

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ENDORSING ) RESOLUTION NO. 93-1771  
THE REGION'S PROPOSED NATIONAL )  
HIGHWAY SYSTEM AS REQUIRED UNDER) Introduced by  
THE INTERMODAL SURFACE TRANSPOR-) Councilor Van Bergen  
TATION EFFICIENCY ACT OF 1991 )

WHEREAS, The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 includes the creation of a National Highway System (NHS); and

WHEREAS, ISTEA requires the NHS to be designated by the Secretary of Transportation no later than September 30, 1995; and

WHEREAS, States are required by the Federal Highway Administration to work with local jurisdictions and Metropolitan Planning Organizations (MPO) and submit a proposed NHS by April 30, 1993; and

WHEREAS, Metro, through the Joint Policy Advisory Committee on Transportation, is the designated MPO for the Portland metropolitan area and has worked with local jurisdictions and the Oregon Department of Transportation (ODOT) to develop the region's proposed NHS; and

WHEREAS, The region's proposed NHS is based on ISTEA NHS requirements and FHWA guidelines, and considers urban area travel movements of national significance; now, therefore,

BE IT RESOLVED,

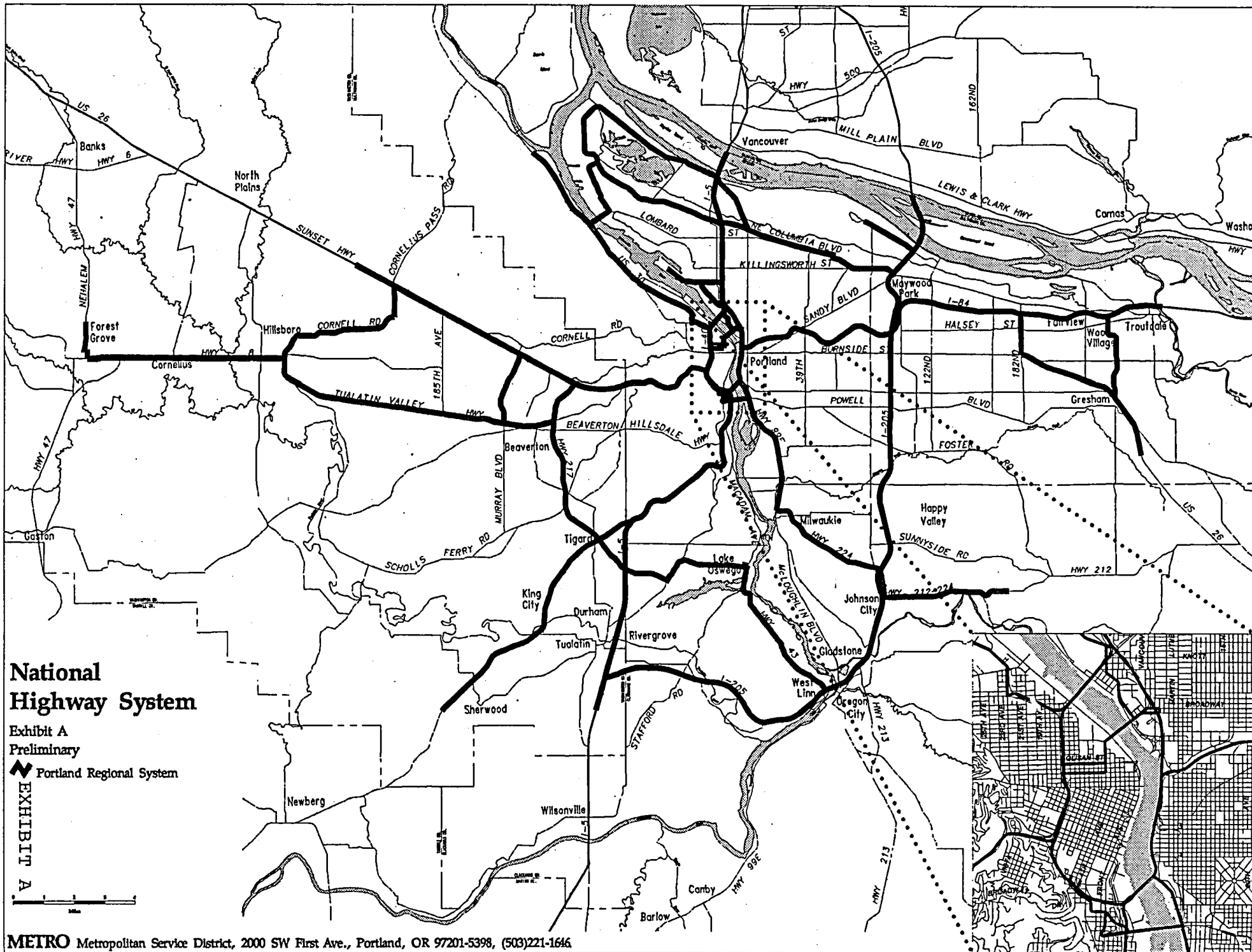
1. That the Metro Council adopts as the region's proposed NHS those facilities as mapped on Exhibit A and listed on Exhibit B.

2. That the Metro Council directs staff to forward the proposed NHS to the Oregon Transportation Commission and appropriate ODOT staff.

ADOPTED by the Metro Council this 25th day of March, 1993.

  
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Judy Wyers, Presiding Officer

MH:lmk  
2-18-93  
93-1771.RES



METRO Metropolitan Service District, 2000 SW First Ave., Portland, OR 97201-5398, (503)221-1646

Exhibit B

National Highway System (Preliminary)			3/1/93
FACILITY NAME	SEGMENT DESCRIPTION	LENGTH IN MILES	
<b>Portland's System</b>			
99W	I-5 to Urban Growth Boundary	9.26	
Highway 217	Sunset HWY to I-5	7.20	
I-205	Washington state line to I-5	26.05	
I-405	All	3.46	
I-5	Throughout Region	20.90	
I-84	I-5 to Urban Growth Boundary	15.23	
Mt Hood Parkway Corridor	I-84 to Urban Growth Boundary	4.96	
82nd	HWY 224 to HWY 224/212	0.90	
Sunrise 224/212	McLoughlin (99E) to Urban Growth Boundary	8.36	
US 26/Sunset	I-405 to Urban Growth Boundary	12.88	
US 30	I-405 to Urban Growth Boundary	8.60	
181st	I-84 to Burnside	1.33	
Airport Way	I-205 to Portland International Airport	1.88	
Burnside	181st to Mt. Hood Parkway Corridor	3.42	
Cornelius Pass	Cornell to Sunset Highway	1.02	
Cornell	Cornelius Pass to HWY 8	4.25	
Boones Ferry	Kruse Way to Country Club	0.74	
Kruse Way	I-5 to Boones Ferry	1.44	
Country Club/A Street	Boones Ferry to HWY 43	2.36	
Highway 43	A Street to I-205	5.27	
Going St/Channel	I-5 to Dolphin	1.01	
Greeley Ave	I-5 to Going	1.18	
Highway 47	HWY 8 to Urban Growth Boundary	1.29	
Highway 8	HWY 47 to HWY 217	16.08	
N Columbia	N Lombard to I-5	4.66	
N Lombard	N Columbia to St Johns Bridge	2.69	
NE Portland HWY (NE Columbia, 60th, N Lombard, Killingsworth)	I-5 to I-205	6.03	
MLK Jr Blvd	NE Columbia to I-5	2.03	
N Marine	I-5 to N Columbia	6.92	
Murray	Sunset HWY to Tualatin Valley HWY	2.41	

Exhibit B

<b>Central City</b>					
McLoughlin Blvd, Ross Island Bridge, I- 405 Corridor Connection		McLoughlin (99E) to I-405		6.86	
NW Everett/NW Glisan Broadway		I-405 to NW Broadway Everett to I-5		0.95 1.28	
N Interstate Ave		Broadway Bridge to UP Intermodal Yard		1.30	
			<b>TOTAL</b>	194.20	

**PLANNING COMMITTEE REPORT**

CONSIDERATION OF RESOLUTION NO. 93-1771, ENDORSING THE REGION'S PROPOSED NATIONAL HIGHWAY SYSTEM AS REQUIRED UNDER THE INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT (ISTEA) OF 1991

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Date: March 24, 1993

Presented by: Councilor Kvistad

**Committee Recommendation:** At the March 23 meeting, the Planning Committee voted unanimously to recommend Council adoption of Resolution No. 93-1771. Voting in favor: Councilors Van Bergen, Kvistad, Devlin, Gates, Monroe, and Moore.

**Committee Issues/Discussion:** Andy Cotugno, Planning Director, presented the staff report. He explained that the National Highway System (NHS), authorized under ISTEA, is the only Federal-Aid Highway system. It is intended to consist of routes with national or international significance and is limited to 155,000 miles nationwide. These routes are eligible for dedicated federal funding for modernization as long as they are constructed to principal arterial standards. Alternative projects in urban areas are allowed if they are more cost effective. Deviations must be approved by FHWA.

Oregon has until April 30, 1993 to submit its proposed NHS to the Federal Highway Administration (FHWA). This plan must first be forwarded to the State of Oregon (ODOT). Congress will make the final decision in 1995.

Councilor Moore voice some concerns about the actual choice of roadways, particularly in the Highway 43 area around Lake Oswego. She questioned the decision not to include a more direct route from Lake Oswego to downtown Portland.

Councilor Devlin clarified that Congress, in its decision making process, also must have a process for amendments or additions to the system.

## STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 93-1771 FOR THE PURPOSE OF ENDORSING THE REGION'S PROPOSED NATIONAL HIGHWAY SYSTEM AS REQUIRED UNDER THE INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991

Date: February 17, 1993

Presented by: Andrew Cotugno

### PROPOSED ACTION

This resolution would establish the region's proposal for a National Highway System (NHS) within the Metro boundary. As required by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the Oregon Department of Transportation (ODOT) is required to submit to the Federal Highway Administration the state's proposed NHS by April 30, 1993.

Also required by ISTEA, the state is to take the lead role in ensuring a cooperative federal/state/local process for developing NHS recommendations. The state is required to work with Metropolitan Planning Organizations (i.e., Metro in the Portland region) and other local officials to identify proposed routes, coordinate the system, and submit all required products to FHWA. Metro has assisted the state in the Portland area process by convening a Transportation Policy Alternatives Committee (TPAC) NHS Work Group to assist in the formulation of the proposed system.

Included in the Staff Report is additional information on the NHS. Also included is information on the process used by the TPAC NHS Work Group to develop the proposed Portland Area NHS.

TPAC reviewed and generally approved regional criteria used to supplement federal NHS guidelines for designation of the proposed system on January 29. On February 26, TPAC reviewed the proposed NHS and recommended approval of Resolution No. 93-1771.

### FACTUAL BACKGROUND AND ANALYSIS

#### The National Highway System

The NHS was authorized under Section 1006 of ISTEA. The NHS is the only Federal-Aid Highway system under ISTEA and is intended to consist of routes with national or international significance. The system is limited to 155,000 miles nationwide, although the Secretary of Transportation may increase or decrease the size by up to 15 percent.

From the federal perspective, the NHS is intended to provide an interconnected system of principal arterials and other highways that will serve major population centers, international border

crossings, ports, airports, nationally oriented public and intermodal transportation facilities, and other nationally significant travel destinations. The system is intended to meet national defense needs and serve interstate and inter-regional travel. Required to be on the system are Interstate highways, highways on the Strategic Highway Network (STRAHNET), major STRAHNET connectors, and Congressional high priority routes. The only Congressional high priority route in Oregon is US 395 in eastern Oregon.

For Oregon, ODOT has recommended that all Access Oregon Highways (AOH) and other key facilities be included in the NHS. AOH facilities within the Portland area include the Sunrise Corridor, Mt. Hood Parkway Corridor, US 30 to Astoria, and 99W southwest from I-5 at Tigard. As other key facilities, ODOT has recommended that the Sunset Highway and Highway 217 be included in the NHS.

The NHS is intended to consist primarily of principal arterials, including freeways and major highways. However, routes which serve major ports, airports, international border crossings, nationally oriented public transit and international transportation facilities, and STRAHNET routes can be minor arterials or collectors.

Routes on the NHS are eligible for a dedicated federal funding source. However, these routes must be constructed to principal arterial standards. Also, FHWA must approve all deviations from these standards. These standards apply to the route regardless of the source of project funds. The result could be higher cost projects and federal EIS requirements on certain facilities. One caveat in ISTEA allows that any route that provides parallel service to a limited access NHS route may receive NHS funding even if the parallel route is not on the NHS. Improving the parallel route must act to improve the NHS route. Attachment A is an ODOT overview providing more information on the NHS from both the state and federal perspective.

### Immediate Schedule

ODOT must submit a proposed NHS to FHWA by April 30, 1993. In order for ODOT to prepare the submittal and to provide for OTC adoption of the proposed system, Metro must submit the region's proposed NHS by mid-March. Consequently, JPACT is scheduled to act on a regional NHS at its March 11 meeting following TPAC's February 26 action.

### TPAC NHS Workgroup Activities

The TPAC NHS Work Group was initially formed in October 1992 to address ISTEA-related requirements to update the region's Functional Classification map and to begin a proposed regional NHS. The Work Group was comprised of TPAC representatives or their designees. A list of the members is provided in Attachment



B. The group submitted a proposed Functional Classification System to ODOT in December that identifies a system of streets eligible for Surface Transportation Program (STP) funds.

Also in late 1992, Work Group participants submitted proposals for the NHS in their areas for additional facilities which were not required through ISTEA or requested by the state. To guide their recommendations, Work Group participants referred to federal NHS guidelines (page 3 of Attachment A) and to the proposed "Highways of National Significance" system developed by the region for illustrative purposes prior to adoption of ISTEA in 1990. From this exercise, a proposed system was developed and reviewed by the Work Group on January 19.

As expected, there were differences throughout the region on interpretation of the FHWA guidelines. Consequently, the Work Group initially focused on developing a consistent interpretation of the guidelines. Following that, the proposed network was adjusted accordingly at a second meeting on January 26.

Exhibits A and B to the resolution are a map and listing of the proposed system. Attachment C to this Staff Report list facilities that were proposed for the NHS, but are not recommended.

#### Criteria/Approach

As noted, the FHWA guidelines are open to some interpretation. While it is required that certain routes (Interstates, STRAHNET, etc.) must be included, and while it seems reasonable that key state highways (AOH, Sunset, and Highway 217) should be included, it is less clear as to the precise definition of certain ISTEA and FHWA guidelines. For example, those guidelines suggest inclusion of "major ports, airports, public transportation facilities or intermodal transportation facilities" and "principal arterial routes that provide service to major travel generators." A liberal interpretation of these guidelines would suggest including all major arterials in the region. However, by doing so, the region's urban mileage target would be exceeded.

The Work Group identified two broad approaches to interpret the FHWA guidelines: 1) a liberal interpretation which would include essentially all principal arterials and most connections to public transit (including park-and-rides, etc.). Such a network overtly recognizes urban arterials and mobility as being of national significance; or 2) a conservative interpretation which focuses on a system which meets national objectives of promoting interstate and inter-regional movements and provides adequate connections to a higher order national system.

The Work Group recommended the latter approach (with some adjustment) as best for developing the region's NHS. The Work Group concluded that "urban mobility" is not a key NHS consideration, although it is certainly of national significance.

However, the group noted that ISTEA addresses the significance of urban mobility through flexible funding programs such as the Surface Transportation, Congestion Mitigation/Air Quality, and the Transportation Enhancements. The Work Group therefore recommends that the NHS should be for promoting the development and maintenance of interstate and inter-regional traffic movement.

Given this approach, the Work Group used the following subjective criteria to supplement the ISTEA, FHWA, and state requirements or guidelines. The criteria generally follow the "conservative" approach. Exceptions include a desire to provide a direct connection to cities within the region and accommodating certain freight/commerce movements of national significance.

1. NHS routes will provide direct connections to the primary interstate and inter-regional routes (Interstates, AOH, and other key state facilities).
2. Direct NHS access should be provided to international, interstate, and inter-regional port, airport, and passenger facilities.
3. Cities within the urban area shall have direct access to at least one NHS route (again, to better accommodate access to Interstates, AOH, etc.).
4. Direct NHS routes should be provided to key employment areas within the region that have international and national significance (this resulted in Murray Boulevard access to the Sunset Corridor; and NE 182nd and SE Burnside in east Multnomah County and Gresham).
5. With the exception of port/airport access, the system should be connected ("spurs" eliminated). Parallel designations should also be eliminated.

#### EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No. 93-1771.

## Development of Oregon's National Highway System

### INTRODUCTION

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 calls for the establishment of a new National Highway System (NHS). Oregon has until April 30, 1993 to submit its proposed NHS to the Federal Highway Administration (FHWA). Local governments and others must be involved in the process of developing this proposal.

Oregon submitted a preliminary NHS to FHWA in September, 1990. The backbone of the proposal was formed by the Access Oregon Highway system (not including OR82), the Interstate system, and US101. FHWA imposed other criteria on the states: The Strategic Highway Network (STRAHNET) and logical connections to each adjoining state. After some review, FHWA proposed what is known as the "Illustrative" system to Congress. To that system, Congress added a northern and southern portion of US395.

In the meantime, considerable interest has been expressed to add US20 from Sisters to Ontario to the NHS. For the purpose of beginning discussions, this segment will be added to the National Illustrative system to form Oregon's Illustrative system. This closely matches the mileage allocation for Oregon and leaves some room for adding urban mileage if desired.

Congress has authorized a 155,000 mile NHS, but has given the Secretary of Transportation the ability to alter that system by plus or minus fifteen percent. FHWA has provided each state with an allocation of mileage based on the Illustrative system. It should be noted that the Illustrative system totals 149,888 miles, somewhat short of the 155,000 authorized. Further, FHWA has divided those miles into urban and rural. Some flexibility is provided in that fifteen percent of the urban mileage can be transferred to the rural mileage and vis versa. In addition, the state can add fifteen percent to the mileage allocated provided that the additions are justified and placed in priority order.

The National Illustrative system approved by Congress contains 2,603.37 rural miles and 267.36 urban miles, for a total of 2,870.73 miles in Oregon. This includes 135.89 rural and 4.65 urban totaling 140.54 miles on US395 beyond the Oregon's original request.

Including US20 will add 327.15 rural miles and 2.54 urban miles, totalling 329.69 miles to the system. This makes the Oregon Illustrative system total 2,930.52 rural miles and 269.90 urban miles for a total of 3,200.42 miles.

FHWA allocated 2,450.00 rural miles and 522.00 urban miles for a total of 2,972.00 miles to Oregon. This is to be used as a base. Assuming Oregon wishes to add fifteen percent, the mileages are 2,817.50 rural and 600.30 for a total of 3,417.80 miles. Table 1 summarizes the match between the Oregon Illustrative system and our allocation.

Table I Illustrative Oregon Highway System (NHS) Mileage Summary			
Description	Rural	Urban	Total
Oregon Illustrative system	2,930.52	269.90	3,200.42
Oregon's Allocated Target Base Mileage	2,450.00	522.00	2,972.00
Oregon's Allocated Mileage + 15%	2,817.50	600.30	3,417.80
Mileage Difference between request and allocation	(113.02)	+330.40	+217.38
15 % Mileage transfer (Urban to Rural)	+90.05	(90.05)	
Available Miles	(22.97)	240.35	217.38

A quick comparison shows that the Oregon Illustrative system falls within the total mileage available (after adding the fifteen percent). However, the rural mileage surpasses our allocation by 113.02 miles. Up to 90.05 miles (15%) can be transferred from the urban allocation to the rural allocation. If this were done, Oregon will exceed the allowable rural mileage by 22.97 miles.

Changes can be made to Oregon's Illustrative system. However, if additions are proposed, they will need to be justified and to stay within the mileage allocations, sections, will need to be deleted. It is important to develop justification for these additions. It is equally important to point out which routes should be deleted and why.

Other points to consider are:

Section 1006 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 defines that the purpose or objective of the NHS is to "provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities, and other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel".

The NHS is the centerpiece of the ISTEA, and the system is expected to be the major focus for the Federal-aid highway program into the 21st century. FHWA will play a strong leadership role in the development of the proposed NHS to ensure that national objectives are achieved. The instructions for developing the proposed NHS emphasize a cooperative Federal/State/local process. The State is to take the lead role in working with the MPOs and other local officials to 1) identify routes for the proposed NHS, 2) coordinate with adjacent States to achieve an integrated system consistent with the objectives of the NHS, and 3) submit all required products to FHWA.

Federal emphasis on the components of the NHS consist of:

- All highways designated as part of the Interstate System.
- Strategic highway network (STRAHNET)
- Major STRAHNET connectors.
- Congressional High Priority Routes (US395 from the Canadian border to Reno, Nevada).
- Routes providing access between the NHS and major ports, airports, public transportation facilities or intermodal transportation facilities.
- Remaining routes must be comprised of routes functionally classified as rural and urban principal arterials.
- Consideration should also be given to principal arterial routes on the National network for trucks and those that provide service to major travel generators such as National Parks, commercial recreation facilities, resorts, etc.

#### FUNDING IMPLICATIONS

The formula for distribution of NHS funds is the same as for the Surface Transportation Program (STP) and is based on each State's FY 1987-1991 share of total national funding with appropriate adjustment for Interstate Maintenance and Bridge apportionments. The General Accounting Office, in conjunction with the Bureau of Transportation Statistics, is to study and recommend to Congress a fair and equitable highway allocation formula by January 1, 1994.

After 2% Highway Planning and Research "Takedowns" (a requirement of ISTEA), Oregon's received the following FY 1992 apportionments:

NHS	\$33,857,773
STP	\$33,438,070
Bridge	\$24,664,492
Interstate Construction	\$22,842,602
Interstate Maintenance	\$34,446,722

## PROGRAM TRANSFERABILITY

- Fifty percent of a State's NHS funds may be transferred to the STP; an additional 50 percent may be transferred to the STP with State request and DOT approval.
- Any portion of STP funds may be used on the NHS.
- A total of 40 percent of a State's Bridge funds may be transferred to the STP and NHS.
- Twenty percent of a State's Interstate Maintenance funds may be transferred to the STP and NHS. Up to 100 percent of Interstate Maintenance funds may be transferred to STP and NHS, if State certifies funds are not needed for Interstate Maintenance and DOT approves.
- A State may transfer Interstate Construction funds for open-to-traffic segments included in the latest cost estimate to the NHS and Interstate Maintenance Program.

NHS funds can be used on, a Federal-aid highway not on the NHS system if:

1. such highway or transit project is in the same corridor as, and in proximity to, a fully access controlled highway designated to the National Highway System;
2. the construction or improvement will improve the level of service on the fully access controlled highway and improve regional travel; and
3. the construction or improvements are more cost effective than an improvement to the fully access controlled highway.

Federal projects on the STP carried out within the boundaries of a transportation management areas (TMA) (urbanized areas over 200,000 population), are selected by the metropolitan planning organization (MPO) in consultation with the State. Projects on the NHS and projects funded under the Bridge and Interstate Maintenance programs are selected by the State in cooperation with the MPO. In non-TMAs, projects are selected by the State in cooperation with the MPO.

## STANDARDS AND ADMINISTRATION

All NHS standards follow FHWA approved AASHTO design and construction standards except for NHS non-freeway 3R projects where individual State developed standards approved by FHWA field offices may be used. Non-NHS projects follow individual State approved standards. In addition, FHWA has much tighter project review involvement on NHS projects.

## FEDERAL FUNDING NOT TIED TO NHS SIZE

Presently more miles on the NHS does not mean more dollars for Oregon. Current apportionment does not include mileage as a factor. If NHS fund allocation were tied to mileage in the future, minimizing the system would result in fewer NHS dollars, but there is little indication that this will occur.

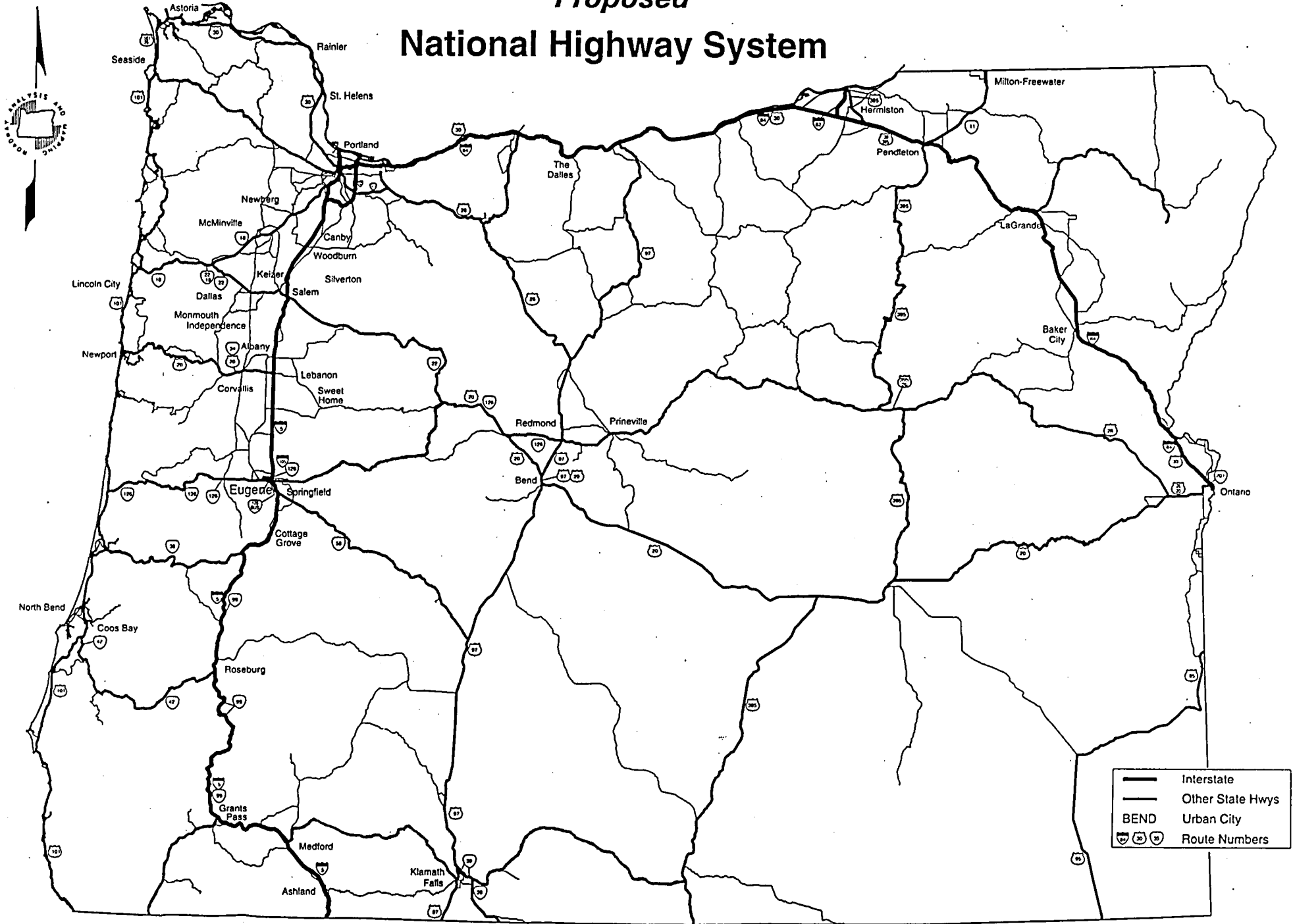
## THE CHALLENGE AHEAD

The Oregon Department of Transportation Region Managers will be working with local governments and others to formulate a recommended NHS for Oregon. Public meetings will be held in January or February on Oregon's proposal. Transportation Commission approval will be obtained prior to submittal to FHWA in April.

9/1/92  
RER:kaj

# STATE OF OREGON

## *Proposed* National Highway System





National Highway System  
TPAC Workgroup

Mike Hogle, Metro  
Bill Barber, Metro  
Victoria Bernreuter, Metro  
Mark Wills, ODOT  
Mark Landers, C-TRAN  
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Clark Berry, Washington County  
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Greg Jones, City of Portland  
Ed Pickering, Multnomah County  
Bob Royer, ODOT  
Steve Dotterer, City of Portland  
Susie Lahsene, Port of Portland  
Dave Williams, ODOT  
Sterling Williams, Citizen  
Kathy Busse, Multnomah County  
Richard Ross, City of Gresham  
Fred Patron, FHWA

## Attachment C

National Highway System			2/18/93
Facilities Proposed, Not Recommended			
FACILITY NAME	SEGMENT DESCRIPTION	LENGTH IN MILES	
Front	Ross Island Bridge to Steel Bridge	1.56	
Morrison Bridge	Front to I-5	0.26	
Steel Bridge	Interstate Ave to Front	0.85	
Oregon City Bypass	I-205 to Urban Growth Boundary	3.09	
185th	Sunset HWY to Tualatin Valley HWY	3.30	
Beaverton/Hillsdale	Tualatin Valley HWY to Barbur	3.34	
Cornelius Pass	Sunset HWY to Urban Growth Boundary	1.01	
Cornell	Cornelius Pass to Sunset HWY	3.25	
Highway 43	A Street to I-5	1.09	
Highway 8	Sunset HWY to Highway 217	2.73	
McLoughlin Blvd	HWY 224 to Urban Growth Boundary	9.46	
Murray	Tualatin Valley HWY to Scholls Ferry	3.54	
Scholls Ferry	Highway 217 to Murray	2.26	
Sunnyside	I-205 to Urban Growth Boundary	2.63	
		<b>TOTAL</b>	<b>38.37</b>