BEFORE THE COUNCIL
OF THE METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AUTHORIZING CITY OF PORTLAND FEDERAL AID URBAN SYSTEM FUNDS FOR A CITYWIDE SIGNAL SYSTEMS ANALYSIS PROJECT	RESOLUTION NO. 80-169 Introduced by the Joint Policy Advisory Committee on Transportation (JPACT)

WHEREAS, The City of Portland has identified deficiencies in its signal system in the form of equipment, timing and signal coordination; and

WHEREAS, The City of Portland has determined that a comprehensive study of the existing signal system is necessary to recommend methods for its better utilization and to provide guidelines and plans for its future expansion; and

WHEREAS, The City of Portland has requested that $330,000 of the Federal Aid Urban (FAU) funds be authorized to conduct such a study; and

WHEREAS, These funds are available in the City of Portland's FAU contingency; and

WHEREAS, The City Council has approved this project in its Capital Improvment Program; and

WHEREAS, The Metro Systems Planning Analysis indicates that the study project will lead to solutions to the identified transportation objectives set forth in Exhibit "A"; now, therefore,

BE IT RESOLVED,

1. That $330,000 of Federal Aid Urban System Funds be authorized from the City of Portland's FAU contingency to conduct the Citywide Signal System Analysis Project.

2. That the TIP and its annual element be amended to reflect this authorization as set forth in Exhibit "B."

3. That the Metro Council finds the project in accordance with the region's continuing, cooperative, comprehensive planning process and, hereby, gives affirmative A-95 Review approval.

ADOPTED by the Council of the Metropolitan Service District this 24th day of July, 1980.

Marjorie Merlin Rafferty
Presiding Officer

BP:ss
8593/92

EXHIBIT "A"

SYSTEMS REPORT FOR CITY WIDE SIGNAL SYSTEM PROJECT

Objectives: The purpose of the study is to improve the existing signal network so as to provide a hightly coordinated, interconnected signal system capable of providing a smooth vehicle flow throughout the City signal network, and close ties into abutting signal systems in the surrounding county areas.

Approach: This project will consist of a two-phase study. Phase I consists of retaining a consultant to perform a comprehensive study of the existing signal system, with the final product being a recommended five-year improvement program. Phase II consists of the consultant's design of the new system(s) recommended in Phase I.

Anticipated Results: We anticipate improvements of the existing signal system which will provide time savings to the motoring public, reduce air pollution, reduce signal system energy requirements, reduce fuel consumption, reduce accidents, improve transit and pedestrian movement, and reduce maintenance costs.

PROJECT INFORMATION FORM · TRANSPORTATION IMPROVEMENT PROGRAM

PORTLAND- VANCOUVER METROPOLITAN AREA

PROJECT DESCRIPTION

RESPONSIBILITY (AGENCY) CITY OF PORTLAND

LIMITS City Wide LENGTH N.A.

DESCRIPTION A two phase comprehensive study of the City of Portland's existing signal system which will lead to a recommended 5 year Transportation Systems Management improvement program. The purpose of the study is to improve the existing signal network so as to provide a time savings to the motoring public, reduce air pollution, save energy, reduce accidents, improve transit and pedestrian connections, and reduce maintenance costs.

RELATIONSHIP TO ADOPTED TRANSPORTATION PLAN

LONG RANGE ELEMENT _____ TSM ELEMENT _____

FUNDING PLAN BY FISCAL YEAR ($000)

	FY 80/81	FY 81/82	FY 82/83	FY 83/84	FY 84/85	TOTAL
TOTAL	75	300				375
FEDERAL	66	264				330
STATE						
LOCAL	9	36				45

LOCATION MAP

PROJECT NAME City Wide Signal System

ID No Various

APPLICANT City of Portland

SCHEDULE

TO ODOT _____

PE OK'D _____ EIS OK'D _____

CAT'Y _____ BID LET _____

HEARING _____ COMPL'T _____

APPLICANT'S ESTIMATE OF TOTAL PROJECT COST

PRELIM ENGINEERING	$ 375,000
CONSTRUCTION	
RIGHT OF WAY	
TRAFFIC CONTROL	
ILLUMIN, SIGNS, LANDSCAPING, ETC	
STRUCTURES	
RAILROAD CROSSINGS	
TOTAL	$ 375,000

SOURCE OF FUNDS (%)

FEDERAL

FAUS (PORTLAND)	88
FAUS (OREGON REGION)	
FAUS (WASH REGION)	
UMTA CAPITAL _____ *UMTA OPRTG*	
INTERSTATE	
FED AID PRIMARY	
INTERSTATE SUBSTITUTION	

NON FEDERAL

STATE 6 *LOCAL* 6

Exhibit "B"

APPROVED BY THE METRO COUNCIL

THIS 24th DAY OF July 1980

Cynthia M. Wichmann
CLERK OF THE COUNCIL

Agenda Item 6.3

A G E N D A M A N A G E M E N T S U M M A R Y

TO: Metro Council
FROM: Executive Officer
SUBJECT: Authorizing City of Portland Federal Aid Urban System Funds for a Citywide Signal Systems Analysis Project

I. RECOMMENDATIONS:

A. ACTION REQUESTED: Council adoption of the attached Resolution 80-169 authorizing $330,000 of City of Portland Federal Aid Urban System funds to conduct a citywide signal systems analysis.

B. POLICY IMPACT: This action will result in undertaking a comprehensive study of the existing system, and design of the system as an out growth of the study. The Transportation Policy Alternatives Committee (TPAC) and the Joint Policy Advisory Committee (JPACT) have reviewed and approved this project.

C. BUDGET IMPACT: The approved Metro budget funds staff involvement in establishing project priorities and monitoring project implementation.

II. ANALYSIS:

A. BACKGROUND: The first traffic signals were installed in Portland in the late 1920's. Today the signal system consists of approximately 700 signalized locations controlled by a variety of devices. While attempts are made to coordinate signal timing in the Central Business District (CBD) and along major routes, this unmatched collection of traffic signal control devices which has accumulated over the years is causing costly delays for motorists in both time and fuel consumption.

The purpose of this study is to take a comprehensive look at the entire signal system and to outline a five-year Transportation Systems Management Improvement Program. This program will identify improvements to the existing signal network.

The study will consist of two phases:

Phase I:

1. An analysis of the existing signal system to determine deficiencies in signal control equipment, timing, and coordination, and to provide an assessment of future needs;

2. An assessment of existing equipment deficiencies as they relate to reliability and existing standards (MUTCD) for signal installations;

3. An assessment of special transit needs and any additional provisions to meet future transit needs;

4. An assessment of special pedestrian/bicycle needs;

5. An examination of the energy consumption of present equipment to assess ways to reduce energy needs for the existing and future signal systems;

6. An analysis of the existing signal system to determine how well it reflects the Downtown Circulation Policy and the Arterial Streets Policy, and to tie the existing and future systems into these City policies, and into policies of abutting jurisdictions in Multnomah, Clackamas and Washington Counties.

The final result of Phase I will be a recommended program for improvement of the existing system including:

1. Equipment changes (including control devices, interconnect);

2. Signal additions, removals, relocations;

3. Performance standards to reduce system failure and liability problems.

Phase II:

Phase II will consist of the design of the system(s) recommended in Phase I.

B. ALTERNATIVES CONSIDERED: The alternative to this study is to let the existing system continue to grow and change without a clear overall coordination of the varied signal installations.

C. CONCLUSION: Metro staff recommends authorization of funding for this project based on potentially favorable benefits derived in the form of time savings to the motoring public, reduced air pollution, reduced signal system energy requirements, reduced fuel consumption, reduced accidents, improvee transit and pedestrian movements and reduced maintenance costs.

BP:ss
8592/92
7/24/80