

Appendix C: AIRPORT USER SURVEY

Airport Master Plan Update

Aurora State Airport

Aurora State Airport User Survey

Survey Summary

July 2010

Background

In the fall of 2009, The Oregon Department of Aviation began the process of updating the 2000 Aurora State Airport Master Plan. The Airport Master Plan is ten years old and needs to be updated to reflect new facilities, current projections of airport activity, new environmental and other regulatory constraints, and to plan for future use of the airport.

To support this process, the Oregon Department of Aviation conducted a survey as part of the project kick-off in October 2009. The survey asked airport users and interested parties about their aircraft and airport use and suggestions for improvements. The following is a summary of their responses. An appendix of all responses is also available.

In total, 61 people responded to the survey. 31 of these respondents completed the survey online and 30 mailed or faxed in hard copies to the project team.

Aircraft Use and Landings

Aircraft Use

The survey asked respondents to indicate whether they own or fly an aircraft. 49 respondents indicated that they do own or fly an aircraft and 12 respondents indicated that they do not.

(All participants answered this question)

The responses below are classified by Aircraft Reference Code (ARC). The ARC is commonly used to group similar aircraft, and is represented by a letter designation and Roman numeral. The letter designation (A, B, C, etc.) is the aircraft approach category, which is representative of the aircraft's approach speed. The Roman numeral (I, II, III, etc.) represents the airplane design group and is determined by physical characteristics of the airplane (either wingspan or tail height, whichever is most demanding). Below is a table showing the number of responses by ARC, along with aircraft representative of each ARC.

ARC	Approach Speed (Aircraft Approach Category)	Airplane Design Group (Wingspan / Tail Height)	Representative Aircraft	Number of Response s
A-I	< 91 knots	< 49' / < 20'	Cessna 172	54
A-II	< 91 knots	49'-79' / 20'-30'	Pilatus PC-12	3
B-I	91-121 knots	< 49' / < 20'	Lear Jet 45	3
B-II	91-121 knots	49-79' / 20'-30'	Beechcraft King Air 200	10
-	-	-	Helicopter	10
-	-	-	Aircraft with Unknown ARCs	6
			Total	86

The appendix has a full listing of aircraft types reported by respondents.

Annual Landings

Respondents estimated their annual number of landings, including touch and go landings.
(51 participants answered this question.)

The table below summarizes their responses:

Range of estimated annual landings	Number of responses
None	4 responses
17-50	7 responses
55-80	9 responses
100-190	9 responses
200-300	14 responses
350-450	3 responses
500-600	2 responses
2000	2 responses

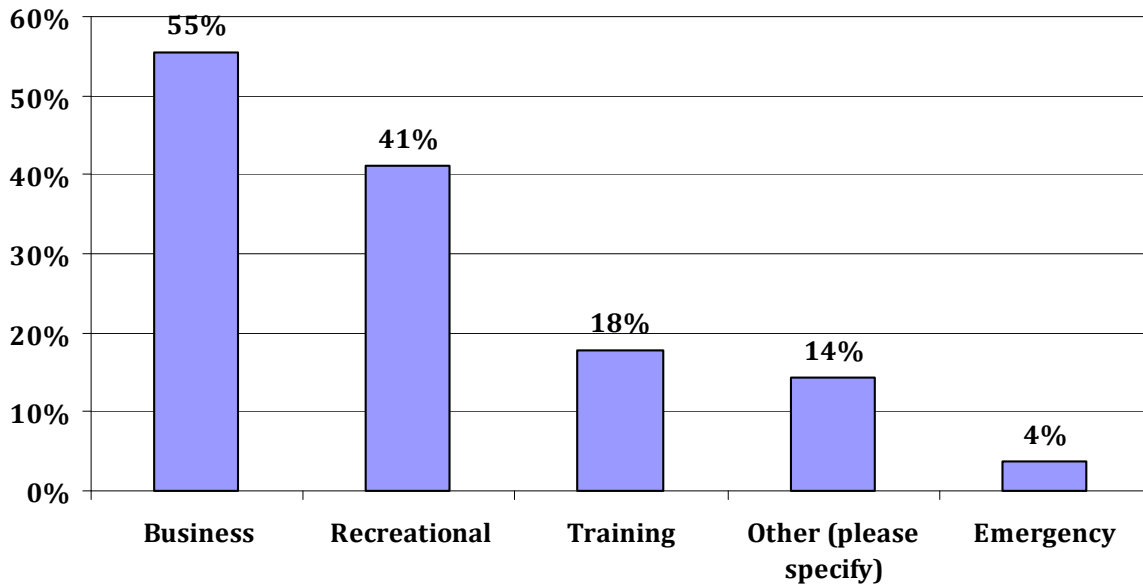
Respondents estimated the percentage of annual landings made at Aurora State Airport. *(53 participants answered this question.)*

Estimated percentage of annual landings at Aurora State Airport	Number of responses (total)	Number of responses (for participants who answered that their aircraft is based at Aurora State Airport)	Number of responses (for participants who answered that their aircraft is NOT based at Aurora State Airport or do not own an aircraft)
0%	4	0	4
2-5%	5	0	5
10%	1	1	0
20-29%	4	0	4
30-45%	10	9	1
50%	10	7	2
60-75%	10	8	3
80-90%	4	4	0
100%	2	1	1

Primary use of Aurora State Airport

Respondents indicated how they primarily use the airport. Over 55% of participants use the airport for business purposes. *56 participants responded to this question.*

How do you primarily use the Aurora State Airport?



Eight respondents indicated that they have an “other” primary use for the airport. The following other uses were listed:

- Personal transportation/personal travel (*4 responses*)
- I live by the airport but I do not fly (*2 responses*)
- Telephone/ Broadband utility company (*1 response*)
- Volunteer (*1 response*)

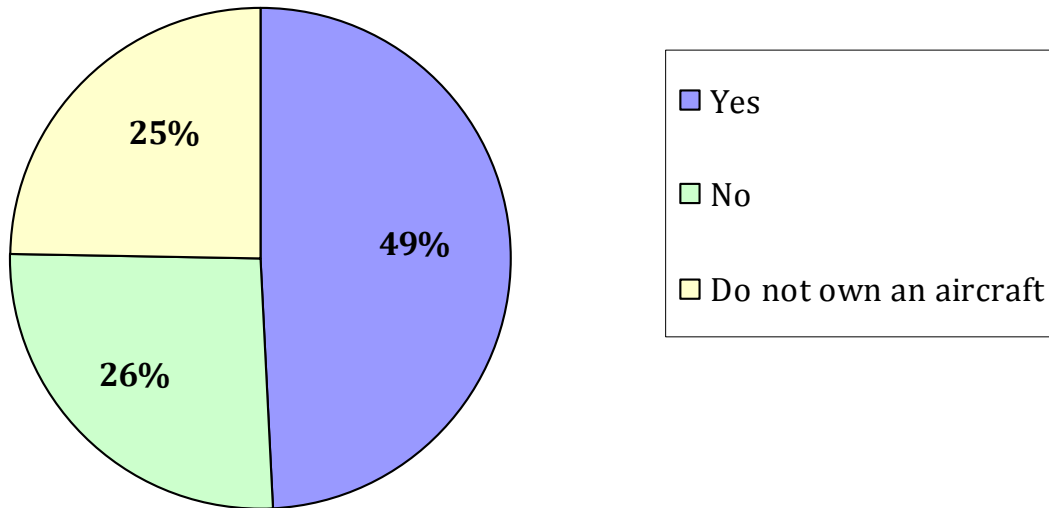
Aircraft Base and Leasing

Aircraft Base

Respondents indicated whether their aircraft is based at Aurora State Airport. 49% indicated that their aircraft is based at Aurora State Airport, 26% said no, and 25% indicated that they do not own an aircraft.

(All participants responded to this question.)

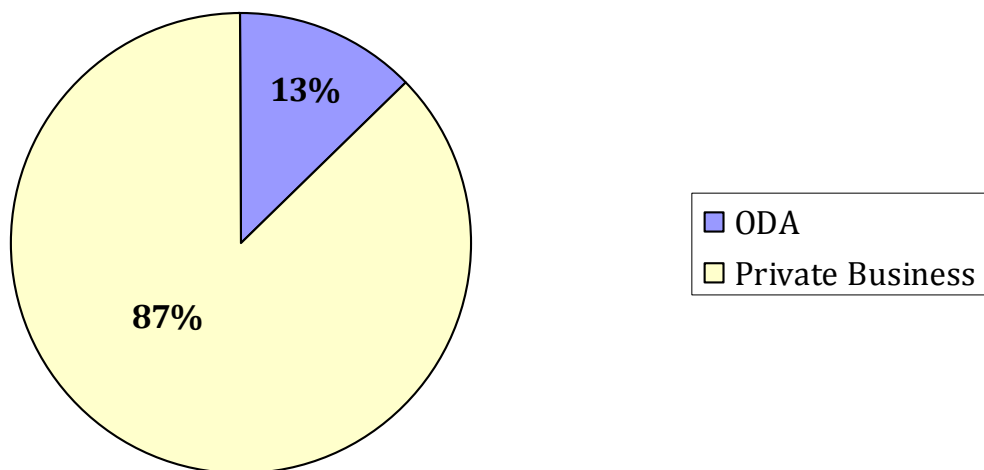
Is your aircraft based at Aurora State Airport?



Aircraft Storage and Tie-down

Those participants that do keep an aircraft at the Aurora State Airport indicated whether they lease or rent aircraft storage or tie-down from the Oregon Department of Aviation or from a private business. 87% indicated that they lease or rent from a private business. (31 participants answered this question.)

Do you lease or rent aircraft storage or tiedown from the Oregon Department of Aviation or from a private business?



Aircraft based at other Airports

Those participants who do not keep an aircraft at the Aurora State Airport indicated where they base their aircraft.

(14 participants answered this question.)

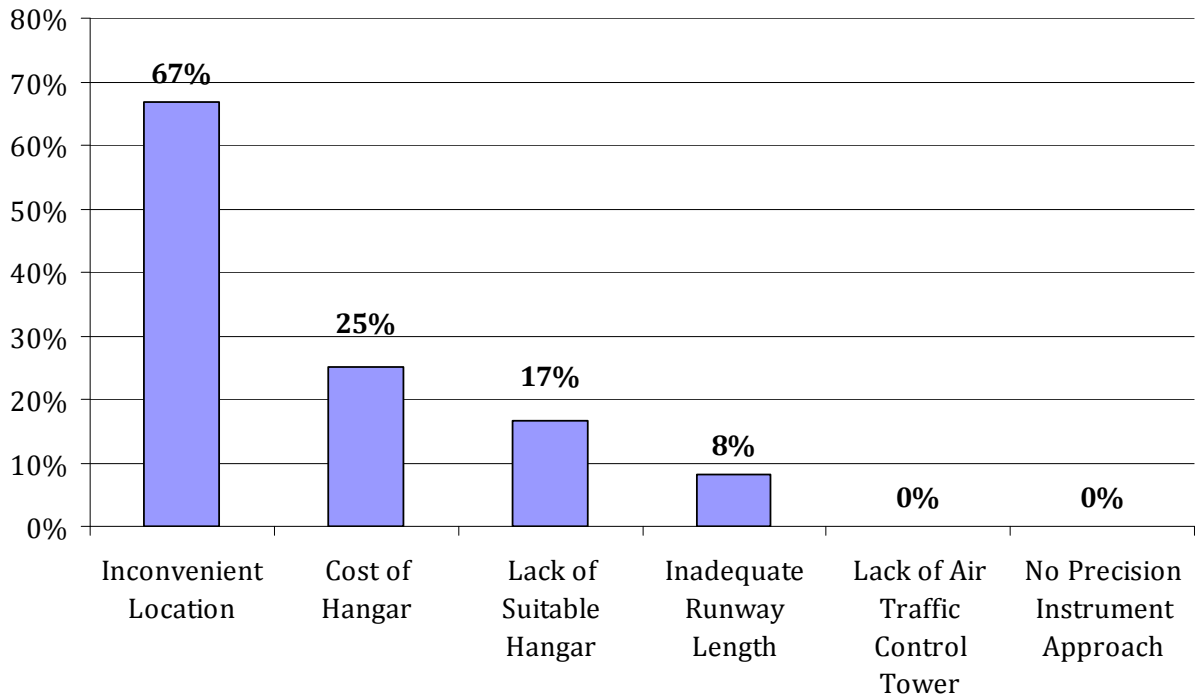
The following airport codes were listed:

- Corvallis, OR (CVO) (2 respondents)
- Hubbard, OR (Lenhardt Airpark) (7S9) (2 respondents)
- Troutdale, OR (TTD) (2 respondents)
- Medford, OR (MFR)
- La Grande, OR (LGD)
- Newburg, OR (Sportsman Airpark) (2S6)
- Sunset Airpark
- Hillsboro, OR (Stark's Twin Oak) (7S3)
- Scappoose, OR (SPB)
- San Jose, CA (SJC)
- Eugene, OR (EUG)
- Salem, OR (SLE)

Those participants who do not keep an aircraft at the Aurora State Airport indicated why they do not base their aircraft there. Most cited inconvenient location.

(12 participants answered this question.)

Why don't you base your aircraft at Aurora State Airport?



Four participants left other responses:

- In the process of building a 135,000 square foot hangar in property adjacent to airport
- Aircraft are conveniently based at my home airport (2 responses)
- Based in Eugene (BIZ)

Airport Improvements

Respondents were asked to provide suggestions for improving Aurora State Airport. *(50 participants responded to this question.)*

The most commonly suggested improvements were the following:

- Build a control tower. (25 comments)
 - 25 respondents commented that a control tower is the most needed improvement. Six of these noted that a control tower is needed for safety and three thought that it would help with noise abatement. One person added that a control tower could reduce conflicts in IFR/VFR traffic.
- Lengthen runway. (14 comments)
 - 14 respondents suggested lengthening the runway. Two suggested adding 1,000 ft to the existing length, and two suggested a 6,000-foot length.
- Add precision instrument ILS approach. (10 comments)

- Ten participants suggested a precision instrument ILS approach. One noted that this would help with the problem of fog, and another added that an ILS approach could reduce the chance of accidents.
- Change calm wind runway back to R17. (9 comments)
 - Nine participants suggested changing the calm wind runway back to R17. Two noted that the current calm wind designation of R35 creates a safety conflict.
- Improve airport roads and address traffic issues. (8 comments)
 - Eight respondents suggested various improvements to the airport internal roads and traffic issues. Three suggested general airport road improvements for safety. One said that traffic issues on Airport Road are a concern. One said there is too much hangar construction at Southend airpark. One suggested relocating Keil, as it is a dangerous road. One suggested changing Ehlen Road and Highway 515.
- Provide public sewer and water facilities. (6 comments)
 - Six participants suggested connecting the airport to City of Aurora sewer and water facilities.
- Add a restaurant or café. (4 comments)
 - Four respondents suggested adding a restaurant or café. One suggested using Nampa, ID or Caldwell, ID as an example.
- Lower approach minimums. (3 comments)
 - Three participants suggested lowering minimums. One suggested clearing obstacles to meet TERPS requirement for lower RNAV (GPS) approach minimums.
- Do not build a control tower. (3 comments)
 - Three people commented that a control tower should not be built. One noted that a control tower would not be cost effective.
- Consider the neighborhood in planning. (3 comments)
 - One person who lives near the Aurora State Airport commented that large jet planes make too much noise, and would like to see only smaller aircraft at the airport. One asked that local neighbors be informed of this process and results. A third suggested using design and building standards in the planning process that enhance the neighborhood.
- Get radar coverage/radar approach in the area. (2 comments)
- Improve lighting and install approach path lighting on Runway 35. (2 comments)

The following lists some other suggestions made by respondents. A full list of comments can be found in the appendix.

- Add run-up areas for safety.
- Add commercial service.
- Begin the master planning project by developing a vision statement.
- Allow for more developable land inside of Keil Road, Airport Way, Hwy 515, and Arndt Road.

- Get controlled airspace.
- Support ancillary airport and flight business.
- Provide better non-aircraft access.
- Increase hangar lease locations for new construction.
- Have an area for grass landings.
- Glideslope.
- Add mufflers and reduce noise.
- Provide lower cost hangars.
- The bigger taxiways were a great addition.
- Acquire land surrounding airport for future growth.
- The single runway is close to the maximum traffic possible. Lengthening a single runway or adding a tower will not solve this problem.
- Change nothing at all; the airport has all I need.
- May acquire large aircraft, would like to see increased weight restriction on runway (65,000 lb) to match taxiway.
- Need jet maintenance.
- Provide better control of entry of helicopter traffic.

Aurora State Airport User Survey

Appendix of All Responses

July 2010

This appendix includes all questions asked on the Aurora State Airport User Survey and all responses received.

Question# 1: What zip code do you live in?

61 total responses:

- 97225
- 97008
- 97002
- 97002
- 97035
- 97013
- 97002
- 97002
- 97202
- 97045
- 97140
- 97002
- 97062
- 97002
- 97333
- 97013
- 97055
- 97035
- 97223
- 970710
- 97068
- 97032
- 97219
- 97070
- 97034
- 97002
- 97002
- 97002
- 97224
- 97002
- 97124
- 97080
- 97035
- 97007
- 97070
- 97229
- 97013
- 95110
- 97002
- 97212
- 97002
- 97002
- 97013
- 98662
- 97402
- 97013
- 97070
- 97032
- 97013
- 97392
- 98607
- 97013
- 97224
- 97002
- 97002
- 97062
- 97002
- 97034
- 97140
- 97002
- 98664

Question# 2: Do you own or fly an aircraft? If so, list model/type of aircraft.

61 total responses:

- No 12 responses
- Yes 49 responses

The 49 respondents that answered “yes” provided the following model/type of aircraft:

- Beechcraft King Air (BE-200)
- Cessna P210 Centurion
- Piper J3, Cessna 180, Cessna T210, Cessna 310, Aero Commander 680V
- Cessna 172
- Beechcraft Bonanza F33A
- Single engine
- Beechcraft P-35 Bonanza
- Large Sikorsky and Bell Type I Helicopters
- Piper Arrow
- PA-30 Piper Twin Comanche
- Cessna 172
- Aviat Husky
- Piper Aztec
- Piper PA-32-300
- Globe Swift
- Cessna 182RG
- Cessna 205, J-4a Cub, 415d Ercoupe, N3N-3 navy
- Cessna TR182
- Piper Comanche
- Van's RV-4, Van's RV-10, Van's RV-12
- Van's Aircraft RV-6, 7, 7A, 8, 8A, 9A, 10, 12; Own RV-7A
- Van's RV-6
- RV-9A
- V35-B Bonanza
- PA45 Piper Malibu and XLZ Liberty
- Cessna 172 SP
- Astra 1125/G100
- Cessna 205, J-4a CUB, N3N-3 Navy, Cessna 414
- Mooney M20F
- EC-135 Helicopter, AS350 B3 Helicopter
- Cessna 140 and Cessna 182
- Cessna Citation 560XL
- Single engine and multi-land
- IA 1125 Astra, SR-22 Cirrus
- Cessna Citation XL
- Pilatus PC-12/47E
- Cessna 18L
- Cessna 400TT
- Cessna 550, PAY2, Beechcraft King Air (BE-200)
- Lear Jet 45
- 6X Helo MD500E, King Air C90GTi, King Air B350
- Pilatus PC-12
- DeHavilland Beaver N56TM, DeHavilland Tiger Moth N82TM, Cessna 185 N84TM, J3-Cub N3TM
- Cessna Citation
- RV-8
- Beechcraft King Air (BE-200)
- Beech Debonair
- Beechcraft King Air (BE-200), Cessna 172, Cessna 152
- Falcon F-900
- Pilatus PC-12

Question# 3: Estimate your number of annual landings. (Include Touch & Go)

51 total responses:

- | | | |
|-------|--------|---------------------------|
| • 500 | • None | • 30 |
| • 0 | • 300 | • 25 to 30 local landings |
| • 0 | • 120 | • 100 |
| • 0 | • 200 | • 200 |
| • 17 | • 100 | |

- 30
- 75
- 20
- 150
- 75
- 100
- 120
- 75
- 450
- 200-250
- 300
- 50
- 200
- 300
- 30-35
- 190
- 80
- 2000
- 60
- 250
- hundreds
- 500-600
- 200
- 200
- 75
- 250
- 350
- 250
- 5000
- 175
- 250
- 150
- 80
- 60
- 350
- 300
- 55

Question# 4: What percent of your annual landings are at Aurora State Airport?

53 total responses:

- 2
- 0
- 0
- 0
- 02/03/2010
- None
- 80
- 90
- 70%
- 60
- OR
- 100% of the local landings
- 50
- 40%
- 65
- 50
- 50
- 40%
- 50%
- 75
- 50
- 60
- 25
- 80
- 75
- 5
- 30
- 10
- 35
- 75
- 50
- 60
- 50
- 60
- 30
- 80
- 45

Question# 5: How do you primarily use the Aurora State Airport?

56 total responses:

- Business 31 responses
- Recreational 23 responses
- Training 10 responses
- Other (please specify) 8 responses
- Emergency 2 responses

Those that responded “Other” specified the following:

- I live by the airport I do not fly
- Telephone/ Broadband utility company
- Volunteer
- Personal transportation
- transportation
- don't I live in the neighborhood
- Personal transportation
- Personal travel

Question# 6: Is your aircraft based at Aurora State Airport?

61 total responses

- Yes 30 responses
- No 16 responses
- Do not own an aircraft 15 responses

Question# 7: Do you lease or rent aircraft storage or tiedown from the Oregon Department of Aviation or from a private business?

31 total responses:

- ODA 4 responses
- Private Businesses 27 responses

Question# 8: Where is your aircraft based? (List Airport ID)

14 total responses:

- Corvallis, OR (CVO) (2 respondents)
- Hubbard, OR (Lenhardt Airpark) (7S9) (2 respondents)
- Troutdale, OR (TTD) (2 respondents)
- Medford, OR (MFR)
- La Grande, OR (LGD)
- Newburg, OR (Sportsman Airpark) (2S6)
- Sunset Airpark
- Hillsboro, OR (Stark’s Twin Oak) (7S3)
- Scappoose, OR (SPB)
- San Jose, CA (SJC)
- Eugene, OR (EUG)
- Salem, OR (SLE)

Question# 9: Why don’t you base your aircraft at Aurora State Airport? (Select all that apply.)

12 total responses:

- | | |
|-------------------------------------|-------------|
| • Inconvenient Location | 8 responses |
| • Cost of Hangar | 3 responses |
| • Lack of Suitable Hangar | 2 responses |
| • Inadequate Runway Length | 1 responses |
| • Lack of Air Traffic Control Tower | 0 responses |
| • No Precision Instrument Approach | 0 responses |
| • Other (please specify) | 4 responses |

Those that answered “other” specified the following:

- In the process of building a 135,000 square foot hangar in property adjacent to airport
- Aircraft are conveniently based at my airport home
- TTD is closer to home
- Based in Eugene (BIZ)

Question# 10: What suggestions do you have for improving Aurora State Airport?

50 total responses:

- Add commercial service

- I have lived here since 1976. I am NOT for any growth in the Aurora airport. The larger jet planes make too much noise on take off and landing as they pass over my home. I would like to see the larger jets minimized. The smaller aircraft are not an issue with me. Only the noisy larger jets.
- Traffic issues on Airport Road are a concern.
- Begin the master planning project by developing a vision statement. Connect to City of Aurora utilities. Get a restaurant. Allow for more developable land inside of Keil road, airport way, HWY 51, and Arndt Rd. Get controlled Airspace, get radar coverage in the area. Give John Wilson a raise.
- Support ancillary airport and flight business
- Control Tower for safety and noise abatement, better non-aircraft access
- tower and run-up areas for safety
- We need a restaurant at the airport and the associated infrastructure (sewer, etc) to support it.
- Increase hangar lease locations for new construction.
- 1. Install a new aircraft central tower to control landing. 2. Provide city water and sewer facilities
- First on my list is the need for a control tower.
- Run-up area runway 17. Clear obstacles to meet TERPS requirement for lower RNAV (GPS) approach minimums. Install approach path lighting on runway 35.
- Control tower as soon as you can get it.
- Needs Control tower
- Have a area for grass landings
- Glideslope and control tower
- Mufflers, noise reduction. Also, please inform the local neighbors or let them know what is going on.
- Go back to calm runway 17. the current 35 creates a safety conflict with actual IFR breakouts into VFR and ditto for training IFR in VFR conditions
- Open a tower.
- Utilize better planning methods for building and site development. Have design and building standards that enhance the neighborhood.
- Cafe/restaurant on field. Lower cost hangars.
- Do NOT add a control tower. The bigger taxiways were a great addition. At this time acquire land surrounding airport for future growth. Add a cafe (many people work here). Use Nampa, ID or Caldwell, ID as example.
- Nothing at all, has all I need.
- Do not put in tower - not cost effective. Calm wind runway should be 17. Run up area at 17 (should not have been put at 35).
- Precision instrument approach because of all the fog.
- Look forward to the new tower.
- Should increase runway length.
- For safety - change calm wind runway back to 17 (immediately). Provide for a proper 17 run-up area. Take into future planning consideration the fact that we have only a single runway which under normal economic conditions is close to the

maximum traffic possible now. A tower will not improve this restriction on growth, nor will the lengthening of the single runway solve the problem.

- Precision approach
- Add control tower to deconflict IFR/UFR traffic or eliminate/change instrument approaches to 17.
- Do not put a tower here. Change calm wind runway back to one seven.
- Put run-up area at one seven.
- Control tower. Lengthen runway, add 1000 feet. Precision ILS approach.
- Lengthen runway by 1,000 ft for one longer size. Private jets, Gulfstream, for training and business which would increase weight capacity. The need for a tower for safety.
- Increased runway length, ILS approach. We are limited by runway length at full fuel (24, 650 ft). May acquire large a/c, would like to see increased weight restriction on runway (65,000 ft) to match taxiway.
- A longer runway would be nice.
- There is too much hangar construction at Southend airpark with too limited taxi space.
- precision app, tower
- Tower, tower, tower. ILS
- Runway length increase, ILS
- Need longer runway and tower. Need jet maintenance.
- Get the tower built and operating ASAP
- Lengthen runway. Control tower.
- Need a control tower for safety and noise abatement. 6,000 foot runway. Lower minimums. Airport road improvements for safety. Public sewer and water.
- Control tower for safety and noise abatement. 6,000 foot runway. Lower minimums. Airport road improvements for safety. Public Sewer and water.
- Install tower
- Control Tower/radar approach. Relocate dangerous road on south end (Keil). Better control of entry of helicopter traffic. New ground transportation access. Changing Ehlen Rd and 515.
- With the increasing mix of GA and Jet aircraft, the probability of a mishap or accident is increasing accordingly. A tower and ILS approach could help.
- Lengthen and strengthen runway. Improve lighting, ILS, tower, interior road, public water and sewer systems
- Runway should be longer, tower, ILS system
- Control tower NEEDED. Longer runway (for safety).

Aurora State Airport User Survey

Aircraft and Airport Use Information

1. What zip code do you live in?

2. Do you own or fly an aircraft?

 No

Yes (if so, list model/type of aircraft)

3. Estimate your number of annual landings. (Include Touch & Go)

4. What percent of your annual landings are at Aurora State Airport?

5. How do you primarily use the Aurora State Airport?

Business

Training

Recreational

Emergency

Other (please specify)

* 6. Is your aircraft based at Aurora State Airport?

Yes

No

Do not own an aircraft

Aircraft and Airport Use Information

* 7. Do you lease or rent aircraft storage or tiedown from the Oregon Department of Aviation or from a private business?

ODA

Private Business

Aircraft and Airport Use Information

Aurora State Airport User Survey

8. Where is your aircraft based? (List Airport ID)

9. Why don't you base your aircraft at Aurora State Airport? (Select all that apply.)

- Inadequate Runway Length
- Lack of Suitable Hangar
- Cost of Hangar
- Lack of Air Traffic Control Tower
- No Precision Instrument Approach
- Inconvenient Location

Other (please specify)

Improvements to Aurora State Airport

10. What suggestions do you have for improving Aurora State Airport?

Contact Information

Providing contact information is optional.

If you provide your name, address, phone number, and email address, we will notify you of public meetings about the master plan and may contact you for more information related to the master plan update.

11. Contact Information

Name:

Mailing Address:

City:

State:

ZIP/Postal Code:

Email Address:

Phone Number: