

MEMORANDUM

DATE April 23, 1982

TO Policy Advisory Committee (see Distribution)

FROM Art Yoshioka, Special Project Director

SUBJECT Scope of Work for the Sea-Tac Noise Remedy Program Update

As a guideline for the planning process of the Sea-Tac Noise Remedy Program Update, the study team has developed an outline of the scope of work. This outline presents a strategy and a list of major steps which allow for an effective relationship between the goals and objectives of the study, the planning study, the study recommendations, and plan adoption and implementation. It will be used as the basis for the preparation of a work program which will describe in detail, for each task identified in the outline of the scope of work, the approach (i.e., how the task is to be done), the products (i.e., what is to be accomplished), the responsibilities of each of the study participants and a schedule for completion.

A copy of the outline of the scope of work is attached. It is a product of the evaluation of three strategies and input from the study's working subcommittee of PAC. The study team considered three strategies with which to carry out the Sea-Tac Noise Remedy Program Update. The scope of the three strategies was the same, but differentiated by the phasing of the tasks within the study. The first strategy would address all remedy programs for the total study area in one phase. Completion of the study could take as long as 24 months. The second strategy would address all remedy programs for the total study area in two study phases with recommendations for action following each phase. The first phase of the second strategy would address only the land acquisition program in areas which meet land acquisition criterion established in the Sea-Tac/Communities Plan with updated noise projections. Completion of the first-phase could take as long as 12 months. The third strategy would also address all remedy programs for the total study area in two study phases with recommendations for action following each phase. However, the first phase of the third strategy would address only the land acquisition program in areas identified in the Sea-Tac/Communities Plan for land acquisition which have not yet fallen within a completed or ongoing land acquisition program and at the same time meet land acquisition criterion established in the Sea-Tac/Communities Plan with updated noise projections. Completion of its first-phase could be within eight months.

Based on the estimated completion schedules, the third strategy was selected and is presented herein. Its early first-phase completion schedule was given highest priority in the evaluation of these three strategies for the following reasons:

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- * Enables Port of Seattle to initiate an acquisition program as quickly as possible.
- * Fulfill commitment made to communities identified in the Sea-Tac/Communities Plan for land acquisition that have not yet fallen within a completed or ongoing land acquisition program.
- * Maintains present staff of trained purchase and relocation personnel.
- * Allows the Port to take advantage of any funds for noise remedy program implementation before completion of the total study,

This third strategy was presented to the study's working subcommittee of PAC at meetings held on March 23, 1982 and April 19, 1982. Comments were solicited on both the strategy and the proposed scope of work. Strategy acceptability appeared to be associated with the potential inclusion/exclusion of individual communities in the first-phase land acquisition program. Comments on the scope of work were incorporated into the outline whenever possible. The major additions made to the scope of work were the insertion of two new elements: a review of existing literature covering the effects of noise on population and land resources and the identification and evaluation of aircraft access restrictions as possible noise abatement measures. A presentation of this strategy and scope of work will be made at the next PAC meeting, Wednesday, May 12, 1982.

Without further delay, the study team will prepare a work program which will be based on the attached scope of work. It will be distributed to the study's subcommittee of PAC in late May.


JY/D/3
Attachments

Distribution:

PAC Members: Alexander, Ault, Bohrer, Brown, Dana, Fain, Jennings, Jhaveri, Legg, Rockafellar, Sherer, Simpson, Stalzer

cc: Dwyer, Clark, Dunham, Killeen, Parks, Sims, Sutter, Taylor, Wittren, Yamanaka (POS);

Buley, Saito (FAA); Huebner (Des Moines);
Highline Community Council

OUTLINE OF SCOPE OF WORK FOR THE
SEA-TAC NOISE REMEDY PROGRAM UPDATE

Task 1: Purpose and Objectives

- a. Review of Sea-Tac/Communities Plan process, goals, and recommendations.
- b. Port planning policies and guidelines.
- c. Community and other agencies' goals and guidelines or rules and regulations.

Task 2: Interim Land Acquisition Program

- a. Definition of Study Area
 - o Study area will include the area identified in the Sea-Tac/Communities Plan for land acquisition which has not fallen within a completed or on-going land acquisition program and at the same time meet land acquisition criterion established in the Sea-Tac/Communities Plan using update noise data from Sea-Tac Noise Exposure Update study.
- b. Recommended Program for Study Area
 - o Schedule for implementation
 - o Implementation Responsibilities
 - o Needed actions
 - o Sources of funding
- c. Determination of Federal and/or State Environmental Requirements
 - o Prepare environmental documentation necessary for implementation of land acquisition program.
- d. Commission Authorization for Implementation

Task 3: Literature Review of the Impact of Noise on Population and Land Resources

- a. Noise and Health
- b. Noise and Property Values

Task 4: Definition of Study Area (Sea-Tac/Communities Plan's Airport Vicinity Planning Areas)

Task 5: Update of Inventory of Existing Conditions Within Study Area

- a. Land Use and Zoning
 - o Categories of land use as per King County land use maps
 - o Location of noise sensitive community facilities
 - o Location of permanent and mobile noise monitoring sites
 - o Zoning
- b. Population
 - o Number of individuals and families
 - o Characteristics of households (e.g., minorities, income levels, renter or owner, tenure, elderly, large families, etc.)
 - o Characteristics of community (e.g., attitudes toward neighborhood future, noise, etc.)
- c. Housing
 - o Number of housing types
 - o Characteristics of structures (e.g., types, value, historical significance, etc.)
 - o Neighborhood composition
- d. Ground Transportation
 - o Surface transportation patterns
 - o Vehicular mix and volume
- e. Noise
 - o Ambient noise sources and noise levels
 - o Aircraft generated noise by contour and grid cell
 - o Total noise levels
- f. Air Quality
- g. Water Quality and Drainage
- h. Physical Geography
 - o Geology and soil

- o Topography and slope

- o Flora and fauna

- i. Community Plans and Programs

Task 6: Trends and Forecasts

- a. Land Use Plans

- o Sea-Tac/Communities Plan

- o Highline Community Plan

- b. Population Forecasts

- c. Ground Transportation Projections

- d. Summary of Sea-Tac Noise Exposure Update

- o Forecasts of aviation demand

- o Projections of noise exposure levels

- o Findings

Task 7: Identification of Noise Abatement Measures

- a. Implementation Authority by Airport Operator

- o Residentially-oriented programs as defined in the Sea-Tac/Communities Plan (e.g., land acquisition, purchase guarantee, cost sharing insulation, limited cost sharing insulation, property advisory services, etc.)

- o Aircraft noise reduction policies as developed in the Sea-Tac/Communities Plan (e.g., support of adoption of all operational procedures effective in reducing noise exposure, engine run-up curfews, and specified run-up locations, noise monitoring program, etc.)

- o Aircraft access restrictions (e.g., noise level restrictions, time of day restrictions, limits to number of aircraft operations, etc.)

- o Miscellaneous noise abatement measures (e.g. noise barriers, run-up suppressor facilities, etc.)

- b. Implementation Authority Vested in a Local Agency or Political Subdivision Governing Body, or a State Agency or Political Subdivision Governing Body
 - o Zoning
 - o Soundproofing of buildings
 - o Building codes for sound insulation and noise-induced building vibration control
- c. Implementation Authority Vested in a Federal Agency
 - o Preferential runway system
 - o Noise abatement takeoff or approach procedures
 - o Modification of flight tracks

Task 8: Identification of Evaluation Criteria and Evaluation of Noise Abatement Measures

- a. Community Sentiment
- b. Noise Reduction
- c. Reduction of Noncompatible Land Uses and Exposed Population and Prevention of Additional Noncompatible Land Uses and Exposed Population
- d. Social and Induced Socioeconomic Impacts
- e. Air and Water Quality
- f. Other Environmental Considerations
- g. Costs
- h. Relationship to Existing Airport Layout Plan, Airport Master Plan, Airport System Plan, Community Plans, and Port goals and guidelines.
- i. Safety
- j. Feasibility of Implementation
- k. Timing Before Implementation

Task 9: Recommended Program

- a. Relative Contribution of Each Measure to the Overall Program
- b. Schedule for Implementation and Periodic Review and Updating
- c. Implementation Responsibilities
- d. Needed Actions for Implementation
- e. Sources of Funding
- f. Future Actions for Monitoring and Periodic Review and Updating

Task 10: Community and Intergovernmental Coordination

- a. Citizen Involvement Program
 - o Policy Advisory Committee (PAC)
 - o Working subcommittees of PAC
 - o Public information meetings
 - o Newsletters
- b. Meetings - Consultation with Governmental Agencies
- c. Summary of Comments and Material Submitted to Operator with Responses

Task 11: Environmental Assessment of Proposed Airport Noise Compatibility Plan