TR-940309
(P)

Washington State Department of Transportation
Sid Morrison
Secretary of Transportation

Transportation Building
P.O. Box 47300
Olympia, WA 98504-7300

February 28, 1994

Mr. Paul Curl, Secretary
Washington Utilities and
Transportation Commission
1300 Evergreen Park Drive SW
Olympia, Washington 98504-7250

Dear Mr. Curl:

The Washington State Department of Transportation (WSDOT), Burlington Northern Railroad Company (Burlington Northern) and the National Railroad Passenger Corporation (Amtrak) request the Washington Utilities and Transportation Commission (WUTC) to modify its order concerning passenger and freight train speed restrictions within the City of Marysville.

WSDOT, Burlington Northern and Amtrak are requesting increases in passenger and freight train speeds through the City of Marysville. These speed increases are an integral part of a larger state program to improve rail passenger service for Washington residents and the Pacific Northwest.

Rail Passenger Service

The states of Washington and Oregon and the province of British Columbia are jointly pursuing an incremental strategy to re-establish fast, reliable, convenient intercity rail passenger service in the Pacific Northwest Rail Corridor. The corridor extends 464 miles from Eugene, Oregon, through Portland and Seattle, to Vancouver, B.C. In late 1992, the Federal Railroad Administration designated the corridor as one of five high-speed rail passenger corridors in the nation. The Pacific Northwest Rail Corridor is the only high-speed corridor with both bi-state and international ties.

Engrossed House Bill 1617 was enacted in 1993 and codified as Chapter 47.79 RCW. It directs WSDOT to establish a high-speed ground transportation program for the state. WSDOT is to administer the program in close cooperation with WUTC and affected cities and counties. As a first step in the high-speed ground transportation program, WSDOT is directed to develop high-quality intercity rail passenger service through incremental upgrading of existing rail passenger service and beginning new rail passenger service. WSDOT will improve grade crossing protection, enhance train signals, revise track geometry, upgrade trackage, expand sidings and increase train speeds. These improvements will result in better ride quality and increased rail corridor capacity. WSDOT will also contract for new or improved service to improve service frequency.

WSDOT, Burlington Northern and Amtrak plan to re-establish rail passenger service between Seattle and Vancouver, B.C. beginning October, 1994. This major segment of the Pacific Northwest Rail Corridor has not had rail passenger service since Amtrak discontinued service in October, 1981. The new rail passenger service will be operated by Amtrak running over existing Burlington Northern tracks that run through Marysville. Beginning in October, 1994, passenger trains will pass through Marysville two times a day (one round trip). By 1997, it is planned that passenger trains will make two round trips through Marysville, and by 1999, three round trips.

Train Speed Increases

High-quality intercity rail passenger service can be introduced and sustained in Washington State if the service is competitive with automobile and air travel. Reduced travel time, along with improved service reliability, increased frequency, convenient connections and safety, is critical to competitive rail passenger service. The initial Seattle to Vancouver, B.C. rail passenger service is scheduled for 3 hours 55 minutes, some 35 minutes less than the scheduled service discontinued in 1981.

Both passenger and freight train speed increases are being requested from Seattle to Vancouver, B.C. This request proposes increases in passenger train speeds in the City of Marysville. Because the re-established passenger service will share tracks with freight trains in the Seattle-Vancouver, B.C. corridor, freight trains must operate faster to ensure adequate capacity and an efficient rail corridor system. For this reason, this request also proposes increases in freight train speeds in Marysville.

Increasing passenger and freight train speeds in the City of Marysville, coupled with other proposed speed increases in the corridor requested or to be requested through WUTC, will allow a scheduled one-way travel time of 3 hours 55 minutes to be achieved for the initial service in 1994. Without the proposed passenger and freight train speed increases in Marysville, Burlington Northern, Amtrak and WSDOT do not believe that the needed travel time can be achieved.

The specific speed increases requested within the City of Marysville are as follows:

PASSENGER TRAIN:

Specific Milepost Location	Existing WUTC Order	Proposed WUTC Order
MP 37.8 to MP 38.5	25 mph	30 mph
MP 38.5 to MP 41.0	25 mph	50 mph
MP 41.0 to MP 43.3	25 mph	79 mph

FREIGHT TRAIN:

Specific Milepost Location	Existing WUTC Order	Proposed WUTC Order
MP 38.5 to MP 43.3	25 mph	50 mph

Track and Safety Improvements

WSDOT, Burlington Northern and Amtrak are committed to completing track and safety improvements on Burlington Northern's tracks prior to the introduction of the new rail passenger service. WSDOT has entered into a $27.2 million contract with Burlington Northern to make track and safety improvements between Seattle and Vancouver, B.C. Some $24 million of state funding will pay for improvements from Seattle to the Canadian border. Burlington Northern will use $3.2 million of its own funds for improvements between the border and the Vancouver, B.C. station as well as improvements in Washington State.

State funded improvements at grade crossings will accommodate higher train speeds and assure adequate warning time. Activation circuits will be upgraded for higher speeds and new gates and larger signal lights will be installed where needed. State funded track system improvements will include adjustments in superelevation at curves to accommodate higher train speeds, as well as installing continuously welded rail in some locations to provide a smoother ride and increase the strength of the track.

The specific improvements that will be made by Burlington Northern with state support within the City of Marysville are as follows:

Grade Crossing	Existing Protection	Planned Improvement
136th Street NE	Signals & gates	Upgrade activation circuits
122nd Street NE	Signals & gates	Upgrade activation circuits
116th Street NE	Signals & gates	Upgrade activation circuits
104th Street NE	Signals & gates	Upgrade activation circuits
88th Street NE	Signals only	Add gates and upgrade activation circuits
80th Street NE	Signals & gates	Upgrade activation circuits
Grove Street	Signals & gates	Upgrade activation circuits
8th Street	Signals & gates	Upgrade activation circuits
4th Street	Signals & gates	Upgrade activation circuits
1st Street	Signals & gates	Upgrade activation circuits

Track System Improvements

Adjust superelevation from Everett to U.S. border
Modify rail locks on Bridges 11 and 12

WSDOT, Burlington Northern and Amtrak believe the passenger and freight train speed increases proposed are safe and reasonable with the completion of these track and safety improvements. The improvements are identified on the attached Pacific Northwest Rail Corridor map dated September 1993.

Local Notification

WSDOT met with the Marysville City Council on October 25, 1993 to present the state's plan for re-establishing rail passenger service between Seattle and Vancouver,

B.C. Members of WSDOT's Rail Branch distributed the attached briefing booklet, reviewed proposed speed increases, discussed track and safety improvements within Marysville, and responded to Council questions. WSDOT met again with the City Council during its work session on December 6, 1993. Rail Branch responses to City Council questions are attached.

Rail Branch personnel requested a resolution of support from the City Council for the state's rail passenger program and the increased speeds proposed for Marysville. To date, the City Council has not acted on that request. Enclosed are a motion from the Snohomish County Council and an endorsement from the Puget Sound Regional Council, the transportation planning organization for Snohomish, King, Pierce and Kitsap Counties.

WSDOT, Burlington Northern and Amtrak stand ready to assist WUTC in its timely consideration of this request to increase passenger and freight train speeds within the City of Marysville.

Sincerely,

GIL MALLERY
Rail Branch Manager
Washington State Department
of Transportation

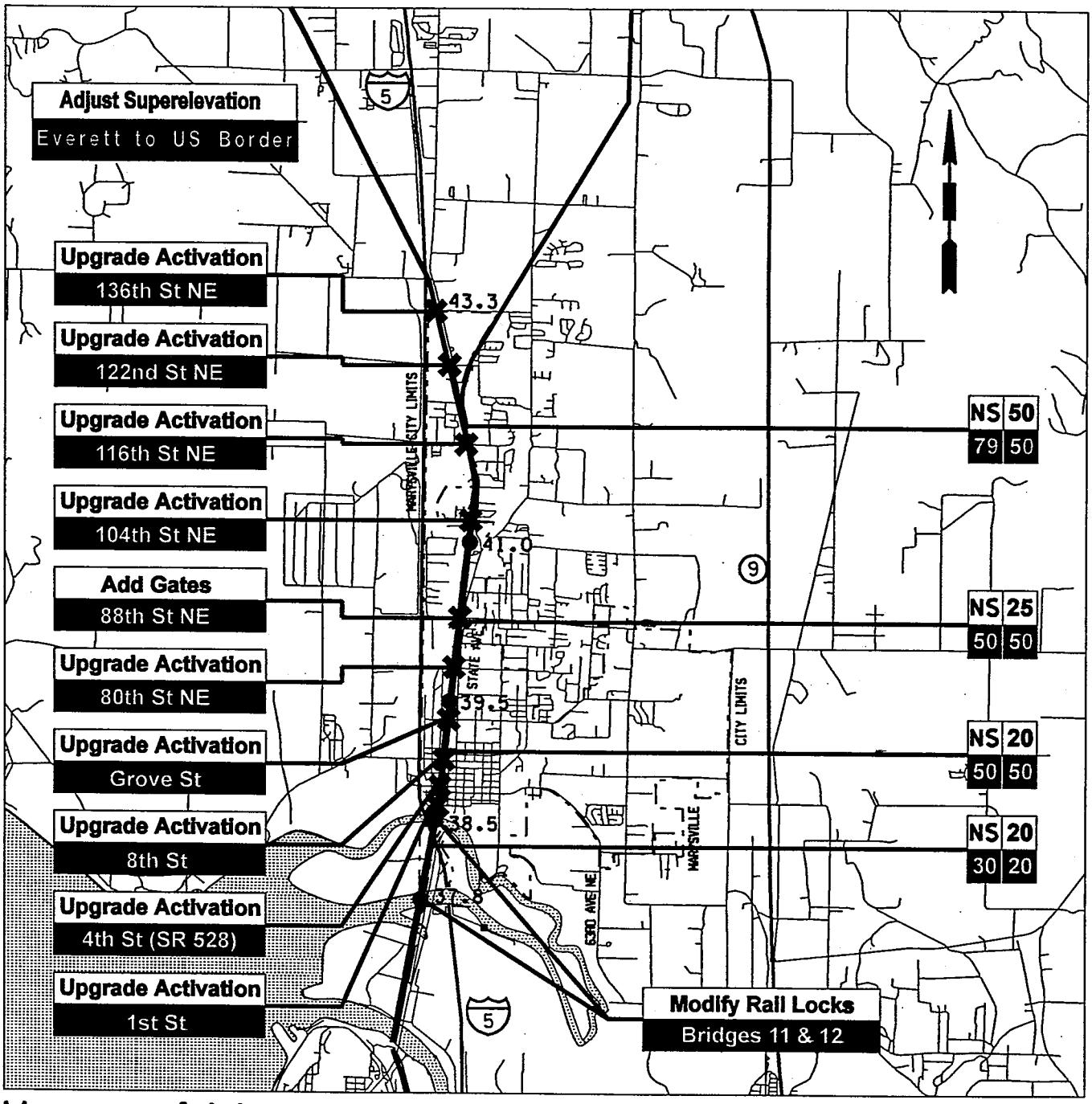
WAYNE A. HATTON
Vice President Transportation
Burlington Northern Railroad
Company

JAMES L. LARSON
Assistant Vice President, Operations
and Planning
National Railroad Passenger
Corporation

GM:lb
Enclosures

cc: The Honorable David A. Weiser
Mayor, City of Marysville

PACIFIC NORTHWEST RAIL CORRIDOR



Marysville

Speed Restrictions Between Mileposts

Passenger	Freight	
45	45	Present
60	50	Proposed

✖ Grade Crossing
● Milepost
■ Track System Improvement
NS No Service

System Improvements

Type of improvements
Add Gates
Baker St.
Location

Scale In Miles

1 mile
4 miles

9/93

RAIL PASSENGER PROGRAM

PRESENTED TO

CITY OF MARYSVILLE

&

CITY OF STANWOOD

SEPTEMBER 1993

Washington State Department of Transportation

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Pacific Northwest Rail Corridor

In late 1992, the Federal Railroad Administration designated the Pacific Northwest Rail Corridor as one of five "high speed" rail corridors across the nation, eligible for federal funding for rail improvement projects. The Pacific Northwest Rail Corridor links Washington, Oregon and Canada, extending from Eugene, OR through Seattle, WA to Vancouver, BC. To retain this eligibility for funding, the corridor must have, or expect to have in the future, sustained speeds of 90 mph.

Rail passenger service in the Pacific Northwest will link the rapidly growing metropolitan areas of Portland, Seattle and Vancouver, BC with an efficient mode of travel, contributing to a balanced transportation system. Increasing the capacity of rail transportation provides an alternative to already congested highways and airports, supports the region's interconnected economies, and decreases air pollution. In addition, improved rail passenger service will help to increase mobility by strengthening Pacific Northwest multimodal transportation systems.

Joint Partnership

The development of the Pacific Northwest Rail Corridor is a cooperative effort between the states of Oregon and Washington, the Province of British Columbia, Burlington Northern Railroad, Southern Pacific Railroad and Amtrak. All have agreed that an incremental strategy is the best way to provide immediate service upgrades while ensuring implementation is matched with available funding.

Program Objectives

In order for intercity rail transportation to be a reliable and convenient way to travel, it must be competitive with automobile and air travel, and provide for a balanced transportation system. Following are the program objectives for attaining competitive rail ridership:

- improve service reliability
- increase frequency of service
- provide convenient connections
- ensure safe travel
- reduce travel time

The program described below was developed to address these objectives.

Program Description

A phased strategy has been designed for the Pacific Northwest Rail Corridor development. In this way, the program builds upon the existing rail infrastructure to offer enhanced service immediately, and allows for continuing improvements in frequency and reliability as funding allows.

To improve frequency of service, plans call for restoring Seattle to Vancouver, BC service with one round trip, and adding one more service run between Eugene, OR and Seattle, WA by October 1994. Service between Seattle and Vancouver, BC, which had a 4 hour and 30 minute travel time, was discontinued in 1981. The ultimate service goals are to provide up to six round trips daily from Portland to Seattle, and three round trips between Seattle and Vancouver, BC by 2000.

The table below outlines the schedule for increasing train frequencies and reduced travel time.

Pacific Northwest Rail Corridor Program
SERVICE OBJECTIVES

Time Frame	Portland, OR - Seattle, WA		Seattle, WA - Vancouver, BC	
	Daily Round Trips	Approximate Travel Time	Daily Round Trips	Approximate Travel Time
Existing Service	3	3:55	0	0
1993-1995	4	3:45	1	3:55
1995-1997	5	3:35	2	3:35
1997-1999	6	3:25	3	3:30

Improvements
Each phase of the program described above consists of improvements which support the incremental increases in frequency and reduced travel time. These improvements allow the trains to run safely and efficiently, and provide for the comfort of rail passengers. They fall into three categories:

- **Track system improvements** consist of improving grade crossings, upgrading signals, extending centralized traffic control, double tracking, replacing rail, extending sidings (passing tracks), changing the superelevation of curves and improving bridges. (More specifics can be found in the Local Description section) The majority of program funding will be used for these kinds of improvements.
- **Station improvements** consist of planning new and renovating existing facilities to enhance multimodal transportation and provide safe environments for travelers. In addition, the program includes plans for transferring the ownership of stations to local jurisdictions. In this way, local communities will be able to plan and design the multimodal facility to meet their individual needs.
- **Train improvements** include the acquisition of trains which offer state-of-the-art technology. Tilt technology and radial trucks are potential features in new trains that allow trains to travel faster, specifically around curves, and provide a smoother and quieter ride for passengers. The program calls for the acquisition of new trains between 1995-1999.

Funding Sources
There are a number of funding sources for the development of the Pacific Northwest Rail Corridor. These include:

- Federal **Intermodal Surface Transportation Efficiency Act (ISTEA)** funds were awarded to this program under Section 1010, as one of five high speed rail corridors nationally. WSDOT will receive $500,000 for 1993-94 for grade crossing improvements along the corridor.
- **Washington State Department of Transportation** was provided $40.2 million in the 1993-95 bienneum for this program.

- The pending Federal Railroad Administration **High Speed Rail Development Act of 1993** was proposed in April. If passed, federal funds would become available for state rail passenger corridors, giving priority to private/public partnerships in developing high speed rail corridors. These federal funds would require a 50% match.
- **Oregon State Department of Transportation** funds support the Oregon portion of the program.
- **Burlington Northern Railroad** is funding portions of the program for track and system improvements.
- **Local jurisdictions**, and in some cases **private funds**, will help in planning and renovation of mult-modal facilities throughout the corridor.

Speed Proposals
Meeting the service objectives for reduced travel time will require easing of local speed restrictions all along the corridor. Initially, this translates into typical increases of 10 - 20 mph in speed limits throughout the corridor. Specific speed increases are presented in the Local Description and map of this booklet.

The regulatory board which approves speed increases within city limts is the Washington Utilities and Transportation Commission (UTC). The Washington State Department of Transportation is seeking local jurisdiction support in attaining UTC approval.

Top speeds for each phase are only feasible in specific places along the corridor. In general, these are long stretches of relatively straight track outside of urban areas. By 1999, the goal is to reach top speeds of 125 mph where possible. Existing speeds on other U.S. rail corridors are already as high as 125 mph.

Program Impacts
Following is a list of the key impacts and results of developing the Pacific Northwest Rail Corridor, and the ways the program addresses them:

- **Higher frequency of trains** - One of the main objectives of the program is to offer more round trips between Pacific Northwest cities. This means more trains on tracks. Currently, there is both single and double track throughout the corridor. To manage a higher frequency of trains, by 1997-1999 double track will exist throughout most of the corridor. In addition, more sophisticated centralized traffic control will ensure a safe and efficient shared use of track.

- **Reliability** - As the program develops, passenger train service between Pacific Northwest cities will improve and become more reliable. Reliability will be enhanced by dedicating trains to the Pacific Northwest Rail Corridor which originate in the corridor. Additionally, state-of the-art trains will provide quieter, more comfortable rides on a more frequent basis, independent of weather conditions.

- **Grade crossing safety** - Grade crossings, where railroad tracks intersect with roads, are places where safety precautions must be taken. This program calls for the improvement of virtually every public grade crossing in the corridor. These could include new gates, larger signal lights, and improving the train-activated warning system.

- **Passenger Safety** - As the program plans for higher speeds, improvements to the rail system (track, signals, bridges, etc.) will continue to ensure passenger safety. Furthermore, plans for renovating multimodal terminals will also address safety for travelers such as well-lit open areas, survellience cameras and hours of opening.

- **Environmental Issues** -There are a number of potential impacts to the environment associated with this program:

  Noise level increases due to trains traveling at higher speeds is minimal. In fact, the noise will occur for less time, although the difference is minimal here as well.

  Ground vibrations will not increase in intensity, as existing freight trains are the heaviest and cause stronger vibrations. However, as passenger trains run more frequently, vibrations will occur more often.

  Air quality will be reduced marginally due to increased service. However, train travel will replace a substantial number of automobile trips and thus offset this impact.

  Fuel consumption of the passenger train is much less for the number of passengers moved compared to automobile, airplane and bus transportation. Therefore, the environmental impacts of fuel consumption will not be as great for rail passenger service as for other modes.

- **Passenger and freight trains sharing tracks** - Both passenger and freight trains use the corridor, but freight trains travel at lower speeds. Plans to manage trains traveling at different speeds include a more sophisticated centralized dispatch system and double tracking. Double track throughout most of the corridor will increase capacity for both passenger and freight trains.

1. How do we know intercity rail passenger service is feasible in the Pacific Northwest region?

Since 1980, there has been an average of 1.7% growth in passenger rail service in Washington. Beginning in 1987, the State established the Rail Development Commission to evaluate the condition of rail services and recommend ways to improve the statewide multimodal system. In connection with this effort, the Washington State Department of Transportation (WSDOT) has completed the Statewide Rail Passenger Program study, the Gap Study, and the High Speed Ground Transportation Study on development of the Pacific Northwest Rail Corridor. Studies found in order for rail to be competitive with other modes of intercity transportation, trains should achieve top speeds of 125 mph. WSDOT, Burlington Northern and Amtrak have structured a work program that identifies capital improvements throughout the corridor. The benefits will provide increased service and decreased travel time.

2. What is multimodal transportation and why is it important?

Multimodal transportation is the ability to move people and goods by connecting different modes of transportation, such as cars, trains, planes, buses, bicycles and ferries. Convenient transfers between modes increases mobility and efficiency for travelers, and therefore, supports economic growth and diversity. One of the objectives of the Pacific Northwest Rail Corridor program is to enhance multimodal transportation by converting existing train depots to multimodal facilities that provide convenient connections to intercity bus, local transit, rental cars, airport shuttles, bicycles and even ferry service at both the beginning and end of trips.

3. How can we assure rail travel will be safe if we increase speed limits?

Rail passenger service has an excellent safety record in the United States, however as trains travel at higher speeds, safety concerns arise regarding grade crossings, curves, and the overall quality of the track system. The studies described above looked at what kinds of improvements would be necessary to support faster trains. The Washington State Department of Transportation, Burlington Northern Railroad and Amtrak are committed to ensuring passenger and public safety. All improvements are incrementally planned to match the intended increases in speeds. Grade crossings will be made safer, with added gates and larger signals. Tracks and the central traffic control system will be upgraded. In the future, some grade crossings will be converted into over or under crossings.

4. What is the difference between light rail, heavy rail, commuter rail and rail passenger service?

Light rail systems are generally single vehicles or short trains loaded from street level, which travel at slower speeds (under 55 mph) and make frequent stops like MAX in Portland. These systems are modern versions of street cars. They share roads with other traffic or run in their own right-of-way separated from traffic. These systems provide transit service within metropolitan areas.

Heavy rail systems are another technology used to provide higher capacity transit in urban areas. These trains run in their own dedicated right-of-way at high speeds (approaching 80 mph) using trains of two to ten cars. Examples would be the subway, or the elevated train like BART in San Francisco. Heavy rail carries commuters, but it is not the same as a commuter rail system.

A **commuter rail system** uses existing freight rail lines and is usually designed to serve commuter markets. Passenger train cars hauled by conventional diesel locomotives are generally used to provide this service. Trains generally share tracks, signals and grade crossings with freight trains.

Rail passenger systems connect metropolitan areas and cities, while light rail, heavy rail and commuter rail meet the travel needs within metropolitan areas. The Pacific Northwest Rail Corridor is anticipated to have top speeds of 125 mph.

5. Why are we spending so much money on these rail improvements?

Capital costs required for this program are approximately $232.8 million over the next six years. The development of the Pacific Northwest Rail Corridor will offer more capacity and mobility for intercity travelers in our quickly growing region, connecting interdependent economies, and promoting economic growth. Equivalent infrastructure investments in highways and air transportation translates into adding concrete and right-of-way, while this rail program uses existing rail infrastructure. Thus, these rail improvements help to preserve the environment as well as support a more efficient transportation system.

6. What is the current and projected growth in rail passenger ridership?

Currently, approximately 425,000 ride annually between Portland and Seattle. It is projected that by the year 2000, with the planned investments in the Pacific Northwest Rail Corridor, ridership will increase to approximately 1 million riders annually.

7. How will customs be handled for travel between the U.S. and Canada?

With the aid of the Pacific Corridor Rail Passenger Working Group, a new and more efficient approach for handling customs has been negotiated. The new procedure allows Canada-bound passengers to go through customs in the Vancouver, BC station. Passengers bound for the U.S. will go through U.S. immigrations in Vancouver, BC, and any potential customs duties will occur as the train travels between Blaine and Bellingham. This arrangement does not delay the train, and permits it to operate within the desired travel schedule. The Working Group is made up of representatives of WSDOT, the British Columbia Transportation Ministry, the U.S. Customs Service, U.S. Immigration Service, Revenue Canada-Customs and Excise, Employment and Immigration Canada, Burlington Northern, Amtrak, VIA, Canadian National Railroad, Transport Canada and the Greater Vancouver Regional District.

8. What are the five corridors that were designated High Speed Rail Corridors by the U.S. Department of Transportation in 1992?

In addition to the Pacific Northwest Rail Corridor which runs from Eugene, OR - Seattle, WA - Vancouver, BC, the other corridors include:

- San Diego - Los Angeles - Bakersfield - San Francisco Bay Area - Sacramento (California)
- Chicago, IL - Milwaukee, WI - Detroit, MI - St. Louis, MO
- Miami - Orlando - Tampa (Florida)
- Washington, DC - Richmond, VA - Charlotte, NC

9. Where can we get more information or send comments?

To send comments or request more information, you can call (206) 705-7901, fax (206) 705-6821, or write to Washington State Department of Transportation Rail Branch, P.O. Box 47370, Olympia, WA 98504-7370.

Beginning in October 1994, rail passenger service from Seattle to Vancouver, BC will be restored on the Pacific Northwest Rail Corridor, providing important links to other communities and enhancing economic growth. The Pacific Northwest Rail Corridor stretches through 9 counties, 34 cities and 296 miles in Washington State. The success of the program in many ways depends on local support.

One of the main objectives of the program is to reduce travel times between Pacific Northwest metropolitan areas. To decrease travel times trains must run faster. Local jurisdiction support is essential in requesting the easing of speed restrictions from the Washington State Utilities and Transportation Commission.

This local description presents the speed proposals, local impacts and planned improvements for Marysville and Stanwood.

Speed Proposals
Passenger trains are not as heavy and have fewer cars than freight trains, and so can start and stop more quickly. For this reason, there are two kinds of speed limits, one for passenger trains and one for freight trains. Please see the attached map for the specific speed proposals for Marysville and Stanwood.

To increase the train capacity of the corridor and reduce travel time, passenger trains must run faster. As passenger trains share tracks with freight trains, freight trains must move faster as well to ensure an efficient rail corridor system. However, passenger trains generally have higher top speeds than freight trains.

With trains traveling at different top speeds, the centralized traffic control (CTC) system will be an important tool in managing the trains. Trains will be scheduled and use passing tracks (sidings) to wait while another passes on the main line.

Local Impacts
Beginning in October 1994, passenger trains will pass through Marysville and Stanwood two times a day (1 round trip). Currently, only freight trains run from Everett to Vancouver, BC because rail passenger service was discontinued in 1981. By 1997 it is planned that passenger trains will make 4 passes daily (2 round trips) through Marysville and Stanwood, and by 1999, 6 passes (3 round trips).

With this restoration of service, residents of Marysville and Stanwood would be connected to the Province of British Columbia, Oregon and Washington by way of Everett or Mount Vernon/Burlington. Local and intercity buses and automobiles will connect with the multimodal facility located in either Everett or Mount Vernon/Burlington. The cities of Everett, Mount Vernon and Burlington are currently involved in site selection their multimodal facilities. The facility could link intercity buses, Amtrak, Community Transit, Skagit Transit (operational by the end of 1993), bicycle and pedestrian amenities. These multimodal facilities are seen as an integral part of developing the region's multimodal transportation system.

Corridor-wide impacts are listed in the General Program Overview section of this booklet.

Improvement Descriptions
At grade crossings, warning systems will be improved to accommodate higher speeds and assure adequate warning time. Crossing warning systems use **train-activated circuits** to turn on grade crossing equipment, comprised of **signal lights** and **gates**. Every grade crossing has **crossbucks** (signs with Xs indicating a railroad crossing). Activation circuits will be upgraded to handle increased speeds, and installation of new gates and larger signal lights will occur where needed. Following are improvements at grade crossings in Marysville and Stanwood:

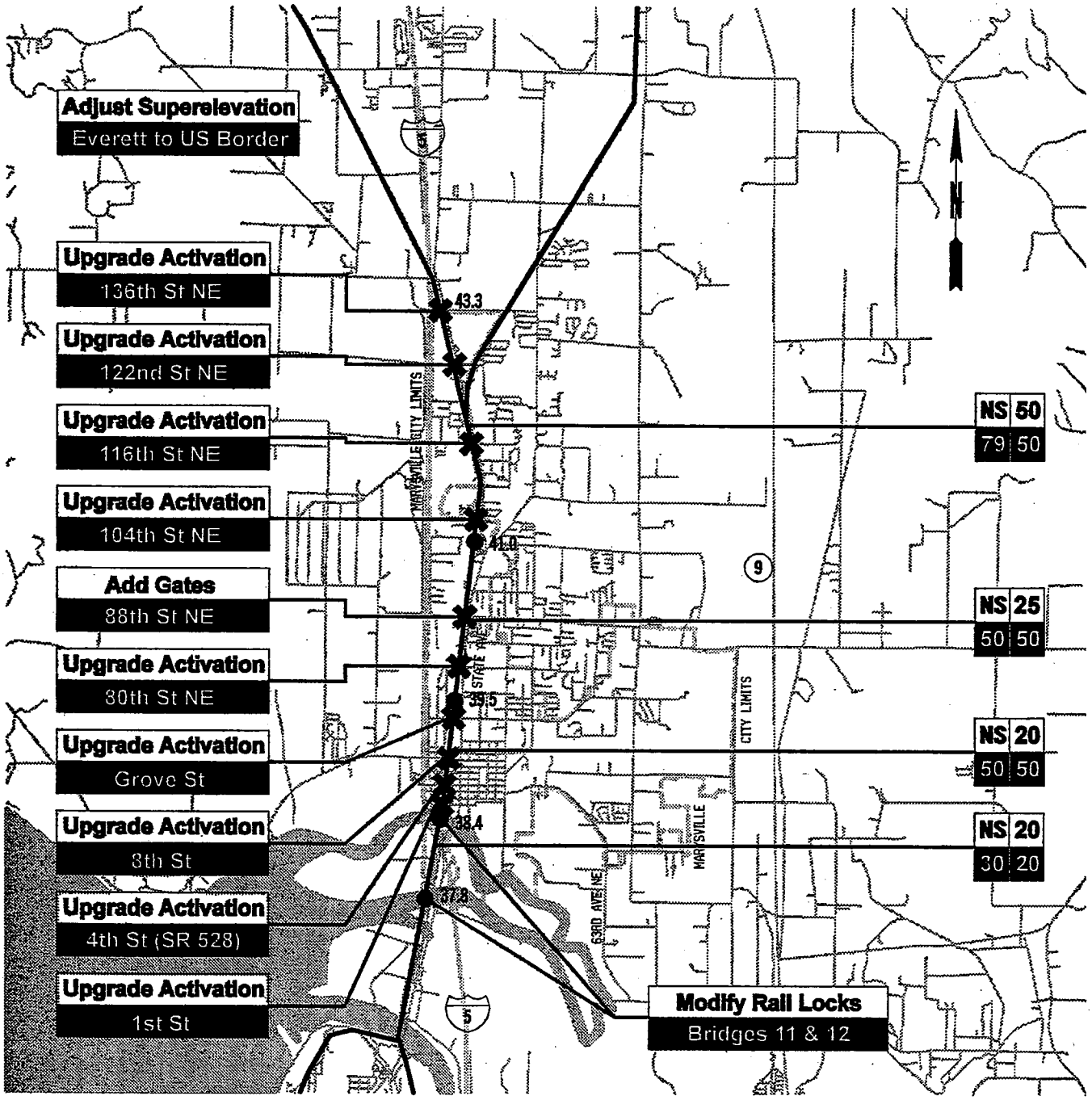
City	Grade Crossing	Existing	Improvement
Marysville	1st Street	signals & gates	upgrade activation circuits
Marysville	4th Street (SR 528)	signals & gates	upgrade activation circuits
Marysville	8th Street	signals & gates	upgrade activation circuits
Marysville	Grove Street	signals & gates	upgrade activation circuits
Marysville	80th Street NE	signals & gates	upgrade activation circuits
Marysville	88th Street NE	signals only	upgrade activation circuits, add gates
Marysville	104th Street NE	signals & gates	upgrade activation circuits
Marysville	116th Street NE	signals & gates	upgrade activation circuits
Marysville	122nd Street NE	signals & gates	upgrade activation circuits
Marysville	136th Street NE	signals & gates	upgrade activation circuits
Stanwood	271st Street NW	signals & gates	upgrade activation circuits

In addition, the following improvements will be made to the track system:

- **Superelevation**, which is the height of the outer rail above the inner rail through curves, will be adjusted to accommodate higher speeds at all appropriate locations.
- Certain sections of rail will be replaced with **heavier continously welded rail** to provide a smoother ride and increase the strength of the track.

Key improvements can be found on the attached map.

PACIFIC NORTHWEST RAIL CORRIDOR



Marysville

Speed Restrictions Between Mileposts

Passenger	Freight	
45	45	Present
60	50	Proposed

✖ Grade Crossing
● Milepost
■ Track System Improvement
NS No Service

System Improvements

Type of improvements

Add Gates
Baker St.
Location

Scale In Miles

1 mile
4 miles

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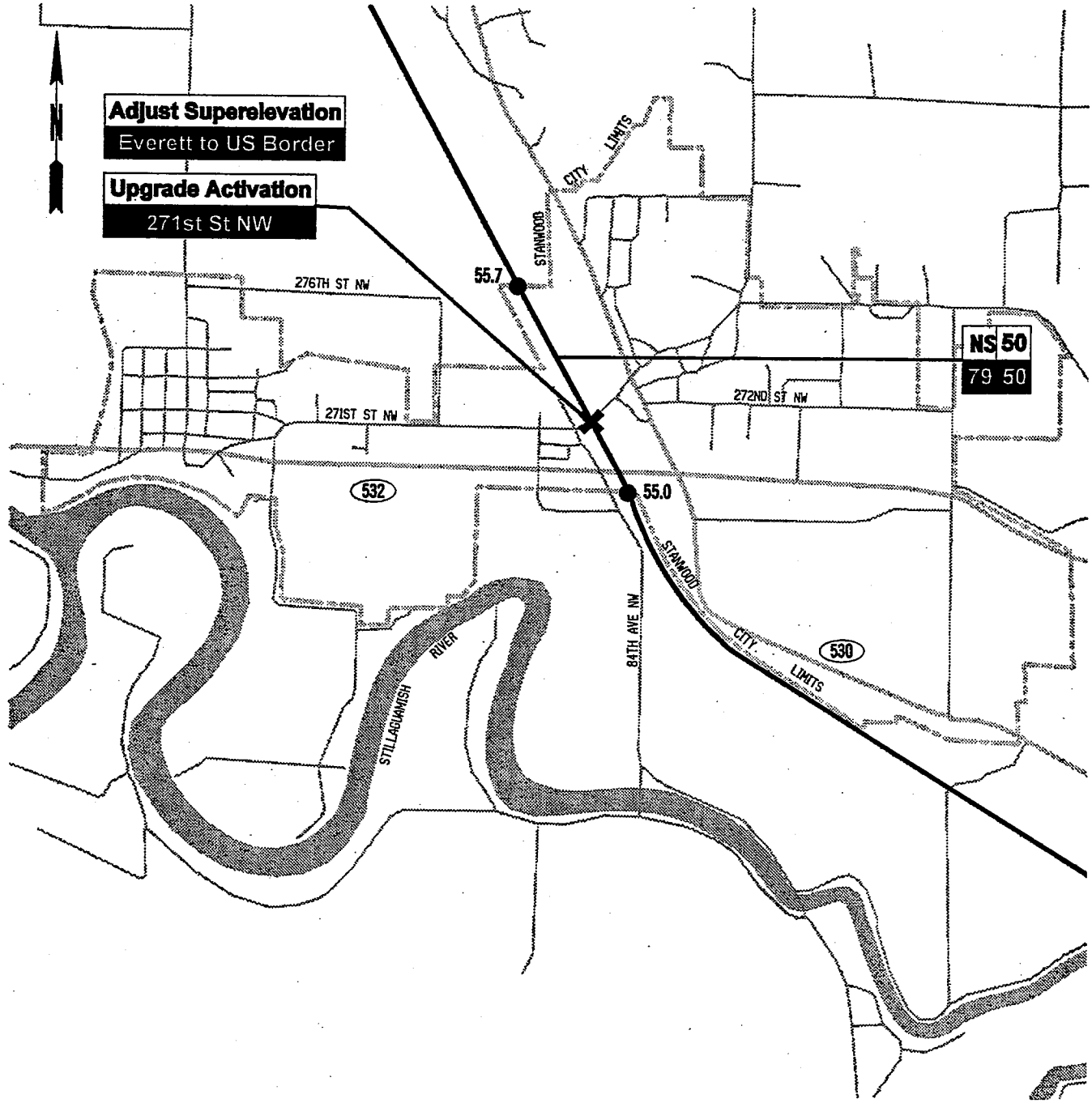
PACIFIC NORTHWEST RAIL CORRIDOR



Stanwood

Speed Restrictions Between Mileposts

Passenger	Freight	
45	45	Present
60	50	Proposed

- ✖ Grade Crossing
- ● Milepost
- ■ Track System Improvement
- **NS** No Service

System Improvements

Type of improvements

Add Gates

Baker St.

Location

Scale In Miles

0.25 mile — 1 miles

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Alignment	The horizontal location of a railroad as described by curves and tangents.
Automatic Block Signals (ABS)	Train control signals which are train-activated and provide warning of traffic on track ahead to train crews.
Automatic Grade Crossing Signals	Train-activated automatic flashing lights and bells mounted on roadside poles to warn motorists of approaching trains at grade crossings. Often combined with automatic gates which block the road to prevent motorists from crossing the tracks.
Ballast	Crushed rock material placed on the road bed for purpose of supporting the track.
Branch line	Secondary line of a railway.
Bungalow	Small building or cabinet used for housing and protecting electrical equipment and circuitry of grade crossing signals systems.
Centralized Traffic Control (CTC)	Traffic control system for trains which includes dispatcher controlled switching and signaling. Dispatcher is located at a central location controlling long sections of track.
Continuous Welded Rail (CWR)	A number of individual rails welded together in lengths of 400 feet or longer.
FRA	Federal Railroad Administration. Federal agency mandated to regulate railroad operations and safety. Agency has authority to set and administer safety standard for rail operations.
Frog	A steel track device used at the intersection of two rails to permit wheels on either rail to cross the other rail.
Gage	Distance between the two rails in a track. Standard gage is 56 1/2 inches.
Grade	The degree of slope of a railway. A measure of the steepness of hills which the track climbs or descends.
Grade Crossing	Intersection of a roadway and railway at the same elevation.
Intercity Rail Service	Rail passenger service connection metropolitan areas and cities. the *Pacific Northwest Rail Corridor* will serve cities from Eugene, Oregon to Vancouver, B.C.

Level	Condition of the track in which the elevation of the two rails is the same.
Line	Condition of the track in regard to straightness of direction on tangents or uniformity of curvature on curves.
Main Line	Principal line of a railway.
Profile	A graphical representation of the established grade of a railway in relation to the horizontal.
Rail	A rolled steel shape designed to be laid end to end in two parallel lines on cross ties or other suitable support to form a track for railway trains.
Rail Joint	Fastening device designed to join the abutting ends of contiguous rails.
Siding	A track which is connected to the main line by switches and used for meeting or passing trains.
Speed Restriction	Government mandated limits on train speeds. Washington Utilities and Transportation Commission can set speed restrictions within city limits. The Federal Railroad Administration sets restrictions in any location based upon track conditions, curvature type of operations, etc.
Superelevation	Vertical distance of the outer rail above the inner rail on curves, which produces a banking effect.
Switch	A track device used to divert trains from one track to another.
Tangent	Any straight portion of railway track alignment.
Ties	Transverse members of the track structure to which rails are spiked or otherwise fastened to provide proper gage and to cushion, distribute and transmit stresses of rail traffic through the ballast to the subgrade.
Track	An assembly of two rails fixed to ties and laid on a roadbed over which cars, locomotives and trains are moved.
Track Surface	The condition of the track as to vertical evenness or smoothness. Uneven track surface creates rough ride, while a smooth surface provides a comfortable quiet ride.
Turnout	The combination of a switch, frog and rails into a complete assembly for diverting cars, locomotives and trains form one track to another.

FAXED TO CITY MANAGER
ON DECEMBER 8, 1993

City of Marysville

1. Run times for the Seattle to Vancouver BC service will be reduced from 3:55 in the 1993-95 (Phase 1) biennium to 3:35 in 1995-97 (Phase 2) and to 3:30 in 1997-99 (Phase 3). What infrastructure improvements will be required within the city of Marysville for these future phases of the program?

All infrastructure improvements proposed in Marysville for the first three phases of the program will be performed in Phase 1. These improvements were indicated in the materials presented during previous meetings.

The reductions in running time during Phases 2 and 3 will require infrastructure improvements at other locations throughout the corridor.

2. In order to reduce the run times as indicated in Phases 2 and 3, will additional speed increases be requested in Marysville?

No additional speed increases are planned in Phases 2 and 3 through Marysville. Passenger and freight speeds that are currently being requested are consistent with the service objectives of the 6 year passenger program.

3. Why are increases in freight speeds being requested in addition to the passenger speeds?

Passenger trains and freight trains will be operating simultaneously throughout the corridor. Computer capacity analysis modeling indicates that the requested passenger speeds and increases in currently authorized freight speeds are necessary to allow consistent traffic flow that is vital for reliable, timely passenger service.

4. Long Range Future Phases

Long range future phases of rail passenger service and incremental improvements are conceptual. The implementation of specific improvements and their timing will be dependent upon availability of funding, demand for the service, and the determination of exact improvements necessary to meet proposed service objectives.

<u>Future Service Objectives and Timeframe</u>
Additional round trips and reduced run times will occur as improvements to infrastructure and acquisition of rolling stock are made. The current Six-Year Statewide Rail Passenger Program as adopted by the Transportation Commission

provides for a commitment at the state level to provide improvements necessary to have 3 round trips per day at speeds of 3 hours 30 minutes as indicated below. The currently proposed objectives in the Seattle to Vancouver BC portion of the Pacific Northwest Rail Corridor are as follows:

Timeframe	Total Trips	One way run time
1994	1 per day	3 hours 55 minutes
1995-1997	2 per day	3 hours 35 minutes
1997-1999	3 per day	3 hours 30 minutes
Long Range	4 per day	2 hours 35 minutes

Future Improvements

Beyond the current improvements as specified, identified improvements for future phases of service and increased speeds are conceptual and have been outlined in the Washington State Department of Transportation Gap Study. Specific improvements will be developed and designed cooperatively with BN, Amtrak, and WSDOT. Future incremental upgrades will provide for the coexistence of freight and passenger operations. They will also include all improvements necessary for meeting and maintaining appropriate Federal Railroad Adminstration (FRA) Track Safety Standards for areas that will have speeds above 79 mph.

Maximum Speeds

The maximum potential rail passenger speeds in Marysville area are dependent upon having all safety improvements and track upgrades in place and the type of rolling stock that is being used. The use of high tech "tilt trains" allows for increased speeds in curved areas. Due to the bridges south of Marysville and track geometry, travel would be limited to the currently proposed speeds from milepost 37.8 to Milepost 39.5. The theoretical maximum track speeds north of Milepost 39.5 could be 125 mph for passenger trains. The following chart shows present, requested, and long range proposed passenger train speeds utilize in the Marysville area:

MILEPOST	PRESENT SPEEDS		REQUESTED SPEEDS		LONG RANGE SPEEDS
	Pass	Freight	Pass	Freight	Passenger only
37.2 to 37.75	NS*	20mph	30mph	20mph	30mph
37.75 to 38.4	NS	20mph	30mph	20mph	50mph
38.4 to 39.5	NS	20mph	50mph	50mph	50mph
39.5 to 41.0	NS	25mph	50mph	50mph	125mph
41.0 to 43.3	NS	50mph	79mph	50mph	125mph
43.3 to 47.9	NS	50mph	79mph	50mph	125mph

*No current Service

Mileposts in bold denote Marysville city limits.

SNOHOMISH COUNTY COUNCIL
SNOHOMISH COUNTY, WASHINGTON

MOTION NO. 93-469
EXPRESSING SUPPORT FOR THE PACIFIC NORTHWEST RAIL CORRIDOR PASSENGER SERVICE OBJECTIVES AND FOR INCREASING THE TRAIN SPEED LIMITS WITHIN SNOHOMISH COUNTY

WHEREAS, Washington State Department of Transportation is committed to re-establishing rail passenger service from Seattle to Vancouver, BC on October 1, 1994; and

WHEREAS, the Washington State Legislature has provided Washington State Department of Transportation funding to upgrade the rail infrastructure to allow passenger rail service to be re-established and safely operated; and

WHEREAS, Washington State Department of Transportation has established rail passenger service objectives for the Seattle to Vancouver, BC route, initiating one round-trip per day October 1, 1994, increasing to three round-trip per day by the year 1999; and

WHEREAS, Amtrak will only agree to operate rail passenger service between Seattle and Vancouver, BC, under contract with Washington State Department of Transportation, which is competitive in terms of run time with other transportation modes; and

WHEREAS, Amtrak and Washington State Department of Transportation have mutually agreed that three hours and fifty-five minutes for a one-way trip between Seattle and Vancouver, BC is the required competitive trip time; and

WHEREAS, all of the passenger and freight rail speed limit increases identified in Exhibit "A" are required to achieve the necessary competitive run time and rail capacity to permit the re-establishment of rail passenger service within the corridor.

NOW, THEREFORE, ON MOTION the Snohomish County Council expresses it support for the Pacific Northwest Rail Corridor passenger service objectives and for the specific train speed limit increases as reflected in Exhibit "A" attached hereto and incorporated herein.

Dated this 29th day of December, 1993.

CHAIR

ATTEST:

Barbara Vitarelli
Asst. Clerk of the Council

D-9

EXHIBIT A
Snohomish County, Washington

Present and Proposed Speeds

MILEPOSTS			PRESENT SPEEDS		PROPOSED SPEEDS	
			PASSENGER	FREIGHT	PASSENGER	FREIGHT
15.0	to	16.6	40	40	50	45
16.6	to	17.0	40	40	45	40
17.0	to	19.0	40	40	60	50
19.0	to	20.0	45	45	60	50
20.0	to	25.4	45	45	50	45
25.4	to	28.1	45	45	60	50
28.1	to	28.5	45	45	55	50
28.5	to	32.0	55	50	55	50
32.0	to	32.16	25	25	25	25
1784.7	to	1782.6	25	25	30	25
0.0	to	0.8	NS	15	30	15
7.86	to	10.7	NS	15	35	15
10.7	to	10.9	NS	10	10	10
37.0	to	37.2	NS	10	10	10
37.2	to	38.5	NS	20	30	20
38.5	to	39.5	NS	20	50	50
39.5	to	41.0	NS	25	50	50
41.0	to	47.9	NS	50	79	50
47.9	to	48.85	NS	50	70	50
48.85	to	49.45	NS	50	65	50
49.45	to	50.95	NS	50	70	50
50.95	to	59.5	NS	50	79	50

City Limits and Grade Crossing

City	City Limit		Mile Post	Grade Crossings	
Woodway	15.7	to	16.9	N/A	No Grade Crossing
Edmonds	17.0	to	21.8	17.50	Dayton St
		to		17.80	Main St (SR 104)
Mukilteo	25.6	to	29.0	28.90	Mt Baker Ave
Everett	29.0	to	37.75	1782.83	Pacific Ave (@ Smith Ave)
		to		0.62	Pacific Ave (east of I-5)
		to		8.30	Railway Ave
Marysville	37.75	to	43.3	38.40	1st St
				38.70	4th Ave (SR 528)
				38.90	8th St
				39.30	Grove St
				39.80	80th St NE
				40.40	88th St NE
				41.20	104th St NE
				42.00	116th St NE
				42.50	122nd St NE
				43.30	136th St NE
Snohomish County	43.3	to	55.0	44.70	156th St NE
				45.90	172 St NE
				48.40	Sill Rd
				48.80	212th St NW (Knutson Rd)
				49.90	14th Ave NW (Sather Rd)
				50.20	227th St NE (Larson Rd)
				51.00	28th Ave NW
				52.40	48th Ave NW
				53.40	Miller Rd
Stanwood	55.0	to	55.7	55.40	271st St NW
Snohomish County	55.7	to	59.5	56.90	Logen Rd (292nd St NW)
				57.50	Dettling Rd (300th St NW)
				57.90	Old Pacific Hwy (102nd Ave NW)

Puget Sound Regional Council
PSRC

October 29, 1993

Gil Mallery
Manager, Rail Branch
Washington State Department of Transportation
Transportation Building
Olympia, WA 98504

Dear Mr. Mallery:

I am pleased to advise you that on October 28, the Regional Council's Executive Board endorsed the Pacific Northwest Rail Corridor program concept to begin implementing new and higher speed intercity rail passenger service along the designated corridor linking the central Puget Sound region to Eugene/Portland, OR, and Vancouver, B.C., subject to the following understandings and conditions:

1. Endorsement of this program assumes implementation of service objectives as proposed by WSDOT for daily train frequencies and travel times as noted in the following table.

Pacific Northwest Rail Corridor Program: Service Objectives

Time Frame	Travel between: Portland, OR & Seattle, WA		Travel between: Seattle, WA & Vancouver, BC	
	Daily Round Trips	Approximate Travel Time	Daily Round Trips	Approximate Travel Time
Existing Service	3	3:55	0	0
1993-1995	4	3:45	1	3:55
1995-1997	5	3:35	2	3:35
1997-1999	6	3:25	3	3:30

2. As modifying speed restrictions along the corridor is a requisite condition of eligibility for federal high speed rail funding, Regional Council endorsement of this program is based upon the WSDOT providing briefings to and obtaining support from all affected cities and counties along the corridor where speed restrictions need to be raised.

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3. Further planning of intercity passenger rail service improvements by the WSDOT must be closely coordinated with the Puget Sound Regional Council in an effort to assure full consideration of effective, convenient access and intermodal connectivity between high speed rail service and Sea-Tac Airport, the largest commercial airport with the heaviest passenger demand for service in the region and state of Washington.

We look forward to working with you in coordinating improved intercity passenger rail service.

Sincerely,

King Cushman, Director
Transportation Planning

cc: Pierce County Executive Doug Sutherland, Chair, Transportation Policy Board
Mary McCumber, Executive Director, PSRC

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