BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE FY 93 UNIFIED WORK PROGRAM AND AUTHORIZING CONTRACTS WITH ODOT AND 1000 FRIENDS OF OREGON) FOR THE LUTRAQ PROJECT	RESOLUTION NO. 93-1738 Introduced by Councilor Van Bergen

WHEREAS, Metro currently has an agreement with ODOT and 1000 Friends of Oregon to receive and pass-through funds for the LUTRAQ project; and

WHEREAS, FHWA wishes to continue to the conclusion the research on alternative land use and transportation options and analytical models; and

WHEREAS, FHWA has made available an additional $216,250 for completion of the project; now, therefore,

BE IT RESOLVED,

1. That the Metro Council approves amending the FY 93 Unified Work Program (UWP) to include additional LUTRAQ work and FHWA funds of $216,250.

2. That Metro Council approves an agreement with ODOT to receive those funds and an agreement with 1000 Friends to pass-through $178,250 of those funds. Metro will retain $38,000 for staff and computer costs.

ADOPTED by the Metro Council District this 28th day of January, 1993.

Judy Wyers

Judy Wyers, Presiding Officer

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93-1738.RES

PLANNING COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 93-1738, AMENDING THE FY 93 UNIFIED WORK PLAN AND AUTHORIZING CONTRACTS WITH ODOT AND 1000 FRIENDS OF OREGON FOR THE LUTRAQ PROJECT

Date: January 20, 1993 Presented by: Councilor Devlin

Committee Recommendation: At the January 12 meeting, the Planning Committee voted 5-1 to recommend Council adoption of Resolution No. 93-1738. Voting in favor: Councilors Van Bergen, Devlin, Gates, Monroe, and Moore. Voting no: Councilor Kvistad.

Committee Issues/Discussion: Andy Cotugno, Planning Director, presented the staff report. He explained that there were two different kinds of work being undertaken by 1000 Friends of Oregon regarding the "Making the Land Use, Transportation and Air Quality Connection" (LUTRAQ) project. The research and development aspect looks at the transportation and land use models that might be considered in this or other areas of the country and development of the analytical tools to evaluate whether these models are viable. The second area deals specifically with developing an alternative to alternatives being considered in the Western Bypass study.

Last month, this Council approved five alternatives for the Oregon Department of Transportation (ODOT) to forward to the environmental impact statement (EIS) process. One of the five was the LUTRAQ alternative. The action effectively transferred responsibility for the alternative from 1000 Friends to ODOT for evaluation. Metro is a party to the ultimate decision at the end of the EIS process.

The funding in this resolution relates to the research and development aspect. The research aspects of the project are partially completed. This will provide the funds to complete the project. Metro is the principal beneficiary of this research. The Federal Highway Administration (FHWA), who will provide $216,000, is interested because they want the research published and available for other uses. Metro will be keeping $38,000 to do the model runs needed for the final report; the remainder of the money goes to 1000 Friends.

Keith Bartholemew, LUTRAQ Project Manager, 1000 Friends of Oregon, explained the decision making process for the project. All decisions are made by the National Technical Advisory Committee (NTAC) which includes six experts from the FHWA, the Environmental Protection Agency, the University of California and other prestigious institutions. Funding from the FHWA looks very positive. It should be forthcoming in the next two to three weeks. This is not money that would ordinarily come to Oregon for any other reason.

The time frame for completion of the project is dependant on Metro's other commitments (e.g. Region 2040, North/South Corridor Study). He hopes the preliminary findings will be ready in July, peer review in the fall, with the final report by December, 1993.

Councilor McLain commented that 1000 Friends deserve our thanks for this project. Metro will gain greatly from the improvement in the modeling. Councilor Devlin concurred with her statements and added that the modeling will assist us greatly in our compliance with the Transportation Rule 12 and implementing the Regional Urban Growth Goals and Objectives (RUGGO).

Councilor Kvistad voiced his concerns about the precedent set by Metro funding or passing through funding to any interest group with a Metro interest. He asked why 1000 Friends were selected for this project. Mr. Cotugno answered that the group originally sought the funding after putting together the project and securing a portion of the funds from foundation money. Councilor Kvistad said that the outcome and the modeling program under development will have long range benefit for Metro and probably should not be discontinued mid-way. His primary concern remains that he believes, as do many in his district, that it was inappropriate for Metro to fund this project in the beginning.

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 93-1738 FOR THE PURPOSE OF AMENDING THE FY 93 UNIFIED WORK PROGRAM AND AUTHORIZING CONTRACTS WITH ODOT AND 1000 FRIENDS OF OREGON FOR THE LUTRAQ PROJECT

Date: December 21, 1992 Presented by: Andrew Cotugno

PROPOSED ACTION

1. Amend the FY 93 Unified Work Program for an FHWA research grant in the amount of $216,250 for 1000 Friends of Oregon to complete the LUTRAQ project.

2. Authorize a contract with ODOT to receive the $216,250 of FHWA funds and a contract for $178,250 with 1000 Friends to pass-through the funds; the remaining $38,000 is for Metro staff and computer costs to assist in modeling.

TPAC reviewed this UWP amendment at its December 18, 1992 meeting and recommended approval.

FACTUAL BACKGROUND AND ANALYSIS

The LUTRAQ project sponsored by 1000 Friends of Oregon has the following major purposes:

1. Conduct research on alternative land use and transportation options and analytical models to improve the reliability of their analysis;

2. Disseminate research conclusions to national groups interested in evaluating alternative land use/transportation options; and

3. Develop a land use/transportation option to be considered by ODOT in their Western Bypass DEIS.

Metro has contracted with 1000 Friends, with funding from Metro, Tri-Met and FHWA, to assist in the research and dissemination aspects of the LUTRAQ project. This contract will complete this activity and includes funding to pay for Metro staff and computer costs associated with modeling support for the project (a full work scope is reflected in Attachment A to this Staff Report). Metro, FHWA and Tri-Met funds have not been used to develop the alternative to the Western Bypass, or evaluate or advocate its merits. A separate resolution recommends including the LUTRAQ alternative into the Western Bypass DEIS which, if approved, would become the responsibility of ODOT to evaluate rather than 1000 Friends.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No. 93-1731.

KB

ATTACHMENT A
PART 1

November 13, 1992

Fred Ducca
Federal Highway Administration (HEP-22)
400 7th Street, SW
Washington, DC 20590

Dear Fred:

Thank you for taking the time to meet with Henry, Sam, and Mary Kyle. I'm sorry that I missed your visit, but I think we covered a lot of ground during my stop-over in D.C. As a follow-up to your Portland meeting, I am submitting a detailed budget for the amount requested in my previous correspondence with Steve Lockwood.

This budget is based on several objectives. First, we are requesting from FHWA only funds for tasks that are research oriented, and whose issues relate to your agency's objectives. We share your interest in focusing on research questions related to transportation, land use, and demand management. We believe our project is generating significant new data on issues of strategic importance to policy makers across the United States.

Secondly, we are requesting sufficient funds to finish all outstanding quantification elements of the project work scope; elements relating to implementation strategies are not included. Our goal is to secure funds sufficient to complete the quantification effort without the starts and stops which have occurred in the past because of sporadic funding.

The accompanying table itemizes the funds required to complete all relevant tasks. The following is a summary of each item.

We have begun modeling the travel demand associated with our alternatives. The complexity of the technical issues associated with model calibration in a previous task (Task D)--for both the interactive land use model and the enhanced four-step model--have left insufficient funds to complete the modeling work.

Our project will benefit from the inclusion of one of our two alternatives in the Western Bypass EIS. Costs for modeling the EIS version of the LUTRAQ alternative will be furnished by ODOT. However, substantial additional modeling and data analysis remains in our original work scope. Funds requested for this task provide the amount needed to finish these analyses and simulations.

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Specifically, funds for Task E.1 are targeted to run the ITLUP package for the no-action alternative and to analyze the results. The budgeted amount will be divided between the consultants and Metro. Since the no-action alternative has already been run on Metro's existing models, no funds are requested for this purpose.

In Task E.2, the same situation exists. Metro and the consultants will divide the budgeted amount to simulate the Western Bypass alternative on ITLUP.

For Task E.3, we have budgeted funds only to analyze model results. The cost of conducting modeling for this version of the LUTRAQ alternative has already been budgeted by ODOT. Our consultants will obtain the data set to conduct further analyses, generating statistics not required by the EIS. These include such statistics as average trip lengths, vehicle trips per household and per person, household VMT estimates, mode splits for numerous trip purposes, and others. These statistics will be developed not only for the entire study area, but also for several subareas, including those comprised of new transit-oriented developments.

The costs of analyzing the non-EIS version of the LUTRAQ alternative are identified in Task E.4. The budget includes costs for modeling this alternative using both the existing Metro model and the linked land use model. Since we will be simulating this alternative for the first time, we have budgeted for analysis to insure its accuracy and usefulness.

We would expect to test the two major elements of the non-EIS alternative as we have already done for the EIS version. This involves quantifying the effects of the TDM package independent of the land use/transportation element. We believe the results of this disaggregation process will be valuable to policy makers. We will be building on work done by Cambridge Systematics and others for this simulation.

We need to provide funds sufficient to complete the planned analysis of capital and operating costs of the alternatives (Task E.9). In this task, FHWA funds will be used only to estimate the cost of the transportation elements of the alternative. Sufficient budget remains to analyze the non-transportation elements from other sources.

The task report (Task E.10) has been funded at the same level as in the initial project budget. The final reports for the project (Task G.1-G.3), however, have taken on ever greater importance in

light of the complexity of the alternatives and of the modeling and analysis done on them. The work product for Task E must be understandable to a general audience. It must also be well documented for technical readers. In this task, we would like to expend funds as well for technical review by a panel of experts identified by FHWA. Funds for this purpose have been identified. We have also budgeted funds for Metro to prepare graphics which summarize visually the travel behavior simulated in Task E and other data which lend themselves to GIS presentation.

The cost for the elements described above is $216,250. This includes $10,000 for the FHWA review and $18,000 more than the minimum we had agreed to furnish to Metro for work on LUTRAQ, in anticipation of the costs they actually expect to face. It also includes $43,250 for administrative costs, secretarial time, rent, postage, accounting, and the like.

In summary, I expect you will find that the funds we have requested not only are well spent, but are also carefully budgeted. Our goal is to insure that FHWA and 1000 Friends get the most value for the budget. Most importantly, we share your interest in getting products which are technically excellent and which shed light on the important policy issues which are at the heart of our project.

Please call me with any questions you have.

Very truly yours,

Keith A. Bartholomew,
LUTRAQ Project Coordinator

bcc: MGS
KLL
HRR
MKM

WORK PROGRAM

for

Making the Land Use, Transportation, Air Quality Connection (LUTRAQ)

Funding Proposal to FHWA
December 15, 1992

Subtask E.1: The No Action Alternative

Under this subtask, the Consultant Team will test the no action alternative -- i.e. conditions in 2010 in the absence of transportation improvements and assuming land uses consistent with existing comprehensive plans. Using data sets developed by the Oregon Department of Transportation (ODOT) for the Western Bypass Study, the Consultant Team will test the alternative using transportation demand model at the Metropolitan Service District (Metro) (as enhanced by the LUTRAQ team) linked to the DRAM/EMPAL integrated land use models.

Subtask E.2: The Western Bypass Alternative

Using the enhanced travel demand model linked to DRAM/EMPAL, the Consultant Team will forecast both travel demand and land uses which can be expected to occur as the result of the construction of a bypass freeway. As with the no-action alternative, the bypass alternative will be as it is described by ODOT.

Subtask E.3: The LUTRAQ Alternative (The EIS Version)

The Consultant Team will analyze data generated by ODOT's modeling of the LUTRAQ package of alternative land uses, transportation improvements, and demand management policies. The land uses for this version of the alternative are directed by a study of market forces and the demand management element contains policies familiar to the Portland region.

Subtask E.4: The LUTRAQ Alternative (The Non-EIS Version)

Using the enhanced travel demand model, both alone and as linked to the DRAM/IMPAL land use models, the team will model a version of the LUTRAQ alternative that contains more aggressive land use and demand management elements than contained in the EIS version of the alternative (Subtask E.3).

Subtask E.5: The LUTRAQ Alternative Components

Each of the three primary elements of the LUTRAQ alternative package (land use, transportation, demand management) have different qualitative and quantitative impact on land use, travel demand, air quality, and quality of life. To measure the relative importance of each of the LUTRAQ alternative's elements, the land use and transportation components of the non-EIS version of the alternative (Subtask E.4) will be modeled separately, without the demand managment component.

Subtask E.9: Assess the Transportation Capital, Operations, and User Costs

The Consultant Team will analyze the capital and operating costs of the transportation infrastructure associated with each of the alternatives. The Team will also develop relative measures of out-of-pocket costs for users of transportation for each alternative. This analysis will help suggest the full societal costs of the various alternatives and will provide a basis for determining least cost provision of transportation services and facilities.

Subtask E.10: Alternative Test Task Report

In this subtask, the Consultant Team will compile all of the data produced in Task E in preparation for the development of the final project reports in Task G.

Task G: Final Reports

The Consultant Team will prepare two final reports responding to the needs of the different constituencies for the LUTRAQ project. Each report will, at a level of detail appropriate to its function,

- state the study purposes and objectives,
- outline the study methodology,
- present the output of each of the project tasks, and
- assess the relative performance of each alternative studied.

Subtask G.1: Summary Report

In the summary report, the Consultant Team will provide an overall view of the study and its conclusions. This report will be targeted at a lay audience, with particular emphasis on presenting concepts and images that are easily understandable to the public at large. To achieve this result, the report will contain a number of renderings, graphics, and diagrams. The report will include separate elements on land use, transportation, air quality, energy consumption, and quality of life. The Team will provide 1000 Friends with a camera-ready copy for publication.

Subtask G.2: Technical Report

In the technical report, the Consultant Team will provide full supporting documentation concerning all key assumptions and findings in the study. As with the summary report, the technical report will be presented with separate sections on land use, transportation, air quality, energy consumption, and quality of life.

Subtask G.3: Visual Aids

The Consultant Team will prepare a slide show communicating the process, methods, concepts, and results of the study.

MAKING THE LAND USE, TRANSPORTATION, AIR QUALITY CONNECTION

Summary of Request for Funds

TASK	DESCRIPTION	RECOMMENDED FUNDING LEVEL Metro	Consultants	1000 Friends	Total
E.1	interactive land use model runs and analysis, no-action alternative	6,000	6,000		12,000
E.2	interactive land use model runs and analysis, bypass alternative	6,000	6,000		12,000
E.3	additional analysis of four-step model results for LUTRAQ EIS alternative		6,000		6,000
E.4	four-step and interactive modeling and analysis for LUTRAQ non-EIS alternative	11,000	34,000		45,000
E.5	sensitivity tests of package elements, non-EIS alternative	5,000	10,000		15,000
E.9	transportation capital operating costs of alternatives		10,000		10,000
E.10	modeling task report		18,000		18,000
E.1-3	final reports	10,000	45,000		55,000
	administrative overhead			43,250	43,250
TOTALS		38,000	135,000	43,250	216,250