Aurora State Airport

Assessment Report

Oregon Solutions | December 2018

Assessment Team

Karmen Fore, Oregon Solutions Director
Peter Harkema, Oregon Consensus Director
Michael Mills, Oregon Solutions Senior Project Manager
Robin Harkless, Oregon Consensus Project Manager

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About Oregon Solutions

Oregon Solutions came into being with the passage of the Oregon Sustainability Act in 2001. It is the state of Oregon's designated program to help communities address challenging community-based problems and opportunities through collaborative approaches. We do this by creating a neutral forum where businesses, governments, nonprofits, community-based organizations, sovereigns, and other stakeholders can come together to align resources and pool efforts to achieve desired results using collaboration.

Oregon Solutions' engagement starts with an *assessment*. When invited, Oregon Solutions begins an assessment to explore whether and how a collaborative approach might be structured to address a particular community issue. The assessment is comprised of a series of one-on-one or small group interviews. If an assessment finds there is a project that can benefit from an Oregon Solutions engagement, it will go to the governor for consideration of a designation as an Oregon Solutions project.

Oregon Solutions is housed at the National Policy Consensus Center in the Hatfield School of Government at Portland State University.

Contact

Oregon Solutions
National Policy Consensus Center
Hatfield School of Government
Portland state University
506 SW Mill Street, Room 720
PO Box 751
Portland, OR. 97207-0751
npccdesk@pdx.edu
www.orsolutions.org

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1. INTRODUCTION

1.1. Overview

During the September 2018 Legislative Days, the Oregon Department of Aviation (ODA) submitted a request to the Joint Emergency Board to pursue a grant application to the Federal Aviation Administration (FAA) in the amount of $37 million for a runway extension at the Aurora State Airport. Earlier in March of this year, the federal Consolidated Appropriations Act of 2018 (P.L. 115-141) was enacted into law and appropriated $1 billion in supplemental discretionary funding in the form of FAA airport grants to be available through September 30, 2020. Any airport included in the FAA's National Plan of Integrated Airport Systems (NPIAS) is eligible to compete for these funds; the Aurora State Airport (airport code: UAO) is one of these airports and is therefore eligible to apply.

Members of Oregon's Joint Emergency Board received extensive comment both in support and opposition from individuals and local jurisdictions in and proximate to the airport. In order to seek a clearer picture of stakeholder points of view before a potential vote in December 2018, the board accepted the recommendation from its Subcommittee on General Government to seek the engagement of Oregon Solutions to conduct an impartial assessment to do the following:

- Facilitate a civil and accurate dialog by conducting an assessment of local governments, community members, and key stakeholders of the airport
- Frame the key issues of the diverse stakeholders around the expansion
- Identify information and process needs that could be helpful in addressing those issues

1.2. Methods

This assessment report is the product of interviews conducted by Oregon Solutions, with the help of Oregon Consensus, with parties and stakeholders representing key interests related to the Aurora State Airport. Between mid-October and early December of 2018, the team interviewed 52 individuals representing city, county, and state government (e.g., state land use, transportation, and aviation departments), as well as other interests representing business, community, and other groups. While the team was not able to interview everyone with an interest in the Aurora State Airport potential runaway extension, every effort was made to ensure that those interviewed represented the diverse interests surrounding the airport. Our goal is that all interested parties felt their perspectives and interests would be represented by those interviewed. A list of those interviewed and their affiliations can be found in appendix A.

Most interviews were held in person—others by phone. Before each interview, individuals were briefed about the purpose of the assessment. All interviews were voluntary and lasted approximately one to one-and-a-half hours. Interviewees were informed that the final report would aggregate responses into key issues without individual attribution.

1.3. Intent of Report

This report is ***not*** intended to be a comprehensive review of all issues published, reported on, or discussed about the airport and a potential runway extension; nor is this report a substitute for a public input process. Instead, this report is a summary reflection of what Oregon Solutions heard

from interviewees at a single point in time, and it is an overview for stakeholders and policy makers about the key topics of interest to parties engaged with this airport.

1.4. Report Organization

This report is structured in three major sections beginning with a brief summary of information from published documents about the Aurora State Airport, a summary of the key issues we heard from interviewees during the assessment interviews, and information and process recommendations that could be helpful in addressing these issues moving forward. This report also includes an appendix of supplemental information that may be of use to policy makers and other relevant parties. More information exists and should be thoughtfully considered as decisions about the future of the airport are made.

2. BACKGROUND

2.1. About the Aurora State Airport

Source: 2006 USGS Orthophoto, Wikipedia

The Aurora State Airport is one of twenty-eight airports owned by the state of Oregon. "It is located on the southern extents of the Portland metropolitan area [Clackamas County], but resides within the Salem Metropolitan Statistical Area [Marion County]—as it is mid-way between Portland and Salem. The city of Aurora is located approximately one-quarter mile southeast of the airport."[1]

The airport was originally built in 1943 by the United States Army Air Forces, was then called the Aurora Flight Strip, and was administered by the US Bureau of Public Roads between 1943 and 1953.[2] After World War II, it was closed as a military asset and turned over to the state of Oregon by the War Assets Administration. In 1947, legislation was passed "to permit the [then] Board of Aeronautics to own and operate state airports." In 1953, the Board of Aeronautics "signed a lease agreement with the US Bureau of Public Roads to maintain and operate the airport."[3] By 1973, "ownership of the land was…transferred from the Highways Division to the Aeronautics Division," the predecessor of the Oregon Department of Aviation (ODA). [4]

Over its life, the airport has served "military aircraft, crop dusters, gliders…a full range of general aviation aircraft," helicopters, student pilots, and small jets.[5] It is identified by the Federal Aviation Administration (FAA) as one of 2,564 general aviation facilities nationwide. The 2007 *Oregon Aviation Plan* further states that the airport is a "Category II, Urban General Aviation Airport, [which]…supports all general aviation aircraft and accommodates corporate aviation activity, including business jets and helicopters, and other general aviation activity."[6] It is one of fifty-seven airports in Oregon that are part of the NPIAS program,[7] and as such it is eligible for funds from the FAA. As a general aviation airport, it does "not have scheduled passenger service."[8] Its status as a general aviation airport was also re-affirmed by the Oregon Aviation Board.[9]

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[1] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_2_Inventory.pdf
[2] 2000 Master Plan Update, Aurora State Airport 1998–2017, pp. 2-1.
[3] Aurora State Airport Master Plan, 1976–1995, CH2M Hill for ODOT Aeronautics Division.
[4] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_2_Inventory.pdf.
[5] Aurora State Airport Master Plan, 1976-1995, Executive Summary, CH2M Hill for ODOT Aeronautics Division
[6] Available online at file:///Users/kfore/Desktop/Aurora%20Airport/For%20Report/2013%20Master%20Plan/Executive_Summary.pdf.
[7] Available online at https://olis.leg.state.or.us/liz/2018R1/Downloads/CommitteeMeetingDocument/144433.
[8] Available online at https://www.oregon.gov/aviation/2011%20Aurora%20Master%20Plan%20Final%20Draft/Chapter_1_Introduction.pdf.
[9] Available online at https://www.oregon.gov/aviation/docs/resources/Appendix_E

Today, the Aurora State Airport is the fourth busiest airport in Oregon behind Portland (PDX), Hillsboro (HIO), and Bend (OTH). It has several businesses at the field including fixed-base operators,[10] charter flight providers, helicopter operators, aircraft manufacturing, aviation schools, and aviation kit companies to name a few.

Basics about the airport

- The Aurora State Airport covers an area of 144 acres
- It has one asphalt paved runway that is 5,004 feet long and 100 feet wide
- Weight bearing capacity: Single wheel = 30,000 pounds and double wheel = 45,000 pounds
- In 2015, an air traffic control tower was constructed at the airport to help manage traffic
- After the construction of the tower, the airspace was changed from Class G[11] to Class D[12] airspace
- Water is provided at the airport from a system of wells
- Sanitary sewer is provided by individual drain field/septic tank systems
- Police protection is provided by Marion County
- The Aurora Fire Protection District provides fire protection and the airport has mutual aid agreements with other agencies for extended levels of emergency services[13]

_PAC_Meeting_Summaries.pdf

[10] An FBO is an organization granted the right by an airport to operate at the airport and provide aeronautical services such as fueling, hangaring, tie-down and parking, aircraft rental, aircraft maintenance, flight instruction, and similar services.

[11] Class G is completely uncontrolled. VFR visibility requirements in class G airspace are one mile (1.6 km) by day, and three miles (5 km) by night, for altitudes below 10,000 feet (3,050 m) MSL but above 1,200 ft AGL.

[12] Class D airspace is typically established around any airport with a functioning control tower, but that does not see significant IFR approaches. Class D airspace is generally cylindrical in form and normally extends from the surface to 2,500 feet (760 m) above the ground. The outer radius of the airspace is variable, but is generally four nautical miles.

[13] 2000 Master Plan Update, Aurora State Airport 1998–2017, p. 2-14

Historical Airport Activity

Year	Total Operations
1979	165,000
1983	58,390
1985	61,503
1986	56,054
1987	75,816
1988	79,317
1989	80,400
1996	86,825
1998	66,821
2009	89,495
2016	50,881*
2017	61,526*
2018	70,717 **

Note: "[Total] operations are defined as operations performed by aircraft which (i) Operate in the local traffic pattern or within sight of the airport; (ii) Are known to be departing for, or arriving from flight in local practice areas located within a twenty-mile radius of the airport; or (iii) Execute simulated instrument approaches or low passes at the airport.[14]
**This numbers includes total tower counted operations plus a five percent estimate added to account for operations when the tower is closed.*
*** This number includes tower counted operations through October 2018 and estimates for November and December, plus a five percent estimate added to account for operations when the tower is closed.*

2.2. Federal Funding for Aviation

The federal government provides significant financial support for aviation planning and infrastructure to support the nation's aviation system. The FAA is funded primarily by two sources: 1) federal general fund appropriations,[15] and 2) the Airport and Airway Trust Fund.

Federal general fund money, which comes from individual income taxes and other revenue sources,[16] pays for day-to-day agency operations like "administration, operation, repair, and maintenance of the National Airspace System (NAS) and Aviation Safety Oversight."[17]

However, most FAA programs are financed through the Airport and Airway Trust Fund which pays for the following:

- *Facilities and equipment* (e.g., current infrastructure, modernization, and the advancement of NextGen Air Traffic Control);
- *Research, engineering, and development* (e.g., research and development of products and services that ensure a safe, efficient, and environmentally-compatible air transportation system); and

[14] Available online at https://definitions.uslegal.com/a/aircraft-operations-aeronautics-and-space/.
[15] Available online at https://fiscal.treasury.gov/general-fund/.
[16] Available online at https://www.treasury.gov/resource-center/faqs/Budget/Pages/us-budget.aspx.
[17] Available online at https://www.faa.gov/about/office_org/headquarters_offices/ast/advisory_committee/meeting_news/media/2016/oct/comstac_faa_budget_briefing_oct_2016.pdf

- *Grants-in-aid* (e.g., funding for FAA's Airport Improvement Program, which supports the development of a nationwide system of public-use airports to meet the current needs and the projected growth of civil aviation).[18]

2.2.1. Airport Improvement Program

The Airport Improvement Program (AIP) grants-in-aid program was established in 1982 by the Airport and Airway Improvement Act of 1982 (P.L. 97-248). It provides grants to public agencies "for the planning and development of public-use airports that are included in the NPIAS."[19] Usually, AIP grants cover 75 percent of eligible costs (or 80 percent for noise program implementation) for large and medium hub airports, and 90–95 percent of eligible costs for small primary, reliever, and general aviation airports.[20] Per the *2012 Aurora Airport Master Plan*, AIP eligible costs include "planning, development and noise compatibility projects."[21] Moreover, as part of receiving AIP grants the ODA, "must accept all conditions and obligations under the FAA grant assurances…. [which] require ODA to operate and maintain the airport in a safe and serviceable condition, not grant exclusive rights, mitigate hazards to airspace, and use airport revenue properly."[22]

2.2.2. Consolidated Appropriations Act of 2018 and $1 Billion Supplemental Grant Funds

In March 2018, the Consolidated Appropriations Act of 2018 (P.L. 115–141), a federal omnibus act, which primarily funds ongoing federal activities, passed and became law. Included in the act was $1 billion in additional discretionary grant funds to the AIP program through September 30, 2020. This funding supplemented the $3.31 billion appropriated to the AIP for FY 2018.

On Monday, July 9, 2018, the FAA published supplemental guidance[23] on the process and deadlines for eligible airport sponsors to notify the FAA of any supplemental discretionary funding requests related to the $1 billion. Any airport included in the FAA's NPIAS program[24] is eligible to request supplemental discretionary funding. The Aurora State Airport is a NPIAS airport[25]and a national airport (based on its high usage) and is also classified as a general aviation airport.

As directed by Congress, the act requires the FAA to give *priority consideration* to projects at "primary" and "non-primary" airports,[26] although NPIAS airports are also eligible to apply. "Primary" airports are classified as small hub or non-hub airports and "non-primary" airports are

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[18] Available online at https://www.faa.gov/about/office_org/headquarters_offices/ast/advisory_committee/meeting_news/media/2016/oct/comstac_faa_budget_briefing_oct_2016.pdf
[19] Available online at https://www.faa.gov/airports/aip/
[20] Available online at https://www.faa.gov/airports/aip/overview/
[21] Eligible costs include planning, development and noise compatibility projects. As part of receiving AIP grants, the ODA must accept all conditions and obligations under the FAA grant assurances. In general, such assurances require ODA to operate and maintain the airport in a safe and serviceable condition, not grant exclusive rights, mitigate hazards to airspace, and use airport revenue.
[22] Available online at https://www.oregon.gov/aviation/2011%20Aurora%20Master%20Plan%20Final%20Draft/Chapter_1_Introduction.pdf.
[23] Available online at Federal Register, 2018-14675: https://www.federalregister.gov/documents/2018/07/09/2018-14675/supplemental-guidance-on-the-airport-improvement-program-aip-for-fiscal-years-2018-2020.
[24] Available online at https://www.faa.gov/airports/planning_capacity/npias/.
[25] Available online at https://www.oregon.gov/aviation/Pages/Aurora.aspx.
[26] Available online at https://www.faa.gov/airports/aip/aip_supplemental_appropriation/media/priority-consideration-airports-aip-supplemental-appropriation-2018-10-25.pdf.

classified as regional, local, or basic airports and not located within a metropolitan or micropolitan statistical area as defined by the Office of Management and Budget.[27]

In Oregon, the following airports meet the requirements of "primary" and "non-primary" as outlined in the Consolidated Appropriations Act of 2018:

Primary

- Eugene Mahlon Sweet Field EUG Small Hub
- Medford Rogue Valley International—Medford MFR Non-Hub
- North Bend Southwest Oregon Regional OTH Non-Hub
- Redmond Roberts Field RDM Hub

Non-Primary

- Burns Municipal BNO Basic
- Christmas Valley 62S Basic
- Condon State Pauling Field 3S9 Basic
- John Day Grant County Regional/Ogilvie Field GCD Local
- Joseph State JSY Basic
- Lakeview Lake County LKV Basic
- Madras Municipal S33 Local
- The Dalles Columbia Gorge Regional/The Dalles Municipal DLS Local
- Tillamook TMK Local

The act further stipulates that funds shall be distributed as discretionary grants to airports; that the federal share of the costs for grants to non-primary airports shall be 100 percent; and that for grants at primary airports, the normal federal share applies based on the airport category and project type. Grant requests for any airport with priority consideration (primary and non-primary) were required to be submitted for consideration for FY 2018 supplemental funding by August 8, 2018. Eligible NPIAS airports, like the Aurora State Airport, were required to submit applications by October 31, 2018.

All airports submitting applications had to submit the following:

- Name and official three-letter identifier of the airport, its location, and NPIAS number;
- A brief (no more than 50 words) description of the project;
- A brief (no more than 500 words) explanation of how the project meets the evaluation criteria set forth in Federal Register notice 2018-14675;
- A target timeframe for grant award and construction date;[28] and
- A brief description (no more than 250 words) explaining how the airport sponsor is using its available AIP entitlement funds.[29]

[27]Available online at https://www.federalregister.gov/documents/2018/07/09/2018-14675/supplemental-guidance-on-the-airport-improvement-program-aip-for-fiscal-years-2018-2020#footnote-3-p31834.
[28] This typically refers to the date of "Notice to Proceed." The FAA recognizes that in certain types of climate, actual construction start may be delayed due to meteorological conditions. The FAA also recognizes that some airport sponsors may request supplemental funding for equipment acquisition rather than actual construction. In such cases, the airport sponsor must provide the associated timeline and key milestones.
[29] Available online at https://www.gpo.gov/fdsys/pkg/FR-2018-07-09/pdf/2018-14675.pdf.

NPIAS airports were required to submit the following additional information:

- A brief explanation (no more than 250 words) explaining the status of the proposed project, including whether the project has already been approved on the airport's current Airport Layout Plan, the status of related environmental reviews, other required permitting, and the level of engineering design completed; and
- For airports that do not meet the criteria for "priority consideration," a brief explanation (no more than 500 words) outlining why the airport sponsor believes the FAA should consider the project for this supplemental funding.[30]

In its published FAQ, the FAA share it, "may consider requests for grants for architectural or engineering design in accordance with the established requirement that there has to be a documented plan to fund construction starting within 2 years."[31]

2.2.3. ODA's Supplemental Grant Application—Process and Review

According to the Oregon Department of Aviation's proposed grant submission, their project would consist of an environmental process, property acquisition, environmental assessment and design, construction of a 1,000-foot runway extension with lighting, strengthening of existing port on RW 17-35, 1,000-foot taxiway extension with lighting, relocation of signing and NAVAIDS, and drainage improvements. They would need to conduct an Environment Assessment[32] in 2019, design the project in 2021, and construct the project in 2022.

2.2.4. FAA Evaluation Criteria for $1 Billion Supplemental Funds

The FAA will consider supplemental discretionary funding requests based on (but not limited to) the following criteria:

- Eligibility and justification of the project pursuant to existing AIP eligibility rules;
- Ability of the project to enhance the long-term economic stability of the airport;
- The airport sponsor's previous track record in project delivery and grant management (including any issues related to the airport's existing federal grant obligations);
- Likelihood of the proposed project to be ready to proceed in construction during the same fiscal year as the grant award or within six months of the grant award;
- Ability of the project to compete for regular AIP discretionary funding—i.e., FAA may give higher consideration to projects that might not otherwise get funded or that might not otherwise get funded as soon; and
- For requests from airports that do not meet the statutory criteria for "priority consideration," the strength of the justification for why the FAA should consider the project.[33]

[30] Available online at https://www.gpo.gov/fdsys/pkg/FR-2018-07-09/pdf/2018-14675.pdf.
[31] Available online at https://www.faa.gov/airports/aip/aip_supplemental_appropriation/media/Frequently-Asked-Questions-FY-2018-Supplemental-Appropriation.pdf
[32] See appendix E, which covers NEPA and the FAA's NEPA Implementing Procedures Manual.
[33] Available online at https://www.federalregister.gov/documents/2018/07/09/2018-14675/supplemental-guidance-on-the-airport-improvement-program-aip-for-fiscal-years-2018-2020.

2.2.5. Status of Current Awards

On September 27, 2018, the FAA "awarded $205 million in supplemental funding for infrastructure grants to small airports in thirty-four states."[34] According to the FAA, "more than half of these airports serve rural communities and mostly general aviation,"[35] and the awarded projects include "runway reconstruction and rehabilitation, and the maintenance of taxiways, aprons and terminals."[36] Supplemental grant funding in the amount of $795 million remains available to be awarded in FY 2019 and FY 2020.

2.3. Aurora State Airport Master Plan History

2.3.1. What Is a Master Plan?

According to the FAA, a master plan "represents the airport's blueprint for long-term development. It is a federally funded and federally scoped study that is required for all NPIAS airports to complete in order to be AIP eligible. A few of the goals of a master plan are as follows:

- To provide a graphic representation of existing airport features, future airport development and anticipated land use;
- To establish a realistic schedule for implementation of the proposed development;
- To identify a realistic financial plan to support the development;
- To validate the plan technically and procedurally through investigation of concepts and alternatives on technical, economic, and environmental grounds;
- To prepare and present a plan to the public that adequately addresses all relevant issues and satisfies local, state and federal regulations; and
- To establish a framework for a continuous planning process."[37]

When writing about the *1976 Aurora State Airport Master Plan*, the consultant, CH2M Hill, said these plans were "a program to anticipate public needs and to maintain compatibility with other public interests."[38] A master plan provides "the community at large and appropriate public agencies with a means to understand the airport's significance and to implement plans and programs related to the airport."[39] It "endeavors to preserve and improve the airport through economical solutions that remain compatible with regional development and responsive to community wishes….[but] is not a program to stimulate growth or development."[40]

In response to an inquiry from the city of Aurora, the Oregon Department of Justice wrote that a master plan is "not a directive, standard, regulation or statement of general applicability interpreting the law, or describing the practice of the agency, it is not an 'administrative rule.'"[41] The plans are used by state aviation and the FAA "to determine what needs the airport might have for new equipment and operation changes, to deal with projected air traffic."[42] They also provide a

[34] https://www.faa.gov/news/press_releases/news_story.cfm?newsId=23174.
[35] Ibid.
[36] https://www.naco.org/blog/apply-now-faa-awarding-1-billion-grant-funding-airport-improvement-projects.
[37] Available online at https://www.faa.gov/airports/central/aip/sponsor_guide/media/0500.pdf.
[38] Aurora State Airport Master Plan, 1976-1995, CH2M Hill for ODOT Aeronautics Division
[39] Ibid.
[40] Ibid.
[41] September 11, 1998, Oregon Department of Justice letter to Mr. John A. Raskin, Aurora City Attorney, regarding Aurora Master Plan, DOJ File No. 802001 GG0722-98.
[42] Ibid.

"basis for federal funds from the FAA," and could "result in recommendations for changes in the airport which would then require further public involvement, such as possible zone changes, or application for a building permit."[43] Overall, they write that a master plan itself "[is not] a pronouncement of policy or proposed actions affecting the general public."[44]

Finally, the FAA does note the limits of master plans from their perspective. They write that "sponsors must not construe the acceptance of an airport master plan by the FAA as an approval of the entire master plan document. The FAA only approves components of a master plan, not the entire document. The key elements that the FAA reviews and formally approves are:

- Forecasts
- Selection of critical aircraft
- Airport layout plan

It is from these elements that the FAA makes determinations regarding eligibility of AIP funding for proposed development."[45]

2.3.2. Master Planning and Land Use Policy

In Oregon, airport planning and land use policy come together under adopted land use policy 660-013-0030 Airport Planning Rule,[46] which outlines the following:

1. The Oregon Department of Aviation (ODA) shall prepare and adopt a state Aviation System Plan (state ASP) in accordance with ORS Chapters 835 and 836 and the State Agency Coordination Program approved under ORS 197.180. ODA shall coordinate the preparation, adoption, and amendment of land use planning elements of the state ASP with local governments and airport sponsors. The purpose of the state ASP is to provide state policy guidance and a framework for planning and operation of a convenient and economic system of airports, and for land use planning to reduce risks to aircraft operations and nearby land uses. The state ASP shall encourage and support the continued operation and vitality of Oregon's airports.

2. A city or county with planning authority for one or more airports, or areas within safety zones or compatibility zones described in this division, shall adopt comprehensive plan and land use regulations for airports consistent with the requirements of this division and ORS 836.600 through 836.630. Local comprehensive plan and land use regulation requirements shall be coordinated with acknowledged transportation system plans for the city, county, and Metropolitan Planning Organization (MPO) required by OAR 660, division 12. Local comprehensive plan and land use regulation requirements shall be consistent with adopted elements of the state ASP and shall be coordinated with affected state and federal agencies, local governments, airport sponsors, and special districts. If a state ASP has not yet been adopted, the city or county shall coordinate the preparation of the local comprehensive plan and land use regulation requirements with ODA. Local comprehensive plan and land use regulation requirements shall encourage and support the continued operation and vitality of airports consistent with the requirements of ORS 836.600 through 836.630.

[43] Ibid.
[44] Ibid.
[45] Available online at https://www.faa.gov/airports/central/aip/sponsor_guide/media/0500.pdf.
[46] Available online at https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3063.

3. FINDINGS

3.1. Introduction

The following section details findings from assessment interviews. During these interviews, the assessment team asked interviewees their perspectives on a variety of topics; interview questions can be found in appendix B. Questions focused on what interviewees saw as the major issues and perceived challenges that need to be addressed, including substantive concerns, and process and procedural concerns. Interviewees were also asked how to overcome perceived challenges and what would be an acceptable path forward.

A number of ***substantive issues*** emerged through the interviews. ***Cross-cutting issues*** also emerged, which the assessment team saw as being applicable across subject areas like "access to accurate information" and "clarification of roles and responsibilities." These themes were described explicitly and implicitly by many interviewees. This section summarizes these issues which are listed in no particular order. We have incorporated content from interviews along with feedback we received from responses for factual corrections to our initial draft findings. We point out that a number of parties requested that specific information be included in this report. The assessment team has tried to provide basic information so the reader has a clear understanding of the dynamics at play related to the potential extension of the runway at the Aurora State Airport. We did not include comments that were not germane to the scope of this assessment. We also found that some facts remain in dispute. We note where clarifications are needed in areas where we received dueling interpretations. To address this dynamic, we have offered a suggested approach to resolving differences in the process considerations section.

3.2. Substantive Issues

3.2.1. Cost of the Aurora State Airport Runway Extension

One of the issues raised related to whether the ODA's grant request to the FAA for the proposed runway extension was the precise cost. The 2012 Master Plan lists a cost of $7.3 million, while the AIP supplemental grant application requests $37 million. These conflicting figures and lack of clarity at the time for what the money "buys" raised questions of trust and fear of further expansion. Some say the conflicting figures reflect a "major" revision that requires additional public involvement and could create the basis for a legal challenge. Some also said they had not seen a copy of the application nor were they privy to the details. In general terms, ODA is seeking permission from the Joint Emergency Board for approval to pursue a $37 million grant application to the FAA to extend the length of the runway by some 1,000 feet. Some interviewees noted the federal grant does not require any local or state matching funds. A portion of the total request would be used to cover the costs associated with the runway extension (e.g., land acquisition to the south side of the existing airport facilities for the safety zone and the relocation of a road for continued agricultural use, as well as funds for an environmental assessment and drainage improvements).

3.2.2. Safety

One reason for the proposed extension is to provide an added level of safety for aircraft landing and taking off, particularly in the case of an aircraft emergency. Many interviewees generally note a runway extension and resurfacing would also lead to a greater number of aircraft operations—with some interviewees saying operations will continue to increase regardless of an extension. Others suggest that the airport would be safer with a longer runway—both in cases of emergency and for

all aircraft, regardless of size, operating at the airport today. Some interviewees said that an extension would primarily serve corporate jets and that current general aviation operators do not need an extension for an increased measure of safety, while others opponents say safety is not a primary driver. Another question raised, however, was would the runway extension change the number or rate of accidents given anticipated increased total operations. It is our understanding that the Aurora State Airport has had only one fatality which was a lost pilot who took off from the airport, was never accounted for, and was presumed to have crashed elsewhere. Even so, one interviewee said there are crashes where runway length may have been a factor but go as unreported "incidents" because there is no loss of life.

3.2.3. Noise

Noise Abatement

The airport has a noise abatement procedure. Its purpose is to route aircraft, when possible, away from residential areas in order to minimize noise impacts. In uncontrolled airspace, pilots are rarely notified of noise abatement procedures at a particular airport. In controlled airspace, tower operators work to guide pilots away from residential areas when possible. Noise abatement procedures are not compulsory unlike other aviation considerations, like air traffic separation for safety. According to the ODA's website for the Aurora State Airport, "Pilots are advised to avoid flying over congested areas, which include Aurora, Charbonneau, and Barlow….Upon arrival, pilots should fly as instructed by the control tower….Upon departure, pilots should fly the runway heading to 900 feet MSL and then make a 45-degree turn to avoid populated areas to the north and south of the field."[47] A concern was raised that some pilots are not following noise abatement procedures and are therefore causing unnecessary noise over residential areas. There were also differing views on whether the recently built control tower at Aurora State Airport has helped to reduce noise impacts.

Amount of Noise

With the runway being extended south rather than north, proponents say there would be a reduced noise impact to residents to the north. Some noted that today's "fan-jets," which require a longer runway, are quieter than "pure-jets" flown out of the airport since the 1970s. Opponents say noise will increase, because there would be more operations as a result of the extension. There are significant differences in noise levels among different types of aircraft. While an ongoing increase in traffic is anticipated, we did not see information to inform whether the evolution of the airport, with an extended runway, would result in noisier or quieter aircraft. There is no indication that ODA can limit the type of aircraft using the Aurora State Airport based on noise levels.

3.2.4. Surface Traffic (Motor Vehicles)

Many are concerned about increased congestion on local roads, state highways, and Interstate 5. Many interviewees expressed concern about the impacts from a potential runway extension and implications for how it could impact surface roads. If the proposal advances and land use reviews proceed, it has been suggested that additional traffic studies should be initiated. There are two primary areas of concern: 1) identifying what impacts growth at the Aurora State Airport will have on Interstate I-5,[48] and 2) congestion on the local roads that provide ingress and egress to the

[47] Available online at https://www.oregon.gov/aviation/docs/Aurora_Noise_Abatement.pdf

[48] This issue has largely focused on the Boone Bridge congestion on I-5 south. (Boone Bridge is the I-5 bridge over the Willamette River between the central portion of the City of Wilsonville and the community of Charbonneau.) The cost of an additional lane to the Boone Bridge (I-5 south) is said to be in the neighborhood of $80,000,000.

airport could be exacerbated with more traffic from additional passengers, crews, and workers heading to and from the airport. These interviewees noted that there have been few improvements over the last decade and that increased traffic could be costly to maintain and would require improved transit.

3.2.5. Land Use

3.2.5.1 Annexation by the city of Aurora/Sewer and Water

In the past, leaders with the City of Aurora were interested in annexing the airport. Today, the airport relies on septic systems and a well water system which interviewees say is "ample." It was suggested that one of the reasons to annex the airport would be to connect it to the city's infrastructure for better water resource management.

3.2.5.2. Farmland / Exclusive Farm Use (EFU)

The farmland in this area was said to be the most productive in the state and among the most productive agricultural land in the United States. As part of the state's land use law system, farmland is zoned as exclusive farm use, or EFU. EFU zoning limits development that could conflict with farming practices. There was no disagreement heard about the value of the farmland or the need to preserve it. Differences of opinion existed over perceptions of how the proposed runway extension would impact farmland now, and how it might influence land use decisions in the future related to the preservation of farmland. While the actual paving for a runway extension would not extend onto EFU-zoned land, there are some associated activities that would. It is also important to note that airport supporters said it is a benefit to have the airport next to EFU land. Some interviewees expressed concern that an extension could lead to future land speculation resulting in decreased availability of future farmland in the area. Airport users have suggested converting and preserving the vacant fourteen acres of land to the west of the runway, between the runway and the Wilsonville-Hubbard Highway, and placing it with OSU Extension Services, or a similar entity, for exclusive farm use. Others also say the purpose for the purchase of farm land by the ODA would be to protect it from building or development.

3.2.5.3. Marion County Land Use Decision

A question was raised whether or not the 2012 Aurora Airport Master Plan, *with* the runway extension proposal included, was ever formally "adopted" by Marion County as an amendment to their County Comprehensive Plan, known as a "local land use plan."

Marion County provided the assessment team with materials (appendix F) that show they did not formally adopt the 2012 plan but instead, through a resolution, "*acknowledged" and "supported"* it. Others told the assessment team that "adopt" and "acknowledge" are specific legal terms related to Oregon's land use laws and that only LCDC can "acknowledge" a plan. We were also told the county needs to adopt an airport plan as part of their comprehensive plan for it to have effect on land use decisions. The county, however, says they saw the 2012 plan as "a capital projects plan, which did not qualify as a land use master plan because it lacked essential land use components (i.e., consideration of state statutes and rules, land use goals, etc.)." Moreover, they say the adoption of the 1976 Master Plan, with its reference to a 6,000-foot runway counted "as a component of the Marion County Comprehensive Plan and Transportation System Plan as part of the county's original comprehensive plan."

It was shared with us that the purpose of a local land use decision is two-fold:

- It provides public notice and public involvement requirements, and creates the opportunity for individuals to appeal the decision or amendments to the State of Oregon's Land Use Board of Appeals (LUBA).
- It also coordinates the state and local planning efforts, including the coordination of an airport master plan with a county comprehensive plan. The adoption of an airport master plan is a component of a local land use plan and provide a basis for coordinated planning and regulation of land use at the airport site.

Further clarification may be warranted to determine what the action taken by Marion County to recognize the 2012 Airport Master Plan means.[49] Our interviews highlighted that there are varying legal interpretations about the validity of the plan by policy experts and counsel of the action taken by Marion County.

3.2.5.4. Portland/Metro Urban Growth Boundary (UGB)
There is a long history of legal challenges to Oregon's land use law and the region's urban growth boundary near the Aurora State Airport. Any rumored development south of this boundary has created fear that it will influence an extension of the UGB and invite subsequent sprawl. While this is a secondary issue, for some it was related to the runway extension proposal and by further extension could erode Oregon's land use provisions related to UGBs.

3.3. Public Process (e.g., Master Planning Process, Intergovernmental Agreement)

We found that what constituted adequate public process—especially over the last ten years—was in the eye of the beholder. Some said the master planning process did not provide adequate opportunity for public input and engagement. Interviewees with this perspective said they did not have a voice and did not understand why they could not appeal the plan locally. Others said there was ample public process through seven public meetings that included open houses and opportunities for public comment. Part of the differing perspectives may have stemmed from lack of clarity about the distinction between the function and purpose of an airport master plan that is under the guidance of the FAA and the ODA, versus land use impacts that are under the jurisdiction of local governments and the State of Oregon.

There is contention with the process used by the Oregon Aviation Board to approve the 2012 Master Plan with a runway extension. The issues revolve around the role of staff and consultant recommendations, the role of consultation by advisory committees, and the role of boards when making policy determinations. Staff and consultants had recommended a no-build option in relation to a runway extension in March 2011. In April 2011, the Oregon Aviation Board did not accept this recommendation, sought additional scenarios, kept open the public comment period, and ultimately supported a proposed 1,000-foot runway extension at the south end of the airport. The FAA approved the Master Plan on October 19, 2012.

The Oregon Aviation Board action is seen by some as overruling the project team recommendation, a failure of consultation with the Policy Advisory Committee (PAC), and in conflict with Goal 1 for

[49] Interviewees shared with us that LCDC is the only entity that can legally "acknowledge" a land use plan (see ORS 197.015(1) and ORS 197.251).

public engagement on Oregon's land use laws. One interviewee added this action "negated all public input and fueled the mounting distrust [of] ODA." Others said the ODA had a quality public process for this master planning effort, and believe the contention has more to do with the decision than the process.

Finally, the jurisdictions impacted by the airport are also in disagreement about a past intergovernmental agreement. Not all impacted governments are party to the IGA and as a consequence the feel they do not have an adequate say in public decisions related to the airport.

3.4. Interagency Coordination

Interviewees raised questions about the status of ODA's State Agency Coordinating Program. Some interviewees noted the ODA completed its state agency coordination requirement in 2017, even though the agency has existed for approximately twenty years. They, therefore, question if the agency has adequately complied with coordination rules. DLCD, however, has shared that because ODA was formerly a division of ODOT, and that ODOT has an approved state agency coordination (SAC) program, ODA remained subject to the existing ODOT's SAC until it created its own SAC.[50]

Oregon State laws require state agency coordination:

> "Keeping local plans and state programs consistent with each other, with the goals, and with acknowledged local plans. State law (ORS 197.180) requires that all state agency programs that affect land use must be carried out in conformance with local land use plans and regulations and in compliance with the statewide land use planning goals. The Land Conservation and Development Commission (LCDC) is charged with establishing State Agency Coordination (or SAC) requirements and assuring that agencies act in accordance with this statute. The Oregon Department of Aviation is responsible for the State's Aviation System Plan, which is an element of the State's Transportation System Plan for all transportation modes….Therefore, adoption and maintenance of the Department of Aviation state agency coordination agreement is required by both state statutes and by related administrative rules. The agreement assures coordinated land use planning and development at all jurisdictional levels including state, county, region, city and special district, including, port districts and airport districts."[51]

3.5. Constrained Operations

The precise number of constrained operations[52] has been questioned, with some disputing what type of operations are counted. They are important because the volume of constrained operations is part of the justification for a runway extension. According to an ODA study conducted by Century West, there are currently enough constrained operations to justify seeking funds to extend the runway at Aurora State Airport. ODA says extending the runway 1,000 feet would significantly reduce the level of constrained operations and improve airport safety. Some interviewees question these findings because oversized aircraft with waivers from ODA are counted, and that some flight

[50] See OAR 660-030-0080(2)
[51] Available online at https://www.oregon.gov/aviation/docs/meetings/AVB%20_17_3_7_PROPOSED%20-%20ODA%20SAC%20Agreement.pdf.
[52] A constrained operation is operation of an aircraft that is operating with less than full fuel or cargo on the basis that the runway isn't long enough or doesn't have the weight-bearing capacity for the aircraft to operate at full fuel and cargo.

operations voluntarily do not depart fully loaded due to short flight distances—flights that are all counted in the tally of constrained operations. Some interviewees say there are constrained flights that have to divert to nearby airports to add fuel which is inefficient and costly. They also say they believe study estimates are fewer than what actually occurs.

3.6. Air Pollution

Opponents are concerned about the air pollution caused by various aircraft and the different fuels that they consume and site a 2005 DEQ study of landings and take-offs, which they say shows this airport has the third highest levels of lead-containing emissions in Oregon. Proponents say aircraft represent a small percentage of air pollution in the area when compared to what is created by cars and trucks. They also note that jet fuel has no lead in it. Further study would have to be undertaken to determine with precision the impact that increased operations would have on air pollution levels.

3.7. Airport as an Emergency Operations Location in an Emergency or Disaster

Several of those interviewed said the Aurora State Airport is strategically located to provide emergency air service during an emergency or disaster. It was also mentioned that the airport would be a valuable asset for emergency transportation in the event of a failure of the I-5 Boone Bridge. One stakeholder noted that the two heavy helicopter businesses at the airport could provide emergency services even if the runway was damaged. Some questioned how resilient the airport would be in a major earthquake, specifically, they raised concerns about the sturdiness of the soils beneath the runway, siting Oregon Department of Geology and Mineral Industries maps.[53]

3.8. Employment

We found that information varies greatly about how a runway extension could contribute to job growth in the area. Depending from whom we heard, we were told eventual job growth could range from 1,200 to 4,000 jobs. Opponents expressed concern about jobs and lawful land use both on and off of the airport, "fueling development," and auto trips. The location of quality family-wage jobs was also raised by interviewees. Some felt job growth should first occur within the Metro UGB while others felt more quality jobs are needed in rural areas, where allowable.

3.9. Oregon Department of Aviation Capacity

A few interviewees raised the issue of the capacity of ODA. In 1999, the legislature passed SB 108 which removed the Aeronautics Division from the Oregon Department of Transportation and established the Department of Aviation. The newly created ODA began operating in 2000. Since that time, ODA has had to work to realign itself with state rules and requirements, while successfully navigating a myriad of federal, state, and local public engagement processes with a relatively small staff. Also, the agency has been without a director since early last summer. Some interviewees pondered whether its small staff size and recent absence of permanent leadership during a pivotal period may have contributed to a less than adequate public engagement process. Others noted that the agency has a "qualified interim director" and who engages in a professional manner.

[53] Available online at: https://www.oregongeology.org/pubs/ims/ims-008/Maps/images/Canby_liq.JPG

3.10. Cross-cutting Themes

3.10.1. Trust

Underlying many of the issues surrounding the potential expansion of the Aurora State Airport is a significant lack of trust for many interviewees. For some, this lack of trust was expressed as a lack of information or faith in the underlying data and information used to arrive at the currently recommend extension. For example, some questioned the noise or traffic projections that might be associated with a potential extension as a result of airport growth. Others questioned how "constrained operations" were calculated, a factor in justifying seeking the runway extension. Numerous interviewees also described a lack of trust in the process, suggesting that the public had inadequate input into the future of the airport or that public input was insufficiently considered and that decisions were a "foregone conclusion" irrespective of public opinion. Others said entities and individuals were misconstruing established facts in order to reshape public opinion to get what they want. While others note many do not understand "technical operations" of an airport and their operating rules, a situation which has led to mistrust. This dynamic caused them to distrust the current approach for moving forward. It is worth noting that, for many interviewees, the FAA grant application for the runway extension was not the first engagement on Aurora State Airport related topics, and a lack of trust in current proceedings was built on perceived breaches of trust from past discussions. The underlying issues related to trust appear to be a contributing factor in the erosion of working relationships and the proliferation of public accusations.

3.10.2. Communication

Many interviewees expressed frustration regarding communication related to the proposed extension. For many, there was a perceived lack of understanding regarding the actual proposal (e.g., the terms "expansion" and "extension" were used interchangeably, and triggered different impressions and understanding of what was being proposed). Most interviewees also felt there was little to no communication around opportunities for public input into the process related to the proposed runway extension and grant application. There was also lack of clarity overall about the procedural steps to develop, review, and approve changes to the Aurora State Airport. The interviews surfaced potential causes for the communication challenges, suggesting that the ODA may lack experience or staffing levels to address topics of this magnitude; inaccurate information related to the FAA grant and potential extension can be easily disseminated but is difficult to correct; and/or communication and coordination gaps between and among decision making agencies and jurisdictions engaged in the potential extension caused gaps or mixed messages to the public.

3.10.2.1. Shared Information

Among all the parties interviewed there was a significant underlying lack of shared or agreed upon information. Nearly all interviewees felt confident that they had a fairly comprehensive understanding of the issues, and yet, the assessment team perceived significant disconnect among parties about what information they had available to them or which information was being considered in their understanding of the issues. The lack of shared information likely contributes to the sense of distrust described above and precipitates a sense of confusion and frustration among many involved in current discussions.

3.10.2.2. Roles and Responsibilities

Related to confusion about procedural steps taken toward changes to the Aurora State Airport, there is not a clear shared understanding of the various roles and responsibilities for state coordination and local decision making, and within this, how master planning processes review and codify changes to land use. Several interviewees were unclear about the authority of ODA's Aurora

State Airport Master Plan and the local jurisdiction's (in this case, Marion County's) comprehensive plan, and ultimately how a decision to proceed with a change to the airport would be made. There was also confusion about the obligation for state agency coordination between ODA and other state entities with authorities (e.g., land use, agriculture, environmental quality, etc.) While Oregon state law requires it, questions were raised about if, when, and how coordination was (or will be) done with regards to changes to the airport. Others noted that any effort to answer these questions should be guided by ORS 197.180 and OAR ch. 660, divisions 04 and 13. Finally, questions were raised about the role of local jurisdictions in decision making. Clarifying these roles and responsibilities, and the process steps/timelines, would serve to clear up much of the confusion revealed by the interviews. While there was a lack of understanding over the applicable local and state land use processes for many, those interviewed were uniformly in agreement and committed to following all applicable land use decision-making processes once there was clarity on what they are.

3.10.2.3. Broader Implications of the FAA Grant

While the application for an FAA grant would be a single action, many interviewees expressed concerns about the topics beyond the grant itself. For example, some suggested that application (and receipt) of the grant might have implications for passenger flight opportunities for Salem Airport. Other related topics that were often described included county land use planning, traffic congestion, economic and business growth, and safety. As a result, some interviewees expressed concern that decisions about the FAA grant would have broader implications than the Aurora State Airport. In this way, decisions about the FFA grant have taken on heightened importance that may reduce parties' willingness to compromise or find innovative ways to reach agreement on potential airport changes.

3.10.3. Who Benefits

The issue of who currently benefits or would benefit in the future from the airport was a common theme. For example, which jurisdiction should benefit from taxes generated by the airport found its way into conversations about potential annexation and UGB issues. Which part of the greater region should be home to "good" and "more" jobs, given Oregon's land use laws and the state's goal to preserve farmland, was raised. Concerns were also raised about land and business speculation driving the need for the extension. Overall, the benefits of the airport are not universally appreciated at this time.

3.10.4. Community Solidarity

While many interviewees entered discussions related to the Aurora State Airport's future expressing the challenges and their frustrations, many, if not most, also expressed willingness to come together to get better informed and participate in constructive deliberations to inform future decisions about the airport. Interviewees consistently expressed a shared sense of place, neighborliness, and a desire to resolve differences in a mutually acceptable manner.

4. PROCESS RECOMMENDATIONS

Given the diversity of views and high level of interest related to the potential changes to the Aurora State Airport, it is likely that no resolution will satisfy all parties completely. After interviewing the diverse array of stakeholders interested in this issue, we found land use to be at the heart of the matter. It was noted to us that this airport is unique when compared to its sister airports: it is in the heart of Oregon's prime farmland, at ground zero for the inspiration for Oregon's land use system; and, is located in a rural community that it is proximate to the Portland/Metro region, which has been and will continue experiencing significant population growth. The weight of these factors should not go underappreciated, and underscores the challenge in finding a broadly-accepted resolution. The tension for those who value this region of Oregon is that, while on the one hand they share a love of place, how they choose or desire to interact in that place is different. Governor McCall said the most critical battle he was ever involved in was land use. It should therefore be no surprise that this issue remains a challenge for Oregonians today.

The Oregon Solutions assessment team believes there are a number of process steps that, if taken, could improve dynamics related to the future of the airport and surrounding communities.

4.1. Information, Facts, and Procedural Requirements

Many of the facts surrounding land use and legal frameworks are in dispute. This lack of agreement contributes significantly to the ongoing lack of trust, and impacts the potential to reach an acceptable outcome. To overcome this dynamic, parties should consider the following:

- Provide third-party experts: Bring in reliable and mutually acceptable independent experts to provide information. Issues that lack clarity include the purpose of airport master plans, land use implications, and traffic projections. Sister state agencies with particular subject matter expertise could be asked to provide subject-matter level information and other supports.
- Review land use rules: The relevant local and state entities could review the areas in dispute identified in this report and attempt to provide clarity. Of particular note for review is the topic of land use, in particular the finding in section 3.2.5.3 of this report, “Marion County Land Use Decision.”
- Conduct seismic review: Studies could be initiated to more closely examine the specific seismic risks and exposure associated with the runway and infrastructure.

4.2. Communication and Engagement

The importance of communication about activities related to the airport is paramount. These include but are not limited to meaningful public engagement, resources, clarifying facts, and information sharing that does its best to avoid or minimize “surprises,” and to clarify who “owns” each issue. It is fair to say there is a complicated array of entities that have a stake in the ownership of discrete issues. The airport is a state-owned asset that follows guidance from the federal government. It is in rural north Marion County, is next to the small town of Aurora and the community of Charbonneau, and is proximate to the border of Clackamas County, the city of Wilsonville, and the edge of the Portland/Metro UGB. Land use, emergency services, basic utilities, taxation, and aviation are *all* core issues. Even so, it is arguable that ODA, as the owner of the asset, owns the burden of proper communication related to the airport. While it has worked to provided

public engagement for planning purposes, the question of how meaningful that engagement was still exists.

There are many approaches the agency and policymakers could consider to clarify communication:

- ***Best Practices:*** The ODA, with the assistance of the Department of Administrative Services (DAS), could explore how sister state agencies and other similar aviation agencies across the country work on public engagement outside of planning activities. We advise using best practices when implementing public engagement strategies.
- ***Agency Capacity:*** The ODA is a small agency serving many functions in many locations. Given its pivotal role in the current discussions related to the future of the Aurora State Airport and the unique characteristics of this airport, it may be beneficial or necessary for the aviation board, legislators, and the governor to consider adding capacity to the agency so it can undertake a large-scale public engagement process that will be necessary in association with a potential project of magnitude currently under consideration.
- ***Onboarding:*** When onboarding the new ODA director, the DAS team should be mindful of the findings in this report and ensure that this director has proper information about relevant rules procedures and statutes. Additionally, The DLCD could consider offering to work with the incoming ODA director and team to ensure their processes for complying with local and state land use laws are up to date.
- ***Give time:*** Over the last ten years there have been multiple actions related to potential changes in the airport. In some instances, these were not broadly vetted or noticed, which resulted in a sense of mistrust and parties feeling surprised by actions that may have long term implications but that were handled with short notice for input. It is worth appreciating that some activities and timelines are not in ODA's control (e.g., the current supplemental FAA AIP grant process); but, if communication and networks were enhanced, the potential for surprises could be reduced and avenues for trust could be built. Policy makers and others with decision making authority should be mindful of this history and plan accordingly with proper notice to minimize opportunities for mistrust caused by a rushed process.
- ***Shared information/neutral table:*** There are many stakeholder groups that are currently organized, but what could be beneficial would be the formation of a neutral forum where parties can come to get information related to the airport and community activities independent from particular projects, grants, or other more formal engagement efforts. ODA should take a leadership role in organizing such activities.

4.3. Noise Abatement

The issue of noise abatement remains an important topic for neighborhoods in proximity to the airport. Oregon Solutions does not have specific information for how noise is managed currently at the airport; however, interviewers did receive a suggestion that, if not happening already, air traffic controllers at both Aurora State Airport and PDX could consider meeting periodically to share information and discuss ongoing strategies to direct aircraft with a goal of minimizing noise impacts to residential areas.

4.4. Long Term Vision

Consideration should be given to the long-term vision for the future of the airport. Lack of clarity about a long-term vision has created opportunity for conflict, and contributed to a sense among some that each decision will result in "opening the door" to other potential changes. While it is impossible to predict the future and any plan is subject to amendment when facts on the ground change, a regional aviation asset planning could be beneficial in this instance.

APPENDIX A: AURORA STATE AIRPORT ASSESSMENT INTERVIEWEES

Richard Angell
Community Member

Deb Barnes
Community Member

Bruce Bennett
Aurora Aviation

Chuck Bennett
City of Salem Mayor

Brad Bueermann
FP Transitions

Jeff Caines
Oregon Department of Aviation

Kevin Cameron
Marion County Commissioner

Tami Carpenter
City of Salem

Sonny P. Chickering
Oregon Department of Transportation

Terry D. Cole
Oregon Department of Transportation

Nellie deVries
Clackamas County Business Alliance

Daniel L. Fricke
Oregon Department of Transportation

Bill Graupp
City of Aurora

Rob Hallyburton
Department of Land Conservation and Development

Bob Harland
Charbonneau Civic Affairs Committee

Tony Helbling
Wilson Construction

Pat Hickman
Community Member

Tony Holt
Charbonneau Country Club

Ken Humberston
Clackamas County

Ken Ivey
Aurora-Butteville-Barlow Community Planning Organization

Jim Johnson
Oregon Department of Agriculture

Jerry King
Community Member

Tim Knapp
Mayor of Wilsonville

Richard I. Kosta
Community Member

John Lattimer
Marion County

Rachel Leo
Community Member

Rick Lewis
State Representative

Sherry Lintner
Marion County

Matt Maass
Oregon Department of Aviation

Carrie MacLaren
Department of Land Conservation and Development

Mary Kyle McCurdy
1000 Friends of Oregon

Martha Meeker
Oregon Department of Aviation

Ted Millar
Southend Corporate Airpark

Kevin O'Malley
Wilsonville Chamber of Commerce

Mark Ottenad
City of Wilsonville

Heather Peck
Oregon Department of Aviation

Tom Potter
Community Member

Steve Powers
City of Salem

Paul Ranta
Community Member

Brandon Reich
Marion County

Kristin Retherford
City of Salem Urban Development Department

Bob Rindy
Formerly of the Department of Land Conservation and Development

Lynda Rose
City of Salem

Jim Rue
Department of Land Conservation and Development

Kris Taylor Sallee
Aurora Mayor Elect

Anita Sandoval
City of Salem

Jan Shea
Community Member

Randy Tucker
Metro

Richard A. Vial
State Representative

Tara Weidman
City of Aurora

Ben Williams
Friends of French Prairie

Josh Williams
Aurora Fire District Chief

APPENDIX B: CORE INTERVIEW QUESTIONS, AURORA STATE AIRPORT ASSESSMENT

Explain Oregon Solutions
Oregon Solutions is the state of Oregon's program to help communities address community-based problems and opportunities through sustainable solutions. We do this by creating a neutral forum for collaboration where community-based organizations, government agencies, businesses, nonprofits, sovereigns, and other stakeholders can align resources and pool efforts to achieve desired results.

Process
When invited, Oregon Solutions begins an *assessment* to explore whether and how a collaborative approach might be helpful in achieving the desired outcome and, if so, how the process might be structured to address a particular community issue. The assessment is comprised of a series of one-on-one or small group interviews, and during an assessment, Oregon Solutions makes every attempt to capture the range of diverse perspectives on an issue. This assessment will be overseen by Oregon Solutions Director, Karmen Fore, with Oregon Solutions Senior Project Manager, Michael Mills, serving as lead staff. Oregon Solutions will also engage colleagues from Oregon Consensus to help conduct assessment interviews.

Oregon Solutions will produce a final summary to capture key issues and perspectives as well as next step process recommendations for moving forward in addressing these issues. This summary will be provided to Oregon's Joint Emergency Board and all other interested parties.

Background
During the September 2018 legislative days, the Oregon Department of Aviation (ODA) submitted a request to the Joint Emergency Board to pursue a grant application to the Federal Aviation Administration (FAA) in the amount of $37 million for a runway extension at Aurora State Airport. Earlier in March of this year, the Consolidated Appropriations Act of 2018 (P.L. 115-141) was enacted into law and appropriated $1 billion in supplemental discretionary funding in the form of FAA airport grants to be available through September 30, 2020. Any airport included in the FAA's National Plan of Integrated Airport Systems is eligible to compete for these funds; the Aurora State Airport is one of these airports and is therefore eligible to apply.

Members of Oregon's Joint Emergency Board received extensive input both in support and opposition from individuals and local jurisdictions in and proximate to the airport. In order to seek a clearer picture of stakeholder points of view prior to a final vote in December, the Joint Board accepted the recommendation from its Subcommittee on General Government to seek the engagement of Oregon Solutions to conduct an impartial assessment.

1. Please describe your background and interest as it relates to the Aurora State Airport.

2. From your perspective, what are major topics that need to be addressed related to the airport?

3. What are the challenges or barriers to addressing these topics? Do you have suggestions for how they might be overcome?

4. *For Commissioners, mayors, or city councilors*—Are there members of your commission/council who might have another opinion from yours on this topic?

5. Do you see an opportunity to work together to resolve the issues surrounding the airport, including unforeseen support/opportunities or opposition/conflict?

6. What does success look like from your perspective? What happens if the status quo continues?

7. Are there information, data, or other technical resource needs (sources of data and resources) that you think should be addressed, utilized and considered as part of any effort related to the Aurora State Airport?

8. Should a collaborative process move forward would you/your organization be willing to participate? Are there resources that you could bring to support such an effort?

9. Who else would you recommend be interviewed for this assessment? Who is a *critical* player that needs to be interviewed?

10. Do you have any questions for us? Is there anything else you want to address that wasn't addressed already?

APPENDIX C: EXCERPTS FROM AURORA STATE AIRPORT MASTER PLANS

The Oregon Department of Aviation (including its predecessor state division and board) have produced four airport master plans since the Aurora State Airport went into state ownership. The reports were published in 1976, 1988, 2000, and 2012 (sometimes the 2012 plan is referred to as the 2013 master plan; for the purpose of this report, it is referred to it as the 2012 master plan since it was published in December 2012). The production of these reports involved state agency and other agency staff, professional consultants, elected officials, and public and stakeholder engagement, and garnered Oregon Aviation Board and FAA approvals.

The following are excerpts from these plans. The excerpts provide information relevant to this assessment. This excerpting does not constitute a comprehensive overview of these master plans and is not intended to be a policy review or critique of the information therein. Instead, this information is provided to help policy makers navigate topics relevant solely to this assessment report.

The master plans vary in length and organization. Therefore, excerpts provided for each master plan also vary. In order to highlight relevant issues for this assessment only, excerpts are not exhaustive. News reports are cited for the 2012 master plan and are included to provide process context.

The master plans also provide detailed renderings of airport layout plans that are included for each year there is a master plan. The airport layout plan shows potentially envisioned runways at this airport.

Links to each report, when available, are provided in the footnotes. These plans are also available upon request from the Oregon Department of Aviation.

1976 Master Plan

The following are direct excerpts from the 1976 master plan.[54]

General Facts

- The runway was 4,100 feet by 150 feet, designated 17/35, and is paved and lighted
- Pavement strength was 30,000 pounds
- Surface condition was poor to fair because of oxidation, extensive cracking, and raveling
- No parallel runway
- No taxiway system or turnarounds—but 150-foot width was adequate
- Runway length accommodated all aircraft using the airport, which was "light twin aircraft and smaller…occasionally turbo-jets use[d] this runway"[55]
- Employees averaged between 100 and 125 with a majority working on maintenance for a helicopter operator

Environmental Requirements

- The principle environmental effects of airport development include: noise, air and water pollution, ecological impacts, social impacts, and effects of construction and operations
- The primary environmental consideration at the Aurora State Airport is to have compatible land use in the airport vicinity
- Exposure to aircraft noise mostly determines compatibility
- Other considerations are aircraft accident potential, air pollution, and effects of vehicular traffic patterns
- Land use compatibility guidelines are based on relative noise sensitivity of different activities
- The most sensitive uses are those involving conversation and sleeping
- Typically, auditoriums, arenas, schools, hospitals, and housing are the least compatible
- Open space uses like farming are the most compatible
- Consequently, preservation of the existing agricultural land use pattern around the Aurora State Airport is the key to compatible land use regardless of the noise exposure levels.

Recommendations of Note

- Suggested construction of a parallel taxiway and exit taxiway
- Improve airfield lighting
- State should continue to work closely with Marion and Clackamas Counties to develop compatible land use planning for the airport environs
- State should work closely with Marion and Clackamas Counties to develop zoning changes on and near the airport as recommended in the master plan
- State should retain ownership as no appropriate alternatives exist
- In updating the master plan, the state should work closely with the airport users, local governments, and citizens. A flexible attitude and approach to the planning process should be maintained
- Keep public and public agencies informed as to what impacts off-airport plans may impose on public facilities.

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[54] The full report can be found at https://www.oregon.gov/aviation/docs/1976%20Aurora%20State%20Airport%20Master%20Plan%20reduced.pdf.

[55] Aurora State Airport Master Plan, 1976–1995, CH2M Hill for ODOT Aeronautics Division.

- This plan recommends lengthening [the runway] to 5000 feet shortly before 1985, and retaining the present 30,000 pounds single gear pavement strength. In the 1985 to 1995 period, the runway should be increased to about 6,000 feet and single gear pavement strength increased to 60,000 pounds."[56]

Findings of Note

- No formal long-range planning for the airport had been otherwise accomplished to date
- Aurora State Airport serves a large service area, including several counties, and its sphere of influence is regional
- Surface access to the airport was poor from Marion County, but adequate from other counties
- The airport is owned in two parts. The runway is owned by the Oregon Aeronautics Division and is basically a paved flight strip. All revenue producing areas of the airport are owned by private interests, who are under no specific obligation to guaranteed minimum levels to the public.
- Was compatible with adjacent land use
- But had inadequate recognition by public comprehensive plans and zoning practices
- Forecasted significant increase in general aviation traffic by 1995 (from approximately 90,000 annual operations to 209,000 annual operations)—turbo jet and multi-engine were anticipated to experience modest growth
- Site was poorly protected by land use planning but adequate for the forthcoming twenty years
- Capacity issues included a lack of a parallel runway and parking (not paved)

Post-1976 Master Plan

The following are direct excerpts from the 2000 master plan.

- In 1977 and 1978, major improvements were constructed, including construction of a parallel taxiway, installation of a rotating beacon, reconstruction and narrowing (to 100 feet) of the runway, addition of drainage improvements, installation of medium-intensity runway lighting, and construction of a tie-down apron for sixteen aircraft.
- In 1979, a twenty-two-acre parcel near midfield was purchased with FAA funds, which was leased to private parties who constructed aircraft hangars and instrument approach was established
- In 1986, another ten acres with small tiedown apron was purchased near midfield

[56] Aurora State Airport Master Plan, 1976-1995, CH2M Hill for ODOT Aeronautics Division.

AIRPORT LAYOUT PLAN

The Airport Layout Plan graphically illustrates the proposed development for the existing airport through the 20-year forecast. The plan provides dimensions of proposed facilities and several tables of data explaining the plan. Details of the development staging are covered later in the Master Plan.

Key points for the 20-year period include:

- In order that there can be an implementable Master Plan the Airport Layout Plan prescribes acquiring 116 acres of land in fee on the east side of the airport. Without this space for airport development it will be impossible to implement a complete and productive airport development program.

  Also 18 acres of land is to be acquired in easement for obstruction removal and for airspace protection north of the airport.

- The existing airport is to be retained with a few criteria surpassing usual maximums. The existing runway remains at its current length, slightly longer than GU requirements, (4100 versus 3600 feet), and will remain 150 feet wide instead of the usual 100 feet.

  The parallel taxiway will be placed at 225 feet instead of 200 feet because of existing drainage conditions, and the building restriction line will remain at 500 feet as established several years ago.

  Pavement strength will remain at 30,000 pounds S.G. except where lighter strength aprons are to be permanently used for lighter aircraft only.

- The runway will be improved from the existing 4100 feet and 30,000 pounds S.G. strength ultimately to 6,000 feet and to 60,000 pounds D.G. strength.

- A parallel taxiway will be constructed with several 90 degree exits and stub taxiways to provide direct access to the parking aprons.

- Paved aircraft parking aprons for 98 based aircraft and 50 transient aircraft will be developed, and turf parking for 30 aircraft will be improved.

- Lighting improvements will be extensive. Medium intensity runway and taxiway lights will be added together with taxiway reflectors on the parallel taxiway, a new beacon, VASI's for both runway ends, MALSF and apron lighting.

- New navigational aids (NDB and MLS or equivalent) are specified in addition to an air traffic control tower.

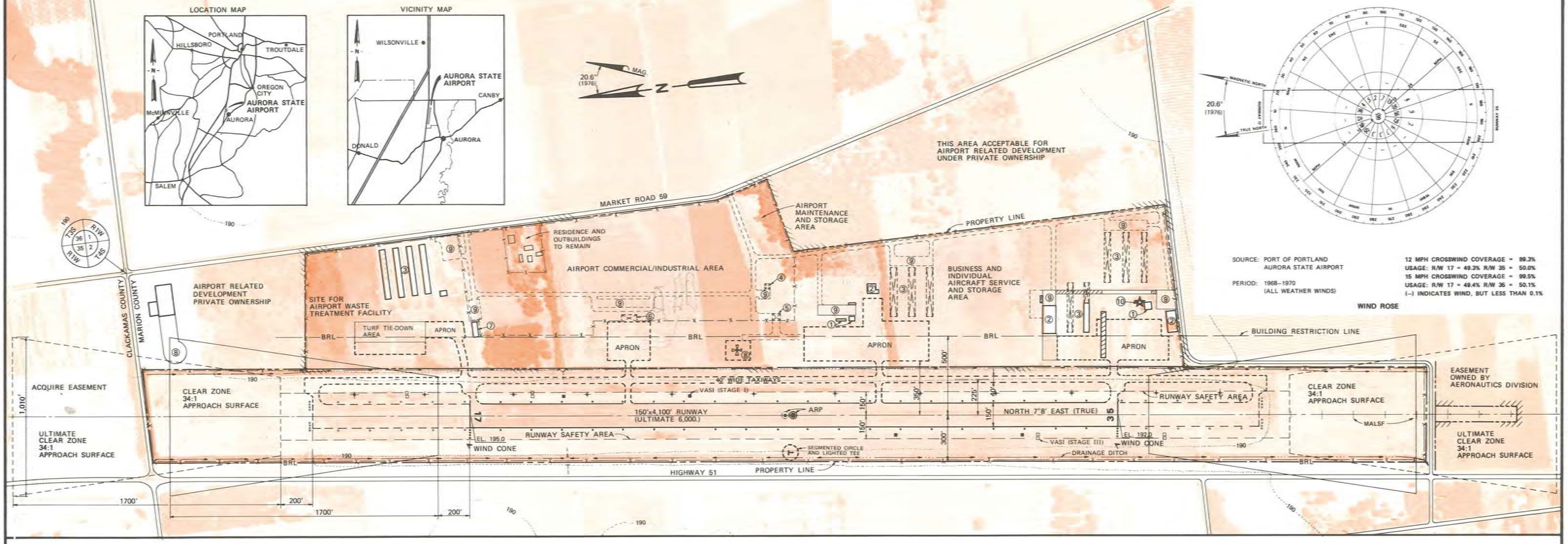
- Airport entrance and internal road systems will be considerably modified on the land which is to be acquired and new automobile parking areas will be provided.

- The airport will be divided into areas of different uses which will be kept segregated. The aircraft areas will be separated from public and commercial areas by security fences. Perimeter fences will enclose the entire airport.

- Ultimately a terminal/administration building and a crash/fire/rescue station will be constructed. More hangars are prescribed.

- A heliport is specified for the ultimate airport.

The Airport Layout Plan has been approved and will remain the official guide for airport development until revised.

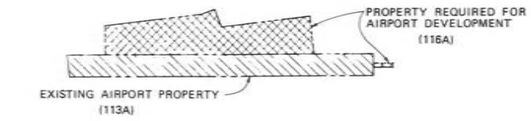


SOURCE: PORT OF PORTLAND
AURORA STATE AIRPORT

PERIOD: 1968–1970
(ALL WEATHER WINDS)

12 MPH CROSSWIND COVERAGE = 99.3%
USAGE: R/W 17 = 49.3% R/W 35 = 50.0%
15 MPH CROSSWIND COVERAGE = 99.5%
USAGE: R/W 17 = 49.4% R/W 36 = 50.1%
(–) INDICATES WIND, BUT LESS THAN 0.1%

WIND ROSE



ULTIMATE AIRPORT PROPERTY

300 0 300 600
SCALE IN FEET

FACILITIES	
NO.	
1	F.B.O. OFFICE
2	F.B.O. HANGAR
3	TEE-HANGAR
4	CONTROL TOWER
5	CRASH, FIRE, RESCUE BLDG.
6	ADMIN./TERMINAL BUILDING
7	AVIONICS SHOP
8	HELIPORT
9	AUTOMOBILE PARKING
10	AIRPORT BEACON

NOTES:

1. FOR ADDITIONAL INFORMATION CONCERNING THE TERMINAL AREA SEE TERMINAL AREA PLAN.
2. FOR ADDITIONAL INFORMATION CONCERNING APPROACH SLOPES, CLEAR ZONES AND OBSTRUCTION SURFACES SEE ULTIMATE AIRPORT IMAGINARY SURFACES PLAN.
3. AFTER MLS STANDARDS HAVE BEEN ESTABLISHED, THE DIMENSIONS FOR RUNWAY WIDTH AND FOR APPROACH SURFACES MAY BE REVISED.
4. THE LOCATION OF THE MALSF IS SUBJECT TO CHANGE DEPENDING ON AN IFR WIND ANALYSIS.

BASIC DATA TABLE				
RUNWAY DATA				
	EXISTING (1975)	STAGE I ((1975-1980)	STAGE II (1980-1985)	STAGE III (1985-1995)
RUNWAY LENGTH	4,100' 1,250m	4,100' 1,250m	5,000' 1,524m	6,000' 1,829m
RUNWAY WIDTH	150' 46m	150' 46m	150' 46m	150' 46m
EFFECTIVE GRADIENT (%)	0.07	0.07	0.07	0.06
PERCENT WIND COVERAGE	99.5	99.5	99.5	99.5
INSTRUMENT RUNWAY	None	None	None	None
PAVEMENT STRENGTH*	30S	30S	30S	60D
FAR PART 77 CATEGORY	B/C	B/C	B/C	B/C
FAR PART 77 APPROACH SLOPES	34:1	34:1	34:1	34:1
ACTUAL CLEAR APPROACH SLOPES	N26:1 S36:1	34:1	34:1	34:1
LIGHTING	L. Intensity	M. Intensity	M. Intensity	M. Intensity
MARKING	Basic	Non-Precision	Non-Precision	Non-Precision
NAVIGATIONAL AIDS	None	VASI	MALSF	MLS
OPERATIONAL ROLE	GU	GU	BT	BT

*Values given are the gross weight in 1,000 lbs. for single (S) and dual (D) gear aircraft.

BASIC DATA TABLE		
AIRPORT DATA		
	EXISTING	ULTIMATE
AIRPORT ELEVATION (MSL)	195'	195'
AIRPORT REFERENCE POINT (ARP) LAT.	45° 14' 43"	45° 14' 44"
LNG.	122° 46' 07"	122° 46' 07"
NAVIGATIONAL AIDS	NONE	MLS
NORMAL MAX. TEMP. HOTTEST MONTH	84°F (29°C)	84°F (29°C)
FUNCTIONAL ROLE	S3	S2
MISCELLANEOUS FACILITIES: TAXIWAY MARKING AND LIGHTING	NONE	BASIC

KEY TO ABBREVIATIONS

B/C Non-precision Instrument Runway Larger Than Utility
GU General Utility
BT Basic Transport
S3 Low Density Secondary System
S2 Medium Density Secondary System

LEGEND		
EXISTING	ULTIMATE	
190		GROUND CONTOURS
		PROPERTY LINE
	+	STORM DRAIN INLET
		RUNWAY LIGHTS
		THRESHOLD LIGHTS
		FACILITIES
		AIRPORT REFERENCE POINT
		BUILDING RESTRICTION LINE (BRL)
		BUILDINGS
		FACILITIES TO BE REMOVED
		DRAINAGE COURSE
		DRAINAGE CULVERT
		FENCE

FEDERAL AVIATION ADMINISTRATION APPROVAL

Approval Date 11 JUNE 1976

See Approval Letter 11 JUNE 1976 Date

GEORGE L. BULEY
Chief, Airports Planning Branch

AERONAUTICS DIVISION APPROVAL

ROY M. RAASINA 13 MAY 1976
Manager Airport Branch

PAUL E. BURKET 13 MAY 1976
Administrator

CH2M HILL

Drawn CRS
Check RDL
Appr. MRM

FIGURE 23

No.	Revision	By	Appr.	Date

AURORA STATE AIRPORT
AURORA, OREGON

AIRPORT LAYOUT PLAN

OREGON STATE AERONAUTICS DIVISION
SALEM, OREGON

Township 4s Range 1w Scale as Shown Dwg. No. B-71 MP
Section 2,11 County MARION Date 13 MAY 76 Sheet 1 of 3

1988 Master Plan

The following are direct excerpts from the 1988 master plan.

General Facts

- The runway was 4,100 feet

Recommendations of Note

- "An extension of the runway to 5,100-foot length would be both beneficial and feasible….should be constructed at the south end of the existing runway"[57]
    - "This 5,100-foot length will offer enhanced operational safety for the large majority of present and future airport users as well as greater payload capabilities for many potential aircraft."[58]
    - An extension at the south end would "help reduce departure noise impacts north of the Airport…."[59]
- Parallel taxiway should be relocated to a distance 300 feet from the runway
- Recommended the state purchase property for state-owned building area (dependent on what happens on private land) for transient aircraft, and conservation easements around the airport
- Most privately-owned land east of runway should remain in private ownership
- Although the airport was far from meeting the eligibility requirements for an FAA control tower, a site should be set aside for long-term possibility
- Communications program: "The state should establish a program of regular communication with both pilots who use Aurora State Airport and with the community which the airport serves and impacts."[60]
- Land use control measures:
    - Clackamas County should adopt a height limit zoning ordinance for the portion of the airport environs within its jurisdiction
    - Marion County should update its existing ordinance to reflect the proposed future configuration of the airport.
    - The Aeronautics Division should seek these local actions both by direct requests to the boards of commissioners and by submission of comments during each county's formal comprehensive plan review process

Findings of Note

- Corporate aircraft was expected to have the fastest rate of growth
- Notes the airports peak activity was in 1979 with 160,000 annual operations
- Adequate airfield and parking
- Compatibility Status: Aurora State Airport is in an excellent situation in terms of both the present and anticipated future degree of off-airport land us compatibility
    - The predominately agricultural character of the surround area and strong statewide land use planning goals greatly limit the types of problems common to general aviation airports in rapidly growing urban communities.

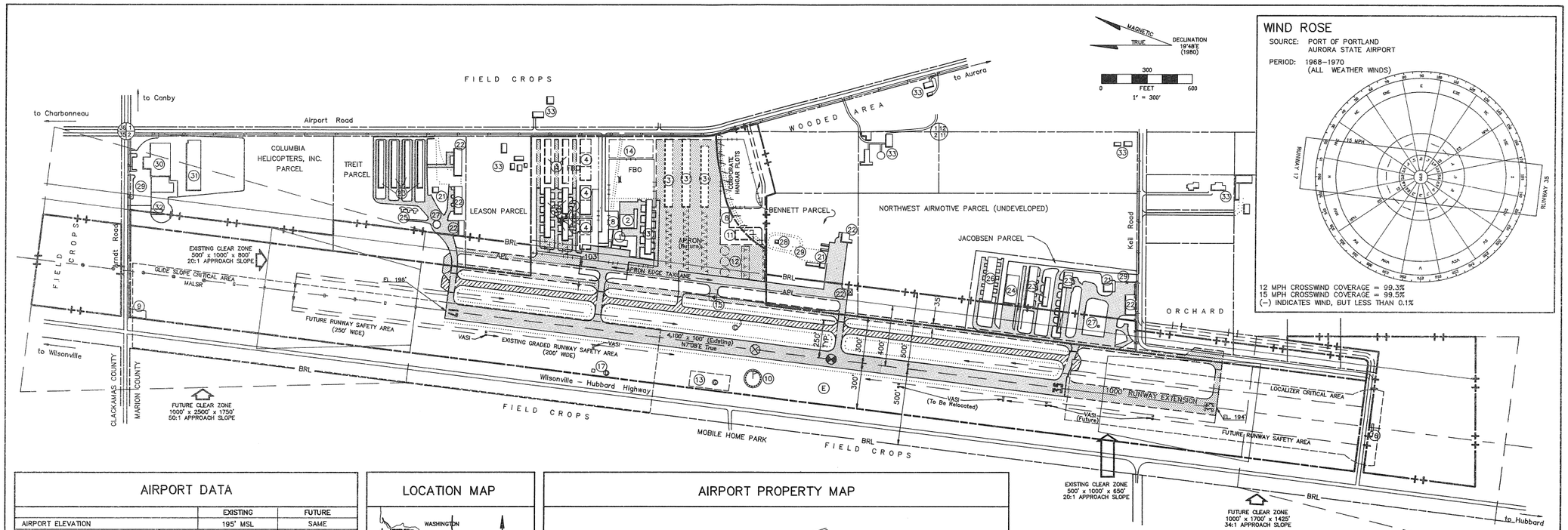
[57] Aurora State Airport Mater Plan Report, April 1988, p. 5.
[58] Ibid.
[59] Aurora State Airport Mater Plan Report, April 1988, p. 12.
[60] Aurora State Airport Mater Plan Report, April 1988, p. 13.

    - Nevertheless, long-term compatibility between the airport and the land uses which surround it should not be taken for granted. Assurance of compatibility requires that current and future problems be recognized and that positive measures, as outlined herein, be adopted to reduce or avoid them.
- Noise and overflight impacts: Growing air traffic, particularly by business jets, will cause the airport's noise and overflight impacts to increase
- Safety: The safety concerns of the airport occur in two forms (height of structures and other objects near the airport; land use susceptible in case of an accident)
- Impact reduction measures were seen as a runway extension to the south end of the runway to reduce noise impacts to the north,

Post 1988 Master Plan

The following is a direct excerpts from the 2000 master plan.

- In 1993, the runway was lengthened from 4,104 feet to 5,000 feet and a non-precision Localizer Landing System instrument approach was added to Runway 17.



WIND ROSE

SOURCE: PORT OF PORTLAND
AURORA STATE AIRPORT

PERIOD: 1968–1970
(ALL WEATHER WINDS)

12 MPH CROSSWIND COVERAGE = 99.3%
15 MPH CROSSWIND COVERAGE = 99.5%
(–) INDICATES WIND, BUT LESS THAN 0.1%

AIRPORT DATA

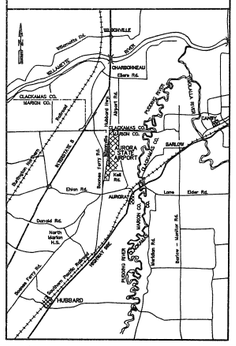
			EXISTING	FUTURE
AIRPORT ELEVATION			195' MSL	SAME
AIRPORT REFERENCE POINT (B)		LATITUDE	45° 14' 54" N	45° 14' 49" N
		LONGITUDE	122° 46' 07"W	122° 46' 08" W
MEAN MAX. TEMP., HOTTEST MONTH			95°	SAME
AIRPORT SERVICE LEVEL			GENERAL AVIATION	SAME
TERMINAL NAVIGATIONAL AIDS			NDB	NDB,ILS
AIRPORT ACREAGE	STATE PROPERTY	FEE SIMPLE	144	196
		EASEMENT	350	355±
	PRIVATE PROPERTY		100	75
BUILDING AREA CAPACITY	STATE PROPERTY	TIEDOWNS	54	100±
		HANGAR SPACES	34	140±
	PRIVATE PROPERTY	TIEDOWNS (approx.)	124	UNCERTAIN
		HANGAR SPACES	74	UNCERTAIN

RUNWAY DATA

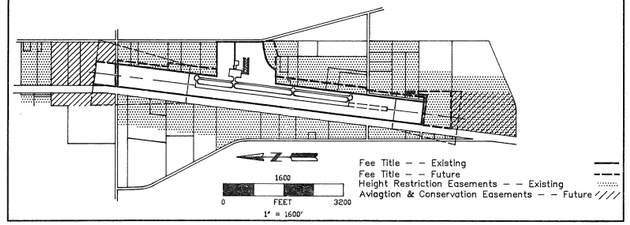
			RUNWAY 17–35 EXISTING	RUNWAY 17–35 FUTURE
RUNWAY CLASSIFICATION			GEN. UTILITY I	TRANSPORT
PHYSICAL LENGTH AND WIDTH			4100' X 100'	5100' X 100'
EFFECTIVE GRADIENT			.06%	SAME
PAVEMENT STRENGTH (1000#) S/D/DT			30/–/–	40/60/–
APPROACH TYPE		17	NONPRECISION	PRECISION
		35	VISUAL	NONPRECISION
APPROACH SLOPE: REQUIRED/CLEAR		17	20:1 / 24:1	50:1 / 52:1 (F)
		35	20:1 / 47:1	34:1 / 87:1 (F)
APPROACH AND LANDING AIDS		17	VASI 3.5°	VASI,MALSR,LOC,GS
		35	VASI 3.0°	SAME
RUNWAY END COORDINATES (B)	17	LATITUDE	45° 15' 14" N	SAME
		LONGITUDE	122° 46' 04" W	SAME
	35	LATITUDE	45° 14' 34" N	45° 14' 24" N
		LONGITUDE	122° 46' 10" W	122° 46' 12" N
CRITICAL AIRCRAFT		RUNWAY LENGTH	MED. TWIN PROP	MED.BUSINESS JET
		PAVEMENT STRENGTH	MED. TWIN PROP	MED.BUSINESS JET
		WINGSPAN	MED. TWIN PROP	MED.BUSINESS JET
RUNWAY LIGHTING			MED. INTENSITY	SAME
TAXIWAY LIGHTING			REFLECTORS	SAME
RUNWAY MARKING			BASIC	PRECISION

LOCATION MAP

VICINITY MAP



AIRPORT PROPERTY MAP



DRAWING LEGEND

	EXISTING	FUTURE
ACTIVE AIRFIELD PAVEMENT		
ABANDONED AIRFIELD PAVEMENT		
OTHER PAVEMENT IN USE		
GRAVEL SHOULDER/ROAD		
AIRPORT PROPERTY LINE		
LEASE OR RIGHT–OF–WAY LINE		
OTHER PROPERTY LINES		
BUILDING RESTRICTION LINE	BRL	
AIRCRAFT PARKING LIMIT	APL	
BUILDINGS		
BUILDINGS TO BE REMOVED		
OTHER FACILITY TO BE REMOVED		
FENCE & GATE		
WATER COURSE		
POWER LINE	P P	
AIRPORT REFERENCE POINT		
SECTION CORNERS	36 1 31 32	

NOTES

(A) Elevations on airport vary by less than 5 feet; topographic contours not shown.
(B) Coordinates measured from USGS topographic maps; not verified by field survey.
(C) Existing taxiway pavement to be removed.
(D) Glide Slope antenna siting and critical area shown based upon use of side–band reference antenna. Actual antenna type, siting and critical area to be determined by FAA study.
(E) Area between runway and taxiway is usable for wastewater system drain field.
(F) Excluding adjacent roads which are in primary surface. Removal of selected trees required. Remaining critical obstacles are office building for Runway 17 and Keil Road for extended Runway 35.
(G) Reservoir dikes shall not penetrate runway obstacle free zone.

BUILDING AND FACILITY LEGEND

STATE LANDS		PRIVATE LANDS	
(1)	ADMINISTRATION BUILDING & FBO OFFICES	(21)	FBO OFFICES
(2)	MAINTENANCE HANGAR	(22)	FBO MAINTENANCE HANGAR/SHOP BUILDING
(3)	T–HANGARS – EXISTING/FUTURE	(23)	T–HANGARS
(4)	EXECUTIVE HANGARS – EXISTING/FUTURE	(24)	CORPORATE/CONVENTIONAL HANGAR
(5)	ROTATING BEACON ON TOWER	(25)	PORTABLE HANGARS
(6)	ELECTRICAL VAULT	(26)	CONCRETE HANGAR SLAB
(7)	PUMP HOUSE	(27)	FUEL STORAGE – UNDER GROUND
(8)	AUTO PARKING	(28)	FUEL STORAGE – ABOVE GROUND
(9)	REMOTE COMMUNICATIONS AIR/GROUND FACILITY	(29)	AUTO PARKING
(10)	WIND CONE & SEGMENTED CIRCLE	(30)	OFFICES
(11)	ADMINISTRATION BLDG & CONTROL TOWER SITE – FUTURE	(31)	TRUCK MAINTENANCE SHOP
(12)	LARGE AIRCRAFT/HELICOPTER PARKING – FUTURE	(32)	HELIPAD
(13)	WATER STORAGE RESERVOIR – FUTURE SITE	(33)	RESIDENCES/FARM BUILDINGS
(14)	WATER STORAGE RESERVOIR – ALTERNATE FUTURE SITE		
(15)	HELICOPTER TAKEOFF & LANDING ZONE – FUTURE		
(16)	LOCALIZER ANTENNA – FUTURE		
(17)	GLIDE SLOPE ANTENNA – FUTURE		

SUBMITTED BY:

STATE OF OREGON
DEPARTMENT OF TRANSPORTATION
AERONAUTICS DIVISION

APPROVED

Date

APPROVED

FEDERAL AVIATION ADMINISTRATION
AIRPORTS DISTRICT OFFICE

By _____ Date _____
Manager
Subject letter dated _____

NO.	REVISION	SPONSOR	DATE

AURORA STATE AIRPORT
AURORA, OREGON

AIRPORT LAYOUT PLAN

HODGES & SHUTT
AVIATION PLANNING SERVICES

AIRPORT CONSULTANTS & ENGINEERS
Santa Rosa, California

DESIGNED BY: KAB	APPROVED BY:		DATE: 7–25–88
DRAWN BY: EF/TE	CHECKED BY:	SCALE: 1" = 300'	SHEET: 1 OF 1

Table 5

EXISTING FACILITIES

ITEM	DESCRIPTION	CONDITION/COMMENTS
RUNWAY/TAXIWAY SYSTEM		
Runway 14-32		
Pavement	4,100' long; 150' wide Effective gradient: 0.06% Section: 2" Asphalt overlay 3" Asphalt 2" aggregate base 13" sub-base Strength: 30,000# (single-wheel)	Very Good Reconstructed 1978
Shoulders	25' wide; Asphalt pavement	Originally part of 150' wide runway
Overruns	Width: 150' Length: 1,000' beyond each end of runway Gravel surface	Good
Safety Areas	Width: 300' Length: 1,000' beyond each end of runway	Adequate
Markings	Basic	
Lighting	Medium-Intensity Edge Lights	Installed 1978
Visual Approach Slope Indicators (VASI)	4-box type Runway 17 - right side 3.5° glide angle Runway 35 - left side 3.0° glide angle	
Wind Indicators	Lighted wind cone in segmented circle; located near midfield Supplemental wind cones on east side of each runway end	Installed 1978
Approaches	Runway 17 (visual) - clear 25:1 (tree) Runway 35 (nonprecision) - clear 50+:1	Additional trees on edges of both approach surfaces
Taxiways		
East Parallel	40' wide; full length of runway 200' runway centerline to taxiway centerline Holding bays at each end Section: 2" Asphalt 7" aggregate base 3" sub-base Strength: 30,000# (single-wheel) Reflectors both sides	Very Good Built 1977
Runway Exits	Each end plus 2 midfield All 40' wide Section: same as East Parallel Hold lines marked 125' from runway centerline	
Signs	On parallel taxiway at cross taxiways: "Calm Runway No. 35 - Advise 122.7 UNICOM before Takeoff" "Warning: Takeoff from Ends of Paved Runway Only"	

ITEM		DESCRIPTION	CONDITION/COMMENTS
BUILDING AREA -- STATE-OWNED LANDS			
Higgins Leasehold			
S1	T-Hangars	42'x335' Corrugated metal on wood frame 10 aircraft bays	Very Good Built 1983
S2	T-hangars	42'x185' Corrugated metal on wood frame 5 aircraft bays	Very Good Built 1983
S3	T-Hangars	42'x130' Corrugated metal on wood frame 3 aircraft bays	Very Good Built 1983
S4	Corporate Hangar	60'x185' Corrugated metal on wood frame 2 large, rectangular bays	Very Good Built 1983
	Hangar Taxilanes	25' wide; Asphalt pavement	Good Built 1983
Columbia Aviation Leasehold			
S5	North Apron	1.5 acres; 16 tiedowns Section: 2" Asphalt 4" aggregate base 6" sub-base Strength: 12,500# (single wheel)	Good Built 1978
S6	Conventional Hangar	90'x100' plus attached 1-story office Corrugated metal on wood frame 1 large aircraft maintenance bay	Very Good Built c. 1981
S7	T-Hangars	42'x365' Corrugated metal on wood frame 10 aircraft bays	Very Good Built c. 1981
S8	Office	40'x100' Wood frame and siding; corrugated metal roof	Very Good Built c. 1981
Other			
S9	South Apron	2.1 acres; 38 tiedowns Section: 1.5" Asphalt 8" aggregate base Strength: uncertain	Fair Weeds in cracks
S10	Airport Beacon	Standard green/white Mounted on wood tower	Installed 1978
S11	Regulator Building		Built 1978
S12	Auto Parking	0.5 acres; approx. 35 spaces Asphalt pavement	Good
S13	Access Road	22' wide, 500' long Asphalt pavement	Good
S14	Remote Communications Air/Ground Facility	Provides radio communications with Portland TRACON; 126.0 MHZ	
BUILDING AREA -- PRIVATELY OWNED LANDS			
Columbia Helicopters Property			
	Parcel	Approx. 21.4 acres No taxiway access to airport	
A1	Helicopter Maintenance Facility and Offices	130'x210'	Built 1975
A2	Truck Maintenance Facility	90'x330'	Built c. 1979
A3	Helicopter Touchdown Pad	140' diameter; asphalt Not marked	Built 1975

ITEM		DESCRIPTION	CONDITION/COMMENTS
Treit Property			
	Parcel	Approx. 16.7 acres	
B1	Apron	Approx. 3.7 acres; irregularly shaped area Approx. 30 tiedowns Asphalt taxilanes; turf tiedown areas	Good Built c. 1969
B2	T-Hangars	4 identical buildings 40'x315' Corrugated metal on steel frame; electricity 10 aircraft bays in each	Very Good Built 1968-70
B3	Corporate Hangar	50'x185' Corrugated metal on steel frame; electricity 3 large rectangular bays 2 bays used by airport businesses	Excellent Built 1986
B4	Corporate Hangar	50'x185' Corrugated metal on steel frame; electricity 3 large rectangular bays 1 bay used by airport business	Excellent Built 1986
B5	Radio Shop	40'x100' Corrugated metal on steel frame 3 bay T-hangar with 2 bays for shop and 1 for office	Good
B6	Office	30'x50' Wood construction	Good
B7	Office	Old railroad caboose	Good
B8	Fuel Island & Building	10'x10' building Corrugated metal 2 pumps on island	Good
B9	Fuel Storage	2 underground tanks; each 10,000 gal. capacity Both currently 100LL	Good
B10	Portable Hangars	3 units	Good
B11	Auto Parking	Approx. 40 cars Oiled gravel surface	Good
Bennett Property			
	Parcel	Approx. 15.1 acres	
C1	Apron	2.4 acres; 31 tiedowns Asphalt pavement	Fair Built c. 1973
C2	Maintenance Hangar	50'x65' with 20'x20' lean-to Corrugated metal on wood frame	Very Good Built 1974
C3	Shop	30'x45' Wood construction	Fair Built c. 1972 Used for line service and aircraft washing
C4	Office	30'x40' Wood construction	Good Built 1972
C5	Office Annex	12'x65' Mobile Home unit	Good Installed 1975
C6	Office Annex	10'x50' Mobile Home unit	Good Installed 1972
C7	Residence/Security	12'x55' Mobile Home unit	Good Installed 1983
C8	Fuel Storage	2 above ground tanks 12,000 gal. -- 100LL 4,000 gal. -- Jet	Good Installed 1974; refurbished 1986
C9	Auto Parking	0.4 acres; approx. 60 autos Oiled gravel surface	Good

ITEM		DESCRIPTION	CONDITION/COMMENTS
C10	Access Road	18' wide; 1,000' long Oiled gravel	Good
	UNICOM	Common Traffic Advisory Frequency 122.7 MHz	
Jacobsen Property			
	Parcel	Approx. 13.4 acres	
D1	Apron	Approx. 4.0 acres; 48 installed tiedowns plus additional space available Asphalt taxilanes; 4 paved tiedown positions, remainder turf	Asphalt: Poor-Fair Built various years
D2	T-Hangars	30'x290' Corrugated metal on wood frame 10 aircraft bays, not partitioned	Fair-Good Built c. 1956 Partly refurbished 1986
D3	T-Hangars	55'x105' Corrugated metal on wood frame 4 aircraft bays	Very Good Built 1981
D4	T-Hangars	35'x195' Corrugated metal on wood frame 6 aircraft bays	Poor-Fair Built c. 1952
D5	T-Hangars	55'x270' Corrugated metal on wood frame 10 aircraft bays 2-story office on W end	Very Good Built 1982
D6	Conventional Hangar	80'x180' Sheet metal on steel frame Currently vacant	Very Good Built c. 1970
D7	Concrete Slab	65'x290' Remaining from 10-unit T-Hangar destroyed by fire	Constructed 1982
D8	Conventional Hangar	70'x135' Sheet metal on wood 2 aircraft bays plus attached 2-story office	Fair Moved to site in 1966; added to in 1969 Occupied by Alair Aviation
D9	Office	40'x40' 2-story, wood frame Offices below, apartment above	Good Built c. 1965 Occupied by South Portland Aviation
D10	Fuel Island	2 pumps	
D11	Fuel Storage	2 underground tanks; each 5,000 gal. capacity; both 100/130 octane	
D12	Auto Parking	Approx. 0.2 acres; 40 spaces Asphalt surface	Good
	Fencing	Installed along street frontage and parking lot	
OTHER FACILITIES			
	Fencing	Only along highway r.o.w. and limited other locations	Inadequate
	Utilities	Electricity supplied by: PG&E	Adequate at present
		Water supply from private wells on each parcel	Adequate at present
		Wastewater treatment by private septic systems on each parcel	Marginal - soil percolation tests have yielded sporadic findings

2000 Master Plan

The following are direct excerpts from the 2000 master plan.

General Facts

- Runway was 5,000 feet long by 100 feet wide
- Pavement strength was rated at 30,000 lbs for aircraft with single wheel landing gear and 45,000 for aircraft with two (dual) wheels per landing gear
- 180 tie-down aircraft parking spaces—30 percent of hangar spaces and tie-downs were on state land
- Annual operations in 1998 were 87,914; projected to grow to 108,204 by 2017
- Was the fifth busiest airport in Oregon at this time.
- Served charter, corporate, and recreational users
- State owned approximately 144 acres of airport land with easements of 350 acres along the sides and off the ends of the runways
- Approximately 180 tie-down aircraft parking spaces
- Noted that the city of Aurora, Marion County, and Clackamas County each established an Airport Overlay Zone/District to protect the airport and airspace—restricts heights of buildings and other structures or trees and use of land that would create electrical interference with radio communications, use lighting/building materials that would cause glare or harm aircraft[61]

Recommendations of Note

- Provide for future development at the airport in accordance with this plan
- Place high priority on removal of identified airspace obstructions
- Acquire remaining identified navigation easement areas to gain sufficient control of airport airspace
- Maintain compatibility of plan with comprehensive plans, other necessary planning documents, and land use regulations for the city of Aurora, Marion County, and Clackamas County
- Recommended runway width be reviewed with overlay or reconstruction as needed; additionally noted the 100 feet exceeds the seventy-five-foot standard for an ARC B-II runway[62]
- Recommended the taxiway be located 300 feet from the runway centerline to match the setback of the southern-most section—would allow the airport to meet the standards for lower visibility minimums as low as three-quarter mile

Findings of Note

- Land use compatibility: Looked at effect of existing and forecast of airport operations, both on-airport and off-airport; aircraft noise, Marion County zoning classification of public use was evaluated; obstructions of trees along Wilsonville-Hubbard Highway
- Also looked at three areas of compatibility: ownership of Runway Protection Zones (RPZs), projection of airport airspace from obstruction, and zoning classification for the airport
- Runway: Runway length of 5,000 feet was found to be "adequate for most of the aircraft in the ARC B-II class and no extension [was] needed."[63]

[61] Master Plan Update, Aurora State Airport 1998–2017, p. 6-2.

[62] Airports serving larger general aviation and commuter-type planes are usually Airport Reference Code B-II or B-III.

[63] 2000 Master Plan Update, Aurora State Airport 1998-2017, p. 4-7.

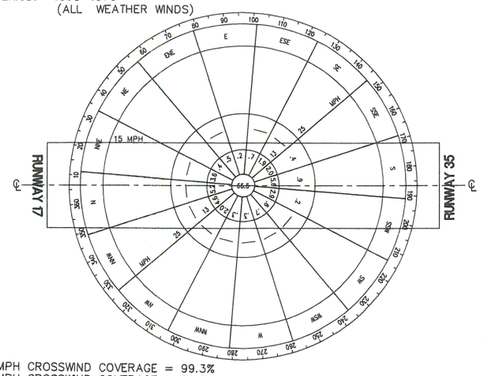
- Aircraft noise was originally part of the scope of this master plan, but an "effective evaluation of noise impacts was well beyond the scope of this study,"[64] so the Aeronautics Division said it set aside funds for a separate noise study.

[64] Master Plan Update, Aurora State Airport 1998–2017, p. 6-1.

WIND ROSE

SOURCE: PORT OF PORTLAND
AURORA STATE AIRPORT

PERIOD: 1968–1970
(ALL WEATHER WINDS)



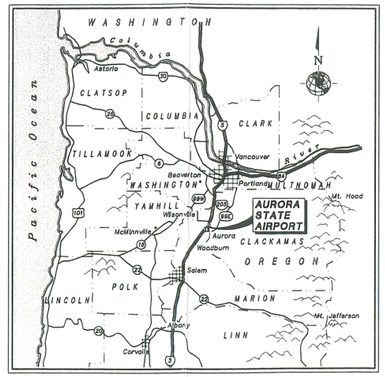
12 MPH CROSSWIND COVERAGE = 99.3%
15 MPH CROSSWIND COVERAGE = 99.5%
(–) INDICATES WIND, BUT LESS THAN 0.1%

MODIFICATIONS TO STANDARDS

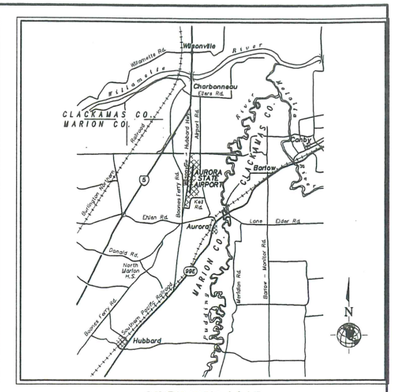
1. ARC B–II STANDARDS FOR RUNWAY/TAXIWAY SEPARATION CALL FOR 240 FEET FOR AIRPORTS WITH AN NPI APPROACH, ONE–MILE VISIBILITY MINIMUMS AND LARGE AIRCRAFT. THE CURRENT SEPARATION IS 200' THROUGHOUT THE MAJORITY OF THE TAXIWAY'S LENGTH. AN INDEFINITE MODIFICATION TO STANDARDS IS RECOMMENDED UNTIL SUCH TIME AS THE TAXIWAY REQUIRES LIGHTING OR MAJOR REHABILITATION. AT THAT TIME, THE SEPARATION SHOULD BE INCREASED TO 300 FEET.

DEVIATIONS FROM STANDARD

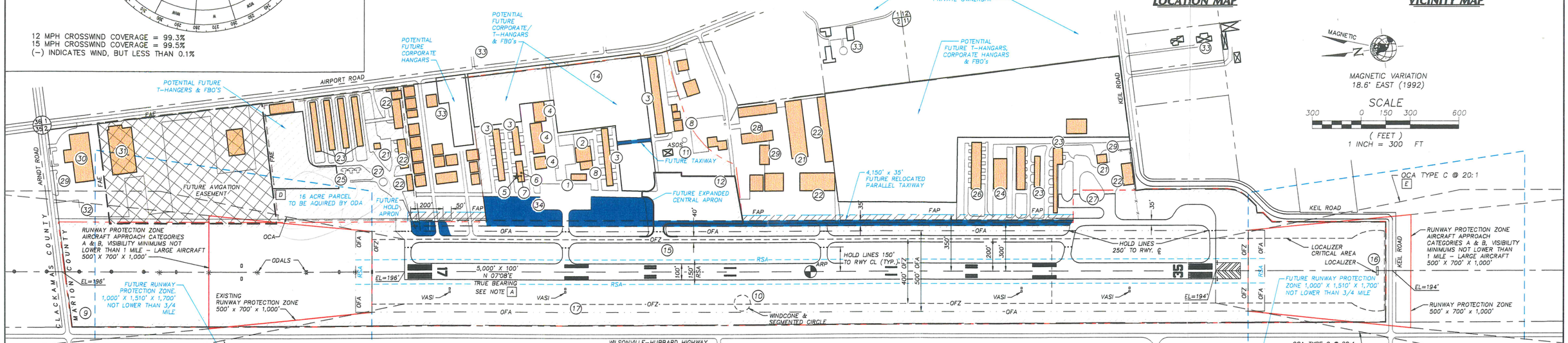
SYMBOL	ITEM	B–II (LARGE) STANDARD	B–II (LARGE) EXISTING	ENCROACHING OBJECT	ACTION
(1)	RUNWAY WIDTH	75'	100'	–	REVIEW FOR MAJOR RUNWAY PROJECT
(2)	TAXIWAY WIDTH	35'	40'	–	REVIEW FOR MAJOR TAXIWAY PROJECT



LOCATION MAP



VICINITY MAP



RUNWAY DATA

			RUNWAY 17–35 EXISTING	RUNWAY 17–35 FUTURE
AIRPORT REFERENCE CODE (CRITICAL AIRCRAFT ARC)			B–II	B–II
CRITICAL AIRCRAFT			SMALL BUSINESS CLASS	SMALL BUSINESS CLASS
PHYSICAL LENGTH AND WIDTH			5,000'x100'	5,000'x100'
EFFECTIVE GRADIENT / MAX. GRADE			0.06% / 0.06%	SAME
PAVEMENT TYPE			ASPHALT CONCRETE	SAME
PAVEMENT STRENGTH SINGLE WHEEL / DUAL WHEEL			30,000/45,000	SAME
RUNWAY SAFETY AREA DIMENSIONS			5,600'x150'	5,600'x150'
RUNWAY OBJECT FREE AREA			5,600'x500'	5,600'x500'
OFZ			NO OFZ OBJECT PENETRATIONS	
APPROACH VISIBILITY MINIMUMS			GREATER THAN 1 MILE	GREATER THAN 3/4 MILE
APPROACH TYPE		17	NPI	NPI
		35	NPI	NPI
APPROACH SLOPE: REQUIRED/CLEAR		17	34:1 / 25:1	34:1 / 34:1
		35	34:1 / 10:1	34:1 / 34:1
APPROACH AND LANDING AIDS		17	GPS, VASI, ODALS, LOC	ADD GPS – WAAS
		35	GPS, VASI, REILS	ADD GPS – WAAS
RUNWAY END COORDINATES SEE NOTE A	RUNWAY 17	LATITUDE	45°15'14.186" N	SAME
		LONGITUDE	122°46'07.842" W	SAME
	RUNWAY 35	LATITUDE	45°14'23.5" N	SAME
		LONGITUDE	122°46'12" W	SAME
RUNWAY LIGHTING			MIRL	MIRL
LINE OF SIGHT			5,000'	5,000'
RUNWAY MARKING			PRECISION	PRECISION
WIND COVERAGE			SEE WIND ROSE	SAME

DECLARED DISTANCES TABLE

	EXISTING 17	EXISTING 35	FUTURE 17	FUTURE 35
TAKEOFF RUN AVAILABLE (TORA)	5,000	5,000	5,000	5,000
TAKEOFF DISTANCE AVAILABLE (TODA)	5,000	5,000	5,000	5,000
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	5,000	5,000	5,000	5,000
LANDING DISTANCE AVAILABLE (LDA)	5,000	5,000	5,000	5,000

AIRPORT DATA

		EXISTING	FUTURE
AIRPORT ELEVATION (Feet above MSL)		196'	SAME
AIRPORT REFERENCE POINT A	Latitude	45°14'54.085" N	SAME
	Longitude	122°46'11.405" W	SAME
MEAN MAX. TEMP (Hottest month)		95°	SAME
COMBINED WIND COVERAGE	VFR	99.3% @ 12 MPH	SAME
	IFR	99.5% @ 15 MPH	SAME
MAGNETIC VARIATION – PER OC591 – AUGUST 1992		18.6° E (1992)	–
AIRPORT REFERENCE CODE		B–II	B–II
AIRPORT SERVICE LEVEL (NPIAS)		GENERAL AVIATION	SAME
TAXIWAY LIGHTING		REFLECTORS	MITL
TAXIWAY MARKING		YES	SAME
AIRPORT & TERMINAL NAVAIDS		LOC/DME, GPS, NDB, ODALS, VASI	ADD GPS – WAAS

LEGEND

DESCRIPTION	EXISTING	FUTURE
AIRPORT PROPERTY		
AVIGATION EASEMENT		FAP FAE
PAVEMENT (ASPHALT)		
ON–AIRPORT BUILDING		
RUNWAY SAFETY AREA	RSA	RSA
RWY OBSTACLE FREE ZONE	OFZ	OFZ
RWY PROTECTION ZONE	RPZ	RPZ
OBJECT FREE AREA	OFA	OFA
TAXIWAY HOLDLINE		
CONTOURS		
PRINCIPAL DRAINAGE FEATURES		

BUILDING AND FACILITIES LEGEND

(1)	ADMINISTRATION BUILDING & FBO OFFICES	(21)	FBO OFFICES
(2)	MAINTENANCE HANGAR	(22)	FBO MAINTENANCE HANGAR/SHOP BUILDING
(3)	T–HANGARS – EXISTING/FUTURE	(23)	T–HANGARS
(4)	EXECUTIVE HANGARS – EXISTING/FUTURE	(24)	CORPORATE/CONVENTIONAL HANGAR
(5)	ROTATING BEACON ON TOWER	(25)	PORTABLE HANGARS
(6)	ELECTRICAL VAULT	(26)	CONCRETE HANGAR SLAB
(7)	PUMP HOUSE	(27)	FUEL STORAGE – UNDER GROUND
(8)	AUTO PARKING	(28)	FUEL STORAGE – ABOVE GROUND
(9)	REMOTE COMMUNICATIONS AIR/GROUND FACILITY	(29)	AUTO PARKING
(10)	WIND CONE & SEGMENTED CIRCLE	(30)	OFFICES
(11)	ADMINISTRATION BLDG & CONTROL TOWER SITE – FUTURE	(31)	TRUCK MAINTENANCE SHOP
(12)	LARGE AIRCRAFT/HELICOPTER PARKING – FUTURE	(32)	HELIPAD
(13)	NOT USED	(33)	RESIDENCES/FARM BUILDINGS
(14)	WATER STORAGE RESERVOIR – FUTURE SITE	(34)	FUTURE FUEL FACILITY
(15)	HELICOPTER TAKEOFF & LANDING ZONE – FUTURE		
(16)	EXISTING LOCALIZER ANTENNA		
(17)	GLIDE SLOPE ANTENNA – FUTURE		

NOTES

A. RUNWAY END COORDINATES AND ARP TAKEN FROM OBSTRUCTION CHART 5722 FOR THE AURORA STATE AIRPORT. SURVEYED DATUM MAY 1992, PUBLISHED JANUARY 1993, HORIZONTAL IS NAD 1983, VERTICAL DATUM IS NGVD 1929.

B. THE AIRPORT IS FLAT. ELEVATIONS VARY BY LESS THAN 5 FEET AND ARE NOT SHOWN. DRAINAGE FEATURES ARE TYPICALLY 2–3 FEET LOWER THAN ADJACENT LAND.

C. BUILDING RESTRICTION LINES ARE BASED UPON A 35–FOOT TALL BUILDING LOCATED 500 FEET FROM THE RUNWAY CENTERLINE NOT PENETRATING SURFACES FOR THE AIRPORT. THE FAR PART 77 SURFACES FOR THE AIRPORT.

D. RUNWAY 17 OCA: TREE PENETRATES THRESHOLD SITING SURFACE BY 1 FOOT. (SEE SHEET 5/6 FOR DETAILS).

E. RUNWAY 35 OCA: NO THRESHOLD SITING SURFACE PENETRATIONS.

DATE	BY	REVISION	CK'D	APPR.

SECTION, TOWNSHIP, RANGE:

W&H PACIFIC
8405 SW Nimbus Avenue
Beaverton, Oregon 97008–7141
(503)626–0455
(503)526–0775 Fax
whpacific.com
A Member of The IT Group
Planners • Engineers • Surveyors • Landscape Architects

FAA APPROVAL
NAME:
TITLE:
DATE:
NOTES:

DESIGNED BY: BWR/CBC
DRAWN BY: JKR
OREGON DEPT. OF AVIATION
DIRECTOR
DATE:

AURORA STATE AIRPORT

AIRPORT LAYOUT PLAN

MARION COUNTY OREGON

SCALE:	PROJECT NO.	DRAWING FILE NAME:	SHEET
1"=300'	4–0167–1601	AAURALO1.DWG	2/6

2012 Master Plan

The following are direct excerpts from the 2012 master plan[65] and news reports.

General Facts

- Runway was 5,004 feet long by 100 feet wide
- Pavement strength was rated at 30,000 pounds for aircraft with single wheel landing gear and 45,000 pounds for aircraft with two (dual) wheels per landing gear
- Parallel taxiway
- 354 based aircraft (2010 data)

Recommendations of Note

- Master plan recommends an extension of at least 1,000 feet at the south end of the airport[66]
- Recommendation was subsequently approved by the FAA on October 19, 2012[67]
- With a runway extension it was also recommended the pavement strength be increased to 60,000 pounds (dual-wheel gear), which is the same pavement strength as the parallel taxiway.[68]

  Details related to runway extension
  - The following alternatives were considered:
    - The no-build alternative
    - Build-alternative 1 includes a 600-foot extension to the north end of the runway
    - Build-alternative 2 incorporates a 1,000-foot extension to the south end of the runway
    - Build-alternative 3 includes no runway extension and parallel taxiway would be relocated 100 feet to the east, multiple buildings would be removed or altered.[69]
  - Seven public meetings were held to review and vet the master plan with a Planning Advisory Committee (PAC)[70]
  - No consensus for a preferred alternative was reached by the PAC
  - The project team consequently recommended the no-build alternative to the Oregon Aviation Board at its March 31, 2011, meeting[71]
  - ODA Board leaves public comment period open until April 21, 2011

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[65] The 2012 Master Plan can be found online at https://www.oregon.gov/aviation/Pages/Final_Aurora_Master_Plan.aspx.
[66] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_5_Alternatives.pdf.
[67] https://www.oregon.gov/aviation/docs/resources/Executive_Summary.pdf.
[68] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_5_Alternatives.pdf.
[69] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_5_Alternatives.pdf.
[70] https://www.oregon.gov/aviation/docs/resources/Appendix_E_PAC_Meeting_Summaries.pdf, PAC members appear to be listed on pages 13–14.
[71] Per *Woodburn Independent*, April 6, 2011, "Among recommendations: *Strengthen the Aurora runway to support plan[es] up to 60,000 pounds with dual-wheel gear. Currently, the runway supports up to 45,000 pounds. The state allowed an increase in the size of the planes that can use the airport to support some of the larger corporate jets already using the airport. *Create a run-up at the north end of the runway that allows planes to check their systems before takeoff. *Reduce visual approach requirements. Planes approaching the airport from the north still need more than a mile of visibility to land. Planes coming from the south end can land with less than a mile of visibility."

- "Based on the comments received during that period, the project team presented potential add-on scenarios 1 and 2 [72]
- On April 28, 2011, the ODA Board chose alternative 2
- Requires no development of any exclusive farm use (EFU) land
- ODA would have to purchase farm land and lease it back for farm use or get an easement for a runway protection zone
- Kiel Road, which runs to the south end of the airport, would have to be rerouted
- Strengthens the runway from 45,000 pound capacity to 60,000 pound capacity

Issues and concerns with potential runway extension

- Issues for airport users:
  "….Airport businesses want to be able to grow, and airport users want utility improvements, particularly sewer service, for existing and future facilities. For example, the lack of sewer service is a major constraint for having a restaurant at the airport."[73]

  "Some airport users report there are times that they must lessen their airplane's weight in order to depart from the airport. Reducing weight means fewer passengers, less cargo, or, most often, less fuel—requiring them to make more refueling stops than the range of their aircraft requires. On hot days, some operators may reschedule a flight to a cooler time of day due to the effect temperature has on the aircraft's takeoff performance."

- Issues of concern raised:
  "Concerns about airport expansion include the effects on the capacity of surrounding infrastructure and environmental impacts. Neighboring jurisdictions fear that off-airport roads and utility systems cannot handle increased usage from airport growth. The Aurora Fire District is concerned about having enough equipment and people to protect expanded airport facilities….Airport neighbors are also concerned about noise and other possible airport impacts that could degrade the rural character, quality of life, and natural environment of the area."[74]

Other Recommendations of Note

- The FAA performed a cost-benefit analysis that justified an air traffic control tower at the airport
- Recommends that Aurora State Airport continue to fulfill its role as an Urban General Aviation Airport
- ODA should establish departure procedures for runway 17-35 to avoid flight over noise-sensitive areas, and change the altitude limit on left turns when departing runway 35 (report says ODA was working with FAA and would publish and update in fall 2011)
- Constrained operations: "The 500 annual constrained operations threshold is projected to occur within five years. Even if jet traffic does not grow as fast as projected, it is likely the

[72] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_5_Alternatives.pdf.
[73] On the other hand, airport businesses want to be able to grow, and airport users want utility improvements, particularly sewer service, for existing and future facilities. For example, the lack of sewer service is a major constraint for having a restaurant at the airport.
[74] Available online at https://www.oregon.gov/aviation/2011%20Aurora%20Master%20Plan%20Final%20Draft/Chapter_1_Introduction.pdf

number of constrained operations will exceed 500 within the twenty-year planning period. Consequently, ODA may want to consider planning for a runway extension now, in order to protect the airspace needed, among other things. To justify FAA funding for a planned extension, operators may need to be surveyed again in the future to identify operations that may be constrained."[75]

- ODA should continue to work with and support Marion County and the City of Aurora as improvements to Airport Road are considered; appropriate considerations should be given to the entrances (gates) to the airport and businesses along Airport Road
- Land use: In general, the airport meets state and county land use requirements. Even so, the ODA and Marion County should work towards several items regarding land use and zoning around the airport.[76]
- Zoning code:
    - ODA should consider working with Marion County to rezone the underlying designations within the Airport property as "Airport" to ensure that only compatible uses occur within the Airport property boundary. The rezoning would be based on Oregon Administrative Rules Division 13, Airport Planning, which provides guidelines for local government land use compatibility to encourage and support the continued operation and vitality of Oregon's airports.
    - Marion County should consider adopting the standards of ORS 836.616, which authorizes certain airport uses and activities to occur at the Airport.
    - A portion of the Airport Overlay, which protects FAR Part 77 Imaginary Surfaces, extends into Clackamas County. The Overlay should be maintained and updated as needed based on any airport layout changes recommended in this Master Plan.[77]
- Comprehensive plan:
    - If Marion County adopts this Master Plan, it would adopt it as a component of the Marion County Comprehensive Plan and all projects identified within the Plan would receive "conditional use" approvals for development. As such, a Traffic Impact Analysis would be necessary for any projects that would have a significant impact on area ground transportation, prior to the County's adoption, in order to meet Statewide Goal 12. Alternatively, ODA could not submit the Plan to Marion County and instead apply for conditional approvals for individual projects. The advantages and disadvantages of these options will be further discussed in Chapter Five as development alternatives are identified.
    - Adopt a title notice or similar requirement to inform purchasers of property within one mile of the Airport that their property is located adjacent to or in close proximity to the Airport and their property may be affected by a variety of aviation activities. Note that such activities may include but are not limited to noise, vibration, chemical odors, hours of operations, low overhead flights, and other associated activities.[78]

Findings of Note

- The airport has grown at a faster rate than past planning efforts expected.
    - It has become popular for both personal and business GA use.

[75] Available online at: https://www.oregon.gov/aviation/docs/resources/Chapter_4_Facility_Requirements.pdf
[76] Ibid.
[77] Ibid.
[78] Ibid.

    - The growth in business use is likely due to the airport's location with access to Interstate 5, along with private development adjacent to the state-owned airport property.
- Clackamas County and Aurora have both enacted Airport Overlay Zones as required by ORS 836.600 through 836.630."[79]
- Commercial air service is not an appropriate future role for Aurora State Airport. Portland International Airport has the capacity to handle commercial passenger and cargo airline activity in the region for many years to come. If commercial service grows elsewhere in the region, it will likely be at Salem, which is more suitable for commuter airline service."[80]
- Utilities: "New septic systems will be required for buildings with sanitary facilities, and may limit growth potential at the airport until sewer service is provided. The lack of sewer service is a particular problem for establishing food service facilities. Extensions of electricity, water, and telephone to future facilities will be required as needed. The City of Aurora has express concerns that additional groundwater wells or expansion of water facilities at the airport will have negative impacts upon the city's current water supply. Drinking water quality is also a concern for the city. Continued development and/or potential expansion of airport facilities without proper advanced planning and feasibility assessments regarding the airport's ability to meet water, sewer, and fire protection needs concerns the city."[81]
- Environmental issues: **"**Beyond controversy over noise and airport expansion, there do not appear to be any significant environmental issues on the airport or in the airport vicinity, with the exception of concerns over vehicular traffic/safety. Additional study regarding noise, threatened and endangered species, cultural resources, and possibly hazardous materials should be conducted once a project is defined."[82]
- Traffic counts: Traffic counting showed the airport generated 2,400 trips per day. A potential runway extension was projected to increase aircraft based at the airport by 28 percent ten years after the runway extension was completed (i.e., from approximately 350 based aircraft to 450 by 2030). The projected based aircraft would further translate into a proportional increase of 28 percent in daily traffic and would generate an additional 700 trips per day. The evening peak hour percentage of daily traffic was judged to be about 20 percent (this is 10 percent higher than what is typically assumed because their evening peak hour percentage was judged to be proportionally higher than typical). Applying this percentage to the estimated 700 additional daily trips would translate to about 140 additional trips during a evening peak hour in 2030. If one assumes that all of the airport traffic heads northbound on Interstate 5, it would be added into the average daily traffic volume of over 155,000 vehicles and would increase Boone Bridge traffic by 0.05 percent in 2030. A traffic impact analysis would be needed to determine how many actual trips originate north of the airport versus east, west, or south.[83]

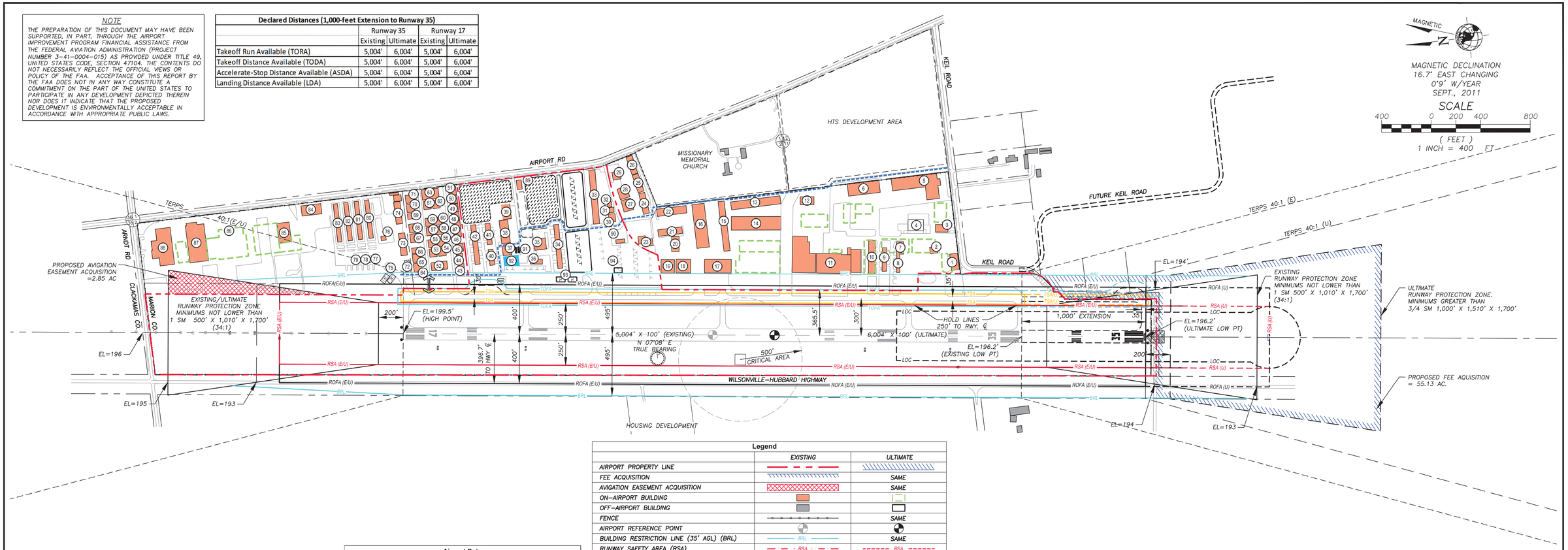
[79] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_2_Inventory.pdf.
[80] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_1_Introduction.pdf.
[81] Available online at https://www.oregon.gov/aviation/docs/resources/Chapter_4_Facility_Requirements.pdf.
[82] Available online at https://www.oregon.gov/aviation/2011%20Aurora%20Master%20Plan%20Final%20Draft/Chapter_2_Inventory.pdf.
[83] From ODOT Region 2 staff and from report available online at https://www.oregon.gov/aviation/docs/resources/Appendix_J_Traffic_Analysis.pdf.

NOTE

THE PREPARATION OF THIS DOCUMENT MAY HAVE BEEN SUPPORTED, IN PART, THROUGH THE AIRPORT IMPROVEMENT PROGRAM FINANCIAL ASSISTANCE FROM THE FEDERAL AVIATION ADMINISTRATION (PROJECT NUMBER 3-41-0004-015) AS PROVIDED UNDER TITLE 49, UNITED STATES CODE, SECTION 47104. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS REPORT BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

Declared Distances (1,000-feet Extension to Runway 35)

	Runway 35		Runway 17	
	Existing	Ultimate	Existing	Ultimate
Takeoff Run Available (TORA)	5,004'	6,004'	5,004'	6,004'
Takeoff Distance Available (TODA)	5,004'	6,004'	5,004'	6,004'
Accelerate-Stop Distance Available (ASDA)	5,004'	6,004'	5,004'	6,004'
Landing Distance Available (LDA)	5,004'	6,004'	5,004'	6,004'



Legend

	EXISTING	ULTIMATE
AIRPORT PROPERTY LINE		
FEE ACQUISITION		SAME
AVIGATION EASEMENT ACQUISITION		SAME
ON-AIRPORT BUILDING		
OFF-AIRPORT BUILDING		
FENCE		SAME
AIRPORT REFERENCE POINT		
BUILDING RESTRICTION LINE (35' AGL) (BRL)	BRL	SAME
RUNWAY SAFETY AREA (RSA)	RSA	RSA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA	ROFA
RUNWAY PROTECTION ZONE (RPZ)		
EXTENDED RUNWAY CENTERLINE		SAME
DISPLACED THRESHOLD	N/A	
RUNWAY HOLDLINE		SAME
TAXIWAY SAFETY AREA (TSA)	TSA	TSA
TAXIWAY OBJECT FREE AREA (TOFA)	TOFA	TOFA
SERVICE ROAD	N/A	
HANGAR DEVELOPMENT AREA		SAME
APRON / TIEDOWN AREA		
WINDCONE & SEGMENTED CIRCLE		SAME
VASI		SAME
PAPI	N/A	
REIL		SAME
ODAL		
LOCALIZER		
LOCALIZER CRITICAL AREA	LOC	SAME
CARGO APRON	N/A	
PAVEMENT		
PAVEMENT REMOVAL		SAME
FUEL TANKS		
HELICOPTER PARKING	H	H
RESIDENTIAL THROUGH THE FENCE ACCESS (RTTF)		SAME

Runway 17/35 Data

	Existing	Ultimate
Percent Effective Gradient	0.06%	Same
Percent Wind Coverage (10.5 kts)	98.93%	Same
Maximum Elevation Above MSL	199.5'	Same
Runway Length	5,004'	6,004'
Runway Width	100'	Same
Runway Surface Type	Asphalt	Same
Runway Strength (Dual Wheel Gear)	45,000 lbs	60,000 lbs
FAR Part 77 Approach Category		
Runway 17	C (NP)	Same
Runway 35	C (NP)	D (NP)
Approach Type	Nonprecision	Same
Runway 17	Not lower than 1 sm	Same
Runway 35	Not lower than 1 sm	Not lower than 3/4 sm
Approach Slope (Required / Clear)	34:1 / 34:1	Same
Runway Lighting	MIRL	Same
Runway Marking	Precision	Same
Taxiway Lighting	MITL / Reflectors	Same
Taxiway Marking	Standard	Same
Navigation Aids	LOC/DME, NDB	Same
Visual Aids	ODALS, VASI, REIL	ODALS, PAPI, REIL
Runway Safety Area Dimension	500' x 1,000' beyond rwy end	Same
Runway Object Free Area Dimension	800' x 1,000' beyond rwy end	Same
Runway Obstacle Free Zone (OFZ)	No OFZ Penetrations	Same
Runway End Coordinates		
Runway 17 Latitude	45°15'14.166"N	Same
Longitude	122°46'07.828"W	Same
Runway 35 Latitude	45°14'25.148"N	45°14'15.350"N
Longitude	122°46'16.515"W	122°46'18.251"W

Airport Data

	Existing	Ultimate
Airport Elevation (MSL)	199.5'	Same
Airport Reference Point (ARP)		
Latitude	45°14'54.085"N	45°14'44.758"N
Longitude	122°46'11.405"W	122°46'13.040"W
Mean Maximum Temperature	84°	Same
Airport Reference Code (ARC)	C-II	C-II
Airport Service Level	General Aviation	Same
Design Aircraft	IAI Astra 1125	Cessna Citation X

Notes

Horizontal datum is NAD 1983, vertical datum is NAVD88.
The Airport is flat. Elevations / ground contours vary by less than 5 feet and are not shown. Drainage features are typically 2-3 feet lower than adjacent land.
Building restriction line is based on a 35-foot building located 495 feet from the runway centerline not penetrating FAR Part 77 surfaces for the Airport.
A Residential Through The Fence (RTTF) access exists at hangar #64 at the Wylee Condominium Association. The tenant is the resident caretaker for the airport.

Modifications to Standards

	Standard Being Modified	Proposed Action
1	Advisory Circular (AC) 150/5300-13, para 307 (Runway Object Free Area)	The standard runway object free area (OFA) for Airport Reference Code C-II airports is 800 feet. Highway 551 runs north/south parallel to Runway 17/35; the approximate distance from the Runway 17/35 centerline to the Highway 551 centerline is 400 feet. As the airport geometry is not changing from the current condition, the Oregon Department of Aviation (ODA) requests a modification of the OFA design standard to allow the runway and highway to remain in their current positions.
2	AC 150/5300-13, Appendix 14 (Declared Distances)	The ODA requests the existing threshold for Runway 17 be referenced in determining FAR Part 77 surfaces and design standard surfaces referenced in AC 150/5300-13 (*i.e.*, RSA, RPZ, OFA, OFZ).

Airport Facilities and Buildings Legend

Building No. Existing	Building No. Ultimate	Name / Owner	Use	Estimated Top Elevation (AGL)
1		Leased by Aurora Jet Center	Maintenance, Aircraft Storage	27'
2		Aurora Jet Center	Fixed Base Operator	22'
3		Private Southend Hangar	Aircraft Storage	19'
4		BPS Associates	Aircraft Storage	23'
5		Van's Aircraft	Business	30'
6		Artex	Business	26'
7, 8		Foxtrot Hangars / Southend Airpark	Aircraft Storage	21'
9		Hangar Row G / Southend Airpark	Aircraft Storage	13'
10		Hangar Row H / Southend Airpark	Business, Aircraft Storage	21'
11		Hangar India, Juliet & Kilo / Southend Airpark	Business, Aircraft Storage	38'
12		Winco	Business	29'
13		Hangar November / Southend Airpark	Business, Aircraft Storage	29'
14		Hangar Mike / Southend Airpark	Business, Aircraft Storage	31'
15 – 17		Airport Aviation Condo Association	Aircraft Storage	32'
18		Airport Aviation Condo Association	Aircraft Storage	32'
19		Aurora Aviation	Maintenance	26'
20 – 22		Airport Aviation Condo Association	Aircraft Storage	25'
23		Columbia Aviation Association	Clubhouse	21'

Airport Facilities and Buildings Legend

Building No. Existing	Building No. Ultimate	Name / Owner	Use	Estimated Top Elevation (AGL)
24 – 26		Meridian Condos	Business	23'
27 – 29		Pacific Coast Aviation	Business	26'
30 – 33		Oregon Dept. of Aviation	Aircraft Storage	25'
34		Columbia Helicopters	Aircraft Storage	22'
35		Columbia Helicopters	Maintenance	28'
36		Aurora Aviation	Fixed Base Operator	16'
37		Pitts Hangar	Aircraft Storage	26'
38 – 42		Aurora Business Park	Aircraft Storage	25'
43 – 71		Wylee Condo Association	Aircraft Storage	27'
72		Civil Air Patrol Building	Aircraft Storage	26'
73		Sunset Helicopters	Business	26'
74		Aerometal	Business	27'
75		Willamette Aviation	Aircraft Fueling	7'
76		Willamette Aviation	Fixed Base Operator	12'
77 – 83		Willamette Aviation	Aircraft Storage	16'
84		Marlow Treit	Aircraft Storage	22'
85 – 88		Columbia Helicopters	Business	30'
89		Fire Suppression Tanks	Fire Suppression	12'
	90	Aurora Rural Fire Protection District	Emergency Response	TBD
	91	Aurora Aviation	Aircraft Fueling	16'
	92	Oregon Dept. of Aviation	Cargo Apron	N/A
	93	Oregon Dept. of Aviation	Helicopter Parking	N/A
	94	Oregon Dept. of Aviation	Air Traffic Control Tower	90'

WHPacific
9755 SW Barnes Rd, Suite 300
Portland, OR 97225
503-626-0455 Fax 503-526-0775
www.whpacific.com

OREGON DEPARTMENT OF AVIATION

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TITLE DATE:

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DESIGNED	SML
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CHECKED	REA
APPROVED	----
LAST EDIT	10/17/12
PLOT DATE	6/28/2012
SUBMITTAL	

REVISIONS

NO.	BY	DATE	REMARKS

AIRPORT LAYOUT PLAN DRAWING

OREGON DEPARTMENT OF AVIATION
AURORA STATE AIRPORT ~ MASTER PLAN UPDATE

PROJECT NUMBER	DRAWING FILE NAME	SCALE
034317	034317-XREF-MSTR-ALP	1"=400'

SHEET NUMBER 1

APPENDIX D: WHAT IS THE NATIONAL ENVIRONMENTAL POLICY ACT

The following are direct excerpts from EPA.[84]

The National Environmental Policy Act (NEPA) process begins when a federal agency develops a proposal to take a major federal action. These actions are defined at 40 CFR 1508.18. The environmental review under NEPA can involve three different levels of analysis:

- Categorical Exclusion Determination
- Environmental Assessment/Finding of No Significant Impact
- Environmental Impact Statement

Categorical Exclusion
A federal action may be "categorically excluded" from a detailed environmental analysis if the federal action does not, "individually or cumulatively, have a significant effect on the human environment" (40 CFR 1508.4). The reason for the exclusion is generally detailed in NEPA procedures adopted by each federal agency.

Environmental Assessment/Finding of No Significant Impact
Note: Per the Oregon Department of Aviation application for supplemental grant funding the proposed runway extension would require an environmental assessment. The next section has reference information from the FAA on what projects qualify as an environmental assessment.

A federal agency can determine that a categorical exclusion does not apply to a proposed action. The federal agency may then prepare an environmental assessment. The environmental assessment determines whether or not a federal action has the potential to cause significant environmental effects. Each federal agency has adopted its own NEPA procedures for the preparation of environmental assessments. See NEPA procedures adopted by each federal agency.

Generally, the environmental assessment includes a brief discussion of the following:

- The need for the proposal;
- Alternatives (when there is an unresolved conflict concerning alternative uses of available resources);
- The environmental impacts of the proposed action and alternatives; and
- A listing of agencies and persons consulted.

Based on the environmental assessment, the following actions can occur:

- If the agency determines that the action will not have significant environmental impacts, the agency will issue a finding of no significant impact. Such a finding is a document that presents the reasons why the agency has concluded that there are no significant environmental impacts projected to occur upon implementation of the action.

[84] Available online at https://www.epa.gov/nepa/national-environmental-policy-act-review-process.

- If the environmental assessment determines that the environmental impacts of a proposed federal action will be significant, an environmental impact statement (EIS) is prepared.

Environmental Impact Statements (EIS)

Federal agencies prepare an EIS if a proposed major federal action is determined to significantly affect the quality of the human environment. The regulatory requirements for an EIS are more detailed and rigorous than the requirements for an environmental assessment.

Summary of the EIS Process

1. An agency publishes a Notice of Intent in the Federal Register. The Notice of Intent informs the public of the upcoming environmental analysis and describes how the public can become involved in the EIS preparation.

   This Notice of Intent starts the scoping process, which is the period in which the federal agency and the public collaborate to define the range of issues and possible alternatives to be addressed in the EIS.

2. A draft EIS is published for public review and comment for a minimum of 45 days.

   Upon close of the comment period, agencies consider all substantive comments and, if necessary, conduct further analyses.

3. A final EIS is then published, which provides responses to substantive comments.

   Publication of the final EIS begins the minimum 30-day "wait period," in which agencies are generally required to wait 30 days before making a final decision on a proposed action.

   EPA publishes a Notice of Availability in the Federal Register, announcing the availability of both draft and final EISs to the public. Find EISs with open comments or wait periods.

4. The EIS process ends with the issuance of the Record of Decision (ROD). The ROD:

- explains the agency's decision,
- describes the alternatives the agency considered, and
- discusses the agency's plans for mitigation and monitoring, if necessary.

What is included in an EIS?

An EIS Includes:

- A cover sheet that includes, among other things, the following:
  - the name of the lead agency and any cooperating agency;
  - agency contact information;
  - the title of the proposed action and its location;
  - a paragraph abstract of the EIS; and

    - the date when comments must be received.
- A summary of the EIS that includes the major conclusions, area of controversy, and the issues to be resolved.
- A table of contents that assists the reader in navigating through the EIS.
- A purpose and need statement that explains the reason the agency is proposing the action and what the agency expects to achieve.
- Consideration of a reasonable range of alternatives that can accomplish the purpose and need of the proposed action.
- Description of the environment of the area to be affected by the alternatives under consideration.
- A discussion of the direct and indirect environmental consequences and their significance.
- A list of the names and qualifications of the persons who were primarily responsible for preparing the EIS.
- A list of agencies, organizations, and persons to whom the EIS was sent.
- An index focusing on areas of reasonable interest to the reader.
- Appendices (if required) that provide background materials prepared in connection with the EIS.

  For a detailed explanation read 40 CFR Part 1502.

When is a supplement to the EIS required?

A supplement to a draft or final EIS is required when an agency makes substantial changes to the proposed action that are relevant to its environmental concerns; or there are significant new circumstances or information relevant to the environmental effects that have bearing on the proposed action or its impacts. If an agency decides to supplement its EIS, it prepares, circulates, and files the supplemental EIS in the same fashion as a draft or final EIS.

APPENDIX E: FAA NEPA IMPLEMENTING PROCEDURES MANUAL: ENVIRONMENTAL ASSESSMENT CHAPTER

The following are direct excerpts from FAA.[85]

CHAPTER 4.

ENVIRONMENTAL ASSESSMENTS AND FINDINGS OF NO SIGNIFICANT IMPACT

400. INTRODUCTION. This chapter summarizes and supplements CEQ requirements for environmental assessments (EA) and findings of no significant impact (FONSI). According to 40 CFR 1508.9 and Order DOT 5610.1C (July 13, 1982), an environmental assessment (EA) is a concise document used to describe a proposed action's anticipated environmental impacts. In 1978, the CEQ revised its regulations to allow agencies to prepare EA's in accordance with section 102(2)(E) and 40 CFR 1501.2c and 1507.2(d), when the following conditions apply or at any time to aid in agency planning and decision making.

401. ACTIONS NORMALLY REQUIRING AN ENVIRONMENTAL ASSESSMENT (EA). The following actions are examples of actions that normally require an EA. Some FAA projects involve actions by multiple FAA program offices. The overall significance of these actions, when viewed together, governs whether an EA or an EIS is required.

401a. Acquisition of land greater than three acres for, and the construction of, new office buildings and essentially similar FAA facilities.

401b. Issuance of aircraft type certificates for new, amended, or supplemental aircraft types for which environmental regulations have not been issued, or new, amended, or supplemental engine types for which regulations have not been issued, or where an environmental analysis has not been prepared in connection with regulatory action.

401c. Evaluation for new, amended, or supplemental commercial launch license applications where an environmental analysis has not been prepared.

401d. Establishment of aircraft/avionics maintenance bases to be operated by the FAA.

401e. Authorization to exceed Mach 1 flight under 14 CFR 91.817.

401f. Establishment of FAA housing, sanitation systems, fuel storage and distribution systems, and power source and distribution systems.

401g. Establishment or relocation of facilities such as Air Route Traffic Control Centers (ARTCC), Airport Traffic Control Towers (ATCT), and off-airport Air Route Surveillance Radars (ARSR), Air Traffic Control Beacons (ATCB), and Next Generation Radar (NEXRAD).

401h. Establishment, relocation, or construction of facilities used for communications (except as provided under paragraph 309a) and navigation that are not on airport property.

[85] Available online at https://www.faa.gov/documentLibrary/media/order/energy_orders/1050-1E.pdf.

401i. Establishment or relocation of instrument landing systems.

401j. Establishment or relocation of approach light systems (ALS) that are not on airport property.

401k. Federal financial participation in, or unconditional airport layout plan approval of, the following categories of airport actions:

(1) Airport location.

(2) New runway.

(3) Major runway extension.

(4) Runway strengthening having the potential to increase off-airport noise impacts by DNL 1.5 dB or greater over noise sensitive land uses within the day-night level (DNL) 65 dB noise contour.

(5) Construction or relocation of entrance or service road connections to public roads which substantially reduce the Level of Service rating of such public roads below the acceptable level determined by the appropriate transportation agency (i.e., a highway agency).

(6) Land acquisition associated with any of the items in paragraph 401k(1) through 401k(5).

401l. Issuance of an operating certificate, issuance of an air carrier operating certificate, or approval of operations specifications or amendments that may significantly change the character of the operational environment of an airport, including, but not limited to:

(1) Approval of operations specifications authorizing an operator to use turbojet aircraft for scheduled passenger or cargo service into an airport when that airport has not previously been served by any scheduled turbojet aircraft.

(2) Approval of operations specifications authorizing an operator to use the Concorde for any scheduled or nonscheduled service into an airport, unless environmental documentation for such service has been prepared previously and circumstances have not changed.

(3) Issuance of an air carrier operating certificate or approval of operations specification when a commuter upgrades to turbojet aircraft.

401m. New instrument approach procedures, departure procedures, en route procedures, and modifications to currently approved instrument procedures which routinely route aircraft over noise sensitive areas at less than 3,000 feet above ground level (AGL).

401n. New or revised air traffic control procedures which routinely route air traffic over noise sensitive areas at less than 3,000 feet AGL.

401o. Regulations (and exemptions and waivers to regulations) that may affect the human environment.

401p. Special Use Airspace (unless otherwise explicitly listed as an advisory action or categorically excluded under Chapter 3 of this Order). This airspace shall not be designated, established, or modified until:

(1) The notice (notice of proposed rulemaking—NPRM—or non-rule circular) contains a statement supplied by the requesting or using agency that they will serve as lead agency for purposes of compliance with NEPA, and in accordance with paragraph 207, Lead and Cooperating Agencies; (e.g., restricted airspace for military use in accordance with the Memorandum of Understanding (MOU) between the FAA and the Department of Defense (October 4, 2005, 1998)).

(2) The notice contains the name and address, supplied by the requesting or using agency, of the office representing the agency to which comments on the environmental aspects can be addressed.

(3) The notice contains the name and address, supplied by the requesting or using agency, of the office representing the agency to which comments on any land use problems can be addressed (applicable only if Special Use Airspace extends to the surface).

(4) The rule, determination, or other publication of the airspace action contains a statement that the FAA has reviewed and adopted the EA prepared by the requesting agency in accordance with paragraph 404d.

(5) The provisions of p(1)–(4) of this paragraph are not applicable to special use airspace actions if minor adjustments are made such as raising the altitudes; if a change is made in the designation of the controlling or using agency; or if the special use airspace action is temporary in nature and does not exceed ninety days (i.e. temporary military operations area (MOA).

402. TIME LIMITS FOR EA's. The time limits established for all FAA EA's are contained in this paragraph.

402a. A draft EA may be assumed valid for a period of three years. If the approving official has not issued an EA/FONSI within three years of receipt of the final draft EA, a written reevaluation of the draft (see paragraph 410) must be prepared by the responsible FAA official to determine whether the consideration of alternatives, impacts, existing environment, and mitigation measures set forth in the EA remain applicable, accurate, and valid. If there have been changes in these factors that would be significant in the consideration of the proposal, a supplement to the EA or a new EA must be prepared in accordance with the procedures of this chapter.

402b. For approved EA's, two sets of conditions have been established:

(1) If major steps toward implementation of the proposed action (such as the start of construction, substantial acquisition, or relocation activities) have not commenced within three years from the date of issuance of the FONSI, a written reevaluation (see paragraph 410) of the adequacy, accuracy, and validity of the EA will be prepared by the responsible

FAA official. If there have been significant changes in the proposed action, the affected environment, anticipated impacts, or proposed mitigation measures, as appropriate, a new or supplemental EA will be prepared in accordance with the procedures of this chapter.

(2) If the proposed action is to be implemented in stages or requires successive federal approvals, a written reevaluation (see paragraph 410) of the continued adequacy, accuracy, and validity of the EA will be made at each major approval point that occurs more than three years after issuance of the FONSI and a new or supplemental EA prepared, if necessary.

403. IMPACT CATEGORIES. Appendix A of this order identifies environmental impact categories that FAA examines for most of its actions. Appendix A provides references to current requirements; information about permits, certificates, or other forms of approval and review; an overview of specific responsibilities for gathering data, assessing impacts, consulting other agencies, and involving the public; and any established significant impact thresholds. The responsible FAA official should contact the reviewing or pertinent approving agencies for information regarding specific timeframes for applicable review or approval processes.

404. ENVIRONMENTAL ASSESSMENT PROCESS. When the responsible FAA official has determined that the proposed action cannot be categorically excluded, the responsible FAA official will begin preparing an EA. An EA for an airport capacity project, an aviation safety project, or an aviation security project may quality and be appropriate for environmental streamlining under provisions of "Vision 100—Century of Aviation Reauthorization Act" (see Appendix D), although these provisions are more likely to be applicable to an EIS. Figure 4-1, Environmental Assessment Process, presents the EA review process for a typical action. The responsible FAA official does not need to prepare an EA if FAA has decided to prepare an EIS.

404a. The responsible FAA official or applicant gathers data, coordinates or consults with other agencies, and analyzes potential impacts. The responsible FAA official or applicant contacts appropriate federal, tribal, state, and local officials to obtain information concerning potential environmental impacts and maintain appropriate contact with these parties for the remainder of the NEPA process. The responsible FAA official or sponsor should involve the public, to the extent practicable, in preparing EA's (see paragraph 208 regarding public involvement for further guidance). Scoping, as described in 40 CFR 1501.7, is not required for an EA, but is optional at the discretion of the responsible FAA official. When the FAA circulates an EA for comment, comments should be responded to, to the extent practicable.

404b. Program offices must prepare concise EA documents with a level of analysis sufficient to:

(1) Understand the purpose and need for the proposed action, identify reasonable alternatives, including a no action alternative, and assess the proposed action's potential environmental impacts.

(2) Determine if an EIS is needed because the proposed action's potential environmental impacts will be significant.

(3) Determine if a FONSI can be issued because the proposed action will have no significant impacts.

(4) Determine if the responsible FAA official should recommend to the approving FAA official issuance of a FONSI listing: (a) proponent-proposed mitigation to avoid the proposed action's significant impacts; or (b) mitigation the FAA requires to reduce those impacts below applicable significant thresholds.

(5) Provide a comprehensive approach for identifying and satisfying applicable environmental laws, regulations, and executive orders in an efficient manner (see appendix A). Although the NEPA process does not preclude separate compliance with these other laws, regulations, and executive orders, the responsible FAA official should integrate NEPA requirements with other planning and environmental reviews, interagency and intergovernmental consultation, as well as public involvement requirements to reduce paperwork and delay, in accordance with 40 CFR 1500.4(k) and 1500.5(g). 1050.1E 06/08/04 4-6

(6) Identify any permits, licenses, other approvals, or reviews that apply to the proposed action.

(7) Identify agencies, including cooperating agencies, consulted.

(8) Identify any public involvement activities (such as scoping or meetings).

APPENDIX F: ADDENDUM TO COMMENTS FOR MARION COUNTY

From section 3.2.5.3 of this assessment report:

"Marion County Land Use Decision
Marion County originally adopted the 1976 Aurora Master Plan as a component of the Marion County Comprehensive Plan and Transportation System Plan as part of the county's original comprehensive plan. On May 8, 2013, Marion County adopted a resolution acknowledging and supporting the 2012 Aurora State Airport master planning process. The 2012 Aurora State Airport Master Plan is a capital projects plan, which did not qualify as a land use master plan because it lacked essential land use components (i.e., consideration of state statutes and rules, land use goals, etc.). In the resolution, the Marion County Board of Commissioners clearly indicated the acknowledgement was not a land use decision and that future uses/projects at the airport would require applications for any land use permits."

Documents that follow this page:
Marion County Resolution No. 13R-13
ODA Letter Requesting Resolution of Support

BEFORE THE BOARD OF COMMISSIONERS
FOR MARION COUNTY, OREGON

In the matter of acknowledging and supporting the 2012 update to the Aurora State Airport Master Plan)

RESOLUTION NO. 13R-13

WHEREAS, Oregon Revised Statutes 197.173 recognizes the importance of coordination between state agencies and local governments on land use regulations and local permitting procedures; and

WHEREAS, Oregon Revised Statutes 195.025 gives the county coordination responsibility of all planning activities affecting land uses within the county to assure an integrated comprehensive plan for the entire area of the county; and

WHEREAS, Oregon Administrative Rule 660-013-0030 encourages the coordination of state airport plans with local government land use regulations; and

WHEREAS, the Oregon Department of Aviation requested that Marion County acknowledge and support the 2012 update to the Aurora State Airport Master Plan; and

WHEREAS, the Aurora State Airport and surrounding airport related uses constitute a unique and significant economic asset of Marion County and are an important component in general aviation travel in the State of Oregon; and

WHEREAS, the Aurora State Airport and surrounding airport related uses have the potential to impact non-airport properties and uses in the area; now therefore,

BE IT RESOLVED that the Marion County Board of Commissioners acknowledges and supports the 2012 update to the Aurora State Airport Master Plan; and

BE IT FURTHER RESOLVED that the Oregon Department of Aviation is advised to apply for land use permits for uses and projects listed in the Capital Improvement Plan of the 2012 Aurora State Airport Master Plan at such times as the Department is ready to proceed with those uses and projects.

DATED this 8th day of May 2013.

MARION COUNTY BOARD OF COMMISSIONERS

Janet Carlson
Chair

Commissioner

Patricia Milne
Commissioner

Oregon

John A. Kitzhaber, MD, Governor

OREGON DEPARTMENT OF AVIATION

3040 25th Street, SE
Salem, OR 97302-1125
Phone: (503) 378-4880
Toll Free: (800) 874-0102
FAX: (503) 373-1688

April 11, 2013

Mr. Brandon Reich
Senior Planner
Marion County
5155 Silverton Rd. NE
Salem OR 97305

Re: Aurora Master Plan

Dear Mr. Reich

The Aurora State Airport Master Plan Update was undertaken to assess the Airport's role, evaluate the Airport's capabilities, forecast future aeronautical activity for the next 20 years, and plan for the timely development of any new or expanded Airport facilities needed to accommodate future aviation activity.

After two and a half years of meetings and public involvement, the Aurora State Airport Master Plan Update is now complete and approved by both the Federal Aviation Administration (FAA) and the State of Oregon's Aviation Board and adopted by the Oregon Department of Aviation (ODA) as a working document for future development at the airport.

The Oregon Department of Aviation requests that the Marion County Board of Commissioners considers adopting a resolution supporting the Aurora State Airport Master Plan Update and recognizing the economic significance of the airport and the important role it plays in the State of Oregon's aviation system.

Sincerely,

Mitchell T. Swecker
Director