WILSONVILLE HEARING – AURORA AIRPORT

11/27/18

Mayor Knapp and City Councilors;

Thank you for the opportunity to give testimony at this, likely the only public hearing on the expansion of the Aurora Airport to be held in the past six or seven years!

I will limit my comments to two things. The Aurora Airport Master Plans, and the IGA or Inter-governmental agreement regarding the Aurora Airport, of which you are now painfully aware that excluded Clackamas County and City of Wilsonville.

The 1976 Master Plan is of interest for two reasons: first, it's the baseline document for recent data on the Aurora Airport, and was updated to the 2000 Master Plan after a master planning process in the late '90's. Second, though I attended all of the public meetings in the 2009-12 master plan process, and met one-on-one with Dept. of Aviatiion and Aviation Board officials during that time, I never once heard the 1979 Master Plan referred to.

However, that changed in February of this year when Kevin O'Malley from the Wilsonville Chamber, JL Wilson, their lobbyist and Wendy Kellington, a land use attorney, were pushing and testifying in favor of HB 4092 to expand the Aurora Airport.

Suddenly one of their main arguments was that the 1979 Master Plan for the Aurora Airport recommended a 6,000 foot runway, as if that should simply and self-evidently be all that was needed to be said to pass the legislation.

As in life, often context is everything, and what everyone concerned with expansion of the Aurora Airport should realize is that lengthening the runway was not the only recommendation, nor was it the only fact of note in the 1979 Master Plan. For example, among the "Recommendations" in that plan regarding local jurisdictions it also says:

> *"The State should continue to work closely with Marion and Clackamas Counties to develop compatible land use planning for the airport environs.....The State should work closely with Marion and Clackamas Counties to develop zoning changes on and near the airport as recommended by the Master Plan.....In updating the Master Plan the State should work closely with the airport users, local governments, and citizens."*

To me this recommendation clearly emphasizes the intent found in our Oregon land use laws: local jurisdictions are to work together and go through the existing land use process.

Also of note is that the recommendation about a lengthened runway was aspirational in part based on a projected increase in Total Operations (landings and take offs) from 90,000 in 1976

to a projected 209,000 by 1995. Actual Total Operations in 1998 were down to 87,914, and in 2017 they were still under 95,000.

The answer to the question "what changed" is corporate jets. In 1997 there was one corporate jet based at the Aurora Airport. This year there are 34. Larger corporate jets require longer and stronger runways. Notwithstanding all of that, Aurora Airport has never been able to demonstrate a need for expansion based on the usual factors of total operations, number of based aircraft, or even constrained operations. All the data we have seen has been "shaped" to create the impression that the airport is somehow "unsafe," and expansion needs to occur to "improve safety."

The 2000 Master Plan not only recommended that the plan maintain compatibility "with the comprehensive plans, other necessary planning documents, and land use regulations for the City of Aurora, Marion County and Clackamas County," it also includes the following statement:

> *The Aurora State Airport is located at an elevation of 196 feet and in a temperate climate (as opposed to a hot climate such as you might find in parts of Arizona). As a result, the runway length requirement for the aircraft listed provides a reasonable representation of the runway length that is needed. Based upon the data in the table, the existing 5,000-foot runway length is adequate for most of the aircraft in the ARC B-II class and no runway extension is needed. Depending upon the specific conditions, some operations may be constrained by the 5,000-foot runway length. This may require that aircraft take off or land with a lighter load than might otherwise be desirable. However, these constrained operations should be the exception rather than the rule.*

As a reminder, the business aircraft at the time were turbo props, not jets, and what has changed especially in the last ten years, is the move to turn Aurora Airport into a major corporate jet airport. So, of note, from the 1976 Master Plan to the 2000 Master Plan, the change was from extending and strengthening the runway to NOT doing so because the data didn't support the change or the cost.

The second subject I would address took place in spite of those Master Plans, and forces the question of "why the IGA?" that has caused so much consternation. The 2000 Master Plan makes the statement that "The Aurora State Airport is a pubic use airport and is designated as a Public Airport Zone. Marion County is the planning and building permit authority for the airport." But, it also includes in its Recommendations the following: "Maintain compatibility of this plan with the comprehensive plans, other necessary planning documents, and land use regulations for the City of Aurora, Marion County and Clackamas County."

It is of some note then, that in direct contravention to the recommendations of coordinated activity between the two counties included in the two prior Master Plans, in April of 2008 (before the most recent Master Plan process began), an IGA between the Department of Aviation, Marion County and City of Aurora was concluded that included an "Impact Area" map

that specifically excluded Clackamas County from impacts from the Aurora Airport. That IGA is somewhat ironically titled "Intergovernmental Agreement on the Coordination of Growth Management and Transportation Issues between City of Aurora, Marion County and the Oregon Department of Aviation."

Listening to the audio recording of the Marion County Commission Management Update (June 7, 2010) where this IGA was presented and approved it is very clear that the logic for it was twofold. First, to allow Dept. of Aviation to go forward in its application for Connect Oregon III transportation funds to construct the air traffic control tower which required that the project could "demonstrate support from public agencies that must approve the project" -- which it did by stating that "coordination required per IGA with Marion County and Aurora." That application also referenced "concurrence" of Clackamas County which was never sought. The second reason is in the discussion among the Marion County Commissioners that they should "protect our own land use interests" and making "them" (i.e. Clackamas County and City of Wilsonville) signing partners and would get Marion County "mixed into Wilsonville and Clackamas County in new ways...." and cede control.

Related to all of these Master Plan matters is the fact that as of 2015 the so-called 2012 Master Plan had still not been "approved" by the Aviation Board. It turns out that this was because the Aviation Board was not in a position to do so in as much as Dept. of Aviation did not have the requisite State Agency Coordination Agreements (SAC) in place nor the corresponding Administrative Rules (OAR).

As Jeff Caines, Aviation Planner at Dept of Aviation told me by email in January, 2015, "Once the OARs are in place the next step will be to formally adopt the individual Master Plan on the state (ODA) level." The SAC was adopted in March of 2017 by the Aviation Board, but we know of no approval by the Aviation Board of the Aurora Airport Master Plan subsequent to that approval. This raises the question if there is, in fact, a legally adopted master plan for this airport. If not, then the FAA funding application, which states that it is "fully supported by the current airport master plan...." is a mis-representation.

For all these reasons, Friends of French Prairie is requesting of Gov. Brown that ODA be required to withdraw its FAA funding application, and of Legislative leadership that retroactive approval for the application not be granted, and that a complete master plan process that is fully compliant with Goal 1 by conducted, and that it includes the participation of all impacted municipalities.

Sincerely

Ben Williams

President, Friends of French Prairie

IMPORTANT ELEMENTS OF THE 1976 AURORA AIRPORT Master Plan

Recommendations

The State should continue to work closely with Marion and Clackamas Counties to develop compatible land use planning for the airport environs.

The State should work closely with Marion and Clackamas Counties to develop zoning changes on and near the airport as recommended by the Master Plan.

In updating the Master Plan the State should work closely with the airport users, local governments, and citizens. A flexible attitude and approach to the planning process should be maintained.

Airport Requirements

In the 1985 to 1995 period the runway should be increased to about 6,000 feet and single gear pavement strength increased to 60,000 pounds.

Environmental Requirements

This Master Plan does not require that an Environmental Impact Assessment Report be performed. Later at the time of construction of major capital improvements at the airport will require a full disclosure of environmental effects expected to result. This will be disclosed in an Environmental Impact Statement as required under the National Environmental Policy Act of 1969.

Forecasts

	1976 Master Plan Actual	1995 Projection from 1976 Master Plan
Employees	100-125	N/A
Based Aircraft	127	248
Total Operations	90,000	209,000

Airport Plans

One alternative considered was to acquire land to the south of the runway. All expansion would then be toward the south. Although for the reasons above this concept was rejected, it will be reconsidered in the future and used if warranted.

Surface Access

The Recommended Airport Access Plan relies on the strong points of the existing surface transportation systems and reinforces its deficiencies. The basic concept is to provide convenient access from the service area to the main airport entrance.

Environmental Considerations

Environmental assessments have been made based upon the Airport Layout Plan drawings and upon the forecast traffic. None of the physical developments proposed require an Environmental Impact Assessment Report at this time. However the runway lengthening proposed after the next five year period will require a formal environmental process prior to construction.

Land Use Plan and Recommended Zoning

Although the airport has been found to be providing a service to large numbers of users, it can remain in public acceptance only as long as its compatibility with the surrounding land use is preserved.

The Land Use Plan shows land uses recommended in the vicinity of the airport which are closely in conformance with the comprehensive plans of Marion County and Clackamas County. Unique to these comprehensive/plans would be the indicated airport buffer overlay which this Master Plan recommends for adoption by both counties.

The airport Master Plan has been submitted to Marion County and Clackamas County for guidance in adopting new zoning in agreement with the airport.

Implementation Plan – Development Schedule and Staging

The timing for Stage III long-range development needs is less definite. The Master Plan calls for a 6000 feet runway at 60, 000 pounds S. G. strength and other pavement strengthening. An MLS or equivalent landing system should be added by that time to maintain adequate airport utilization.

RETROSPECTIVE ASSESSMENT: a 6,000 foot extension was "contemplated" in the 1996 Master Plan as were many other things including Environmental Impact Assessments for all capital improvements and coordination between Marion and Clackamas Counties—neither of which came to pass.

Further, the 1976 Master Plan also projected Total Operations to grow to 209,000 by 1996 when in fact actual Total Operations in 1998 were 87,914! Projected growth in operations at Aurora Airport has consistently fallen short of the forecast for over 40 years.

	1976 Master Plan Actual	1995 Projection from 1976 Master Plan	1998 Actual	2015 Projection from 2012 Master Plan	Current
Employees	100-125	N/A	N/A	N/A	1,200
Based Aircraft	127	248	259	379	475
Total Operations	90,000	209,000	87,914	98,321	94,935

Finally, while the 1976 Master Plan defined that the State and Marion and Clackamas Counties should "work closely" on land use planning, zoning changes and Master Planning, in 2009 the Dept. of Aviation worked exclusively with Marion County to develop an IGA that excluded Clackamas County through the creating of a new and novel "Impact Area Map" that described the extent or airport impact stopping at the north county line.

Prepared by Friends of French Prairie

Aurora State Airport Master Plan Update

October 2000

Prepared for:

Oregon Department of Aviation
Salem, Oregon

Prepared by:

W&H Pacific, Inc.
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
(503) 626-0455

In association with:

Jeanne Lawson Associates
Public Involvement Consultants
Portland, Oregon

Mark Greenfield
Land Use Consultant
Portland, Oregon

October, 2000

Table 1-2
PHASED DEVELOPMENT PLAN - FINANCIAL PARTICIPATION

	Cost (1999)	Portion of Total
Federal Share of Public Development	$5,058,900	49 %
State Share of Public Development	$ 872,100	9 %
Private Property Development	$4,276,000	42 %
TOTAL CIP PROJECT COSTS	**$10,207,000**	**100 %**

Recommendations

In order to provide for and foster aviation in the best interest of the residents of the Aurora region, the Master Plan Update recommends the following:

- Provide for future development at the airport in accordance with this plan.
- Place a high priority on removal of identified airspace obstructions.
- Acquire remaining identified avigation easement areas to gain sufficient control of airport airspace.
- Maintain compatibility of this plan with the comprehensive plans, other necessary planning documents, and land use regulations for the City of Aurora, Marion County and Clackamas County.
- Request and utilize funding assistance as provided by the Federal Aviation Administration.

CHANGING CHARACTER OF THE NATIONAL FLEET. FASTER GROWTH IS EXPECTED IN THE TURBINE AND JET POWERED SEGMENT OF THE GENERAL AVIATION FLEET THAN IN THE PISTON-POWERED SEGMENT. WHILE SOME GROWTH IS ANTICIPATED IN THIS SEGMENT AT THE AURORA STATE AIRPORT, BECAUSE OF THE SMALL NUMBER OF BASED AIRCRAFT, THE FLEET MIX IS ANTICIPATED TO REMAIN RELATIVELY UNCHANGED.

The forecasts for the fleet mix at the airport are presented in **Table 3-4**.

TABLE 3-4
UNCONSTRAINED FORECAST OF BASED AIRCRAFT FLEET MIX

Aircraft Type	1997	2017
Single-Engine Piston	220	284
Multi-Engine Piston	25	36
Turboprop	2	10
Business Jets	1	4
Helicopters	6	9
Specialty Aircraft	2	2
Total	**256**	**345**

Source: W&H Pacific

FORECAST OF AIRCRAFT OPERATIONS

The forecast of aircraft operations for the Aurora State Airport was prepared using five methods. These included:

- Aurora Acoustic Count Program Ratio.
- Salem Airport Tower Count Ratio.
- Scappoose Industrial Airpark Acoustic Count Program Ratio.
- Bend Municipal Airport Acoustic Count Program Ratio.
- Oregon Aviation System Plan Ratio.

Each of these methodologies will be described below.

Aurora Acoustic Count Program. The 1997 adjusted operations count for the Aurora State Airport is estimated to be 86,825 annual operations (see discussion of the acoustic count contained in the Inventory Chapter of this Plan). With 256 based aircraft, the ratio of operations per aircraft is 339 operations per aircraft. Applying this ratio to the forecast number of based aircraft results in an estimated 108,604 annual operations in the year 2017.

Runway Length. A review was made of the business class aircraft falling into the ARC B-II class. The runway length requirements for those aircraft and smaller business aircraft falling into the ARC B-II class are shown in **Table 4-4**. The data in the table are averages that assume the following conditions: sea level elevation; 59 degrees F. ambient air temperature; and maximum gross weight for the specified operation (landing or take off). The actual length for each take-off or landing varies, based upon such factors as the following: weight of the aircraft; runway condition (wet/dry/icy); individual pilot technique; condition of the aircraft; and ambient air temperature. Aircraft may require more or less runway than that shown in **Table 4-4**, depending upon the factors listed above.

The Aurora State Airport is located at an elevation of 196 feet and in a temperate climate (as opposed to a hot climate such as you might find in parts of Arizona). As a result, the runway length requirement for the aircraft listed provides a reasonable representation of the runway length that is needed. Based upon the data in the table, the existing 5,000-foot runway length is adequate for most of the aircraft in the ARC B-II class and no runway extension is needed. Depending upon the specific conditions, some operations may be constrained by the 5,000-foot runway length. This may require that aircraft take off or land with a lighter load than might otherwise be desirable. However, these constrained operations should be the exception rather than the rule.

Table 4-4
ARC B-II, RUNWAY LENGTH REQUIREMENTS

Aircraft	Take-off Length (Feet)	Landing Length (Feet)	Max. Gross Weight (Pounds)
Astra SPX	5,400	2,720	24,650
Beechjet 400A	3,802	2,960	16,300
Cessna Citation Excel	3,460	3,310	19,400
Cessna Citation Jet	3,080	2,750	10,500
Cessna Citation 7	4,690	2,910	22,650
Challenger 600W	5,700	3,050	41,400
Lear 31A	3,490	2,767	17,000
Lear 35A	4,972	3,075	18,500
Saberliner 600	5,100	2,425	20,372

Source: Aviation & Space Technology Aerospace Source Book January 12,1998
Assumptions: Sea level elevation; 59 degrees F. air temperature; and maximum gross weight for the specified operation.

Runway Width. The existing runway width of 100 feet exceeds the 75-foot standard for an ARC B-II runway. At such time as the runway needs a full overlay or reconstruction, or when the runway lights need an upgrade, the runway width should be reviewed and a decision made on the appropriate width. It may be more cost effective to overlay the full width and allow the lights to remain vs. narrowing the runway and having to move the lights. There may be an advantage, if and when the runway is narrowed, to narrow it from east to west, removing the excess width on the east side. Doing this will have the effect of moving the runway and taxiway centerlines an additional 12½ feet further apart. See the discussion of runway/taxiway separation below.

Runway Load Bearing Capacity. **Table 4-4** also illustrates the maximum gross weight of the aircraft falling into the ARC B-II category. Most of these aircraft have dual wheels, meaning that on the main landing gear, there are two wheels to carry the weight of the aircraft. This distributes the weight over a larger area and causes less impact on airport pavements. The

Veliz, Kim

From: ben.williams@liturgica.com
Sent: Sunday, December 2, 2018 9:29 AM
To: City Recorder
Cc: Ottenad, Mark
Subject: Additional submission re: Hearing on Expansion of Aurora Airport
Attachments: Astorga Email_03-2017.pdf; Jeff Caines email_01-2015.pdf

To: City Recorder, Wilsonville

From: Benjamin Williams

Re: Additional submission for the record re: Hearing on Expansion of Aurora Airport

Since submitting by written testimony, and testifying at the hearing, some new info has come to light regarding the Master Plans I referenced (1979, 2000 and 2012) and their relevance, that are important considerations regarding the subject of the referenced hearing concerning Aurora airport expansion.

This information informs the question: **was the 2009 to 2012 Master Plan process concluded with the completion of a "valid" and "lawfully approved" master plan document?**

This question touches both Goal 1 requirements for land use plans, and the specific process and authorities involved in the 2012 Master Plan process. One thing that never happened was a public hearing after the Master Plan was finished. Why? Because the first release of the Master Plan occurred in the lead up to the March 31, 2011 Aviation Board meeting. Prior to that individual chapters of the Master Plan were released, and at that Aviation board meeting Chapter 5 with its expansion recommendations was presented. Specifically, the recommendation of Dept. of Aviation and its consultant WH Pacific to the Aviation Board was the "No Build" option – not to extend the runway.

That recommendation wasn't acceptable to the Aviation Board and it instructed ODA to pursue a runway extension option. That resulted in six to nine months of negotiating with FAA and resulted in "agreement" between FAA and the Dept. of Aviation and then the Aviation Board, on a 1,000 foot extension to the south. At that point, Chapter 5 of the Master Plan that had been presented to the Aviation Board on March 31, 2011 was reissued to include an Appendix that contained the recommendation for a 1,000 foot extension to the south at an estimated cost of $7.2M dollars.

Members of the Public Advisory Committee who had received copies of the Master Plan chapters as they were released did not receive copies of the updated Chapter 5, and it has been posted to the ODA Aurora Airport master plan web site with no reference to the change. Again, this constituted minimally a Minor (if not in fact, a Major) Revision to the previously released Master Plan (as reported in the print media at the time) – but once again there was no public notice, no public comment period or public hearing.

Then the Master Plan went into a dark hole, and all our inquiries about the final status and release were replied to as "waiting on FAA final approval." That is, until January of 2015 when Jeff Caines, Aviation Planner at ODA told me that 2012 Master Plan had still not been "approved" by the Aviation Board. It turns out that this was because the Aviation Board was not in a position to do so in as much as Dept. of Aviation did not have

the requisite State Agency Coordination Agreements (SAC) in place nor the corresponding Administrative Rules (OAR).

Caines told me by email: "Once the OARs are in place the next step will be to formally adopt the individual Master Plan on the state (ODA) level." The SAC and OARs were adopted in March of 2017 by the Aviation Board, but we know of no approval by the Aviation Board of the Aurora Airport Master Plan subsequent to the SAC approval. Our understanding is that Master Plan approval has to happen at the level of the oversight and policy body (i.e. the appointed Aviation Board), not at the agency level, and I have reviewed the agendas for all Aviation Board meetings in 2015, 2016, 2017 and 2018 and there is no Agenda Item to approve the Master Plan for the Aurora Airport to be found. See attached emails.

This is relevant as illustrated by development proponent statements that the Master Plan was approved and opponents did not appeal. No Master Plan was formally approved or adopted by the Aviation Board – so there was nothing to appeal!

It appears that all the aviation parties somehow thought that having received "approval" from the FAA was all they needed, until 2015 when it was pointed out that they didn't have a valid and legally adopted Master Plan because they were missing the requisite SAC and OARs to approve the Master Plan relative to State law. It also appears that once the SAC and OARs were completed they appear to assume they would apply retroactively to the previously approved master plan.

I don't believe that retroactive applicability is valid, and thus it appears that there is no "legally adopted" master plan for this airport. That being the case, among other problems there is this: the FAA funding application states that it is "fully supported by the current airport master plan...." Even if FAA approves the "content" of the 2012 Aurora Airport Master Plan, this statement implies that the application is supported by a valid and lawfully adopted master plan, which appears to be a mis-representation for all the above reasons.

Sincerely

Ben Williams

Friends of French Prairie

503.568.5670

DAVID ASTORGA EMAIL

David Astorga – Feb. 10, 2017

Public Notice - Aviation State Agency Coordination Agreement

Good Afternoon,

You have been identified as a party of interest from ODA to receive public notices. This specific notice is in regards to ODA's State Agency Coordination (SAC) Agreement (see attachment). ODA is taking public comments on the proposed SAC Agreement. This Agreement will is scheduled to be heard at the next Aviation Board meeting on March 7, 2017 in Salem, OR.

Background:

The Oregon Department of Aviation is responsible for the State's Aviation System plan which is an element of the State's Transportation System Plan for all transportation modes. Statewide Planning Goal 12 (Transportation) requires state and local transportation plans in order to facilitate the flow of goods and services so as to strengthen local and regional economies. The goal requires plans to consider all modes of transportation and specifically identifies aviation (air) as a mode of transportation.

Oregon´s statewide goals are achieved through local comprehensive planning. State law requires each city and county to adopt a comprehensive plan and the zoning and land-division ordinances needed to put the plan into effect. Oregon´s planning laws apply not only to local governments but also to special districts and state agencies. The laws strongly emphasize coordination – keeping local plans and state programs consistent with each other, with the goals, and with acknowledged local plans.

If you have any questions contact Jeff Caines at 503-378-2529. Please send written comments to ODA via email: aviation.mail@aviation.state.or.us; Please use ***"Public Notice - Aviation State Agency Coordination Agreement"*** for the subject line; US Mail: 3040 25th St SE, Salem, OR 97302-1125.

Jeff Caines, AICP

Oregon Department of Aviation

Aviation Planner / SCIP Coordinator

FAX 503-373-1688

3040 25th St SE

Salem, OR 97302-1125.

JEFF CAINES EMAIL – JANUARY, 2015

Greetings;

I'm forwarding an e-mail interchange with Jeff Caines, the Aviation Planner at ODA that Mia worked with last year. Of note, her work with Jeff and the coaching she provided him gets us to where we are.

In the last couple of days (again with Mia's coaching) I simply started asking dumb questions about where they are on adopting the Aurora Airport Master Plan, etc. The net/net on their answers:

1. Confirms what we thought – that the Oregon Aviation Board has not adopted the updated AA master plan.....because they now know they can't because they lack a SAC agreement with ODOT.

2. So, they are now working with ODOT and LCDC to get a SAC in place re: land use planning.

3. They have also learned through this exercise that they are out of compliance in another area, namely that there is nothing in their Agency Administrative Rules addressing land use planning! So that work is being taken on also.

You'll see I asked about public process re: the land use OAR work, and they say they're essentially adopting them from ODOT.....and in as much as there are no "new rules" that public input isn't required.

So, besides them finally acknowledging that they've been operating for years in a manner out of compliance with the State land use laws, my question is whether the defined plan here makes sense, and if adopting ODOT's versions is adequate.

It almost make the case whey they should be rolled back into the Dept of Transportation! Since this undertaking has statewide impact, and is much larger in scope that Aurora Airport, it seems to me that you all should give it some serious review, as this may be the only time we have any opportunity for input at all.

I made my case to Steve once again this past Monday that we need to seriously challenge the operating assumption about the critical need of the so-called "aviation system" (which mainly seems to use tax payer money to provide free infrastructure to the aviation industry and help some of them get rich through airport development!) and to my mind this certainly makes the case in the land use area.

Ben Williams

FOFP

Cell: 503.568.5670

Fax: 503.678.5649

From: CAINES Jeff [mailto:Jeff.CAINES@aviation.state.or.us]
Sent: Thursday, January 08, 2015 4:28 PM
To: Ben Williams

Cc: SWECKER Mitch; HOWARD Joy B; PECK Heather
Subject: RE: Check in re: Dept. of Aviation SAC agreement

The OAR will identify the process in which Master Plans for the State's airports can be adopted. This is similar to what local cities and county do for transportation plans. The purpose statement states: *"The purpose of this division is to establish the procedures used by the Department of Aviation to implement the provisions of its State Agency Coordination Program which assure that Department land use programs are carried out in compliance with the statewide planning goals and in a manner compatible with acknowledged comprehensive plans, as required by ORS 197.180 and OAR 660, Divisions 30 and 31."*

The State Agency Coordination (SAC) is a process for state agencies to adopt planning documents that show consistency with State Planning Goals. In the case of ODA, this would be airport Master Plans for the State owned airports throughout the state, including Aurora, Joseph, McDermitt, etc.

Once the OARs are in place the next step will be to formally adopt the individual Master Plan on the state (ODA) level. This is not to be confused with **ORS 836.610** Local government land use and regulations which discusses local governments amending comprehensive plans and land use regulations. Or **ORS 836.616** Rules for airport uses and activities which discuss uses within the boundaries of the airport.

As for the public process, Joy Howard is the one leading that task. I do not believe there is a rule making committee for this update because all ODA is doing is taking the existing rules from ODOT and modifying them to meet ODA's needs. In essence no "new" rules are being created, just modified.

Jeff

Jeff Caines, AICP

Aviation Planner / SCIP Coordinator

503-378-2529 - Office

503-507-6965 – Cell / Text

From: Ben Williams [mailto:ben.williams@liturgica.com]
Sent: Wednesday, January 07, 2015 3:27 PM
To: CAINES Jeff
Cc: SWECKER Mitch; HOWARD Joy B; PECK Heather
Subject: RE: Check in re: Dept. of Aviation SAC agreement

Jeff;

Thank you for your quick reply! It's appreciated. As I said, I'm know to a lot of this, so want to start by confirming that creating a new Division in the OARs for (presumably) land use matters is in process, and this has to occur before the SAC can be undertaken. Please confirm.

Relative to the creation of the new Division for land use, is there a plan for public process therein? For instance, is there a plan for a Rule-making Advisory Committee in this instance, as if often the case at ODOT or LCDC?

Sincerely

Ben Williams

Friends of French Prairie

Cell: 503.568.5670

Fax: 503.678.5649

From: CAINES Jeff [mailto:Jeff.CAINES@aviation.state.or.us]
Sent: Wednesday, January 07, 2015 1:39 PM
To: Ben Williams
Cc: SWECKER Mitch; HOWARD Joy B; PECK Heather
Subject: RE: Check in re: Dept. of Aviation SAC agreement

Ben:

Currently ODA is updating the Departments OARs for the SAC agreement. Joy Howard is the Rules Coordinator for the Department. At this time ODA is creating a new Division to address the SAC agreement - from there the agency all be able to address the formal adoption of airport Master Plans.

I do not have a specific timeline the Aviation Board will hold meetings about the updated OARs.

Jeff

Jeff Caines, AICP

Aviation Planner / SCIP Coordinator

503-378-2529 - Office

503-507-6965 – Cell / Text

From: Ben Williams [mailto:ben.williams@liturgica.com]
Sent: Tuesday, January 06, 2015 3:38 PM
To: CAINES Jeff
Subject: Check in re: Dept. of Aviation SAC agreement

Jeff;

Greetings. I am President of Friends of French Prairie, a 1000 Friends affiliate. You may be aware that Mia Nelson, the 1000 Friends representative for Willamette Valley, has been on very limited work time for the past six months due to health reasons.

She suggested I reach out to you and request a status update on the SAC agreement with DOT relative to land use planning at Aurora Airport associated with the Master Plan update. I understand from her that last year you were in dialogue with OLCD regarding the requirement for ODA to complete this.

Can you please advise on progress and status?

Thank you!

Ben Williams

Friends of French Prairie

Cell: 503.568.5670

Fax: 503.678.5649

Veliz, Kim

From: ben.williams@liturgica.com
Sent: Monday, December 3, 2018 3:38 PM
To: City Recorder
Cc: Ottenad, Mark
Subject: Aurora Airport Hearing Testimony
Attachments: NO ON 4092 - Ben Williams handout - Aurora geology - Submitted Testimony for HTP Comm Hearing 2.9.2018.pdf

Greetings;

Please enter the attached as additional testimony into the record for the Hearing on the Aurora Airport Expansion.

A number of development proponents lightly dismissed geologic hazards, and this document was prepared as part of the testimony against HB 4092, specific to the subject.

Sincerely

Ben Williams
Friends of French Prairie

RELATIVE EARTHQUAKE HAZARD MAPS OF THE AURORA AIRPORT AND ENVIRONS

A significant basis for justifying HB 4092 has been the need for enhancing the Aurora Airport for emergency responsiveness, particularly in the event of a major earthquake or Cascadia event. This is confirmed via an amendment to the bill posted on February 5 which reads as follows:

"SECTION 5. The Oregon Homeland Security Council shall consider a state airport, as defined in section 1 of this 2018 Act, to be a critical emergency preparedness, response, recovery and resiliency platform and shall prioritize state airports for resiliency investments.".

What is missing from this intention is consultation with the State of Oregon Department of Geological and Mineral Industries, who have performed geological surveys of this area of the State and created Hazard Maps which show that the southern half of the Aurora Airport and runway are located within a significant hazard zone.

These maps follow, and specifically illustrate the following:

The **Relative Earthquake Hazard Map** of the Aurora Airport indicates that the southern half of the existing runway, and all of the proposed runway extension, "based on the combined effects of ground shaking application, liquefaction, and earthquake-induced landslides" are within "Zone B — **Intermediate to high hazard"**. (Zone A is Highest hazard and Zone D is Lowest hazard).

The **Relative Amplification Hazard Map** of the Aurora Airport indicates that the southern half of the existing runway, and all of the proposed runway extension, "based on the degree to which shaking from a given earthquake is likely to amplify" are within the "**Medium amplification hazard** (UBC soil type D)". (UBC soil type E has the Highest amplification hazard and UBC soil type C has the Lowest amplification hazard).

The **Relative Liquefaction Hazard Map** of the Aurora Airport indicates that the southern half of the existing runway, and all of the proposed runway extension, "based on the likelihood that liquefaction will occur in a given earthquake" is within the "**Medium liquefaction hazard** zone.

The **Relative Hazard Map Earthquake-Induced Landslides** of the Aurora Airport indicates that the southern half of the existing runway, and all of the proposed runway extension, "based on the possibility that a given earthquake will trigger landslides", are within the "**Low landslide hazard**" zone; the northern half of the Aurora Airport is outside of the Relative Earthquake-Induced Hazard zone.

The report from which the maps are drawn states the following:

"The geology of the [Canby-Barlow-Aurora] area is relatively complex with two units of Quaternary sediments overlying bedrock... part of which is "Columbia River Basalt Group... overlain "by several hundred feet of Pliocene-Pleistocene fluvial silt- and sandstone. The Quaternary sediments consist of silt, sand, and gravel and were deposited by southward flowing catastrophic floodwater associated with drainage of Glacial Lake Missoula (Bretz and others, 1956; Waitt, 1985) and flowing south through the area. The floodwaters scoured an irregular surface on the bedrock units, then deposited an irregular body of pebble to boulder gravel on the scoured surface. The gravel is overlain by sand and silt deposited by waning floodwaters. The Willamette and Mollala Rivers have cut into the flood deposits and have deposited small amounts of fluvial sediment on their floodplains."

What is clearly shown in these maps and detailed in the report is that portions of the Aurora Airport are subject to significant earthquakes and associated significant earthquake-related effects (liquefaction and amplification) that a moderate to severe earthquake would in all likelihood render the runway and much of the airport unusable. Further, in the event of a major and catastrophic event such as a Cascadia event, it is highly unlikely that the Aurora Airport runway would be unusable.

The Aurora Airport may be an appropriate site for aviation related relief in the case of forest fires or other types of catastrophes. However to assert that it would functionally survive a major earthquake event is to consciously ignore the geologic realities.

Map Source:
State of Oregon
Department of Geological and Mineral Industries (DOGAMI)
John D. Beaulieu, State Geologist

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

Madin, Ian P., Wang, Zhenming, 1999, Interpretive Map Series IMS–8: Relative Earthquake Hazard Maps for Selected Urban Areas in Western Oregon", Canby-Barlow-Aurora, Lebanon, Silverton-Mount Angel, Stayton-Sublimity-Aumsville, Sweet Home, Woodburn-Hubbard: Oregon Department of Geology and Mineral Industries report, p. 9

Ian P. Madin, Chief Scientist, Oregon Department of Geology and Mineral Industries

Report Download:
http://www.oregongeology.org/sub/publications/IMS/ims-008/Text/ims-08.pdf

Maps Download:
http://www.oregongeology.org/pubs/ims/p-ims.htm

This document was prepared by Friends of French Prairie and is submitted for the record on February 6, 2018 to House Committee on Transportation Policy re: HB 4092

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

Relative Earthquake Hazard Maps
for Selected Urban Areas in Western Oregon

By Ian P. Madin and Zhenming Wang

CANBY BARLOW AURORA

Canby-Barlow-Aurora Urban Area

Relative Earthquake Hazard Map

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

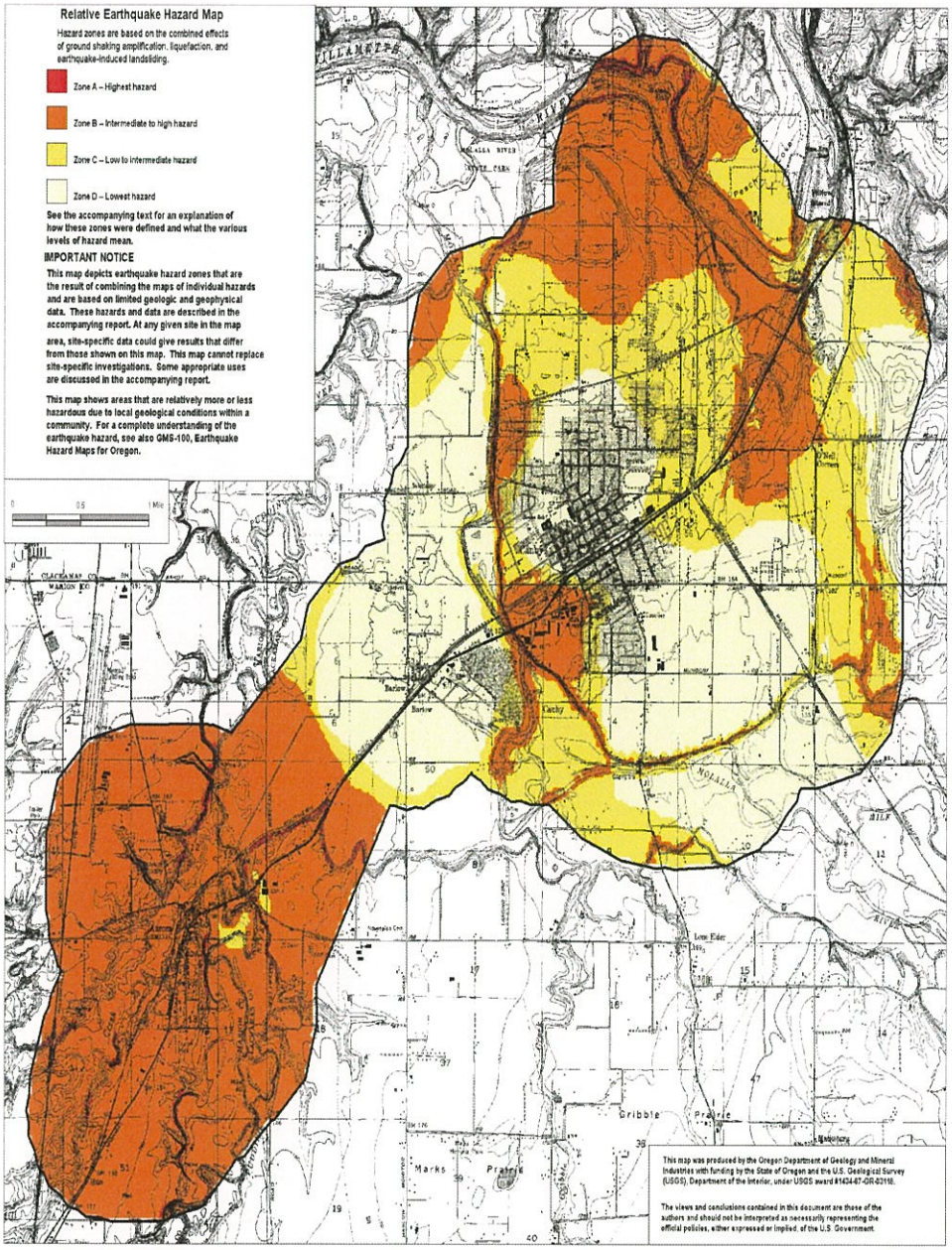
- Zone A – Highest hazard
- Zone B – Intermediate to high hazard
- Zone C – Low to intermediate hazard
- Zone D – Lowest hazard

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

IMPORTANT NOTICE

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

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



This map was produced by the Oregon Department of Geology and Mineral Industries with funding by the State of Oregon and the U.S. Geological Survey (USGS), Department of the Interior, under USGS award #14344-GR-02118.

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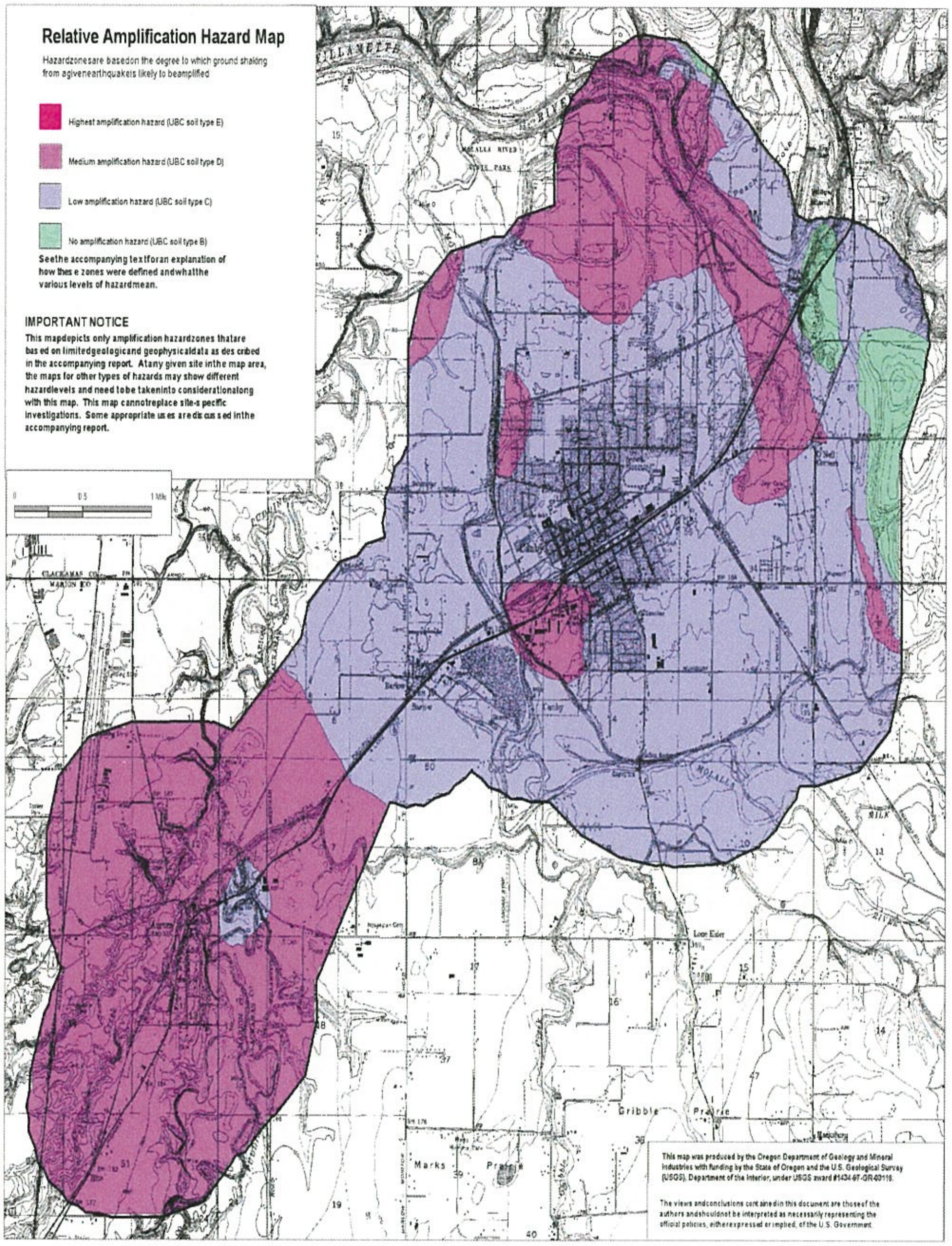
Canby-Barlow-Aurora Urban Area



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

IMS-8

Relative Earthquake Hazard Maps
for Selected Urban Areas in Western Oregon

By Ian P. Madin and Chenming Wang

CANBY-BARLOW-AURORA

Canby-Barlow-Aurora Urban Area

Relative Liquefaction Hazard Map

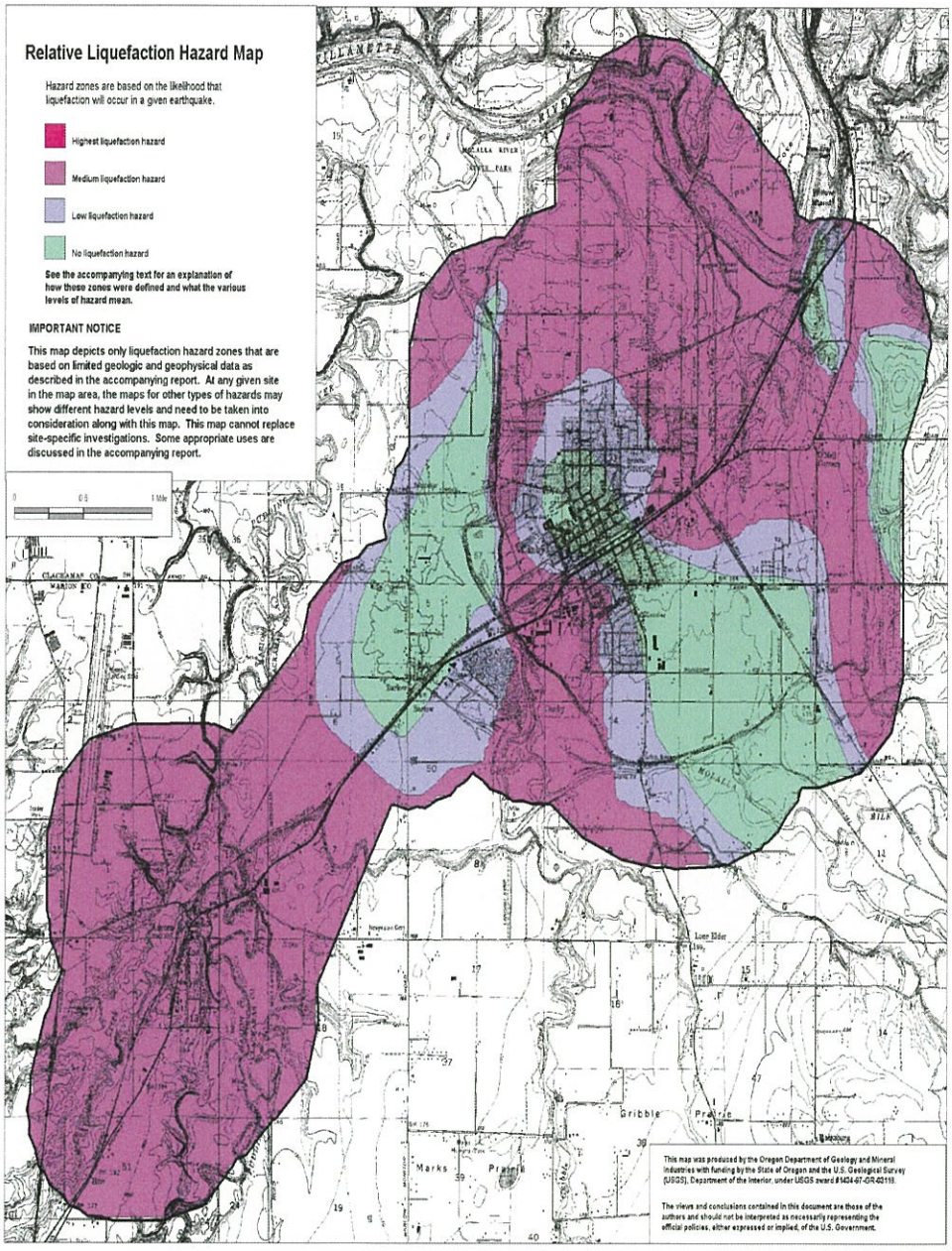
Hazard zones are based on the likelihood that liquefaction will occur in a given earthquake.

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

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

IMPORTANT NOTICE

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



This map was produced by the Oregon Department of Geology and Mineral Industries with funding by the State of Oregon and the U.S. Geological Survey (USGS), Department of the Interior, under USGS award #1434-97-GR-02119.

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Canby-Barlow-Aurora Urban Area

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CANBY BARLOW AURORA