# Appendix G: PAC COMMENTS COMPILATION

Airport Master Plan Update

**Aurora State Airport** 





# Aurora State Airport Master Plan Update - Comments Received on Miscellaneous Items

Comment #	Page #		WHPacific Response
Comments o	-	Comments received from: Nick Kaiser	
0.1	3-18, task 1.2	Significant growth doesn't mean that the runway should be extended. There is no mention of a tower.	A runway extension is not assumed, it is just one element to be studied in the Plan.
0.2	5-18, task 2D	Add proximity to Aurora's city limits.	No changes to Scope of Work will be made. Location of Airport, in relation to Aurora, is mentioned in the Plan.
0.3	6-18, task 2F	Need to collect actual data for airport operations and use ODA noise study.	All available data is used in the Plan, as well as information from the noise study.
0.4	6-18, task 2.4	Include city of Aurora land use data (vision for airport and off airport land use). Include Aurora comp plan and county UGB agreement (area of mutual concern).	Scope indicates land use documents from local government will be obtained. This comment is more applicable to Chapter Two, and this information will be supplemented in that chapter at the appropriate location(s).
0.5	7-18, task 3.2	Need to have firm data on projected critical aircraft. Why not have constraints on projected aircraft types? Current actual operations data should be used for airport demand/capacity not estimated operations.	See response to #3.1. All data available at the time of the study has been used to develop the forecasts.
0.6	9-18, task 4.2	Why not look at an airport design that fits within the current constraints of the airport?	The Facility Requirements only outlines infrastructure needed to meet the forecasted demand. The next task - Airport Alternatives - is where the Plan studies the No Build alternative, which would be a design that fits within the airport's current constraints, as well as other possible layouts.
0.7	13-18, task	(land use and noise contour drawing) Look at city zoning boundaries and noise study.	Noted, the City's zoning boundary will be evaluated, as appropriate. Traffic patterns, which at Aurora State are based on the noise study, are always a consideration in developing the noise contours.
0.8	14-18, task 7.2	Who will guarantee the bonds?	The issue of bonds, including if they are appropriate, will be discussed in Chapter Seven as stated in the Scope of Work.
Comments of Docum		Comments received from: Nick Kaiser	
0.9	4-6	Airport operations for 2002-2003 were 62,926 (actual count).	The RENS acoustical counting program reported 62,926 operations for that reporting cycle. However, that number is an estimate, based on seasonal samples. It is not an "actual" count.
0.10	5-6	The last master plan had a notation on the airport layout that evaluated adjacent property.	It stated the area would be acceptable for airport-related development under private ownership.

0.11	6-6	The last master plan was not adopted by the county but the CIP was completed anyway?	Elements of the CIP that were implemented went through the appropriate conditional use approvals with the County, since they were not approved outright through adoption of the Plan.
Meeting #	1	Comments received from: Nick Kaiser	
0.12	2-7	(parameters) Will not do land use evaluations. If expansion occurs livability concerns from the local community needs to be considered.	If any deficiencies are noted the Plan will consider a variety of issues, including those that impact livability.
0.13	5-7	Aurora airport should not be a reliever airport for PDX.	As stated in Chapter 1, the Airport should continue to fulfill its role as an Urban General Aviation Airport.
General		Comments received from: Tony Holt and City of Aurora	
		Tony Holt	
0.14	-	Chapters 1-3 have been written prior to any discussion of a vision, goals and objectives or assumptions with the PAC. This leaves a clear impression that there is an attempt to lead the discussion in a predetermined direction.	There is no predetermined direction for this Plan. Goals and issues were a significant portion of the PAC #1 discussion, as well as the Kick-Off Meeting.
0.15	-	The process is being rushed and there is not sufficient time allocated, nor enthusiasm by the Consultant and ODA, to make sure all questions are answered at PAC meetings, that the PAC fully understands the assumptions being made and knows the sources of the data being used.	This planning process includes six PAC meetings, five open houses, and one kick-off meeting, which allows all interested parties an opportunity to review and comment on the Plan. ODA and WHPacific are attempting to address all questions and comments from the PAC; however, the meetings are designed to be working sessions and some questions must be answered off-line. These questions are being addressed in this spreadsheet and are available to the PAC and public.
0.16	-	There are obvious constraints to development and expansion of this airport (only one runway, bordered by roads on four sides, limited remaining areas for development within the footprint). Yet there is no discussion of constraints.	Chapter Five, <i>Airport Development Alternatives</i> , will address these constraints - as well as others.
0.17	-	ODA has already picked a preferred activity level forecast prior to any discussion with the PAC.	ODA's draft preferred forecast was submitted to the PAC and FAA in mid- September. Based on comments received, some changes will be made to the forecast chapter before final publication, but we do not see a need to substantially change the activity levels forecast.
0.18	-	Throughout the document many general statements mention that were collected from individuals or organizations but there is no proper attribution. There should be.	Sources will be added, as appropriate. However, some sources were given a promise of confidentiality, see response to #3.29.
0.19	-	City of Aurora  Has ODA hired a planning consultant for this update like in 2000 and if so, who is it?	Yes, ODA has retained WHPacific, Inc. to undertake the Master Plan Update.

0.20	-	Is there an Aviation System Plan adopted by ODA or Marion County as required by OAR 660?	Yes, the Oregon Aviation Plan was published in 2007. Please refer to ODA's website.
0.21	-	Text: Mutually beneficial to city and airport to have services provided by a utility and not under separate properties; the City of Aurora's future industrial and commercial lands will be impacted by expansion of the airport and they have mutually beneficial/reciprocal relationships; reference Aurora Comprehensive Plan goals and policies;	References will be made, as appropriate, within the plan.

# Aurora State Airport Master Plan Update - Comments Received on Draft Chapter One

Comment #	Page #	Comments received from: Nick Kaiser, Susie Stevens, Tony Holt, Clackamas County, and City of Aurora	WHPacific Response	Will revisions to Chapter 1 be made based on comment?
		Nick Kaiser		
1.1	1-2	Enhance safety/noise - Need to complete VFR update of preferred traffic patterns.	Noted, this will be added to the paragraph.	Yes
1.2	1-2	Goal 2 - Livability of surrounding communities should also impact future growth of airport.	Livability of surrounding communities is a consideration for both environmental and political feasibility, which is why it wasn't mentioned outright.	No
1.3	1-3	Runway extension would disrupt the area's livability and encourage the growth of bigger and louder aircraft. Airport growth needs constraints so that the surrounding areas are not negatively impacted.	Impacts of any development will be discussed with the PAC when airport development alternatives are presented in Chapter Five.	No
1.4	1-4	Keep runway 35 as the calm wind runway for noise abatement. Instrument approach on 17 needs to have written training guidelines for calm wind use.	Noted. Chapter Four discusses this issue in more detail.	No
1.5	1-5	If the airport is changed from BII to CII will the runway have to be extended?	C-II is a classification for aircraft based on approach speed, tail height and wingspan. It does not relate directly to runway length.	No
1.6	1-6	Airport use from survey - inadequate runway length is an issue for only 8% of the respondents that don't keep their planes at Aurora.	The survey is only used anecdotally; it was not intended to be a representative sample of all airport users. Data on runway usage, in relation to runway length, was aquired by other sources in addition to this survey.	No
1.7	1-11	Chart error - II should be III	Noted, chart will be revised accordingly.	Yes
1.8	1-13	What is length of Salem airport? Troutdale is a reliever airport for PDX and has an ARC of BII. What is its runway length?	As noted in Table 1A, the length of Salem's runway is 5,811 and Troutdale's is 5,399.	No
1.9	1-14	Airport role - conclusions and recommendations. Need 3rd alternative - grow within the current (physical) constraints of the airport.	This alternative will be evaluated in Chapter Five. This recommendation states the airport should continue to fulfull its role as an Urban General Aviation Activity Airport; it makes no reference to expansion.	No
		Cusio Stavano		
1.10	1-2	Susie Stevens 4th bullet - add "and cite sources."	Noted, text will be revised.	Yes
1.11	1-2	Goal 2 - Add physical constraints to feasibility.	Physical constraints are a component of the financial feasibility, environmental feasibility, and political feasibility.	No
1.12	1-2	Note: This paragraph should address physical constraints as well: one runway, adjacent roads, airport footprint, etc.	This will be discussed in Chapters Four and Five.	No
1.13	1-3	1st bullet - Remove "evaluate" and insert "involve."	Noted, text will be revised.	Yes
1.14	1-3	5th bullet - Conduct proper noise study.	A noise study was conducted in 2002 and noise contours will be prepared as part of this Plan. No other noise study will be conducted as part of this project.	No

1.15	1-3	Could the appendices please be included with the next draft chapters or posted to the website?	The appendices were mailed to all PAC members in hard copy form. For future mailings, they will also be posted on the website (note, they were later added). The appendices were not included in the initial PAC emailing, because of their filesize. However, if future appendices have smaller filseizes, they too will be included in the initial PAC emailing.	Yes
1.16	1-3	Please cite the sources for the statements made in this paragraph (runway extension). Include the survey in the appendices.	Copies of the user surveys will be included as an appendix.	Yes
1.17	1-3	Air traffic control tower section: Please cite sources for these comments.	Sources will be added, as appropriate.	Yes
1.18	1-4	1st full paragraph, revise to read "rural character [, quality of life,] and natural"	Noted, text will be revised.	Yes
1.19	1-4	Other Airport Improvements section: Most important to have the survey and interview data to make this paragraph credible.	See response to #1.16.	Yes
1.20	1-6	Survey paragraph: Please note that there was no random or other conventional method survey. Who received the survey? Who did not? What was the percent returned of those sent out?	We will clarify the survey was not intended to be a statistical representation of airport users, along with a list of where the survey was distributed. The rate of return is difficult to account for, since the survey was also available online and copies may have been made to those that we distributed; however, we will attempt to quantify a firm number.	Yes
1.21	1-7	2nd paragraph: This number does not appear to tied in with graph on 3-10.	We bought IFR data from 2 different providers. The 14,186 IFR ops for Oct. 2007-Oct. 2009 came from FlightAware. Addresses in that database were easy to sort, which helped to mail surveys & analyze service area. Later, the master plan was put on hold for several months. When the project started up again, we needed more up-to-date data for forecasting. We subscribed to GCR's less expensive Airport IQ Data Center to obtain IFR data used in Chapter 3. In comparing calendar year 2008, FlightAware shows 3,606 arrivals and 3,664 departures, or 7,270 operations. For the same period, GCR information shows 3,226 arrivals and 2,462 departures, or 5,688 operations. Perhaps FlightAware is capturing more of the flight plans filed after departure and those cancelled before landing. We will add a source (FlightAware) to the reference in Chapter 1 & change the estimate of IFR ops at the top of page 3-10 from "5% to 7% of total traffic" to "5% to 10% of total traffic." This does not affect the forecasts summarized on 3-32.	Yes
1.22	1-14	Troutdale airport is in Multnomah County.	Noted, text will be revised.	Yes
		Clackamas County		
1.23	1-2	Last bullet top of page. The PAC requested a vision at the beginning of the process.	Yes, however, the Plan initially did not include a vision statement at all (see PAC #1 summary: "The Plan will not: develop a vision statement for the Airport.") This was a compromise.	No

1.24	1-2	Goal 2 - 1st sentence. This is not an accurate statement. Not all the PAC members stated this as a concern. Some PAC members share the community's concern.	It is our recollection the PAC members who are airport users expressed this opinion. However, text will be revised to state "Some PAC members who are airport users fear"	Yes
1.25	1-3	Runway Extension - entire paragraph. This statement is based on 2009 survey? Survey responses should be available on webpage for review.	See response to #1.16.	Yes
1.26	1-3	Air Traffic Control Tower - last sentence. What is meant by "slowed down?"	The FAA and ODA have postponed some critical decision-making points in the ATCT process to include information from the Plan once it becomes available.	No
1.27	1-4	Other Airport Improvements. The survey responses should be available on wepage and to the PAC.	See response to #1.16.	Yes
1.28	1-5	Aurora State Airport's Regional Role. Is the reference to "spin-off" addressing off site businesses the airport serves?	From the 2007 OAP: "Spin-off impacts are calculated using impact multipliers, which are used to reflect the recycling of dollars through both the regional and state economy Spin-off impacts are often reported as indirect and induced impacts."	No
1.29	1-6	5th paragraph. Implies that there is a possibility that Airport will become a reliever. Is that really the intent here, especially when it is concluded on page 1-15 that commercial service is not an appropriate future role for the Aurora Airport. Consultant clarified reliever airport during meeting - does not include commercial aircraft but does include business aircraft that meets the standards in chapter 1, page 11.	Correct, reliever airports do not provide commercial (airline) service.	No
1.30	1-15	Bullet at top of page. See comment for page 1-6.	See response to #1.29.	No
1.31	1-15 & 1- 16	4th paragraph, last paragraph 1-16. What would be the "trigger" to designate the Aurora Airport as a reliever airport, and why Aurora when it was stated above the Salem [airport] is the better choice? What is the process?	The "trigger" points are generally those described in the bullets on pages 1-15 and 1-16. However, each airport is reviewed on a case-by-case basis.  Most likely, at Aurora State, the trigger would be if any of the three entities (ODA, Port of Portland, or FAA) initiated an individual review.	No
		Tony Holt		
1.32	1-2	Goal 2 Heading says "as feasible" Several areas of feasibility are listed.  However, this section needs to recognize the physical constraints to airport expansion such as one runway, bordered by roads on four sides, limited areas remaining available for development within the footprint, etc.	See responses to #1.11 and 1.12.	No

1.33	1-3	First bullet, change word "evaluate" to properly describe the meaning of this bullet (it is meaningless currently)including assessing the effect of any proposed changes on the livability of airport neighbors. Add bullet-Perform noise study (to measure potential impacts of proposed developments).  Runway Extension paragraph Please provide proper attribution to the many statements loosely made in this paragraph such as 'Some Airport users and businesses favor a runway extension of up to 1,500 feet'—which?. 'Airport neighbors are concerned that a runway extension would unduly disrupt the area and encourage more and louder aircraft'who stated that? Air Traffic Control Tower paragraph—again, need proper attribution for statements made.	See responses to #1.13, 1.14, 1.16, and 1.17. Sources will be added for statements regarding airport neighbors and noise, as well.	Yes
1.34	1-4	2 <sup>nd</sup> para "Airport neighbors are". Add to this sentence 'and their quality of life'. Calm Wind Runway Change section Need to explain this move has never lessened the noise over Charbonneau so to revert to 17 is not a major concern. Other Airport Improvements for complete transparency, need a list of individuals interviewed and those given survey with an explanation of how they were chosen, either here or in a table.	See responses to #1.18, 1.27, and 3.29. The calm wind runway section will be	Yes
1.35	1-5	$2^{\rm nd}$ Section, first sentence. How has Aurora Airport suddenly changed from a <b>rural</b> GA airport to an <b>urban</b> GA airport? Note: the Oregon 'Through the Fence' Bill only applies to rural airports.	Aurora State has always been defined as an Urban GA Airport, as it lies on the southern extents of the Portland-Vancouver-Beaverton Metropolitan Statistical Area (MSA) and is within the Salem MSA. It was included in SB 680 explicitly as an exception to the rural airport requirement.	No
1.36	1-7	$\underline{2^{\text{nd}}}$ para the $\underline{\text{14,186 IFR operations}}$ does not seem to tie to the graph on page 3-10	See response to #1.21.	Yes
1.37	1-14	Page 1-14 6 <sup>th</sup> para-error- <b>Troutdale is not in Washington County</b> .	See response to #1.22.	Yes
1.38	14-Jan	Para 7-again refers to Aurora as an urban airport.	See response to #1.35.	No
1.39	1-16	4 <sup>th</sup> para- refers to 79,953 operations at Aurora on a 10 year average. <u>This calculation needs to be carefully explained to the PAC.</u>	The footnote on p. 1-16 mistakenly says it is a ten-year average, when in fact 1998-2008 is 11 years. That footnote will be corrected to say 11 instead of ten. Using averages instead of individual years discredit year-to-year fluctuations. 79,953 is the average of the 1998-2008 total operations in Table 3K, p. 3-23.	Yes
1.40	-	"PAC members who are airport users fear community concerns will unduly constrain growth."	See response to #1.33.	Yes
1.41	-	"Some airport users report there are times that they must lessen their airplanes weight in order to depart"	See response to #1.33.	Yes
1.42	-	"Some Airport users and businesses favor a runway extension of up to 1,500 feet." (but not mentioned in the survey)	See response to #1.33.	Yes
1.43	-	"Airport neighbors are concerned that a runway extension would unduly disrupt the area and encourage more and louder aircraft."	See response to #1.33.	Yes
1.44	-	Re changing calm wind runway back to 17, "noise impact would move with traffic, a concern for Airport neighbors." $ \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} $	See response to #1.34.	Yes

1.45	-	One goal is "evaluate all communities and jurisdictions in the Airport's influence area." Meaning?	See response to #1.33.	Yes
1.46	-	When did Aurora Airport go from being classified as a Rural General Aviation Airport to an Urban General Aviation Airport.	See response to #1.35.	No
1.47	-	-You want to "determine" Airport's future role rather than predict it.	There is no predetermined direction for this Plan.	No
1.48	-	-No discussion of possible constraints to growth such as one runway, hemmed in by roads, current zoning, etc.	See responses to #1.11 and 1.12.	No
1.49	-	-No mention of livability of airport neighbors as goal.	See response to #1.2	No
1.50	-	-An MP goal should be to predict demand as accurately as possible.	It is, see bullet #4 on page 1.2.	No
1.51	-	-An MP goal should be to evaluate potential noise and traffic impacts for any new development.	These are included as Goal #3, "Consider all the off-airport impacts of Airport development." Impacts to ground transportation are cited specifically, and noise contours will be developed as part of the Plan.	No
1.52	-	-Should show a list which individuals/organizations responded to the survey?	See response to #1.16.	Yes
1.53	-	-Should show a list of which individuals/organizations were interviewed?	Sources will be added, as appropriate. However, some sources were given a promise of confidentiality, see response to #3.29.	Yes
1.54	-	-How do the Oct 2007 to Oct 2009 IFR numbers on page 1-7 fit with Exhibit 3D, page 3-10?	See response to #1.21.	Yes
1.55	1-16	Says the average operations at Aurora from 1998-2008 were 79,953 operations; how calculated and isn't this meaningless?	See response to #1.39. Average operations at both Aurora and PDX were used to perform the calculations associated with the reliever designation. Using averages instead of individual years discredit year-to-year fluctuations. The reliever calculations help assess the role of the Airport. In the past, reliever airports received set-aside funding in the Airport Improvement Program (AIP). This is not the case with the current (expired) legislation covering the AIP, although reliever airports receive higher priority than general aviation airports for some discretionary funding, according to the AIP Handbook. Because the authorizing legislation for the FAA has expired and the content of new legislation is unknown, we were hesitant to go into much detail. We will summarize this information and add it to the chapter so that it seems more meaningful.	Yes
		City of Aurora		
1.56	1-2	Goal 3 has good language that needs to be referred to often in other parts of the plan update, "Consider all the off-airport impacts of Airport development; minimize negative impacts and maximize positive impacts"	All goals are used to evaluate the proposed preferred alternative in Chapter 5, and are used in the decision-making process.	No

1.57	1-3	"For example, the lack of sewer service is a major constraint for having a restaurant at the Airport" Add text: "While Oregon Department of Aviation recognizes the complexities of Oregon's land use system and potential need for upgrades to City of Aurora utilities prior to annexation, ODA is generally supportive of annexation of the Aurora Airport by the City of Aurora due to the economic growth potential for the airport if it were connected to city services".	Noted, text will be revised.	Yes
1.58	1-12	Page 1-12 under Aurora State Airport heading, add text: "Located less than a quarter mile from the City of Aurora"	See response to #2.1.	Yes

## Aurora State Airport Master Plan Update - Comments Received on Draft Chapter Two

Comment #	Page #	Comments received from: Nick Kaiser, Susie Stevens, Tony Holt, Clackamas County, and City of Aurora	WHPacific Response	Will revisions to Chapter 2 be made based on comment?
		Nick Kaiser		
2.1	2-1	Airport location - correction - airport is 1/3 mile from the city limits.	Noted, text will be revised.	Yes
2.2	2-7	Airspace - Need written guidelines for IFR on 17 when calm wind runway 35 is used during VFR conditions.	Chapter Two reports existing conditions. ODA is working with FAA to create procedures to reduce the noise impact to surrounding communities.	No
2.3	2-8	Use noise study	A detailed discussion of the noise study is in Chapter Four.	No
2.4	2-8	Land use - Airport is public Zone - If airport becomes an airport zone what changes other than outright uses will be allowed?	No other changes would occur.	No
2.5	2-9	RPZ - How will this change with runway extension?	Chapter Five discusses alternative Airport Layouts, along with design standards.	No
2.6	2-9	Human factors - consultants indicate there are currently 87,000 operations and the plan projects there will be 100,000 by the end of 2010? Does no make sense? There continues to be noise sensitive issues because of flight over populated areas.	See response to #3.19. 87,345 is the number for 2008 from the Terminal Area Forecast. 100,224 is the number estimated by multiplying 2010 based aircraft (432) by average operations per based aircraft (232). Will revise p. 2-9 to be more clear.	Yes
2.7	2-10	Golf course is on Airport Road. (correct)	Noted, text will be revised.	Yes
2.8	2-10	Social impact - If the state has to acquire land and business and homes are relocated, that is beyond constraint.	This is a general statement, quantifying what would be considered a "social impact" per the National Environmental Policy Act definition. Any proposed land acquisition would undergo NEPA review and the impact would be further assessed.	No
2.9	2-11	Farmland - What happens during the process of coordinating with NRCS?	NRCS coordination is conducted by FAA per NEPA requirements, once a project is identified and if the project includes a taking of farmland. Through consultation, the NRCS would need to be shown there's no feasible and prudent alternative to taking farmland for the use.	Yes
2.10	2-13	Wetlands - Are they not jurisdictional?	A wetland delineation was not conducted, so this is unknown. A delineation would be prepared if any development action could affect the areas in question.	No
2.11	2-14	Controversy - Not correct - There are opinions that the airport should exist but growth should have some constraints to insure livability in the community.	Noted, text will be revised.	Yes
2.12	2-15	Terminal area forecast of operations at 87,345 is shown as "actual data." How is this measured?	See response to #3.13. We will change the word "actual" to "estimated."	Yes
2.13	2-16	Fuel fees - 2010 down 12% from 2009 and down 8% from 2008. This is indication that airport activity is going down.	See response to #3.3. Not all fees were paid on time.	No
		Susie Stevens		
2.14	2-7	Other Support Facilities: Please add Wilsonville to this paragraph.	Wilsonville will be added.	Yes

	2.15	2-7	Airspace: Note - From the City of Aurora only, but not to the north. What is the source of this sentence?	Overall complaints have been reduced and source will be given. Text will clarify that overall complaints have reduced, but complaint levels from the north have remained at a consistent level.	Yes
	2.16	2-11	Farmland: Please add information from the Oregon Department of Agriculture on the designation of Foundation farmland.	Information will be added.	Yes
	2.17	2-14	Other Issues: Add a paragraph on (vehicular) traffic.	Issues relating to vehicular traffic will be added to the environmental conclusion section.	Yes
	2.18	2-15	Regarding the Terminal Area Forecast: It would be more informative to have a couple sentences explaining how this forecast is determined.	See response to #3.45.	Yes
			Clackamas County		
,	2.19	2-2	Area Topography. Incorrect: Not part of Mt. Hood National Forest	Marion County reports the forest extends into Marion County, as does the Clackamas River Ranger District Office.	No
	2.20	2-2	Community and Airport History. Why not include when tower was 1st put on ALP? This will provide clarification on all structures planned.	Noted, this will be included.	Yes
:	2.21	2-3	Airfield Facilities. How often is runway rated? What type of aircraft does runway support - commercial, business? Is there a limitation on runway strength and future strength?	The runway is rated every three years. The runway supports General Aviation, which includes private and business operators but does not include commercial (airline) operators. Discussions relating to runway limitations are provided in Chapters Four and Five.	Yes
:	2.22	2-8	3rd paragraph. Unclear sentence, please restate for clarity. Are you saying that allowed uses on adjacent lands must be compatible with the airport imaginary surface overlays?	Statement will be clarified. The FAA does require that airport sponsors - to the extent of their ability - restrict zoning on adjacent lands and lands within an airport's immediate vicinity to compatible land uses.	Yes
:	2.23	2-8	Surrounding Area Land Use. This statement gives the impression that adjacent lands are RRFF5 and the golf course. Restate as " further north of the airport are RRFF-5 zoned lands and a golf course."	Statement will be clarified.	Yes
	2.24	2-8	Surrounding Area Land Use. Did not address local, regional or state land use laws and regulations. As long as there is not a proposal to expand the airport runway or locate a facility off of the ALP boundaries the MP does not have to address these regulations, however any expansion will require addressing local, regional and state laws to include an exception process. Then again the FAA guidelines in accordance with the FPPA will prohibity the expansion of the airport boundary on high value farm lands.	This chapter presents the existing conditions. Any actions proposed in this Plan - in subsequent chapters - will address local, regional and state land use laws and regulations.	No
	2.25	2-9	1st paragraph. Clackamas County's Capital Improvement Plan (CIP) 2006-2008 Update shelved the Arndt Rd/99E (#267) in 02-23-05.	Noted, text will be revised.	Yes

2.26	2-9	2nd to last sentence. Is this an FAA requirement in response to PAC and community's concerns relating to noise impacts?	No, this is a standard planning requirement for airports. Occasionally FAA will waive this requirement for smaller airports. It has always been in the Scope of Work for this project.	No
2.27	2-10	1st paragraph. In the 2002 noise mitigation study, where was the noise redirected with the implementation of use of Runway 35? Need to see this runway on a map to know where it is.	Please refer to the exhibits for a visual of Runway 17/35. Aircraft landing Runway 35 are approaching from the south.	No
2.28	2-11	4th paragraph. This implies that extension of the airport lands cannot be achieved. The surrounding farmlands are considered high value farmland according to the 1985 soil survey of Clackamas County Area, Oregon, that identifies surrounding soils as type #3 Amity silt loam and #88 Willamette silt loam. Other high value soils surrounding the airport property include #68 and #69 Newberg loam.	Any proposed improvement off airport would undergo NEPA review, in which this concern would be addressed. See response to #2.9.	No
2.29	2-14	Conclusion. The Master Plan goals stated in the beginning of this document also commit the MP to include" evaluation and minimum impacts of airport growth to include transportation."	See response to #2.17.	Yes
		Tony Holt		
2.30	2-7	$\underline{4}^{\text{th}}$ para, second last sentence-"complaints from neighboring Aurora have dropped"should note that they have not dropped at Charbonneau which is now suffering the wide spectrum of take-off noise.	See response to #2.15.	Yes
2.31	2-9	last para-the PAC needs to properly understand how the current annual operations number quoted of 87,345 was arrived at. Also, the sentence 'Because the majority of the adjacent land is in agricultural use, the number of noise sensitive uses is minimal' is ludicrous given the adjacent residential areas of Aurora and Charbonneau	See response to #3.45. When compared to other urban airports, there are fewer noise sensitive land uses. However, that statement does not negate the impacts at Aurora State.	
2.32	2-11	$\underline{3}^{rd}$ para should also quote the Oregon Department of Agriculture study classifying areas as either Foundation or Important or Conflicted farmland. The area around the Airport is classified as Foundation farmland the D of A's top rated classification.	See response to #2.16.	Yes
2.33	2-14	$\underline{2}^{nd}$ para who are the community members who 'desire closure of the Airport'? 3 <sup>rd</sup> para- under "Other Issues" traffic impacts should be mentioned.	See response to #2.17. Source will be added.	Yes
2.34	2-15	<b>Table 2D Operational Records</b> . The PAC needs to know how this was developed. It is fundamental to the key forecasts.	See response to #3.45.	Yes
2.35	2-14	Page 2-14, "There are some members of the community who are against airport growth and desire closure of the Airport and release of the land to other uses." Who are they??	Source will be added.	Yes
2.36	-	"An accurate inventory helps produce an aviation demand forecast"		

2.37	2-7	"Complaints from neighboring Aurora have dropped since this designation (calm wind 35) was enacted." Maybe, but not from Charbonneau.	See response to #2.15.	Yes
2.38	2-9	Under 'Human Factors' and 'Noise' talks about noise sensitive land uses and says "the number of noise sensitive land uses is minimal' because the majority of the adjacent land is in agricultural use.	See response to #2.31.	No
2.39	2-11	Under 'Farm Preservation' should also reference the Oregon Department of Agriculture study.  'Conclusion' "Beyond controversy over noise and airport expansion, there do	See response to #2.16.	Yes
2.40	2-14	not appear to be any significant environmental issues on the Airport or in the airport vicinity." What about traffic??	See response to #2.17.	Yes
		City of Aurora		
2.41	2-1	Page 2-1 under Airport Location and Access hearing: "The city of Aurora is located approximately one one-quarter mile southeast of the Airport".	See response to #2.1.	Yes
2.42	2-6	Page 2-6 under Airport Support Facilities heading: Add text: "Surrounding communities have expressed concerns that additional growth at the airport and the potential for airport expansion will have negative impacts upon their water supplies and/or water quality. Advanced planning and feasibility assessments regarding the airport's ability to meet water, sewer, and fire protection needs for development and expansion are of concerns. While not required as part of the Airport Master Plan Update and not included in this document, the ODA recognizes the importance of completion of this work in the future. ODA is supportive of pursuing funding options for such studies and supports surrounding communities in their pursuit of funding for such studies".	Noted, text will be added.	Yes
2.43	2-6	Page 2-6 under Airport Support Facilities heading and Utilities subheading, add text: "While Oregon Department of Aviation recognizes the complexities of Oregon's land use system and potential need for upgrades to the City of Aurora utilities prior to annexation, ODA is generally supportive of annexation of the Aurora Airport by the City of Aurora due to the economic growth potential for the airport if it were connected to city services."	A reiteration of this point will be made. See response to #1.57.	Yes
2.44	2-8	Page 2-8 under the Surrounding Area Zoning and Land Use heading, please make reference to the Urban Growth Boundary Coordination Agreement with Marion County that has a section on the Airport and surrounding lands as an Area of Mutual Concern, and the IGA signed between ODA, Marion County and the City of Aurora. I can provide copies of these documents if needed.	Noted, text will be supplemented.	Yes

Yes

Goal 14- Growth and Urbanization. Policy 4: The city will seek the funding to evaluate the impacts of development of the industrial and commercial properties at the Aurora Airport and on surrounding lands to determine the role of the Aurora Airport in relationship to the Overall Objectives of the Aurora Comprehensive Plan and to identify formal and informal relationships needed to achieve mutually beneficial goals.

Goal 9- Economic Policies. Policy 1: The City will work closely with Marion County, the Oregon Department of Aviation, and the Oregon Department of Economic and Community Development to evaluate and balance the net value (cost/benefit) of the industrial and commercial potential of the Aurora Airport and surrounding lands. The City will strive to minimize potential land use conflicts within the mutual planning area in an effort to maximize the livability of the community.

Goal 11-Public Facilities. Policy 2 and 8: The City shall consider extension of a sewer and water line to the Aurora Airport industrial district if it is determined by the City and county that: a. The City is the most logical service provider; and b. The extension benefits the City economically; and c. Precautions prevent hook-ups to the line by property owners in the rural area between the urban growth boundary and airport; and d. In full compliance with applicable laws.

## Aurora State Airport Master Plan Update - Comments Received on Draft Chapter Three

Comment #	Page #	Comments received from: Nick Kaiser, Susie Stevens, Tony Holt, and Clackamas County	WHPacific Response	Will revisions to Chapter 3 be made based on comment?
		Nick Kaiser		
3.1	General	Why are the projections unconstrained? There should be some parameters. The last master plan one of the constraints was an ARC of BII.	Airport master plan forecasts of aviation demand are usually unconstrained. ODA did not feel it necessary to constrain the forecasts, particularly since there is undeveloped land at the Airport (ODA and private) for hangars, etc. ODA may elect to constrain the forecasts later in the planning process, as happened in the 2000 master plan update. (During the last master plan, ODA decided to constrain the forecasts by not meeting design standards for Airport Reference Code C-II.) Identifying how to constrain the future is much easier when you have an idea what the unconstrained future might be. The FAA typically produces unconstrained forecasts. The FAA's annual Terminal Area Forecast (TAF) (http://www.faa.gov/data_research/aviation/taf_reports/media/TAF%20Summary%20Rep ort%20FY%202009%20-%202030.pdf) contains forecasts for over 3,000 airports. Page 3 of the TAF report published December 2009 says, "The TAF assumes an unconstrained demand for aviation services based upon local and national economic conditions as well as conditions within the aviation industry. In other words, an airport's forecast is developed independent of the ability of the airport and the air traffic control system to furnish the capacity required to meet demand." This information will be added to Chapter Three to more clearly indicate why the forecasts are unconstrained.	Yes
3.2	3-2	"Critical Aircraft" current analysis is an unconstrained mix. Where do you draw the line on size of plan?	Decisions about the size of the plan will be made later.	No
3.3	3-3	2010 trend is still down so how can operations go up?	Nationwide aircraft shipments were down the first quarter of 2010, although billings were up (p. 3-3). At Aurora, IFR traffic was up 22% for partial year 2010 (p. 3-10) and fuel flowage resumed growth in 2009 (p. 3-8).	No
3.4	3-5	Need to label the charts 3A and 3B.	Exhibits 3A and 3B have titles and sources, so the comment intent is not clear.	No
3.5	3-7	With the slight increase in US active aircraft and Oregon trending below that how can we show such a large increase in base aircraft? How can you conclude that operations will increase at the same rate as based aircraft?	Aurora's historical 2000-2009 growth is 7.0% annually (233 based aircraft in 2000 growing to 427 in 2009), while the national increase for 2000-2009 is 0.6% annual (Table 3A on p. 3-5). So, it is reasonable that Aurora's future growth is higher than the national forecast (1.36% compared to 0.9%). Using a constant OPBA for forecasting future general aviation operations is common in airport master plans. Historical info at Aurora shows operations sometimes go down when based aircraft go up and vice versa.	No
3.6	3-8	Aviation gas dropped 47% in 2008 and the increase in 2009 and 2010 is mainly jet fuel. Jets are a small portion of based aircraft so operations should have not increased at levels indicated.	Fuel is sold to transient as well as based aircraft. Jets have larger fuel tanks and on average are flown more hours than other fixed wing aircraft. This explanation will be added.	Yes
3.7	3-9	2002 & 2003 operaions were measured at 62,926. Chart 3C shows approximately 78,000?	See Table on p. 3-23 for the numbers in Exhibit 3C and see response to #3.13.	No
3.8	3-10	IFR operations in 2009 is approximately the same as 2002-2003. 2010 continues to be a bad year.	See response to #3.3. IFR is growing in 2010.	No
3.9	3-13	I don't see the correlation between the population growth in the core area and licensed pilots.	We did not specifically correlate population growth with pilot growth.	No
3.10	3-16	Based Jet aircraft went from 33 in 2007 to 21 today.	Noted. However, the number in 2006 was only 6. We tried to look at trends over time.	No

3.11	3-18	Based aircraft increase is not following the socioeconomic trends.	Based aircraft forecast is 1.36% annual growth. Average annual population growth in service area is 1.53% (p. 2-13). Metro forecasts for nonfarm employment are between 0.7% and 1.8% annual (p. 3-14).	No
3.12	3-71	Using preferred forecast 1.36% the based aircraft is too optimistic. It will not follow population growth or other socioeconomic trends. For based aircraft to increase at the forecasted rate there will need to be a lot more hangar space. (constraint?)	See response to #3.11. Hangar space needed for forecasts will be in Chapter Four.	No
3.13	3-22	The last actual operations recorded was 2002/2003 at 62,900. No actual data was taken in 2008.	Acoustical counts in 2002/2003 were estimates based on samples (as reported on ODA's website). We have not been able to account for the difference in operations reported from acoustical sampling on ODA's website and the operations reported in the Terminal Area Forecast, which the FAA says come from ODA. We will change the word "actual" to "estimated".	Yes
3.14	3-23	OPBA of 232 means there is little itinerant traffic (according to FAA guidelines). Table shows heavy itinerant traffic? The OPBA from the survey doesn't make sense?	We noted that FAA's OPBA guidance does not relate well with Aurora having considerable itinerant traffic, hence the discussion on p. 3-23 and 3-24. The survey was a random sample, but it did cover a wide range of aircraft types and convey average OPBA per fixed wing aircraft similar to FAA's historical records of aircraft and operations.	No
3.15	3-25	Preferred forecast 1.9% - At 232 OPBA the itinerant will be lower so how do you get to 1.9%/year?	In 2008, operations were 87,345 and the number of based aircraft was 422. The OPBA was 207, below the average of 232. 1.9% average annual growth is from 87,345 in 2008 to 131,312 in 2030.	No
3.16	3-26	Why large growth in itinerant from 51,000 to 85,000?	Itinerant operations are those that are not local (touch and go training, primarily) and are performed by both based and transient aircraft. The assumption is that training operations will comprise a slightly lower portion of total operations in the future, which often happens when airports grow busier. However, the growth in itinerant operations (2.1% per year) is not much different than the growth rate for total operations.	No
3.17	3-27	With 21 jets in 2010 what is the correct % of the jet capable airports.	We do not have 2010 information about the other airports, so cannot calculate that.	No
3.18	3-27	With 21 based jets and 432 total based aircraft (5%) how do you get to 13% of operations growing to 18%?	Business jet aircraft are used more often than piston aircraft. From Tables 3A and 3B, compare national averages by aircraft type. Piston aircraft are flown 83 hours per year and jet aircraft are flown 252 hours per year on average. Also, since it is jet capable, and most of the 46 other airports in the service area are not, Aurora will be used more by transient jet aircraft than most of the other airports. This explanation will be added.	Yes

3.19	3-28	There is a sensitivity to using an inflated operations per year number. Just going from 100,000 to 87,000 the peak hour operations goes from 40 to 34 and 80,000 gets you 32.	This comment is one of several concerned with inaccurate or inflated numbers of aircraft operations. The FAA uses aircraft operations estimates from airport owners to determine the number of aircraft operations at non-towered facilities, and assesses them for their reasonableness before publishing them in the Terminal Area Forecasts. See p. 3-22 through 3-24 for a discussion of different ways to measure operations at non-towered airports, FAA guidance for ratios of operations per based aircraft, and analysis of Aurora's operations per based aircraft compared to other airports in the region. The FAA's records of aircraft operations at over 2,000 airports across the nation are estimates, so reliance on estimates for planning is not unique to Aurora State. Here is how the number of aircraft operations could affect the requirements in Chapter Four: The capacity analysis uses operations numbers. (However, the analysis will show that the runway has the capacity for many more operations than are estimated to occur at the Airport now or in the 20-year future.) Also, peak operations are used to project the amount of transient aircraft parking apron needed in the future. These projections help in planning the future layout of the Airport. However, neither ODA nor private entities will build more apron until actual need is demonstrated.	No
3.20	3-29	What % of the Aurora based jets is the runway design for?	Airports are designed for transient airplanes as well as based airplanes; this is not something a master plan would normally calculate.	No
3.21	3-29	Do we want to go to ARC C and open the door to much larger jets? What is max weight of jets in C category?	The standards for ARC C-II will be spelled out in Chapter Four, along with weight information about jets in C category that use the Airport. The decision about meeting those standards will be made later.	No
3.22	3-29	How many planes listed in the II category fit the weight restrictions (45,000 dual) currently at the airport? What increase would the runway weight capability have to be to fit the critical aircraft?	All or nearly all the current based aircraft have maximum takeoff weights below 45,000 pounds. The current and forecast critical aircraft mentioned on pages 3-30 and 3-31 weigh 23,500 and 36,100.	No
3.23	3-30	I thought that the current ARC was BII?	The Airport is now designed to meet ARC B-II standards. Operations at the Airport now meet the threshold for the ARC to be C-II.	No
3.24	3-30	What are the weight design specs fro ARC CII? What are the weight design specs for the Astra 1125 and Cessna Citation (X)? Is it 36,000# for both? Are the dual wheel? Footnote shows that ARC CI and CII have the same max takeoff weight?	ARC is based on approach speed, wingspan, and tail height, not weight. Aircraft in one ARC can and do have different weights. More information about different weights of business jets will be in Chapter Four.	No
3.25	3-30	Since 2009 C category jet operations are low and if you used 2009 and 2010 you would probably be below the 500 critical operations.	See p. 3-10. IFR Traffic is up 22% in 2010 compared to 2009, so that is probably not the case.	No
3.26	3-30	What are the runway design specifications for ARC CII? What is the Runway length specs for the Critical aircraft?	This will be in Chapter Four.	No
3.27	3-1	Susie Stevens  1st paragraph: Constrained projections should be part of the Master Plan if there is the possibility that ODA may choose to not meet the unconstrained projections.	See response to #3.19.	-
3.28	3-5	Oil prices: This seems unrealistic; perhaps a couple of other sources will provide credibility.	The oil price assumption is in the FAA's forecast for aviation activity nationwide (FAA Aerospace Forecasts Fiscal Years 2010-2030, March 2010) and is based on Global Insight's October 2009 oil price forecast. This is simply part of the description of the FAA's latest national forecasts. We don't have sufficient data about Aurora activity to distinguish the effect of high fuel prices in 2008 from effects of the recession or other factors in 2008. High fuel costs usually influence discretionary/recreational flying more than business travel.	No

3.29	3-10	Regarding business interviews: It would be helpful to know which businesses provided this information.	We promised those businesses confidentiality because they compete with each other. If there are any businesses at the Airport that believe this paragraph misrepresents their activity or projections for the future, we will delete the paragraph.	No/Yes
3.30	3-12	I suggest a paragraph that notes that Marion County is the entity that approves zoning and land use changes.	See Chapter Two, page 2-9: "The entire Airport is zoned in the Marion County Zoning Code. Marion County is the planning and building permit authority for the Airport."	No
3.31	3-16	Last paragraph: It would be interesting to see, maybe in the appendix, the Table 3I recalculated without Southend Airpark's growth. Sort of like eliminating high and low numbers to get a better average.	We may have mistakenly implied that the Southend Airpark was the only cause of the market shift and will revise the text to mention that the development and removal of hangars at other airports in the region may have contributed to the shift in market share. For example, the privately owned Evergreen Field in Vancouver with up to 165 aircraft closed in 2006 (http://www.airfields-freeman.com/WA/Airfields_WA_SW.html#evergreen). Several other private airports in the region closed between 1998 and 2007. In 2008, Portland International Airport removed 18 hangars for a road improvement project.	Yes
3.32	3-21	Preferred Based Aircraft Forecast: I realize PAC members may feel like we are going backwards, but this is such a critical paragraph. I suggest we discuss the assumptions made in choosing the Preferred Forecasts.	Noted for Dec. 9 meeting.	-
3.33	3-22	It's frustrating that we can't get an accurate count. Using the estimated forecast results in an operation every 6 minutes, 24 hours a day, 365 days per year. This seems too high.	See response to #3.19.	-
3.34	3-23	It would be good to note how the survey was done; how many sent, how many returned, etc.	See Appendix C. It is difficult to estimate how many questionnaires were distributed, but we'll try to quantify this more. See response to #1.20.	Yes
3.35	3-29	Last paragraph: It would be helpful to have a table showing the numbers of piston and turboprop aircraft operations, even if they are estimates. This relates to the ideas expressed at the first PAC meeting of a "vision" for the airport - what do the majority of users want. In 2000, ODA decided to constrain the forecast by keeping the ARC BII (pg 3-28). We should discuss this idea.	See Table 3M, p. 3-27. For a response to the comment about vision, see the response to comment #1.23.	No
3.36	3-32	With over 70% of the projected operations by piston or helicopter for the next 20 years, improvements should be geared to serve the majority of users.	Chapter Four will address the needs of piston and helicopter users. Following FAA guidance, airfield design is for the most demanding aircraft in regular use and then the airfield is adequate for all the less demanding aircraft.	No

3.37	-	In reference to the data and text on pages 3-28 through 3-31, is a designation of ARC C-II mandatory?	Probably not. The obligation to improve the Airport to meet demand is not in the 39 assurances that ODA makes when accepting Federal Airport Improvement Program grants. However, it is possible that the FAA will not fund a future airfield project if does not meet the design standards for the ARC. The FAA's guiding principles for investing in airports include: "Airports should be safe and efficient, located at optimum sites, and developed and maintained to appropriate standards," and "Airports should be flexible and expandable, and able to meet increased demand and to accommodate new aircraft types." On the other hand, cost beneficial investing is another guiding principle for the FAA, along with "Airports should be compatible with surrounding communities, maintaining a balance between the needs of aviation and the requirements of residents in neighboring areas."  We believe the best time for deciding whether or not it is feasible to meet ARC C-II standards is after we know the impact of meeting those standards, later in the process. (The guiding principles are in the National Plan of Integrated Airport Systems (NPIAS) 2011-2015, p. 3, http://www.faa.gov/airports/planning_capacity/npias/.)	No
		Clackamas County		
3.38	-	Forecast Growth Rate for Jets It would seem that the linear trend would not be a valid predictor of future growth. Is there any factual basis for predicting that the rapid growth that resulted from the opening of the Southend Airpark will or can continue? Is there room within the existing airport boundaries or sufficient land available outside the airport? Zoning maps indicate that there is not. Is the ODA aware of any plans to change the surrounding zoning?	We agree that growth in based jet aircraft will not continue at the 5.9% historical growth rate. The 4.5% growth rate for based jets is substantially less than the historical rate, but comparable to the 4.3% annual growth from 2010 to 2030 that the FAA projects for jets nationwide (Table 3A). The forecasts are unconstrained. Evaluating the amount of land available will be in Chapter Four. If any change in zoning is contemplated, it will be later in the planning process.	No
3.39	-	Critical Aircraft. Is there any reason why the "critical aircraft" is different than the predominant aircraft of last year? How does this meet the "regularly" or "substantially" standards set forth on page 3-28?	The prevalent or predominant jet aircraft is the model that uses the Airport the most. This discussion just expands on what Table 3P shows. The most used aircraft is not the critical aircraft. The critical aircraft is the most demanding that regularly uses the Airport. The predominant jets in 2007 and 2009 were Airport Reference Code (ARC) B-I and B-II. ARC C-II has more demanding design standards (generally larger safety clearances) than ARC B-I or B-II, as Chapter Four will show. We will try to explain the distinction between predominant and critical for better clarity.	Yes
		Tony Holt		
3.40	3-1	1 <sup>st</sup> para, 3 <sup>rd</sup> sentence-"These projections are unconstrained and assume ODA or others will be able to develop the various facilities necessary to accommodate based aircraft and future aircraft operations." This is a fatal flaw in the conclusions so far. Constraints to growth must be considered in producing any accurate operations forecast(s).	See response to #3.1.	-
3.41	3-5	last para, the statement that oil prices will not exceed \$100 before 2025 is ridiculous given the limited supply of new sources of petroleum and increases in demand once the current worldwide recession is over. What is the source?	See response to #3.28.	-
3.42	3-9	Exhibit 3C Historical Aircraft Operations at Aurora State Airport. On the following page it is admitted that this is an estimate so Exhibit 3C should show that. How were these data it compiled? Sentence above Exhibit 3C says' The FAA keeps records of airport operations reported by airport owners'. Please explain this.	We will add that the airport owners estimate the operations they report to the FAA. Airport operators report estimated operations on periodically updated http://www.gcr1.com/5010web/airport.cfm?Site=UAO) and the FAA Airport District Office in Seattle reports numbers to Headquarters annually.	Yes

3.43	3-10	Exhibit 3D It is hard to believe that out of supposedly 90,000 total operations at Aurora in 2009 only 5,000 were IFR!! Please confirm and supply source	We realize from our line-by-line analysis of jet IFR operations that quite a few IFR operations are not documented in the IFR records from GCR (http://www.airportiq.com/) because flight plans are filed after takeoff or cancelled before landing. We documented those unrecorded jet operations to identify the appropriate airport reference code, but jets account for less than half of the IFR records. When charting the IFR operations trend in Exhibit 3D, we felt using the data exactly as provided by GCR would be the best course of action. We are increasing the estimate of IFR operations to up to 10% of total operations to account for unrecorded operations. 36% of operations are classified local (touch-and-go) operations that are nearly all VFR. Underestimating or overestimating the IFR operations proportion of total operations has no impact on the facility requirements in Chapter Four, although the FAA might consider IFR operations numbers when contemplating new or different instrument approaches in the future. The consequences of underestimating or overestimating total operations is described in the response to #3.19.	Yes
3.44	3-15	<u>Based Aircraft Forecast</u> -explain how various forecast models were developed and the preferred one selected.	The explanation is in the chapter and can be discussed more at the meeting Dec. 9.	-
3.45	3-22	3 <sup>rd</sup> para- the <u>FAA's Terminal Forecast</u> is mentioned frequently. What is it, how is it developed and explain how it is relevant.	The Terminal Area Forecast (TAF) is the FAA's annual forecasting for terminal control centers and for the approximately 3,300 individual airports that are in the National Plan of Integrated Airport Systems (NPIAS). According to the Terminal Area Forecast Summary, Fiscal Years 2009 – 2030, p. 3, "The TAF is prepared to assist the FAA in meeting its planning, budgeting, and staffing requirements. In addition, state aviation authorities and other aviation planners use the TAF as a basis for planning airport improvements." The TAF provides a benchmark for individual master plan forecasts. The FAA may modify or update the TAF based on an approved master plan forecasts. If an airport master plan forecast for operations exceeds the TAF by more than 10% in the first five years, they are sent to FAA Headquarters for review. According to Par. 428.a, FAA Order 5100.38C, AIP Handbook, the lack of FAA acceptance of forecasts may delay any further planning or capital improvements depending on them. See Appendix H for the comparison of Aurora's master plan forecasts and the TAF. We will add this explanation to the chapter. For more information about the TAF, see http://www.faa.gov/data_research/aviation/taf_reports/media/TAF%20Summary%20Rep ort%20FY%202009%20-%202030.pdf.	Yes
3.46	3-29	last para-"The airport has now passed the 500 operations threshold for Aircraft Approach Category C". How do we know? Where is it documented and by whom? But there are not 500 operations for ARC C II.	There are at least 500 operations for Aircraft Approach Category C and at least 500 operations for Airplane Design Group II, hence the ARC is C-II. Table 3P shows the number of Aircraft Approach Category C operations in FY 2007 and FY 2009 (665 and 377)—these include Airport Reference Code (ARC) C-I, C-II, and C-III. The average of these two years is 521. We consider this average a fair representation of activity because within the last ten years, 2007 was the peak year and 2009 was the valley year. To get these numbers, we counted individual jet operations in IFR records, adding VFR arrivals and departures as required. Here's an example of the backup for Table 3P. The table lists 293 ARC C-I operations in FY2007. These ops are: BAE 125-122, Israel 1124-15, Learjet 36-2, Learjet 45-4, Learjet 55-2, Learjet 31/31A-12, Learjet 35A-14, and Hawker 400/400A-122. A sample from the IFR data is copied below these comment responses.	No
3.47	-	All activity forecasts presented are unconstrained; that is unrealistic.	See response to #3.1.	-

3.48	3-5	The oil price prediction needs references as to source/basis. The prediction is totally unrealistic.	See response to #3.28.	-
3.49	3-10	Exhibits 3C and 3D indicate that of an estimated 88,000 operations at Aurora in 2008, only some 5,800, or 7% were IFR. That seems unrealistic.	See response to #3.10.	-
3.50	3-29	How do we know "the airport has now passed the 500 operations threshold for Aircraft Approach Category C, so the current ARC should be C-II"? What proof? Why C II?		-

#### ADDITIONAL INFO FOR DOCUMENTATION OF ARC

Exhibit 3D on page 3-10 lists IFR operations for all types of aircraft, piston and turboprop as well as jet aircraft. Table 3P is only jet aircraft. The jet operations in Table 3P result from reviewing IFR records line-by-line and adding additional arrivals and departures as needed. See the footnote on p. 3-29. Here is an example of an IFR record:

Aircraft - N600ST Make and Model CESSNA 550 Class JET ROBERTS FIELD to AURORA STATE - 02/13/2007 at 08:01 AM REDDING MUNI to AURORA STATE - 02/13/2007 at 03:55 PM ROBERTS FIELD to AURORA STATE - 03/07/2007 at 07:44 AM AURORA STATE to ROBERTS FIELD - 03/07/2007 at 08:19 AM ROBERTS FIELD to AURORA STATE - 03/07/2007 at 02:45 PM AURORA STATE to ROBERTS FIELD - 03/07/2007 at 03:12 PM ROBERTS FIELD to AURORA STATE - 06/11/2007 at 09:25 AM AURORA STATE to REDDING MUNI - 06/11/2007 at 10:28 AM

SACRAMENTO MATHER to AURORA STATE - 06/11/2007 at 06:59 PM

BOEING FIELD/KING COUNTY INTL to AURORA STATE - 07/18/2007 at 12:19 PM

AURORA STATE to ROBERTS FIELD - 07/18/2007 at 04:18 PM

Total Operations 11

Operations need to be added to get the airplane from Aurora to Redding Muni on 2/13, from Aurora to Roberts Field between 2/13 and 3/7, and from Aurora to Boeing Field between 6/11 and 7/18.

		Nick Kaiser (submitted March 24, 2011)		
3.51	3-22	1.36% growth in based aircraft will be dependent on what facilities are available at Aurora vs. other airports. What data other than population and Employment shows that Aurora will get this kind of growth?	It is an unconstrained forecast that assumes capacity will be built to meet demand.  Chapter Three discusses historical growth at the airport, national and state aviation trends, other forecasts for the airport, and anecdotal projections by some businesses at the Airport.	No
3.52	3-24	According to the FAA guidelines having 240 OPBA indicates little itinerant traffic but according to the Aurora airport operations chart over half of the operations are itinerant?	The FAA uses two different meanings for the word "itinerant". Itinerant operations are those travelling more than 20 miles to/from the airport, and are performed by aircraft based at the airport and by aircraft based at other airports. Operations that are not "itinerant" are "local". Local operations are mostly touch-and-go and other training operations that stay within 20 miles of the airport. Local operations are also performed by both based and visiting aircraft. By saying that 250 OPBA is typical at a rural GA airport with little itinerant traffic, the FAA means little activity by aircraft based at another airport. Aurora State Airport's activity is not consistent with this guidance regarding OPBA, as discussed on pages 3-24 and 3-25 of Chapter Three.	No

## Aurora State Airport Master Plan Update - Comments Received on Draft Chapter Four

Comment #	Page #	Comments received from: Tony Holt, Nick Kaiser, Bruce Bennett, Roger Kaye, and City of Aurora	WHPacific Response	Will revisions to Chapter 4 be made based on comment?
4.1	General	Repeating a question I asked at the last meeting, to ensure a response: Current runway length is 5004ft. What is the current length of the required 'safety zones' (sz) at the north end and the south end? What is the distance from the ends of the current safety zones to the airport fence (F) at the north end and the south end? For example, what are the following distances: F	Safety zones are referred to as Runway Protection Zones (RPZs) per FAA Advisory Circular 150/15300-13. Table 4C (page 4-8) shows the RPZ dimensions for the existing condition (ARC B-II with approach minima greater than 1 statute mile), as well as for ARC C-II (all approach minimums). The dimensions you requested are shown below, along with the Runway Safety Area (RSA) lengths (Runway 17 end is to the north, and Runway 35 end is to the south): RPZ length beyond Runway 17: 1,200' RPZ length beyond Runway 35: 1,200' Runway 17 RPZ end to fence: 847' Runway 35 RPZ end to fence: -154 (RPZ extends south of Keil Rd) RSA length beyond Runway 17: 300' RSA length beyond Runway 35: 300' Runway 17 RSA end to fence: 1,747 Runway 35 RSA end to fence: 746'	No. Chapter 5 addresses these issues.
4.2	General	If the runway was lengthened as much as possible without expanding outside the current airport fence, what would be the new runway length and how long would the new 'safety zones' be?	Draft Chapter 5 shows an alternative that extends the runway, while keeping within the current Airport footprint. The appropriate RPZs and RSAs are shown in each alternative.	No. Chapter 5 addresses these issues.
4.3	General	Chapter 5 of the FAA Advisory Circular on Airport Master Plans talks about 'Environmental Considerations' and spends considerable time talking about noise pollution. It mentions noise levels as one of the three most common environmental concerns, talks about a noise compatibility planning program and noise overlay zones. When will this master planning exercise talk about noise? Hopefully it will be before a choice of "possible development alternatives" is made since that must surely be a factor in basing a decision.	Per the Scope of Work, noise contours are developed for Draft Chapter 5. Within Chapter 5 each alternative, including the no build alternative, will be shown with the noise contours. The FAA's Integrated Noise Modeling (INM) program is used to develop the contours. Additionally, an environmental overview for each alternative is given in Draft Chapter 5, wherein noise is an important component for analysis. The noise contours and subsequent analysis will assist decision-making for the "Preferred Alternative."	No. Chapter 5 addresses these issues.
4.4	General	Regarding the survey, it is interesting that of the 61 respondents only 10, or 16%, would publicly say that they have constrained operations. It is interesting also that these 10 operators are content to use KUAO, rather than move to Hillsboro or elsewhere, even though they claim to be constrained. It is also interesting that one operator claims to be about to purchase a new Citation X even though he knows that aircraft may be constrained. It makes one wonder why considerable taxpayer money may be expended to make these already happy operators even happier.	Two surveys were distributed for this planning project: Airport User Survey and Runway Length Survey. The responses you reference are from the Airport User Survey. This survey was distributed at FBOs on Airport and at nearby airports, and on the project website. Many of the respondents were operators of single engine, piston-driven aircraft that have vastly different needs than business jet users. The Runway Length Survey (Appendix I) was distributed to a targeted group identified by IFR flight records that would likely be constrained due to runway length. The runway length analysis identified 358 constrained annual operations based on those survey returns (this number will likely change, as more surveys continue to be returned), see page 4-13. Many factors are used by operators to determine where they base their aircraft - or operate in and out of - in addition to runway length (i.e., location, hangar availability, etc.).	No

4.5	4-2	picking two years (2007 and 2009) and averaging them with the defense that one is the decade's highest activity year and 2009 is apparently the decade's lowest year. That is not a robust enough analysis to justify big changes in airport facilities at	The averaging of two years was a reasonable way to account for the extraordinary impact of the recession. We did not examine more than two years because tallying this information is very labor intensive. There are airports that upgrade their ARC based on forecasts only, without having already surpassed the 500 operations threshold as Aurora has. The ARC represents a family of aircraft and the representative aircraft chosen as the critical aircraft is the one in that ARC that uses Aurora the most. Since the forecast chapter was prepared, an Astra aircraft (ARC C-II) has based at Aurora. (The Astra was listed as the current critical aircraft in the forecast chapter, due to operations by transient aircraft.) Astras were introduced in the mid-1980s. The Citation X is a newer business jet model in ARC C-II and so is likely to remain in the business jet fleet longer than the Astra. If the Aurora tenant purchases a Citation X, the number of Citation X operations will increase considerably in the future from the number occurring now. The Citation X is neither the heaviest airplane using the airport nor the one needing the longest runway, as shown in Table 4E. Consequently, there is no need to fear that future airport design will be focused on that one aircraft. ODA has not yet decided to upgrade the airport from ARC B-II to ARC C-II and will not before considering the development alternatives that show both ARCs.	No
4.6	4-5	The table at the bottom of the page, I presume the hourly capacities mentioned for VFR and IFR are either /or, not additive? It is interesting that one respondent to your questionnaire says "we have only a single runway which under normal economic conditions is close to the maximum traffic possible now."	Yes, the capacities are not additive, because weather is either visual or instrument. One user may feel the runway is close to maximum traffic, but examples of busier airports with one runway include McClellan-Palomar (Carlsbad, CA) with over 170,000 annual ops and Scottsdale with over 190,000 annual ops.	No
4.7	4-14	Runway Pavement Strengthcurrently 45,000lbs for dual wheel and taxiway currently 60,000lbs, so if mtow of ARC CII aircraft is more than 45,000lbs and they are using the runway, why is "the current strength rating adequate for the current runway length and using aircraft"?	As shown in Table 4E, not all ARC C-II aircraft have a maximum takeoff weight (MTOW) greater than 45,000 lbs (seven aircraft are shown to have MTOW's greater than 45,000 lbs, regardless of ARC). While this list is not all inclusive of business jets, it is representative of the common business jet fleet, which shows MTOWs can vary greatly. Rarely do aircraft operate at MTOW, due to constraints such as runway length or high ambient temperatures, nor do operators fill the fuel tanks completely if the flight does not require it for safe operations. As such, it is our analysis that because of constraints, such as runway length limitations, few operators will be able to take off with weights greater than 45,000 lbs. ODA, in some instances, has issued waivers for heavier aircraft to operate at the Airport. If the runway were extended,	Yes, clarification will be added as to why the current strength rating is adequate for the existing runway length and aircraft fleet.

however, operators would be less constrained and more likely to put on more fuel, for instance, thus increasing the aircraft's weight and the need for the pavement strength to be increased. Even with increased pavement strength,

operators are not likely to operate at MTOW.

4.8	4-17	1st bullet, if FAA approves this additional departure procedure will it (and a 90-degree left turn) become mandatory, even without a tower?	Departure procedures, unless flying under instrument flight rules (IFR), are not mandatory for aircraft operators. An air traffic control tower (ATCT) would be able to direct both IFR and visual flight rules (VFR) traffic on the departure procedures. The purpose of an ATCT is to provide aircraft separation and sequencing. Without an ATCT it is solely the pilot's discretion on how to operate safely.	Yes, clarification will be given.
4.9	4-17	3rd bullet, please explain "allow a back course approach".	Runway 17 has a localizer approach. A "back course" approach would utilize the Runway 17 localizer to give approach guidance for Runway 35. See the drawing below. The hatched chevrons show the localizer, while the solid chevron represents the back course approach. Tracking the back course approach inbound gives reverse sensing unless the aircraft has an HSI (horizontal situation indicator) installed; meaning if the indicator shows course deflection to the left, the pilot would actually correct to the right to get back on the localizer course. For this to work at Aurora State, the distance measuring equipment (DME) associated with the localizer would require an upgrade. Utilizing a back course approach to Runway 35 would reduce the conflict of flight students practicing the Runway 17 localizer approach during calm wind conditions (Runway 35 is the preferred calm wind runway).	Yes, clarification will be given.
			17 35	
		Nick Kaiser		
4.10	General	Nick Kaiser  In the 2000 master plan update it was noted that the operations acoustical counts for 1997 were not totally accurate but the procedures would be improved for 1998. Were there acoustical counts taken in 1998 or beyond?	According to ODA records (http://www.aviation.state.or.us/Aviation/docs/RENSSummary94-02.pdf), four counts have occurred since the 1997 cycle. The results were: 1998-99 = 74,056 ops; 1999-2000 = 57,823 ops; 2001-02 = 58,479 ops; and 2002-03 = 62,926 ops. The RENS counts are estimates, based on seasonal acoustical samples. While procedures were improved, flaws with the RENS program are inherent ( <i>i.e.</i> , aircraft noise not "triggering" the system, false-positives, etc).	No
4.10	General	In the 2000 master plan update it was noted that the operations acoustical counts for 1997 were not totally accurate but the procedures would be improved for 1998.	(http://www.aviation.state.or.us/Aviation/docs/RENSSummary94-02.pdf), four counts have occurred since the 1997 cycle. The results were: 1998-99 = 74,056 ops; 1999-2000 = 57,823 ops; 2001-02 = 58,479 ops; and 2002-03 = 62,926 ops. The RENS counts are estimates, based on seasonal acoustical samples. While procedures were improved, flaws with the RENS program are	No. Chapter 5 addresses these issues.

4.13	4-18	Will wastewater land requirements be considered when the final land needs are identified for the various airport designs?	Wastewater land requirements for development needs on state-owned property will be identified in Chapter 5.	No. Chapter 5 addresses these issues.
4.14	4-26	(land use planning) The city of Aurora's comprehensive plan and vision plan have references to current and future airport opportunities and issues and should be reviewed in the master planning process. Also the City has an Urban Growth Boundary Coordination Agreement with Marion County that has a section on the Airport and surrounding lands as an Area of Mutual Concern.	These planning documents will be reviewed and included, as appropriate.	Yes. Documents cited in Chapter 2.
		Bruce Bennett		
4.15	General	Should the current weight restrictions of both based and visiting aircraft be mentioned in the length sections?	See response to 4.7.	No
4.16	General	Please be advised a 27,400 pound Hawker 800A s/n 2580055 (federal registration N855BC pending) has flown into Aurora and is based here until eventual sale, it is not now flyable but will be when registration is complete and US Airworthiness established and issued.	Noted.	No
4.17	General	I request the addition of the attachment to the master plan; this follows up on my comments at the last meeting and on my attempt to keep things in perspective. (attachment shown below)	The information will be included in an appendix of the Final Draft Master Plan Update.	No
4.18	4-11	Table 4E. JHRD does base their Citation CJ3 at UAO.	Noted, table will be corrected.	Yes
4.19	4-16	We do have precision instrument approaches (GPS 17 $\&$ 35) although with high (1 mile) visibility.	The Airport has LPV (localizer performance with vertical guidance) approaches, which are considered nonprecision.	No

## Aurora Airport Relative Runway Length & Strength Comparison

Based on FAA Airport Facility Directory dated 18 NOV 2010 Compiled by Aurora Aviation December 13, 2010

Compiled by Aurora Aviation December 13, 2010				
Airport	MAX Strength Runy	way Length		
UAO- Aurora State	45K	5004		
AST- Astoria	119K	5796		
Baker	82K	5095		
Bend		5200		
Bums	90K	5100		
Christmas Valley		5200		
Toketee		5350		
Corvallis	100K	5900		
Cape Blanco	340K	5100		
John Day		5220		
Joseph		5200		
K-Falls	230K	10301		
LaGrande	130K	5600		
Lakeview	109K	5306		
Madras	180K	5089		
McDermitt		5900		
McMinnville	80K	5420		
Newport	170K	5398		
OTH- N. Bend	190K	5980		
Ontario	50K	5011		
PDT- Pendleton	210K	6301		
TTD- Troutdale		5399		
RDM- Redmond	200K	7038		
RBG- Roseburg	88K	4602		
Scappoose	90K	5100		
Sunriver		5455		
The Dalles		5097		
Tillamook	125K	5001		

		Roger Kaye (asked at the PAC #3 meeting)		
4.20	4-26	The zoning/planning discussion should be deferred to Chapter 5. If were to remain in Chapter 4, there could be conflicting data.	The recommendations given would remain, regardless of alternatives presented in Chapter Five, as they are broad and conform with State guidance given in the Oregon Aviation Plan.	No
		Nick Kaiser (submitted March 24, 2011)		
4.21	4-13	Constraints have increased from 358 to 473 and at the last PAC meeting it was said that it was now even higher. Does ODA have a way to verify these constraints?	Names, phone numbers, addresses, N numbers, and aircraft types can be verified through public records.	No
		City of Aurora		
4.22	4-24	Add text to the effect that public services/facilities should be planned in accordance with needs and capacities rather than be forced to respond to development as it occurs.	Chapter Four identifies facilities that would be required to meet the forecasted demand. Planning and the phasing of specific projects, including utilities, is more appropriate in later chapters of the Plan.	No
4.23	4-25	Under Utilities subheading, add text, "The City of Aurora has express concerns that additional groundwater wells or expansion of water facilities at the Aurora State Airport will have negative impacts upon the City's current water supply. Drinking water quality is also a concern for the City. Continued development and/or potential expansion of airport facilities without proper advanced planning and feasibility assessments regarding the airport's ability to meet water, sewer, and fire protection needs concerns the City.	Noted, text will be supplemented.	Yes
4.24	4-25	Under Utilities subheading, add text, "While it is not within the scope of the Airport Master Plan Update to collect data on surrounding properties and potential expansion of the airport boundary and whether expansion of the airport boundary would be able to provide adequate water or sanitary sewer service (septic or otherwise), the City has requested that the Master Plan Update provide additional documentation as to the adequacy of water, sewer, and other proposed utilities of existing facilities and within the existing airport boundary prior to adoption of the plan document. It is the City's position that adequate consideration of impacts to public facilities and services such as water, sanitary sewer, storm water, and traffic should be given as part of the Plan Update".	This request is outside of the Plan's Scope of Work. Issues relating to utilities will be addressed, as specific projects are identified.	No
4.25	4-5	Under Airfield Capacity: Reference should be made to the Airport Planning Rule here and the requirement that land use applicants should <i>show</i> that the proposed increased capacity and projections for flight growth/need <i>cannot</i> be reasonably accommodated in the existing airport boundary.	This section is relating to runway capacity; therefore, this addition would not be appropriate.	No

## Aurora State Airport Master Plan Update - Comments Received on Draft Chapter Five

Comment #	Page #	Comments received from: Fred Netter, Dan Riches, Nick Kaiser, Tony Holt, City of Wilsonville, City of Aurora, Marion County, and Dave Waggoner	WHPacific Response	Will revisions to Chapter 5 be made based on comment?
5.1	General	Fred Netter Since our role is safety and we strive to be "the safety experts", we place this as our number one concern. We support any proposals that enhance safety as well as protecting the other patrons of our district from economic hardship or undo inconvenience.	Noted.	No
5.2	General	After evaluating all of the proposals, we concluded that a fire facility consisting of two apparatus bays should be included in any plan, even the "no build". We believe this facility should be located by the airport water supply facility along Airport Rd. This location best serves ARFPD for accessibility and eliminates the problem of security. Since this facility is necessitated by airport use and business, it should be paid for by airport generated funding.	Noted, the Preferred Alternative will reserve land for a facility in the location supported by the ARFPD. Funding sources will be identified at a later time. As an Airport Rescue and Fire Fighting facility is not required at the Airport, funding from FAA or ODA is unlikely.	No
5.3	General	We would support the expansion of the runway both north and south as long it does not impinge on the use of private property, both farm and non farm, or result in increased response times or call volume for ARFPD without funding increases.	A runway extension has been shown to be infeasible at this time.	No
5.4	General	Necessary changes in area intersections and roadways must be part of any plan with a focus on safety.	Traffic impacts of proposed development will be evaluated as projects are defined.	No
		Dan Riches		
5.5	General	Columbia Helicopters supports modernization and possible extension of the Airport runway to provide for a safer operating environment however, it cannot support any proposal that would restrict business development of our property.	See response to #5.3.	No
		Nick Kaiser		
5.6		Need to correct the calm wind runway in chapter 5 pages 9, 15, 20.  ODA and FAA will establish departure procedures for both runway 35 and 17 to	Yes, these errors will be corrected.	Yes
5.7	5-2	avoid flight over noise sensitive areas.	Runway 17 will be included in the text.	Yes
5.8	General	I still feel that the number of actual operations used, as base data in this study is too high. There should be an actual count made over the various seasons of the year to validate the number and type of operations.	See response to #3.19.	No
5.9	General	The number of operations for critical aircraft that exceeded 500 is still borderline.	See response to #3.25.	No
5.10	General	Constrained operations need to be further validated. The timing of implementing any alternative that is based on constrained operations should be looked at again after further study.	See response to #4.21.	No
5.11	General	There should be a category of airplanes that is used in the study that is medium size not just small and large. The study mix that includes medium size might show a better fit.	The aircraft called "large jets" in the noise input are actually medium-sized according to the industry (see Table 4A in Chapter Four).	No
5.12	General	The preferred alternative should not extend past the current airport boundary, including the RPZ.	Noted.	No
5.13	General	The weather is below 1 mile visibility a small $\%$ of the time so having an approach that is usable in lower visibility minimums might not be necessary.	Noted.	No

5.14	General	Calm Wind runway 35 has worked to help abate noise over populated areas and should be continued.	Agreed. See response to #5.6.	No
5.15	General	Having a control tower will help with Safety and Noise.	Noted.	No
5.16	General	In the short term no change in the airport (except for a run-up area for runway 17) is needed and should be adequate to accommodate planned business growth.	Noted.	No
5.17	General	A longer-term look could accommodate a build alternative like number 1 and still stay within the boundaries of the airport.	Noted.	No
5.18	General	All livability issues from the surrounding communities need to be considered when Airport development changes are planned and all long-term impacts are not thoroughly understood.	The planning team has tried to consider these needs, as outlined in the Goals and Issues section of the Master Plan.	No
5.19	General	How did you use the noise data from the 2002 noise study to help develop the noise contours for each alternative?	The 2002 noise data was utilized to determine the model aircraft type and the percentage of operations in a given group (i.e. turboprop, small prop, large prop, jets, and heli). The operations data from this older study was not used to determine the number of operations – just the group makeup. The same group composition (percents and aircraft) was used for each alternative, with the only change the operation numbers between existing conditions and the future conditions.	Yes
		Tony Holt		
5.20	General	Constrained Operations: Given the proviso that the FAA requires airport sponsors to document at least 500 annual itinerant aircraft operations before considering funding of a runway extension (Chapter 4, page 4-11), it is vitally important that proper and accurate documentation be provided by operators demonstrating past constrained operations. Simply sending surveys to based aircraft operators and a wide selection of non-based operators, including some aircraft brokers in California, and asking them how many constrained operations they estimate they have had (or even would have) at Aurora Airport, is insufficient and can lead to possible manipulation of the data. There needs to be a more rigorous attempt at accurate documentation from logbooks or other records. Given that more surveys were returned and mentioned at the last PAC meeting I believe this is a valid topic for Chapter 5.	See response to #4.21. The mailing list for the questionnaire was compiled	No
5.21	General	Predicted Noise Contours: It is notable that the maps shown as Exhibits 5E-5H have predicted (after a tower is installed and new departure rules are approved by the FAA) noise contours that stop short of Wilsonville City Limits. Clearly, the noise does not stop at the 55 dBA contour. The contours should continue northward to show what noise level is experienced over the City of Wilsonville, including that caused by landings on runway 17. The noise analysis was poorly explained at the last PAC meeting, in my view, and more time should be spent discussing the basis for the conclusions.	The FAA requires noise contours to the 65 dBA line be shown, we have	No
		City of Wilsonville		
5.22	General	The Wilsonville City Council recognizes the Oregon Department of Aviation master planning obligations, and supports an Aurora State Airport Master Plan alternative that achieves the following outcomes:		
5.23	General	Improves management of aircraft approaching and departing Aurora State Airport that results in minimized noise and enhanced safety to the City of Wilsonville;	Noted.	No
5.24	General	Eliminates the need to expand the runway to the North in a way that impacts current facilities;	Noted.	No

5.25	General	Preserves foundation farmland by restricting future airport development to the property suitable for airport use and bounded by the Hubbard Cutoff to the West, Airport Road to the East, and Arndt Road to the North;  Supports concurrency by recognizing surface transportation impacts on Airport	Noted.	No
5.26	General	Road resulting from future development and allowing for cooperation with Clackamas and Marion Counties on the scope and funding of any future	Noted.	No
5.27	General	improvements that may be required; Recognizes a preference for preserving the existing use of Keil Road.	Noted.	No
		City of Aurora		
5.28	5-2	When addressing demand, please specify whether land is public or private or a combination of both to meet hangar demand, aprons and aircraft parking, cargo apron, fuel tanks, etc. (bullets under "Landside Requirements")	As shown in the alternatives, the allocation of these items vary by alternative. Therefore, it would be inappropriate to allocate specific acreages.	No
5.29	5-3	It is my understanding that the Aurora Rural Fire Protection District has not yet identified the site for their new facilities and this was confirmed with the fire chief. While the fire district may have identified the need to park a vehicle at the airport, this distinction needs to be made. Also, please specify how much land is being dedicated/set aside for the fire district under Landside Requirements.	•	No
5.3	5-3	3 <sup>rd</sup> bullet from the top re: Airport Road. Improvements to Airport Road will occur as improvements occur and will require Traffic Impact Analysis (TIA) from Marion County. This bullet should be completely removed as it is not a statement of fact. ODA and private owners WILL BE required to work with Marion County and City of Aurora as improvements to Airport Road are REQUIRED as a result of development. Funding for improvements are based upon traffic impacts of development. I can provide suggested language from Marion County if requested.	Noted, section will be revised as appropriate.	Yes
5.31	5-3	2 <sup>nd</sup> to last paragraph, please clarify whether the needs for 40 developable acres to meet demand includes: ODA land, private land, or a combination or both. This is clarified later in the text (pages 5-4) but it should be made clear from the beginning. Also include information regarding whether the 40 acres includes needs for water and sewer to accommodate this growth (i.e. Septic fields)	This paragraph states ODA only has nine developable acres, implying development will be a combination of private and public lands. The 40 acres includes allowances of 3 to 4 times the building floor or individual vehicle/aircraft parking area, to account for circulation, fire separation, inefficiency in layout, etc. Depending on how many facilities have plumbing, the land allowance may not be enough for septic fields.	Yes
5.32	5-3	2 <sup>nd</sup> to last paragraph- Again, the Aurora Fire District has not identified a site for their new facility. Please remove reference to the Fire District facility.	See response to #5.29.	No
5.33	5-4	Includes the following statement, "Combining 9 acres of undeveloped State-owned property and 26 acres of undeveloped private property currently zoned for airport use this is a shortfall of approx. 5 acres over the next 20 yearsadjacent property is shown to be suitable for airport-related development. This area incorporates approximately 16 acres. This land, now used as a church camp" Please explain how the adjacent lands cannot meet the need for 5 additional acres over the next 20 years.	years and 35 acres are available for development on either state-owned land or privately owned land that is zoned appropriately for airport use. To provide for the 5-acre shortfall, the church camp is the most suitable for converting to airport development, given its location. The explanation of	
5.34	5-4	"Development of private property, adjacent to the Airport, would be permitted-consistent with local and State regulations". This sentence does not provide an appropriate explanation of the land use constraints associated with rezoning EFU land to Public including application to Marion County for Oregon Planning Goal 3 exception. Language from Marion County should be requested and submitted here.	This statement is referring to the adjacent private property on-airport currently zoned as Public, which would be consistent with zoning. Clarification will be given that the No Build Alternative is only a no build for the state, private property (i.e., Southend Airpark, Columbia Helicopter, etc) could still be developed. For the church camp property, a statement will be included to detail the Planning Goal exception.	Yes

5.35	5-5	"The runway extension would accommodate Keil Road would be dead-ended". Please specify whether this Alternative would result in the loss of road access/frontage for any property owners along Keil Road.  Alternative 2 Noise Contours should acknowledge that by moving closer to the City	Information will be added to text.	Yes
5.36	5-9	of Aurora and its surrounding communities would result in a significantly higher impact as the number of residential impacts is much higher than any other alternative since the City of Aurora is primarily residential in nature in the NW end of the city limits and UGB.	Text will include a statement that the 65 dBA contour line would incorporate more residential properties than the other build alternatives.	Yes
5.37	5-15	1 <sup>st</sup> paragraph: Remove reference to the No Build Alternative not presenting noise concerns. The document has acknowledged that the No Build Alternative would still result in growth at the Airport, simply within the current land use boundary. As such, growth at the Airport will continue to have noise concerns/impacts of growth upon surrounding communities.	This statement relates to FAA thresholds of noise impact. A statement will be added that surrounding communities are concerned of the increased noise expected at the airport due to the increase in operations.	Yes
5.38	5-16	Please provide clarification on why avigation easements will be sought on residential lands but agricultural use lands will require acquisition. All lands south of the airport are EFU, some of which include residential uses along with their EFU zone. If the ODA is to pursue acquisition of some lands and only avigation easements over others, this needs to be explained in more detail. In addition, the document later references (on page 5-17) that the FAA may allow continuation of agricultural practices in the RPZ based upon the commodity produced. Whether or not property owners with EFU lands can pursue avigation easements rather than acquisition needs to be explained.	Please refer to the Preferred Alternative and the proposed plan for acquisition/easement within the RPZ.	No
		Marion County - Patti Milne		
		An air traffic control tower at the airport can improve safety and reduce the		
5.39	General	impact of air traffic over residential properties in the area.	Noted.	No
5.40	General	A fire facility at the airport is necessary	Noted.	No
5.41	General	Based on information provided throught the planning process, we favor an extension of the length of the runway and an increase in it's weight-dearing capacity to support safe and economically efficient airport operations.	Noted.	No
5.42	General	Marion County would support instrument upgrades that improve safety through	Noted.	No
F 42	Canar-I	improved technology.  Marion County supports ODA's efforts to design departure procedures and	Noted	No
5.43	General	designate a calm-wind runway	Noted.	No
5.44	General	Marion County recognizes that Aurora State Airport is different from many airports in the state Marion County encourages ODA as well as property owners in the Public Zone at the airport to continue working collaboratively with Marion County on landside development, zoning issues, and traffic impacts in the area outside the airport property.	Noted.	No
		Dave Waggoner		
5.45	General	Modify Build Alternative 1 (600' runway extension to the north) by adding a 400' Displaced Threshold.	Displaced thresholds and the use of "declared distances" (different runway lengths for different components of takeoff/landing) are not recommended at this Airport and they are not supported by the FAA for Aurora. Declared distances must be approved by the FAA. The FAA would rather invest in pavement that can be used for both landing and taking off, otherwise they are only getting half of the utility from their investment.	No

# Aurora State Airport Master Plan Update - Comments Received at the Planning Advisory Committee (PAC) #4 Meeting

Comments received from PAC Members and the Audience that warrant further response/clarification	WHPacific Response
If the runway object free area (ROFA) extends, what will happen to the highway?	The highway would not be relocated. ODA would request the FAA to approve modifying the ROFA standard to allow the highway to remain. Recent conversations with the FAA indicate the request would likely be approved.
Have you considered what this project will do to the town of Aurora? Who needs this extension?	Yes, surrounding communities have been considered, including Aurora. The City of Aurora also has a seat on the PAC. As for the extension question, please refer to Appendix I.
Currently the flight plan/pattern is not followed, especially at night. Planes fly righ over houses and shake the windows. Concerned about the future safety and who disciplines pilots who fly in no flight zones.	t The flight pattern and noise abatement procedures are recommended, not required in most situations. The air traffic control tower will allow for better oversight of operations and sequencing of traffic.
Can we use the additional capacity at Salem Airport rather than expand Aurora?	While there may be unused capacity at Salem, users prefer to operate at Aurora.
What does it take to become a C-II Airport?  Can alternative 1 become a C-II with all other elements remaining the same?	For the most part, the Airport already meets C-II design standards. Notable changes would be the increased runway object free area (ROFA) width and increased runway protection zone (RPZ) size.  Yes, however, the ROFA, RPZ, and runway safety area (RSA) would have to increase in size.
Since we are already a volunteer fire station in Aurora, who will pay for a new fire facility?	We do not know. ODA could not obtain a grant from the FAA to pay for such a facility, since the Airport does not have airline service (therefore a fire facility is not required). Consequently, ODA would not be able to fund construction of the facility. ODA could lease land for the facility, however.
Can you request a modification to standards of the ROFA (on Highway 551) from the FAA?	Yes, see first response above.
Why do you need more clearance for a more precise approach?	A more precise approach allows landing in lower visibility conditions. Larger safety clearances increase the margin of safety - they account for the fact a pilot cannot see as far as in clear weather.
Has ODOT gotten onboard with road improvements, especially Keil Road?	ODOT has reviewed the alternatives, and has expressed concern over the possiblity of closing Keil Road.
If the current noise/flight pattern policy isn't being followed, why would a differen policy be followed?	<del>-</del>

Where is the money/funding for the project coming from?

Will there be any consideration for jet fumes in any of the future alternatives?

Who enforces the noise abatement procedures?

Will future zoning be amended due to the expanded noise footprint?

What will be done to mitigate noise from maintenance on jet engines?

No specific projects have been defined yet. For those projects eligible for FAA funding, the FAA could fund up to 95% of the project costs. The remaining responsibility would fall on the state or private developers (depending on the project).

We see no appreciable difference in the alternatives regarding jet fumes. An environmental assessment for a runway improvement would look at air quality in more detail.

There is no enforcement; they are recommendations.

We do not know. The FAA and airport owners encourage local governments to make zoning around airports consistent with the FAA's aircraft noise/land use compatibility guidance. According to FAA guidance, any land use is normally compatible outside the 65 DNL noise contour. Guidance for land use compatibility inside the 65 DNL contour is in FAA Advisory Circular 150/5020-1, Noise Control and Compatibility Planning for Airports, Appendix 1.

No mitigation is proposed at this time.