Dear Ms. Morgan,

Last Thursday (1/21/10) I attended the public hearing that was "to gather public comment" as to the draft Environmental Assessment on the potential impacts that could result if two commercial carriers were to begin regular passenger service from Paine Field.

As the meeting proceeded, it became clear that the FAA did not really want public input, it just wanted to present a badly flawed EA. The EA was prepared by an ‘air-port planning consultant, Barnard Dunkelberg & Co. Their focus is proving that airports should grow and expand, and their clients are typically airports and related government entities.

The fact that this consultant's assessment was that there would be no significant negative impacts from about 8,000 commercial flights a year is just plain ridiculous. This just points to the fact that this 'assessment' is not impartial, not accurate, and did not correctly address the issues of the communities surrounding the airport. The FAA should be ashamed to have presented such a flawed report.

The issues to be correctly and impartially addressed should have been:

1. Pollution of air quality from the plane engines as debris (gas and fumes, etc) is expelled during take-off and landing.

2. Noise during take-off and landing. The dBA for schools should be set to reduce the noise that stops the teaching of students so they can be competitive with other students. (Note: during the construction of the Snohomish County Regional Landfill, The Environmental Impact required noise monitoring during...
construction. The noise level of 65 dBA could not be exceeded on the North, West and East side of the landfill because housing in that area.)

3 - Property values among homes surrounding airports will drop! These property values are a major source of tax revenues which fund improved services and that affects the quality of life in this community. Not only that, but Property Values are a retirement safety-net for home owners.

4 - The fact that the EA found that the addition of thousands of passengers coming and going to the airport would have "no significant impact" on traffic points out that this report is biased, inaccurate, and terribly flawed.

5 - This report also did not reflect the great number of citizens that oppose the addition of more flights out of Paine Field, it seems to endorse the small number of folks that want to "save a long drive to Sea-Tac".

6 - Those supporters that insist that the flights would boost the economy are not running the numbers. If any economy is boosted, it would be the City of Everett. The economy of surrounding cities (Mukilteo, Lynnwood, Shoreline, Mill Creek, etc.) would undoubtedly suffer because of depressed property values that would also result in a decreased tax base for those cities.

7- One big issue is the fact that once the commercial flight door is ajar it will eventually open all the way.

Mike Fergus, regional FAA spokesman, said in a recent interview that the FAA is not pushing for commercial flights at Paine Field. However, when hiring a consultant, Mr. Fergis hired a firm that works toward planning how airports should grow and expand. Mr. Fergis needs to remember that 'actions speak louder than words'.

In closing, I once again want to state that the Environmental Assessment draft is inaccurate and biased. It is incomprehensible that it could carry any weight in this issue.

Sincerely,

Roy E. Eastman
Professional Civil Engineer, retired
8909 55th Pl. W.
Mukilteo, WA 98275
Dear Roy Eastman:

Thank you for your comments to the FAA, Snohomish County, and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

General Response 1-1: Why can't the County limit or restrict operations?
General Response 1-9: Roles of consultant and their qualifications
General Response 1-11: Flawed/inadequate/biased EA
General Response 1-15: EA did not reflect the opposition of the community
General Response 3-5: Why was 2016 selected as the future year?
General Response 3-14: What actions will require additional environmental review?
General Response 6-1: Significance of Project Effects
General Response 6-3: What are the project benefits?
General Response 7-6: What are the existing and future noise impacts?
General Response 7-7: Noise impacts on schools
General Response 8-1: Traffic analysis
General Response 8-2: Why weren't diverted trips accounted for?
General Response 9-1: What is the impact upon property values?
General Response 9-2: Indirect/induced traffic effects
General Response 10-2: Air quality conformity
General Response 10-4: Would there be an increase in fuel dump/fuel smell/residue?
General Response 10-5: Question regarding the analysis of PM10 and PM2.5
GOOD EVENING
MY NAME IS ROY E. EASTMAN JR.  ENVIRONMENT
ASSessment —
I AM A RETIRED PROFESSIONAL CIVIL ENGINEER IN THE
STATE OF WASHINGTON.
I WAS ALSO SNOHOMISH COUNTY'S ENGINEER FOR THE
CART CART SOLID WASTE SANITARY LANDFILL.
THE FINAL DESIGN REPORT OF JANUARY 1990 WAS
UTILIZED FOR AWARD AND CONSTRUCTION BY THE
SNOHOMISH COUNTY DEPARTMENT OF PUBLIC WORKS,
SOLID WASTE DIVISION.
SECTION 5.7.5 FINAL DESIGN FOR NOISE MONITORING.
THE REQUIREMENT WAS INFORCED DURING CONSTRUCTION
THE CONTRACTOR "WILDER CONSTRUCTION" WAS REQUIRED
BY 5:00 PM. TO SHUT OFF ALL HEAVY EQUIPMENT EVEN
INCLUDING FUEL AND MAINTENANCE VEHICLES.
THESE REQUIREMENTS WERE FOLLOWED ON SITE TO
MAINTAIN A DBA OF 65 AND UNDE FOR A FEW HOUSES.
MY QUESTION IS, HOW CAN THE COUNTY JUSTIFY
A LARGE NUMBER OF HOMES AND SCHOOLS TO EXCEED
THE NOISE OF 65 DBA'S TO A LARGE AREA OF NOW
EXISTING HOMES AND SCHOOLS, WHEN THEY HAVE ALREADY
ESTABLISHED A MAXIMUM OF 65 DBA FOR OTHERS.
WHAT IS YOUR PLAN TO TAKE A CORRECTIVE ACTION.
There are several surface water bodies on the RLF that will be sampled on a monthly basis. Outcrop Creek will be monitored at both the north and south property lines. Discharges from the three sedimentation/detention basins will be monitored when installed. Finally, any discharge from the underdrain system will be monitored. The analyses to be performed on these samples will be the same as for groundwater.

5.3.4 LEAK DETECTION SYSTEM

Inspection ports for the leak detection system will be monitored monthly. The inspector will measure the quantity of any liquid present. The rate of leakage will be calculated in gallons per acre per day (gpad) by comparing the volume of liquid added since the last monitoring event. Based on the rate of leakage, action will be initiated as described in Section 5.7.3.

5.3.5 NOISE MONITORING

Noise measurements will be taken at the location of the nearest existing residence located north and west of the landfill site during initial construction activities. The frequency of monitoring after will be monthly if actual measurements exceed predicted levels. If a noise level of 65 dBA is exceeded the County Solid Waste Management Division will take necessary mitigative actions to reduce the noise level to 65 dBA or less.

During initial landfill operations, noise monitoring will be conducted along the north, west and east boundaries of the site. This monitoring will continue on a quarterly basis or as necessary to respond to noise complaints. Results will be reported to the Snohomish Heath District and Ecology within 7 days. Should any violations of County noise ordinance occur, the Solid Waste Management Division will take corrective action. Corrective action will include construction of earthen berms or acoustical walls and will be subject to approval from the County Planning Division.

FINAL DESIGN REPORT
Page 88
Dear Roy Eastman:

Thank you for your comments to Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

**General Response 5-1: Existing aircraft noise concerns**
----- Original Message -----  
From: Cayla.Morgan@faa.gov [mailto:Cayla.Morgan@faa.gov]  
Sent: Wednesday, January 20, 2010 5:16 PM  
To: Waggoner, Dave; Dolan, Bill; Ryk Dunkelberg; Ryan Hayes  
Cc: Patricia.Deem@faa.gov; Caroline.CTR.Poyurs@faa.gov;  
Roland.J.McKee@faa.gov  
Subject: Fw: Paine Field Air Service  

Cayla Morgen  
Environmental Protection Specialist  
Seattle Airports District Office  
Federal Aviation Administration  
425-227-2653  

----- Forwarded by Cayla Morgan/ANM/FAA on 01/20/2010 04:16 PM -----  

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<td>&quot;Lindsey Echelbarger&quot; <a href="mailto:lindsey@ech-cpm.com">lindsey@ech-cpm.com</a></td>
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----- Forwarded by Cayla Morgan/ANM/FAA on 01/20/2010 04:16 PM -----  

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Hello,

I have lived in south Snohomish County for 57 years. I am strongly in favor of limited commercial air service starting at Paine Field in Mukilteo/Everett, Washington.

I fly out of SeaTac about once per month. The automobile drive to SeaTac has become almost unbearable over the last 10 years. It is getting worse—and it will not get better. The situation acts as a damper on our local economy and reduces the attractiveness of local employment. This is a JOBS ISSUE—I find it hard to believe that in this extremely difficult economic environment, that preventing commercial air service is even being considered.

Road congestion is one of the reasons the Seattle-Everett Metropolitan Area needs another airport. We need alternatives. Many, many urban areas now have more than one airport to serve them—-it is time that the Seattle area added another airport—and Paine Field is such a logical alternative.

We built it with taxpayer money, we’ve expanded it with taxpayer money, we own it and it should be used by all taxpayers—and NOT held hostage by a small group of loud neighbors, interested only in their narrow interest (their house). Many other airports in suburban areas coexist well with local residents through a use of sensible regulation (e.g. restrictions on early morning flights and late evening flights); something like this should govern commercial air service at Paine Field. John Wayne Airport in Orange County, California, is an example of a smaller airport with “curfew”. It works there and it would work at Paine Field.

It is also a well-known fact that the small planes (mainly doing “touch and go” landing/takeoffs) create a disproportionate amount of the noise at the airport. Newer planes that the commercial airlines would use are much quieter than they used to be. Please use logic and not emotion to decide this issue. If you do exercise logic, you will see that commercial air service should be allowed and encouraged in order to meet the needs of our local area.

You should also be aware that the Mukilteo mayor and council lobbied neighboring city councils in order to help stop any Paine Field expansion. Most of these “resolutions” were not publicized well with local citizens—in effect, these resolutions are simply a matter of the Political Class scratching each others backs.

My town of Woodway was one of those who passed a resolution restricting commercial air service----this is NOT widely supported by the town citizens, many of whom never heard of the pending resolution. If objectively polled, these frequent fliers would say “Hell Yes” to Paine Field commercial air expansion. The patent orchestration of these city resolutions was a real perversion of democracy and an outrageous gaming of the system by self-serving elected, primarily from the City of Mukilteo.

Please, in this most difficult economic time, do not permit a few loud people to drown out the legitimate use of a taxpayer-owned airport. Thank
you for your consideration of this.

Sincerely,

Lindsey Echelbarger

11233 Whitcomb Place
Woodway, WA  98020

(425) 774-0205
(425)487-6772 FAX
lindsey@ech-cpm.com
Dear Lindsey Echelbarger:

Thank you for your comments to the FAA; they have been noted.
Attached, please find, written comments.

Deborah Knutson
President
Economic Development Council of Snohomish County
A Private Non-Profit Organization
728 134th Street SW, Suite 128
Everett, WA 98204
(425) 249-4211 (direct)
www.snoedc.org
Dear Mr. Waggoner and Ms. Morgan:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment regarding changes proposed at the Snohomish County Airport/Paine Field listed above. The Economic Development Council of Snohomish County (the “EDC”) strongly supports the limited actions proposed that would enable commercial air service at Paine Field.

From our review, the EA properly identifies the scope of the proposed actions and their likely impacts on the environment. As you know from reviewing the FAA guidance regarding the preparation of EAs, the level of detail and analysis in an EA is permitted to be fairly brief and to the point. FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, Section 700. This EA appears to go above and beyond what is ordinarily required in an EA to provide significant and in depth analysis the various potential impacts of the proposed actions. Further, the EDC appreciates the County’s and FAA’s effort and ability to stay on point in its analysis and address the relevant issues under NEPA, rather than slipping into the emotional debate that some have attempted to use as a tactic to oppose the proposed actions. The EA addresses and thoroughly analyzes the relevant environmental impacts of the proposal and documents that the environmental impacts are all below the significance thresholds established by the FAA. FAA Order 5050.4B, National Environmental Policy Act (NEPA) implementing Instructions for Airport Actions, Table 7-1.

As the EDC, we are most concerned with the economic impacts of the proposed action. As the EA explains, the proposed actions will have numerous economic benefits for Snohomish County and the surrounding areas. Some project opponents have raised concern, however, that the proposed action will adversely impact Boeing’s operations at the Airport. In 2009, Boeing representatives expressly rejected these concerns and explained that Boeing’s continued operations at the Airport will not be affected by the provision of commercial service from the Airport. We have attached a copy of Boeing’s letter on this issue for the record.
Several Airport opponents have also asserted that the EA should have considered "the worst case scenario," (which they define as unlimited commercial air service at Paine Field). As you know, such review is expressly not required by NEPA. To the contrary, NEPA requires only that the environmental review documents consider the proposed action and any reasonably foreseeable actions. "Reasonably foreseeable actions" are defined as "an action on or off-airport that a proponent would likely complete and that has been developed with enough specificity to provide meaningful information to a decision maker and the interested public." See FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, Section 9(q). At this point, only the actions actually proposed by Horizon and Allegiant are reasonably foreseeable. Consequently, they define the scope of the County's and FAA's analysis at this point.

The EDC concurs with the County and FAA that additional analysis on a broader scope project is not necessary for the adequacy of the EA. Still, it seems that including some additional analysis regarding a somewhat broader scope could help to calm some of the unfounded fears expressed by project opponents.

To the extent the County or FAA are persuaded to supplement their analysis to include a broader scope, the outer boundary of that additional scope should be no more than the "realistic capacity" of the proposed terminal as described by Hirsh Associates in Exhibit K to the EA. As the EA team has explained during the public hearings regarding the EA, any action to expand commercial operations at Paine Field beyond the capacity of the proposed terminal would trigger additional environmental review. (Further, actions by other airlines to provide commercial service, or by Horizon or Allegiant to change their destinations or add aircraft types, would similarly trigger additional environmental review.) Taking that slightly expanded scope into consideration, the information in the EA demonstrates that operations at the realistic capacity of the terminal still would have no significant environmental impacts. The County and FAA may want to consider documenting this in the final EA.

Related to this, it is the EDC’s understanding that additional noise analysis was conducted as part of preparing the updated Airport Master Plan for Paine Field in 2002. That analysis considered a much larger number of potential operations at Paine Field, including larger amounts of commercial air service. The results of that analysis demonstrate that the noise impacts do not trip significance thresholds. The EDC would recommend that the County and FAA incorporate that prior analysis in the final EA.

Thank you again for your thorough review of the proposed actions and the opportunity to comment regarding the draft EA. The EDC looks forward to the speedy completion of the EA/FONSI process so that the reviewed actions can get underway.

Sincerely,

Deborah Knuston
President
Economic Development Council of Snohomish County
Dear Deborah Knutson, on behalf of Economic Development Council of Snohomish County:

Thank you for your comments to the FAA and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

**Response to Comment**

General Response 1-10: Scope of the EA analysis for future operations and passengers
General Response 2-2: Boeing reaction to the Proposed Project and effect of the Project on Boeing
General Response 2-3: Airport Master Plan
General Response 3-1: What is the purpose and need for the action or project?
General Response 3-6: There should be an alternative future activity scenario
General Response 7-6: What are the existing and future noise impacts?
Dave and Cayla,

Please accept the attached letter from the City of Edmonds as a formal response to the Draft NEPA Environmental Assessment (EA) for the Amendment of Operations Specifications for Air Carrier Operation, Amendment of a FAR Part 139 Certificate, and Modification and Modular Expansion of the Terminal at the Snohomish County Airport/ Paine Field.

Thank you,

Stephen

Stephen Clifton, AICP
Director
Community Services & Economic Development
121 - 5th Avenue North
Edmonds, WA 98020
425-771-0251
Clifton@ci.edmonds.wa.us
February 3, 2010

Dave Waggoner, Director
Snohomish County Airport
3220 100th Street SW, Suite A
Everett, WA 98204

Cayla Morgan
Environmental Protection Specialist,
Seattle Airports District Office, FAA
1601 Lind Avenue SW
Renton, WA 98057-3356

Re: COMMENTS on Commercial Air Services at Paine Field: NEPA Review - Inadequacy of NEPA Environmental Assessment for the Amendment of Operations Specifications for Air Carrier Operation

Dear Mr. Waggoner and Ms. Morgan:

The City of Edmonds (“City”), submits this letter as its formal response to the Draft NEPA Environmental Assessment (EA) for the Amendment of Operations Specifications for Air Carrier Operation, Amendment of a FAR Part 139 Certificate, and Modification and Modular Expansion of the Terminal at the Snohomish County Airport/Paine Field.

The NEPA document is significantly flawed and we bring to your attention the following key deficiencies.

1. The NEPA EA fails to acknowledge the full impact of the proposal
2. The NEPA EA does not address the cumulative impacts affected by the amendments
3. The NEPA EA fails to inform the public that further environmental review will take place according to state law

Regarding Item 1 above, the City of Edmonds formally requests that a full environmental impact statement - that addresses the real and full scope of potential impacts over time be developed. The NEPA EA fails to acknowledge the nearly unlimited growth potential at the airport, and does not fully analyze the
full impacts of this change. This violates the spirit of an environmental assessment.

The NEPA EA does not acknowledge that the amendments to operational specifications, and to the FAR Part 139 certificate, would essentially allow Snohomish County Airport to operate virtually an unlimited number of flights at the airport, in addition to fully completing the approved Master Plan. . . . which includes a much larger terminal improvements than presented in the modular expansion. The NEPA EA does not recognize that extended evening and nighttime hours ignore the long standing Mediated Role Determination Agreement that limits nighttime flights, and would be a significant impact to surrounding communities.

The NEPA EA is flawed as it also lacks any kind of thorough analysis related to the change from a Class IV operating certificate to a Class I operating certificate which is necessary in order to serve scheduled operations by large aircraft.

The FAA website summarizes this classification as follows:
   a. Airports serving all types of scheduled operations of air carrier aircraft designed for at least 31 passenger seats (large air carrier aircraft) and any other type of air carrier operations are Class I airports. This comes from FAA's webpage at:
      http://www.faa.gov/airports/airport_safety/part139_cert/?p1=classes

With a Class I certificate, Paine Field could operate without limitations. Additionally, the NEPA EA only contains an analysis related to impacts associated with requests by Horizon and Allegiant Airlines and only a limited amount of flights per day through year 2016. What is to limit other airlines from operating at Paine Field once a Class I permit is obtained? Another significant question is why impacts or activity levels (see page b.6) are being analyzed only through year 2016? Long-term impacts must be analyzed.

Once a Class I operating certificate is approved, then operations may only be limited by runway configuration and operational considerations (e.g. terminal size and operations capacity). Would any changes in these be subject to further environmental review? Critical to this analysis is determining what actual "action" the environmental documents are analyzing. If it's a specific set of operating parameters (e.g. number of flights, schedule, etc.) that's one thing; but if the NEPA EA does not adequately address impacts associated with a Class I certificate and the operations specifics are just "examples" or non-binding in nature, then it will not be possible to reconsider environmental impacts once the Class I certificate is approved and flight operations steadily escalate over time.
Regarding Item 2 above, the scope of the NEPA analysis is inadequate to address the cumulative impacts that would actually occur from expanding air service. The current scope is limited to assumed use by two airlines in a five- or six-year period; however, if a license for such commercial air services is granted, it would come with virtually NO limits on the number of airlines or flights that could occur and that could increase greatly over time.

The actual impacts from expanded air service would be much greater than is documented in the material. Cumulative effects must be documented. That requires looking at all potential impacts, not just those associated with one or two airlines at a time or for a few years- but for the full scope of potential use if commercial air services are allowed.

To effectively measure the environmental impacts of the proposed changes accommodated under the Airport Master Plan, the NEPA EA must consider the impacts of full-scale development at the airport. Because federal law and FAA regulations may appear to not allow a Category I airport to place limitations in the types of aircraft allowed to operate schedule passenger service, nor does it possibly appear that the airport can impose limitations on the hours of operations, this amendment would allow the potential for the most noise-producing aircraft to operate at nearly every hour of the day. The NEPA EA fails to address the cumulative impacts of these operations on noise, air quality, traffic, climate change and general quality of life in the surrounding communities. Additionally, the adopted Master Plan for the airport clearly identifies a future terminal location, significantly larger than the modular terminal proposed. Allowing the certificate amendments would pave the way for the construction of these improvements in the future. As such, the NEPA EA must address those potential cumulative impacts in the analysis of the proposed certificate changes.

Regional air service has already been planned and constructed for the central Puget Sound Region through the 3rd Runway project at SeaTac. Billions of dollars have been spent to provide services at SeaTac in order to meet long term meet regional needs, now and into the future, and to ensure that Paine Field would not need to do so. The NEPA document fails to acknowledge prior environmental studies that have performed related to commercial passenger air service in the Puget Sound Region.

In addition to the above deficiencies, the NEPA Environmental Assessment fails to notify the public that there may be additional review conducted under the state Environmental Protection Act (SEPA). This gives the public a deficient and incomplete view of the environmental review process and is likely to cause confusion about further review under SEPA. The final analysis should provide a clearer view of opportunities for public participation.

In summary, the NEPA Environmental Assessment lacks critical information on the full and cumulative impacts of the amendments and proposed expansion.
The net effect of this deficiency gives an incomplete picture of the environmental impacts of the proposed changes. Such a flawed review will lead to a lack of appropriate mitigation and to devastating consequences for the affected communities. As such, due to the inadequacy of the NEPA Environmental Assessment for the Amendment of Operations Specifications for Air Carrier Operations, the City of Edmonds request that the Federal Aviation Administration prepare a full Environmental Impact Statement to ensure that all of these objections and deficiencies are sufficiently addressed and that a fair assessment of the environmental impacts be conducted.

Thank you for your consideration.

Sincerely,

[Signature]

Stephen Clifton
Community Services and Economic Development Director

cc: Gary Haakenson, Mayor
    Edmonds City Council
    Rob Chave, Planning Manager
Response to Comment

Dear Stephen Clifton, on behalf of City of Edmonds:

Thank you for your comments to the FAA and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

General Response 1-1: Why can't the County limit or restrict operations?
General Response 1-10: Scope of the EA analysis for future operations and passengers
General Response 1-13: Additional study should be conducted
General Response 1-14: What is the role of the State Environmental Policy Act (SEPA) and why is it not mentioned in EA?
General Response 2-1: MRD document
General Response 3-4: EA Conflicts with proposed terminal in Airport Master Plan
General Response 3-5: Why was 2016 selected as the future year?
General Response 3-10: What is the capacity of the airport?
General Response 3-13: What is a Class I Airport? Explanation of Federal Aviation Regulations (FAR) Part 139
General Response 3-14: What actions will require additional environmental review?
General Response 4-3: What is the demand for this proposal and how does it fit with regional planning?
General Response 11-8: Cumulative impacts
Dear Mr. Reardon,

We attended two of the EA hearings on the proposed introduction of commercial air service to Paine Field. I came away feeling offended and violated. There has been much written in the local newspapers from concerned citizens. I am one of them. Here are a few key points that I think are worth remembering:

- The research was conducted by Dunkleberg Associates who are an airport planning consultancy. They are in the business of proving why and how and when airports should be built and/or expanded. They are hired by airports. They are not, in any way, an independent research organization. If they were they would have spent a LOT of time and resources talking to residents and businesses to get their views.

- This desire for air service did NOT come as a result of a groundswell of need from citizens and businesses. There was no huge outcry demanding commercial air service at Paine Field. However there was an outcry voiced by Horizon and Allegiant Air, the FAA and the airport itself. Those three entities all stand to derive revenues from this initiative. The only groundswell occurring is from citizens saying NO.
- The cost to property values will be huge. Those in turn affect taxes. And those affect services. Is the trade off of a few dollars for a few interested parties worth the much larger loss in home values and thus taxes and services to this area?

- What problem is this solving? We have lived here since 1993. We moved here from Seattle to get a simpler quality of life. One with less noise, less traffic and less pollution. We're already seeing huge traffic issues and see no upside to the noise generated by a bunch of jets taking off and landing.

- And speaking of quality of life...commercial airports attract bad businesses. Drive around Sea-Tac and just soak in that quality of life. We don't want that here.

This appears to be an example of big business, the FAA and the airport colluding to help themselves while ignoring the voice of the people. Please help stop the madness.

Jan and Barbara Edmondson

3619 Shelby Road
Lynnwood, WA 98087
Response to Comment

Dear Jan & Barbara Edmondson:

Thank you for your comments to Snohomish County; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

General Response 1-6: What are the FAA and County roles in this EA and has a decision been made to move forward?

General Response 1-8: Adequacy of FAA guidance and use of FAA guidance

General Response 1-9: Roles of consultant and their qualifications

General Response 3-1: What is the purpose and need for the action or project?

General Response 4-3: What is the demand for this proposal and how does it fit with regional planning?

General Response 5-1: Existing aircraft noise concerns

General Response 5-4: Existing Traffic

General Response 6-4: What are the quality of life impacts?

General Response 9-1: What is the impact upon property values?
Jan and Barbara Edmondson  
3619 Shelby Road  
Lynnwood, WA 98087  
(425) 742-8919

My husband and I sent this letter to the Herald; it represents how we feel.

We attended Thursday night's FAA public hearing at Kamiak. The Draft Environmental Assessment (EA) purports to show "No Significant Impact" on noise, air quality or traffic. In other words, the EA says that our quality of life will not be impacted in any way by opening Paine Field to commercial passenger flights. What?

It felt like a bad movie in which the corporate machine puts on a sham meeting to satisfy legal requirements while pulling a fast one on the local dolts known as citizens. In reality, the FAA's arrogance and dishonesty angered us.

The EA was prepared by Barnard Dunkelberg & Co., an airport-planning consultant. They are in the business of proving that airports should grow and expand, and their clients are typically airports and related government entities. Are they ever hired by residents who want an objective perspective on the impact of an airport and its growth plans? No.

The EA didn't even mention what happens to property values among homes surrounding airports that go through this type of added commercial service. So here's a bombshell: they drop! Property values represent most people's retirement nest eggs. They're also a major source of tax revenues, which in turn fund improved services. That all affects quality of life drastically.

The EA also found that the addition of thousands of passengers coming and going to the airport would have "No Significant Impact" on traffic. That's so far beyond absurd it makes us dizzy.

The Environmental Assessment and the FAA's methods of railroading this through an overwhelmingly opposed citizenry are shameful. We can only hope that enough people rise up and let their elected officials know how they feel.
Dear Jan & Barbara Edmondson:

Thank you for your comments to the FAA, Snohomish County, and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

**General Response 1-6:** What are the FAA and County roles in this EA and has a decision been made to move forward?

**General Response 1-9:** Roles of consultant and their qualifications

**General Response 6-4:** What are the quality of life impacts?

**General Response 8-1:** Traffic analysis

**General Response 9-1:** What is the impact upon property values?
Dear Dave and Cayla,

Attached is the letter I sent to the local newspapers today. I think it speaks for itself. I worry about consultants hired by those who want these new services being totally objective. They are not in the objective research business they are in the airport viability business.

In my view we have plenty of commercial air service between Bellingham and Sea-Tac. Moreover you never address real economic issues beyond vague “more job creation” comments. My economic reality is that my house value will decline as will others close to Paine Field. That in turn affects the tax base so I question the economic benefit when those are weighed against each other. Of course, true unbiased research would tell us that.

The notion of no impact across the board is absurd for anybody who sits in traffic in Snohomish County.

You seem to be serving the economic benefit of airlines rather than the economic and human benefit of citizens. A few folks make some money while many have an erosion of their quality of life. Your POV and related research is biased and self-serving.

I hope you will take another look.

Regards,

Jan Edmondson
3619 Shelby Road
Lynnwood, Wa 98087
Monday night I attended the public hearing at Meadowdale High School in which the Environmental Assessment research findings were presented regarding the addition of a new terminal, two airlines and 30+ new commercial weekly flights at Paine Field by 2011. The plan is for a lot more flights by 2016.

The boring and bored representative of the research company said that their findings proved No Significant Impact on noise, air quality or traffic as a result of the aforementioned increases.

What?

As my wife said, it felt like we were in a bad movie in which the big bad corporate machine was putting on a faux meeting to satisfy legal requirements and put one over on the dolts known as citizens. The only thing they did was anger a lot of people. Think about this:

- No meetings are scheduled for Mukilteo, which is the community most impacted by this change.
- The meeting notice came out during the holiday and the public hearings are on an express schedule.
- Citizens were each allowed three minutes to speak. The study took months and over $400,000.
- Upon completion of presenting a bunch of jargon-laden eye charts, the speaker sat down and spent the citizen-testimony portion of the meeting texting. His work was done, along with his interest.
- The research was done by an airport planning company -- not an independent organization.
- There was no information provided on what happens to property values among homes surrounding airports that have been through this type of added commercial service.
- Apparently the research found the addition of thousands of passengers coming and going to the airport would have "No Significant Impact." We already have a traffic problem; it is absurd to think this amount of increase would not have any impact.
- I live within a mile-and-a-half of Paine Field. When the Boeing jets take off and land, we cannot carry on a conversation in our home. Yet the research says these jets will have no significant impact on noise levels.
- We have an airport called Sea-Tac and a growing one in Bellingham. Either of those serves my needs just fine. Do we really need to trade quality of life for a short drive to an airport I would use a couple of times a year?
- The shills from the various economic development councils who spoke said this will attract lots of business and jobs. In my travels around the country I have yet to see airport-related businesses that are attractive and improve the quality of life. Wrong. Airports attract transients and crime. Do you know anybody who likes to hang out near an airport?

The meeting was a sham. I only hope that enough citizens rise up and let others know.

Jan Edmondson

3619 Shelby Road
Lynnwood, WA 98087
(425) 742-8919
Dear Jan Edmondson:

Thank you for your comments to the FAA and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

General Response 1-9: Roles of consultant and their qualifications
General Response 1-13: Additional study should be conducted
General Response 6-1: Significance of Project Effects
General Response 9-3: Socioeconomic Impacts
---- Original Message ----

From: Cayla.Morgan@faa.gov [mailto:Cayla.Morgan@faa.gov]
Sent: Monday, January 25, 2010 6:38 PM
To: Waggoner, Dave; Dolan, Bill; Ryk Dunkelberg; Ryan Hayes
Subject: Fw: Paine Field EA

Cayla Morgan
Environmental Protection Specialist
Seattle Airports District Office
Federal Aviation Administration
425-227-2653

---- Forwarded by Cayla Morgan/ANM/FAA on 01/25/2010 05:37 PM ----

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Dear Ms. Morgan:

As a long time resident of South Snohomish county (Lynnwood address, Mukilteo school district) living about a mile and a half south of Paine Field I admit to having a biased opinion. That said, I do feel I have logic on my side.

First questions:

What problem is this solving?

And For Whom?

- For residents around and near Paine Field.
- For Airlines.
- For citizens of Puget Sound
- For the airport
- For the FAA
- For the economy?

And how exactly is this improving quality of life?

I attended two of the public hearings and by now I'm sure you've heard most of the comments both pro and con. In my mind the most compelling discussion was that surrounding the notion of future airlines coming to Paine Field. As I read the research it appears once the certificate is changed nothing can be done to prevent more airlines from coming. And we certainly know that airports make money from more airlines using the facility.

I also wonder from the FAA's perspective why the recently expanded/upgraded Sea-Tac is not sufficient for our area needs. Moreover the Bellingham airport is also growing and being upgraded. Why do we need yet another commercial airport between those two?

When we bought our house in 1993 we specifically asked about air traffic in and out of Paine Field. We were told that it was specifically and only for general aviation and Boeing. No commercial traffic was planned. Were we lied to?

There is a thriving city surrounding Paine Field. It has schools, parks, health facilities all within a few miles. All of that was built on the same premise that no commercial expansion was coming. And we too are already suffering from growth-caused traffic issues. To think the number of people forecasted to use these new services would not impact already bad traffic is absurd.

To me this is an issue where the FAA, Paine Field and the airlines have colluded for THEIR interests, not those of the surrounding community or for that matter, the flying public.

At the very least I would like to see more research done to prove the impact of future REAL growth of airline traffic. And I would like it to be done by an independent research company, not an airport planning consultant.
Response to Comment

Dear Jan Edmondson:

Thank you for your comments to the FAA; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

General Response 1-10: Scope of the EA analysis for future operations and passengers
General Response 1-13: Additional study should be conducted
General Response 1-13: Additional study should be conducted
General Response 2-1: MRD document
General Response 3-1: What is the purpose and need for the action or project?
General Response 3-5: Why was 2016 selected as the future year?
General Response 3-14: What actions will require additional environmental review?
General Response 4-3: What is the demand for this proposal and how does it fit with regional planning?
General Response 5-4: Existing Traffic
I support commercial air service proposed at Paine Field.

Larry Edwards
4717 Gardner Ave.
Everett, WA. 98203
Dear Larry Edwards:
Thank you for your comments to Paine Field Airport; they have been noted.
I am adamently in support of increased air service at Paine Field by Horizon Air and Allegiant Airlines. This airport was built for the military during WW II and later turned over to Snohomish County for use as a civilian airport. It was never to be closed or restricted for air travel esp since federal monies have been used there for improvements. Those who moved to the immediate area around the airport should realize there always will be noise levels associated with aircraft flights. They should not be allowed to restrict the full population's use of this fine airport. Sea-Tac Intl is so congested and now 2 airlines wish to utilize the advantages of Paine Field for the convenience of those who would still wish to use commercial aircarft for their trips. Do not let these narrow minded persons to deny the full population the distinct advantages of air travel from and to Snohomish County.

I live in Edmonds and have done so since 1973 and I have always been proued of the fact Snohomish County has such a fine facility. I also appreciate the advantages that Paine Field has for the greater public.

I welcome the possible jobs that will come to this county especially at a time when jobs are so dear with so many people jobless. We need to do what we can to generate jobs and the income that comes with them. It will benefit Snohomish County and ensure that the aircraft industry will increase in manufacturing and associated other jobs. Do not turn down the requests of these airlines to utilize Paine Field. We deserve to ensure Paine Field not only continues as an airport but also to further its advantages to the travelling public. Paine Field as an asset and needs to be treated as such. We need jobs locally here and with Boeing building our future in Snohomish County we can assure ourselves that the aircraft industry will increase potential revenues and jobs for our increasing population. Horizon & Allegiant Airlines can only help in our economy's recovery. What little flight noise is generated should be seen as a small part that we of Snohomish County need to do for our communities and ensure our futures here.

Please welcome the future of Snohomish County and say Hello to what we can surely call our new neighbors - Horizon and Allegiant Airlines.

Vern Elder
Edmonds WA
Response to Comment

Dear Vern Elder:

Thank you for your comments to Paine Field Airport; they have been noted.
-----Original Message-----
From: Chris Elli [mailto:chrise1li123@yahoo.com]
Sent: Thursday, January 07, 2010 8:21 PM
To: County Executive
Subject: Airport

I just wanted to say I support putting in an airport at Paine field. It will bring money to the state and more jobs

Thanks

Chris Elli

Sent from my iPod touch
Dear Chris Elli:

Thank you for your comments to Snohomish County; they have been noted.
-----Original Message-----
From: Cayla.Morgan@faa.gov [mailto:Cayla.Morgan@faa.gov]
Sent: Wednesday, January 13, 2010 4:02 PM
To: Waggoner, Dave; Dolan, Bill; Ryk Dunkelberg; Ryan Hayes
Cc: Patricia.Deem@faa.gov; Caroline.CTR.Poyurs@faa.gov;
Roland.J.McKee@faa.gov
Subject: Fw: Air Service

Cayla Morgan
Environmental Protection Specialist
Seattle Airports District Office
Federal Aviation Administration
425-227-2653

----- Forwarded by Cayla Morgan/ANM/FAA on 01/13/2010 03:01 PM -----
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E.38
Hello Ms. Morgan

My name is Chris Elli and I am contacting you regarding commercial air service at Paine Field in Snohomish County.

I wanted to let you know that I am in full support of having commercial airports at Paine Field.

I know that with these airports, they will bring more jobs and revenue to the county and the state which we need.

These jobs will provide the many opportunities people need to get them working again so that they may provide for their families.

I believe that the people who are complaining about bringing air service to the county are not taking into consideration the revenue and the jobs that will come.

I know what it is like living next to a major airport because we have lived directly under the flight path for Sea Tac airport and after awhile, you get used to it.

Please bring commercial air service to Paine Field. We so desperately need it.

Thank you

Chris Elli

Sent from my iPod touch
Dear Chris Elli:

Thank you for your comments to the FAA and Paine Field Airport; they have been noted.
February 5, 2010

Ms. Cayla Morgan  
Environmental Protection Specialist  
Seattle Airports District Office, Federal Aviation Administration  
1601 Lind Avenue S.W.  
Renton, WA 98057-3356

Mr. Dave Waggoner, Director  
Snohomish County Airport  
3220 100th Street S.W., Suite A  
Everett, WA 98204

Re: Draft Environmental Assessment

Dear Ms. Morgan and Mr. Waggoner:

The Endeavour Elementary School Parent Teacher Association (PTA) members have followed the Paine Field issue both as citizens and as parents concerned with providing our children a safe, healthy and productive learning environment. We feel compelled to comment on the Draft Environmental Assessment (EA) related to federal actions being considered at Paine Field.

The EA fails on several levels including a failure to comply with Executive Order 13045—Protection of Children from Environmental Health and Safety Risks (E.O.) as it does not fully assess all impacts to children as required. The EA’s finding that schools are not impacted because they are not in the “project area” is far from the rigorous analysis required and expected by the public in matters related to the health and safety of our children. It is well known that there are no schools actually “in the project area” where the proposed terminal would be constructed. The impacts to children we are most concerned with are not those associated with project construction but with the start up and growth of scheduled commercial air service resulting from terminal construction and a change in Paine Field’s Airport Operating Certificate from a general aviation airport to a commercial airport.

Outside the terminal area and under the Paine Field flight paths are schools located with the cities of Everett, Mukilteo, Lynnwood, Edmonds, Woodway, Brier and Mountlake Terrace. If only public schools are accounted for that is well over 53,000² schoolchildren who would be affected by

1 Source: Schoolmatters.com; Everett School District; Mukilteo.wednet.edu
proposed scheduled passenger flights at Paine Field. This number grows significantly if all schools including preschools, private and parochial schools are included as well as daycare facilities, tutoring centers and recreational facilities like Boys and Girls Clubs and YMCA's.

We understand that FAA rules do not allow restrictions on scheduled commercial service once it starts up. We therefore do not understand how the FAA could possibly accept an EA that does not fully account for all the impacts that unconstrained commercial air service will have on children both in and out of school. Further, we do not understand why the public including the schools were not included in the preparation and project scope of the EA which would have provided a more proactive way to ensure all impact concerns were fully considered.

The proposed Federal Action resulting in a change to the Operating Certificate for Snohomish County Airport/Paine Field from a Class IV to a Class 1 airport would open the door to unconstrained commercial air service subjecting these schools and learning sites to an increase in noise, pollution, health and other environmental impacts that must be identified and assessed with the EA.

We therefore request you respond to the following recommendations:

- Reject the Draft EA and instead conduct a more thorough Environmental Impact statement (EIS) based on the foreseeable significant impacts associated with changing the airport’s Operating Certificate.
- Ensure potential impacts of unconstrained commercial air service growth are fully considered in full compliance with NEPA and E.O. 13045.
- Maximize involvement of the public including PTA’s and other non-governmental organizations during scoping and preparation of the EIS to best ensure that all concerns are included.
- Ensure the latest learning environment and children’s health studies are incorporated in the EIS effort.
- Include a complete listing of all schools, both public and private, that may be impacted by unconstrained scheduled commercial air service.
- Include all potential mitigation costs to school districts both short and long term.

We look forward to your response and appreciate the opportunity to participate.

Endeavour Elementary PTA Board of Directors
Dear Endeavour Elementary School PTA Board of Directors:

Thank you for your comments to the FAA and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

**General Response 1-1:** Why can't the County limit or restrict operations?

**General Response 1-5:** Mitigation

**General Response 1-10:** Scope of the EA analysis for future operations and passengers

**General Response 1-13:** Additional study should be conducted

**General Response 3-5:** Why was 2016 selected as the future year?

**General Response 3-13:** What is a Class I Airport? Explanation of Federal Aviation Regulations (FAR) Part 139

**General Response 3-14:** What actions will require additional environmental review?

**General Response 7-7:** Noise impacts on schools

**General Response 7-8:** Where are the schools located on the noise map?

**General Response 9-4:** E.O. 13045 Children's Health and Safety impact analysis
Dear Cayla, Morgan

Environmental Protection
Specialist FAA,

Re: Expansion of Paine Field

When I first saw the newspaper headlines, "No Adverse Impact" from the EA paid by the FAA, I was amazed.

When an airplane flies over our home in the Lake Serene area, the windows rattle, and the serenity of our area loses its meaning.

We love living in the Lake Serene, but the area is so disappointed in our business leaders who put "profit" over people's quality of life, their environment.
No adverse affects or "impact" - what a joke or what a lie.

Let's ask the people that live around Sea Tac airport - where prostitution, crime and pornography are prevalent!

"No adverse Impact" - it feels like this distortion of the truth is an insult to our intelligence. Ask the people around Sea Tac airport about the noise they endure.

We love our community - having lived here over 20 years raising our children here. We were promised before all these beautiful homes were built that our airport would remain local - now our housing values will be lower and our environment noisier - how depressing it our area will be ruined.
"No adverse impact" — for once let's consider the quality of our environment before greedy money and profit! Our children and our children's children will benefit from this decision.

Let's "Save our Community".
Please listen to the people in this beautiful community for a change who really care instead of business people who put profit first. We trusted our leaders years ago when they told us they would never expand to commercial air service.

There are always choices — please choose to preserve our beautiful, serene community we all love.

Sincerely, Mrs. Barbaree Cranley
Dear Barbara Eneberg:

Thank you for your comments to the FAA; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

- **General Response 2-1:** MRD document
- **General Response 5-1:** Existing aircraft noise concerns
- **General Response 5-6:** Sources of existing air pollution
- **General Response 6-1:** Significance of Project Effects
- **General Response 6-4:** What are the quality of life impacts?
- **General Response 9-1:** What is the impact upon property values?
100 one hundred

ONCE AGAIN, POORLY PLANNED...
AND MANIPULATED TO RESTRICT...
PUBLIC INPUT

REMEMBER, THERE IS/WAS AN...
UNDER LOCAL AGREEMENT IN PLACE...
THAT ADDRESSES THIS ISSUE ALREADY

JOHN ENGLISH
(BANG HARBOR HS. MUSI) 10/7/75
Dear John Engdahl:

Thank you for your comments to Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

**General Response 1-12:** Adequacy of public involvement and release of the Draft EA and Public Hearings

**General Response 2-1:** MRD document
Accept this as my comment for the record:

The expansion to commercial flights affects all our citizens. It is not only noise but impacting our ability to relieve our home values. No one is pleased with it.

This is a true review.
Dear Shirley Engdahl:

Thank you for your comments to Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

**General Response 6-1:** Significance of Project Effects
**General Response 6-4:** What are the quality of life impacts?
Comments re the Paine Field Draft Environmental Assessment

I don't think the proposed commercial flights at Paine Field are a good idea. I've scanned the Draft Environmental Assessment. It appears to say no adverse environmental impacts will occur. I doubt this will be true because the study doesn't consider probable future growth.

I've heard & read that adding commercial flights to Paine Field will give travelers a convenient alternative to Sea-Tac. If that's the true goal, more flights & destinations than the current proposal will be necessary. It's logical to assume pressure will increase for more and more flights.

I don't think Paine Field should be a mini Sea-Tac. Developing light rail from Snohomish County to Sea-Tac is a better environmental choice. I've lived in Portland Oregon and Munich Germany. Both offer mass transit to their airports. This type of non-bus transit isn't affected by freeway delays; travelers can be confident they'll be on time.

Munich sited their new airport farther away from their City Center, not in the middle of established population. Perhaps the airport at Arlington would be more appropriate unless development there would create the same problems for them that we're trying to avoid.

We live in Lynnwood. Currently aircraft noise is generally tolerable although at times it's loud enough to be disconcerting. More flights from Paine Field will create more noise. Our livability will be negatively impacted. This has personal and financial costs. Neighborhoods impacted by the airport would likely be less desirable resulting in lower home values and property tax revenues.

My letter could be construed as NIMBY. I think not because I don't think the true impact has been considered. If the goal is to create an alternative to Sea-Tac for Snohomish County travelers, the study should evaluate that level of commercial traffic.
Dear Kathleen Engele:

Thank you for your comments to the FAA and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

**General Response 3-1:** What is the purpose and need for the action or project?

**General Response 3-5:** Why was 2016 selected as the future year?

**General Response 4-2:** What is the relationship of the Proposed Project to WSDOT's Long-Term Air Transportation Study (LATS)

**General Response 4-3:** What is the demand for this proposal and how does it fit with regional planning?

**General Response 4-4:** Relationship between capacity at other airports and Paine Field

**General Response 4-5:** Other modes of transportation may be better alternatives

**General Response 5-1:** Existing aircraft noise concerns

**General Response 6-1:** Significance of Project Effects

**General Response 6-4:** What are the quality of life impacts?

**General Response 9-1:** What is the impact upon property values?
Cayla Morgan  
Environmental Protection Specialist  
Seattle Airports District Office  
Federal Aviation Administration  
425-227-2653  

----- Forwarded by Cayla Morgan/ANM/FAA on 01/20/2010 04:36 PM -----  
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| From:  
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| Bill Erdle <mr_beel2020@yahoo.com>  
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| Paine Field  
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E.54
I'm writing in support of commercial airline service to Paine Field in Everett. I grew up in Everett, but now I live in Portland. I would love to be able to fly there and avoid the mess on I-5. Also, my feeling is the region needs to have an alternative to Sea-Tac, and an airport north of Seattle makes a whole lot of sense.

Regards,

Bill Erdle
Oregon City, OR
Response to Comment

Dear Bill Erdle:
Thank you for your comments to the FAA; they have been noted.
Dear Reviewers;

Our family moved to Mukilteo from out of state in 1991. At the time, our real estate agent mentioned that there was an agreement that no commercial aviation would be allowed at Paine Field in the future. Of course we did no independent research to verify this, but it seemed to be a common understanding by local residents and politicians, so we had no reason to believe that this was not a fact.

I would like to mention the following:
1. Mukilteo is one of the top school districts in the state.
2. Mukilteo city has been ranked as number 10 in the country by Forbes magazine.

There is no doubt that regularly scheduled flights will have a negative impact on the local community. Horizon will fly the quiet Dash 8 turbo-props, however Alligant and other carriers will be flying the old noisy DC-9s. Please see article from P-I dated Jan 4, 2010 below:

"Allegiant Air (Las Vegas) on December 30, 2009 signed a contract to acquire 13 McDonnell Douglas DC-9-82/83 (MD-82/83) aircraft from the SAS group with delivery this year and next. The deal also includes five DC-9-87s (MD-87s) which will be dismantled for the spare parts. Allegiant will pay cash and expects to have 60 aircraft in operation by the end of 2011". 

These old generation jets are extremely noisy, they are not Stage 3 aircraft. Not only will local residents be disturbed, but so will thousands of local school children taking their classes nearby. My family and I request that you please consider the well being of thousands of local residents rather than the business interests that will benefit only a very few local residents. Please do not allow regularly scheduled airline operation at Paine Field. Please put the wishes of local residents before the business interests of a very few.

PS; I am not opposed to the aviation industry currently operating at Paine Field. I am a Boeing employee and understand the need for this airport. However, I would ask that you do not support introduction of commercial airline service at Paine Field. I think that if once the go-ahead were given, even for only limited service, there will be no stopping it if in the future additional flights are requested.

Thanks.

Steffen Erler
425-750-9003
Dear Steffen Erler:

Thank you for your comments to the FAA and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

- General Response 1-1: Why can't the County limit or restrict operations?
- General Response 2-1: MRD document
- General Response 7-5: Proposed commercial fleet mix
- General Response 7-7: Noise impacts on schools
Cayla Morgan
Environmental Protection Specialist
Seattle Airports District Office
Federal Aviation Administration
425-227-2653

-----Forwarded by Cayla Morgan/ANM/FAA on 02/05/2010 12:37 PM-----

From: Pete Everett <peverett@pacific-9engineering.com>
To: Cayla Morgan/ANM/FAA@FAA
Date: 02/05/2010 10:42 AM
Subject: Comments on FAA Draft Environmental Assessment of Paine Field
This comment was prepared in response to the Draft Environmental Assessment prepared by Paine Field Airport as prerequisite to becoming an FAA designated Class I airport.

After reading the Draft Environmental Assessment it is very clear that it shows preferential prejudice towards airlines and commercial air service.

The Draft Environmental Assessment clearly discriminates against property owners and citizens living near the airport. The lie of "limited commercial air service" at Paine has been exposed.

The Draft Environmental Assessment does not mention the word “pollution” once. It skews every figure possible to paint a rosy picture of the wholesale destruction of community and property of Paine Field's neighbors' (victims!).

The Draft Environmental Assessment contains dozens of prejudice and discriminatory statements. The Draft Environmental Assessment:

* Does not use the word "pollution" once.

* Uses "guesstimates" as baseline air, noise and light pollution measurements.

* Intentionally low balls the number of flights.

* Fails to mention compatible land use.

* Disregards the culture of local communities.

* Disregard the destruction of property done by commercial airports.

* Fails to mention the health impacts of the pollution at Paine.

The Draft Environmental Assessment fails to mention the Mediated Role Determination (MRD). Written in 1979, an era when the Growth Management Act did not exist, the MRD has stood as the de-facto land use document near Paine Field. It assured tens of thousands of property owners that their property would not suffer the same fate as do property values near commercial airports.
In the 1970s, '80s, and '90s other local airports such as Sea-Tac and Bellingham used funds to minimize property damage to their neighbors. Paine Field assured its neighbors (behind the veil of the MRD) that their property would be safe and encouraged growth right up to the property lines of Paine Field.

In the decade starting in the year 2000 wealthy local businessmen began to make large political contributions in order to get the county to disregard local planning documents and the property rights of those affected by the MRD. The airport began to plan for commercial air service while the government that supposedly manages the airport assured the public that they would comply with land use as described in the MRD.

Once again this shows the outright discrimination against local property owners while showing preferential prejudice towards airlines and their proponents.

Paine Field is attempting to become a Class I Airport. Sea-Tac, LAX, and JFK are examples of Class I airports. All large passenger airports in the United States are Class I airports.

Drawings show TWO passenger terminals: The "Proposed Modular Terminal Addition" and a much larger "Future Passenger Terminal". The environmental effects of the "Future Passenger Terminal" and it’s "Access and Parking" have been intentionally omitted from this report.

A two gate 225 passenger terminal is capable of handling FAR MORE than one MD-80 and four Dash-80's a day. Not to mention the "future Passenger Terminal" being planned.

The airport wants tax payers to pay to build the airline terminals and to help subsidize Horizon and Allegiant operations. This comes at a time when record government deficits are occurring. Spending money on commercial air service at Paine Field will only serve to show that government spending is totally out of control.

The "No Action Alternative" is the alternative that should be chosen. The "Proposed Alternative" seeks taxpayer funding to destroy the cities near the airport and destroy hundreds of millions of dollars in property, whereas the "No Action Alternative" will not affect ANYTHING!

The report claims "no expansion of service or facilities beyond those proposed is reasonably foreseeable" yet is shows a "Future Passenger Terminal"! This report shows service increasing despite this statement contradicting so.

Horizon claims 6-10 flights a day of 76 seat aircraft and Allegiant claims 2 to 10 flights per week of 150 seat aircraft. Obviously a 225 seat
terminal is capable of carrying far more passengers than the supposed "estimates". In addition the "Future Passenger Terminal" the airport is planning is not mentioned. ix

The report says the number of enplanements will increase 120% from 112,000 in 2010 to over 238,200 by 2016. Yet this report states no future expansion is planned! 9

The reports states "as a result of these considerations, the use of another airport for the proposed scheduled commercial passenger air service is not a reasonable alternative to the proposed action". How on earth can the reports state that when they also state "there has been no indication from these airlines that should the proposed project not be implemented that they would initiate service to any other area airport beyond those used today"? A change of the status quo FUNDED BY TAXPAYERS is obviously not needed.

The noise analysis is based on Dash-80s and MD-80sx yet the planned two terminals are capable of handling a variety of aircraft far larger. In fact the Noise Analysis says A330's will be using the new terminals. Again the report states "neither the FAA nor the Airport sponsor has the authority to instruct either carrier to provide service using a different aircraft". The use of any type of aircraft is not just plausible, it is guaranteed. Yet this report omits ALL types of aircraft except those they pick and choose to study. xi

The report states the larger "Future Terminal" is "premature" and not "warranted and not the best use of public funds at this time". Yet the report obviously PLANS expansion because they show the drawings and state Future Passenger Terminal" will "continue to be shown on the ALP as a future reservation of space. The statement that it is "premature" to study this planned expansion yet reserve space for the expansion is nothing more than an attempt to minimize the environmental damage they feel they should report at this time. If the best use of public funds is an issue why are taxpayers being asked to pay to build airport facilities to transport gamblers to the casinos and prostitutes of Las Vegas? xii

The report states "the airlines anticipate that some of the enplanements will be "new demand". The airlines are obviously planning for expansion, as is the airport, yet the report omits the effects of this expansion and new demand in an effort to hide the truth. xiii

The report states a potential gain of 27 jobs, although most of those jobs would be jobs that already exist. Millions of taxpayers' dollars to subsidize 27 jobs. xiv

Table 2 shows 0 flights by A330s in 2008. Then it shows 420 flights by A330s in 2010, and 538 flights by 2016. Yet the A330 flights, which are obviously planned, are omitted from this report and not included in "Current Project Totals" used to calculate noise. Instead the use of A330's
is included in BASELINE calculations despite the fact that they do not fly out of Paine! This is done to falsely show that noise from A330’s will occur WITHOUT passenger operations, thus minimizing the actual impact of noise pollution from commercial air service!

DNL calculations are based on values of NO MD-80, Dash-8, and A330 operations at night! If one of the new “project” planes takes off during the hours between 7AM and 10PM it will dramatically change DNL calculations. THERE IS NO WAY TO RESTRICT FLIGHT TIMES. Night flights are being INTENTIONALLY omitted. xvii

Oddly the number of flights given in the Draft Environmental Assessment was immediately adjusted downward to reduce the number of flights because of Boeing decision to relocate a 787 line to South Carolina. xviii Yet the Draft Environmental Assessment FAILS to mention the INCREASE in flights resulting from the large Air Force Tanker contract Boeing is expected to win.

Table 5 shows between 40% and 60% of flights leaving Paine on the only runways capable of carrying commercial aircraft occur at night. Yet the report states there will be NO nighttime flights.

Which aircraft have been substituted in the INM model? xix What aircraft are they being substituted for? What are the effects of the substitution? I think we know the answer to that. Obviously they would follow the clear pattern of deception in this report and be substituted to lower environmental damage being reported.

Flight tracks are not shown although they are supposedly used. xx The reason this is done is because Paine vectors aircraft AWAY from monitoring stations instead instructing them to fly OVER NEIGHBORHOODS (particularly over the Olympus Terrace neighborhood). Since there are not noise monitoring stations in any neighborhoods (unlike other Class I airports) this allows Paine to skew baseline figures and falsely report minimal noise damage.

In addition Paine Field has no noise pollution monitoring equipment on its grounds. Instead it has moved them approx. 2 miles away from the north and south ends of the main runway to artificially reduce noise measurements.

The tables also show flights of MD-83’s increasing from 0 in 2008, to 208 in 2010, to 1040 in 2016. Yet the “alternatives” section says Allegiant Air will have “departures ranging from 2 to 10 per week over 365 days”. 1040 flights per year equal 20 flights per week. This is another example of this report to hide the truth by minimizing the environmental damage done by the world’s most environmentally destructive aircraft, the MD-80.

Air Quality calculations (Table 5 shows commercial air service will contribute 1200 tons of toxins to the air in 2010, and 1300 tons of toxic
emissions in 2016) are all based on 4-6 flights per day. Since there is no way to limit the amount of commercial traffic the air quality figures are truly low ball guesses.

Compatible Land uses incorrectly calculated noise figures (see Noise Analysis). The actual effects of the noise pollution resulting from Paine field are much higher.

The Light emissions and Visual Environment does not mention that the only visual barriers to the blight of the proposed terminals are trees to the west that have been removed. In addition it discusses a "slight change" in the light environment. Moonlight is the natural light in most neighborhoods any light increase at the airport would be destructive. The report does not base any of its "light affects" on science. xxii

The incorrectly calculated noise pollution (see Noise Analysis section) states it will only affect 4.0 acres in 2011 and 17 acres by 2016. Even this overly optimistic noise analysis concludes that noise pollution resulting from commercial air service will QUADRUPLE every 6 years xxiii. As we extrapolate this out:

- 68 acres (.106 square miles) rendered uninhabitable by 2021.
- 272 acres (.425 square miles) rendered uninhabitable by 2026.
- 1088 acres (1.7 square miles) rendered uninhabitable by 2031.
- 4353 acres (6.8 square miles) rendered uninhabitable by 2036.

Even by using the unrealistically optimistic noise figure the town of Mukilteo (6.3 square miles) will be rendered uninhabitable by 2036. These numbers are totally inline with the environmental damage done by other Class I airports. Thousands of property owners are about to suffer HUNDREDS OF MILLIONS OF DOLLARS IN DAMAGES AS A RESULT OF UNNEEDED COMMERCIAL AIR SERVICE.

The report also fails to mention how much solid waste will be produced by the 238,000 passengers expected at the two new terminals at Paine Field. xxiv In addition it does not discuss where this solid waste will go or how the addition of this solid waste will affect existing waste treatment facilities. The airport is placing the passing the ball making local ratepayers responsible for the sewage treatment facility upgrade. This will cost local rate payers MILLION of dollars.

The report also fails to address the pollution that will seep in to the aquifer directly below Paine Field. This aquifer provides water for thousands of local residents. Given the amount of the increase in vehicular
aircraft pollution a thorough study of the effects of this pollution on drinking water is warranted.

The Hirsch report intentionally omits the "Future Passenger Terminal". It uses 4-6 flight a day figure as the maximum capacity for the modular terminal xxv.

The turnaround time for aircraft at the terminal is not mentioned (why not?). Nor are the number of flights out of each terminal building at other Class I airports such as LAX and Sea-Tac.

Clearly two large commercial aircraft can be serviced at each of the two terminals xxvi.

There is absolutely no evidence the Alaska Air Group will NOT USE Paine as its regional hub. To the contrary, two terminals would only be needed if the plan WAS to use Paine as a hub. This is in contradiction to Hirsch’s assertion that Paine will not be a hub for Horizon AND Allegiant. Xxvii

After performing an in depth analysis the following are exposed as fact in the Draft Environmental Assessment:

- Paine is planning for two new terminals. At no point do they ever quantify the number of flights or passengers that will utilize these two terminals.

- By not specifying realistic use of TWO airline terminals Paine is intentionally not specifying how many airliners will be in operation in 1, 5 or 10 years.

- Statements to minimize the number of flights using Paine such as reduced operations at Paine resulting from losing the Boeing 787 line while failing to mention future aerospace manufacturing opportunities such as the Air Force tanker contract.

- Paine thinks using taxpayer money to provide air terminals for gamblers flying to the casinos and prostitutes of Las Vegas are a proper user of taxpayer funds.

- Baseline Noise Analysis is flawed. It includes fraudulent A330 flight information to raise the background noises level to minimize. It purposely omits night flights and actual capacity of the two planned terminals. It also omits Flight Path information to skew noise measurement.

- At best millions of taxpayer dollars will result in two dozen low paying service jobs.
In depth solid waste studies have not been performed.

Using the intentionally low noise pollution numbers supplied in this report property damage will occur to neighborhoods within 10 years.

Using the intentionally low noise pollution numbers supplied in this report within 20 years the ENTIRE City of Mukilteo will be uninhabitable due to noise and air pollution from commercial air service at Paine.

The omissions and misstatements in the report are a clear attempt by the airport and airlines to deceive the public in an attempt to not mitigate damages from their operations.

Contempt and disregard for current land use.

Recommendations:

1. The FAA MUST immediately stop preferential prejudice towards commercial air service and discrimination against local the residents who are going to suffer property damage due to commercial air service at Paine.

2. The FAA MUST grant victims of the discrimination resulting from their preferential prejudice towards commercial air service monies equal to those preferentially given to promote commercial air service at Paine Field. This will allow for an unbiased environmental review to be performed by the victims of the Draft Environmental Assessments discrimination.

3. Any current or future Environmental Reviews must include both new terminals and their maximum capacity. The environmental effect of two large terminals in operation 24 hours a day seven days a week MUST BE studied. In addition current or future Environmental Review must study the solid waste requirements of the MAXIMUM capacity of two airport terminals.

4. Paine Field MUST move noise pollution monitoring stations to the north and south end the main runway, not two miles away from these locations. These stations will use science (not estimates) to calculate the baseline noise pollution currently done at Paine Field.

5. Paine Field MUST install equipment to generate Flight Tracks (the ACTUAL flight paths of aircraft). This will enable the public to see where noise and air and noise pollution occur outside the property line of Paine Field.
6. Paine Field MUST install air pollution monitoring stations to the north and south end the main runway. This will allow for scientific calculations (not estimates) to be used to calculate the baseline air pollution currently done at Paine Field.

7. Paine Field MUST install light pollution monitoring stations to the north and south end the main runway. This will allow for scientific calculations (not estimates) to be used to calculate the baseline light pollution currently done at Paine Field.

8. Any current or future Environmental Reviews must include land use and the cultural damage that will be done to the City of Mukilteo.

9. The FAA and the operators of Paine Field must take every possible step to INDEMNIFY taxpayers against civil and punitive actions by abiding to existing the de-facto LAND USE document (MRD). Failure to do so should be construed as contemptible and negligent behavior.

Reference:

i  

ii Per the FAA Airport Certification Program Handbook, a change from a Class IV operating certificate to a Class I operating certificate is required to serve scheduled operations by large aircraft

iii Figure A3

iv In order to efficiently and safely serve the aircraft and passengers using those aircraft, the existing passenger processing space needs to be increased. Based on FAA planning guidelines to accommodate these passengers in a safe manner, and meet security requirements, it has been determined that approximately 18,000 square feet would be needed with two aircraft "boarding gates", and these would be sized to accommodate 225 people in the gate boarding area.

v Approval of Airport Improvement Program (AIP) funding for the construction of modular terminal building sufficient to accommodate the proposed passenger service.

vi
vii The use of other area airports by both Horizon Air and Allegiant Air instead of Paine Field is reflected in the No Action alternative because Horizon Air already offers scheduled commercial air service at Seattle-Tacoma International Airport, approximately 30 miles south of Paine Field, and Bellingham, located approximately 74 miles north of Paine Field. Allegiant Air offers scheduled commercial air service currently at Bellingham International Airport.

viii Therefore, no expansion of service or facilities beyond those proposed is reasonably foreseeable.

ix Horizon Air will utilize the 76 seat Q400 aircraft with a predicted load factor (percentage of available seats filled) ranging from 61 to 63% with departures ranging from 6 to 10 per day for approximately 350 days per year. Allegiant Air will utilize the MD83 aircraft with 150 available seats with a predicted load factor of 90% with departures ranging from 2 to 10 per week over 365 days. This would result in approximately 112,000 enplanements (people boarding aircraft at Paine Field) in 2010 increasing to approximately 238,200 enplanements in 2016.

x Preferred Alternative (Proposed Action or the Project). The proposed action is for the FAA to approve an amendment to Horizon Air and Allegiant Air Operating Specifications pursuant to 14 CFR Part 119 and amendment to the airport operating certificate pursuant to 14 CFR Part 139. This would allow both airlines to provide scheduled commercial service to PAE with the Bombardier Q400 Dash 8 (with the CRJ700 as the substitute) and the Boeing MD83 aircraft, respectively, if all safety, operational, and environmental issues are satisfied.

xi As discussed above, neither the FAA nor the Airport sponsor has the authority to instruct either carrier to provide service using a different aircraft if the proposed aircraft can safely operate at the proposed airport in compliance with all statues. Additionally, public use airports such as Paine Field cannot deny access to an aircraft operator if they can safely operate at that facility.

xii Construct a Large Permanent Terminal as Shown on the ALP. Consequently, this alternative is not warranted and not the best use of public funds at this time. As such, it will not be considered in detail but will continue to be shown on the ALP as a future reservation of space.

xiii The airlines anticipate that some of the enplanements will be "new demand" although some passengers now using Sea-Tac and Bellingham may opt for Paine Field due to closer proximity and shorter travel times.
This demand would generate the need for six to ten additional airline employees, several which may be contracted from existing Fixed Base Operators. An additional seventeen employees; including TSA employees, security, rental car and maintenance workers are anticipated.


The study evaluated the existing 2008 baseline conditions (actual operations) and the future years 2010 and 2016.

In the DNL metric, any operations that occur after 10 p.m. and before 7 a.m. are considered more intrusive and are weighted by an additional 10 dBA. Therefore, accurately estimating the number of nighttime operations is very critical in determining the DNL noise contour.

It is important to note, that the forecasts were revised in October of 2009 (and a new FAA approval issued) based on a news release from Boeing indicating that some of the B-787 final assembly would take place in Charleston, South Carolina instead of Paine Field. Both the original forecasts and approval letter, and the October 2009 revised forecasts and associated approval letter are included in Appendix G.

Because some aircraft are not in the INM database, the INM model will reflect a substitute aircraft that is a close approximation in terms of noise.

The FAA has established flight paths for aircraft arriving and departing from PAF. Flight tracks are established for each runway end, and the use of each flight track by aircraft type is used as an INM input. These flight paths are not precisely defined ground tracks, but represent a path along the ground over which aircraft generally fly.

There would be a slight change in the light environment around the Airport due to increase lighting in the vicinity of the modular terminal expansion. However, due to the mostly industrial land use in the area, neither the No Action Alternative nor the Preferred Alternative would result in any significant impacts relating to the lighting and visual environment of the Airport.

In the first year of commercial service operations (2010), the change in the noise contours compared to the No Action Alternative would be approximately 4.0 acres larger. By 2016, the change in the noise contours compared to the No Action Alternative would be approximately 17.0 acres larger.

Solid Waste. Increases in solid waste generation and disposal as a result of the Preferred Alternative can reasonably be expected due to the increased use of the terminal building by arriving and departing airline passengers, as well as additional airport employees.

Maximum capacity - A typical spoke (non-hubbing) airport will average 4-6 departures per gate per day. So PAE could have a daily capacity of 900-1,350 departing seats per day if both gates were used for the largest aircraft they are sized for.

For PAE, the gates have a design capacity of one 75 seat regional aircraft plus one 150 seat mainline aircraft for a total of 225 seats.

Maximum capacity - A typical spoke (non-hubbing) airport will average 4-6 departures per gate per day. So PAE could have a daily capacity of 900-1,350 departing seats per day if both gates were used for the largest aircraft they are sized for.
Dear Pete Everett:

Thank you for your comments to the FAA and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

General Response 1-5: Mitigation
General Response 1-6: What are the FAA and County roles in this EA and has a decision been made to move forward?
General Response 1-8: Adequacy of FAA guidance and use of FAA guidance
General Response 1-10: Scope of the EA analysis for future operations and passengers
General Response 1-13: Additional study should be conducted
General Response 1-15: EA did not reflect the opposition of the community
General Response 1-16: How will the proposal be funded?
General Response 2-1: MRD document
General Response 3-4: EA Conflicts with proposed terminal in Airport Master Plan
General Response 3-5: Why was 2016 selected as the future year?
General Response 3-10: What is the capacity of the airport?
General Response 3-11: What is the capacity of the terminal?
General Response 3-12: What is the relationship of the two terminals?
General Response 3-13: What is a Class I Airport? Explanation of Federal Aviation Regulations (FAR) Part 139
General Response 3-14: What actions will require additional environmental review?
General Response 3-14: What actions will require additional environmental review?
General Response 4-1: Alternative airports should be used
General Response 6-1: Significance of Project Effects
General Response 6-3: What are the project benefits?
General Response 6-6: The document does not refer to "pollution"
General Response 7-3: Noise analysis methodology
General Response 7-4: Flight tracks should be shown
General Response 7-5: Proposed commercial fleet mix
General Response 7-12: How are the potential noise impacts compatible with surrounding residential land uses?
General Response 9-1: What is the impact upon property values?
General Response 9-8: What are the health and quality of life effects associated with the project?
General Response 11-4: Effect on culture of local community
General Response 11-10: Water quality impacts
General Response 11-11: Light pollution
Enplanements as New Demand – Indication of More Activity to come:

This comment references a statement that “the airlines anticipate that some of the enplanements will be ‘new demand.’” This statement is not referring to new demand, over and above what the airlines are projecting. Instead the term “new demand” is referring to passengers included in the Horizon Air and Allegiant Air projections that would chose to fly instead of not taking their trip at all if the proposed service is available from Paine Field. In this case “existing demand” would describe those passengers who would otherwise be flying to Portland, Spokane or Las Vegas via Bellingham International Airport or Sea-Tac, or would be driving to Portland or Spokane. See also General Response 8-2.

A330 Activity Shown in Tables:

In response to comments regarding the presence of the A330 aircraft in modeling tables, the Federal Aviation Administration’s (FAA) Integrated Noise Model (INM) software does not include the Boeing 787 Dreamliner as an aircraft type. FAA Headquarters currently recommends substituting the Airbus A330 for the B-787 which is why the A330 is listed in future year operations tables in Appendix D of the Environmental Assessment.

Tanker Deal of Boeing and its Effects:

In response to comments regarding potential future Boeing deals, the final forecasts used in the Draft Environmental Assessment (EA) reflect the Boeing decision to locate a B-787 line to South Carolina. Initially forecasts were prepared that did not reflect this change, but before the Draft EA analysis was finalized, that change was reflected.

Allegiant Calculations of Flights per Week:

In response to comments regarding the Allegiant calculations of flights per week, the tables and the Alternatives chapter are consistent with regard to the number of projected Allegiant operations. The tables show 208 operations (approximately 4 operations per week or 2 departures per week) in 2010 and 1,040 operations (approximately 20 per week operations or 10 departures per week) in 2016. Confusion may occur over the use of “departures” versus “operations.” Departures are the activity which departs the airport. On the other hand, operations reflect the total of arrivals and departures occurring at the Airport. The operations projections for Allegiant Air are consistent with the letter from the airline included in Appendix A.

Noise Monitors:

In response to comments regarding noise monitors, the Airport currently has a noise monitoring system in place, called AIRSCENE. These monitors are not required at airports, but were put into place as the result of a Part 150 Noise Compatibility Study conducted voluntarily by Snohomish County. The locations of the monitors were determined to monitor the noise at a wide variety of locations and communities and include a mobile monitor to spot monitor locations depending on complaints. Monitor One is located 9,500 feet north of the Airport in Mukilteo. Monitor Two is located 6,500 feet west of the airport in Harbour Point. Monitor Three is located 8,500 feet south of the Airport near Lake Serene. Monitor Four is the mobile monitor and is mounted in the Airport’s noise monitoring trailer and is used for spot monitoring throughout the community.

Nighttime Runway Use/No Restriction on Nighttime Operations:

In response to comments regarding nighttime operations, in the Draft Environmental Assessment (EA), it was assumed that the proposed scheduled commercial operations would occur primarily during the day (7 a.m. to 10 p.m.). However, to account for potential weather delays and/or late arriving commercial flights, it was assumed...
that two percent of commercial flights would take place at night. In response to comments, the nighttime activity assumption was re-examined and discussed with both Horizon Air and Allegiant Air. Both airlines indicated that the two percent assumption to account for potential late flights and weather delays was appropriate. Additionally, Horizon Air indicated that it was likely that one Q400 would depart before 7 a.m. in the 2013 condition and that two Q400 aircraft would depart before 7 a.m. and one Q400 aircraft would arrive after 10 p.m. in the future (2018) condition. Allegiant Air indicated that they anticipate all operations to occur during the day since the aircraft would be scheduled to overnight in Las Vegas, with operations occurring around midday at Paine Field. The updated nighttime operation assumptions were input to Integrated Noise Model (INM) and the contour was remodeled to analyze potential noise impacts. No noise sensitive uses are included in the new 65 Day-Night Noise Level (DNL) noise contour in the Final EA based on the new operational assumptions; therefore, no significant noise impacts would occur. The day and nighttime operations are detailed in Tables 3 and 4 of the Appendix D in the Draft and Final EA.

While it is true that the Airport cannot restrict nighttime operations, indications from the airlines are that there would only be a small number of scheduled operations within the hours of 10 p.m. and 7 a.m.

Aircraft Substitution List:

In response to comments regarding the aircraft substitution list, the Integrated Noise Model (INM) includes a list of aircraft, the operational profiles and noise characteristics. Version 7.0a of the INM includes approximately 140 aircraft models, and thus, on occasion, when specific aircraft models are not included in INM, it is necessary to substitute other similar aircraft for those not included in the model. For aircraft not included in the standard list, the Federal Aviation Administration (FAA) recommends a “substitution” aircraft type with a similar noise footprint. The FAA determines the appropriate substitution aircraft. If the INM does not have a substitution listed, the FAA must be contacted and approve the unique substitution. The substitution aircraft included in the EA noise modeling included the Airbus A330 which, according to FAA, is the appropriate substitution aircraft for the Boeing B-787. Additionally, it included the 747-400 as a substitute for large cargo freighter and the DHC8300 substituted for the DHC8400.

Low-ball Emissions Due to Activity:

In response to comments regarding the level of activity, as noted in General Response 10-2, the Federal Aviation Administration (FAA) guidance concerning the National Environmental Policy Act (NEPA) requires the evaluation of environmental consequences to be based on reasonably foreseeable impacts. The analysis was focused on presenting the reasonably foreseeable effects of the proposal, rather than "low balling" the evaluation. As noted, the activity levels of the carriers proposing service represents the reasonably foreseeable level of activity, which then served as the basis for the evaluation. However, due to many comments on the activity levels, a maximum capacity for enplanements at the proposed modular terminal was analyzed, including for air quality, and was included in Appendix P of the Final Environmental Assessment (EA). This scenario, while the FAA does not believe it to be reasonably foreseeable, depicts the modeling of the air quality under the maximum capacity of the terminal in terms of enplanements.

Included in comments of this nature was the perception that the air quality evaluation was based on "guestimates" and a notation that pollution measurements were not conducted. The evaluation of emissions was conducted in accordance with FAA requirements, as defined by the Clean Air Act and NEPA/Council on Environmental Quality (CEQ) regulations. Pages D.2 through D.9 of the EA describe the existing and with project emissions, as well as a determination of whether the emissions are below the thresholds of significance. The CO emissions summarized in Table D6 are results from the modeling in the Emissions Dispersion Modeling System (EDMS) Version 5.1, the FAA approved air quality modeling system. Based on this modeling and federal thresholds of significance, no significant impacts related to air quality would occur as a result of the proposed project.
Visual/Lighting Impacts:

In response to comments regarding visual/lighting impacts, according to Federal Aviation Administration (FAA) Order 1050.1E, Change 1, project-related lighting impacts would be significant, “when an action’s light emissions create annoyance to interfere with normal activities.” It also states that, “because of the relatively low levels of light intensity compared to background levels associated with most air navigation facilities (NAVAIDS) and other airport development actions, light emissions impacts are unlikely to have an adverse impact on human activity.

With the proposed actions at Paine Field, there would be some minimal additional lighting from the construction of the terminal. The Airport is located in a developed area, and the lighting changes would be in keeping with existing background lighting. Commercial aircraft would not be substantially distinguishable from other types of aircraft already operating at Paine Field. Therefore, no significant lighting impacts related to the Preferred Alternative were identified.

According to FAA Order 1050.1E, Change 1 “the visual sight of aircraft, aircraft contrails or aircraft lights at night, particularly at a distance that is not normally intrusive, should not be assumed to constitute an adverse impact.” The terminal expansion would occur in a developed area of the Airport, keeping with the existing visual and lighting background, would not significantly alter the skyline and otherwise would not substantially change the visual environment around the Airport. Therefore, no significant impacts on the visual environment were identified.

Solid Waste: No Data Given:

In response to comments regarding solid waste increases, as stated in the Environmental Assessment (EA), increases in solid waste generation and disposal as a result of the Preferred Alternative can reasonably be expected due to the increased use of the terminal building by arriving and departing airline passengers, as well as additional employees. However, because the Preferred Alternative does not include the demolition of any structures or facilities, these increases are expected to be minimal and would not be expected to exceed the capacities of the local disposal facilities. The increase in solid waste was qualitatively assessed and it is anticipated that the increase could easily be accommodated by the existing waste disposal facilities.

Using Sea-Tac as an example, if Paine Field passengers generate the same quantity of solid waste as occurs at Sea-Tac, 2018 passenger levels would generate about 48 tons of solid waste per year (about 0.0002 tons per enplanement or about 0.4 lb). Assuming about 50 percent of this is recyclable waste, 24 tons of waste would be sent to the local transfer station for ultimate disposal in Eastern Washington. The existing landfill system would capable of accommodating this demand.
February 4, 2009

Cayla Morgan
Environmental Protection Specialist
Seattle Airports District Office
Federal Aviation Administration
1601 Lind Avenue SW
Renton, WA 98057-365

Re: Draft NEPA Environmental Assessment of Commercial Air Service at Paine Field

Dear Ms. Morgan,

I am writing on behalf of the Everett Area Chamber of Commerce and our 550 local businesses that employ over 55,000 employees throughout Snohomish County to express our support for the Draft NEPA Environmental Assessment of Commercial Air Service at Paine Field. The Chamber has long supported commercial air service at Paine Field. In reviewing the assessment we note the conclusions that flights would have little effect on traffic, air quality and noise. In particular, there are two areas of the assessment that we believe are especially important to consider.

First, the Draft EA indicates that additional air traffic associated with the proposed commercial air service will result in only a nominal increase to the noise contour compared to the No Action alternative, and that the majority of the noise will stay within the confines of the airport and the Boeing complex, with no residential properties affected. Further, once service has realized its projected peak in 2016, commercial operations will still represent far less than 10% of total Airport operations.

Secondly, the Draft EA concludes that pollution associated with the proposed commercial air service and associated activities will be minimal on all accounts. Commercial air service will contribute a minimal amount of additional air pollution and would not result in significant adverse environmental impacts to fish, wildlife, plants, lighting, visual environment, surface water resources, storm water runoff, sanitary wastewater, or ground water resources.

In conclusion, the Chamber is encouraged to know that commercial air service at Paine Field is congruent with the healthy communities surrounding Paine Field. Commercial air service at the Airport will be an asset for our community’s efforts to recruit new companies to Snohomish County, as well as for residents who regularly travel to regional destinations. We look forward to working with Paine Field, Horizon Air and Allegiant Air to make commercial air service in our community a success.

Sincerely,

Louise Stanton-Masten
President & CEO
Dear Louise Stanton-Masten, on behalf of Everett Chamber of Commerce:
Thank you for your comments to the FAA; they have been noted.
Cayla Morgan
Environmental Protection Specialist
Seattle Airports District Office
Federal Aviation Administration
425-227-2653

----- Forwarded by Cayla Morgan/ANM/FAA on 02/05/2010 09:34 AM -----

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"Allan Giffen" <AGiffen@ci.everett.wa.us>
Please accept the City of Everett comments on the draft EA for Paine Field, attached.

Thank you.

Allan Giffen

Planning Director / SEPA Responsible Official

<<Paine Field EA Comment letter 2-3-10.pdf>> (See attached file: Paine Field EA Comment letter 2-3-10.pdf)
February 3, 2010

Cayla Morgan, Environmental Protection Specialist
Seattle Airports District Office, FAA
1601 Lind Ave. SW
Renton, WA 98057-3356

RE: Draft NEPA Environmental Assessment – Commercial Air Service at Paine Field Airport

Dear Ms. Morgan

Thank you for the opportunity to comment on the Draft Environmental Assessment (EA) dated December 2009. This letter will focus on the adequacy of the environmental analysis contained in the EA. The purpose of the EA is to evaluate the environmental impacts of proposed scheduled commercial air service by Horizon Air and Allegiant Airlines. This information will be used by the Federal Aviation Administration in its evaluation of:

1) Issuance of an ‘Operations Specifications Amendment’ to these carriers to allow operations at Paine Field Airport;
2) Issuance of an ‘Operating Certificate Amendment; for Paine Field Airport; and
3) Approval of ‘Airport Improvement Program’ (AIP) funding for the construction of a modular terminal building sufficient to accommodate the proposed passenger service. The EA Preferred Alternative indicates a new 18,000 square foot terminal is proposed. It would be capable of accommodating 225 people within the terminal building.

I. Technical Corrections to the EA:
- Figures A-2, C-1, and C-3 through C-7 show City of Everett boundaries that were changed in 2000. The map should be revised to show current boundaries: all land west of Evergreen Way and east of Airport Road, with the exception of land owned by Snohomish County (Bomarc site, and former County Public Works yard), is within the Everett City limits. On page C-6, under compatible land use and zoning, the EA makes reference to Figure C1 in describing the relationship of the airport to surrounding cities.
- The Map in Figure C-3 incorrectly shows residential zoning on the east side of Airport Road, south of 112th Street SW. This area is in the City of Everett and is zoned for light industrial use.
- The Map in Figure C-4 shows Comprehensive Plan Future Land Uses in the vicinity of Paine Field. This map incorrectly shows the land on the east side of Airport Road and south of Holly Drive as residential. This area is located in the City of Everett, and is designated for light industrial use by the City’s Comprehensive Plan Land Use Map.

II. Alternatives:
Clarification of Preferred Alternative – On page B-6 of the EA, the discussion of the Preferred Alternative states that Allegiant Air would begin service with 208 operations per year. This number increases to 1,040 operations in the fifth year in 2016. Similarly, Horizon’s service would begin with 4,380 operations, increasing to 8,340 in 2016. Following discussions with Snohomish County, it is our understanding that the proposed Operations Specifications Amendment and Operating Certificate Amendment will not place an upper limit on the number of operations that these two carriers are permitted to conduct each year to the proposed destinations if using the same aircraft as stated in the EA. If approved, these amendments would, however, limit the types of aircraft and destinations served.

If our understanding is correct, the EA should contain a statement that clearly indicates there is no FAA restriction on the maximum number of operations permitted by Allegiant and Horizon under the proposed amendments.

III. Affected Environment:
Paine Field and the surrounding industrial area have undergone an extraordinary review under federal, state and local jurisdictions. In general, the capacity needs of the aerospace businesses located at or adjacent to Paine Field are the same as those necessary to serve commercial service at Paine Field.

This EA is the latest in a series of studies that have extensively examined significant aviation, land use and environmental issues associated with Paine Field. The EA adds to a considerable body of information that has been developed during the last 20 years. Some of these studies have included a specific focus on impacts associated with air service at Paine Field such as: noise, transportation, air quality and elements of the built and natural environment. These studies are hereby incorporated in our comment letter by reference including:
- Boeing Environmental Impact Statement for the Boeing Master Plan Expansion to build the 777 Airplane (1991);
- Paine Field Master Plan update (1995);
- Southwest Everett/Paine Field Subarea Plan and EIS (1996);
- Paine Field Master Plan update (2002);
• Report on Mediated Role Determination for Paine Field (2007);
• Feasibility & Impacts of Scheduled Commercial Air Service at Paine Field, Thomas/Lane Associates (2008); and,
• Long-Term Air Transportation Study, Recommendations of the Washington State Aviation Planning Council (2009). One of the key recommendations in this report emphasized more efficient use of existing airports over development new ones.

These studies reflect over twenty years of extensive planning and capital projects intended to address the needs of Paine Field, the aviation industry, and economic development in Everett and Snohomish County. They have been designed to systematically address both the natural environment and the built environment. Issues such as stream corridors, surface water, noise, threatened and endangered species, air quality, surface transportation, capital facilities and utilities have been studied at considerable length over a relatively long period of time. This remarkable body of work, supports the conclusions reached in the EA: that the proposed action will result in no significant environmental impacts. Also of note is that these plans and studies resulted in considerable infrastructure investment, using both public and private funds, in the immediate vicinity of Paine Field, as well as the SW Everett vicinity. The resulting improvements will support increased flight and business activity of the airport.

In 2008, the City hired the Thomas/Lane firm to analyze the financial feasibility of scheduled commercial air service at Paine Field, as well as the costs and benefits it would bring. The draft EA, by comparison, evaluates the environmental impacts of scheduled commercial air service proposed by Horizon Air and Allegiant Airlines. Both studies evaluated noise and transportation impacts. Both documents point out that the current terminal facility is inadequate for scheduled commercial air service at Paine Field. The Thomas Lane study points out that the economic impact of Paine Field aviation facilities is in the range of 35,000 to 40,000 current jobs, and annual wages and salaries over $2.5 billion.

We note that the proposed action is insignificant in relation to the level of activity that has been planned for and analyzed under adopted land use plans, the Paine Field Airport Master Plan, and the many environmental studies listed above.

IV. Environmental Consequences:
The EA correctly concludes there are no significant environmental impacts associated with the proposed action, and that the limited impacts that will result from the proposed action are within the framework of existing capital and environmental systems. It is noteworthy that there are multiple data points that have in essence reached the same conclusion. A few of these are worth noting for the record here, as they support the EA’s general conclusion and underscore that the EA has been conducted with an abundance of caution and is generally conservative in its scope and conclusions.
Some of the more significant issues are noted as follows:

**Noise:** Although aircraft noise is exempt from regulation under the City of Everett’s noise control ordinance (EMC Chapter 20.08.100.A.1), some residential areas in the Boulevard Bluffs neighborhood are directly in line with the flight path north of Paine Field Airport. These areas are not shown in any of the graphics or maps in the EA. This neighborhood will experience additional aircraft noise as a result of additional commercial flight operations. However, the EA correctly identifies the noise footprint; the 65 DNL contour would increase by a small percentage, and would be contained on the airport property excepting a small portion of industrially designated property. Similar noise studies have been conducted related to the Airport Master Plan updates in 1995 and 2002, and related to the Boeing Master Plan EIS in 1990. Clearly the assumptions in the subject EA are unique to this proposal and the specific aircraft identified in the preferred alternative. However, in these other studies, modeling was done to reflect a number of aircraft types and operational considerations and the findings appear to be generally consistent with those of other studies related to commercial aircraft types.

**Air quality:** The increases in emissions resulting from additional commercial flights “...are below de-minimis thresholds...” according to the EA. This is consistent with other work done in this area regarding air quality. The six pollutants regulated by the EPA under the Clean Air Act, and administered by the Washington State Department of Ecology and the Puget Sound Clean Air Agency would not be impacted by this proposal. These pollutants are monitored and regulated within the Puget Sound air shed. The EA assumes: “While the proposed service may decrease vehicular travel from residents of Snohomish County who would otherwise travel to/from either SeaTac International Airport or Bellingham International Airport, an analysis was preformed assuming that the project generated all new passengers and that all travel would be project based.” (EA at D.6). However, other work including the “Long-Term Air Transportation Study” has identified likely positive air impacts as a result of reducing trips and vehicle miles traveled if trips that would have been directed to SeaTac or Bellingham were to be redirected to Paine Field. While it was not addressed in this EA, it is reasonable to assume commercial service at Paine Field will likely have a small positive impact on the Puget Sound air shed by reducing automobile trips and vehicle miles traveled in the region.

**Surface Transportation:** No significant traffic impacts are anticipated according to the EA. Again, the EA assumes all the trips to be “new” though it is likely some of these trips would replace trips otherwise destined for Sea-Tac or Bellingham. Additionally, the EA does not reflect the considerable additional transportation improvements that have been made to accommodate all growth and development in the Southwest Everett/Paine Field area.
The Boeing Master Plan EIS, and the Southwest Everett / Paine Field Subarea Plan and EIS, anticipated transportation improvements sufficient to accommodate an employment base projected to be between 58,000 and 83,000 by 2030 for the 4,000 acre area including Paine Field (SW Everett/PF Plan at 1-4 & 1-5). Today, the current employment and traffic generation for transportation demand is estimated to be 44,000 or slightly more than half of the higher estimated total capacity (PSRC, 2010).

Related to this effort, the Boeing Mitigation Fund was employed with other transportation funds by the City of Everett, in cooperation with WSDOT, Snohomish County, and other jurisdictions, to improve all of the transportation corridors serving southwest Everett and Paine Field. Over $620,000,000 was spent in this area to improve projects including but not limited to:

- I-5 HOV lanes and improvements
- SR 526 - I-5 north bound fly-over On-ramp;
- SR 527, 112th St. to 132nd;
- SR 525/99 Interchange;
- SR 525 Paine Field Blvd. to SR 99;
- SR 525, SR 99 to I-5/I-405;
- SR 526/Evergreen Way/Casino Rd; 112th St. Corridor Improvements;
- 128th St. SW /Airport Rd. HOV Improvements;
- Paine Field Blvd.;
- Airport Rd. HOV, SR 526 to SR 99; and more.

The EA does not reflect that most of these improvements were specifically intended to expand access and egress to the southwest Everett / Paine Field area. Any additional operations, such as commercial service at Paine Field, benefit from these projects. It is not surprising that the EA has concluded that the impact of the proposal on the surface transportation is insignificant.

**Cumulative impacts:** There has been testimony at the hearings on this EA critical of the analysis of induced or cumulative impacts, asserting that a more detailed analysis of the potential for increased scheduled commercial air service is necessary. Such requests are based on the assumption that if the service proposed under the preferred alternative is successful, additional service and flights would be proposed at Paine Field. To put this into context, it would be beneficial to have a better understanding of the foreseeable level of commercial air service that would be economically viable at Paine Field.

The 2008 study by Thomas / Lane & Associates addressed the potential for scheduled commercial air service at Paine Field. This study considered projected business and population growth, service provided at competing airports (Seatac International and Bellingham International), and concluded:
• Paine Field has no chance of attracting major carriers such as Alaska, American, Continental, Delta, Northwest, United or US Air.
• The demand for scheduled commercial air service at Paine Field in the foreseeable future is for about five flights per day.
• To attract a regional partner of a major carrier (such as Horizon) will likely require some type of financial guarantee or incentive. Some form of ticket banking or other revenue guarantee will probably be required.

In other words, Paine Field is a small and risky market for a commercial air carrier. It is reasonable to limit the analysis to the immediate application, as the only professional study we are aware of that has analyzed potential demand for service has concluded that the service proposed by the preferred alternative is in close alignment with the anticipated demand for the foreseeable future. Until there is a track record of successful scheduled commercial flight service at Paine Field, it is unreasonable to assume a greater level of flight activity can be supported.

In addition to the technical corrections listed in Section I above, we offer the following additional recommendations in order further clarify the analysis:

1) Add a statement clarify that the EA addresses only the environmental impacts of the number of total commercial operations identified in the letters of intent by Allegiant Air and Horizon (i.e., 1,040 operations for Allegiant in 2016 and 8,340 operations for Horizon in 2016). The EA does not address impacts of additional flights beyond these numbers. Also clarify that the proposed Operations Specifications Amendment and Operating Certificate Amendment for the airlines to operate from Paine Field Airport will not limit the number of flights to the same destinations using the same aircraft.

2) Add a new graphic showing the expected flight path(s) of commercial flight operations to and from Paine Field.

Other impacts: The Southwest Everett / Paine Field Subarea Plan and EIS addressed the full array of environmental impacts required under SEPA. It is not surprising that this Plan and EIS is similar in many respects to NEPA as the State Act - SEPA - is patterned after the federal act. These impacts include: land use, transportation, earth/geological hazardous areas, surface/groundwater and plant and animals, air quality, energy and natural resources, environmental health and public services and utilities. While the specific issues associated with building a commercial air terminal and flying certain aircraft were not specifically addressed, the general natural and built environment was. Thus, there was consideration provided to environmental impacts associated with significant additional development in this area including impacts associated with commercial service at Paine Field.
V. Conclusion:
In conclusion, we believe the analysis contained in the Environmental Assessment is thorough, detailed and accurate. The City concurs with its findings and conclusions concerning the different alternatives considered, and identification of impacts for each element of the environment.

Sincerely,

[Signature]

Allan Giffen
Director, SEPA Responsible Official

Cc: Mayor Stephanson
    Everett City Council
    Dave Waggoner, Director, Snohomish County Airport
Response to Comment

Dear Allan Giffen, on behalf of City of Everett, Planning:

Thank you for your comments to the FAA, Snohomish County, and Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

General Response 1-1: Why can't the County limit or restrict operations?
General Response 1-10: Scope of the EA analysis for future operations and passengers
General Response 3-1: What is the purpose and need for the action or project?
General Response 3-4: EA Conflicts with proposed terminal in Airport Master Plan
General Response 3-5: Why was 2016 selected as the future year?
General Response 3-6: There should be an alternative future activity scenario
General Response 3-13: What is a Class I Airport? Explanation of Federal Aviation Regulations (FAR) Part 139
General Response 4-2: What is the relationship of the Proposed Project to WSDOT's Long-Term Air Transportation Study (LATS)
General Response 7-4: Flight tracks should be shown
General Response 8-1: Traffic analysis
General Response 8-2: Why weren't diverted trips accounted for?

Please also refer to the following individual response.

Suggest Project Text Modifier on Purpose & Need:

This comment suggested the addition of a clarifying statement in the Purpose and Need chapter stating that the Environmental Assessment (EA) examines only the environmental impacts of the air carrier operations included in the letter in Appendix A. Comment noted. The EA is already clear on this point and the entire Environmental Consequences chapter assesses the environmental impacts of the No Action Alternative and the Preferred Alternative.

The comment also suggested the addition of a statement clarifying that the proposed operations specifications amendment and operating certificate amendment will not limit the number of flights to the same destination using the same aircraft. A clarifying statement to this effect has been included in Appendix P, the Terminal Capacity Analysis.

Corrections to Boundaries of Everett and Map Contents:

In response to comments regarding corrections needed on the boundaries of Everett, Figures C3 and C4 have been revised to show correct zoning and land use within the City of Everett boundaries.
Hi,

I could not find the transit element in the NEPA. Would you please help me find where it’s at?

Thank you,

Kelvin Barton

Project Coordinator

Everett Transit

Transportation Services

City of Everett

425-257-8805
Dear Kelvin Barton, on behalf of Everett Transit:

Thank you for your comments to Paine Field Airport; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

**General Response 8-1: Traffic analysis**
Aaron Reardon,

Although the Snohomish County Council is adamantly opposed to commercial flights at Paine Field, you have somehow justified their presence.

I have some questions for you:
- Do you really think you can control airline activity – hours of operation – once the airlines begin operating?
- Do you really believe that Horizon will limit themselves to 6 flights a day, or even 16?
- Do you really think you can stop other airlines from joining these two and ramping traffic up to 50-100 flights per day if they wanted to do so? And, do you care how your constituents would like that?
- Do you know that Allegiant Air flies old, used – and noisy – MD 80’s and has customer satisfaction problems?
- Do you really think the FAA will revoke airport funding if you had insisted on the highest standards regarding a terminal with airlines paying upfront, including infrastructure surrounding the airport, the increased police and fire personnel needed in the area? (And that might have dissuaded the airlines from coming to Paine Field?)
- Do you really believe the moneyed developers when they say commercial flights are the answer to all our county’s economic problems, an answer to your prayers for great employment opportunities?
- Do you know how much a rental car clerk, snack bar waitperson, or even a TSA screener makes? How about the wait staff at the new Denny’s or Shari’s that gets built on the Speedway or Airport Road?)
- Do you care at all about the wishes of a majority of the 120,000 residents of southern Snohomish County whose quality of life will diminish considerably, i.e. noise and air pollution, plummeting property values, leading to the loss of their retirement nest eggs, college tuition funds, and more? (Realtors are already reporting a decline in interested buyers for communities affected by Paine Field activity.)
- Do you think those in favor of Paine Field expansion would feel the same if they lived under a flight path?
- Do you realize that the number of business travelers is steadily declining nationwide? It is not only due to the current recession, but also because high tech
Innovations make video conferencing, teleconferencing, and other advancements considerably cheaper and less time-consuming to conduct business meetings without leaving their offices and homes. These are the customers your developers are counting on to fly from Paine Field; that is, besides those who are off to gamble in Vegas.

- Do you realize also that many of the developers won't give a damn whether this venture is successful in the long term? They will have made their money building the infrastructure, the new Denny's, Shari's, or chain motels; even if it all stands vacant in five years.
- Do you really have a good picture of what the "new and improved" cities of Mukilteo, Edmonds, Woodway, Lynnwood, Mount Lake Terrace, Brier, and even parts of Everett will look like when people start to leave in droves, and small, local businesses are forced out by the big chains?
- Do you have any idea how angry people from northern parts of the county be when they are tapped to pay increased taxes to make up for the lower taxes on the devalued homes of the south county cities?

And lastly:
- Do you really think you will be sitting in that seat in the County Council chambers after the next election?

\[Signature\]
Dear Wanda Eyre:

Thank you for your comments to Snohomish County; they have been noted. Please refer to the following general responses (see Appendix S) that apply to your comments.

General Response 1-1: Why can't the County limit or restrict operations?
General Response 1-4: The County should no longer seek FAA funds
General Response 1-15: EA did not reflect the opposition of the community
General Response 3-5: Why was 2016 selected as the future year?
General Response 4-3: What is the demand for this proposal and how does it fit with regional planning?
General Response 6-3: What are the project benefits?
General Response 6-4: What are the quality of life impacts?
General Response 7-5: Proposed commercial fleet mix
General Response 9-1: What is the impact upon property values?
General Response 9-2: Indirect/induced traffic effects
Isabelle Eytinge
340 Heather Rd., Everett, Washington 98203
12-21-09

To whom this may concern:

I wish you would please hurry up and get Horizon Airlines flying out of Paine Field.

I could fly over to Eastern Washington every other week to see my daughter, or she could
come here.

It is hard for me to believe that 2 more flights a day of smaller airplanes compared to
Boeing jets would add that much noise. It’s
ever the noise of Army Interceptors during
the war with out complaint.

As you know the airport was there years
before the houses were built there. They took that
 gamble. 

Please get the airline connection next time.

E.92
Response to Comment

Dear Isabelle Eytinge:

Thank you for your comments to Paine Field Airport; they have been noted.
Isabelle Eytinge
340 Heather Rd., Everett, Washington 98203
12-31-09

Dear Mr. Higgeno —

We need Marjorie Air at Paine Field —
Now, I could fly to Seattle WA. every other week to see my daughter and she could fly here and not dwell that hard over the Pinc.
I know this is just for my personal enjoyment but thousands of people would use it instead of going to Seattle.

Compared to those big, a couple of flights a day you smaller airplanes could not sustani the price that much, you should have built here where the Army.Interceptor took off —
that was noise!
The airport was then before people took the gamble of building that.
I plea do your part to get the airlines at Paine Field. Sincerely—Isabelle Eytinge
Response to Comment

Dear Isabelle Eytinge:
Thank you for your comments to Paine Field Airport; they have been noted.
1-1 Why can’t the County limit or restrict operations?

Comments stated that the County should limit or restrict commercial operations. Other comments expressed concern that once commercial operations are allowed that there will be no limit to those operations. The County is not allowed to limit or restrict operations at the Airport, because it is a public use airport that has accepted federal funding, which requires certain assurances. In accepting federal funding, the County has agreed to comply with 39 specific grant assurances. These assurances require that the County, among other things, must “make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds, and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the Airport.” (Grant Assurance 22(a)).

The U.S. government deregulated the airline industry with Public Law 95-504, known as the “Airline Deregulation Act of 1978.” Since the deregulation of the airline industry in 1978, certificated U.S. air carriers are free to fly routes of their choice and serve airports of their choice. Airports that are composed of surplus federal property and/or receive federal funding are considered public use airports, and must be made available for use on a reasonable basis when a carrier seeks to start service. A consequence of that Act allowed airlines unrestricted choice as to which airports they serve. Other than to ensure safety, neither the Airport Sponsor (Snohomish County) nor the Federal government controls where, when, and how airlines provide service. Operators of public use airports, such as Paine Field, cannot deny access to an airline if the aircraft they propose to use can safely operate at that facility. Consistent with its grant assurance obligations, Snohomish County has been negotiating in good faith with Horizon Air and Allegiant Air to accommodate proposed passenger service at Paine Field.

If the FAA were to find the Airport in non-compliance with its grant assurances, the consequences could include the suspension of grant funding, loss of the Part 139 Certificate, and the County could be required to pay back historical grant funding. The requirements of Grant Assurance 22a are similar to the requirements of the quitclaim deed for airport property from the Federal government to Snohomish County. Deed covenants require that the land be used for public airport purposes for the use and benefit of the public, without unjust discrimination or granting of exclusive rights. If Snohomish County does not meet these deed requirements, if portions of the Airport are transferred for non-airport purposes, or if the entire property ceases to be used as an airport, the property may revert back to the Federal government at their option. See General Response 1-4 on grant funding and grant assurances, and General Response 3-15 on what actions would require additional environmental review.

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1 Quitclaim Deed, Book 889859, Volume 421, Pages 449-467.
1-2 What is the Centennial rule? Does it apply here?

Some comments recommended invoking the Centennial Rule at Paine Field to enable the County to reject the commercial service request at Paine Field. The Centennial Rule, Title 49 U.S. Code (USC) 47107 (q) and (r), provides an exception test under which a general aviation airport can prohibit scheduled air passenger service yet otherwise remain “in compliance” and qualify for federal funding under FAA rules. Specifically, the rule states:

“Notwithstanding any written assurances prescribed in subsections (a) through (p), a general aviation airport with more than 300,000 annual operations may be exempt from having to accept scheduled passenger air carrier service, provided that the following conditions are met: (1) No scheduled passenger air carrier has provided service at the airport within 5 years prior to January 1, 2002. (2) The airport is located within or underneath the Class B airspace of an airport that maintains an airport operating certificate pursuant to section 44706 of title 49. (3) The certificated airport operating under section 44706 of title 49 does not contribute to significant passenger delays as defined by DOT/FAA in the ‘Airport Capacity Benchmark Report 2001’. (r) An airport that meets the conditions of subsections (q)(1) through (3) is not subject to section 47524 of title 49 with respect to a prohibition on all scheduled passenger service.”

Paine Field does not meet the primary requirement of the Centennial Rule to be a general aviation airport with more than 300,000 annual operations. Paine Field accommodated approximately 143,722 annual operations in 2008, 114,784 in 2010 and the Final EA only forecasts 122,127 annual operations by 2018. Therefore, the Centennial Rule does not apply to Paine Field.

1-3 An independent investigation is needed because the FAA pushed the County to approve the terminal

Comments suggested that the FAA pushed Snohomish County to support construction of a terminal, thus an independent investigation should be completed. Both the FAA and Snohomish County have followed all applicable rules and regulations in responding to the requests from the airlines to initiate commercial passenger service at Paine Field. The FAA has taken the appropriate actions related to the approval process for all Federal actions. The referenced communications reflect the parties seeking clarity concerning the requirements of the grant assurances, as well as the Federal agency steps and requirements in approving the Federal actions. Snohomish County has been and continues to negotiate in good faith with the air carriers in accordance with those requirements.

The FAA is not requiring, nor do they have the power to require, Snohomish County to change existing land use, existing zoning, or future planned land use to allow Paine Field to be served by the air carriers.
1-4 The County should no longer seek FAA funds

Some comments were received stating that no additional taxpayer money or FAA grants should be given to Snohomish County for Paine Field and that the County should pay back funds already received from the FAA.

Even if Snohomish County were to no longer take any FAA grants for Paine Field, the County would still be obligated due to the tens of millions of dollars already received in FAA grant funding. The County would also have to pay FAA back for any funds received in the past. The County does not believe that it is feasible or prudent to pay the FAA back because the County would then be responsible for the on-going operation of the Airport. The County would likely have to significantly increase fees charged to tenants or would have to obtain other County funding (derived from taxpayers), which is not considered prudent in today’s economic climate. See also General Response 1-1.

1-5 Mitigation

Comments received concerning mitigation were varied. Some comments mentioned the need for mitigation for anticipated environmental impacts associated with the Airport and the proposed actions/projects. Other comments questioned what roadway traffic, noise, and air quality mitigation would be required as a result of the proposed actions and who would be responsible for that mitigation.

Mitigation is only required for actions where the project-related effects would exceed the Federally defined thresholds of significance (see also General Response 6-1). As is noted, the proposed actions and their associated projects are not expected to produce impacts that would exceed the Federal thresholds and thus, compensatory mitigation is not required for the proposed actions at Paine Field.

Even though actions may not exceed defined thresholds, the County and airport users undertake best management practices (BMPs) to regularly reduce the effects of the Airport on the surrounding community, such as noise abatement measures and emission reduction actions. These actions are funded by the County or the tenants. These are referred to as BMPs as they are not mandated because of an exceedance of a federal threshold.

For traffic mitigation, the only required mitigation identified in the EA is traffic mitigation fees, which are a local requirement. Implementation of the proposed actions and associated projects will require contributing local mitigation fees to the two WSDOT intersections to aid in funding improvements to the I-5/128th Street SW interchange, per the interlocal agreement and WSDOT comments. Traffic mitigation fee payments to the WSDOT and the City of Mukilteo would mitigate the project’s impacts to the intersection of SR-525 at 84th Avenue NE by allowing the signal timing of the intersection to be optimized, which is anticipated to allow the intersection to operate at an acceptable level of service.

Under the Washington State Growth Management Act, state and local communities can impose impact fees based on new surface traffic that a project is expected to generate. Appendix F,
Traffic Impact Analysis notes that impact fees would be required based on the passengers that would be served at the Airport and their use of area roadways and local intersections. The traffic impact fees that would be paid by the Airport to Snohomish County, WSDOT, and the City of Mukilteo for the proposed actions have been calculated at approximately $333,262.85.

In regards to noise mitigation, the federal threshold for significance is 65 DNL. As stated on Page D.21 of the EA, there are no noise sensitive land uses within the 65 DNL noise contour or greater. Therefore, no noise mitigation is required. See General Response 7-1.

In response to comments about air quality mitigation, Snohomish County is in attainment for all pollutants as defined by the U.S. Environmental Protection Agency (EPA). This means, that while past pollutant levels in parts of the county may have exceeded standards, currently the standards are being attained. The area retains a maintenance designation for carbon monoxide due to exceedances during winter months of the standard during mid-1980s and conditions in 1992.

As the proposed actions would generate emissions less than de-minimis, mitigation would not be required. However, Snohomish County notes that it continues to work with its existing and future tenants to reduce emissions and implement best management practices. The County will investigate participation in the FAA’s Voluntary Airport Low Emission (VALE) grant program to reduce pollutant emissions from its fleet vehicles and those of its tenants. These programs (such as participation in the VALE program) are voluntary and not related to the proposed actions; no mitigation is required from the proposed actions. See General Response 10-2.

1-6 What are the FAA and County roles in this EA and has a decision been made to move forward?

Some comments requested clarification of the role of the FAA and the County in the EA process and the environmental decision making process. Also, some comments suggested that the decision to move forward with the proposed federal actions has already been made.

The FAA is the agency responsible for meeting the requirements of NEPA for federal actions related to the airport. Because the federal actions were not eligible for a categorical exclusion, the FAA required the preparation of an EA to determine if the actions would produce significant adverse effects. Both the FAA and County have been involved in this EA process from the beginning of scope development.

In the case of actions subject to EAs, FAA guidance enables the FAA to delegate responsibility for preparing the Draft EA to the Airport Sponsor. As such, Snohomish County’s role in this EA process is to prepare the environmental documentation (either the County itself or, in this case, through the use of consultants - See General Response 1-10) for the proposed Federal actions at Paine Field and submit the Draft EA to the FAA. FAA typically provides funding assistance through the Airport Improvement Program (AIP) to Airport Sponsors to complete NEPA documentation. Ultimately, the FAA must accept and sign the EA for it to become a Federal document used in the decision making process.
As of the preparation of the Draft EA and response to comments, the decision to approve the federal actions has not yet been made and cannot be made prior to an official environmental finding based on the Final EA. Following receipt of the Final EA from the Airport Sponsor, the responsible FAA official (See General Response 1-7) reviews the EA, the public comments, the expected impacts, the proposed mitigation, and then makes a decision. The FAA will either decide that the anticipated environmental impacts are not significant, or have been adequately mitigated where appropriate, and issue a Finding of No Significant Impact (FONSI)/Record of Decision (ROD). Alternatively, the FAA will decide that the anticipated environmental impacts are significant and recommend the preparation of an EIS.

1-7 Who will make the final environmental determination?

Some comments asked who would make the environmental determination on the proposed actions. The approving official is the FAA Regional Administrator, Northwest Mountain Region.

1-8 Adequacy of FAA guidance and use of FAA guidance

Some comments questioned FAA’s implementation of and compliance with the National Environmental Policy Act (NEPA) as well as analysis methodologies used in the EA. Some comments stated that the EA was biased toward the FAA, and that there was insufficient detail in the EA.

The FAA has the authority and responsibility, consistent with NEPA and CEQ, to prepare and issue guidance for the preparation of environmental documents addressing FAA actions. The FAA has published such guidance and Airport Sponsors are required to follow that guidance when preparing EA’s.

Preparation of the Draft EA followed the policies, procedures, and guidelines as outlined in FAA Order 1050.1E Change 1, Environmental Impacts: Policies and Procedures and Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions. These orders outline FAA accepted methodologies, methods, models, techniques, and thresholds of significance for the impact assessment and preparation of EA documents. The EA was prepared in compliance with NEPA, and Council on Environmental Quality (CEQ) regulations. All environmental documents prepared under FAA oversight follow and adhere to these same Orders, setting national standards for the preparation of environmental documentation.

1-9 Roles of consultant and their qualifications

Some comments questioned the role of the consultant in the Environmental Assessment (EA) process and the qualifications/potential for bias of the consultant to complete NEPA analysis. The Federal Aviation Administration (FAA) often delegates the preparation of Environmental Assessments (EAs) to the Airport Sponsor for projects involving federal actions. Snohomish County, as the Airport Sponsor, retained a third-party, independent consultant to prepare the Draft EA. The third-party consultant was retained using the County procurement process. The
process also complied with FAA requirements which ensure a competitive selection is undertaken. Barnard Dunkelberg & Company was selected.

Compliance with NEPA is not voluntary and it is the FAA’s obligation to ensure that the analysis is done correctly before accepting the EA as a Federal document. Barnard Dunkelberg & Company has no financial interest in whether or not a project is constructed or initiated. Therefore, there is not potential for a conflict of interest. For information on the FAA and County roles, see also General Response 1-6.

1-10  Scope of the EA analysis for future operations and passengers

Some comments received on the Draft EA stated that the scope of the EA should be broader in terms of the level of operations analyzed and more long-term in nature, believing that once commercial service was initiated at the Airport, that the airlines would chose to operate many more flights and enplane many more passengers than what was projected in the Draft EA. A majority of the comments questioned the projected numbers of operations and passengers used in the analysis, indicating that they were too low.

Preparation of the Draft EA complied with applicable FAA Orders and guidance implementing NEPA (see General Response 1-8). The orders outline FAA accepted methodologies, methods, models, techniques, and thresholds of significance for the impact assessment and preparation of EA documents based on actions that are “reasonably foreseeable”. The FAA does not believe that it is reasonably foreseeable that activity levels will be higher than those projected by the airlines (Appendix A). Council on Environmental Quality (CEQ) regulations implementing NEPA require that documents address impacts that are "reasonably foreseeable." FAA Order 5050.4B Paragraph 9q defines reasonably foreseeable as:

"An action on or off-airport that a proponent would likely complete and that has been developed with enough specificity to provide meaningful information to a decision maker and the interested public. Use the following table to help determine if an action is reasonably foreseeable."

(footnote 4: Paragraph 905.c(1) and (2) provide definitions of “connected actions” and “similar actions,” respectively)

The evaluation of operations or enplanements beyond 2018 would be speculative and not reasonably foreseeable. Not only would aircraft operation numbers be speculative, but the types of aircraft flown, the destinations flown, and the time of day or night those operations could occur would also be speculative. An infinite number of possibilities could be imagined, none of which would be based on actions which are reasonably foreseeable. This is especially true in response to the comment requesting that the maximum capacity of the Airport be evaluated. The maximum capacity of the Airport is a theoretical number driven by the type of aircraft, and will vary based on the aircraft fleet mix. In addition, any additional airlines or aircraft types desiring to operate at the Airport would be subject to additional environmental documentation. If the number of passengers exceeded the capacity of the proposed terminal; the terminal would require expansion or a new terminal. Such expansion of the terminal would in turn require modification to the Airport Layout Plan (ALP), which would be another Federal action, triggering NEPA compliance. For more information on what actions would require additional environmental review, please see General Response 3-15.
However, in response to these public comments, the FAA tasked the County to prepare an analysis to disclose the effects should activity grow and reach the **maximum capacity of the proposed terminal**. The FAA determined that the terminal is the limiting factor, so the maximum capacity of the modular terminal was examined as a theoretical scenario. This additional analysis was prepared for disclosure purposes to respond to comments about activity levels either above that identified by the airlines or outside the time period which the FAA believes is reasonably foreseeable. See also **General Response 3-12**. This analysis evaluated the Hirsh Report, Terminal Capacity Estimates (Draft and Final EA Appendix K) which reflect a theoretical activity level of the maximum capacity of the proposed terminal in terms of the maximum number of enplanements that could be accommodated and the resultant number of aircraft operations utilizing the proposed aircraft types. This analysis and its results can be found in **Appendix P** of the Final EA. For more information on methods, scope and impact analysis, please see **General Responses 1-8 and 1-12**.

### 1-11 Flawed/inadequate/biased EA

Some comments indicated that the EA was flawed and inadequate in its analysis of environmental impacts of the Airport or the proposed actions and its associated projects.

The FAA and County believe that the EA provides an appropriate assessment of the potential environmental impacts of the proposed actions both for existing conditions and under reasonably foreseeable conditions in accordance with all FAA Orders and guidance (**General Response 1-8**) and the requirements of NEPA. During the preparation of the EA, the most up-to-date models were used in all modeling exercises, per FAA Orders. FAA policy is that the same model will be used throughout the preparation of an EA even if a new model is available. However, based on public comments, the air quality analysis in the Final EA was updated with the most recent version of the model. The EA addresses the potential impacts of the proposed actions based on reasonably foreseeable conditions compared to the thresholds of significance outlined in the FAA Orders and described in **General Response 6-2**. The development of the EA and its conclusions take a critical look at the potential impacts that could occur if the proposed actions are implemented, as required under the NEPA. For more information on the scope and analysis within the EA, please see **General Responses 1-8, and 6-1**.

### 1-12 Adequacy of public involvement and release of the Draft EA and Public Hearings

Some comments questioned the adequacy of public involvement in the EA process including both the public review of the draft EA document and the public hearing arrangements. Some comments related to the timing for the release of the Draft EA, with some suggesting that the release near the holidays and perceived lack of notification was deliberate in an effort to reduce the level of public involvement. Also, comments were received noting the lack of space in the third public hearing in Mukilteo, stating that it was poorly planned and limited the ability to hear commenters.

FAA Order 1050.1E Change 1, paragraph 208.a states that:

NEPA and the CEQ regulations, in describing the public involvement process, require Federal agencies to: consider environmental information in their decision making process; obtain
information from the public regarding environmental concerns surrounding an agency’s proposed action; fully assess and disclose potential environmental impacts resulting from the proposed action and alternatives; and provide the public with this information and allow it to comment on these findings.

The Draft EA was published with electronic versions of the entire EA placed on the County’s website and hard copies available for review and comment at the following locations:

- Snohomish County Planning and Development Services Customer Support Center,
- Snohomish County Airport administrative office, and
- Seven local libraries.

Public involvement for this EA provided more public hearings than is typical for a FAA EA. Snohomish County ultimately conducted three public hearings. Each hearing included an open house to enable the public to discuss the actions/project with the County, the FAA and consultant staff, followed by a presentation, and a formal comment forum. Notices for the three public hearings were run in the *Everett Daily Herald*, the *Mukilteo Beacon*, and *Mukilteo Tribune*. In addition, notices of the hearings were posted at the local libraries where the EA was available, as well as on the County website.

The Draft EA was released as soon as it was complete and was not timed to occur during the holidays. Originally two hearings were scheduled for January 4th and 5th. Some early comments requested that additional public hearings be added not so close to the holidays, allowing people an opportunity to review the document and be available. Both the FAA and the County were responsive to these comments, and adjustments in scheduling and access were made. A third hearing was added on January 21, 2010 to enable those people who could not attend the first hearing dates (January 4th and 5th) to attend a hearing.

In addition to requests regarding an additional hearing date, requests were made to extend the comment period. The initial end of the comment period was January 15, 2010. This comment period was initially extended to January 29, 2010. Then, when a third hearing date was added, the comment period was extended to February 5, 2010. Although the FAA generally only has one public hearing on an EA, the County felt that additional hearings were reasonable due to the public interest in the proposed actions.

All of the hearings were held starting at 6 p.m. to allow adequate time for the open houses, the hearing presentations, and verbal testimony, while balancing the fact that many people get off work around 5 p.m. The general process and procedures for the hearings allowed each person to accept one speaking card that equated to an initial allotment of three minutes for public testimony. Three minutes is the generally allowed length of comment time used at Snohomish County public meetings. If, after those three minutes were finished, a commenter wished to make additional comments, they were invited to submit additional verbal comments after all other people who wished to give testimony had received their first opportunity to speak. Or the person was invited to submit their additional comments in writing either at the hearing or by mailing or emailing their additional comments to the contact addresses. This process ensured that everyone who wished to provide verbal testimony would have a chance to speak without any one person monopolizing the entirety of the hearing. Due to the large number of commenters,
some people did not get a chance to orally finish the entirety of their comments. Recognizing that this was frustrating, the agencies hope that the commenters took the opportunity to submit the remainder of their comments in writing.

In regards to the stated inadequacies of the Mukilteo public hearing site, the FAA and the County worked with local authorities when trying to find a site in Mukilteo as was requested by a number of early commenters. The Kamiak High School in Mukilteo was found to offer the most room for a public hearing. There was no way for the agencies to determine the exact count of those in attendance prior to the night of the public hearing. Although some people were not able to attend, the same options to submit written comments were available to all interested individuals.

**1-13 Additional study should be conducted**

Some comments requested additional study and some comments specifically requested that the FAA prepare an EIS. Council on Environmental Quality (CEQ) regulations and FAA guidance require the preparation of and EISs for certain actions or in cases where an EA has shown significant adverse impacts.

As described in General Response 1-6, the FAA will review the Final EA, expected impacts, and proposed mitigation. If the impacts exceed the significance thresholds for any affected resource, the FAA may then recommend the preparation of an EIS. Should the impacts not exceed the significance thresholds for any affected resources; the FAA may prepare a Finding of No Significant Impact (FONSI)/Record of Decision (ROD). Please see General Responses 1-8, 1-11, and 1-12 regarding additional information on EA preparation guidance, scope of the EA, and comments on the analysis contained within the EA.

The Draft EA for the proposed actions and projects showed that there would be no significant unresolved project-related effects. Therefore, while an EIS for the proposed actions is not warranted, in response to comments requesting additional study for higher activity levels, the FAA asked the Consultants to prepare additional analysis for the maximum capacity of the proposed terminal. While the FAA does not believe this activity level scenario is reasonably foreseeable, it has been included in response to comments for disclosure purposes (See General Response 1-11).

**1-14 What is the role of the State Environmental Policy Act (SEPA) and why is it not mentioned in EA?**

Some comments asked why there was no discussion of the requirements of the State Environmental Policy Act (SEPA) analysis in the NEPA EA. Other comments questioned when SEPA compliance would be undertaken.
Certain actions by Airport Sponsors located in Washington must comply with SEPA. Similar to FAA Order 1050.1E, Change 1 and Order 5050.4B, the Department Ecology has issued guidance on compliance with SEPA, titled “SEPA Handbook”. Snohomish County is responsible for SEPA compliance.

The County and FAA recognize that SEPA compliance is required. While the approach to the SEPA process has not been finalized, the County may adopt the NEPA document for purposes of meeting SEPA requirements in accordance with Washington Administrative Code (WAC) 197-11-610. Thus, to preserve this option, the FAA and the County agreed to complete the NEPA process first and to then begin the SEPA process. The County will comply with SEPA and will provide public notice in compliance with the SEPA process.

1-15   EA did not reflect the opposition of the community

Some comments stated that the EA did not reflect the opposition of the community to the proposed actions. Other comments asked what the role of community support was in the EA.

The Draft EA did not discuss community support or opposition to the proposed actions. The public hearings and comment period provided opportunity for the community to comment upon the proposed actions and projects. Comments were received both in support of the proposed actions and in opposition to the proposed action. The FAA and Snohomish County have considered all comments received concerning the Draft EA in preparing the Final EA. These comments resulted in modifications to the main body of the EA as well as the preparation of additional analysis in Appendix P, as described in General Response 1-11.

A detailed response was prepared for all substantive comments, as reflected in this document. Similar comments were grouped together and responses were then prepared and are provided in this document. Individual/unique comments were responded to individually. The general grouped responses are included in Appendix S while the individual responses are provided either at the bottom of the letter/email or on the page following the letter/email in Appendix Q. Comments obtained at the hearings were responded to in Appendix R. The Final EA reflects changes that were made in the Draft EA based on public and agency comments. The next steps for the EA process are described in General Response 1-6.

1-16   How will the proposal be funded?

Some comments asked how the proposal would be funded and whether this would be a good use of public funds. The operations specifications for air carrier operations and the amendment to the Federal Aviation Regulations (FAR) Part 139 certificate do not require FAA or County funding. Preparation of the NEPA documentation was funded through the FAA Airport Improvement Program (AIP) of the Aviation Trust Fund and Airport funds. The airlines and the FAA would be responsible for their own administrative actions. The modification and expansion of the terminal building is estimated to cost approximately $3 million. Snohomish County has

2 The Trust Fund is generated through fees on aviation activities such as passenger tickets and aircraft parts.
not yet decided how the proposed modular terminal addition will be funded. Options for funding the terminal development and the specific approach to the terminal funding will be determined during negotiations with the airlines to reach agreement on a lease or license.
**ISSUE 2, BACKGROUND**

### 2-1 MRD document

Some comments cited the “mediated role determination” as an agreement or promise by the County that Paine Field would never have commercial service. In some instances, the commenters stated that they moved to the area because of the promise that commercial service would never be implemented. The May 16, 2007 Executive Summary of the Report on the Mediated Role Determination for Paine Field states the following:

In 1978 at the request of Snohomish County, the University of Washington, Office of Environmental Mediation convened a panel to recommend the future role of Paine Field. The “mediated role determination” (MRD) panel suggested that general aviation and commercial aeronautical work (such as Boeing’s Everett plant) be the dominant uses of Paine Field. The MRD Panel recommended encouraging those uses, and discouraged any uses incompatible with community harmony. The existing airport uses that would be discouraged included supplemental/charter air passenger service, large transport crew training operations, air cargo aviation, and military aviation.

In late 1978 and early 1979, the Snohomish County Planning Commission adopted the recommendations and forwarded them to the County Commissioners who adopted the recommendations with few changes. These two documents are colloquially known as the “MRD Document.”

The community and aviation business changed dramatically in the past quarter century. Populations boomed. Aeronautical technologies improved, with larger jets becoming quieter. Environmental and land use and planning laws became ever more stringent. The form of County government changed from a commission system (in which the commissioners handle both the legislative and executive functions of government) to an executive/council form of government (in which the executive leads, provides policy direction, and operates the government while an elected council decides overarching policy issues and approves the budget). The 1980s saw many disagreements around the Country between local jurisdictions and the aviation industry over noise and other impacts from a burgeoning scheduled passenger air service industry. Those disagreements led the federal government to pre-empt local attempts to control the type, frequency, and noise of scheduled passenger air service with the passage of the Airport Noise and Capacity Act (ANCA) of 1990 (49 U.S.C. 2101 et seq.). Among the requirements of ANCA was the establishment of Federal Aviation Regulations (FAR) Part 161 Notice and Approval of Airport Noise and Access Restrictions. Since the passage of FAR Part 161, only one airport has met the requirements to enable a restriction on the types of aircraft operating at that airport.
After booming through the 1990s, the economy saw a downturn with the dawn of the 21st century. The terrorist attacks on the World Trade Center in New York City exacerbated the economic problems. Boeing laid off thousands. The County Council and then County Executive Bob Drewel formed a task force to develop methods of stimulating the local economy. The task force produced an economic stimulus action plan in 2002.

The 2002 action plan called for exploration of regional air service and for specific steps to prepare for regional air service at Paine Field. This plan concerned the communities of south Snohomish County. Many south County residents believed the MRD Document forbade scheduled passenger air service and were concerned that scheduled passenger air service would disrupt and diminish the quality of life that attracted them to the area.

In 2005, County Executive Aaron Reardon formed an advisory panel of 12 community members to review and update the role of Paine Field defined by the Snohomish County Commissioners in 1978, and charged the community panel to update the MRD Document.

The community panel held its first meeting in November 2005 and heard from numerous experts on such diverse topics as land use, noise, airport operations, and airport law.

Some community panel members viewed the MRD Document as an important, fundamental social contract between the County government and the citizens and south County cities. Some of these community panel members would like to see the MRD Document rewritten to more clearly state a dislike for scheduled passenger air service.

Other community panel members believed the MRD Document has been overtaken by events and is no longer relevant. They believe the MRD Document is subsumed within Comprehensive Plans mandated by the State’s Growth Management Act and the County’s Airport Master Plan. They say the MRD Document informed the decisions made in the Comprehensive and Master Plans, and the Plans now describe the appropriate role of Paine Field.

These community panel members would like to see scheduled passenger air service at Paine Field and felt such service would drive economic development and provide a substantial convenience to users. This perspective was countered by other community panel members who vehemently disagreed, arguing no evidence supported the claim that scheduled passenger air service would stimulate economic development and claiming that scheduled passenger air service would devalue property and diminish a cherished quality of life.

The panel completed its charge in December 2006. The community panel substantially agreed on how to update the language, though some felt no need to update the MRD Document at all. For example, the community panel generally agreed that references to military aircraft operations could be deleted because Paine Field no longer hosts a military aviation unit.
The efforts of the community panel identified three primary, fundamental factors influencing the future role of the Snohomish County Airport (Paine Field):

1. Current federal law does not allow the County to prohibit or limit scheduled passenger air service.
2. Current federal law does not require the County to encourage or subsidize scheduled passenger air service.
3. The County can and should insist that an airline pay its own way and mitigate its impacts.

The MRD is advisory in nature. As stated previously in General Response 1-1, federal law does not allow the County to prohibit or limit scheduled passenger air service.

**2-2 Boeing reaction to the Proposed Project and effect of the Project on Boeing**

Some comments expressed concern that the proposed actions may negatively affect Boeing operations and/or cause Boeing to relocate facilities to other airports or other states. According to a Boeing Company letter sent to County officials on January 8, 2009, “Boeing would not be negatively impacted by the addition of commercial air service to Paine Field.” Boeing also expressed concern in the letter that if Snohomish County were to refuse airline service at Paine Field, the FAA could withhold future airport improvement funding. For further description of these issues please see General Responses 1-1 and 1-4.

**2-3 Airport Master Plan**

Some comments asked about the purpose of the Airport Master Plan and its relation to the analysis in the EA. Other comments indicated that the EA was not consistent with the Master Plan.

The Airport Master Plan is a plan for long-term physical development that may be needed at the Airport. The Airport Master Plan’s purpose is to reserve areas for potentially necessary facilities and to assess how airport land is best used in consideration of anticipated future demand. Airports typically undertake preparation of a Master Plan every 5-10 years in response to changing local and national conditions. Snohomish County completed its most recent long-range plan in 2002 for Paine Field. The 2002 Airport Master Plan included a list of projects to be implemented over 20 years and other projects to be implemented as dictated by demand. One of the projects scheduled to be implemented when demand materialized was a commercial passenger terminal project. As activity levels have changed at the Airport, the County has pursued recommendations in the Plan. Until receiving the request for service from Horizon and Allegiant, there was no need to develop the commercial passenger terminal project.

Some comments compared the forecasts included in the EA to the forecasts included in the 2002 Airport Master Plan. Some comments implied that amending the Airport’s Federal Aviation Regulations (FAR) Part 139 operating certificate enables an uncalculated and unanalyzed number of air carrier operations and that the forecasts included in the Airport Master Plan should be analyzed rather than the forecasts included in the EA. Many conditions have changed since
the forecasting effort for the 2002 Master Plan was conducted. As such, the FAA required a new forecasting effort for this EA based on new conditions and the information provided by the air carriers (Horizon Air and Allegiant Air). In addition, because the proposed action would result in air carrier service at an airport that does not presently have service, two forecasts were required – one that reflected the No Action and the other reflecting activity with the proposed actions. These forecasts were reviewed and approved by FAA as described in more detail in Appendix G of the Draft and Final EA. The preferred forecast in the 2002 Airport Master Plan was the regional low forecast (Scenario 3) which indicated approximately 10,861 passenger air carrier operations by 2016. By comparison, the forecasting effort for the Final EA indicated approximately 12,055 passenger air carrier operations by 2018 which is only slightly higher than the Master Plan forecast. See also General Response 1-11.

Some comments also recommended that the EA consider either the regional high or the national high scenarios included in the Airport Master Plan and evaluate the environmental impacts of those scenarios. Neither Snohomish County, nor the FAA has any information that would indicate that either the regional high or the national high scenarios included in the Airport Master Plan are reasonably foreseeable. For information related to the environmental impacts related to the maximum capacity of the proposed terminal, please see Appendix P of the Final EA. For more information regarding the Master Plan and the proposed terminal scenarios, please see General Response 3-5.
ISSUE 3, PROJECT AND PURPOSE AND NEED

3-1 What is the purpose and need for the action or project?

Some comments raised questions concerning the purpose and need for the proposed Federal actions and the need for the County to accommodate commercial passenger operations beyond that forecast by the two airlines proposing service at Paine Field. The purpose and need are explained on Pages A.1 through A.4 in the Final EA. The purpose of the proposed action is to allow passengers to fly between Paine Field and Portland, Spokane and Las Vegas. The need for the proposed actions is to meet an unmet demand for commercial service within the area, as identified by Horizon and Allegiant Air. The County is evaluating the development of a new passenger terminal to satisfy this demand. The FAA must review amendments to operations specifications and is required to either grant or deny the amendment to the operations specifications based on a number of criteria. The FAA will review the requests from both Horizon Air and Allegiant Air for the FAA to amend operations specifications to allow scheduled commercial air service to Snohomish County Airport/Paine Field to ensure that any amendments to the FAR Part 139 operating certificate meets all safety standards.

Activity levels beyond what is forecast are not considered reasonably foreseeable and are not pertinent to the purpose and need of the proposed project. For more information on what reasonably foreseeable actions were determined and the effects of these actions, please see General Responses 1-11 and 6-1. Also, the potential addition of new carriers providing service at Paine Field would require additional environmental review, as described in General Response 3-14.

3-2 What are the effects of the Proposed Project on general aviation?

Some comments questioned the effect of the proposed actions on general aviation operations at Paine Field. As indicated in Table B2 of the Final EA, passenger air carrier operations are expected to be approximately 13,931 by 2018 out of a total of 122,127 aircraft operations. In other words, with the proposed actions, air carrier operations are expected to account for less than 12 percent of total aircraft operations. General aviation operations are expected to total 104,479 operations in 2018 regardless of whether or not the proposed actions are implemented. Thus, the initiation of commercial service is not expected to affect the level of general aviation operations at Paine Field. Furthermore, the Annual Service Volume (ASV), or the number of aircraft operations that an airport can accommodate without undue delay, was determined to be 367,000 annual operations. As Paine Field would operate well below the ASV with or without the proposed actions, impacts to general aviation operations due to commercial service are not anticipated.
3-3 Concerns that only half of the activity was considered

Several comments stated that there was confusion over the term “enplanements”, and that the activity reported is only half of what should have been considered in the analysis.

Enplanements refer to passengers boarding flights, deplanements refer to passengers that get off the aircraft on arrival, and total passengers refers to both enplanements and deplanements. The Draft and Final EA used total passengers in the assessment. Similarly, total operations (the sum of all arrivals and all departures) were used. This confusion appears because a standard reporting of airport activity often occurs through the use of enplanements to enable comparison of one airport to another. However, for purposes of assessing the effect of the Airport and the proposed actions, enplaned and deplaned passengers (total passengers) and total operations were included. Performing environmental assessments using total passengers and operations is standard practice in FAA NEPA documents.

3-4 EA Conflicts with proposed terminal in Airport Master Plan

Some comments suggested that the proposed terminal expansion conflicts with the planned permanent terminal in the Airport Master Plan. The County’s proposed project reflects construction of a modular terminal to accommodate the proposed air service. The alternative to construct a larger, more permanent terminal was considered in the EA and is described on Page B.5 of the EA.

The 2002 Airport Master Plan facility requirements were a conservative estimate of spatial needs based on then forecast growth in activity. The Master Plan forecasts were not based on actual airline derived passenger projections, but were based on generalized “rule of thumb” airport planning estimates. The Master Plan used this approach, because at the time, there was not a specific air service proposal, and thus the needs of a possible carrier could not be precisely anticipated. This resulted in the Master Plan space requirements that overestimated the space that may be required so that adequate room was reserved on the ALP to accommodate a terminal. Recognizing that the Airport currently meets the requirements for both aircraft parking and automobile parking spaces, the County decided that the larger, more permanent terminal and parking facilities recommended in the Airport Master Plan and shown on the ALP was not warranted to accommodate the air service activity proposed by Horizon Air and Allegiant Air. A more detailed evaluation of the terminal needs was prepared based on the anticipated activity forecast by Horizon and Allegiant Airlines, which indicated a terminal building smaller than that reserved on the ALP. Given the uncertainty of the success of the service, the County proposes the development of a semi-permanent modular terminal. There are many examples throughout the industry of air service starts and stops as well as airports building terminals only to have airlines cease operations and the terminal goes unused.

Some comments also suggested that because a larger terminal is shown on the Airport’s ALP, the expansion of commercial service that might operate within this larger terminal is reasonably foreseeable and should be addressed in this EA. The purpose of an Airport Master Plan is to reserve space for potentially needed future facilities and the presence of a facility on an ALP does not indicate that demand for that facility is imminent or reasonably foreseeable. For
information regarding the forecasts used in the EA and the Airport Master Plan, please refer to General Response 2-3 and 3-13.

3-5 Why was 2016 selected as the future year?

Some comments stated that there would be growth beyond the Draft EA future year (2016) and that those future operations should be analyzed in the EA. The comments questioned why 2016 was selected as the future year and not additional dates further into the future.

Neither the NEPA nor Council on Environmental Quality (CEQ) regulations contain requirements about specific years to be evaluated. Rather, these regulations indicate that NEPA documents should address the reasonably foreseeable future (See General Response 1-11). The only reference to analysis of project impacts beyond five years in FAA environmental guidance is in Section 14 entitled Noise, of Appendix A in FAA Order 1050.1E. Paragraph 14.4g. states that “DNL (Day-Night Noise Level) contours, grid point, and/or change-of-exposure analysis will be prepared for the following: (1) Current conditions; and (2) Future conditions both with and without (no action) the proposal and each reasonable alternative. Comparisons should be done for appropriate timeframes. Timeframes usually selected are the year of anticipated project implementation and 5 to 10 years after implementation. Additional timeframes may be desirable for particular projects.”

The year 2016 was selected, in part, because it is the concurrency timeframe required under the Snohomish County Unified Development Code (SCC30.66B.155) as well as the timeframe required in accordance with the Clean Air Act General Conformity analysis years (based on the year of attainment/maintenance). The Draft EA considered noise impacts, in accordance with FAA guidance, for the first year of implementation, 2010, and for one future year, 2016, both with and without the proposed activity levels. There were a number of reasons that this timeframe was considered reasonable and appropriate. First, the information from both Allegiant Air and Horizon Air (Appendix A of the EA) was given to the County in two year increments, starting with year 1, and continuing with years 3 and 5. The forecasts of aviation activity (Appendix G) were based on these projections supplied by the airlines.

Due to the timeframe required to respond to comments on the Draft EA and changes in operational activity at the Airport during that time, the aviation activity forecasts and analysis years from the Draft EA were updated prior to the publication of the Final EA. In the Final EA, 2008 remains the base year or existing year, while 2013 was considered the initial year of commercial airline service, and 2018 was considered the future year for applicable environmental consequence analysis.

The growth rates beyond 2018 (if any) cannot be accurately predicted at this time. It is unclear whether or not the air service would be successful, or if successful, how quickly the air service would increase. Such increases would be dependent on area residents choosing to fly using commercial service at Paine Field (See General Response 3-1).
In response to concerns about future activity levels, the FAA requested that an additional appendix be prepared that identifies the operating capacity of the proposed terminal and the associated environmental effects. These issues are documented in Appendix P.

3-6 There should be an alternative future activity scenario

In response to comments received concerning alternative activity scenarios that might arise with the amended Part 139 certificate and commercial passenger terminal, an expanded analysis was prepared for the Final EA. This analysis in Appendix P, considers the theoretical maximum level of operations that could occur at the proposed terminal and the resulting environmental effect. For more information see General Responses 1-11 and 3-15.

3-7 Parking capacity

Some comments indicated that the EA failed to address parking needs of the passengers or that a future parking plan was not provided. The vehicle parking requirements associated with the proposed actions were identified using generally accepted airport planning practices and estimates of parking demands. The County determined that the existing number of vehicle parking spaces is adequate based on the anticipated passenger demand. As described on Page B.7 of the EA, Snohomish County shows a Uniform Building Code (UBC) requirement of 115 parking spaces for buildings similar in size to the proposed terminal and 141 spaces required for the terminal, the airport office, and Precision Engines (a private business located adjacent to the terminal and airport office) combined.

FAA Advisory Circular (AC) 150/5360-13 Planning and Design Guidelines for Airport Terminal Facilities indicates that between 1 space per 500 to 1 space per 700 enplanements is a general rule of thumb for estimating parking requirements for airports. Estimations using that guidance would equate to 160 to 224 spaces for the 112,000 enplanements in 2013 and 340 to 476 spaces for the 238,200 enplanements in 2018. FAA AC 150/5360-9 Planning and Design of Airport Terminal Facilities at Non-Hub Locations, Figure 6-2 indicates 340 to 440 parking spaces would be required to meet the need for the total 238,200 estimated enplanements in 2018.

There are currently six parking areas near the terminal as follows:

1. SE lot with 70 spaces dedicated to Precision and Aviation Technical Services (ATS) parking.
2. Adjacent to the existing C1/C2 terminal building with 30 spaces dedicated to airport staff and Precision parking.
3. Main lot with 177 spaces.
4. North lot with 102 spaces.
5. C4 lot with 35 spaces.

Of these six lots, only the last four can be used for air carrier passenger vehicle parking, enabling space for 364 cars, or 1 space per 308 enplanements in 2013 and 1 space per 654 enplanements.
in 2018. Therefore, the available parking stalls are expected to meet the requirements for parking.

3-8 Increase in rental cars/rental car agencies

Comments were received about the use of rental cars or the increase in rental car agencies as a result of the proposed actions. Enterprise Rent-A-Car currently provides service at Paine Field to general aviation users of the Airport out of Building Number C84. Enterprise currently rotates cars to Paine Field from their downtown Everett lot as needed. No additional proposals or letters of interest from rental car agencies have been received to date. However, it is possible that additional rental car agencies might consider providing service at Paine Field if commercial service is initiated. If additional rental car facilities would be constructed, a review would be conducted at that time to determine if a modification to the Airport Layout Plan (ALP) would be needed, thereby triggering a federal action, which in turn would require NEPA compliance. Until a proposal for additional rental car space is received, such increases are not reasonably foreseeable.

3-9 Public transportation options should be considered

Comments suggested that more analysis of public transportation options, including bus service and light rail service, should be included in the alternatives chapter.

Local public transportation is technically not an alternative to regional air service. Improvements to local public transportation may, however, facilitate improved access to other airports like Bellingham or Sea-Tac. This alternative is addressed on page B.4 of the EA within the section “Use of Other Area Airports.” This alternative is also represented by the No Action Alternative because with the No Action Alternative, passengers wishing to travel by air are required to use other area airports and either use public transportation or private surface vehicle travel. With or without the proposed actions, neither the FAA nor the County can require passengers to access Paine Field or other airports using public transportation.

3-10 What is the capacity of the airport?

Some comments requested consideration of the maximum operational capacity of the airfield in the EA.

The capacity of the airfield system was analyzed and disclosed in the 2002 Airport Master Plan in accordance with FAA Advisory Circular 150/5060-5, Airport Capacity and Delay. The Annual Service Volume (ASV) is a reasonable estimate of an airport’s annual capacity (defined as the level of annual aircraft operations that would result in an average annual aircraft delay of approximately one to four minutes). According to the Master Plan, under current policies and practices, the Airport has an ASV of approximately 367,000 operations. In 2008, the Airport recorded approximately 143,722 annual operations, or approximately 39 percent of the calculated capacity. Given the dramatic decrease in general aviation activity at the Airport in 2010, the Final EA forecast (Appendix G) indicates the Airport only reaching 122,127 total operations by 2018 or approximately 33 percent of annual capacity. Consideration or analysis of
367,000 annual operations is not considered appropriate because neither the County nor the FAA has received any indication of interest to provide passenger service beyond that proposed by Allegiant Air and Horizon Air. Consequently, analysis of environmental impacts resulting from commercial operations and enplanement levels that are not reasonably foreseeable is considered speculative.

3-11 What is the capacity of the terminal?

Some comments requested consideration in the EA of the maximum operational capacity of the proposed modular terminal building expansion.

The capacity of the proposed terminal expansion was estimated and disclosed in Appendix K of the Draft EA, as described in General Response 1-11. Two estimates of terminal capacity were completed, the maximum capacity of the terminal and the realistic capacity of the terminal. The maximum capacity estimate was based on the capacity of the terminal’s gates and a range of departures per gate. Using a number of standard industry assumptions, the capacity range was determined to be between 252,000 to 401,600 annual enplaned passengers. In other words, 401,600 annual passengers boarding aircraft is considered the maximum theoretical capacity of the proposed modular terminal expansion. A more realistic capacity considers the mix of aircraft which might actually serve the Airport based on predicted fleet mix. In consideration of the mix of commercial service aircraft expected to use the facility, the realistic capacity of the modular terminal expansion was estimated at 294,000 annual enplanements.

To respond to comments concerning this issue, an analysis was added to the Final EA (in Appendix P) to examine the probable environmental effects associated with the maximum theoretical terminal capacity. See also General Response 3-15.

3-12 What is the relationship of the two terminals?

Some comments mentioned the two separate terminals shown in Figure B2 of the Draft EA and some of the comments suggested that the capacity of both terminals need to be disclosed. The base map used in Figure B2 of the Draft EA was the existing, FAA conditionally approved Airport Layout Plan (ALP) for Paine Field. Because the conditionally approved ALP included the recommendations of the Airport Master Plan, it showed a possible future passenger terminal. That terminal is conditionally approved because it would still require a NEPA review, separate from this EA. The Airport Master Plan forecasts indicated that a level of commercial service and enplanements might occur at Paine Field, at a level greater than what could be accommodated by the existing terminal building. Consequently, during the Airport Master Plan process, area and space were reserved for a future terminal and vehicle parking facilities to accommodate that commercial service activity. See also General Response 3-5.

Following receipt of requests from Horizon Air and Allegiant Air to initiate commercial service, the County decided that a terminal facility similar to the Airport Master Plan/ALP terminal was not warranted. An alternative to the Airport Master Plan terminal building was to provide a modular expansion of the existing terminal building. This is further described on Pages B.2 through B.6 of the EA.
Two terminals would not be constructed to accommodate the proposed service at Paine Field. Rather, the modular terminal expansion of the existing terminal would be constructed instead of the future passenger terminal considered during the Master Plan process and subsequently shown on the ALP.

3-13 What is a Class I Airport? Explanation of Federal Aviation Regulations (FAR) Part 139

Some comments requested clarification on the term Class I airport and an explanation of Federal Aviation Regulations (FAR) Part 139.

The FAA is required by 14 CFR Part 139 to issue airport operating certificates to airports that:

- Serve scheduled and unscheduled air carrier aircraft with more than 30 seats;
- Serve scheduled air carrier operations in aircraft with more than 9 seats but less than 31 seats; and
- The FAA Administrator requires an airport to have a certificate.

In 2004, the FAA revised FAR Part 139 to create four classes of operating certificates. Prior to this revision, certificated airports could have either a full or a limited operating certificate. Paine Field has had a full operating certificate since 1974. The certificate was revised in 2005 as a Class IV certificate because at that time there were no scheduled large air carrier operations at the Airport. Part 139 does not apply to airports at which air carrier passenger operations are conducted only because the Airport has been designated as an alternate airport. Airport Operating Certificates (AOC) serve to ensure safety in air transportation. To obtain a certificate, an airport operator must agree to certain operational and safety standards and provide for such things as firefighting and rescue equipment. These requirements vary depending on the size of the airport and the type of flights available.

Class I airports include airports serving all types of scheduled operations of air carrier aircraft designed for at least 31 passenger seats (large air carrier aircraft). These airports currently hold an AOC and may serve any air carrier operations covered under Part 139. Accordingly, the operators of these airports must comply with all Part 139 requirements. The operating certificate at Paine Field would be changed to a Class I Airport as part of the proposed Federal actions assessed in the EA.

Class II airports include airports that currently hold a Limited AOC (or airports that have maintained an AOC after loss of scheduled large air carrier aircraft service) are either Class II airports or Class IV airports. Class II airports are those airports that serve scheduled operations of small air carrier aircraft and unscheduled operations of large air carrier aircraft. Class II airports are not permitted to serve scheduled large air carrier operations.

Class III airports are airports that serve only scheduled operations of small air carrier aircraft. As specified in the authorizing statute, airport certification requirements are not applicable to certain airports in the State of Alaska.
Class IV airports that currently hold a Limited AOC (or airports that have maintained an AOC after loss of scheduled large air carrier aircraft service) are either Class II or Class IV airports. Class IV airports are those airports that serve only unscheduled operations of large air carrier aircraft. Air carrier operations are so infrequent at these airports that in the past, FAA only required them to comply with some Part 139 requirements. This continues to be the case, but new operational requirements have been added along with modifications to the Airport certification process and other administrative changes. The proposed actions in the EA include an approval to the FAR Part 139 operating certificate for Paine Field recategorizing the Airport from its existing classification as a Class IV airport to a Class I airport.

The change to a Class I airport would enable Paine Field to have scheduled air carrier aircraft operations at the Airport and Horizon and Allegiant could potentially increase operations beyond the projected number. However, if carriers other than Horizon and Allegiant would want to start service at Paine Field, additional environmental review would be required. For additional information on what other actions would require additional environmental review, please see General Response 3-14.

3-14 What actions will require additional environmental review?

Some comments asked if this would “open the door” entirely to unconstrained commercial air service actions and what would require additional environmental review prior to implementation. Such review could be one of the following levels of Federal environmental review:

- Categorical Exclusion (CatEx)
- Environmental Assessment (EA)
- Environmental Impact Statement (EIS)

Federal actions that may require further environmental review include:

- An operations specifications amendment request by another airline to begin service to Paine Field.
- An operations specification amendment to add a new aircraft type by an existing airline.
- Additional city destinations not currently covered by Horizon’s or Allegiant’s operations specifications.
- FAA funding for a new or expanded terminal building beyond that proposed in this EA or other airport facility development.

Additional service by either Horizon Air or Allegiant Air to the cities included in their request letters in Appendix A of the EA or service to other cities included in the airlines’ approved operations specifications would not constitute a Federal action and would not likely require additional environmental review unless FAA funding of further terminal expansion was required to accommodate that service or a new aircraft type was proposed.
 ISSUE 4. ALTERNATIVES

4-1 Alternative airports should be used

Some comments requested that other airports, such as Sea-Tac Airport, be used in lieu of Paine Field. The airlines’ use of another airport other than Paine Field was examined as part of the Alternatives Analysis in Chapter B of the EA.

The use of other area airports by both Horizon Air and Allegiant Air in place of Paine Field is reflected in the No Action Alternative because Horizon Air already offers scheduled commercial air service at Sea-Tac Airport, approximately 30 miles south of Paine Field, and Bellingham International Airport, located approximately 74 miles north of Paine Field. Allegiant Air offers scheduled commercial air service currently at Bellingham International Airport. There has been no indication from these airlines that, should the proposed actions not be implemented, they would initiate service to any other area airport beyond those used today. Further, Snohomish County is not aware of any airport in the area with sufficient runway length that is specifically marketing itself to receive air carrier service other than the airports that Horizon and Allegiant are already operating as reflected in the No Action Alternative. Therefore, this alternative is not prudent and feasible, nor would it meet the purpose as described in Chapter A of the EA. The FAA cannot require airlines to choose one airport over another and therefore, this is not a viable alternative to the Proposed Action.

4-2 What is the relationship of the Proposed Project to WSDOT’s Long-Term Air Transportation Study (LATS)

Some comments asked about the relationship of the airline proposals and the EA to the recently completed study by the Washington State Department of Transportation (WSDOT) known as the Long-Term Air Transportation Study (LATS). LATS was a strategic planning effort based on the first comprehensive review of the aviation system in the State of Washington in over two decades. The result of the study was a set of realistic recommendations to address the state’s future aviation needs. One of the identified future aviation needs was additional airside and landside capacity for scheduled commercial air service. LATS recommended consideration of other airports in the Puget Sound Area with the potential to absorb future commercial capacity including Snohomish County Airport/Paine Field, Olympia Regional Airport, King County International Airport/Boeing Field, and Bremerton National Airport. However, the report qualified the recommendation that these airports could provide additional capacity by stating that the provision of commercial service at these airports is dependent on the interest of the airlines.

The planning process for the LATS included several regional public meetings in July 2008 and March 2009. Concern was expressed at these meetings and in written comments about the potential impacts of commercial service at Snohomish County Airport/Paine Field and at Olympia Regional Airport. Participants encouraged the Aviation Planning Council to explore non-aviation alternatives to relieve capacity for in-state travel and alternatives to airport expansion or new airport constructions. The purpose of the proposed actions at Paine Field is not to increase capacity or to provide regional capacity relief. Rather the purpose of the Federal action by the FAA is to evaluate the requests from both Horizon Air and Allegiant Air for the
FAA to amend operations specifications to allow scheduled commercial air service to Paine Field, to approve an amendment to the Federal Aviation Regulations (FAR) Part 139 operating certificate for Paine Field and the construction of the modular terminal.

4-3 What is the demand for this proposal and how does it fit with regional planning?

Some comments questioned whether regional demand was sufficient to support commercial service at Paine Field. Other comments suggested that additional regional planning and analysis of the regional demand for air service should be conducted.

The decision to initiate commercial service at an airport is a business decision by the airlines. Other than to ensure safety, neither the Airport Sponsor nor the Federal government controls where, when, and how airlines provide service. Should demand prove to be lower than that projected by the airlines, the airlines would likely choose to reduce the number of flights or cease service at Paine Field.

The purpose and need as identified in this EA is not to address the concerns related to regional demand/capacity. Rather the EA addresses the responsibility of the FAA and County in responding to the request of two carriers to begin service at the Airport. Per Council on Environmental Quality (CEQ) and FAA guidance, alternatives considered in NEPA process must address the underlying purpose or need.

In this case, the EA has considered the possible use of other airports (See General Response 4-1). However, as noted, if the carriers who are seeking to use Paine Field wished to serve other area airports they are not currently serving, they would make the request to those airports. These two airlines have identified demand for commercial air service at Paine Field and have consequently proposed to initiate service to accommodate that demand. In accordance with Federal grant assurances, the County has limited discretion to deny an airline request to operate at Paine Field. Since additional analysis on regional demand does not meet the purpose and need identified in this EA, it is not warranted.

For comments regarding the capacity at other airports, please see General Response 4-4.

4-4 Relationship between capacity at other airports and Paine Field

Some comments question the relationship between unused capacity at other airports and the proposed service at Paine Field. Comments suggested that expanded airline service at Sea-Tac Airport is a better alternative than the introduction of commercial service at Paine Field.

In regard to the recent "capacity" improvements at Sea-Tac, the third runway was not constructed to relieve or otherwise accommodate projected demand at Paine Field. The use of the third runway is separate from the purpose and need for the proposed action considered in this EA. The proposed Federal actions that are the subject of this EA respond to requests from two specific airlines to initiate service at Paine Field.
Regarding the “demand” for operations at Paine Field, the airlines’ use of another airport other than Paine Field was examined as part of the Chapter B, Alternatives Analysis, in the EA. As described in General Response 1-1, the FAA and Snohomish County cannot require an airline to serve a specific airport nor can they restrict an airline from a specific airport if the airport is a public use airport and the proposed aircraft can safely operate at that airport, regardless of which airport has more unused capacity.

4-5 Other modes of transportation may be better alternatives

Some comments suggested that either high speed rail, bus service, or other modes of transportation would be a better alternative to initiating commercial air service at Paine Field.

Use of public transit is discussed in General Response 3-9 and local public transportation is technically not an alternative to regional air service. Other modes of transportation were not considered in the alternatives analysis as they do not meet the purpose and need for the proposed Federal actions; the decision to take different forms or modes of transportation rests with the passenger, and under the current Federal regulatory process, neither the FAA or the County can require passengers to drive or take other surface modes (train or bus).

4-6 What does the term “Preferred Alternative” mean?

Some comments asked about the use of the term "Preferred Alternative."

Council on Environmental Quality (CEQ) defines the term Preferred Alternative as “the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors.” While the Draft EA was prepared by the Airport Sponsor, it was closely coordinated with the FAA to ensure that the selection of the preferred alternative would address the FAA’s responsibilities under NEPA. The other alternatives reviewed in Chapter B of the EA were determined not reasonable as they did not meet the purpose and need. The Draft EA identified the draft Preferred Alternative so that the public and agencies would have an opportunity to comment upon that selection. A final confirmation of the Preferred Alternative will be made if the FAA accepts and signs the Final EA. The Preferred Alternative is also referred to as the Proposed Action, the project or the proposed project in the EA.

ISSUE 5. AFFECTED ENVIRONMENT/EXISTING CONDITIONS

5-1 Existing aircraft noise concerns

Some comments discussed the level of existing noise and its impact on quality of life. As stated on page C.16 of the Draft Environmental Assessment (EA), existing aircraft related noise exposure was defined in the EA through the use of noise exposure maps or contours prepared with the Federal Aviation Administration’s (FAA’s) Integrated Noise Model (INM), version 7.0a. The INM is a state-of-the-art, FAA approved software program used to model the noise exposure levels from aircraft operations and engine testing and produce contours of equal noise energy. These contours are presented using the 65 Day-Night Average Sound Level (DNL) noise contour metric where 65 DNL represents significant aircraft noise levels.

DNL metric measures the overall aircraft noise experienced during an entire (24-hour) day. DNL calculations account for the sound exposure level of aircraft, the number of aircraft operations and a penalty for nighttime operations. In the DNL scale, each aircraft operation occurring between the hours of 10 p.m. to 7 a.m. includes a sound level penalty to account for the higher sensitivity to noise in the nighttime and the expected further decrease in background noise levels that typically occur at night. DNL provides a numerical description of the weighted 24-hour cumulative noise energy level using the A-weighted decibel scale, typically over a period of a year.

Because DNL is a cumulative metric, while areas can receive single event noise levels above 65 dB, it is the average of these noise levels over the course of a year that provides for the 65 DNL contour. Although the FAA recognizes that noise occurs outside of these contours, the 65 DNL contour has been federally accepted at the level at which residential and other noise sensitive land uses are non-compatible with aircraft noise. Because the existing 65 DNL noise contour, shown on Figure C6, page C.18 of the EA, does not encompass any noise sensitive land uses (homes, schools, churches, etc.) the existing land use in the vicinity of the Airport is considered compatible with aircraft operations and aircraft generated noise under the federal guidelines. See General Response 7-6 regarding the existing and future noise impacts.

5-2 Current curfew is broken

Some comments stated that the Airport currently operates under a noise curfew and that the curfew is already broken.

The County has a voluntary noise abatement program that discourages touch-and-go flights and repetitive training flights by jet, turboprop, and large propeller aircraft and requires air carrier aircraft with more than 30 passenger seats between 9:00 p.m. and 7:00 a.m. to receive prior permission from the Airport Director. The voluntary noise abatement program does not prevent aircraft from operating at the Airport and is not a mandatory noise curfew as suggested by some comments. The program requests those aircraft to have prior permission during those hours. Other aircraft are still allowed to depart/arrive at the Airport during those times without the request of prior permission. See also General Response 7-11.
5-3 Aircraft currently fly low and very close to houses

Some comments mentioned that aircraft already fly very low, and close to houses.

The height of aircraft on final approach to a runway or departure from a runway is controlled by the FAA. The standard traffic pattern altitude for small aircraft is 1,600 feet Mean Sea Level (MSL) while the traffic pattern altitude for large aircraft is 2,000 feet MSL. An airfield traffic pattern is a standard path followed by aircraft on takeoff or landing while maintaining visual contact with the airfield. Aircraft typically begin descending from pattern altitude in the downwind leg of the pattern when landing and on a 3-degree approach slope for the final leg of the pattern.

According to Title 14, Code of Federal Regulations, Section 91.119, Minimum safe altitudes; in general, there are minimum standards for operations of fixed wing aircraft (excluding when necessary for takeoff/landing). Over congested areas, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet is required, except for under take-off and landing procedures. Complaints on low-flying aircraft may be filed with the FAA, Office of Flight Standards, which monitors aircraft operations. Once the facts have been recorded, an FAA aviation safety inspector attempts to identify the offending aircraft operator. For more information on low flying aircraft complaints, please visit the following website: http://www.faa.gov/about/office_org/field_offices/fsdo/

5-4 Existing Traffic

Some comments indicated that existing surface traffic in the area is already very bad and that additional traffic analysis should be included in the EA.

The surface traffic analysis was based upon the existing level of traffic compared to the future levels under the Preferred Alternative. Local jurisdictions establish thresholds which determine if a road segment or intersection is operating at an acceptable level or at a deficient level of service (see General Response 8-1). Currently all roads analyzed are operating at acceptable levels of service. However, there are currently two intersections that operate at deficient levels of service and a total of four intersections that are anticipated to operate at deficient levels of service in the future whether or not the proposed action is implemented. These four intersections are SR-525 at Beverly Park Road (WSDOT Intersection), SR-99 at Airport Road (City of Everett Intersection), the I-5 northbound ramps at 128th Street SW/SR-96 (WSDOT intersection), and SR-525 at 84th Street SW (City of Mukilteo intersection). The City of Everett has identified that capacity improvements for single-occupant vehicles to the intersection of SR-99 at Airport Road are not practical due to the existing land configuration and lack of right-of-way. The project’s impacts to the WSDOT intersections will be mitigated through the WSDOT mitigation fees in accordance with the interlocal agreement between Snohomish County and WSDOT. The City of Mukilteo intersection would operate at an acceptable level of service with optimized timings, which may occur as part of the normal maintenance of the signal. However, the traffic mitigation fees that will be paid to the City of Mukilteo will mitigate the impacts of the proposed action.
5-5  Study Areas

Some comments questioned the boundaries used for evaluation of various resource areas in the EA and stated that expanded study areas should have been considered. Also, some comments stated that the area identified for various resource evaluations for the EA should be the same as the Airport Influence Area, as designated in the Snohomish County 2025 Comprehensive Plan.

As stated in General Response 1-8, the purpose of the EA is to analyze potential environmental impacts from the proposed Federal actions in accordance with NEPA and the associated FAA Orders. These Orders include guidance for study methodologies to identify project-related effects and thresholds of significance, which result in determining resource study areas for each environmental resource category. The analysis in the EA follows those methodologies, significance thresholds, and other guidance for determining the boundaries of resource study areas as described in the EA.

The scope of each environmental resource category is slightly different and consequently, not all study areas for these resource categories are identical. For instance, two resource study areas were examined for historic/cultural resources. The first resource study area includes the direct impact area that is limited to the ground that would be affected during construction where artifacts might be located. Therefore, the study area for that resource category is limited to the direct construction impact area where the terminal footprint is proposed. However, impact on historic properties was also examined within the context of environmental affects that would occur off airport, such as aircraft noise, outside the construction footprint. Federal guidance states that noise above a 65 Day-Night Noise Level (DNL) level is not compatible with land uses such as certain historic properties, schools, and residences.

The EA does not state that noise would not occur outside the 65 DNL contour, but rather presents the area of significant noise exposure as defined by the 65 DNL and area that would be incompatible with various land uses. Changes in the noise environment would occur outside this contour with or without the proposed actions; however, the 65 DNL contour is the federally accepted threshold of the beginning of significant aircraft noise levels and therefore is the contour used to disclose any significant impacts.

Similar to historic/cultural and noise resources, study areas were also established separately for air quality, water quality, and wildlife resources among others. For instance, the resource study area for air quality was based upon the Central Puget Sound Region airshed. Likewise, water quality impacts are considered over potentially affected watersheds, and wildlife habit impact areas are considered for the species potentially affected.

The Airport Influence Area, shown on Figure C1 of the EA, is designated in the Snohomish County 2025 Comprehensive Plan as “property within the environs of the Airport where land uses are either influenced by, or would influence the operation of the Airport in a positive or negative manner.” (See also General Response 7-14). The study area boundaries for the EA resource categories are those where the proposed actions would exert a change and where the context and intensity of the impact should be identified. Therefore, the resource areas for the EA were established following that guidance in accordance with the agency's guidance on the
individual environmental discipline. The Airport Influence Area does not coincide with the guidance regarding identifying study areas for resource evaluation.

**5-6 Sources of existing air pollution**

Some comments requested a description of existing pollution sources compared with the airport pollution sources. A number of documents identify the likely sources of emissions at airports, which typically represent the following:

- Aircraft and auxiliary power units (APU) on the aircraft
- Ground support equipment (GSE) - the vehicles that service the aircraft
- Ground access vehicles, roadways, and parking lots - the vehicles that transport passengers, employees, and goods and services that use the airport on the area roadway system
- Stationary sources - such as generators, heating and cooling systems, etc.
- Fire training
- Maintenance and construction activity

Other sources of pollution not associated with the airport and its operations are not the subject of the EA.

Information provided by the Puget Sound Clean Air Agency indicates that airport-related emissions are less than 5 percent of total Puget Sound air emissions. Surface vehicle emissions within the Puget Sound Region are the single largest source of emissions.
ISSUE 6. GENERAL PROJECT EFFECTS

6-1 Significance of Project Effects

Some comments disputed that the project-related effects would not rise to the level of the significant thresholds; comments indicated that the project would generate significant adverse effects.

As stated in General Response 1-8, the EA was prepared according to NEPA and associated FAA guidance. The Draft and Final EA identify all anticipated project-related effects associated with the proposed actions. However, while there would be project-related effects, these effects are not expected to exceed the significance thresholds identified in Appendix A of FAA Order 1050.1E, Change 1. Therefore, because these effects are not significant under NEPA, no mitigation measures are required.

6-2 How is significance defined?

Some comments suggested that either the term significance is ambiguous or that it is not well defined in the Draft EA.

FAA Order 5050.4B paragraph 9s provides the following definition:

s. Significant impact threshold. The impact level or “threshold” that the responsible FAA official uses to determine if the environmental effects of a proposed action or its reasonable alternatives would cause significant environmental effects. If FAA has established a threshold for a resource, the responsible FAA official must use that threshold to determine impact severity and context.

Note: For convenience, Table 7-1 of Chapter 7 of this Order provides the verbatim text of significant impacts in FAA Order 1050.1E, Appendix A, for many environmental resources. The Table also presents information about those thresholds to help analyze airport-related environmental impacts.

FAA defined thresholds of significance for each environmental resource category are described and explained in Appendix A of FAA Order 1050.1E Change 1. The thresholds of significance are described in Chapter D of the EA.

6-3 What are the project benefits?

Some comments questioned what the benefits of the proposed projects are and whether or not the cost outweighed the benefits.

It is important to note the purpose of the EA is not to assess the cost/benefit of the proposed actions. The effects that would be beneficial to the area are of a socio-economic nature, which are discussed in Chapter D, Environmental Consequences. The Proposed Action is not expected to significantly change the socioeconomic environment around the Airport. It would temporarily increase jobs during the construction phase and would increase use of local goods and services. There would also be a slight increase in business both at the Airport and in the vicinity of Airport Road from the increase in vehicle traffic. However, no major shifts in public service demand are expected. Overall, there would not be a significant change in the socioeconomic environment around the Airport. It is true that the airlines would likely benefit from the proposed project.
6-4 What are the quality of life impacts?

Some comments mentioned that their quality of life would be impacted due to changes in noise, air quality, and potential decreases in property value.

“Quality of life” is not a category that is specifically called out in NEPA or FAA guidance. However, the concept of quality of life is tied into several environmental resource categories addressed in NEPA documents, including noise, water quality, air quality, children’s health and safety, etc. While the proposed actions are not expected to generate significant adverse effects, there will be project-related effects. In accordance with the requirements of NEPA, the purpose of the EA is to assess and disclose the environmental impacts of the proposed action and make a determination as to the significance of the impact(s). While some of the environmental resource categories would have project-related environmental effects, as is noted in General Response 6-1, these effects would not exceed FAA defined thresholds of significance.

6-5 Are there any growth inducing or indirect effects?

Some comments asked about the secondary impacts or indirect effects of the project that could induce additional growth.

Secondary (induced) impacts are described on page D.32 of the EA. Major development projects can potentially influence induced or secondary impacts on the surrounding community. Some of these induced impacts could include the relocation of people or a substantial change to traffic patterns in the area. The analysis in the Draft and Final EA considered the induced effects of the proposed actions. Minor traffic changes are anticipated to the roadway systems in the vicinity of the Airport as presented in the Surface Transportation Section (Page D.34 of the EA) and in the Traffic Impact Analysis Report found in Appendix F, and further described in General Response 9-2. However, these traffic changes are not expected to induce growth or otherwise significantly impact the community.

The proposed actions are not considered a major development project. Due to the low number of project related commercial aircraft operations and enplanements, shifting in patterns of population movement and growth or changes in public service demands are not likely. No significant secondary impacts are expected as the result of the proposed Federal actions.

6-6 The document does not refer to “pollution”

Some comments questioned where the EA analyzed pollution impacts since the document did not refer to the word pollution.

“Pollution” is not a term used in the EA because pollution is an overarching word that refers to several separate resource categories within an EA. Pollution, by definition, could be a contamination of air, water, or soil by substances that are harmful to living organisms.\(^4\)

the EA, the air quality, noise, water quality, hazardous materials, and fish, wildlife and plants analysis, all address with different aspects of potential pollution. Therefore, per FAA Orders 5050.4B and 1050.1E, Change 1, impacts are examined based on those specific environmental resource categories, and not “pollution” as a whole. As stated in each of the sections within Chapter D, Environmental Consequences, based on federal thresholds of significance there are no expected significant environmental impacts to water quality, air quality, or noise and no significant impacts relating to hazardous materials or fish, wildlife and plants. Therefore, there are no significant impacts related to the broader category of pollution that encompasses all of the resource categories that relate to pollution.
ISSUE 7, NOISE AND LAND USE

7-1 Use of DNL

Some comments asked, “why is the Day-Night Noise Level (DNL) used as the basis for the noise analysis within the EA.”

DNL is the standard required metric for quantifying aircraft noise exposure. As a result of the 1979 Aviation Safety and Noise Abatement Act (ASNA), Congress required the FAA to select a single metric to standardize the evaluation of aircraft noise. In response to ASNA, through Federal Aviation Regulations (FAR) Part 150 Noise Compatibility Planning, FAA formally adopted DNL as its primary metric for evaluating aircraft noise to ensure consistency across the country. FAA Order 1050.1E, Change 1, Paragraph A14.1, states “For aviation noise analysis, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of yearly day/night average sound level (DNL) as FAA's primary metric.”

DNL is the 24-hour average sound level in A-weighted decibels (dBA). This average is derived from all aircraft operations during a 24-hour period that represents an airport’s average annual operational day. DNL reflects the inclusion of a penalty to each aircraft operation occurring during nighttime hours (10 p.m. to 7 a.m.). This penalty attempts to compensate for people’s heightened sensitivity to noise during this period. Significant project-related effects are defined as impacts to noise sensitive land uses at or above the 65 DNL that experience a project-related increase of at least 1.5 DNL.

DNL contours were prepared with the FAA’s Integrated Noise Model (INM), version 7.0a. The INM is a state-of-the-art, FAA approved software program used to model the noise exposure levels from aircraft operations and engine testing and produce contours of equal noise energy. These contours are presented using the 65 DNL noise contour metric where 65 DNL represents significant aircraft noise levels, and project-related significant impacts are identified based on a project-caused increase of 1.5 DNL within the 65 DNL contour for noise sensitive land uses.

Although the FAA recognizes that noise occurs outside of these contours, the 65 DNL contour has been federally accepted as the level at which residential and other noise sensitive land uses are non-compatible with aircraft noise. Because the existing 65 DNL noise contour shown on Figure C6, page C.18 of the EA, does not encompass noise sensitive land uses (homes, schools, churches, etc.), the existing land use in the vicinity of the Airport is considered compatible with aircraft operations and aircraft generated noise under the federal guidelines.

The compatibility of various land uses with noise above 65 DNL has been based on scientific research concerning public reaction to noise exposure. The Schultz curve, predicts approximately 14 percent of the exposed population would be highly annoyed with exposure to the 65 DNL. At 60 DNL, this rate of annoyance decreases to approximately 8 percent of the population would be highly annoyed. For more information on additional requests for noise
analysis, please see General Response 7-2, and for more information on perception of noise and general noise methods, please see General Response 7-3.

7-2 Noise Measurements and Supplemental Metrics requested

Some comments requested that noise measurements be conducted and that alternative noise metrics (including change in decibel) be used for the analysis. As described in General Response 7-1, the analysis of aircraft noise exposure was prepared in compliance with Federal Aviation Administration (FAA) Orders. Those orders require the use of noise exposure contours using the FAA’s Integrated Noise Model (INM) showing the area affected by 65 Day-Night Noise Level (DNL) and greater noise levels. While alternative metrics can be informative, they are often associated with further understanding the effects associated with 65 DNL and greater sound levels when noise sensitive land uses are located within the 65 DNL noise contour. While FAA guidance indicates that the use of supplemental metrics such as Lmax and Leq is warranted in special circumstances such as areas of natural quiet or sleep disturbances, the FAA has determined that in this case, use of supplemental metrics is not warranted. For more information on noise perception, please see General Response 7-3. Therefore the standard DNL metric and 65 DNL threshold would be used to determine significance of the potential impacts on noise sensitive land uses.

Noise measurements, commonly referred to as noise monitoring, is a process used to confirm and verify the accuracy of the modeled contours. Noise monitoring is not a process used to test public reaction to a proposed action.

7-3 Noise analysis methodology

Some comments were received on the noise analysis questioning the use of the INM model, and the validity of the analysis. Other comments suggested that the analysis did not include additional noise sources such as engine run-up noise.

The noise methods used in the EA comply with the FAA environmental orders concerning aircraft noise. The noise contours were developed using the Integrated Noise Model (INM) 7.0a, which was the most current INM model at the time the report was created. The operational inputs were based on the FAA approved forecasts in Appendix G.

The INM model included aircraft engine run-ups that take place on the Boeing ramp on the northeast quadrant of the Airport. The “bubbling out” of the noise contour in the south central part of the Airport and to the northeast near the Boeing ramp is a result of aircraft run-ups from Boeing operations and Aviation Technical Services (ATS) operations. Because these noise events can be quite loud, they have a substantial effect on the contour, pushing the contour out to the east. However, the proposed actions are not expected to increase or change these aircraft run-ups. Taxiing operations are not included in the noise model as the INM does not model taxiing noise because it is believed to be overshadowed by landing and takeoff noise.
7-4 Flight tracks should be shown

Some comments requested that the flight tracks be shown on maps in the EA and asked if any changes would occur to the flight tracks as a result of the proposed Federal actions. In response to this request, the flight tracks are included in Figure C6 of the Final EA. Flight tracks are not expected to change with implementation of the proposed actions.

The Integrated Noise Model (INM) uses multiple input variables such as flight track data along with fleet mix, number of operations, etc. to produce noise contours. The flight track data from the Part 150 Study was used in preparing the noise contours for the Draft and Final EA. Data from the Part 150 included both flight track location and flight track use by type of aircraft. There would not be any change to the flight tracks as a result of the Proposed Action.

7-5 Proposed commercial fleet mix

Some comments were about the type of aircraft proposed for commercial service. Some comments suggested that the Allegiant MD83 aircraft should not be allowed to operate at Paine Field because of the noise levels that it generates.

The fleet mix used in evaluating the proposed actions in the EA was based upon communications with both Horizon and Allegiant. Horizon plans on using the Q400 for the proposed service at Paine Field and Allegiant plans on using the MD83. The Integrated Noise Model (INM) noise contours were completed based on these aircraft types and therefore the contours take into account the relative “noisiness” of each aircraft. Horizon also listed the CRJ 700 as a substitution aircraft for scheduling conflicts, so 1% of the Horizon traffic was modeled for that aircraft. Both turboprops and jets already operate at Paine Field.

In the early 1980s, the FAA began issuing rules and regulations that control aircraft noise at the source, the aircraft fuselage and engines. These aircraft noise standards established by the federal government must be met by aircraft manufacturers through newly-designed engines and aircraft. The government established timetables for airlines to comply with these noise standards, commonly known as Stage 1, Stage 2, Stage 3, and Stage 4 (in the international area these stages are referred to as Chapter 1 through 4).

Full compliance with Stage 2 standards was established in January 1, 1988 (Federal Aviation Regulations (FAR) Part 36). Subsequent to this timeframe, Congress passed the Airport Noise and Capacity Act of 1990 [ANCA], PL 101-508, 104 Stat. 1388, which established two broad directives for the FAA. The first directive established a method to review aircraft noise and airport use or access restrictions imposed by airport proprietors, and the second was to institute a program to phase-out Stage 2 aircraft over 75,000 pounds by December 31, 1999. In early 2000, the International Civil Aviation Organization established the Stage 4 requirements that require newly manufactured aircraft engines to meet Stage 4 levels by December 31, 2006.
To implement ANCA, the FAA amended FAR Part 91 and issued a new FAR Part 161. Part 91 addresses the phase-out of large Stage 2 aircraft and the phase-in of quieter Stage 3 aircraft. FAR Part 161 was promulgated as a stringent review and approval process for implementing use or access restrictions by airport proprietors, such as curfews and caps on operations.

This is in keeping with one of the major reasons for ANCA, which was to discourage local restrictions more stringent than ANCA’s 1999 Stage 2 phase-out. Part 161 makes it more difficult for airports or any others to implement use or access restrictions, especially those associated with Stage 3 aircraft. These difficulties are so significant that to date there has been only one Part 161 plan approved by the FAA. This plan was approved for Naples Airport in Florida for restricting Stage 2 smaller aircraft (under 75,000 pounds). Worth noting, airport/aircraft use restrictions in place at airports before the passage of ANCA were “grandfathered” and therefore allowed to remain in place as long as the airports did not modify the restrictions making them more stringent. Airports and state and local governments are preempted from regulating the operations of aircraft, with one exception. They may exclude aircraft from an airport for noise reasons as long as the exclusion is reasonable and nondiscriminatory. In addition, it must comply with the provisions of the ANCA, through FAR Part 161, and it must not regulate military aircraft. In 2005, the FAA adopted a new noise standard for jet airplanes that ensures the latest available noise reduction technology be incorporated into new designs. This noise standard, Stage 4, applies to any person submitting an application for a new airplane type design on after January 1, 2006.

The Q400 is a Stage 4 aircraft and the MD 83 is a Stage 3 aircraft. Therefore they meet all noise regulations related to aircraft stages.

7-6 What are the existing and future noise impacts?

Some comments stated that the existing noise is already intolerable, and mentioned that the proposed project would only make the problem worse and open the floodgates for even more noise. The comments also indicated that the analysis was flawed and did not represent the true change in noise.

The analysis of aircraft noise exposure in the EA was prepared in compliance with FAA Orders 1050.1E, Change 1 and 5050.4B. Those orders require the use of noise exposure contours using the FAA’s Integrated Noise Model (INM) showing the area affected by 65 Day-Night Noise Level (DNL) and greater noise levels.

The FAA and the County have taken steps over the years to assess existing levels of aircraft noise and develop noise abatement procedures to reduce the impacts on residential and other noise sensitive areas. As a result, under current conditions (without aircraft operating in commercial service at Paine Field) there are currently no noise sensitive uses exposed to 65 Day-Night Noise Level (DNL) noise levels at Paine Field. This existing 65 DNL noise contour is shown in Figure C6, page C.18 of the EA. The 65 DNL does not encompass any noise sensitive land uses (homes, schools, churches, etc.). Therefore, as described in General Response 5-1, the existing land use in the vicinity of the Airport is considered compatible with aircraft operations and aircraft generated noise according to Federal guidelines.
With the proposed actions, a slight change in noise would occur increasing the 65 DNL contour by approximately 17 acres in 2018. As seen starting on page D.21 of the Final EA, the proposed actions and their associated projects would not result in noise sensitive uses within the 65 DNL noise exposure contour. Because no significant noise impacts would occur to sensitive land uses within the FAA defined thresholds of significance (65 DNL contour), no mitigation is required. For more information on the use of DNL please see General Response 7-1 and for more information regarding noise perception compared to this significance analysis, please see General Response 7-3.

7-7 Noise impacts on schools

Some comments stated that there will be impacts on schools from increased noise as a result of the Proposed Action.

As stated in General Response 7-1, the noise and land use impact analysis presented in the document were prepared in accordance with Federal guidelines and showed that while aircraft noise would change slightly with the proposed project (increasing the 65 DNL contour by approximately 17 acres in 2018), there would continue to be no noise sensitive uses exposed to 65 Day-Night Noise Level (DNL) or greater noise levels. No schools would be exposed to 65 DNL or greater noise levels with or without the proposed actions. Part 150 Land Use Compatibility Guidelines indicate that schools are compatible with aircraft noise levels less than 65 DNL. For comments regarding the use of additional noise metrics in the analysis, please see General Response 7-2.

7-8 Where are the schools located on the noise map?

Some comments requested that the locations of the schools be included in the EA.

In response to these comments, the locations of the schools have been placed on the noise exposure maps for both existing and future base case and with project scenarios in the Final EA. Please see Figures C4, and D1 through D6 of the Final EA. As described in General Response 7-2, use of the Lmax or Leq metric would not be warranted in this case. See General Response 7-7 for information regarding the noise impacts on schools.

7-9 What are the health effects of noise?

Some comments were received questioning the impacts of noise on public health. According to various studies and scientific research, noise can have varying effects on people. From these effects, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. These criteria are based on effects of noise on people, such as hearing loss (not a factor with typical community noise), communication interference, sleep interference, physiological responses, and annoyance.

The health effects were taken into account when the FAA was required by Congress, through the Aviation Safety and Noise Abatement Act (ASNA) of 1985, to select one metric for describing aircraft noise levels. As stated in General Response 7-1, the FAA selected the use of the Day-Night Noise Level (DNL), which is required for use in FAA NEPA documents. The DNL
reflects the Schultz curve, which predicts that approximately 14 percent of the exposed population would be highly annoyed with exposure to the 65 DNL. This annoyance level has been correlated to health effects due to stress; hearing loss would not be expected at sound levels experienced off-airport in the vicinity of Paine Field. The Proposed Action would not subject any noise sensitive land uses to exposure of 65 DNL or greater; therefore, no significant project-related noise impacts are expected.

As stated above, noise is known to have adverse effects on people and these effects have helped establish criteria to protect the public health and safety and prevent disruption of certain human activities. These criteria are based on effects of noise on people, including hearing loss, communication interference, sleep interference, physiological responses, and annoyance. Each of these potential noise impacts is briefly discussed in the following points:

- **Hearing Loss** is generally not a concern in community/aircraft noise situations, even when close to a major airport or a freeway. The potential for noise induced hearing loss is more commonly associated with occupational noise exposure in heavy industry; very noisy work environments with long-term, sometimes close-proximity exposure; or, certain very loud recreational activities such as target shooting, motorcycle, or car racing, etc. The Occupational Safety and Health Administration (OSHA) identifies a noise exposure limit of 90 dBA for eight hours per day to protect from hearing loss (higher limits are allowed for shorter duration exposures). Noise levels in neighborhoods near airports, even in very noisy neighborhoods, do not exceed the OSHA standards and are not sufficiently loud to cause hearing loss.

- **Communication Interference** is one of the primary concerns with aircraft noise. Communication interference includes interference with hearing, speech, or other forms of communication such as watching television and talking on the telephone. Normal conversational speech produces sound levels in the range of 60 to 65 dBA, and any noise in this range or louder may interfere with the ability of another individual to hear or understand what is spoken. There are specific methods for describing speech interference as a function of the distance between speaker, listener, and voice level. The following figure entitled *QUALITY OF SPEECH COMMUNICATION IN RELATION TO THE DISTANCE BETWEEN THE TALKER AND THE LISTENER* shows the relationship between the quality of speech communication and various noise levels.

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5 **Source:** *Noise Effects Handbook, EPA*
QUALITY OF SPEECH COMMUNICATION IN RELATION TO THE DISTANCE BETWEEN THE TALKER AND THE LISTENER

- Sleep Interference, particularly during nighttime hours, is one of the major causes of annoyance due to noise. Noise may make it difficult to fall asleep, create momentary disturbances of natural sleep patterns by causing shifts from deep to lighter stages, and may cause awakenings that a person may not be able to recall.

Research has shown that once a person is asleep in their own home, it is much more unlikely that they will be awakened by a noise. Some of this research has been criticized because it has been conducted in areas where subjects had become accustomed to aircraft noise. On the other hand, some of the earlier laboratory sleep studies have been criticized because of the extremely small sample sizes of most laboratory studies and because the laboratory was not necessarily a representative sleep environment.

An English study assessed the effects of nighttime aircraft noise on sleep in 400 people (211 women and 189 men; 20-70 years of age; one per household) living at eight sites adjacent to four U.K. airports, with different levels of night flying. The main finding was that only a minority of aircraft noise events affected sleep, and, for most subjects, that domestic and other non-aircraft factors had much greater effects. As shown in the following figure entitled CAUSES OF REPORTED AWAKENINGS⁶, aircraft noise is a minor contributor among a host of other factors that lead to awakening response.

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⁶ Source: Federal Interagency Committee on Aviation Noise (FICAN), 1997
Likewise, the Federal Interagency Committee On Noise (FICON) in a 1992 document recommended that sleep disturbance be assessed based on laboratory studies of sleep disturbance. This review was updated in June 1997, when the Federal Interagency Committee on Aviation Noise (FICAN) replaced the FICON recommendation with an updated curve based on the more recent in-home sleep disturbance studies. The FICAN recommended consideration of the "maximum percent of the exposed population expected to be behaviorally awakened," or the "maximum awakened."

The FICAN recommendation is shown in the following figure entitled *RECOMMENDED SLEEP DISTURBANCE DOSE-RESPONSE RELATIONSHIP* along with a more common statistical curve. The differences indicate, for example, a 10% awakening rate at a level of approximately 100 dB SEL, while the "maximum awakened" curve prescribed by FICAN shows the 10% awakening rate being reached at 80 dB SEL. (The full FICAN report can be found on the internet at [www.fican.org](http://www.fican.org).) Sleep interference continues to be a major concern to the public and an area of debate among researchers.
Physiological Responses reflect measurable changes in pulse rate, blood pressure, etc. Generally, physiological responses reflect a reaction to a loud short-term noise, such as a rifle shot or a very loud jet over flight. While such effects can be induced and observed, the extent to which these physiological responses cause harm is not known.

Annoyance is the most difficult of all noise responses to describe. Annoyance is an individual characteristic and can vary widely from person to person. What one person considers tolerable may be unbearable to another of equal hearing capability. The level of annoyance also depends on the characteristics of the noise (e.g., loudness, frequency, time, and duration), and how much activity interference (e.g., speech interference and sleep interference) results from the noise. However, the level of annoyance is also a function of the attitude of the receiver. Personal sensitivity to noise varies widely. It has been estimated that two to 10 percent of the population are highly susceptible to annoyance from noise not of their own making, while approximately 20 percent are unaffected by noise. Attitudes are affected by the relationship between the listener and the noise source (Is it your dog barking or the neighbor's dog?). Whether one believes that someone is trying to abate the noise will also affect their level of annoyance.
7-10 What potential exists for a project related increase in vibrations?

Some comments stated that aircraft noise associated with Paine Field causes vibrations in homes and some of the comments stated that these homes are located outside of the 65 Day-Night Noise Level (DNL) contour. Some comments stated objections to the potential vibrations that could result from additional aircraft activity as a result of the Proposed Action.

As shown on Figure C6 of the EA, there are no homes or other noise sensitive land uses located within the 65 DNL or greater noise exposure contour. Residences in the vicinity of Paine Field are subject to vibration associated with existing aircraft. The vibrations are caused by waves of energy emitted from both aircraft engines and the physical airframe of the aircraft as they pass through the air. Vibration, sufficient to cause structural damage, typically only occurs in areas of close proximity to the runway end, usually with areas exposed to 80 DNL and greater sound levels.7 As 80 DNL conditions do not occur outside the immediate confines of the runway ends at Paine Field, no adverse vibration effects sufficient to result in damage or hazards would be expected.

7-11 Call for noise curfew/activity restrictions

Some comments called for a noise curfew, or for activity restrictions or other measures to mitigate the impacts of the proposed project and general noise at the Airport.

Because there are no noise sensitive land uses within the 65 Day-Night Noise Level (DNL) and there are no project-related effects that rise to the level of being significant, no mitigation measures are required. See General Response 1-5.

In terms of restrictions or curfews, the Airport Noise and Capacity Act (ANCA) of 1990 restricted local Airport Sponsor’s ability to impose a curfew or restrict activity at a public use airport. Restrictions or required curfews can put an unreasonable burden on interstate commerce (which is an area of regulation reserved for the Federal government), and also results in discriminatory regulation that violates the tenets of the constitution. Therefore, these types of restrictions cannot be put into place at a public use airport. However, in 1997, the Airport enacted a voluntary noise abatement procedure for large commercial aircraft with more than 30 passengers from 9 p.m. to 7 a.m., where aircraft cannot land or take off without receiving prior permission from the Airport. This procedure is voluntary since ANCA makes it impossible to impose a required curfew or activity restriction and it also serves as a safety measure to inform pilots of potential head to head conflicts when the tower is closed. See also General Responses 2-1 and 5-2.


7-12 How are the potential noise impacts compatible with surrounding residential land uses?

Some comments questioned how the potential project-related aircraft noise impacts can be compatible with surrounding residential land uses.

The FAA selected the use of the Day-Night Noise Level (DNL) noise metric, which is required for use in FAA NEPA documents. See General Response 7-1.

In accordance with the land use compatibility guidelines as defined in 40 Code of Federal Regulations (CFR) Part 150, certain land uses are compatible with various noise exposure levels. Most notably, residences, schools, churches, and other noise sensitive uses are compatible with noise levels less than 65 DNL (See Figure D7 in the Final EA). As shown in the Draft and Final EA, no noise sensitive uses would be affected by 65 DNL or greater noise levels. However, please see General Response 7-3 regarding people’s perception of noise.

7-13 What is the effect of the proposed project on parks?

Some comments stated that the proposed actions would have an impact on parks in the community.

Figure D7 of the EA shows land uses, including parks, relative to various levels of aircraft noise. Recreational uses of all kinds are compatible with noise below 65 Day-Night Noise Level (DNL). While there would be a project-related increase in noise to several parks in the airport vicinity, because no parks or recreation facilities are located in areas with noise exposure above 65 DNL, FAA land use compatibility guidelines indicate that the existing and future noise exposure with the proposed actions would be compatible with the anticipated noise. Therefore, no significant project-related impact to these parks is expected. For more information on noise see General Response 7-1.

7-14 What is the Airport Influence Area?

Some comments stated that the Airport Influence Area was designated by the local government to be an area appropriate for residential development, and that because of this designation, local officials had promised that commercial service would not occur at Paine Field.

The Airport Influence Area is defined in the Snohomish County General Policy Plan as “the property within the environs of the airport where land uses are either influenced by, or will influence, the operation of the airport in a positive or negative manner.” As described in General Response 5-5, the Airport Influence Area does not relate to the EA thresholds of significance or project area boundaries. The Airport Influence Area includes the Land areas within the Federal Aviation Regulations (FAR) Part 77 conical and approach surfaces within three miles from the ends of the Airport’s runways. The Airport Influence Area was not a consideration of the Mediated Role Determination.
ISSUE 8. TRAFFIC

8-1 Traffic analysis

Some comments were received questioning the validity of the surface traffic impact analysis.

The traffic impact analysis for the proposed action (“the project”) was performed in accordance with Snohomish County’s requirements for new developments and the interlocal agreements between Snohomish County and WSDOT and the City of Mukilteo. Snohomish County does not have an interlocal agreement with the City of Everett and therefore the City of Everett’s SEPA traffic impact analysis requirements for developments were used when determining the scope of analysis required for the trips generated by the project impacting City of Everett intersections.

Reviewing jurisdictions generally require impacts to be analyzed during the typical PM peak-hour (within the 4:00 PM to 6:00 PM time period) and sometimes the AM peak-hour (within the 7:00 AM to 9:00 AM time period). Snohomish County, WSDOT, the City of Mukilteo and the City of Everett do not require analysis of impacts during Boeing shift-changes, peak ferry times, during holidays or other non-typical peak times. In addition, the daily count data along 128th Street SW (the closest Snohomish County critical arterial unit) shows that the 4:00 PM to 6:00 PM traffic volumes are the highest volumes during the day. Snohomish County and the surrounding jurisdictions do not have a weekend or holiday peak analysis requirement for this area since the standard weekday commuter peaks typically have higher traffic volumes than weekends in the study area and seasonal peaks are only for 2-3 months of the year.

The exact schedule for the flights is not currently known. Therefore, to analyze the highest impact scenario it was assumed that the peak trip generation of the project would occur during the existing weekday commuter peaks (7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM). This analysis timeframe was scoped with Snohomish County during the traffic scoping meeting held on September 17, 2009. During the scoping process the distribution of trips and intersections/arterials that were required to be analyzed were also determined.

The peak trip generation of the project assumes that during a 60-minute period the following trips will occur:

- One Horizon Air turn, all passengers arriving and departing
- One Allegiant Air turn, all passengers arriving and departing
- A quarter of the 17 employees will arrive and a quarter of the 17 employees will leave

These Paine Field trip generation assumptions were compared to the operations at Bellingham International Airport, which serves Horizon Air and Allegiant Air. It was found that the time between a full turn for Horizon Air and Allegiant Air at Bellingham is closer to two hours. Therefore, the assumption that all of the Paine Field trips will occur during one hour is conservatively high.

The trip generation calculations for the proposed action were also compared to the analysis performed by The Transpo Group for the Bellingham International Airport, dated November 2009. The Bellingham International Airport analysis shows that the existing 1,100 daily
enplanements, which equates to approximately 385,000 annual enplanements, generates 131 PM peak-hour trips. In comparison, the proposed action is anticipated to have 238,200 annual enplanements in 2018, approximately 40% fewer enplanements than the existing annual enplanements at Bellingham International Airport. However, the anticipated peak-hour trip generation for the proposed action is 212 PM peak-hour trips, which are 60% more trips from 40% fewer enplanements. The trip generation calculations performed for the proposed action are also similar to the maximum peak-hour trip generation calculations that were calculated by Hirsh Associates in their analysis. The three comparisons of the peak-hour trip generation of the project show that the trip generation is conservatively high.

All of the trips generated by the proposed action (i.e. trips to and from the new terminal) were assumed to be new trips to the road system for the purposes of performing the level of service analysis. This assumption that all trips are new, despite the fact that it is likely that the project will divert some existing trips to Paine Field from Sea-Tac International Airport and Bellingham International Airport that are presently traveling along the local road system, represents the highest impact scenario. The diversion of trips on a microscopic scale, intersection by intersection, is nearly impossible to determine. However, the diversion of trips can be calculated on a macroscopic level, the level at which the VMT analysis was performed, since the macroscopic level analysis is performed over a large area and is not based on turning movement volumes at specific intersections. A diversion of trips has therefore not been included in the level of service analysis for the traffic impact analysis. This assumption means that all of the trips generated to the project are new to the analyzed intersections and arterials, which represents the highest estimate of the impacts of the project.

The analysis of the impacts of the development are based on the Snohomish County and City of Everett standards for all developments and the interlocal agreements between Snohomish County and WSDOT and the City of Mukilteo and City of Everett standards for all developments. WSDOT, the City of Mukilteo and the City of Everett evaluate impacts of a development based on the operation of intersections. Snohomish County evaluates the impacts of a development based on the operation of arterial segments. The level of service criteria for WSDOT, City of Mukilteo and City of Everett intersections is summarized in Table 1, which is consistent with Table 1 of the traffic impact analysis.
Table 1: Level of Service Criteria for Intersections

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Expected Delay</th>
<th>Intersection Control Delay (Seconds per Vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unsignalized Intersections</td>
</tr>
<tr>
<td>A</td>
<td>Little/No Delay</td>
<td>≤10</td>
</tr>
<tr>
<td>B</td>
<td>Short Delays</td>
<td>&gt;10 and ≤15</td>
</tr>
<tr>
<td>C</td>
<td>Average Delays</td>
<td>&gt;15 and ≤25</td>
</tr>
<tr>
<td>D</td>
<td>Long Delays</td>
<td>&gt;25 and ≤35</td>
</tr>
<tr>
<td>E</td>
<td>Very Long Delays</td>
<td>&gt;35 and ≤50</td>
</tr>
<tr>
<td>F</td>
<td>Extreme Delays⁹</td>
<td>&gt;50</td>
</tr>
</tbody>
</table>

The City of Mukilteo and the City of Everett have a level of service threshold of LOS D for the operation of their intersections. WSDOT has a level of service threshold of LOS D for intersections along SR-525 and SR-526 and a threshold of LOS E for I-5 interchange ramps.


LOS A: Free-flow traffic conditions, with minimal delay to stopped vehicles (no vehicle is delayed longer than one cycle at signalized intersection).

LOS B: Generally stable traffic flow conditions.

LOS C: Occasional back-ups may develop, but delay to vehicles is short term and still tolerable.

LOS D: During short periods of the peak hour, delays to approaching vehicles may be substantial but are tolerable during times of less demand (i.e. vehicles delayed one cycle or less at signal).

LOS E: Intersections operate at or near capacity, with long queues developing on all approaches and long delays.

LOS F: Jammed conditions on all approaches with excessively long delays and vehicles unable to move at times.

⁹ When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing which may cause severe congestion affecting other traffic movements in the intersection.
The level of service criteria for Snohomish County arterials is summarized in Table 2, which is consistent with Table 2 of the traffic impact analysis.

**Table 2: Level of Service Criteria for Arterials**

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Expected Delay</th>
<th>Average Arterial Speed (miles per hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Urban, Category II</td>
</tr>
<tr>
<td>A</td>
<td>Little/No Delay</td>
<td>&gt; 35</td>
</tr>
<tr>
<td>B</td>
<td>Short Delays</td>
<td>&gt; 28</td>
</tr>
<tr>
<td>C</td>
<td>Average Delays</td>
<td>&gt; 22</td>
</tr>
<tr>
<td>D</td>
<td>Long Delays</td>
<td>&gt; 17</td>
</tr>
<tr>
<td>E</td>
<td>Very Long Delays</td>
<td>&gt; 13</td>
</tr>
<tr>
<td>F</td>
<td>Extreme Delays</td>
<td>≤ 13</td>
</tr>
</tbody>
</table>

Snohomish County has a level of service threshold of LOS E for the operation of their arterials. There are two arterials that are Urban Category II arterials:

- Arterial Unit #227 – Beverly Park Road, SR-525 to Airport Way
- Arterial Unit #231 – Airport Road, 106th Street SW to Kasch Park Road

The only Urban Category III arterial impacted by the project is:

- Arterial Unit #228 – Airport Road/128th Street SW, SR-99 to I-5 Southbound Ramps

The analysis of the Snohomish County arterials is based on a model that has been calibrated to field collected data to ensure that the model accurately represents the existing operation of the arterial and can accurately predict the operation with the additional traffic.

It should be noted that Arterial Unit #223 was analyzed as part of the traffic impact analysis in the Draft EA, but not the Final EA. This arterial was no longer a critical arterial unit at the time of the traffic impact analysis included in the Final EA.

A scoping meeting was held with Snohomish County staff on September 17, 2009 and a scoping memorandum was received from WSDOT. Scoping discussions were held with City of Everett staff and a scoping request was made to the City of Mukilteo, but a response from the City of Mukilteo was never received. These scoping discussions were performed to, in part, determine the scope of analysis required for the project. The interlocal agreement between Snohomish County and WSDOT sets a threshold of 10 total PM peak-hour trips for analysis of WSDOT intersections. The following WSDOT intersections, designated by their associated study intersection numbers, are impacted with 10 or more PM peak-hour development trips and were analyzed as part of the traffic impact analysis:
4. SR-525 at Beverly Park Road
12. I-5 Southbound Ramps at 128th Street SW
17. I-5 Northbound Ramps at 128th Street SW
20. Airport Road at SR-526 Westbound Ramps

Additional WSDOT intersections were not analyzed since the either did not meet the threshold of 10 PM peak-hour trips or were not requested by WSDOT for analysis during the scoping process. A review letter from Lorena Eng of WSDOT, dated January 20, 2010, agreed with the analysis of impacts to WSDOT intersection.

The interlocal agreement between Snohomish County and the City of Mukilteo requires arterial intersections impacted with 10 or more directional PM peak-hour trips to be analyzed. The only City of Mukilteo intersections meeting this criteria that will be impacted by 10 or more directional PM peak hour trips from the project, designated by their associated study intersection numbers, are:

21. SR-526/Paine Field Boulevard at 84th Street SW
22. 44th Avenue W at 84th Street SW
23. SR-525 at 84th Street SW

The Traffic Impact Analysis included these intersections.

Snohomish County and the City of Everett do not have an interlocal agreement. However, impacts to City of Everett intersections have been analyzed following the City of Everett SEPA impact threshold of 50 PM peak-hour trips. The intersection of the SR-526 westbound ramps at Evergreen Way which is a City of Everett intersection, was also analyzed at the request of WSDOT even though it is not impacted with 50 PM peak-hour trips. The following City of Everett intersections, designated by their associated study intersection numbers, were analyzed as part of the traffic impact analysis:

5. Beverly Park Road at Airport Road
6. SR-99 at Airport Road
18. Airport Road at 112th Street SW
19. Airport Road at Casino Road
24. SR-526 Westbound Ramps at Evergreen Way

The project does not impact any other City of Everett intersections with 50 or more PM peak-hour trips. A review letter, dated February 3, 2010, from Allan Giffen, the SEPA Responsible Official of the City of Everett, agreed with the analysis of impacts to City of Everett intersection. The traffic impact analysis determined that the project’s impacts to these arterials and intersections would decrease the travel speed on the arterials and add delay to the intersections. However, the analysis showed that the project will not have a significant impact on the surrounding roadways since the project will not cause any of the arterials or intersections to change from an acceptable level of service without the project to an unacceptable level of service with the project. This increase in delay is not anticipated to significantly affect emergency vehicles that will use the major roadways in the site vicinity, especially since Snohomish County
provides pre-emptive operation for emergency vehicles. The increase in delay is also not anticipated to significantly change the existing travel patterns since the project will not cause any arterials or intersections to operate at a deficient level of service.

The project will add trips to one City of Everett intersection, SR-99 at Airport Road, one City of Mukilteo intersection, SR-525 at 84th Street SW, and two WSDOT intersections, SR-525 at Beverly Park Road and 128th Street SW at the I-5 northbound ramps, which will operate at LOS F without the addition of the project and will meet the respective impact thresholds for the jurisdiction. The City of Everett did not require mitigation for impacts to this intersection since capacity improvements for single-occupant vehicles are not practical. The City of Everett supported the recently implemented Swift bus rapid transit as its strategy for multi-modal transportation improvements to this corridor and is in the process of evaluating the entire Evergreen Way corridor in this area for comprehensive transportation enhancements. The project will be contributing mitigation fees as part of the WSDOT traffic mitigation fees to aid in funding improvements to the I-5/128th Street SW interchange, per the interlocal agreement and WSDOT comments and the intersection of SR-525 at Beverly Park Road is at its ultimate configuration. The City of Mukilteo intersection of SR-525 at Beverly Park Road is anticipated to operate at a deficient level of service under the 2018 with project conditions and the existing signal timings. However, the intersection is anticipated to operate at an acceptable level of service under the 2018 with project conditions if the signal timings are optimized. Traffic mitigation fees are proposed to be paid to the City of Mukilteo that will help mitigate the impacts to City of Mukilteo roadways.

The calculated peak-hour trip generation for the Paine Field project, which is used for all of the impact analysis in the traffic impact analysis, has been shown to be consistent with the trips generated at Bellingham International Airport for a Horizon Air and Allegiant Air arrival and departure over approximately 2 hours. The peak-hour trip generation of the project is therefore conservatively high since it has been assumed that all of the trips will occur in 1 hour, as opposed to 2 hours. This assumption is also consistent with the analysis in the Hirsh Associates report (Appendix K of the Draft EA and Final EA). The peak-hour trip generation is also higher than the peak-hour trip generation that would be calculated using the Institute of Transportation Engineers trip generation data.

8-2 Why weren’t diverted trips accounted for?

Some comments questioned why the analysis did not account for diverted trips.

Diversions are expected. However, it is not possible to determine on an intersection-by-intersection basis the diverted traffic. Evaluating diversions would require knowing, on a neighborhood-by-neighborhood and street-by-street basis, how many passengers are likely to use Paine Field instead of Sea-Tac International Airport or Bellingham International Airport. The FAA determined that such micro level scale location information was not available and thus, the impact analysis should focus on a conservative evaluation. For these reasons a diversion of trips (reduction in trips) was not applied to the microscopic analysis that is required for the traffic impact analysis. Therefore, a conservative analysis of the impacts of the project was used.
 ISSUE 9, SOCIOECONOMIC

9-1 What is the impact upon property values?

Some comments expressed concern that the proposed actions would have a negative impact on property values in the area.

A limited number of studies have attempted to measure the impact of aircraft noise on property values. No specific studies of the impact of noise at Paine Field on real property values have been conducted. Studies conducted at other airports have concluded that airport noise has only a slight impact on property values within the 65 Day-Night Noise Level (DNL) or greater noise contour. Additionally, comparison of older studies to more recent studies indicates that the impact was greater in the 1960’s, when jet aircraft first entered the fleet, than in the 1980’s or 1990’s. This presumably is the result of stabilization of real estate markets following an initial adjustment to noisier jets, and of noise reduction in more modern Stage 3 planes.

An FAA summary report on aviation noise effects states:

“Studies have shown that aircraft noise does decrease the value of residential property located around airports. Although there are many socio-economic factors which must be considered because they may negatively affect property values themselves, all research conducted in this area found negative effects from aviation noise, with effects ranging from 0.6 to 2.3 percent decrease in property value per decibel increase of cumulative noise exposure ... The studies can be divided into two groups and some conclusions drawn. The first group of estimates ... was based on 1960 data (and included New York, Los Angeles and Dallas) and suggests a range of 1.8 to 2.3 percent decrease in value per decibel (DNL). The second group of estimates, covering the period from 1967 to 1970, suggests a mean of 0.8 percent devaluation per decibel change in DNL... The bottom line is that noise has been shown to decrease the value of property by only a small amount -- approximately 1 percent decrease per decibel (DNL). At a minimum, the depreciation of a home due to aircraft noise is equal to the cost of moving to a new residence. Because there are many other factors that affect the price and desirability of a residence, the annoyance of aircraft noise remains just one of the considerations that affect the market value of a home."

One of the difficulties in evaluating the effect of aircraft noise on property values is the application of findings from one location to another. The Effect of Airport Noise on Housing Values, a report prepared in 1994 by Booz-Allen & Hamilton for the FAA, outlined a viable method of examining the effects of airport noise on housing values at the national level by using an approach referred to as the "neighborhood pair model." A series of studies conducted at Baltimore-Washington International, Los Angeles International, and New York LaGuardia and Kennedy International Airports determined that the neighborhood pair model can be used to establish the boundaries of the effect that airport noise has on housing values at a given airport. However, Booz-Allen recommended that their approach not be used at this time to determine property values.

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In the Summary and Conclusions section of the report, it was stated "the magnitude of this impact [of noise on property values] cannot be estimated at the national level at this time, since the results varied across a wide range for the Airports studied, and only a small sample of airports was considered."

9-2 Indirect/induced traffic effects

Some comments questioned the evaluation of indirect and induced impacts, specifically relative to traffic.

The evaluation of indirect and induced impacts was conducted in accordance with FAA Orders 1050.1E Change 1 and 5050.4B. Major development projects can potentially influence induced or secondary impacts on the surrounding community. Some of these induced impacts could include relocation of people or a substantial change to traffic patterns in the area. Minor traffic changes are anticipated to the roadway systems in the vicinity of the Airport as presented in the Surface Transportation section of the EA (Page D.34) and in the Traffic Impact Analysis Report found in Appendix F. Growth induced impacts are addressed in General Response 6-6, job impacts and socioeconomic impacts are addressed in General Response 9-3.

9-3 Socioeconomic Impacts

Some comments generally questioned what socioeconomic impacts would occur as a result of the proposed actions. Other comments questioned what impacts the proposed actions would have on the community, specifically in terms of jobs.

According to FAA Order 1050.1E Change 1, a socioeconomic impact is significant if it requires extensive relocation, with insufficient replacement housing available, extensive relocation of community business that would cause severe economic hardship for affected communities, disruption of local traffic patterns that substantially reduce the Levels of Service (LOS) of roads serving the airport and its surrounding communities, or a substantial loss in community tax base. As stated in the Final EA, an increase in the number of jobs and use of local goods and services as a result of the Proposed Action can be expected. The proposed actions would specifically generate additional jobs, payroll, and expenditures in the airport vicinity. It is estimated that 6 to 10 airline jobs would be created. However, some of these employees (such as fuel service providers) may be existing Fixed Base Operator (FBO) contracted employees. It is also estimated that up to 17 new Transportation Security Administration (TSA), rental car, and maintenance jobs would be permanently created at the Airport. There was concern from some commenters that these jobs created would be “lower-paying jobs,” and this issue is addressed in General Response 9-7.

Because the Proposed Action would not require relocation of businesses or residences, there would be no significant change in either the tax base or the economic vitality of the area. No significant impacts on property values are expected and therefore, no induced impacts resulting from a negative change in the tax base are expected. There would be a slight change in traffic as described in General Responses 8-1 and 9-2, but this impact would not be significant.
9-4 E.O. 13045 Children’s Health and Safety impact analysis

Some comments stated that children’s health and safety were not analyzed in the EA.

The analysis of impacts to children’s health and safety was prepared in accordance with FAA Orders 1050.1E Change 1 and 5050.4B. Per Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks Federal agencies:

   (a) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and

   (b) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

The analysis of children’s health and safety was included in the EA and can be found on page D.32 of the Final EA. In response to comments, the locations of schools were added to the noise contour figures in the EA (General Response 7-8). There are no anticipated significant noise impacts on schools (General Response 7-7 and see Figures D1 through D6 of the Final EA) and there are no other general effects on schools regarding air quality, water quality or other resources which could affect the health of children or impact schools. Because there are no significant adverse impacts (including noise) to any population groups or neighborhoods according to FAA defined thresholds of significance, there are no significant adverse impacts or disproportionate impacts to children’s health or safety.

9-5 Environmental Justice

Some comments stated that the EA did not address environmental justice or special population issues.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its actions on minority populations and low-income populations. The effects of the proposed actions were addressed in the Draft and Final EA in the section titled Socioeconomic Environment, Environmental Justice, and Children’s Environmental Health and Safety Risks.

There are no significant impacts to any population group or neighborhoods based on the 65 Day-Night Noise Level (DNL) noise contour and the FAA’s threshold of project-related significance; consequently, there can be no disproportionate adverse effects to special population groups, minority populations or low-income populations. The “project area” in the EA either refers to the actual construction footprint of the modular terminal and/or the 65 DNL noise contour. While there are special population groups in the surrounding community, there are no special population groups or neighborhoods located within the direct impact area (construction footprint) or within the 65 DNL noise contour (the indirect impact area); therefore there would not be any significant direct or indirect impacts on special population groups or neighborhoods. No land acquisition is associated with the Proposed Action and the only off-airport effects of the Proposed Action are in the areas of surface transportation and noise. No significant impacts are
expected and no improvements are required for the roadway system as a result of the increased traffic attributable to the Proposed Action and the 65 DNL noise contour remains primarily on airport property and does not encompass any residential development.

9-6 What is the impact of the project on crime?

Some comments stated that the proposed actions will increase crime in the community.

There is no known published research that would indicate a correlation between the initiation of commercial air service or conduct of commercial aviation and local crime or prostitution. Therefore, it is not possible to evaluate such conditions relative to the proposed actions.

9-7 Project will bring in lower income people and low paying jobs

Some comments stated that the proposed actions will bring in lower income people and low paying jobs that would have a negative impact on the community.

The proposed actions are not expected to alter population patterns in the airport area, as the actions are not expected to result in residential or business displacements or result in a material change in employment patterns. The jobs that would be created as a result of the Proposed Action are expected to have a positive impact on the local community. See also General Response 9-3 on the number of created jobs resulting from the proposed actions. No negative socioeconomic impacts are expected to result from jobs, which would help stimulate the economy. Also see General Response 9-1 concerning perceived loss in property values and General Response 9-4 regarding general socioeconomic impacts.

9-8 What are the health and quality of life effects associated with the project?

Some comments stated that the proposed actions will have an adverse effect on health and quality of life.

“Health” is not a category that is specifically called out in NEPA or FAA NEPA guidance. However, each of the environmental resource categories addressed in the EA can be related back to health effect. For example, in the area of air quality, the national ambient air quality standards are established by the USEPA to protect public health and welfare. Thus, the air quality evaluation considers the effects of the proposed actions relative to these standards. Similarly, FAA’s consideration of aircraft noise exposure ensures the protection of public health and also the compatibility of land uses with various sound levels. Each section in Chapter D of the EA discusses the environmental resources. As noted, in accordance with FAA NEPA guidance, the project-related effects of the proposed actions are not expected to exceed the FAA’s thresholds of significance, and thus, no significant health-related effects are expected.


ISSUE 10, AIR QUALITY/EMISSIONS

10-1 Greenhouse gas/climate change

Some comments requested that the EA address project-related greenhouse gas emissions and climate change.

In response to these comments and in close coordination with the Puget Sound Clear Air Agency, the FAA included the following discussion in the Final EA:

In January 2012, the FAA issued FAA Order 1050.1E Change 1 Guidance Memo #3 titled "Considering Greenhouse Gases and Climate Change under the National Environmental Policy Act (NEPA): Interim Guidance". This section addresses the effects of the proposed actions at Paine Field in accordance with the FAA guidance.

Of growing concern is the impact of proposed projects on climate change. Greenhouse gases are those that trap heat in the earth's atmosphere. Both naturally occurring and anthropogenic (man-made) greenhouse gases include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃).

Research has shown that there is a direct link between fuel combustion and greenhouse gas emissions. Therefore, sources that require fuel or power at an airport are the primary sources that would generate greenhouse gases. Aircraft are probably the most often cited air pollutant source, but they produce the same types of emissions as cars. Aircraft jet engines, like many other vehicle engines, produce CO₂, water vapor, nitrogen oxides, carbon monoxide, oxides of sulfur, unburned or partially combusted hydrocarbons [also known as volatile organic compounds (VOCs)], particulates, and other trace compounds.

According to most international reviews, aviation emissions comprise a small but potentially important percentage of human-made greenhouse gases and other emissions that contribute to global warming. The Intergovernmental Panel on Climate Change (IPCC) estimates that global aircraft emissions account for about 3.5% of the total quantity of greenhouse gas from human activities. In terms of relative U.S. contribution, the U.S. General Accounting Office (GAO) reports that aviation accounts “for about 3% of total U.S. greenhouse gas emissions from human sources” compared with other industrial sources, including the remainder of the transportation sector (23%).

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12 All greenhouse gas inventories measure carbon dioxide emissions, but beyond carbon dioxide different inventories include different greenhouse gases (GHGs).

13 Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. For example, chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) are halocarbons that contain chlorine, while halocarbons that contain bromine are referred to as bromofluorocarbons (i.e., halons) or sulfur (sulfur hexafluoride: SF₆).

and industry (41%). The 2012 USEPA nationwide inventory of greenhouse gas emissions, notes that aviation-related emissions represented about 2.1% of emissions. That report also found "Across all categories of aviation, CO2 emissions decreased by 20.6 percent (36.9 Tg) between 1990 and 2010."  

The scientific community is developing areas of further study to enable them to more precisely estimate aviation's effects on the global atmosphere. The FAA is currently leading and participating in several efforts intended to clarify the role that commercial aviation plays in greenhouse gas emissions and climate change. The most comprehensive and multi-year program geared towards quantifying climate change effects of aviation is the Aviation Climate Change Research Initiative (ACCRI) funded by FAA and NASA. ACCRI will reduce key scientific uncertainties in quantifying aviation-related climate impacts and provide timely scientific input to inform policy-making decisions. FAA also funds Project 12 of the Partnership for Air Transportation Noise & Emissions Reduction (PARTNER) Center of Excellence research initiative to quantify the effects of aircraft exhaust and contrails on global and U.S. climate and atmospheric composition.

Aviation activity levels and airport development projects have the potential to both affect climate change and be affected by climate change. Changes to generation and/or use of natural resources such as air quality and energy supply can potentially affect climate change (e.g., by increasing the amount of greenhouse gases emitted), but projects can also be impacted by climate change (e.g., rising sea levels). At this point, there is no consistent scientific indication of when and how the climate will change.

Research has shown that there is a direct link between fuel combustion and greenhouse gas emissions. Therefore, sources that require power/fuel at an airport are the primary sources that would generate greenhouse gases. Aircraft are probably the most often cited air pollutant source, but they produce the same types of emissions as cars. Based on FAA data, operations activity at Snohomish County Airport, relative to aviation throughout the United States, represents less than 1% of U.S. aviation activity. Therefore, assuming that greenhouse gases occur in proportion to the level of activity, greenhouse gas emissions associated with existing and future aviation activity at the Airport would be expected to represent less than 0.03% of U.S.-based greenhouse gases. Therefore, emissions of greenhouse gases from this project are not expected to be significant.

As discussed above, changes to resource categories such as air quality and natural resources and energy supply can potentially affect climate change (e.g., by increasing the amount of greenhouse gases emitted), but projects can also be impacted by climate change (e.g., rising sea levels). At this point, there is no consistent scientific indication of when and how the climate will change.

16 Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2010, United States Environmental Protection Agency, Report EPA 430-R-12-001, April 15, 2012; page 3-13/
The EA adequately addresses FAA guidance and requirements for Air Quality and Climate Change. There is no FAA requirement for GHG quantitative evaluation. At this time a full airport and project-related greenhouse gas inventory has not been prepared. However, parts of the information are available, and others will be generated when the County prepares its Washington State Environmental Policy Act (SEPA) documentation. The following data is available:

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BridgeNet Consulting Services, July 2012 Using EDMS 5.1.3; Surface emissions: Synergy Consultants, July 2012. Note that EDMS is not able to quantify CO2 emissions from GSE and CO2 emissions for ground access vehicles assumes no diverted trips. GAV calculated assuming average MPG of 22.5 and 19.56 lbs of CO2 per gallon fuel. * Project-related emissions for 2013 are conservative and assume a full year of operations in addition to construction of the proposed terminal.
10-2 Air quality conformity

Some comments stated that the EA did not address general conformity or fully address air quality impacts.

The General Conformity Regulation requirements of the Clean Air Act (40 Code of Federal Regulations (CFR) Part 93) are very clear. Any actions of the federal government must be shown to conform with the State Implementation Plan (SIP) for the area. In undertaking a conformity analysis, the conformity regulations identify the steps of the process, which first starts with a determination of whether or not the regulation applies, through the preparation of an applicability analysis. If the total project-related emissions are less than the de minimis threshold for the pollution, a conformity determination is not required. The Draft and Final EA contain that applicability analysis. Because the Puget Sound Region is in attainment for all pollutants, but is subject to a maintenance plan for carbon monoxide, the conformity analysis is only required for that pollutant. The de minimis threshold for a carbon monoxide maintenance area is 100 tons of project-related emissions per year. (40 CFR Part 93.153(b)(2)). The air quality modeling indicated that the proposed project would not trigger the de-minimis threshold (i.e. the project would produce less than 100 tons of project-related emissions per year).

In response to questions and comments about the emissions being low because the evaluation only focused on the proposal by two carriers, it is important to understand the basis by which NEPA documents are prepared. Council on Environmental Quality (CEQ) regulations implementing NEPA requires that NEPA documents address impacts that are "reasonably foreseeable".

Federal Aviation Administration (FAA) Order 5050.4B Paragraph 9q defines reasonably foreseeable as:

An action on or off-airport that a proponent would likely complete and that has been developed with enough specificity to provide meaningful information to a decision maker and the interested public. Use the following table to help determine if an action is reasonably foreseeable.4

(footnote 4: Paragraph 905.c(1) and (2) provide definitions of “connected actions” and “similar actions,” respectively)

Similar to the requirements of NEPA, the General Conformity Regulations also contain a related definition. 40 CFR 93.153 defines "reasonably foreseeable emissions" as:

... are projected future indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known and the emissions are quantifiable, as described and documented by the Federal agency based on its own information and after reviewing any information presented to the Federal agency.

While the action of constructing a new modular terminal is reasonably foreseeable, and thus is ripe for consideration in the EA, how and when activity levels may change beyond that
predicted by the two proposing airlines is not foreseeable. Such information is required to evaluate the environmental effect. To disclose the effects of activity at the maximum capacity of the proposed terminal, the Final EA includes Appendix P. It is important to note that some commenters indicated that the proposing carriers may increase their activity to that capacity level, or that additional carriers may choose to operate at Snohomish County Airport. The results of the impact evaluation would differ based on the fleet mix assumptions and activity assumptions of the carriers operating. Appendix P describes one such scenario. Without a clear understanding of the carriers that would be operating in a specific timeframe, the impacts on air quality could not be identified, as emissions vary based on aircraft type and the associated engines. For these reasons, the FAA determined that such conditions are not reasonably foreseeable and therefore will not be modeled or assessed in this EA.

10-3 Outdated model: EDMS

Some comments indicated concern with the modeling process and use of an outdated model in the EA to assess air quality conditions.

At the time the analysis was initiated, it was conducted using the most recent version of the model required by the FAA for use in NEPA documents – the FAA’s Emissions Dispersion Modeling System (EDMS). This is the same model used by the Puget Sound Clean Air Agency (PSCAA) in preparing inventories for airports that are represented in the maintenance plan/State Implementation Plan (SIP). FAA Order 1050.1E Change 1 Appendix A.2.2 notes: “In conducting air quality analysis for purposes of complying with NEPA or conformity, the FAA requires use of the Emissions and Dispersion Modeling System (EDMS) model for aviation sources (aircraft, auxiliary power units, and ground support equipment).”

The emissions inventory presented in the Draft EA was prepared using FAA's EDMS version 5.1. Preparation of the Draft EA was initiated in early 2009. At that time, Version 5.1 was the most recent version of EDMS offered by FAA. Subsequently, the FAA issued Version 5.1.3. As noted on the FAA's web site, Version 5.1.3 corrected several output reports associated with the FAA's Voluntary Airport Low Emission (VALE) grant program, which is not related to analysis used in this EA. However, because a new forecast was prepared the most recent version of the EDMS was used.

FAA Order 1050.1E Appendix A.2 states:

2.4c. Modeling Requirements. The EDMS is FAA’s required methodology for performing air quality analysis modeling for aviation sources. EDMS also offers the capability to model other airport emission sources that are not aviation-specific, such as power plants, fuel storage tanks, and ground access vehicles. (underline added)

2.4d. Except for air toxics or where advance written approval has been granted to use an equivalent methodology and computer model by the FAA Office of Environment and Energy, the air quality analyses for aviation emission sources from airport and FAA proposed projects conducted to satisfy NEPA, general conformity, and 49 USC 47106(c) requirements under the Clean Air Act Amendments of 1990 (as amended) must be
prepared using the most recent EDMS model available at the start of the environmental analysis process. In the event that EDMS is updated after the environmental analysis process is underway, the updated version of EDMS may be used to provide additional disclosure concerning air quality but use is not required. (Underline added)

Although the consultant had already completed the emissions inventory modeling, due to public comments, the EDMS model was re-run with the most recent version of the model, EDMS 5.1.3. The quality modeling results presented in the Final EA reflect the analysis using the most recent version of the model.

EDMS was accepted as an U.S. Environmental Protection Agency (EPA) “Preferred Guideline” model in 1993 under Title 40 CFR part 51 Appendix W. In 2005 the FAA and EPA recognized that EDMS employs a suite of standalone compliance models already listed in the “Preferred Guideline” such as MOBILE6.2, NONROAD, AERMOD, AERMET, and AERMAP. Consequently, EDMS was relocated to section 6.2.4 “Modeling Guidance for Other Governmental Programs” in 40CFR51 Appendix W to coincide with FAA’s policy that EDMS is the required model to assess airport emissions.

**10-4 Would there be an increase in fuel dump/fuel smell/residue?**

Some comments stated that there would be added fuel dump, smell and residue as a result of the proposed project. Rarely does fuel dumping actually occur. If an aircraft needs to jettison fuel, it is in an emergency situation. Most aircraft have the capability of taking off with more weight than they can safely land with. This means that in an emergency situation after takeoff, the aircraft would need to reduce its weight to make a safe return landing. Depending on the nature of the emergency, the pilot has two options, either jettison fuel or fly in a holding pattern until enough fuel has been burned to reduce the weight to below the maximum certified gross landing weight. According to federal directive 7110.65T paragraph 9-4-1 through 9-4-4, aircraft may dump fuel as necessary in a declared emergency state. There are no restrictions as to where the aircraft may or may not dump fuel. However, each airspace area has a recommended, pre-designated fuel dumping area for instances where fuel needs to be dumped if time permits. 7110.65T states controllers are to "assign an altitude at least 2,000 feet above the highest obstacle within 5 miles of the route or pattern being flown." For the Central Puget Sound Region, this is typically over Puget Sound at an altitude of above 5,000 feet to allow time for the fuel to evaporate before reaching the ground, and to prevent non-evaporated fuel from reaching populated areas. Because any fuel release is irregular and restricted to emergency conditions, impacts to human or natural habitats would be minimal and rare.

It is important to note that not all aircraft even have the capability to jettison fuel. Some are designed and stressed to be able to takeoff and land with the same weight, so fuel jettisoning is not necessary. Boeing information indicates that fuel dumping is not available on the MD80 aircraft as this aircraft is designed with a high landing weight.

Citizens also noted that soot or particles are deposited on their property due to aircraft flights. The FAA has conducted soot analysis at many airports across the country with the uniform result that samples collected on and near the airport bore little chemical resemblance to either unburned
jet fuel or soot from jet exhaust. Instead, the collected material was found to be chemically similar to general urban pollution, particles from burning heavy fuels, and motor vehicle exhaust.

Odors from aircraft typically have more of an oily smell versus an odor like one would experience when fueling an auto. The pollutants that comprise this type of smell are accounted for in the air pollutant assessment presented in the Environmental Assessment (EA) for precursor pollutants -- pollutant levels where the standards exist to protect human health and welfare.

There are many different types of odorous hydrocarbon compounds in jet exhaust which may be responsible for periodic “odor episodes”. Typically, the most reactive or “volatile” hydrocarbons have the most potential to cause odor (i.e., cause a detectable odor at a lower concentration). The principal odor-causing hydrocarbon species in jet exhaust are the aromatic (fuel-related) and oxygenated (partially burned) hydrocarbons. Hydrocarbon emission rates are greatest during the low-power idle and taxi modes of the Landing-Take-Off (LTO) cycle, when the engines are not operating as efficiently. During takeoff and climbout, for example, hydrocarbon emissions are greatly reduced since the engines operate with greater efficiency.

The most recent study concerning odors from jet engine exhaust was conducted at Boston’s Logan Airport (“Identification of Odorous Compounds From Jet Engine Exhaust at Boston’s Logan Airport”, December, 1992). Based on air monitoring at Boston Logan, three compounds - acetaldehyde, formaldehyde, and naphthalene - were present on a consistent basis above their respective odor recognition thresholds. Each of these compounds could be generated by the incomplete combustion of jet fuel. The odor impact depends on wind speed and direction, turbulence, and distance between the source and nearby residents. The odor recognition characteristics of these compounds is generally characterized as follows: Acetaldehyde is described as sweet, “apple ripened” and pungent; Formaldehyde is described as odor like hay, straw-like, and pungent; Naphthalene is described as having odor like tar, creosote, and mothballs.

As noted by the Boston study, the results were based on the minimum detectable limits because overall concentrations for these compounds were generally small. Additionally, no specific source or activity was identified as the primary source of these compounds. Moreover, the Boston study notes that motor vehicle exhaust also contains many of these same compounds. No conclusion was drawn as to the source, concentration, or potential impact to human health.

The air quality modeling within the EA covers many of the pollutants that relate either directly or indirectly to fuel “smells,” and covers all the pollutants regulated federally that relate to human health. Since the project does not trigger any federal thresholds of significance for air quality for these pollutants, there are no significant impacts relating to the air quality.

10-5 **Question regarding the analysis of PM$_{10}$ and PM$_{2.5}$**

Some comments stated that particulate matter needed to be rigorously analyzed in the EA. The EA considered emissions of particulate matter within the evaluation capabilities of the models that are required for use (Emissions Dispersion Modeling System – EDMS). The inventory presented in the EA considered the two particulate matters for which there are national ambient
air quality standards (PM_{10} and PM_{2.5}). The Environmental Protection Agency (EPA) has designated the Snohomish County as attainment for both PM_{10} and PM_{2.5}.

The EPA, Washington State Department of Ecology, and the Puget Sound Clean Air Agency (PSCAA) conduct measurements throughout the State for purposes of monitoring compliance with the National Ambient Air Quality Standards (NAAQS). The closest air quality monitoring station to Paine Field is located in Marysville (7th Ave) about 10 miles north of the Airport, and Lynnwood (on 212th) about 9 miles south of the Airport. Two other sites also measure concentrations in Snohomish County – Darrington (Fir Street) and Woodinville. Both of these monitoring sites measure PM_{2.5} concentrations. The *2007 Air Quality Data Summary Report*\textsuperscript{17} by the PSCAA states:

> The agency, along with partners, continued to monitor the region’s air quality in 2007. Over the last decade, criteria air pollutant concentrations for some pollutants have fallen well below levels of concern in our jurisdiction. For example, levels of carbon monoxide, a pollutant that the region was formerly in nonattainment for, have fallen to levels so low that the Washington State Department of Ecology discontinued many of the monitors in 2006 in order to focus its monitoring resources on higher priority pollutants.

> The same is true for the criteria pollutants sulfur dioxide, lead, and nitrogen dioxide. While the area enjoys improving air quality, we are facing new challenges. After more than a decade of attaining all federal standards, the agency faces nonattainment, potentially in multiple areas, for PM2.5 and ozone. This is due to recent revisions to the national fine particulate and ozone standards to better protect public health. … sites in Snohomish and King Counties are close to the daily fine particle federal standard. … While efforts to reduce fine particulate emissions will be tailored to different areas, they generally target wood smoke emissions reductions, as the highest PM2.5 levels occur in heating months when wood stoves and fireplaces contribute the majority of PM2.5. (Page 3)

Relative to particulate emissions, the PSCAA has noted that “Concentrations at the Marysville and Darrington monitors, both in Snohomish County, are on the brink of violating the new daily standard” (35 μg/m3 which was adopted in 2006). Daily PM_{2.5} measurements in Snohomish County have shown that measurements at Lynnwood have not exceeded the federal standard since measurements began in 2002, but measurements at Maryville equaled or exceeded the standards between 2001 and 2007, except in 2006. Relative to the annual PM_{2.5} standard, measurements at the two Snohomish County sites have been below the standard between 2001 and 2007. PSCAA notes that the primary contributor to PM emissions is from residential wood stoves and fireplaces.

The air quality modeling within the EA covers the analysis for both PM$_{10}$ and PM$_{2.5}$. Since the project does not trigger any federal thresholds of significance for air quality for these pollutants, there are no significant impacts relating to the air quality under NEPA.

10-6 Toxics/HAPS

Some comments addressed hazardous air pollutants (HAPs) and their potential increase due to the proposed project. FAA guidance states:

e. Airport-related hazardous air pollutants (HAPs). The Environmental Protection Agency (EPA) has identified roughly 25 individual HAPs that are associated with emissions from aircraft and airport ground service equipment (GSE). However, EPA does not specify aircraft and airports in the definitions and categories of HAP sources in Section 112 of the Clean Air Act (CAA) (“Hazardous Air Pollutants”). Nor has EPA established standards for HAPs. When compared with existing urban backgrounds, air quality monitoring studies near several large airports have not shown that increased HAP levels occur near those facilities. In fact, only a small percentage of an urban area’s overall air pollution is attributable to airport emissions. Nevertheless, due to the emission levels of unburned hydrocarbons and particulates near airports, EPA’s National Air Toxic Program notes that airports are complex facilities that emit HAPs.

Therefore, to comply with NEPA’s disclosure requirements, FAA reports HAPs emissions in its environmental documents for information purposes only. FAA does not use that information to assess human health risks. The responsible FAA official should consider whether 40 CFR Section 1502.22, which addresses incomplete and unavailable information, applies to HAPS emissions for major airport development projects.

(1) For major projects normally requiring an EIS (e.g., new airport, new runway, major runway extension), the responsible FAA official should decide, in consultation with Federal, State, and local air quality agencies whether it is appropriate to conduct a HAPs emission inventory. This is, especially so when the action would occur in areas that are classified as nonattainment or maintenance for O3 or particulate matter (PM).

(2) As needed, consult APP-400 to determine the HAPs FAA will analyze and the methodology FAA will use to conduct that analysis.

In 2003, the Puget Sound Clean Air Agency (PSCAA) completed a toxics evaluation for the Puget Sound region. Relative to airports, the following was concluded:

Emissions from the two airports (Sea-Tac and Boeing Field) could impact the Sea-Tac and Georgetown monitors. However, the results do not reflect significantly higher pollutant levels at these locations when compared with other sites. In fact, SeaTac potential risks appear slightly lower than Beacon Hill. It is possible that the airport emissions do not significantly impact the monitors because the emissions are diluted over the area. It is also possible that the pollutants of concern at the airport are not those included in the monitoring study.
Because of this information, the FAA did not feel that the evaluation of HAPs would be warranted.
ISSUE 11, OTHER RESOURCE CATEGORIES

11-1 What is the impact on wildlife?

Some comments stated that there would be impacts on wildlife as a result of the proposed actions.

Potential action-related impacts to wildlife as a result of the Proposed Action were assessed in Chapter D of the EA in accordance with FAA Order 1050.1E Change 1. There are no endangered, threatened, or special status species or habitat in the study area. The area of direct effect is located entirely on airport property and consists of pre-disturbed ground that does not contain any native habitats. No natural habitats would be impacted by the construction activities. Concerns were raised over the project study area of potential effect with respect to wildlife, suggesting that wildlife outside of airport property and construction area could be impacted, especially with respect to areas within the flight pattern from aircraft activities or noise.

Public observations of special status species were located outside the project area. Because the area of construction consists of pre-disturbed ground on airport property, and because flight paths would not change, it was determined that no substantial impacts to wildlife would occur to species outside the construction area. Additionally, no significant impacts are expected with respect to air quality, noise, wetlands or water quality that would affect surrounding habitats on or off airport property that would warrant examining a larger biotic project area or require a large-scale survey. No habitats would be affected, and according to FAA Orders, no additional coordination with the U.S. Fish and Wildlife Service is required.

Although there are documented special status species, such as the Bald Eagle and Spotted Owl within Snohomish County, the Proposed Action is not expected to alter any important natural habitat of any kind. According to FAA Order 1050.1E Change 1, for federally listed species, a significant impact would occur if, “a proposed action would likely jeopardize a species’ continued existence or destroy or adversely affect a species’ critical habitat.” Since the Proposed Action would not destroy any natural habitat, and there are no significant indirect impacts from changes in noise, air quality, wetlands, or water quality, there are no expected significant impacts to Federally-listed species. For non-listed species, FAA Order 1050.1E, Change 1, states that the FAA should “consider scientific literature on and information from agencies having expertise on addressing the affected species. Consider information on: project effects on population dynamics; sustainability; reproduction rates; natural and artificial mortality (aircraft strikes); and the minimum population size needed to maintain the affected population.” As stated above, while there would be an increase in the number of flights, the additional aircraft operations would use the same flight paths that are currently used today. Therefore, there are no significant impacts to fish, wildlife or plants as a result of the Proposed Action.

Additionally, the Airport discourages the siting of land uses (such as ponds) that are wildlife (specifically bird) attractants through a provision within the Snohomish County 2025 Comprehensive Plan’s designated Airport Influence Area. This applies directly to the area on the Airport and immediately surrounding the Airport due to the safety risks of bird strikes. This provision does not pertain to the natural features outside this direct area, such as the ravines,
bluffs, and hillsides within a larger area around the Airport. It is merely a pre-existing means to prevent aircraft/wildlife safety issues. The Airport regulates wildlife through its Wildlife Hazard Management Plan, which pertains to wildlife on airport property. No changes in this policy would occur as the result of the Proposed Action and the continued management of wildlife on airport property would not change. The Airport has no authority over the preservation of open spaces within the County, and can only manage wildlife and wildlife attractants within airport property. Additionally, the Proposed Action would not result in the removal of any trees.

11-2 Migratory Bird Treaty Act and ESA threshold of effect were not considered

Some comments stated that the EA did not address the Migratory Bird Treaty Act or the Endangered Species Act.

The Migratory Bird Treaty Act (MBTA) was not specifically discussed in the Draft EA as the proposed actions will not affect migratory birds. As outlined in FAA Order 1050.1E, Change 1, MBTA prohibits private parties (and depending on the judicial circuit, federal agencies), from “intentionally taking a migratory bird, their eggs, or nest. Take is defined as ‘pursue, hunt, shoot, wound, kill, trap, capture, or collect’ (50 CFR 10.21). The MBTA prohibits taking, selling or other activities that would harm migratory birds, their eggs or nests unless the Secretary of the Interior authorizes such activities under a special permit.”

Because there are no migratory birds known to be located within the construction area, no migratory birds would be intentionally taken or impacted as a result of the Proposed Action. Therefore, there would be no significant impacts to migratory birds under the MBTA and coordination with the U.S. Fish and Wildlife Service is not required.

The endangered, threatened, and special status species impacts are described in Chapter D, Environmental Consequences. FAA Orders 1050.1E, Change 1 and 5050.4B require FAA to make an affect determination for Federally-listed species. If the FAA determines that the Proposed Action may affect a Federally-listed species or critical habitat, then further consultation with the U.S. Fish and Wildlife Service is required. If the FAA determines that the Proposed Action would not affect a Federally-listed species or critical habitat, consultation with the U.S. Fish and Wildlife Service is not required.

Based on regular on-airport surveys, there are no endangered, threatened, or special status species that are known to be permanent residents in the project area, the area where the proposed terminal would be completed. There is also no known habitat of importance to any special status species within the project area. Of all the species listed during the weekly surveys, only two special status species were observed (the Bald Eagle and Peregrine Falcon). The Peregrine Falcon was observed only once since 2001 and the Bald Eagle observations are infrequent.

According to FAA Order 1050.1E, Change 1, for federally listed species, a significant impact would occur if, “a proposed action would likely jeopardize a species’ continued existence or destroy or adversely affect a species’ critical habitat.” The area of direct effect is located entirely on airport property and consists of pre-disturbed ground that does not contain any native habitats. No natural habitats would be impacted by the construction activities. Concerns were raised over
the project area of potential effect with relation to special status species, suggesting that wildlife outside of the airport property and construction area could be impacted, especially with respect to areas within the flight pattern from aircraft activities, noise, air pollution or water quality impacts that could occur outside of the area of direct impact. Public observations of special status species such as the Spotted Owl were located entirely outside the project area. Because the area of construction is within pre-disturbed ground on airport property and the additional aircraft operations would use the same flight paths that are currently used today, it was determined that no significant impacts to wildlife would occur to species outside the construction area.

11-3 What is the potential for additional bird strikes?

Some comments expressed concern over the safety of commercial service operations in an area with birds and the potential for additional bird strikes.

The Airport discourages the siting of land uses (such as ponds) that are wildlife (specifically bird) attractants through a provision within the Snohomish County 2025 Comprehensive Plan’s designated Airport Influence Area. This applies directly to the area on the Airport and immediately surrounding the Airport due to the safety risks of bird strikes. This provision does not pertain to the natural features outside this direct area, such as the ravines, bluffs, and hillsides within a larger area around the Airport. It is merely a pre-existing means to prevent aircraft/wildlife safety issues.

The Airport attempts to control wildlife through its Wildlife Hazard Management Plan, which pertains to wildlife on-airport property that could be a risk to aircraft safety. Snohomish County contracts with the United States Department of Agriculture to manage wildlife on airport property. While there would be an increase in the number of flights as a result of the Proposed Action, the additional aircraft would use the same flight paths that are currently used today. The Proposed Action is not expected to increase bird strikes at the Airport.

11-4 Effect on culture of local community

Concerns were raised on the change in local community culture as the result of the Proposed Action and that the EA “disregarded the culture of the local community.”

Following FAA Order 1050.1E, Change 1 guidance, impacts to local communities are generally analyzed based on the significance of noise impacts or required relocations that could fracture a community or otherwise disrupt the community physically or economically. Aircraft noise already exists from current operations, although no noise sensitive uses are located in significant aircraft noise exposed areas. The proposed actions are not expected to generate significant aircraft noise exposure (See General Response 7-6). No homes, businesses or other community resources would need to be relocated (See General Response 9-4). Additionally, no historic, cultural, architectural or archaeological sites are located within the project’s area of potential effect (APE). No significant health effects are anticipated (See General Response 9-9). No significant impacts on children’s health of safety or schools are anticipated (General Response
Therefore, no significant impact on the local community or cultural values is expected as a result of the Proposed Action.

11-5 What are the health impacts compared to safety?

Some comments expressed concern with health and safety of the community relating to the proposed addition of commercial service at Paine Field.

The continuing mission of the FAA is to provide the safest, most efficient aerospace system in world. Air carriers and airports must meet various safety certifications and operating requirements required by the FAA. Both Horizon Air and Allegiant Air currently meet FAA safety certification requirements and air worthiness standards for their respective fleets.

As stated in General Response 9-9, because no significant adverse impacts were identified, there are no predicted significant impacts to human safety, or health as a result of the Proposed Action. Safety is further described in General Response 11-6.

11-6 Safety: No mention of accident history or airline safety

Some comments were received on the safety of initiating commercial service at Paine Field, specifically about the lack of discussion in the EA on accident history of the airlines or overall airline safety.

The continuing mission of the FAA is to provide the safest, most efficient aerospace system in world. Air carriers and airports must meet various safety certifications and operating requirements required by the FAA. Both Horizon Air and Allegiant Air are in good standing and meet current safety certification requirements and air worthiness standards for their respective fleets. Paine Field meets all applicable FAA standards.

11-7 Security: terrorist attack

Some comments questioned the security of adding commercial service to Paine Field, citing the fact that commercial service aircraft have been used for terrorist activity.

The Transportation Security Administration (TSA) protects the nation’s transportation systems to ensure freedom of movement for people and commerce. Security screening (including both passenger and baggage screening) associated with the proposed commercial service would be conducted by TSA using all required technology and equipment. For more information on general safety issues, please see General Response 11-6.

11-8 Cumulative impacts

Some comments suggested that the overall cumulative impacts of the proposed Federal actions were not adequately assessed in the Draft EA, while others suggested that the future timeframe for the assessment of impacts (2016) was not appropriate and that an additional outlier year should be considered in the cumulative impacts analysis.
Council on Environmental Quality (CEQ) regulations state that cumulative impacts represent the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time.” The cumulative impacts assessment, which was prepared in accordance with CEQ regulations and FAA Order 1050.1E Change 1 and Order 5050.4B, is described in the Final EA in Chapter D, Environmental Consequences starting on page D.40. The cumulative impacts section in the Final EA describes past, present, and reasonably foreseeable projects on and adjacent to the Airport that have the potential for cumulative impacts when considered with the proposed actions. The analysis in the Final EA has been refined to address the comments received, and states that based on Federal significance thresholds, there would be no significant cumulative impacts.

In regard to the future timeframe for the assessment of impacts (2016), as stated above, CEQ regulations state that future actions being considered for cumulative impact analysis must be “reasonably foreseeable.” As mentioned in General Response 3-5, the aviation activity forecasts and analysis years from the Draft EA were updated prior to the publication of the Final EA. In the Final EA, 2008 remains the base year or existing year while 2013 was considered the initial year of commercial airline service and 2018 was considered the future year for applicable environmental consequence analysis.

Passenger service growth rates beyond 2018 (if any) cannot be accurately predicted at this time and are therefore not reasonably foreseeable. Accordingly, projects beyond 2018 are not appropriate for consideration in the cumulative impacts analysis. Also see General Response 3-5 for additional discussion on the selection of 2018 as the future year of analysis for the proposed actions.

11-9  How does this project compare to the commercial operations at Bellingham Airport?

Some comments suggested that the initiation of commercial service at Bellingham Airport was a good parallel example of what they envision occurring at Paine Field.

In response to comments about the potential parallel between commercial service at Bellingham Airport and Paine Field, consideration was given to the characteristics of the two airports. Because of the proximity of Bellingham Airport to the City of Bellingham and Vancouver British Columbia as well as the distance from Sea-Tac Airport, Bellingham Airport serves a much broader and larger market than would be served by Paine Field. The lower cost and relative convenience for British Columbia residents clearing customs at the border instead of at Vancouver International Airport is also a factor in the popularity of flying to U.S. destinations from Bellingham Airport.

If commercial service is initiated at Paine Field, the airlines will be serving a completely different market. Given the existing service at both Sea-Tac and Bellingham airports, the service
at Paine Field would likely draw traffic from primarily Snohomish County and those closest to the airport. Growth in traffic beyond that predicted by the carriers proposing the service is not reasonably foreseeable. See General Response 3-5.

11-10 Water quality impacts

Some comments related to the potential for water quality impacts as a result of the Proposed Action.

Water quality considerations related to airport development and operation often include increased surface runoff, erosion, and pollution from fuel, oil, solvents and deicing fluids and potential impacts from decreased water quality on fish, wildlife, plants, and humans. Potential pollution could come from petroleum products spilled on the surface and carried through drainage channels off of the Airport. State and Federal laws and regulations have been established that include standards for above ground and underground storage tanks, leak detection and overflow protection.

Paine Field currently operates under a Master Drainage Plan which includes stormwater detention and water quality requirements. According to the Master Drainage Plan, all runoff from the Airport is detained for stream protection standards as set forth in the 1992 Department of Ecology (DOE) Manual and the Snohomish County Addendum to that manual. The Airport also operates under Permit #SO3000428C issued to Snohomish County under the State of Washington’s Industrial Stormwater General Permit.

Only a small amount of additional impervious area (approximately 1,000 square feet) is anticipated as a result of the Proposed Action, as described in the water quality section starting on page D.37 of the Final EA. Commercial aircraft maintenance and washing activities are not expected as a result of the Proposed Action. All commercial aircraft requiring deicing would use the approved deicing pad located at Taxiway “A1”. This deicing pad drains to the Boeing Company sanitary sewer system and outfalls to the City of Everett Treatment Plant, not to groundwater or other bodies of water. The de-icing run-off would be treated at the treatment plant. The closest known aquifer is located approximately 220-feet below the Airport and infiltration or other impacts to this aquifer are considered unlikely. Therefore, there are no expected water quality impacts resulting from the Proposed Action.

Concerns were raised over the dumping of aircraft fuel before landing and its potential to impact water quality. Dumping of fuel is a rare practice that generally only occurs during emergency situations. Aircraft at lower altitudes often show a “trail,” that some people assume is a fuel dump. However, these vapor trails (contrails) are created due to moisture in the air and are not evidence of fuel dumping. Therefore, there are no expected water quality impacts related to the rare practice of fuel dumping.

11-11 Light pollution

Some comments stated that the project could increase light pollution.
According to the FAA Order 1050.1E, Change 1, *Environmental Impacts: Policies and Procedures*, due to relatively low levels of light intensity from airport lighting compared to background levels associated with airport development actions, light emissions impacts are unlikely to have an adverse impact on human activity or the use or characteristics of the protected properties. The metric for measuring impacts is generally a comparison between existing background lighting/visual impacts compared with the change proposed from the project. The Proposed Action includes only minor lighting improvements associated with the modular terminal expansion as well as minor lighting improvements for the commercial aircraft parking apron. No additional runway lighting would be required. Generally, airfield lighting is the most visual aspect of an airport. Because the additional terminal lighting meets with the general background lighting environment within the developed area, and because the existing Boeing aircraft parking ramp includes lighting, the minor lighting improvements associated with the terminal are not expected to result in a significant impact.

### 11-12 Wetlands

Some comments questioned impacts on wetlands.

As stated in the EA on page D.38, according to the Airport’s Master Drainage Plan, there are two large wetland areas, one wetland mitigation bank and a number of small wetlands located on airport property. Wetlands on Snohomish County Airport/Paine Field property have been impacted by fill, clearing and/or surrounding land use over the past several years. However, no wetlands were identified that could be potentially impacted by the proposed project.

Additionally, as stated in **General Response 11-10**, no significant water quality impacts are expected. Because increased stormwater and deicing practices would not exceed the capacity of the stormwater detention systems and permits, no water quality impacts are expected and therefore, no indirect wetland impacts are expected.