United States Department of Transportation
Federal Aviation Administration
Northwest-Mountain Region
Seattle, Washington

RECORD OF DECISION

FOR
THE MASTER PLAN UPDATE
DEVELOPMENT ACTIONS
SEA-TAC INTERNATIONAL AIRPORT
SEATTLE, WASHINGTON
July 3, 1997

TABLE OF CONTENTS

I. INTRODUCTION

This Record of Decision (ROD) provides final Federal Aviation Administration (FAA) approval for the Master Plan Update development actions adopted by the Port of Seattle (POS) on August 1, 1996, in POS Commission Resolution # 3212, as amended on May 27, 1997, in POS Commission Resolution No. 3245.

This ROD provides final approval for those agency actions necessary in order to provide FAA support for a new 8500-foot dependent air carrier runway, for a 600 foot southerly extension of runway 16L/34R, for expanded runway safety areas for runways 16R and 16L, and for various landside Master Plan Update improvements scheduled to be completed through the year 2010. The phasing of these various projects is graphically presented on pages 2-22 to 2-23 of the Final Supplemental Environmental Impact Statement [FSEIS], and is also presented in Appendix A of this ROD.

II. BACKGROUND

Over the past decade, the Federal Aviation Administration (FAA) has worked closely with local and regional officials and with the Port of Seattle (POS) aviation planning staff to investigate ways in which to accommodate the increasing passenger and operational activity demands at Seattle-Tacoma International Airport (Sea-Tac). As documented in Chapter I of the Final Environmental Impact Statement (FEIS) and in Chapter 2 of the FSEIS, the present airport runway configuration, with two closely-spaced runways, is currently responsible for significant airside delays, particularly during poor weather conditions, and is forecast to be responsible for increasing such delays in the future. Furthermore, the present design and configuration of airport landside facilities cannot adequately accommodate projected increases in activity without severe landside congestion.

On the regional level, the FAA has worked for a number of years with the local metropolitan planning organization [currently entitled the Puget Sound Regional Council (PSRC)], and with other local planning agencies, to find solutions to the related problems of inadequate capacity and increasing delays which are forecast for Sea-Tac. The FAA participated in the 1989-1992 Flight Plan Study, which recommended a multiple airport system that included a new runway at Sea-Tac. The agency also funded a PSRC study of the feasibility of a major supplemental airport, which concluded on October 27, 1994, with PSRC Resolution # EB-94-01, determining that there were no feasible sites for such a airport, and deciding not to proceed with further such studies on a regional level (See FEIS Appendix B for detailed information on regional alternatives).

On January 5, 1994, the FAA began the public phase of the environmental process involving POS site-specific development proposals, which included a third Sea-Tac runway, by announcing in the Federal Register its intent to prepare an Environmental Impact Statement (EIS), and by requesting scoping comments (59 Fed. Reg. 645). Scoping meetings were held with the general public and with Federal, State and local agencies on February 9 and 10, 1994 (See FEIS Appendix A for detailed information on this scoping process).

During this same time frame, the POS began its Master Plan Update study, designed to develop recommendations for improvements to Sea-Tac which would reduce existing and forecasted poor weather aircraft operating delay and would accommodate forecasted growth in passengers, cargo, and aircraft operations. The Master Plan Update study process occurred concurrently with the initial environmental studies discussing the impacts of the development actions being proposed.

On April 24, 1995, the FAA published in the Federal Register a Notice of Availability of the Draft Environmental Impact Statement (DEIS) [60 Fed. Reg. 20149]. Public comments were taken on

the DEIS from the date of its release until August 3, 1995. During the comment period, two public hearings were held, on June 1, 1995 and June 14, 1995. Final Environmental Impact Statement (FEIS) Appendix T, located in Volumes 5, 6, and 7, contains the transcript from the public hearings, and letters commenting on the DEIS which were received from the public and government agencies. FEIS Volume 4, Appendix R contains responses to the issues presented during the comment period.

The FEIS, approved by the FAA on February 1, 1996, was released to the public on February 9, 1996 (see 61 Fed. Reg. 5056). The FEIS addressed areas of public concern by way of modifications to the DEIS text and specific responses to public comments.

The U.S. Environmental Protection Agency (EPA) published a notice of the availability of the approved FEIS, pursuant to 40 CFR 1506.10 (61 Fed. Reg. 6243) in the Federal Register on February 16, 1996.

Although the FAA did not solicit public comments on the FEIS (on issues other than air quality conformity), several public agencies, community groups, and citizens nevertheless submitted written comments for agency consideration on the FEIS. Appendix A of the Final Supplemental Environmental Impact Statement (FSEIS) responds to substantive agency and public comments on the FEIS, other than those pertaining to air quality conformity.

On July 11, 1996, in Resolution A-96-02, the PSRC General Assembly approved an amendment to the Metropolitan Transportation Plan to include a third runway at Sea-Tac Airport, with specific noise reduction measures based upon the recommendations of an expert Panel.

On August 1, 1996, the Commissioners of the Port of Seattle met to discuss the Master Plan Update proposals discussed in the FEIS. During the course of that meeting, by approving Resolution No. 3212, they adopted and approved a preferred development alternative, and authorized implementation of the first phase of those development actions. To date, due to the superseding events discussed below, no such implementation activity has taken place.

In May of 1996 the FAA Northwest Mountain region became aware of the fiscal year 1996 Terminal Area Forecast (TAF) prepared by the FAA headquarters Office of Policy and Plans. The TAF suggested that the air travel demand forecasts used in the Master Plan Update may have significantly understated the actual demand currently being experienced at Sea-Tac Airport and likely to be experienced at the airport in the foreseeable future. Over the next six months, a more detailed reexamination of those national forecasts, with more focus upon local conditions, was undertaken by the FAA and the Port of Seattle, together with their consultants. In December 1996, the FAA decided that a Supplemental EIS (SEIS) was necessary in order to reexamine, with public participation, how this anticipated growth might affect the conclusions reached in the February 1996 FEIS.

By Federal Register notice dated December 27, 1996 [61 Fed. Reg. 68327], the FAA published a Notice of Intent to prepare this SEIS. On February 4, 1997, the FAA and the POS released a Draft SEIS to the public. A public notice of availability of the Draft SEIS was published in local newspapers on February 9, 1997, in the Federal Register on February 13, 1997 [62 Fed, Reg. 6831] and by the Environmental Protection Agency [EPA] on February 14, 1997 [62 Fed. Reg. 6969]. A public hearing was held at the Sea-Tac International Airport on March 4, 1997, during which oral comments were taken from approximately 26 members of the public. By the March 31, 1997, close of the public comment period, 85 written public comments on the DSEIS had been received [reprinted at Final SEIS Appendix G]. All substantive oral and written public comments [including those pertaining to air quality conformity] are responded to in Appendix F of the FSEIS.

On May 13, 1997, the FAA signed and released the FSEIS to the public. A public notice of availability of the FEIS was published in local newspapers on May 19, 1997, in the Federal Register on May 21, 1997 [62 Fed. Reg. 27831] and by the Environmental Protection Agency [EPA] on May 23, 1997 [62 Fed. Reg. 28469]. Although not solicited, further public comments (not pertaining to air quality) were received on the FSEIS, which are responded to in Appendix D of this ROD. Public Comments on the FSEIS Air Quality analysis are responded to in Appendix E of this ROD.

On May 27, 1997, the Commissioners of the Port of Seattle met to discuss the Master Plan Update proposals discussed in the FSEIS. During the course of that meeting, by approving Resolution No. 3245, they again adopted and approved a preferred development alternative [as outlined in Appendix A of this ROD], and authorized immediate implementation of the first phase of those development actions.

III. THE PROPOSED AGENCY ACTIONS AND APPROVALS

FEIS page II-42 outlines a variety of actions that will require Federal approval prior to undertaking the proposed development actions. The majority of these actions will require FAA approval. However, the U.S. Army Corps of Engineers, a cooperating agency for the FEIS, will be responsible for permitting processes under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. The necessary FAA actions, determinations and approvals are summarized below.

a. Determination of project eligibility for Federal grant-in-aid funds (49 U.S.C. § 47101, et. Seq.) and Passenger Facility Charge [PFC] funds (49 U.S.C. § 40117), for land acquisition and relocation (49 CFR Part 24), site preparation, runway, taxiway, runway safety area, and other airfield construction, terminal and related landside development, navigational and landing aids, and environmental mitigation.

b. Conclusions regarding air quality conformance of the proposed facility with applicable air quality standards under the Clean Air Act, as amended. (42 U.S.C. § 7506, Section 176(c)(1)), and 40 CFR Part 93).

c. Approval for relocation/upgrade of the existing airport traffic control tower and various navigational aids (49 U.S.C. § 44502(a)(1)).

d. Decisions to develop air traffic control and airspace management procedures to effect the safe and efficient movement of air traffic to and from the proposed new runway, including the development of a system for the routing of arriving and departing traffic and the design, establishment, and publication of standardized flight operating procedures, including instrument approach procedures and standard instrument departure procedures (49 U.S.C. § 40103(b)).

e. Determinations, through the aeronautical study process, under 14 CFR Part 77, regarding obstructions to navigable airspace (49 U.S.C. § 40103(b) and 40113).

f. Determinations under 14 CFR Part 157 as to whether or not the agency objects to the airport development proposal from an airspace perspective, based upon aeronautical studies (49 U.S.C. § 40113(a)).

g. Determinations under the 49 U.S.C. Sections 47106 and 47107 pertaining to FAA funding of airport development [including approval of a revised airport layout plan (ALP), 49 U.S.C. §

47107(a)(16)], Environmental approval (see 42 U.S.C. §§ 4321-4347, and 40 CFR § 1500-1508), and approvals under various executive orders discussed in the ROD.

h. A certification that the proposed facility is reasonably necessary for use in air commerce or for the national defense (see 49 U.S.C. § 44502(b)).

IV. ALTERNATIVES ANALYSIS

The Master Plan Update Study process identified four broad development needs at Sea-Tac, which formed the basis for the site-specific EIS. These four needs, discussed in detail in FEIS Chapter I and in FSEIS Chapter 2, are summarized as follows:

(1) Improve the poor weather airfield operating capability in a manner that accommodates aircraft activity with an acceptable level of aircraft delay;

(2) Provide sufficient runway length to accommodate warm weather operations without restricting passenger load factors or payloads for aircraft types operating to the Pacific Rim;

(3) Provide Runway Safety Areas (RSA's) that meet current FAA standards; and

(4) Provide efficient and flexible landside facilities to accommodate future aviation demand.

FEIS Chapter II and FSEIS Chapter 3 discuss in detail the alternatives considered by the FAA and the POS during the EIS study process for each of these four identified needs. For each need, the no action alternative was also considered. A summary of the FAA's consideration of alternatives for each of these needs is set forth below:

(1) Improve the poor weather airfield operating capability in a manner that accommodates aircraft activity with an acceptable level of aircraft delay;

The Puget Sound region of Western Washington is renowned for its poor weather, characterized by frequent precipitation, clouds and fog. Under FAA aircraft separation criteria, the two existing Sea-Tac runways are too close together to permit simultaneous approaches to both runways during much of this poor weather. Under these weather conditions, therefore, there is but one usable approach path for aircraft landing at Sea-Tac. A one runway airport operates much differently from a multiple runway airport in terms of its ability to accommodate aircraft landings during periods of heavy air traffic demand. The FEIS and FSEIS document the current and forecasted aircraft delays resulting from the inadequate spacing of the two existing Sea-Tac runways, and the resulting single approach stream of air traffic during poor weather.

As noted at the beginning of this ROD, the FAA has participated for many years in regional attempts to find a solution to the Sea-Tac delay problem through the development of a replacement or supplemental airport or airports, or the expanded use of existing airports, in the Puget Sound region, in order to reduce the aircraft demand existing at and forecast for Sea-Tac (see FEIS Appendix B). However, for the reasons documented in the EIS and SEIS, the FAA has concluded that these regional solutions are currently not reasonable alternatives to meet the defined need. Likewise, the FAA has considered the reduction and management of demand at Sea-Tac through the use of other modes of transportation, demand and system management alternatives, and the use of additional air traffic and flight technology alternatives, and concluded that these alternatives would not meet the defined need.

As discussed at FEIS I-13 and at FSEIS 3-5 to 3-6, the FAA and the POS have in recent years made a number of procedural and technological improvements at Sea-Tac, which have increased the efficiency of the air traffic flow. However, we have now exhausted all known available and reasonable improvements of this nature. Additional technological and procedural alternatives which have been suggested are not reasonable solutions to the defined need, for the reasons explained at FEIS II-14 through II-18, and in response to public comments in FEIS Appendix R and in FSEIS Appendix F.

Finally, the FAA has considered the use of delayed or blended alternatives as a means to avoid the immediate construction of a new runway at Sea-Tac. For the reasons discussed in FSEIS pages 3-6 to 3-7, the FAA and the POS have decided that limitations on financial resources, and a refined consideration of the construction process, require extending the runway construction period and delaying the commissioning of the runway until late in the year 2004. It is recognized that this delay will cause significant inconvenience to the traveling public and additional costs to airport users. However, the phasing plan outlined at FSEIS pages 2-22 to 2-23 represents a compromise which balances construction-related financial constraints with the costs associated with rapidly increasing airside delays.

As part of the POS Master Plan Update, an extensive evaluation was undertaken, summarized at FEIS pages II-12-14, to identify the appropriate alignment, spacing and length for a proposed third runway. The FAA worked closely with the POS to develop the assumptions and methodologies during this portion of the alternatives evaluation, which relied upon FAA design standards and the results of recent FAA Capacity Enhancement Plan updates. The FAA believes that this evaluation process was appropriately conducted, and therefore does not consider it necessary, in its independent Federal consideration of alternatives, to undertake a de novo comprehensive alternatives analysis of alignment, spacing, and length issues. The Port of Seattle, as the sponsor and airport operator, has the fundamental role of planning and developing aviation facilities at Sea-Tac.

Considered further in FEIS Chapter IV and in FSEIS Chapter 5, were the reasonably foreseeable environmental consequences of the Do-Nothing/No-Build alternative and the site-specific runway development alternatives. These evaluations concluded that the proposed third runway project would not result in any significant environmental impacts which could not be adequately mitigated [see ROD Section VI and Appendix F for summaries of mitigation].

The Port's decisions, at its August 1, 1996, and May 27, 1997, Commission meetings, to proceed with a third parallel runway spaced at 2500 feet from runway 34R/16L, and 8500 feet in length, are well supported by airspace, engineering, environmental, and financial considerations, as documented in the Master Plan Update and in the FEIS and FSEIS.

Under the Do-Nothing/No-Build alternative, a third runway at Sea-Tac would not be developed now or in the near future. However, Federal adoption of this alternative would fail to alleviate the current and forecast airside delays at Sea-Tac which are documented in the FEIS and FSEIS. Although the FEIS and FSEIS find that, with appropriate mitigation, the POS preferred alternative will have no significant environmental impacts, the Do-Nothing/No-Build Alternative would still be the least environmentally impacting alternative, and thus the Do-Nothing/No-Build alternative is environmentally preferable. However, since it would fail to accomplish the principal purpose and need for the project, this alternative is not supported by the FAA.

In its consideration of alternatives, the FAA has been mindful of its statutory charter to encourage the development of civil aeronautics and safety of air commerce in the United States (49 U.S.C. 40104). We have also considered the congressional policy declaration that airport construction and improvement projects that increase the capacity of facilities to accommodate passenger and cargo traffic be undertaken to the maximum feasible extent so that safety and efficiency increase and delays decrease (49 U.S.C. 47101(a)(7)).

As a further policy consideration, the construction and operation of the proposed third Sea-Tac runway will alleviate delays and congestion at Sea-Tac International Airport, as extensively documented in the administrative record for this ROD. Although the $587 million cost for property acquisition, runway construction, and environmental mitigation (as specified in the SEIS) is significant by any standard, the annual delay savings from an 8500 foot new runway are expected to be approximately $438 million by the year 2005, and $646 million by the year 2010. ROD Appendix G presents a recent Benefit-Cost Analysis for the third runway project, prepared by the agency's System and Policy Analysis Division at FAA headquarters. That analysis reflects that the total benefit of the proposed runway exceeds the total project cost by a factor of approximately 5, based upon a comparison of present values of benefits and costs. Based upon the Appendix G figures, discounted to present value, it is evident that if the third runway becomes operational by the year 2005, the delay savings will compensate for the runway costs within a two year period.

Although the benefit/cost analysis reflects savings from both airline operation and passenger delays, there are other more qualitative considerations. The FAA and the POS seek to relieve passenger and public inconvenience, and to make travel to and from this region more attractive by reducing travel delay and uncertainty. The FAA therefore concludes that the third runway project is both cost effective, and otherwise worthy of Federal support through the approvals in this ROD.

This support and these approvals do not, however, suggest that an FAA commitment to provide a specific level of financial support for the new runway project has yet been made. Future FAA discretionary funding decisions will be based upon the statutory criteria set forth in 49 U.S.C. § 47115(d), and upon the FAA policy announced in the Federal Register on June 24, 1997 (62 Fed. Reg. 34108), or under subsequent revisions to that agency policy.

After careful consideration of the analysis of the impacts of the various alternatives considered, and of the ability of these alternatives to satisfy the identified purpose and need for this proposal; and after review and consideration of the testimony at the various public hearings, of the comments submitted in response to the circulation of the DEIS, FEIS, DSEIS and FSEIS and of coordination with Federal, state and local agencies; and after considering the policy matters discussed above; the FAA hereby selects the runway alternative adopted and approved for construction by the POS on August 1, 1996, and on May 27, 1997, as the FAA's preferred runway alternative.

(2) Provide sufficient runway length to accommodate warm weather operations without restricting passenger load factors or payloads for aircraft types operating to the Pacific Rim.

The FEIS documents the inability of existing Sea-Tac runways (at 9,425 and 11,900 feet) to service unrestricted warm weather non-stop operations to Pacific Rim destinations. The inability of Sea-Tac to accommodate unrestricted operations to these destinations is expected to result in ever-increasing airline economic losses throughout the planning period (estimated at $1.2 million in the year 2000 and $2 million by the year 2010).

The Master Plan Update determined that a 12,500 foot runway is the minimum length necessary to permit unrestricted B747-200B operations at 76° F. Although consideration was given to meeting this need by extending runway 16R/34L to a length of 12,500 feet, this alternative was rejected as unreasonable due to impacts on wetlands and the expense of roadway relocations, as discussed in the FEIS. Consideration was also given to development of a new third runway with a 12,500 foot length, but this alternative was also rejected due to the extensive disruption of existing development and the expense associated with roadway relocation, as discussed in the FEIS. The FEIS identifies a 600 foot southward extension of Runway 16L/34R as being the most

cost effective and least environmentally damaging development alternative. The net cost of this runway extension is estimated at $12,700,000.

With regard to the Delayed/Blended alternatives, although these were considered at FEIS page II-21, they were dismissed from further study and not chosen as the preferred alternative. Although the POS had not earlier identified a preferred development date for this aspect of the Master Plan Update (see FEIS footnote #19, page II-44), the Final SEIS [at page 2-22] states an intent to proceed with this development aspect of the Master Plan Update in the year 2010, when it is anticipated that this development project will become cost-effective (payback period estimated at 11.1 years in year 2000 but reduced to 6.5 years by the year 2010). In order to maintain the integrity of the FEIS environmental process, which requires the consideration of connected, cumulative and similar actions in one document, the FEIS and FSEIS evaluated this runway extension project during this EIS process. Under FAA Order 5050.4A paragraph 102.b., a written environmental reevaluation of this project will likely be required prior to the commencement of construction.

Under the Do-Nothing/No-Build alternative, a runway extension at Sea-Tac would not be developed now or in the foreseeable future. Although the FEIS and FSEIS find that, with appropriate mitigation, the POS preferred alternative will have no significant environmental impacts, the Do-Nothing/No-Build Alternative would still be the least environmentally impacting alternative, and thus the Do-Nothing/No-Build alternative is environmentally preferable. However, since it would fail to accomplish the principal purpose and need for the project, this alternative is not supported by the FAA.

Having considered the policies set forth at 49 U.S.C. sections 40104 and 47101, the ability of the available alternatives to meet the articulated need, and the administrative record which concerns the proposed runway extension, the FAA hereby selects as its preferred alternative the runway extension alternative identified in the FEIS as the POS planning staff‘s preferred alternative, as adopted by the POS as part of its Master Plan Update and ALP at its August 1, 1996, and on May 27, 1997, meetings.

The FAA’s approval of the runway extension project in this ROD signifies that the project meets FAA standards for approval of the agency actions discussed in Section II of this ROD. It does not, however, signify an FAA commitment to provide financial support for the runway extension, which is a decision which may not be made unless and until the project can be justified under the criteria prescribed by 49 U.S.C. § 47115(d), and under the agency policy announced in the Federal Register on June 24, 1997 (62 Fed. Reg. 34108), or under subsequent revisions to that agency policy.

(3) Provide Runway Safety Areas (RSA’s) that meet current FAA standards.

The FEIS documents the fact that existing Sea-Tac runways do not meet current FAA safety design standards, in that three of the four runway ends have RSA’s which are of insufficient length to ensure safe operations in the event of aircraft runway overruns [As noted at FEIS I-18 and at FSEIS 4-3, the RSA for runway end 34L was brought into compliance in 1995]. FAA approval of the RSA for runway end 34R was provided in a FAA Record of Decision dated April 18, 1996, notice of which was given through publication of an announcement in several local newspapers [discussed at FSEIS 3-8 and 4-3]. Construction is expected to be completed in late 1997.

For the remaining two RSAs (16R and 16L), consideration was given to the Do-Nothing/No-Build alternative during the EIS process. A literal do nothing approach (See FEIS II-24, footnote #12) was rejected as an unreasonable option early in the process, since it would not address the immediate need to correct a runway design which does not meet current FAA standards.

Considered further as part of the detailed analyses of development alternatives 2, 3, and 4, were the No-Build alternative (requiring the establishment of displaced threshold/declared distance procedures for each runway), and the POS preferred alternative, involving the construction of a 1,000 foot RSA for the two remaining runway ends, as well as standard size RSAs on both ends of the new proposed third runway.

Under the Do-Nothing/No-Build alternative, these runway safety area improvements at Sea-Tac would not be developed now or in the near future. Although the FEIS and FSEIS find that, with appropriate mitigation, the POS preferred alternative will have no significant environmental impacts, the Do-Nothing/No-Build Alternative would still be the least environmentally impacting alternative, and thus the Do-Nothing/No-Build alternative is environmentally preferable. However, since it would fail to accomplish the principal purpose and need for the project, this alternative is not supported by the FAA.

As explained at FEIS page II-23, the FAA does not favor the establishment of displaced threshold/declared distance procedures at Sea-Tac, for reasons of safety and efficiency. Accordingly, having considered the policies set forth at 49 U.S.C. sections 40104 and 47101, the ability of the available alternatives to meet the articulated need, and the administrative record which concerns the proposed RSA extensions, the FAA hereby selects as the FAA's preferred alternative the RSA extension alternative adopted by the POS as part of its Master Plan Update and ALP, at its August 1, 1996, and May 27, 1997, meetings.

The FAA's approval of the RSA extension projects in this ROD signifies that the projects meet FAA standards for approval of the agency actions discussed in Section II of this ROD. It does not, however, signify an FAA commitment to provide a specific level of financial support for the RSA extensions, which is a future decision which will be made under the agency policy announced in the Federal Register on June 24, 1997 (62 Fed. Reg. 34108), or under subsequent revisions to that agency policy.

(4) Provide efficient and flexible landside facilities to accommodate future aviation demand.

The FEIS and FSEIS document the need to incrementally improve existing terminal and other landside facilities at Sea-Tac over the next several decades, in order to alleviate the congestion and passenger inconveniences anticipated to result from regional growth and increased demand for airport services.

During the EIS process, the FAA considered but rejected for further detailed evaluation, the reduction of demand at Sea-Tac landside facilities through the development of a replacement or supplemental airport or airports in the Puget Sound region, through the use of other modes of transportation, or through demand and system management alternatives. For the reasons discussed in the FEIS, the FAA concluded, as it did in the case of the proposed third runway project, that these alternatives were unreasonable.

Although Delayed/Blended alternatives were also rejected in the FEIS as not meeting the need for landside improvements, it should be noted that the POS originally planned to incrementally expand and improve the Sea-Tac landside facilities discussed in the FEIS over the next 25 years, as the need for specific improvements was justified by the rate of increased demand placed upon existing facilities. With the accelerated demand forecast in the FSEIS, the terminal and landside facilities are now needed even sooner than originally forecast in the FEIS, and accordingly, the Delayed/Blended alternative is an even more unreasonable alternative. The current project phasing plans documented at FSEIS pages 2-22 to 2-23 and in Appendix A to this ROD represent earlier timeframes for many of these terminal and landside facilities, in order to accommodate these increased demand forecasts.

Carried forward for detailed evaluation in FEIS Chapter IV, and considered also in FSEIS Chapter 5, were the Do-Nothing/No Build alternative, along with three development alternatives, centered around a central terminal concept, a north unit terminal concept, and a south unit terminal concept. As part of the POS Master Plan Update, an extensive engineering and financial evaluation was undertaken by the POS, to evaluate these proposed landside improvements. The FAA worked closely with the POS to develop the assumptions and methodologies during this portion of the alternatives evaluation. The FAA believes that this evaluation process was appropriately conducted, and therefore does not consider it necessary, in its independent Federal FEIS consideration of alternatives, to undertake a de novo comprehensive alternatives analysis of these landside improvements. The Port of Seattle, as the sponsor and airport operator, has the fundamental role of planning and developing aviation facilities at Sea-Tac. The preferred alternative recommended in the FEIS and FSEIS by the POS's planning staff (the North Unit Terminal concept), is well supported by airspace, engineering, environmental, and financial considerations, as documented in the Master Plan Update and in the FEIS and FSEIS.

Under the Do-Nothing/No-Build alternative, these landside improvements would not be developed now or in the next several decades. However, Federal approval of this alternative would fail to alleviate the congestion and passenger inconveniences anticipated to result from regional growth and increased demand for airport services. Although the FEIS and FSEIS find that, with appropriate mitigation, the POS preferred alternative will have no significant environmental impacts, the Do-Nothing/No-Build Alternative would still have the fewest developmental impacts. However, the Do-Nothing/No-Build Alternative would not be the environmentally preferable alternative, since it would fail to alleviate the significant environmental impacts associated with increased surface transportation congestion, which the preferred alternative is designed to remedy. Furthermore, since the Do-Nothing/No-Build Alternative would fail to accomplish the principal purpose and need for these landside development projects, this alternative is not supported by the FAA.

Accordingly, having considered the policies set forth at 49 U.S.C. sections 40104 and 47101, the ability of the available alternatives to meet the articulated need, and the administrative record which concerns these landside development projects, the FAA hereby selects as the FAA's preferred alternative the landside development recommended in the FEIS and FSEIS by the POS's planning staff (alternative #3, North Unit Terminal), as adopted as Part of its Master Plan Update and ALP, and as partially approved for immediate construction by the POS at its' August 1, 1996, and May 27, 1997, meetings.

The FAA's approval of these landside expansion and improvement projects in this ROD signifies that these projects meet FAA standards for approval of the agency actions discussed in Section II of this ROD. It does not, however, signify an FAA commitment to provide a specific level of financial support for these projects, which must await future decisions to be made under the criteria prescribed by 49 U.S.C. § 47115(d), and under the agency policy announced in the Federal Register on June 24, 1997 (62 Fed. Reg. 34108), or under subsequent revisions to that agency policy.

V. THE AGENCY FINDINGS

The FAA makes the following determinations for this project, based upon the appropriate information and analysis set forth in the FEIS and FSEIS and upon other portions of the administrative record:

A. The project is consistent with existing plans of public agencies for development of the area surrounding the airport. [49 U.S.C. 47106(a)(1)].

The determination prescribed by this statutory provision is a precondition to agency approval of airport project funding applications. It has been long-standing policy of the FAA to rely heavily upon actions of metropolitan planning organizations (MPOs) in amending regional airport system plans (RASPs) to satisfy the project consistency requirement of 49 U.S.C. 47106(a)(1) [see, e.g., Suburban O'Hare Com'n v Dole, 787 F.2d 186, 199 (7th Cir, 1986)]. Furthermore, both the legislative history and consistent agency interpretations of this statutory provision make it clear that reasonable, rather than absolute consistency with these plans is all that is required.

Under the provisions of both Federal and State Law (see FEIS Appendix S, and FEIS Appendix R, response to comment R-2-1), the Puget Sound Regional Council (PSRC) has been designated as the MPO for the Puget Sound metropolitan area, and given primary responsibility for transportation planning in the region. On April 29, 1993, the PSRC adopted Resolution No. A-93-03 amending the Puget Sound area RASP, to provide for a third runway at Sea-Tac. That resolution stated that a third Sea-Tac runway shall be authorized by April 1, 1996, subject to the following three conditions:

1. Unless shown through an environmental assessment, which will include financial and market feasibility studies, that a supplemental site is feasible and can eliminate the need for the third runway. [By PSRC resolution EB-94-01, dated October 27, 1994, the PSRC determined that a supplemental airport site was not feasible].

2. After demand and system management programs are pursued and achieved or determined not to be feasible, based upon independent evaluation. [By final order dated December 8, 1995, the expert panel appointed by the PSRC to independently evaluate this issue, determined that that demand and system management programs were not feasible].

3. When noise reduction performance objectives are scheduled, pursued and achieved based on independent evaluation and based on measurement of real noise impacts. [By final order dated March 27, 1996, a PSRC expert panel found that the POS had not satisfied this condition. However, on July 11, 1996, in Resolution A-96-02, the PSRC General Assembly approved an amendment to the Metropolitan Transportation Plan to include a third runway at Sea-Tac Airport, with specific noise reduction measures based upon recommendations of the expert panel].

In consideration of the above-described actions of the PSRC in amending the local RASP to authorize the third runway project [more fully described at FSEIS pages 4-1 to 4-2], the FAA is satisfied that 49 U.S.C. 47106(a)(1) has been fully complied with.

With regards to this issue, however, the FAA has also reviewed the substantial documentation in the administrative record demonstrating that throughout the EIS process the POS has shown great concern for the impact of the proposed development actions on surrounding communities, and has attempted to ensure the consistency of its project proposals with the planning efforts of neighboring communities. The administrative record for this Record of Decision includes a detailed chronology of coordination between the POS and neighboring jurisdictions concerning local planning proposals, along with documents describing the extensive public meetings, hearings, and other means by which public participation in project planning was accommodated. Further discussion of consistency of the proposed development projects with public agency planning is summarized at FEIS pages IV.2-7 through IV-2-18, and at FSEIS Chapter 4.

As noted in the referenced text, Sea-Tac Airport lies almost totally within the boundaries of the City of SeaTac. The extent to which City of Sea-Tac regulations apply to Sea-Tac Airport development is unresolved, and the POS is currently involved in a process with the City to resolve this question. Meanwhile the POS has committed itself to participating in the City's land use planning activities, to address any issues relating to the proposed Sea-Tac Airport development to the extent required.

As discussed at FEIS IV.2-10 through IV.2-16, the cities of Des Moines, Normandy Park, Burien, and Tukwila have each engaged in recent land use planning actions which appear designed to limit airport expansion. These local plans and ordinances establish land use compatibility guidelines with noise levels for residential and other noise-sensitive areas that are substantially more restrictive than those established by the FAA. Some of these local plans and ordinances also establish zoning policies (a prohibition on use of lands acquired by public entities to be used for new commercial activities). These ordinances purport to restrict the use of some lands within these jurisdictions (e.g., for the third runway northern Runway Protection Zone), needed by the POS in order to implement important safety and aircraft operation aspects of its preferred alternative.

It has not yet been decided under Washington state law whether the Master Plan Update proposed development actions would be subject to any of these plans and ordinances adopted by these adjacent cities. Thus there may be little or no inconsistency here. With regard to noise planning, the FAA has considered the fact that implementation of the POS preferred alternative will not result, after mitigation, in any significant increases in noise impacts on lands of these neighboring jurisdictions. To the extent that these adjacent cities impose restrictions on land acquisition by the POS for essential aviation safety and aircraft operation purposes, the FAA believes that such planning policies are inapplicable and invalid under Federal law.

In making its determination under 49 U.S.C. 47106(a)(1), the FAA has considered the fact that each of these local governments has been represented on the PSRC, and has participated as a member of that organization in its decision to authorize the third runway project at Sea-Tac (although some of these local governments may have disagreed, as individual PSRC members, with that ultimate decision). The FAA has also recognized the fact that none of these jurisdictions has regulatory authority over airport operations, since long-established doctrines of Federal preemption preclude these communities from regulating aircraft operations conducted at Sea-Tac.

Furthermore, these local government planning policies, which appear designed to obstruct the proposed Sea-Tac development, appear to be in conflict with provisions of the Washington State Growth Management Act, 1990, such as those found at RCW §§ 36.70A.100 and 36.70A.200, which require these city comprehensive plans to be coordinated with and consistent with regional policy decisions (e.g., the 1995 update of the Vision 2020 Growth and Transportation Strategy. Vision 2020 is the region's long-range growth management, economic, and transportation strategy. The transportation component of Vision 2020 specifically incorporates PSRC Resolution A-93-03 which authorizes the third runway project).

The Growth Management Act also requires these local plans to be coordinated with and to be consistent with King County countywide planning policies and the comprehensive plans of King County and neighboring cities such as Sea-Tac, and prohibits any local comprehensive plan from precluding the siting of essential public facilities such as airports.

Given the FAA determination in this ROD, under appropriate Federal law, that there is a compelling need for the proposed Sea-Tac improvements, as documented in the FEIS, it is inappropriate for these local communities to attempt to exercise local zoning control in a manner which would conflict with the domestic and international aviation requirements of this airport. If there were to be a conflict between Federal and local policies, the local policies must give way to the Federal policies, under the doctrine of Federal preemption.

B. <u>The interests of the community in or near which the project may be located have been given fair consideration.</u> [49 U.S.C. 47106(b)(2)]

The determination prescribed by this statutory provision is a precondition to agency approval of airport development project funding applications. The regional planning process over the past decade and the environmental process for this project-specific EIS which began in 1994 and extended to this point of decision, provided numerous opportunities for the expression of and response to issues put forward by communities in and near the project location. Nearby communities and their residents have had the opportunity to express their views during the Draft EIS public comment period, at several public hearings and a congressional hearing, as well as during the comment periods following public issuance of the FEIS, the DSEIS, and the FSEIS,. The FAA's consideration of these community views is set forth in FEIS Appendix R, in FSEIS Appendix F, and in Appendix A of this ROD.

C. The State of Washington has certified in writing that there is reasonable assurance that the project will be located, designed, constructed, and operated in compliance with applicable air and water quality standards [49 U.S.C.§ 47106 (c)(1)(B)].

The determination prescribed by this statutory provision is a precondition to agency approval of airport development project funding applications involving a major runway extension or new runway location.

By letter dated December 20, 1996 [see Appendix B to this ROD], the Washington State Department of Ecology, acting under delegated authority from the Governor of the State of Washington, provided this certification, conditioned upon a number of mitigation measures to be undertaken by the Port of Seattle. Pursuant to general principles of agency and administrative law, and absent evidence that delegation is unauthorized or unlawful as a matter of state law, the FAA has interpreted this statute to permit state chief executive officers to delegate this certification responsibility to lower state officials with appropriate subject matter jurisdiction over state air and water quality [see FAA Order 5050.4A, paragraph 47e.(5)(e)]. As described at FSEIS Appendix F, page F-79, the delegation to the Department of Ecology which occurred in this case was appropriate under Washington State law.

However given the public controversy which has arisen over this delegation, by letter dated June 30, 1997, (see Appendix C to this ROD], the Governor of the State of Washington further certified that the airport project evaluated in the FEIS and FSEIS will be located, designed, constructed and operated so as to comply with applicable air and water quality standards.

D. Effect On Natural Resources [49 U.S.C. § 47106(c)(1)(C)]

Under this statutory provision the FAA may approve funding of a new runway or runway extension having a significant adverse effect on natural resources, only after determining that no possible and prudent alternative to the project exists and that every reasonable step has been taken to minimize the adverse effect.

As documented in the FEIS and FSEIS, for several natural resource impact categories which have established significance levels, the agency finds that, without implementation of the mitigation summarized in Section VI and Appendix F of this ROD, the preferred alternative would have a significantly adverse affect. However, given the inability of other alternatives discussed in the FEIS and FSEIS, to satisfy the purposes and needs for the preferred alternative, we have concluded that no possible and prudent alternative exists to development of the proposed alternatives. As discussed in Section VI and Appendix F of this ROD, and documented throughout the FEIS, FSEIS and the administrative record, every reasonable step has been taken to minimize adverse environmental effects resulting from the project.

As discussed generally in FSEIS Chapters 1 and 2, and more specifically at FSEIS Appendix F, response to comment 2-J, specific airport activity levels and their associated environmental

impacts were determined not to be reasonably foreseeable at this time following the year 2010. Accordingly, that year was set as the end of the planning horizon for the revised master plan update proposal evaluated in the FSEIS. However, FSEIS Appendix D did present possible activity levels and their associated environmental impacts for three test cases through the year 2020, based upon an extrapolated quantification of anticipated impacts prior to the year 2010. Although that extrapolated presentation is quite speculative, for the reasons explained in FSEIS Appendix F, the FSEIS does acknowledge that after the year 2010 there will likely be some level of adverse noise and land use impacts resulting from the approval of the preferred development alternatives, when compared to the no action alternative after that date.

Accordingly, in order to consider further mitigation under NEPA, and to address any possible adverse environmental effects resulting from the projects approved in this ROD, the FAA has decided to condition such approval upon the following additional noise and land use mitigation measure:

Following commencement of operations on the new runway, but prior to the year 2010, the POS and the FAA will undertake a further supplemental evaluation of noise and land use impacts anticipated after the year 2010. That supplemental evaluation may be included as part of a future Part 150 study undertaken by the POS. Following completion of that evaluation, if significant additional adverse environmental impacts are found, the Port of Seattle will be required to adopt further noise and land use mitigation measures designed to minimize any significant adverse affects found in that evaluation. This conditional approval will be enforced through a special condition included in future Federal airport grants to the Port of Seattle.

The FAA has reviewed the amount of such additional mitigation which would be required if the maximum additional adverse environmental effects estimated in FSEIS Appendix D should occur. This additional mitigation required would be similar to mitigation programs that have been implemented by the POS in the past, and are expected to be implemented as mitigation in connection with the projects approved in this ROD. Therefore, the FAA concludes that such additional mitigation is feasible. The POS has indicted that such additional mitigation would be financially feasible if it were to be required, based on this special condition. The FAA also concludes that even if the maximum additional adverse environmental effects estimated in Appendix D should occur, it would still make the decisions set forth in this ROD and would approve the projects, subject to the special condition with respect to additional mitigation.

E. Appropriate action, including the adoption of zoning laws, has been or will be taken to the extent reasonable to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations. [49 U.S.C. § 47107(a)(10)].

The sponsor assurance prescribed by this statutory provision is a precondition to agency approval of airport development project funding applications. In addition to the actions described in section IV.A. of this ROD, the Port of Seattle has worked extensively with local jurisdictions over the past two decades to develop and implement plans and policies to ensure compatible land use in the airport vicinity.

FEIS pages III-2 through III-4 and FSEIS chapter four, describe the current status of zoning and land use planning for lands near the airport. FEIS Appendix C, pages 3-9 outline former and existing noise programs which have been designed to either reduce noise at the source or mitigate the noise received by sensitive land uses in the airport vicinity. As explained in FEIS Chapter IV, sections 1 and 2, and FSEIS Section 5-3, with planned mitigation, development of the Master Plan Update proposals will not result in any increased significant impacts on non-compatible land uses. Based upon the entire administrative record for this ROD, the FAA has concluded that existing and planned noise reduction programs at Sea-Tac provide for appropriate action to ensure compatible land use in the airport vicinity.

F. Clean Air Act, Section 176(c)(1) Conformity Determination regarding Seattle-Tacoma International Airport Master Plan Update Development Actions [42 U.S.C. § 7506(c)].

The determination prescribed by this statutory provision is a precondition for Federal agency support or approval of airport development actions which are projected to exceed the *de minimis* air emission levels prescribed at 40 CFR § 93.153. USEPA regulations more generally governing the conformity determination process are found at 40 CFR Part 93, Subpart B.

In the 1996 FEIS, the FAA made a Draft Conformity Determination on the POS Master Plan Update proposals [FEIS pages IV.9-10 and IV.9-11]. Pursuant to the provisions of the USEPA regulations, the FAA published notice of this draft conformity determination in the Federal Register on February 9, 1996 (61 Fed. Reg. 5055), announced the availability of the draft determination in several local newspapers, and provided notice to appropriate Federal, state and local public agencies. In these notices, the agencies and the general public were invited to review and comment on the draft conformity determination. Through a series of Federal Register notifications, the FAA ultimately extended this comment period until June 6, 1996 (61 Fed. Reg. 27944). Comments received during this 1996 comment period are presented at FSEIS Appendix B, Attachment D and are addressed at FSEIS Appendix B, Attachment A.

In February 1997, a Revised Draft Conformity Analysis was issued as part of the Draft SEIS, with a 30 day comment period announced in a February 9, 1997, Seattle Times advertisement. On March 7, 1997, the FAA announced an extension of the comment period on this draft analysis until March 31, 1997 [62 Fed. Reg. 10606]. FSEIS Appendix G presents all public and agency comments on the draft SEIS, including those pertaining to air quality issues. FSEIS Appendix F, section six, responds to those comments which concern air quality and conformity issues.

Due to a number of changes in the nature and timing of the Master Plan Update Development Proposals from those originally evaluated in the FEIS, the draft SEIS air quality analysis projected air quality emission levels below the 40 CFR § 93.153 *de minimis* levels.

Several commenters on the draft SEIS air quality and conformity analyses stated that factual errors had been made in those analyses. At the FAA's request, the EIS consultant then performed a detailed quality assurance reevaluation for the data input to the air emissions and dispersion models. This led to a revised air emissions inventory, with several revisions to the specific emission estimates presented in the draft SEIS. However, this quality assurance process confirmed the overall conclusion of the draft SEIS, which projected air quality emission levels below the *de minimis* levels set forth in 40 CFR § 93.153. FSEIS Appendix B details the basis for this conclusion. Accordingly, a formal conformity determination is not legally required under applicable EPA regulations.

ROD Appendix E presents letters dated June 23, 1997, from the United States Environmental Protection Agency, the State of Washington Department of Ecology, and the Puget Sound Air Pollution Control Agency. In their letters, each of these air quality agencies has concurred with the FSEIS analysis conclusion that the *de minimis* thresholds have not been exceeded for general conformity under the Clean Air Act.

However, in order to achieve maximum public disclosure and to address community concerns, the FSEIS nevertheless presents an analysis of air quality impacts utilizing the regulatory structure set forth in the EPA conformity regulations.

The FSEIS Appendix B analysis demonstrates that if the FAA were legally obligated to make a conformity determination for the projects approved in this ROD, the project would not cause or contribute to any new exceedences of air quality standards. As confirmed by the Washington State Department of Ecology, the project conforms to the Washington State Implementation Plan.

As noted above, the Final SEIS, approved on May 13, 1997, included as Appendix B a Final Air Quality Conformity Analysis. At the request of several air quality agencies, the FAA agreed to provide an additional 30 day comment period on the FSEIS air quality analysis, due to the revisions which had been made to that analysis since issuance of the DSEIS. Notice of the availability of that analysis for public review and comment was published in the Federal Register on May 21, 1997 [62 Fed. Reg. 27830]. Appendix E to this ROD presents the comments received in response to this notice and the agency's response to those comments.

Based upon the air quality information and discussion presented in the FEIS, the FSEIS, and Appendix E of this ROD, and upon other supporting material in the administrative record, the FAA finds that the development actions summarized in ROD Appendix B will not cause air emissions that exceed de minimis thresholds set forth in 40 CFR § 93.153, and conform to the provisions of the Washington State Implementation Plan and the National Ambient Air Quality Standards (AAQS).

Because projects at Sea-Tac Airport are governed by the maintenance area designation, the FSEIS shows that the project will not cause or contribute to any new violations of any of the AAQS in the project area or the metropolitan area. Because the computer modeling predicts that exceedances of the Carbon Monoxide AAQS could occur in the future without the proposed improvements (Do-Nothing/No-Build), consideration was also given to the two non-attainment area principles, and the FSEIS showed that the project will not increase the frequency or severity of any existing violations of any AAQS, and that the project will not delay timely attainment of the AAQS or any required interim emission reduction in the project area.

G. For this project, involving new construction which will directly affect wetlands, there is no practicable alternative to such construction. The proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. [Executive Order 11990, as amended]

This executive order requires all Federal agencies to avoid providing assistance for new construction located in wetlands unless there is no practicable alternative to such construction and all practicable measures to minimize harm to wetlands are included in the action.

FEIS Chapter IV Section 11, and FSEIS Section 5-5 document that the preferred development alternative (North Terminal with 8500 foot runway) selected by the POS from the Master Plan Update study will directly affect approximately 12.23 acres of wetlands. Given the extensive FEIS and FSEIS alternatives analyses (summarized at FEIS IV.11-5 and FSEIS Chapter 3) showing that there are no other reasonable alternative to developing a third runway at Sea-Tac, the FAA additionally concludes that there is no practicable alternative to constructing such a runway, resulting in these wetland impacts, given the purposes and needs documented in the FEIS, consideration of environmental and economic factors, and land use issues.

FEIS Chapter IV, Section 11 and FSEIS Section 5-5, state that for each of the three landside development alternatives, an 8,500 foot runway would result in impacts to slightly more wetlands than would 7,000 foot or 7,500 foot runways. Additional runway length beyond 7,500 feet would require filling additional wetlands. Extending the runway to 8,100 feet requires filling 0.19 additional acres of wetlands, and extension to the full 8,500 feet requires filling a yet additional 0.86 acres. The FEIS and FSEIS demonstrate that these are low quality wetlands. Two of their significant functions, floodwater attenuation and floodwater storage, would be fully mitigated within the airport basin. Additional wetland functions for these wetlands will be mitigated at the Auburn site as part of the overall wetlands mitigation program.

An important purpose of the additional 600 and 400 feet of runway (to 8,100 or 8,500 feet) beyond the 7,500 foot runway is to provide the maximum air transportation service and efficiency

available to the POS and the national air transportation system. Although a 7,500 foot runway provides many of the benefits of a new runway, it does not provide all of the desirable benefits. Alternatives of staggering runway ends or relocating the entire runway are not practicable, because, among other reasons, they would require considerable additional cost and complicate air traffic control procedures. Considering these and other reasons described more fully in Appendix C of this ROD, considering the standards set forth at 40 CFR 230.10(a)(2), and taking into consideration cost, existing air traffic control and aviation technology and logistics, in light of the overall purpose of the runway project, the FAA finds that there is no practicable alternative to the wetland loss associated with an 8500 foot runway.

As noted in FEIS Chapter IV, Section 11, FEIS Appendix P, and FSEIS Section 5-5, the U.S. Army Corps of Engineers (COE) has worked with the FAA and the POS as a cooperating agency to ensure that all practicable measures will be taken to minimize harm to wetlands which will be impacted through development of the preferred alternative, through Best Management Practices during construction and the development of a wetland compensatory mitigation site. Following issuance of this ROD , the COE, in consultation with the Washington State Department of Ecology, will complete its processing of a Section 404 permit, required for the POS to proceed with development impacting wetlands. The project approvals in this ROD and this wetlands determination are expressly conditioned upon permit approval and conditions to be outlined by the U.S. Army Corps of Engineers, and upon the POS accomplishing the wetlands mitigation measures identified in the FEIS, FSEIS, and any COE permit approval.

Although it is generally preferable to attempt to mitigate wetland loss through replacement wetlands in the same watershed [a goal reflected in the local regulations discussed at FSEIS Appendix F, page 127], this is not the case where such replacement would create man-made wetlands adjacent to airport aircraft movement areas. Included at the end of FSEIS Section 5-5 is a reprint of FAA Advisory Circular 150/5200-33, dated May 1, 1997, which states the FAA's strong opposition to wetland mitigation projects located within 10,000 feet of airports serving turbine-powered aircraft [such as SEA-TAC], due to the safety hazard such wetlands present as attractants of wildlife, which significantly increase the risk of bird/aircraft strikes.

The safety standards set forth in this FAA policy statement are recommended for the operators of all public-use airports. Furthermore, for airport sponsors who are the recipients of Federal grant funding, adherence to safety standards set forth in FAA advisory circulars are a requirement of standard grant assurance #34, as acknowledged in paragraph 4-6.a. of Advisory Circular 150/5200-33.

This recent agency policy determination supports the FEIS and FSEIS determinations that the replacement wetlands for the Sea-Tac Master Plan Update development actions should not be located in the vicinity of the airport. Given the limited land area in the Sea-Tac watershed available for wetland replacement, and the hazard associated with the creation of wildlife attractions within 10,000 feet of jet runways, there is no practicable alternative to the replacement of these impacted wetlands outside of the Sea-Tac watershed.

As detailed in FEIS Appendix P, and FSEIS Section 5-5, a detailed wetland mitigation program has been developed to offset the impacts of the project and to recognize other long-term biological problems. The mitigation plan calls for replacing the filled wetlands on a 47 acre mitigation site located on a 69 acre parcel of land along the Green River in Auburn Washington.

H. For this project, involving a significant encroachment on a floodplain, there is no practicable alternative to the selected development of the preferred alternative. The proposed action conforms to all applicable state and/or local floodplain protection standards. (Executive Order 11988)

This executive order, together with applicable DOT and FAA orders, establish a policy to avoid supporting construction within a 100 year floodplain where practicable, and where avoidance is not practicable, to ensure that the construction design minimizes potential harm to or within the floodplain.

Chapter IV Section 12 of the FEIS explains that, without mitigation, construction and operation of the Master Plan Update preferred alternative could result in significant adverse floodplain impacts in both the Miller and Des Moines Creek basins. The FSEIS analysis does not alter the FEIS analysis, but presents additional information at FSEIS Appendix F, pages 123-124, based on a 1997 POS Stormwater Review Study.

As outlined in the "alternatives" discussion earlier in this ROD and in the FEIS and FSEIS, there is no practicable alternative to the preferred alternative. Development of this alternative achieves the purposes and needs for the projects in the most cost-effective manner with the least impact on the surrounding land uses. As shown in FEIS Appendix P, a mitigation program has been designed which will create an equivalent amount of floodplain so that there would be no net loss of flood storage capacity or increased risk of loss of human life or property damage. This program has been designed to comply with applicable requirements of the permitting agencies, with whom the FAA and the POS have been coordinating in order to ensure that the construction design minimizes potential harm to or within the floodplain. Each of these agencies have agreed with the mitigation plan in concept and the coordination will continue throughout the permitting process.

I. Relocation Assistance [42 U.S.C. § 4601 *et. seq.]*

These statutory provisions, imposed by Title II of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA), require that state or local agencies undertaking Federally-assisted projects which cause the involuntarily displacement of persons or businesses, must make available relocation benefits to those persons impacted.

As detailed in FEIS Chapter IV, Sections 6 and 8, the preferred development alternative would displace up to 391 single family, 260 condos/apartments, and 105 businesses. Of the 105 businesses identified by the FEIS, 88 are located in the Runway Protection Area. While the FAA prefers airport sponsors to have control over the land in the RPZ, exceptions to property ownership can occur as long as the use of the land does not represent a hazard to aircraft operation. The Port has surveyed these property owners and their use.

The FAA will continue to coordinate with the POS concerning the need for acquisition versus the purchase of easements to ensure the appropriate land use control. The FAA will require the POS to provide fair and reasonable relocation payments and assistance payments pursuant to the provisions of the URA. Comparable decent, safe, and sanitary dwellings are available for occupancy on the open market. (See FEIS, pages IV.6-5 to IV.6-7).

J. For any constructive use of lands with significant historic sites, there is no prudent and prudent and feasible alternative to using the land, and the project includes all possible planning to minimize harm resulting from the use. [49 U.S.C. § 303(c)]

FEIS Chapter IV, Section 4, concluded that the Master Plan Update development actions would not involve either the use or constructive use of resources protected by this statutory provision, more commonly referred to as "4(f)" resources.

However the FSEIS, at Section 5-5, pages 8-19, shows that when comparing the no action and the preferred alternative using the updated airport activity forecasts, several structures (one school and three homes) which may be of local historical significance, will experience noise impacts which exceed the Federal standard (a 1.5 DNL increase within the 65 DNL contour).

As discussed at FSEIS Section 5-5, pages 13-14, the FAA questions whether most of these structures are truly of historical significance, despite their designation as such by communities surrounding the airport. The FAA also questions whether these structures will be "constructively used" under the circumstances discussed in the referenced FSEIS text, because there will be no significant degradation of the noise environment of these structures since the time when they were designated as locally significant, and thus there will likely be no significant degradation of their historic or architectural values.

Nevertheless, assuming such "local historical significance" and such a "constructive use", the referenced FSEIS text demonstrates that there is no prudent or feasible alternative to any such constructive use. Furthermore, based upon the acoustical insulation planned for these structures by the POS (discussed at FSEIS Section 6-6, pages 17-19), the FAA concludes that there has been all possible planning to minimize any harm resulting from any such constructive use.

K. There are no disproportionately high and adverse human health or environmental effects from the project on minority or low-income populations. [Executive Order 12898]

Environmental justice concerns were addressed in Chapter IV.6, page IV.6-6 and IV.6-7 of the FEIS, and it was concluded that no minority, age or income group would be disproportionately affected by displacements that would occur as a result of the Preferred Alternative. Individual comments regarding environmental justice were also addressed on page R-102 of FEIS Appendix R. The FSEIS contained an extensive discussion of environmental justice issues on page F-98 through F-101 in response to comments on this issue. It was concluded that the proposed noise exposure impacts from the Proposed Master Plan Update improvements will not disproportionately affect minority and low-income communities and that the impacts of the higher demand forecasts were not different than those discussed in the FEIS.

L. The FAA has given this proposal the independent and objective evaluation required by the Council on Environmental Quality. [40 CFR 1506.5]

As outlined in the FEIS, there was a lengthy process that led to the ultimate identification of the preferred alternative and appropriate mitigation measures. This process began through the FAA competitive selection of an independent EIS contractor which was financially-disinterested in the project outcome, and continued throughout the NEPA process. The FAA provided input, advice, and expertise throughout the planning and technical analysis, along with an administrative and legal review of the project. From its inception, the FAA has taken a strong leadership role in the environmental evaluation of this project, and has maintained its objectivity.

VI. MITIGATION

In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the following mitigation actions are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the FEIS and FSEIS with respect to mitigation are carried out. The approvals contained in this Record of Decision are specifically conditioned upon full implementation of these mitigation measures. These mitigation actions will be made the subject of a special condition included in future Federal airport grants to the POS.

FEIS Chapter V, and Appendix F to this ROD include summaries of the mitigation actions discussed more fully in FEIS Chapter IV and FSEIS Chapter 5, for each environmental impact category. Based upon these discussions, the FAA finds that all practical means to avoid or minimize environmental harm have been adopted, through appropriate mitigation planning.

Mitigation measures for those impact categories where mitigation measures are necessary to avoid or minimize significant environmental impacts, as well as identified or adopted monitoring and enforcement programs, are summarized below:

A. Noise and Land Use

As discussed in FEIS Chapter IV, Sections 1 and 2, and FSEIS Chapter 5, Sections 3 and 6, future noise impacts within the study area will be less than current noise exposure due to the continued phase-out of Stage II (noisier) aircraft. However in the future the preferred alternative is expected to still result in greater significant [1.5 DNL within the 65 DNL contour] noise exposure in comparison to the future do-nothing alternative. [See FSEIS Exhibit 5-6-1 for a graphic comparison of noise exposure for no action alternative and the preferred alternative in the year 2010].

To facilitate continued noise reduction, the following noise and land use mitigation programs now in effect will continue to be implemented.

- Noise Budget — The goal of the Noise Budget of an all Stage 3 fleet is anticipated to be reached by the year 2001.
- Nighttime Limitations Program — limiting the hours of operation for Stage 2 aircraft.
- Ground Noise Control — reducing the noise of ground events such as powerback operations, run-ups, and reverse thrust on landing.
- Flight Corridorization — maintenance of north flow east turn runway heading flight track by departing jets until reaching altitudes above 4,000 feet.
- Flight Track and Noise Monitoring — maintenance of noise level records and flight track location information for identification of deviations and communication with the public and users.

The FEIS concluded that since relatively few properties were projected to experience significant impacts, and since they already fall within the boundaries of one or more of the POS's existing noise remedy programs designed to mitigate to non-significance airport noise levels, no additional project-related mitigation would be needed, as described at FEIS page IV.2-6,7.

However, the updated airport activity forecasts evaluated in the FSEIS resulted in an increase of noise exposure of approximately 7.69 square miles, and 11 percent more persons [approximately 1,280 persons, in an additional 460 dwelling units) being significantly affected by the preferred alternative in contrast to the do-nothing alternative, by the year 2010.

Furthermore, by the year 2010, a small portion of this area [with approximately 170 newly impacted residents], would be located outside of the POS existing noise remedy boundary [This is graphically shown in FSEIS exhibit 5-6-1]. The POS will be required to modify its mitigation strategy, as described at FSEIS pages 5-6-5 to 5-6-7, and in the following paragraph #4, to include these 170 newly-impacted residents within in its Noise Remedy Program.

To address changes in specific noise conditions, primarily associated with the third parallel runway, the Port will be required to undertake the following specific mitigation actions:

Mitigating Significant Noise Impacts on Public Facilities and Historic Sites: The following nine public facilities or historic sites would experience significant increased noise impacts (i.e. an increase of 1.5 DNL or more) in the year 2010 in comparison to the Do-Nothing alternative:

- Sea-Tac Occupational Skills Center;
- Woodside Elementary School;

- Sunnydale Elementary;
- Albert Paul House;
- Homer Crosby House;
- Sunny Terrace Elementary School;
- Brunelle Residence;
- Coil House;
- Bryan House.

Impacts on the facilities incompatible with noise associated "With Project" will be mitigated by acoustical insulation that would allow their uses to be compatible with increased noise levels. Because of their historic value, the five residences and Sunnydale School (locally significant historic facilities) could require custom treatment to avoid significant alteration of the architectural style. In pursuing sound insulation of these structures, the Port's Noise Remedy Office will work with a historian to preserve such characteristics.

Provide Directional Soundproofing: Residences that were insulated prior to 1992 may need additional directional soundproofing to mitigate noise generated from a new flight path from the operation of the proposed new third runway. To mitigate noise caused by the proposed airport improvements, the Port will conduct audits and sound insulate these facilities if additional insulation is warranted.

Acquisition in the Approach Transitional Area: In recognition of the fact that the standard Runway Protection Zone (RPZ) dimensions do not always provide sufficient buffer to the satisfaction of nearby residents, the FAA has indicated that funding could be available to airport operators acquiring up to 1,250 feet laterally from the runway centerline, and extending 5,000 feet beyond each end of the primary surface. Based on the configuration of current airport land, local streets, and residential development patterns, the approach and transitional area selected for use as a mitigation area includes the standard Runway Protection Zone and a rectangular extension of the RPZ outward another 2,500 feet.

Acquisition would include all residential uses, and any vacant, residentially zoned properties which cannot be compatibly zoned, within selected areas both to the north and the south of the new runway ends. Commercial land uses, which make up most of the eligible area to the south, will not be acquired. Input from the affected residents is necessary to design and initiate an acceptable relocation program. The Port will develop the appropriate implementation program for this action during the forthcoming Sea-Tac Airport FAR Part 150 Update, which the Port anticipates undertaking during 1997. The implementation plan will include coordination with eligible residents concerning their desire to participate and then establish relocation objectives, timing and funding priorities.

Sound insulation of residences affected by 1.5 DNL or greater within 65 DNL noise exposure: About 170 of these homes within 65 DNL would be exposed to 1.5 DNL or higher noise levels as a result of the proposed improvements and are not already subject to the Port's existing Noise Remedy Program. The Port will develop an implementation strategy to sound insulate these 170 additional homes within the 65 DNL noise contours as part of the Part 150 Noise Compatibility Plan study effort. The purpose of delegating finalization of the implementation approach for this action to determination during the Part 150 process is to ensure that consideration is given to the proposed Approach Transition Area acquisition and the relationship of that area to the existing Noise Remedy Program boundary, as well as the westerly expansion of the Noise Remedy Program to accommodate this added insulation.

In Port Resolution No. 3125 dated November 1992, the POS committed to develop and implement a plan to insulate up to 5,000 eligible single family residences in the existing noise remedy program included on the waiting list as of December 31, 1993, before commencing construction of the proposed runway. The remaining eligible single family residences on the

waiting list are to be insulated prior to operation of the proposed runway. In addition, the Port has committed to complete insulation of all single-family residences that become eligible for insulation as a result of actions taken based on the site-specific EIS and are on the waiting list as of December 31, 1997, prior to commencing operations of said runway.

Pursuant to PSRC Resolution A-96-02, the POS will be required to conduct a Part 150 study with the goal of assessing needed additional noise abatement and mitigation. This study began late in 1996, and is expected to take several years.

The FAA will consider as required mitigation a standard insulation package for homes that fall both inside and outside the 65 DNL project contours, which are within the POS noise remedy program boundaries, since this was the intent of the PSRC in conditioning its regional approval of the 3rd runway upon the accomplishment of additional noise mitigation measures.

The FAA will continue to support and monitor the POS's existing and future noise programs, in order to ensure that any anticipated significant project noise and land use impacts are fully mitigated by the time the third runway becomes operational.

Finally, for significant project noise impacts which might occur after the year 2010, the FAA will also require a supplemental environmental evaluation and appropriate mitigation, as described in Section V.D. of this ROD.

B. Archaeological, Cultural and Historical Resources

FEIS Chapter IV, Section 3, finds that no known significant archaeological or cultural sites would by physically impaired as a result of the preferred alternative, and that mitigation is therefore not anticipated to be necessary. The FSEIS [Chapter 5, Section 5-6] does not alter that conclusion. ROD Section V.J. addresses the issue of mitigating any noise-based "constructive use" of these resources.

Both the FEIS and the FSEIS state that in the event artifacts are discovered during construction activities, construction in the area will be halted immediately in order to record the finding, determine its level of significance, and develop appropriate mitigation measures.

As noted in FSEIS Section 5-6, the Sunnydale Elementary School could receive significant increased noise in the future when a comparison is made between noise associated "with project" versus noise associated with the "do nothing" alternative. Because of this noise increase, the agency, through its EIS consultant team, initiated consultation with the Washington Department of Community, Trade and Economic Development, Office of Archeology and Historic Preservation (the State Historic Preservation Officer, or SHPO).

At the time that the FEIS was published in February 1996, a significant change in noise impact to this school associated with the project was not anticipated. However, since that time, through preparation and publication of the FSEIS, the data suggests that noise impacts associated with the higher forecast operations might result in a significant noise impact to this school. The following summarizes the noise impact at Sunnydale Elementary School:

	Do-Nothing	With-Project
Existing	65.8	NA

Year 2000	61.6	61.6
Year 2005	61.7	63.7
Year 2010	62.3	65.1

As is shown in the above noise exposure data, "with-project" will be less than existing or past noise exposure. During earlier years, this school was exposed to even greater noise exposure. The 1984-1985 noise contour indicates that this school was exposed to between 70-75 DNL sound levels during that period (Sea-Tac International Airport Part 150 Study Noise Compatibility Planning, dated February 1985, Exhibit 3-5).

While this site is not currently listed on the National Register of Historic Places, during consultation on the 1996 FEIS, the SHPO indicated that it could be eligible. Because of the change in impacts, a follow-up request concerning eligibility was made of the SHPO. On February 10, 1997, the SHPO stated "It is my opinion that the Sunnydale School is eligible for National Register listing. Information provided indicates that the school has played a significant role in the development of the Burien area, and retains character defining features conveying its historic function as a school". As suggested by the SHPO, a April 14, 1997, letter was forwarded to the Advisory Council on Historic Preservation (ACHP) for the purpose of determining if the ACHP wished to participate in the development of a Memorandum of Agreement to address mitigation.

Because the school is currently affected by noise above 65 DNL, and could continue to be affected in the future, the POS has proposed to sound insulate this school. Recognizing it's historic context, the FSEIS notes that "Because of their historic value, these facilities [*several homes which the SHPO has since determined not eligible for inclusion on the National Register, and Sunnydale school*] could require custom treatment to avoid significant alteration of the architectural style. In pursuing sound insulation of these structures, the Port's Noise Remedy Office will work with a historian to preserve such characteristics" [*emphasis added*]. The City of Burien Public Hearing Draft Proposed Comprehensive Plan dated April 1997 (page II-96) states "Cedarhurst and Sunnnydale elementary schools will be remodeled to increase capacity to 650 students by the year 2002". The current capacity of Sunnydale is 525 students. Thus, the sound insulation could be done as part of the scheduled remodel and can be conducted to ensure compatibility of the structure relative to its continued use as an educational facility.

On April 14, 1997, at the request of the SHPO, the FAA's EIS historic consultant sent a letter to Ms. Claudia Nissley of the ACHP Western Office of Project Review summarizing this situation and stating: "In response to a request from the SHPO, we are asking if the Advisory Council would like to be involved in the MOA...If I do not hear from you within (30) days after your receipt of this letter, I will assume that you do not wish to participate in the MOA". This letter was addressed to the ACHP Western Office address of record and was not returned to the sender. However, as a courtesy, the consultant contacted the ACHP Western Office in June 1977 to follow up on the letter. As part of this contact, the ACHP verbally indicated that it had not received the letter, but that it would refer the issue to the Washington DC office of ACHP. No response has been received from either the ACHP Western Office or the ACHP Washington DC office as of the date of approval of this ROD.

For the reasons discussed in FEIS section 5-6, the FAA questions whether the consultation procedures under the National Historic Preservation Act apply to the Sunnydale School. Nevertheless, the FAA has attempted to consult with the appropriate agencies. As is noted in the Final Supplemental EIS, relative to the National Historic Preservation Act, this school is the only property arguably affected. The FAA is approving the Master Plan Update project at this time having considered the following:

- The noise impacts that would be experienced at this school would be less than the current noise exposure;
- The noise exposure has not altered the use of this site as a school and is not related to its historic significance;
- Appropriate mitigation has been proposed and will be required by the FAA to address any significant aircraft noise exposure impacts;
- In light of the failure of the ACHP to respond to correspondence concerning this project, the FAA and the POS have initiated additional consultation with the SHPO concerning the development of a Memorandum of Agreement to address sound insulation mitigation.

Consultations have occurred with the SHPO and have been attempted with the ACHP as part of the FAA's comprehensive efforts to involve all appropriate commenters and as a courtesy, the FAA and the POS will continue to work with the appropriate agencies. In reaching its conclusions relative to the National Historic Preservation Act, the FAA's findings are supported by the FSEIS and ROD evaluation performed relative to DOT Section 4(f).

C. Social and Induced Socio-Economic Impacts

As detailed in FEIS Chapter IV, Section 6, the preferred development alternatives would displace up to 391 single family, 260 condos/apartments, and 105 businesses. Of the 105 businesses identified by the FEIS, 88 are located in the Runway Protection Area. While the FAA prefers airport sponsors to have control the land in the RPZ, exceptions to property ownership can occur as long as the use of the land does not represent a hazard to aircraft operation. The Port has surveyed these property owners and their use and will continue to coordinate with the FAA concerning the need for acquisition versus the purchase of easements to ensure the appropriate land use control. Given the anticipated displacement and relocation of people, the FAA will require the POS to provide fair and reasonable relocation payments and assistance payments pursuant to applicable provisions of 42 U.S.C. § 4601 *et. seq.* and implementing regulations.

D. Air Quality

As noted in ROD section V.C., the Governor of the State of Washington has certified to the FAA after reviewing the FEIS and FSEIS that the project will be located, designed, constructed, and operated in compliance with applicable air quality standards.

In Section V.F. of this ROD air quality conformity under 42 U.S.C. § 7506(c) is discussed, and it is concluded that the project will, although not exceeding the *de* minimis thresholds for general conformity, nevertheless conforms to the Washington State Air Quality Implementation Plan and the National Ambient Air Quality Standards. With no significant air quality impacts, no air quality mitigation is necessary.

FEIS Chapter IV, section 9 and its supporting Appendix D, had included a worst-case intersection "hot spot" analysis of the preferred alternative, which predicted slight potential exceedences of air quality standards for carbon monoxide at two key intersections at the northeast side of the airport, as the year 2010 approached. The FEIS had contemplated future air monitoring and evaluation in order to determine whether specific mitigation of these exceedences would be required.

However, as explained at FSEIS page 5-2-10, project planning of the surface transportation features for those two intersections has since been modified so as to eliminate these modeled potential exceedences, thus avoiding the necessity for future mitigation of this nature. Specifically, the POS will accomplish the following:

- At the time that the North Unit Terminal is undertaken, the Port will develop additional southbound right turn and northbound left turn capability at the intersection of S. 170th

Street at International Blvd., unless shown by then current conditions that these improvements are no longer necessary; and

- At the time that the North Employee Parking Lot is undertaken, the Port will develop additional intersection turning capability at the intersection of South 154th Street at 24th Avenue S.
- To ensure that construction emissions do not exceed the air conformity de-minimis levels, the Port will ensure that annual construction-related truck haul does not exceed 280,700 two-way trips by Heavy Duty Diesel Vehicles.
- To minimize construction related particulate emissions, the Port will implement construction Best Management Practices (BMPs) as noted in Table 5-4-8 in the Final Supplemental EIS.

E. Water Quality

As noted in ROD section V.C., the Governor of the State of Washington has certified to the FAA after reviewing the FEIS and FSEIS that the project will be located, designed, constructed, and operated in compliance with applicable water quality standards. Furthermore, the approvals in this ROD are expressly conditioned upon the POS accomplishing the water quality mitigation measures identified in the FEIS and FSEIS.

With implementation of the preferred alternative developments, there would be widespread surface area disturbance throughout the study area, which has the potential to significantly affect area hydrology. Absent mitigation, the extensive earthmoving required during project construction has the potential to significantly impact the flow rates and water quality of soil infiltration, surface runoff, and stream flow.

FEIS pages IV.10-16 through IV.10-20 provide an extensive set of mitigation measures designed to avoid or minimize these hydrological impacts. These include a set of stormwater management measures based upon Department of Ecology standards, BMPs (best management practices) required by applicable Federal, state and local laws, policies and design standards, as well as other requirements set forth in existing and additional NPDES permits to be required of the POS.

Specifically, the POS will be required to implement the following water quality and hydrology mitigation:

a. Construction Erosion and Sedimentation Control Plan. Prepare a construction erosion and sedimentation control plan for the construction of the new runway. The plan shall require use of Best Management Practices (BMPs) including but not limited to the following:

- Erosion control measures such as use of mulching, silt fencing, sediment basins, and check dams that are properly applied, installed, and maintained pursuant to agreements with contractors.
- Spill containment areas to capture and contain spills at construction sites and prevent their entry into surface or ground waters. Install proper temporary fuel storage areas and maintenance areas to reduce the potential for spills and contamination.
- Phasing of construction activities to minimize the amount of area that is disturbed and exposed at any one time.
- Where feasible, use of temporary and permanent terraces for fillslopes and cutslopes to reduce sheet and rill erosion and reduce transport of eroded materials from the construction site.
- Install gravel and wheel wash facilities on construction equipment access roads and encourage covering of loads to minimize sediment transport onto nearby roads.

b. Stormwater Management Plan. Prepare a stormwater management plan for the new runway that includes the following:

- Detention criteria should be based upon Department of Ecology standards limiting 2-year peak flow rates from the developed portions of the site to 50% of the existing 2-year rate, limiting the developed 10-year rate to the existing 10-year rate, and limiting the developed 100-year flow rate to the existing 100-year rate.
- Design stormwater facility outlets to reduce channel scouring, sedimentation and erosion, and improve water quality. Where possible, flow dispersion and outlets compatible with stream mitigation will be incorporated into engineering designs.
- Maintain existing and proposed new stormwater facilities. Stormwater management facilities will be maintained according to procedures specified in the operations manuals of the facilities.

c. NPDES Permit Requirements. Comply with the requirements of the National Pollution Discharge Elimination System permit for the airport dated June 30, 1994, as may be revised from time to time.

FSEIS pages 5-7-4 through 5-7-6 discuss additional mitigation measures relating to groundwater concerns of the Seattle Water Department. Additional related mitigation measures are set forth in a June 20, 1997, agreement between the POS and The City of Seattle Public Utilities Department, pertaining to the proposed North Employee Parking Lot at SEATAC. That agreement is incorporated by reference in this ROD.

F. Wetlands

FEIS Chapter IV, Section 11, documents that the preferred development alternative (North Terminal with 8500 foot runway) will directly affect approximately 10.37 acres of wetlands. FSEIS Section 5-5 modifies this figure to approximately 12.23 acres of wetlands. As noted in FEIS Chapter IV, Section 11, FEIS Appendix P, and FSEIS Chapter 5, section 5-5, the U.S. Army Corps of Engineers (COE) has worked with the FAA and the POS as a cooperating agency to develop a wetland compensatory mitigation site. The mitigation plan calls for replacing the filled wetlands on a 47 acre mitigation site located on a 69 acre parcel of land along the Green River in Auburn Washington. As explained in this ROD at Section V.G., this off-site, out-of-watershed mitigation is consistent with FAA policy, and will be required as a condition of FAA grant assurances associated with Federal funding of the Master Plan Update development projects.

In December 1996, the Port submitted an application to the Army Corps of Engineers for a permit to fill wetlands at Sea-Tac Airport associated with the Master Plan Update improvements in compliance with the Clean Water Act, Section 404. The 404 permit application submitted to the Corps of Engineers includes a completed Joint Aquatic Resources Project Application (JARPA) form, in a report entitled "JARPA Application for Proposed Improvements at Seattle-Tacoma International Airport" dated December 1996. Upon issuance of this ROD, the COE, in consultation with the Washington State Department of Ecology, will complete its processing of a COE Section 404 permit, required for the POS to proceed with development impacting wetlands.

G. Floodplains

Chapter IV Section 12 of the FEIS explains that, without mitigation, construction and operation of the Master Plan Update preferred alternative could result in significant adverse floodplain impacts in both the Miller and Des Moines Creek basins. As shown in FEIS Appendix P, a mitigation program has been designed which will create an equivalent amount of floodplain so that there would be no net loss of flood storage capacity or increased risk of loss of human life or property damage. This program has been designed to comply with applicable requirements of the permitting agencies, with whom the FAA and the POS have been coordinating in order to ensure

that the construction design minimizes potential harm to or within the floodplain. Each of these agencies have agreed with the mitigation plan in concept and the coordination will continue throughout the permitting process. The FSEIS does not alter the conclusions or mitigation approach discussed in the FEIS.

H. Surface Transportation

FEIS Chapter IV, Section 15, presented the results of both an initial analysis and a refined analysis of level of service volumes for the preferred alternative, at relevant intersections and freeway ramp junctions in the airport vicinity. The initial analysis indicated a slight and nonsignificant degradation of level of service at only one intersection, not requiring any mitigation.

The FEIS refined analysis of the preferred alternative included two scenarios, one assuming the construction of a SR 509 extension, and one assuming no such extension. This refined analysis showed adverse impacts (defined as a significant degradation in level of service when compared with the do-nothing alternative) at a number of intersections and at one freeway ramp junction, with and without SR 509, requiring a variety of intersection and ramp junction improvements as mitigation.

However, the revised surface transportation analyses presented in the FSEIS reflected changes in the design and timing of the surface transportation components of the Master Plan Update development actions. The FSEIS analysis concluded that no significant adverse changes in Levels of Service would result from the preferred alternative for any of the evaluated intersections and freeway ramp junctions in the airport vicinity during the project planning period. Accordingly, no surface transportation project-related mitigation is required.

I. Plants and Animals

FEIS Chapter IV Section 16 discusses the impacts of the preferred alternative upon vegetation and wildlife communities. Absent mitigation, the greatest project-related impacts to these resources would result from the degradation of area hydrology, water quality, aquatic habitat and biota of Miller and Des Moines Creeks, due to the realignment and relocation of portions of these waterways.

FEIS pages IV.16-11 through IV.16-15 and FEIS Appendix P discuss these anticipated impacts and planned measures to mitigate these biological impacts. These mitigation measures include a wetlands replacement plan, creek relocation and habitat improvement plans, a stormwater pollution prevention plan, and a spill prevention control and countermeasures plan. These plans are subject to approval of a number of other Federal, state and local agencies, as conditions to issuance of required permits.

The FSEIS presents no additional information which would alter the FEIS conclusions with regard to this mitigation.

J. Services/Utilities

FEIS Chapter IV Section 18 discusses the impacts of the preferred alternative upon public services and utilities serving the immediate airport vicinity. The greatest project-related impacts to these resources would result from relocation or abandonment of fresh water, sanitary sewer, electrical power and telephone pipes and lines which transverse the project area. FEIS page IV.18-7 discusses the required mitigation, which includes POS assuming the cost of these relocations and abandonments. The FSEIS presents no additional information which would alter the FEIS conclusions with regard to this mitigation.

K. Earth

FEIS Chapter IV Section 19 discusses the impacts of the preferred alternative upon the geology, soils and hazard areas in the immediate airport vicinity. The greatest project-related impacts to these resources would result from the extensive clearing, grading, excavation, and fill placement required throughout the project area. FEIS page IV.18-7 discusses mitigation measures, which include the design and implementation of an erosion and sedimentation control plan subject to approval by state and local authorities, and a landscaping plan. The FSEIS presents no additional information which would alter the FEIS conclusions with regard to this mitigation. Specifically, the POS will implement the following earth-related mitigation:

- The FEIS identifies two seismic hazard areas on the site of the new runway, referred to as "relatively small areas of loose shallow sediment". The Port will remove the sediment and replace it with compacted fill, or other appropriate engineering approach to stabilizing these areas, should be included in the final engineering plans.

- Prepare a landscaping plan for the new runway area, including plans for seeding and planting of vegetation to stabilize areas of fill that will not be covered by impervious surface.

L. Hazardous Substances

FEIS Chapter IV Section 21 discusses the impacts of the preferred alternative associated with hazardous substances. Concerns in this area include the exposure of contaminated soils during excavation activities, release of hazardous substances during underground storage tank removal and building demolition activities associated with facility relocations, and spills of construction-related hazardous materials. FEIS pages IV.21-8,9 discuss mitigation measures, which include the development of a spill pollution, control and countermeasures plan for the transport, storage and handling of hazardous materials, and a hazardous substances management and contingency plan for the removal, storage, transportation and disposal of hazardous wastes. The FSEIS presents no additional information which would alter the FEIS conclusions with regard to this mitigation.

M. Construction

FEIS Chapter IV Section 23 and FEIS Appendix J, discussed the temporary impacts to the environment associated with the construction activities necessary to implement the preferred alternative. These temporary impacts included air, water and noise pollution, social and socio-economic impacts, and the disruption of surface transportation patterns. Since detailed design and construction plans for the proposed projects had not yet been prepared, it was not then possible to identify the specific types of construction equipment or the frequency of its usage. Accordingly, the FEIS discussed a range of construction-related impacts, using worst-case assessments which assume a range of excavation sources and means of transporting fill material.

Under the FEIS worst-case analysis, absent mitigation, the most significant construction-related impacts would be a temporary degradation of the level of service levels on freeways, highways, arterials, and permitted local streets used for truck hauling of fill material through congested areas during peak travel times.

The FEIS construction impacts section discussed mitigation measures, including the development of a construction and earthwork management plan, which will specify hours of operation, haul routes, and similar controls, and would discourage haul activities along extremely congested routes and during extreme roadway congestion periods. This plan would also provide for

signalization and other improvements to several intersections in the vicinity of the airport which may be impacted by construction hauling activity.

Additional construction-related mitigation measures include property acquisition to minimize potential social and neighborhood disruption, fill spillage prevention and removing procedures, fugitive dust prevention, and an erosion and sediment control plan.

FSEIS Chapter 5, section 5-4, presents additional information developed since publication of the FEIS, including changes to construction phasing, a lengthening of the runway haul duration, the identification of additional haul routes, and the identification of two temporary interchanges on SR 518 and SR 509. This additional information permitted a refined analysis of possible construction impacts in the FSEIS, and the identification of additional mitigation measures presented at FSEIS Table 5-4-8.

Based on the selected fill hauling plan, the FAA will require the POS to include essential provisions of its construction and earthwork management plan in construction earthwork bid documents as contractual requirements.

VII. DECISION AND ORDER

Although the "No Action" alternatives have fewer developmental impacts than the preferred alternative, they fail to achieve the purposes and needs for these projects. For the reasons summarized earlier in this ROD, and supported by detailed discussion in the FEIS and FSEIS, the FAA has determined that the preferred alternatives are the only possible and prudent alternatives as well as the most practicable.

Having made this determination, the two remaining decision choices available for the FAA are to approve the agency actions necessary for the projects' implementation, or to not approve them. Approval would signify that applicable Federal requirements relating to airport development planning have been met, and would permit the Port of Seattle to proceed with the proposed development and receive Federal funds for eligible items of development. Not approving these agency actions would prevent the Port of Seattle from proceeding with Federally supported development in a timely manner.

I have carefully considered the FAA's goals and objectives in relation to various aeronautical aspects of the proposed master Plan Update development actions discussed in the FEIS, including the purposes and needs to be served by the projects, the alternative means of achieving them, the environmental impacts of these alternatives, the mitigation necessary to preserve and enhance the environment, and the costs and benefits of achieving these purposes and needs in terms of effective and fiscally responsible expenditure of Federal funds.

Based upon the administrative record of this project, I make the certification prescribed by 49 U.S.C. § 44502 (b), that implementation of the preferred alternatives approved in this ROD are reasonably necessary for use in air commerce.

Therefore, under the authority delegated to me by the Administrator of the FAA, I find that the projects summarized in this ROD at Appendix B are reasonably supported, and for those projects I therefore direct that action be taken to carry out the agency actions discussed more fully in Section II of this Record, including:

A. Approval under existing or future FAA criteria of project eligibility for Federal grant-in-aid funds and/or Passenger Facility Charges, including the following elements:

1. Land Acquisition

2. Site Preparation

3. Runway, Taxiway, and Runway Safety Area Construction

4. Terminal and Other Landside Development

5. Certain POS-Installed Navigational Aids

6. Environmental Mitigation

B. Approval of a revised airport layout plan (ALP), based on determinations through the aeronautical study process regarding obstructions to navigable airspace, and that the agency does not object to the airport development proposal from an airspace perspective.

C. Approval for relocation/upgrade of the existing Airport Traffic Control Tower (ATCT), radars, and various navigational aids. I specifically reaffirm, in the context of the policy considerations set forth in this ROD, my April 4, 1997, approval of the SEA-TAC ATCT Siting Study. As demonstrated by that study, a replacement ATCT at SEA-TAC is required immediately, whether or not the other Master Plan Update development actions are approved.

D. The development of air traffic control and airspace management procedures to effect the safe and efficient movement of air traffic to and from the proposed new runway, including the development of a system for the routing of arriving and departing traffic and the design, establishment, and publication of standardized flight operating procedures, including instrument approach procedures and standard instrument departure procedures.

original signed by
_____ *July 3, 1997*
Lawrence B. Andriesen Date
Regional Administrator,
Northwest Mountain Region

RIGHT OF APPEAL

This decision constitutes the Federal approval for the actions identified above and any subsequent actions approving a grant of Federal Funds to the Port of Seattle. Today's action is taken pursuant to 49 U.S.C. Subtitle VII, Parts A and B, and constitutes a Final Order of the Administrator, subject to review by the courts of appeals of the United States in accordance with the provisions of 49 U.S.C. § 46110.