this Agreement shall be construed to require the parties to exercise jurisdiction beyond that which is required by state law.

II. Definitions

"Aurora Airport" means that area of land located at what is commonly known as the Aurora Airport that is designed, used or intended for use for the landing and take-off of aircraft, and any public or privately owned appurtenant areas and structures, including open space, used for airport buildings or other airport facilities or rights-of-way or which is located on lands located within the Marion County Public Zone.

"Impact Area" means the Aurora Airport, the Aurora Airpark, and those portions of North Marion County the development of which impacts the parties to this Agreement

and existing residents and businesses within each party's jurisdiction, as shown on the Aurora Airport Impact Area Map, attached as Exhibit A.

III. Amendment of Aurora Airport Impact Area Boundaries

A. Impact Area boundaries may be amended by Marion County upon its own initiative or upon the written request of Aurora and/or the ODA.

B. When amending boundaries, Marion County shall give notice to and work in cooperation and coordination with Aurora and the ODA, and shall consider the following factors:

1. Existing and future land development;

2. Existing and future local and state transportation corridors;

3. Existing and future Aurora Airport usage and flight patterns; and

4. Each affected jurisdictions' Comprehensive Plan boundaries and related goals and policies.

IV. Comprehensive Planning within the Impact Area

A. Existing Comprehensive Plan designations and zoning, as currently designated by each party to lands within its jurisdiction, shall continue to apply to those lands within the Impact Area.

B. Any party formally considering a Comprehensive Plan Amendment for lands within Impact Area boundaries shall provide for notice and opportunity for comment to the other parties to this Agreement in a manner provided in Article VI below.

C. Special plans and studies undertaken that involve lands within the Impact Area such as infrastructure, environmental, or economic planning shall be shared amongst the parties.

V. Land Use Development and Coordination within the Impact Area

A. This Agreement shall have no effect on the current local and statutory zoning and regulatory authority of each jurisdiction within the Impact Area boundaries, nor any existing intergovernmental agreements between the parties.

B. Aurora and Marion County respectively agree to provide ODA, Wilsonville, and Clackamas County, with notice and an opportunity to comment, in the same manner as currently required for affected property owners by their

respective development codes for land use applications within the Impact Area. The parties shall provide each other with requested data, maps, and other information in hard copy or digital form in a timely manner.

C. ODA shall provide Aurora, Wilsonville, Clackamas County, and Marion County with notice and opportunity to comment for all Airport Master Plan amendments, new access agreements (through-the-fence agreements), and for proposed development or infrastructure improvements, relative to the Aurora Airport.

D. The parties shall discuss and work cooperatively to determine whether specific uses which would otherwise be permitted within existing exception areas under County zoning should be prohibited or restricted within the Impact Area to implement the purposes of this Agreement.

VI. Notice and Coordination Responsibilities

A. Aurora and Marion County each shall provide ODA, Wilsonville, and Clackamas County with notice and an opportunity to comment prior to the first scheduled public hearing, in the same manner provided to property owners in their applicable codes, for all of their respective legislative plan amendments, zone changes, or new land use regulations and amendments affecting property within the Impact Area.

B. Aurora and Marion County each shall provide ODA, Wilsonville, and Clackamas County with notice and an opportunity to comment prior to all of their respective administrative or public hearing actions, in the same manner provided to property owners in their applicable codes, for any quasi-judicial development applications (including, but not limited to, plan and zoning code amendments, conditional use permits and design review) within the Impact Area.

C. ODA shall provide reasonable notice and opportunity to comment to Aurora, Wilsonville, Clackamas County, and Marion County for all Airport Master Plan amendments, new access agreements (through-the-fence agreements), and for its proposed development or infrastructure improvements, relative to the Aurora Airport.

D. In order to fulfill the cooperative planning provisions of this Agreement, Aurora, Marion County, and ODA shall provide each other with all requested reasonable data, maps, and other information in hard copy or digital form in a timely manner.

VII. Amendments to this Agreement

This Agreement may be amended in writing by the agreement of all parties and may be reviewed by the parties at any time.

VIII. Termination

This Agreement may be terminated by any party as to the rights and responsibilities of that party within 60 days written notice to the other parties. Termination of the rights and responsibilities of one or more parties does not affect the rights and responsibilities of the remaining parties as to each other.

IX. Reservation of Rights and Authorities

This Agreement is intended only to achieve the purposes set forth in Section I of the Agreement and is not intended to create any right or responsibility which is legally enforceable by any person or entity against any Party and creates no rights in third parties or the right to judicial review regarding the acts or omissions of any Party. Each Party reserves all rights or authorities now or hereafter existing and nothing in this Agreement waives or forecloses the exercise of any such rights or authorities.

X. Severability

If any section, clause or phrase of this Agreement is invalidated by any court of competent jurisdiction, any and all remaining parts of the Agreement shall be severed from the invalid parts and shall remain in full force and effect.

XI. Effective Date

This Agreement is effective on the date it is fully executed.

IN WITNESS THEREOF, the respective parties have caused this Agreement to be executed by their authorized officer or representative on their behalf:

CITY OF AURORA

_____ 6/8/10

James Meirow — Date
Mayor, City of Aurora

ATTEST:

By: _____
City Recorder

MARION COUNTY

Janet Carlson 6/7/10
Janet Carlson Date
Chair, Board of Commissioners

ATTEST:

By: _____
Recording Secretary

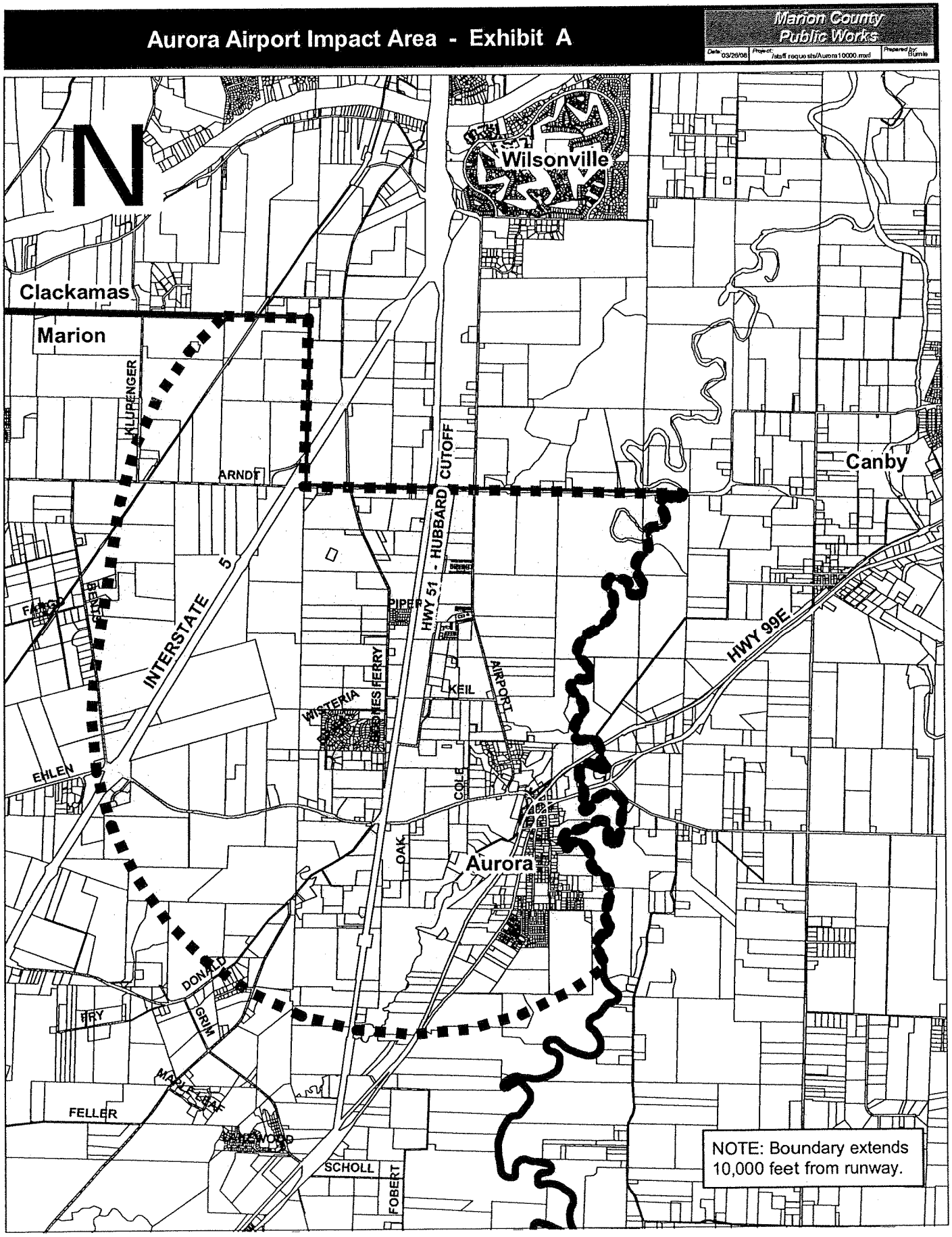
Approved as to form:

Gloria M. Roy 06/07/10
Legal Counsel

APPROVED AS TO FORM:
Peggy Mitchell 6/7/10
Marion County Contracts Date

OREGON DEPARTMENT OF AVIATION

_____ 6/8/10
Doug Hedlund Date
Director, Oregon Department of Aviation


Aurora Airport Impact Area - Exhibit A
Marion County Public Works
Date: 03/26/08
Project: Staff requests/Aurora10000.mxd
Prepared by: Stumle
N
Wilsonville
Clackamas
Marion
Canby
Aurora
KILDRENGER
ARNDT
CUTOFF
HUBBARD
HWY 51
INTERSTATE 5
HWY 99E
PIPER
FERRY
KEIL
AIRPORT
WISTERIA
EHLEN
COLE
OAK
DONALD
GRIM
FELLER
SCHOLL
FOBERT
NOTE: Boundary extends 10,000 feet from runway.

A LETTER OF CONCERN

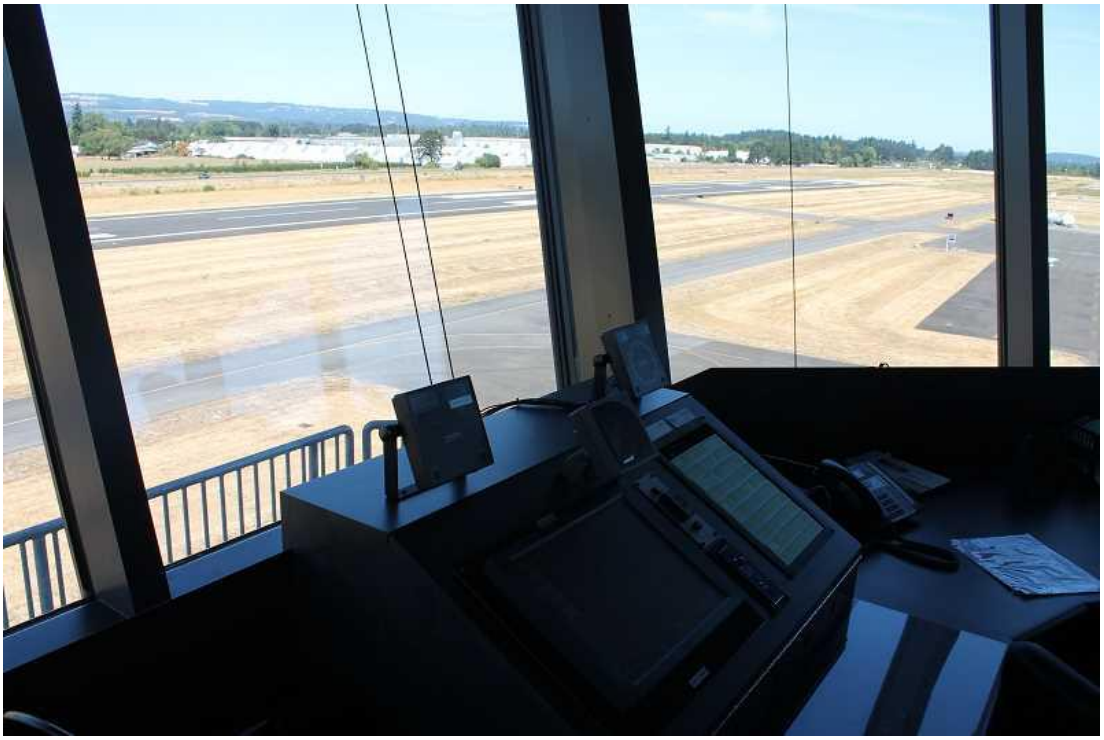
WilsonvilleSpokesman

Corey Buchanan, Wilsonville Spokesman

Tuesday, January 16, 2018

https://portlandtribune.com/wsp/134-news/384055-272627-a-letter-of-concern

City of Wilsonville expresses uneasiness about Aurora Airport legislation and the potential traffic impacts it might bring



SPOKESMAN FILE PHOTO -
A legislative bill that would expedite the process for the implementation of an Aurora Airport extension could be introduced at the Oregon State Legislature February session.

Potentially in unison with Clackamas County, the City of Wilsonville is expected to deliver a draft letter this month to Oregon Senate President Peter Courtney (D-Salem) and House Speaker Tina Kotek (D-Portland) expressing concern about a bill — which could be introduced in the Oregon State Legislature's February "short" session — that would "circumvent standard Oregon land-use and public process laws to allow a special interest to 'carve-out' to extend the runway at the Aurora State Airport," according to a draft of the letter obtained by the Spokesman.

The City of Wilsonville approved the letter Jan. 4 and sent it to the Clackamas County Board of Commissioners — which will then review the letter and determine whether to sign on. The letter could be revised before it's sent to state legislators.

Wilsonville City Council discussed the concept bill at length during a meeting Dec. 18.

"I have met with several different entities and communicated the opinion that we think it's not appropriate to have a legislative action to make an end run around Oregon land use process that would normally allow stakeholders to be part of the decision process but that's exactly what this legislation proposes," Knapp said at the meeting.

Multiple city councilors expressed concern that an airport extension could lead to increased traffic in the Wilsonville area.

"On a basic level I think back to our community survey that we do every year. The big theme from that is people are concerned about traffic. So that's all of the people that live in Wilsonville and come into work in Wilsonville, commute in, commute out. I think that has to be carefully considered, what this issue might do," Councilor Kristin Akervall said.

The legislative concept, which was put forth by Rep. Rick Lewis (R-Silverton), posits that the Aurora Airport, which is the largest state-owned airport in Oregon and employs 1,200 people, needs additional investment in order to "maintain aviation safety and commercial viability" and that the current runway is "inadequate and unsafe."'

The current runway is 5,004 feet and, according to the Aurora Airport Improvement Association, the airport is the state's third busiest and ranks 31st in terms of runway length. This plan has been in the works since the 1976 Aurora Airport Master Plan proposed increasing the runway length to 6,000 feet — which is also the proposed length in the updated master plan.

The concept bill proposes to extend the airport's boundaries, add or expand airport taxi areas and add new or expand facilities for aviation related equipment.

The letter from the City of Wilsonville says the proposed bill would set a precedent that parties who "seek special treatment" should go directly to the legislature rather than go through the goal exception process in order to pass legislation.

Lewis said he wasn't sure exactly what legislative steps the bill would be avoiding but that he assumes the process would include public hearings.

Ben Williams of Friends of French Prairie was not happy when he caught wind of the bill's legislative concept when he spoke with the Spokesman in December.

"If the public was fully informed about A, what has happened, and B, the scope of the consequences, you can bet that the majority would be opposed to it because of the consequences and the precedent," he said.

Lewis, however, says that an extensive public process took place during the crafting of the Aurora Airport Master Plan, which was updated in 2013, and would rather not use more state money and prolong the project's implementation.

He added that additional public hearings will take place if the legislative concept becomes a bill and is assigned to a committee.

"Had the state not done a recent master plan update and this bill hadn't had public hearings, there would need to be more of a public process involved but that's all been done," Lewis said.

According to the Aurora Airport Master Plan, the current runway of 5,004 feet accommodates all small aircrafts with fewer than 10 passenger seats but larger aircraft require a longer runway. Also, the runway's shorter length constrains about 500 flights a year and forces them to "eliminate fuel and cargo to take off and land," according to the Aurora Airport Improvement Association.

The airport extension could allow corporate jets to take off at the airport. According to the master plan, the extension would cost over $3 million.

Lewis is not sure why Wilsonville has raised concerns.

"As far as Wilsonville, I don't know (why) because they stand to benefit if larger corporate jets are able to land there. Corporate jets are less noisy. I would think people would look for lodging, restaurants in Wilsonville, so I'm not really sure what their issues are," he said.

Before the bill had been released, Wilsonville Chamber of Commerce CEO Kevin Ferrasci O'Malley said the WACC would likely support it.

"The Aurora Airport is a member in good standing of the Wilsonville Chamber of Commerce. Our stated WACC vision is to create and promote economic vitality for business in the south metro region," the chamber wrote in a statement. "Historically, the WACC has fully supported efforts to help the Aurora airport realize its potential. It's a powerful local generator of economic development and jobs to Wilsonville and the surrounding local area."

O'Malley says talks of massive changes regarding the airport are overblown.

"There are comments being made about it becoming an Orange County Airport by simply having a runway safety zone," he said. "That's not happening. It's fear mongering. This is allowing the small business aircrafts that are landing and taking off to do so more efficiently. That's what it's about."

Aurora Airport Improvement Association board member Tony Helbing, says the airport currently provides ample economic benefits to surrounding communities and the extension will increase the positive impact. Helbing also says businesses are more likely to use the Aurora Airport if a safer runway is implemented.

"It's important to know that as we want this runway extension, it has to do with our choice to be in business and that business we choose to do here has big ripple impacts into the surrounding community," Helbing said.

Williams believes the benefits of the expansion are more limited. "At the end of the day, the beneficiaries are developers who can have larger airport, larger jets, sell more fuel and more hangars," Williams said. "A few people are going to make a lot of money and there will be a few employment jobs working at aircraft hangars or pumping fuel but that doesn't translate to a lot of benefits for say Wilsonville or the city of Aurora. Most of the economic benefit goes to a small number of businesses and developers."

The Wilsonville letter also addresses concerns regarding "a lack of transportation options in the area," "unfair competition to adjacent jurisdictions," "environmental concerns" and "potential harm to the important agriculture economic cluster brought about by increased land-speculation and difficulty in conducting farming operations."

Additionally, the letter posits that the proposed legislation is too large and significant to be deliberated at the "short" 35-day February session, which will begin Feb. 5.

April 5, 2022

Brandy Steffen, JLA Public Involvement,

First, it should be noted that the Aurora State Airport runway is 5,003 feet and has a strength rating of 45,000 pounds. As we now know from a Public Records Request submitted to the Oregon Dept. of Aviation, there is over a decade-long history of granting overweight waivers to large jets.

This not only includes what most of the public think of as corporate jets, such as Gulfstream or Citation or Falcon jet aircraft, but also the much heavier Bombardier Global Express. The larger Gulfstreams have manufacturer specified minimum runway lengths at maximum takeoff weight that exceed 6,000 feet and have a maximum takeoff weight of 70,000 pounds. However, the most eye-opening aircraft receiving regular overweight waivers is the Global Express that has a maximum takeoff weight of 92,500 pounds, a minimum take off distance of 6,170 feet and weighs 50,200 pounds when empty.

These facts are important because much of Chapter 3, Aviation Activity Forecasts is based on the ***2019 Aurora State Airport Constrained Operations Runway Justification Study*** which determined that aircraft operating at Aurora experienced 645 constrained operations in 2018. It should be noted that this number was based on pilot surveys which were not validated against flight plans, and did not take into consideration that the practice of allowing more and more oversized aircraft to operate at Aurora was the major factor driving the number of constrained operations. Further, that number of 645 was a 33% increase over that reported in the unapproved 2012 master plan, in spite of there being a 24% reduction in Total Operations since 2010. That increase can only be attributed to allowing more and more oversize jets to operate at Aurora which drives the increase in constrained operations.

That though is not the most troubling fact about the Constrained Operations study. What is most troubling are facts illustrating a faulty methodology and inaccuracy. For instance, the Minimum Takeoff Distances listed for the four jets with the most constrained operations are higher than the published Minimum Takeoff Distances from the manufacturers. For instance, the Falcon 50 which had the single largest number of constrained operations in 2018 at 160, is shown on Page 16 of Chapter 1 to have a Minimum Takeoff Distance of 5,413 feet when, in fact, the published manufacturer's spec is 4,935 feet.

On top of that, in the data listing annual operations and constrained operations, the Falcon 50 is shown to have had 226 operations at Aurora in 2018, of which 160 were constrained. That is almost 71% constrained operations for a jet with manufacturer's minimum takeoff distance shorter than the runway at Aurora.

To make matters worse, though, and to question the accuracy of the data presented in the entire study, the Falcon 900 was listed as having 68 operations at Aurora in 2018, of which 75 were constrained. That is to say, they had 110% of their operations constrained, which seems to be mathematically impossible.

The number of Falcon 900 constrained ops of 75 (from the survey) is found on page 3-18. The actual operations of 68 for the Falcon 900 is found in TFMSC IFR Data table on page 1-16 of the Constrained Operations Study.

Charlotte Lehan, Wilsonville City Councilor
503-313-8040

April 5, 2022

TO: Brandy Steffen, Senior Program Manager
JLA PUBLIC INVOLVEMENT
EMAIL: brandy.steffen@jla.us.com

RE: Question of Legal Validity of 2012 Master Plan

My comments are about the propriety and legality of the data presented in the Draft chapters. Chapter 3 is titled ***Aviation Activity Forecasts***, and beginning on page 8 is a section titled ***Recent Events Summary***. No mention is made of the 2021 Final Judgment by the Oregon Court of Appeals, later ratified by the Oregon Supreme Court, that the 2012 Aurora Airport Master Plan is invalid because it was never legally approved or adopted by the Oregon Aviation Board, and it was never adopted into the Marion County Comprehensive plan. Certainly, this qualifies as a "recent event!" This matters because the Forecast chapter and the data therein are built on data from the 2***019 Aurora State Airport Constrained Operations Runway Justification Study*** and the unapproved ***2012 Aurora State Airport Master Plan***.

The Constrained Operations study references the 2012 master plan 99 times and includes such statements as "intended to supplement the 2012 AMP document," and "the current 2012 Airport Master Plan should be consulted for specific plans related to airport development and protection," and finally, *The primary purpose of the forecast update associated with the Aurora State Airport Constrained Operations Runway Justification Study is to evaluate the forecasts of aviation activity (2010-2030) contained in the 2012 Aurora State Airport Master Plan (AMP), which supported the planned runway extension depicted on the 2012 Airport Layout Plan (ALP).*

On top of that, the Draft Chapters for the current master planning processes are not only based on the Constrained Operations Study, but directly refer back to the 2012 Master Plan and include 18 references to it. This linkage and dependency is confirmed in the ***Previous Airport Planning*** section of Chapter 3 that states *The 2012 Aurora State Airport Master Plan Update provides the most recent FAA-approved airport layout plan (ALP) drawing for the Airport. The 2019 Constrained Operations Runway Justification Study provided updated aviation activity forecasts and airside facility requirements assessment related to the critical aircraft.*

The Court of Appeals ruling on the 2012 Master Plan raises real legal questions about the Forecast chapter in as much as the data is built on the Constrained Operations study which in turn is dependent on the unapproved 2012 master plan. Last week's Court of Appeals ruling on a private development next to the Aurora Airport makes clear that expanding the Aurora Airport must comply with Oregon's land use laws and requires it being adopted into the Marion County comprehensive plan, something that hasn't happened since 1976.

Roger Kaye,Pres.
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(503)743-4567

c: Andrew Mulkey, Rural Lands Attorney
1000 Friends of Oregon
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Re: Comments in advance of PAC Work Session today

ben.williams@liturgica.com <ben.williams@liturgica.com>

Tue 4/5/2022 2:12 PM

To: PECK Heather <heather.peck@odav.oregon.gov>

Cc: LUCAS Sarah <Sarah.LUCAS@odav.oregon.gov>; Brandy Steffen <brandy.steffen@jla.us.com>; benjamin.j.mello@faa.gov <benjamin.j.mello@faa.gov>

Heather;

Thank you for your email. Since today's PAC Working Session concerns Forecasts, I would like to submit two questions that I think it would be important for you or someone from Century West to address at the outset, given the complexity of the subject.

They are:

1. Why does the master plan not use historical tower data (ATCT) for particular types of aircraft when determining existing design aircraft for taxiway and runway separation and runway length?

2. Why does the master plan not use tower data to determine its forecast for particular types of aircraft?

The confusion arises from the use of TFMSC data which is based on flight plans, and in rather tables presented that data goes back to 2009 when there was no tower and thus flight operations were mainly estimates as opposed to hard data from the FAA ATADS database from 2017 to present.

Sincerely

Ben Williams
Friends of French Prairie

> On Apr 5, 2022, at 12:10 PM, PECK Heather <heather.peck@odav.oregon.gov> wrote:
>
> Thank you again, for your comments and we will include them in the record, files and forward to the FAA.
> For clarification however, while you are correct that the State Aviation Board did not approve the 2012 Master plan, the FAA did approve the methodology, the data as related to the forecast, the forecast and the final ALP, as also signed and dated by the FAA.
>
> Kind Regards,
> Heather

OFFICE 503-378-3168 **CELL** 503-881-6966

HEATHER PECK
OREGON DEPARTMENT OF AVIATION
PLANNING & PROGRAMS MANAGER

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From: LUCAS Sarah <Sarah.LUCAS@odav.oregon.gov>
Sent: Tuesday, April 5, 2022 11:42 AM
To: ben.williams@liturgica.com <ben.williams@liturgica.com>; brandy.steffen@jla.us.com <brandy.steffen@jla.us.com>
Cc: benjamin.j.mello@faa.gov <benjamin.j.mello@faa.gov>; PECK Heather <heather.peck@odav.oregon.gov>
Subject: RE: Comments in advance of PAC Work Session today

Ben,

Thank you for your comments. We have received and will include in the Working Session Meeting Summary document, which will be posted to the website and included as an appendix in the Master Plan.

See you this afternoon.

Sarah Lucas, MPA
OREGON DEPARTMENT OF AVIATION
Planner

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From: ben.williams@liturgica.com <ben.williams@liturgica.com>
Sent: Tuesday, April 5, 2022 10:34 AM
To: LUCAS Sarah <Sarah.LUCAS@odav.oregon.gov>; brandy.steffen@jla.us.com
Cc: benjamin.j.mello@faa.gov
Subject: Comments in advance of PAC Work Session today

Sarah and Brandy;

Please see attached comments from Friends of French Prairie in advance of the April 5 PAC Work Session.

Please confirm receipt and that they will be entered in the record.

Thank you

Ben Williams
Friends of French Prairie

April 5, 2022

By electronic mail

Sarah Lucas, Aviation Planner
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Brandy Steffen
JLA Public Involvement
Brandy.steffen@jla.us.com

Re: Aurora State Airport Master Plan, Preliminary Aviation Activity Forecasts and Selection of critical aircraft or design aircraft for ARC and runway length.

On behalf of 1000 Friends of Oregon, please accept the following statement for the record in the proceedings for the draft airport master plan and the FAA's forecast review for the Aurora State Airport master planning process.

Introduction

The Oregon Department of Aviation is in the process of preparing a new airport master plan for the Aurora State Airport in Marion County, Oregon. To that end the ODA has prepared draft chapters for the new airport master plan (draft AMP), and is expected to send its forecast and selection of design aircraft to the FAA for review and approval. In the draft AMP, the ODA discusses a prior 2019 constrained operations runway justification study (hereinafter 2019 Study) and appears to use the 2019 Study as the basis for its current selection of the design aircraft for Airport Reference Code and the group of critical design airplanes for runway length. The analysis provided in the 2019 Study and the draft AMP are flawed, and the draft AMP lacks any of the explanation and analysis required to select the existing or forecast group of critical design airplanes used to determine runway length.

The draft AMP chapter 3 and the 2019 Study fail to follow the appropriate methodology for identifying the critical aircraft or design aircraft for runway length. Draft AMP 2-18. As discussed in more detail below, the draft AMP attempts to use the Aircraft Approach Category component of the Airport Reference Code for the purpose of determining the critical design aircraft for runway length. Notably, the Airport Reference Code (ARC) and Runway Design Code (RDC) are not used to determine runway length. The 2019 study incorrectly states that "critical aircraft operations are used to establish the corresponding [ARC] and [RDC] designations for Runway 17/35 *that define the applicable FAA design standards and length requirements*." 2019 Study at 2-1 (emphasis added). The draft AMP appears to duplicate that error, stating "runway length requirements will be derived from the composite of Approach Category C and D jet aircraft reflected in the FAA runway length planning tables." Draft AMP at 3-24. As explained in various Advisory Circulars, the ARC and RDC refer to characteristics of aircraft used to determine taxiway and runway separation distances. However, they are not used to determine runway length.

The following comments briefly discuss the method for determining the critical design aircraft for runway length. Next, the comments discuss the flaws and errors of the 2019 Study. Finally the comments explain the failure of the draft AMP to comply with the requirements for determining the design aircraft for ARC and the critical design aircraft for runway length.

Method of Selecting the Critical Design Aircraft for Runway Length

The RDC contains three components, the Aircraft Approach Category (AAC), which refers to aircraft approach speed listed in groups A to E; the Airplane Design Group (ADG), which groups aircraft by tail height and wingspan in groups I to VI; and aircraft approach visibility minimums or Runway Visual Range (RVR) listed in feet. AC 150/5300-13A at 105.c (Airport Design). The ARC contains the first two components of the RDC, the AAC and ADG. *Id.* at 102.i. Together, the RDC, ARC, and a third designation, the Taxiway Design Group (TDG), determine separation standards for taxiways and runways. *Id.* at 105.c., 105.d. None of these design categories are used to design runway length.

The Advisory Circular for Airport Design refers the reader to a different Advisory Circular to determine runway length, AC 150/5325-4 (Runway Length). AC 150/5300-13A at 302.a, 304.a. The Airport Design Advisory Circular explains that "[t]akeoff distances are often longer than landing distances." *Id.* at 302.a. The ARC and RDC are design standards related to landing requirements of the design aircraft.

For aircraft weighing between 12,500 pounds and 60,000 pounds, the Runway Length Advisory Circular relies on maximum certified takeoff weight (MTOW) to determine runway

length. “MTOW is used because of the significant role played by airplane operating weights in determining runway lengths.” AC 150/5325-4B at 102.b.3. The design and funding standards for runway length require the designer to identify the “critical design airplanes” that have at least 500 or more annual itinerant operations at the airport. *Id.* at 102.a.2, 102.a.8. Note that landings and takeoffs are considered separate operations. *Id.* at 102.a.8. The critical design airplane or airplanes are a list of airplanes that result in the longest recommended runway length. *Id.* at 102.a.2. The circular explains that “listed airplanes will be evaluated either individually or as a single family grouping to obtain a recommended runway length.” *Id.* For airplanes that weigh between 12,000 and 60,000 pounds, “the recommended runway length is determined according to a *family grouping of airplanes* having similar performance characteristics and operating weights.” *Id.* at 102.b.2. The only exception is for regional jets that weigh less than 60,000 pounds. Regional jets are subject to a different methodology that relies on the characteristics of the individual airplane. *Id.* at 102.b.2.

Flaws in the 2019 Constrained Operations Runway Justification Study

In this case, the 2019 Study fails to use a “family grouping of airplanes” that have “similar performance characteristics and operating weights” to identify the critical design airplanes for runway length that meet the “substantial use” or “regular use” threshold of 500 annual itinerant operations. Instead of grouping airplanes by their performance characteristics and operating weights, the 2019 Study groups airplanes by whether or not their MTOW exceeds the current runway length of 5,003 feet. Using this methodology, the 2019 Study groups dissimilar airplanes that do *not* share similar performance characteristics and operating weights. It appears that only by grouping dissimilar airplanes can the 2019 Study achieve a 500 annual itinerant operations threshold that justifies a longer runway length. The 2019 Study fails to use the methodology required by the FAA’s Runway Length Advisory Circular. AC 150/5325-4B.

For example, the 2019 Study groups planes with vastly different operating weights. The Study includes the Astra 1125 (ASTR) which has a 24,650 MTOW in the same list as the Falcon 900 (F900) which has a 45,503 MTOW. *See* 2019 Study at 1-16. These aircraft do not share similar “operating weights.” Moreover, the 2019 Study also groups planes with dissimilar “performance characteristics.” The Study lists the Falcon 900 (FA90) which has a minimum takeoff distance at MTOW of 5,215 feet with a Challenger 600 (CL60) which has a minimum takeoff distance at MTOW of 6,544 feet. *Id.* Note that the table listing MTOW and takeoff distances at MTOW contains takeoff distances for a number of planes that do not match the distances published by the manufacturer. The table lists the takeoff distance for the Falcon 900 at MTOW as 5,723 feet. Aircraft that require more than 500 feet (or 1,000 feet in this case) of runway distance at MTOW do not share “similar performance characteristics.” The 2019 Study’s analysis groups itinerant operations of planes that require vastly different takeoff distances at

MTOW. For that reason, the 2019 Study fails to comply with the methodology required in Advisory Circular 150/5325-4B.

The 2019 Study also fails to adequately identify the "existing" group of critical design airplanes. This methodological shortcoming applies to the critical design aircraft for runway length as well as the critical design aircraft for other design categories such as AAC and ADG. The Study averages the itinerant operations for each type of airplane over a span of multiple years. However, to determine the "existing" critical design aircraft for a particular design category, the guidelines require "an operations count by aircraft make and model… for the most recent 12-month period of activity that is available." AC 15/5000-17 (Critical Aircraft and Regular Use) at 2.1.1. The 2019 Study only presents data up to 2018, and it averages the operations counts over multiple years. For that reason, the Oregon Department of Aviation cannot rely on the 2019 Study to determine the *existing* critical design aircraft for any design criteria for a 2022 airport master plan.

Finally, the analysis conducted in the 2019 Study fails to correctly determine the "percentage of fleet and useful load factor" used for runway length determinations. AC 150/5325-4B at 303. The design guidelines require the selection of "the critical design airplanes under evaluation with their respective useful loads." *Id.* at 301. "Once obtained," the guidelines explain, the airport must "apply either figure 3-1 or figure 3-2 to obtain a single runway length for the entire group of airplanes under evaluation." *Id.* "To determine which of the two figures apply, first use tables 3-1 and 3-2 to determine which one of the two 'percentage of fleet' categories represents the critical design airplanes under evaluation." *Id.* at 302.

The 2019 Study makes a number of methodological errors in its selection and application of figures 3-1 and 3-2. The 2019 Study appears to select a different group of critical design airplanes as a way of arriving at a predetermined outcome. For example, the table on page 1-16 appears to show one grouping of 28 airplanes with an average of 1,954 annual itinerant operations. The table on page 3-2 contains a larger group of more than 28 airplanes with an average of 2,491 annual itinerant operations. The table on page 3-2 of the Study does not list the takeoff distance at MTOW or other performance characteristics for the listed airplanes.

Assuming the 2019 Study correctly selected a family grouping of airplanes, the Study uses the wrong table and load curves. The Study fails to demonstrate that its family grouping of airplanes with 500 itinerant operations actually includes the type of airplanes listed in table 3-2. It is not clear that the Study correctly selects the 25 percent of fleet curve based on Table 3-2 as opposed to the 75 percent of fleet curve based on Table 3-1. *See* AC 150/5325-4B at 303.a.2. (requiring use of "figure 3-1 when the airplanes *under evaluation* are not listed in table 3-2.")

Given the airplanes listed in the Study, the two tables in the Advisory Circular appear to have overlapping airplane types. For example, both tables 3-1 and 3-2 list the Falcon 900, the Learjet 45, and the Cessna 650. Based on the information provided in the Study, it is not clear under which table the itinerant operations for the aircraft listed in the Study should be grouped. For example, the Study's listing of itinerant operations for a Falcon 900 does not distinguish between the Falcon 900 and 900B listed in Table 3-1 and the Falcon 900C and 900EX listed in table 3-2. Removing the overlapping aircraft types from the 25 percent calculations reduces that category below 500 itinerant operations.

Ultimately, the 2019 Study fails to justify its selection of the 90 percent useful load curve over the 60 percent useful load curve. Selection between the 60 percent and 90 percent useful load curves depends on "the haul lengths and service needs of the critical design airplanes." AC 150/5325-4B at 302. The "useful load factor" "is considered to be the difference between the maximum allowable structural gross weight and the operating empty weight," and in practical terms the useful load "consists of passengers, cargo, and usable fuel." *Id.* at 303.b.1. In this case, the 2019 Study fails to describe or evaluate the actual haul lengths and service needs of the "family grouping of airplanes" selected for runway length. The Study fails to demonstrate that the airport receives 500 itinerant operations that meet the 90 percent useful load threshold for the critical design aircraft that would determine runway length.

The Study admits that TFMSC data only "identifies 197 verified annual operations to/from airports beyond 1,000 nm." The Study does not, however, provide the aircraft types responsible for those operations. The Study also fails to demonstrate that 1,000 nm represents a 90 percent useful load threshold for the critical design aircraft, many of which are capable of ranges significantly longer than 1,000 nm. For instance, the study fails to identify how many of those 197 annual operations met the 90 percent threshold of the aircraft's useful load.

The 2019 Study attempts to add itinerant operations to the existing 197 annual operations by determining the number of operations that it considers to be constrained by existing runway length. 2019 Study 3-4. The Advisory Circular does not define or otherwise rely on "constrained operations" to determine the group of existing critical design aircraft for runway length. Even if the 2019 Study's methodology were allowed, the Study fails to include the actual survey data used to determine the number of constrained operations that it concludes would have traveled longer than 1,000 nm from the airport if the runway were longer. By failing to include the actual survey information and flight plans, the Study fails to demonstrate that the extent to which the constrained operations met or would have met the 90 percent useful load threshold. Notably, the number of constrained operations listed for some of the aircraft exceed the total operations for that aircraft type as shown by the TFMSC data. For those reasons, the 2019 Study fails to determine "the haul lengths and service needs" of the existing and forecast critical design aircraft

for runway length. The Study fails to adequately justify its selection of the 90 percent useful load threshold over the 60 percent useful load threshold in figure.

Flaws in the Draft Airport Master Plan Chapter 3

The draft airport master plan (draft AMP) includes many of the errors contained in the 2019 Study. For clarification, the AMP cannot rely on the 2019 Study to determine the existing critical design aircraft for the various airport design categories (e.g. AAC, ADG, runway length). As explained above, the airport master plan must make that determination through "an operations count by aircraft make and model for the most recent 12-month period of activity that is available." AC 15/5000-17 at 2.1.1. The 2019 Study only includes information through 2018. For that reason, the draft airport master plan cannot rely on the findings "in the data review contained in the 2019 Constrained Operations Runway Justification Study" for either the existing or forecast design aircraft for any airport design category. AMP 3-13. Instead, the AMP must make those determinations based "on the review of current… aircraft operations data." *Id.*, Table 3-8.

ARC Design Aircraft

The most recent data shown in Table 3-8 show fewer than 500 itinerant operations for AAC category C airplanes in 2021. The table also only shows only 96 total operations among three category D airplanes, some of which have low numbers of operations within the most recent 12-month period of activity. AMP 3-14. The draft AMP uses the AAC category D airplanes as the basis for its AAC category C-II critical aircraft determination. Given the low number of operations for the Lear 35 (D-1) and the Gulfstream V/G500 (D-III) it is not clear that operations from these two airplanes are "indicative of sustained operations." AC 15/5000-17 at B.8.3. The same can be said of the Gulfstream IV/G400 which shows a large jump in operations between 2020 and 2021, and it is not clear that those numbers will continue into the future. The AMP and the 2019 Study also recognize that TFMSC activity are based on flight plans, which do not always correspond to actual flight activity. 2019 Study at 1-15 ("not every flight plan results in an operation"). Under these circumstances, the guidance provided by the Advisory Circulars do not justify selecting C-II over B-II as the existing critical aircraft for runway and taxiway separation determined by ARC or RDC. AC 15/5000-17 at B.8.3.

Critical Design Airplanes for Runway Length

The draft AMP fails to justify or even explain its use of "the composite of Approach Category C and D jet aircraft" as the critical design airplanes for runway length. Draft AMP at 3-24. First, runway length is determined in part by MTOW, not AAC. AC 150/5325-4B at 102.b.3 (explaining use of MTOW). Next, three of the four AAC category D aircraft shown in Table 3-8 are over 60,000 pounds and cannot be used to determine runway length using the methods for

aircraft between 12,000 and 60,000 pounds in Chapter 3 of Advisory Circular 150/5325-4B. The decision in the draft AMP to select the critical design aircraft for runway length based on a composite of AAC category C and D aircraft does not comply with the methodology explained in Advisory Circular 150/5325-4B.

Second, the draft AMP does not contain any analysis of operations count by aircraft make and model for the purpose of determining the existing (or forecast) critical aircraft for runway length based "a family grouping of airplanes" that have "similar performance characteristics and operating weights." AC 150/5325-4B at 102.b.2. The AAC category C and D aircraft listed in the itinerant operations tables (Table 3-8) do not represent a family grouping of airplanes with similar performance characteristics and operating weights. Those categories include aircraft with widely varying "operating weights" as well as widely ranging "performance characteristics" in terms of runway length. The draft AMP fails to identify the family grouping of airplanes with 500 annual itinerant operations required to determine the critical design aircraft for runway length.

Third, the draft AMP does not provide any information on "haul lengths and service needs of the critical design airplanes." AC 150/5325-4B at 302. For that reason, the draft AMP does not present the information needed to determine whether to use a 60 percent and 90 percent useful load factor to determine runway length. Simply put, the draft AMP fails to provide any analysis or explanation of its selection, nor does it follow the methodology required by Advisory Circular 150/5325-4B for determining the critical design aircraft used for existing and forecast runway length determinations.

Finally, the AMP cannot rely on the outdated information included in the 2019 study. Draft AMP 2-18 (explaining conclusions of the 2019 Study). Not only does the 2019 Study not provide information required to determine the existing critical design aircraft for runway length, it also fails to provide the basis for a forecast for a 2022 airport master plan. Circumstances have changed since 2018. As an example, the Study identified the Astra 1125 and Cessna 750 Citation as potential "design aircraft" for the master planning process. However, more recent operations data shows that operations for both of those aircraft had declined significantly since 2016. Draft AMP 3-14, Table 3-8. The draft AMP must provide updated analysis and information.

Conclusion

Both the 2019 Study and the draft AMP are flawed. However, the draft AMP fails to include *any* relevant information or analysis for the purpose of selecting a critical design aircraft for runway length. The draft AMP simply does not provide the information required to determine the existing critical design aircraft for runway length, much less the information required for a forecast for runway length. The draft AMP's selection of a design aircraft for ARC is also

flawed. For those reasons, 1000 Friends requests that the Oregon Aviation Department update the draft AMP to provide the required analysis and requests that the FAA decline to approve the draft AMPs selection of the design aircraft for ARC and runway length.

Sincerely,

Andrew Mulkey, Staff Attorney
1000 Friends of Oregon
(503) 497-1000x138
andrew@friends.org

1000 Friends of Oregon is a non-profit organization founded by Governor Tom McCall shortly after the Legislature passed Senate Bill 100, which created the land use planning rules that shape Oregon's communities. Since its founding in 1975, 1000 Friends has served Oregon by defending Oregon's land use system—a system of rules that creates livable communities, protects family farms and forestlands, and conserves the natural resources and scenic areas that make Oregon such an extraordinary place to live. 1000 Friends accomplishes this mission by monitoring local and statewide land use issues, enforcing state land use laws, and working with state agencies and the Legislature to uphold the integrity of the land use system.

FLAWED METHODOLOGIES AND DATA ERRORS IN THE DRAFT MASTER PLAN CHAPTERS AND THE UNDERLYING 2019 AURORA STATE AIRPORT CONSTRAINED OPERATIONS RUNWAY JUSTIFICATION STUDY

Prepared by Friends of French Prairie, April 5, 2022

Draft chapters 1, 2 and 3 were presented to the Public Advisory Committee for the current Aurora Airport Master Plan process on March 1, 2022. It included data on Based Aircraft and Total Operations as well as preliminary data about constrained operations. Regular references are made to the 2012 Aurora Airport Master Plan and the 2019 Aurora Airport Constrained Study.

***

The 2012 Aurora Airport Master Plan, which was never approved or adopted by the Oregon Aviation Board and has been the basis of a decade long legal dispute, included data about Based Aircraft, Total Operations and Constrained Operations that became the basis for a call to expand the Aurora State Airport—a $37 million expansion requiring 55 acres of EFU land Per the Airport Layout Plan in the unapproved 2012 Aurora Airport Master Plan.

Among the data assessed in a master plan are the inventory of aircraft based at an airport and the total operations taking place, and from these, growth is forecasted or the coming decades. Comparing prior master plan data and forecasts to current data and forecasts is important to assess overall need and is not being done in the current master planning process. This was not done in 2021-2041 Aviation Activity Forecasts (Draft Chp. 2) of the current master plan process.

BASED AIRCRAFT

The Based Aircraft inventories and forecasts for the 2012 and present Master Plan processes are:

2012 Master Plan

Table 3J. Based Aircraft and Fleet Mix Forecast

Year	Jet	Turboprop (Multi-engine)	Multi-engine Piston	Single Engine	Helicopter	Other	Total
2010	23	16	24	261	25	5	354
2015	27	19	24	276	28	5	379
2020	33	20	25	288	34	5	405
2030	47	26	27	316	43	5	464

Table 3J from Chapter Two: Inventory, 2012 Aurora State Airport Master Plan, Pg. 3-21

2022 Aurora Airport Master Plan – Draft Chapters for PAC

TABLE 3-14: FORECAST BASED AIRCRAFT FLEET MIX

	CAGR	2021	2026	2031	2036	2041
Single Engine*	0.9%	216	229	240	250	259
Multi Engine Piston	0.0%	6	6	6	6	6
Turbo Prop	1.1%	13	14	15	15	16
Jet	2.3%	36	40	45	50	56
Helicopter	1.4%	10	11	11	12	13
Total Based Aircraft	1.1%	281	300	317	333	350

Source: Century West Engineering
*Includes Experimental/LSA

Table 3-14: Forecast Based Aircraft Fleet Mix, Draft Chapter 3 of current master plan process

Based Aircraft growth was forecast in the unapproved 2012 Master Plan to increase from 354 to 464 in 2030. The Draft Chapter of the current master plan process is forecasting Based Aircraft in 2031 to only be 317. That is a **lowering of forecast for that year by 31.6 percent when compared to 2012.**

What has occurred in the last ten years though, is an increase in the corporate jet fleet which has increased from 23 to 36 (at the expense of general aviation aircraft) and is forecast to further increase to 45 by 2031.

TOTAL OPERATIONS

Correspondingly both master plans have Total Operations and forecast increases. The 2010 Total Operations number was an estimate based on adjusting the 2009 number for year-on-year growth.

Aurora Airport 2012 Master Plan

Table 3L. Aircraft Operations Forecast

Year	Itinerant Air Taxi	Itinerant GA	Itinerant Military	Total Itinerant	Local GA	Total Operations
2009 Historical	9,788	42,592	250	52,630	36,865	89,495
2010 Estimated	10,000	48,395	250	58,645	32,264	90,909
2015	10,815	52,354	250	63,419	34,902	98,321
~~2020~~	11,697	56,635	250	68,582	37,756	~~106,338~~
2030	13,682	66,272	250	80,205	44,181	124,386

Source: WHPacific, Inc., except Terminal Area Forecast for 2009.

Table 3J from Chapter Two: Inventory, 2012 Aurora State Airport Master Plan, Pg. 3-25

2022 Aurora Airport Master Plan – Draft Chapters for PAC

TABLE 3-15: AIRCRAFT OPERATIONS FORECAST MODELS

	CAGR	2021	2026	2031	2036	2041
Historical Tower Counts Trend	3.6%	76,028	95,039	114,646	134,254	153,862
TFMSC Historical Trend (20-Year) - Recommended Forecast	**2.3%**	**76,028**	**85,201**	**95,480**	**107,000**	**119,909**
Marion County Population Correlation	2.9%	76,028	96,244	112,162	124,981	135,506
National Aerospace Forecast Operations (w/ ATCT)	0.8%	76,028	78,939	81,966	85,114	88,388
Federal Contract Tower (Oregon) TAF	0.6%	76,028	81,924	82,972	84,046	85,151

Source: Century West Engineering developed using FAA TFMSC Data

Table 3-15: Aircraft Operations Forecast Models, Draft Chapter 3 of current master plan process

Total Operations was forecasted in the unapproved 2012 Master Plan to increase from 90,909 to 124,386 by 2030. The Draft Chapter of the current master plan process is forecasting Total Operations in 2031 to only be 94,480. That is a **lowering of the operations forecast for that year by 24 percent when compared to 2012.**

Dramatic reductions in these two forecast numbers call into question the entire premise of need to lengthen the runway and expand the Aurora Airport.

However, in order to support the need for an extended runway and expanded airport, the focus is moved from the failure to come close to the previously forecasted numbers and instead has been placed on forecasted year-on-year increases in based aircraft and total operations from 2021 to 2026, etc.

CONSTRAINED OPERATIONS

According to the FAA, a constraint is "anything that interferes with the normal flow of air traffic. Common constraints are weather, excess volume, and runway limitations," and a constrained operation is a takeoff or landing in which the aircraft is forced to reduce freight, passenger or fuel load because of these conditions.

As part of the 2012 Aurora Airport master planning process:

> *…aircraft operators were surveyed to quantify operations that are constrained by the current runway length at Aurora State Airport (Pg. 4-9). The runway length survey (Appendix I) identified the number of aircraft operations constrained at the Airport annually total 473, using only existing aircraft with N numbers and operators' names identified,* (Pg. 4-13).

A documented illustration of how growth in constrained operations is built into the system is found in the 2012 Master Plan on page 4-13 where it states:

One operator based at the Airport, RJ2/DB Aviation, plans to replace its 650 Citation III/VI with a 750 Citation X, which would be constrained by runway length more often (an estimated 40 times per year compared to 30 for the existing aircraft).

That is to say, this operator knowing full well that a 750 Citation X is oversized for the current airport specifications is going to upgrade to that aircraft and virtually all, if not all, of its operations will qualify as "constrained." It is doing so with the full knowledge and support of Oregon Dept. of Aviation!

Additionally, ODA has regularly granted weight waivers to larger and larger corporate jets, many of which exceed the weight rating of the runway, and require longer minimum runway lengths based on manufacturer's specifications. These approvals in turn result in constrained operations for virtually all flights by these oversized aircraft.

2019 Aurora Airport Constrained Operations Study

The Constrained Operations Study commissioned by the Dept. of Aviation in February 2018, and approved by the FAA in 2019, stated the following in the Scope of Work document which was titled "Aurora State Airport (UAO) Constrained Operations Runway Justification Study":

PROJECT INTENT

The Oregon Department of Aviation (ODA) has selected Century West Engineering (Consultant) to complete a focused planning effort to provide FAA requested justification for a constrained operations study to determine if a runway extension at the Aurora State Airport (UAO) that is currently identified on the ALP is justified. ***This Constrained Operations Runway Justification Study scope identifies the planning efforts and supporting justification for the planned runway extension and appurtenant facilities.*** *The study will utilize the current 2012 Airport Master Plan (AMP) and updated Airport Layout Plan revised July 25, 2016 as the foundation documents upon which additional justification and modifications (as needed) are required to satisfy the FAA for funding eligibility and confirm project configuration, work elements, and agency approval requirements. The study will be self-funded by ODA, but will be coordinated with the FAA Seattle Airports District Office (ADO) to obtain concurrence on the scope, forecast approval, funding justification for relevant projects, and approval of the updated Airport Layout Plan, if required.*

It should be noted then, that the purpose of the study was to document constrained operations in order to justify the **planned** runway extension.

Thus, it comes as no surprise that the Final 2019 Constrained Operations Study, approved by the FAA begins in the Executive Summary by stating:

The purpose of this study is to review the current runway length requirements and activity at the Aurora State Airport compared to the assumptions made in the approved 2012 Airport Master Plan to consider if the eligibility threshold for a runway extension has been met. An analysis of aviation activity at the Airport has identified 349 based aircraft. 10.8% of the aircraft based at the Airport are jet aircraft. The Air Traffic Control Tower (ATCT) began

collecting data in October 2015 and has identified 48,459 Airport operations in 2016 and 58,597 Airport operations in 2017. The confirmed TAF numbers are 44,292 and 54,999 respectively. FAA Traffic Flow Management Systems Counts (TFMSC) operations data presented by Aircraft Design Group identified at least 860 annual operations by C and D aircraft on average from 2009 to 2018. A constrained operations Airport user survey was distributed as part of this study. The survey identified 645 constrained annual operations from a variety of aircraft and aircraft operators. Additional analysis of the TFMSC data and the airport user surveys indicates there have been in excess of 500 annual operations by aircraft to/from destinations beyond 1,000 nm of Aurora State Airport which justifies the use of the 100% Fleet Group at 90% Useful Load curve identified in FAA Advisory Circular (AC) 150-5325-4B, Runway Length Requirements for Airport Design.

As demonstrated by Airport activity data and user surveys obtained as part of this study, a minimum runway length of 7,888' is justified based on the FAA substantial use threshold of 500 annual operations and the runway length methodologies defined by AC 150-5325-4B. However, given the future runway length of 6,002' identified in the 2012 Airport Master Plan and depicted in the current ALP, it is recommended that the runway only be extended by 1,000'.

[It should be noted that while this quotation references the "approved 2012 Master Plan, that master plan was never properly approved and adopted by the Oregon Aviation Board, as found by the Oregon Court of Appeals in 2021]

Constrained Operations - 2018 ODA Constrained Operations Study				
Cited Jets with Constrained Operations				
	Total	645		

The majority of constrained operations are being experienced by oversize aircraft that are either too heavy for the current runway strength rating (45,000 pounds) or carry manufacturer requirements for a longer runway. Yet more and more of these oversized aircraft are being lured into use of Aurora State Airport.

Further, almost half of the reported constrained operations (315 out of 645) come from four aircraft (Astra 1125, Bombardier Global Express, Dassault Falcon 50 and Dassault Falcon 900).

Comparing the 2012 survey with that conducted in 2018 shows a 33% increase in Constrained Operations, in spite of the fact that actual Total Operations are running an average of 24% below that forecast in 2012, and based aircraft are down by 31% compared to that forecast in 2012. This increase is driven by the change in fleet mix from general aviation to large corporate jets.

The Constrained Operations Study does not include any data indicating that the constrained operations claimed by pilots were validated with actual flight data. This is particularly questionable when these two elements are considered:

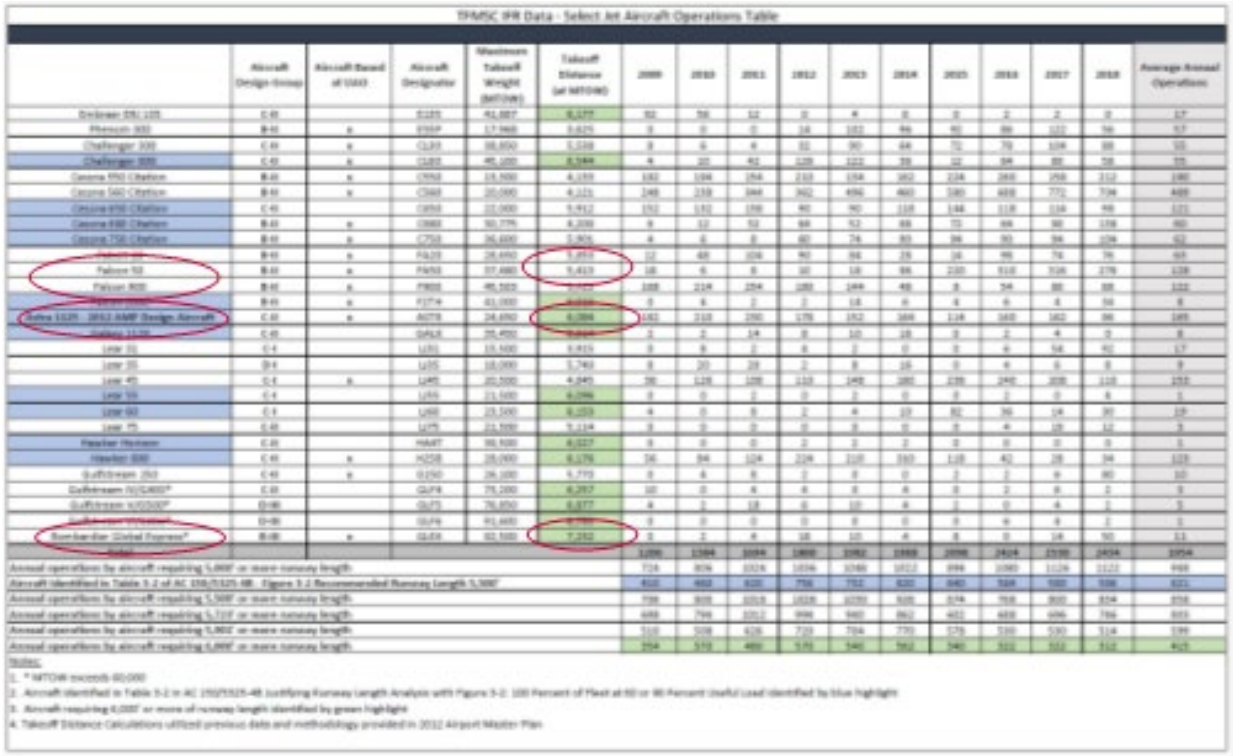
1. Seven of the 16 corporate jets reporting constrained operations reported a specific "typical stage length" on their survey, and that Stage Length is less than half of the Manufacturer Stated Maximum Range for the aircraft. For example:

	Reported CO's	Typical Stage Length Reported (nm)	Manufacturer Stated Range (nm)
Falcon 50	160	1,000-1,5000	3,200

2. In other words, what was done to assure that a 1,500 mile flight which only requires a 50% fuel load was not counted as a constrained operation? Fifty percent of the jets reporting Constrained Operations gave identical Reported Reasons for the experienced Constrained Operations, for example:

Reported reason for experienced Constrained Operations
Unable to depart with enough fuel to accomplish mission due to inadequate runway length

In the Final study, the following table of select jets shows those requiring 6,000 feet or more of runway highlighted in green. It also shows the four jets identified above that claimed to experience almost half of the constrained operations (circled in red).



The table (reproduced full size on last page) also shows the Minimum Runway Length required by those aircraft at Maximum Takeoff Weight (MTOW). It should be noted that for the four jets experiencing almost half of the constrained operations, the Minimum Runway Length shown in the table for this study is longer than the length found in published manufacturer specifications, as follows:

Aircraft	No. Const Ops	Aircraft Design Group	Manufacturer Stated Range (nm)	Minimum Takeoff Distance (at MTOW) In Const Ops Study	Minimum Takeoff Distance (at MTOW) in published Mfg or reseller literature	Empty or Operating Weight	Max Landing Weight	Maximum Takeoff Weight (MTOW)
Astra 1125	40	B-II	3,110	6,084	5,250	12,670	20,700	24,650
Bombardier Global Express	40	B-III	5,960	7,232	6,170	50,300	78,600	92,500
Falcon 50	160	B-II	3,260	5,413	4,935	22,250	35,715	37,480
Falcon 900	75	B-II	3,960	5,273	5,215	24,683	42,000	45,503

In addition, the table also shows annual and average annual operations. Again, if we look closely at the four aircraft identified above, and compare 2018 operations to the claimed constrained operations during the 2018 study period, we see the following:

	2018 Operations	2018 Reported Constrained Ops	% of Operations Constrained
Falcon 50	226	160	70.8%
Falcon 900	68	75	110.3%
Astra 1125	96	40	41.7%
Bombardier Global Express	50	40	80.0%

Credulity is stretched that a single aircraft (the one with the most annual constrained operations) which has a manufacturer's minimum takeoff distance shorter than the runway at Aurora should experience almost 71% of its operations as constrained. It is further stretched beyond belief for the Falcon 900 whose rate of constrained operations is 110% because it reported MORE constrained operations than actual operations at Aurora Airport during 2018!

These errors may be the result of a transposition during creation of the table, but given the weight the number of constrained operations comprise of the total, at a minimum it implies careless work, and maximally a manipulation of the data to give the appearance of regularity.

If Dept. of Aviation and its consultant Century West, to say nothing of the FAA, who approved the Constrained Operations Study are serious about the numbers of constrained operations

being claimed by pilots, the questionable survey results should have been validated against filed flight plans and flight logs, not just accepted at face value.

For example, on listed aircraft, the Bombardier Global Express has a Minimum Takeoff Distance of 6,179 feet and an empty weight of 50,300 pounds. Aurora Airport has a 5,004 foot runway with a strength rating of 45,000 pounds and aspirations of 6,000 feet and 60,000 pounds. Not only will a lengthened runway not meet Bombardier's minimum specifications for the aircraft, this aircraft has received a Permanent Waiver from ODA, and many takeoffs and landings count as constrained operations.

Conclusion

As stated above, based on surveys about constrained operations the Constrained Operations Study show a 33% increase in Constrained Operations since 2012, in spite of the fact that actual Total Operations are 24% below the number forecast in 2012, and based aircraft are down by 31% compared to the 2012 forecast.

In the Aviation Activity Forecasts section of the Constrained Operations Study, the following is stated:

> ***AVIATION ACTIVITY FORECASTS***
>
> *The primary purpose of the forecast update associated with the Aurora State Airport Constrained Operations Runway Justification Study is to evaluate the forecasts of aviation activity (2010-2030) contained in the 2012 Aurora State Airport Master Plan (AMP), which supported the planned runway extension depicted on the 2012 Airport Layout Plan (ALP). This forecast update focuses on the activity generated by the critical aircraft, or group of aircraft, required to support the runway length justification study, but also updates other elements of the 2012 AMP forecast, per FAA requirements for aviation activity forecast approval. This interim forecast update will rely on existing master plan data where appropriate, and supplement with more recent data, where available.*
>
> *The primary tasks supporting the runway justification study include verifying current year activity (2018 based aircraft and aircraft operations, including critical aircraft) and updating key forecasts for the next twenty years (2018-2038). Events occurring at UAO since the AMP was completed in 2012 will be reviewed to evaluate the accuracy of AMP forecasts and to support the updated forecast.*
>
> *The updated forecasts will support the runway length justification study by identifying the current and future levels of critical aircraft operations. The critical aircraft operations are used to establish the corresponding Airport Reference Code (ARC) and Runway Design Code (RDC) designations for Runway 17/35 that define the applicable FAA design standards and length requirements.*

How can such an assertion be made?

Because while the study says this about current Total Operations data from the Air Traffic Control Tower:

The 2012 AMP forecasts provided reasonable growth assumptions for both based aircraft and annual aircraft operations that reflected both broad regional economic conditions and airport-specific factors. An updated discussion of the underlying economic conditions and airport events is provided in the existing conditions section of this memo (see 2012 AMP for additional information).[1] The evaluation of critical aircraft activity contained in this forecast update confirms that the current and future C-II ARC and RDC defined for Runway 17/35 in the 2012 AMP remain valid.

However, the availability of new data sources, particularly air traffic control tower (ATCT) operations counts (adjusted to include aircraft activity when the tower is closed) indicates that recent UAO activity is currently about 25 percent below previously forecast levels. The ability to rely on actual traffic counts improves the accuracy of the overall forecasts, although it appears that the original long term growth rate assumptions were reasonable.

It then goes on to pass over the very fact that Total Operations forecasts in the 2012 Master Plan were dramatically overstated and the forecast error was very large, by pivoting to make the case that it doesn't matter because the MIX of aircraft has changed, and now the major aircraft at Aurora Airport are corporate jets:

However, the availability of new data sources, particularly air traffic control tower (ATCT) operations counts (adjusted to include aircraft activity when the tower is closed) indicates that recent UAO activity is currently about 25 percent below previously forecast levels. The ability to rely on actual traffic counts improves the accuracy of the overall forecasts, although it appears that the original long term growth rate assumptions were reasonable.

Although the recalibration (lowering) of overall air traffic volumes at UAO is significant, data confirms that this adjustment does not affect critical aircraft (business jet) determination at UAO. Table 9, provided later in this chapter, illustrates that the volume of high performance business jet activity at UAO increased by 40 percent between 2012 and 2018.[2] This most recent five-year period of business jet activity represents an average annual growth rate of 7 percent, which is slightly lower than the 9.7 percent annual growth experienced at UAO between 2009 and 2018. This trend provides a strong indication of future growth potential at UAO.

On the face of it, how can it be asserted in the same paragraph that forecast levels were off by 25% and then also state that "it appears that the original long-term growth rate assumptions were reasonable?"

What is obviously taking place is enticing larger corporate jets to base at or regularly operate into Aurora State Airport. Because the airport only has a 5,000 foot runway with a strength rating of 45,000 pounds, it is clearly not designed to accommodate large corporate jets, let alone commuter jet aircraft like the Bombardier Global Express.

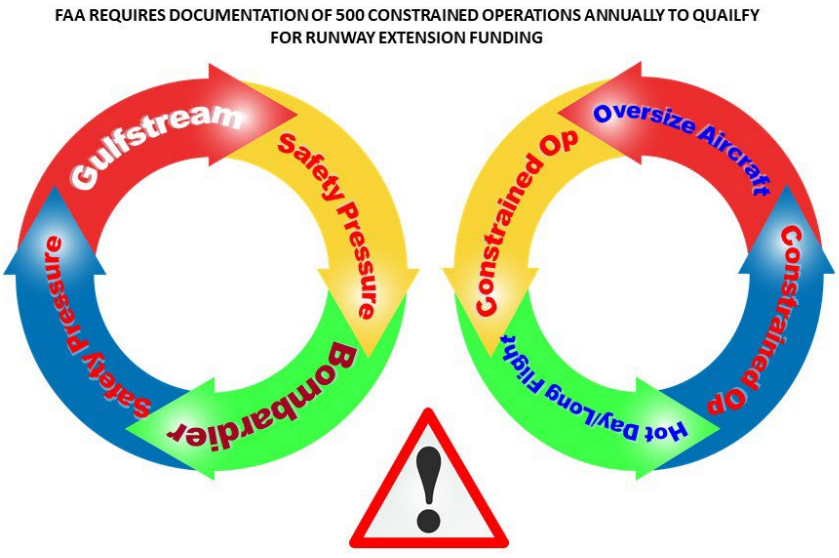
Yet, the airport owner and sponsor, Oregon Department of Aviation, has been aiding and abetting this undertaking by granting waivers for oversize aircraft (oversize in wingspan and in total weight). Because oversize aircraft are granted waivers and can operate at Aurora, many (if not all) of their operations now qualify as "constrained" by virtue of the aircraft being heavier

than the runway strength rating, or having to takeoff with lighter load/less fuel because of the runway length.

There appears to be very little objective criteria other than bad weather that are to be applied in the determination of whether a takeoff or landing is “constrained” beyond the personal opinion of the pilot. The subjective nature of assessing constrained operations themselves, is then further compounded by 1) an airport sponsor that has openly approved ever increasing operations by oversized aircraft at Aurora and 2) a data collection method used by the sponsor’s consultant that was based on **unvalidated pilot survey**s to arrive at the annual number of constrained operations.

The straightforward data errors concerning Minimum Take Off Distances are striking. That a single aircraft can be included in this study to have more constrained operations than actual operations illustrates calls the data itself into question, while the subjective nature of data collection via unvalidated surveys demonstrates flawed methodology. All of this is compounded by the fact that the Constrained Operations Study was conducted with no public involvement. In spite of eight years of legal dispute over the 2012 master plan, there was no public notice for the Scope of Work or the contract award, nor of the completion of the Draft study. We only received a copy via Public Records Request. There was, correspondingly, no public notice about FAA approval of the Draft study, not that the Final version was released. Yet it is now being used as a major element in the current master planning process.

This absence of public transparency is compounded by the practice of allowing more and more oversized aircraft operate at Aurora, not only causing safety problems, but directly driving constrained operations even as overall aviation activity has dropped in the last decade.



UNVIRTUOUS REINFORCEMENT CYCLE AT THE AURORA AIRPORT

TFMSC IFR Data - Select Jet Aircraft Operations Table

	Aircraft Design Group	Aircraft Based at UAO	Aircraft Designator	Maximum Takeoff Weight (MTOW)	Takeoff Distance (at MTOW)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average Annual Operations
Embraer ERJ 135	C-II		E135	41,887	6,177	92	56	12	0	4	6	0	2	2	0	17
Phenom 300	B-II	x	E55P	17,968	3,625	0	0	0	14	102	96	92	86	122	56	57
Challenger 300	C-II	x	CL30	38,850	5,538	8	6	4	32	90	64	72	78	104	88	55
Challenger 600	C-II	x	CL60	45,100	6,544	4	10	42	126	122	36	12	64	80	58	55
Cessna 550 Citation	B-II	x	C550	13,300	4,133	192	194	154	210	134	162	224	260	158	212	190
Cessna 560 Citation	B-II	x	C560	20,000	4,121	248	238	344	362	496	460	580	688	772	704	489
Cessna 650 Citation	C-II		C650	22,000	5,912	152	132	158	90	90	118	144	118	114	98	121
Cessna 680 Citation	B-II	x	C680	30,775	4,200	6	12	32	64	52	68	72	64	90	138	60
Cessna 750 Citation	B-II	x	C750	36,600	5,901	4	6	8	60	74	90	94	90	94	104	62
Falcon 20	B-II	x	FA20	28,650	5,853	12	48	104	90	84	28	14	98	74	76	63
Falcon 50	B-II	x	FA50	37,480	5,413	18	6	8	10	18	96	220	310	316	276	128
Falcon 900	B-II	x	F900	45,503	5,723	168	214	254	180	144	48	8	54	80	68	122
Falcon 2000	B-II	x	F2TH	41,000	5,816	0	4	2	2	14	6	4	6	4	34	8
Astra 1125 - 2012 AMP Design Aircraft	C-II	x	ASTR	24,650	6,084	182	210	230	178	152	164	114	160	162	96	165
Galaxy 1126	C-II		GALX	35,450	6,314	2	2	14	8	10	16	0	2	4	0	6
Lear 31	C-I		LJ31	15,500	3,915	0	8	2	4	2	0	0	6	54	92	17
Lear 35	D-I		LJ35	18,000	5,740	8	20	20	2	8	16	0	4	6	8	9
Lear 45	C-I	x	LJ45	20,500	4,845	36	126	138	110	148	180	236	240	208	110	153
Lear 55	C-I		LJ55	21,500	6,096	0	0	2	0	2	0	0	2	0	4	1
Lear 60	C-I		LJ60	23,500	6,153	4	0	8	2	4	10	82	36	14	30	19
Lear 75	C-II		LJ75	21,500	5,114	0	0	0	0	0	0	0	4	10	12	3
Hawker Horizon	C-II		HA4T	39,500	6,027	0	0	0	2	2	2	0	0	0	0	1
Hawker 800	C-II	x	H25B	28,000	6,176	56	84	124	224	210	310	118	42	28	34	123
Gulfstream 150	C-II	x	G150	26,100	5,770	0	4	8	2	0	0	2	2	6	80	10
Gulfstream IV/G400*	C-II		GLF4	73,200	6,257	10	0	4	4	0	4	0	2	6	2	3
Gulfstream V/G500*	D-III		GLF5	76,850	6,877	4	2	18	6	10	4	2	0	4	2	5
Gulfstream VI/G600*	D-III		GLF6	91,600	6,785	0	0	0	0	0	0	0	6	4	2	1
Bombardier Global Express*	B-III	x	GLEX	92,500	7,232	0	2	4	18	10	4	8	0	14	50	11
Total						1206	1384	1694	1800	1982	1988	2098	2424	2530	2434	1954
Annual operations by aircraft requiring 5,000' or more runway length						724	806	1024	1036	1048	1022	894	1080	1126	1122	988
Aircraft Identified in Table 3-2 of AC 150/5325-4B - Figure 3-2 Recommended Runway Length 5,500'						410	460	620	756	732	820	640	584	590	596	621
Annual operations by aircraft requiring 5,500' or more runway length						706	800	1016	1026	1030	926	674	766	800	834	858
Annual operations by aircraft requiring 5,723' or more runway length						698	794	1012	994	940	862	602	688	696	746	803
Annual operations by aircraft requiring 5,901' or more runway length						510	508	626	720	704	770	578	530	530	514	599
Annual operations by aircraft requiring 6,000' or more runway length						354	370	460	570	540	562	340	322	322	312	415

Notes:

1. * MTOW exceeds 60,000
2. Aircraft Identified in Table 3-2 in AC 150/5325-4B Justifying Runway Length Analysis with Figure 3-2: 100 Percent of Fleet at 60 or 90 Percent Useful Load Identified by blue highlight
3. Aircraft requiring 6,000' or more of runway length identified by green highlight
4. Takeoff Distance Calculations utilized previous data and methodology provided in 2012 Airport Master Plan

ASTRA 1125

IAI Astra 1125

Technical Specifications

Occupancy

Crew: 2

Passengers: 6

Operating Weights

Max T/O Weight: 23501 Lb

Max Landing Weight: 24650 Lb

Empty Weight: 12670 Lb

Fuel Capacity: 9365 lbs Lb

Payload Useful: 10700 Lb

Payload W/Full Fuel: 1335 Lb

Max Payload: 2900 Lb

Range

Max Range: 3110 nm

Service Ceiling: 45000 ft

Distances

Takeoff Distance: 5250 ft

Landing Distance: 2250 ft

Performance

Rate of Climb: 3500 fpm

Max Speed: 465 kts

Normal Cruise: 424 kts

Economy Cruise: 412 kts

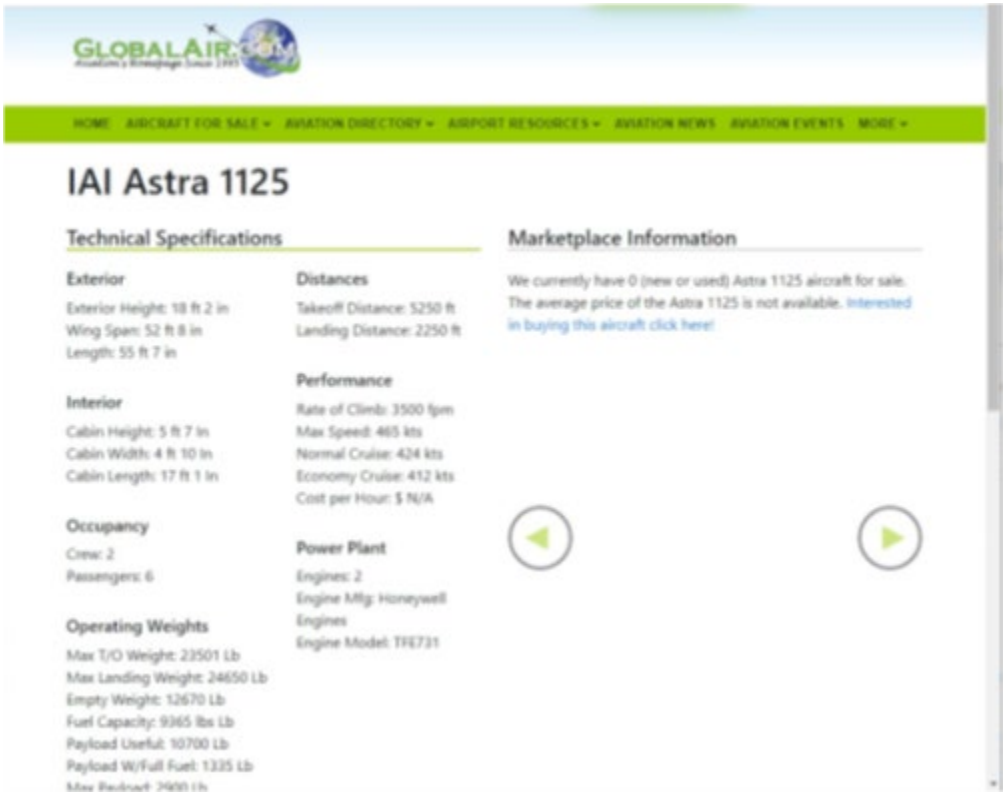
Cost per Hour: $ N/A

Power Plant

Engines: 2

Engine Mfg: Honeywell Engines

Engine Model: TFE731



BOMBARDIER GLOBAL EXPRESS

Global Express Specifications, Ca

globalair.com/aircraft-for-sale/Specifications?specid=845

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Bombardier Global Express

Technical Specifications

Exterior

Exterior Height: 25 ft 5 in
Wing Span: 94 ft 0 in
Length: 99 ft 4 in

Interior

Cabin Height: 6 ft 3 In
Cabin Width: 8 ft 2 In
Cabin Length: 48 ft 4 In
Cabin Volume: 2140 cu ft
Door Height: 6 ft 2 In
Door Width: 3 ft 0 In
Internal Baggage: 195 cu ft

Occupancy

Crew: 2
Passengers: 8-19

Operating Weights

Max T/O Weight: 98000 Lb
Max Landing Weight: 78600 Lb
Operating Weight: 51200 Lb
Fuel Capacity: 44642 lbs Lb

Range

Normal Range: 6055 nm
Max Range: 6226 nm
Service Ceiling: 51000 ft

Distances

Balanced Field Length: 6170 ft
Landing Distance: 2670 ft

Performance

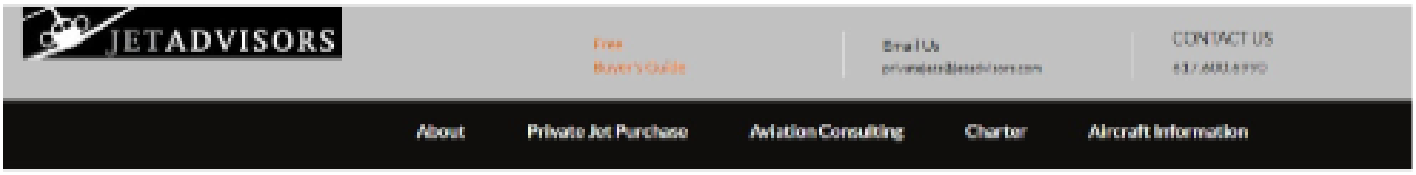
Rate of Climb: 3300 fpm
Climb Rate One Engine Inop: 474 fpm
Max Speed: 511 kts
Normal Cruise: 488 kts
Economy Cruise: 471 kts

Power Plant

Engines: 2
Engine Mfg: Rolls Royce
Engine Model: BR 710-A2-20

Marketplace Information

We currently have 5 (new or used) Global Express aircraft for sale. The average price of the Global Express is $12,250,000.
Interested in buying this aircraft click here!



Bombardier Global Express

Description | Performance | Cabin

Description

The Global Express was the pioneer of ultra-long-range private jets. At the time of its release, no other private jet had a cabin nearly as large, nor could any jet make such long-range direct flights like New York to Tokyo or Paris to Singapore. The Global Express offers everything an airliner does – range, comfort, and speed –- without the hassle. The cabin of the Global Express is designed to offer maximum comfort and amenities for the duration of long, transoceanic flights. The cabin can be configured to hold between thirteen and nineteen passengers in a space that is 6.3 feet high, 8.2 feet wide, and 48.4 feet long. The cabin can be divided into three areas for increased privacy in conferences. Two fully-enclosed lavatories are located in the cabin, one of which can be equipped with a shower, if desired. Extensive cabin insulation cuts down on noise, and improved engines produce less audible vibration. There is a wide range of standard and optional cabin amenities, including a 17 channel SATCOM, fax machine, cabin entertainment system with VHS, DVD, and CD players, as well as individual video screens and a full-sized galley.

The engines themselves are BMW/Rolls-Royce BR710A2-20 turbofans, which produce 14,750 pounds of thrust each on takeoff. The Global Express can climb to 37,000 feet in nineteen minutes. Its maximum certified flight ceiling is 51,000 feet, but it generally cruises around 42,000 feet –well above most commercial and private jets. For long-distance flights, the Global Express can reach speeds of 488 knots, and reach 499 knots when cruising at high speed.

Fortunately, one of the strengths of the Global Express is its ability to fly at high speeds without sacrificing range. Its maximum range is 7,000 miles (6,100 nautical miles) at a speed of .85 Mach.

Despite a fairly high maximum takeoff weight of 95,000 pounds, the Global Express needs only 5,820 feet of runway to take off at sea level, and 7,880 feet to take off from a runway 5,000 feet above sea level.

The avionics and flight control systems were designed to be intuitive and easy to operate. Many systems require almost no input from the pilots. The Express' cabin pressurization system, for example, automatically adjusts cabin pressure throughout the flight. The pilot merely has to enter the altitudes of the runways at the initial and final destinations. The cabin is rated to 10 psi, meaning it can maintain a sea level cabin while at an altitude of 26,500 feet. Engine startup is very simple, as is the fuel balance system, which automatically adjusts the fuel levels in the two wet wing tanks. Besides being easy to fly, the Global Express is very reliable. Most of its critical systems have two or three backup systems in place.

The avionics system equipped in the Global Express is the Honeywell Primus 2000XP suite. It has six 7 x 8 inch screens. Some screens display flight and environment information, while others are blank (to minimize distractions), except when notifying the pilots of an emergency. The avionics system comes standard with a triple LASEREF IV inertial reference system, a GPS receiver, avionics computers, nav/comm radios, and can be configured to include almost any piece of avionics equipment desired.

DASSAULT FALCON 50

FROM WIKIPEDIA: https://en.m.wikipedia.org/wiki/Dassault_Falcon_50

Data from Flight International[15]

General characteristics

- **Crew:** 2
- **Capacity:** 8 to 9 passengers / 1,080 kg (2,381 lb) payload with full fuel
- **Length:** 18.52 m (60 ft 9 in)
- **Wingspan:** 18.86 m (61 ft 11 in)
- **Height:** 6.98 m (22 ft 11 in)
- **Wing area:** 46.83 m^2 (504.1 sq ft) [16]
- **Max takeoff weight:** 18,008 kg (39,701 lb)
- **Max Landing Weight:** 16,200 kg (35,715 lb)
- **Powerplant:** 3 × Honeywell TFE 731-40 turbofan engines, 16.46 kN (3,700 lbf) thrust each

Performance

- **Maximum speed:** 1,015 km/h (631 mph, 548 kn)
- **Maximum speed:** Mach 0.86
- **Cruise speed:** 903 km/h (561 mph, 488 kn) / M0.85 at 15,000 m (49,000 ft)
- **Range:** 5,695 km (3,539 mi, 3,075 nmi)
- **Service ceiling:** 14,936 m (49,003 ft)
- **Rate of climb:** 10.433 m/s (2,053.7 ft/min)
- **Take-off run:** 1,504 m (4,934 ft)
- **Landing run:** 685 m (2,247 ft)

DASSAULT FALCON 50 TECHNICAL SPECS

From GLOBAL AIR: https://www.globalair.com/aircraft-for-sale/Specifications?specid=209

Technical Specifications

Exterior

- Exterior Height: 22 ft 9 in
- Wing Span: 61 ft 8 in
- Length: 60 ft 8 in
- External Baggage: 90 cu ft

Interior

- Cabin Height: 5 ft 9 In
- Cabin Width: 6 ft 1 In
- Cabin Length: 22 ft 11 In
- Cabin Volume: 569 cu ft
- Internal Baggage: 25 cu ft

Occupancy

- Crew: 2
- Passengers: 9

Operating Weights

- Max T/O Weight: 38320 Lb
- Max Landing Weight: 35715 Lb
- Operating Weight: 22000 Lb
- Fuel Capacity: 15520 lbs Lb
- Payload W/Full Fuel: 1280 Lb
- Max Payload: 3570 Lb

Range

- Normal Range: 3057 nm
- Max Range: 3200 nm
- Service Ceiling: 31000 ft

Distances

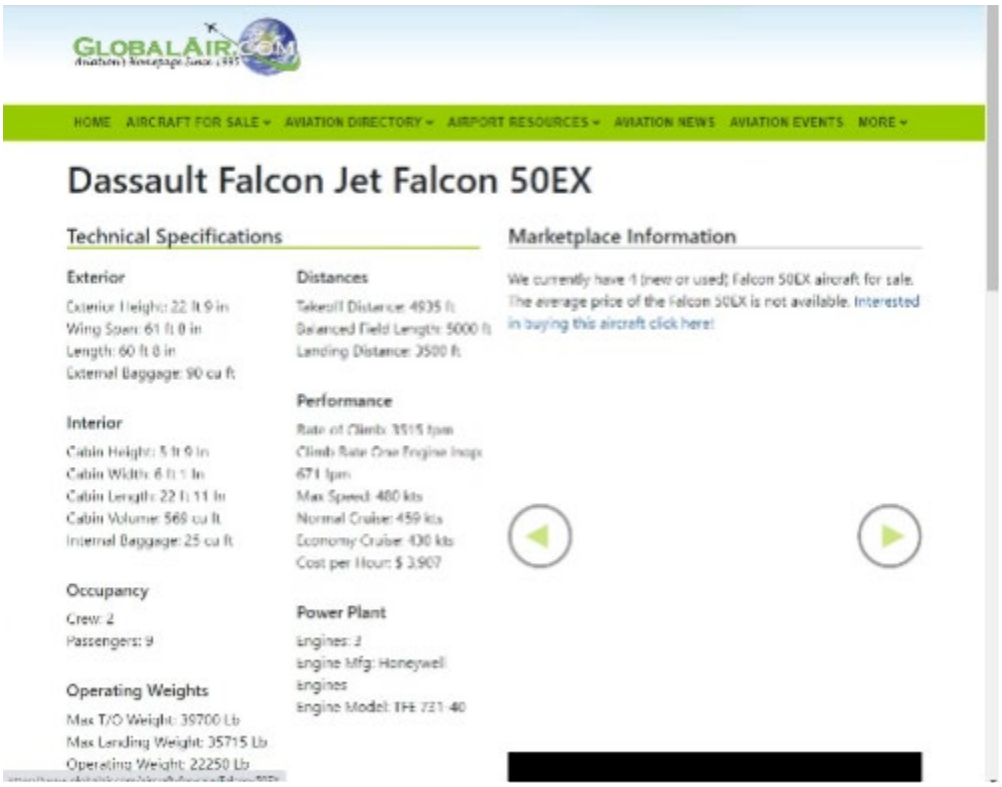
- Take Off Distance: 4.935 ft
- Landing Distance: 3500 ft

Performance

- Rate of Climb: 3430 fpm
- Climb Rate One Engine Inop: 601 fpm
- Max Speed: 480 kts
- Normal Cruise: 431 kts
- Economy Cruise: 410 kts
- Cost per Hour: $ 4,444.65

Power Plant

- Engines: 3
- Engine Mfg: Honeywell Engines
- Engine Model: TFE 731-3-1C



TECHNICAL SPECIFICATIONS FOR FALCON 50

FROM PLANEPHD: https://planephd.com/wizard/details/670/DASSAULT-FALCON-50-specifications-performance-operating-cost-valuation

1980 - 1996 DASSAULT FALCON 50 Multi engine turbofan aircraft. The FALCON 50 seats up to 8 passengers plus 2 pilot(s).

Performance specifications

Thrust: 3 x 3,700 N

Best Cruise Speed: 468 KIAS

Best Range (i): 3,500 NM

Fuel Burn: 229.0 GPH

Stall Speed: 77 KIAS

Rate of climb: 3,430 FPM

Rate of climb (1 engine out): 2,200 FPM

Ceiling: 49,000 FT

Ceiling (1 engine out): 31,000 FT

Takeoff distance: 4,700 FT

Landing distance: 2,150 FT

Takeoff distance over 50ft obstacle: 4,700 FT

Landing distance over 50ft obstacle: 2,800 FT

Weights

Gross Weight: 38,800 LBS

Empty Weight: 20,170 LBS

Maximum Payload: 3,570 LBS

Fuel capacity: 15,520 LBS

TECHNICAL SPECIICATIONS FALCON 50

FROM AIRCRAFT EXCHANGE: https://planephd.com/wizard/details/670/DASSAULT-FALCON-50-specifications-performance-operating-cost-valuation

Dassault Falcon 50 Range:

Normal Range: 3,057 nm

Maximum Range: 3,200 nm

Service Ceiling: 31,000 ft

Dassault Falcon 50 Performance

Rate of Climb: 3430 fpm

Maximum Speed: 480 kts

Normal Cruise: 431 kts

Economy Cruise: 410 kts

Dassault Falcon 50 Distances

Balanced Field Length: 5000 ft

Takeoff Field Length: 4,950 ft

Landing Distance: 3,500 ft

Dassault Falcon 50 Operating Weights

Max T/O Weight: 38,320 lb

Max Landing Weight: 35,715 lb

Operating Weight: 22,000 lb

Fuel Capacity: 15,520 lb

Payload with Full Fuel: 1,280 lb

Maximum Payload: 3,570 lb

Dassault Falcon Jet Falcon 900EX

Technical Specifications

Exterior

Exterior Height: 24 ft 10 in
Wing Span: 63 ft 5 in
Length: 66 ft 4 in

Interior

Cabin Height: 6 ft 2 In
Cabin Width: 7 ft 8 In
Cabin Length: 33 ft 2 In
Cabin Volume: 1218 cu ft
Internal Baggage: 127 cu ft

Occupancy

Crew: 2
Passengers: 12

Operating Weights

Max T/O Weight: 48300 Lb
Max Landing Weight: 44500 Lb
Operating Weight: 24700 Lb
Fuel Capacity: 21000 Lb
Payload W/Full Fuel: 2800 Lb
Max Payload: 6164 Lb

Distances

Takeoff Distance: 5215 ft
Balanced Field Length: 5215 ft
Landing Distance: 3750 ft

Performance

Rate of Climb: 3880 fpm
Climb Rate One Engine Inop: 755 fpm
Max Speed: 482 kts
Normal Cruise: 459 kts
Economy Cruise: 430 kts
Cost per Hour: $ 4,090.01
Avionics: Rockwell Collins system

Power Plant

Engines: 3
Engine Mfg: Honeywell Engines
Engine Model: TFE 731-60

Marketplace Information

We currently have 2 (new or used) Falcon 900EX aircraft for sale. The average price of the Falcon 900EX is not available. Interested in buying this aircraft click here!

LUCAS Sarah

From: Wayne Richards <rich4748@outlook.com>
Sent: Tuesday, March 1, 2022 4:41 PM
To: LUCAS Sarah
Subject: OAB PAC #2 March 1st 2022

March 1st 2022
Master Plan Pac Meeting #2
OAB Committee Members

To whom It May Concern:

First, sending an 83 page detailed document to us the night before this meeting is not a good start for you.
Second, allowing ten minutes for public comment with two minutes each allowed will only let five people speak! I understand that there are rules about everyone wishing to speak be allowed to.
Health and wellbeing are an important part of livability.

According to the a report by the US Department of Health and Human Services Agency for Toxic Substance and Disease Registry, The toxicity of lead in humans has been known for 2000 years, and is not disputed.

On the Aurora State Airports vo0luntary agreement with our community regarding overflights, they said they would make the effort. Over the last 12 months, just on Flight Aware, there were over 4,500 flights directly over Wilsonville spewing lead from their reciprocating engines. There is a reason we don't use lead paint, lead water pipes and leaded gasoline.

Jets. Jet exhaust is even more toxic. Sulfur in jet fuel is a major killer. The FAAs own Lourdes Maurice (the administration's chief scientist) notes that jet fuel creates 11 toxic chemicals in their exhaust.

The noise is clearly a form of pollution from the Aurora State Airport and is documented as a health hazard

They're known as "Forever Chemicals". Whenever fire suppressant foams (as one example) are used (for instance) it stays in the environment forever. These PFAS (polyfluoroalkyl) are in our environment now. Like lead, they do not disintegrate. PFAS are known to cause serious health problems in humans (heightened cholesterol as well as thyroid and immune system disorders)

Safe is their goal? What's safe about this.

Wayne Richards
7417 SW Lakeside Dr.
Wilsonville, Or

Rich4748@outlook.com

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EXHIBIT B
PUBLIC COMMENTS RECEIVED THROUGH PROJECT WEBSITE

Date Added	First Name	Last Name	Title	Organization	Type	Address	City	State	ZIP	Email	Phone	Website	Tags	Requested to be on email list	Notes	Follow up requested	Follow up type	Comment	Response	Follow up Communication	Follow up Communication2
Date	*1EXAMPLE*	*Doe*	*NA*	*NA*	*individual/business/school/etc.*	*111 SW Address*	*Portland*	*OR*	*97209*	*Hello@*	*(503) xxx-xxxx*	*NA*	*comment through website*	*x*	*This format is consistent across tabs, allowing copy/paste*		*phone/email*	*6/20/20 - Hello…*	*6/21/20 - Email - Responder Name - Hello…*	*Any action? Reply to the response?*	
10/25/2021	Patrick	Donaldson		Wilsonville Area Chamber of Commerce WACC	PAC member					pfdforbes@aol.com	503-460-0595		comment through website	x	PAC member	x	email	10/22/2021 - Is there a list of Aurora State Airport Master Plan Public Advisory Committee (ASAMPPAC) members that you could provide to me?	10/29/2021- Tracie Heidt emailed: Hello Patrick, Thanks for your question. We are still finalizing all of the PAC members and alternates; the final list will be added to the project website as soon as possible: https://publicproject.net/AuroraAirport# In the meantime, here is the current list: [list was in table format].		
11/8/2021	Mary Anne	Cooper	Vice President of Government Affairs	Oregon Farm Bureau	community organization	1320 Capitol St. NE, Suite 200	Salem	OR	97301	maryanne@oregonfb.org	503.399.1701 x. 306	oregonfb.org	email		was originally on PAC	x	email	11/02/21: Hi Brandy, I talked to my two impacted County Farm Bureaus, and they did not see a need for OFB to be involved in this project. Can you please remove me from the RAC? Thanks!	11/03/2021 - Brandy emailed: Hi Mary Anne, Thank you so much for your email. I've passed along your request to ODA staff and they'll be reaching out to you directly.	11/08/2021 - Sarah Lucas emailed: Good morning, Mary Anne. I am following up on your email to JLA requesting the Farm Bureau's removal from the Aurora State Airport Master Plan Advisory Committee. I am sensitive to your time and would like to honor the request. Our agency initially included the Farm Bureau because it was strongly encouraged by elected officials. As a result, we must require that you ask to be removed via an official letter (which can be emailed). Once we have received your formal request, we will remove your agency from the PAC roster. Thank you for understanding.	
11/8/2021	Kevin	O'Malley	CEO	Wilsonville Area Chamber of Commerce WACC	individual	8565 SW Salish Lane, Suite 150	Wilsonville	OR	97070	kevin@wilsonvillechamber.com	503-682-0411 X: 101	http://wilsonvillechamber.com	email	x	PAC member	x	email	11/3/2021 - Thanks very much for emailing me the packet. I noticed one item that I'd like to call to your attention and ask you to update, please. My name should be listed in the roster as the official alternate for the Wilsonville Chamber of Commerce and currently it is just blank. Will someone be able to fix that please? Thanks	11/3/2021 - Sarah Lucas emailed: Good morning, Mr. O'Malley. Thank you for the clarification. My prior understanding was to include you on correspondence, but that you had not requested to be an official alternate. We will correct that error and update the roster. If you have any questions about the requirements of being an alternate – mainly that we request your presence at all PAC meetings, regardless if Mr. Donaldson is in attendance – please let me know. I look forward to working with you throughout this project.		

11/24/2021	Miranda	Bateschell	Planning Director	City of Wilsonville	individual		bateschell(	503.570.1581	email	x		x	email	11/18/21 - Could you add me to the mailing /distribution list for the Aurora Airport Master Plan PAC? Chris Neamtzu serves on the committee and I work with him and need to be up to speed on these meetings.	11/22/21 - Brandy Steffen emailed: Thanks for reaching out. As City of Wilsonville already has a designated alternate, we will add you to our general notices GovDelivery email list. I hope this will work for keeping you updated on the project. Please reach out if you have any other questions or comments.
11/24/2021	Bill	Horton			individual	bhorton@outlook.com			comment through website	x		x	email	11/16/21 - As a private pilot who uses the Aurora State Airport, I completely support the extension of the runway as part of this plan, to provide an additional buffer of safety to the existing operations at the airfield.	11/22/21 - Brandy Steffen emailed: Thanks for your interest in the project and for your comment. We will add you to our email list to ensure you stay updated on the project and have further chances to provide input as we move forward.

11/24/2021	Jason	Paolo	Maintenance Manager	Anderson Hay & Grain Co.	individual		jason.paolo@anderson-hay.com	503-678-7332	email	x	x	email	11/16/21 - Sorry I was late to register for the meeting. I noticed that I am not listed on the “PAC member” listing. I am an airport neighbor and will be the contact person for this. Please add me to the Pac Member list.	11/22/21 - Brandy Steffen emailed: Thank you for your interest in this project. Membership of the Planning Advisory Committee (PAC) has been finalized. However, all PAC meetings are open to the public and will include time for public comments. Comments can also be submitted on the project website and will be responded to in writing before the next PAC meeting: https://publicproject.net/AuroraAirport If you feel like this participation is not sufficient, please review the list of PAC members (https://publicproject.net/files/2021/Aurora Airport/uao-amp-pacagenda-110121.pdf?6668f3cfd3) and reach out to the PAC member that best aligns with your representation. As a neighbor, you might want to reach out to Marion County, City of Aurora, or some of the neighboring community representatives. We'll also be sure to add you to our email list, so that you know about upcoming meetings and events.
11/24/2021	Ray	Hardiman			individual		hardiman.ray@gmail.com	503-951-2231	comment through website	x	x	email	11/11/21 - I would like to see a comprehensive noise abatement "requirement" to avoid fly over issues with area residences. The current "guidance" is not effective as several large jets continue to fly over the residential area to the south of Charbonneau at all hours of the day. They are not Life-Flight aircraft but appear to be the larger charters going to PDX to pick up passengers. There should be some form of fine for those that violate the airspace. Now that there is a control tower it would be simple to enforce.	11/21/21 - Brandy Steffen emailed: Thank you for reaching out and for your comments. The Aurora State Airport Master Plan will not include a noise abatement requirement; rather it will evaluate the noise contours generated by existing aircraft operation levels, as well as forecasted operations. We'll report that information in the future and it will be presented at public meetings, PAC meetings (which are open to anyone to attend) and the website. The current noise abatement procedures for the Aurora Airport can be found at this link (scroll down and expand the “Noise Abatement” box) https://www.oregon.gov/aviation/Airports/Pages/AIRPORTS/UAO.aspx Also, any noise complaints can be directed to the Northwest Mountain Aviation Noise Ombudsman for Oregon, Justin Biassou via email at 9-anm-noise@faa.gov and phone 206-231-4202.

11/24/2021	Loita	Colebank	individual	loitajc@gmail.com		email	x	x	email	11/17/21 - I was held late at another appointment and missed this meeting…is there anyway I can pick it up? Repeat at another time?	11/18/21 - Tracie Heidt emailed: Can you please let me know which meeting you are referring to? We are a consulting firm that is involved with coordinating and facilitating several different government agencies' public meetings, so I'm not sure which one you are referring to. :)	11/18/21 Loita responded: Thank you for your response..it was a Zoom meeting given by Oregon Dept. of Aviation on Nov. 16th to address changes in the area which will impact property owners here. I realize , I believe, that I should have contacted Sarah Lucas , Planner, Oregon Dept. of Aviation and will do so tomorrow. Thank you again.. 11/19/21 Tracie responded: Yes, Sarah Lucas would be a great point of contact. Also, please feel welcome to visit the website, https://publicproject.net/auroraairport#, and click on the “public meetings” button at the top of the page to see the meeting materials, including the PowerPoint Presentation that was given that night.
11/24/2021	Trevor	Conroy	individual	trevor.conroy@outlook.com	503-868-8269	comment through website	x	x	email	email	11/18/21 - Brandy Steffen emailed: Thank you for your comment and interest in the project. The video of the first PAC meeting was just posted today: https://publicproject.net/AuroraAirport on the "Public Meetings" page. A written summary of the meeting and responses to all questions and comments will also be posted in a few weeks.	

11/24/2021	Frank	Vedack		individual	21830 Boones Ferry Rd. NE	Aurora	OR	97002	frank.vedack@gmail.com	comment through website	x		x	email	11/16/21 - My place is south of hwy 551 and at the end of your RPZ. I have been contacted by mail about an avigation easement for the area above my property. I do not wish to negotiate a deal with you people for an easement. I have attempted to make contact with all of the people listed in the mail piece to no avail. Do you plan on trying to use eminent domain to screw me out of my property? Have you taken into consideration my property value is going to plummet so a few wealthy people north of 551 can get richer? I have made several attempts to contact "TONY" the man the just was talking. He has not returned my call. I have left 2 voicemails. I also attempted to contact the person from central Oregon who is supposed to be able to come onto my property when ever he feels like it to mark trees.	11/18/21 - Anthony Beach emailed: Good morning Mr. Vedack, I have received this comment from our Aurora Master Plan webpage, and I apologize that we haven't been able to connect yet. We'd really like to work with you on removing obstructions in the navigable airspace for the Aurora State Airport. We do not wish to affect your property except to preserve airspace that is already in place to ensure aircraft safety. Here is a bit more information about this project and our process. We are in the middle of an obstruction removal project for the Aurora State Airport. I've attached a document showing the obstruction removal areas for this project. These obstruction areas are in approach and departure surfaces for existing conditions at the airport. The work areas are not surveyed for individual trees, we are surveying for that now which is why you received a letter from us. After we have surveyed all of the obstructions, the next step will include compensating property owners for an avigation easement and for the value of the removed obstructions. This process will take some time, we don't anticipate removing any trees until fall of 2022 at the earliest.	11/18/21 - an attachment was also included "Obstruction Evaluation Rev4 RW35 - reduced"
12/17/2021	James	Peterson		individual		Aurora	OR		jep.pdx@gmail.com	comment through website	x		x	email	12/17/21 - I own a home on Boones Ferry Road near the south end of the Aurora State Airport runway. I have read through the original Master Plan documents and noticed one aspect of this plan refers to acquisition of property near my house. The specific properties mentioned are: 21860 Boones Ferry Rd., 21830 Boones Ferry Rd., and 21810 Boones Ferry Rd. My question is this: does the Master Plan still involve acquisition of these properties? I would also like to know if you have information regarding any effect of the Master Plan on the property I own at 21811 Boones Ferry Rd. I appreciate any information you could provide regarding this. Thank you.	12/21/21 - Ariella Frishberg emailed: Thank you for your question! This Master Plan Project will replace any prior master plan. At the time, the current project is in the initial stages of gathering data. You can stay up-to-date on the new Master Plan by attending the public Planning Advisory Committee meetings as a neighbor and interested party. There has only been one meeting so far and in that meeting there was no discussion about property acquisition or proposed property acquisition. The first meeting was a general discussion about scope and the process of the Master Plan project. You can watch a recording of that meeting and find information about upcoming meetings on the project website at https://publicproject.net/AuroraAirport. You can also sign up for updates and notifications from the Department of Aviation at Oregon Department of Aviation (https://public.govdelivery.com/accounts/ORAVIATION/subscriber/new). I hope this helps. Please be in touch if you have further questions, and Happy Holidays!	

1/27/2022	Emily	Klepper	individual	Clackamas County	OR	EmilyKle@clackamas.us	email	x	email	1/27/22 - Emily Klepper wrote: Morning Brandy – I'm reaching out on behalf of Clackamas County Chair Tootie Smith. We received a general notice of a Airport Master Plan Project meeting on March 1. Is this the next Public Advisory Committee meeting? I haven't seen anything come through for members – meeting materials, zoom information, etc. Just wanted to reach out and clarify. I want to make sure we don't miss something she is supposed to attend. Thank you! Emily	1/27/2022 - Brandy Steffen emailed: Hi Emily, Yes, that is the next PAC meeting. I will be sending out an email soon directly to the PAC members, followed by a second email before the 3/1 meeting. Thanks for double checking! Please reach out if you have any other questions. Thanks, Brandy		
1/26/2022	Steve	Switzer	individual	Charbonneau	OR	steveimg@aol.com	email	x	email	1/26/22 - Steve Switzer wrote: Brandy, Good morning. In preparation for our next PAC meeting for the Aurora State Airport Master Plan, I was reviewing documents from the past Aviation Board meetings, as well as our last meeting. In several instances, on the public record, including the LUBA and subsequent court cases, the issue of safety was brought up. In my limited research, I can find no supporting documents that have been presented either in the last Master Planning process or the current one that links the runway extension with increase in safety (for the current ARC). I would like that information prior to the next meeting (March 1) so I can review it. Is that something you can ask the ODA to provide in the next two weeks? Thank you. Steve Switzer Charbonneau Country Club	1/26/22 - Brandy Steffen emailed: Hi Steve, Thanks for reaching out. I am copying Sarah on this email and I will reach out to the rest of the technical team as well. I hope to have an answer back to you by Monday. Thanks, BRANDY STEFFEN	1/26/22 - Steve Switzer responded: Brandy, Thank you for your quick response. However, I am not talking about future design criteria. if you go back to the statement from one of the PAC members (Mr. Bennett) he specifically said that this was a safety issue. There was no disagreement from the ODA at that time. That statement was also made by one of the attorneys representing the business interests at a recent Oregon Aviation Board meeting. Again, no disagreement or pushback from the ODA as there is below. If, in fact, there is no current safety issue with the runway length, then those statements should be refuted by the ODA at the next PAC meeting. If there is an issue, then the data should be presented. I am not arguing the point either way. Simply asking for the data to support the public statements already on the record. Thanks for your help. Steve 1/27/22 Brandy Steffen responded: Hi Steve, Thanks for clarifying your question. We are trying to set up PAC meetings to allow all PAC members to freely	1/28/22 Steve Switzer replied: Again, Thank you. But we are getting nowhere other than a circle. If the ODA and PAC members are allowed to, on the public record, make statements with no data to support their assertions, then this further harms the credibility of the whole process. From your
				Charbonnea									

2/17/2022	Bruce	Porter	individual	Portland	OR	bruce@smbfinancialservices.com	503-387-3222	email	email	2/17/2022 Bruce Porter wrote: Dear Sarah, I'd like to add a comment in anticipation of your March 1st, 2022 meeting. I am a private pilot and small business owner and a member of Columbia Aviation Association. I have used Aurora Airport for ten years for both personal and business purposes. Please make sure that the airport operations are not curtailed in any way. The airport predates the large residential area nearby. Every homeowner residing there knew before purchasing that there were aviation activities adjacent to their soon-to-be-purchased property.
2/28/2022	Joe	Richardson	individual					comment through website		2/28/2022 Joe Richardson wrote: I'm a retired Marine who likes to fly. I support the airfield and all proposed improvements thereto.

USMC Retir

3/1/2022	Gerald (Gerı	Tunstall	Columbia Aviation Assn.	individual			OR		famtunstall1@frontier.com	503-799-2827	comment through website	x	x	email or phone	3/1/2022 Gerry Tunstall wrote: I am a private pilot with approximately 1000 hours of pilot time and 3200 hours as a C-130E Hercules transport navigator/flight instuctor/flight examiner. Originally from Portland, Oregon, I live in Tualatin, Oregon. After my military service (USAF), which included VietNam, Cambodia, Africa, Europe, and the Pacific, bought a fractional ownership in a Cessna 172, and we rent a hangar at Aurora Airport. I am a member of the Columbia Aviation Assn., which is a social and professional organization based at the airport. Thanks to the efforts of this club, I maintain FAA proficiency and currency requirements and it is a vehicle for numerous professional lectures, fly-outs to regional destinations, and for developing connections for aircraft maintenance. Why do I love flying and why do I believe in the future of the Aurora Airport? After years of military flying, recreational flying provides an activity that puts the fun back into flying. I enjoy	3/3/2022 Brandy Steffen responded: Hi Gerry, Thank you so much for your comments and interest in the Aurora State Airport Master Plan project. I just wanted to let you know that we've shared your comment with the rest of the project team and will include it in the summary of our outreach activities surrounding our first public event. We'll also include you on the email list so that you get updates on the project. Please let me know if you have any other questions or comments about the project. Thank you, BRANDY STEFFEN
3/1/2022	William	Wallace		individual	32433 SW Lake Drive	Wilsonville	OR	97070	bill.wallace@wallacefutures.com		Public comment for meeting				3/1/2022 William Wallace wrote: Dear Ms. Lucas: I am reviewing the Aurora State Airport Draft Airport Master Plan of February 2022. What is conspicuously absent in the current draft is any mention of climate change and its potential impact on future operability of the Aurora State Airport. Over the next 20 years and beyond, climate change in this locale is likely to have significant impacts on airport operations and economics. Some of these impacts are described below. Not taking climate change into account makes the Plan deficient. The Environmental Data section on Page 2-19 provides a recitation of the weather and climate conditions at the airport based on historical climate information. However, according to respected scientific organizations such as NASA, NOAA, the National Academies and the Intergovernmental Panel on Climate Change (IPCC), the climate is changing significantly. In	3/3/2022 Sarah Lucas responded: Mr. Wallace, Thank you for your email and I appreciate hearing your perspective. We will be including your comment in the Open House public meeting record and also responding to it formally within the meeting summary document. Once the summary is developed, I will send it to you via email. Expect that to be sent within a few weeks. In the meanwhile, we will be sharing your letter with the Federal Aviation Administration (FAA), which directs/approves the scope of work for federally-designated Public Use Airport Master Plans and is funding this project. We will also add your email address to our GovDelivery notification system, which will inform you of future meetings about the Master Plan Project. Regards, Sarah Lucas

3/1/2022	Cornelia	Gibson	individual	10904 SW Parkwood Ct	Wilsonville	OR	97079	corneliagibson@yahoo.com	503-969-1322	Public testimony for meeting	3/1/2022 Cornelia Gibson wrote: We live in the Willamette Valley, -a valley which is considered among the best farmland in the world with several feet of topsoil! It is common knowledge that airports create significant environmental cost and hugely impact the locality where they are built. In addition to noise pollution, emissions from aircraft in the air and at ground level degrade air quality severely and thereby directly impact human health. Additionally ground support equipment increases the air pollution and pollutant runoff into our nearby waterways, the Willamette river. Whether piston engine planes or jets which use AV fuel, the contaminants are harmful for the farmland of the Willamette valley, our rivers and our local food supply. Why would we want an expanded airport with all its negative side effects of increased airport waste, on this valuable farm land ? What and	3/3/2022 Sarah Lucas responded: Cornelia, Thank you so much for attending our public Open House! We appreciate your participation and feedback from the viewpoint of an airport neighbor. Please know we will be including your written and verbal comments in the public meeting record and also responding formally within the meeting summary document. Once the summary is developed, I will send it to you via email. Expect that to be sent within a few weeks. Since you attended the Open House, we have automatically added you to our GovDelivery email system. As a member of this list serve, you will be notified of future meetings for the Aurora State Airport Master Plan Project. Thanks again, Sarah Lucas, MPA
3/1/2022	Klaus	Gibson	individual	10904 SW Parkwood Ct	Wilsonville	OR	97079	haindevelopment@yahoo.com	503-209-3630	Public testimony for meeting	3/1/2022 Klaus Gibson wrote: In the past 25 years that we have lived in Wilsonville we have seen enormous change in the community. The I-5 Corridor has become more and more the major commercial arterial between Canada and Mexico. Wilsonville Road under the I-5 underpass was a 2 Lane road. Travel north and south on I-5 was very accessible and efficient. Today, Wilsonville Road is heavily traveled and five lanes. Today between 3:30 PM and 6:30 PM we avoid going across town because traffic is backed up on the west side most of the time all the way to Brown Road because of the bottleneck on the southbound I-5 Willamette River bridge. Now traveling south on I-5, traffic begins to jam up during that time in Tigard and homeward bound we need to exit the North Wilsonville exit because all lanes are standing still with traffic snarled because of the bottleneck at the I-5 bridge. I-5 northbound south of the Willamette River Bridge, too becomes often congested with traffic slowing to between 25	3/3/2022 Sarah Lucas responded: Cornelia, Thank you so much for attending our public Open House! We appreciate your participation and feedback from the viewpoint of an airport neighbor. 3/3/2022 Sarah Lucas responded: Mr. Gibson, Thank you for your email and I appreciate hearing your perspective. We will be including your comment in the public meeting record and also responding to it formally within the meeting summary document. Once the summary is developed, I will send it to you via email. Expect that to be sent within a few weeks. In the meanwhile, we will be sharing your experience and thoughts with the Oregon Department of Transportation (ODOT). Kind regards, Sarah Lucas, MPA

3/1/2022	Wayne	Richards	individual	7417 SW Lakeside Dr.	Wilsonville	OR		rich4748@outlook.com		email/testimony	3/1/2022 Wayne Richards wrote: To whom It May Concern: First, sending an 83 page detailed document to us the night before this meeting is not a good start for you. Second, allowing ten minutes for public comment with two minutes each allowed will only let five people speak! I understand that there are rules about everyone wishing to speak be allowed to. Health and wellbeing are an important part of livability. According to the a report by the US Department of Health and Human Services Agency for Toxic Substance and Disease Registry, The toxicity of lead in humans has been known for 2000 years, and is not disputed. On the Aurora State Airports vo0luntary agreement with our community regarding overflights, they said they would make the effort. Over the last 12 months, just on Flight Aware, there were over 4,500 flights directly over Wilsonville spewing lead from their reciprocating engines. There is a reason we don't use lead paint, lead water pipes and	3/3/2022 Sarah Lucas replied: Wayne, Thank you for your email and I appreciate hearing your perspective. We will be including your comment in the Open House public meeting record and also responding to it formally within the meeting summary document. You will receive the summary once it is developed via email and it will be posted on the project website. Expect that to be sent within a few weeks. Regards, Sarah Lucas
3/1/2022	Mary	Closson	individual	11692 SW Palermo Street P.O. Box 3826	Wilsonville or	OR	97070	closson.maryе@gmail.com	503-320-9757	email/testimony	3/1/2022 Mary Closson wrote: Dear Ms. Stansbury: I've been a Wilsonville resident since 2010 and an Oregon resident since 1990. I'm writing today because I'm deeply concerned about the proposed expansion of the Aurora State Airport. I bolded the word "State" because I'm aware that my tax dollars support the Aurora State Airport and the ADA. Over the past few years, I have made it a priority to understand the history of this airport and the efforts that have taken place to expand it, specifically by lengthening the main runway, but also through placing more commercial buildings in and around the airport. Included in my research is the ruling given by the Oregon Court of Appeals (June 16, 2021) which stated that your organization misapplied state land-use laws in approving the contentious 2012 Aurora State Airport Master	3/3/2022 Sarah Lucas responded: Mary, Thank you for your email and I appreciate hearing your perspective! We will be including your comment in the Open House public meeting record and also responding to it formally within the meeting summary document. Once the summary is developed, I will send it to you via email. Expect that to be sent within a few weeks. As your letter addresses surface transportation issues, we will also share your thoughts with the Oregon Department of Transportation (ODOT). Last, we will add your email address to our GovDelivery notification system, which will inform you of future meetings about the Master Plan Project. Regards, Sarah Lucas

3/1/2022	Lee	Barckmann	individual	27170 SW Wood Ave.	Wilsonville	OR	97070	lbarckmann@gmail.com	503-804-2564	email/testimony	3/1/2022 Lee Barckmann wrote: To: Aurora State Airport Master Plan Advisory Committee, Oregon Department of Aviation The planning of the Airport needs to be tightly meshed with the “quality of life” concerns of the surrounding area. This quality of life can be measured by looking very closely at the concerns of people living adjacent to or near the airport. The continual attempts of aviation business interests to override or minimize those concerns should be closely examined. Who will benefit from the airport expansion? Aurora Airport is a state owned facility, owned by all of us. A poorly conceived Master Plan, or one that does not take into consideration the views of people who live nearby will have wide ranging and long term negative consequences for the area. It will deed millions of dollars worth of public value to local aviation “oligarchs”.	3/3/2022 Sarah Lucas responded: Lee, Thank you for your email and I appreciate hearing your perspective! We will be including your comment in the Open House public meeting record and also responding to it formally within the meeting summary document. Once the summary is developed, I will send it to you via email. Expect that to be sent within a few weeks. As your letter is addressed to both the Department of Aviation and the Planning Advisory Committee (PAC), please know PAC members receive the meeting summary document and it is also posted to the project website. We will also add your email address to our GovDelivery notification system, which will inform you of future meetings about the Master Plan Project.	
3/3/2022	Steve	Switzer	individual		Charbonneau	OR		steveimg@aol.com		email	3/3/2022 Steve Switzer wrote: Good Afternoon, Brandy, Couple of comments regarding the last PAC meeting. First and foremost is the fact that you are allowing comments in the “chat” section from PAC members attacking other PAC members (in this case, calling Mr. Williams a liar). This uncalled for, highly inappropriate, and unprofessional. PAC members should be reminded that the chat feature should only be used to address the moderator or the panel. If we were not on Zoom, this conduct would not be tolerated and it should not be tolerated here. We are not here to debate with each other. Secondly, we have had two meetings and there are members that have not attended either of them. Out of a possible 6 meetings, that means they have missed 30%. Apparently, it is not important to them. It is to the people I represent. I know that the decision to remove them is with	3/3/2022 Brandy Steffen replied: Hi Steve, As always, thanks for reaching out. I'm sorry I didn't see that comment during the meeting. I will make sure that we do a better job of tracking PAC member interactions in the chat. I will also remind the group of our ground rules during our next work session (and periodically throughout the project), particularly highlighting that we need to respect one another and different viewpoints. I'll add that data should only be shared from the project team, to ensure that we're focused on the process taking place now - not pulling from past or outside data sources. We want to all have the same, correct information. You are correct that ODAV is responsible for the PAC membership. I will raise your point about meeting attendance with the team. Thanks, BRANDY STEFFEN	3/3/2022 Steve Switzer replied: And, as always Brandy, please take my comments in context. You have a huge task and one that I appreciate. Your role is a little similar to mine when I wear my football referee uniform. Keep the game moving and stay within the rules. And, don't care who wins. I am focussed on my issues because that is my charter from my Board here at Charbonneau. As I have stated before, the decisions made in this process will be affecting my community after everyone involved is long gone. I do not want someone to ask 10 years from now why someone did not raise a particular point. I am a rules guy and a data guy. And, as you learned in statistics 101, there are lies, damn lies, and statistics. It is not uncommon for a contractor to "view the data" in a way to determine the required outcome, especially when outside funding requires certain thresholds. So, yes, I go into this a little skeptical and it is also why I needed a lot more time to review the draft and determine where the data is coming from and what changed from the projections that were in the 2011/12 plan.

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3/21/2022	Donald	Bowerman	CAA	individual		Don@bowermanlawgroup.com	503-705-4627	comment through website				3/21/2022 Donald Bowerman wrote: I have been an active pilot using the UAO since 1974. It has provided many essential uses for clients access to and for expert witnesses and other needs for the legal community in Clackamas County over the years. Essential services such as Life Flight make life saving use of the facility. Expansion and Improvement of Uao is certainly warranted .	
3/23/2022	Kevin	Lane		individual		kevinlane55@gmail.com		comment through website	x		email	3/23/2022 Kevin Lane wrote: Where's the survey?	3/23/2022 Jen Winslow responded: Hi Kevin, Thank you for your inquiry. The survey can be found here: Aurora State Airport Master Plan (publicproject.net) Aurora State Airport Master Plan - publicproject.net Airport Master Plan. The Oregon Department of Aviation (ODAV) in cooperation with the Federal Aviation Administration (FAA) is preparing an Airport Master Plan for the Aurora State Airport to address the airport's needs for the next twenty years. publicproject.net If you have trouble accessing it there, you can also access it here: Aurora State Airport Master Plan - Survey #1 (surveymonkey.com) Aurora State Airport Master Plan - Survey #1 Category II - Urban General Aviation Airports - These airports support all general aviation aircraft and accommodate corporate aviation activity, including piston and turbine engine aircraft, business jets, helicopters, gliders, and other general aviation activity. The most demanding user requirements are business-related. These airports service a large/multi-state geographic region, or ... www.surveymonkey.com

4/5/2022	Roger	Kaye	Friends of Marion County	individual	PO BOX 3274	Salem	OR	97302	rkaye2@gmail.com	503-743-4567	letter/email		x	4/5/2022 Roger Kaye wrote: RE: Question of Legal Validity of 2012 Master Plan My comments are about the propriety and legality of the data presented in the Draft chapters. Chapter 3 is titled Aviation Activity Forecasts, and beginning on page 8 is a section titled Recent Events Summary. No mention is made of the 2021 Final Judgment by the Oregon Court of Appeals, later ratified by the Oregon Supreme Court, that the 2012 Aurora Airport Master Plan is invalid because it was never legally approved or adopted by the Oregon Aviation Board, and it was never adopted into the Marion County Comprehensive plan. Certainly, this qualifies as a “recent event!” This matters because the Forecast chapter and the data therein are built on data from the 2019 Aurora State Airport Constrained Operations Runway Justification Study and the unapproved 2012	This was mentioned in the PAC working session and a response will be in the meeting summary.		
4/5/2022	Bruce	Bennett	Aurora Airport Improvement Association	individual					bruce@auroraaviation.com		comment through website	x		4/5/2022 Bruce Bennett wrote: Thank you for the very professional and detailed planning efforts to date. We look forward going over the working papers and your progress this afternoon.		
4/5/2022	Daniel	Stark	City of Wilsonville	individual					stark@ci.wilsonville.or.us |	503-570-1533	comment through website	x	x	4/5/2022 Daniel Stark wrote: Hi Sarah - I'm making maps for the City of Wilsonville's participation in the Aurora Airport Master Plan process. Can you connect me with a resource to obtain GIS data for the primary, approach, horizontal, transitional and conical surfaces? Thanks for any assistance! Best, Dan	4/6/2022 Jen Winslow responded: Hi Daniel, Thanks for reaching out. It sounds like you may have spoken to Heather Peck at ODAV. Was she able to answer this question for you?	4/6/2022 Daniel Stark replied: Hi Jennifer- I did receive a response that ODAV is unable to share FAR approach surface mapping layers in GIS or KML formats. Please don’t hesitate to let me know if you are able to provide an alternate resource for obtaining these mapping layers found in the attached for use by our City staff. Thanks for reaching out. Best, Dan