

Issues/Actions and Recommendations

Introduction

This Section presents the recommended noise abatement plan, which includes the issues to be addressed, the actions/recommendations to be taken to address those issues, the responsible parties involved for implementing those actions and recommendations, the Airport action to be taken, the time frame for implementation and the effectiveness of each. The issues and actions will become the recommended Noise Compatibility Program. This Section also recommends which Noise Exposure Map should be used for the basis of the Noise Compatibility Program. In addition, the Future Noise Exposure Map is presented, along with the impacts associated with it.

A recommended implementation schedule and sequence, in both narrative and graphic form, indicating the roles and responsibilities of the many parties involved in the Noise Compatibility Program for King County International Airport will be presented in a subsequent chapter.

Future Noise Exposure Map

The aircraft-generated noise contours used to identify areas eligible for various mitigation programs are the Future Base Case Noise Contours for King County International Airport. These contours represent the aircraft activity forecast for the next five years and includes the assumption that the Airport Master Plan will be adopted, with the proposed runway shift implemented. Although there are several recommendations that will reduce the size of the noise contours if they are implemented, the Future Base Case contours reflect the largest number of structures eligible for noise mitigation programs, thus providing various options to the largest number of people. The following table presents the number of people, the number of residential units and other noise sensitive structures within the King County International Airport Future Base Case noise contours that will be the Future Noise Exposure Map.

As an option to using the King County International Airport Future Base Case Noise Contours to define the Noise Remedy Program Boundary, and as submitted to the FAA for approval, the KCIA and Sea-Tac Combined Noise Contours are also recommended to be used to define program boundaries. It is the intent of the Airport to utilize the Combined Contours for land use remediation eligibility. However, it is recognized that there are several issues involved with using the Combined Contours

that could take a considerable amount of time to resolve (funding ratio, responsible Sponsor, consistency with existing programs) and the Airport does not want to postpone implementing the land use options for affected residents while these issues are being resolved. Therefore, the KCIA contours will be used to define program boundaries and implement the recommendations until these issues can be resolved. At that time, the Combined Contours will be used to define the program boundaries.

The Future Noise Exposure Map is illustrated on Figure J1, *FUTURE NOISE EXPOSURE MAP, 2006*. The specific noise abatement recommendations are contained on the pages following the Future Noise Exposure Map. They are categorized as Amended Actions and New Actions for each specific noise abatement recommendation. The Amended Actions are those Actions which the Airport currently has in place but are recommended for some changes and the New Actions are those which would be implemented for the first time. Some are administrative in nature while others are land use or operational in nature. Table J1 shows the number of people, housing units and acres of land uses within the Future Noise Exposure Map Contours. Table J2 shows the additional population and housing units within the Future Combined Contours (KCIA and Sea-Tac), using 2000 census data, for comparative purposes. The future combined contour is larger than the existing combined contour.

Table J1
EXISTING LAND USE WITHIN FUTURE NOISE EXPOSURE MAP CONTOURS, 2006
King County International Airport FAR Part 150 Study

Land Use	DNL 55 Contour	DNL 60 Contour	DNL 65** Contour	DNL 70** Contour	DNL 75** Contour
Residential*	NA Ac	NA Ac	459 Ac	66 Ac	0 Ac
People	57,265	17,616	4,890	762	0
House Units	21,197	6,862	2,011	356	0
Schools	NA	NA	1	0	0
Historical Sites	NA	NA	1	1	0
Fire Stations	NA	NA	2	2	1
Com/Retail	NA Ac	NA Ac	186 Ac	83 Ac	2 Ac
Manufacture	NA Ac	NA Ac	863 Ac	322 Ac	79 Ac
Other	NA Ac	NA Ac	1,357 Ac	689 Ac	418 Ac
Total	17,100 Ac	6,833 Ac	2,865 Ac	1,160 Ac	499 Ac

*Based on FAA Part 150 Land Use Compatibility Guidelines, residential land uses and schools are considered compatible with sound attenuation. Cleveland School is within the Future KCIA 65 DNL noise contour.

**It should also be noted that only those non-compatible land uses within the 65 and greater DNL contours are eligible for FAA funding participation.

The total figures for each contour are cumulative. The figures for the larger contours contain the area -within all smaller contours.

SOURCE: Aerial Photography, 2000 Census Data, Field Survey, BDC Analysis

Table J2
**ADDITIONAL PEOPLE AND HOUSING WITHIN COMBINED FUTURE NOISE
 CONTOURS**
King County International Airport FAR Part 150 Study

Land Use	DNL 55 Contour	DNL 60 Contour	DNL 65 Contour	DNL 70 Contour	DNL 75 Contour
People	11,743	2,451	844	0	0
House. Units	5,108	1,066	367	0	0

SOURCE: Sea-Tac International Airport FAR Part 150, 2000 Census data, Bridgenet International Analysis, BDC Analysis

The Recommendations are summarized as follows.

- Recommendation 1** Develop Combined Noise Contours
- Recommendation 2** Implement a Curved or Segmented Approach Over Water
- Recommendation 3** Implement Close-In Departure for North Departures
- Recommendation 4** Investigate the viability of undertaking a Part 161 Study for Stage 2 jets
- Recommendation 5** Upgrade Flight Tracking and Noise Monitoring System and Develop Fly Quiet Program
- Recommendation 6** Conduct Site Selection and Feasibility Study for GRE
- Recommendation 7** Identify Building Noise Design/Placement Standards for On-Airport Buildings to Reduce Off-Airport Noise
- Recommendation 8** Provide Sound Attenuation, Purchase of Avigation Easement and/or Sales Assistance for Residential Structures within the 65 and 70 KCIA Noise Contours
- Recommendation 9** Provide Sound Attenuation, Purchase of Avigation Easement and/or Sales Assistance for Residential Structures within the 65 and 70 Combined KCIA/Sea-Tac Noise Contours
- Recommendation 10** Provide Sound Attenuation for Schools and Public Buildings within the 65 and 70 KCIA and Combined Noise Contours
- Recommendation 11** Operations Review and Part 150 Updates
- Recommendation 12** Establish/Continue Advisory Committee

It is the intent of the Airport to implement future noise mitigation programs as quickly as possible. However, it must be remembered that this will depend very heavily on the availability of funds and resources, especially the availability of Federal funding.

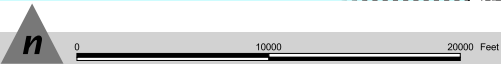
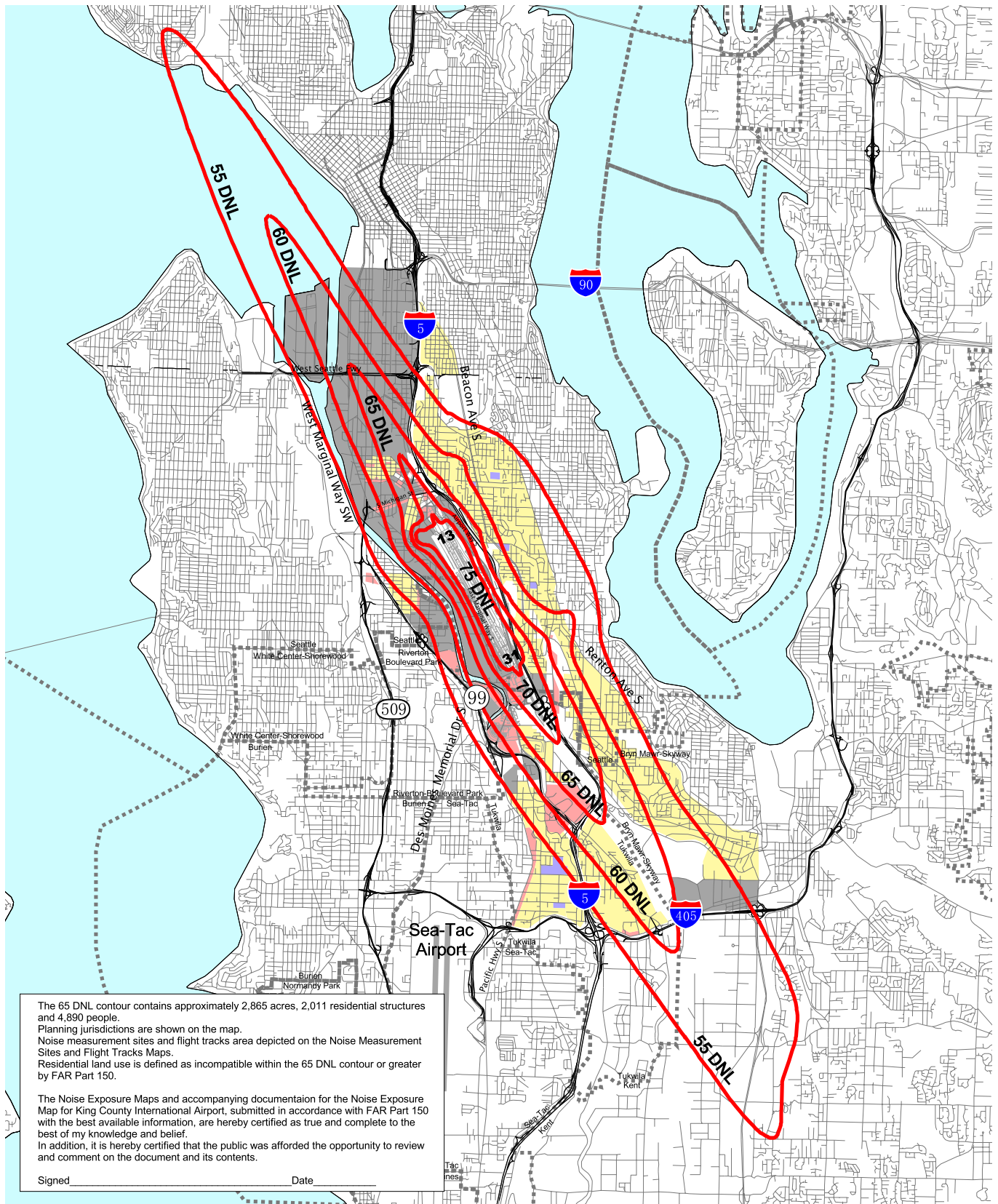


Figure J1 Future Noise Exposure Map (2006)

- Existing Land Use
- Government
- Industrial
- Residential
- Retail-Commercial
- Noise Contour

RECOMMENDATION 1—DEVELOP COMBINED NOISE CONTOURS

ISSUE

Recognize there are some residents which are not adversely impacted by either KClA or Sea-Tac but are adversely impacted by the combined noise associated with both airports.

NEW ACTION

This Action is to develop a set of combined noise contours for King County International Airport and Sea-Tac International Airport in order to identify residents affected by the combined noise and to develop programs to assist those residents that would not be eligible for noise abatement/mitigation programs associated with either airport separately.

COMMENTS

This Recommendation was developed at the direction of the County Work Plan and is intended to provide guidance in developing noise mitigation programs that address residents affected not only by King County International Airport aircraft noise but also aircraft noise generated by aircraft using both Sea-Tac International Airport and King County International Airport. There are residents that are not within the noise contours of either airport but when the noise contours for both airports are combined, those same residents are within an identified noise contour.

COST

There is no cost associated with this Recommendation as it has been completed.

RESPONSIBLE PARTIES

The Airport was responsible for preparing and generating the combined contours. The FAA is responsible for recognizing them as a valid indication of non-compatible land uses.

AIRPORT ACTION

The Airport has prepared the contours and will work with the FAA in an effort to use the contours to identify eligible properties.

TIME FRAME

These discussions can be initiated immediately and are not dependent upon other Actions.

RECOMMENDATION 2—IMPLEMENT A PUBLIC INSTRUMENT APPROACH PROCEDURE WITH AN ELLIOT BAY GROUND TRACK TO AVOID OVER FLIGHTS OF RESIDENTIAL AREAS

ISSUE

Reduce Aircraft Over Flights to Residential Areas North of the Airport.

NEW ACTION

Implement a public instrument approach procedure with an Elliott Bay ground track to avoid over flights of residential areas. New technology should be aggressively pursued with the FAA to implement such a procedure that would route approaching aircraft over the water instead of straight in over residential areas.

COMMENTS

The implementation of such a system for approaches from the north would enable aircraft to approach through the Bay and avoid over-flights of residential areas, especially Magnolia. This would have negligible effect on the size of the 65 DNL but it would provide substantial relief from single-event flyovers to these residential areas. This would be especially effective in reducing noise intrusion during sensitive nighttime hours.

COST

The cost for the Action is anticipated to be approximately \$1 Million dollars for the ground based equipment. It is anticipated that no additional airborne equipment would be required.

RESPONSIBLE PARTIES

The Airport is responsible for meeting with the FAA regarding instituting the program and procedure, (a KCIA pilot project at a minimum). A Formal Motion from County Council supporting program will be required, and the Airport will utilize a Technical Committee, including pilots and FBO's, to help move program forward.

The FAA is responsible for approving such a procedure, procuring the equipment and implementing such a procedure. The operators are responsible for helping to implement the procedure when possible. The FAA would be responsible for completing the required environmental documentation.

AIRPORT ACTION

The Airport will seek a Motion from the County Council supporting the Recommendation, continue to meet with and support the FAA in approving and implementing the procedure and working with both based and transient pilots to use the procedure after it is implemented.

TIME FRAME

The Airport can initiate the discussions and dialog with FAA concerning such an approach immediately upon approval by the FAA. Implementation of the approach will depend upon FAA developing and publishing such an approach, purchasing of equipment, aircraft instrumentation and testing. This is not contingent upon other Recommendations.

RECOMMENDATION 3—IMPLEMENT THE CLOSE-IN DEPARTURE PROCEDURE FOR NORTHERN DEPARTURES

ISSUE	Reduce the Size of the 65 DNL Noise Contour Over Residential Areas North of the Airport.
NEW ACTION	Implement the close-in departure procedure for northern departures.
COMMENTS	The FAA has approved specific Close-in Noise Abatement Departure Procedures for all aircraft types over 75,000 pounds and each aircraft operator has such a procedure for their specific aircraft types. The Airport Sponsor can request that each operator utilize this particular procedure when departing north from King County International Airport. FAA has previously approved the procedures for the specific aircraft, but will require some airspace review to ensure safety.
COST	No additional cost other than direct notification to users of the Airport and publication in Airman's Manuals. A Noise Abatement Brochure explaining the Recommendations will be prepared as part of the Part 150 Study
RESPONSIBLE PARTIES	The Airport is responsible for notifying the operators to use the close-in departure procedure and to work with the pilots and FBO's to explain the reasoning behind the request. The FAA is responsible for approving this Recommendation and making an airspace review to ensure safety concerning the procedure. A Formal Motion from County Council supporting this procedure will be requested. The operators are responsible for helping to implement the procedure when possible.
AIRPORT ACTION	The Airport will seek a Motion from the County Council supporting the Recommendation, prepare request for FAA Airspace review and continue dialog with the Agency to ensure timely completion of review. Write request letters to users to implement close-in departure procedure (voluntary) for each type of aircraft they fly.

Work with the FBO's and pilots to explain the reasoning behind the request.

TIME FRAME

Can initiate immediately upon approval, approximately six months to fully implement upon approval by the FAA. Airport users will have to notify pilots and modify procedures manuals.

RECOMMENDATION 4—INVESTIGATE THE VIABILITY OF UNDERTAKING A PART 161 STUDY FOR STAGE 2 JETS

ISSUE

Reduce noise impacts from loud jets.

NEW ACTION

This Action will investigate the viability of a Part 161 Study to prohibit the use of Stage 2 jets at the Airport while concurrently maintaining the existing ban during the nighttime hours (10:00 pm to 7:00 am).

COMMENTS

If the undertaking of a Part 161 Study ban on Stage 2 jets is approved, this Action will reduce the number of residents within the 65 DNL noise contour and will remove significant noise intrusion during the most noise sensitive time. This Action will reduce the 65 DNL noise contour over the area that is directly north and south of the Airport and will reduce loud single events for residents all around the Airport. Figure J2 on the following page illustrates the Future Noise Exposure Map with and without the Stage 2 Ban in an attempt to visually indicate the incremental benefit this Recommendation has to the overall noise environment. Please refer to Table F1, as it indicates that there would be less people inside the 65 or greater DNL if this Recommendation is implemented.

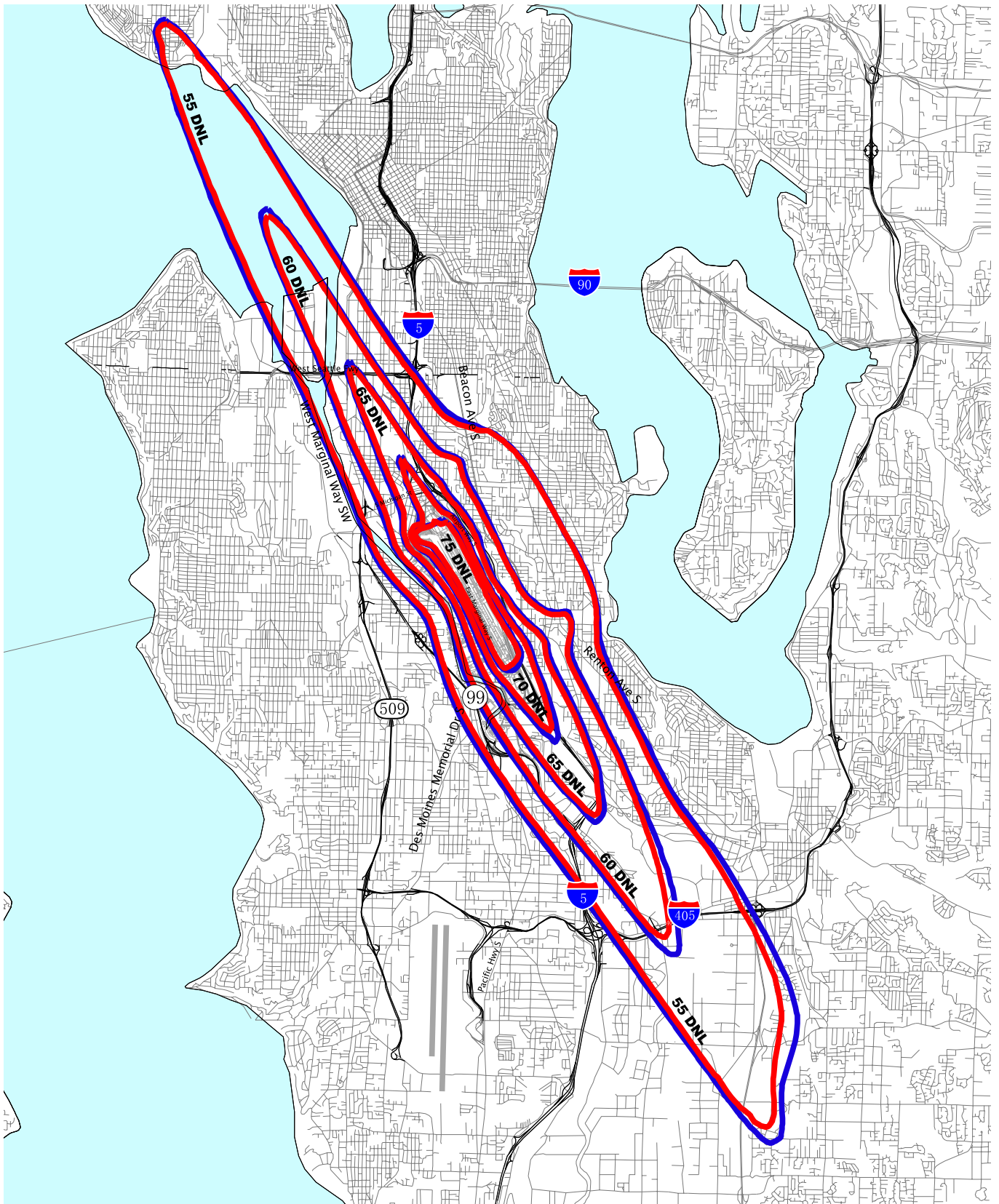
It is recognized that such a restriction cannot be implemented without completing a FAR Part 161 Study. The Airport is requesting approval for such a study so that AIP funding may be made available.

COST

The cost to prepare such a Study is estimated to be in the range of \$850,000-1,500,000 including legal fees.

RESPONSIBLE PARTIES

The Airport is responsible for preparing such a Study through the use of consultants. The Airport would select the consultants, prepare the scope and application and accept FAA funding, if available. A Formal Motion from the County Council would be required. The FAA is responsible for approving the Recommendation and



n Scale 1"=10,000'

Figure J2 2006 Basecase and Total Restriction of Stage 2 Operations DNL Contours

- ▬ Ban Stage 2 DNL Noise Contour
- ▬ 2006 Basecase DNL Noise Contour

providing funding, if such funding is available and the number of people removed from the contour is significant.

AIRPORT ACTION

The Airport will select consultants to prepare such a Study and submit an application to the FAA upon approval of the Recommendation by the FAA.

TIME FRAME

The consultant could be selected, scope prepared and an application submitted within six months of approval of the Recommendation by the FAA. The Study itself will take approximately two to three years to complete. Implementation of the restriction will take approximately six to nine months after approval of the Study.

RECOMMENDATION 5—UPDATE FLIGHT TRACKING AND NOISE MONITORING PROGRAM (FLY QUIET PROGRAM)

ISSUE

Verification of Noise Abatement Program and Flight Track Adherence.

NEW ACTION

It is recommended that the Airport upgrade the existing noise monitoring system, including flight track monitoring, to monitor noise levels and compliance with the noise abatement measures.

COMMENTS

This Recommendation includes upgrading of the existing noise monitoring system to include flight track monitoring, which will be used to formulate voluntary Fly Quiet procedures, provide accountability in evaluating the success of the Program and provided information so that improvements can be made to the recommended noise abatement programs and procedures. Flight track and other operational changes are difficult to achieve without sufficient data to indicate problems with existing procedures, and this is the method to best gather defensible data.

The type of equipment and capabilities will be determined through the use of the Technical Committee and Airport Staff/Management. This may include additional monitors and computer hardware, updated software and Web capabilities. There is one permanent monitor in Beacon Hill and more will be required.

A committee could help identify the potential noise monitoring sites and review the specifications for the system. This process takes approximately two years to complete. The noise monitoring sites must be owned or long-term leased by the Airport, be secure and have electrical power/telephone access.

COST

It is estimated that consultant and equipment installation, approximately \$125,000-400,000. This includes conversion of portable monitors to permanent monitors (\$13,000 each), Fly Quiet Program compliance at \$43,000, compatibility with Sea-Tac software conversion at \$6,000, new digital recorder, PC server and software, installation and training at \$20,000, and annual maintenance at \$49,000. Additional new monitors may bring the cost up to around \$400,000, including consultants time. Preparation and Printing of materials/website, \$21,000.

RESPONSIBLE PARTIES

The Airport is responsible for hiring the consultant, identifying the sites, developing the specifications, budgeting for the equipment and installing the equipment through a contractor. The Airport is responsible utilizing the Technical Committee to help refine and compliment Fly Quiet Program, for engaging pilots in discussion and training about practices and encourage change; such as increase use of Charted Visual Path, Close-in departure, avoidance of residential areas, etc. and to promote incentives for pilot compliance. The Airport will produce materials and manuals for distribution to pilots and FBO's. The FAA is responsible for assisting the Airport with funding if such funding is available.

AIRPORT ACTION

The Airport will budget for monitoring, hire the consultant, prepare specifications and initiate the process as soon as possible. They will apply for Federal funds for the permanent system when such funds become available.

TIME FRAME

It will take approximately one year to acquire the equipment and become operational, voluntary procedures can be implemented immediately, FAA airspace review could take approximately 7 -9 months, Fly Quiet Program development could take approximately 6 months to accomplish. Publication procedures in

Airman's Manual could take approximately
4 months.

RECOMMENDATION 6--CONDUCT SITE SELECTION/FEASIBILITY STUDY FOR GROUND RUN-UP ENCLOSURE (GRE)

ISSUE	Reduce Noise Associated with Ground Run-Up/Maintenance Activities.
NEW ACTION	This Action is to conduct a site selection and feasibility study for a Ground Run-up Enclosure (GRE).
COMMENTS	The Study Advisory Committee evaluated the noise reduction potential associated with a Ground Run-up Enclosure and determined that noise reduction could be achieved through the use of such a facility. The amount of reduction is dependent upon the number and type of run-ups conducted on the Airport, with the majority of those associated with the Boeing Company. The number and type of run-ups vary with the specific aircraft program that the Boeing Company is under taking. Based on the existing uses on Airport property, it is difficult to determine a feasible site for such a facility at this time. Therefore, it is recommended that a more detailed site selection and feasibility study be undertaken.
COST	The cost to conduct the study is approximately \$100,000.
RESPONSIBLE PARTIES	The Airport is responsible for preparing the Request for Proposals (RFP), hiring the consultant and submitting a grant application to the FAA. The FAA is responsible for providing funding, if it is available.
AIRPORT ACTION	The Airport will prepare the RFP, hire the consultant, submit the grant application and manage the study.
TIME FRAME	This Action can be implemented as soon as the FAA has approved the Recommendation. It will take approximately 9-12 months to complete the study after consultant selection.

**RECOMMENDATION 7--IDENTIFY BUILDING NOISE
DESIGN/PLACEMENT STANDARDS TO REDUCE OFF-AIRPORT GROUND
NOISE EFFECTS**

ISSUE

Reduce noise ground generated noise impacts to residents.

NEW ACTION

This New Action is to identify standards for building placement and design to act as barriers to reduce the effects of ground generated noise to adjacent residences.

COMMENTS

Proper placement and design of future landside facilities can be useful in reducing ground generated noise intrusion to adjacent residences. Proper acoustical treatment and placement can act as barriers to sound transmission, and such considerations should be incorporated, if feasible, in future landside development.

COST

The cost to prepare the study is approximately \$80,000.

RESPONSIBLE PARTIES

The Airport is responsible for developing the RFP, hiring consultants to develop the standards and for adopting such standards for building design and placement.

AIRPORT ACTION

The Airport would develop the RFP and hire the consultant as soon as funds are available. Funds will be budgeted as soon as possible.

TIME FRAME

This Action can be initiated immediately, the study will take approximately 9 months from consultant selection and is not dependent upon any other Action.

RECOMMENDATION 8-- PROVIDE SOUND ATTENUATION, PURCHASE OF AVIGATION EASEMENT AND/OR SALES ASSISTANCE FOR RESIDENTIAL STRUCTURES WITHIN THE 65 AND 70 KCIA NOISE CONTOURS

ISSUE

Reduction of noise sensitive land uses within the Airport environs.

NEW ACTION

It is recommended that the Airport sound attenuate, on a voluntary basis, those single-family houses and multi-family structures within the 65 and 70 KCIA noise contours, which are economically feasible to attenuate. As an option, the Airport would offer Sales Assistance to homeowners wishing to sell their homes but are not able to do so due to proximity to the Airport. This would be a voluntary Action available to homeowners subsequent to sound attenuation of their homes. A third option would be the voluntary purchase of an avigation easement from those homeowners who do not want to take advantage of either the sound attenuation or sales assistance programs. Those properties within the Noise Mitigation Boundary that are eligible for participation can be seen in the following figures J3 through J7.

The Study Committee recommended that sound attenuation of single-family residences (FAA definition of 4-plex or smaller) and schools are a shared first priority, with multi-family attenuation second.

Even if all feasible noise abatement measures are implemented, there will still be residences within the significant noise contours associated with aircraft operations occurring at the Airport. As such, there are several land use options, which can be offered to residents in an effort to reduce inside noise levels or provide some type of relief. The following options are intended to be voluntary at the option of the homeowner.

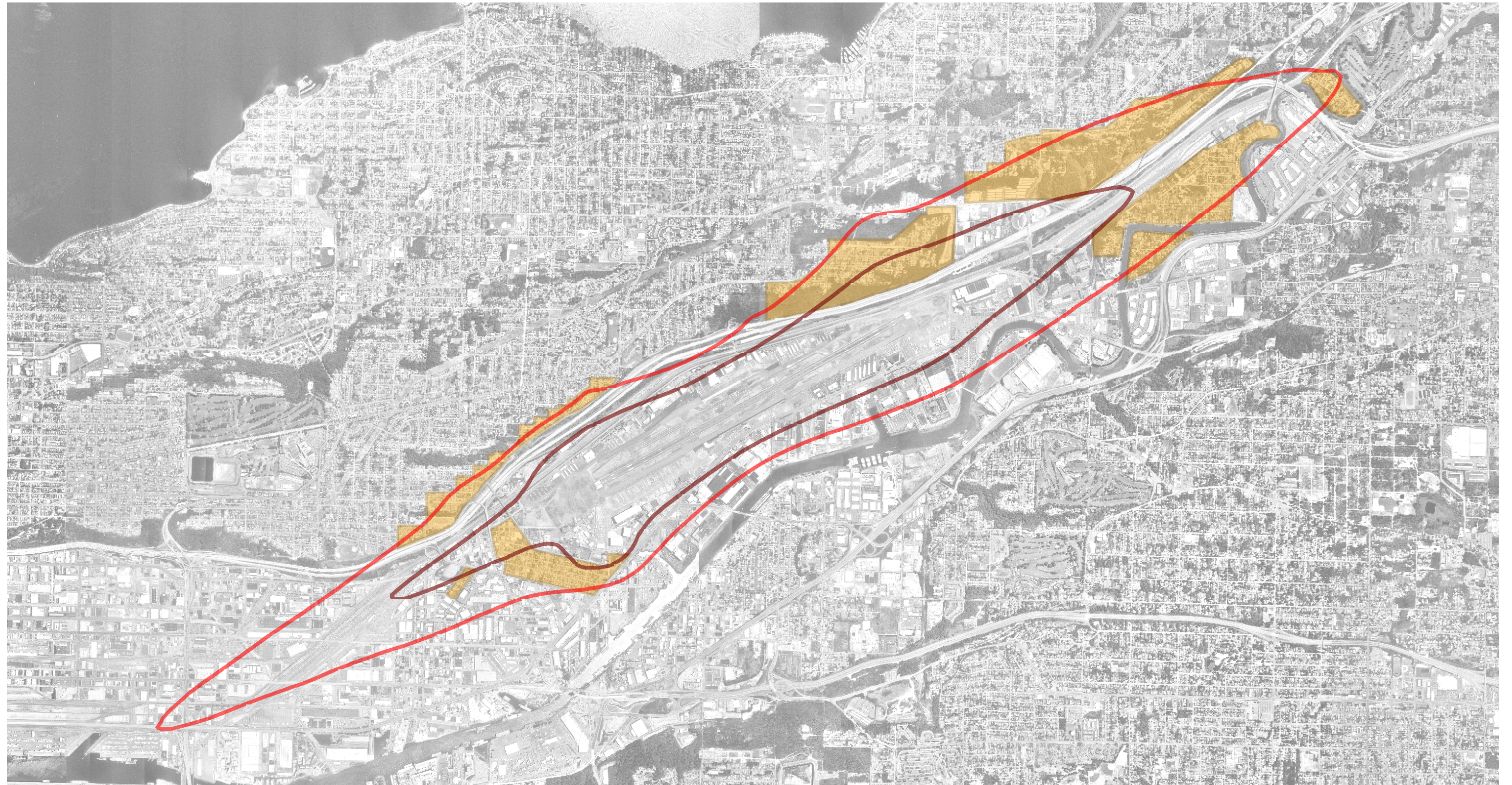



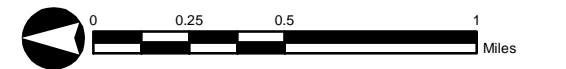


Figure J3 Noise Mitigation Boundary Indicating Eligible Properties (Future 2006 Noise Contour)

-  Noise Mitigation Boundary
-  65 DNL Noise Contour
-  70 DNL Noise Contour



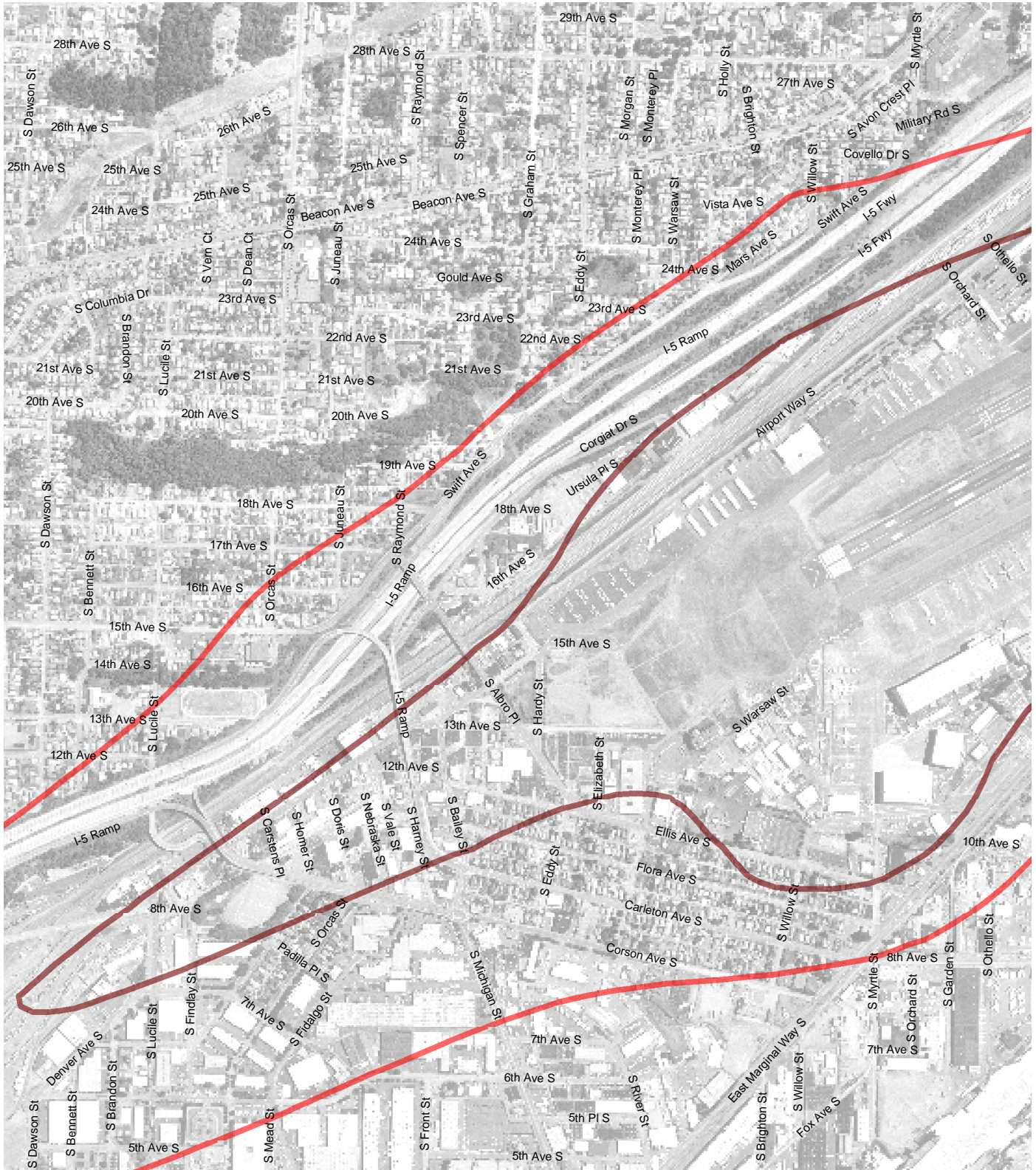



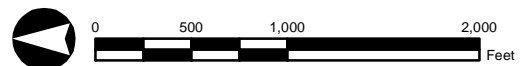


Figure J4 Noise Mitigation Boundary Detail Area 1
Indicating Eligible Properties (Future 2006 Noise Contour)

-  Noise Mitigation Boundary
-  65 DNL Noise Contour
-  70 DNL Noise Contour



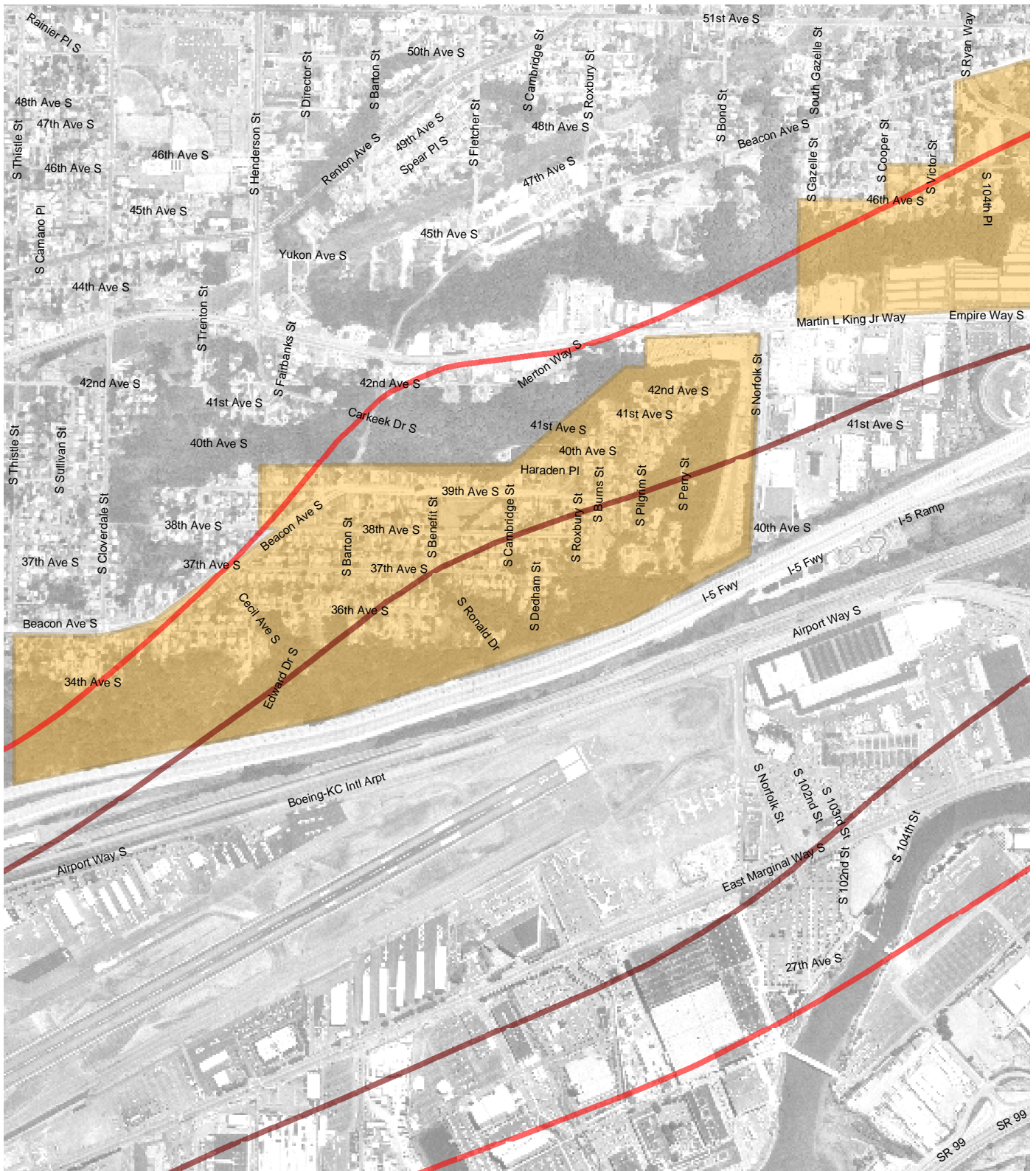





Figure J5 Noise Mitigation Boundary Detail Area 2
Indicating Eligible Properties (Future 2006 Noise Contour)

-  Noise Mitigation Boundary
-  65 DNL Noise Contour
-  70 DNL Noise Contour



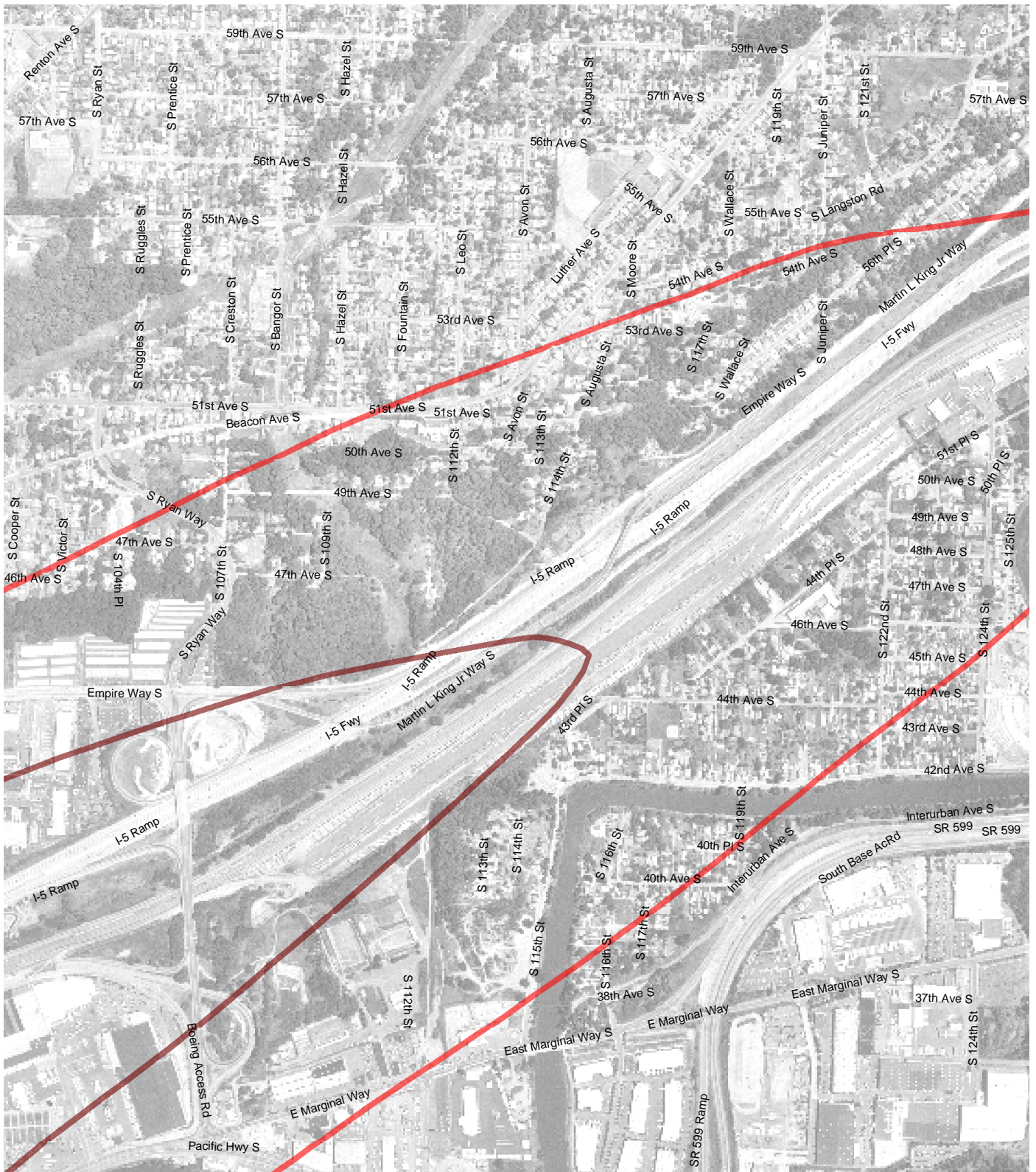



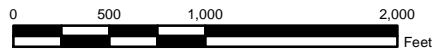


Figure J6 Noise Mitigation Boundary Detail Area 3
Indicating Eligible Properties (Future 2006 Noise Contour)

-  Noise Mitigation Boundary
-  65 DNL Noise Contour
-  70 DNL Noise Contour



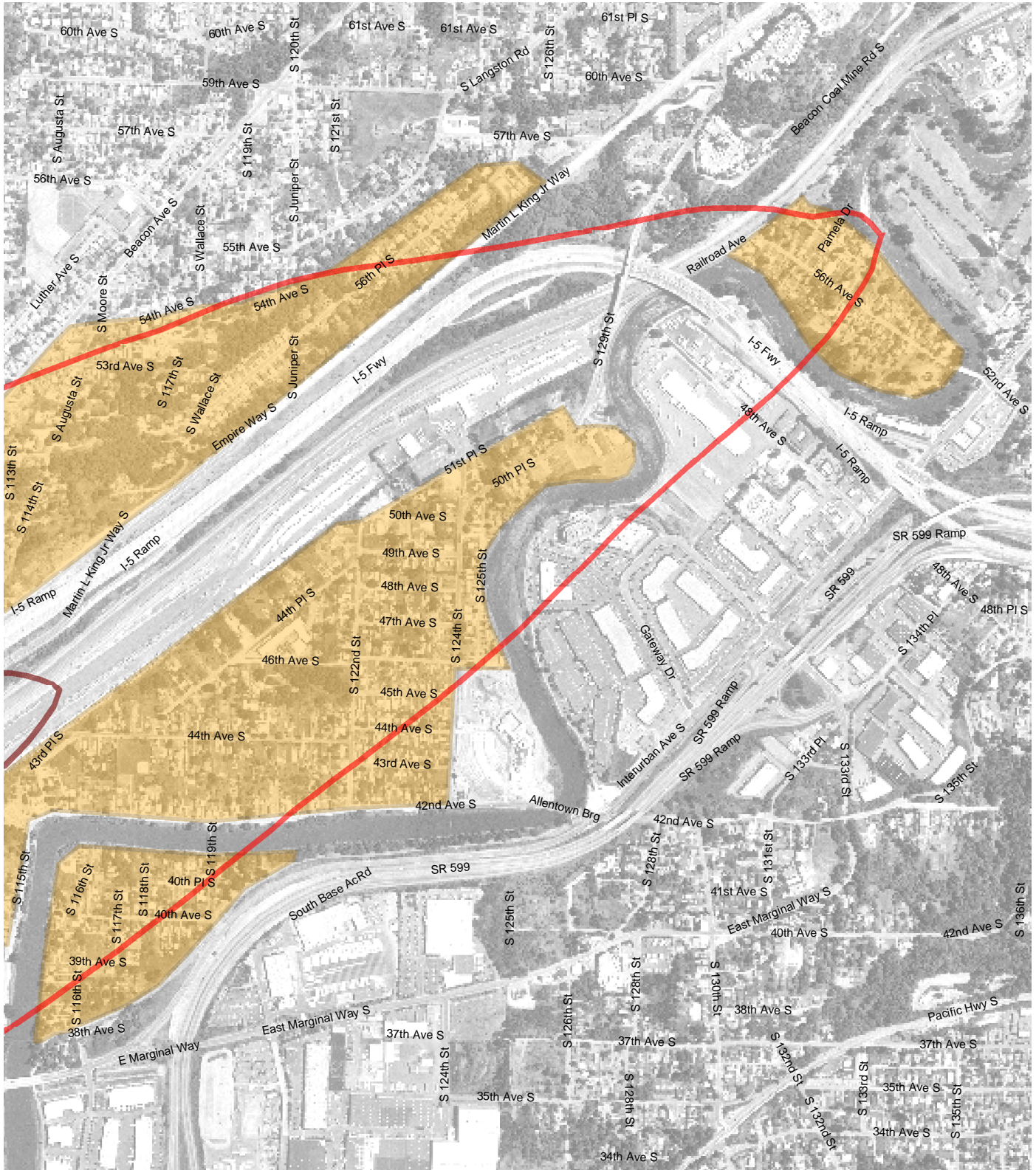



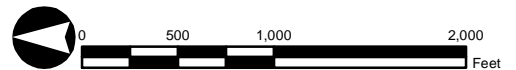


Figure J7 Noise Mitigation Boundary Detail Area 4
Indicating Eligible Properties (Future 2006 Noise Contour)

-  Noise Mitigation Boundary
-  65 DNL Noise Contour
-  70 DNL Noise Contour



COMMENTS

This Action would allow those homeowners within the 65 and 70 DNL noise contours to receive sound attenuation for their homes to reduce the inside noise levels to 45 dB or below. The Federal Aviation Administration guidelines consider sound attenuated houses within the 65 DNL contour compatible if sound attenuation achieves 25 dB reduction and homes inside the 70 DNL if they receive 30 dB reduction. This Action would convert non-compatible uses to compatible uses and would reduce the noise intrusion to those residents who decide to take advantage of this offer. The Airport would receive a noise easement in return for the sound attenuation.

A Pilot Program could be developed so that a "Standard Package" for such attenuation would then be identified for both the 65 and 70 contours and utilized to sound attenuate houses within the same noise contours in approximately the same location. If attenuation is found to be economically unfeasible or if other circumstances exist, the Airport would determine if purchase of noise easements only would be more desirable.

The Sales Assistance Program would allow those residents within the 65 and 70 DNL who determine that sound attenuation is not desirable to sell their houses. The Program is intended to provide those residents within the contours an opportunity to sell their homes at fair market value. The Program is designed so that the homeowner places the home on the market at fair market value. If the home does not sell within the average time limit that homes in the immediate area sell, then the selling price is reduced a certain percentage and it is placed on the market again. This process is continued until the home sells. The Airport makes up the difference between the original sales price and the actual sales prices. Prior to closing, an aviation easement is placed on the property, and this is only available to homeowners after they have received sound attenuation. This assures that future

purchasers would have sound attenuation and be considered compatible.

The Avigation Easement Purchase Program would allow those homeowners with the 65 and 70 DNL contours to sell an avigation easement to the Airport, which would grant to the Airport the right for aircraft to fly over their home and generate noise. The easement would be attached to the property and would be binding on subsequent purchasers. This Action will be offered at the same time as sound attenuation. These programs are all contingent upon the availability of Federal funds.

COST

The cost to implement this Action is estimated to be approximately \$56 Million if all eligible structures take advantage of the programs. It is estimated to be approximately \$10 Million for the 70 DNL contour only. FAA funding anticipated at approximately \$5 Million per year, the maximum allowable.

RESPONSIBLE PARTIES

The Airport is responsible for preparing an RFP for consultant selection, preparing and submitting the FAA Grant Application, hiring the consultant, developing the priority system and priority manual, notifying eligible homeowners of options and implementing the program. The FAA is responsible for helping fund the programs if funds are available.

AIRPORT ACTION

The Airport will prepare an RFP for consultant selection, prepare and submit the FAA Grant Application, hire the consultant, develop the priority system and priority manual, notify eligible homeowners of options and implement the program upon receiving funding. The Airport will budget its funds to match the Federal grant, and hire approximately one more employee to manage the Program.

TIME FRAME

This Action is slated for implementation in approximately 2003, upon FAA approval and funding.

RECOMMENDATION 9-- PROVIDE SOUND ATTENUATION, PURCHASE OF AVIGATION EASEMENT AND/OR SALES ASSISTANCE FOR RESIDENTIAL STRUCTURES WITHIN THE 65 AND 70 COMBINED NOISE CONTOURS

ISSUE

Reduction of noise sensitive land uses within the Airport environs.

NEW ACTION

It is recommended that the Airport sound attenuate, on a voluntary basis, those single-family houses and multi-family structures within the 65 and 70 combined noise contours, which are economically feasible to attenuate. As an option, the Airport would offer Sales Assistance to homeowners wishing to sell their homes but are not able to do so due to proximity to the Airport. This would be a voluntary Action available to homeowners subsequent to sound attenuation of their homes. A third option would be the voluntary purchase of an avigation easement from those homeowners who do not want to take advantage of either the sound attenuation or sales assistance programs.

The Study Committee recommended that sound attenuation of single-family residences (FAA definition of 4-plex or smaller) and schools are a shared first priority, with multi-family attenuation second.

COMMENTS

These are the same options presented for the KCIA noise contours but would be extended to include residents living in the combined contours that are not within either the KCIA or Sea-Tac individual contours. This Recommendation would provide relief to those residents that are not currently eligible under existing noise programs or existing FAA Policy. The intent with this Recommendation is to utilize the KCIA contours first and then address those noise sensitive uses within the Combined Contours. This would ensure that the residents closest to the airport, in the loudest noise contours, would be provided assistance first.

This Action would allow those homeowners within the 65 and 70 DNL combined noise contours to receive sound attenuation for their homes to reduce the inside noise levels to 45 dB or below. The Federal Aviation Administration guidelines consider sound attenuated houses within the 65 DNL contour compatible if sound attenuation achieves 25 dB reduction and homes inside the 70 DNL if they receive 30 dB reduction. This Action would convert non-compatible uses to compatible uses and would reduce the noise intrusion to those residents who decide to take advantage of this offer. The Airport would receive a noise easement in return for the sound attenuation.

A Pilot Program could be developed so that a “Standard Package” for such attenuation would then be identified for both the 65 and 70 contours and utilized to sound attenuate houses within the same noise contours in approximately the same location. If attenuation is found to be economically unfeasible or if other circumstances exist, the Airport would determine if purchase of noise easements only would be more desirable.

The Sales Assistance Program would allow those residents within the 65 and 70 DNL who determine that sound attenuation is not desirable to sell their houses. The Program is intended to provide those residents within the contours an opportunity to sell their homes at fair market value. The Program is designed so that the homeowner places the home on the market at fair market value. If the home does not sell within the average time limit that homes in the immediate area sell, then the selling price is reduced a certain percentage and it is placed on the market again. This process is continued until the home sells. The Airport makes up the difference between the original sales price and the actual sales prices. Prior to closing, an aviation easement is placed on the property, and this is only available to homeowners after they have received sound attenuation. This assures that future

purchasers would have sound attenuation and be considered compatible.

The Avigation Easement Purchase Program would allow those homeowners with the 65 and 70 DNL contours to sell an avigation easement to the Airport, which would grant to the Airport the right for aircraft to fly over their home and generate noise. The easement would be attached to the property and would be binding on subsequent purchasers. This Action will be offered at the same time as sound attenuation. These programs are all contingent upon the availability of Federal funds.

COST

The cost to implement this Action is estimated to be approximately \$67 Million if all eligible structures take advantage of the programs. FAA funding anticipated at approximately \$5 Million per year, the maximum allowable.

RESPONSIBLE PARTIES

The Airport is responsible for meeting with the FAA and the Port of Seattle to develop criteria, guidelines, funding ratios, Sponsorship and standards for implementing the program in the combined contours. The County and Port are responsible for a Formal Resolution and Intergovernmental Agreement for implementation. The Airport/Port are responsible for preparing an RFP for consultant selection, preparing and submitting the FAA Grant Application, hiring the consultant, developing the priority system and priority manual, notifying eligible homeowners of options and implementing the program. The FAA and Port of Seattle are responsible for helping fund the programs if funds are available.

AIRPORT ACTION

The Airport will meet with the Port and FAA to develop criteria and guidelines, develop and enter into an Intergovernmental Agreement with the Port, prepare an RFP for consultant selection, prepare and submit the FAA Grant Application, hire the consultant, develop the priority system and priority manual, notify eligible homeowners of options and implement the program upon receiving funding. The Airport will budget

its funds to match the Federal grant, and hire approximately one more employee to manage the Program.

TIME FRAME

This Action is slated for implementation in approximately 2003, upon FAA approval and funding.

RECOMMENDATION 10-- PROVIDE SOUND ATTENUATION FOR SCHOOLS AND PUBLIC BUILDINGS WITHIN THE 65 AND 70 KCIA AND COMBINED NOISE CONTOURS

ISSUE

Reduction of noise sensitive land uses within the Airport Environs.

NEW ACTION

This Action is to insulate schools and public buildings in the following order of priorities in the KCIA 65 and 70 DNL contours. Sound attenuate schools as a first priority (shared with single-family structures as outlined in the previous Action), with sleeping portions of fire stations (after multi-family structures) as the last priority. This Recommendation is similar to the previous Recommendation to address those uses and structures within the KCIA contours. Subsequent to the completion of these programs inside the KCIA contours, then they should be extended to the Combined Contours.

COMMENTS

This Action will allow those schools and public buildings to receive sound attenuation based on the FAA guidelines to achieve attenuation for schools (Cleveland) and sleeping portions of fire stations (two). This Action would convert non-compatible uses to compatible uses and would reduce the noise intrusion to those facilities deciding to take advantage of this offer. The Airport would receive a noise easement in return for the sound attenuation. Schools within the combined contours are Maple and St. George.

COST

The cost to implement this Action is approximately \$20 Million, with a 90/10 ratio for those within the Sea-Tac contours.

RESPONSIBLE PARTIES

The Airport/Port are responsible for preparing an RFP for consultant selection, preparing and submitting the FAA Grant Application, hiring the consultant, developing the priority system and priority manual, notifying eligible homeowners of options and implementing the program. They are also responsible for entering into an Intergovernmental Agreement for funding the attenuation for schools within the combined contours. The FAA is responsible for helping fund the programs if funds are available.

AIRPORT ACTION

The Airport will meet with representatives of the school and fire stations to discuss the project and process, submit application for funds, hire the consultant and develop policy and procedures manual, and implement the program. The Airport will meet with the Port of Seattle and develop an Intergovernmental Agreement for funding identified schools.

TIME FRAME

This Action is anticipated to start in approximately 2005/6, depending upon the availability of funds.

**RECOMMENDATION 11--OPERATIONS REVIEW AND PART 150
UPDATES**

ISSUE

Update and Review of the FAR Part 150 Study.

CONTINUED ACTION

The FAR Part 150 Study is a five-year program recommended to be reevaluated at the end of the five-year period. In addition, if there is a significant change in either aircraft types or numbers of operations, or significant new facilities, then it is recommended that the Study be reevaluated prior to the end of the five-year time frame.

COMMENTS

It is recommended that Airport management undertake a yearly review of the aircraft types and numbers, along with the actual number of operations occurring at the Airport, and determine if they are consistent with the projections contained in the FAR Part 150 document. FAR Part 150 defines the level of change necessary to trigger a revision of the Noise Exposure Map to be when any change in the operation of the Airport would create any substantial new non-compatible use in any area depicted on the map beyond that which is forecast for the fifth calendar year after the date of approval. That is, if that change results in an increase in the yearly day-night average sound level of 1.5 DNL or greater in either an area which was formerly compatible but is hereby made non-compatible or in a land area which was previously determined to be non-compatible and whose non-compatibility is not significantly increased. The various recommendations will also be reviewed as to their ability to mitigate the projected noise intrusion and the overall effectiveness of the program.

At the end of the five-year study all of the forecasts and aircraft mix are to be reevaluated to determine the extent to which they have changed from those projected in this study, and are to be undated to reflect the following five years. If necessary, new mitigation measures are to be evaluated. Contingent upon Federal funds, the Noise Compatibility Program is to be reevaluated,

and public review of documents will be incorporated.

COST

The cost of monitoring the information set forth in this section will be borne out of the normal Airport operating budget. Consultant assistance for various elements would be approximately \$30,000.

RESPONSIBLE PARTIES

The Airport would be responsible for updating and monitoring the FAR Part 150 Study at the five-year increments or when there is a significant change in aircraft types or numbers of operations. The Federal Aviation Administration could help fund the update if there are funds available for such planning.

AIRPORT ACTION

Based on the monitoring activities described, the Airport will reevaluate the program when there is a significant change in operations, aircraft types or at the end of the five-year timeframe.

TIME FRAME

The Airport will continue its monitoring program and plan for a full update at the end of the fifth-year after submittal or earlier if necessary as per FAR Part 150.

**RECOMMENDATION 12--ESTABLISH FOLLOW-UP ROUNDTABLE/
COMMITTEE**

ISSUE

Formulation of Fly Quiet Program and Evaluation of other Noise Abatement Programs.

AMENDED ACTION

The Study Advisory Committee established for this Study has been instrumental in establishing these Recommendations. It is recommended that a similar committee continue to monitor programs implemented as a result of the Part 150 Study after its completion, establish the Fly Quiet Program guidelines and the Noise Monitoring Program.

COMMENTS

Considerable time and effort has been expended, by both the Airport and the Committee, in the development of this study, especially the “learning curve” effort and the building of relationships, that is too valuable a tool for communication to risk losing at the end of this process. In addition, on-going aircraft operational procedures evaluation should be discussed through the Committee.

It is very difficult to foster a feeling of trust in many Airport planning efforts. Such a feeling can be developed through the members of this or a similar Committee. Both sides of most issues are represented and all interests are heard. This is very important for the continued successful implementation of the noise abatement program and operation of the Airport.

COST

The cost for the Committee could be included in the normal operating expenses of the Airport, with Federal funding, if available.

RESPONSIBLE PARTIES

The Airport is responsible for determining the formulation of the committee and committee administration. Other parties may be responsible for appointing members of the committee. Committee members are responsible for attending and participating in committee functions.

AIRPORT ACTION

The Airport will hold committee meetings, on at least a quarterly basis, as a means of disseminating information and gathering input on noise abatement issues. The Committee will help the Airport in developing the Fly Quiet Program and the Noise Monitoring Program

TIME FRAME

This Action can occur within the first few months of approval of the FAR Part 150 Study. It can also be implemented without regard to any other recommendation.