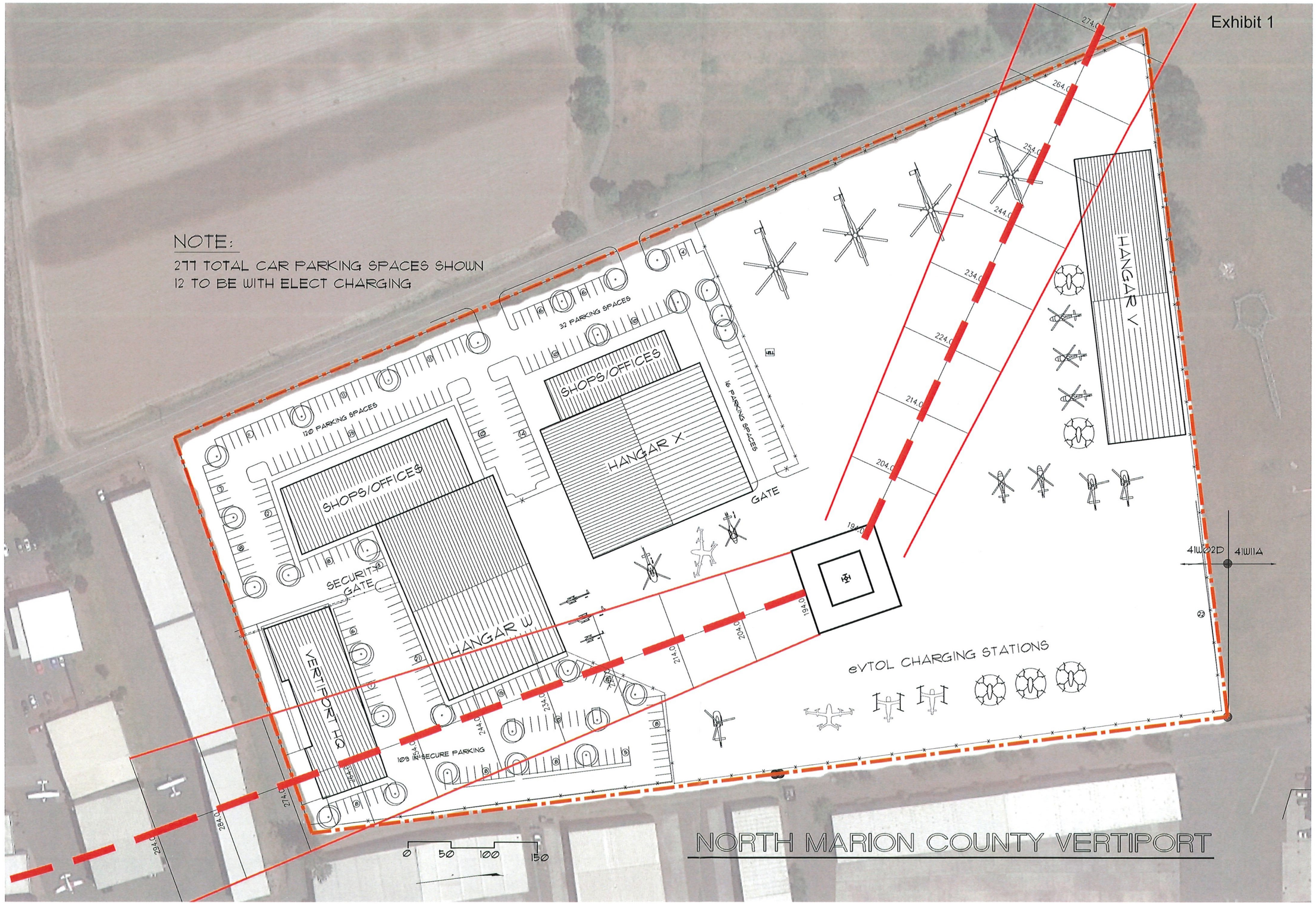
Exhibit 1



ARON FAEGRE ARCHITECT
13200 FIELDING RD.
LAKE OSWEGO
OREGON
97034
503-880-1469

REGISTERED ARCHITECT
ARON FAEGRE
LAKE OSWEGO OREGON
STATE OF OREGON

NORTH MARION COUNTY VERTIPORT -

SITE PLAN

AIRPORT ROAD - AURORA, OREGON

SITE PLAN

DATE 12-15-2023

CHECKED BY AF

REVISIONS

PAGE: L1.0

Exhibit 2

North Marion County Vertiport/Heliport
12/13/2023

NMCVH Buildings					Parking Spaces		
Name	Floor	Uses	Area sf		Occupiable Area (Note 2 below)	Req'd Area per Parking Space	Req'd Spaces
Vertiport HQ	Ground	Shops/Offices	15,658		13,309	300	45
	Second	Shops/Offices	15,658		13,309	300	45
Subtotal				31,316			
Hangar W	Ground	Hangar	32,000		30,400	5000	7
	Mezzanine	Storage	10,560		10,032	5000	3
Hangar W Office/Shops	Ground	Shops/Offices	16,800		14,280	300	48
	Second	Shops/Offices	16,800		14,280	300	48
Subtotal				76,160			
Hangar X	Ground	Hangar	32,000		30,400	5000	7
	Mezzanine	Storage	10,560		10,032	5000	3
Hangar X Office/Shops	Ground	Shops/Offices	7,500		6,375	300	22
	Second	Shops/Offices	7,500		6,375	300	22
Subtotal				57,560			
Hangar V	Ground	Hangar	29,260		27,797	5000	6
	Mezzanine	Storage	9,656		9,173	5000	2
Subtotal				38,916			
				=======			=======
Total Gross Building Area				203,952		Total Spaces Req'd	258
						# parking spaces provided on site plan	277

Notes

1. Parking Analysis based on Marion County Rural Zoning Parking Requirements in 17.118.050 which requires one space per 300 sf primary use plus one space per 5,000 sf of storage or warehouse.

2. Shop/Office space is assumed 2/3 shop and 1/3 office. The same staff work back and forth between a shop and an office.

3. Analysis assumes a 90% efficient building floor plan layout for hangars and mezzanines, i.e. not counting wall thickness and hangar door recess; and a 70% efficient building floor plan layout for offices and shops, i.e. not counting corridors, stairs, elevators, toilets, and mechanical-electrical-plumbing spaces.

Exhibit 3

December 6, 2023

Ted Millar
TLM Holdings LLC
14379 Keil Rd NE, Echo Hanger
Aurora, OR 97002

RE: TLM Holdings LLC's Proposed Transportation Facility

Dear Mr. Millar:

I am the President of Columbia Helicopters, and I am writing to you to support TLM Holdings LLC's proposal for a transportation facility authorizing a heliport or vertiport at 22515 Airport Rd NE, Aurora, next to the Aurora Airport. I understand the proposed use will allow takeoff and landing of helicopters, storage, and other related uses to the operations. Columbia Helicopters provides local, regional, and national services. We are headquartered at the Aurora Airport at 14452 Arndt Rd NE. Our long-term strategic plan anticipates continued growth in operations and aligns with your project as we need to identify near-by opportunities for expanding our capacity for helicopter takeoff and landing, helicopter storage and service, and other related operations. Your property's proximity to our headquarters and existing operations would allow us to efficiently expand our current services and is the ideal location for our future requirements.

If this application were approved, I would strongly consider acquiring your property and locating our expanded operations on this site. I strongly support this application. Please contact me if you have any questions.

Sincerely,

Michael Tremlett

Michael Tremlett
President and CEO

Exhibit 4

LIFE FLIGHT NETWORK™

22285 Yellow Gate Lane, Suite 102
Aurora, Oregon 97002
Office (503) 678-4364
Fax (503) 678-4369

November 16, 2023

Ted Millar
TLM Holdings LLC
14379 Keil Road NE, Echo Hanger
Aurora, OR 97002

RE: TLM Holdings LLC's Proposed Transportation Facility

Dear Mr. Millar:

I am the Chief Executive Officer of Life Flight Network. I support TLM Holdings LLC's proposal for a transportation facility authorizing a heliport or vertiport at 22515 Airport Road NE, Aurora. Life Flight Network has a long history of providing emergency medical care to Marion County, Oregon, and the greater region. We are proud to be headquartered at the Aurora Airport. The proposed use will allow takeoff and landing of helicopters, storage, and other related uses to the operations. Additional land to support helicopter and vertical takeoff of aircraft would enhance Life Flight Network's continued and future success, and Life Flight Network would be interested in leasing property at the new facility.

I strongly encourage Marion County to approve your proposal for the conditional use application and related permits. Please contact me if you have any questions.

Sincerely,

Ben Clayton
Chief Executive Officer

Exhibit 5

Vicinity Map

IN THE COURT OF APPEALS OF THE
STATE OF OREGON

Joseph SCHAEFER,
Petitioner,

v.

MARION COUNTY
and TLM Holdings, LLC,
Respondents.

Land Use Board of Appeals
2020108; A179153

Submitted October 6, 2022.

Joseph Schaefer filed the brief *pro se.*

Alan M. Sorem and Saalfeld Griggs PC filed the brief for respondent TLM Holdings, LLC.

Scott A. Norris filed the brief for respondent Marion County.

Andrew Mulkey filed the brief *amicus curiae* for 1000 Friends of Oregon.

David James Robinson filed the brief *amicus curiae* for City of Aurora.

Before James, Presiding Judge, and Aoyagi, Judge, and Joyce, Judge.

JAMES, P. J.

Reversed and remanded.

JAMES, P. J.

This is the second time we have addressed this land-use dispute involving TLM Holdings, LLC's application to Marion County for a comprehensive plan map amendment, a zoning map amendment, exceptions to Statewide Land Use Planning Goals 3 and 14, and a conditional use permit, all to allow industrial and commercial development on a 16.54-acre parcel adjacent to the Aurora State Airport. In our first opinion, we agreed with petitioner that the Land Use Board of Appeals (LUBA) erred in affirming the county's determination that the applied-for development constituted "expansion *** of [a] public use airport[]" and thus was "consistent with Goals 3, 4, 11, and 14" as a matter of law. OAR 660-012-0065(3)(n); *Schaefer v. Marion County*, 318 Or App 617, 620, 509 P3d 718 (2022). On remand, LUBA considered the county's alternative reasoning in the same county order—specifically, the county's conclusion that, if goal exceptions were required, they were justified by the presence of the airport—and rejected petitioner's challenge to the county's reasoning regarding the Goal 3 exception raised in his first assignment of error before LUBA.[1]

Petitioner again seeks review, and, again, he is joined by *amici* 1000 Friends of Oregon and the City of Aurora. In his first assignment of error, he contends that LUBA erred in concluding that the county could base its goal exceptions on the fact that the proposed uses need to be sited adjacent to an airport. In his view, that justification for an exception is prohibited by OAR 660-012-0060(5), which provides, "The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional, or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028." As explained below, we agree with petitioner that OAR 660-012-0060(5) prohibited the county from basing the Goal 3 exception on the presence of the airport. We also agree with petitioner and LUBA that the county based the exception on the presence of the airport. Thus, we reverse and remand.

[1] LUBA also addressed petitioner's other assignments of error, sustaining some assignments and subassignments and denying others. Those issues do not affect our analysis and, accordingly, we do not describe them.

In his second assignment of error on judicial review, petitioner contends that the county erred in approving the applications without also taking an exception to Goal 11. In light of uncertainty about what further proceedings in this case will bring given our holding in this opinion, we decline to address that assignment of error at this point. *See, e.g.*, *Moore v. Coos County*, 144 Or App 195, 197 & n 1, 925 P2d 927 (1996) (declining to address a second assignment of error and noting that, "[i]n the event that subsequent review by this court takes place, petitioners and the county are not foreclosed from again raising" the issue that the court did not address (citing *Beck v. City of Tillamook*, 313 Or 148, 831 P2d 678 (1992)). Schaefer is not foreclosed from raising that issue again in a subsequent review proceeding.

I. BACKGROUND

The background facts are set out in our previous opinion. *Schaefer*, 318 Or App at 620-22. On remand after our decision, LUBA decided the assignments of error that it had previously declined to address, including assignments related to the county's determinations that the applied-for development satisfied the requirements for exceptions to Goal 3, which governs agricultural lands, and Goal 14, which governs urbanization. Many of the county's findings in support of the exceptions are not relevant to the issue before us; we summarize only the findings and conclusions that are relevant to our analysis.

For its Goal 3 exception, the county relied on OAR 660-004-0022, which governs goal exceptions for uses on resource land that are based on justifying reasons. ORS 197.732(2)(c);[2] Statewide Planning Goal 2: Part II (Exceptions);

[2] ORS 197.732(2)(c) provides, as follows:

"A local government may adopt an exception to a goal if:

"* * * * *

"(c) The following standards are met:

"(A) Reasons justify why the state policy embodied in the applicable goals should not apply;

"(B) Areas that do not require a new exception cannot reasonably accommodate the use;

"(C) The long term environmental, economic, social and energy consequences resulting from the use at the proposed site with measures designed

OAR 660-004-0020; *see also 1000 Friends of Oregon v. Yamhill County*, 203 Or App 323, 328, 126 P3d 684 (2005) ("When, as here, the exception sought involves a use on resource land not allowed under the goals, OAR 660-004-0022 describes types of reasons that may be used."). Those exceptions are known as reasons exceptions. *1000 Friends of Oregon v. Jackson County*, 292 Or App 173, 177, 423 P3d 793 (2018), *rev dismissed*, 365 Or 657 (2019). The county found that reasons justified an exception for the applied-for commercial uses under OAR 660-004-0022(1) and that reasons justified an exception for the applied-for industrial uses under OAR 660-004-0022(3).

We begin by briefly explaining the county's reasoning as to the applied-for commercial uses. OAR 660-004-0022(1) addresses reasons for uses not otherwise specifically provided for in other rules. The reasons for exceptions for such uses "include but are not limited to the following:"

> "There is a demonstrated need for the proposed use or activity, based on one or more of the requirements of Goals 3 to 19; and ***:
>
> "*****
>
> "(b) The proposed use or activity has special features or qualities that necessitate its location on or near the proposed exception site."

The county found that there was a demonstrated need for the applied-for uses under Goals 9 and 12. Then, beginning from the premise that "[a]irport-related uses, generally, require locations proximate to airports," the county found that the proposed commercial uses have "special features or qualities that necessitate" their location adjacent to the airport because they rely on access to the airport. OAR 660-004-0022(1)(b).

We turn to the county's reasoning as to the applied-for industrial uses. OAR 660-004-0022(3) provides reasons

---

to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed site; and

"(D) The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts."

that can justify "the siting of industrial development on resource land outside an urban growth boundary." Under that rule, "appropriate reasons and facts may include, but are not limited to, the following":

> "(a) The use is significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include geothermal wells, mineral or aggregate deposits, water reservoirs, natural features, or river or ocean ports;
>
> "(b) The use cannot be located inside an urban growth boundary due to impacts that are hazardous or incompatible in densely populated areas; or
>
> "(c) The use would have a significant comparative advantage due to its location (e.g., near existing industrial activity, an energy facility, or products available from other rural activities), which would benefit the county economy and cause only minimal loss of productive resource lands. Reasons for such a decision should include a discussion of the lost resource productivity and values in relation to the county's gain from the industrial use, and the specific transportation and resource advantages that support the decision."

Again, the county began from the premise that the "[p]roposed airport-related uses, including industrial uses, generally require location proximate to an airport." The county reasoned that the applied-for industrial uses meet the requirements of both OAR 660-004-0022(3)(a)—they are significantly dependent on a unique resource on agricultural land, *i.e.*, the airport—and OAR 660-004-0022(3)(c)—the uses would have a significant comparative advantage due to their location near the airport. The county explained,

> "The design, repair, and manufacturing of aircraft, parts, and other aerospace and aerodynamic uses described above, all need to occur as part of an airport cluster and require access to airfields for testing. If these uses were located outside of an airport, they would be severely restricted from accessing their customers' primary use of transportation—air service. Therefore, the evidence in the record supports both the conclusion these uses depend on the Aurora Airport and they would have a significant comparative advantage due to [their] location ([*i.e.*], near the Aurora Airport)."

Before the county, and again before LUBA, petitioner contended that the county's reasoning was impermissible under OAR 660-012-0060(5), part of the transportation planning rule. That provision states, "The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional, or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028." A "transportation facility" is "any physical facility that moves or assist[s] in the movement of people or goods including facilities identified in OAR 660-012-0020 but excluding electricity, sewage, and water systems." OAR 660-012-0005(46). OAR 660-012-0020(2)(e) identifies "public use airports" as transportation facilities.[3]

Petitioner contended that, by its terms, OAR 660-012-0060(5) prohibits the county's reasoning, because the airport is a transportation facility and the presence of the airport was the sole basis for the county's determination that an exception to Goal 3 was justified under OAR 660-004-0022 for the applied-for commercial and industrial development.

LUBA agreed with petitioner that the airport is a transportation facility and that the county's reasoning was based on its presence. However, LUBA held that petitioner's proffered interpretation of OAR 660-012-0060(5)—his view that "[t]he presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional, or industrial development on rural lands under *** OAR 660-004-0022" means that the presence of the airport, concededly a transportation facility, cannot be the basis for an exception for commercial and industrial development on rural lands under OAR 660-004-0022—was precluded by LUBA's previous interpretation of OAR 660-012-0060(5) in *Columbia Riverkeeper v. Columbia County*, 78 Or LUBA 547, 577-81 (2018),

[3] OAR 660-012-0020 provides requirements for transportation system plans, one of the elements of which is "[a]n air, rail, water and pipeline transportation plan which identifies where public use airports, mainline and branchline railroads and railroad facilities, port facilities, and major regional pipelines and terminals are located or planned within the planning area." OAR 660-012-0020(2)(e).

aff'd, 297 Or App 628, 443 P3d 1184, *rev den*, 365 Or 721 (2019).[4]

As explained above, OAR 660-004-0022(1) and (3) both set out specific reasons that can justify a reasons exception and also state that the reasons on which a local government may rely "include but are not limited to" those specifically stated in the rule. OAR 660-004-0022(1), (3). Thus, the rule divides the universe of potentially permissible reasons that justify exceptions into two categories: specified reasons, each of which is listed in its own subsection of the rule, and unspecified reasons, which are addressed only by the catchall "but are not limited to" language of the rule. In this case, LUBA relied on its holding in *Columbia Riverkeeper* to conclude that OAR 660-012-0060(5) does not prohibit exceptions based on the presence of a transportation facility for the specified reasons; it prohibits only exceptions based on the presence of a transportation facility for unspecified reasons. LUBA stated: "OAR 660-012-0060(5) is intended to prohibit only an exception based on the existence of a transportation facility and not otherwise appropriate for an exception for reasons set out in OAR 660-004-0022."

Thus, as a textual matter, LUBA concluded that, when OAR 660-012-0060(5) prohibits the presence of a transportation facility as the basis for "an exception for residential, commercial, institutional, or industrial development on rural lands *under *** OAR 660-004-0022*" (emphasis added), it means an exception under OAR 660-004-0022 that is based on the catchall language, not an exception under OAR 660-004-0022 that is based on any of the reasons specified in the rule. Here, LUBA explained, the county had determined that the applied-for development met the requirements of OAR 660-004-0022(1)(b)—it "has special features or qualities that necessitate its location on or near the proposed exception site" (because it is airport-related development that must be sited near an airport)—

[4] Although we affirmed LUBA's opinion in *Columbia Riverkeeper*, LUBA's interpretation of OAR 660-012-0060(5) was not at issue on review, and we do not understand our previous opinion to have created any precedent on its meaning. Later in this opinion, we summarize and discuss LUBA's analysis of OAR 660-012-0060(5) in that case; the purpose of that discussion is to provide context for LUBA's reasoning and our analysis in this case.

and, accordingly, it was "appropriate for an exception for reasons set out in OAR 660-004-0022." Thus, it did not rely on the catchall language of OAR 660-004-0022. Consequently, under LUBA's interpretation of OAR 660-012-0060(5), an exception for the applied-for development was not prohibited.[5]

LUBA also reasoned that OAR 660-012-0060(5) could not be interpreted, consistently with its text, to apply to both specified and unspecified reasons under OAR 660-004-0022—as petitioner asserted it should be—because, if petitioner's interpretation of OAR 660-012-0060(5) were correct, no reasons exceptions under OAR 660-004-0022 would be permitted for expansions of public use airports on rural land. LUBA reasoned that an exception for the expansion of a public use airport is necessarily based on the presence of the existing airport, a transportation facility, so, under petitioner's interpretation, reasons exceptions would not be allowed for public use airport expansions. That would be problematic, LUBA noted, because goal exceptions are required for certain expansions of public use airports—expansions that permit service to a larger class of airplanes. *See* OAR 660-012-0065(3)(n) (no exceptions are required for "[e]xpansions or alterations of public use airports that do not permit service to a larger class of airplanes"). Thus, LUBA concluded, "Consistent with our reasoning and conclusion in [*Columbia Riverkeeper*], we conclude that OAR 660-012-0060(5) does not prohibit a reasons exception for airport-related uses that need to be located proximate to the Airport for purposes allowed under OAR 660-004-0022(1)(b)."

II. ARGUMENTS AND ANALYSIS

Petitioner seeks judicial review, again pointing to the plain text of OAR 660-012-0060(5) and contending that the provision applies here and unambiguously prohibits the county's reasoning in support of the exception. He

[5] As described above, the county found that the applied-for commercial uses were justified under OAR 660-004-0022(1)(b), but it also found that the applied-for industrial uses were justified under OAR 660-004-0022(3)(a) and (c). Although petitioner's first assignment of error before LUBA applied to both parts of the county's analysis, LUBA did not expressly address the latter group of uses. Because we are reversing LUBA's order as to petitioner's first assignment of error before LUBA, on remand, LUBA will have the opportunity to address both parts of the county's reasoning.

asserts that LUBA misinterpreted the rule provision and, accordingly, that its order is "unlawful in substance." ORS 197.850(9)(a); *see Mountain West Investment Corp. v. City of Silverton*, 175 Or App 556, 559, 30 P3d 420 (2001) (a LUBA order is unlawful in substance if "it represent[s] a mistaken interpretation of the applicable law").

A. *TLM's Procedural Argument*

TLM responds, first, that the fact that petitioner has assigned error to LUBA's reasoning regarding OAR 660-012-0060(5), rather than challenging LUBA's evaluation of the county's reasoning that the requirements of OAR 660-004-0022 are satisfied—which appears in a different part of LUBA's opinion and does not address OAR 660-012-0060(5)—renders petitioner's assignment of error unreviewable. We reject that contention. Petitioner's argument before LUBA, and again before us, addresses the relationship between OAR 660-004-0022 and OAR 660-012-0060(5). More specifically, petitioner argues that OAR 660-012-0060(5) prohibits the county from taking exceptions under OAR 660-004-0022 based on the presence of the airport regardless of the correctness of its determination that the applied-for development meets the textual requirements of OAR 660-004-0022 based on the presence of the airport.

Regardless of whether petitioner could have raised the same underlying issue in a slightly different way by arguing that, in light of OAR 660-012-0060(5), the county erred in finding the textual requirements of OAR 660-004-0022 to be satisfied, the argument he makes on review is a legitimate way of raising the issue. Petitioner did not need to assign error to LUBA's evaluation of the county's reasoning about the textual requirements of OAR 660-004-0022.

TLM's argument is premised, to some extent, on its assertion that the county based the exceptions on more than just the presence of the airport. Thus, it contends, petitioner's failure to challenge the county's reasoning about the textual requirements of OAR 660-004-0022 means that his argument fails to address some factual predicate for the county decision beyond the presence of the airport.

However, TLM does not explain, nor do we—nor did LUBA—perceive, that the county identified any reason independent of the airport to site the development on the subject parcel. It is true that, in the course of addressing the textual requirements of OAR 660-004-0022, the county made further determinations necessary under that rule and OAR 660-004-0020—for example, that there was a need for airport-related development under Goal 9 and Goal 12 and that the subject parcel is uniquely well suited for airport-related development because of its location next to the airport and because of a runway access easement. However, none of the further determinations are independent of the airport; their relevance to the analysis is based on the county's initial premises that the applied-for development is airport-related and, consequently, has to be sited near the airport. The county's reasoning does not depend on any attribute of either the applied-for development or its proposed location that is not directly tied to the airport. Stated differently, when the airport is removed from the calculus, the county's reasoning collapses entirely.

Given that, petitioner's legal contention—that OAR 660-012-0060(5) prohibits reliance on the presence of the airport—if correct, completely undermines the county's reasoning. Thus, there is no factual predicate for the county's decision that is outside the scope of his challenge.

B. *Interpretation of OAR 660-012-0060(5)*

TLM and the county's remaining arguments go to the merits of the rule construction issue that LUBA decided and that petitioner raises on review. We review interpretation of administrative rules for legal error. *Boatwright v. Dept. of Human Services*, 293 Or App 301, 304, 425 P3d 449 (2018); *see also Mountain West Investment Corp.*, 175 Or App at 559 (a mistaken interpretation of the law makes a LUBA order unlawful in substance). In construing an administrative rule, absent a controlling construction by the authoring agency, "we apply the same analytical framework that applies to the construction of statutes." *State v. Hogevoll*, 348 Or 104, 109-10, 228 P3d 569 (2010). That is, "we seek to divine the intent of the rule's drafters" by considering "the text of the rule in its regulatory and statutory context."

Noble v. Dept. of Fish and Wildlife, 355 Or 435, 448, 326 P3d 589 (2014). The text of a rule "is the starting point for interpretation and is the best evidence of the [enacting body's] intent." *PGE v. Bureau of Labor and Industries*, 317 Or 606, 610, 859 P2d 1143 (1993).

1. *Text*

Thus, we begin with the text of OAR 660-012-0060(5), which was enacted by the Land Conservation and Development Commission (LCDC). As set out above, it provides, "The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional, or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028."

As described above, in this case, LUBA understood that text "to prohibit only an exception based on the existence of a transportation facility and not otherwise appropriate for an exception for reasons set out in OAR 660-004-0022." That is, LUBA understood OAR 660-012-0060(5) not to apply to exceptions under OAR 660-004-0022 that are based on the reasons specified in the rule. Initially—and, as we will explain, conclusively—we note a fundamental inconsistency between the text and that interpretation of it: The text does not state or imply that it applies to only a subset of the exceptions that can be taken under OAR 660-004-0022. By its terms, it prohibits exceptions "under *** OAR 660-004-0022" based on the existence of a transportation facility for the listed types of development on rural lands. If LCDC had intended the rule not to apply to exceptions based on the specified reasons in OAR 660-004-0022, as LUBA concluded, it seems to us that LCDC would have included that limitation in the text of the rule, rather than leaving it to LUBA or a court to insert a major limitation that is not evident from the text itself. The text of the rule does not support LUBA's interpretation of it.

We agree with petitioner that it is more likely that LCDC intended the rule to mean what it says: "The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial,

institutional, or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028."[6] In this context, we understand "*an* exception *** under *** OAR 660-004-0022" (emphasis added) to mean *any* exception under OAR 660-004-0022 (for the specified types of development on rural lands), not just a subset of possible exceptions under OAR 660-004-0022. *See Webster's Third New Int'l Dictionary* 1 (unabridged ed 2002) (one meaning of the indefinite article is "any, each—used with a following restrictive modifier <A man guilty of kidnaping wins scant sympathy.> <A man who is sick can't work well.>"). Stated differently, the rule indicates that no exception under OAR 660-004-0022 for the listed types of development on rural land shall be based on the presence of a transportation facility.

2. *LUBA's holding in* Columbia Riverkeeper

Our understanding of the rule is consistent with the outcome in *Columbia Riverkeeper*. In that case, LUBA reviewed a Columbia County decision that took reasons exceptions to allow port-related industrial development on 837 acres of land zoned for exclusive farm use adjacent to a river port, one of five deepwater ports in the state. 78 Or LUBA at 550. The port, a natural feature of the river, was already developed with a dock facility and rail connections. *Id.* The proposed development was limited to five categories of uses that "are intended to be significantly dependent on the deepwater port." *Id.* at 551.

Opponents of the development argued before the county that the reason for the exceptions was proximity to the dock facility, and, thus, that the exceptions violated OAR 660-012-0060(5) because docks are transportation facilities. *Id.* at 577. The county disagreed. It noted that one of the bases for the exceptions was OAR 660-004-0022(3)(a), which, as set out above, 323 Or App at 394-95, allows a reasons exception for industrial uses on rural land if "[t]he use is significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include geothermal wells, mineral or

[6] OAR 660-004-0028 governs exceptions for land "irrevocably committed to uses not allowed by the applicable goal." OAR 660-004-0028(1).

aggregate deposits, water reservoirs, natural features, or *river or ocean ports*." OAR 660-004-0022(3)(a) (emphasis added).

The county reasoned that, regardless of the dock facility, the exception was based, at least in part, "on the natural upland and aquatic features of the port, with the combination of flat developable upland in proximity to deep water and self-scouring features, aspects of a deepwater river port that is the 'unique resource' justifying an exception under OAR 660-004-0022(3)(a)." *Columbia Riverkeeper*, 78 Or LUBA at 578. In light of the fact that the text of OAR 660-004-0022(3)(a) referred specifically to "river *** ports," the county decided, an exception could be taken based on the port, without reliance on the dock facility—that is, the port independently qualified as a "unique resource" on which the proposed uses significantly depended. Given that, the county reasoned that OAR 660-012-0060(5) did not prohibit the exceptions. *Id.*

Before LUBA, Columbia Riverkeeper, one of the opponents, argued that there was no meaningful distinction between the dock facility—a transportation facility, on which an exception cannot be based under OAR 660-012-0060(5)—and the port itself, the "unique resource" that expressly justified the exception under OAR 660-004-0022(3)(a). *Columbia Riverkeeper*, 78 Or LUBA at 578. Columbia Riverkeeper contended that, as a result, the prohibition in OAR 660-012-0060(5) should be understood to supersede altogether OAR 660-004-0022(3)(c)'s express allowance of a river port as the basis for an exception. *Id.* at 579. In support of that view, it noted that, of the two rules, OAR 660-012-0060(5) was enacted later, and it contended that that indicated an intention for OAR 660-012-0060(5) to supersede the older rule. *Id.*

LUBA rejected Columbia Riverkeeper's argument, noting that understanding the river port—a "unique resource" specifically listed in OAR 660-004-0060(5)—to be indistinguishable from the transportation facility of the dock unnecessarily brought the two provisions into direct conflict. LUBA explained that it was not clear "that OAR 660-012-0060(5), read in context, is properly interpreted to prohibit

the establishment or expansion of an industrial area based on an existing river or ocean port authorized under OAR 660-004-0022(3)(a), as [Columbia] Riverkeeper argues." *Id.* at 579.

In our view, the remainder of LUBA's reasoning in *Columbia Riverkeeper*, 78 Or LUBA at 579-81, is not entirely clear. It could be based on the fact that river ports are specifically listed as qualifying "unique resources" in OAR 660-004-0022(3)(a). If that is the case, we understand LUBA's reasoning in *Columbia Riverkeeper* to be that an exception based on the presence of a river port is not prohibited by OAR 660-012-0060(5) because it is not based on "the presence of a transportation facility;" rather, it is properly understood to be based on the presence of a specifically listed unique resource that is conceptually separable from the transportation facility built on or near it—even if one value of that unique resource is that it can be developed with a transportation facility.

As we understand it, that reasoning rests on an interpretation of OAR 660-012-0060(5) that is consistent with the rule's plain text. It does not use "[t]he presence of a transportation facility" as "a basis for an exception," OAR 660-012-0060(5). Instead, by recognizing that the specifically listed examples in OAR 660-004-0022(3)(a) are not transportation facilities, even to the extent that their resource value comes from their potential for development with transportation facilities, that interpretation avoids conflict between OAR 660-012-0060(5) and the examples of unique resources listed in OAR 660-004-0022(3)(a).

If that was LUBA's reasoning in *Columbia Riverkeeper*, then we agree. And if that was LUBA's reasoning in *Columbia Riverkeeper*, then its holding in that case—that an exception based on something specifically listed in OAR 660-004-0022 that is conceptually separable from a transportation facility is not subject to the prohibition of OAR 660-012-0060(5)—does not prevent the prohibition from applying in this case. That is so because, as we have explained, here, the county's reasoning was based solely on the presence of the airport itself. The county did not identify any "special features or qualities," of the proposed

uses, OAR 660-004-0022(1)(b), any "significant comparative advantage due to [their] location (e.g., near existing industrial activity, an energy facility, or products available from other rural activities)," OAR 660-004-0022(3)(c), or any "unique resource" like "geothermal wells, mineral or aggregate deposits, water reservoirs, natural features, or river or ocean ports" near which they had to be sited, OAR 660-004-0022(3)(a)—that were conceptually separable from the airport, a transportation facility. In *Columbia Riverkeeper*, the river port, a specifically listed "unique feature" under OAR 660-004-0022(3)(a), was conceptually separable from the dock facility, a transportation facility, so an exception was allowed *based on the river port*—even though the existing dock facility would play some role in the analysis. Here, the county did not identify, and we do not perceive, any aspect of the airport or the applied-for uses that is conceptually separable from the transportation facility and specifically listed in OAR 660-004-0022.

However, significant parts of LUBA's opinion in *Columbia Riverkeeper* suggest that its holding is much broader, and, in its opinion in this case, LUBA appeared to adopt that broader holding. In *Columbia Riverkeeper*, LUBA stated its holding as being that "OAR 660-012-0060(5) is intended to prohibit only an exception based on the existence of a transportation facility for reasons that are not otherwise *specifically* listed as an appropriate reason for an exception set out in OAR 660-004-0022." 78 Or LUBA at 580 (emphasis added). In this case, LUBA restated that conclusion slightly differently, omitting the requirement that the reason be "*specifically* listed" as an appropriate reason: "OAR 660-012-0060(5) is intended to prohibit only an exception based on the existence of a transportation facility and not otherwise appropriate for an exception for reasons set out in OAR 660-004-0022." That is, in this case, LUBA understood its holding in *Columbia Riverkeeper* to have been that OAR 660-012-0060(5) applies only to exceptions taken under the catchall "but not limited to" language of OAR 660-004-0022. Under that interpretation, an exception may be based on the presence of a transportation facility as long as, based on the presence of the transportation facility, it can satisfy one of the reasons stated in OAR 660-004-0022.

That interpretation is inconsistent with the text of OAR 660-012-0060(5). However, as we have explained, there is an interpretation of OAR 660-012-0060(5) that is consistent with the rule's text and leads to the same conclusion on the facts of *Columbia Riverkeeper*. Regardless of how we characterize LUBA's reasoning in *Columbia Riverkeeper*, then, the outcome in that case is compatible with our text-based understanding of OAR 660-012-0060(5) in this case.

In *Columbia Riverkeeper*, LUBA noted one textual point, related to OAR 660-004-0022(3)(c), that bears further discussion. Again, that rule provision, which is one of the specified reasons for an exception for industrial development on rural lands, provides as follows:

> "The use would have a significant comparative advantage due to its location (*e.g.*, near existing industrial activity, an energy facility, or products available from other rural activities), which would benefit the county economy and cause only minimal loss of productive resource lands. Reasons for such a decision should include a discussion of the lost resource productivity and values in relation to the county's gain from the industrial use, and the specific transportation and resource advantages that support the decision."

OAR 660-004-0022(3)(c). In *Columbia Riverkeeper*, LUBA pointed out that the second sentence of that paragraph notes that the county should discuss "the specific transportation and resource advantages that support the decision," and stated that that text "presumably would allow the county to consider advantages provided by proximity to an existing transportation facility." 78 Or LUBA at 580.

Insofar as LUBA's point was that transportation advantages of certain locations are not categorically excluded from the county's discussion of the reasons for the exception, we agree. However, to the extent that LUBA understood that text to override OAR 660-012-0060(5) and expressly allow exceptions for industrial uses under OAR 660-004-0022(3)(c) based on their location near transportation facilities, we disagree. For our purposes here, the essence of an exception justified by OAR 660-004-0022(3)(c) is that "[t]he use would have a significant comparative advantage

due to its location (e.g., near existing industrial activity, an energy facility, or products available from other rural activities)." Like the examples of "unique resources" listed in OAR 660-004-0022(3)(a), the listed uses and resources in OAR 660-004-0022(3)(c)—industrial activity, an energy facility, or products available from other rural activities—are not transportation facilities. Necessarily, analysis of the extent to which a use will have a comparative advantage based on a location near one of those other uses or resources will involve consideration of how the location interacts with the transportation system. However, in light of OAR 660-004-0060(5), the county cannot decide that a transportation facility *is* the other use or resource from which the comparative advantage arises.

3. *LUBA's reasoning regarding transportation facility expansions*

Finally, we consider LUBA's concerns, expressed both in *Columbia Riverkeeper* and in this case, about expansions of transportation facilities on rural land. In this case, LUBA noted that its decision avoided concerns about the effect of OAR 660-012-0060(5) on expansions of transportation facilities. However, as *amicus* 1000 Friends points out, the effect of OAR 660-012-0060(5) on expansions of transportation facilities is not directly at issue in this case. As we explained in our previous opinion, the applied-for development is not part of the airport. *Schaefer*, 318 Or App at 620 ("Requests for comprehensive plan amendments and zone changes, like the ones at issue here, sought by private parties without corresponding expansion of the airport boundary through the airport planning process are not expansions of public use airports within the meaning of OAR 660-012-0065(3)(n)."). And neither the county nor LUBA suggested that the proposed development itself—that is, the applied-for commercial and industrial uses, independent of the airport—qualifies as a transportation facility. OAR 660-012-0005(46) (A transportation facility is "any physical facility that moves or assist[s] in the movement of people or goods including facilities identified in OAR 660-012-0020 but excluding electricity, sewage, and water systems.").

To any extent to which our interpretation might indirectly affect expansion of transportation facilities, we are not persuaded that any such effects require us to reach a different conclusion about the meaning of OAR 660-012-0060(5). First, we question, but need not decide, whether OAR 660-012-0060(5) even applies to exceptions for transportation facilities themselves. *See* OAR 660-012-0060(5) (prohibiting certain exceptions for "residential, commercial, institutional, or industrial development"). Second, and dispositively, the text of OAR 660-012-0060(5) is not susceptible to any reading that would support LUBA's view that the rule should be construed narrowly based on concerns about expansion of transportation facilities. *See State v. Gaines*, 346 Or 160, 171, 206 P3d 1042 (2009) ("[T]here is no more persuasive evidence of the intent of the legislature than the words by which the legislature undertook to give expression to its wishes." (Internal quotation marks omitted.)).

III. CONCLUSION

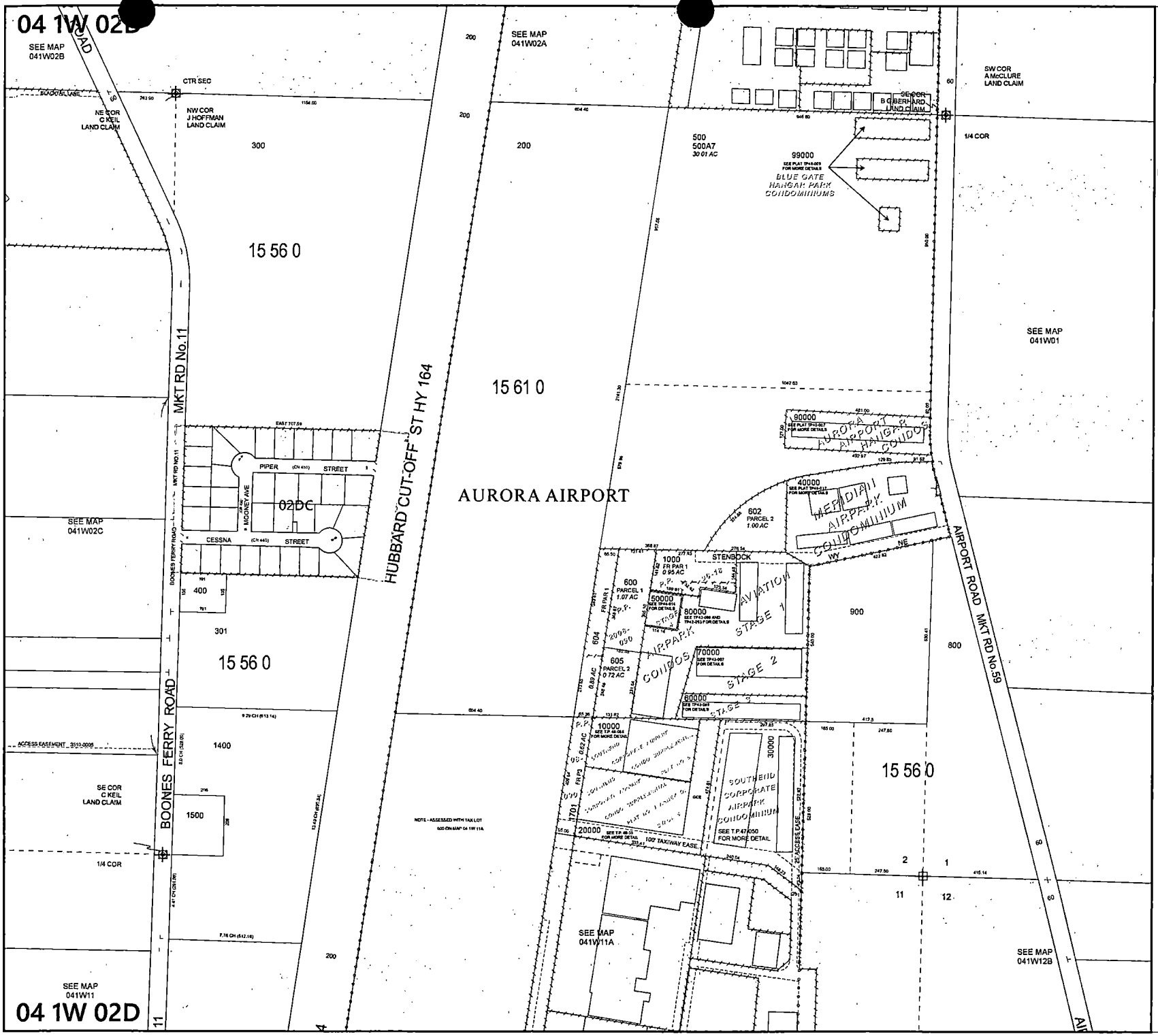
We conclude that OAR 660-012-0060(5) means what it says: "The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional, or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028." If an exception is based on a use, resource, or characteristic that is specifically listed in OAR 660-004-0022 and is conceptually separable from a transportation facility—as was the case in *Columbia Riverkeeper*—then it is not prohibited by OAR 660-012-0060(5).[7]

In this case, the county reasoned that the uses at issue have "special features or qualities that necessitate [their] location on or near the proposed exception site" because the uses are airport related and must be located near a public-use airport. OAR 660-004-0022(1)(b). It is undisputed that public-use airports are "transportation facilities." Thus, the exception was based on "the presence

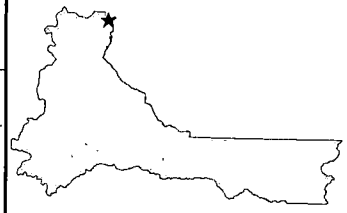
[7] This case does not require us to decide whether it would be possible to base an exception on a use, resource, or characteristic that, unlike the river port in *Columbia Riverkeeper*, is not specifically listed in OAR 660-004-0022, but that nevertheless is conceptually separable from a transportation facility. We reserve that question for a case in which it is presented.

of a transportation facility," in violation of OAR 660-012-0060(5). Accordingly, LUBA's rejection of petitioner's first assignment of error before LUBA was unlawful in substance.

Reversed and remanded.



04 1W 02D
Exhibit 7



MARION COUNTY, OREGON
SE1/4 SEC2 T4S R1W W.M.
SCALE 1" = 200'

LEGEND

LINE TYPES

Taxlot Boundary	Historical Boundary
Road Right-of-Way	Easement
Railroad Right-of-Way	Railroad Centerline
Private Road ROW	Taxcode Line
Subdivision/Plat Bndry	Map Boundary
Waterline - Taxlot Bndry	Waterline - Non Bndry

CORNER TYPES

+ 1/16TH Section Cor. ⌖ 1/4 Section Cor.
◎ DLC Corner 16 15 ⌖ Section Corner 21 22

NUMBERS
Tax Code Number
00 00 0

Acreage 0.25 AC — All acres listed are Net Acres, excluding any portions of the taxlot within public ROWs

NOTES
Tick Marks: A tick mark in the road indicates that the labeled dimension extends into the public ROW

200.00
175.00

CANCELLED NUMBERS

100		
100A1		
100A2		
100A3		
100A4		
501		
601		
603		
700		
1100		
1600		
1700		
1702		
20001		

DISCLAIMER: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY

Marion County OREGON — Assessors Office Cartography Dept

FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT www.co.marion.or.us

PLOT DATE: 2/9/2023

04 1W 02D

EXHIBIT A

LEGAL DESCRIPTION

Beginning at the corner common to Sections 1, 2, 11 and 12 in Township 4 South, Range 1 West of the Willamette Meridian in Marion County, Oregon; thence West 412.5 feet to an iron pipe; thence North 0° 15' West 1068.0 feet to an iron pipe; thence North 77°41' East 511.39 feet, more or less, to the center line of the County Road; thence South 15° 30' East along said center line 1222.50 feet, more or less, to the South line of Section 1; thence North 89° 50' West along said Section line 411.114 feet to the point of beginning.

Exhibit 8, page 2 of 2

21113 July 20, 1977 REEL 89 PAGE 344

Key Title # 10825

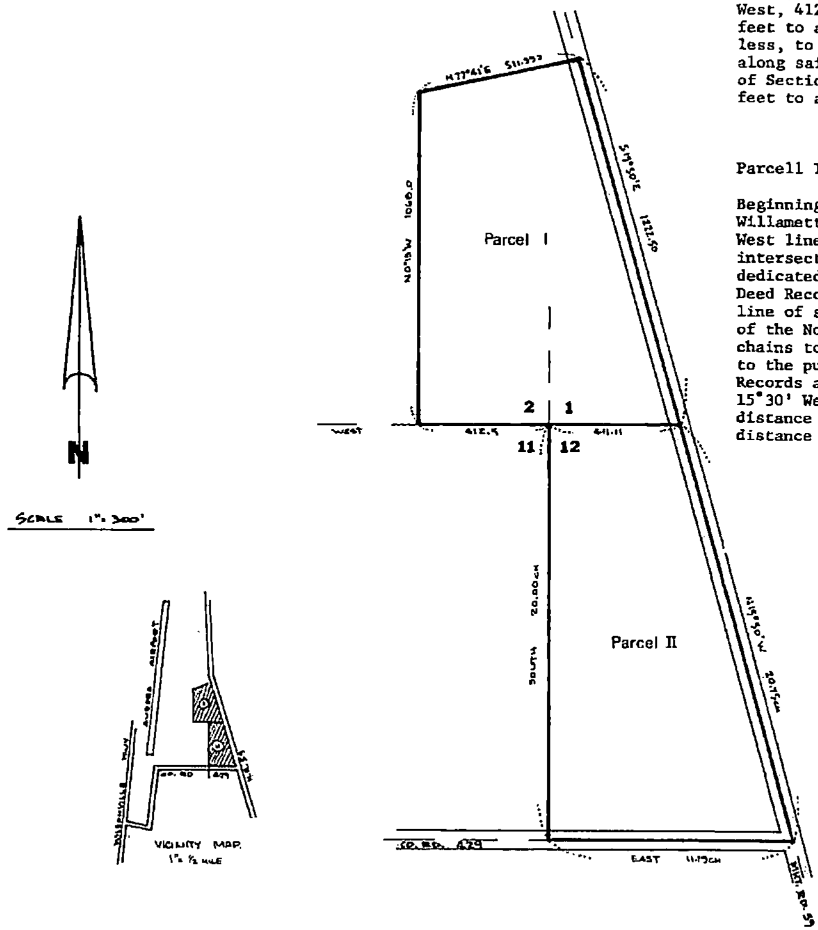
026386

EXHIBIT C

SPECIAL EXCEPTION NO. 77-37

Applicant's signature [signature]

Sections 1, 2, and 12, T.4S. R.1W.



Parcel I

Beginning at the corner common to Sections 1, 2, 11 and 12 in T.4S., R.1W., of the Willamette Meridian in Marion County, Oregon; thence West, 412.50 feet to an iron pipe; thence North 0°15' West, 1068.00 feet to an iron pipe; thence North 77°41' East, 511.39 feet, more or less, to the center line of the County Road; thence South 15°30' East along said center line, 1222.50 feet, more or less, to the South line of Section 1; thence North 89°50' West along said Section line, 411.114 feet to a point of beginning.

Parcell II

Beginning at the Northwest corner of Section 12, T.4S., R.1W., of the Willamette Meridian, Marion County, Oregon; thence South along the West line of said Section 12, a distance of 20.00 chains to the intersection of said Section line and the center line of the road dedicated to the public by instrument recorded in Volume 105, page 380, Deed Records for Marion County, Oregon; thence East along the center line of said road and along the South line of the Northwest quarter of the Northwest quarter of said Section 12, a distance of 11.79 chains to the intersection of the center line of the road dedicated to the public by instrument recorded in Volume 105, page 380, Deed Records and the center line of another County Road; thence North 15°30' West along the center line of said Second County Road, a distance of 20.75 chains to the North line of said Section 12, a distance of 6.29 chains to the place of beginning.

21113
STATE OF OREGON } ss.
County of Marion }
I hereby certify that the within was received and duly recorded by me in Marion County records: Reel 89 Page 344

JUL 20 3 55 PM '77

BY [signature] DEPUTY

[signature]

PLANNING DIR.

By [signature], Deputy

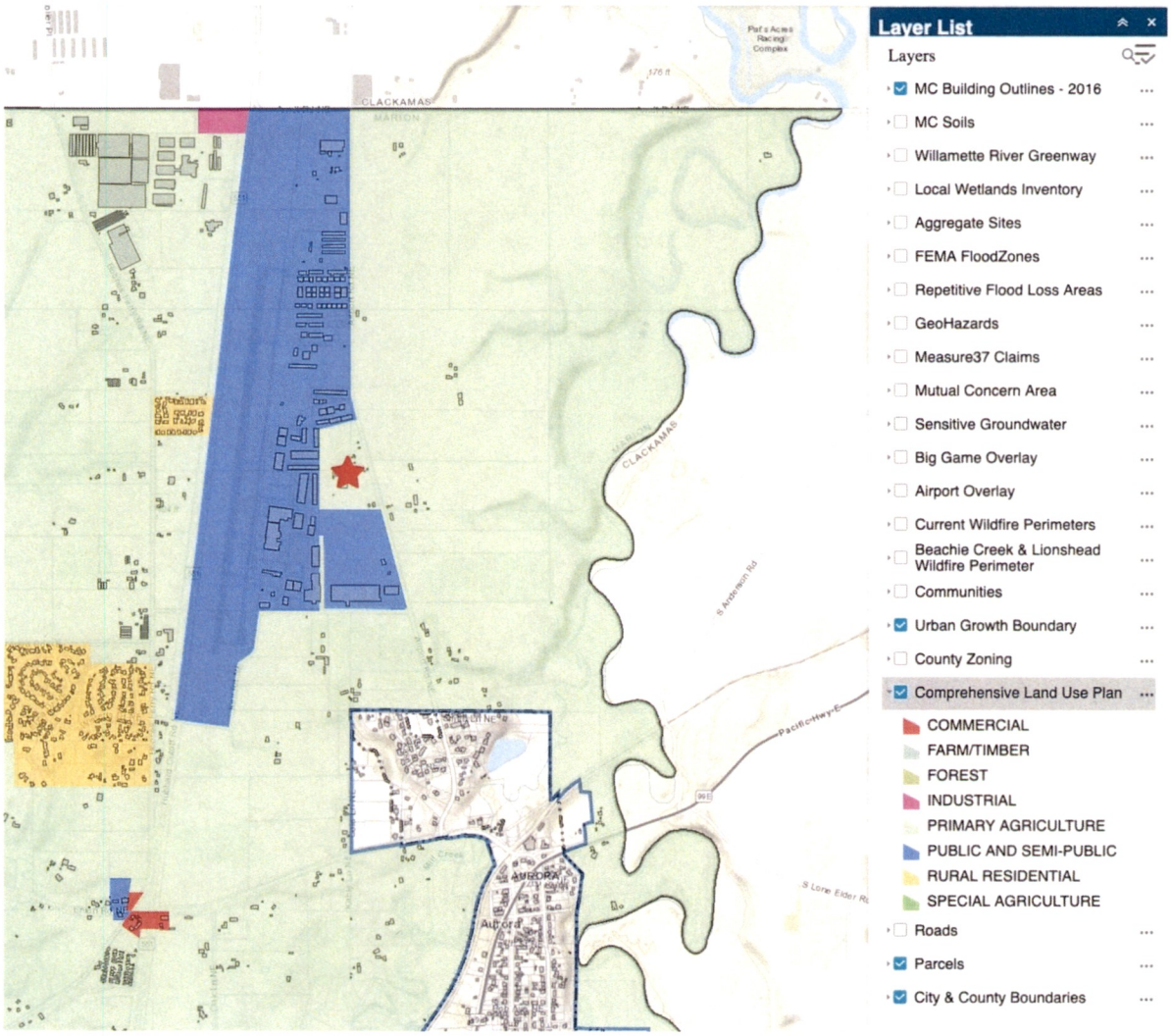
PACIFIC SURVEYS
181 N. GRANT ST.
CANBY, OREGON 97013
266-9979

026386

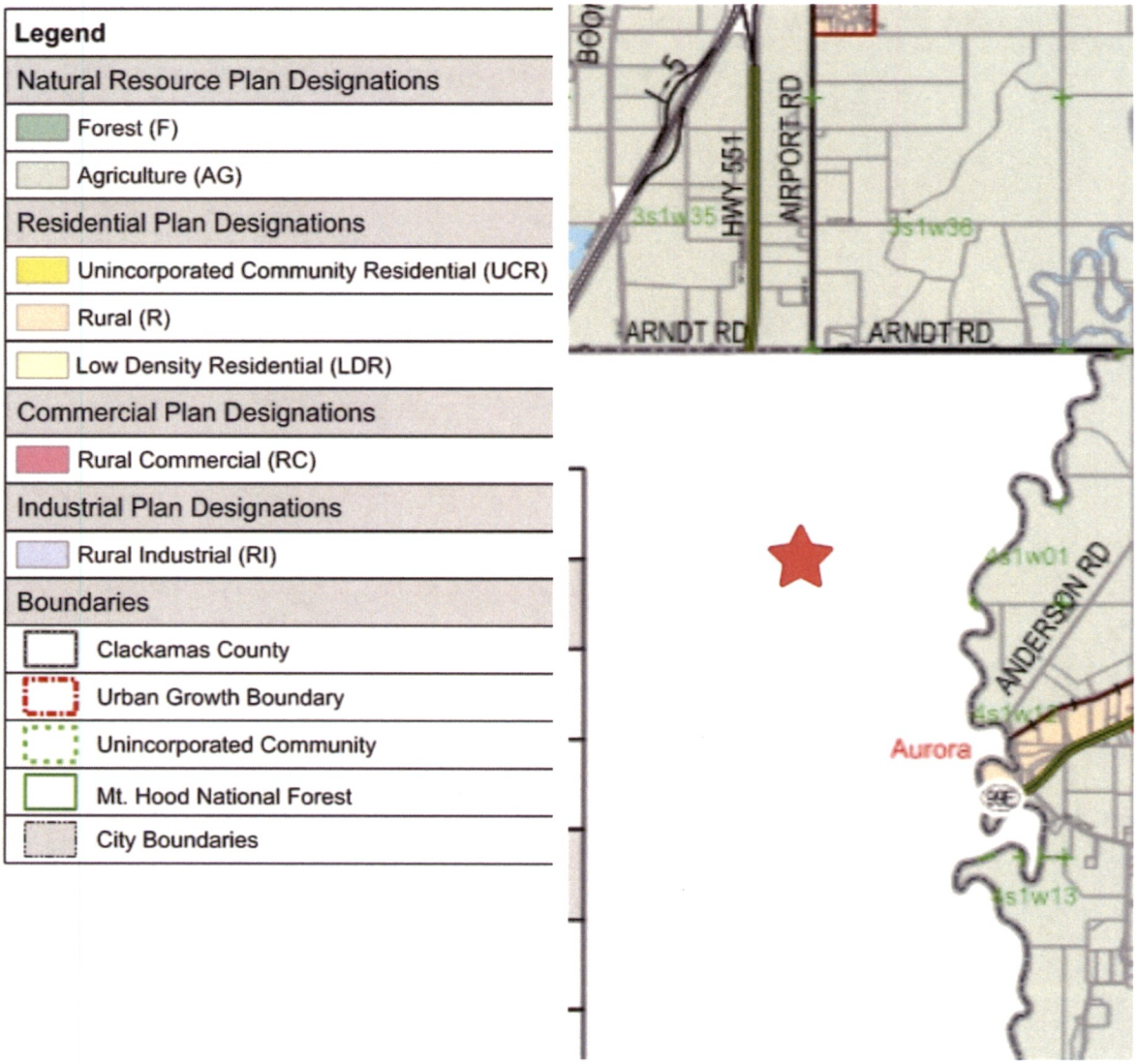
026386

Corridor Plan Designations

Marion County Plan Designation Map Excerpt

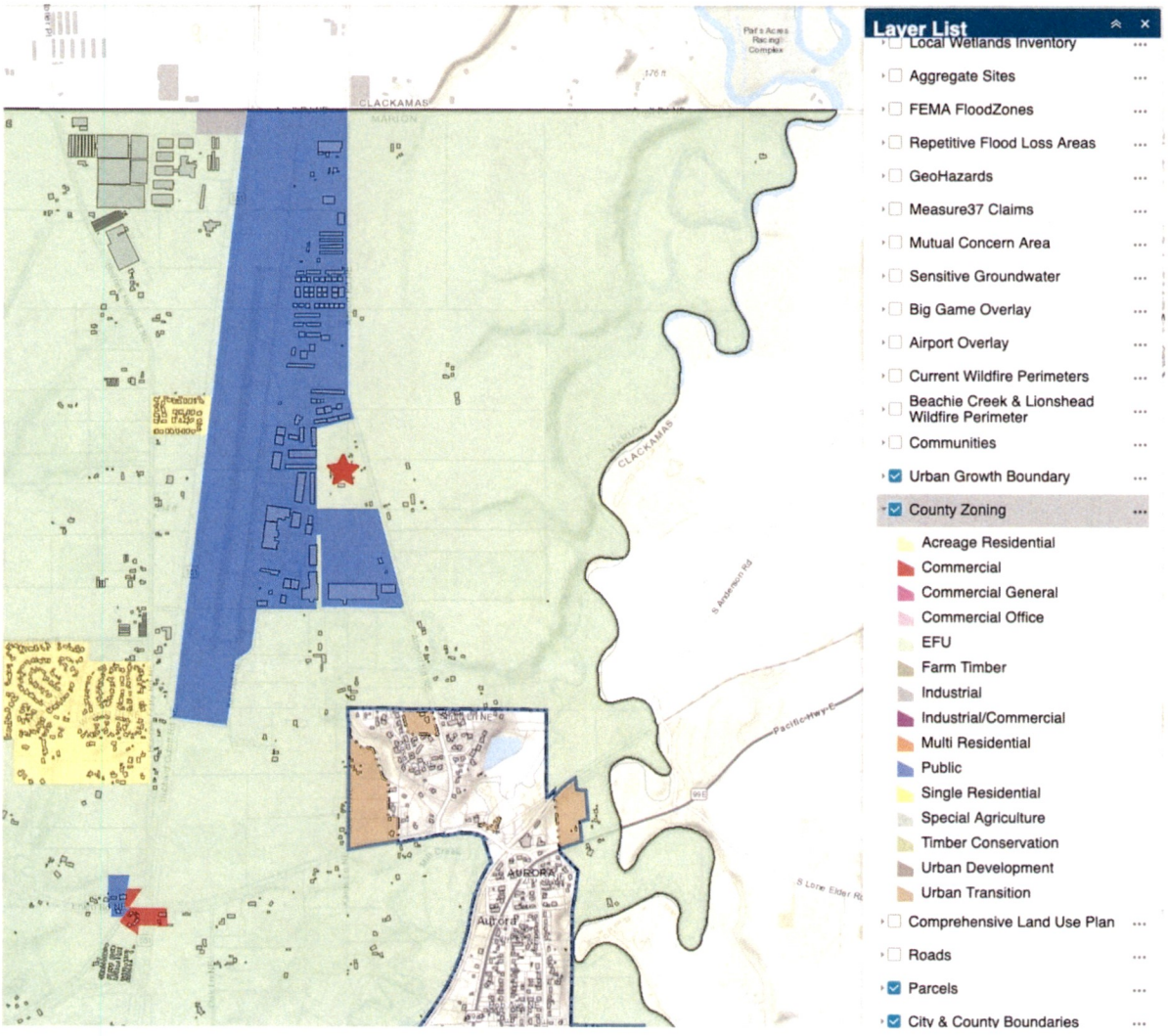


Clackamas County Plan Designation Map Excerpt



Corridor Zoning

Marion County Zoning Map Excerpt



Clackamas County Zoning Map Excerpt

Legend
Natural Resource Zoning Districts
Ag / Forest (AGF)
Exclusive Farm Use (EFU)
Timber (TBR)
Residential Zoning Districts
Farm Forest 10-Acre (FF-10)
Rural Residential Farm Forest 5-Acre (R
Rural Area Residential 2-Acre (RA-2)
Rural Area Residential 1-Acre (RA-1)
Future Urban 10-Acre (FU-10)
Commercial Zoning Districts
Rural Commercial (RC)
Industrial Zoning Districts
Rural Industrial (RI)
Special Zoning Districts
Limited Use Zone (LUZ)
Historic District (HD) Overlay Historic Landmark (HL) Overlay
Mineral and Aggregate Overlay (MAO)
Boundaries
Clackamas County
Urban Growth Boundary
Unincorporated Community
Mt. Hood National Forest
City Boundaries

Exhibit 11

Marion County Airport Overlay Zone

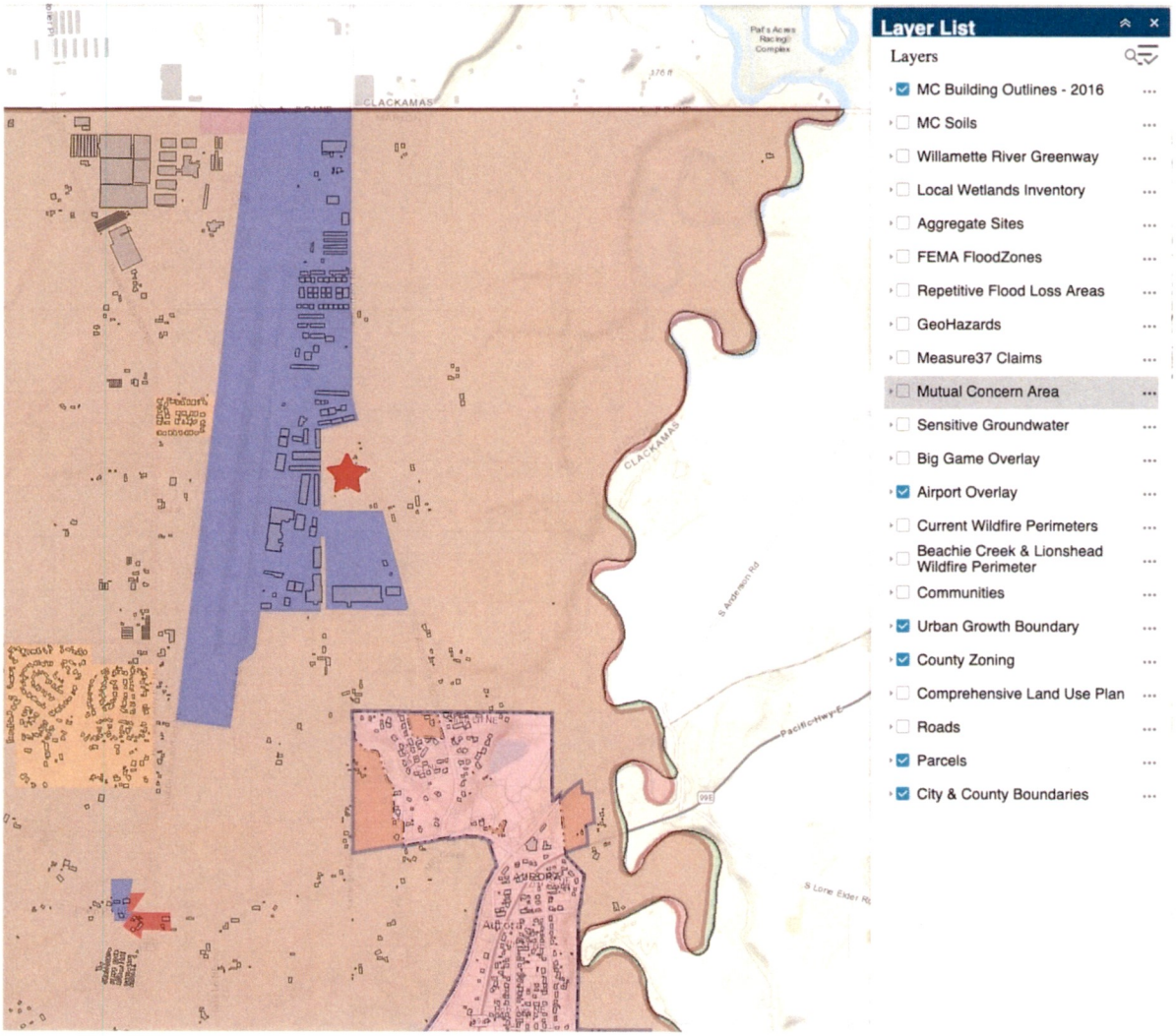


Exhibit 13

Urban Areas

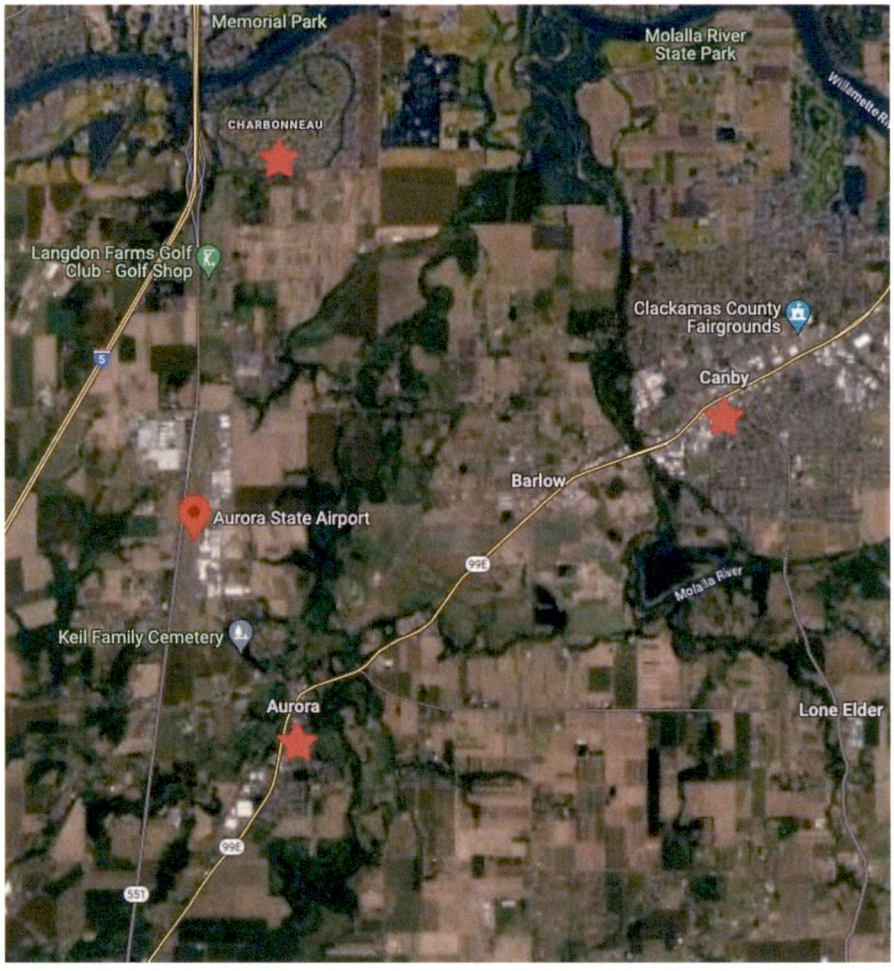


EXHIBIT D

3217 B

FLIGHT STRIP EASEMENT VOL 279 PAGE 91

KNOW ALL BY THESE PRESENTS That we, the undersigned, are the owners in fee simple of the following described real property, to-wit:

PARCEL #1. A parcel of land lying in the south half (S½) of Section 2, Township 4 South, Range 1 West, W. M., Marion County, Oregon, the said parcel being all that portion of the grantor's property lying east of the 600 foot width flight strip and being described as follows:

Beginning at the east quarter corner of said Section 2; thence west along the east and west center line of said Section 945 feet to the east line of the said flight strip; thence South 7° 08' West along said east line 2129 feet to the south line of the grantor's property; thence east 1205 feet to the east line of Section 2; thence North 2112 feet to the point of beginning.

PARCEL #2. All that portion of the grantor's property lying between the westerly right of way line of the West Portland-Hubbard Highway and the existing County Road and being more particularly described as follows:

Beginning at the intersection of the east and west center line of said Section 2 and the westerly right of way line of said highway; said intersection being 1752 feet west of the east quarter corner of said Section 2; thence west along said east and west center line 1154 feet to the center of said County Road; thence southerly along the center of said Road 2165 feet, more or less, to the south line of the grantor's property; thence east along said south line 625 feet to the westerly right of way line of said highway; thence North 7° 08' East along said right of way line 2129 feet to the point of beginning.

AND, WHEREAS, the United States of America has designated and established a flight strip for the use and benefit of aircraft, all or a portion of which flight strip is in the vicinity of the property above described; and

WHEREAS, the undersigned desire to cooperate with the United States of America and the State of Oregon to the extent and in the manner hereinafter set forth in the creation and development of said flight strip and the area required therefor.

THEREFORE, we, the undersigned, in consideration of the sum of Four Hundred fifty five and —20/00 Dollars, receipt of which said sum hereby is acknowledged, do for ourselves, our heirs, successors and assigns, grant to and vest in the United States of America and the State of Oregon the right, privilege and license to use the space over the real property hereinabove described for the use and benefit of aircraft; and we further grant to the United States of America and the State of Oregon the right to limit, control and remove obstructions extending in space above the hereinafter defined inclined plane.

We, the undersigned, hereby covenant and agree for ourselves, our heirs and assigns as a covenant binding the above described real property and for the benefit of the United States of America, the State of Oregon and the said flight strip that no building, structure, object, obstruction or other thing shall be erected, placed or maintained on the above described real property or [illegible] which shall extend above the horizontal [illegible]

VOL 279 PAGE

EXHIBIT D

The said inclined plane directly above Parcel #1 of said real property, the southeast corner of which plane has an elevation of 772 feet, the southwest corner of which has an elevation of 190 feet, the northeast corner of which has an elevation of 327 feet, and the northwest corner of which has an elevation of 192 feet, and which plane has also the following elevations:

The said inclined plane is the space directly above Parcel #2 of said real property, the southeast corner of which plane has an elevation of 218 feet, the southwest corner of which has an elevation of 312 feet, the northeast corner of which has an elevation of 220 feet, and the northwest corner of which has an elevation of 385 feet, and which plane has also the following elevations:

The above elevations refer to the standard datum established by the U. S. Coast and Geodetic Survey (1929 Adjustment).

We, the undersigned, further covenant and agree that the State of Oregon and/or the United States of America and/or their assigns shall have and hereby are given the right, through their respective officers, agents, contractors, or representatives to enter from time to time upon the said described real property and to trim, cut, and/or fell trees or other natural growth which may extend above, or within any period of five years could reasonably be anticipated to extend above, the said inclined plane. All trees or other natural growth cut or felled by the grantee shall remain the property of the grantors and may be removed at the option and convenience of the owners.

We further covenant and agree that we, at our own expense, will remove or alter any buildings, structures, objects, obstructions or other things other than trees or natural growth and other than telephone, telegraph, power lines or other utility facilities which are now on said real property, [illegible] of the

VOL 279 PAGE 93

EXHIBIT D

We further covenant and agree that the covenants herein specified shall run with the above described real property and shall be binding upon our heirs, administrators, successors and assigns and shall continue in full force and effect so long as the said flight strip is maintained for aircraft purposes, provided, that in the event the said flight strip is abandoned by competent governmental action, then this easement, grant and covenant shall cease and be of no further force or effect.

Dated this 4th day of December, 1942.

Executed in the presence of:

H G Benson — Otto Knorr (SEAL)

Matilda C Knorr (SEAL)

STATE OF OREGON,)
County of Marion) ss

On this 4th day of December, 1942, personally came before me, a Notary Public in and for said county and state, the within named Otto Knorr and Matilda C Knorr, his wife, to me personally known to be the identical persons described in, and who executed, the within instrument, and who each personally acknowledged to me that they executed the same freely and voluntarily for the uses and purposes therein named.

Witness my hand and official seal the day and year last above written.

Harry G. Benson
Notary Public for Oregon
My commission expires: Sept 20 1944

INDEXED

242944

COUNTY RECORDS — Deeds Vol 279 — DEC 10 1942 — Deputy

RETURN TO: OREGON STATE HIGHWAY COMMISSION, SALEM, OREGON

Exhibit 15

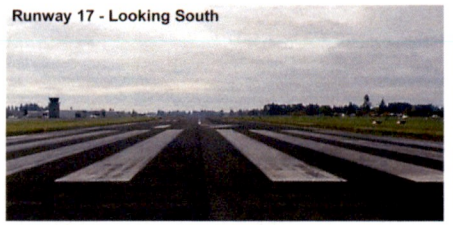
WHPacific

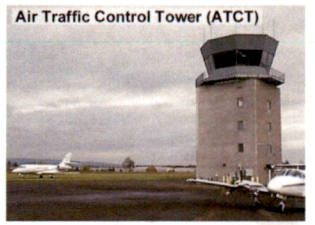
Legend
75
70
65
60
55

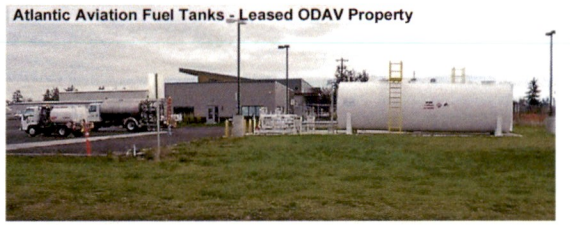
Aurora State Airport
Aurora, OR

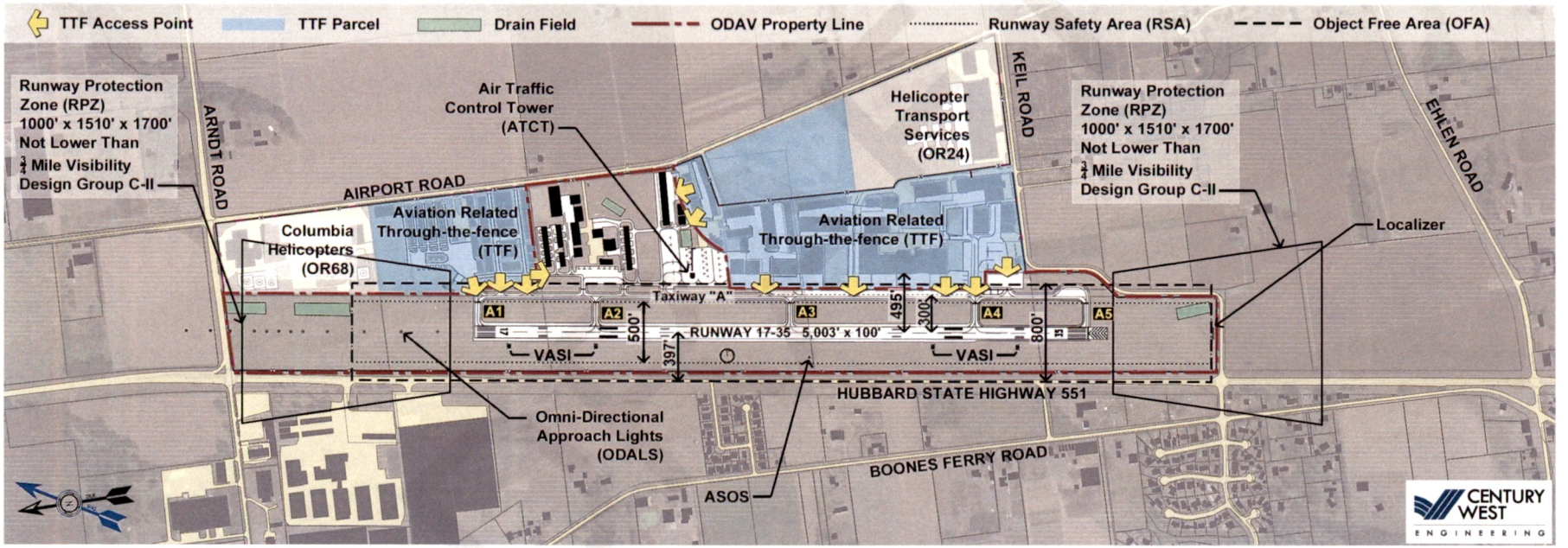
Exhibit 5E - Noise Contours
Existing Conditions 2010


Taxiway "A"


Runway 17 - Looking South


Air Traffic Control Tower (ATCT)


Atlantic Aviation Fuel Tanks - Leased ODAV Property


TTF Access Point
TTF Parcel
Drain Field
ODAV Property Line
Runway Safety Area (RSA)
Object Free Area (OFA)
Runway Protection Zone (RPZ) 1000' x 1510' x 1700' Not Lower Than ¾ Mile Visibility Design Group C-II
ARNDT ROAD
Air Traffic Control Tower (ATCT)
AIRPORT ROAD
Aviation Related Through-the-fence (TTF)
Columbia Helicopters (OR68)
Helicopter Transport Services (OR24)
Aviation Related Through-the-fence (TTF)
KEIL ROAD
Runway Protection Zone (RPZ) 1000' x 1510' x 1700' Not Lower Than ¾ Mile Visibility Design Group C-II
EHLEN ROAD
Localizer
Taxiway "A"
A1
A2
A3
A4
A5
RUNWAY 17-35 5,003' x 100'
500'
495'
300'
800'
397'
VASI
VASI
HUBBARD STATE HIGHWAY 551
Omni-Directional Approach Lights (ODALS)
ASOS
BOONES FERRY ROAD
CENTURY WEST ENGINEERING


Hangars on ODAV Property

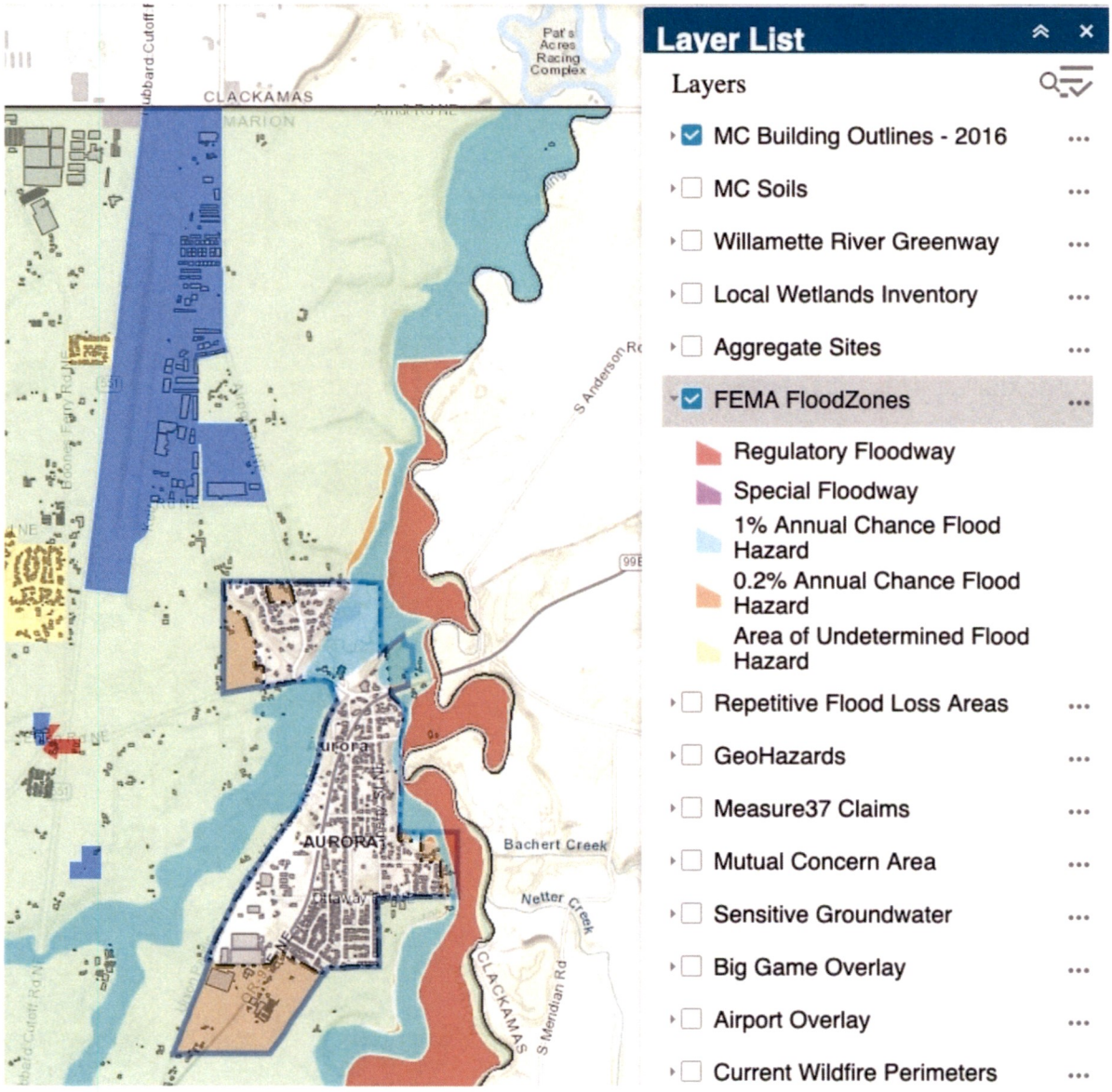

Hubbard Highway at Arndt Road


Piper Road at Hubbard Highway

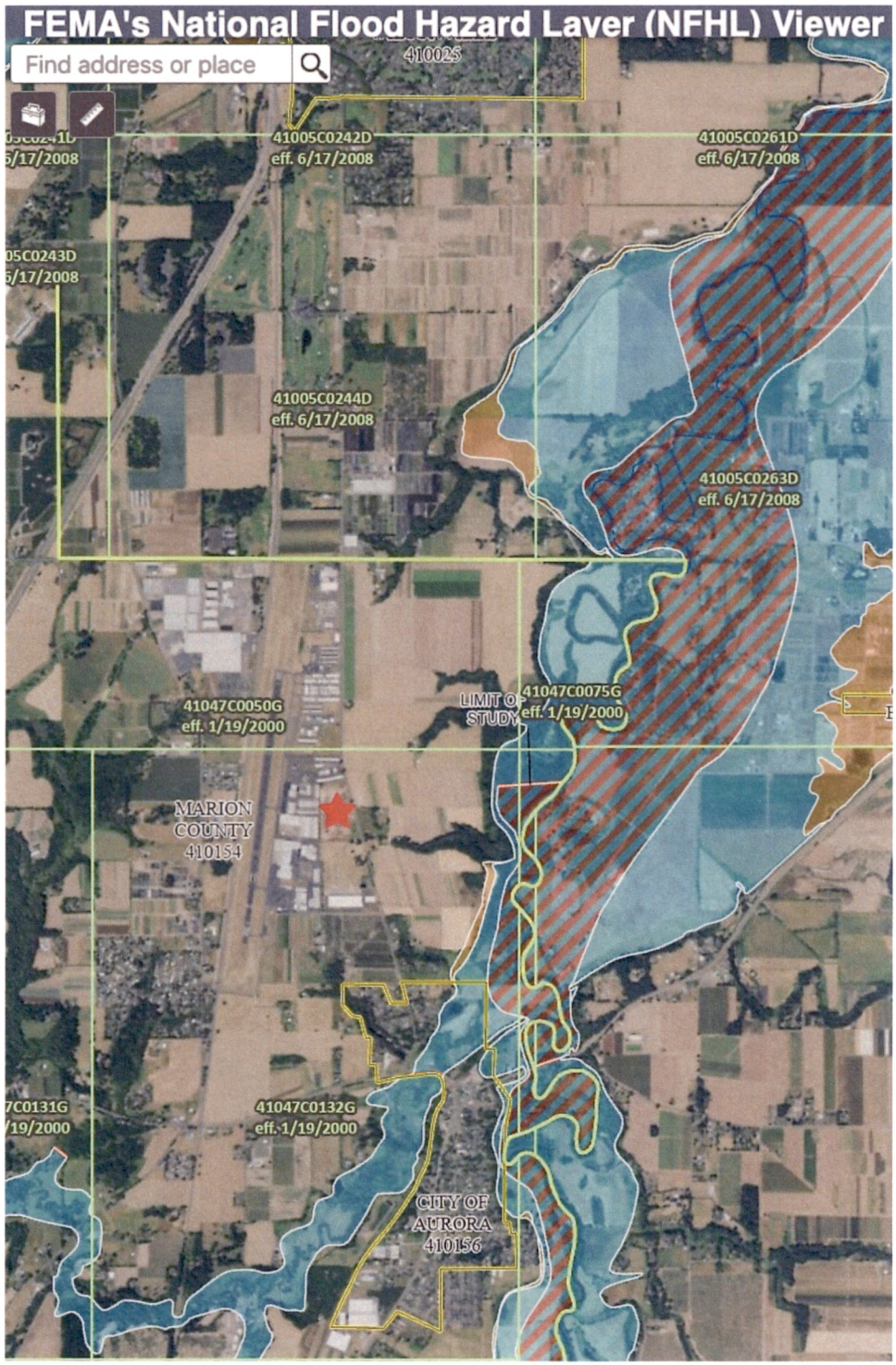

Runway Distance Markers and VASI

Floodplain Areas

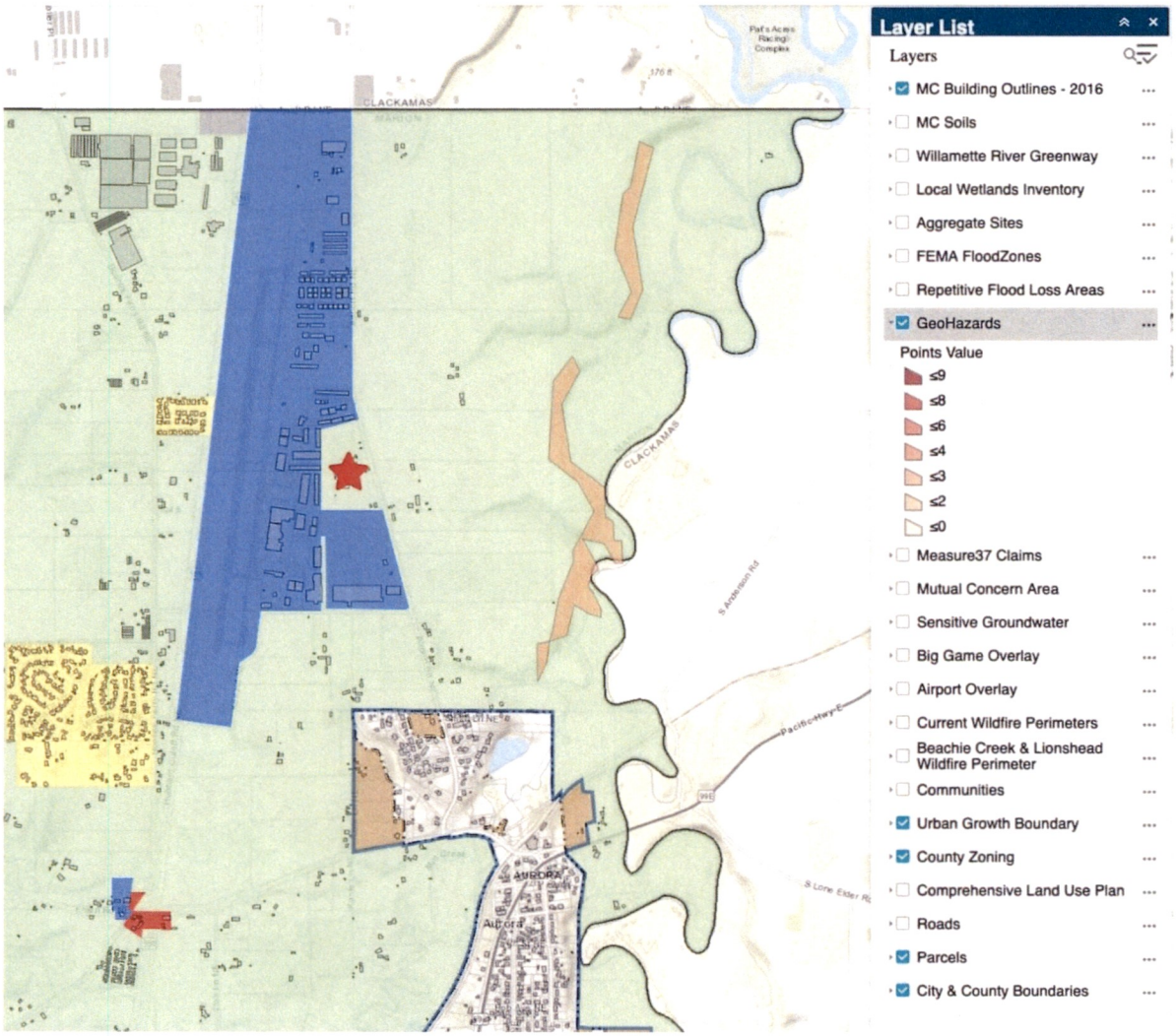
Marion County FEMA Flood Zone Areas Excerpt



FEMA National Flood Hazard Layer (NFHL) Viewer Excerpt



Marion County and Clackamas County Geohazards



GEOLOGIC HAZARD MAPS

Relative Ground-Shaking Amplification Susceptibility Map

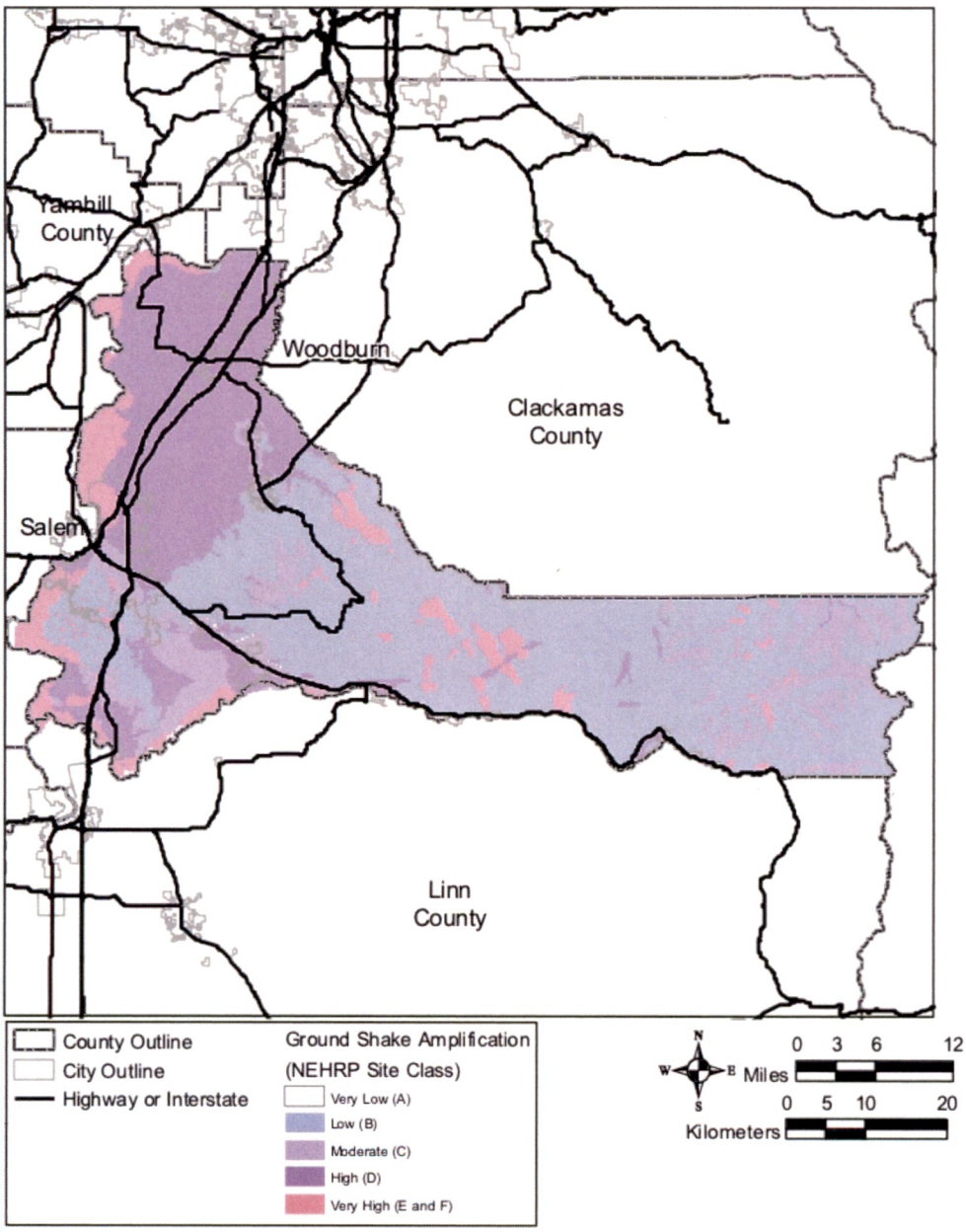


Figure E5. Relative ground-shaking amplification susceptibility map for Marion County, Oregon.

Relative Liquefaction Hazard Susceptibility Map

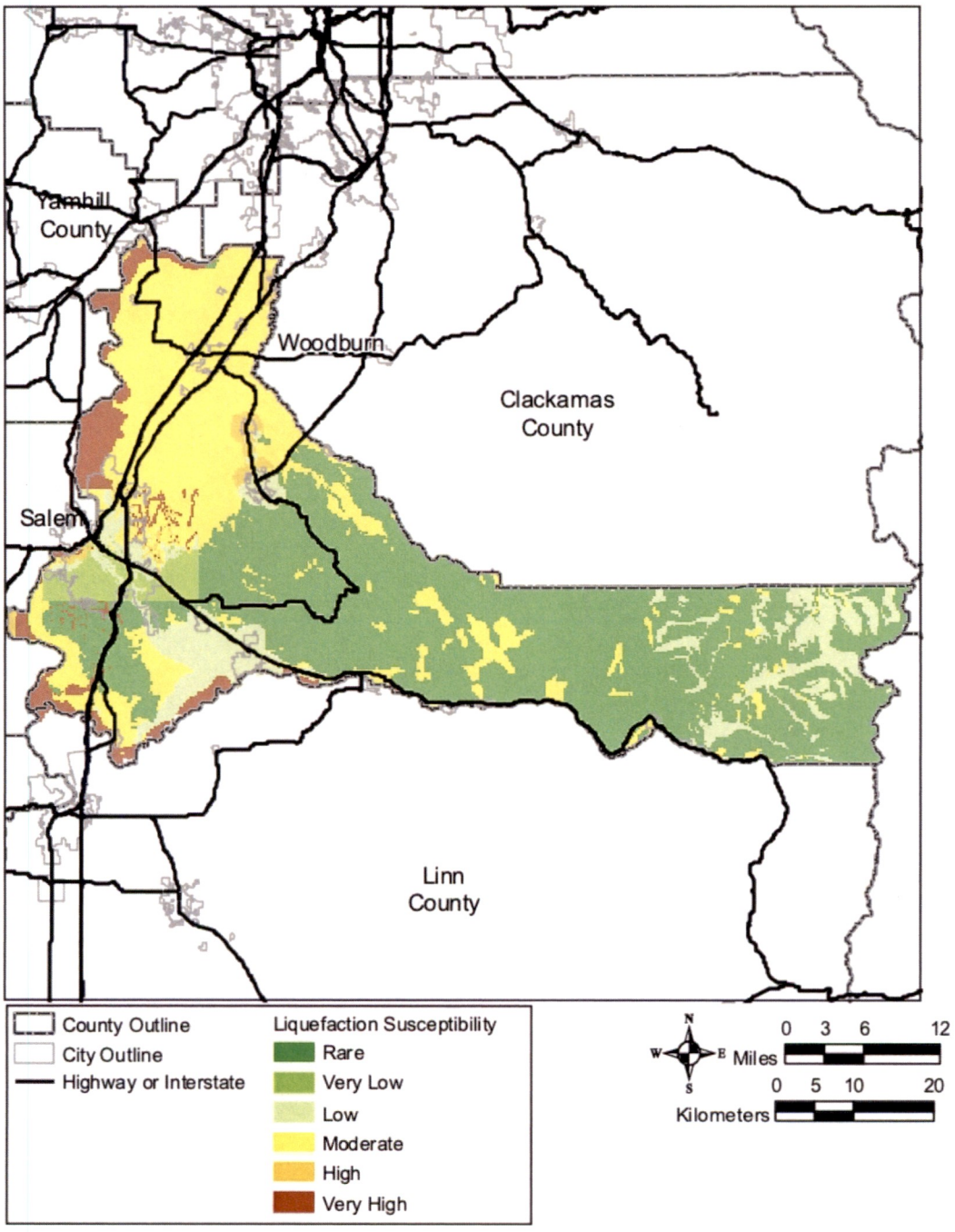
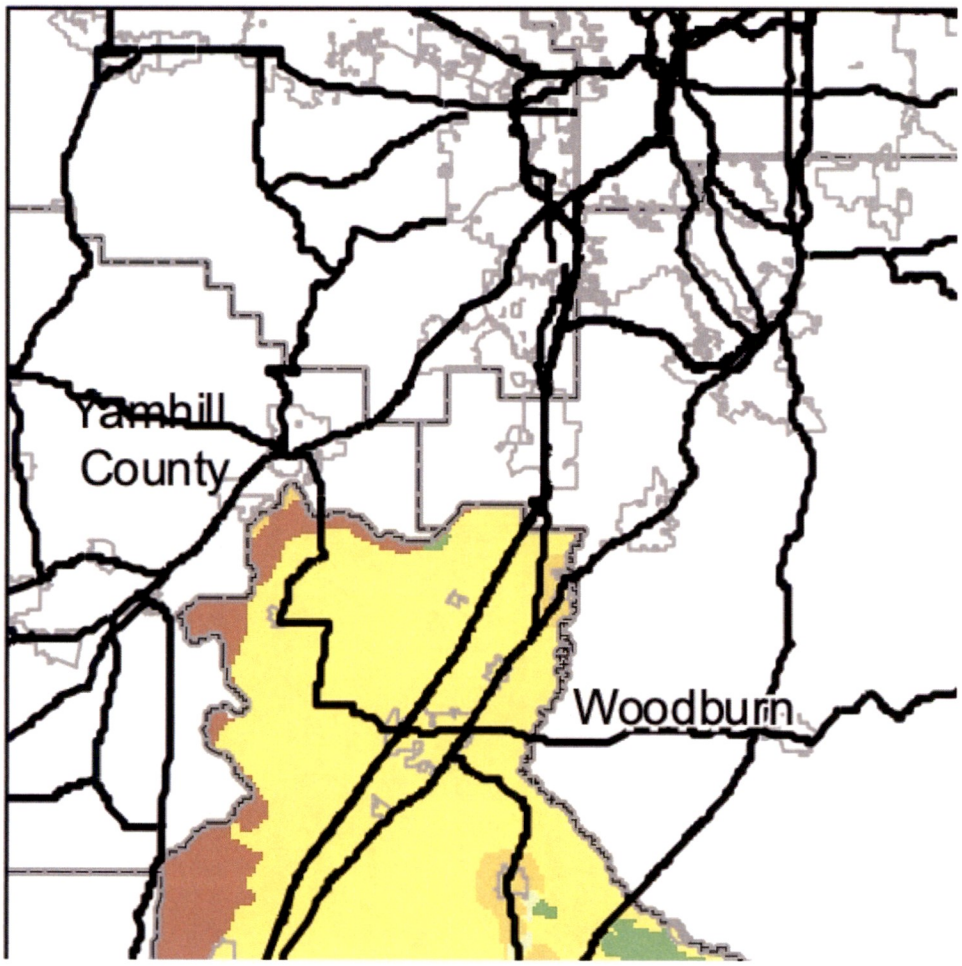


Figure E6. Relative liquefaction susceptibility map for Marion County, Oregon.

Detail of Figure E6 Relative liquefaction susceptibility Map for Marion County, Oregon

Relative Liquefaction Hazard Susceptibility Map



Relative Earthquake-Induced Landslide Susceptibility Map

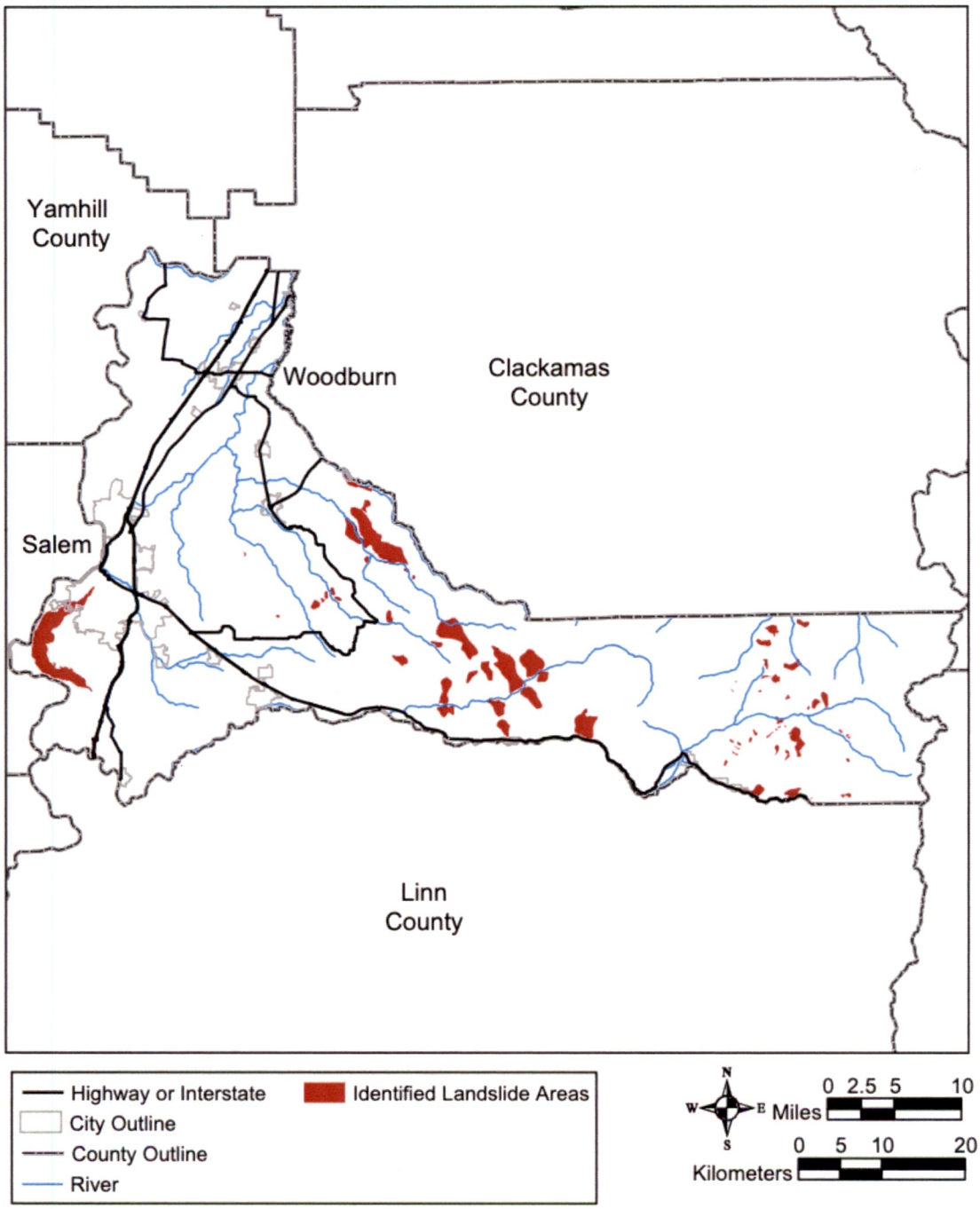


Figure E7. Relative earthquake-induced landslide susceptibility map for Marion County, Oregon.

Identified Landslide Areas Map

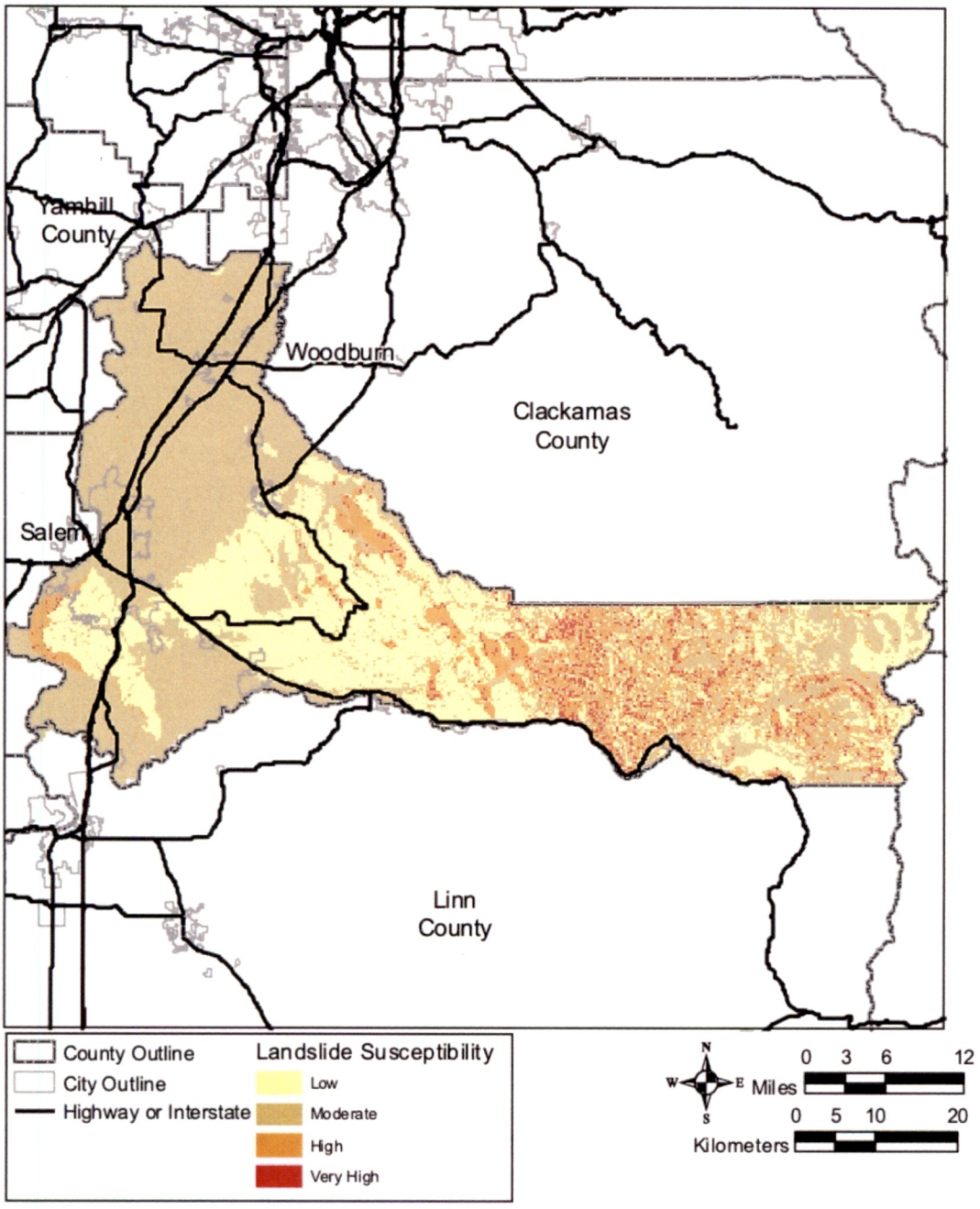


Figure E8. Identified landslide map for Marion County, Oregon.

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
VICKI S. McCONNELL, ACTING STATE GEOLOGIST

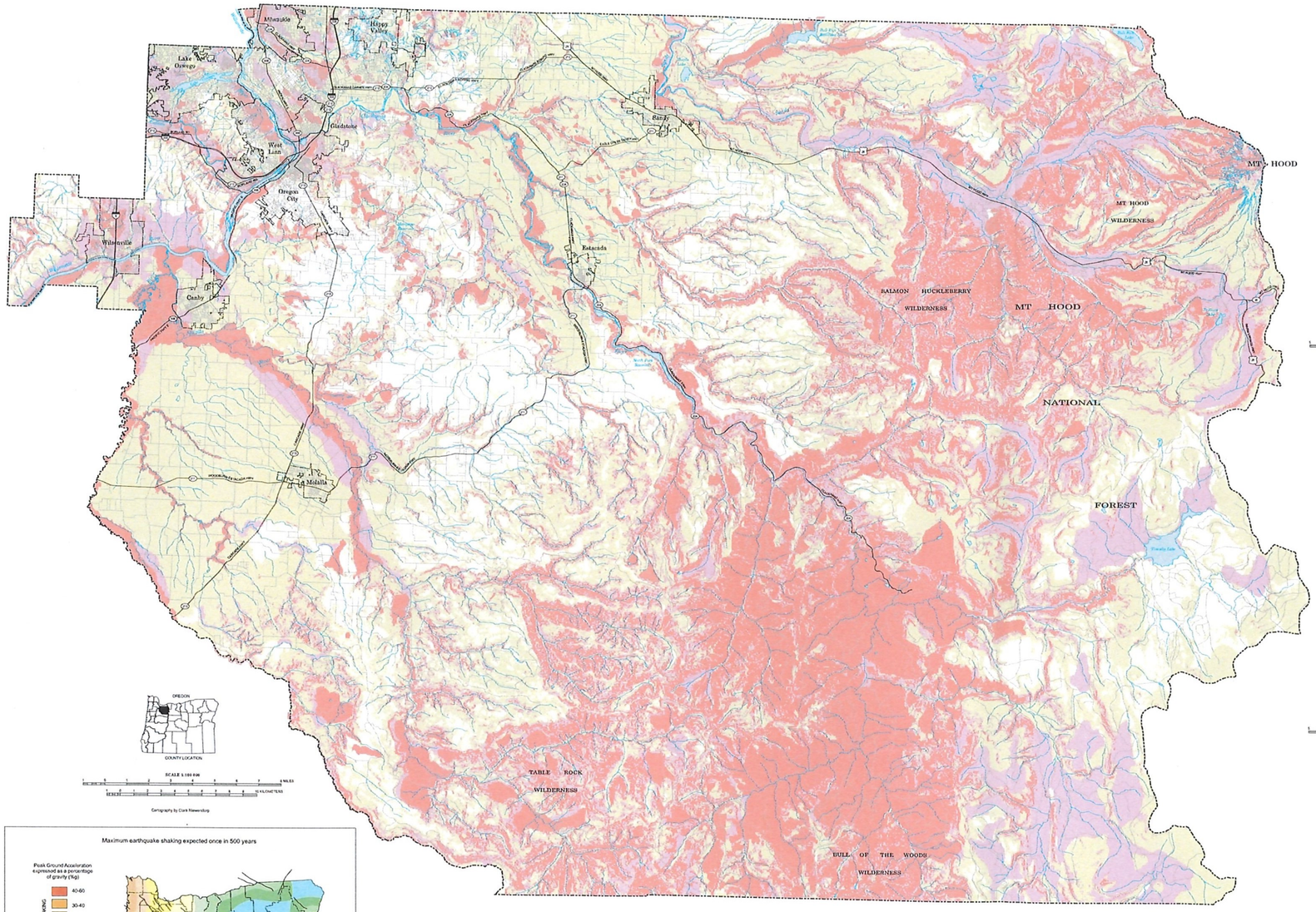
Relative Earthquake and Landslide Hazards in Clackamas County

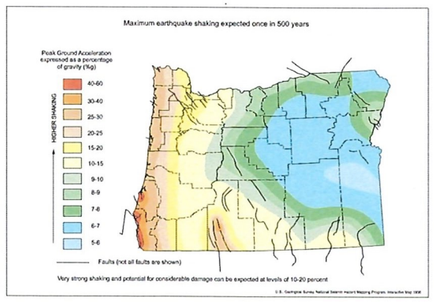
2003

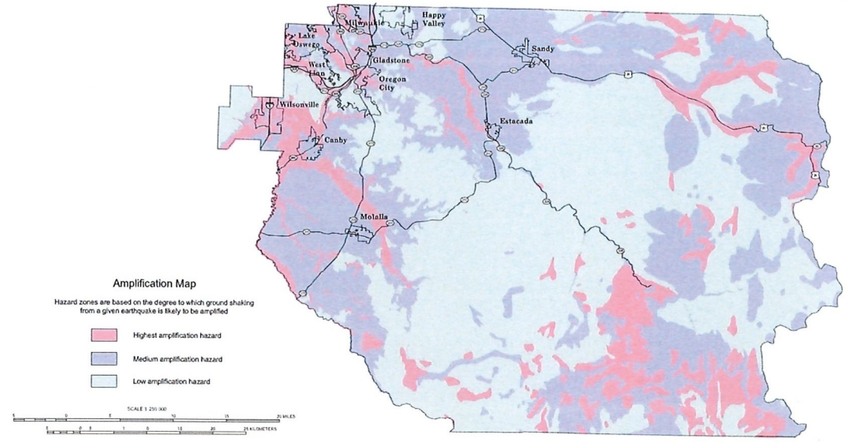
OFR O-03-09

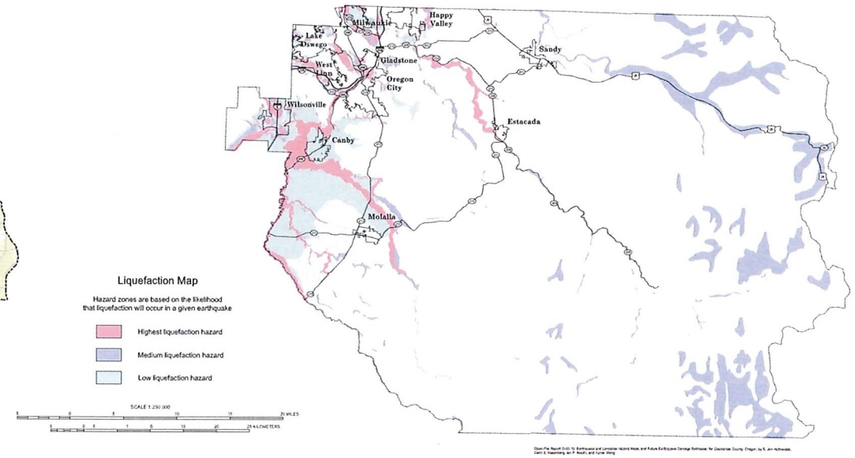
Relative Earthquake and Landslide Hazards in Clackamas County

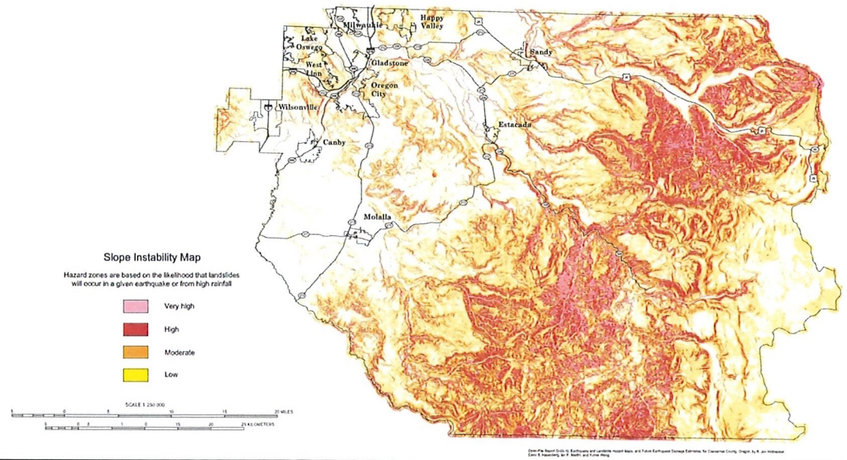
Clackamas County Emergency Management and Geographic Information Systems











This map is available from:
The Nature of the Northwest Information Center
Suite 177
800 NE Oregon Street #5
Portland, OR 97232
503/872-2750
www.naturenw.org
and the Baker City (541 523-3133) and Grants Pass (541 476-2496) Field Offices of the Oregon Department of Geology and Mineral Industries

IMPORTANT NOTICE: This map depicts relative earthquake hazard zones that are based on limited geologic and geophysical data as described in the Department of Geology and Mineral Industries' publication, Open-File Report O-03-10, 2003, Earthquake and Landslide Hazard Maps, and Future Earthquake Damage Estimates, for Clackamas County, Oregon, by R. Jon Hofmeister, Carol S. Hasenberg, Ian P. Madin, and Yumei Wang. This map is intended for regional purposes only and cannot replace site-specific investigations.

Exhibit 19

Marion County Local Wetlands Inventory

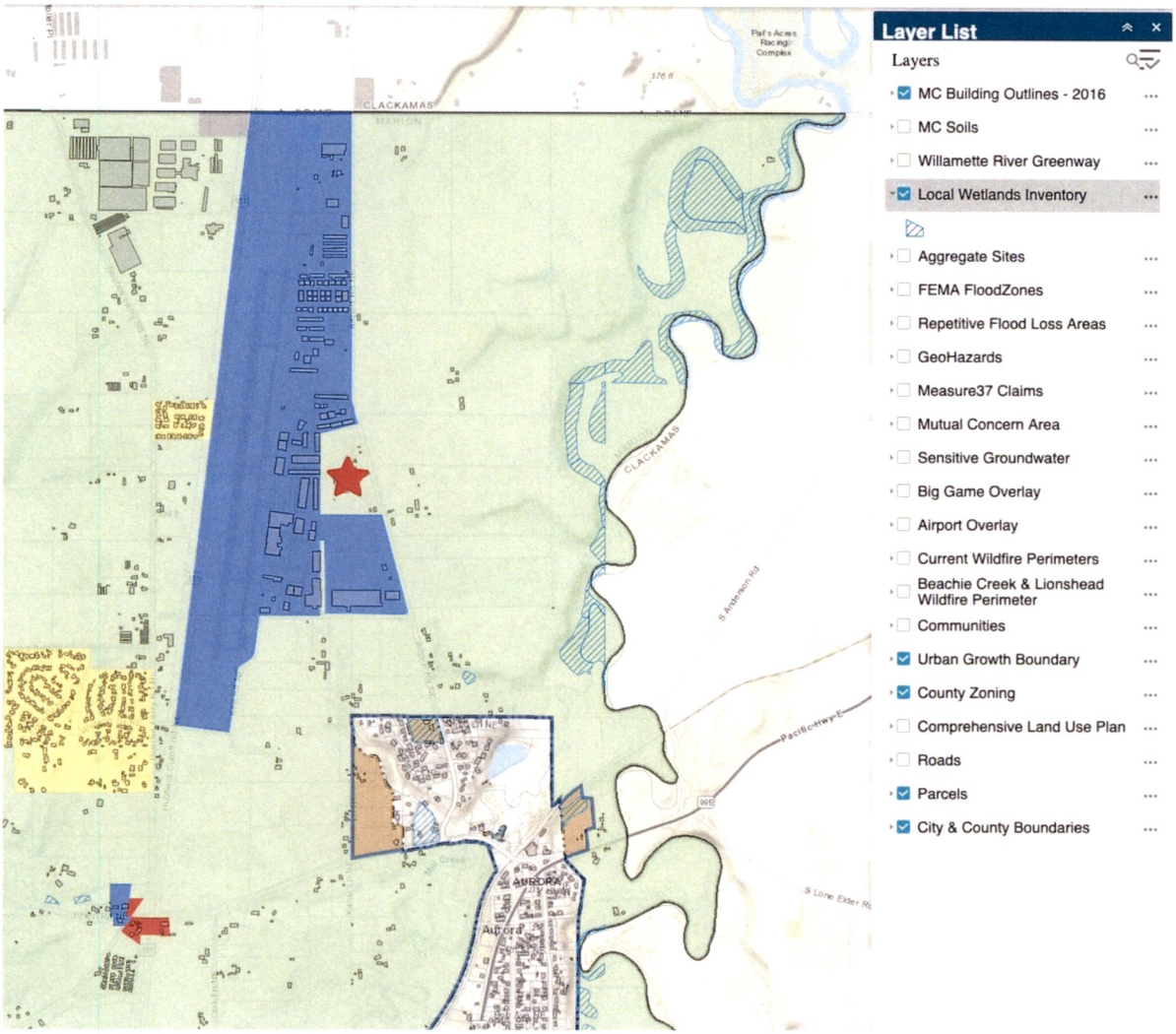


EXHIBIT K

BEFORE THE MARION COUNTY PLANNING COMMISSION
MARION COUNTY, OREGON
Conditional Use Case No. 73-37

In the Matter of the Conditional Use Application of)
)
)
NORTHWEST GOSPEL TEMPLE)

NOTICE OF ORDER GRANTING CONDITIONAL USE

NOTICE IS HEREBY GIVEN to the above-named petitioners that the aforesaid application for conditional use is granted, subject to the conditions stated in the attached report, which report by this reference is made a part hereof.

THIS CONDITIONAL USE shall not be effective until ten days after the mailing of the notice of decision, and then not in case certification of the proceedings has been requested by the Board of Commissioners, or an appeal has been taken as hereinafter provided; in either case, the conditional use not being effective until the Board of Commissioners has acted on the certification of appeal.

THIS CONDITIONAL USE shall be effective only when the exercise of the right granted hereunder shall be commenced within six months from the effective date of the conditional use, unless a longer period be specified or thereafter allowed by the Commission. In case such right be not exercised, or extension obtained, the conditional use shall be void.

DATED at Salem, Oregon, this 2nd day of JULY, 1973.

MARION COUNTY PLANNING COMMISSION

By _____
Acting Secretary

Effective date: July 12, 1973
Expiration date: January 12, 1974

NOTE: PERMITS are required PRIOR to construction, and PRIOR to the installation of septic tanks and drain fields. Please make application to the Marion County Building Inspector, Room 22, Marion County Courthouse, Salem, Oregon. Telephone: 588-5147

EXHIBIT K

REVIEW COMMITTEE REPORT
Marion County Planning Commission
June 26, 1973

EXHIBIT "I"
Agenda Item No. 3.9
CONDITIONAL USE CASE NO. 73-37
Filed: May 16, 1973
Public Hearing Held: 6/5/73

1. APPLICANT: Northwest Gospel Temple

2. FILED BY: Joel Cooper

3. REQUEST: To construct a restroom thereby expanding an existing church conference dormitory in an RA (Residential Agricultural) zone (Sections 129.020 (k) and 120.060 of the Marion County Uniform Zone Code)

4. LOCATION: Route 2, Box 296, Aurora (approximately 1 mile northwest of Aurora on the west side of MR 59)

5. LEGAL DESCRIPTION: As set forth in application file

6. REPORT OF FACTS: The church officials have requested to expand their restroom facilities on the property which is partially wooded and contains a church campground consisting of cabins, dining room, snack bar, tabernacle and office.

   The Marion County Health Department reports that, although the soils are very restrictive, this facility would be appropriate due to its seasonal use. However, it also indicates no further expansion will be approved.

7. REVIEW COMMITTEE CONCLUSIONS: The Committee finds that the proposed use would be appropriate.

8. REVIEW COMMITTEE RECOMMENDATION: The Committee recommends that the conditional use be GRANTED.

APPROVED BY THE COMMISSION and forwarded to the Marion County Board of Commissioners on this 26th day of June, 1973.

Acting-Secretary

CURTIS/jd

EXHIBIT L

BEFORE THE HEARINGS OFFICER

JUL 8 1977

FOR MARION COUNTY, OREGON

In the matter of the application of Christian Gospel Temple to divide 34 acres into two parcels of 17 acres each in an EFU Zone on property located on MR 59, at the northwest corner of its intersection with MR 429, near Aurora, Oregon.	)	SPECIAL EXCEPTION CASE NO. 77-37

FINDINGS OF FACT AND DECISION

Date and Place of Hearing: June 16, 1977, in the Board's Hearing Room, Marion County Courthouse, Salem, Oregon.

Appearances:

Staff Report by Pam Brown

Proponents: Cornelius Mears, Mary Mears, and the Reverend David Busch appeared in support of the application.

Opponents: No appearance in opposition.

DISCUSSION

This is an application to divide 34 acres into two parcels of 17 acres each in an EFU (Exclusive Farm Use) Zone on property located on Market Road 59, at the northwest corner of its intersection with Market Road 429, near Aurora, Oregon.

The subject property extends north and south along Market Road 59. The northerly half is tree-covered and supports approximately 20 buildings which comprise an existing church camp. The southerly half is cleared and is in agricultural production. A residence exists on each half of the property. The present owners wish to divide the property and sell the camp to another church organization. The farmable portion would then be sold to a party interested in continuing its agricultural use.

As proposed, the application would not create additional homesites, as homes already exist on the parcels. The use of the land would not be affected by this division as each parcel would continue to be used as it is at present. The campground is a legal use and may be continued so long as no material changes in activities take place.

The application as proposed will not result in a diminishing of agricultural land, will not seriously interfere with farm uses, and will not alter the stability of the land use pattern in the area.

The Marion County Health Department states that due to soil limitations the camp facility should be used only during the summer months and that continued expansion

EXHIBIT L

of the camp cannot be approved. Since expansion is not contemplated in this application, the question cannot be specifically dealt with here. However, present or potential owners should be made aware that further discussions with the Sanitarian are advisable.

FINDINGS OF FACT

1. The proposed division will not result in additional homesites.
2. The proposed division will not cause any change in the activities already existing on the property.
3. The application will not adversely affect farm activity in the area nor remove tillable land from production.
4. The division will not affect the land use pattern in the area.

BASED ON THE FOREGOING, THE HEARINGS OFFICER ENTERES THE FOLLOWING:

CONCLUSIONS AND DECISION

The Hearings Officer is empowered by the Ordinance to Grant the Special Exception in this case. The application, as proposed, is in harmony with the purpose and intent of the Ordinance.

The Special Exception is GRANTED, subject to the following conditions.

1. That the applicants shall, within 60 days of this Order, submit a partitioning map in the appropriate form to the Director of the Planning Department for approval. Said map shall reflect the Hearings Officer's decision herein. When approved, said map shall be recorded with the Marion County Clerk.
2. Should the applicants fail to submit or gain approval and have recorded a partitioning map within 60 days of this Order, the approval granted herein shall be void without further action by the Hearings Officer.

Dated this 7 day of July, 1977.

MARION COUNTY HEARINGS OFFICER

Larry Jon Pound

BEFORE THE LAND USE BOARD OF APPEALS
OF THE STATE OF OREGON

JOSEPH SCHAEFER,
Petitioner,

vs.

MARION COUNTY,
Respondent,

and

TLM HOLDINGS LLC,
Intervenor-Respondent.

LUBA No. 2020-108

FINAL OPINION
AND ORDER

Appeal from Marion County.

Joseph Schaefer filed the petition for review and reply brief and argued on behalf of themselves.

Scott A. Norris and Alan M. Sorem filed the joint response brief. Scott A. Norris argued on behalf of respondent. Alan M. Sorem argued on behalf of intervenor-respondent. Also on the brief was Saalfeld Griggs PC.

RYAN, Board Member; ZAMUDIO, Board Chair; RUDD, Board Member, participated in the decision.

REMANDED 10/12/2021

You are entitled to judicial review of this Order. Judicial review is governed by the provisions of ORS 197.850.

Opinion by Ryan.

NATURE OF THE DECISION

Petitioner appeals a decision by the board of county commissioners approving an application for (1) a comprehensive plan map amendment to change the plan designation of property adjacent to the Aurora State Airport (the Airport) from Primary Agriculture (PA) to Public and Semi-Public (P), (2) a zoning map amendment to change the zoning designation of the property from Exclusive Farm Use (EFU) to P, (3) exceptions to Statewide Planning Goals 3 (Agricultural Lands) and 14 (Urbanization), and (4) a conditional use permit authorizing various airport-related uses on the property.

FACTS

The subject 16.54-acre parcel is zoned EFU and is bordered on the east by Airport Road, a county road. Properties to the east of Airport Road are zoned EFU and farmed. Properties to the north, west, and south of the subject property are part of the Airport and zoned P. The Airport is owned and managed by the State of Oregon. We take the description of the use of properties to the north, west, and south of the subject property from the challenged decision:

> "The property bordering the Subject Property directly to the north * * * is a 3.71-acre parcel, zoned [P] * * *. This property contains six buildings that are all related to airport use. Five of the buildings house twelve hangars offering storage options to private aircraft owners with direct access to the Airport and runway. Each hangar is individually owned and possesses a unique tax lot number on Marion County Assessor Map No. 04-1W-02D. Further north is a 21.42-acre parcel owned by Oregon Department of Aviation ('ODA') with airport hangars, offices, and a tarmac * * *. The

> property bordering the Subject Property directly to the south * * * is 27.47 acres and owned by US Leaseco, Inc. This is the site of Helicopter Transport Services, which charters heavy lift and fire suppression helicopters. To the southwest is a group of privately owned properties commonly referred to as the Southend Corporate Airpark [(the Airpark)]. It consists a number of hangars, office, maintenance, repair, engineering and design spaces serving Columbia Helicopters, FLIR Systems, Inc., Erickson Inc., Life Flight Network, Metal Innovations, Inc., Van's Aircraft, Wilson Construction and other companies operating airport and aircraft-related uses together with Fixed Based Operator (FBO) LYNX, which provides fuel and direct aircraft, pilot and customer support services." Record 12-13 (boldface omitted).

The subject property is located within the horizontal surface district of the airport overlay zone, described in Marion County Code (MCC) chapter 17.177, which limits uses of the subject property. The subject property is encumbered by a taxiway easement that allows users direct access to the Airport's runway. Intervenor-respondent (intervenor) applied for comprehensive plan map and zoning map amendments to change the plan and zoning designations from PA and EFU to P with a Limited Use (LU) overlay, exceptions to Goals 3 and 14, and a conditional use permit to authorize the future development of ten categories of airport-related uses allowed in the LU overlay: aircraft hangars; air medevac and emergency medical technician services; aviation facilities; air charter operations; aircraft fixed based operations; airport-related administration; aerospace- and aerodynamic-related uses; design, maintenance, and similar uses

of aircraft and related equipment; aviation-related schools; and public health and safety services intended to serve the airport.[1] Record 63-65.

The subject property contains soils that make on-site wastewater treatment infeasible.[2] The Airport includes a shared septic system at the Airpark, located

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[1] The challenged decision describes the proposed development as follows:

> "[Intervenor] anticipates the initial use of these facilities will consist primarily of hangars, but may also include maintenance and repair facilities, storage, management office space, research and development, flight testing, equipment sales and service, and other airport-related uses allowed under the required zone. The Subject Property would be developed under the Marion County Building Code and leased to multiple tenants. The proposed site plan and descriptions are conceptual only. Tenant 1 would have access to 7.02 acres of the Subject Property and the taxi lane. Hangar Y is proposed to be approximately 52,870 square feet, with a parking area, and office/maintenance/shop space proposed to be multiple stories and approximately 49,590 square feet. Tenant 2 would have access to 2.42 acres. Hangar X is proposed to be 32,000 square feet with a taxi lane, parking area, and a multiple story office/maintenance/shop space proposed to be approximately 22,500 square feet. Tenant 3 would have access to 5.0 acres of space. Hangar W is proposed to be 36,000 square feet and include a taxi lane, parking area, and a multi-story office/maintenance/shop space proposed to be approximately 48,000 square feet. Tenant 4 would have access to 2.0 acres. Hangar V is proposed to be approximately 29,410 square feet together with a taxi lane and parking area." Record 13.

[2] The decision explains the prior use of the subject property as follows:

> "The Subject Property was the site of a Methodist church camp and later a religious retreat, training center and church. The Subject Property has not been in resource use for several decades and is not

adjacent to the subject property, that was installed after the county approved a reasons exception to Statewide Planning Goals 11 (Public Facilities and Services) and 14 in 2004 (the 2004 Exception). Record 537-48. As part of its application, intervenor proposes to provide wastewater treatment for the subject property either by connecting to the Airpark's shared septic system or through on-site holding tanks that are periodically pumped.

In March 2019, the hearings officer held a hearing on the application, and, in November 2019, they recommended conditional approval of the application. In June 2020, the board of county commissioners held *de novo* hearings on the application and, at the conclusion, left the record open until July 15, 2020. In August 2020, the board of county commissioners deliberated and approved the application, and, in October 2020, it adopted findings and conclusions in support of the decision.

The board of county commissioners concluded that no exceptions to Goals 3 or 14 were required because the application is consistent with Goals 3, 4, 11, and 14 as a matter of law pursuant to OAR 660-012-0065(3)(n). We discuss those findings in detail in our resolution of the sixth assignment of error. In the

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specially assessed for farm or forest use. The Subject Property was developed with a house of worship, two dwellings, several cabins, a meeting hall, snack bar, and an office building, along with roads, parking areas, well, several septic systems, and infrastructure for electricity and gas service. Remediation would likely be required to make the parcel suitable for resource use." Record 39.

alternative, the board of county commissioners approved exceptions to Goals 3 and 14 pursuant to OAR 660-004-0020, 660-004-0022, and 660-004-0040. Petitioner challenges those findings in portions of their first, second, third, fourth, fifth, sixth, and tenth assignments of error.

This appeal followed.

SIXTH ASSIGNMENT OF ERROR

OAR 660-012-0065, adopted by the Land Conservation and Development Commission (LCDC), "identifies transportation facilities, services and improvements which may be permitted on rural lands consistent with Goals 3, 4 [(Forest Lands)], 11, and 14 without a goal exception." OAR 660-012-0065(1). OAR 660-012-0065(3) provides:

> "The following transportation improvements are consistent with Goals 3, 4, 11, and 14 subject to the requirements of this rule:
>
> "* * * * *
>
> "(n) Expansions or alterations of *public use airports* that do not permit service to a larger class of airplanes[.]" (Emphasis added.)

The board of county commissioners relied on OAR 660-012-0065(3)(n) to conclude that the application for comprehensive plan map and zoning map amendments to expand the Airport is consistent with Goals 3, 4, 11, and 14.[3] In

[3] There is no dispute that the proposed expansion of the Airport does not "permit service to a larger class of airplanes."

the sixth assignment of error, petitioner includes several subassignments of error that challenge the board of county commissioners' reliance on OAR 660-012-0065(3)(n).

Citing ORS 197.763(1), the county and intervenor (respondents) respond, initially, that several of the issues presented in the sixth assignment of error were not raised prior to the conclusion of the initial evidentiary hearing, and petitioner may not raise them for the first time at LUBA. ORS 197.763(1) requires that issues be not only raised below but also accompanied by statements or evidence sufficient to afford the local decision maker an opportunity to respond. *See Boldt v. Clackamas County*, 21 Or LUBA 40, 46, *aff'd*, 107 Or App 619, 813 P2d 1078 (1991) (the "raise it or waive it" principle embodied in ORS 197.763(1) does not limit the parties on appeal to the exact same arguments made below, but it does require that the issue be raised below with sufficient specificity so as to prevent "unfair surprise" on appeal). We address the waiver argument first before turning to the subassignments of error.

A. Waived Issues

In a portion of the second subassignment of error, petitioner argues that OAR 660-012-0065(3)(n) is inconsistent with and conflicts with (1) ORS 197.175(2)(a) and (e), which require that comprehensive plan map amendments and simultaneous land use decisions subject to those amendments comply with the statewide planning goals, and (2) ORS 197.732(1)(b)(B) and (2), which authorize exceptions to the statewide planning goals for comprehensive plan map

amendments that fail to comply therewith. Relatedly, petitioner argues that LCDC lacked authority to adopt OAR 660-012-0065(3)(n). Respondents respond that petitioner failed to raise those issues prior to the close of the initial evidentiary hearing and may not do so for the first time at LUBA. ORS 197.763(1); ORS 197.835(3).

In the petition for review, petitioner cites Record 435 to 436, 830, 855, 937, and 5483 to demonstrate that the issues raised in the sixth assignment of error were preserved.[4] Petitioner does not otherwise respond to the waiver argument. We have reviewed the cited record pages, and we agree with respondents that nothing in them raises the issues that are presented in the second subassignment of error. The cited record pages do not show that fair notice was provided. Accordingly, petitioner may not raise those issues for the first time on appeal.

In the third subassignment of error, petitioner challenges the board of county commissioners' reliance on the definition of "airport" at OAR 660-013-0020(1) and the legislative policy of "encourage[ing] and support[ing] the continued operation and vitality of Oregon's airports" at ORS 836.600 to conclude that the proposed expansion of the Airport is consistent with Goals 3,

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[4] OAR 661-010-0030(4)(d) requires each assignment of error in the petition for review to demonstrate that the issue raised in the assignment of error was preserved during the proceedings below or, where an assignment raises an issue that was not preserved, to state why preservation is not required.

4, 11, and 14 as a matter of law. Petitioner argues that the definition of "airport" at OAR 660-013-0020(1) is inconsistent with the definition of "airport" at ORS 836.605(2), which petitioner argues limits airport boundaries to those that existed in 1994. Petitioner also argues that OAR 660-013-0040(1) requires the county to adopt a map showing the Airport's boundaries, which petitioner argues the county has not done. Accordingly, petitioner argues that ORS 836.600 does not apply, since the subject property is not actually part of an "airport" for purposes of that statute. Petition for Review 47-48.

Respondents argue that the issues presented in the third subassignment of error were not raised prior to the close of the initial evidentiary hearing, and petitioner is precluded from raising them for the first time on appeal to LUBA. We have reviewed the record pages cited by petitioner, and we agree with respondents that nothing in them raises the issues that are presented in the third subassignment of error. The cited record pages do not show that fair notice was provided. Petitioner may not raise those issues for the first time on appeal.

In the fourth subassignment of error, petitioner argues that ORS 836.640 to 836.642 do not apply to the decision. Again, respondents respond that petitioner failed to raise that issue below. We agree. The cited record pages do not show that fair notice was provided. Moreover, the fourth subassignment of error does not actually assign error to the decision. Rather, it maintains that "the Decision correctly does not rely on [ORS 836.640 to 836.642]." Petition for

Review 49. Accordingly, even if it were not waived, the fourth subassignment of error would provide no basis for reversal or remand.

The second subassignment of error is denied, in part. The third and fourth subsassignments of error are denied.

B. OAR 660-012-0065(3)(n) Applies

In the portion of the second subassignment of error that is not waived, petitioner argues that the board of county commissioners improperly relied on OAR 660-012-0065(3)(n) to find that the proposed comprehensive plan map and zoning map amendments are consistent with Goals 3, 4, 11, and 14 as a matter of law and that, accordingly, no goal exceptions are required.[5] The essential issue

---

[5] The board of county commissioners found:

> "The City of Aurora argued that OAR 660-012-0065(3)(n) does not apply to [intervenor's] Proposal and only applies to development of ODA-owned facilities. Such a construction is inconsistent with the definition of OAR 660-013-0020(1), which is the implementing rule for [Statewide Planning Goal 12 (Transportation)] as it applies to airport facilities. The specific definition of an airport to include 'all adjacent land used in connection with the aircraft' clearly applies to the Subject Property that is adjacent to the [Airport Layout Plan] boundary and is benefited by a taxi-lane easement. The text 'including but not limited to land used for existing airport uses' also expressly addresses that the Subject Property has not yet been used for existing uses. Had the intent been to limit the definition to only land with existing uses, the text would not have expressly stated it was not limited to such existing airport used lands. Aurora's argument that the Subject Property must be excluded is inconsistent with the text and context of OAR 660-012-0065(3)(n), OAR 660-013-0020(1), and ORS 836.600." Record 57.

that petitioner presents in this portion of the second subassignment of error is the meaning of the phrase "public use airport" in OAR 660-012-0065(3)(n).

Petitioner argues that OAR 660-012-0065(3)(n) does not apply because the application seeks to expand the Airport to allow for private development. Therefore, petitioner argues, the application is not for the "[e]xpansion[] or alteration[] of [a] *public use airport*[]." (Emphasis added.) Relatedly, petitioner argues that the proposed expansion is not of a "public use airport" because it is not proposed by a public owner of the Airport and because the subject property is not owned by, and will not be owned by, a public entity but, rather, will remain in private ownership.

Respondents respond that the Airport is a "public use airport" within the meaning of OAR 660-012-0065(3)(n). Response Brief 45. Respondents respond that petitioner's interpretation of the phrase "public use airport" is not supported by anything in the express language of the rule or in related rules or statutes.

"The meaning of an administrative rule is a question of law, governed by the same principles that apply to the interpretation of statutes." *Gunderson, LLC v. City of Portland*, 352 Or 648, 662, 290 P3d 803 (2012) (citing *State v. Hogevoll*, 348 Or 104, 109, 228 P3d 569 (2010); *Tye v. McFetridge*, 342 Or 61, 69, 149 P3d 1111 (2006)). We begin with a brief description of the rules and enabling legislation leading to LCDC's adoption of OAR 660-012-0065(3)(n) in its current form before turning to the meaning of the phrase "public use airport."

OAR chapter 660, division 12, implements Statewide Planning Goal 12 (Transportation) and is known as the Transportation Planning Rule (TPR). LCDC first adopted the TPR in 1991. The 1991 TPR provided that "[p]ersonal use airports and expansions or alterations of public use airports that do not permit service to a larger class of airplanes" were consistent with Goals 11 and 14 and could be located on rural lands. OAR 660-012-0065(4)(o) (May 8, 1991).

ORS 215.283(3) was subsequently enacted in 1993. Or Laws 1993, ch 792, § 14. That statute has not been amended since its enactment, and it provides:

> "Roads, highways and other transportation facilities and improvements not allowed under subsections (1) and (2) of this section may be established, subject to the approval of the governing body or its designee, in areas zoned [EFU] *subject to*:
>
> "(a) Adoption of an exception to the goal related to agricultural lands and to any other applicable goal with which the facility or improvement does not comply; *or*
>
> "(b) ORS 215.296 for those uses identified by rule of [LCDC] as provided in section 3, chapter 529, Oregon Laws 1993."[6] (Emphases added.)

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[6] Oregon Laws 1993, chapter 529, section 3, provides:

> "The Department of Transportation shall, by March 30, 1994, submit to [LCDC] proposed rules identifying the other roads, highways and transportation facilities that may be allowed pursuant to ORS 215.213(10)(b) and 215.283[(3)](b). [LCDC] shall adopt rules implementing ORS 215.213(10)(b) and 215.283[(3)](b) by June 30, 1994."

Thus, ORS 215.283(3) allows transportation facilities to be established on EFU-zoned land, subject to either (1) an exception to Goal 3 and any other applicable goals or (2) compliance with ORS 215.296 "for those uses identified by rule of [LCDC] as provided in section 3, chapter 529, Oregon Laws 1993."[7]

LCDC amended the TPR in 1995, thereby adopting OAR 660-012-0065(3)(n) in its current form.[8] Unlike OAR 660-012-0065(4)(o) (May 8, 1991),

---

[7] ORS 215.296(1) requires an assessment of whether a proposed nonfarm use on EFU land would "'[f]orce a significant change' in accepted farm practices or '[s]ignificantly increase the cost' of those practices on surrounding agricultural lands." *Stop the Dump Coalition v. Yamhill County*, 364 Or 432, 434, 435 P3d 698 (2019) (quoting ORS 215.296(1)(b)).

[8] The 1995 TPR amendments also adopted OAR 660-012-0065(5), which provides:

> "For transportation uses or improvements listed in *subsections (3)(d) to (g) and (o) of this rule* within an [EFU] or forest zone, a jurisdiction shall, *in addition to demonstrating compliance with the requirements of ORS 215.296*:
>
> "(a) Identify reasonable build design alternatives, such as alternative alignments, that are safe and can be constructed at a reasonable cost, not considering raw land costs, with available technology. The jurisdiction need not consider alternatives that are inconsistent with applicable standards or not approved by a registered professional engineer;
>
> "(b) Assess the effects of the identified alternatives on farm and forest practices, considering impacts to farm and forest lands, structures and facilities, considering the effects of traffic on the movement of farm and forest vehicles and equipment and

OAR 660-012-0065(3)(n) in its current form, quoted above, does not mention "personal use airports," and it provides that "[e]xpansions or alterations of public use airports that do not permit service to a larger class of airplanes" are consistent with Goals 3 and 4 in addition to Goals 11 and 14.

The phrase "public use airports" is not defined in LCDC's rules. However, at the time LCDC adopted OAR 660-012-0065(4)(o) (May 8, 1991), and at the time LCDC adopted OAR 660-012-0065(3)(n) in its current form in 1995, an Oregon Department of Transportation (ODOT) Aeronautics Division rule defined "public use airport" to mean an airport that is "[o]pen to the flying public considering performance and weight of the aircraft being used. May or may not be attended or have services available." OAR 738-020-0015(2)(b) (Sept 20, 1989).

Given that the definition of "public use airport" in OAR 738-20-015(2)(b) (Sept 20, 1989) was in effect when LCDC adopted OAR 660-012-0065(4)(o)

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considering the effects of access to parcels created on farm and forest lands; and

"(c) Select from the identified alternatives, the one, or combination of identified alternatives that has the least impact on lands in the immediate vicinity devoted to farm or forest use." (Emphases added.)

While the issue is not presented in this appeal, we note that OAR 660-012-0065(5) appears to be LCDC's implementation of ORS 215.283(3)(b), which subjects the transportation facilities that LCDC has identified by rule to compliance with ORS 215.296. *See Van Dyke v. Yamhill County*, 78 Or LUBA 530, 544 n 12 (2018) (explaining ambiguities in the rule).

(May 8, 1991); when ODOT submitted proposed rules to LCDC in response to Oregon Laws 1993, chapter 529, section 3; and when LCDC adopted the current version of OAR 660-012-0065(3)(n) in 1995, we conclude that the phrase "public use airports" in OAR 660-012-0065(3)(n) has the meaning in OAR 738-020-0015(2)(b) (Sept 20, 1989). Petitioner does not dispute that the Airport is open to the flying public. Accordingly, we agree with respondents that OAR 660-012-0065(3)(n) applies to the proposed comprehensive plan map and zoning map amendments to expand the Airport because the Airport is a "public use airport" within the meaning of the rule.[9]

Although petitioner does not dispute that the Airport is "open to the flying public," they argue that the record includes no evidence that the *subject property* will be open to the flying public. However, whether the subject property will be open to the flying public is not relevant. OAR 660-012-0065(3)(n) applies to expansions and alterations of "public use airports," not to individual components or concessionaires of public use airports. Stated differently, nothing in OAR 660-012-0065(3)(n) requires every aspect of a public use airport to be "open to the

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[9] The board of county commissioners relied on the definition of "airport" in OAR 660-013-0020(1), which is part of the Airport Planning Rule. However, because that definition was not adopted by LCDC until 1996, it does not provide context for interpreting the term "public use airport" in OAR 660-012-0065(3)(n), which was adopted in 1995. *See Stull v. Hoke*, 326 Or 72, 79-80, 948 P2d 722 (1997) (later-enacted statutes are not context for what the legislature intended an earlier-adopted statute to mean).

flying public." Rather, OAR 660-012-0065(3)(n) requires that the airport as a whole be open to the flying public to qualify as a public use airport.

Petitioner also argues that OAR 660-012-0065(3)(n) does not apply where the airport expansion is for privately owned development adjacent to the public use airport. However, nothing in the definition of "public use airport" limits its scope to airports owned by public entities, and nothing in OAR 660-012-0065(3)(n) prohibits expansions or alterations of public use airports for privately owned development adjacent thereto. We conclude that the proposed expansion of the Airport falls squarely within the ambit of OAR 660-012-0065(3)(n). Accordingly, the proposed expansion of the Airport is consistent with Goals 3, 4, 11, and 14 as a matter of law, and no exception is required.

The second subassignment of error is denied.

The sixth assignment of error is denied, in part.

FIRST, SECOND, THIRD, FOURTH, FIFTH, SIXTH, AND TENTH ASSIGNMENTS OF ERROR

As explained above, in the alternative to its conclusion that the proposed expansion of the Airport is consistent with Goals 3, 4, 11, and 14 as a matter of law pursuant to OAR 660-012-0065(3)(n), the board of county commissioners approved exceptions to Goals 3 and 14 pursuant to OAR 660-004-0020, 660-004-0022, and 660-004-0040.

Petitioner's first through fifth assignments of error, the first subassignment of error under the sixth assignment of error, and the first subassignment of error

under the tenth assignment of error challenge the county's alternative findings that the exceptions standards at OAR 660-004-0020, 660-004-0022, and 660-004-0040 are met. In the first assignment of error, petitioner argues that OAR 660-012-0060(5) precludes the county from relying on OAR 660-004-0022 to approve an exception to Goal 3. In the second, third, and fourth assignments of error, petitioner argues that the county's conclusion that OAR 660-004-0020(2) is met is not supported by substantial evidence or adequate findings and improperly construes the rule. Petitioner also challenges the county's findings under OAR 660-004-0020 in the first subassignment of error under the sixth assignment of error. In the fifth assignment of error, petitioner argues that the county's conclusion that OAR 660-014-0040, the rule that applies to certain exceptions to Goal 14, is met are not supported by substantial evidence or adequate findings. Also in the fifth assignment of error, and in the first subassignment of error under the tenth assignment of error, petitioner argues that the county's decision requires an exception to Goal 11 and is not supported by substantial evidence in the record.

Because we conclude above that the county correctly concluded that OAR 660-012-0065(3)(n) applies to the proposed expansion of the Airport, the proposed expansion is consistent with Goals 3, 4, 11, and 14 as a matter of law. It would be inconsistent with "sound principles governing judicial review" to issue what would be an advisory opinion on the above-described assignments of

error, and we deem it more consistent with those principles to address only the county's dispositive findings. ORS 197.805.

Accordingly, we do not resolve the first through fifth assignments of error, the first subassignment of error under the sixth assignment of error, or the first subassignment of error under the tenth assignment of error.

SEVENTH ASSIGNMENT OF ERROR

Statewide Planning Goal 6 (Air, Water and Land Resources Quality) is "[t]o maintain and improve the quality of the air, water and land resources of the state."[10] "Goal 6 requires that the local government establish that there is a *reasonable expectation* that the use that is seeking land use approval will also be able to comply with the state and federal environmental quality standards that it must satisfy to be built." *Friends of the Applegate v. Josephine County*, 44 Or

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[10] Goal 6 further provides, in part:

> "All waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules and standards. With respect to the air, water and land resources of the applicable air sheds and river basins described or included in state environmental quality statutes, rules, standards and implementation plans, such discharges shall not (1) exceed the carrying capacity of such resources, considering long range needs; (2) degrade such resources; or (3) threaten the availability of such resources.
>
> "**Waste and Process Discharges** -- refers to solid waste, thermal, noise, atmospheric or water pollutants, contaminants, or products therefrom." (Boldface in original.)

LUBA 786, 802 (2003) (emphasis in original). The board of county commissioners found that Goal 6 is met because there are feasible options for wastewater treatment:

> "No public sewer service is available. Standard on-site wastewater disposal is not feasible without procuring off-site drain field facilities, which is feasible. [Intervenor] examined alternatives to standard septic systems, and favors tying into the digester system on the [Airpark] property to the west. The [Airpark] was approved subject to a Goal 11 exception. Before connecting to such a system, [intervenor] would need to obtain a modification to the existing Goal 11 exception approval to include the property. Evidence from [intervenor's] engineer attested to the system's ability to accommodate such use as a feasible option. Other possible alternatives include having a holding tank and trucking wastewater off the site or procuring off-site drain field facilities. Reusing water for plant watering and toilet flushing is also being considered to reduce the amount of water going into the wastewater disposal system. [Intervenor] has shown there are feasible options available for wastewater disposal." Record 37.

Petitioner cites more conclusory findings in other parts of the decision and argues that those findings are inadequate to explain why the board of county commissioners concluded that Goal 6 is met. However, petitioner does not address or otherwise challenge the above-quoted findings. Absent any challenge to those findings, petitioner's argument provides no basis for reversal or remand.

Petitioner also argues that the county's conclusion that the uses allowed by the LU overlay will be able to comply with applicable environmental standards is not supported by evidence in the record because there is no evidence of an approvable drain field on the property. Respondents respond, and we agree, that

the evidence in the record demonstrates that there are feasible options for sewage disposal. Petitioner does not challenge or address that evidence, and it is evidence that a reasonable person would rely upon to conclude that the uses allowed on the subject property will be able to comply with applicable environmental standards.

Finally, citing *1000 Friends of Oregon v. City of North Plains*, 27 Or LUBA 372, 406 (1994), petitioner argues that the county was required but failed to assess the cumulative impacts of septic waste discharges from existing and proposed development. Respondents do not respond to that argument.

By its terms, Goal 6 requires consideration of the cumulative effects of proposed future development and existing development, and it prohibits plan amendments allowing future development that, alone or combined with existing development, will violate or threaten to violate state or federal environmental standards. We agree with petitioner that the county's findings are inadequate because they fail to consider the cumulative effects of septic waste discharges from proposed development and existing development.

The seventh assignment of error is sustained, in part.

EIGHTH AND TENTH ASSIGNMENTS OF ERROR

MCC 17.119.070 provides:

> "Before granting a conditional use, the director, planning commission or hearings officer shall determine:
>
> "A. That it has the power to grant the conditional use;
>
> "B. *That such conditional use, as described by the applicant, will be in harmony with the purpose and intent of the zone*;

> "C. That any condition imposed is necessary for the public health, safety or welfare, or to protect the health or safety of persons working or residing in the area, or for the protection of property or improvements in the neighborhood." (Emphasis added.)

In the eighth assignment of error and in the second subassignment of error under the tenth assignment of error, petitioner challenges the board of county commissioners' conclusion that the development standards for uses in the P zone do not apply to the conditional use application and that only the conditional use criteria at MCC 17.119.070 apply. The purpose of the P zone is "to provide regulations governing the development of lands appropriate for specific public and semi-public uses and to ensure their compatibility with adjacent uses." MCC 17.171.010. In the eighth assignment of error, petitioner argues that MCC 17.119.070(B) makes MCC 17.171.010 an approval criterion for the conditional use application. Stated differently, petitioner argues that, because MCC 17.119.070(B) requires that the proposed conditional use be in harmony with the purpose and intent of the zone, the conditional use approval must ensure compatibility with adjacent uses and establish compliance with the development standards for the P zone.

The board of county commissioners concluded that MCC 17.171.060, which provides the development standards for the P zone, was not an approval criterion for the conditional use application:

> "MCC 17.171.060 contains development standards in the P-zone. They are not mandatory approval criteria for the comprehensive plan map amendment, zone change or conditional use criteria.

> [Intervenor] is not proposing any development concurrent with the Proposal. The City of Aurora's comments regarding nonconformance with MCC 17.171.060 are not a basis for denial of the application. The conditional use criteria are identified in MCC 17.119.070. Review of conformance with the development standards will occur during the County's building permit and site plan review." Record 19.

The board of county commissioners also addressed petitioner's argument that MCC 17.119.070(B) requires a compatibility determination at this stage:

> "The Board disagrees in part with arguments from opponents regarding their interpretation of [MCC] 17.119.070(B). Opponents['] assert[ion] that the conditional use permit must be denied 'without individualized compatibility' considerations is unnecessary and contradicts the text of the code. The conditional use criteria do not require general compatibility with surrounding uses. Such analysis has been repeatedly addressed above regarding other criteria (including the exception criteria). It need not be repeated. Moreover, it is not required by the text of [MCC] 17.119.070(B).
>
> "As Condition No. 1, the Board has imposed [an LU] overlay zone with ten (10) categories of proposed uses. In proposing this [LU] overlay zone, [intervenor] adequately responded to the Hearings Officer's request to memorialize the list of allowed uses through [an LU] overlay zone." Record 63.

Below those findings is a table that explains why each category of uses allowed in the LU overlay is "in harmony with the purpose and intent of the [P] Zone." Record 63-65.

Petitioner argues that the board of county commissioners' interpretation of MCC 17.119.070(B) and MCC 17.171.010 is inconsistent with the express language of those provisions. Respondents respond, and we agree, that the board of county commissioners' interpretation of those provisions is not inconsistent

with their express language or purpose and is plausible. *Siporen v. City of Medford*, 349 Or 247, 259, 243 P3d 776 (2010). Accordingly, we affirm it. ORS 197.829(1). Nothing in the express language of MCC 17.119.070(B) converts MCC 17.171.010, the purpose statement for the P zone, into a mandatory approval criterion for conditional uses. Rather, MCC 17.119.070(B) requires the county to review the purpose of the P zone and determine that proposed conditional uses "will be in harmony with" that purpose. The board of county commissioners adopted findings that the conditional uses authorized by the LU overlay will be in harmony with the purpose of the P zone. Record 63-65. Petitioner does not challenge those findings.

In addition, nothing in the express language of MCC 17.119.070(B) or MCC 17.171.010 requires a conditional use permit application to satisfy MCC 17.171.060, the development standards for the P zone, at least in the absence of a concurrent site plan review or building permit application. The board of county commissioners plausibly interpreted the relevant provisions to conclude that the development standards for uses allowed in the P zone apply at the time of building permit and site plan review.

The board of county commissioners adopted alternative findings that one of the development standards cited by participants during the proceedings below, MCC 17.171.060(I), was met: "[Intervenor] provided substantial evidence in the record that demonstrates wastewater from the proposed use can be feasibly managed without affecting the surrounding property or local environmental

resources. The Board finds [intervenor's] evidence satisfies MCC 17.171.060[(I)] * * *." Record 19. In the second subassignment of error under the tenth assignment of error, petitioner argues that that finding is inadequate and not supported by substantial evidence. However, that finding is an alternative finding. We agreed above with respondents' argument that the board of county commissioners' interpretation of the development standards at MCC 17.171.060 as not applying to the conditional use application must be affirmed. Accordingly, petitioner's challenges to the board of county commissioners' alternative finding provides no basis for reversal or remand.

The eighth assignment of error and the second subassignment of error under the tenth assignment of error are denied.

NINTH ASSIGNMENT OF ERROR

As explained above, the county approved a reasons exception to Goals 11 and 14 for the adjacent Airpark in 2004. Record 537-48. In the ninth assignment of error, petitioner argues that OAR 660-004-0018(1) and (4)(b) require a new reasons exception to Goals 11 and 14 because the new uses allowed on the subject property will increase the intensity of the use of the Airpark's septic system and taxiway.[11] Respondents respond, initially, that petitioner failed to preserve that

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[11] OAR 660-004-0018, which implements Statewide Planning Goal 2 (Land Use Planning), provides, in relevant part:

> "(1) Purpose. This rule explains the requirements for adoption of plan and zone designations for exceptions. Exceptions to one

issue. In the petition for review, petitioner cites Record 829 to 831 and 5483. We have reviewed the cited record pages, and we agree with petitioner that the issue presented in the ninth assignment of error was raised below. Record 830-31 ("The combination of existing and proposed uses exceeds what was authorized in the prior exceptions for the existing airport, and therefore a new reasons exception is required." (Citing OAR 660-004-0018(1).)).

> goal or a portion of one goal do not relieve a jurisdiction from remaining goal requirements and do not authorize uses, densities, public facilities and services, or activities other than those recognized or justified by the applicable exception. Physically developed or irrevocably committed exceptions under OAR 660-004-0025 and 660-004-0028 and 660-014-0030 are intended to recognize and allow continuation of existing types of development in the exception area. Adoption of plan and zoning provisions that would allow changes in existing types of uses, densities, or services requires the application of the standards outlined in this rule.
>
> "* * * * *
>
> "(4) 'Reasons' Exceptions:
>
> "(a) When a local government takes an exception under the 'Reasons' section of ORS 197.732(1)(c) and OAR 660-004-0020 through 660-004-0022, plan and zone designations must limit the uses, density, public facilities and services, and activities to only those that are justified in the exception.
>
> "(b) When a local government changes the types or intensities of uses or public facilities and services within an area approved as a 'Reasons' exception, a new 'Reasons' exception is required."

However, we agree with respondents that petitioner's arguments provide no basis for reversal or remand because petitioner has not established that, in the challenged decision, the county approved an increase in the intensity of uses allowed at the adjacent Airpark. That is so because petitioner does not argue, let alone identify any place in the record that supports an argument, that the uses and public facilities approved in the 2004 Exception were limited to any particular intensity.

We also agree with respondents that the decision does not authorize or require use of the Airpark's septic system. Rather, the county's decision recognizes that connection to the Airpark's septic system is one feasible option for sewage disposal.

In addition, the decision does not authorize or require an increase in taxiway traffic, and petitioner does not identify any place in the record that establishes that the use of the taxiway was limited to any particular intensity under the 2004 Exception. Stated differently, in order to establish that the proposed uses would increase the intensity of the uses or public facilities that were approved in the 2004 Exception, petitioner must first identify the intensity of the uses and public facilities that were approved in the 2004 Exception. Petitioner does not point to anything in the record that establishes or limits the intensity of the uses or public facilities at the Airpark or that establishes that the conditional uses authorized by the LU overlay will increase the intensity of the uses or public facilities that were allowed at the Airpark through the 2004

Exception. Without a developed argument regarding the approved intensity of those uses or public facilities, petitioner's arguments do not provide a basis for reversal or remand.

The ninth assignment of error is denied.

The county's decision is remanded.

Submitted January 7, reversed and remanded March 30, 2022

Joseph SCHAEFER,
Petitioner,
v.
MARION COUNTY
and TLM Holdings, LLC,
Respondents.

Land Use Board of Appeals
2020108; A177262

509 P3d 718

TLM Holdings, LLC (TLM) applied for, and Marion County approved, a comprehensive plan map amendment, a zoning map amendment, exceptions to statewide land use planning Goals 3 and 14, and a conditional use permit for a variety of uses on a 16.54-acre parcel adjacent to the airport. Land Use Board of Appeals concluded that, pursuant to OAR 660-012-0065(3)(n), the development that TLM proposes for the parcel is consistent with Goals 3, 4, 11, and 14 without a goal exception. *Held*: OAR 660-012-0065(3)(n) provides that "[e]xpansions or alterations of public use airports that do not permit service to a larger class of airplanes" are consistent with Goals 3, 4, 11, and 14. An expansion of a public use airport occurs when, pursuant to OAR chapter 660, division 13, a local government adopts a map showing an airport boundary that includes a larger area than the boundary shown on the previously adopted map of the airport. Requests for comprehensive plan amendments and zone changes, like the ones at issue here, sought by private parties without corresponding expansion of the airport boundary through the airport planning process are not expansions of public use airports within the meaning of OAR 660-012-0065(3)(n).

Reversed and remanded.

Joseph Schaefer filed the briefs *pro se.*

Scott A. Norris filed the brief for respondent Marion County.

Alan M. Sorem and Saalfeld Griggs PC filed the brief for respondent TLM Holdings, LLC.

Andrew Mulkey filed the brief *amicus curiae* for 1000 Friends of Oregon.

Emily Gilchrist filed the brief *amicus curiae* for City of Aurora.

Before James, Presiding Judge, and Lagesen, Chief Judge, and Kamins, Judge.

KAMINS, J.

Reversed and remanded.

KAMINS, J.

This case presents a dispute about compliance with statewide land use planning goals on land near the Aurora State Airport. Petitioner Schaefer seeks review of an order of the Land Use Board of Appeals (LUBA) affirming Marion County's approval of TLM Holdings, LLC's (TLM's) application for a comprehensive plan map amendment, a zoning map amendment, exceptions to statewide land use planning Goals 3 and 14, and a conditional use permit for a variety of uses on a 16.54-acre parcel adjacent to the airport. LUBA concluded that, pursuant to OAR 660-012-0065(3)(n), the development that TLM proposes for the parcel is "consistent with Goals 3, 4, 11, and 14 without a goal exception," OAR 660-012-0065(1).

OAR 660-012-0065(3)(n) provides that "[e]xpansions or alterations of public use airports that do not permit service to a larger class of airplanes" are consistent with Goals 3, 4, 11, and 14.[1] In *Schaefer v. Oregon Aviation Board*, 312 Or App 316, 345, 495 P3d 1267, *adh'd to as modified on recons*, 313 Or App 725, 492 P3d 782, *rev den*, 369 Or 69 (2021), we interpreted the phrase "permit service to a larger class of airplanes" in that rule provision. Here, we interpret the phrase "[e]xpansions *** of public use airports."[2] OAR 660-012-0065(3)(n). As explained below, we conclude that an expansion of a public use airport occurs when, pursuant to OAR chapter 660, division 13, a local government adopts

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[1] We recently explained as follows:

"[The Land Conservation and Development Commission] has promulgated OAR 660-012-0065 to 'identif[y] transportation facilities, services and improvements which may be permitted on rural lands consistent with Goals 3, 4, 11, and 14 without a goal exception.' OAR 660-012-0065(1). OAR 660-012-0065(3) provides as follows:

"'The following transportation improvements are consistent with Goals 3, 4, 11, and 14 subject to the requirements of this rule:

"'*****

"'(n) Expansions or alterations of public use airports that do not permit service to a larger class of airplanes[.]'"

Schaefer v. Oregon Aviation Board, 312 Or App 316, 338, 495 P3d 1267, *adh'd to as modified on recons*, 313 Or App 725, 492 P3d 782, *rev den*, 369 Or 69 (2021) (brackets in *Schaefer*).

[2] As LUBA noted, the parties agree that TLM's proposal would not permit service to a larger class of airplanes.

a map showing an airport boundary that includes a larger area than the boundary shown on the previously adopted map of the airport. Requests for comprehensive plan amendments and zone changes, like the ones at issue here, sought by private parties without corresponding expansion of the airport boundary through the airport planning process are not expansions of public use airports within the meaning of OAR 660-012-0065(3)(n).

Accordingly, LUBA erred in affirming the county's determination that TLM's proposal to develop its parcel adjacent to the airport qualifies as an expansion of a public use airport under OAR 660-012-0065(3)(n) and, consequently, is "consistent with Goals 3, 4, 11, and 14 without a goal exception," OAR 660-012-0065(1). Thus, we reverse and remand.

"[O]ur task on review is to discern whether LUBA's order is 'unlawful in substance or procedure,' ORS 197.850(9)(a), and we 'may not substitute [our] judgment for that of [LUBA] as to any issue of fact,' ORS 197.850(8)." *Schaefer*, 312 Or App at 321 (brackets in original). Here, the question is whether LUBA's order was "unlawful in substance," that is, whether "it represented a mistaken interpretation of the applicable law." *Mountain West Investment Corp. v. City of Silverton*, 175 Or App 556, 559, 30 P3d 420 (2001).

I. FACTS

The relevant facts are undisputed. The Aurora State Airport is located in Marion County and operated by the Oregon Department of Aviation. All of the land that is currently developed for airport-related uses is zoned Public (P). Some of that land is owned by the state and some of it is privately owned.

The 1976 Aurora State Airport Master Plan, including its airport layout plan, which is a map of the airport, is part of the Marion County Comprehensive Plan. The 1976 airport layout plan shows the subject property outside what it refers to as the "ultimate airport property"—that is, the boundary of the property proposed, in the 1976 Master Plan, to be used as an airport. The "ultimate airport property" on that plan includes the state-owned airport property and, in

addition, some privately owned property. The plan includes the following note on the subject property:

> "THIS AREA ACCEPTABLE FOR
> AIRPORT RELATED DEVELOPMENT
> UNDER PRIVATE OWNERSHIP"

The privately owned land that is part of the "ultimate airport property" on the 1976 airport layout plan is zoned P and is developed for airport-related uses. The subject parcel is adjacent to some of that property; however it is in a Primary Agriculture (PA) comprehensive plan designation and is zoned for Exclusive Farm Use (EFU). The subject parcel is benefited by an easement that allows its owners use of a paved taxi lane on adjoining property, which provides access to the airport runway.

TLM applied to Marion County for a comprehensive plan map amendment to change the comprehensive plan designation from PA to public and semi-public; a zoning map amendment to change the zoning from EFU to P with a limited use overlay; exceptions to Goals 3 and 14; and a conditional use permit "to authorize the future development of ten categories of airport-related uses" on the subject parcel. Although the application included a site plan and a description of development, it noted that the site plan and descriptions were "conceptual only."

The county approved the application with conditions, reasoning that (1) under OAR 660-012-0065(3)(n), the comprehensive plan and zoning changes did not require goal exceptions because the application was for an "[e]xpansion[] *** of [a] public use airport[] that does not permit service to a larger class of airplanes," and (2) in the alternative, goal exceptions were justified. Petitioner appealed to LUBA, and LUBA agreed with the county's first conclusion and, consequently, declined to address petitioner's assignments of error directed at the county's second line of reasoning.[3]

[3] Our summary in the text is limited to the parts of the county's decision and LUBA's order that are relevant to the issue that we decide. On another issue, LUBA determined that the county's findings regarding Goal 6 were inadequate in one respect and remanded for the county to reconsider its decision on that issue.

On judicial review, petitioner, joined by *amici* 1000 Friends of Oregon and the City of Aurora, contends that LUBA erred in a variety of ways. In his first assignment of error, he argues that TLM's application was not for an expansion of a public use airport within the meaning of OAR 660-012-0065(3)(n), and that LUBA erred in concluding that the rule applies to situations like this one. TLM and Marion County respond that LUBA correctly interpreted the rule.

"'When interpreting an administrative rule, we seek to divine the intent of the rule's drafters, employing essentially the same framework that we employ when interpreting a statute. Under that analytical framework, we consider the text of the rule in its regulatory and statutory context.'" *Schaefer*, 312 Or App at 336-37 (quoting *Noble v. Dept. of Fish and Wildlife*, 355 Or 435, 448, 326 P3d 589 (2014) (internal citation omitted)). "'In construing statutes and administrative rules, we are obliged to determine the correct interpretation, regardless of the nature of the parties' arguments or the quality of the information that they supply to the court.'" *Id.* at 337 (quoting *Gunderson, LLC v. City of Portland*, 352 Or 648, 662, 290 P3d 803 (2012) (citing *Dept. of Human Services v. J. R. F.*, 351 Or 570, 579, 273 P3d 87 (2012), and *Stull v. Hoke*, 326 Or 72, 77, 948 P2d 722 (1997)).

Here, as explained above, we must determine the meaning of "[e]xpansions *** of public use airports" in OAR 660-012-0065(3)(n). As LUBA observed, the Land Conservation and Development Commission (LCDC) originally adopted a rule using that phrase in 1991, OAR 660-012-0065(4)(o) (May 8, 1991), and adopted OAR 660-012-0065(3)(n) in its current form in 1995. LUBA held that LCDC intended "'public use airports' to mean airports that are '[o]pen to the flying public considering performance and weight of the aircraft being used. May or may not be attended or have services available.'" (Quoting OAR 738-020-0015 (2)(b) (Sept 20, 1989).). LUBA rejected petitioner's argument that the proposed development was not an expansion of a public use airport, explaining that "OAR 660-012-0065(3)(n) applies to the proposed comprehensive plan map and zoning

map amendments to expand the Airport because the Airport is a 'public use airport.'"

We agree with LUBA that the Aurora State Airport is a public use airport as contemplated by the rule. Indeed, petitioner has never disputed that point. Rather, the argument that petitioner raised before the county, reiterated before LUBA, and renews on judicial review is that *the requested land use actions and proposed development* do not constitute an expansion of a public use airport. As explained below, we agree with petitioner.

II. ANALYSIS

As LUBA noted, the initial question here is what LCDC intended by "[e]xpansions *** of public use airports" in 1995, when it adopted the current version of the rule. As noted above, it is undisputed that the Aurora State Airport is a public use airport. And "expansion" had then, and continues to have, a straightforward meaning here: "Expansion" means "the act or process of increasing in extent, size, number, volume, or scope : ENLARGEMENT, GROWTH." *Webster's Third New Int'l Dictionary* 798 (unabridged ed 2002); *see also id.* ("expand" means "to increase the extent, size, number, volume, or scope of : ENLARGE").[4] Thus, we conclude that LCDC intended the phrase to refer to the act or process of increasing the size or extent of a public use airport.[5]

That leaves the question of what act or process increases the size of a public use airport. That turns on sources of law other than LCDC's rule, and those sources of law have changed significantly since the rule's adoption. However, as the parties appear to recognize, the rule does not purport to preserve permanently the statutory and regulatory scheme that governed increases in the size of public

[4] As the Supreme Court has noted, "'any version of *Webster's Third*—regardless of its copyright date—provides a relevant source of ordinary meaning for statutes enacted any time after 1961.'" *Jones v. Four Corners Rod & Gun Club*, 366 Or 100, 114, 456 P3d 616 (2020) (quoting *State v. Eastep*, 361 Or 746, 751 n 2, 399 P3d 979 (2017)).

[5] In these circumstances, we understand "size" and "extent" to be synonymous. *Webster's* at 805 (defining "extent" as "the amount of space which something occupies or the distance over which it extends : the length, width, height, thickness, diameter, circumference, or area of something : DIMENSIONS, PROPORTIONS, SIZE, MAGNITUDE, SPREAD").

use airports when the rule was adopted. Rather, the rule simply provides that an act or process that increases the size of a public use airport (that does not permit service to a larger class of airplanes) is consistent with Goals 3, 4, 11, and 14, and it is up to the legislature and, as directed by the legislature, administrative agencies, to specify the acts or processes that increase the size of a public use airport. Thus, we look to current statutes and rules to determine what acts or processes increase the size of a public use airport.

A. *Airport Boundaries*

In 1995, the legislature acted to integrate existing airports into Oregon's land use system. Or Laws 1995, ch 285. The bill defined "airports" as "the strip of land used for taking off and landing aircraft, together with all adjacent land used in 1994 in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for the existing commercial and recreational airport uses and activities as of December 31, 1994." Or Laws 1995, ch 285, § 3. Thus, although the bill did not refer to airport boundaries, it effectively created airport boundaries by defining which land qualified as "airports." The bill also required LCDC to enact rules establishing permissible uses on airports and instructed local governments to amend their comprehensive plans and land use regulations to include airports and allow the uses set out in the rules. Or Laws 1995, ch 285, §§ 4, 5.

In 1997, the legislature amended the provisions that it had enacted in 1995. Or Laws 1997, ch 859. It did not amend the 1995 definition of "airports," which remains in the statute today. ORS 836.605(2). Among other things, the 1997 bill specified that LCDC "shall adopt rules for uses and activities allowed within the boundaries of airports identified in ORS 836.610(1)."[6] Or Laws 1997, ch 859, § 5. It also required LCDC to adopt rules establishing airport boundaries: "Within airport boundaries established pursuant to commission rules, local government land use regulations

[6] Airports identified in ORS 836.610(1) include "[p]ublicly owned airports registered, licensed or otherwise recognized by the Department of Transportation on or before December 31, 1994, that in 1994 were the base for three or more aircraft." ORS 836.610(1)(a). The Aurora State Airport meets those specifications. OAR 738-090-0030(1)(a) (Exhibit 1).

shall authorize the following uses and activities[.]" *Id.* Those provisions remain in effect. ORS 836.616(1), (2).

The rules that LCDC adopted pursuant to those sections are OAR chapter 660, division 13, entitled "Airport Planning." OAR 660-013-0010(1) ("This division implements ORS 836.600 through 836.630 and Statewide Planning Goal 12 (Transportation)."). Similar to ORS 836.605(2), those rules define "airport" as "the strip of land used for taking off and landing aircraft, together with all adjacent land used in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for existing airport uses." OAR 660-013-0020(1).

OAR 660-013-0040 requires local governments to adopt detailed airport plans, which include a variety of maps and data about current airport uses and facilities, as well as future needs. The "economic and use forecast information" necessary for an airport plan is provided by the airport's sponsor, which, in the case of publicly owned airports like Aurora State, is the Oregon Department of Aviation.[7] OAR 660-013-0040(9).

The first planning requirement that the rule establishes is

> "[a] map, adopted by the local government, showing the location of the airport boundary. *The airport boundary shall include the following areas*, but does not necessarily include all land within the airport ownership:
>
> "(a) Existing and planned runways, taxiways, aircraft storage (excluding aircraft storage accessory to residential airpark type development), maintenance, sales, and repair facilities;
>
> "(b) Areas needed for existing and planned airport operations; and
>
> "(c) Areas at non-towered airports[8] needed for existing and planned airport uses that:

[7] "Sponsor" means "the owner, manager, other person, or entity designated to represent the interests of an airport." OAR 660-013-0020(6).

[8] For purposes of the rule, the Aurora State Airport is a non-towered airport. *See* OAR 660-013-0020(4) ("'Non Towered Airport' means an airport without an existing or approved control tower on June 5, 1995.").

"(A) Require a location on or adjacent to the airport property;

"(B) Are compatible with existing and planned land uses surrounding the airport; and

"(C) Are otherwise consistent with provisions of the acknowledged comprehensive plan, land use regulations, and any applicable statewide planning goals.

"(d) 'Compatible,' as used in this rule, is not intended as an absolute term meaning no interference or adverse impacts of any type with surrounding land uses."

OAR 660-013-0040(1) (emphasis added).

The airport boundary is expanded based on need, demonstrated through data and forecasting: Additional planning requirements include:

"(4) A projection of aeronautical facility and service needs;

"(5) Provisions for airport uses not currently located at the airport or expansion of existing airport uses:

"(a) Based on the projected needs for such uses over the planning period;

"(b) Based on economic and use forecasts supported by market data;

"(c) When such uses can be supported by adequate types and levels of public facilities and services and transportation facilities or systems authorized by applicable statewide planning goals;

"(d) When such uses can be sited in a manner that does not create a hazard for aircraft operations; and

"(e) When the uses can be sited in a manner that is:

"(A) Compatible with existing and planned land uses surrounding the airport; and

"(B) Consistent with applicable provisions of the acknowledged comprehensive plan, land use regulations, and any applicable statewide planning goals.

"*****

"(9) Local government shall request the airport sponsor to provide the economic and use forecast information

> required by this rule. The economic and use forecast information submitted by the sponsor shall be subject to local government review, modification and approval as part of the planning process outlined in this rule. Where the sponsor declines to provide such information, the local government may limit the airport boundary to areas currently devoted to airport uses described in OAR 660-013-0100."

OAR 660-013-0040.

Those provisions clearly identify the act that increases the size of a public use airport like Aurora State. The airport boundary establishes the size of the airport. *See Webster's* at 260 (defining "boundary" as "something that indicates or fixes a limit or extent : something that marks a bound (as of a territory or a playing field) : a bounding or separating line"). Thus, the local government's act of adopting a map showing an airport boundary that is larger than the boundary shown on the previously adopted map is the act that increases the size of the airport. That act is the end product of the airport planning process governed by OAR chapter 660, division 13.

The parties dispute the role that the definition of "airports" in ORS 836.605(2) plays in the analysis of what act or process increases the size of an airport. That statute defines an "airport" as "the strip of land used for taking off and landing aircraft, together with all adjacent land used in 1994 in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for the existing commercial and recreational airport uses and activities as of December 31, 1994." Petitioner contends that the definition limits airport boundaries while respondents reason that the definition expands them. As explained below, that definition does neither; rather, it is consistent with our understanding of the scheme described above.

Petitioner appears to be of the view that, given that statutory definition of "airports," airport boundaries are frozen at their 1994 size and cannot be expanded. That understanding overstates the significance of the statutory definition. As we have explained, airport boundaries were established by the definition of "airports" in ORS 836.605(2), which identified which land constituted existing airports at

that time. In the same 1995 bill, the legislature required LCDC's rules to "allow for the reasonable growth of" "[p]ermissible commercial and recreational airport uses and activities." Or Laws 1995, ch 285, § 5(2), (3). Thus, when the statutory provision was enacted, it was not intended to prohibit future expansion of airport uses, and, consequently, airport boundaries. Subsequently, in 1997, the legislature tasked LCDC with adopting rules that would establish airport boundaries, ORS 836.616(2), and LCDC has done that—including providing for how airport boundaries are to be expanded—in OAR 660-013-0040(1). Given that scheme, the definition of "airports" in ORS 836.605(2) does not limit airport boundaries to their 1994 sizes.

On the other hand, respondents contend that, under the statutory definition, all land adjacent to an airport runway (and apparently also all land, like the subject parcel, adjacent to land adjacent to an airport runway) can be part of the "public use airport" regardless of the location of the airport boundary.[9] That view ignores the significance—and even the existence—of airport boundaries in the statutory and regulatory scheme. As set out above, ORS 836.605(2) defines an "airport" as "the strip of land used for taking off and landing aircraft, together with all adjacent land used in 1994 in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for the existing commercial and recreational airport uses and activities as of December 31, 1994." Respondents contend that, by including the phrase "*but not limited to* land used for the existing commercial and recreational uses and activities as of December 31, 1994" in that definition, the legislature included in its definition of "airports" an unspecified amount of land that was not "used in 1994 in connection with the aircraft landing or taking off from the strip of land." They contend that we should understand that additional land to include land, like TLM's parcel, that is near a "strip of land used for taking off and landing aircraft" and

[9] In our view, it is not a foregone conclusion that, if TLM's parcel were, by definition, part of the airport, the development TLM proposes would be an expansion of the airport; if that were the case, the development would not expand the size of the airport because the parcel would already be part of the airport. However, because, as explained below, we reject respondents' understanding of the statutory definition of "airport," we need not consider that question.

that could be used in connection with the aircraft using the strip.

We need not consider respondents' latter contention, because we disagree that the statutory definition of "airports" includes any land that was not "used in 1994 in connection with the aircraft landing or taking off from the strip of land." ORS 836.605(2). In the 1995 bill, in addition to defining which land was "airports," the legislature instructed the Department of Transportation to draft, and send to LCDC for enactment, rules specifying "[p]ermissible commercial and recreational airport uses and activities" that would be allowed on the land that it had defined as "airports." Or Laws 1995, ch 285, §§ 4(1), 5(2). The "[p]ermissible commercial and recreational airport uses and activities" included "emergency medical flight services, law enforcement and firefighting activities, search and rescue operations, flight instruction and ground training, aircraft maintenance, aircraft refueling, aircraft service and sales, aircraft rental, aeronautic skills training, aeronautic recreational and sporting activities, construction and maintenance of airport facilities and crop dusting and other agricultural activities." Or Laws 1995, ch 285, § 5(2).

Thus, the 1995 bill contemplated that (1) land that was, at the end of 1994, "the strip of land used for taking off and landing aircraft" and "all adjacent land used in 1994 in connection with the aircraft landing or taking off from the strip of land" would be airports and (2) going forward, LCDC rules would enumerate the "[p]ermissible commercial and recreational airport uses and activities" that would be allowed on airports.

With that understanding, and at the risk of repetition, we set out the disputed definition of "airports" from ORS 836.605(2) one more time: "the strip of land used for taking off and landing aircraft, together with all adjacent land used in 1994 in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for the existing commercial and recreational airport uses and activities as of December 31, 1994." Given the context that we have just described, the phrase "including but not limited to" in that definition reflects a recognition

that the existing uses "in connection with the aircraft landing or taking off from the strip of land" might include uses beyond those enumerated as "[p]ermissible commercial and recreational airport uses and activities." That is, *all* adjacent land used in 1994 in connection with the aircraft landing or taking off from the strip of land was part of the airport; although the uses affirmatively allowed on airports were limited to the enumerated airport uses, the land that made up the airport was not limited to the land occupied by the enumerated uses.

Thus, the legislature's inclusion of "but not limited to" in the definition of "airports" does not indicate an intention to include land that was not "used in 1994 in connection with the aircraft landing or taking off from the strip of land." ORS 836.605(2).[10] Accordingly, we reject respondents' contention to the contrary. Nothing in that definition provides a ground on which to conclude that development on land outside the airport boundaries, as established and regulated by OAR chapter 660, division 13, alone increases the size of a public use airport within the meaning of OAR 660-012-0065(3)(n).

B. *Through the Fence Operations*

Next we consider the statutes that establish the through the fence pilot program, ORS 836.640 and ORS 836.642. TLM contends that, in those provisions, the legislature has redefined the boundary of the Aurora State Airport to include the subject property. As we will explain, those provisions do not change our understanding that an airport like Aurora State increases in size when the local government, in compliance with OAR chapter 660, division 13, adopts a map showing a larger airport boundary.

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[10] The county relied on a similar understanding of OAR 660-013-0020(1), which defines "airport" as "the strip of land used for taking off and landing aircraft, together with all adjacent land used in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for existing airport uses." Although the rule's definition omits the statute's reference to "adjacent land used *in 1994* in connection with the aircraft landing or taking off from the strip of land," ORS 836.605(2) (emphasis added), that omission is immaterial here; the rule's definition of the relevant "adjacent land" is, like its statutory counterpart, limited to adjacent land "*used* in connection with the aircraft taking off or landing on the strip of land." OAR 660-013-0020(1) (emphasis added). It is undisputed that the subject parcel is not currently, nor has it ever been, "used in connection with" the airport or aircraft.

In 2005, the legislature enacted ORS 836.640 and ORS 836.642, which direct the Department of Aviation to establish a pilot program to encourage "through the fence operations." ORS 836.642(1); Or Laws 2005, ch 820, § 3(1). The Aurora State Airport is one of the program sites. ORS 836.642(2)(a); Or Laws 2005, ch 820, § 3(2) ("The pilot program shall operate at *** [t]he Aurora State Airport.").

In simplified terms, a through the fence operation is an airport-related business located on privately owned land that relies on the ability to taxi a plane to or from the airport runway. The statute defines "through the fence operation" as "a customary and usual aviation-related activity that *** [i]s conducted by a commercial or industrial user of property within an airport boundary; and *** [r]elies, for business purposes, on the ability to taxi aircraft directly from the property employed for the commercial or industrial use to an airport runway." ORS 836.640(5); Or Laws 2005, ch 820, § 2(4). "Customary and usual aviation-related activity" includes activities from two sources, both of which are established outside of the through the fence provisions: those "described in ORS 836.616(2)" and those "that a local government may authorize pursuant to ORS 836.616(3)." ORS 836.640(2); Or Laws 2005, ch 820, § 2(1).

ORS 836.616(2) contains a list of the uses and activities that "local government land use regulations shall authorize" "[w]ithin airport boundaries established pursuant to commission rules."[11] We refer to those uses and activities as "airport uses." ORS 836.616(3) provides as follows:

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[11] Those uses and activities are a more developed version of the list of airport uses, set out above, that was originally enacted in 1995, Or Laws 1995, ch 285, § 5(2):

> "(a) Customary and usual aviation-related activities including but not limited to takeoffs, landings, aircraft hangars, tie-downs, construction and maintenance of airport facilities, fixed-base operator facilities and other activities incidental to the normal operation of an airport;
>
> "(b) Emergency medical flight services;
>
> "(c) Law enforcement and firefighting activities;
>
> "(d) Flight instruction;
>
> "(e) Aircraft service, maintenance and training;
>
> "(f) Crop dusting and other agricultural activities;
>
> "(g) Air passenger and air freight services at levels consistent with the classification and needs identified in the State Aviation System Plan;

> "All land uses and activities permitted within airport boundaries, other than the uses and activities established under subsection (2) of this section, shall comply with applicable land use laws and regulations. A local government may authorize commercial, industrial and other uses in addition to those listed in subsection (2) of this section within an airport boundary where such uses are consistent with applicable provisions of the acknowledged comprehensive plan, statewide land use planning goals and commission rules and where the uses do not create a safety hazard or limit approved airport uses."

Thus, the through the fence program concerns airport uses, and other uses allowed under certain circumstances within airport boundaries under ORS 836.616(3), conducted by private users, that rely on the ability to taxi aircraft directly to the runway. ORS 836.640(2), (5); Or Laws 2005, ch 820, § 2(1), (4).

The 2005 bill provided that the Department of Aviation shall establish a pilot program "to encourage development of through the fence operations" using, among other things, "public-private partnerships" and required the Oregon Department of Aviation to adopt "standards and guidelines for through the fence operations." ORS 836.642(1), (3); Or Laws 2005, ch 820, § 3(1), (3). It required DLCD and local governments to

> "coordinate with the Oregon Department of Aviation to ensure that the applicable comprehensive plans and land use regulations, including airport zoning classifications pursuant to ORS 836.600 to 836.630, facilitate through the fence operations and support the development or expansion of the pilot site consistent with applicable statewide land use planning requirements."

ORS 836.642(4); Or Laws 2005, ch 820, § 3(4). It directed a state business assistance program to assist pilot sites in achieving objectives of the program. ORS 836.642(5); Or Laws 2005, ch 820, § 5. And it imposed deadlines for the

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"(h) Aircraft rental;

"(i) Aircraft sales and sale of aviation equipment and supplies; and

"(j) Aviation recreational and sporting activities."

ORS 836.616(2).

Department of Aviation's adoption of rules; coordination with DLCD and local governments; and amendment of comprehensive plans and land use regulations. Or Laws 2005, ch 820, § 4.

The bill did not modify land use statutes or rules. Instead, the through the fence program worked within the existing land use framework for airports. *See* Audio Recording, Senate Committee on Transportation, Apr 27, 2005, SB 680, at 17:10, 38:10 (statement of Bob Rindy, Department of Land Conservation and Development (DLCD)), http://records.sos.state.or.us/ORSOSWebDrawer/RecordHtml/4196707 (accessed Mar 15, 2022) (explaining that a previous version of the bill would have required changes to rules and statewide planning goals, but that the amended version—which was ultimately enacted—did not require any changes to the existing land use framework, and, for that reason, DLCD was withdrawing its objections to the bill); *see also Schaefer*, 312 Or App at 333 ("The text does not suggest that the legislature intended any section of ORS 836.642 to affect how land use requirements apply to the programs or uses of land at the identified airports; to the contrary, it explicitly makes the programs subject to 'applicable statewide land use requirements.' ORS 836.642(4).").

The legislative intention not to modify the existing land use framework for airports is evident in each section of the bill that relates to land use: The coordination requirement of section 3(4) of the bill, set out above, Or Laws 2005, ch 820, § 3(4), requires DLCD and local governments to ensure that land use laws "facilitate through the fence operations and support the development or expansion of the pilot site *consistent with applicable statewide land use planning requirements*." (Emphasis added.) The definition of "[c]ustomary and usual aviation-related activity" in ORS 836.640(2) relies on the airport uses allowed by ORS 836.616(2) and additional uses that may be allowed under ORS 836.616(3); thus, the group of uses that the bill addresses is the same group of uses that was already allowed on airports. Finally, in the provision requiring the Department of Aviation to adopt rules, the single paragraph that tangentially relates to land use recognizes the airport planning process governed by OAR chapter 660, division 13:

> "The Oregon Department of Aviation, by rule, shall provide standards and guidelines for through the fence operations that *** [r]equire submission, review, approval, and, as appropriate, revision of a facility site plan for each through the fence operation so that the real property covered by the site plan can be *incorporated into the airport boundary and coordinated with the other aspects of the airport master plan*[.]"

ORS 836.642(3)(b); Or Laws 2005, ch 820, § 3(3)(b) (emphasis added).

We pause here to consider the function of the provision set out immediately above. That paragraph instructs the Department of Aviation to adopt a rule requiring a procedure through which an entity that wants to establish a through the fence operation submits a site plan to the airport sponsor, and the airport sponsor reviews it, may require revisions, and, ultimately, can approve it. The purpose of that process is to allow the real property covered by the site plan to be incorporated into the airport boundary and coordinate the through the fence operation with the other aspects of the master plan.

For current purposes, that statutory paragraph is most notable for what it does not do: The statute itself does not modify the procedure for expanding the airport boundary, which, as we have explained, the legislature has committed to LCDC in ORS 836.600 to 836.630, and LCDC has comprehensively addressed in OAR chapter 660, division 13. Nor does the statute authorize the Department of Aviation to modify the procedure for expanding the airport boundary. Rather, the statutory text simply provides that the Department of Aviation's rule must require a procedure through which the proponent of a through the fence operation submits a site plan to the airport sponsor, and the airport sponsor reviews it, may require revisions, and, ultimately, can approve it. Although the purpose of the site plan approval requirement is related to land use—it is for the purpose of allowing the real property on which the through the fence operation is located to be incorporated into the airport boundary and coordinated with the other aspects of the airport master plan—under the terms of the statute, neither the statute nor the rule that the Department of Aviation is

authorized to adopt effectuates any change to the existing land use framework for airports.

Thus, the 2005 bill authorized the Department of Aviation to adopt a rule requiring a process through which the proponent of a through the fence operation submits a site plan to the airport sponsor, and the airport sponsor reviews it, may require revisions, and, ultimately, can approve it. Because neither the identified paragraph nor any other part of the through the fence statutes modifies, or authorizes modification of, the land use framework for airports, the airport sponsor's later use of the site plan to incorporate the property into the airport boundary and coordinate the operation with the other aspects of the airport master plan must take place through the airport planning process established in OAR chapter 660, division 13.

In 2009, the legislature amended the 2005 through the fence provisions, including by providing, for the first time, a definition of "airport boundary," which is specific to the through the fence provisions. "As used in this section and ORS 836.642: *** 'Airport boundary' includes the combined public and private properties that are permitted to have direct access to the airport runway by aircraft." Or Laws 2009, ch 398, § 1(1); ORS 836.640(1).

As enacted, the 2009 bill did not add the term "airport boundary" to the through the fence provisions except in the definition section. Or Laws 2009, ch 398. As introduced, the bill included a section that explicitly relied on that definition of "airport boundary"; however, that section was not enacted. SB 170 (2009), § 3 (proposing to amend ORS 197.713 to allow "a county or its designee" to consider "for industrial development under this section" "[l]and within an airport boundary, as defined in ORS 836.640, of a public use airport participating in the pilot program established under ORS 836.642 to encourage development of through the fence operations"); SB 170 (2009), Senate Amendments (Feb 26, 2009) (removing section 3). Thus, the definition's only effect was to create a new meaning for the term "airport boundary" in the original 2005 through the fence provisions. *See* Audio Recording, House Committee on Transportation, SB 170, May 20, 2009, at 1:04:50 (statement of Dan Clem,

director, Oregon Department of Aviation), https://olis.oregonlegislature.gov (accessed Mar 15, 2022) (noting that the airport boundary would be expanded "for purposes of this bill" but not for all purposes).

As we have explained, the 2005 bill did not modify the existing land use framework for airports. We conclude, for two interrelated reasons, that the new definition of "airport boundary" added in 2009 likewise did not modify the existing land use framework for airports.

First, the definition of "airport boundary" in ORS 836.640 does not apply to ORS 836.600 to 836.630 or LCDC's airport planning rule, OAR chapter 660, division 13, which is required by and implements ORS 836.600 to 836.630. ORS 836.600 to 836.630 govern land use at airports; as explained above, ORS 836.640 and ORS 836.642 are free-standing provisions that do not. *See also Schaefer*, 312 Or App at 333; *id.* at 335 ("The provisions of ORS 836.600 to 836.630 are independent from ORS 836.640 and ORS 836.642, and they do not suggest that we should understand the latter provisions to have a greater effect on land use than their text indicates.").

Second, the new definition of "airport boundary" does not remove or modify the land use limitations, described above, that the legislature included in the through the fence provisions in 2005. The new definition expands the reach of "through the fence operations": The new definition of "airport boundary" means that through the fence operations now include customary and usual aviation-related activities that are conducted by a commercial or industrial user of property on "the combined public and private properties that are permitted to have direct access to the airport runway by aircraft," ORS 836.640(1), rather than just such activities conducted on the area encompassed by the actual airport boundary established by OAR 660-013-0040(1).[12]

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[12] As set out above, "[t]hrough the fence operation" means

"a customary and usual aviation-related activity that:

"(a) Is conducted by a commercial or industrial user of property within an airport boundary; and

"(b) Relies, for business purposes, on the ability to taxi aircraft directly from the property employed for the commercial or industrial use to an airport runway."

ORS 836.640(5).

That broader meaning of "through the fence operations" means that the through the fence pilot program now encourages development of through the fence operations on private properties outside the airport boundary established by OAR 660-013-0040(1) that are permitted to have direct access to the airport runway by aircraft. The Department of Aviation must adopt standards and guidelines for those operations. ORS 836.642(1), (3). Further, DLCD and local governments must consult with the Department of Aviation to "ensure that the applicable comprehensive plans and land use regulations *** facilitate [that larger group of operations] and support the development or expansion of the pilot site *consistent with applicable statewide land use planning requirements*." ORS 836.642(4) (emphasis added).

As the text emphasized immediately above indicates, the 2009 amendments did not change the textual limitations on the land use effect of the original through the fence provisions. Nor does the new definition of "airport boundary" give new meaning to ORS 836.642(3)(b), the provision that directs the Department of Aviation to adopt a rule that requires a process for approval of a through the fence operation. Again, that paragraph provides:

> "The Oregon Department of Aviation, by rule, shall provide standards and guidelines for through the fence operations that *** [r]equire submission, review, approval, and, as appropriate, revision of a facility site plan for each through the fence operation so that the real property covered by the site plan can be incorporated into the airport boundary and coordinated with the other aspects of the airport master plan."

ORS 836.642(3)(b).

Whatever effect the new definition of "airport boundary" has on the site plan approval requirement, it does not change the fact that, as explained above, ORS 836.642(3)(b) neither directly modifies the procedure for expanding the airport boundary nor authorizes the Department of Aviation to modify the procedure for expanding the airport boundary. Rather, that paragraph simply provides that the Department of Aviation's rule must require a process through which an

entity that wants to establish a through the fence operation submits a site plan to the airport sponsor, and the airport sponsor reviews it, may require revisions, and, ultimately, can approve it. That process ensures that the airport sponsor will be well positioned to incorporate the property into the airport boundary and coordinate the operation with the other aspects of the airport master plan in the course of the airport planning process established in OAR chapter 660, division 13.[13]

In sum, considering the through the fence provisions in the context of the statutory and regulatory scheme establishing airport boundaries, it remains clear that an increase in the size of a public use airport like Aurora State occurs when the local government, in compliance with OAR chapter 660, division 13, adopts a map showing an expanded airport boundary. Compliance with OAR chapter 660, division 13, is a necessary prerequisite to any "expansion[] *** of [a] public use airport[]" within the meaning of OAR 660-012-0056(3)(n).

TLM applied to Marion County for, as relevant here, a comprehensive plan map amendment and a zoning map amendment to allow airport-related development on the subject parcel. It is undisputed that the application was not part of the airport planning process established in OAR chapter 660, division 13. Thus, the application was not for an "expansion[] *** of [a] public use airport[]" within the meaning of OAR 660-012-0056(3)(n). LUBA erred in holding otherwise. We therefore reverse on petitioner's first assignment of error on judicial review and remand to LUBA.

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[13] Our conclusion that the 2009 bill did not modify the existing land use framework for airports is also consistent with the provision's legislative history, which demonstrates that the purpose of the bill, as enacted, was to allow the pilot program to expand to more sites and to change the definition of "rural airport," not to change the operation of the statewide land use planning system. *See, e.g.*, Staff Measure Summary, House Committee on Transportation, HB 170 B (2009), May 20, 2009.

The proponents of the bill never suggested, nor did the legislature intend, that the bill would affect land use at airports with established pilot programs. If it had, DLCD's original objections to the 2005 bill—that changes to the land use framework for airports would require LCDC to amend the statewide planning goals and other rules, and would require legislative changes to ORS chapter 215—would likely have resurfaced.

Next, we briefly address petitioner's third and fourth assignments of error. In the third assignment, petitioner contends that LUBA erred in rejecting, as insufficiently supported, his contention that 2004 goal exceptions did not extend to cover the proposed development, which, he argued, would increase the intensity of uses and facilities on the adjacent parcel. LUBA reasoned that petitioner failed to argue or identify evidence in the record showing that "the uses and public facilities approved in the 2004 Exception were limited to any particular intensity."

Petitioner's argument before the county, and again before LUBA, was that, as a matter of law, the uses and public facilities approved in any exception are limited to the intensity necessary for the development for which the exception is taken. *See* OAR 660-004-0018(4)(b) ("When a local government changes the types or intensities of uses or public facilities and services within an area approved as a 'Reasons' exception, a new 'Reasons' exception is required."). It is undisputed that, when the exception for the adjacent parcel was taken in 2004, no development was contemplated on the subject parcel. Thus, under petitioner's legal theory, as a matter of law, the 2004 exception did not encompass any increase in intensity that will result from development of the subject parcel.

Under those circumstances, petitioner did not need to identify evidence that the 2004 exception was limited to a particular intensity; instead, his legal argument fully addressed that point. LUBA erred in declining to consider that issue. If, on remand, LUBA concludes that the goal exceptions are justified, it should consider petitioner's argument about new exceptions for the adjacent parcel.

In his fourth assignment on judicial review, petitioner argues that LUBA incorrectly reasoned that petitioner failed to sufficiently raise before the county his contention, made before LUBA in the third subassignment of the sixth assignment of error, that the county erred in relying on the provisions of ORS 836.600 to 836.630 to approve the requested land use actions without goal exceptions. As explained in petitioner's brief, petitioner raised that issue before the county sufficiently to allow the decision-maker

and TLM an adequate opportunity to respond: Petitioner described the applicant's reasoning, cited the relevant statutes, and explained that those statutes did not apply. *See Boldt v. Clackamas County*, 107 Or App 619, 623, 813 P2d 1078 (1991) ("ORS 197.763(1) does not simply require 'sufficient specificity,' but goes on to define what the objective of the requisite specificity is, *i.e.*, to afford the decision-maker and the parties 'an adequate opportunity to respond to each issue.' The plain thrust of that language is that the statute requires no more than fair notice to adjudicators and opponents[.]"). Thus, to any extent that the issues underlying petitioner's fourth assignment are not resolved by this opinion, LUBA should consider them on remand.[14]

Our disposition obviates the need for us to address petitioners' second assignment of error, in which petitioner contends that LUBA's application of OAR 660-012-0065(3)(n) is not supported by substantial evidence.

Reversed and remanded.

[14] As we understand it, the county relied on ORS 836.600 to 836.630 to support its determination that OAR 660-012-0065(3)(n) applied. As we have explained, under a proper interpretation of OAR 660-012-0065(3)(n), that was erroneous. However, to any extent that the county relied on ORS 836.600 to 836.630 independently of OAR 660-012-0065(3)(n), petitioner's argument that those statutory provisions do not apply to the development proposed on the subject property preserved an argument that the county erred in that respect.

BEFORE THE LAND USE BOARD OF APPEALS
OF THE STATE OF OREGON

JOSEPH SCHAEFER,
Petitioner,

vs.

MARION COUNTY,
Respondent,

and

TLM HOLDINGS LLC,
Intervenor-Respondent.

LUBA No. 2020-108

FINAL OPINION AND ORDER

Appeal on remand from the Court of Appeals.

Joseph Schaefer represented themselves.

Scott A. Norris represented respondent.

Alan M. Sorem represented intervenor-respondent.

ZAMUDIO, Board Chair; RYAN, Board Member; RUDD, Board Member, participated in the decision.

REMANDED 07/07/2022

You are entitled to judicial review of this Order. Judicial review is governed by the provisions of ORS 197.850.

Opinion by Zamudio.

NATURE OF THE DECISION

Petitioner appeals a decision by the board of county commissioners approving an application for (1) a comprehensive plan map amendment to change the plan designation of property adjacent to the Aurora State Airport (the Airport) from Primary Agriculture (PA) to Public and Semi-Public (P), (2) a zoning map amendment to change the zoning designation of the property from Exclusive Farm Use (EFU) to P, (3) exceptions to Statewide Planning Goals 3 (Agricultural Lands) and 14 (Urbanization), and (4) a conditional use permit authorizing various airport-related uses on the property.

FACTS

This matter is on remand from the Court of Appeals. *Schaefer v. Marion County*, 318 Or App 617, 509 P3d 718 (2022). We restate the facts from our prior decision. *Schaefer v. Marion County*, ___ Or LUBA ___ (LUBA No 2020-108, Oct 12, 2021) (*TLM I*).

The subject 16.54-acre parcel is zoned EFU and is bordered on the east by Airport Road, a county road. Properties to the east of Airport Road are zoned EFU and farmed. Properties to the north, west, and south of the subject property are part of the Airport and zoned P. The Airport is owned and managed by the State of Oregon. We take the description of the use of properties to the north, west, and south of the subject property from the challenged decision:

> "The property bordering the Subject Property directly to the north * * * is a 3.71-acre parcel, zoned [P] * * *. This property contains six

> buildings that are all related to airport use. Five of the buildings house twelve hangars offering storage options to private aircraft owners with direct access to the Airport and runway. Each hangar is individually owned and possesses a unique tax lot number on Marion County Assessor Map No. 04-1W-02D. Further north is a 21.42-acre parcel owned by Oregon Department of Aviation ('ODA') with airport hangars, offices, and a tarmac * * *. The property bordering the Subject Property directly to the south * * * is 27.47 acres and owned by US Leaseco, Inc. This is the site of Helicopter Transport Services, which charters heavy lift and fire suppression helicopters. To the southwest is a group of privately owned properties commonly referred to as the Southend Corporate Airpark [(the Airpark)]. It consists a number of hangars, office, maintenance, repair, engineering and design spaces serving Columbia Helicopters, FLIR Systems, Inc., Erickson Inc., Life Flight Network, Metal Innovations, Inc., Van's Aircraft, Wilson Construction and other companies operating airport and aircraft-related uses together with Fixed Based Operator (FBO) LYNX, which provides fuel and direct aircraft, pilot and customer support services." Record 12-13 (boldface omitted).

The subject property is located within the horizontal surface district of the airport overlay zone, described in Marion County Code (MCC) chapter 17.177, which limits uses of the subject property. The subject property is encumbered by a taxiway easement that allows users direct access to the Airport's runway. Intervenor-respondent (intervenor) applied for comprehensive plan map and zoning map amendments to change the plan and zoning designations from PA and EFU to P with a Limited Use (LU) overlay, exceptions to Goals 3 and 14, and a conditional use permit to authorize the future development of ten categories of airport-related uses allowed in the LU overlay: aircraft hangars; air medevac and emergency medical technician services; aviation facilities; air charter

operations; aircraft fixed based operations; airport-related administration; aerospace- and aerodynamic-related uses; design, maintenance, and similar uses of aircraft and related equipment; aviation-related schools; and public health and safety services intended to serve the airport.[1] Record 63-65.

The subject property contains soils that make on-site wastewater treatment infeasible.[2] The Airport includes a shared septic system at the Airpark, located

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[1] The challenged decision describes the proposed development as follows:

> "[Intervenor] anticipates the initial use of these facilities will consist primarily of hangars, but may also include maintenance and repair facilities, storage, management office space, research and development, flight testing, equipment sales and service, and other airport-related uses allowed under the required zone. The Subject Property would be developed under the Marion County Building Code and leased to multiple tenants. The proposed site plan and descriptions are conceptual only. Tenant 1 would have access to 7.02 acres of the Subject Property and the taxi lane. Hangar Y is proposed to be approximately 52,870 square feet, with a parking area, and office/maintenance/shop space proposed to be multiple stories and approximately 49,590 square feet. Tenant 2 would have access to 2.42 acres. Hangar X is proposed to be 32,000 square feet with a taxi lane, parking area, and a multiple story office/maintenance/shop space proposed to be approximately 22,500 square feet. Tenant 3 would have access to 5.0 acres of space. Hangar W is proposed to be 36,000 square feet and include a taxi lane, parking area, and a multi-story office/maintenance/shop space proposed to be approximately 48,000 square feet. Tenant 4 would have access to 2.0 acres. Hangar V is proposed to be approximately 29,410 square feet together with a taxi lane and parking area." Record 13.

[2] The decision explains the prior use of the subject property as follows:

adjacent to the subject property, that was installed after the county approved a reasons exception to Statewide Planning Goals 11 (Public Facilities and Services) and 14 in 2004 (the 2004 Exception). Record 537-48. As part of its application, intervenor proposes to provide wastewater treatment for the subject property either by connecting to the Airpark's shared septic system or through on-site holding tanks that are periodically pumped.

In March 2019, the hearings officer held a hearing on the application, and, in November 2019, they recommended conditional approval of the application. In June 2020, the board of county commissioners held *de novo* hearings on the application and, at the conclusion, left the record open until July 15, 2020. In August 2020, the board of county commissioners deliberated and approved the application, and, in October 2020, it adopted findings and conclusions in support of the decision.

The board of county commissioners concluded that no exceptions to Goals 3 or 14 were required because the application is consistent with Goals 3, 4 (Forest

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> "The Subject Property was the site of a Methodist church camp and later a religious retreat, training center and church. The Subject Property has not been in resource use for several decades and is not specially assessed for farm or forest use. The Subject Property was developed with a house of worship, two dwellings, several cabins, a meeting hall, snack bar, and an office building, along with roads, parking areas, well, several septic systems, and infrastructure for electricity and gas service. Remediation would likely be required to make the parcel suitable for resource use." Record 39.

Lands), 11, and 14 as a matter of law pursuant to OAR 660-012-0065(3)(n). In the alternative, the board of county commissioners approved exceptions to Goals 3 and 14 pursuant to OAR 660-004-0020, 660-004-0022, and 660-004-0040. Petitioner challenged those findings in portions of their first, second, third, fourth, fifth, sixth, and tenth assignments of error.

In *TLM I*, we agreed with respondent's application of OAR 660-012-0065(3)(n) and their conclusion that no exception to Goals 3 or 14 was required. Petitioner sought judicial review of our decision.[3] The Court of Appeals concluded that our decision represented a mistaken interpretation of OAR 660-012-0065(3)(n). The court concluded that "[r]equests for comprehensive plan amendments and zone changes, like the ones at issue here, sought by private parties without corresponding expansion of the airport boundary through the airport planning process are not expansions of public use airports within the meaning of OAR 660-012-0065(3)(n)." *Schaefer*, 318 Or App at 620.

The court also concluded that we erred in rejecting petitioner's contention that, as a matter of law, the proposed uses will increase the intensity of uses and facilities approved by the 2004 Exception because the 2004 Exception did not contemplate any development on the subject parcel. *Id.* at 639. Finally, the court concluded that we improperly rejected as unpreserved petitioner's argument that

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[3] 1000 Friends of Oregon and the City of Aurora filed amicus briefs in the Court of Appeals.

the county erred in relying on the provisions of ORS 836.600 to 836.630 to approve the requested land-use actions without goal exceptions. *Id.* at 639-40.

SIXTH ASSIGNMENT OF ERROR

OAR 660-012-0065, adopted by the Land Conservation and Development Commission (LCDC), "identifies transportation facilities, services and improvements which may be permitted on rural lands consistent with Goals 3, 4, 11, and 14 without a goal exception." OAR 660-012-0065(1). OAR 660-012-0065(3) provides:

> "The following transportation improvements are consistent with Goals 3, 4, 11, and 14 subject to the requirements of this rule:
>
> "* * * * *
>
> "(n) Expansions or alterations of public use airports that do not permit service to a larger class of airplanes[.]"

The county relied on OAR 660-012-0065(3)(n) to conclude that the application for comprehensive plan map and zoning map amendments to expand the Airport is consistent with Goals 3, 4, 11, and 14.[4] In the sixth assignment of error, petitioner challenges the county's reliance on OAR 660-012-0065(3)(n). The court agreed with petitioner that OAR 660-012-0065(3)(n) does not apply to the application. Accordingly, the sixth assignment of error is sustained, in part, and we proceed to address petitioner's challenges to the county's alternative

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[4] There is no dispute that the proposed expansion of the Airport does not "permit service to a larger class of airplanes."

findings that the exceptions standards at OAR 660-004-0020, 660-004-0022, and 660-004-0040 are met.

FIRST ASSIGNMENT OF ERROR

In the first assignment of error, petitioner argues that OAR 660-012-0060(5) precludes the county from relying on OAR 660-004-0022 to approve an exception to Goal 3. OAR 660-012-0060(5) provides: "The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional, or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028." There is no dispute that the Airport is a "transportation facility" for purposes of OAR 660-012 or that the county relied on the presence of the Airport as a basis for the exception to allow airport-related uses on the subject property. *See* OAR 660-012-0005(30) ("'Transportation Facilities' means any physical facility that moves or assist[s] in the movement of people or goods including facilities identified in OAR 660-012-0020 but excluding electricity, sewage and water systems.").

Respondents respond, and we agree, that petitioner's argument conflicts with our prior interpretation of OAR 660-012-0060(5) in *Columbia Riverkeeper v. Columbia County*, 78 Or LUBA 547, 577-81 (2018) *aff'd*, 297 Or App 628, 443 P3d 1184 (2019) (*Riverkeeper II*). In *Riverkeeper II*, we explained that OAR 660-012-0060(5) is intended to prohibit only an exception based on the existence

of a transportation facility and not otherwise appropriate for an exception for reasons set out in OAR 660-004-0022.

> "An easy-to-imagine example is an exception to allow commercial or industrial uses on rural or resource land that are rendered economically feasible due only to the presence of an adjoining public highway. Conversely, it makes no policy sense to interpret OAR 660-012-0060(5) to effectively prevent local governments from adopting an exception necessary to improve or expand existing docks, ports or similar transportation facilities, where that exception is otherwise authorized by a reason that LCDC has specifically deemed to be appropriate." *Riverkeeper II*, 78 Or LUBA at 581.

OAR 660-004-0022(1)(b) provides for a reasons exception based on demonstrated need and that "[t]he proposed use or activity has special features or qualities that necessitate its location on or near the proposed exception site." Here, the county concluded that the reason justifying the Goal 3 exception is that airport-related uses need to be located proximate to the airport. Record 25-26.

Respondents point out that OAR 660-012-0065(3)(n) authorizes replacement or expansion of an airport without taking a goal exception, where the expansion does not permit a larger class of airplanes. Thus, under that scheme, certain airport expansions that permit a larger class of airplanes *do* require a goal exception. However, no such goal exception would be possible under petitioner's broad interpretation of OAR 660-012-0060(5).

Consistent with our reasoning and conclusion in *Riverkeeper II*, we conclude that OAR 660-012-0060(5), does not prohibit a reasons exception for airport-related uses that need to be located proximate to the Airport for purposes

allowed under OAR 660-004-0022(1)(b). We address below petitioner's challenges to the county's conclusion that OAR 660-004-0022 supports the exception.

The first assignment of error is denied.

SECOND ASSIGNMENT OF ERROR

OAR 660-004-0020(2)(a) requires the county to explain why and what reasons justify the exception to the applicable goals. "The exception shall set forth the facts and assumptions used as the basis for determining that a state policy embodied in a goal should not apply to specific properties or situations, including the amount of land for the use being planned and why the use requires a location on resource land[.]" *Id.*; ORS 197.732(4).

The decision approves a conditional use permit for 123,000 square feet of office space for aviation related office uses. See n 1 (description of proposed development). The county-imposed LU allows only "airport-related uses, which require being on land within or immediately adjacent to the Airport and generally require access to the runway for their most efficient operation." Record 34. The county found that the proposed uses must be located at the Airport:

> "Aron Faegre, P.E. and Architect has served and developed airport-related uses professionally for 36 years. Mr. Faegre provided an affidavit and supporting letters identified above and incorporated herein by this reference providing more detailed explanation as to why the proposed uses cannot be reasonably accommodated on properties outside of an airport.
>
> "The Board concurs in the Hearings Officer's determination that

> evidence demonstrating that uses that require runway access preclude being on other lands not located adjacent to an airport; however, the Board concludes that, even if an airport-related use does not need direct runway access, it still should be located adjacent to the airport. As Mr. Faegre demonstrated, allowed uses must be at an airport for efficient and quality use. Those uses practically must be located as part of airport clusters, which are inherently at airports. Thus, the Applicant has demonstrated that non-resource land that would not require an exception, including increasing the density of uses on non-resource land, such as commercial, industrial or public lands at non-airport locations, cannot reasonably accommodate the proposed use. There are no available lands of sufficient size within the study area within or adjacent to an airport. Therefore, the factor supports the Proposal.
>
> "The Board rejects Wilsonville's argument that lands within its city limits zoned for commercial or industrial use can satisfy the need for airport-related use land. It ignores the substantial evidence in the record that the uses proposed cannot be reasonably accommodated outside of an airport. The Subject Property is the only available property in the study area with access to an airport runway that can serve commercial jets and other aircraft. It is not reasonable to presume all future hangar, service and repair shops, pilot services, and other related uses can be accommodated by lands without reasonable access to an airport runway within Wilsonville. Such access must be safe and direct as provided in the Subject Property's taxi-lane easement." Record 35.

Petitioner argues that the decision lacks findings supported by evidence that general office functions require a location on resource land. If we understand petitioner's argument, petitioner's unstated premise is that the county can only grant an exception to Goal 3 if the airport-related uses themselves have some nexus with other farm or rural uses. That premise is not supported by the exception standards, which allow exceptions when the proposed use or activity

has special features or qualities that necessitate its location on or near the proposed exception site.[5] OAR 660-004-0022 expands on OAR 660-004-0020(2)(a) by giving examples of the types of reasons that may justify exceptions, including demonstrated need for the activity and special features of the proposed use or activity that necessitate its location on the proposed exception site. The disputed reasons exception is based on demonstrated need and that the proposed aviation related office uses require a location near the Airport with access to the Airport. In those circumstances, the county's findings that the proposed aviation related office uses require a location near the Airport with access to the Airport satisfy the OAR 660-004-0020(2)(a) requirement for findings that the approved office uses require a location on resource land.

With respect to general aviation uses, petitioner challenges the county's finding that

> "Applicant provided substantial evidence that airport-related uses must generally be located proximate to airports, and that some uses require on-airport land or locations with taxi easements. Applicant has further demonstrated that there is need for 16.54 acres at this Airport. The analysis below finds the use cannot be sited on already

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[5] For example, in *1000 Friends of Oregon v. Yamhill County*, the county found reasons justified an exception to Goal 3 to develop a highway on resource land. 52 Or LUBA 418 (2006). The county explained the need to serve the large numbers of through trips that pass through the exception area, impacts to Dundee's adopted economic and community development objectives, and the fact that highways, unlike other land uses, are linear and must travel through rural lands to connect cities and regions of the state. *Id.* at 423.

excepted lands." Record 33.

Petitioner argues that finding is inadequate because it fails to explain what evidence leads to the conclusion that what petitioner characterizes as "urban aviation" uses require a location on resource land. That argument also relies on a premise that the aviation uses for which the exception is sought must have some nexus with other farm or rural uses.

The exception standards do not require the county to make any findings that the airport-related uses have a nexus with other farm or rural uses. Accordingly, petitioner's findings and substantial evidence arguments provide no basis for reversal or remand.

The county's conclusion that the airport related uses require a location on resource land relies, in part, on the county's finding that the subject property is benefited by an easement that provides access to the runway (taxiway easement). See Record 14 ("The Subject Property is subject to the taxi lane easement, giving the Subject Property direct access to the runway via the taxiway."); Record 29 ("The Subject Property is bordered by P-zoned airport-related properties north, west and south and is the last remaining undeveloped property with a taxiway easement and the opportunity for ["through the fence"] access to the runway, taxiways and aprons, making it a logical parcel for eventual airport-related development."); *id.* ("Applicant's revised site plan and testimony adequately explained that the ultimate users of the Subject Property will require use of the runway access taxi easement directly."); Record 50 ("The Subject Property is

benefited by a taxiway easement that runs through the property, providing access to the runway."). Petitioner argues that those findings are not supported by substantial evidence because the purported taxiway easement in the record is not a taxiway easement that *benefits* the site. Instead, it *burdens* the site and grants to "the United States of America and the State of Oregon the right, privilege and license to use the space over the real property hereinabove described for the use and benefit of aircraft." Record 6545.

Respondents respond that the issue of the validity and benefit of a taxiway easement are waived because petitioner did not raise that issue below. To be preserved for LUBA review, an issue must "be raised and accompanied by statements or evidence sufficient to afford the governing body, planning commission, hearings body or hearings officer, and the parties an adequate opportunity to respond to each issue." ORS 197.797(1). Petitioner does not respond to that waiver argument in the reply brief. In the petition for review, petitioner cites record pages 832 and 5483 as raising the issue of a lack of need for locating this use on resource land. We have reviewed those pages and they do not raise any issue with respect to a taxiway easement. We agree with respondents that issue is waived. Therefore, petitioner's findings and substantial evidence challenges based on the purported taxiway easement provide no basis for remand.

The second assignment of error is denied.

THIRD ASSIGNMENT OF ERROR

To show why the particular site is justified for an exception, the county must evaluate "why other areas that do not require a new exception cannot reasonably accommodate the proposed use." OAR 660-004-0020(2)(b)(B).

OAR 660-004-0020(2)(b)(C) provides:

> "The 'alternative areas' standard in paragraph B may be met by a broad review of similar types of areas rather than a review of specific alternative sites. Initially, a local government adopting an exception need assess only whether those similar types of areas in the vicinity could not reasonably accommodate the proposed use. Site specific comparisons are not required of a local government taking an exception unless another party to the local proceeding describes specific sites that can more reasonably accommodate the proposed use. A detailed evaluation of specific alternative sites is thus not required unless such sites are specifically described, with facts to support the assertion that the sites are more reasonable, by another party during the local exceptions proceeding."

During the local proceeding, opponents argued that areas that do not require a new exception can reasonably accommodate the proposed use, including land around existing airports. The county rejected that argument and concluded that no alternative areas that do not require a new exception could reasonably accommodate the proposed use. The county relied on intervenor's study area and described the alternative areas analysis.

> "Applicant surveyed available lands at or near Aurora and other airports within about a 25-mile range. The perimeter was chosen based on an approximate 30-minute driving distance from Aurora Airport to airports with similar uses. The area includes Hillsboro Airport, McMinnville Municipal Airport, Portland International Airport (PDX), Mulino State Airport, McNary Field in Salem and

Troutdale Airport. PDX, Hillsboro, and Troutdale are owned by the Port of Portland; Mulino and Aurora are state-owned; and McMinnville and McNary are city-owned. Applicant's study area is large enough to contain sufficient comparative airports and is appropriate for evaluating the proposed Goal 3 exception.

"* * * * *

"Applicant looked for commercial, industrial and, in Marion County, P-zoned property within the study area that might accommodate airport-related uses. Applicant owns an undeveloped, 4.52-acre, P-zoned parcel adjacent to the taxiway at the Aurora Airport (Assessor's Map 041W02D TL 1700). Applicant states the parcel is too small for the contemplated development and is already committed to two 42,912 square foot hangars, one of which has already been purchased. With each hangar taking up nearly an acre each, the 4.52-acre parcel likely cannot reasonably accommodate Applicant's proposed airport-related uses. Applicant also consulted real estate listings and contacted the Aurora Airport manager and found no other parcels available at the Airport.

"Applicant also looked at properties on or near alternative airports in the study area. Applicant contacted the airport managers and received no positive response about on-airport lands. Applicant also searched various real estate listings for airport-adjacent industrial or commercial zoned parcels of ten acres or more within a UGB. The ten-acre parcel size reasonably acknowledges that a smaller development may work for Applicant's purposes. The search turned up two available properties; one in Salem and one in Hillsboro. The Salem property is a 12.45-acre, industrial zoned parcel on 25th Street, a City of Salem major arterial roadway. The parcel is across the road from McNary Field. Location across 25th Street means no immediate runway access for hangar and other uses needing on-site location. The Hillsboro UGB site is an 18.73-acre, industrial zoned property at 5340 NW 253rd Avenue, one-half mile from Hillsboro Airport; also making runway access a problem." Record 33-34.

Intervenor searched available listings and contacted the airport managers for each of the above-mentioned airports inquiring whether the airports have any parcels "available for purchase, 10 acres or larger, inside the fence with runway access, and no such parcels were identified." Record 6504; *see also* Record 7617.[6]

Petitioner argues that the county misconstrued OAR 660-004-0020(2)(b) by concluding that land is "not available" if it is not for sale. Respondents respond that the proposed uses require location at the Airport to serve the Airport's unmet needs. Respondents dispute that the county considered "available" only those properties that intervenor identified as for sale. Moreover, respondents respond that the record has no evidence of properties for lease, on-airport or off, of a sufficient size with a runway access available, within the study area that could have been considered available for the proposed use. Response Brief 26.

Petitioner replies, and we agree, that the record demonstrates that intervenor's alternative areas search included only properties for sale, not lease. Record 6504, 7617. Petitioner argues, and we agree, that availability for sale is not the legal standard for the required initial alternatives analysis under OAR 660-004-0020(2)(b)(B). In *Columbia Riverkeeper v. Columbia County*, 70 Or

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[6] Intervenor identified two properties for sale within the search area and over 10 acres in size. Intervenor concluded that neither is a suitable alternative area. The first property is 12.45 acres, zoned Industrial, and located adjacent to Salem McNary Field across 25th Street and has no access to the airport. The second property is 18.73 acres located half a mile from the Hillsboro Airport.

LUBA 171, 195, *aff'd*, 267 Or App 637, 342 P3d 181 (2014) (*Riverkeeper I*), we explained: "In conducting the alternative sites analysis required by OAR 660-004-0020(2)(b), the county cannot limit its analysis to lands controlled by the applicant, or conclude that an alternative site controlled by others is not available for industrial development simply due to different ownership or control." Land available for lease must be considered unless the record demonstrates that the property owner is "categorically unwilling" to lease the land. *Id.*; *see also Riverkeeper II*, 78 Or LUBA at 587 (Zamudio, Board Member, concurring) ("[A]n applicant or local government could avoid meaningful consideration of alternative sites if allowed to exclude areas that are either contractually obligated or in different ownership, and thereby obtain approval for a preferred location for an exception.").

"Initially, a local government adopting an exception need assess only whether those similar types of areas in the vicinity could not reasonably accommodate the proposed use." OAR 660-004-0020(2)(b)(C). Here, the county assessed "similar types of areas in the vicinity" by looking at other airports within intervenor's study area. The county relied on the intervenor's alternative areas analysis as its basis to conclude that OAR 660-004-0020(2)(b) is satisfied. Because intervenor's alternative areas analysis was limited to property available for sale, the county did not consider properties under different ownership that may be available for lease. Stated differently, the county limited its initial analysis to lands that intervenor could purchase and control and impermissibly

concluded that "similar types of areas in the vicinity" are not available for airport-related development simply due to different ownership or control. We conclude that the county thereby misconstrued OAR 660-004-0020(2)(b), and the decision that no alternative area is available that does not require a new exception is not supported by substantial evidence in the record.

Intervenor bears the ultimate burden to prove that the exception requirements are satisfied. *Fasano v. Washington Co. Comm.*, 264 Or 574, 588, 507 P2d 23 (1973). We observe that OAR 660-004-0020(2)(b)(C) imposes a burden shifting framework. Again, OAR 660-004-0020(2)(b)(C) provides:

> "The 'alternative areas' standard in paragraph B may be met by a broad review of similar types of areas rather than a review of specific alternative sites. Initially, a local government adopting an exception need assess only whether those similar types of areas in the vicinity could not reasonably accommodate the proposed use. Site specific comparisons are not required of a local government taking an exception unless another party to the local proceeding describes specific sites that can more reasonably accommodate the proposed use. A detailed evaluation of specific alternative sites is thus not required unless such sites are specifically described, with facts to support the assertion that the sites are more reasonable, by another party during the local exceptions proceeding."

Petitioner has identified evidence in the record that alternative areas may be available for lease at McNary Field on undeveloped property "suitable for hangars, aprons, and business development."[7] Record 2560; Reply Brief 4.

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[7] 2012 Salem Airport Master Plan and Airport Layout Plan, describes the acreage available at different sites within and adjacent to the airport that have

On remand, the county should consider and make findings on whether land available for lease that does not require a new exception can reasonably accommodate the use.

The third assignment of error is sustained.

FOURTH ASSIGNMENT OF ERROR

The county must find that "[t]he proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts." OAR 660-004-0020(2)(d).[8] Petitioner argues that the decision misconstrues OAR 660-004-0020(2)(d) because the proposed uses are not compatible with surrounding farm uses and there is no mitigation of identified conflicts with farm uses in the decision. Adjacent uses include farm uses. Existing farm uses on surroundings lands includes plowing that creates dust and the use of slow-moving farm equipment on and across Airport Road.

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proximity to an airport, taxiway access, and inclusion in a master plan. Record 2403-2582.

[8] OAR 660-004-0020(2)(d) provides:

> "'The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts.' The exception shall describe how the proposed use will be rendered compatible with adjacent land uses. The exception shall demonstrate that the proposed use is situated in such a manner as to be compatible with surrounding natural resources and resource management or production practices. 'Compatible' is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses."

A. Dust

Petitioner argues that the decision acknowledges that dust caused by farm use conflicts with aviation uses. Petitioner argues that the decision "erroneously places the burden to avoid adverse compatibility impacts on farm operators" and that "the cost of customary farm practices would be increased for dust mitigation." Petition for Review 24.

Petitioner's argument is unavailing for two reasons. First, the county's findings concerning dust describe why *the subject property*, which is not in farm use, is not a suitable site for farm uses and do not describe a conflict between the proposed use and surrounding resource uses.[9] Second, the exception compatibility criterion is concerned with impacts from the proposed use on resource management practices. The potential conflict from dust created by farm uses is an impact on the proposed use. Nothing in the applicable exception criteria or decision imposes any obligation on surrounding farm uses to mitigate dust impacts on the proposed aviation uses within the exception area.

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[9] The county found that "there is no credible evidence in the record that the Proposal will cause a significant loss of productive resource lands. Testimony from the Applicant and area farmers support the conclusion that losing the Subject Property for farming would not be significant due to the constraints against creation of dust onsite for safety of air travel, small size, and historical non-farm use." Record 30. The county explained that the subject property has "unique features allowing it access to the runway and creating an ideal location for the proposed use. Conversely, natural resource uses are constrained because of the safety concern caused by smoke, dust, or fowl commonly associated with natural resource uses." Record 50.

B. Increased Flight Traffic

The staff report concluded that the development "will result in more aircraft being based at the Aurora Airport and increase the number of takeoffs and landings[.]" Record 6400. Petitioner argues that the county erred by failing to make findings showing how increased flight operations comply with the compatibility rule in OAR 660-004-0020(2)(d). Petitioner relies on *Brockman v. Columbia County*, 59 Or LUBA 302 (2009), where we explained that intervenors and the county have the evidentiary burden of proof concerning the compatibility of the proposed uses with the existing adjoining uses. We remanded on that issue because no party

> "identified any evidence in the record regarding how much additional air traffic might be expected at the airport as a result of the uses authorized by the disputed exception. Until that is known, the county is simply not in a position to know if that increased air traffic will be incompatible with adjoining uses. If the increased air traffic will not be incompatible with adjoining uses, the proposal complies with OAR 660-004-0020(2)(d). Even if increased air traffic might be incompatible with adjoining uses, the county is required under OAR 660-004-0020(d) and 660-013-0040(6) to consider 'measures designed to reduce adverse impacts' and take 'reasonable steps to eliminate or minimize the incompatibility through location, design, or conditions.' Those measures and reasonable steps may be sufficient to conclude that the proposed uses will be compatible notwithstanding the additional air traffic impacts." *Id.* at 318.

Respondents respond that no party raised the issue of impacts from increased flight traffic during the local proceeding. Instead, the only impacts

regarding flight traffic raised involved helicopters hovering over the property for an extended period, which is prohibited by condition of approval number 5.

Petitioner has not responded to explain where this issue of impacts from increased flight traffic was preserved or why preservation is not required. We conclude that this issue is waived.

C. Increased Road Traffic

The site is bordered on the east by Airport Road, a county road. Properties to the east of Airport Road are zoned EFU and farmed for hay, grass seed, and fresh market vegetables. The total number of vehicle trips generated by a reasonable worst-case development level is estimated to be 1,592 daily trips. Record 55.

A farmer who farms fresh market vegetables on approximately 100 acres on the west side of the Airport and approximately 100 acres located on the east side of the Airport, directly east of Airport Road, submitted testimony on the traffic impacts on their farm use. Record 5632. The farmer explained:

> "Farming operations of both sides of the airport rotate fresh vegetables year-round in small plots, thus requiring ingress and egress year-round for soil preparation and harvesting. To farm this much land, Aurora Farms owns 14 tractors, 5 of which carry specialized implements (plows, chisels, harrows, etc.) that must move from plot to plot on a weekly or bi-weekly schedule and thus side to side of the Aurora Airport. Besides moving slower than traffic on any local roads, many of these implements are wider than a single lane of traffic. Some implements have already been forced to be duplicated (i.e., permanently located on one side of the airport or another) due to traffic and associated potential vehicular accident

risks." Record 5633.

In addition to safety concerns, the farmer described estimated increases in travel time and associated costs for labor due to increased travel time. Record 5634. The farmer explained that the farm's packing, washing, and cooling facilities are on the west side of the Airport, and it would be cost prohibitive to replicate those facilities on the east side of Airport Road to avoid the danger and cost of farm traffic delays caused by increased traffic on Airport Road. The farmer opined that "[d]evelopment of the type being considered by TLM Holdings will dramatically impact surface transportation, and adequate traffic mitigation is an absolute necessity to allow existing farms near the airport to continue to operate." Record 5634.

With respect to compatibility with adjacent farm uses, the county found:

> "Comments from farm operators in the area did not claim the proposed use itself would negatively affect farm operations, except that additional traffic on Airport Road would exacerbate dangerous conditions at farm entrances during high speed, rush hour traffic times caused by traffic levels that currently (and/or during the planning horizon) exceed planned levels based on current traffic levels. Applicant's revised TIA and subsequent traffic memorandums and response letters explain the proposed conditions of approval adequately mitigate Applicant's proportionate impact on the affected traffic facilities. Condition of approval No. 2 will ensure that resource management of land at present levels surrounding and nearby the site proposed for urban development is assured notwithstanding the proposed use." Record 45.

Petitioner argues that the county failed to make adequate findings explaining how traffic impacts will be mitigated to make the proposed use compatible with surrounding farm uses.

Respondents respond, initially, that the issue of compliance with OAR 660-004-0020(2)(d) was not raised below and was waived. Petitioner replies, and we agree, that the issue was raised below. Record 835.

On the merits, respondents respond that the decision establishes that appropriate mitigation will be provided based on conditions of approval 2 through 4, which require frontage improvements and proportional share payments for upgrades to four intersections, two of which are on Airport Road.[10]

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[10] Conditions of Approval 2, 3 and 4 are:

> "2. Prior to building permit issuance, design and obtain a Major Construction Permit for rural type frontage improvements along the Airport Road subject property frontage that are anticipated to include vegetation clearing, gravel road shoulder, slope and open system drainage work. Prior to issuance of a Building Department Certificate of Occupancy, construct and acquire final inspection approval of the roadway related improvements.
>
> "3. At the time of zone change approval, remit a proportional share in the amount of $6,000 for the impact of the proposed use toward the cost of planning, designing, and constructing the following project:
>
> "• OR551 / Ehlen Road Intersection East Bound/West Bound Left Turn Lanes.

Petitioner argues that the findings are inadequate to explain how those required improvements mitigate the traffic impacts to farm uses. We agree. Even if the conditions of approval mitigate some of the general traffic impacts, the county did not explain how that mitigation renders the proposed use compatible with farm uses that will be impacted from increased traffic on Airport Road. Remand is required for the county to make adequate findings on that issue. *See Norvell v. Portland Area LGBC*, 43 Or App 849, 853, 604 P2d 896 (1979)

> "4. Prior to building permit issuance, remit a proportional share at a rate of $200/trip (in 2020 dollars and adjusted at the time of development according to the SCCI) for the impact of the proposed use calculated in daily trips using ITE methodology toward the cost of planning, designing, and constructing the following projects:
>
> "• OR551 / Arndt Rd Intersection East Bound/West Bound Left Turn Lanes
>
> "• Airport Rd / Ehlen Rd Intersection Signalization & East Bound Left Tum Lane
>
> "• Airport Rd / Arndt Rd Intersection West Bound Right Turn Lane
>
> "MCPW Engineering has reviewed the updated April 2019 TIA and also concurred with total trip generation, distribution analysis, and the proportional share calculation methodology summarized in DKS's Memorandum dated March 4, 2020. All daily vehicle trip estimates and subsequent proportionate share contributions listed under this condition shall be calculated using the latest edition of the ITE Trip Generation Manual and are subject to review and approval by Marion County Public Works." Record 395-96.

(findings must address and respond to specific issues relevant to compliance with applicable approval standards that were raised in the proceedings below).

The fourth assignment of error is sustained, in part.

FIFTH ASSIGNMENT OF ERROR and PORTION OF TENTH ASSIGNMENT OF ERROR

A. Goal 14 (Urbanization)

Goal 14 is "[t]o provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities." OAR 660-014-0040 is LCDC's rule governing establishment of new urban development on undeveloped rural lands. The county found that the "P-zone, subject to the limited use overlay zone, will allow industrial and commercial airport and airport-related uses. The proposed use would be urban in nature but appropriate for this rural location." Record 58. Absent the application of OAR 660-012-0065(3)(n), which the Court of Appeals determined is inapplicable, there is no dispute that the proposed uses require a Goal 14 exception. OAR 660-014-0040(2) provides:

> "A county can justify an exception to Goal 14 to allow establishment of new urban development on undeveloped rural land. Reasons that can justify why the policies in Goals 3, 4, 11 and 14 should not apply can include but are not limited to findings that an urban population and urban levels of facilities and services are necessary to support an economic activity that is dependent upon an adjacent or nearby natural resource."

Petitioner argues that the decision violates OAR 660-014-0040(2) because the uses are not dependent on a natural resource. Petitioner also argues that the findings are inadequate because they fail to address OAR 660-014-0040(2).

Respondents respond, and we agree, OAR 660-014-0040(2) does not limit the bases for a reasons exception to uses that are dependent on a natural resource. OAR 660-014-0040(2) expressly provides a non-exclusive basis for a reasons exception. Petitioner's arguments under OAR 660-014-0040(2) are based on an incorrect interpretation of that rule and provide no basis for reversal or remand.

The fifth assignment of error, first subassignment, is denied.

To approve a reasons exception, a county must show, among other things, "that the proposed urban development cannot be reasonably accommodated in or through expansion of existing urban growth boundaries." OAR 660-014-0040(3)(a). Petitioner argues that the decision violates OAR 660-014-0040(3)(a) because the uses can be accommodated within the existing urban growth boundaries of McMinnville, Metro, Redmond, and Salem.

Intervenor's study area for the Goal 3 exception alternatives analysis includes other airports within about a 25-mile range from the Airport. "The perimeter was chosen based on an approximate 30-minute driving distance from Aurora Airport to airports with similar uses" and covers multiple counties. Record 33. Differently, intervenor's study area for the Goal 14 analysis includes only Marion County. The county found that was an appropriate study area.

"The large Goal 3 study area ran from Salem to Portland to bring in

> several airports for study. There is no requirement for the Goal 3 and 14 study areas to be the same. Applicant looked at Marion County when considering Goal 14, and it makes sense to narrow the study area when looking at potential urbanization of Marion County land. Specifically, it is reasonable to interpret OAR 660-014-0040(1) definition of 'undeveloped rural land' to include 'all land outside of acknowledged urban growth boundaries except for rural areas committed to urban development' to be limited to such lands within the reviewing county rather than the entire State of Oregon, United States, or elsewhere. The narrower study area is appropriate considering the text of OAR 660-014-0040(2) through (4) and the emphasis on analyzing the impact of urban uses on rural lands by a county reviewing the Proposal. (*See* OAR 660-014-0040(3) emphasis on expanding existing UGBs, which if located in other jurisdictions would be beyond the scope of practical analysis or authority of a reviewing County.)" Record 43.

Petitioner argues that the county misconstrued OAR 660-014-0040(3)(a) by limiting the analysis to Marion County.

Respondents respond that the limited study area for the Goal 14 analysis is appropriate because the county "has no say in the urbanization of land outside its borders" and "[t]here must be some geographic limit for the Goal 14 analysis, and it makes sense for Respondent to set that limit as it did." Response Brief 35.

We agree with petitioner that the county's narrow interpretation of OAR 660-014-0040(3)(a) is not supported by the text or underlying policy of that rule. OAR 660-014-0040(3)(a) provides that the county must show "that the proposed urban development cannot be reasonably accommodated in or through expansion of existing urban growth boundaries or by intensification of development in existing rural communities." While the county correctly observed that it has no authority to expand an urban growth boundary in another county, nothing in the

text of OAR 660-014-0040(3)(a) supports the county's interpretation that it need only consider areas over which the county has planning authority. That subsection refers to "existing urban growth boundaries" and "existing rural communities" and does not limit the scope of that inquiry to the county considering the Goal 14 exception.

The county's interpretation of OAR 660-014-0040(3)(a) is also at odds with the underlying policy governing reasons exceptions. The statewide planning goals are the foundation of statewide land use planning. Exceptions are exceptional. *1000 Friends of Oregon v. LCDC*, 69 Or App 717, 731, 688 P2d 103 (1984). A reasons exception is the most limited type of exception. *See Riverkeeper I*, 70 Or LUBA at 181-82 (explaining that a reasons exception is a more limited vehicle than physically developed and irrevocably committed exceptions). The policy of Goal 14 is implemented by concentrating urban uses on urban and urbanizable land. That policy is served by the requirement in OAR 660-014-0040(3)(a) that the county show that urban uses should be allowed on undeveloped rural land because it cannot be accommodated within or adjacent to an existing urban area, even if that area is in a different county.

We agree with petitioner that the county misconstrued OAR 660-014-0040(3)(a) by limiting its Goal 14 analysis to areas within Marion County. On remand, the county must consider areas outside the county in its analysis under OAR 660-014-0040(3)(a).

With respect to areas within Marion County, the county concluded that the proposed use cannot be reasonably accommodated in or through expansion of existing urban growth boundaries.

The county observed that McNary Field is within the Salem city limits and a City of Salem UGB expansion would not provide more land at McNary Field. Petitioner argues, and we agree, that the finding fails to address land at Salem Airport evidenced by the 2012 Salem Airport Master Plan and the Airport Layout Plan, which describe the acreage available at different sites within and adjacent to the airport that have proximity to an airport, taxiway access, and inclusion in a master plan. Record 2403-2582. There is no evidence the land has since been developed or that the property owner, the City of Salem, is unwilling to lease it.

Presumably, the county disregarded that evidence based on intervenor's evidence that there is not a sufficient amount of land available for sale at McNary Field. We determined that available for sale limitation is erroneous for the alternatives analysis required under OAR 660-004-0020(2)(b)(C). The county should consider whether land available for lease can "reasonably accommodate" the proposed uses under OAR 660-014-0040(3)(a).

The City of Aurora UGB is about a half mile away from the subject property with EFU-zoned farmland in between. The county explained that the City of Aurora originally proposed including the Airport in its UGB during the city's acknowledgment process, but that part of the UGB proposal was not

approved by LCDC. Thus, the UGB likely would not be extended to include the subject site because of the intervening resource land. Record 43-44.

Petitioner argues that the county's conclusion that the use cannot be accommodated by expansion of the City of Aurora's UGB is based on a legally erroneous assumption that the UGB expansion would require Goal 3 and 14 exceptions. OAR 660-004-0010(l)(d)(C) ("When a local government changes an established urban growth boundary applying Goal 14 as amended April 28, 2005, a goal exception is not required unless the local government seeks an exception to any of the requirements of Goal 14 or other applicable goals."); OAR 660-024-0020(l)(a)-(b) (explaining that Goals 3 and 4 are not applicable when establishing or amending a UGB and "[t]he exceptions process in Goal 2 and OAR chapter 660, division 4, is not applicable unless a local government chooses to take an exception to a particular goal requirement"). Petitioner points to *Zimmerman v. LCDC*, 274 Or App 512, 533 (2015), in which the Court of Appeals affirmed a UGB expansion onto 266 acres of EFU land around the Scappoose Airport. Petitioner argues that case demonstrates that expanding Aurora's UGB across EFU land is feasible, and does not require goal exceptions.

Respondents respond that the county's decision did not solely rely on its conclusion that an Aurora UGB expansion would require goal exceptions. Instead, the county explained that the City of Aurora had previously attempted to include a property south of the subject property within its UGB and LCDC rejected it. We agree that information, combined with the fact that additional

resource land lies between the subject property and the city's UGB supports the county's conclusion that it is unlikely that the use could be reasonably accommodated by expanding Aurora's UGB.

The fifth assignment of error, second subassignment, is sustained, in part.

B. Goal 11

Goal 11 is "[t]o plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development." To approve a reasons exception, a county must show, among other things, "[t]hat an appropriate level of public facilities and services are likely to be provided in a timely and efficient manner." OAR 660-014-0040(3)(d). The county found:

> "The appropriate level of facilities and services will be provided in a timely manner. In short, the Subject Property would tie into the Airport fire suppression system at a nearby hook up and be served by the Aurora Fire Protection District, with a possible resiliency center with fire station locating on the Subject Property. The Subject Property will have its own water system supported by an on-site well. Options other than traditional on-site subsurface disposal are feasible and available for this site. With improvements and permitting, adequate stormwater management is feasible. Law enforcement service is provided by the Marion County Sheriff's Office. Expansion of the City of Aurora UGB is unnecessary to serve the proposed uses nor is there a need to expand urban public services. Applicant may connect to the existing septic system benefitting the adjoining property to the south of the Subject Property; however, such connection is unnecessary to serve the Subject Property." Record 45.

Petitioner argues that the finding that the proposed uses will not require public services is not supported by adequate findings or substantial evidence. Petitioner also argues county must make findings on adequacy and timing of public services, even when the proposed uses will not require public facilities and services.

We first observe that OAR 660-014-0040(3)(d) requires the county to find "[t]hat *an appropriate level* of public facilities and services are likely to be provided in a timely and efficient manner." (Emphasis added.) The county found that the proposed uses will not require any public facilities. If that finding is supported by substantial evidence, then the "appropriate level of public facilities and services" would be none.

Petitioner argues that the finding that the proposed uses will not require any public facilities is not supported by substantial evidence in the whole record and cites evidence in the record that the Aurora Airport Water Control District and the county have historically supported connection to City of Aurora public water and sewer services. For example, in 2015, the county supported Senate Bill 534, which would allow airports and cities to enter into agreements for sewer and water services. The county's support statement stated:

> "SB 534 would allow Aurora Airport in Marion County to connect to the water and sewer services necessary for its continued success as a regionally significant employer. Wells at the airport have, at times, been insufficient to provide the water necessary for businesses located at the airport. Also, septic systems are difficult to locate at the airport due to soil conditions. The provision of water

and sewer service from the City of Aurora would address these deficiencies in rural services." Record 1025.

Petitioner argues that evidence in the record demonstrates inadequate firefighting water, potable water, and sanitary sewer facilities and there is no evidence in the record that the identified deficiencies have been resolved. Petitioner argues that a reasonable decision maker would not find that the proposed development would not require public water and sewer facilities.

With respect to water supply, respondents point to Record 616 to 624. Record 616 is a 2018 water quality test from an "outside faucet," at the subject site that shows "coliforms absent." Record 617 includes a flow test that shows 40 gallons per minute over a two-hour test period. Record 618 to 623 is a copy of an EPA report on arsenic removal. Record 624 is a quote for an arsenic removal filtration system. We agree with respondents that is evidence that a reasonable person could rely upon to support the county's finding that the subject property can supply its own water system supported by an on-site well and will not require public water service.

With respect to sewage disposal, respondents point to Record 328 to 394, which includes expert opinion outlining sewage disposal options, including connecting to the Airpark's shared septic system or holding tanks and off-site disposal. We agree with respondents that is evidence that a reasonable person could rely upon to support the county's finding that options other than traditional on-site subsurface disposal are feasible for this site.

With respect to fire suppression, respondents point to Record 37, 44, 45, 49, 62, and 6452. Record 37, 44, 45, 49, and 62 include findings that the subject property is within the Aurora Fire District and can tie into the Airport fire suppression system. Record 6452 is a request for comment form demonstrating that the Aurora Fire District "reviewed the proposal and determined that we have no comment." We agree with respondents that is evidence that a reasonable person could rely upon to support the county's finding that the Subject Property would tie into the Airport fire suppression system and be served by the Aurora Fire Protection District.

In sum, the county's finding that the proposed development would not require public water and sewer facilities and will be served by existing fire suppression facilities is supported by substantial evidence.

The fifth assignment of error, third subassignment, is denied.

The tenth assignment of error, first subassignment, is denied.

The fifth assignment of error is sustained, in part.

NINTH ASSIGNMENT OF ERROR

As explained above, the county approved a reasons exception to Goals 11 and 14 for the adjacent Airpark in 2004. Record 537-48. In the ninth assignment of error, petitioner argues that OAR 660-004-0018(1) and (4)(b) require a new reasons exception to Goals 11 and 14 because the new uses allowed on the subject

property will increase the intensity of the use of the Airpark's septic system and taxiway.[11]

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[11] OAR 660-004-0018, which implements Statewide Planning Goal 2 (Land Use Planning), provides, in relevant part:

> "(1) Purpose. This rule explains the requirements for adoption of plan and zone designations for exceptions. Exceptions to one goal or a portion of one goal do not relieve a jurisdiction from remaining goal requirements and do not authorize uses, densities, public facilities and services, or activities other than those recognized or justified by the applicable exception. Physically developed or irrevocably committed exceptions under OAR 660-004-0025 and 660-004-0028 and 660-014-0030 are intended to recognize and allow continuation of existing types of development in the exception area. Adoption of plan and zoning provisions that would allow changes in existing types of uses, densities, or services requires the application of the standards outlined in this rule.
>
> "* * * * *
>
> "(4) 'Reasons' Exceptions:
>
> "(a) When a local government takes an exception under the 'Reasons' section of ORS 197.732(1)(c) and OAR 660-004-0020 through 660-004-0022, OAR 660-014-0040, or OAR 660-014-0090, plan and zone designations must limit the uses, density, public facilities and services, and activities to only those that are justified in the exception.
>
> "(b) When a local government changes the types or intensities of uses or public facilities and services within an area approved as a 'Reasons' exception, a new 'Reasons' exception is required."

Petitioner's argument before the county, and again before LUBA, is that, as a matter of law, the uses and public facilities approved in any exception are limited to the intensity necessary for the development for which the exception is taken. It is undisputed that, when the exception for the adjacent parcel was taken in 2004, no development was contemplated on the subject parcel. Thus, under petitioner's legal theory, as a matter of law, the 2004 Exception did not encompass any increase in intensity that will result from development of the subject parcel. Petitioner argues that the decision lacks adequate findings because it failed to analyze the uses approved in the 2004 Exception or evaluate the increased intensity of uses and services that will result from the decision, and the decision unlawfully fails to take a new reasons exception for the increased intensity of uses on the 2004 Exception lands.

The county did not make any findings about whether the proposal will intensify the uses on land within the 2004 Exception area. Based on the Court of Appeals' decision, we conclude that the county erred by not making findings on that issue. Accordingly, remand is appropriate for the county to make findings under OAR 660-004-0018 and determine whether a new reasons exception is required for the 2004 Exception area.

The ninth assignment of error is sustained.

SEVENTH ASSIGNMENT OF ERROR

Statewide Planning Goal 6 (Air, Water and Land Resources Quality) is "[t]o maintain and improve the quality of the air, water and land resources of the

state."[12] "Goal 6 requires that the local government establish that there is a *reasonable expectation* that the use that is seeking land use approval will also be able to comply with the state and federal environmental quality standards that it must satisfy to be built." *Friends of the Applegate v. Josephine County*, 44 Or LUBA 786, 802 (2003) (emphasis in original).

In *TLM I*, we agreed with petitioner that the county's findings are inadequate because they fail to consider the cumulative effects of septic waste discharges from proposed development and existing development. We sustained the seventh assignment of error, in part. As far as we can tell, the court's opinion does not require us to revisit that disposition.

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[12] Goal 6 further provides, in part:

> "All waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules and standards. With respect to the air, water and land resources of the applicable air sheds and river basins described or included in state environmental quality statutes, rules, standards and implementation plans, such discharges shall not (1) exceed the carrying capacity of such resources, considering long range needs; (2) degrade such resources; or (3) threaten the availability of such resources.
>
> "**Waste and Process Discharges** – refers to solid waste, thermal, noise, atmospheric or water pollutants, contaminants, or products therefrom." (Boldface in original.)

EIGHTH ASSIGNMENT OF ERROR and PORTION OF TENTH ASSIGNMENT OF ERROR

In the eighth assignment of error and in the second subassignment of error under the tenth assignment of error, petitioner challenges the board of county commissioners' conclusions regarding applicable conditional use criteria. We denied the eighth assignment of error and the second subassignment of error under the tenth assignment of error. As far as we can tell, the court's opinion does not require us to revisit that disposition.

The county's decision is remanded.

BEFORE THE LAND USE BOARD OF APPEALS
OF THE STATE OF OREGON

JOSEPH SCHAEFER,
Petitioner,

vs.

MARION COUNTY,
Respondent,

and

TLM HOLDINGS LLC,
Intervenor-Respondent.

LUBA No. 2020-108

FINAL OPINION
AND ORDER

Appeal on remand from the Court of Appeals.

Joseph Schaefer represented themselves.

Scott A. Norris represented respondent.

Alan M. Sorem represented intervenor-respondent.

ZAMUDIO, Board Member; RYAN, Board Chair, participated in the decision.

RUDD, Board Member, did not participate in the decision.

REVERSED 03/14/2023

You are entitled to judicial review of this Order. Judicial review is governed by the provisions of ORS 197.850.

Opinion by Zamudio.

NATURE OF THE DECISION

Petitioner appeals a decision by the board of county commissioners approving an application for (1) a comprehensive plan map amendment to change the plan designation of property adjacent to the Aurora State Airport (the Airport) from Primary Agriculture to Public and Semi-Public (P), (2) a zoning map amendment to change the zoning designation of the property from Exclusive Farm Use to P, (3) exceptions to Statewide Planning Goals 3 (Agricultural Lands) and 14 (Urbanization), and (4) a conditional use permit authorizing various airport-related uses on the property.

FACTS

This matter is on remand from the Court of Appeals for a second time. The underlying facts are set out in our prior decisions and we do not reiterate them here. *Schaefer v. Marion County*, ___ Or LUBA ___ (LUBA No 2020-108, July 7, 2022), *rev'd and rem'd*, 323 Or App 390, 523 P3d 1142 (2022) (*TLM II*); *Schaefer v. Marion County*, ___ Or LUBA ___ (LUBA No 2020-108, Oct 12, 2021), *rev'd and rem'd*, 318 Or App 617, 620, 509 P3d 718 (2022) (*TLM I*).

FIRST ASSIGNMENT OF ERROR

In the first assignment of error, petitioner argues that OAR 660-012-0060(5) precludes the county from relying on OAR 660-004-0022 to approve an exception to Goal 3. OAR 660-012-0060(5) provides: "The presence of a transportation facility or improvement shall not be a basis for an exception to

allow residential, commercial, institutional, or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028." There is no dispute that the Airport is a "transportation facility." *See former* OAR 660-012-0005(30) (Aug 15, 2014), *renumbered as* OAR 660-012-0005(46) (Aug 17, 2022) ("'Transportation Facilities' means any physical facility that moves or assist[s] in the movement of people or goods including facilities identified in OAR 660-012-0020 but excluding electricity, sewage and water systems.").

In *TLM II*, we rejected petitioner's argument. Petitioner sought judicial review and argued that OAR 660-012-0060(5) prohibits a Goal 3 exception based on access to the airport because the airport is a transportation facility and the presence of the airport was the sole basis for the county's determination that an exception to Goal 3 was justified under OAR 660-004-0022 for the proposed commercial and industrial development. The court agreed with petitioner. The court concluded that proximity to the Airport underpinned the county's reasoning allowing the exception for airport-related uses on the subject property. *See Schaefer*, 323 Or App at 400 ("The county's reasoning does not depend on any attribute of either the applied-for development or its proposed location that is not directly tied to the airport. Stated differently, when the airport is removed from the calculus, the county's reasoning collapses entirely.").

In a footnote, the court stated:

> "[T]he county found that the applied-for commercial uses were justified under OAR 660-004-0022(1)(b), but it also found that the applied-for industrial uses were justified under OAR 660-004-

> 0022(3)(a) and (c). Although petitioner's first assignment of error before LUBA applied to both parts of the county's analysis, LUBA did not expressly address the latter group of uses. Because we are reversing LUBA's order as to petitioner's first assignment of error before LUBA, on remand, LUBA will have the opportunity to address both parts of the county's reasoning." *Schaefer*, 323 Or App at 398 n 5.

OAR 660-004-0022(3)(a) provides that a reasons exception may be supported when the county finds that "[t]he use is significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include geothermal wells, mineral or aggregate deposits, water reservoirs, natural features, or river or ocean ports." OAR 660-004-0022(3)(c) provides that a reasons exception may be supported when the county finds that "[t]he use would have a significant comparative advantage due to its location (e.g., near existing industrial activity, an energy facility, or products available from other rural activities), which would benefit the county economy and cause only minimal loss of productive resource lands."

Given the court's interrelated conclusions that (1) the county did not identify any reason for the exception that is independent of the airport and (2) OAR 660-012-0060(5) prohibits a Goal 3 exception based on access to the airport because the airport is a transportation facility, we do not perceive how OAR 660-004-0022(3)(a) and (c) could support the Goal 3 exception based on the record and the county's reasoning in this appeal.

The first assignment of error is sustained for the reasons explained in the court's decision.

1 The county's decision is reversed.

61 Or LUBA 264 (Or Luba), 2010 WL 2655109

Land Use Board of Appeals

State of Oregon

PAUL E. FOLAND AND CONSTANCE J. FOLAND, Petitioners,
vs.
JACKSON COUNTY, Respondent,
and
OREGON DEPARTMENT OF TRANSPORTATION, Intervenor-Respondent.

LUBA No. 2009-109

DANIEL FOLLIARD, JAMES MCINTOSH, LOIS LANGLOIS, DAN BATY, JOHN EASTER AND MICHAEL BIANCO, Petitioners,
vs.
JACKSON COUNTY, Respondent,
and
OREGON DEPARTMENT OF TRANSPORTATION, Intervenor-Respondent.

LUBA No. 2009-112

ALLEN BAKER, JOHN WEISINGER, STEVEN STOLZER, JEAN MORGAN, MICHAEL MORGAN, SUZANNE FREY AND GAIL ZARO, Petitioners,
vs.
JACKSON COUNTY, Respondent,
and
OREGON DEPARTMENT OF TRANSPORTATION, Intervenor-Respondent.

LUBA No. 2009-113
REMANDED June 4, 2010

FINAL OPINION AND ORDER

Appeal from Jackson County.

**1 Paul E. Foland and Constance J. Foland, Ashland, filed a petition for review and Constance J. Foland argued on her own behalf.
Anne C. Davies, Eugene, filed a petition for review and argued on behalf petitioners Baker et al and Folliard et al.
No appearance by Jackson County.
Bonnie Heitsch, Assistant Attorney General, Salem, filed the response brief and argued on behalf of the Oregon Department of Transportation. With her on the brief was John R. Kroger, Attorney General.

BASSHAM, Board Member; HOLSTUN, Board Chair; participated in the decision.

RYAN, Board Member, concurring.

You are entitled to judicial review of this Order. Judicial review is governed by the provisions of ORS 197.850.

*266 Opinion by Bassham.

NATURE OF THE DECISION

Petitioners appeal a decision by the county approving exceptions to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities and Services) and Goal 14 (Urbanization), and related comprehensive plan map and zoning map amendments, in order to site an interstate highway rest area and welcome center on land zoned Exclusive Farm Use. The challenged decision also approves an access road.

REPLY BRIEFS

Petitioners Baker *et al* (Baker) and Folliard *et al* (Folliard) move for permission to file a joint reply brief under OAR 661-010-0039, to respond to new matters they allege were raised for the first time in the response brief. Intervenor Oregon Department of Transportation (ODOT) objects to the reply brief, arguing that the reply brief does not respond to new matters raised in ODOT's response brief. We agree with ODOT that *267 portions of the reply brief contain responses to statements and arguments in the response brief that do not qualify as "new matters" under OAR 661-010-0039. Accordingly, we will not consider subsections A or C. Subsections B, D, E, and G respond to new matters raised in the response brief, and those sections of the reply brief are allowed.[1] Baker's and Folliard's motion is granted in part.

Petitioners Folands (Foland) move for permission to file a reply brief to respond to new matters they allege were raised in the response brief. ODOT also objects to the Foland reply brief, arguing that it does not respond to any new matters raised in ODOT's response brief and includes new arguments that were not presented in the Foland petition for review. We agree with ODOT that the Foland reply brief does not respond to new matters raised in the response brief. *Wal-Mart Stores, Inc. v. City of Gresham*, 54 Or LUBA 16, 19-20 (2007) (new matters are responses that an argument should fail regardless of its stated merits, or responses to assignments of error that could not reasonably have been anticipated by a petitioner). Foland's motion is denied.

FACTS

**2 The challenged decision approves ODOT's application to site a rest area and welcome center on an 18-acre parcel of land located approximately 500 feet south of the urban growth boundary (UGB) of the City of Ashland. In 1996, ODOT closed the Siskiyou Safety Rest Area and Welcome Center, located near Milepost 10 on Interstate 5, because the rest area experienced safety issues due to its location at approximately 2,650 feet above sea level, just north of the Siskiyou Summit on a 6% downgrade slope, and its insufficient deceleration ramp and sighting distance. The welcome center that was sited at the closed rest area was relocated to the U.S. Forest Service's Ashland Ranger District building in the City of Ashland, where it is still located.

In 2008, ODOT applied to site a new rest area and welcome center serving northbound traffic on ODOT's property between Mileposts 12 and 13, about 2.5 miles north of the closed rest area. The site is approximately 500 feet south of the City of Ashland's urban growth boundary. Exits to the City of Ashland are located at Mileposts 11 and 14. There is an interstate interchange within the City of Ashland at Milepost 14, approximately 1.5 miles north of the subject property.

*268 The property is zoned Exclusive Farm Use (EFU) and is located on the east side of I-5, at an elevation of 2,100 feet above sea level. Prior to its acquisition by ODOT in 1999, the property was used for cattle grazing. The property is surrounded by other resource lands used for grazing, and growing crops, fruit trees, berries and cane. Approximately one-half mile north of the property lies Crowson Road, a county road, and a residential subdivision, Oak Knoll Meadows. An irrigation ditch, the "Dunn Ditch,"[2] parallels the property on the west side of Interstate-5, and lateral pipes from the Dunn Ditch run under I-5 onto the ODOT property at various locations. Record Exhibit AF. Foland's property, together with other properties located near the subject property, possess a right to use water from the Dunn Ditch for irrigation. Record 2554-55. A sewer line that connects to the City of Ashland's sewer system and had previously served the closed rest area traverses the

property from north to south, along the east side of I-5.

The proposal includes entrance and exit ramps, approximately 4.5 acres for approximately 60 car and 13 RV parking spaces, driveways, an area for staff parking, an interpretive area, a picnic area, a pet area, walkways, drinking fountains, and ornamental landscaping. The proposal also includes three separate buildings, including an approximately 1,800-square foot restroom building, a 576-square foot "travel kiosk," and an approximately 3,800-square foot welcome center building. Record 1411-12, 1418. Finally, the proposal includes construction of a new access road from the north boundary of the rest area to connect to Crowson Road, located approximately 200 feet north of the north boundary of the rest area. The proposed access road is located entirely on the subject parcel.

**3 After conducting six public hearings, the planning commission voted to recommend approval of the application to the board of county commissioners. After conducting several more public hearings, the board of county commissioners adopted the planning commission's recommendation and voted to approve the applications. These appeals followed.

INTRODUCTION

The proposed rest area and welcome center are not uses that are allowed under Statewide Planning Goal 3 (Agricultural Lands) and *269 ORS 215.283(1) and (2) on land zoned EFU. ORS 197.732 and Statewide Planning Goal 2, Part II(c) allow a local government to plan and zone land for uses not allowed under the statewide planning goals if the local government identifies "[r]easons [that] justify why the state policy embodied in the applicable goals should not apply." This type of statewide planning goal exception is referred to as a "reasons" exception, to distinguish it from the "physically developed" and "irrevocably committed" exceptions that are authorized by Goal 2, Part II(a) and (b). Under ORS 215.283(3), in order to gain approval of the rest area and welcome center, ODOT sought the disputed reasons exception to Statewide Planning Goals 3, 11, and 14.[3]

In most circumstances, a reasons exception to allow development on EFU-zoned land would require application of the standards set forth in OAR 660-004-0020 and 660-004-0022. Those rules are set forth in Appendix A. However, for exceptions that are required in order to site "transportation facilities and improvements" on rural lands, OAR chapter 660, division 12, the transportation planning rule (TPR) provides different exception standards. OAR 660-012-0070.[4] The TPR exception standards *270 set out in OAR 660-012-0070 require identification of the need for a transportation facility and a demonstration that measures not requiring an exception, such as improvements to existing transportation facilities, cannot reasonably satisfy that need. OAR 660-012-0070(4). The TPR exception standards also require a demonstration that lands that do not require an exception to Goal 3 (non-exception locations) cannot reasonably accommodate the transportation facility. OAR 660-012-0070(5). The required demonstration regarding alternative measures and alternative non-exception lands under OAR 660-012-0070(4) and (5) requires that "cost, operational feasibility, economic dislocation and other relevant factors" must be addressed. OAR 660-012-0070(6). The TPR exception standards allow the local government to utilize "thresholds," or required features or characteristics, in order to judge whether a measure or non-exception location alternative can reasonably accommodate the transportation need. The county's thresholds are the focus of petitioners' assignments of error and they are discussed in more detail below.

FIRST ASSIGNMENT OF ERROR (BAKER)/FIRST AND SECOND ASSIGNMENTS OF ERROR (FOLAND)

A. OAR 660-012-0070(1): "Transportation Facilities and Improvements"

**4 OAR 660-012-0070(1) provides that:
"*Transportation facilities and improvements* which do not meet the requirements of OAR 660-012-0065 require an exception to be sited on rural lands." (Emphasis added.)

Baker and Foland allege in their first assignment of error that the county erred in failing to adopt adequate findings explaining why the proposed rest area and welcome center qualify as "transportation facilities and improvements" under OAR 660-012-0070(1), so that the TPR exception standards rather than the exceptions standards set forth in OAR 660-004-0020 and 660-004-0022 apply. Baker first argues that the county erred in failing to explain why the proposed rest area and welcome center are "transportation facilities" and in failing to respond to opponents' arguments that the rest area and welcome center do not qualify as transportation facilities.

1. Failure to Respond to Opponents' Arguments

The board of county commissioners incorporated the recommendation of the county planning commission, which adopted several pages of findings. According to Baker, none of the incorporated ***271** findings specifically addressed Baker's and Foland's contention that the proposed rest area and welcome center are not "transportation facilities [or] improvements" and are therefore not eligible to meet the TPR exception standards rather than the exception standards set forth in OAR 660-004-0020 and 660-004-0022.

ODOT responds by pointing to the board of commissioners' finding that "the application complies with the Oregon Administrative Rules for exceptions." Record 4. ODOT also points to findings of the planning commission that "the application, with the recommended conditions of approval, sufficiently addresses the exception criteria that [are] required for an amendment and approval of the application." Record 7. Finally, ODOT points to places in the record where the issue of whether the rest area and welcome center are a transportation facility was addressed: in the initial application materials, and in ODOT's final rebuttal to the board of commissioners. Record 90.

The planning commission adopted findings that concluded in relevant part:
"Because [the exception] involves taking 'reasons' exceptions, it requires an amendment to the Jackson County Comprehensive Plan. As an exception and plan amendment, ODOT must demonstrate compliance with the following criteria:
"ORS 197.732 (Goal Exceptions)

"Statewide Planning Goal 2, Part II

"OAR 660-012-0070 (Exceptions for Transportation Improvements on Rural Land)." Record 16.

ODOT's application includes the following statement:
"Relocating the Rest Area/Welcome Center on land zoned [EFU] requires goal exceptions pursuant to ORS 215.283(3) and the Transportation Planning Rule, OAR 660, Division 12. Because a Rest Area/Welcome Center is a transportation facility, the applicable exception standards are those set out in OAR 660-012-0070." Record 1282.

****5** In a footnote, ODOT explained:
"Because rest areas are considered highway related facilities (see, e.g., ORS 215.283(1)([k])), and because welcome centers are typically associated with rest areas both in Oregon and nationally, welcome centers ***272** are an accessory use to the rest area when proposed in conjunction with a rest area. Accordingly, the proposed welcome center is included as part of the exception for the rest area." Record 1282, n 6.

In adopting its findings, which specifically refer to OAR 660-012-0070, we understand the planning commission to have agreed with ODOT that the rest area and welcome center qualify as "transportation facilities and improvements" under OAR 660-012-0070(1). Although not directly responding to each of petitioners' arguments on the issue, the board of commissioners adopted the planning commission recommendation and findings, including its conclusion that the TPR exceptions standards were met. That indicates that the board of commissioners concluded that the rest area and welcome center are "transportation facilities and improvements" within the meaning of the rule. Baker and Foland assign error to that conclusion in their petitions for review. We do not see that it was error for the board of commissioners to fail to adopt findings responding to their specific arguments, and we address those arguments below in resolving the assignments of error.

2. Rest Area

Baker and Foland argue that the proposed rest area does not qualify as a "transportation facilit[y] and improvement[]" as that term is used in OAR 660-012-0070(1). The TPR includes a definition of "transportation facilities," but does not separately define "transportation improvements." "Transportation facilities" are defined in OAR 660-012-0005(30) as:
"'any physical facility that moves or assist[s] in the movement of people or goods including facilities identified in OAR 660-012-0020 but excluding electricity, sewage and water systems."

Baker and Foland argue that the rest area is not a "physical facility that moves or assists in the movement of people or goods" within the meaning of "transportation facility" at OAR 660-012-0005(30). According to Baker, *Interstate 5* is the "transportation facility," and at most the rest area could be said to be an improvement appurtenant to that transportation facility. Baker argues that OAR 660-012-0070 permits ODOT to take a reasons exception under that rule only for "transportation facilities and improvements," which does not include facilities that are merely appurtenant or accessory to transportation facilities.

Both Baker and Foland cite to contextual language in the TPR and ORS Chapter 215 to support their view that a rest area does not move or assist in the movement of people or goods, and thus does not fall within the ***273** OAR 660-012-0005(30) definition of transportation facility. Foland notes that OAR 660-012-0020, referenced in OAR 660-012-0070(1), lists various elements that must be included in all transportation system plans (TSPs). OAR 660-012-0020(2) requires plans for roads, public transportation, bicycle and pedestrian paths, air, rail, water and pipeline transportation, parking, etc., but does not include any reference to rest areas. Based on the type of transportation elements required in a TSP under OAR 660-012-0020, Foland argues that a "transportation facility" must necessarily be some kind of "physical infrastructure for the actual conveyance or 'movement' of people or goods," or at least "facilities with the purpose of transferring people and/or goods from one conveyance to another." Foland Petition for Review 5-6.

****6** Both petitioners also point out that the ORS 215.283(1)(k) and ORS 215.283(2)(s) permit improvements to existing "rest areas" as permitted or conditional uses, and that both statutes place rest areas within a category described as "highway related facilities."[5] Petitioners argue that because the statutory term "highway related facilities" expressly includes rest areas, but the TPR definition of "transportation facilities" does not expressly include rest areas, the TPR definition of "transportation facilities" should not be interpreted to include rest areas.

***274** Foland also points to the definition of "minor transportation improvements" found at OAR 660-012-0005(15), to argue that the term "transportation improvements" is intended to include only linear facilities such as roads, and does not include facilities that merely provide traveler services.[6] Finally, Foland points to the definition of "transportation improvements" found in the Jackson County Land Development Ordinance (LDO) 13.3(278), which provides in relevant part that "[a]ccessory uses include maintenance yards, stockpile sites, weigh stations, or rest areas." Because LDO 13.3(278) describes a rest area as an "accessory use," Foland argues, rest areas should not be viewed as a "transportation facility" as defined in OAR 660-012-0005(30) or a "transportation improvement" under OAR 660-012-0070(1).

ODOT responds, and we agree, that the proposed rest area is a facility that clearly "assists in the movement of people and goods" and thus falls within the TPR definition of "transportation facilities." The proposed rest area allows northbound travelers to exit the freeway after crossing the Siskiyou Pass, rest, use the restroom, and gather information before entering the freeway again and continuing north on I-5.[7] On its face, that function "assists in the movement of people or goods."

Petitioners' contextual arguments for a narrow understanding of the term "transportation facilities and improvements" are unpersuasive. In our view, the relevant context supports ODOT's broader view of that term. Turning first to OAR 660-012-0020, which lists the required elements of a TSP, the definition of "transportation facilities" at OAR 660-012-0005(30) states that the term "include[s] facilities identified in OAR 660-012-0020," ***275** but does not limit the scope of "transportation facilities" to those identified in OAR 660-012-0020. Further, OAR 660-012-0020 sets out in very general terms the required elements and plans for TSPs adopted by local governments. That ODOT did not require local governments to specifically plan for "rest areas," which are typically associated with interstate highways, does not carry the suggestion that a rest area does not "assist in the movement of people or goods" and thus fall within the TPR definition of "transportation facility."

****7** With respect to ORS 215.283(1)(k) and (2)(s), we agree with ODOT that the legislature's inclusion of "rest areas" within the description of "highway related facilities" does not mean that rest areas are excluded from the TPR term "transportation facilities and improvements." In fact, considering the relevant ORS chapter 215 and TPR provisions as a whole, the stronger impression is that the TPR term "transportation facilities and improvements" was intended to be a broad umbrella term that includes rest areas and other facilities that the legislature describes as "highway related facilities" in ORS 215.283(1)(k) and (2)(s), but which do not qualify under those statutes.

As noted, ORS 215.283(1) and (2) provide for various transportation improvements to roads and other facilities as permitted or conditionally permitted uses within the EFU zone, without an exception to Goal 3. *See* OAR 660-012-0065(3)(b) (providing for "[t]ransportation improvements that are allowed or conditionally allowed by ORS 215.283" on rural lands without an exception). The scope of "transportation improvements" permitted under OAR 660-012-0065(3)(b) presumably includes those described in ORS 215.283(1)(k) and 215.283(2)(s), which as noted provide for "[m]inor betterment" and "[i]mprovement of public road and highway related facilities, such as maintenance yards, weigh stations and rest areas." *See* n 5. Thus, improving or expanding an *existing* rest area under ORS 215.283(2)(s) is a conditionally permitted use, allowed on rural lands without an exception, pursuant to OAR 660-012-0065(3)(b).

ORS 215.283(1) and (2) work in tandem with ORS 215.283(3), which as noted provides that "[r]oads, highways and other transportation facilities and improvements not allowed under subsections (1) and (2)" may be established, subject to the adoption of an exception to applicable goals. *See* n 3. Notably, ORS 215.283(3) is the actual source of the term "transportation facilities and improvements" that is used in OAR 660-012-0070(1) and that is the focus of the parties' arguments. In context, it is apparent that ORS 215.283(3) is describing an open-ended category of transportation uses that is one part of a continuum with those transportation ***276** facilities and improvements that are allowed without an exception in ORS 215.283(1) and (2). It is clear, for example, that expansion of an *existing* rest area under ORS 215.283(2)(s) is a permitted conditional use, but construction of an identical *new* rest area would require an exception to Goal 3 pursuant to ORS 215.283(3), because a *new* rest area is "not allowed under subsections (1) and (2)." In other words, given the language of ORS 215.283(3) and the structure of the statutory scheme, it is clear that the phrase "transportation facilities and improvements" is intended to encompass facilities such as rest areas and other "highway related facilities."

****8** The Land Conservation and Development Commission (LCDC) implemented the statutory scheme by adopting a similar bifurcated continuum in OAR 660-012-0065 and OAR 660-012-0070. The former rule identifies the "transportation facilities, services and improvements" that may be permitted without an exception. As noted, improvements to existing rest areas and other "highway related facilities" under ORS 215.283(2)(s) are permitted without an exception, and are described in OAR 660-012-0065(3)(b) as "transportation improvements." Thus, an improvement to an existing rest area is a "transportation improvement," and a subset of the "transportation facilities, services and improvements" that are allowed without a goal exception. LCDC implemented ORS 215.283(3) by providing in OAR 660-012-0070(1) for "[t]ransportation facilities and improvements" that "do not meet the requirements of OAR 660-012-0065" and therefore require an exception. The parallel structure and phrasing of the rule and statute make it clear that OAR 660-012-0070 is intended to govern the transportation uses referenced in ORS 215.283(3). Because ORS 215.283(3) clearly requires an exception for "highway related facilities" such as maintenance yards, weigh stations and rest areas that do not satisfy the requirements of ORS 215.283(1) and (2), the strongest inference is that LCDC intended OAR 660-012-0070(1) to govern such uses. That intent is confirmed in the broad definition of "transportation facilities" to include facilities that "assist" in the movement of people or goods. Highway related facilities such as maintenance yards, weigh stations and rest areas clearly "assist in the movement" of people and goods.

In sum, contrary to petitioners' arguments, consideration of the statutory context and scheme indicates that LCDC intended "transportation facility" to include the facilities such as rest areas that the legislature described in ORS 215.283(1) and (2) as "highway related facilities."

Foland's last two contextual arguments are also unpersuasive. OAR 660-012-0005(15) defines "minor transportation improvements" to ***277** include a non-exclusive list of minor improvements to transportation facilities. *See* n 6. The listed improvements and the exclusions to that list almost entirely involve improvements to roads or similar linear facilities. Foland argues that OAR 660-012-0005(15) provides context suggesting that the scope of the term "transportation improvements" used in OAR 660-012-0070(1) is not intended to include non-linear facilities such as rest areas. However, the definition of "minor transportation improvement" does not categorically exclude improvements to non-linear facilities such as rest areas. Indeed, as noted above, OAR 660-012-0035(3)(b) explicitly characterizes uses allowed under ORS 215.283(1) and (2), including improvements to a rest area, as a "transportation improvement," which does not suggest that LCDC intended to limit the meaning of the term "transportation improvement" to exclude rest areas. Finally, we agree with ODOT that the LDO definitions indicating that the county code characterizes rest areas as "accessory" transportation improvements does not have any bearing on construction of the provisions of OAR 660-012-0070.

****9** In sum, we agree with ODOT that the proposed rest area is properly viewed as a transportation facility that can be approved under the exception criteria in OAR 660-012-0070, and the county did not err in failing to apply the exception

criteria in OAR chapter 660, division 004.

3. Welcome Center

Finally, Baker and Foland argue that even if the rest area itself is viewed as a transportation facility, the welcome center component of the rest area is an entirely different use from the rest area and must independently qualify as a "transportation facility or improvement" in order to be approved under the OAR 660-012-0070 TPR exception process. Baker and Foland first challenge ODOT's reasoning stated in its application, quoted above, that the welcome center is an "accessory use" to the rest area and therefore qualifies for review under the TPR exception standards. In support of their argument petitioners point to OAR 660-012-0070(10), which provides:
"An exception taken pursuant to this rule does not authorize uses other than *the transportation facilities or improvements* justified in the exception." (Emphasis added.)

According to petitioners, the main purpose of the welcome center is to promote tourism and commerce in the region and around the state, and because the welcome center does not move or assist in the movement of people or goods, it therefore does not qualify as a transportation facility.

***278** Although it is a closer question, we disagree with petitioners that the proposed welcome center component of the rest area cannot be approved under the definition of "transportation facility" set out in OAR 660-012-0005(30). Like the rest area itself, the welcome center "assists in the movement" of northbound travelers crossing into Oregon from California, by providing information on where in Oregon travelers might choose to go. In this respect, the welcome center is simply a more elaborate version of an information kiosk or signboard that provides travel information to interstate travelers, and that is a common feature in rest areas. That in providing travel information to travelers the welcome center might also serve the interests of local and regional commerce and tourism does not mean that the welcome center does not "assist in the movement" of travelers, by providing travel information.

B. OAR 660-012-0070(3) and (4): Transportation Need

OAR 660-012-0070(3) and (4) provide that a TPR exception must identify and explain the transportation need consistent with OAR 660-012-0030.[8] The requirement to identify the need derives from the more general ***279** requirement under Goal 2, Part II(c)(1) that the exception must explain the reasons why Goal 3 should not apply. ODOT identified the need for the rest area and welcome center as "to provide essential rest, safety and tourist information services to persons traveling northbound on Interstate 5 from California across Siskiyou Pass." Record 1302. ODOT then described the need more specifically as:
****10** "To Provide for the Safety of the Traveling Public.

"To Relocate the Decommissioned Siskiyou Rest Area in the Area as required by FHWA [Federal Highway Administration].

***280** "To Provide for the Travel Needs of Visitors to Oregon." Record 1302-04.

Baker initially argues that the county failed to address the opponents' challenges to the transportation need, and instead relied on statements in ODOT's application, which was introduced prior to opponents' statements. However, as explained above, the planning commission adopted several pages of findings regarding the transportation need for the project, based on ODOT's initial application and subsequent testimony and evidence that was submitted to the planning commission. The board of commissioners adopted the planning commission's recommendation and findings as its own, and also concluded:
"The Board of Commissioners finds that the need for a new Siskiyou Safety Rest Area and Welcome Center has been established and is supported by substantial evidence and testimony." Record 3.

We think the board of commissioners' findings that ODOT established the need for the rest area and welcome center are adequate, and that it was not error for the board of commissioners not to respond to all of the opponents' arguments.

As explained above, ODOT identified a need "to provide for the safety of the traveling public" and "to replace the decommissioned Siskiyou Safety Rest Area." Relying on guidance provided by the "AASHTO Guide for Development of

Rest Areas on Major Arterials and Freeways," ODOT maintained:
"[A] rest area is needed a short distance north of Siskiyou Pass to enable drivers to relax and recover from any accumulated stress or fatigue after travel through the steep and circuitous mountain area. Lacking a rest stop at the proposed site the next rest area serving northbound traffic would be at the Valley of the Rogue exit, another 33 miles farther north near Milepost 45B. Given the terrain and the effects of winter driving conditions, the approximately 58 mile distance from the Klamath River Safety Rest Area in California to the Valley of the Rogue Safety Rest Area is too great a distance between rest areas, particularly during the winter months when travel through Siskiyou Pass is often slow, hazardous and exhausting.

"FHWA recommends that no more than one hour of drive time should elapse between safety rest area facilities, depending on service needs and deficiencies. It also recommends that safety rest areas be spaced no greater than 60 miles apart.

***281** "While closure of the Siskiyou Safety Rest Area mitigated the immediate safety hazards it produced, ODOT felt a need to replace the rest area, and indeed, the [FHWA] required that it be replaced 'in kind' at a safe location." Record 1302-03.

Petitioners first argue that there is not substantial evidence in the record to support ODOT's statement that travel in the area of Siskiyou Pass is unsafe, and assert that evidence in the record "appears to suggest an unusually low number of accidents." Baker Petition for Review 16. Petitioners also argue that ODOT's application, and the county's findings, misconstrued what the AASHTO guidelines actually provide. According to petitioners, the AASHTO guidelines do not contain the recommendations that ODOT described in its application. As an example, Foland points to language in the AASHTO guidelines that rest area spacing should consider the presence of "alternative stopping opportunities and services," such as those provided by the City of Ashland. Record 1749. Finally, petitioners argue that ODOT's statement that the FHWA "requires" the closed rest area to be replaced is inaccurate.

****11** ODOT responds that the replacement of the closed rest area is included in the Rogue Valley Regional Transportation Plan as a needed transportation project, consistent with OAR 660-012-0030(1)(a). Record 42, 67, 4064; *see* n 8. ODOT also points to evidence in the record that the county considered regarding road geometry, regular adverse winter weather conditions, and other factors, including AASHTO guidelines for safety rest areas, in concluding that a safety rest area is needed. Finally, ODOT explains that in 1997, 2001, and 2008, the FHWA stated and reiterated its position that its 1996 approval of the closure of the former rest area was given with the understanding that the rest area would be reconstructed as soon as possible. Record 3811-12, 3868-69.

We agree with ODOT that the evidence in the record supports the county's conclusion that safety concerns warrant a rest area and that the AASHTO guidelines support the location of the rest area at Milepost 12.5. We do not think that the fact that 14 years have elapsed since the FHWA originally approved the closure has any bearing on whether the rest area is required to be reconstructed under the original closure approval, and we agree with ODOT that the FHWA is requiring its replacement.

Finally, Baker and Foland challenge the need that ODOT described as "to provide for the travel needs of visitors to Oregon." Similar to their challenges to the welcome center, Baker and Foland assert that the identified need is not a transportation need, but rather a desire to increase tourist spending in the area. In support of their arguments, Baker and ***282** Foland point to statements in the record from ODOT and others that refer to the need to provide information about tourist opportunities in the Ashland area and the state.

ODOT responds by noting that the identified need states that there is a need to provide for the "travel needs" of visitors. ODOT explains that providing a rest area with restrooms, picnic tables, pet areas, and informational kiosks provides for the travel needs of visitors. ODOT also points to the AASHTO Design Guidelines discussed above, and federal regulations that allow rest areas to provide both motorist information such as maps and directions, and information that can promote tourism, albeit with a restriction that there can be no commercial activity associated with the distribution of information. 23 CFR 752.8(a); 23 USC 111. We agree with ODOT that the identified need to provide for the needs of travelers to the state at the rest area and welcome center is a legitimate transportation need identified by the county and that the need is supported by substantial evidence in the record.

Finally, Foland also alleges that the county failed to make determinations under OAR 660-012-0070(3) regarding the mode and general location of the proposed rest area. ODOT responds that the county properly identified the mode (highway use) and general location (I-5 southern corridor) for the proposed facility. Record 1305. We agree with ODOT and reject Foland's

arguments without further discussion.

C. OAR 660-012-0070(4), (5), and (6): Thresholds

**12 Under OAR 660-012-0070(4), in order to approve the exception, the county must conclude that alternative *measures* that do not require an exception, such as improvements to existing facilities, cannot reasonably accommodate the identified transportation need. *See* n 8. Under OAR 660-012-0070(5), the county must conclude that alternative "locations" or sites that do not require an exception cannot reasonably accommodate the identified transportation need.[9] In considering alternative measures and sites, the rule allows the county to rely on thresholds that are generally applicant-identified required characteristics that a proposed location must *283 possess in order to address the identified transportation need, and requires the county to justify any such thresholds.[10] If an alternative measure or location not requiring an exception does not satisfy a threshold, then the county is not required to consider it in determining whether to approve an exception. OAR 660-012-0070(6)(b); *1000 Friends of Oregon v. Yamhill County*, 49 Or LUBA 640, 652, *rev'd on other grounds*, 203 Or App 323, 126 P3d 684 (2005).

*284 ODOT identified ten thresholds.[11] The parties initially disagree about the standards against which LUBA reviews the chosen thresholds. According to Baker, the requirement of OAR 660-012-0070(6) that the county justify the thresholds used requires the county to relate each threshold to an identified transportation need. ODOT disagrees, and argues that in order to justify the thresholds as required by the rule, the county must merely determine that the thresholds are "reasonable." As ODOT explains it:

"Under [*1000 Friends v. Yamhill County*], the validity of thresholds must be determined based on their reasonableness for testing alternative locations, and not on whether the threshold justifies the underlying need for the safety rest area." Response Brief of ODOT 32-33.

We agree with Baker that the requirement to justify the thresholds that will be used to eliminate alternatives means that the county must explain how each threshold relates to an identified transportation need. OAR 660-012-0070(6) provides in relevant part that in determining the "reasonableness" of alternative measures or sites under subsection (4) and (5) of the rule, "[t]he thresholds chosen to judge whether an alternative method or location cannot reasonably accommodate the *proposed transportation need* or facility must be justified in the exception." OAR 660-012-0070(4) provides in relevant part that "[f]urther, the exception shall demonstrate that *there is transportation need identified* consistent with the requirements of OAR 660-012-0030 which cannot reasonably be accommodated through one or a *285 combination of the following measures not requiring an exception." Those provisions specifically require that the county evaluate the thresholds chosen in relation to the identified transportation need.

1. Threshold 6 - Location Before Exit 14

**13 Baker and Foland argue that ODOT's threshold that the proposed rest area and welcome center must be located prior to the South Ashland Interchange at Exit 14 does not relate to an identified transportation need, and that therefore the threshold is not justified as required by OAR 660-012-0070(6).[12] According to petitioners, threshold 6 relates to the county's desire to increase tourism revenues within the city and the region, and not to any of the three identified needs for a safety rest area, discussed above.

*286 ODOT responds that threshold 6 is related to the identified safety need to replace the closed rest area with a new rest area in the same general location, in order to provide a safe location for drivers who have just driven over Siskiyou Pass to stop and rest before continuing their travels. ODOT explains that AASHTO guidelines recommend that rest areas should provide maps and directions before travelers enter an urban zone where traffic is more difficult to navigate. ODOT also points to evidence in the record that a task force recommended that the rest area be located north of the "snow zone" and south of state highway 66, which connects to I-5 at Exit 14.

While we agree with ODOT that all of the reasons cited in its brief for locating the rest area prior to Exit 14 relate to the identified safety need for a rest area north of Siskiyou Pass, and reasonably close to the summit, the problem with those cited reasons is that they are not mentioned in ODOT's description of threshold 6 from the application, which the board of commissioners apparently relied on in justifying the threshold. ODOT's description of threshold 6 is focused almost exclusively on locating the rest area prior to Exit 14 so that those drivers will be made aware of all of the opportunities

presented within the city and region for recreation, lodging, and entertainment. We do not see how that threshold is justified given the identified need to provide a safe place for drivers to stop and rest after crossing Siskiyou Pass. As a result, we do not think the county has adequately justified threshold 6 to explain why "alternative method[s] or location[s] cannot reasonably accommodate the *proposed transportation need.*" OAR 660-012-0070(6).

However, as we explain later in this opinion, because the county considered alternative locations north of Exit 14 and rejected those locations for failing to meet other thresholds, the county's failure to justify threshold 6 in relation to the identified transportation need does not warrant reversal or remand.

2. Threshold 2 - Proximity to Snow Zone

Baker and Foland challenge ODOT's threshold that the rest area should be located "outside of and beyond the 'snow zone,' which is that area where travelers frequently encounter the probability of icy winter road conditions." Record 1307. In explaining threshold 2, ODOT stated:
"For northbound traffic traveling over Siskiyou Pass, the snow zone extends from the Oregon/California border to approximately Milepost 11. There, Interstate 5 begins to level out and become less circuitous and the worst of the mountain crossing is over. Locating the Rest Area outside ***287** the snow zone also better permits routine daily maintenance of the Rest Area/Welcome Center to be performed, because it generally will avoid the need to install traction devices during inclement weather." Record 1307.

****14** According to Baker and Foland, ODOT's description of the location of the relevant "snow zone" is inconsistent with a different description of the snow zone set forth in an e- mail message from an ODOT district manager that described the snow zone as extending from the California border to mile post 20. Record 2107. If that description of the snow zone is used, then the proposed location falls within the "snow zone" and fails to meet threshold 2.

ODOT responds that the description of a snow zone as extending from the California border to mile post 20 is a description used for highway maintenance purposes and for enforcement of chain and traction tire laws. After opponents raised the issue, ODOT explained that where threshold 2 refers to the "snow zone," it is referring to the area between the border and milepost 11 that receives the most snowfall and where sanding, de-icing and other operations are necessary to maintain highway safety. Record 3931. If the snow zone is located between the border and milepost 11, then the approved location is located outside of the snow zone.

We disagree with Baker and Foland that ODOT's threshold 2 changed during the course of the proceedings below. The application explains threshold 2 as requiring a site located outside of the snow zone that is further described as "that area where travelers frequently encounter the probability of icy winter road conditions." We also disagree with Baker and Foland that the evidence in the record indicates that the snow zone extends north from the border to milepost 20. Subsequent evidence and testimony introduced later in the proceedings expounded on the description in ODOT's application by explaining that the area where travelers frequently encounter winter conditions is located from milepost 0 to milepost 11. That the threshold uses the term "snow zone," while confusing, does not mean that the term is absolutely defined for all purposes as the area where chain laws and traction tires may be required. ODOT explained, and the county ultimately concluded, that the threshold to locate the rest area outside of the area where winter weather frequently occurs, which the evidence indicates is south of milepost 11, met the transportation need to provide travelers with a safe place to stop and rest after crossing the summit of Siskiyou Pass.

***288 3. Threshold 3 - Beyond Steep Grades**

Baker challenges ODOT's threshold that the proposed rest area must be sited in an area of I-5 where there is a 3% or less slope.[13] The grade at the proposed location is approximately 2.4%. The grade at the closed rest area was approximately 6%. Baker argues that the county erred in failing to respond in its findings to challenges to this threshold by opponents.

ODOT responds that the county found:
"The Board of Commissioners finds that opponents raised many issues and concerns including whether the proposed site was safe from the standpoint of traffic safety However, considering the record as a whole, including credible and substantial testimony offered on ODOT's behalf by ODOT engineers the Board of Commissioners finds that the opponents concerns are

unwarranted or overstated." Record 3.

**15 We agree with ODOT that the county's findings are adequate to explain that it chose to rely on ODOT's engineers and experts regarding appropriate grade for the rest area rather than on the opponents' evidence and testimony regarding threshold 3.

4. Threshold 9 - Operational Feasibility and Safety

Baker argues that the county's findings do not adequately explain how the proposed site satisfies threshold 9. Threshold 9 requires that the proposed location be "safe and operationally feasible," and must not violate applicable road design and engineering standards. Record 1309. Baker argues that opponents presented expert testimony and evidence *289 refuting ODOT's analysis that the proposed site is safe, and the county failed to address that evidence and testimony in its findings.

ODOT responds by pointing to the county's finding, quoted above, that concluded that substantial evidence in the record supports a finding that the proposed location is operationally safe and feasible. ODOT also points out that opponents' evidence and testimony, while prepared and introduced into the record by an aeronautical engineer, is not "expert" testimony because an aeronautical engineer is not an expert in roadway or traffic engineering. We agree with ODOT that being an aeronautical engineer does not qualify a person as an expert in road or traffic engineering. In light of that, we also agree that the county's findings are adequate to explain that it chose to rely on ODOT's evidence and not to rely on opponents' evidence.

5. Threshold 1- Site Size and Depth

ODOT explained threshold 1 as follows:
"To be operationally feasible, a Rest Area/Welcome Center requires at least 15 acres in size and at least 500 feet in depth. A minimum of 15 [of] acres are required to accommodate access from and back onto the freeway, vehicle parking, and buildings (including restrooms), as well as landscaped areas where people can walk pets, have a meal or relax, and which provide buffering from the freeway and adjoining uses. A minimum 500 foot depth is required to provide adequate access to and from the mainline, provide buffering from the mainline, and provide parking and space for buildings." Record 1307.

Baker argues that threshold 1 is not justified because the amount of land needed (15 acres) is attributable to the welcome center, and the record does not indicate the amount of land needed without the welcome center. ODOT responds that the size requirement was based on estimates of the amount of land needed for access from and back to I-5, parking for 60 vehicles and 13 RVs, rest rooms, landscaped areas, pet areas and the welcome center. ODOT also responds that Baker's statement that the size of the site is solely attributable to the welcome center is not supported by any evidence in the record and is also incorrect. We agree with ODOT that Baker has failed to explain why the amount of land needed is attributable to the welcome center, and that threshold 1 is justified in relation to the need to provide a safe location for the rest area.

290 6. Threshold 5 - Proximity to and Visibility from I-5

**16 Finally, Baker challenges ODOT's threshold that the rest area must be located not more than one-quarter mile from I-5 and the location must be visible from the northbound lanes of I-5. Baker argues that the county's findings fail to address opponents' arguments that the record does not support ODOT's position that a location that is not visible from the freeway lanes will not be as heavily used as a location that is visible. ODOT responds that evidence in the record demonstrates that rest areas are most effective where they are conveniently located with easy access to and from the freeway, and visible from the freeway prior to the exit to enter the rest area, and that the county addressed opponents arguments and explained that it chose to rely on ODOT's evidence. We agree with ODOT that threshold 5 is justified in relation to the identified need to provide a location for the rest area that is most likely to be used by the traveling public.

In summary, with one exception related to its justification of threshold 6, we disagree with Baker and Foland that the county failed to justify the thresholds as required under OAR 660-012-0070(6). However, as explained below, even though the county failed to justify threshold 6 in relation to the identified transportation need, the county determined that alternative measures and sites could not reasonably accommodate the proposed facility because they did not meet other identified thresholds. Accordingly, the county's failure to justify threshold 6 does not provide a basis for reversal or remand of the

decision.

D. Alternative Measures - Improvements to Existing Facilities

Baker and Foland argue that the county's findings that the transportation need cannot reasonably be accommodated through improvements to existing transportation facilities are inadequate and are not supported by substantial evidence in the record. Baker and Foland argue that the county failed to explain why improvements could not be made to the Valley of the Rogue Rest Area located at Exit 45, the Suncrest Rest Area located on the west side of I-5 at milepost 22 (serving southbound traffic), or the Port of Entry weigh station site located on the east side of I-5 at milepost 18 (serving commercial vehicles).

The board of commissioners found:
"[O]pponents identified several potentially available alternative sites for the Rest Area located outside of Ashland's UGB, e.g., [Record 2819- ***291** 2860 (Skreptos Letter)]. However, these alternative sites are problematic because 1) They do not allow for easy off/on access to I-5; and/or 2) They require northbound visitors to 'backtrack' in order to visit Ashland, one of the area's significant tourist destinations; and/or 3) They require large scale capacity expansions or other modifications to existing infrastructure in order to accommodate projected traffic. Additionally, ODOT's analysis and evidence (e.g. [Record 3383-3431 and Record 3920-3942] shows that these proposed sites are not feasible from an operational or safety standpoint and cannot reasonably accommodate the identified need. For these reasons, they do not require more detailed study." Record 3.

****17** By these findings, we understand the board of commissioners to have concluded based on evidence and arguments presented by ODOT found at Record 72-73 that, under OAR 660-012-0070(4), improvements to existing transportation facilities do not meet the identified thresholds and therefore, cannot reasonably accommodate the identified need. Record 72 and 73 contains an analysis by ODOT's consultant explaining why improvements to the Port of Entry site and the Suncrest Rest Area do not meet identified thresholds. Regarding the Valley of the Rogue Rest Area, ODOT considered and rejected improvements to that facility because it does not meet the threshold of being located close to but outside of the snow zone. ODOT also points out that because the existing facilities are located on rural lands outside of the Ashland UGB, it is not clear that goal exceptions would not be required for improvements to the existing facilities, making OAR 660-012-0070(4) inapplicable to those sites. We agree with ODOT that the county's findings, including incorporated portions of the planning commission findings and ODOT's application, are adequate to explain why improvements to existing transportation facilities do not meet the identified thresholds and cannot reasonably accommodate the identified need.

E. Alternative Sites Not Requiring an Exception

Baker argues that under OAR 660-012-0070(5), the county's findings regarding whether non-exception sites can reasonably accommodate the proposed use are inadequate and are not supported by substantial evidence in the record. First, Baker argues, because the county has failed to justify threshold 6 (that the rest area be located south of Exit 14), it erred in relying on threshold 6 to eliminate alternative non-exception locations: 1) north of Ashland, 2) between Exit 14 and Exit 19 in the city of Ashland, and 3) on the east side of I-5 at Exit 19. Also according to Baker, OAR 660-012-0070(6)(b) requires the county to explain why those non-exception sites do not meet other thresholds, and the county failed to provide that explanation.

***292** The board of commissioners found:
"The Board of Commissioners finds that ODOT's application includes thresholds that relate to whether alternative sites not requiring goal exceptions can reasonably accommodate the use. For purposes of this application, all of those sites are in the City of Ashland. The evidence provided by ODOT and the City of Ashland clearly indicates that there are no sites within the City's urban growth boundary that could reasonably accommodate the need here identified." Record 3.

1. "North of Ashland"

ODOT responds that OAR 660-012-0070(6)(c) places the burden on parties to the proceedings to "specifically describe with supporting facts why [any alternative] locations can more reasonably accommodate the identified transportation need, taking into consideration the identified thresholds." The rule provides that detailed evaluation of alternative sites identified during

the proceedings below is not required unless that burden is satisfied. According to ODOT, no party below identified sites that are located "north of Ashland" with sufficient specificity to require the county to perform a detailed evaluation of those alternatives under OAR 660-012-0070(6)(c). We agree with ODOT. Baker does not provide any citations to any places in the record where sites "north of Ashland" other than the sites located within Ashland's UGB and at Exit 19 discussed below were identified with specific detail by parties as required by OAR 660-012-0070(6)(c). *See* n 10.

2. "Between Exits 14 and 19"

****18** ODOT considered a 27-acre parcel located north and east of Exit 14 within the city of Ashland's UGB, a location not requiring an exception. ODOT concluded that if the rest area were developed at that location, the northbound exit ramps to the rest area would be located in close proximity to the current Exit 14 on-ramps, creating safety issues, and that an alternative design to re-route traffic would also cause safety issues. ODOT further determined that the parcel is designated for future residential use and that removing the parcel from the city's inventory of housing units would require the city to expand its UGB onto surrounding resource land. For those reasons, ODOT concluded that the alternative location within Ashland's UGB could not "reasonably accommodate" the identified transportation need. We agree with ODOT that based on safety concerns, the 27-acre parcel could not reasonably accommodate the identified transportation need and did not meet requirements of threshold 9, relating to operational feasibility and safety.

***293** In addition, Baker also alleges that the county failed to consider
"at least two other locations in the same general vicinity that could accommodate the proposed uses. Just west of I-5, across the freeway from the 27-acre parcel, are two vacant adjacent parcels that are each between 5 and 10 acres. There is another location just south of the 27-acre parcel, on the west side of I-5 that contains numerous vacant adjacent parcels. Neither the map [attached to a letter from the city of Ashland planning director Molnar], Molnar's letter, nor ODOT's findings indicate the zoning of those properties or discusses why those locations are not considered." Baker Petition for Review 33.

In response to that argument, ODOT responds that the sites described in the quote above were not identified with specificity during the proceedings below, and therefore the county was not required to provide a detailed evaluation of those sites. Baker does not provide a citation to any place in the record where the specific sites described in the petition for review were described "with supporting facts why such locations can more reasonably accommodate the identified transportation need, taking into consideration the identified thresholds." We agree with ODOT that the county was not required to consider any of those sites.

3. "Exit 19"

Opponents identified an alternative site on the east side of I-5 at Exit 19, and Baker argues that the county failed to address that alternative site, as required by OAR 660-012-0070(6)(c). ODOT responds that after parties raised the alternative site, ODOT examined the site and concluded that the intersection of the Exit 19 ramps and South Valley View Road already possessed high volume traffic conditions that would be exacerbated by adding traffic from the rest area, creating unsafe queuing at off ramps. Record 222-223. Thus, according to ODOT, the site failed to meet threshold 9, requiring alternative sites to demonstrate operational feasibility and safety. We think the county and ODOT adequately addressed the alternative site at Exit 19.

F. Alternative Sites Requiring an Exception: OAR 660-012-0070(7) and (8)

1. Application of Thresholds

****19** Goal 2, Part II(c)(3) allows the county to adopt a reasons exception when "[t]he long-term environmental, economic, social and energy [ESEE] consequences resulting from the use of the proposed site with measures designed to reduce adverse impacts are not significantly ***294** more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed site." OAR 660-012-0070(7) implements Goal 2, Part II(c)(3) and requires the county to evaluate whether there are alternative sites also requiring an exception that would have fewer adverse impacts than the proposed site.[14]

Baker first argues that the county erred in limiting its review of other potential sites requiring a goal exception, including any

site located west of I-5, to only sites that met all of the identified thresholds. ODOT ***295** responds that Baker is precluded under ORS 197.763(1) and ORS 197.835(3) from raising the issue of whether the county can limit its consideration of other sites requiring an exception to sites that meet all of the thresholds, because no party raised that issue during the proceedings below.[15] In the reply brief, Baker responds by citing to record pages that generally discuss alternative sites. However, those record pages do not appear to present the issue that is presented by Baker in the petition for review: whether the thresholds can be used to eliminate any requirement to consider alternatives requiring an exception under OAR 660-012-0070(7).

Baker next responds that general challenges to ODOT's alternative sites analysis and to the county's ESEE analysis of exception alternatives were raised below, and that it is not necessary that the specific argument regarding whether thresholds can eliminate consideration of potential exception sites must have been raised below. We disagree with Baker that the issue presented in the petition for review was raised below with sufficient specificity to allow the governing body an opportunity to respond to it. Bringing general challenges to an applicant's alternative sites analysis under OAR 660-012-0070(7) is not sufficient to raise an issue regarding whether the thresholds described in OAR 660-012-0070(6) can be applied to eliminate alternative sites requiring a goal exception. *Graser-Lindsey v. City of Oregon City*, 56 Or LUBA 504, *aff'd* 221 Or App 702, 191 P3d 813 (2008). Accordingly, we do not consider Baker's argument that the thresholds that are authorized by OAR 660-012-0070(6) to eliminate non-exception alternatives from consideration may not be similarly used under OAR 660-012-0070(7) to eliminate alternatives that do require an exception.

***296 2. Alternative Sites Identified by Parties**

Baker also argues that the county failed under OAR 660-012-0070(7)(c) to conduct a "[d]etailed evaluation of specific alternative locations identified by parties" during the proceedings below. *See* n 14. Baker argues that parties to the proceedings identified alternative sites that also require an exception, including two resource sites on the east side of I-5, and the county failed to address those sites in "detail" as required by the rule. Those sites are described in Baker's petition for review as "a site near Exit 19 and the Port of Entry site." Baker Petition for Review 38. However, in a previous section of Baker's petition for review, discussed above under our discussion of OAR 660-012-0070(4) and (6), Baker took the position that the "site near Exit 19" and the "Port of Entry site" were alternative sites *not* requiring a goal exception under OAR 660-012-0070(4). Baker Petition for Review 31, 33. Similarly, the party who identified those sites alleged that the site located at Exit 19 was "on land zoned for rural residential use not requiring an exception" and that the Port of Entry site was an existing transportation facility not requiring an exception. Record 2832, 2848-49. ODOT responded to that initial identification and conducted an analysis for each site under OAR 660-012-0070(6), which applies to alternative sites that do not require an exception, and concluded that they could not reasonably accommodate the proposed transportation facilities based on their lack of conformance to the identified thresholds. Baker may not now argue that the county was required to evaluate those same sites under OAR 660-012-0070(7), which only applies to sites requiring an exception.

3. ESEE Analysis

****20** OAR 660-012-0070(7)(b) provides in relevant part that:
"The exception shall include the reasons why the consequences of the needed transportation facility or improvement at the proposed exception location are not significantly more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed location. Where the proposed goal exception location is on resource lands subject to Goals 3 or 4, *the exception shall include the facts used to determine which resource land is least productive; the ability to sustain resource uses near the proposed use; and the long-term economic impact on the general area caused by irreversible removal of the land from the resource base[.]*" (Emphasis added.)

In the ESEE analysis, ODOT considered properties within the larger area it identified as "Alternative Area B" that are resource land, including a ***297** property south of the proposed site and north of Clayton Creek. Record 1313, 1391. The ESEE analysis concluded in relevant part:
"While soil types vary somewhat among the resource lands east of Interstate 5, according to the National Resource Conservation service (NRCS) any alternative location will largely occupy the same soil type: Medford Silty Clay Loam (127A), as shown on Exhibit 2.5. This is because the proposed used cannot be moved north more than about 200 feet without violating ODOT vertical alignment standards, and all other Alternative Area B lands to the south are occupied by the same soil type which occurs as well at the proposed location.

"Based upon Exhibit 2.8, the subject property and potential sites located within Alternative Area B also are similarly irrigated and have similar topography and pasture grasses. Other than soils and irrigation there are no other features which distinguish the resource productivity of the proposed location in relation to other Alternative Area B sites. An irrigation ditch runs along the eastern boundary of the subject property. While construction of the Rest Area should not impact that ditch, ODOT would agree to a condition of approval to ensure that water flow continues through its property to other properties and that irrigation water rights are not interrupted during the irrigation season.

"As to the ability to sustain resources used near the Rest Area, fencing and landscaping along the agriculture interface will mitigate all potential adverse impacts to the cattle grazing operation adjoining the proposed location, such as trespass or mischief. Fencing and landscaping similarly could mitigate adverse impacts at other Alternative Area B sites." Record 1314.

a. "Facts Used to Determine Which Resource Land is Least Productive"

Foland challenges the ESEE analysis, arguing first that it was error to limit the analysis to only sites on the east side of I-5 and to the south of the proposed site. ODOT responds that under OAR 660-012-0070(7)(c), it was not required to provide site-specific analyses of every site located within Alternative Area B, absent any identification by Foland or other parties of specific locations that may have fewer ESEE impacts than the proposed site. ODOT also explains that, in accordance with OAR 660-012-0070(7)(c), it generally evaluated the ESEE consequences of locating the rest area on resource lands on the west side of I-5 and concluded, consistent with OAR 660-012-0070(3), that those sites would not satisfy the identified need to provide a safe rest area. We agree with ODOT.

****21 *298** Foland also argues that the finding that alternative locations on resource land will occupy the same soil types is incorrect and is not supported by substantial evidence in the record. According to Foland, the soil types on many properties located in Alternative Area B are different from the soil type on the proposed site (Medford Silty Clay Loam (127A)), which carries a class I rating with irrigation. ODOT responds that the soil types on the alternative location it did evaluate (south of the proposed site and north of Clayton Creek) is largely the same soil type as the proposed site. Record 1383. We agree with ODOT that the record supports the county's determination that the soil types on the alternative locations are similar.

Foland also disputes the finding that the proposed site and potential sites within Alternative Area B are similarly irrigated. Based on a water rights map that shows water rights for properties located within Alternative Area B, Foland argues that many of the properties within that Alternative Area are not irrigated, while the proposed site is irrigated, making it more productive resource land than other sites. ODOT responds that the proposed site as well as the potential site it evaluated south of the proposed site both have water rights and are irrigated, and thus the finding that they are similarly irrigated is correct. Record 1389. We agree with ODOT.

Foland next argues that the finding that alternative locations within Alternative Area B have similar topography and vegetation is incorrect and not supported by substantial evidence, because the topography and vegetation on the west side of I-5 is steep, planted in woodland or crops, while the topography and vegetation on the proposed site is pasture grass. ODOT responds that the proposed site as well as the potential site it evaluated south of the proposed site have similar topography and are planted in grasses. Record 1387. We agree with ODOT.

Finally, Foland argues that the ESEE analysis failed to give proper consideration to the fact that the proposed site contains class I soils when irrigated and class IV soils without irrigation. ODOT responds that the ESEE analysis compared the soils for the proposed site with the soils on a potential site located near the proposed site and found the impacts to be substantially similar. ODOT argues that there is no prohibition on a local government taking an exception involving prime farmland as long as it concludes that, based on evaluation of all of the impacts, the ESEE effects of the proposed site are not significantly more adverse than they would be if the project was sited on another location. We agree with ODOT.

***299 b. "Ability to Sustain Resource Uses Near the Proposed Use" (OAR 660-012-0070(7)(b))/Compatibility with Adjacent Uses (OAR 660-012-0070(8)(b))**

OAR 660-012-0070(7)(b) requires the county to consider the ability to sustain resource uses near the proposed rest area and welcome center. *See* n 14. OAR 660-012-0070(8)(b) requires the county show the proposed rest area and welcome center will

be compatible with adjacent uses.[16] Foland next argues that developing the rest area on the proposed site will affect the ability of neighboring properties to sustain agricultural uses near the proposed rest area, and that the county's findings do not adequately evaluate or address the impacts that siting the rest area at the proposed location will have on Foland's water rights and irrigation system. Foland also argues that because of those impacts, the county could not reasonably determine under OAR 660-012-0070(8)(b) that the rest area is compatible with other adjacent uses.

**22 Several properties adjacent to and near the proposed rest area possess rights to use water from the Dunn Ditch for irrigation. Record 2553-2555. The Dunn Ditch is located on the west side of I-5. The rights to use water from the Dunn Ditch were first established in 1852 and were further confirmed by a decree of the Jackson County Circuit Court in 1919 (the Rogue River Decree). The Rogue River Decree adjudicated the rights of various users of water of the Rogue River and its tributaries, including Neil Creek, which provides water to the Dunn Ditch. The decree confirms the right of water for irrigation of 465.20 acres described in the decree, with each property that is a part of the 465.20 acres entitled to the amount of water specified in the decree.[17] As we understand it, those water rights *300 are associated with the properties identified at Record 1377 and on Exhibit AF as tax lots 101 (also referred to as the Provost property), tax lot 700 (also referred to interchangeably as both the Johnson property and the Radio Station property), tax lot 725 (also referred to as the Reynolds property) and tax lot 729 (also referred to as the Foland property), There is apparently no single "point of diversion" associated with the places of use of the water rights adjudicated in the decree; rather, a 1995 certificate issued by the Oregon Water Resources Department confirming cancellation of the rights of one of the holders to some of the water in the ditch lists the diversion point as "Houck-Dunn-Homes Ditch." Record 2536. Water from the ditch is transported through lateral pipes that cross under the interstate into a distribution ditch running adjacent to I-5, north to south, on the proposed rest area site. We will summarize our understanding of how the water enters that distribution ditch and where the water from the ditch goes from there based on evidence in the record.

Foland's description of how water is delivered from the Dunn Ditch to the holders of the water right appears in a few places in the record. We quote relevant portions below

"The irrigation procedure is that landowners block the ditch at strategic locations during their time on the rotation to cause the water to overflow the ditch and flood irrigate all the land between it and Clayton Creek through a series of interconnected ditches. It is like a 150 year old soaker hose, gingerly kept intact." Record 2535.

"The ditch as it appears on the east side of the freeway distributes approximately two thirds of the water allocated for the water right from Neil Creek, as shown in the irrigation schedule

"The properties with irrigation rights, as a whole are flood irrigated and the system that delivers the water from Neil Creek has evolved and developed over the last 156 years. The entire system was hand dug and the vast majority of the system to this day is maintained by hand.

"The ditch as it appears on the east side of the freeway might best be thought of as a 156 year old soaker hose that feeds hundreds if not *301 thousands of laterals spreading water over the property entitled to the water. Laterals are composed of smaller ditches ranging in size from one to two feet wide and several hundreds of feet long down to scratches in the pasture one or two inches wide and several inches long. All working together and dependent one upon the other.

**23 "In other words the water starts at the southern end and flows downhill to the north and east with the runoff if any entering Clayton Creek to the north and east. Since in recent years ownership has changed on several properties and tenants have come and gone, informal points of access were established. Parcel 725 [the Reynolds property] has access along its entire western boundary to the ditch. Parcel 700 [the Johnson property] has two points on its southern property line where one larger lateral and the ditch enters the property. The same is also true for parcel 101 [the Provost property].

"While informal points of access have been established, these parcels still water as one. The water from the ditch begins on parcel 725 [the Reynolds property], spreads out and then flows to parcel 700 [the Johnson property] and parts of parcel 729 [the Foland property] with parcel 700 receiving some water along its entire southern property line and parcel 729 [the Foland property] receiving some of its water along its western property line. From there the water flows across [parcel] 700 entering the western most section of parcel 729 [the Foland property] along its entire southern boundary. After leaving parcel 729 [the Foland property] along the northern boundary it proceeds to water parcels 100, 101, 2000, and so on. The water is ushered and moved over the parcels during the times it is allotted during each rotation throughout the State authorized irrigation

season (April 1 - October 31). See irrigation schedule [at Record 2557].

"[P]aving over or piping any part of the ditch will adversely affect the whole with unforeseen consequences that could be devastating to agriculture on the parcels with a water right. It is **NOT POSSIBLE** to pipe 'flood.'" Record 3309-3310 (capitals and bold in original).

In its ESEE analysis and in subsequent documents responding to the issue, ODOT concluded that the point at which the Foland property diverts water from the Dunn Ditch is located south of the proposed rest area property, on tax lot 725 (the Reynolds property), so that the proposed rest area would not affect Foland's or any other property owner's water rights or irrigation system. ODOT also proposed to reroute the distribution ditch that is located on the proposed rest area to the east of the area of the property that is to be developed with the rest area and welcome center.

***302** In approving the exception, the county imposed conditions of approval, which provide:
"2. Irrigation Interruption: ODOT shall maintain water flow in affected sources of agricultural irrigation, if any, and shall ensure that irrigation water or rights are not interrupted during the irrigation season." Record 50.

"21. Irrigation Features:
"(a) Irrigation Ditches.

"ODOT shall maintain all existing waterways across its property during and after the construction of the rest area facility.

****24** "(b) Access to diversion points.

"ODOT agrees to meet with adjacent property owners to develop a plan to re-route the ditch system serving the area, so it will be unnecessary to cross ODOT right-of-way to manage the irrigation to the affected properties.

"In the event a plan cannot be agreed upon by all the affected parties and irrigation ditches or diversion points exist on ODOT right-of-way, then ODOT agrees to issue a permit to the affected parties to enter upon state owned property to exercise that right. Before a permit is issued, ODOT will require that each party establish by legal judgment entered by a court of competent jurisdiction that it has a legal right to enter onto state owned property to access the existing diversion point of their right on state owned property." Record 52.

Foland argues that rerouting the distribution ditch will "destroy the system by moving the water to a location past many of the neighbors' diversion points to a location from which the neighbors can no longer use flood irrigation to move it to their other existing ditches." Foland Petition for Review 33. Foland also argues that the conditions of approval do not lessen the adverse impacts on neighboring agricultural properties because the conditions place a burden on the holders of the affected water rights to first establish a legal right of access to what they refer to as their "informal diversion points" in order to enter onto the proposed rest area site, rather than requiring ODOT to grant such easements or protect the irrigation rights. We understand Foland to thus ***303** argue that the county did not adequately consider the serious impacts to the irrigation rights of neighboring properties in its ESEE analysis, and that had it done so, it would have concluded that developing the rest area on the subject property would hinder the "ability to sustain resource uses near the [proposed rest area]" under OAR 660-012-0070(7)(b) and would have been required to consider other resource lands that are not subject to historic irrigation rights delivered through an intricate distribution system.

Condition 2 requires ODOT to ensure that irrigation rights are not interrupted during the irrigation season. That condition presumably requires ODOT to allow irrigators access to any re-routed ditch on ODOT property, and seems sufficient to eliminate any significant differences between the subject property and the other resource property that ODOT and the county considered in the ESEE analysis regarding the ability to sustain resource uses near the subject property under OAR 660-012-0070(7)(b). While condition 21 also requires that holders of the irrigation right establish with the property owner their right to access the diversion points, we fail to see how that requirement could possibly run afoul of OAR 660-012-0070(7)(b) or OAR 660-012-0070(8)(b). That condition simply provides that ODOT can require that people seeking

to enter its property for irrigation purposes have a legal right to require that ODOT allow them to do so.[18]

**25 Finally, Foland argues that the county erred in concluding that the fencing that is required as a condition of approval means that the rest area is compatible with adjacent uses. Foland argues that the condition is inadequate because secure six-foot high fencing is only required on the northern property line of the proposed rest area, and on the south where farming activities are occurring, only a four foot high fence is required. Foland also points out that one of the properties south of the subject property contains a radio tower and argues that a four foot high fence will not be adequate to keep trespassers away from that property, where they could be electrocuted if they come into contact with the tower.

ODOT responds by explaining that the four-foot high fence will run along the 900 feet of the off-ramp to the rest area, and that it is constructed of woven fabric with three strands of barbed wire. ODOT notes that because the off-ramps will be used by vehicles and will not be open or easily accessible to pedestrians, it is unlikely that trespassers will be able to climb over the barbed wire fence. We agree with ODOT that the *304 county reasonably concluded that with the required fencing, nearby agricultural uses will not be hindered.

The assignments of error are denied.

THIRD ASSIGNMENT OF ERROR (FOLAND)/THIRD ASSIGNMENT OF ERROR (FOLLIARD)

OAR 660-012-0065(3)(g) provides that certain transportation projects on EFU land do not require exceptions to goals 3, 4, 11 and 14, including as relevant:
"[N]ew access roads and collectors where the function of the road is to reduce local access to or local traffic on a state highway. These roads shall be limited to two travel lanes. Private access and intersections shall be limited to rural needs or to provide adequate emergency access."

As previously noted, the proposal includes construction of a new road running from a parking lot at the north boundary of the rest area approximately 200 feet to connect to Crowson Road, a county road located to the north. According to the application, the road would not be accessible to the public but is intended to provide construction access during construction of the rest area, alternative emergency access, and access for welcome center employees and ODOT maintenance personnel, who would otherwise be required to travel on I-5 south for approximately 8 miles to a freeway interchange located to the south and then backtrack onto I-5 north to get to work from the north. The county determined that the proposed access road did not require an exception under OAR 660-012-0065(3)(g) and (5).

In these assignments of error, Foland and Folliard *et al* (Folliard) challenge the county's approval of the access road. Foland argues that the access road is a part of the same proposal to build a "transportation facility" on rural land, and that the road is a "transportation facility" under OAR 660-012-0070(1) that is not exempt from obtaining a goal exception. As such, they argue, an exception must be sought under the TPR exception standards. In support of the argument, Foland also argues that the road does not meet the requirements of OAR 660-012-0065(3)(g). First, Foland argues that because the number of trips that would be generated by welcome center employees and ODOT maintenance personnel using I-5 is so minimal, that the county erred in determining that the access road will *305 "reduce traffic on [I-5]" from those trips.[19] However, we think the county reasonably concluded that the new road would reduce local traffic on I-5. The rule does not specify a numerical measure of reduction that is required in order to rely on the rule. A reduction of six trips per day from I-5 is still a reduction.

**26 Foland and Folliard next challenge the county's conclusion that:
"Regarding OAR 660-012-0065(3)(g), following its construction, the proposed service access road will be used exclusively by ODOT maintenance personnel and other state employees or authorized contractors to maintain the Rest Area/Welcome Center, as well as by drivers of emergency vehicles and persons manning the Welcome Center.

"The level of traffic associated with the permitted use by authorized personnel would be a level that is appropriate to serve rural area travel needs." Record 1330.

According to Foland and Folliard, the county cannot find that the road will serve "rural area travel needs" consistent with approving an exception to Goal 14, which allows urban levels of use of the subject property.

ODOT responds that Foland and Folliard misread the rule, which requires "private access" to the road and "intersections" with the road to be limited to rural needs. As ODOT explains the rule, the third sentence of OAR 660-012-0065(3)(g) limits the connection of private "accesses" such as driveways to the new road unless those accesses serve rural needs or provide emergency access. ODOT explains that it cannot issue a driveway permit where there is no right of access, and because access to the road will be blocked by a locked gate, there is no "private access" to the road. In addition, ODOT points out, the road will provide emergency access to the rest area.

We agree with ODOT that the access road meets the requirements of OAR 660-012-0065(3)(g) and an exception is not required. We agree with ODOT that the focus of the third sentence of the rule is to regulate new connections to the road, and that the third sentence does not require that the road itself be demonstrated to serve only rural needs.

***306** Foland also challenges the county's consideration of alternative locations on which to site the access road under OAR 660-012-0065(5), which provides:
"For transportation uses or improvements listed in subsections (3)(d) to (g) and (o) of this rule within an exclusive farm use (EFU) or forest zone, a jurisdiction shall, in addition to demonstrating compliance with the requirements of ORS 215.296:
"(a) Identify reasonable build design alternatives, such as alternative alignments, that are safe and can be constructed at a reasonable cost, not considering raw land costs, with available technology. The jurisdiction need not consider alternatives that are inconsistent with applicable standards or not approved by a registered professional engineer;

"(b) Assess the effects of the identified alternatives on farm and forest practices, considering impacts to farm and forest lands, structures and facilities, considering the effects of traffic on the movement of farm and forest vehicles and equipment and considering the effects of access to parcels created on farm and forest lands; and

****27** "(c) Select from the identified alternatives, the one, or combination of identified alternatives that has the least impact on lands in the immediate vicinity devoted to farm or forest use."

According to Foland, the fact that ODOT owns the subject property and that it is included in the I-5 right of way should not be a factor in evaluating alternative locations for the road. Foland also takes issue with the county's conclusion that the subject property is not being farmed because the application takes the position that it is currently used for grazing. We understand Foland to argue that because the county erred in relying on ODOT's ownership of the subject property and its inclusion within the right of way and erred in determining that the property is not currently being farmed, it was not reasonable for the county to conclude that developing the road in the proposed location has the least impact on surrounding farm lands.

ODOT responds that the county properly determined that the portion of the right of way on which the road is proposed to be sited is not being farmed. ODOT also responds that ODOT conducted an alternatives analysis to consider other locations, including locating an access road from Highway 66, located east of the subject property, to the site. ODOT concluded that the cost of locating an access road in that alternative location was substantially higher due to the need for bridges and culverts ***307** over Neil and Clayton Creeks. Record 1331. We agree with ODOT that the county's alternatives analysis reasonably concluded that the location with the least impact on surrounding farm uses is the proposed location.

In the third assignment of error, Folliard argues that the proposed access road violates a FHWA Policy Statement that provides in relevant part:
"Ramps providing access to rest areas, information centers, and weigh stations within the Interstate controlled access are not considered access points for the purpose of applying this policy. These facilities shall be accessible to vehicles only to and from the Interstate System. Access to or from these facilities and local roads and adjoining land is prohibited. The only allowed exception is for access to adjacent publicly owned conservation and recreation areas, if access to these areas is only available through the rest area, as allowed under 23 CFR 752.5(d)."

Folliard argues that the issue regarding whether the proposal complies with the federal policy quoted above was raised below and the county failed to address it, requiring remand.

ODOT responds initially by arguing that LUBA's "jurisdiction" does not extend to determining whether a land use decision

is consistent with federal law, other than resolving constitutional issues. However, LUBA has jurisdiction over "land use decisions" as defined in ORS 197.015(10)(a). In reviewing land use decisions, our scope of review extends to issues regarding a decision's compliance with federal law. LUBA has routinely reviewed assignments of error that allege land use decisions violate federal laws. *See, e.g., Young v. Jackson County*, 58 Or LUBA 64, 80-81 (2008), *aff'd* 227 Or 290, 205 P3d 890 (2009) (holding that administrative rule prohibiting siting of churches within three miles of an urban growth boundary without an exception violates the Religious Land Use and Institutionalized Persons Act of 2000, 42 USC 2000cc (RLUIPA)); *Curl v. City of Bend*, 56 Or LUBA 746, 760, *aff'd* 222 Or App 525, 195 P3d 492 (2008) (determining that 47 USC 332 prohibits a local government from imposing conditions of approval requiring filters to reduce radio frequency interference).

**28 On the merits, ODOT responds that the access road does not run afoul of the FHWA policy cited by Folliard because it is not a public road open to use by the public, but is gated and access controlled. For that reason, ODOT argues, the access road is not inconsistent with the FHWA policy. We agree with ODOT.

The assignments of error are denied.

***308 FIRST ASSIGNMENT OF ERROR (FOLLIARD)/THIRD ASSIGNMENT OF ERROR (FOLAND)**

As described above, an existing sewer line that previously served the now-closed rest area to the south runs through the proposed rest area property and connects to the City of Ashland's sewer system. Statewide Planning Goal 11 (Public Facilities and Services) and the administrative rule that implement Goal 11 prohibit the extension of sewer lines from within urban growth boundaries to serve land outside those boundaries except in limited circumstances.[20] One of those circumstances is set out in OAR 660-011-0060(9):

"A local government may allow the establishment of new sewer systems or the extension of sewer lines not otherwise provided for in section (4) of this rule, or allow a use to connect to an existing sewer line not otherwise provided for in section (8) of this rule, provided the standards for an exception to Goal 11 have been met, and provided the local government adopts land use regulations that prohibit the sewer system from serving any uses or areas other than those justified in the exception. Appropriate reasons and facts for an exception to Goal 11 *include but are not limited to* the following:

***309** "(a) The new system, or extension of an existing system, is necessary to avoid an imminent and significant public health hazard that would otherwise result if the sewer service is not provided; and, there is no practicable alternative to the sewer system in order to avoid the imminent public health hazard, or

"(b) The extension of an existing sewer system will serve land that, by operation of federal law, is not subject to statewide planning Goal 11 and, if necessary, Goal 14." (Emphasis added.)

In order to connect the existing sewer line to the proposed rest area, ODOT sought an exception to Goal 11 under OAR 660-004-0020 and -0022, set out in full at Appendix A.

The county concluded that an exception to Goal 11 may not be required. However, in the alternative, the county approved an exception under OAR 660-004-0020 and -0022, relying on the same reasons that it relied on in approving the exception under OAR 660-012-0070, and incorporated its findings for the TPR exception into its findings supporting the Goal 11 exception.[21] Folliard and Foland challenge the county's conclusion that a goal exception may not be required. However, because we conclude below that the county's Goal 11 exception is justified, even if Folliard and Foland were correct, at most the county's finding would be harmless error.

Folliard and Foland argue that the county erred in relying on its approval of the exceptions for the rest area and welcome center under the TPR exception standards to conclude that the proposed Goal 11 exception meets the requirements of OAR 660-004-0020 and -0022. Folliard argues that the reasons identified by the county and ODOT cannot also justify the Goal 11 exception under OAR 660-004-0022.

**29 ODOT responds that the county properly evaluated the proposed use of the property for a rest area and welcome center under OAR 660-004-0022, and properly incorporated the findings for the TPR reasons exception into its analysis of the Goal 11 exception. Record 1324-26. ODOT cites *Friends of Marion County v. Marion County*, 59 Or LUBA 323 (2009), *aff'd* 233 Or App 488, 227 P3d 198 (2010), in support of its argument. In *Friends of Marion County*, the county approved an exception

*310 to Goal 11, relying in large part on the same reasons it relied on to approve a reasons exception to Goal 14. We concluded that the reasons that justify one goal exception may be sufficient to justify another goal exception, depending on the applicable goals and the circumstances ("the same set of reasons might well constitute a partial or complete justification for both goal exceptions"). 59 Or LUBA at 337.

We agree with ODOT that it was reasonable for the county to rely on the justifications for the TPR exceptions for the rest area in justifying the reasons for the Goal 11 exception under OAR 660-004-0022 and OAR 660-011-0060(9). We also agree with ODOT that the county's findings indicate that it evaluated the evidence in the record regarding alternative locations for the sewer line and alternative methods of disposal (a septic system), and conducted an ESEE analysis as required by OAR 660-004-0020(2)(c). Record 1325. Although Folliard argues that the reasons relied on to justify a Goal 11 exception cannot be "makeweights," Folliard does not explain how the reasons cited by the county qualify as "makeweights" or otherwise fail to provide justification for the exception. The county reasonably concluded that an on-site septic system would not be adequate to handle the volume of projected waste from the rest area, given that the soils on the site are not ideal for a septic system and given the amount of waste projected to be generated. The county also concluded that the proposed use of the sewer line requires a location close to or on the rest area site. Those findings are adequate to explain the reasons for the Goal 11 exception, and it was reasonable for the county to rely on the evidence in the record regarding the proposed sewer line extension as support for its justification.

These assignments of error are denied.

SECOND ASSIGNMENT OF ERROR (FOLLIARD)

ODOT's proposal includes obtaining water service from the City of Ashland by extending city water lines to the subject property. The county found:
"The extension of water, phone and electrical service to the Rest Area is consistent with Goal 11." Record 33.

The county imposed a condition of approval requiring ODOT to obtain final approval from the City of Ashland to connect to its water service. Record 4.

*311 As explained above, ODOT sought and the county granted exceptions to Goals 3 and 14 for the proposed rest area to be sited on rural land. In approving an exception to Goal 14 for the rest area, we understand the county to have determined that a rest area serving over a million visitors a year is an urban use of rural land that would otherwise be prohibited by Goal 14 without an exception. The question presented in this assignment of error is whether an exception to Goal 11 is required in order to extend city water services to that rest area and welcome center.

**30 Goal 11 provides that "urban and rural development shall be guided and supported by types and levels or urban and rural public facilities and services appropriate for, but limited to, the needs and requirements of the urban, urbanizable and rural areas to be served." Goal 11 also provides in relevant part:
"Local governments shall not rely upon the presence, establishment, or extension of a water or sewer system to allow residential development of land outside urban growth boundaries or unincorporated community boundaries at a density higher than authorized without service from such a system."[22]

Finally, Guideline A.2 of Goal 11 provides that "[p]ublic facilities and services for rural areas should be provided at levels appropriate for rural use only and should not support urban uses."

The administrative rules implementing Goal 11 are found at OAR 660-011-0000 *et seq*, which has the stated purpose of "aid[ing] in achieving the requirements of Goal 11, Public Facilities and Services, [and] interpret[ing] Goal 11 requirements regarding public facilities and services on rural lands." Under OAR 660-011-0005(5), "[p]ublic facility includes water, sewer, and transportation facilities, but does not include buildings, structures or equipment incidental to the direct operation of those facilities."

OAR 660-011-0065 implements the language quoted above from Goal 11:
***312 "Water Service to Rural Lands**
"(1) As used in this rule, unless the context requires otherwise:

"(a) 'Establishment' means the creation of a new water system and all associated physical components, including systems provided by public or private entities;

"(b) 'Extension of a water system' means the extension of a pipe, conduit, pipeline, main, or other physical component from or to an existing water system in order to provide service to a use that was not served by the system on the applicable date of this rule, regardless of whether the use is inside the service boundaries of the public or private service provider.

"(c) 'Water system' shall have the same meaning as provided in Goal 11, and includes all pipe, conduit, pipeline, mains, or other physical components of such a system.

"(2) Consistent with Goal 11, local land use regulations applicable to lands that are outside urban growth boundaries and unincorporated community boundaries shall not:
"(a) Allow an increase in a base density in a residential zone due to the availability of service from a water system;

"(b) Allow a higher density for residential development served by a water system than would be authorized without such service; or

"(c) Allow an increase in the allowable density of residential development due to the presence, establishment, or extension of a water system."

"(3) Applicable provisions of this rule, rather than conflicting provisions of local acknowledged zoning ordinances, shall immediately apply to local land use decisions filed subsequent to the effective date of this rule."

**31 In the second assignment of error, Folliard argues that the county erred in concluding that an exception to Goal 11 was not required for the extension of city water services to the proposed rest area. Folliard argues that Goal 11 prohibits the extension of the City of Ashland's water service onto the rest area site. Folliard argues that merely because OAR 660-011-0065 *313 specifically regulates the creation and extension of sewer and water systems for residential uses does not mean that Goal 11 is not also concerned with the extension of urban water systems onto rural lands for non-residential uses that are urban uses.

ODOT responds that Goal 11 and the rules that implement Goal 11 do not require an exception in order to extend water service from the City of Ashland to the proposed rest area because it is not a residential use. According to ODOT, the provisions of OAR 660-011-0065 limit the need for an exception to Goal 11 for water service outside a UGB to residential uses. According to ODOT, because the rule does not prohibit extending water service outside of the city of Ashland's UGB to the proposed rest area, no exception to Goal 11 is required.

OAR 660-011-0065 took effect in July, 1998, in response to the Court of Appeals' decision in *Dept. of Land Conservation v. Lincoln County*, 144 Or App 9, 925 P2d 135 (1996). In *Lincoln County*, DLCD challenged the county's approval of 113 residential lots on a 50-acre parcel of land outside of an urban growth boundary (the "Mariner's Village" development). The property was within the boundaries of an existing water district, and the proposed density of the subdivision was higher than would otherwise be permitted without the property's location within the water district boundaries. LUBA held that under a prior version of Goal 11, the proposed extension of water lines to each individual lot from the main water district line violated Goal 11 because it was an "extension of a water system" under the then-applicable Goal 11 language. *See* n 22. The Court of Appeals disagreed, finding that the phrase "establishment or extension of a water system" referred to the "new *or* expanded presence of water systems in areas where none was present before." *Id.* at 17 (emphasis in original).

In response to the court's holding, LCDC enacted OAR 660-011-0065, the current language of which is quoted above. The rule does make clear that Goal 11 is concerned with the presence or availability of a sewer or water system facilitating increased residential density on rural land, presumably because that could lead to rural land being put to urban use in contravention of Goal 14. However, the history of the enactment of that rule indicates that LCDC did not intend to address the universe of concerns under Goal 11 in enacting the rule, or to in all circumstances allow a water system to serve

non-residential urban uses on rural land without an ***314** exception to Goal 11.[23] Thus, we agree with Folliard that OAR 660-011-0065 does not purport to identify the universe of Goal 11 concerns regarding extension of water systems onto rural land. Where the extension of a water system onto rural lands is proposed to facilitate an urban use of that land, the extension is prohibited without an exception to Goal 11.[24] In the present case, the county granted an exception to Goal 14 for the rest area and welcome center, presumably because a use that attracts over a million visitors a year constitutes an urban use. Goal 11 prohibits the extension of city water services to serve that urban use on rural land without an exception to Goal 11.

****32** We note that where an exception to Goal 14 is required in order to site an urban use on rural land, a corresponding exception to Goal 11 will be required where the intensity of urban use of land requires the provision of public sewage facilities and services for health and safety reasons. In that circumstance, it may well be that the same factors that justify an exception for extending the city's sewer system onto the subject property, or the same factors that justify the Goal 14 exception to site the urban use on rural land, could serve as justification for extending water service onto the property. However, an exception to Goal 11 to extend water service is still required.

Folliard's fourth assignment of error is sustained.

The county's decision is remanded.

Ryan, Board Member, concurring.

I respectfully concur because although I agree with the majority that the decision should be remanded, and I agree with the majority that the proposed rest area can be viewed as a "transportation facility" under the rule definition, I disagree with the majority that the welcome center can be ***315** evaluated under the TPR exception standards.[25] OAR 660-012-0070(10) provides that "[a]n exception taken pursuant to this rule does not authorize uses *other than the transportation facilities or improvements* justified in the exception." In my view, that language requires that all components of a proposal that seeks review under the TPR exception standards must in fact be "transportation facilities or improvements."

Although the issue may seem largely academic, whether the welcome center component of the proposal is a "transportation facility or improvement" is important because the TPR exception standards provide a different, and arguably more streamlined, path to obtain approval of a reasons exception for *transportation projects* on resource land. As the Court of Appeals noted in *1000 Friends of Oregon v. Yamhill County*, 203 Or App 323, 333-34, 120 P3d 684 (2005), the exceptions standards set forth in OAR 660-012-0070 are not identical in language or substance to the exceptions standards set forth in OAR 660-004-0020 and -0022. Even after the 2006 amendments to OAR 660-012-0070 were adopted by LCDC, key differences remain. One key difference is that OAR 660-012-0070(6) does not include provisions similar to OAR 660-004-0020(2)(b)(B)(i) - (iv). Practically, OAR 660-012-0070(6) allows the early elimination of other measures and non-exception alternative sites that do not meet the thresholds established by the applicant. There does not appear to be a similar allowance in the general exception rules, which require consideration of non-exception sites if the proposed development can be "reasonably accommodated" on those sites. And the TPR exception standards certainly do not mirror or incorporate the provisions of OAR 660-014-0040, the standards applicable to a reasons exception under Goal 14 for urban use of rural land.

****33** In my view, the welcome center is not a "transportation facility or improvement" under OAR 660-012-0070(1) or OAR 660-012-0005(30). I do not think the welcome center, as described in ODOT's application and the record "assists in the movement of goods or people" within the meaning of the term "transportation facility." It does not serve a transportation purpose, except in the most general sense due to its proposed location within a rest area. It is not similar to any of the listed transportation facilities in OAR 660-012-0020, and neither the county nor ODOT has provided an explanation as to how the welcome center meets the definition of "transportation facility." The welcome center is not dependent on a location within a rest area in order to accomplish its stated purpose, and conversely, the rest area is not dependent on having a ***316** welcome center located adjacent to it in order to serve its stated purpose. Each could be separately located without affecting the other's functionality.

ODOT's site plan indicates that the development will contain three separate buildings: an 1,800-square foot restroom building, a separate 576-square foot "travel kiosk," and an approximately 4,000-square foot welcome center. Record 1411-12. Although the record does not make clear what uses the welcome center will encompass, or what different purpose it

will serve than the "travel kiosk," testimony below from ODOT, local governments, chambers of commerce and hospitality organizations in the area indicates that the proposed use of the welcome center building appears to be to establish a tourist information center to promote local, regional and statewide commerce and business activities.[26] Record 2354. Presumably, the distributed tourist information will include information and promotional literature about businesses, activities, and events in the City of Ashland, the Rogue Valley, and the state of Oregon. *See* Response Brief of ODOT 29 ("[a]s this safety rest area is the southern gateway to Oregon it is reasonable that the state and the Travel Information Council and the respective Chambers of Commerce would want to distribute information that welcomes tourists to the state"). However, building a separate building for the purpose of distributing "tourist information" that primarily urges motorists to spend time and money at specified locations within the state, is not the same as distributing "travel information" from a "travel kiosk" that provides maps, road condition, and weather information helpful to travelers to assist them in moving on in their journey. While promoting local, regional, and statewide tourism is a laudable goal, and likely garnered support for the project from nearby communities and businesses, it does not qualify the welcome center as a transportation facility under OAR 660-012-0070(1) so that the applicant-determined thresholds can eliminate non-exception alternative measures and sites.[27]

**34 *317 I do not dispute the convenience, efficiency or cost-effectiveness of locating the welcome center adjacent to the rest area, or locating it reasonably close to the point of entry of travelers into the state. However, there is frequently tension between Oregon's land use laws protecting agricultural land and development that is most easily or cost-effectively facilitated on resource land. That does not mean that ease of development should supply a reason to develop that land without compliance with Goal 3 or Goal 14. I agree with Baker and Foland's argument that the welcome center is not a "transportation facility or improvement" under OAR 660-012-0070(1). I would sustain that portion of Baker's assignment of error and Foland's first assignment of error that so argue, and remand the decision in order for the county to apply the reasons exception standards at OAR 660-004-0020 and - 0022, and OAR 660-014-0040, to the proposed welcome center.

***318 APPENDIX A**
660-004-0020

Goal 2, Part II(c), Exception Requirements

(1) If a jurisdiction determines there are reasons consistent with OAR 660-004-0022 to use resource lands for uses not allowed by the applicable Goal or to allow public facilities or services not allowed by the applicable Goal, the justification shall be set forth in the comprehensive plan as an exception.

(2) The four factors in Goal 2 Part II(c) required to be addressed when taking an exception to a Goal are:

(a) "Reasons justify why the state policy embodied in the applicable goals should not apply": The exception shall set forth the facts and assumptions used as the basis for determining that a state policy embodied in a goal should not apply to specific properties or situations including the amount of land for the use being planned and why the use requires a location on resource land;

(b) "Areas which do not require a new exception cannot reasonably accommodate the use":

(A) The exception shall indicate on a map or otherwise describe the location of possible alternative areas considered for the use, which do not require a new exception. The area for which the exception is taken shall be identified;

(B) To show why the particular site is justified, it is necessary to discuss why other areas which do not require a new exception cannot reasonably accommodate the proposed use. Economic factors can be considered along with other relevant factors in determining that the use cannot reasonably be accommodated in other areas. Under the alternative factor the following questions shall be addressed:

(i) Can the proposed use be reasonably accommodated on nonresource land that would not require an exception, including increasing the density of uses on nonresource land? If not, why not?

(ii) Can the proposed use be reasonably accommodated on resource land that is already irrevocably committed to nonresource uses, not allowed by *319 the applicable Goal, including resource land in existing rural centers, or by increasing the density

of uses on committed lands? If not, why not?

**35 (iii) Can the proposed use be reasonably accommodated inside an urban growth boundary? If not, why not?

(iv) Can the proposed use be reasonably accommodated without the provision of a proposed public facility or service? If not, why not?

(C) This alternative areas standard can be met by a broad review of similar types of areas rather than a review of specific alternative sites. Initially, a local government adopting an exception need assess only whether those similar types of areas in the vicinity could not reasonably accommodate the proposed use. Site specific comparisons are not required of a local government taking an exception, unless another party to the local proceeding can describe why there are specific sites that can more reasonably accommodate the proposed use. A detailed evaluation of specific alternative sites is thus not required unless such sites are specifically described with facts to support the assertion that the sites are more reasonable by another party during the local exceptions proceeding.

(c) The long-term environmental, economic, social and energy consequences resulting from the use at the proposed site with measures designed to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located in other areas requiring a Goal exception. The exception shall describe the characteristics of each alternative areas considered by the jurisdiction for which an exception might be taken, the typical advantages and disadvantages of using the area for a use not allowed by the Goal, and the typical positive and negative consequences resulting from the use at the proposed site with measures designed to reduce adverse impacts. A detailed evaluation of specific alternative sites is not required unless such sites are specifically described with facts to support the assertion that the sites have significantly fewer adverse impacts during the local exceptions proceeding. The exception shall include the reasons why the consequences of the use at the chosen site are not significantly more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed site. Such reasons shall include but are not limited to, the facts used to determine which resource land is least productive; the ability to sustain resource uses near the proposed use; and the long-term economic impact on the general area caused by irreversible removal of the land from the resource base. Other possible impacts include the effects of the proposed use on the water table, on the costs of improving roads and on the costs to special service districts;

*320 (d) "The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts". The exception shall describe how the proposed use will be rendered compatible with adjacent land uses. The exception shall demonstrate that the proposed use is situated in such a manner as to be compatible with surrounding natural resources and resource management or production practices. "Compatible" is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses.

**36 (3) If the exception involves more than one area for which the reasons and circumstances are the same, the areas may be considered as a group. Each of the areas shall be identified on a map, or their location otherwise described, and keyed to the appropriate findings.

(4) For the expansion of an unincorporated community defined under OAR 660-022-0010, or for an urban unincorporated community pursuant to OAR 660-022-0040(2), The exception requirements of subsections (2)(b), (c) and (d) of this rule are modified to also include the following:

(a) Prioritize land for expansion: First priority goes to exceptions lands in proximity to an unincorporated community boundary. Second priority goes to land designated as marginal land. Third priority goes to land designated in an acknowledged comprehensive plan for agriculture or forestry, or both. Higher priority is given to land of lower capability site class for agricultural land, or lower cubic foot site class for forest land;

(b) Land of lower priority described in subsection (a) of this section may be included if land of higher priority is inadequate to accommodate the use for any one of the following reasons:

(A) Specific types of identified land needs cannot be reasonably accommodated on higher priority land; or

(B) Public facilities and services cannot reasonably be provided to the higher priority area due to topographic or other physical constraints; or

(C) Maximum efficiency of land uses with the unincorporated community requires inclusion of lower priority land in order to provide public facilities and services to higher priority land.

***321 660-004-0022**

Reasons Necessary to Justify an Exception Under Goal 2, Part II(c)

An exception Under Goal 2, Part II(c) can be taken for any use not allowed by the applicable goal(s). The types of reasons that may or may not be used to justify certain types of uses not allowed on resource lands are set forth in the following sections of this rule:

(1) For uses not specifically provided for in subsequent sections of this rule or in OAR 660-012-0070 or chapter 660, division 14, the reasons shall justify why the state policy embodied in the applicable goals should not apply. Such reasons include but are not limited to the following:

(a) There is a demonstrated need for the proposed use or activity, based on one or more of the requirements of Goals 3 to 19; and either

(b) A resource upon which the proposed use or activity is dependent can be reasonably obtained only at the proposed exception site and the use or activity requires a location near the resource. An exception based on this subsection must include an analysis of the market area to be served by the proposed use or activity. That analysis must demonstrate that the proposed exception site is the only one within that market area at which the resource depended upon can reasonably be obtained; or

(c) The proposed use or activity has special features or qualities that necessitate its location on or near the proposed exception site.

****37** (2) Rural Residential Development: For rural residential development the reasons cannot be based on market demand for housing, except as provided for in this section of this rule, assumed continuation of past urban and rural population distributions, or housing types and cost characteristics. A county must show why, based on the economic analysis in the plan, there are reasons for the type and density of housing planned which require this particular location on resource lands. A jurisdiction could justify an exception to allow residential development on resource land outside an urban growth boundary by determining that the rural location of the proposed residential development is necessary to satisfy the market demand for housing generated by existing or planned rural industrial, commercial, or other economic activity in the area.

(3) Rural Industrial Development: For the siting of industrial development on resource land outside an urban growth boundary, appropriate reasons and facts include, but are not limited to, the following:

***322** (a) The use is significantly dependent upon a unique resource located on agricultural or forest land. Examples of such resources and resource sites include geothermal wells, mineral or aggregate deposits, water reservoirs, natural features, or river or ocean ports; or

(b) The use cannot be located inside an urban growth boundary due to impacts that are hazardous or incompatible in densely populated areas; or

(c) The use would have a significant comparative advantage due to its location (e.g., near existing industrial activity, an energy facility, or products available from other rural activities), which would benefit the county economy and cause only minimal loss of productive resource lands. Reasons for such a decision should include a discussion of the lost resource productivity and values in relation to the county's gain from the industrial use, and the specific transportation and resource advantages which support the decision.

Footnotes

1 There is no subsection "F."

2 The same irrigation ditch is alternatively referred to in various places in the record as the "Houck-Dunn-Homes Ditch," and the "Houck Ditch." In this opinion we refer to the ditch as the Dunn Ditch.

3 ORS 215.283(3) provides, in part:

"Roads, highways and other transportation facilities and improvements not allowed under subsections (1) and (2) of this section may be established, subject to the approval of the governing body or its designee, in areas zoned [EFU] subject to:

"(a) Adoption of an exception to the goal related to agricultural lands and to any other applicable goal with which the facility or improvement does not comply[.]"

4 In *1000 Friends of Oregon v. Yamhill County*, 203 Or App 323, 120 P3d 684 (2005), the Court of Appeals held that the OAR 660-012-0070 TPR exception standards and the exception standards in OAR 660-004-0020 and 660-004-0022 are not identical, and both sets of standards must be satisfied in order to site "transportation facilities and improvements" on lands that are subject to Goal 3. 203 Or App at 333-34. In response to the Court of Appeals' decision, the Department of Land Conservation and Development (DLCD) amended OAR 660-012-0070 in several respects, and in July, 2006, the current version of OAR 660-012-0070 took effect. The current version of OAR 660-012-0070(2) allows reasons exceptions for "transportation facilities and improvements" without applying the OAR 660-004-0020 and 660-004-0022 exception standards:

"When an exception to Goals 3, 4, 11, or 14 is required to locate a transportation improvement on rural lands, the exception shall be taken pursuant to ORS 197.732(1)(c), Goal 2, and this division. The exceptions standards in OAR chapter 660, division 4 and OAR chapter 660, division 14 shall not apply. Exceptions adopted pursuant to this division shall be deemed to fulfill the requirements for goal exceptions required under ORS 197.732(1)(c) and Goal 2."

5 ORS 215.283 provides in relevant part:

"(1) The following uses may be established in any area zoned for exclusive farm use:

"(k) Minor betterment of existing public road and highway related facilities such as maintenance yards, weigh stations and rest areas, within right of way existing as of July 1, 1987, and contiguous public-owned property utilized to support the operation and maintenance of public roads and highways.

"(2) The following nonfarm uses may be established, subject to the approval of the governing body or its designee in any area zoned for exclusive farm use subject to ORS 215.296:

"(s) Improvement of public road and highway related facilities, such as maintenance yards, weigh stations and rest areas, where additional property or right of way is required but not resulting in the creation of new land parcels."

6 OAR 660-012-0005(15) defines "minor transportation improvements" as including:

"signalization, addition of turn lanes or merge/deceleration lanes on arterial or collector streets, provision of local streets, transportation system management measures, modification of existing interchange facilities within public right of way and design modifications located within an approved corridor. Minor transportation improvements do not include new interchanges; new approach roads within the influence area of an interchange; new intersections on limited access roadways, highways or expressways; new collector or arterial streets, road realignments or addition of travel lanes."

7 Although there is no rule or statutory definition of "rest area," ODOT cites to the following definition of "safety rest area" at 23 CFR 752.3(a) as an accurate description of the intended function of a rest area:

"A roadside facility safely removed from the traveled way with parking and such facilities for the motorist deemed necessary for his rest, relaxation, comfort and information needs. The term is synonymous with 'rest and recreation areas.'"

8 OAR 660-012-0070(3) and (4) provide:

"(3) An exception shall, at a minimum, decide need, mode, function and general location for the proposed facility or improvement:

"(a) The general location shall be specified as a corridor within which the proposed facility or improvement is to be located, including the outer limits of the proposed location. Specific sites or areas within the corridor may be excluded from the exception to avoid or lessen likely adverse impacts. Where detailed design level information is available, the exception may be specified as a specific alignment;

"(b) The size, design and capacity of the proposed facility or improvement shall be described generally, but in sufficient detail to allow a general understanding of the likely impacts of the proposed facility or improvement and to justify the amount of land for the proposed transportation facility. Measures limiting the size, design or capacity may be specified in the description of the proposed use in order to simplify the analysis of the effects of the proposed use;

"(c) The adopted exception shall include a process and standards to guide selection of the precise design and location within the corridor and consistent with the general description of the proposed facility or improvement. For example, where a general location or corridor crosses a river, the exception would specify that a bridge crossing would be built but would defer to project development decisions about precise location and design of the bridge within the selected corridor subject to requirements to minimize impacts on riparian vegetation, habitat values, etc.;

"(d) Land use regulations implementing the exception may include standards for specific mitigation measures to offset unavoidable environmental, economic, social or energy impacts of the proposed facility or improvement or to assure compatibility with adjacent uses.

"(4) To address Goal 2, Part II(c)(1) the exception shall provide reasons justifying why the state policy in the applicable goals should not apply. Further, the exception shall demonstrate that there is a transportation need identified consistent with the requirements of OAR 660-012-0030 which cannot reasonably be accommodated through one or a combination of the following measures not requiring an exception:

"(a) Alternative modes of transportation;

"(b) Traffic management measures; and

"(c) Improvements to existing transportation facilities."

OAR 660-012-0030 provides in relevant part:

"Determination of Transportation Needs

"(1) The TSP shall identify transportation needs relevant to the planning area and the scale of the transportation network being planned including:

"(a) State, regional, and local transportation needs;

"(b) Needs of the transportation disadvantaged;

"(c) Needs for movement of goods and services to support industrial and commercial development planned for pursuant to OAR 660-009 and Goal 9 (Economic Development)."

9 OAR 660-012-0070(5) provides:

"To address Goal 2, Part II(c)(2) the exception shall demonstrate that non-exception locations cannot reasonably accommodate the proposed transportation improvement or facility. The exception shall set forth the facts and assumptions used as the basis for determining why the use requires a location on resource land subject to Goals 3 or 4."

10 OAR 660-012-0070(6) provides:

"To determine the reasonableness of alternatives to an exception under sections (4) and (5) of this rule, cost, operational feasibility, economic dislocation and other relevant factors shall be addressed. The thresholds chosen to judge whether an alternative method or location cannot reasonably accommodate the proposed transportation need or facility must be justified in the exception.

"(a) In addressing sections (4) and (5) of this rule, the exception shall identify and address alternative methods and locations that are potentially reasonable to accommodate the identified transportation need.

"(b) Detailed evaluation of such alternatives is not required when an alternative does not meet an identified threshold.

"(c) Detailed evaluation of specific alternative methods or locations identified by parties during the local exceptions proceedings is not required unless the parties can specifically describe with supporting facts why such methods or locations can more reasonably accommodate the identified transportation need, taking into consideration the identified thresholds."

11 The thresholds that ODOT identified are found at Record 1307-1309 and are set out below:

"1. Site Size and Depth.

"2. Proximity to 'Snow Zone.'

"3. Beyond Steep Grades.

"4. Merging and Diverging Traffic Movements.

"5. Proximity to and Visibility from Interstate 5 Northbound Lanes.

"6. Location Before the South Ashland Interchange (Exit 14).

"7. Cost.

"8. Impact to Ashland Urban Growth Boundary and Planning Process.

"9. Operational Feasibility and Safety.

"10. Economic Displacements."

12 Threshold 6 is described in ODOT's application as:

"The multi-billion dollar travel industry in Oregon is a vital part of the state and local economies. The industry is represented primarily by retail and service firms, including lodging establishments, restaurants, retail stores, gasoline service stations and other types of businesses that sell their products and services to travelers. It also is represented by unique tourist attractants like Oregon Shakespeare Festival in Ashland.

"The money that visitors spend on various good, services, and recreational and cultural activities while in Oregon produces business receipts at these firms, which in turn employ Oregon residents and pay their wages and salaries. State and local government units also benefit from the tax receipt that travel generates. The state government collects taxes on lodging, motor fuel and the income of travel industry employees. Local governments also collect taxes on lodging, auto rentals and in some instances (including Ashland), on restaurant dining. Total direct travel spending in Oregon was $7.9 billion in 2006, a 6.7 percent increase

over the preceding year.

"With its Oregon Shakespeare Festival, Ashland is a nationally recognized tourist destination that contributes significantly to the economies of Ashland, Jackson County and the State of Oregon. Because Ashland is the southern I-5 gateway to the State of Oregon, it is critical that the Rest Area/Welcome Center be located before motorists pass by the Interstate 5 South Ashland Interchange (Exit 14). According to Travel Oregon, its border welcome center program will play an important role in welcoming visitors to Oregon. Research conducted prior to the decommissioning of the former Siskiyou Rest Area showed that for every dollar spent in operating the welcome center program, 41 new dollars were generated in visitor spending as visitors chose to extend their stays with their new found information. In short, welcome centers make a positive difference in the travel and spending patterns of visitors. Locating the Rest Area north of the South Ashland Interchange defeats the purpose of having a gateway Welcome Center welcoming people to Ashland and Oregon. Additionally, a location prior to Exit 14 makes good common sense to minimize vehicle miles traveled and avoid unnecessary fuel consumption for Welcome Center visitors who choose to visit Ashland." Record 1308.

13 The explanation of this threshold provides:

"For safety reasons the Rest Area and Welcome Center need to be located along a stretch of Interstate 5 that is relatively flat. Steep downgrades, such as the nearly six (6) percent downgrade on I-5 at the former Siskiyou Rest Area, create the threat of runaway trucks which may then enter the Rest Area at full speed with no brakes posing a serious safety risk. In fact, several times trucks at full speed with no brakes entered the former Siskiyou Rest Area. One such truck breached the North embankment and flew over the edge and down the side of the mountain. Additionally on steep slopes, vehicles leaving the Rest Areal and merging with Interstate 5 traffic are at risk from run-away trucks that have lost their brakes. During the 30 years the former Rest Area was in use, there were fatalities, several accidents and many close calls. To avoid such safety risks, a maximum threshold of a three (3) percent slope along the Interstate 5 mainline next to the Rest Area is established." Record 1307.

14 OAR 660-012-0070(7) provides:

"To address Goal 2, Part II(c)(3), the exception shall:

"(a) Compare the long-term economic, social, environmental and energy consequences of the proposed location and other alternative locations requiring exceptions. The exception shall describe the characteristics of each alternative location considered by the jurisdiction for which an exception might be taken, the typical advantages and disadvantages of using the location for the proposed transportation facility or improvement, and the typical positive and negative consequences resulting from the transportation facility or improvement at the proposed location with measures designed to reduce adverse impacts;

"(b) Determine whether the net adverse impacts associated with the proposed exception site, with mitigation measures designed to reduce adverse impacts, are significantly more adverse than the net impacts from other locations which would also require an exception. A proposed exception location would fail to meet this requirement only if the affected local government concludes that the impacts associated with it are significantly more adverse than the other identified exception sites. The exception shall include the reasons why the consequences of the needed transportation facility or improvement at the proposed exception location are not significantly more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed location. Where the proposed goal exception location is on resource lands subject to Goals 3 or 4, the exception shall include the facts used to determine which resource land is least productive; the ability to sustain resource uses near the proposed use; and the long-term economic impact on the general area caused by irreversible removal of the land from the resource base; and

"(c) The evaluation of the consequences of general locations or corridors need not be site-specific, but may be generalized consistent with the requirements of section (3) of this rule. Detailed evaluation of specific alternative locations identified by parties during the local exceptions proceeding is not required unless such locations are specifically described with facts to support the assertion that the locations have significantly fewer net adverse economic, social, environmental and energy impacts than the proposed exception location."

15 ORS 197.763(1) provides:

"An issue which may be the basis for an appeal to the Land Use Board of Appeals shall be raised not later than the close of the

record at or following the final evidentiary hearing on the proposal before the local government. Such issues shall be raised and accompanied by statements or evidence sufficient to afford the governing body, planning commission, hearings body or hearings officer, and the parties an adequate opportunity to respond to each issue."

ORS 197.835(3) provides:

"Issues shall be limited to those raised by any participant before the local hearings body as provided by ORS 197.195 or 197.763, whichever is applicable."

16 OAR 660-012-0070(8)(b) provides in relevant part:

"To address Goal 2, Part II(c)(4), the exception shall:

"(b) Demonstrate how the proposed transportation improvement is compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts. Compatible is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses[.]"

17 The Rogue River Decree more specifically provides:

"Nothing in this decree, or in the findings, herein, shall be construed to be a limitation upon the rights of the various owners of said Houck-Dunn-Homes ditch, from said Neil Creel, reducing the quantity of water to which they are jointly entitled through said ditch under and by virtue of said decrees mentioned in said findings, and so long as said owners of said ditch shall maintain at the head thereof a flume in accordance with the provisions of said decrees, and shall comply with said decrees, in every particular, the rights to divert through said ditch the quantity of water specified in said decrees, and in the manner therein provided, is hereby recognized and confirmed; and the quantity to which said claimants are entitled as a prior right shall be measured accordingly in the distribution of water among the several ditches." Record 2555.

18 As a practical matter, ODOT as the property owner could at any time require any party seeking access to ODOT's land to establish the legal right to do so prior to entry.

19 ODOT maintains that ODOT maintenance personnel will make 2 round trips per day and welcome center personnel will make 4 daily round trips to the rest area. ODOT's Response Brief 77.

20 OAR 660-011-0060 provides in relevant part:

"(2) Except as provided in sections (3), (4), (8), and (9) of this rule, and consistent with Goal 11, a local government shall not allow:

"(a) The establishment of new sewer systems outside urban growth boundaries or unincorporated community boundaries;

"(b) The extension of sewer lines from within urban growth boundaries or unincorporated community boundaries in order to serve uses on land outside those boundaries;

"(c) The extension of sewer systems that currently serve land outside urban growth boundaries and unincorporated community boundaries in order to serve uses that are outside such boundaries and are not served by the system on July 28, 1998."

"Sewer System" is defined in OAR 660-011-0060(1)(f) as:

"[A] system that serves more than one lot or parcel, or more than one condominium unit or more than one unit within a planned unit development, and includes pipelines or conduits, pump stations, force mains, and all other structures, devices, appurtenances and facilities used for treating or disposing of sewage or for collecting or conducting sewage to an ultimate point for treatment and

disposal."

21 The county found:

"For the reasons set forth by ODOT in ODOT's Exhibit 1, and with the stipulations as noted in the above findings, this application to connect the Rest Area/Welcome Center with public sewer is consistent with and satisfies the requirements for taking a 'reasons' goal exception to Goal 11 as set out in OAR 660, Division 4." Record 25.

22 The first iteration of that language became a part of Goal 11 in 1994 and provided:

"For land that is outside urban growth boundaries and unincorporated community boundaries, county land use regulations shall not rely upon the establishment or extension of a water system to authorize a higher residential density than would be authorized without a water system."

23 We note that DLCD's rules governing Goal 14 exceptions for lands that are "irrevocably committed" to urban use require consideration of the "location of urban levels of facilities and services; including at least public water and sewer facilities." OAR 660-014-0030(3)(c).

24 In *Hammack & Associates, Inc. v. Washington County*, 16 Or LUBA 75, 84-85, *aff'd* 89 Or App 40, 747 P2d 373 (1987), a case that predates the adoption of OAR 660-011-0065, the county approved an exception to Goal 11 in order to extend water and sewer services from the City of Wilsonville to a location outside of the city limits in order to provide city services to a commercial use, a proposed amphitheater. LUBA concluded that the Goal 11 exception was inadequate, and the Court of Appeals concluded that the proposed use was an urban use.

25 Baker and Foland do not challenge other buildings to be sited on the property, such as the restroom building or the travel kiosk. Accordingly, I express no opinion on the lawful status of those buildings.

26 The board of commissioners' findings conclude:

"The Board of Commissioners finds that the need for a new Siskiyou Safety Rest Area and Welcome Center has been established and is supported by substantial evidence and testimony. This evidence and testimony demonstrates that, among other things, the loss of approximately 50,000 visitors per year to the Welcome Center following the closure of the former Siskiyou Rest Area signifies a substantial lost opportunity for improved tourism in Jackson County." Record 3.

27 As discussed in the opinion, one of ODOT's thresholds is that the welcome center must be located prior to the first interchange exit within the city limits of the City of Ashland, in order to better capture tourist dollars before travelers bypass Ashland. Record 1308.

70 Or LUBA 247 (Or Luba), 2014 WL 4976338

Land Use Board of Appeals

State of Oregon

PAUL E. FOLAND AND CONSTANCE J. FOLAND, Petitioners,

vs.

JACKSON COUNTY, Respondent.

LUBA No. 2014-050
AFFIRMED September 30, 2014

FINAL OPINION AND ORDER

Appeal from Jackson County.

*1 Sean T. Malone, Eugene, filed the petition for review and argued on behalf of petitioners.
Joel C. Benton, County Counsel, Medford, filed the response brief and argued on behalf of respondent.
Bonnie Heitsch, Assistant Attorney General, Salem, filed a state agency brief and argued on behalf of Oregon Department of Transportation.

BASSHAM, Board Member; RYAN, Board Chair; HOLSTUN, Board Member, participated in the decision.

You are entitled to judicial review of this Order. Judicial review is governed by the provisions of ORS 197.850.

Opinion by Bassham.

NATURE OF THE DECISION

Petitioners appeal a county ordinance that amends a condition of approval of a prior ordinance that required a highway rest area to be serviced by water from the City of Ashland.

FACTS

This is the fourth appeal related to a proposed Oregon Department of Transportation (ODOT) highway rest area project. The subject property is an agriculturally zoned 18-acre parcel adjacent to Interstate 5 and located about 500 feet south of the City of Ashland urban growth boundary. Petitioners own nearby agricultural land. In 2007, ODOT filed applications for exceptions to Statewide Planning Goal 3 (Agricultural Land), Goal 11 (Public Facilities and Services) and Goal 14 (Urban Development) to allow the subject property to be developed with a rest area, including restrooms, parking and a welcome center. The Goal 11 exception was required because ODOT proposed that the rest area would connect to the City of Ashland's sewage disposal system. ODOT also proposed that the rest area would connect to city water, but ODOT did not seek a Goal 11 exception for that connection.

In September 2009, the county approved the comprehensive plan and land use regulation amendments and requested exceptions. The 2009 decision included Condition 27, which required that ODOT obtain City of Ashland city council approval to connect city sewer and water lines to the rest area.[1] Petitioners appealed the 2009 decision to LUBA, which rejected most of petitioners' challenges, but remanded the decision after concluding that a Goal 11 exception was also necessary to connect to city water. *Foland v. Jackson County*, 61 Or LUBA 264, 314 (2010) (*Foland I*), *aff'd* 239 Or App 60, 243 P3d 830 (2010).

While the county processed the additional Goal 11 exception required by *Foland I*, ODOT sought city council approval to connect to city sewer and water lines, as required by Condition 27. ODOT proposed, however, that city water be used only for potable or domestic uses, and that irrigation water for landscaped areas be obtained elsewhere. The city council approved the use of city water only for potable and domestic uses. ODOT ultimately acquired the right to use water from Talent Irrigation District (TID), with a 1912 priority date and in amounts more than 10 times needed for irrigation. The source of the TID water is a creek approximately 31 miles distant from the subject property. ODOT proposes to use the TID allotment to irrigate the landscaping during the dry summer months.

***2** During the county's public hearing on remand from LUBA to consider an exception to Goal 11 for water service from the city of Ashland, project opponents argued that the city's approval of only limited water service required re-evaluation of the proposal's compliance with the county's Land Development Ordinance (LDO). LDO 3.7.3(C)(1) requires county commissioners to review minor comprehensive map amendments to ensure "adequate" public safety and utility facilities, and to verify that services "can be provided" prior to approval. In 2011, the commissioners adopted the additional Goal 11 exception for water service, but did not address the opponents' arguments regarding LDO 3.7.3(C)(1). Petitioners appealed the 2011 exception decision to LUBA.

In *Foland v. Jackson County*, 64 Or LUBA 265, 274 (2011) (*Foland II*), *aff'd* 248 Or App 755, 275 P3d 1017 (2012), we remanded the decision for the county to consider the opponents' arguments regarding LDO 3.7.3(C)(1), and adopt any necessary interpretations of that code provision. On remand from *Foland II*, the county rejected petitioners' arguments regarding the meaning of LDO 3.7.3(C)(1), and concluded that the proposal to supply the rest area's water from a mix of city and TID water was consistent with LDO 3.7.3(C). Petitioners appealed that decision to LUBA, and we affirmed the county's decision. *Foland v. Jackson County*, ___ Or LUBA ___ (LUBA No. 2013-082), January 30, 2014 (*Foland III*).

On August 30, 2013, ODOT filed an application with the county to modify Condition 27 to allow ODOT to supply water for landscape irrigation from the TID or other off-site sources. On November 13, 2013, the planning commission held a hearing on the request, and on January 23, 2014, issued a recommendation to the board of commissioners to approve the request. On March 12, 2014, the board of commissioners held a hearing on the planning commission recommendation, and on May 7, 2014, adopted an ordinance approving the modification to Condition 27, based on the planning commission's recommendation and findings.[2] This appeal followed.

FIRST ASSIGNMENT OF ERROR

OAR 660-004-0018(4) provides:
"(a) When a local government takes an exception under the 'Reasons' section of ORS 197.732(1)(c) and OAR 660-004-0020 through 660-004-0022, plan and zone designations must limit the uses, density, public facilities and services, and activities to only those that are justified in the exception.

"(b) When a local government *changes the types or intensities of uses or public facilities and services* within an area approved as a 'Reasons' exception, a new 'Reasons' exception is required." (Emphasis added.)

Petitioners argue that the modification to Condition 27 to allow ODOT to use TID water to irrigate landscaping instead of city water constitutes a change to the "types or intensities of uses or public facilities and services" within the project area, and

therefore triggers the requirement for the county to adopt a new "Reasons" exception to Goal 11. Specifically, petitioners argue that the ""type" of public facilities has changed, in that ODOT will use TID or other sources to irrigate landscaping, rather than city water. In addition, petitioners argue that "intensity" of public services has also changed, because the modification effectively decreases the amount of water the city supplies to the site.

*3 The county argues, and we agree, that the modification to Condition 27 to allow use of TID water for landscaping does not change the "type" of public facilities and services, within the meaning of OAR 660-004-0018(4)(b). We note, initially, that read together with OAR 660-004-0018(4)(a), OAR 660-004-0018(4)(b) seems intended to require a new reasons exception in circumstances where the use or a public facility serving the use is changed in way that makes the use or facility *less* conforming to the applicable statewide planning goal or goals. It is less clear to us that OAR 660-004-0018(4)(b) requires a new reasons exception when the change would make the use or facility *more* conforming with Goal 11, as appears to be the case here. Generally, goal exceptions are required only for uses or facilities that are not allowed by the goals. No party in the present case contends that irrigating landscaping with TID water requires a goal exception.

In any case, even if OAR 660-004-0018(4)(b) is potentially triggered by a change that makes the use or facility more conforming to the goals, we disagree with petitioners that the modification to Condition 27 constitutes a "change" in the "type" of a public facility within the meaning of the rule.

The "public facility" at issue here is the extension of a city water system to the rest area to provide for human consumption. OAR 660-011-0005(5), part of the administrative rule that implements Goal 11, defines "public facility" in relevant part to include a water system. OAR 660-011-0065(1)(c), which concerns extension of a water system into rural areas, defines "water system" to have "the same meaning as provided in Goal 11, and includes all pipe, conduit, pipeline, mains, or other physical components of such a system." However, Goal 11 itself defines "water system" as a "system for the provision of piped water for human consumption subject to regulation under ORS 448.119 to 448.285."[3] Thus, the "water system" that required a Goal 11 exception in the present case was the extension of city water to the rest area for human consumption, including pipes or physical components needed to provide water for human consumption. That "water system" does not include facilities for non-human consumption, such as for landscape irrigation. *See also* OAR 660-011-0005(5) ("public facility" does not include structures or equipment incidental to the direct operation of public facilities). Petitioners do not contend that Condition 27 changes anything with regard to the city-supplied water system, *i.e.*, the pipes and equipment for human consumption of water.

For the same reason, we disagree with petitioners that because the modification to Condition 27 will likely result in less water flowing to the site through city water pipes that the modification changes the "intensity" of the water system. The amount of water flowing through city pipes for human consumption remains the same. The only thing that has changed is the source of the water that will be used for landscape irrigation. In our view, that change does not constitute a change in the "intensity" of the water system, for purposes of OAR 660-004-0018(4).

*4 The first assignment of error is denied.

SECOND ASSIGNMENT OF ERROR

Petitioners argue the county lacked the authority or jurisdiction to commence proceedings to modify Condition 27 while the county's decision at issue in *Foland III* was pending before LUBA, pursuant to the reasoning in *Standard Insurance Co. v. Washington County*, 17 Or LUBA 647, 660, *rev'd on other grounds*, 97 Or App 687, 776 P2d 1315 (1989).

Standard Insurance involved a comprehensive plan map amendment that was remanded by LUBA, but LUBA's decision was then appealed to the Court of Appeals and ultimately to the Supreme Court. While the appeal was pending before the Court of Appeals and Supreme Court, the county responded to LUBA's remand by re-adopting, with modifications, the comprehensive plan map amendment at issue before the Court of Appeals and Supreme Court. We held that the County lacked the authority or jurisdiction to adopt the modified comprehensive plan map amendment, and reversed the remand decision.

In the present case, the county did not adopt its decision to modify Condition 27 until May 7, 2014, more than three months after LUBA issued its decision affirming the ordinance at issue in *Foland III*. No party appealed LUBA's decision to the Court of Appeals, and thus there was no pending appeal on the date the county issued the decision at issue in this appeal. For that reason alone, the holding in *Standard Insurance Co.* simply does not apply.

We understand petitioners to argue, nonetheless, that LUBA should extend the holding in *Standard Insurance Co.* to conclude that local governments lack the authority or jurisdiction to even *commence* proceedings to modify a decision that is on appeal, even if the local government does not *adopt* the modification until after appellate proceedings are finally concluded. In petitioners' view, while the county may have had full authority to modify Condition 27 following the conclusion of *Foland III*, because the request to modify Condition 27 was filed and initially processed prior to the conclusion of *Foland III*, petitioners contend that that initial lack of authority tainted the county's entire proceedings, and therefore the county's May 4, 2014 final decision to modify Condition 27 must be reversed.

We disagree with petitioners that the holding in *Standard Insurance Co.* should be extended to effectively prohibit local governments from commencing proceedings to modify a decision that is pending on appeal. The concerns expressed in *Standard Insurance Co.* focused on actions that actually modify *the decision on appeal*, not interlocutory actions that simply commence or initially process applications that may lead to a future modification. Tellingly, petitioners identify no purpose that would be served by reversing the county's decision to modify Condition 27 based on the requested extension of the holding in *Standard Insurance Co.*, other than to cause further delay to re-adopt the very same decision. LUBA's review statutes embody the legislative policy that ""time is of the essence in reaching final decisions in matters involving land use[.]" ORS 197.805. It would be inconsistent with that policy to exercise our review authority as petitioners request. Accordingly, we decline to extend the holding in *Standard Insurance Co.*

***5** Petitioners' second assignment of error is denied.

THIRD ASSIGNMENT OF ERROR

Petitioners contend that the county erred in approving a modification of Condition 27 to allow use of TID water to irrigate landscaping without also requiring ODOT to submit and obtain approval of a final landscape plan.

In its 2009 decision, the county imposed Condition 4, which provides that prior to issuance of development permits ODOT must submit and obtain approval of a final landscape plan in compliance with LDO 9.2. Record 91. ODOT has not yet applied for development permits, and has not yet submitted the final landscape plan for approval. During the proceedings on ODOT's request to modify Condition 27, some participants argued that certain drought-resistant plants that could be used for landscaping could increase fire risk to nearby homes. The commissioners adopted the following responsive finding:
"We heard testimony regarding the nature of the plant selection identified for the proposed landscape plan. This Board is not approving the landscape plan at this time. Approval of the landscape plan is an administrative decision subject to review under LDO 9.2." Record 5.

Under the third assignment of error, petitioners challenge that finding. According to petitioners, modification of Condition 27 to allow use of water from TID to irrigate landscaping necessarily will require changes in the landscape plan to be evaluated under the LDO 9.2 criteria, pursuant to Condition 4. Petitioners contend that under these circumstances the county cannot "defer" evaluation of the landscape plan to a future administrative proceeding, but must require ODOT to submit the landscape plan for approval under LDO 9.2 as part of the current proceeding to modify Condition 27. In addition, petitioners argue that the LDO 9.2 landscape plan criteria will require the exercise of discretion and therefore the landscaping plan cannot be evaluated in an administrative proceeding, but rather the county must evaluate the landscaping plan under procedures that offer notice and an opportunity for a hearing.

The county responds, and we agree, that petitioners have not established that the county was required to evaluate the final landscaping plan as part of the current proceeding to modify Condition 27. Even if using TID water to irrigate landscaping means that ODOT's final landscaping plan will involve different types of plants than if city water were used to irrigate landscaping, nothing cited to us in the LDO or elsewhere obliges the county to approve the final landscaping plan as part of the current proceeding. Condition 4, adopted in 2009, provides that the final landscaping plan will be evaluated in a later proceeding conducted prior to issuance of development permits. Petitioners' argument that evaluation of the final landscaping plan must be accelerated to the present proceeding is something in the nature of a collateral attack on Condition 4.

***6** As to petitioners' challenge to the statement that "[a]pproval of the final landscape plan is an administrative decision subject to review under LDO 9.2," petitioners have not demonstrated that that statement is erroneous, or that any error warrants reversal or remand. Even if that statement turns out to be incorrect, something we do not address or decide, the statement is at best harmless error, because nothing in the present decision to modify Condition 27 was required to, or purports to, determine the appropriate procedure for evaluating the final landscaping plan when that plan is ultimately submitted for approval pursuant to Condition 4.

The third assignment of error is denied.

FOURTH ASSIGNMENT OF ERROR

Petitioners argue that the county's findings regarding fire suppression and the adequacy and reliability of the TID water source are inadequate and not supported by substantial evidence.

Finding 2.1.3 states in relevant part that Condition 27 was intended to avoid water conflicts with surrounding agricultural operations, and that the county heard no testimony from surrounding farmers that using TID water will adversely affect surrounding farm practices.[4] Finding 2.1.10 addresses testimony about fire safety, and relies on testimony from the local fire district chief that a municipal water source is not necessary for fire suppression, and noting that ODOT has proposed a 22,000 gallon tank on-site, four times the recommended size.[5] Finding 2.1.6 notes testimony that landscaping irrigation will need only 10 percent of the TID water right acquired by ODOT. Finding 2.1.7 addresses testimony that the TID water supply is unreliable in dry years, and relies on contrary testimony, also noting that ODOT's water right has a 1912 priority, and finally noting that if for some reason TID water becomes insufficient ODOT has the capability of using tanker trucks and storage tanks from its nearby Central Point facility to supplement the TID water supply.[6]

Petitioners contend that these findings are inadequate and not supported by substantial evidence. Petitioners cite to testimony expressing concern that in dry years the TID water supply may be insufficient to irrigate the Rest Area, causing dry vegetation that increases fire risk to surrounding agricultural operations. According to petitioners, the findings are inadequate because they do not address that testimony. The county responds, and we agree, that the findings directly address the issue of fire risk and the reliability and adequacy of the TID water supply. The findings set out the evidence relied upon and, as discussed below, that evidence is substantial evidence. Adequate findings must set out the evidence relied upon, but need not address conflicting evidence on which the decision maker did not choose to rely. *Tandem Development Corp. v. City of Hillsboro*, 33 Or LUBA 335, 344 (1997); *Miller v. City of Ashland*, 17 Or LUBA 147, 158 (1988).

***7** Petitioners argue that several statements in the findings are not supported by substantial evidence. For example, petitioners argue that the district fire chief's testimony is "hearsay," second-hand information based on a planner's "alleged" phone conversation with the chief, rather than direct testimony. Similarly, petitioners question the landscape architects' credibility regarding the adequacy of the TID water supply during dry years. And petitioners argue that the fact that ODOT's water right has a 1912 priority does not support the county's conclusion that the TID water supply will be adequate in dry years, noting testimony that the TID does not reduce water allotments in dry years based on priority alone, but on a combination of factors.

The county responds, and we agree, that petitioners have not demonstrated that the evidence the county relied upon regarding fire risk and the reliability and adequacy of the TID water supply is not substantial evidence. Land use proceedings are not governed by rules of evidence, and that the fire district chief did not provide what petitioners characterize as direct testimony does not mean that his testimony regarding fire risk as relayed by the city planner is not evidence a reasonable person could rely upon. The landscape architect's testimony regarding the adequacy of the TID water supply in dry years is evidence that a reasonable person could rely upon. And that the TID takes additional factors into account in allocating water supplies in dry years does not mean that ODOT's 1912 priority date does not provide some assurance that ODOT will be able to obtain the amount of water necessary for irrigation even in dry years, especially given the undisputed testimony that the amount needed for irrigation is only 10 percent of ODOT's allocation. Petitioners' other assorted evidentiary critiques amount to disagreement with the evidence that the county chose to rely upon, and fail to establish that the county's findings are not supported by substantial evidence. A reasonable person could conclude, based on the whole record, that the TID water supply is sufficiently reliable and adequate to provide the amount of water needed for landscape irrigation and that, with the storage tank and other measures identified by ODOT, the modification of Condition 27 to allow ODOT to obtain water for landscaping irrigation from the TID, instead of from the City of Ashland, does not increase fire risk to surrounding farm practices.

The fourth assignment of error is denied.

The county's decision is affirmed.

Footnotes

1 Condition 27 as adopted in 2009 stated:

> "Prior to the issuance of any permits or statements of land use compatibility by Jackson County, ODOT must obtain final approval to connect the land uses that are the subject of this application to city water services and to city sewer services through the City Council of Ashland. The City Council's approval shall be made subsequent to the Board's approval of this application." Record 1.

2 As amended, Condition 27 states:

> "Prior to issuance of an occupancy permit for the Siskiyou Safety Rest Area & Welcome Center, ODOT shall connect those structures to City of Ashland sewer and water systems and demonstrate that it has an adequate supply of water for landscaping purposes from the Talent Irrigation District or other off-site sources." Record 84.

3 The regulations at ORS 448.119 to 448.285 are concerned with safe drinking water systems. *See* ORS 448.123 (the purpose of ORS 448.119 to 445.285 is to ensure that all Oregonians have safe drinking water).

4 Finding 2.1.3 states, in relevant part:

> "Connecting to an urban water source, as required through the imposition of Condition #27, also serves to avoid water conflicts with the surrounding agricultural operations in conformance with the requirements of ORS 215.296 (LDO 4.2.3). * * * We are aware that the Rest Area site has well and irrigation rights from Dunn Ditch which could supply some or all of the water needs at the facility. We are also aware that some of the surrounding agricultural operators raised concerns regarding potential impacts to their wells and water sources if the Rest Area was supplied by a ground water source or from Dunn Ditch. In response to these very concerns, we imposed Condition #27, in part, to avoid any real or perceived conflicts with the water use of these surrounding operations. We heard no testimony from surrounding agricultural operators that the addition of the Talent Irrigation District (TID) water rights to Tolman Creek will adversely affect surrounding farm practices." Record 3.

5 Finding 2.1.10 states, as relevant:

> "We heard testimony that a municipal water source is needed for fire suppression. Correspondence in the record shows that Jackson County Fire District #5 Chief Dan Marshall has concluded that the 'main thing that is needed for fire safety is good access for fire department vehicles' and that ' 'a fire hydrant' (connecting to a municipal water source) 'would not likely be required.' Chief Marshall instead recommended a 5,000 gallon water tank for fire suppression needs. ODOT has proposed a 22,000 gallon tank holding more

than four times the amount recommended by Chief Marshall. We therefore find that the use of off-site water sources for irrigation will not adversely affect fire suppression efforts for this site." Record 5.

6 Finding 2.1.7 states, as relevant:

"We heard testimony that there will be an inadequate water supply during dry years. Based upon expert testimony from ODOT's landscape architect, we find that the TID water supply is sufficiently robust to meet the short-term water demands to establish the landscape plants and sufficiently adequate to meet the water needs of plants requiring long-term maintenance. ODOT testified that the water right it acquired from Arrowhead Ranch has a priority right from 1912. ODOT also testified that should the need arise it has the ability to supplement the TID water supply with tanker trucks and storage tanks on site. Our condition requiring that replacement of plant materials that do not survive the establishment period adequately addresses concerns regarding a potential water shortage." Record 4.

70 Or LUBA 247 (Or Luba), 2014 WL 4976338

End of Document

OREGON DEPARTMENT OF AVIATION

AURORA STATE AIRPORT

DRAFT AIRPORT MASTER PLAN

Aurora, OR
May 19, 2022 (Updated)

Working Paper No. 1 - Version 2

CENTURY WEST ENGINEERING

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Runway 17 Looking South – Source: Century West Engineering

Chapter 1
Introduction

The Oregon Department of Aviation (ODAV) is preparing an Airport Master Plan (AMP) for Aurora State Airport (Airport) in cooperation with the Federal Aviation Administration (FAA) to define the Airport's needs for the next 20 years. The Airport Master Plan will provide specific guidance to maintain a safe and efficient airport that is economically, environmentally, and socially sustainable.

A glossary of common aviation terminology and list of acronyms is provided in **Appendix 1**.

Project Purpose and Need

The purpose of the Airport Master Plan is to define the current, short-term, and long-term needs of the Airport through a comprehensive evaluation of facilities, conditions, and FAA airport planning and design standards. The study will also address elements of local planning (land use, transportation, environmental, economic development, etc.) that have the potential of affecting the planning, development, and operation of the Airport. The FAA requires airports to maintain current planning as conditions change. This Airport Master Plan will address changing local conditions, current FAA standards, and trends within the aviation industry.

Project Funding

Funding for the Airport Master Plan is being provided through an FAA Airport Improvement Program (AIP) grant (AIP grant 3-41-004-022; $994,764). The AIP is a dedicated fund administered by FAA with the specific purpose of maintaining and improving the nation's public-use airports. The AIP is funded exclusively through fees paid by users of general aviation and commercial aviation. This project received 100% funding from the FAA, which includes COVID recovery funds. No local match was required.

100% FAA Funded Project

Total: $994,764

Goals of the Airport Master Plan

The primary goal of the master plan is to provide the framework and vision needed to define future facility needs at Aurora State Airport. The FAA sets out goals and objectives each master plan should meet to ensure future development will cost-effectively satisfy aviation demand and consider potential environmental and socioeconomic impacts.

Goal 1: Define the vision for the Airport to effectively serve airport users and the region. Assess known issues including air traffic control, runway length, ability to accommodate development, auto parking, fencing, and land use to develop a realistic, sustainable plan to improve the Airport.

Goal 2: Document existing activity, condition of airfield facilities, and policies that impact airport operations and development opportunities.

Goal 3: Forecast future activity based on accepted methodology.

Goal 4: Evaluate facilities and conformance with applicable local, state, and FAA standards.

Goal 5: Identify facility improvements to address design conformance issues and accommodate demand.

Goal 6: Identify potential environmental and land use requirements that may impact development.

Goal 7: Explore alternatives to address facility needs. Work collaboratively with all stakeholders to develop workable solutions to address needs.

Goal 8: Develop an Airport Layout Plan to graphically depict proposed improvements consistent with FAA standards as a road map to future development. Prepare a supporting Capital Improvement Plan to summarize costs and priorities.

Goal 9: Provide recommendations to improve land use and zoning oversight of the Airport to remove barriers to appropriate growth at the Airport.

Goal 10: Summarize the vision and plan for the Airport in the Airport Master Plan report.

Source: FAA with Century West airport-specific content.

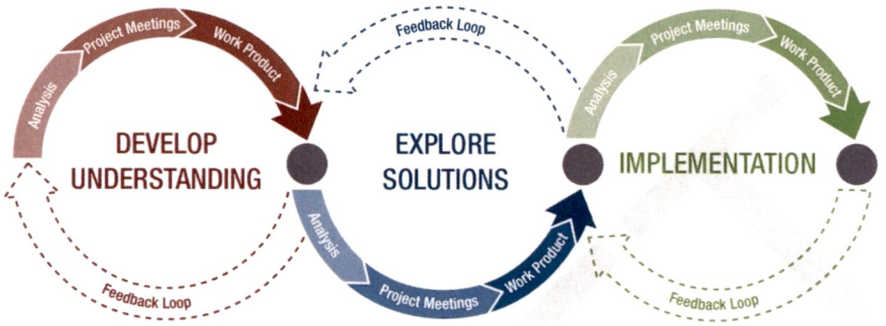
THE FAA ROLE IN THE AIRPORT MASTER PLAN

FAA *Advisory Circular (AC) 150/5070-6B Airport Master Plans* defines the specific requirements and evaluation methods established by FAA for the study. The guidance in this AC covers planning requirements for all airports, regardless of size, complexity, or role. However, each master plan study must focus on the specific needs of the airport for which a plan is being prepared.

The recommendations contained in an airport master plan represent the views, policies and development plans of the airport sponsor and do not necessarily represent the views of the FAA. Acceptance of the master plan by the FAA does not constitute a commitment on the part of the United States to participate in any development depicted in the plan, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public law. The FAA reviews all elements of the master plan to ensure that sound planning techniques have been applied. However, the FAA only approves the Aviation Activity Forecasts and Airport Layout Plan.

Planning Process

The three-phase planning process is designed to provide multiple feedback loops intended to maintain the flow of information and ideas among the community and project stakeholders and ultimately maximize public involvement.



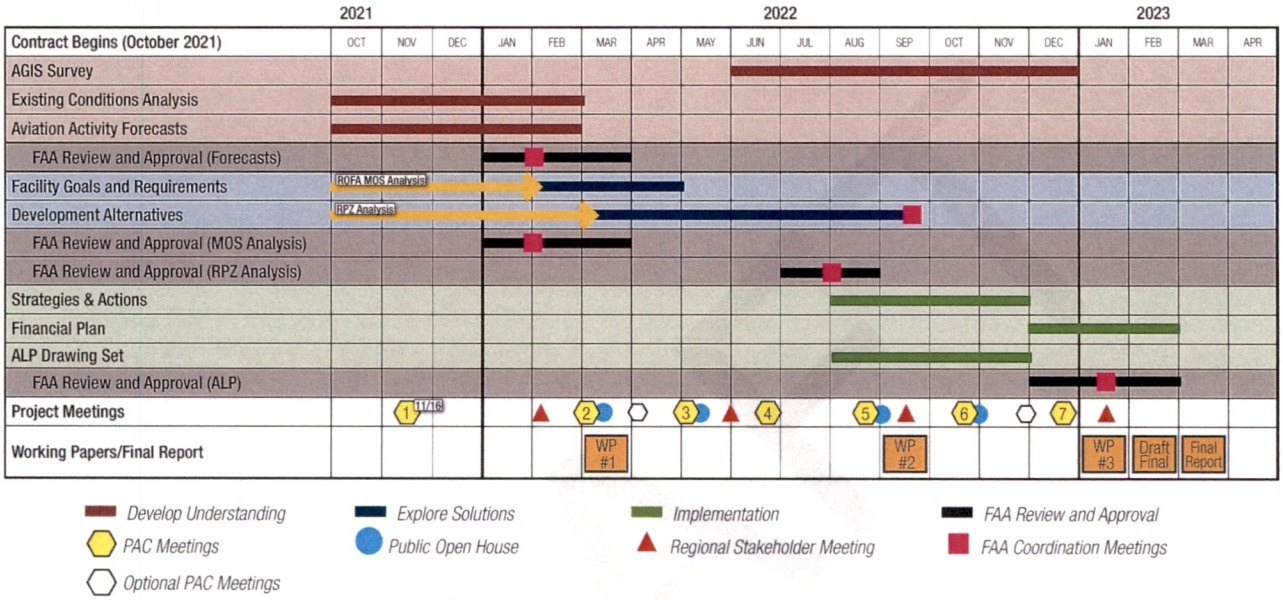
Framework of the Airport Master Plan

The framework of the Airport Master Plan provides a clear structure to inform and steer future planning decisions and serve as a tool to guide a process that allows the plan to take shape through flexibility, iteration, and adaptation. The framework is based upon an airport-urban interface model intended to analyze the regional setting of the Airport, its landside elements and airside elements, as well as the management and administration functions associated with the Airport. The framework provides guidance while being flexible enough to adapt to changing conditions to maximize opportunities to develop understanding, explore solutions, and implement the preferred development alternatives for the Airport and adjacent urban and rural environments.

	Regional Setting	Airside Elements	Landside Elements	Airport Administration
Develop Understanding	Location & Vicinity Socio-Economic Data Airport Role Airport History Area Airports Context Airport Operations Applicable Planning Studies Environmental Data Local Surface Transportation Land Use/Zoning	Area Airspace Approach Procedures FAA ATCT Runway/Helipad Taxiways/Taxilanes Aprons/Tiedowns Pavement Condition FAA Design Standards Support Facilities	General Aviation (GA) Terminal Areas Through-the-fence (TTF) Agreements Hangars Airport Surface Roads Vehicle Parking Airport Fencing Utilities	Airport Ownership & Management Airport Financials Airport Rates and Charges Local Codes and Regulations Oregon Aviation Laws FAA Compliance Overview
Explore Solutions				
Implementation				

Project Schedule

The Aurora State Airport Master Plan schedule is expected to occur over 18 months, Phase 1 – Develop Understanding will take approximately five months; Phase 2 – Explore Solutions will take approximately eight months; and Phase 3 – Implementation will take approximately five months including three months for FAA approvals, which can take from three to six months after delivery of the final draft narrative reports and drawings.



Public Involvement Process

A comprehensive and engaging public involvement process is a key element to a successful Airport Master Plan. Therefore, numerous opportunities for public input are built into the process. ODAV is completing the Aurora Airport Master Plan in accordance with the Department of Land Conservation and Development's (DLCD) State Agency Coordination (SAC) Program. Accordingly, ODAV established a Planning Advisory Committee (PAC) that includes members from all affected Federal, State, Local Special Districts, and Interested Parties. The PAC will meet nine times throughout the 18-month Aurora State AMP project timeline. All PAC meetings are open to the public.

Planning Advisory Committee Meetings

The PAC was assembled to provide input and allow for public dissemination of data. Airport tenants, pilots, local & regional economic development interests, neighbors of the airport, and staff/representatives of ODAV serve as members of the PAC. In addition to the membership composition noted above, representatives from the FAA Seattle Airports District Office (ADO) serve as ex officio members of the PAC.

TABLE 1-1: PLANNING ADVISORY COMMITTEE MEMBERS

Organization	Name	Alternate
1000 Friends of Oregon	Roger Kaye	
AABC/TLM Holdings	Ted Millar	
Atlantic Aviation (formerly Lynx Aviation)	Bob Hala	
Aurora Air Traffic Control	Raul Suarez	
Aurora Airport Improvement Association	Bruce Bennett	
Aurora Butteville Barlow Community Planning Organization	Ken Ivey	
Aurora CTE, Inc	Bill Graupp	
Charbonneau Country Club	Steven P. Switzer	
City of Aurora	Brian Asher	
City of Canby	Scott Archer	
City of Wilsonville	Charlotte Lehan	Chris Neamtzu
Clackamas County	Commissioner Tootie Smith	
Columbia Helicopters	Rob Roedts	Bob Buchanan
Confederated Tribes of Siltez Indians	Robert Kentta	
Confederated Tribes of the Grand Ronde Community of Oregon	Cheryl Pouley	
Confederated Tribes of Warm Springs Reservation of Oregon	Christian Nauer	
Deer Creek Estates HOA	Matt Williams	
Friends of French Prairie	Ben Williams	Wayne Richards
Helicopter Transport Service	Robert Fournier	
Life Flight Network	Ben Clayton	
Marion County	Commissioner Danielle Bethell	
Marion County Planning Department	Austin Barnes	Brandon Reich
Oregon Dept of Aviation	Tony Beach	
Oregon Dept of Aviation Board	Cathryn Stephens	
Oregon Dept of Land Conservation and Development	Matt Crall	Nicole Mardell
Oregon Dept of Transportation	Naomi Zwerdling	
Oregon Farm Bureau	Mary Anne Cooper	
Oregon Office of Emergency Management	Bill Martin	Sarah Puls
Positive Aurora Airport Management	Tony Helbling	
Regional Solutions	Jody Christensen	
Vans Aircraft	Rian Johnson	Greg Hughes
Willamette Aviation	David Waggoner	
Wilsonville Chamber of Commerce	Patrick Donaldson	Kevin O'Malley

Air Traffic Control Tower from Hubbard Highway – Source: Century West Engineering

Chapter 2
Existing Conditions Analysis

The existing conditions analysis documents the existing airfield assets and conditions that affect the operation and development of Oregon Department of Aviation (ODAV)-owned facilities with emphasis on the Airport's regional setting, and its airside, landside, and administrative functions. The existing conditions analysis utilizes site visits, FAA and Sponsor documentation and records, and other publicly available information to support the effort. The findings documented in this chapter will be referenced to support subsequent studies and recommendations throughout the master planning process. A survey of airport stakeholders is being conducted to acquire additional information to help guide the planning process. This information will be summarized and added to the Airport Master Plan documentation.

Regional Setting

The Regional Setting section is comprised primarily of features that provide the "big-picture" context of the Airport within its local community and region. This section describes the location and vicinity of the Aurora State Airport and provides a range of information related to the operation and function of the Airport: socio-economic data, airport history, airport role, area airports context, airport activity data, environmental data, local surface transportation systems, land use on and around the Airport, and other relevant data.

LOCATION AND VICINITY

The community of Aurora, Oregon is located in the Willamette Valley in Marion County. Aurora is located about three miles east of the U.S. Interstate 5 (I-5) corridor, 23 miles south of Portland. Aurora is located within 15 miles of three other adjacent counties (Washington, Yamhill, and Multnomah).

Aurora State Airport is located approximately one mile northwest of the City of Aurora, in Northwest Marion County. The north end of the Airport is located immediately adjacent to the Clackamas County western boundary (at Arndt Road).

Marion County has a land area of approximately 1,193 square miles. The county extends east from the Willamette Valley into the Cascade Range, including Mount Jefferson. Incorporated cities include Salem, Keizer, Woodburn, Silverton, and Aurora. Salem is the county seat.

Clackamas County has a land area of approximately 1,883 square miles. The county extends east from the Willamette Valley into the Cascade Range, including Mount Hood. Incorporated cities include Barlow, Canby, Gladstone, Happy Valley, Lake Oswego, Milwaukie, Oregon City, West Linn, and Wilsonville. Oregon City is the county seat.

FIGURE 2-1: LOCATION AND VICINITY MAP

Source: Google Maps

COMMUNITY SOCIO-ECONOMIC DATA

Data from the Population Research Center (PRC) at Portland State University was reviewed to gauge recent changes in population within the Airport's service area. PRC data confirms that the areas within 30 to 60 minutes of Aurora State Airport have experienced steady growth over the past 10 years, often outpacing statewide growth rates. Sustained population growth within an airport's service area is often a general indication of broader economic conditions required increase airport activity. Historical PRC population estimates and average annual growth rates (AAGR) for these areas are presented in **Table 2-1**.

TABLE 2-1: HISTORIC POPULATION ESTIMATES

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Oregon	3,883,735	3,919,020	3,962,710	4,013,845	4,076,350	4,141,100	4,195,300	4,236,400	4,243,791	4,266,560
AAGR:	-	0.91%	1.11%	1.29%	1.56%	1.59%	1.31%	0.98%	0.17%	0.54%
Marion County	320,495	322,880	326,150	329,770	333,950	339,200	344,035	347,760	349,120	347,182
AAGR:	-	0.74%	1.01%	1.11%	1.27%	1.57%	1.43%	1.08%	0.39%	-0.56%
Clackamas County	381,680	386,080	391,525	397,385	404,980	413,000	419,425	423,420	426,515	425,316
AAGR:	-	1.15%	1.41%	1.50%	1.91%	1.98%	1.56%	0.95%	0.73%	-0.28%
Portland	601,510	592,120	587,865	613,355	627,395	639,100	648,740	657,100	664,675	658,773
AAGR:	-	-1.56%	-0.72%	4.34%	2.29%	1.87%	1.51%	1.29%	1.15%	-0.89%
Salem	156,455	157,770	159,265	160,690	162,060	163,480	165,265	167,400	168,970	177,694
AAGR:	-	0.84%	0.95%	0.89%	0.85%	0.88%	1.09%	1.29%	0.94%	5.16%
Wilsonville	20,515	21,550	21,980	22,870	23,740	24,v315	25,250	25,635	25,915	27,186
AAGR:	-	5.05%	2.00%	4.05%	3.80%	2.42%	3.85%	1.52%	1.09%	4.90%
Aurora	930	935	950	950	970	980	985	985	985	1,133
AAGR:	-	0.54%	1.60%	0.00%	2.11%	1.03%	0.51%	0.00%	0.00%	15.03%

Source: PSU Population Research Center (PRC), 2021

A review of economic data also indicates broad growth in the region over the last decade. According to Woods & Poole Economics[1] data, the gross regional products (GRP) of Marion and Clackamas counties have both experienced steady growth over the last 10 years (average annual growth of 4.28% and 3.59%, respectively).

It should be noted that the economic effects of the COVID-19 pandemic are evident in the 2020 data when GRP for both counties decreased -3.77% (Marion) and -3.19% (Clackamas). These declines are attributed to state and local restrictions put in place to slow the spread of the virus, and the corresponding economic contraction. However, data for 2021 highlights economic recovery fueled in part by federal stimulus and steps toward economic recovery.

A summary of Marion and Clackamas County GRPs over the past decade is presented in **Table 2-2**.

TABLE 2-2: HISTORIC GROSS REGIONAL PRODUCT (2012 DOLLARS)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Marion County (millions)	$11,546	$11,865	$12,287	$13,311	$14,0921	$14,6971	$15,532	$16,132	$15,523	$16,761
Percent Change	-	2.76%	3.56%	8.33%	5.87%	4.29%	5.68%	3.86%	-3.77%	7.97%
										AAGR 4.28%
Clackamas County (millions)	$15,497	$15,520	$15,505	$16,734	$17,606	$18,569	$19,613	$20,237	$19,592	$21,172
Percent Change	-	0.15%	-0.10%	7.93%	5.21%	5.47%	5.62%	3.19%	-3.19%	8.07%
										AAGR 3.59%

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

1 2021 State Profile - Woods & Poole Economics, Inc. Copyright 2021

AIRPORT HISTORY

Aurora State Airport was built by the United States Army Air Forces in 1943 and was known as the Aurora Flight Strip. From the time of construction until 1953 it was managed by the United States Bureau of Public Roads, when it was transferred to the State of Oregon's Highway Division. In 1973, the Highway Division transferred ownership to the State Aeronautics Division, which would later become ODAV. ODAV remains the owner and operator of Aurora State Airport today.

Although the general configuration of the single-runway airfield has remained largely unchanged, several notable airport facility improvements have been made during the nearly 50 years of State of Oregon ownership:

- **1976** – runway reconstructed and parallel taxiway constructed;
- **1979 and 1986** – property acquisition (22 acres, 10 acres) increased ODAV-owned property to the current 140 acres;
- **1995** – runway length increased to 5,004 feet;
- **2004** – runway reconstructed;
- **2009** – parallel taxiway shifted east, to its current location; and
- **2015** – Air Traffic Control Tower (ATCT) constructed.

During this period, aeronautical use facilities such as aircraft hangars were developed both on ODAV property and on privately-owned land parcels adjacent to the east side of the Airport. These off-airport developments have agreements with ODAV (referred to as "Through-The-Fence", or "TTF" agreements) to access the Aurora State Airport at designated points. Development of two privately-owned heliports adjacent to the east side of Airport has also occurred. However, these facilities do not have TTF access agreements and their operations are fully independent of the Aurora State Airport.

Several planning studies have been completed through the Airport's history, including FAA-funded master plans in 1976, 1988, and 2012. A Constrained Operations – Runway Justification Study was completed in 2019 to review the recommended runway improvements defined in the 2012 Airport Master Plan Update. A list of recent FAA AIP funded projects is presented below in **Table 2-3**.

TABLE 2-3: PROJECT HISTORY

Fiscal Year	Federal Grant Sequence Number	Project Description	Federal Grants/Funds	State of Oregon Grants/Funds
2005	11	Rehabilitate Runway - 17/35	$1,100,000	$0
2007	12	Construct Taxiway, Install Miscellaneous NAVAIDS, Install Taxiway Lighting	$1,959,856	$0
2007	13	Construct Taxiway, Install Miscellaneous NAVAIDS, Install Taxiway Lighting	$2,293,993	$0
2009	14	Remove Obstructions	$100,000	$0
2009	15	Conduct Miscellaneous Study (Airport Master Plan Update)	$534,431	$0
2010	16	Continued Study - Airport Master Plan Update	$64,600	$0
2013	17	Rehabilitate Apron, Rehabilitate Taxiway	$139,393	$0
2015	18	Construct Taxiway, Rehabilitate Apron, Rehabilitate Taxiway, Rehabilitate Taxiway	$1,289,561	$0
2015	–	2015 IGA/Proj Number 26906 Aurora Air Traffic Control Tower	$2,695,000	$141,852
2016	19	Rehabilitate Taxiway	$639,502	$0
2017	20	Conduct Environmental Study (Phase 1)	$189,635	$0
2017	–	SOAR-2017-ODA-S-00016, Constrained Operations Study	$0	$70,000
2017	–	SOAR-2017-SO PROJ 3, Ramp Light Repairs	$0	$13,000
2020	–	SOAR-2020-ODA-S-00002, Taxiway Repair, Obstruction Easement Survey, Obstruction Removal	$0	$ 330,000
2021	21	Environmental Assessment for Obstruction Removal (Phase 2)	$ 140,294	$0
2021	22	Airport Master Plan Study and AGIS Survey	$994,764	$0

Source: FAA AIP Grant Look Up Tool (Accessed 12/10/2021) and ODAV provided state grant information.

AIRPORT ROLE

The role of an airport may vary within the context of the National, State, or Local perspective. Understanding the existing roles of the Airport is vital to establish the long-term vision and development of the facility.

National Role

The federal airport system, referred to as the National Plan of Integrated Airport Systems (NPIAS), includes 3,304 public-use airports in all 50 states.[2] Fifty-seven of Oregon's 97 public-use airports are included in the NPIAS. Like federal highways, NPIAS airports represent a critical element of the national transportation system.

NPIAS reports are submitted every two years to Congress in accordance with title 49 United States Code (U.S.C.), section 47103. As required by the statute, the Federal Aviation Administration (FAA) *"...shall maintain the plan for developing public-use airports in the United States." The statute also requires that: "The plan shall include the kind and estimated cost of eligible airport development the Secretary of Transportation considers necessary to provide a safe, efficient, and integrated system of public-use airports adequate to anticipate and meet the needs of civil aeronautics, to meet the national defense requirements of the Secretary of Defense, and to meet identified needs of the United States Postal Service."*

NPIAS airports are grouped into two major categories: primary (commercial service) and non-primary (general aviation and limited passenger service). The majority of NPIAS airports are non-primary general aviation airports. Within the broad definition of general aviation airports, four functional categories are defined: National, Regional, Local, and Basic.

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

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

Available data indicate that Aurora State Airport has consistently met or exceeded the FAA's "11+ based jet" and "5,000+ instrument operations" criteria established for National airports since the early 2000s. Aurora State Airport, and nearby Portland-Hillsboro Airport (19 miles northwest) are the only FAA-designated National Airports located in Oregon.

NPIAS airports are deemed significant to the air transportation in the United States, and thus are eligible for federal funding though the Airports Improvement Program (AIP), which currently covers 90% of eligible costs of planning and development projects.

State Role

The Oregon Department of Aviation has developed and periodically updates the Oregon Aviation Plan (OAP) to provide guidance on preserving the State's system of airports. The OAP presents a framework for improving the system to enhance support of local communities and regional economic development. The current OAP (OAP v6.0), completed in 2019, classified Aurora State Airport as **Category II – Urban General Aviation Airport**. The definition for Category II airports is:

2 2021-2025 NPIAS Report, Federal Aviation Administration (9/30/2020)

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

The most demanding user requirements for Category II airports are typically related to business class aircraft since the airports do not support commercial airline service. Category II airports serve large/multi-state geographic regions and generally experience higher levels of general aviation activity.

The distribution of Category II airports throughout Oregon is a reflection of the state's physical geography, population centers, and the underlying market conditions required to support the full range of general aviation activity common to this type of airport. As documented in OAP v6.0, Oregon has a total 11 Category II airports, which includes one public-use heliport (Portland Downtown Heliport). More than half (6 of 11) of Oregon's Category II airports are located within 30 nautical miles of Aurora State Airport. The concentration of Category II airports in the Portland Metro area is consistent with the region's overall population and economic characteristics. Four of Oregon's Category II airports currently have an air traffic control tower (ATCT); three of these, including Aurora State Airport, are located in the Portland Metro area.

OAP-defined characteristics for Category II airports correspond to the business jet aircraft segment of general aviation. These airports accommodate a wide range of locally-based and transient aircraft that are designed to operate in all-weather conditions. These aircraft require increased facility capabilities for runways, taxiways, instrument approaches/departures, and airfield lighting systems.

Local Role

Aurora State Airport serves the local community in several ways. Based on data reviewed in late 2021, the Airport is currently home to 281 aircraft stored both on ODAV-owned property, and on adjacent privately-owned property with authorized airport access. A review of 2016-2021 Aurora ATCT operations data shows mostly consistent year-over-year increases during the six-year period, ranging from roughly 48,000 to 70,000 annual operations. Additional aircraft flight activity occurs outside the ATCT hours of operation between 0700 and 2000 local time (7:00 am to 8:00 pm in standard time terms). Detailed breakdowns of airport activity are provided later in this chapter and in Chapter 3 – Aviation Activity Forecasts.

The (2019) OAP v6.0[3] states that Aurora State Airport supported 2,672 direct, indirect, and induced jobs, contributing over $125 million in payroll benefits to the local economy (2014 data). The Airport accommodates several businesses including two Fixed Base Operators (FBOs), three flight schools, several aircraft manufacturing and service providers, and a restaurant. OAP v6.0 estimates a total of nearly $510 million in sales revenue/output is generated from airport businesses annually. Two examples of the numerous businesses based at Aurora State Airport include the Life Flight Network administrative office, which supports life-saving medevac services across the Pacific Northwest Region, and Vans Aircraft, a leading kit aircraft manufacturer.

AREA AIRPORT CONTEXTUAL ANALYSIS

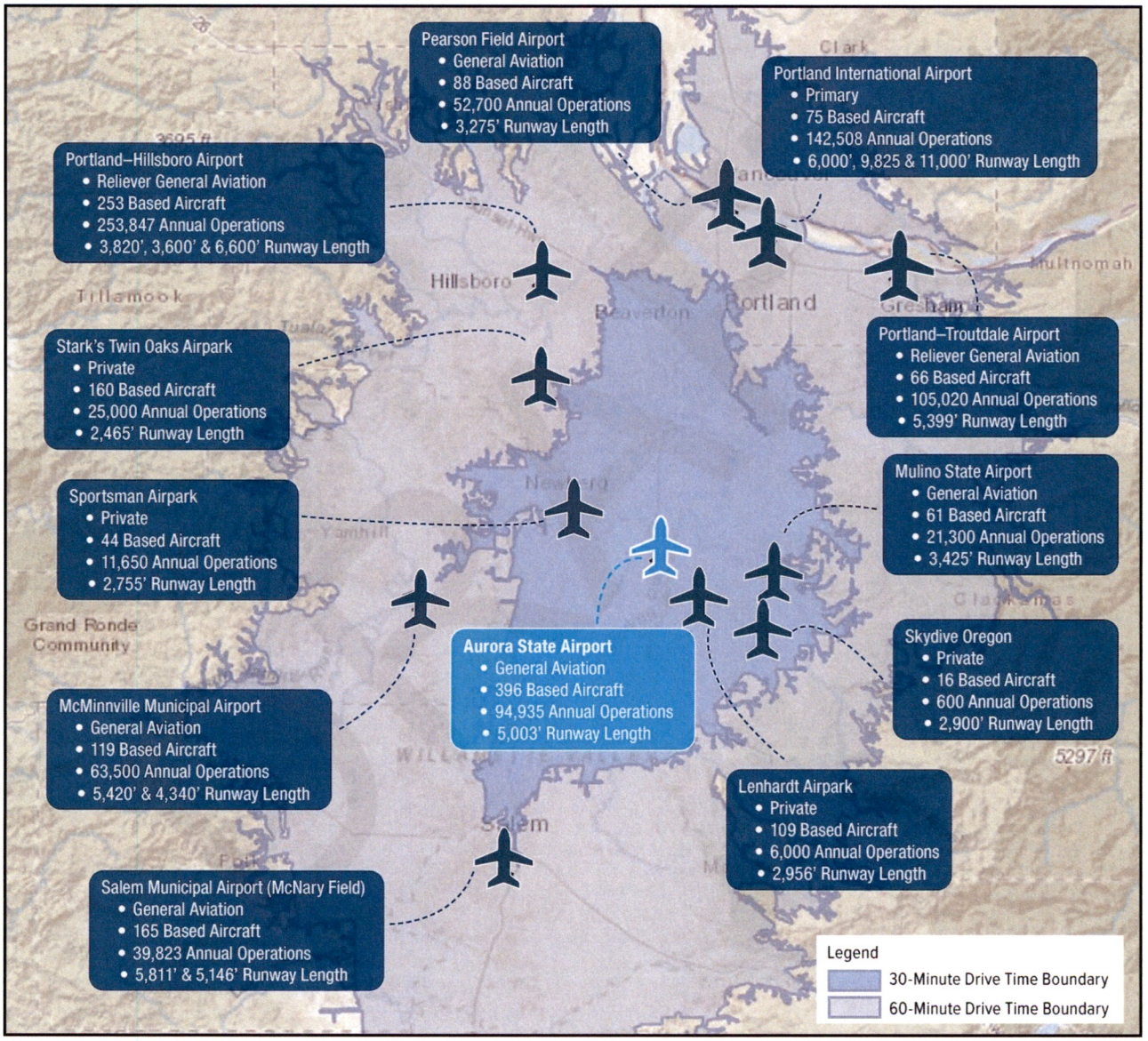
Contextual analysis of the airport service area examines the impact that the airport has on its immediate geographic area. For general aviation airports, the majority of aviation activity can be directly linked to their service area boundaries defined by 30- and 60-minute driving times surrounding the Airport. The airports and aviation activity within a defined service area may directly affect activity at any individual airport in the service area. This ranges from locally-based aircraft to transient aircraft where operators choose airports based in part on proximity to their place of business or travel destination.

Figure 2-2 (and **Table 2-4** at the end of this section) provide an overview of the public-use airports located in the service area for Aurora State Airport. These airports include both publicly-owned and privately-owned facilities. The most recent FAA Airport Master Record Form (5010) data available is presented for these airports to provide common reporting of activity. It is noted that the FAA 5010 data listed for Aurora State Airport is obsolete, but will be revised to reflect the 2021 baseline data developed in the Airport Master Plan. Current based aircraft and aircraft operations data for Aurora State Airport are provided later in this chapter and will be used to develop the aviation activity forecasts (Chapter 3).

3 OAP v6.0 Chapter 8: Economic Impact

As noted in the state airport classification system, an airport's functional role is determined primarily by facility capabilities and factors such as the size of the population it serves. The airports in the local area accommodate a wide range of general aviation activity. Aurora State Airport, Portland-Hillsboro Airport, and Portland International Airport accommodate the majority of business aviation activity in the Portland Metro area, while the smaller airports accommodate predominately smaller aircraft. Portland International Airport (PDX) is the primary commercial service airport serving the local area and region. PDX also accommodates a limited amount of general aviation activity. With the exception of PDX, the other public-use airports located within the service area for Aurora State Airport do not accommodate scheduled airline service.

FIGURE 2-2: AREA AIRPORTS



Source: AirportIQ 5010, Esri, USGS, NOAA

Portland International Airport

Portland International Airport (PDX) is located in northeast Portland, in Multnomah County on the south bank of the Columbia River. The Airport is owned and operated by the Port of Portland and is the largest commercial service airport in Oregon. It has three lighted runways with instrument approach capabilities and full range of aircraft services. The Airport is primarily focused on commercial airline service, but also supports a limited amount

of general aviation (GA) activity, 75 GA based aircraft and 10,391 annual GA operations, according to the most recent 5010 data. The Port of Portland also owns Hillsboro and Troutdale Airports, which serve as GA reliever airports to Portland International.

Portland – Hillsboro Airport

Portland-Hillsboro Airport, owned by the Port of Portland, is located in Hillsboro, 10 miles west of Portland. The Airport is a designated reliever GA airport for PDX and serves the Portland Metro Area. The Airport has three lighted runways with instrument approach capabilities, an ATCT, and weather reporting. Available services include aviation fuel, hangars and parking, aircraft repair and maintenance, flight training, aircraft rental, and air taxi (charter) services. Current FAA 5010 data lists 253 based aircraft and 253,847 annual operations.

Portland – Troutdale Airport

Portland-Troutdale Airport, also owned by Port of Portland, is in Troutdale in northern Multnomah County between Interstate 84 (I-84) and the Columbia River. The Airport is a designated GA reliever airport for Portland International. The Airport has a single lighted runway, instrument approach capabilities, an ATCT, and weather reporting. Available services include aviation fuel, hangars and parking, parking, aircraft repair and maintenance, flight training, and aircraft rental. Current FAA 5010 data lists 66 based aircraft and 105,020 annual operations.

Pearson Field Airport

Pearson Field Airport is owned by the City of Vancouver and located on the south side of the city in Clark County, Washington. The Airport is located north of the Columbia River and State Highway 14, approximately two miles northwest of Portland International Airport. The Airport has a single lighted runway with instrument approach capabilities, and weather reporting. Available services include aviation fuel, hangars and parking, aircraft repair and maintenance, flight training, and aircraft rental. Current FAA 5010 data lists 88 based aircraft and 52,700 annual operations.

McMinnville Municipal Airport

McMinnville Municipal Airport is in the City of McMinnville in Yamhill County, on the southeast side of the city. The Airport is owned and operated by the City of McMinnville. The Airport has two runways (one lighted), instrument approach capabilities, and weather reporting. Available services include aviation fuel, hangars and parking, aircraft repair and maintenance, flight training, and aircraft rental. Current FAA 5010 data lists 199 based aircraft and 63,500 annual operations.

Salem Municipal Airport (McNary Field)

Salem McNary Field is owned and operated by the City of Salem and located within the city limits two miles southeast of downtown. The Airport previously had scheduled commercial airline service, but the service ended in 2011 and current activity is limited to GA and military operations (Oregon Army National Guard). McNary Field is also the home of the ODAV offices. It has two lighted runways and a helipad, instrument approach capabilities, an ATCT, and weather reporting. Available services include aviation fuel, hangars and parking, aircraft repair and maintenance, flight training, and aircraft rental. Current FAA 5010 data list 165 based aircraft and 39,823 annual operations.

Mulino State Airport

Mulino State Airport is ODAV-owned and operated, and is located in the Hamlet of Mulino, along State Highway 213, approximately five miles north of the City of Molalla. The Airport has a single lighted runway with visual approach capabilities. Available services include aviation fuel, hangars and parking, and aircraft repair and maintenance. Current FAA 5010 data lists 61 based aircraft and 21,300 annual operations.

Stark's Twin Oaks Airpark

Stark's Twin Oaks Airpark is a privately-owned, public-use airport located south of Hillsboro, approximately 13 miles northwest of Aurora State Airport. The Airport has a single lighted runway with visual approach capabilities. Available services include aviation fuel, aircraft parking, hangars and parking, flight training, and aircraft rental. Current FAA 5010 data lists 160 based aircraft and 25,000 annual operations.

Lenhardt Airpark

Lenhardt Airpark is a privately-owned, public-use airport located east of Hubbard, approximately three and a half miles south of Aurora State Airport. The Airport has a paved lighted runway and a parallel grass strip on the west side of the runway, both with visual approach capabilities. Available services include aviation fuel, hangars and parking, aircraft maintenance, flight training, and aircraft rental. Current FAA 5010 data lists 109 based aircraft and 6,000 annual operations.

Sportsman Airpark

Sportsman Airpark is a privately-owned, public-use airport located within the city limits of Newberg, approximately eight miles northwest of Aurora State Airport. The Airport has a single lighted runway with visual approach capabilities. Available services include aviation fuel, hangars and parking, aircraft maintenance, flight training, and aircraft rental. The airpark also serves as a launching point for hot air balloon operations. Current FAA 5010 data lists 44 based aircraft and 11,650 annual operations.

Skydive Oregon

Skydive Oregon Airport is a privately-owned, private use airport located on the west side of Molalla, approximately eight miles southeast of Aurora State Airport. The Airport has a single lighted runway with visual approach capabilities. Skydive Oregon Airport facilitates skydiving operations and instruction services offered by a resident provider also called Skydive Oregon. While the airport has fuel and hangars on site, these services support the skydiving operations and are not available to the public. Current FAA 5010 data lists 16 based aircraft and 600 annual operations.

A summary of the most recent FAA 5010 data for theses airports is presented in **Table 2-4**. As note earlier, the 5010 data is provided for general reference only as a broad indication of activity. Relevant data to be updated in the aviation activity forecasts (Chapter 3).

TABLE 2-4: FAA 5010 DATA

	Aurora State	Lenhardt	Sportsman	Mulino State	Skydive Oregon	Stark's Twin Oaks	McMinnville	Hillsboro	Salem	Portland Int.	Pearson Field	Troutdale	Total
Air Carrier	0	0	0	0	0	0	0	0	0	113,737	0	0	113,737
Air Taxi	7,909	0	100	0	0	0	0	9,561	3,776	16,168	100	4,000	41,614
GA Local	32,177	1,250	3,875	13,000	400	7,000	22,000	160,261	12,043	3,517	18,375	70,000	343,898
GA Itinerant	54,569	4,750	7,675	8,300	200	18,000	40,000	83,381	20,330	6,874	34,125	29,520	307,724
Military	280	0	0	0	0	0	1,500	644	3,674	2,212	100	1,500	9,910
TOTAL OPERATIONS	**94,935**	**6000**	**11,650**	**21,300**	**600**	**25,000**	**63,500**	**253,847**	**39,823**	**142,508**	**52,700**	**105,020**	**816,883**
TOTAL BASED AIRCRAFT	**396**	**109**	**44**	**61**	**16**	**160**	**119**	**253**	**165**	**75**	**88**	**66**	**1,552**
Single Engine	287	108	31	59	15	159	94	163	141	16	83	56	1212
Multi Engine	26	1	2	2	1	1	7	26	10	39	4	3	122
Jet	34	0	0	0	0	0	3	41	6	19	0	0	103
Helicopters	49	0	11	0	0	0	15	23	8	1	1	7	115
Glider	3	0	0	2	0	0	4	5	2	0	1	0	17
Military	0	0	0	0	0	0	0	0	19	21	0	0	40
Ultra-Light	1	4	0	0	4	1	0	0	0	0	0	0	10
OPBA[1]	239	55	265	349	38	568	521	1001	219	354	598	1569	447

Source: AirportIQ 5010 Airport Master Records and Reports (AirportIQ5010.com, Accessed 12/6/2021)
1. OPBA ratio includes general aviation and air taxi operations only. This is a ratio of total aircraft takeoffs and landings divided by the number of aircraft based at the airport.

AIRPORT OPERATIONS SUMMARY

Aurora State Airport accommodates a wide variety of aeronautical activity, including small single- and multi-engine aircraft, business class turbine aircraft (business jets and turboprops), helicopters, and gliders.

Based Aircraft

In late 2021, the ODAV State Airport Manager reviewed the based aircraft count for Aurora State Airport in the FAA based aircraft registry database. The count was previously updated in 2018 (349 based aircraft). The review was completed in consultation with the FAA Seattle Airports District Office in December 2021, and resulted in a new validated count of 281 based aircraft. The reduction in the Airport's based aircraft total reflects a more precise verification of aircraft and removal of previously-counted aircraft (helicopters) located at two private heliports adjacent to the Airport. Please see Chapter 3 - Aviation Activity Forecasts, for a full description of the current based aircraft count.

Aurora State Airport is unique compared to many other airports in that the majority of its based aircraft are stored off airport property on privately-owned land parcels. These aircraft access the Airport via a TTF agreement with ODAV. The flight operations for these aircraft rely on the Airport's runway-taxiway system, lighting, and navigational aids to access area airspace in the same manner as on-airport based aircraft. As noted above, the current based aircraft count does not include helicopters located at two privately owned heliports located adjacent to the Airport. A summary of all based aircraft by type and storage location is presented in **Table 2-5**.

TABLE 2-5: BASED AIRCRAFT AND FLEET MIX

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

Source: National Based Aircraft Inventory – January 2022

Aircraft Operations

The ATCT at Aurora State Airport has been in service daily since October 2015. Controllers in the ATCT log aircraft contacts in the airport airspace, including arriving and departing aircraft, as well as aircraft transiting the airspace (without originating or terminating at the Airport). The resulting counts are available to the public through FAA's Operations Network (OPSNET) Traffic Counts datasets. To serve as a base for the Aurora State Airport operations estimate, the OPSNET Airport Traffic Counts dataset was downloaded for the period of 2016 through 2021, representing the six full years that the ATCT has been in service.

The Airport Traffic Counts dataset includes departure and arrival counts for itinerant aircraft (in both visual and instrument flight rules conditions)[4], local GA, and local military aircraft. The OPSNET Airport Traffic Counts for 2016-2021 are summarized in **Table 2-6**. These counts are unadjusted and provide the basis for a more detailed evaluation of aircraft operations at Aurora State Airport.

TABLE 2-6: OPSNET AIRPORT TRAFFIC COUNTS

Calendar Year	Itinerant Total	Local Total	Total Operations
2016	33,195	15,182	48,377
2017	34,641	23,511	58,152
2018	36,629	26,374	63,003
2019	34,252	28,598	62,850
2020	31,777	34,172	65,949
2021	35,566	34,176	69,742
Total:	206,060	162,013	368,073

Source: FAA OPSNET – January 2022

Aurora ATCT is in service daily between 0700 and 2000 local time. It should also be noted that in 2021 the ATCT was out of service outside of the normal schedule for portions of seven days. On February 13th, 2021 the ATCT opened 18 minutes late due to winter storm conditions, and due to a staffing shortage ATCT went to reduced hours (0800 to 1745 local time) Oct 29th - 31st, and Nov 3rd, 6th, and 10th. Total down time was 19 hours and 48 minutes, accounting for less than 0.5% of the scheduled service time scheduled for the year. These closures and their impact on the aggregated Airport Traffic Counts are not significant.

4 Visual Flight Rules (VFR) apply to aircraft operating with minimum visibility and cloud clearance requirements to maintain safe flight operations in visual meteorological conditions. Instrument Flight Rules (IFR) apply to aircraft operated under instrument flight plans, capable of meeting aircraft equipment and pilot requirements to operate exclusively with electronic guidance from ground or satellite navigational aids.

Also of note, the OPSNET traffic counts presented in **Table 2-6** include itinerant helicopter operations for two private helipads located immediately east of the Airport. These aircraft movements are captured by the ATCT since they require the same clearance to operate in the controlled airspace that surrounds the Airport. However, ATCT does not log the flight activity differently than runway-related operations. As a result, the presence of these operations in the OPSNET source data have an inflating effect on the unadjusted data presented above.

For airport master planning purposes, the evaluation of aircraft activity will be limited to aircraft physically operating on the Airport's runway-taxiway system. Since the remote facility operations do not require any physical contact with the Airport's runway-taxiway system, the flight activity (and based aircraft) will be removed from datasets.

ATCT personnel indicate that the adjacent facility helicopter operations typically account for less than 3% of itinerant traffic recorded by Aurora ATCT. Based on this guidance, the historical itinerant operation counts from the OPSNET dataset were decreased by 3% in order to remove the helicopter operations. This traffic mix assumption will also be applied to forecast aircraft operations.

After-Hour Operations Estimates

Outside of the scheduled service times, the Aurora ATCT is not staffed and aircraft operations at Aurora State Airport are not counted. After-hours operations are known to exist (see below) and they need to be estimated, and added to the Airport Traffic Counts to develop an accurate baseline operations total.

The *2019 Constrained Operations Runway Justification Study* for Aurora State Airport addressed after-hours operations hours by assuming that 95% of all airport operations occur during ATCT service hours, and inversely 5% occur outside of those hours. This is a standard method that has been employed at other airports in similar situations, and the resultant baseline counts were approved by FAA for use in the study's forecasts. However, the availability of additional flight data supports a more precise approach.

Instrument Aircraft Flight Activity

FAA Traffic Flow Management System (TFMS) records were obtained through a Freedom of Information Act (FOIA) request. These records provide Instrument Flight Rules (IFR) flight plan arrivals and departures for all airports nationwide and include information on each aircraft, departure and arrival airports, and departure and arrival dates and times, among other data. Nearly 10 years of Aurora State Airport records were available for analysis—January 1, 2012 through August 16, 2021. Consultants have requested the remaining 2021 data through the FOIA process and will incorporate the data when available to complete the 2021 counts.

Flight records where Aurora State Airport was listed as either the departing or arrival airport were queried from the TFMS dataset, resulting in 79,885 IFR operations over the 10-year period. This time period predates the period that ATCT began service. However, arrival and departure times of IFR operations are likely minimally dependent on the presence of an ATCT, and the additional data increased the sample size provides a higher level of confidence in the resultant ratios. Although the TFMS data is based on actual flight plans that are not affected by the operating hours of the ATCT, the data distributions provide a reliable record of after-hours activity at the Airport.

Each of the TFMS operations was classified as occurring either during or outside of ATCT service hours based on arrival or departure timestamps. The timestamps are provided in the 24-hour format used in Coordinated Universal Time (UTC), which does not reflect local time change due to daylight savings time. This was then accounted for in the queries based on departure and arrival dates included in each record.

The queries showed that 86.1% (68,778) of IFR operations during the period occurred during the scheduled ATCT service time, and 13.9% (11,107) occurred outside of the scheduled service hours. To simplify calculations, the splits for IFR operations were rounded (86/14) for in-service and out-of-service operations ratios.

A breakdown of annual TFMS operations data based on the on- and off-hours schedule of the ATCT is presented in **Table 2-7**. The "ATCT open/closed" periods listed in the table are intended to provide time of day consistency when comparing TFMS data, and does not reflect actual period of ATCT operation, which began in late 2015.

TABLE 2-7: TFMS OPERATIONS DATA (ORGANIZED BY ATCT HOURS)

	ATCT Open Ops	ATCT Closed Ops	Total Ops	% Closed
2012*	6,110	703	6,813	10.32%
2013*	6,417	645	7,062	9.13%
2014*	6,450	1,014	7,464	13.59%
2015*	6,838	1,242	8,080	15.37%
2016	7,882	1,436	9,318	15.41%
2017	7,771	1,406	9,177	15.32%
2018	8,265	1,476	9,741	15.15%
2019	7,676	1,238	8,914	13.89%
2020	6,649	1,071	7,720	13.87%
2021	4,720	876	5,596	15.65%
Total	**68,778**	**11,107**	**79,885**	**13.90%**

Source: Century West Engineering developed using FAA TFMS Data
* Data prior to October 2015 ATCT opening

As the ratio was derived using only IFR flight plan data, it is valid for estimating only IFR operations, but does not capture activity conducted outside of IFR flight plans. This would include aircraft operating visually, with or without visual flight rules (VFR) flight plans. While the OPSNET Traffic Counts provide hard counts of VFR traffic during ATCT service hours, off-hours traffic is not represented in the OPSNET or other available datasets. However, as previously mentioned, other studies have employed a general 5% (of total operations) estimate to approximate all traffic outside of ATCT service hours. Inversely, 95% of VFR operations were assumed to occur during ATCT service hours. It is reasonable to apply that same method to account for after-hours VFR activity at Aurora State Airport. While not as precise as the above IFR method, it is the best option available evaluating available data.

The above discussed ratios were applied to OPSNET Airport Traffic Counts (ATCT in-service) to approximate IFR and VFR operations occurring when the ATCT was closed. A summary of IFR and VFR operations by ATCT status, as well as the resulting total annual operations estimates are presented in **Table 2-8**.

TABLE 2-8: ANNUAL OPERATIONS (ATCT ADJUSTED)

	2016	2017	2018	2019	2020	2021
ATCT Open (86%) - IFR	9,880	10,018	10,522	7,515	6,576	7,596
ATCT Closed (14%) - IFR	1,608	1,631	1,713	1,223	1,071	1,237
Total IFR	**11,488**	**11,649**	**12,235**	**8,738**	**7,647**	**8,833**
ATCT Open (95%)- VFR	37,501	47,095	51,381	54,306	58,418	63,835
ATCT Closed (5%) - VFR	1,974	2,479	2,704	2,858	3,075	3,360
Total VFR	**39,475**	**49,574**	**54,085**	**57,164**	**61,493**	**67,195**
ATCT Open - Total	47,381	57,113	61,903	61,821	64,994	71,431
ATCT Closed - Total	3,582	4,110	4,417	4,081	4,146	4,597
Total Ops	**50,963**	**61,223**	**66,320**	**65,902**	**69,140**	**76,028**
% ATCT Closed Ops	7.56%	7.20%	7.14%	6.60%	6.38%	6.44%

Source: Century West Engineering developed using FAA TFMS Data

The adjusted operations estimates align well with the previous approved forecast developed in the 2019 *Constrained Operations Runway Justification Study*. Using a 5% after-hours estimate across the board, that study approximated 66,153 operations for the 2018 base year. Using the updated methodology, the adjusted 2018 operations count is 67,478, an increase of 0.25%. Considering the heavier weight that was placed on IFR operations occurring outside of ATCT service hours, coupled with the removal of the erroneous itinerant helicopter operations, the slight increase is reasonable.

Operations Fleet Mix

To better understand the operational demand that the Airport's fleet composition has on the facility, an operations mix analysis was completed. The OPSNET Airport Traffic Counts attribute the airport operations to individual itinerant and local aircraft classifications. These classifications include:

- Itinerant
  - » Air Taxi
  - » General Aviation
  - » Military
- Local
  - » Civil (General Aviation)
  - » Military

The percentage of operations that each classification composes of the annual totals was calculated for each year that the ATCT has been in service to create ratios for each classification for each year. The ratios for each classification were assumed to apply to all operations regardless of ATCT status. The resultant ratios were applied to the historical operations estimates described above. The results of the exercise are summarized in **Table 2-9**.

TABLE 2-9: ANNUAL OPERATIONS FLEET MIX (HISTORICAL)

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

Source: Century West Engineering developed using FAA OPSNET Data

The OPSNET Airport Traffic Count data only differentiate local and itinerant traffic for GA aircraft. Understanding the demand placed on the Airport by different sizes and types of aircraft is also important. A review of Traffic Flow Management System Counts (TFMSC) data illustrates an evolving fleet mix at the airport over the previous six-year period. Aircraft activity is primarily categorized by aircraft size (wingspan and tail height) and approach speed (during landing). The two characteristics are combined to create an "Airport Reference Code" (ARC). **Table 2-10** depicts aircraft ranging from small single-engine piston aircraft to large transport category jets. In general, larger and faster aircraft require larger operating surfaces and protected areas. The current and future ARC for Aurora State Airport will be determined following FAA approval of the aviation activity forecasts, specifically approval of the design aircraft is completed. The design aircraft represents the most demanding aircraft type that generates at least 500 annual operations.

TABLE 2-10: AIRPORT REFERENCE CODE (ARC)

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

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

Beech Baron 55
Beech Bonanza
Cessna 182
Piper Archer

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

Beech Baron 58
Beech King Air C90
Cessna 402
Cessna 421

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

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

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

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

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

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

C-I, D-I

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

C-II, D-II

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

C-III, D-III

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

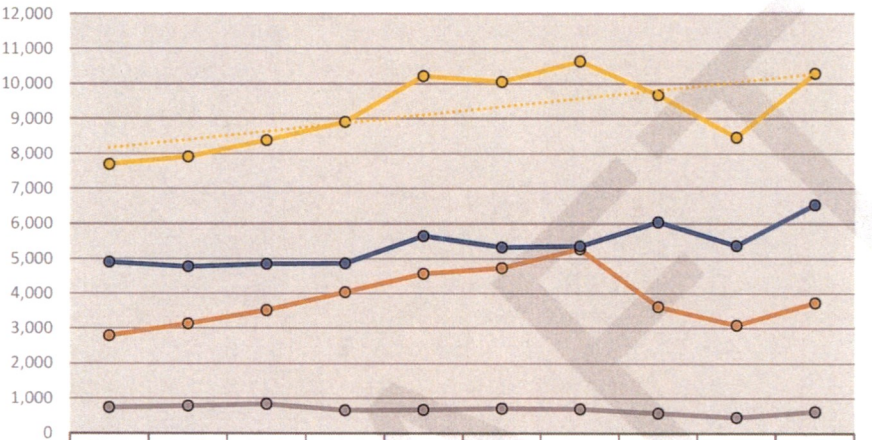
C-IV, D-IV

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

Source: Century West Engineering

As shown in **Figure 2-3**, while total operations are trending upward, operations by aircraft smaller than ARC B-I have declined significantly over the past three years, causing a decrease in total operations over the same period. At the same time operations by ARC B-I and larger aircraft have remained steady or increased slightly. This may indicate that the activity at the Airport, previously driven by single-engine piston aircraft, is evolving toward an environment driven increasingly by larger aircraft such as multi-engine piston, turboprops, and jets. This observation is further supported by fuel flowage data presented in **Table 2-11** below. Over the six years of available data, and accounting for decreased activity in 2020 due to the impacts of COVID-19, aviation gasoline (AVGAS) flowage has shown a decreasing trend while jet fuel flowage has increased.

FIGURE 2-3: TFMSC IFR OPERATIONS DATA



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	7,700	7,908	8,378	8,904	10,214	10,054	10,632	9,664	8,462	10,284
Smaller than B-I Aircraft	2,796	3,138	3,524	4,040	4,568	4,728	5,278	3,618	3,092	3,736
B-I and Larger Aircraft	4,904	4,770	4,854	4,864	5,646	5,326	5,354	6,046	5,370	6,548
Total C and D Aircraft	738	780	838	656	668	712	698	578	454	622

Source: Century West Engineering developed using FAA TFMSC Data

TABLE 2-11: AURORA STATE AIRPORT FUEL FLOWAGE

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

Source: Oregon Department of Aviation

APPLICABLE PLANNING STUDIES/DOCUMENTS

This section summarizes existing planning documents, federal advisory documents and background information directly related to the Aurora State Airport and the Aurora State Airport Master Plan. The documents in this section were utilized by Century West Engineering and the ODAV to support the production of the Aurora State Airport Master Plan. The documents included in this section represent the most comprehensive information related to the Aurora State Airport Master Plan that were available to the ODAV at the time of publication.

FAA Advisory Circulars

The FAA publishes a series of documents known as Advisory Circulars (AC) aimed at providing guidance to airports, airport users, and consultants for compliance with Code of Federal Regulations (CFR) pertaining to a variety of operational, engineering, and planning issues. While not an exhaustive list, the following ACs are commonly referenced during the airport master planning process. Additional ACs may be introduced and referenced as the plan develops.

- *AC 150/5070-6B, Airport Master Plans* – Provides guidance for the preparation of airport master plans that range in size and function from small general aviation to large commercial service facilities
- *AC 150/5300-13A, Airport Design* – Contains the Federal Aviation Administration's (FAA) standards and recommendations for the geometric layout and engineering design of runways, taxiways, aprons, and other facilities at civil airports
- *AC 150/5060-5, Airport Capacity and Delay* – Explains how to compute airport capacity and aircraft delay for airport planning and design
- *AC 150/5325-4B, Runway Length Requirements for Airport Design* – Provides guidelines for airport designers and planners to determine recommended runway lengths for new runways or extensions to existing runways

Marion County Comprehensive Plan

The Marion County Comprehensive Plan was developed for the purpose of providing a guide to development and conservation of Marion County's land resources. It is a long-range policy and land use guide that provides the basis for decisions on the physical, social, and economic development of Marion County. The Marion County Comprehensive Plan incorporates elements and policies of other Marion County planning documents through a formal process.

The following policies were identified in the Goals and Policies section of the Marion County Comprehensive Plan to address airports in the County[5]:

- *"Airports and airstrips shall be located in areas that are safe for air operations and should be compatible with surrounding uses."*
- *"The County should review and take appropriate actions to adopt State master plans for public airports in Marion County."*
- *"The County will adopt appropriate provisions (including plans, ordinances and intergovernmental agreements) to protect the public airports from incompatible structures and uses. These provisions will be consistent with Federal Aviation Administration guidelines."*
- *"The County will discourage noise-sensitive uses from locating in close proximity to public airports."*

Marion County Rural Transportation System Plan

Marion County completed the *Rural Transportation System Plan* (RTSP) in 2005 with the intent of "providing framework for developing an efficient, well-balanced, and cost-effective transportation system for the next 20 years".[6] The RTSP addresses rural transportation facilities managed by Marion County outside of Urban Growth Boundaries (UGB). Transportation planning topics for areas within UGBs are addressed in individual city transportation system plans (E.g. City of Aurora Transportation System Plan). The RTSP has been formally adopted into the Marion County Comprehensive Plan.

5 Marion County Comprehensive Plan, pg. 58
6 Marion County RTSP Page 2-1

The RTSP lists Aurora State Airport among the County's 25 airports and heliports (as of 2005), and references the projects outlined in the 1999 Aurora State Master Plan, most of which have been completed since the plan was developed. The RTSP states that the County intended to adopt the 2005 update to the Aurora State Airport Master Plan after review to ensure compatibility with County land use and zoning requirements.[7]

City of Aurora Transportation System Plan

The City of Aurora developed its 2009 Transportation System Plan (TSP) to establish the City's goals, policies, and strategies to improve the transportation system within its UGB. The primary objective of the TSP is to "... enhance the general mobility throughout the City and offer guidance on multi-modal transportation decisions over the coming decades".[8]

While Aurora State Airport is not located within the Aurora UGB, its proximity to the city and its impact on residents warranted its inclusion in the plan. The following excerpt from the plan lays out the recommendations concerning the Airport.

> *"...For planning purposes, the City needs to continue to work with the Aurora State Airport and ODAV to help maintain and improve roadway access to and from the airport, as well as understand and address the effects of increased traffic flow on Airport and Ehlen Roads caused by airport growth. The increased growth will likely impact operations at intersections under the jurisdiction of the City, County, and ODOT. Mitigation for these impacts may be required in the future to ensure safety and efficient traffic operations."*[9]

Oregon Aviation Plan

In 2019, ODAV completed an update to the *Oregon Aviation Plan* (OAP v6.0) for the state airport system which includes 95 airports, one heliport, and one seaplane base. The study area was statewide and considered both commercial service and general aviation airports.

Each airport's level generally reflects the type of aircraft and customers the airport serves as well as the characteristics of the airport's service area. In the OAP update, Aurora State Airport is classified as Category II – Urban General Aviation Airport.

As a Category II airport, the OAP has identified certain facilities and services that should ideally be in place. These objectives are considered the "minimums" to which the airport should be developed. At this time Aurora State Airport meets all of the listed requirements with the exception of a precision instrument approach.

As part of the OAP update, annual economic impacts for 97 statewide airports were also estimated. General aviation operations at Aurora State Airport accounted for an estimated 2,672 direct, indirect, and induced jobs, which contribute over $125 million in payroll. Airport businesses are estimated to generate nearly $510 million in sales revenue/output annually.[10]

Oregon Resilience Plan

The Oregon Resilience Plan was completed in 2013, and provides analysis of key challenges, including the potential impact on Oregon's infrastructure and outlines a basic strategy for post disaster response coordination following a significant Cascadia seismic event. The overall expectation is that critical infrastructure components in coastal and western areas of the affected states will suffer complete loss or significant damage during a major event. The ability to respond will require coordinated use of assets outside the areas of damage. The plan identifies 29 airports throughout the state arranged into a three-tier system to indicate the priorities for making future investments:

- Tier 1 (T1) is comprised of the essential airports that will allow access to major population centers and areas considered vital for both rescue operations and economic restoration;
- Tier 2 (T2) is a larger network of airports that provide access to most rural areas and will be needed to restore major commercial operations; and
- Tier 3 (T3) airports will provide economic and commercial restoration to the entire region after a Cascadia subduction zone event.

7 Marion County RTSP, pg. 2-7
8 Aurora Transportation System Plan, pg. 1-1
9 City of Aurora Transportation System Plan, pg. 3-21
10 OAP v6.0, Chapter 8, Tables 8-3, 8-4, 8-5

Aurora State Airport is classified as a T3 airport. As a T3 airport the plan sets goals for reaching recovery milestones after an event. For Aurora, those goals are:

- To restore a Minimal level of recovery within 1-3 days: Restore essential services primarily for use of first responders, repair crews, and vehicles transporting critical supplies;
- To restore a Functional level of recovery within 1-3 months: Although service is not yet restored to full capacity, it is sufficient to get the economy moving again—e.g. some truck/freight traffic can be accommodated. There may be fewer lanes in use, some weight restrictions, and lower speed limits; and
- To restore an Operational level of recovery within 6-12 months: Restoration is up to 90% of capacity: A full level of service has been restored and is sufficient to allow people to commute to school and to work.

The study also modeled the potential impacts of a Cascadia magnitude 9.0 earthquake on the region using models from the United States Geological Survey (USGS) to simulate strong shaking that is likely to occur in such an event. The resulting simulated shaking map was then used to estimate the amount of ground failure due to liquefaction and landsliding that would occur. Liquefaction susceptibility values were assigned and then categorized into Low, Moderate, and High susceptibility categories. The results of the model scenario are publicly available via the Oregon Department of Geology and Mineral Industries (DOGAMI) Oregon HazVu: Statewide Geohazards Viewer website (https://gis.dogami.oregon.gov/maps/hazvu/). The HazVu viewer shows that the southern half of the airfield is classified as a Moderate hazard area and the north half is classified as a High hazard area.

2012 Aurora State Airport Master Plan Update

The validity of the AMPU (Aurora Master Plan Update, 2012) was recently questioned as part of a petition for review made to the Oregon Land Use Board of Appeals (LUBA). In that land use action, the petitioners sought review of a 2019 Oregon Aviation Board (OAB) Decision made pursuant to OAR 138-103-0055 in which the Board found that the AMPU was compatible with the Marion County Comprehensive Plan. Petitioners also filed in state Circuit Court as a precautionary measure in the event LUBA dismissed the matter for lack of jurisdiction. LUBA did conclude that it lacked jurisdiction to hear this matter, but was overturned on appeal on that issue. Following the instructions of the Court of Appeals, LUBA found that it did have jurisdiction and remanded the decision back to OAB, finding that it could not review the matter until certain records from the 2012 adoption process were provide to LUBA. The circuit court cases remain pending but are expected be dismissed or otherwise resolved consistent with LUBA's order of remand.

2019 Constrained Operations Runway Justification Study

In 2019, the ODAV completed a study to review the runway length requirements and activity at Aurora State Airport to consider if the eligibility threshold for a runway extension has been met. A constrained operations Airport user survey was distributed as part of this study. The survey identified 645 constrained annual operations from a variety of aircraft and aircraft operators. Additional analysis of TFMSC data and the airport user surveys indicated in excess of 500 annual operations by aircraft to/from destinations beyond 1,000 nm of Aurora State Airport. The study concluded that a runway length of 7,888 feet was justified by FAA methodologies (AC 150/5325-4B). However, consultants recommended a future runway length of 6,002 feet as it was identified in the 2012 Airport Master Plan and depicted on the ALP.

ENVIRONMENTAL DATA

Aurora has a warm-summer Mediterranean climate as classified by the Köppen climate classification system. The climate is characterized by cool, rainy winters, and warm, dry summers. The fall, winter, and spring seasons often have overcast, wet, and changing conditions, while the summers are warm and dry.

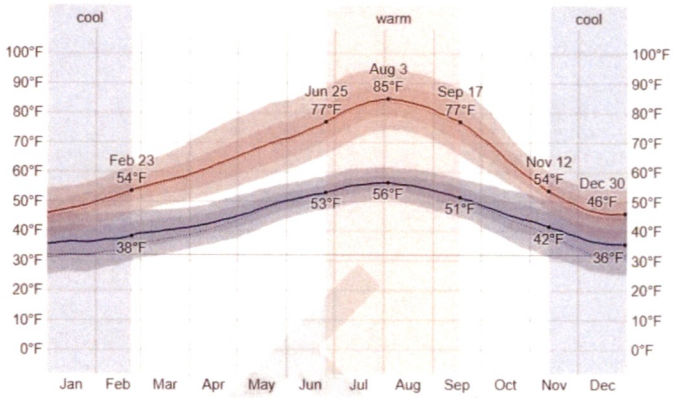
Average daily temperatures in Aurora range from a low of 40 degrees in December to a high of 68 degrees in July and August. The maximum average high temperature of the hottest month is 83 degrees in August, and the minimum average low temperature of the coldest month is 36 degrees in January and December. Annual temperature data are presented in **Figure 2-4**.

Precipitation at the Airport varies significantly throughout the year, as shown in **Figure 2-5**. The wet season lasts approximately seven months from mid-October to early-May. Inversely the dry season last approximately five months from early-May to mid-October. The airport receives an average of 52.3 inches of rainfall annually. The wettest month is December with an average of 8.7 inches; the driest month is July with an average of 0.5 inches of precipitation.

Sky conditions at the Airport, shown in **Figure 2-6**, vary significantly by season and are consistent with precipitation distributions. In general, the Airport experiences more instrument meteorological conditions (IMC) during the wetter months. The wetter, cloudy season generally begins in October and runs into early summer. The summer months are predominately partly cloudy, mostly clear, or clear—conditions that correspond to visual meteorological conditions (VMC).

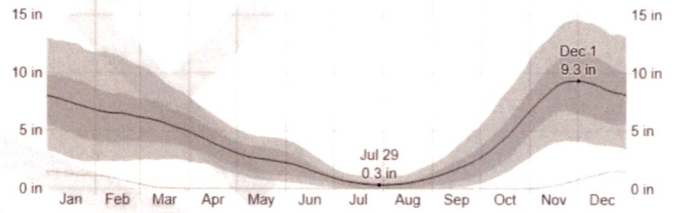
Wind data for the Airport indicates that prevailing wind directions vary by season. Spring and summer are characterized by north and west winds, while the fall and winter months observe winds from the south and east. See **Figure 2-7**. The FAA wind analysis computer program (Airport Data and Information Portal - Windrose Generator) confirms that the existing orientation of Runway 17/35 satisfies the FAA's minimum threshold of 95% crosswind coverage for all categories of aircraft.

FIGURE 2-4: ANNUAL TEMPERATURES



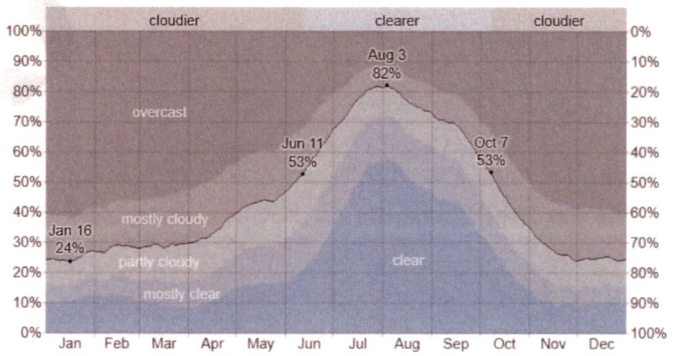
Source: www.weatherspark.com

FIGURE 2-5: ANNUAL RAINFALL



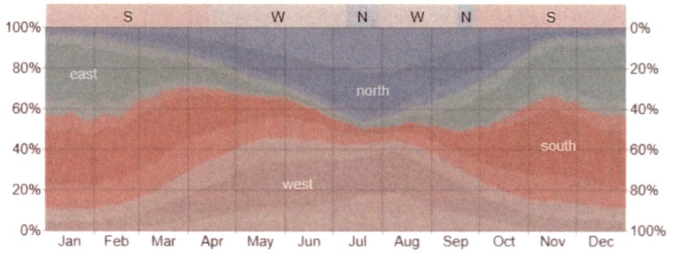
Source: www.weatherspark.com

FIGURE 2-6: ANNUAL CLOUD COVER



Source: www.weatherspark.com

FIGURE 2-7: ANNUAL WIND DATA



Source: www.weatherspark.com

ENVIRONMENTAL SCREENING/NEPA CATEGORIES

An environmental screening for the following environmental impact categories were included as part of the Airport Master Plan.

- Air Quality;
- Biological Resources (including fish, wildlife, and plants);
- Department of Transportation Act, Section 4(f);
- Hazardous Materials, Solid Waste, and Pollution Prevention;
- Natural Resources and Energy Supply;
- Visual Effects; and
- Water Resources (including wetlands, floodplains, surface waters, water quality, stormwater, groundwater, and wild and scenic rivers).

A summary of significant findings is below. The full environmental screening report is provided in **Appendix 2.**

Air Quality

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

Biological Resources

A review of available data yielded no records of species observed on the Airport listed by state, or federally as endangered or threatened, nor were any species listed as candidates for listing reported. However, the Molalla River (three miles northeast of the Airport), the Pudding River (0.85 mile east of the Airport), and Mill Creek (0.75 mile southeast of the Airport) are designated as habitat for Chinook salmon (federally threatened; state classified sensitive critical), Pacific lamprey (federal species of concern; state classified sensitive vulnerable), and steelhead (federally threatened; state classified sensitive vulnerable) based on records of historic sightings.

There are no designated critical habitats on the Airport property. However, sub-watersheds surrounding the Airport are considered Essential Fish Habitat (EFH) for Chinook and coho salmon. Federal agencies are required to consult with the National Oceanic and Atmospheric Administration (NOAA) Fisheries regarding any action authorized, funded, or undertaken that may adversely affect EFH. Stormwater runoff from the Airport property flows into the Chinook and steelhead critical habitat areas as well as the Chinook and coho EFH areas.

Hazardous Materials, Solid Waste and Pollution Prevention

An EPA hazardous waste treatment, storage, and disposal facility (TSDF) was reported at Columbia Helicopters Inc., adjacent to the Airport's northeast property boundary. This TSDF is recorded as addressing the handling and prevention of releases of hazardous materials into the environment from wastes generated on site at the property, as well as wastes received from off-site facilities. In addition to this TSDF, Columbia Helicopters Inc. also holds a National Pollutant Discharge Elimination System (NPDES) permit for water discharges and is identified by the EPA Cleanups in My Community Map as having been a Resource Conservation and Recovery Act (RCRA) corrective action site. Aurora State Airport also holds an NPDES permit (also referred to in Oregon as a 1200-Z Stormwater Discharge General Permit), as do 12 other properties within 12 miles of the Airport.

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

Natural Resources and Energy Supply

A Water Control District has been formed at the Airport to provide water for fire protection for properties at the Airport. Two wells are located on Airport property, in addition to a pumphouse and underground water storage tanks that provide water to fire hydrants across the Airport property.

Water testing has revealed the presence of arsenic above the maximum contamination level set by the EPA in wells located on and surrounding the Airport property. Mitigation measures in the form of pump and filtration systems were recommended to be implemented to provide adequate flow and water quality.

Water Resources

Wetlands

Several non-jurisdictional wetlands have been identified on Airport property. These wetlands were products of man-made drainage swales that are located in historic uplands with non-hydric soils. According to Oregon Department of State Lands Rule 141-085-0515 Removal-Fill Jurisdiction by Type of Water, these swales with wetland hydrology, vegetation, and soils are not considered waters of the state because they are artificially created for the purposes of stormwater detention and/or treatment.

Floodplains

The Airport property lies in a FEMA Zone X, which is considered an area of minimal flood hazard. The Airport is located outside of the 500-year floodplain. The closest 100-year floodplain is located approximately 0.55 miles east of the Airport and is associated with the Pudding River.

Water Quality

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

- A segment of the Pudding River east of the Airport is on the 303(d) list of impaired waterways for guthion, water temperatures, and dieldrin. It is impaired for fish and aquatic life, fishing, and public and private domestic water supplies.
- The entire Mill Creek-Pudding River sub-watershed (1st–4th order streams) is listed on the 303(d) list for benthic macroinvertebrates bioassessments and inorganic arsenic. It is considered impaired habitat for fish and aquatic life, fishing, public and private domestic water supplies, and recreational contact with the water.
- A segment of the Molalla River that intersects the Pudding River east of the Airport is not a 303(d)-listed waterway but is listed by the EPA's "How's My Waterway" tool as impaired for fishing due to flow regime modification.
- The segment of the Willamette River that the Molalla River flows into north of the Airport is also a 303(d)-listed waterway. It is listed for the following factors: noxious aquatic plants, aldrin, benthic macroinvertebrates bioassessments, temperatures, 4,4'-DDE, 4,4'DDT, dieldrin, and PCBs. It is considered impaired for aesthetic quality, boating, fish and aquatic life, fishing, and public and private domestic water supply.

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

LOCAL SURFACE TRANSPORTATION

The Airport is located between Interstate 5 and State Highway 99E. Interstate 5, which is an essential north-south commerce link for the western United States, runs west of the Airport providing access to the Portland metro area. Access to the Airport is also provided by Highway 551 (Canby-Hubbard Highway) from the north and south, Arndt Road from the east and west, and Airport Road from Aurora. Keil Road is located south of the Airport and provides additional airport business access from Highway 551 and Airport Road. State Highway 99E, accessible to the Airport via Ehlen Road off of Highway 551 and Airport Road, provides access to the nearby communities of Canby, and Oregon City.

AREA LAND USE/ZONING

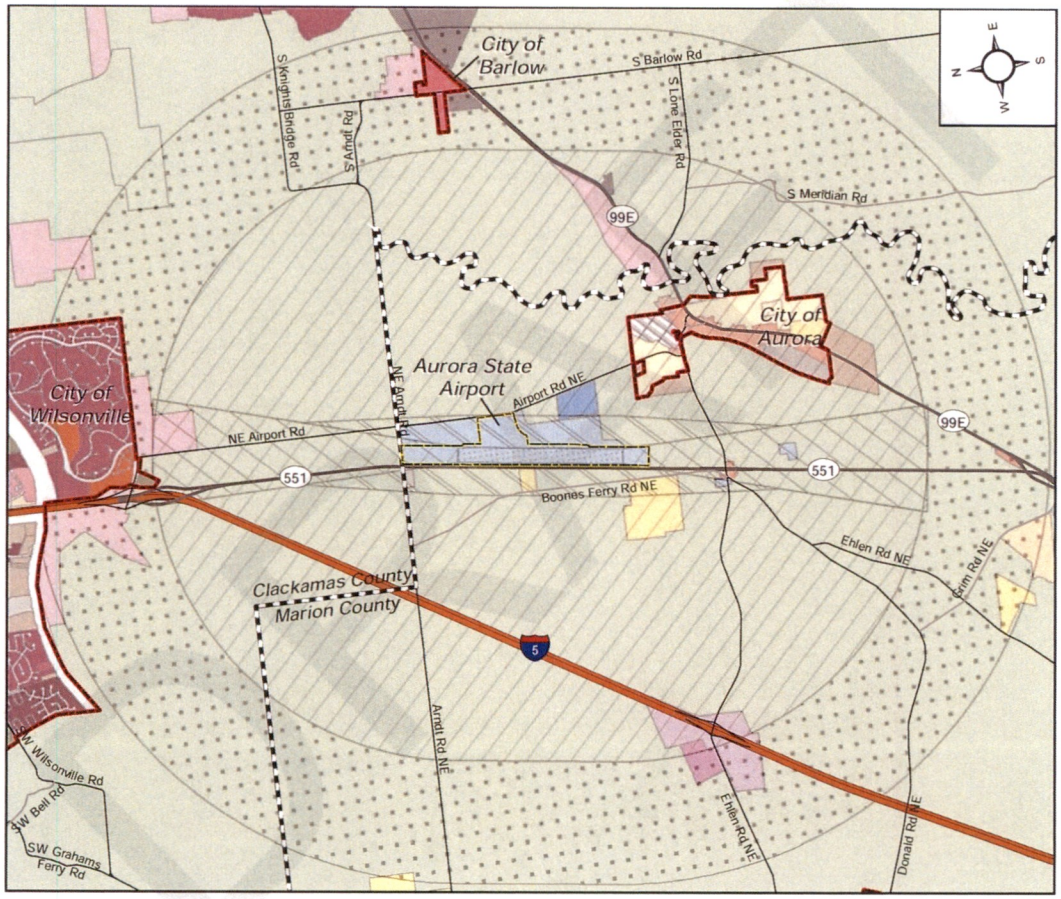
Aurora State Airport is located outside of the Aurora UGB. Land use actions related to the airport property and its immediate surroundings are under the exclusive jurisdiction of Marion County. The applicable zoning ordinance articles associated with the Airport are summarized below and provided in full in **Appendix 3**.

The Airport's FAR Part 77 airspace extends over areas of Marion and Clackamas County, and the City of Aurora. Each of these jurisdictions is responsible for protecting the areas of airport airspace that fall within their boundaries, and each employs overlay zoning districts as a mechanism to do so. The overlay districts are discussed in more detail below. The zoning around the airport property is shown in **Figure 2-8**.

Existing Airport Base Zone

The existing airport property is zoned as **Public (P)** as defined in Marion County Code 17.171. The intent of the P zone is "to provide regulations governing the development of lands appropriate for specific public and semi-public uses and to ensure their compatibility with adjacent uses." Airports are regulated by Chapter 17.171, Section 030 - Conditional Uses, which states that "Airport and airport related commercial and industrial uses" are authorized under the procedure provided for conditional uses and are permitted in the P zone.

FIGURE 2-8: ZONING MAP



Marion County Zoning[1]		Clackamas County and City of Wilsonville Zoning[2]			City of Aurora Zoning[3]	FAR Part 77 Overlay[4]
AR	ID-LU	CN	PF	SFR3	C	Primary Surface
C	P	EFU	RI	SFR5	FH	Appproach Surface
EFU	P-LU	FUD	RRFU	SFR7	I	Transitional Surface
I	RS	IC	SFR10		R1	Horizontal Surface
ID	UT-20	MFR1	SFR2		R2	Conical Surface

Note: The Cities of Wilsonville and Barlow have not adopted overlay zoning districts to protect FAR Part 77 airspace surfaces. The conical surface over these jurisdictions has been excluded.

Compiled by Century West Engineering from the following data sources:

[1] Marion County GIS Open Data (https://marioncounty.maps.arcgis.com)
[2] Metro RLIS Discovery (https://rlisdiscovery.oregonmetro.gov)
[3] City of Aurora Planning (https://www.ci.aurora.or.us/planning/page/zoning-maps)

Airport Vicinity Zoning/Land Use

The Airport is generally surrounded by Marion County **Exclusive Farm Use (EFU)** districts, and a few parcels of **Acreage Residential (AR)** and **Industrial (I)** located in the immediate vicinity of the property.

The intent of the EFU zone (Marion County Code 17.136) is to provide and preserve the continued practice of commercial agriculture. It is intended to be applied in areas composed of tracts that are predominantly high-value farm soils. EFU zone generally prohibits the construction, use, or design of buildings and structures except for facilities used in agricultural or forestry operations, replacing or restoring a lawfully established dwellings, supporting exploration of geothermal or mineral resources, or supporting agri-tourism destinations and events. EFU zone also permits the construction of public roads, establishment or enhancement of wetlands, and the operation of composting facilities.

The AR zone (Marion County Code 17.128) facilitates the division and development of property suitable for development of acreage homesites. Allowed uses include single-family dwellings, agricultural development, planned developments, public parks and recreation facilities, religious organization use (less than 20,000 square feet in area), or replacement of an existing lawfully established dwelling.

The I zone (Marion County Code 17.165) is intended to provide for the location of needed industrial uses which are not dependent upon urban services. The I zone encourages orderly and compatible development of industrial uses, including agricultural related industry, on rural lands. Permitted uses include agricultural services and forestry; contracting and service facilities; the processing and manufacture of various commercial products; coal and wood fuel dealers; fire stations, utility facilities, and dwellings intended for facility caretakers.

The closest City of Aurora zoning district to the airport is an area of **Low Density Residential (R-1)** located approximately one-third of a mile southeast of the property.

The LDR zone (Aurora Municipal Code 16.10) is intended to provide a minimum standard for residential uses in areas of low population density. The municipal code allows LDR zoned areas to be used for single-family dwellings, public support facilities, childcare facilities, residential home care, public parks and recreation areas, two-family dwellings, city-owned structures, accessory buildings including accessory dwelling units (ADU), and some agricultural buildings.

Marion County, Clackamas County, and the City of Aurora have adopted airport overlay zoning districts intended to enhance the protection of airport airspace, and compatible land use planning. The City of Wilsonville has not adopted an overlay zoning district.

The airport overlay zones based on FAR Part 77 imaginary surfaces, applicable within each jurisdictional boundary, are included in the following codes:

- Marion County Code (Chapter 17.177)
- Clackamas County Code (Chapter 713)
- City of Aurora Municipal Code (Chapter 16.24)

The language contained in the zoning codes addresses permitted and conditional uses within each of the designated overlay zones to address land use compatibilities and height restrictions intended to protect aircraft operating in the airspace, as well as persons and property on the ground. **Figure 2-8**, presented earlier, depicts the overlay zones based on FAR Part 77 imaginary surfaces established for Aurora State Airport.

The Oregon Department of Aviation Land Use Compatibility Guidebook recommends guidance for determining land use compatibility with overlaying FAR Part 77 surfaces. The guidance suggests that areas of residential land use should not be located under primary, approach, or transitional surfaces. At Aurora State Airport, two areas of residential property are located beneath the west transitional surface and another area of residential use is located south of the Willamette River near the end of the Runway 17 approach surface. Additionally, while the above discussed Public zone lists airports as a conditional use for the zone, the Land Use Compatibility Guidebook recommends establishing an airport-specific zone for airport properties.

Airside Elements

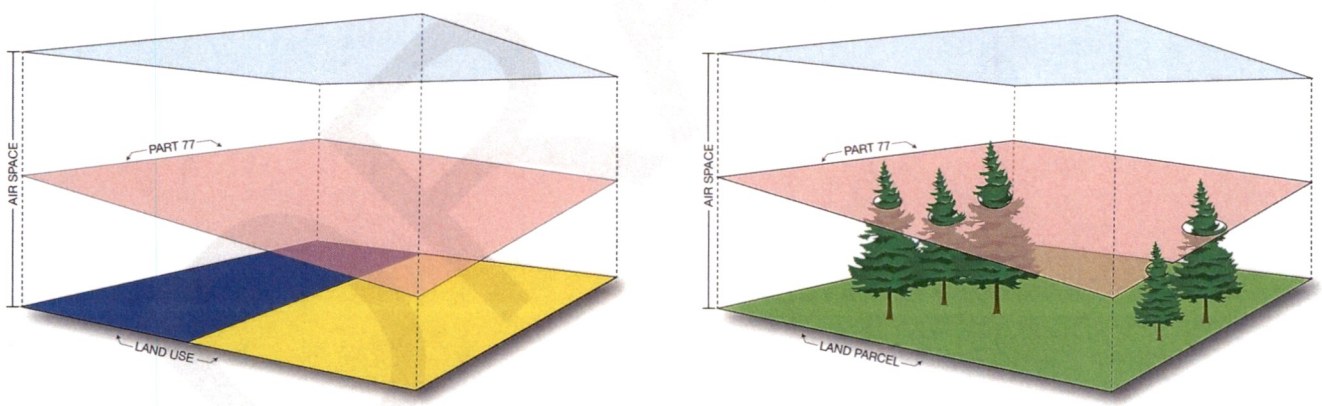
The Airside Elements (depicted in the existing conditions **Figure 2-12**) section is comprised of the facilities that facilitate the movement and operation of aircraft on the ground and in the air around Aurora State Airport. This section of the existing conditions analysis includes a discussion of the area airspace, instrument flight procedures, runways, taxiways/taxilanes, aprons/tiedowns/aircraft parking, airfield pavement condition, and airside support facilities.

AIRSPACE – FAR PART 77, TERPS, AND RUNWAY END SITING SURFACES

In addition to the airspace classifications and operating environment with which pilots are more familiar with there are a variety of rules, regulations, design standards, and policies associated with the protection of airspace, evaluation of proposed objects on and near airports, and their effects on navigable airspace. Airport Cooperative Research Program (ACRP) Report 38 - *Understanding Airspace, Objects, and Their Effects on Airports* provides a comprehensive description of the regulations, standards, evaluation criteria, and processes designed to protect the airspace environments surrounding airports and is summarized below for additional context of airspace evaluation and design to serve Aurora State Airport.

FAR Part 77 – Object Affecting Navigable Airspace

Federal Air Regulation (FAR) Part 77.19 defines airspace surfaces for civil airports and establishes the central regulation governing airspace protection, with cross-references to many other criteria documents. It sets forth the requirements for notifying the FAA of proposed construction; defines obstruction criteria; and describes aeronautical studies required to assess hazard status. The FAR Part 77 surfaces associated with Aurora State Airport have been codified by the local jurisdictions through airport overlay zones discussed above. **Figure 2-9** depicts the existing FAR Part 77 airspace defined for Runway 17/35 at Aurora State Airport. The graphics below illustrate the relationship between an invisible airspace surface (these surfaces are also referred to as "imaginary" surfaces) defined in Part 77 and the underlying land use and objects.



Source: Century West Engineering

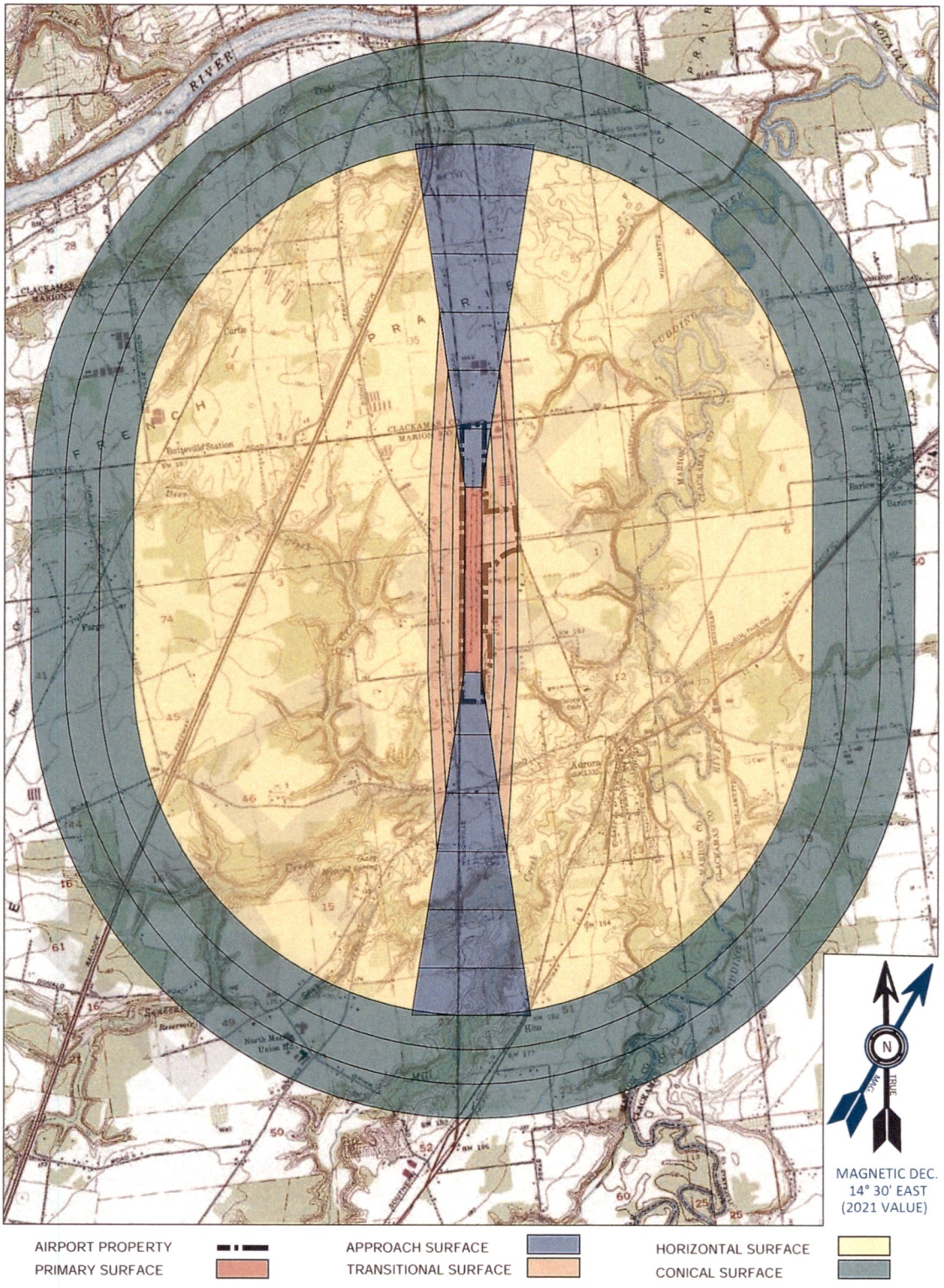
FAA Order 8260.3E – United States Standard for Terminal Instrument Procedures (TERPS)

This FAA Order, along with several derivative orders in the 8260 series and other related orders, define criteria that FAA flight procedure designers utilize when designing instrument flight procedures. Airspace protection requirements for instrument flight procedures are similar to those defined in FAR Part 77, although they also define protected airspace requirements for instrument approach and departure routes connecting the terminal and enroute airspace. Obstruction mitigation (obstacles to protected airspace) defined in FAA aeronautical studies may be required for TERPS surfaces, in addition FAR Part 77 surfaces.

FAA AC 150/5300-13A – Airport Design

This Advisory Circular (AC) is the principal document utilized by the FAA, airport sponsors, and consultants when planning and designing new airports or modifications to airports. Airspace clearances for key runway end features are defined in the AC's discussion of Runway End Siting Surfaces.

FIGURE 2-9: FAR PART 77 AIRSPACE



For Aurora State Airport, the approach surfaces for the runway extend 10,000 feet beyond each runway (beginning 200 beyond the runway end).

Source: Century West Engineering

AIRSPACE CLASSIFICATIONS (Figure 2-10)

Airspace within the United States is classified by the FAA as "controlled" or "uncontrolled" with altitudes extending from the surface upward to 60,000 feet above mean sea level (MSL). Controlled airspace classifications include Class A, B, C, D, and E. Class G airspace is uncontrolled. Aircraft operating within controlled airspace are subject to varying levels of positive air traffic control that are unique to each airspace classification. Requirements to operate within controlled airspace vary, with the most stringent requirements associated with very large commercial airports in high traffic areas. Uncontrolled airspace is typically found in remote areas or is limited to a 700 or 1,200-foot AGL layer above the surface and below controlled airspace.

LOCAL AREA AIRSPACE STRUCTURE (Figure 2-11)

The Seattle Sectional Aeronautical Chart depicts nearby airports, notable obstructions, and special airspace designations in the vicinity of Aurora State Airport. Low-altitude instrument airways are also depicted for general reference because pilots use them for both visual and instrument flight planning. The blue airways are identified as "Victor" or Area Navigation ("T routes") airways.

Additional definition of the low altitude airways is provided on FAA IFR Enroute Low Altitude – U.S. Chart L-1.[11] The chart is used exclusively for instrument flight planning and provides additional detail for pilots. As is common in busy air traffic areas, Aurora State Airport is surrounded by low altitude instrument airways in all directions. However, the minimum flight altitudes assigned to the nearby airway segments are well above the traffic pattern altitude (1,200 feet above mean sea level; 1,000 feet above ground level) for the Airport, which avoids operational conflicts between local and enroute air traffic. The proximity of several instrument airways, combined with VFR activity generated by nearby airports causes overflights from aircraft not departing or arriving at Aurora State Airport.

The nearest low altitude enroute airways to Aurora State Airport pass along the west and south sides of the Airport. These airways connect to ground-based electronic navigational aids (very high frequency (VHF) transmitters) located in Newberg, Bend, Eugene, and Battleground, Washington.

The airspace designation surrounding Aurora State Airport is dependent on the operational status of the ATCT. When the ATCT is operating, the surrounding airspace is Class D from the surface up to 2,500 feet AGL and extends outward in a four-mile radius. Aircraft operating in Class D airspace are required to establish contact with the ATCT before entering Class D airspace. When the ATCT is not operating, Class E airspace is in effect, extending from the surface upward and pilots are responsible for monitoring the assigned Common Traffic Advisory Frequency (CTAF).

Special Use Airspace

Special Use Airspace (SUA) is airspace where activities are confined due to their nature or where limitations are placed on aircraft operations that are not part of those activities. SUAs also include warning areas, military operations areas (MOA), alert areas, controlled firing areas (CFA), and national security areas (NSA).

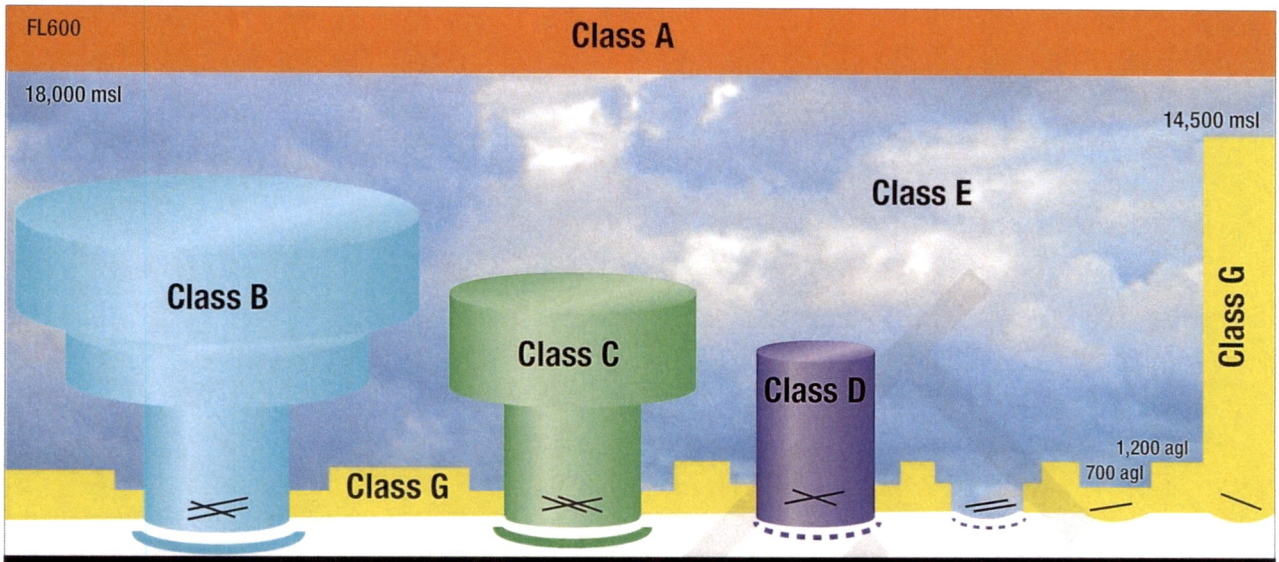
There are no SUAs in the immediate area of Aurora State Airport, with the closest example being the EEL C and EEL D MOAs located on the Oregon and Washington Coast.

Controlled and Uncontrolled Airspace

As mentioned previously, Aurora State Airport operates in controlled Class D airspace during the hours of ATCT operations. During these times pilots contact Aurora ATCT upon arrivals and departures. Outside of the hours of ATCT operations, the Airport operates as Class E airspace, at which times pilots use the CTAF for communications with ground facilities and other aircraft operating in the vicinity of the airport.

11 United States Government Flight Information Publication

FIGURE 2-10: AIRSPACE CLASSIFICATIONS



COMMUNICATION REQUIREMENTS AND WEATHER MINIMUMS

	Class A	Class B	Class C	Class D	Class E	Class G
Airspace Class Definition	Generally airspace above 18,000 feet MSL up to and including FL 600.	Generally multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports	Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control	Generally airspace from the surface to 2,500 feet AGL surrounding towered airports	Generally controlled airspace that is not Class A, Class B, Class C, or Class D	Generally uncontrolled airspace that is not Class A, Class B, Class C, Class D, or Class E
Minimum Pilot Qualifications	Instrument Rating	Student*	Student*	Student*	Student*	Student*
Entry Requirements	IFR: ATC Clearance VFR: Operations Prohibited	ATC Clearance	IFR: ATC Clearance VFR: Two-Way Communication w/ ATC	IFR: ATC Clearance VFR: Two-Way Communication w/ ATC	IFR: ATC Clearance VFR: None	None
VFR Visibility Below 10,000 msl**	N/A	3 Statute Miles	3 Statute Miles	3 Statute Miles	3 Statute Miles	Day: 1 Statute Mile Night: 3 Statute Miles
VFR Cloud Clearance Below 10,000 msl***	N/A	Clear of Clouds	500 Below 1,000 Above 2,000 Horizontal	500 Below 1,000 Above 2,000 Horizontal	500 Below 1,000 Above 2,000 Horizontal	500 Below 1,000 Above 2,000 Horizontal***
VFR Visibility 10,000 msl and Above**	N/A	3 Statute Miles	3 Statute Miles	3 Statute Miles	5 Statute Miles	5 Statute Miles
VFR Cloud Clearance 10,000 msl and Above	N/A	Clear of Clouds	500 Below 1,000 Above 2,000 Horizontal	500 Below 1,000 Above 2,000 Horizontal	1,000 Below 1,000 Above 1 Statute Mile Horizontal	1,000 Below 1,000 Above 1 Statute Mile Horizontal

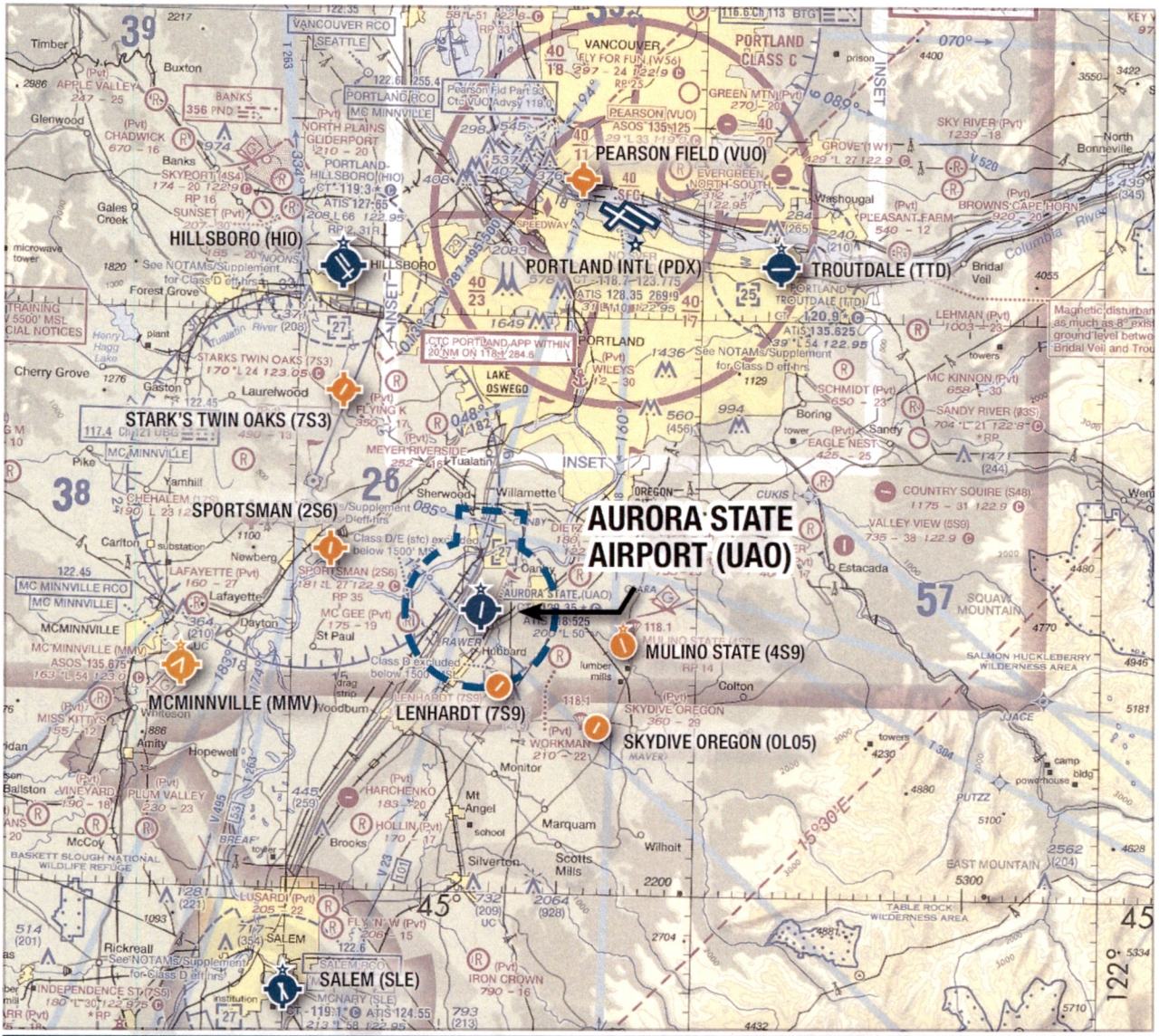
* Prior to operating within Class B, C, or D airspace (or Class E airspace with an operating control tower), student, sport, and recreational pilots must meet the applicable FAR Part 61 training and endorsement requirements. Solo student, sport, and recreational pilot operations are prohibited at those airports listed in FAR Part 91, appendix D, section 4.

** Student pilot operations require at least 3 statute miles visibility during the day and 5 statute miles visibility at night.

*** Class G VFR cloud clearance at 1,200 agl and below (day); clear of clouds.

Source: Century West Engineering

FIGURE 2-11: AREA AIRSPACE – SEATTLE SECTIONAL CHART



LEGEND			
○	Airports with other than hard-surface runways		Compass Rose (VOR/DME or VORTAC)
	Airports with hard-surfaced runways 1,500 ft. to 8,069 ft.		VOR or RNAV Airways
	Airports with hard-surfaced runways greater than 8,069 ft. or some multiple runways less than 8069 ft.		Class D Airspace (surface)
			Class E Airspace with floor 700' above surface
⬡	VOR/ VORTAC		National Wilderness Area

Source: SkyVector.com

INSTRUMENT FLIGHT PROCEDURES

Instrument approach and departure procedures are developed by the FAA using electronic navigational aids and satellite navigation (SATNAV) to guide aircraft through a series of prescribed maneuvers in and out of an airport's terminal airspace. The procedures are designed to enable continued airport operation during instrument meteorological conditions (IMC), but are also used during visual conditions, particularly in conjunction with an instrument flight plan. The capabilities of each instrument approach are defined by the technical performance of the procedure platform (ground based navigational aids or satellite navigational aids) and the presence of nearby obstructions, which may affect the cloud ceiling and visibility minimums for the approach, and the routing for both the approach and missed approach procedure segments. The aircraft approach speed and corresponding descent rate may also affect approach minimums for different types of aircraft.

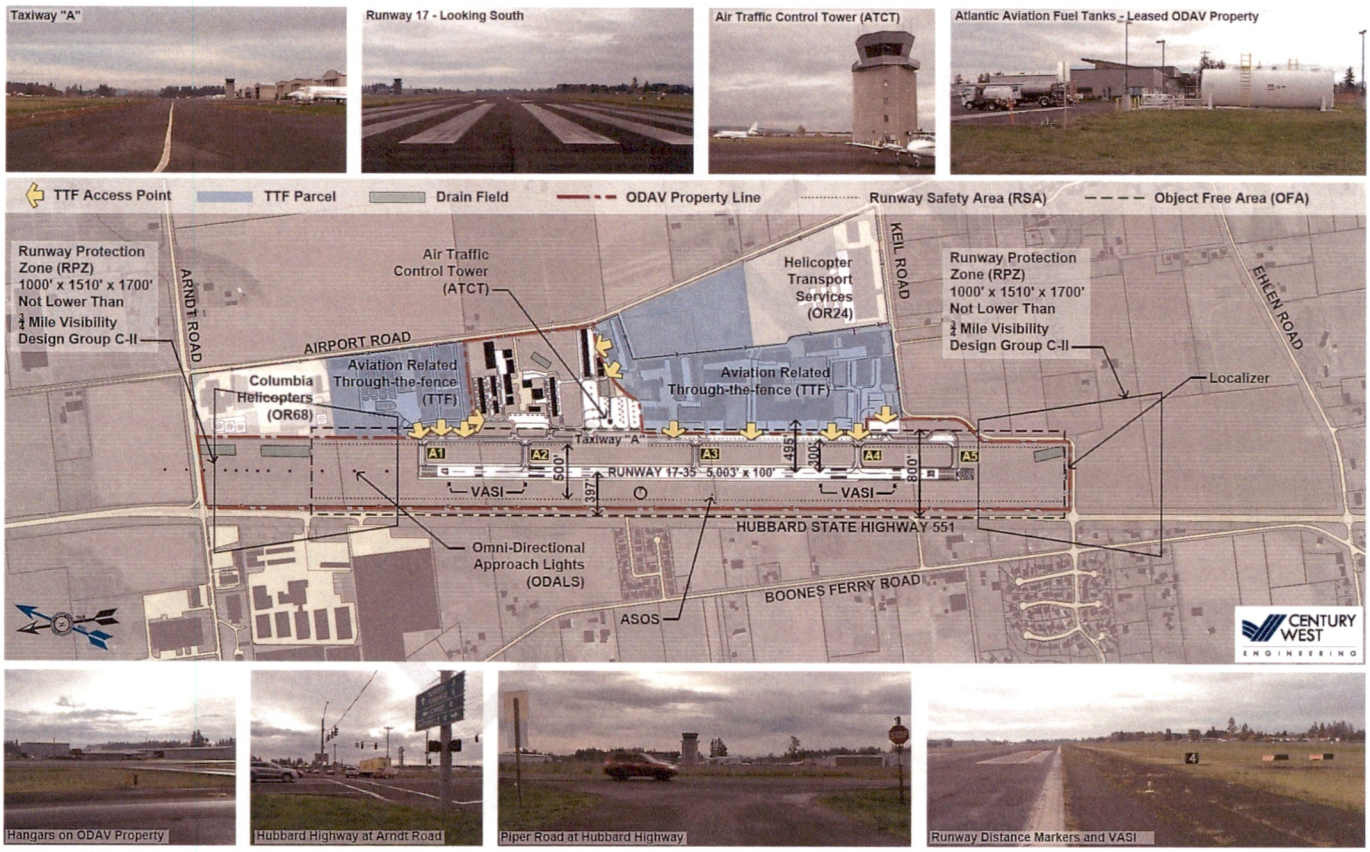
Aurora State Airport currently has three instrument approaches, two global positioning system (GPS) approaches to Runways 17 and 35, and a single localizer (LOC) approach to Runway 17. LOC RWY 17 approach presents separate minimums for approaching aircraft that are equipped to obtain a fix on FIDOV intersection. The GPS approaches provide vertical guidance to approaching aircraft. All published approach procedures provide electronic course guidance to either runway end and are authorized for category A-D aircraft (varying aircraft approach speeds) with approach minimums for both straight-in and circling procedures. Approach minimums are for each procedure are summarized in **Table 2-12** and the approach plates are provided in **Appendix 4**.

TABLE 2-12: INSTRUMENT APPROACH PROCEDURES – AURORA STATE AIRPORT

	MINIMUM ALTITUDE (MSL)	MINIMUM VISIBILITY (SM)	AIRCRAFT CATEGORY
RNAV (GPS) RWY 17			
LPV DA	511	7/8	A,B,C,D
LNAV/VNAV MDA	661	1 1/4	A,B,C,D
LNAV MDA	660	1	A,B
	660	1 1/8	C,D
Circling	700	1	A,B
	700	1 1/2	C
	940	2 1/4	D
RNAV (GPS) RWY 35			
LPV DA	453	7/8	A,B,C,D
LNAV/VNAV MDA	515	1	A,B,C,D
LNAV MDA	620	1	A,B
	620	1 1/4	C,D
Circling	700	1	A,B
	700	1 1/2	C
	940	2 1/4	D
LOC RWY 17			
S-17	1000	3/4*	A
	1000	1	B
	1000	2	C,D
Circling	1000	1	A
	1000	1 1/4	B
	1000	2 1/2	C,D
LOC RWY 17 (FIDOV FIX)			
S-17	580	3/4*	A,B
	580	1	C,D
Circling	700	1	A,B
	700	1 1/2	C
	940	2 1/4	D

Source: Federal Aviation Administration
* Visibility minimums increased to 7/8-mile via NOTAM 1/5229

There are three departure procedures published for the Airport. GLARA TWO instructs aircraft departing from Runway 17 to climb to 1,000 feet then make a climbing left turn direct to GLARA, crossing at 4,000 feet, and aircraft departing Runway 35 to climb to 700 feet then make a climbing right turn to GLARA, also crossing at 4000 feet. GNNET TWO instructs aircraft departing from Runway 17 to climb to 1,000 feet then make a climbing right turn direct to GNNET, crossing at 5,000 feet, and aircraft departing Runway 35 to climb to 700 feet then make a climbing left turn to GLARA, crossing at 5,000 feet. NEWBERG TWO directs aircraft departing from Runway 17 to climb to 1000 feet then make a climbing right turn direct to the URG VOR/ DME and aircraft departing Runway 35 to climb to 700 feet then make a climbing left turn to URG VOR/DME, then traffic from either runway should continue climb in URG VOR/DME holding pattern to cross the waypoint at or above 4,000 feet before proceeding on course. Copies of the departure procedure plates are available in **Appendix 4**.


Taxiway "A"
Runway 17 - Looking South
Air Traffic Control Tower (ATCT)
Atlantic Aviation Fuel Tanks - Leased ODAV Property
TTF Access Point
TTF Parcel
Drain Field
ODAV Property Line
Runway Safety Area (RSA)
Object Free Area (OFA)
Runway Protection Zone (RPZ) 1000' x 1510' x 1700' Not Lower Than ¾ Mile Visibility Design Group C-II
ARNDT ROAD
Air Traffic Control Tower (ATCT)
AIRPORT ROAD
Columbia Helicopters (OR68)
Aviation Related Through-the-fence (TTF)
Helicopter Transport Services (OR24)
KEIL ROAD
Runway Protection Zone (RPZ) 1000' x 1510' x 1700' Not Lower Than ¾ Mile Visibility Design Group C-II
EHLEN ROAD
Localizer
Taxiway "A"
A1
A2
A3
A4
A5
RUNWAY 17-35 5,003' x 100'
VASI
VASI
HUBBARD STATE HIGHWAY 551
Omni-Directional Approach Lights (ODALS)
BOONES FERRY ROAD
ASOS
CENTURY WEST ENGINEERING
Hangars on ODAV Property
Hubbard Highway at Arndt Road
Piper Road at Hubbard Highway
Runway Distance Markers and VASI

RUNWAY

Runway 17/35 is 5,003 feet long and 100 feet wide and is oriented in a north-south direction (187°/007° true bearing). Both runway ends employ left-hand traffic patterns with a traffic pattern altitude of 1,200 feet MSL. The runway is lighted and has a full-length parallel taxiway. The runway slopes downward from the 17 end (elevation 199.7 feet MSL) to the 35 end (elevation 196.3 feet MSL) resulting in an effective runway gradient of 0.06%.

The current runway pavement is comprised of two main sections. The largest being the 4,100-foot northern portion which was originally constructed in 1943. The southern 900 feet of the runway was constructed as an extension in 1993. The most recent runway paving work was a 2- to 3-inch asphalt overlay for the entire runway length, completed in 2005. The runway surface is grooved asphalt with a published single-wheel gear strength rating of 30,000 pounds and a dual-wheel gear strength rating of 45,000 pounds.

The runway has precision markings on each end to accommodate vertical guidance associated with the LPV[12] minimums. Precision markings include threshold bars, edge and centerline striping, aiming point markings, and touchdown zone markings, and runway designation markings. The markings were observed in good condition during a recent field visit to the facility. All markings are consistent with FAA standards.

Runway 35 Looking North – Source: Century West Engineering

TAXIWAYS AND TAXILANES

Runway 17/35 has a full length, 35-foot wide parallel taxiway (Taxiway A) that is offset 300 feet east of the runway (centerline to centerline). Taxiway A has five 90-degree connector taxiways accessing the runway (A1 – A5). The numbered taxiway connectors begin at the Runway 17 end (A1) and end at the Runway 35 end (A5). There are also 10 taxilanes branching off Taxiway A to provide access to apron and hangar areas, as well as the three defined GA development areas with landside aviation facilities at the Airport. These include:

- Northern TTF Development Area;
- ODAV Terminal Development Area near the center of the airfield; and
- Southern TTF Development Area.

Additional taxilanes are located in and around hangar areas. Taxiway A and connector taxiways are equipped with blue medium intensity edge lights and yellow markings. Taxiway pavement conditions range from "Good" to "Poor" according to the ODAV's 2018 Pavement Evaluation Program (PEP) report (**Appendix 5**). Pavement condition is discussed in more detail in the Pavement Condition section below.

APRONS AND TIEDOWNS

Within the ODAV-owned property, there is a total of 316,434 square feet of apron space available, primarily on two apron areas. The largest terminal apron area is located at the center of the property east of Taxiway A, adjacent to the ATCT and measures 143,546 square feet. A smaller aircraft parking apron is located near the northern end of ODAV landside property at Taxiway A and Taxiway A2. This apron space is used primarily by Aurora Flight Training. The remaining apron area is on the south end of the airport adjacent to Atlantic Aviation.

12 LPV = "Localizer Performance with Vertical guidance." Satellite-based instrument approach procedure

The ODAV-owned airport property has a total of 34 tiedown locations. Of the 34 tiedowns, 27 are located near the ATCT, including two configured as pull-through parking intended for large business aircraft. The remaining 25 tiedowns on the main apron are configured for small aircraft. The smaller north apron has seven tiedown locations for small aircraft. Neighboring tenants with airport TTF agreements also provide additional apron space and aircraft parking on their privately-owned land parcels.

Taxiway A Looking South – Source: Century West Engineering

Apron Looking East – Source: Century West Engineering

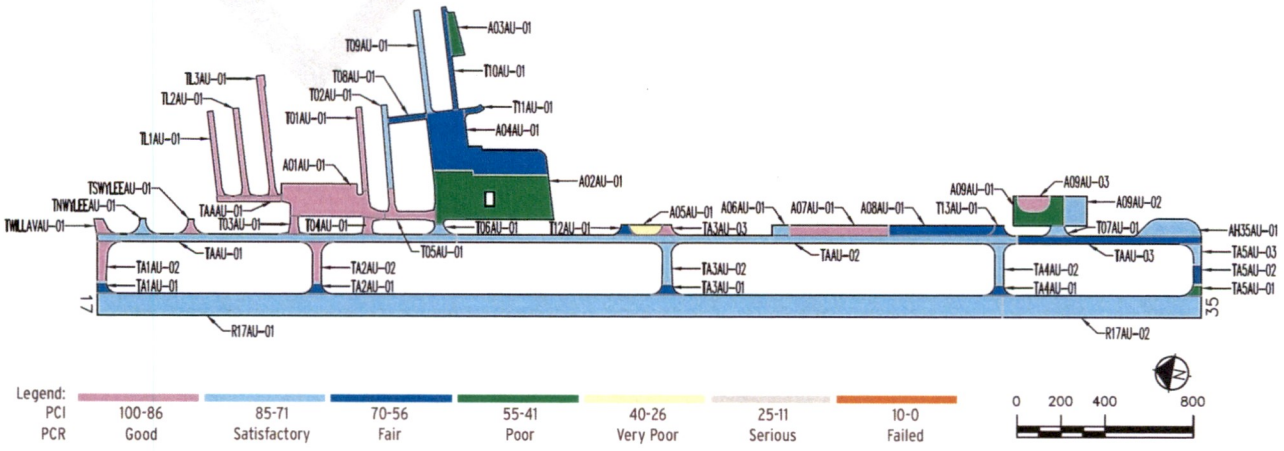
AIRFIELD PAVEMENT CONDITION

The ODAV PEP systematically evaluates surface conditions, and identifies maintenance, repair, and rehabilitation projects needed to sustain functional pavements at Oregon airports. The PEP provides each paved, public-use airport in Oregon a thorough "snapshot in time" evaluation of surface conditions and provides projections of future surface condition for all eligible pavements in terms of pavement condition index (PCI). For NPIAS airports like Aurora State Airport that receive federal funding, the PEP report is a critical tool for prioritizing airfield pavement needs and meeting FAA grant assurances.

PCI evaluations were performed as part of the PEP at Aurora State Airport in July 2018. The PEP was performed using the PCI methodology developed by the U.S. Army Corps of Engineers and outlined in the current edition of ASTM D-5340, Standard Test Method for Airport Condition Index Surveys. The 2018 PEP report for the Aurora State Airport is included in **Appendix 5**.

The PEP results (**Figure 2-13**) show that the runway pavement surface was in "satisfactory" condition with a weighted average PCI of 81 at that time. The primary distresses present on the runway were low- to medium-severity longitudinal cracking, low-severity weathering, and isolated low-severity alligator cracking. The longitudinal cracking was located primarily at paving joints created during the 2005 overlay project and sealed most recently in August of 2020. The alligator cracking was located primarily in areas aligning with the gear paths for typical business jet aircraft using the airport.

FIGURE 2-13: PAVEMENT CONDITIONS (2018 INSPECTION)



Source: 2018 ODAV Pavement Evaluation/Maintenance Management Program

Most of the taxiway pavements were rated "Satisfactory" or "Good." Notable exceptions being the south 900 feet of Taxiway A and west fillets of connector taxiways A1 – A4, which received ratings of "Fair," and the west fillet of connector taxiway A5 that was rated as "Poor." The Taxilanes accessing hangar areas were rated as "Good" to "Fair."

The apron pavements conditions were more varied. The west half of the main apron was rated as "Poor", the east half was rated as "Fair," and the north parking apron received a rating of "Good." Most of the remaining apron pavements were rated as "Fair" or better. However, there was a single small area of apron located north of A3 between two access taxilanes rated "Very Poor."

The 2018 PEP report recommended a variety of treatments to address the findings of the inspection, ranging from crack and slurry sealing to asphalt overlays and pavement reconstruction. The recommended treatment projects will be completed according to priority and funding availability, and ultimately included in the airport master plan's capital improvement program (CIP).

In August of 2019, the ODAV commissioned GRI to conducted a Runway 17/35 pavement evaluation (included in **Appendix 5**) to determine the existing Pavement Classification Number (PCN). PCN is an International Civil Aviation Organization (ICAO) standard used to indicate the strength of a runway, taxiway or apron. That assessment included review of ODAV historical pavement records, falling weight deflectometer testing, pavement cores, and related analysis. The guidance provided in FAA Advisory Circular 150/5335-5C, Standardized Method of Reporting Airport Pavement Strength – PCN, was used to calculate the final PCN.

The results of the evaluation suggested that based on calculated PCN, individual operations of up to 102,000 pounds for single-wheel and 143,000 pounds for dual-wheel could theoretically be accommodated. The evaluation hypothesized that a higher than expected PCN number for these isolated operations may have resulted from additional structural capacity added by the 2005 overlay. Conversely, the study also identified low-severity top-down alligator cracking and delamination of the top layer of pavement within the gear paths that would limit the ability of larger aircraft to use the runway. This type of cracking and delamination results from shear stresses at the pavement surface from aircraft wheel loading during landing and hard braking. These shear stresses are greater when larger aircraft with larger tire contact patches are in use, potentially resulting in catastrophic runway pavement damage if operations of larger aircraft were allowed.

Century West Engineering produced an additional memorandum for ODAV in September of 2020 that summarized the findings of the GRI pavement evaluation. The memorandum, entitled "Runway Pavement Considerations for Overweight Landings" (included in **Appendix 5**), also provided recommendations on evaluation of future requests by operators of aircraft exceeding the published Runway 17/35 weight limitations. The memorandum recommended that cumulative operations and their effects on pavement structural life be considered when operations exceeding weight limitations are requested. Since PCN is a measure only of whether individual operations may cause pavement failure, analysis that includes changes in overall fleet mix should be conducted for any reoccurring overweight operations. Also, the memorandum discussed pavement surface distresses and overlay delamination that were noted (and discussed above) that should be carefully considered as an indicator of increased chance of catastrophic pavement failure in the affected areas due to overweight landings and takeoffs. More frequent pavement inspections in areas of concern were also recommended. Finally, the memorandum provided recommendations on response planning should a pavement failure occur.

In May of 2021, GRI completed one additional evaluation for the ODAV that examined the remaining structural life of the Runway 17/35 pavement (included in **Appendix 5**). This evaluation calculated the remaining structural pavement life under a variety of fleet mix scenarios including the existing fleet mix and with the addition of varying numbers of overweight aircraft operations. The assessment concluded that repeated stresses put on the Runway by overweight aircraft would likely result in further damage, a shortened structural life of the pavement, and increased the likelihood of a catastrophic pavement failure. GRI also recommended a rehabilitation of the existing Runway pavement within the next 10 years due to the distresses noted previously.

FAA DESIGN STANDARDS

The FAA defines several recommended standards for airport design in *AC 150/5300-13A, Airport Design*. Some of the most critical standards are those related to the design of runways and taxiways and will be described in more detail in subsequent chapters of this planning study. At this stage of the planning process, it is relevant to summarize existing non-standard conditions previously identified by the FAA for consideration throughout the planning process.

Runway Safety Area (RSA) – The RSA is a defined surface surrounding the runway that is prepared or suitable for reducing the risk of damage to airplanes in the event of an airplane undershoot, overshoot, or an excursion from the runway.

Object Free Area (OFA) –The OFA is an area on the ground centered on the runway, taxiway, or taxilane centerline that is provided to enhance the safety of aircraft operations. No above ground objects are allowed except for those that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

Object Free Zone (OFZ) – The OFZ is a volume of airspace that is required to be clear of obstacles, except for frangible items required for the navigation of aircraft. It is centered along the runway and extended runway centerline.

Runway Protection Zone (RPZ) – The Runway Protection Zone (RPZ) is a trapezoidal area off each runway end intended to enhance the protection of people and property on the ground. The dimensions of an RPZ are a function of the critical aircraft and approach visibility minimums. The FAA recommends that RPZs be clear of all residences and places of public assembly (churches, schools, hospitals, etc.) and that airports own the land within the RPZs.

At Aurora State Airport, there are several known existing non-standard conditions to be analyzed in detail in the Facility Goals and Requirements and Development Alternatives Chapters:

- RPZs are encroached by various public roadways and contain properties that are not directly controlled by the Airport. "Interim Guidance on Land Uses Within Runway Protection Zone (2012)" generally identifies a public roadway as an incompatible land use within the RPZ. It also states that it is preferred that all property within RPZs be held by the airport in fee simple so the Airport sponsor can completely control the land use within.
- The runway OFA along its entire length is obstructed by Hubbard State Highway 551.
- There are several taxiway/taxilane design standard issues that should also be addressed at the Airport. The FAA recommends that taxiways/taxilanes not lead directly from an apron to the runway without requiring a turn. There are two direct runway access points on the Airport at Taxiways A3 and A4.
- The intersection of Taxiway A at A4 has been designated as a hotspot by the FAA. A hot spot is defined as a location on an airport movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots and drivers is necessary.

AIRPORT SUPPORT SERVICES

Support facilities generally include airside support facilities such as airfield lighting, signage, weather reporting equipment, ground-based navigational aids (NAVAIDS), and fueling facilities.

Air Traffic Control Tower

Aurora State Airport has an FAA Contract Air Traffic Control Tower (ATCT) on the main apron. Contract towers are ATCTs that are staffed by employees of private companies rather than by FAA employees. The ATCT was constructed in 2015 and began operations in October of that year. The tower is in operation daily between 0700 and 2000 local time (7:00 am to 8:00 pm in standard time terms).

Runway/Taxiway Lighting

Airfield edge lighting is classified as low, medium, or high intensity systems. Aurora State Airport's runway has a medium intensity runway lighting (MIRL) which are white in color. The parallel taxiway and connector taxiways have medium intensity taxiway lighting (MITL) which are blue in color. Both systems are pilot-activated by keying the microphone from their aircraft. Apron edges are marked by blue edge reflectors.

Airfield Lighting

The Airport accommodates day and night operations in visual and instrument meteorological conditions. The runway is equipped with lighting systems that meet the standards for the current instrument approach requirements and runway use.

Exterior building and pole-mounted overhead lighting is installed at various locations around the airfield in some parking lots and on airport buildings.

The airfield lighting was observed to be in good working condition and fully operational during recent site visits.

Airfield Signage

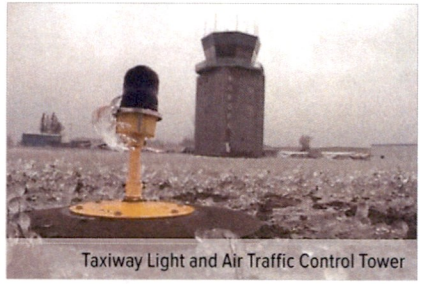
The runway-taxiway system has lighted mandatory instruction signs (red background with white text) marking the aircraft holding positions at each of the taxiway connections with the runway [17-35, 17, 35, etc.]; the signs also include taxiway direction/designations [A1, A2, etc.] with yellow background and black numbers/letters. The signs are located to coincide with the painted aircraft hold lines on each taxiway that connects to the runway.

Weather Reporting

Aurora State Airport has an Automated Surface Observation System (ASOS) that provides 24-hour weather information. The ASOS sensor array is located west of the runway, near midfield. The system reports the following readings:

- Sky conditions such as cloud height and cloud coverage up to 12,000 feet;
- Surface visibility up to at least 10 statute miles;
- Basic present weather information such as the type and intensity for rain, snow, and freezing rain;
- Obstructions to vision like fog, haze, and/or dust;
- Sea-level pressure and altimeter settings;
- Air and dew point temperatures;
- Wind direction, speed and character (gusts, squalls);
- Precipitation accumulation; and
- Selected significant remarks including variable cloud height, variable visibility, precipitation beginning/ending times, rapid pressure changes, pressure change tendency, wind shift, peak wind.

When the ATCT is operating, weather reports are broadcast via the Automated Terminal Information System (ATIS). ATIS reports weather conditions and other information relevant to the airport hourly at 55 minutes past the hour on frequency 118.525 MHz. When the ATCT is not in service, the system reverts to the default ASOS information broadcast on the same frequency. The ASOS weather information is also available by telephone (503) 678-3011.



Taxiway Light and Air Traffic Control Tower

Willamette Aviation Fuel Tanks

Medium Intensity Runway Lighting (MIRL)

VASI and Windsock

Source: Century West Engineering

NAVAIDs

Navigational Aids (NAVAIDS) provide navigational assistance to approaching aircraft. They are classified as either Visual or Electronic. Visual NAVAIDs provide visual cues to pilots, usually through lights. Electronic NAVAIDs aid the pilot on approach by interacting with electronic instruments onboard the aircraft.

Visual NAVAIDs

Aurora State Airport has four types of visual NAVAIDs:

Visual Approach Slope Indicators (VASI). Two-box VASIs are located at both runway ends. VASIs give pilots visual cues regarding their angle of final approach by displaying different colored lights based on where they are in relation to the published glide slope angle. The Runway 17 VASI has a 3.5-degree glide path; the Runway 35 VASI has a 3.0-degree glide path. VASIs allow a limited range of adjustment above the standard 3.0-degree glide path angle to increase clearance over close-in obstructions to the runway approach.

Runway End Indicator Lights (REIL). Runway 17 is equipped with a REIL. REILs mark runway ends with sequenced strobe lights positioned on each corner of the runway end. REILS increase a pilot's ability to identify the runway end in darkness or poor visibility conditions.

Omnidirectional Approach Lighting System (ODALS). Runway 17 is equipped with an ODALS. ODALSs are normally associated with runways with published instrument approach procedures. They consist of a series of lights extending out from the runway end flashing in sequence guiding the aircraft to the runway end.

Airport Rotating Beacon (APBN). APBNs are used to indicate the location of an airport to pilots in darkness or during reduced visibility. For land airports, the APBN provides sequenced white and green flashing lights that rotate 360-degrees to allow pilots to identify the airport from all directions, from several miles. The beacon operates on a dusk-dawn photocell automatic switch and reportedly functions normally.

Electronic NAVAIDs

Localizer (LOC) with Distance Measuring Equipment (DME). The LOC and DME work in conjunction to provide lateral course guidance and distance information to aircraft on approach to Runway 17.

Newberg (URG) Very High Frequency Omnidirectional Range with DME (VOR/DME). The NAVAID is located 10.8 miles northwest of the Airport and supports nearby enroute navigational routes and instrument procedures to several airports in the area. Nine separate instrument airways converge in the area surrounding Aurora State Airport. Air traffic on these airways includes aircraft from throughout the instrument enroute system, including aircraft operating at airports throughout the region and aircraft that are simply transiting the area enroute to more distant airports.

FBO and Flight Training Services

There are two businesses offering fixed base operator (FBO) services at the Airport. Atlantic Aviation (formerly Lynx FBO) provides fueling and oxygen services, aircraft parking, hangar rentals, aircraft maintenance, and avionics sales and service. Willamette Aviation Services provides aircraft fuel, aircraft parking, hangar leasing and sales, and aircraft rental and maintenance services. Flight training service are offered by Willamette Aviation Services and Aurora Flight Training (formerly Aurora Aviation), which is a non-FBO business.

Fuel Services

On airport fuel sales are provided by Atlantic Aviation, which has an above-ground 12,000-gallon aviation gasoline (AVGAS/100LL) tank and an above-ground 20,000-gallon Jet A tank located on leased ODAV property immediately southwest of the Atlantic Aviation building. Atlantic Aviation operates two mobile fuel trucks to ferry fuels from their tanks to aircraft parked on the apron. Additional off-airport fuel storage and service is available on surrounding private properties with TTF agreements. There are no known underground fuel storage tanks on airport property.

Emergency Services

Marion County Sheriff Department provides emergency service and response to the Aurora State Airport. A single dedicated deputy is assigned to the Aurora community, which includes the Airport. The Aurora Fire District provides fire suppression, rescue, emergency medical response, and hazardous material response. The nearest district fire station is in the City of Aurora, less than two miles from the Airport. The Aurora Airport Water Control District was formed in 2002 and installed a 247,800-gallon fire suppression system to assist the Aurora Fire District in protecting the Airport in the event of fire.

Landside Facilities

The landside elements section includes the landside facilities (depicted in **Figure 2-12**) designed to support airport operations, including aircraft storage and maintenance. This section of the existing conditions analysis includes a discussion of General Aviation (GA) Terminal Areas and "Through-The-Fence" (TTF) development, hangars/airport buildings, airport surface roads, vehicle parking, airport fencing, and utilities.

GENERAL AVIATION (GA) TERMINAL AREAS AND "THROUGH-THE-FENCE" (TTF) AGREEMENTS

As depicted in **Figure 2-14**, there are three discernible GA development areas with landside aviation facilities at the Airport. All of the existing landside facilities are located on the east side of the runway:

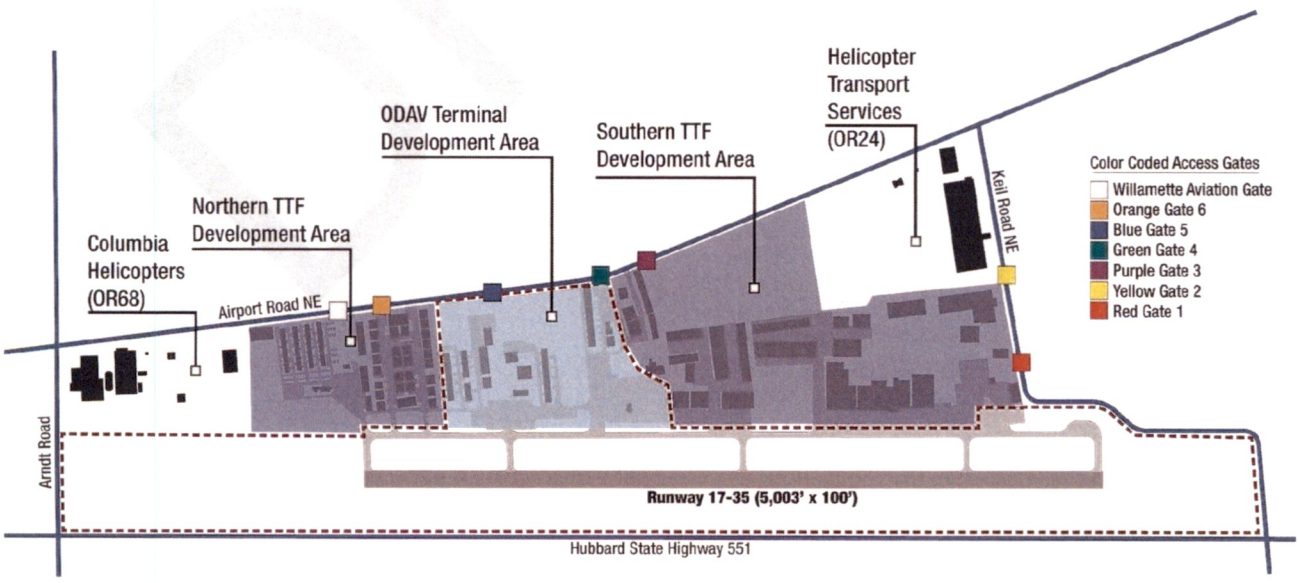
- **Terminal Development Area** – ODAV-owned property near the center of the airfield
- **North TTF Development Area** – privately-owned aeronautical use areas with ODAV-approved TTF access agreements
- **South TTF Development Area** – privately-owned aeronautical use areas with ODAV-approved TTF access agreements

The focus of the Airport Master Plan are the public facilities located on ODAV property and the eleven designated TTF access points on the airport property line. As noted earlier, the nearby Columbia Helicopters and Helicopter Transport Services (HTS) facilities are privately-owned helipads that are fully independent from Aurora State Airport operations and facilities. These facilities will not be included in the airport master plan evaluations.

Therefore, from a landside development standpoint, attention will be given to the facilities within the ODAV Terminal Development Area. In certain instances, appurtenant facilities in the North and South TTF Development Areas may be included to provide necessary context.

The ODAV Terminal Development Area is comprised of numerous hangars for storing general aviation aircraft, airport businesses like Aurora Flight Training, Aurora Aviation; an apron for itinerant traffic, and the FAA Air Traffic Control Tower (ATCT). The specific airfield facilities within this area of the Airport have been discussed within the relevant sections of this existing conditions analysis.

FIGURE 2-14: AURORA STATE AIRPORT DEVELOPMENT AREAS



Source: Developed by Century West Engineering

HANGARS/AIRPORT BUILDINGS

Within the ODAV Terminal Development Area there are six T-hangar buildings, eight conventional / multiple-aircraft hangars, and three other buildings (fixed base operator and fire suppression facility). On the remaining TTF and private development areas there are 76 buildings: seven T-hangar buildings, 54 conventional / multiple-aircraft hangars, and fifteen other buildings.

Table 2-13 summarizes the existing buildings, ownership, and general usage.

TABLE 2-13: HANGARS/AIRPORT BUILDINGS

	T-Hangar Buildings	T-Hangar Buildings SF	Conventional / Multiple-Aircraft	Conventional / Multiple-Aircraft SF	Other (business, office, etc)	Other (business, office, etc) SF	Total	Total SF
Northern TTF Development Area	5	47,300	33	163,100	1	1,500	35	211,900
ODAV Terminal Development Area	5	64,400	10	73,300	3	6,000	17	143,700
Southern TTF Development Area	-	-	28	623,000	2	14,500	30	637,500
Total	**10**	**111,700**	**71**	**859,400**	**6**	**22,000**	**82**	**993,100**

Source: Century West Engineering - Aerial photo based analysis

The 2019 *Constrained Operations Runway Justification Study* included a hangar/building analysis to identify new construction:

> *"Since 2012, most of the new hangar construction at the Airport has occurred in the South TTF Development Area. Approximately 30,650 SF of T-hangars were removed to accommodate construction of new larger conventional and corporate aircraft storage hangars. Overall, in the South TTF Development Area, including the HTS building, new construction amounted to approximately 223,000 SF of new aviation commercial and corporate aircraft storage space. Further expansion in the South TTF Development Area is ongoing.*
>
> *Within the ODAV Terminal Development Area no hangars had been removed since 2012 and new construction included one hangar at approximately 6,200 SF. There is approximately 8.1 acres of developable land within the ODAV Terminal Development Area. In the north end Columbia Helicopters development area, new construction included approximately 3,500 SF of new storage buildings that appear to have been constructed to replace steel shipping/storage containers. No changes were identified in the Wiley or Willamette development areas within the North TTF Development Area."*

AIRPORT SURFACE ROADS

There are multiple access points to the Airport that coincide with a colored gate system to clearly delineate Airport access and assist in emergency response and advertisement (see **Figure 2-14**). Stenbock Way NE access is located at the Purple Gate at Airport Road NE and is considered to be the major entry point to ODAV property due to the access provided to the ATCT. However, the Purple Gate entry on Stenbock Way NE provides access directly on to privately-owned land on the South TTF Development Area and provides access to numerous private hangars and buildings like the Columbia Aviation Association meeting facility.

Access to the ODAV Terminal Development Area is also provided at the unnamed access roads identified by the Green and Blue Gates on Airport Road, slightly north of the Purple Gate. The access road at the Blue Gate is the only public access point that is located entirely on public land. The road is approximately 700' long and provides vehicle access to Aurora Flight Training, a large vehicle parking lot, and most of the hangars located on public property.

VEHICLE PARKING

On the public land within the ODAV Terminal Development Area, several joint use parking lots are available near the public tiedown area, air traffic control tower, adjacent hangars, and airport related businesses. The parking areas on state-owned land provides parking for approximately 60 vehicles. The majority of the vehicle parking positions are located adjacent to Aurora Flight Training and is accessible from the Blue Gate. Several more parking positions located next to the ATCT are typically reserved for FAA ATCT and ODAV maintenance staff.

On the adjacent privately held land, airport businesses offer parking for employees and customers based on Marion County zoning and development standards. Individual hangar tenants typically park adjacent to or in their hangars while flying; some parking lots are available for their use, as well.

AIRPORT FENCING

Approximately four miles of security fencing and access gates surround the entire Airport inclusive of the public and private properties. The perimeter fencing was constructed in 1999 and funded with private funds on private land and FAA grant money on the publicly owned land. All access points are gated, although not all are automated.

The non-automated gates sometimes remain open during normal business hours. The Airport gate signage and color system (Red, Yellow, Purple, Blue, Orange, Green, and Yellow) was installed at access points along Canby-Hubbard Highway, Keil Road, Arndt Road, and Airport Road. The design, construction, and installation of the access gates was funded with private money. ODAV maintains the gates and pays for lighting and electricity.

UTILITIES

The developed areas of Aurora State Airport have water, sewer, storm water drainage, natural gas, and electric. The following text describes the major utilities serving the Airport.

Water

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

Sewer

Sanitary sewer is provided by individual and shared drain field/septic tank systems. There are six individual drain fields located on ODAV owned property, with three more proposed for the south end of the RSA near the existing one used by the South End Airpark. The drain fields are shared for both aviation related uses on both private and publicly owned land.

Stormwater

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

Electric

Electric service is provided by Portland General Electric (PGE).

Gas

Natural gas service is provided NW Natural.

Airport Administration

The Airport Administration section provides a summary of Airport Ownership and Management, Airport Finance, Rates and Charges, and overview of FAA Grant Assurances and Compliance.

AIRPORT OWNERSHIP AND MANAGEMENT

Aurora State Airport is owned and operated by the Oregon Department of Aviation. ODAV manages Aurora State Airport among a group of 28 state-owned or operated airports from its office in Salem. The department has approximately 15 ½ full-time employees with one State Airports Manager, who is responsible for the day-to-day management of the airports. Airport management staff oversees grant administration, construction management, airport finance and leasing, as well as operations and maintenance of the Aurora State Airport. Airport tenants are responsible for managing their facilities and leased areas to meet the requirements defined in their leases.

AIRPORT FINANCE

ODAV operates Aurora State Airport within its group of state-owned airports as an enterprise fund. All revenue generated by the airports remains within the airport operating budget. This is a standard FAA requirement for all airports to prevent revenue diversion from airport operations to general services or non-airport operations.

The primary revenue generating sources for Aurora State Airport includes improved and unimproved ground lease rents, access fees from through-the-fence users, and fuel flowage fees. The primary expenditures for the Airport include airport legal fees, property taxes, maintenance and operation expenses, and personnel services. The Airport's capital improvement projects are typically funded through FAA grants with a local match that may be provided by ODAV grants. Based on a review of the airport's revenues and expenses for 2021, the airport's revenues exceed its expenses for normal operations and maintenance. A summary of the airports revenues and expenses are included in **Tables 2-14** and **2-15**.

TABLE 2-14: AIRPORT REVENUE/EXPENSE SUMMARY (2021)

AIRPORT REVENUE	
Leases, Tiedowns, Property Tax, Utilities	$83,203.15
Access Fees (Through-the-Fence)	$40,000.00
Fuel Flowage Fees	$92,114.00
TOTAL AIRPORT REVENUES	**$215,317.15**
AIRPORT EXPENSES	
Airport Personnel Services	$19,101.96
Transit Tax	$63.28
Utilities	$28,547.38
Maintenance & Inspections	$30,359.68
Supplies	$5,834.80
Legal Fees	$83,166.70
Reporting & Monitoring Charges	$14,050.00
Property Taxes	$33,009.73
TOTAL AIRPORT OPERATING EXPENSES	**$214,133.53**
NET OPERATING INCOME	**$1,183.62**

Source: ODAV Budget FY2021 Actuals

TABLE 2-15: AIRPORT RATES AND CHARGES DATA

RATES AND CHARGES	
FBO Tiedown Fees (Monthly)	$10.00
Non-Commercial Tiedown Fees (By Category) (Per Month)	
Category II	$20.00
Category III & IV	$17.50
Category V	$15.00
Access Fees (shall be the greater of the two (1) weight range or (2) minimum guarantee)	
(1) Weight Range (Per Month)	
Class 1 Aircraft (up to 5,000 lbs)	$15.00
Class 2 Aircraft (5,001 to 10,000 lbs)	$24.00
Class 3 Aircraft (10,001 to 20,000 lbs)	$44.00
Class 4 Aircraft (20,001 to 30,000 lbs)	$66.00
Class 5 Aircraft (30,001 to 40,000 lbs)	$88.00
Class 6 Aircraft (40,001 lbs and over)	$120.00
(2) Minimum Guarantee (Per Month)	
Category II	$275.00
Category III & IV	$175.00
Category V	$75.00
Fuel Flowage Fee (Per Gallon)	$0.08
Improved Ground Lease Rates (Sq/Ft) (Per Month)	$0.3256
Unimproved Ground Lease Rates (Sq/Ft) (Per Month)	$0.05

Source: ODAV State Airport Rates 2021

FAA COMPLIANCE OVERVIEW

A management program based on the FAA's "Planning for Compliance" guidance and the adoption of additional airport management "Best Practices" is recommended to address FAA compliance requirements and avoid noncompliance, which could have significant consequences.

Airport management "Best Practices" are developed to provide timely information and guidance related to good management practices and safe airport operations for airport managers and sponsors. The practices outlined herein are designed for use by ODAV for evaluating and improving their current and future operation and management program.

Airport sponsors must comply with various federal obligations through agreements and/or property conveyances, outlined in *FAA Order 5190.6B, Airport Compliance Manual.* The contractual federal obligations a sponsor accepts when receiving federal grant funds or transfer of federal property can be found in a variety of documents including:

- Grant agreements issued under the Federal Airport Act of 1946, the Airport and Airway Development Act of 1970, and Airport Improvement Act of 1982. Included in these agreements are the requirement for airport sponsors to comply with:
  - » Grant Assurances;
  - » Advisory Circulars;
  - » Application commitments;
  - » FAR procedures and submittals; and
  - » Special conditions.
- Surplus airport property instruments of transfer;
- Deeds of conveyance;
- Commitments in environmental documents prepared in accordance with FAA requirements; and
- Separate written requirements between a sponsor and the FAA.

OREGON AVIATION LAWS

The Oregon Department of Aviation (ODAV) has created both the Oregon Administrative Rules (OAR) and Oregon Revised Statutes (ORS) to govern airports within the state.

Oregon Administrative Rules (OAR)

- OAR Chapter 660, Division 13 – Airport Planning
- OAR Chapter 660, Division 13 – Exhibits
- OAR Chapter 738 – ODAV
- Non-Commercial Leasing Policy
- Commercial Leasing Policy
- Category II Minimum Standards Policy
- Category IV Minimum Standards Policy
- Category V Minimum Standards Policy
- Insurance Requirements

Oregon Revised Statutes (ORS)

- ORS 197 – Land Use Planning I
- ORS 197A – Land Use Planning II
- ORS 319 – Aviation Fuel Tax
- ORS 835 – Aviation Administration
- ORS 836 – Airports and Landing Fields
- ORS 837 – Aircraft Operations
- ORS 838 – Airport Districts

Airport Compliance with Grant Assurances

As a recipient of both federal and state airport improvement grant funds, the airport sponsor is contractually bound to various sponsor obligations referred to as "Grant Assurances", developed by FAA and the State of Oregon. These obligations, presented in detail in federal and state statute and administrative codes, document the commitments made by the airport sponsor to fulfill the intent of the grantor (FAA or state) required when accepting federal and/or state funding for airport improvements. Failure to comply with the grant assurances may result in a finding of noncompliance and/or forfeiture of future funding. Grant assurances and their associated requirements are intended to protect the significant investment made by the FAA or State of Oregon to preserve and maintain public-use airports as valuable transportation assets.

FAA Grant Assurances

The FAA's Airport Compliance Program defines the interpretation, administration, and oversight of federal sponsor obligations contained in grant assurances. The Airport Compliance Manual defines policies and procedures for the Airport Compliance Program. Although it is not regulatory or controlling with regard to airport sponsor conduct, it establishes the policies and procedures for FAA personnel to follow in carrying out the FAA's responsibilities for ensuring compliance by the sponsor.

The *Airport Compliance Manual* states the FAA Airport Compliance Program is: "...designed to monitor and enforce obligations agreed to by airport sponsors in exchange for valuable benefits and rights granted by the United States in return for substantial direct grants of funds and for conveyances of federal property for airport purposes. The Airport Compliance Program is designed to protect the public interest in civil aviation. Grants and property conveyances are made in exchange for binding commitments (federal obligations) designed to ensure that the public interest in civil aviation will be served. The FAA bears the important responsibility of seeing that these commitments are met. This order addresses the types of commitments, how they apply to airports, and what FAA personnel are required to do to enforce them."

According to the FAA, cooperation between the FAA, state, and local agencies should result in an airport system with the following attributes:

- Airports should be safe and efficient, located at optimum sites, and be developed and maintained to appropriate standards;
- Airports should be operated efficiently both for aeronautical users and the government, relying primarily on user fees and placing minimal burden on the general revenues of the local, state, and federal governments;
- Airports should be flexible and expandable, able to meet increased demand and accommodate new aircraft types;
- Airports should be permanent, with assurance that they will remain open for aeronautical use over the long-term;
- Airports should be compatible with surrounding communities, maintaining a balance between the needs of aviation and the requirements of residents in neighboring areas;
- Airports should be developed in concert with improvements to the air traffic control system;
- The airport system should support national objectives for defense, emergency readiness, and postal delivery;
- The airport system should be extensive, providing as many people as possible with convenient access to air transportation, typically not more than 20 miles of travel to the nearest NPIAS airport; and
- The airport system should help air transportation contribute to a productive national economy and international competitiveness.

The airport sponsor should have a clear understanding of and comply with all assurances. The following sections describe the selected assurances in more detail.

Project Planning, Design, and Contracting

Sponsor Fund Availability (Assurance #3)

Once a grant is given to the airport sponsor, the sponsor commits to providing the funding to cover their portion of the total project cost. Currently this amount is 10% of the total eligible project cost, although it may be higher depending on the particular project components or makeup. Once the project has been completed, the receiving

airport also commits to having adequate funds to maintain and operate the airport in the appropriate manner to protect the investment in accordance with the terms of the assurances attached to and made a part of the grant agreement. It is noted that this Airport Master Plan project is 100% FAA funded due to the availability of grants associated with COVID-19 pandemic recovery.

Consistency with Local Plans (Assurance #6)

All projects must be consistent with city and county comprehensive plans, transportation plans, zoning ordinances, development codes, and hazard mitigation plans. The airport sponsor should familiarize themselves with local planning documents before a project is considered to ensure that all projects follow local plans and ordinances.

Accounting System Audit and Record Keeping (Assurance #13)

All project accounts and records must be made available at any time. Records should include documentation of cost, how monies were actually spent, funds paid by other sources, and any other financial records associated with the project at hand. Any books, records, documents, or papers that pertain to the project should be available at all times for an audit or examination.

General Airport Assurances

Good title (Assurance #4)

The airport sponsor must have a Good Title to affected property when considering projects associated with land, building, or equipment. Good Title means the sponsor can show complete ownership of the property without any legal questions, or show it will soon be acquired.

Preserving Rights and Powers (Assurance #5)

No actions are allowed, which might take away any rights or powers from the sponsor, which are necessary for the sponsor to perform or fulfill any condition set forth by the assurance included as part of the grant agreement.

Airport Layout Plan (ALP) (Assurance #29)

The airport sponsor should maintain an up-to-date ALP, which should include current and future property boundaries, existing facilities/structures, locations of non-aviation areas, and existing and proposed improvements. FAA requires proposed improvements to be depicted on the ALP in order to be eligible for FAA funding. If changes are made to the airport without authorization from the FAA, the FAA may require the airport to change the alteration back to the original condition or jeopardize future grant funding.

Disposal of Land (Assurance #31)

Land purchased with the financial participation of an FAA Grant cannot be sold or disposed of by the airport sponsor at their sole discretion. Disposal of such lands are subject to FAA approval and a definitive process established by the FAA. If airport land is no longer considered necessary for airport purposes, and the sale is authorized by the FAA, the land must be sold at fair market value. Proceeds from the sale of the land must either be repaid to the FAA, or reinvested in another eligible airport improvement project.

Airport Operations and Land Use

Pavement Preventative Maintenance (Assurance #11)

Since January 1995, the FAA has mandated that it will only give a grant for airport pavement replacement or reconstruction projects if an effective airport pavement maintenance-management program is in place. The Oregon Department of Aviation prepares and updates pavement reports for the airport. These reports identify the maintenance of all pavements funded with federal financial assistance and provides a pavement condition index (PCI) rating (0 to 100) for various sections of aprons, runways, and taxiways; including, a score for overall airport pavements.

Operations and Maintenance (Assurance #19)

All federally funded airport facilities must operate at all times in a safe and serviceable manner and in accordance with the minimum standards as may be required or prescribed by applicable Federal, State, and Local agencies for maintenance and operations.

Compatible Land Use (Assurance #21)

Land uses around an airport should be planned and implemented in a manner that ensures surrounding development and activities are compatible with the airport. Aurora State Airport is located in unincorporated Marion County. The airport sponsor should work with the county and adjacent land use jurisdictions to ensure that zoning and land use controls are in place to protect the airport from incompatible land uses. Incompatible land uses around airports represents one of the greatest threats to the future viability of airports.

Day-To-Day Airport Management

Economic Non-Discrimination (Assurance #22)

Any reasonable aeronautical activity offering service to the public should be permitted to operate at the airport as long as the activity complies with airport established standards for that activity. Any contractor agreement made with the airport will have provisions making certain the person, firm, or corporation will not be discriminatory when it comes to services rendered including rates or prices charged to customers.

Exclusive Rights (Assurance #23)

No exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. However, an exception may be made if the airport sponsor can prove that permitting a similar business would be unreasonably costly, impractical, or result in a safety concern, the sponsor may consider granting an exclusive right.

Leases And Finances

Fee and Rental Structure (Assurance #24)

An airport's fee and rental structure should be implemented with the goal of generating enough revenue from airport related fees and rents to become self-sufficient in funding the day-to-day operational needs. Airports should update their fees and rents on a regular basis to meet fair market value, often done through an appraisal or fee survey of nearby similar airports. Common fees charged by airports include fuel flowage fees, tiedown fees, landing fees, and hangar or ground lease rents.

Airport Revenue (Assurance #25)

Revenue generated by airport activities must be used to support the continued operation and maintenance of the airport. Use of airport revenue to support or subsidize non-aviation activities or to fund other departments who are not using the funds for airport specific purposes is not allowed and is considered revenue diversion. Revenue diversion is a significant compliance issue for FAA.

For additional information on FAA Grant Assurances, please visit: https://www.faa.gov/airports/aip/grant_assurances/#current-assurances

Taxiway A at A4 – Source: Century West Engineering

Chapter 3
Aviation Activity Forecasts

COVID-19 STATEMENT (JANUARY 2022)

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

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

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

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

Introduction and Overview

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

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

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

The chapter is organized around the following sections:

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

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

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

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

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

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

FEDERAL AIRPORT SYSTEM

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

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

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

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

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

STATE AIRPORT SYSTEM

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

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

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

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

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

FAA Forecasting Process

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

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

Key Activity Elements

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

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

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

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

FAA Forecast Terminology

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

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

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

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

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

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

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

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

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

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

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

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

TABLE 3-1: FORECASTING DATA SOURCES

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

(Continued)

TABLE 3-1: FORECASTING DATA SOURCES

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

Source: Century West Engineering

National General Aviation Activity Trends

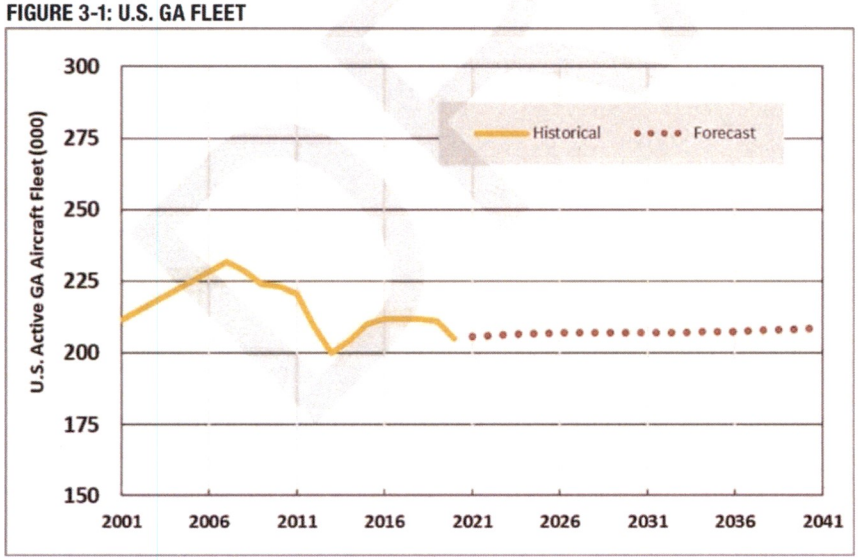
The first two decades of the 21st Century have presented numerous challenges for the GA industry. On a national level, most measures of GA activity declined sharply during the Great Recession, rebounded, then declined again at the outset of the COVID-19 pandemic.

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

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

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

FIGURE 3-1: U.S. GA FLEET



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

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

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

Positive Activity Indicators

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

Negative Activity Indicators

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

Neutral Activity Indicators

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

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

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

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

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

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

Recent Events Summary

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

HANGAR CONSTRUCTION

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

TABLE 3-3: HANGAR DEVELOPMENT SUMMARY

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

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

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

AVIATION FUEL VOLUMES

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

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

TABLE 3-4: FUEL FLOWAGE (GALLONS)

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

Source: Oregon Department of Aviation

FLIGHT TRAINING

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

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

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

FIXED BASE OPERATORS (FBO)

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

CHANGES IN DATA SOURCES AND METHODOLOGY

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

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

BASED AIRCRAFT COUNTING METHODOLOGY

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

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

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

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

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

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

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

TABLE 3-5: BASED AIRCRAFT AND FLEET MIX

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

Source: National Based Aircraft Inventory – January 2022

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

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

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

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

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

Jets

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

Helicopter

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

Other

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

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

Source: Century West Engineering, FAA and industry terminology.

ANNUAL AIRCRAFT OPERATIONS

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

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

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

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

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

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

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

Source: Century West Engineering developed using FAA OPSNET Data

INSTRUMENT FLIGHT PLAN (TFMSC) DATA

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

TABLE 3-7: AURORA STATE AIRPORT INSTRUMENT FLIGHT OPERATIONS

TFMSC IFR Operations by ADG - Calendar Year Data											
ARC	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average Annual Operations
A-I	2,372	2,638	2,414	2,482	2,750	2,752	3,428	2,458	2,162	2,334	2,579
A-II	410	494	1,108	1,554	1,814	1,966	1,844	1,158	930	1,398	1,268
A-III	14	6	2	4	4	10	6	2	0	4	5
A-IV	0	0	0	0	0	0	0	0	0	0	0
B-I	1,496	1,368	1,422	1,194	1,198	1,126	1,134	1,190	1,024	1,154	1,231
B-II	2,222	2,232	2,214	2,620	3,270	3,110	3,146	3,798	3,448	4,166	3,023
B-III	0	0	0	2	0	2	4	8	2	0	2
B-IV	0	0	0	0	0	0	0	0	0	0	0
C-I	360	374	514	438	340	306	274	286	170	274	334
C-II	348	378	294	208	316	368	358	226	242	242	298
C-III	18	10	6	8	0	14	50	54	10	0	17
C-IV	0	0	0	0	0	0	2	0	0	2	0
C-V	0	0	0	0	0	0	0	0	0	0	0
D-I	2	8	16	0	4	10	8	4	2	14	7
D-II	4	0	4	0	2	6	2	8	26	84	14
D-III	6	10	4	2	6	8	4	0	4	6	5
D-IV	0	0	0	0	0	0	0	0	0	0	0
D-V	0	0	0	0	0	0	0	0	0	0	0
Unknown	448	390	380	392	510	376	372	472	442	606	439
Total	**7,700**	**7,908**	**8,378**	**8,904**	**10,214**	**10,054**	**10,632**	**9,664**	**8,462**	**10,284**	**9,220**
Operations by AAC C and D Aircraft	**738**	**780**	**838**	**656**	**668**	**712**	**698**	**578**	**454**	**622**	**674**
Operations by ADG II and Larger	**3,022**	**3,130**	**3,632**	**4,398**	**5,412**	**5,484**	**5,416**	**5,254**	**4,662**	**5,902**	**4,631**

Source: FAA TFMSC Report - 4/14/2022 (Aurora State Airport)

TERMINAL AREA FORECAST

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

FIGURE 3-2: HISTORICAL TAF – BASED AIRCRAFT

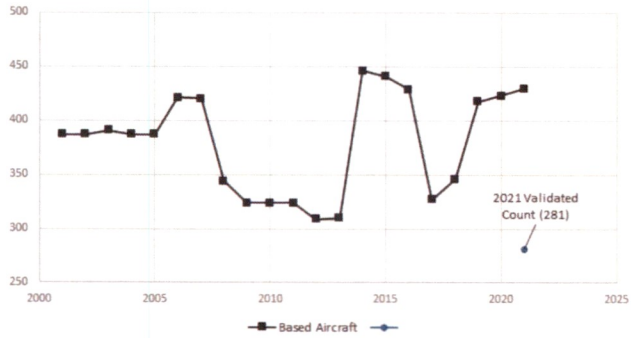
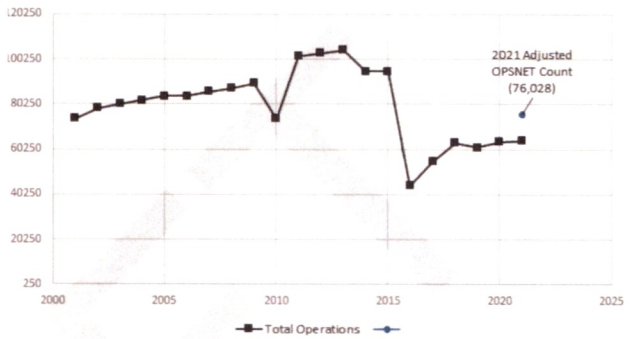


FIGURE 3-3: HISTORICAL TAF – ANNUAL AIRCRAFT OPERATIONS



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

SUMMARY OF RECENT ACTIVITY FORECASTS

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

2012 Aurora State Airport – Airport Master Plan Update

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

2019 Aurora State Airport – Constrained Operations Runway Justification Study

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

FAA Terminal Area Forecast

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

Oregon Aviation Plan V6.0 Model

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

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

COMMUNITY PROFILE

Historical population and economic data for the region was presented in Chapter Two. Long term population and economic forecasts are summarized in **Tables 3-8 and 3-9**. These data are used by local government to project future demand for services, housing, and to effectively manage growth as required by the State of Oregon land use planning law. The forecast population and economic growth within the service area for Aurora State Airport is expected to contribute to increased aviation demand the master planning horizon.

Table 3-8 summarizes the 2021 Portland State University - Population Research Center (PRC) population forecast for the 2021-2041 period that corresponds to the Airport Master Plan. The county and statewide population forecasts for the local area generally project higher rates of annual growth over the next five years, followed by a slowing that accelerates near the end of the forecast horizon. The PRC forecast growth in Clackamas County and in Aurora exceed the projected statewide growth rate; the forecast growth in Marion County trails the forecast statewide growth rate. The Aurora urban growth boundary (UGB) population forecast projects annual growth averaging above 2% over the 20-year forecast.

TABLE 3-8 : FORECAST POPULATION

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

Source: PSU Population Research Center (PRC), 2021

Table 3-9 summarizes the current Woods & Poole Economics forecast gross regional product (GRP) for Marion and Clackamas County for the 2021-2041 period that corresponds to the Airport Master Plan. GRP measures the market value of all goods and services produced in the defined region. As indicated in the data, strong GRP growth is forecast over the long term, with a similar slowing near the end of the forecast horizon.

TABLE 3-9: FORECAST GROSS REGIONAL PRODUCT

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

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

Current Aviation Activity

Current based aircraft and annual aircraft operations data for use in developing new aviation activity forecasts are presented in **Tables 3-10 and 3-11**. The 2021 baseline totals will be applied to all 2021-2041 airport master plan forecast models.

TABLE 3-10: BASELINE BASED AIRCRAFT (JANUARY 2022)

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

Source: National Based Aircraft Inventory – January 2022

TABLE 3-11: BASELINE AIRCRAFT OPERATIONS (2021)

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

Source: Century West Engineering developed using FAA OPSNET Data

2021-2041 Aviation Activity Forecasts

BASED AIRCRAFT

Seven based aircraft forecasts were developed based on a variety of models. The average annual growth rates for the models ranged from 0.1% to 1.7%. Four of the models were discarded after review and additional analysis determined limited applicability. The remaining three models were determined appropriate for comparison. These models are presented in **Table 3-11** and depicted in **Figure 3-4**. These forecast models are applied to the 2021 based aircraft baseline data presented earlier in the chapter.

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

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

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

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

RECOMMENDED BASED AIRCRAFT FORECAST SUMMARY

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

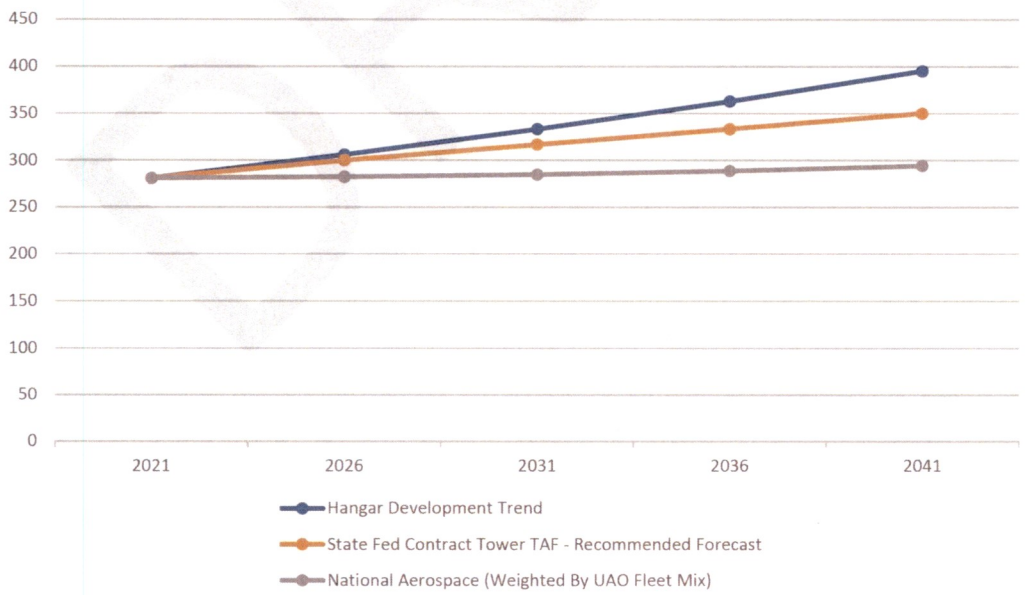
The recommended forecast results in a net increase of 69 based aircraft over the planning period, which reflects an average annual growth rate of **1.1%**. The forecast exceeds the FAA's most recent NPIAS forecast for the region (0.9% CAGR) and the OAP v6.0 long-term forecast rates for Oregon's based aircraft fleet (1.1% CAGR). The based aircraft forecast models presented for consideration, including the recommended model, are summarized in **Table 3-12** and depicted on **Figure 3-4**.

TABLE 3-12: FORECASTS OF BASED AIRCRAFT

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

Source: Century West Engineering

FIGURE 3-4: BASED AIRCRAFT FORECASTS



Source: Century West Engineering developed using FAA TFMSC Data

Discarded Models

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

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

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

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

Based Aircraft Fleet Mix

Table 3-13 summarizes the current and forecast fleet mix for the planning period. The based aircraft fleet mix at Aurora State Airport is expected to become slightly more diverse as it is anticipated that as single-engine piston aircraft are retired over time, a portion are likely be replaced by LSA or experimental kit aircraft, following national trends. The addition of locally based turbine-engine aircraft (turboprop, jet, helicopter, etc.) is also anticipated based on the FAA's long term general aviation fleet forecast which reflects continued adoption of turbine engine technology.

TABLE 3-13: FORECAST BASED AIRCRAFT FLEET MIX

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

Source: Century West Engineering
*Includes Experimental/LSA

AIRCRAFT OPERATIONS

Eleven aircraft operations forecasts were developed based on a variety of models. The average annual growth rates for the models ranged from 0.5% to 3.6%. Five of the models were discarded after review; the remaining models are presented in **Table 3-14** and depicted in **Figure 3-5**. These forecast models are applied to the 2021 aircraft operations baseline data presented earlier in the chapter.

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

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

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

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

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

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

Discarded Models

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

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

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

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

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

RECOMMENDED AIRCRAFT OPERATIONS FORECASTS SUMMARY

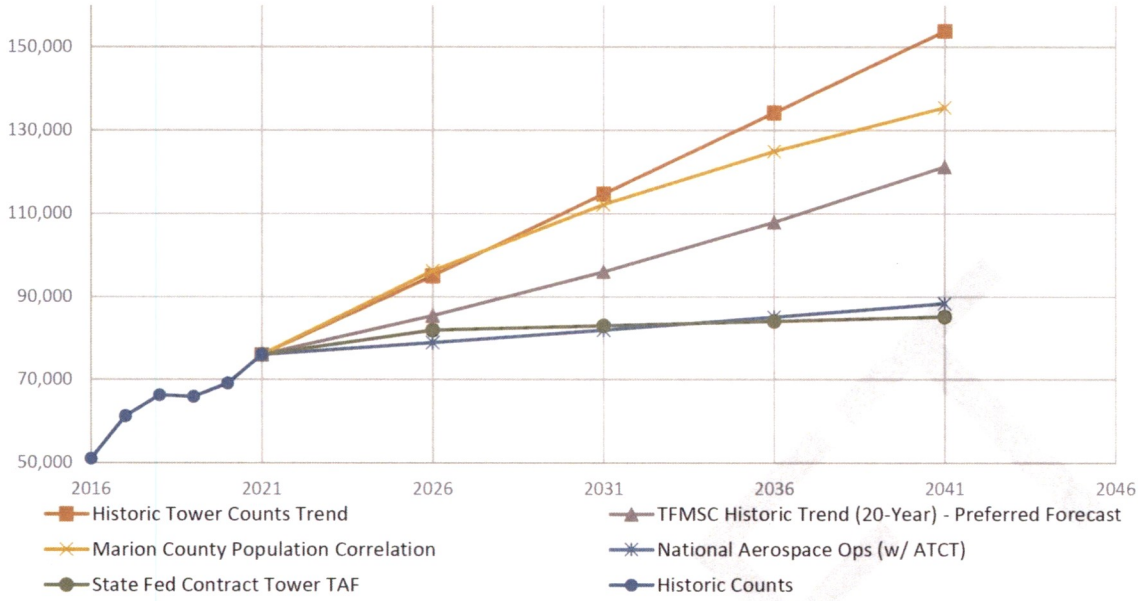
The FAA TFMSC Historical Trend Model is the recommended aircraft operations forecast for the 2021-2041 Aurora State Airport Master Plan. The extended period of TFMSC data provides a reliable indication of the Airport's growth in flight activity that is not exceedingly influenced by intermittent events. The TFMSC data also provides a stable measure of activity that is not affected by adjustments to baseline activity data. This model projects an average annual growth rate in operations of 2.3% over the planning period. The aircraft operations forecast models are included in **Table 3-14** and depicted in **Figure 3-5**.

TABLE 3-14: OPERATIONS FORECAST

	CAGR	2021	2026	2031	2036	2041
Historic Tower Counts Trend	3.6%	76,028	95,039	114,646	134,254	153,862
TFMSC Historic Trend (20-Year) - Preferred Forecast	**2.4%**	**76,028**	**85,438**	**96,013**	**107,898**	**121,253**
Marion County Population Correlation	2.9%	76,028	96,244	112,162	124,981	135,506
National Aerospace Ops (w/ ATCT)	0.8%	76,028	78,939	81,966	85,114	88,388
State Fed Contract Tower TAF	0.6%	76,028	81,924	82,972	84,046	85,151

Source: Century West Engineering developed using FAA TFMSC Data

FIGURE 3-5: OPERATIONS FORECAST MODELS



Source: Century West Engineering developed using FAA TFMSC Data

AIRCRAFT OPERATIONS FLEET MIX AND SPLITS

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

It is anticipated that the expected decline in older conventional single-engine piston aircraft will be partly offset by growth in experimental and sport aircraft. The aircraft operations fleet mix forecast is summarized in **Table 3-15**. Activity splits (local, itinerant, etc.) for forecast operations are summarized in **Table 3-16**.

TABLE 3-15: OPERATIONS FLEET MIX

Aircraft Type	2021	2026	2031	2036	2041
Total Airport Operations	**76,028**	**85,438**	**96,013**	**107,898**	**121,253**
Single Engine*	60,823	67,838	75,562	84,377	93,971
Multi Engine Piston	760	769	768	647	606
Turbo Prop	3,041	3,588	4,321	5,071	6,063
Jet	5,322	6,408	7,681	9,171	10,913
Helicopter	6,082	6,835	7,681	8,632	9,700
Fleet Mix Percentages					
Single Engine*	80.0%	79.4%	78.7%	78.2%	77.5%
Multi Engine Piston	1.0%	0.9%	0.8%	0.6%	0.5%
Turbo Prop	4.0%	4.2%	4.5%	4.7%	5.0%
Jet	7.0%	7.5%	8.0%	8.5%	9.0%
Helicopter	8.0%	8.0%	8.0%	8.0%	8.0%

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

TABLE 3-16: LOCAL AND ITINERANT ACTIVITY

Aircraft Operations	2021	2026	2031	2036	2041
Itinerant					
Itinerant Air Taxi	2,006	2,254	2,533	2,847	3,199
Itinerant GA	36,390	40,904	45,977	51,677	58,083
Itinerant Military	79	79	79	79	79
Itinerant Total	**38,475**	**43,237**	**48,589**	**54,603**	**61,361**
Local					
Local GA	37,488	42,136	47,360	53,230	59,826
Local Military	65	65	65	65	65
Local Total	**37,553**	**42,201**	**47,425**	**53,295**	**59,891**
Total Operations	**76,028**	**85,438**	**96,013**	**107,898**	**121,253**

Source: Century West Engineering developed using FAA ATCT Data

Operational Peaks

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

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

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

The operational peaks for each forecast year are summarized in **Table 3-17**. This level of peaking is consistent with the mix of airport traffic and is expected to remain relatively unchanged during the planning period. These measures of activity are considered in the facility requirements analyses when calculating runway/taxiway capacity and transient aircraft parking requirements.

TABLE 3-17: PEAK OPERATIONS

	2021	2026	2031	2036	2041
Annual Operations	**76,028**	**85,438**	**96,013**	**107,898**	**121,253**
Peak Month Operations (11%)	8,363	9,398	10,561	11,869	13,338
Design Day Operations (Average Day in Peak Month)	274	308	346	389	437
Busy Day Operations (Assumed 150% of design day)	411	462	519	584	656
Design Hour Operations (Assumed 20% of design day)	55	62	69	78	87

Source: Century West Engineering

Design Aircraft

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

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

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

Table 3-18 summarizes FAA technical criteria used to determine the applicable ARC for aircraft based on physical characteristics; representative aircraft are also depicted.

TABLE 3-18: AIRPORT REFERENCE CODE (ARC)

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

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

Beech Baron 55
Beech Bonanza
Cessna 182
Piper Archer

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

Beech Baron 58
Beech King Air C90
Cessna 402
Cessna 421

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

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

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

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

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

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

C-I, D-I

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

C-II, D-II

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

C-III, D-III

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

C-IV, D-IV

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

Source: Century West Engineering

Military Activity

Air traffic control tower counts for the Airport average 248 annual military operations since 2016, although the volume has decreased to less than 150 annual operations over the last two years. Occasional military use with helicopters or small fixed-wing aircraft in support of emergency response, search and rescue, and flight training activities would be consistent with activity (Oregon Army National Guard, etc.) experienced at other Oregon general aviation airports. Military flight activity at the Airport is projected to remain at current levels, with a static projection of 144 annual operations during the planning period. Forecast military activity is included in **Table 3-19**.

Air Taxi Activity

Air taxi activity includes for-hire charter flights, medevac flights, and some scheduled commercial air carriers operating under FAR Part 135. Air taxi activity at Aurora State Airport is forecast to increase at the same rate as itinerant general aviation operations. Forecast air taxi activity is included in **Table 3-19** (forecast summary).

Forecast Summary

A summary of the based aircraft and annual aircraft operations is presented in **Table 3-19**. These forecasts project slight to modest growth over the 20-year planning period that is consistent with FAA's long-term expectations for general aviation in the region. Based aircraft are forecast to increase at an average annual rate of 1.1% between 2021 and 2041. Aircraft operations are forecast to increase at an average annual rate of 2.3% between 2021 and 2041. The forecasts reflect the Airport's ability to attract and accommodate both locally based and transient aeronautical activity from a diverse group of users, including flight training, recreational aviation, personal travel, and business aviation.

TABLE 3-19: FORECAST SUMMARY

Activity	CAGR	2021	2026	2031	2036	2041
Based Aircraft						
Single Engine*	0.9%	216	229	240	250	259
Multi Engine Piston	0.0%	6	6	6	6	6
Turbo Prop	1.1%	13	14	15	15	16
Jet	2.3%	36	40	45	50	56
Helicopter	1.4%	10	11	11	12	13
Total Based Aircraft	**1.1%**	**281**	**300**	**317**	**333**	**350**
Aircraft Operations						
Itinerant						
Itinerant Air Taxi	2.4%	2,006	2,254	2,533	2,847	3,199
Itinerant GA	2.4%	36,390	40,904	45,977	51,677	58,083
Itinerant Military	0.0%	79	79	79	79	79
Itinerant Total	**2.4%**	**38,475**	**43,237**	**48,589**	**54,603**	**61,361**
Local						
Local GA	2.4%	37,488	42,136	47,360	53,230	59,826
Local Military	0.0%	65	65	65	65	65
Local Total	2.4%	37,553	42,201	47,425	53,295	59,891
Total Operations	**2.4%**	**76,028**	**85,438**	**96,013**	**107,898**	**121,253**
Aircraft Operations Fleet Mix						
Single Engine*	2.1%	60,823	67,838	75,562	84,377	93,971
Multi Engine Piston	-1.2%	760	769	768	647	606
Turbo Prop	3.5%	3,041	3,588	4,321	5,071	6,063
Jet	3.6%	5,322	6,408	7,681	9,171	10,913
Helicopter	2.3%	6,082	6,835	7,681	8,632	9,700
Total Operations	2.4%	76,028	85,438	96,013	107,898	121,253
Operations By C-II (Critical Aircraft)	2.4%	242	272	306	343	386
Operations by AAC C & D	2.4%	622	699	785	883	992
Operations by ADG II & Larger	2.4%	5,902	6,632	7,452	8,374	9,410
Instrument Operations	2.4%	9,658	10,853	12,196	13,390	15,402

Source: Century West Engineering
*Includes Experimental/LSA

TERMINAL AREA FORECAST (TAF) COMPARISON

The recommended based aircraft and aircraft operations forecasts are compared to the current TAF as required for FAA review in **Table 3-20**.

TABLE 3-20: AIRPORT PLANNING AND TAF FORECAST COMPARISON

Activity	Year	Airport Forecast	TAF	"AF/TAF (% Difference)"
Passenger Enplanements				
Base yr.	2021	0	0	0.0%
Base yr. + 5yrs.	2026	0	0	0.0%
Base yr. + 10yrs.	2031	0	0	0.0%
Base yr. + 15yrs.	2036	0	0	0.0%
Commercial Operations				
Base yr.	2021	2,006	1,191	68.4%
Base yr. + 5yrs.	2026	2,254	1,731	30.2%
Base yr. + 10yrs.	2031	2,533	1,848	37.1%
Base yr. + 15yrs.	2036	2,847	1,973	44.3%
Total Operations				
Base yr.	2021	76,028	64,035	18.7%
Base yr. + 5yrs.	2026	85,438	65,371	30.7%
Base yr. + 10yrs.	2031	96,013	66,303	44.8%
Base yr. + 15yrs.	2036	107,898	67,262	60.4%

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

Next Steps

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

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

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

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