# Regional Transit System Plan

October 1992

# Regional Transit System Draft Plan recommended

n the next 30 years, the Puget Sound region's population and employment levels are expected to grow more than 50 percent. Meanwhile regional traffic is expected to grow almost 80 percent. Faced with those sobering statistics it is important to take a hard look at how the region can accommodate growth without sacrificing livability.

Elected officials, citizens and planners in King, Pierce and Snohomish counties are working to create a new regional transit system. This regional system will make it easier to travel throughout the region as it continues to grow and prosper.

The Joint Regional Policy Committee, representing the transit agencies and the state Transportation Department, released a recommended Regional Transit System Draft Plan for public review and comment Oct. 12. A draft

Environmental Impact Statement was issued at the same time.

This summary of the recommended plan provides some background about the process leading to the recommendation. If you'd like copies of the complete

draft system plan, call 1-800-894-9844.

Following public review and comment, and release of a final EIS, the JRPC will approve a final system plan in early 1993. The participating counties may then form a new Regional Transit Authority to finance, build and run the regional facilities and services. The RTA will work with transit agencies to coordinate local and regional services. The RTA is expected to propose a financing plan to voters within the regional transit district boundary in fall 1993.

But before we take the important steps towards a final regional transit plan, we need your review and comments on this draft. The next move is yours. After all, it's your future. ▲

# Something needs to be done

transportation system
moves more than just
vehicles. It also moves
people, goods and services,
directly affecting our lives—where
we live, work and play. When the
system works, we're free to choose
where, when, and how we move. But
when the transportation system
begins to break down our choices
become limited. And when our
transportation system begins to hurt
the neighborhoods it once helped, it
affects our quality of life.

We are losing the ability to move freely—Over the years, our region has invested more in freeways and roads than public transit.

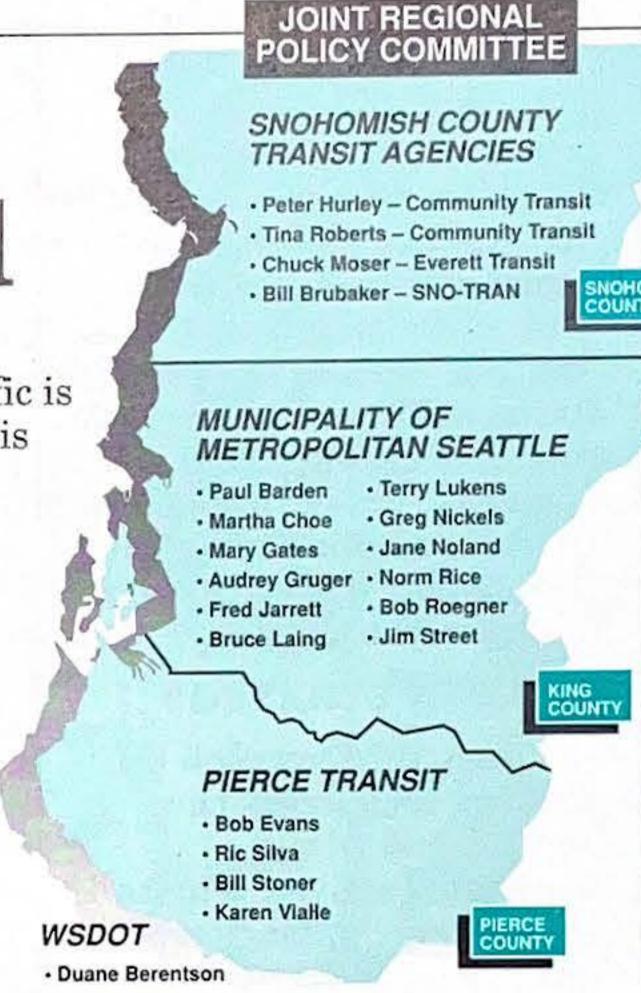
Ironically, relying on the car, once the symbol of freedom, now limits freedom and costs our communities dearly. Our transportation system can't handle the load any more. To keep moving freely we need to increase our transportation system's people-moving capacity. Building more roads isn't the answer.

We are losing open space—New housing, office parks and parking lots are eating away at rural areas and open space, increasing our dependence on cars. If this pattern continues, the region will pay a high economic and environmental price.

Our economy is threatened—
Congestion is making it difficult
to provide reliable transportation

to jobs and other destinations.
Goods and services deliveries are also delayed. Without a well-functioning transportation system investors won't invest, our economy can't grow, jobs become less secure and our economic future is jeopardized.

We're wasting fuel and polluting
our environment—Cars are
responsible for most of the carbon
monoxide polluting our air. Air
quality has dropped to where
many of our region's urban areas
don't meet federal air quality
standards. Relying on private
vehicles for all of our
transportation needs wastes fuel.





# Achieving a vision

n 1990, the region's policymakers, together with citizens, developed a vision for how the Puget Sound region will develop over the next 30 vears-Vision 2020. The plan combines a growth management strategy with transportation investments. The goal is to develop a region with compact, welldefined communities or "centers." framed by open spaces and connected by new transit lines and ferries. The Regional Transit System Draft Plan builds on Vision 2020 to help achieve a vision for the region's future.

### **GROWTH STRATEGY**

Vision 2020's growth strategy encourages new housing and jobs in designated activity centers (downtowns, commercial centers, business parks, etc.) where urban services can be efficiently provided. The growth strategy discourages low-density employment centers that can't effectively be served by transit. This preserves open spaces and keeps neighborhoods livable.

### TRANSPORTATION STRATEGY

Vision 2020 stresses transit and ridesharing investments to support centers. It emphasizes moving people rather than cars. It offers more travel options for people to avoid congested roadways. Vision 2020 commits to completing and maintaining our extensive street and highway system. It recommends adding some new road capacity to correct severe bottlenecks. But it affirms earlier policies not to build new freeways. A

### **Regional Transit System Plan goals**

### SYSTEM GOALS:

- Ensure the ability to move around the region. Provide reliable, convenient and safe public transportation services throughout the region.
- Preserve communities and open space. Support communities' ability to develop in ways that preserve and enhance their livability and limit intrusion into rural areas.
- Improve the region's economic vitality—Increase access to jobs, education and other community resources.
- Preserve environmental quality—conserve land and energy resources, and contain the growth of air pollution.

### PERFORMANCE OBJECTIVES:

### Mobility

- Increase the portion of regional trips by people using transit and ridesharing.
- Reduce average transit travel time by 10 minutes.
- Improve transit access to jobs and other activities.

### Cost and efficiency

 Offer the most efficient and effective services and facilities possible within available resources.

### Social, economic and environmental benefits

- Help limit urban sprawl, maintain open space and protect natural resources.
- Support creation of pedestrian-friendly and transit-supportive communities.
- Offer more transportation options that use less energy, consume less land resources and produce less pollution.
- · Reduce the miles and hours travelled per day per person.

### Equity

- Provide services and facilities that benefit all socio-economic groups.
- Benefit geographic areas in proportion to the revenues they generate. Financial feasibility
- Develop a system that is affordable to build, run and use.

## Developing a plan

he planning process has included a thorough evaluation of a variety of options and alternative investment plans including doing nothing, investing in bus-only transit systems or adding the capacity of a rail rapid transit system to an improved bus system.

Extensive analysis of various types of rail systems was conducted to define the type of system to be evaluated in the Bus/Rail Alternative. For the evaluation, the JRPC selected rail rapid transit running in its own right-ofway. Factors leading to the selection include:

- Significant increases in transportation capacity must be made in already
  congested corridors and centers to accommodate projected population and
  employment growth—rail rapid transit operating in its own right-of-way
  provides much higher capacity than rail systems running at-grade on city
  streets.
- To provide more transportation capacity in a way that offers a competitive alternative to the automobile the system must offer a competitive speed advantage—separate right-of-way assures that the rapid rail system can maintain higher speeds and reliable service.
- To help meet growth management objectives, the system needs to provide direct service to employment and activity centers—the rail system evaluated accomplishes this in a way that minimizes adverse effects on urban streets and neighborhoods by proposing some underground or elevated segments.

### THE RECOMMENDATION

he JRPC recommends a combined bus/rail system. The bus system provides basic mobility for local communities, connecting neighborhoods and linking communities with nearby centers. The bus system also links communities to the regional rapid transit system which connects other regional centers. The plan recommends much more bus service over the first 10 years to better serve basic mobility needs.

The recommended system includes the added capacity and service of a regional rail system to meet regional mobility needs, support growth management objectives and help preserve environmental quality.

Mobility—The recommended bus/rail system increases people-carrying capacity for already congested major travel corridors more than the other alternatives. It increases capacity without reducing capacity in the existing transportation system for other vehicles.

The recommended bus/rail system provides direct access from throughout the region to major employment and commercial centers, colleges, universities and hospitals. It provides transit permanent speed and reliability that cannot be promised with either of the all-bus alternatives or rail systems running at-grade in city streets.

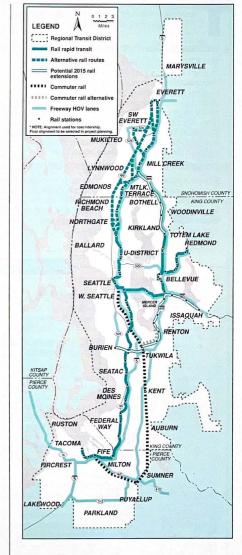
The bus/rail system provides a range of public transportation services tailored to meet a variety of mobility needs. Rail service along the regional system spine allows bus service replaced by rail service to be reinvested in more local service. Existing bus service can also be restructured to better serve neighborhoods and communities.

Growth management—The recommended bus/rail system is the most consistent with growth management objectives. It would be implemented incrementally to serve both immediate and long-term needs. Bus services would increase immediately to serve existing development. Continued bus service expansion and restructuring, along with phased rail line implementation, allows the transit system to develop with local actions to shape new growth patterns.

The bus/rail system capacity and service quality affords the best opportunity to accommodate housing and employment growth without severe economic and environmental consequences. The system can help local land-use authorities preserve people-oriented communities and open space by being able to move more people conveniently between and within the region's urban centers where streets are already at capacity.

Environmental quality—The recommended bus/rail system is the only alternative that significantly increases the current share of regional trips using transit. It is also the only alternative that provides enough added capacity to accommodate the expected increase in riders resulting from growth management and air quality legislation.

The recommended bus/rail system has the greatest potential benefits for air quality and energy conservation. Its higher capacity also provides the best environmental insurance policy in the event of energy shortages or other severe environmental conditions. A



### THE PLAN

he Regional Transit System draft plan has ten parts that form a comprehensive regional system including the following:

### 1. REGIONAL TRANSIT DISTRICT

The plan recommends the area shown on the map on Page 3 within which new regional public transportation services would be provided to support growth management objectives. The district outlines the area where local tax revenues would be proposed for voter approval to finance the plan. Representatives from within the district boundary in each county would be appointed to a new regional transit authority that will build regional facilities and implement services.

### 2. COMPREHENSIVE SYSTEM OF SERVICES

The plan recommends a comprehensive system of services and types of transportation tailored to serve diverse transportation needs. The system would support existing development and local and regional plans for communities and regional centers.

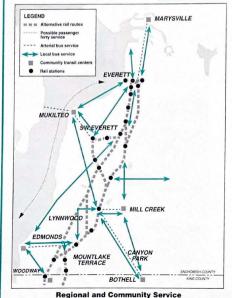
### 3. NEW AND IMPROVED SERVICES

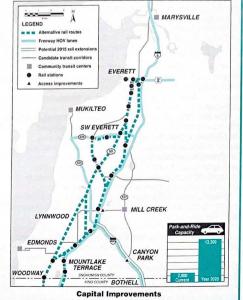
The plan recommends expanding the extent and frequency of service in local communities and connecting them to the regional rapid transit system. The plan would provide new regional services to link major activity centers and tie in with local services. Guidelines are recommended to match appropriate services and technologies to community and regional needs.

### 4. SYSTEM INTEGRATION AND ACCESS

The plan recommends improving the speed, reliability and convenience of public transportation. It commits to increased safety, security and comfort for people using public transportation services and facilities. The plan promotes creating people-friendly environments in transit travel corridors. It also commits to improving access for all people, including those with disabilities. The plan includes access and storage for bicycles. It also commits to providing convenient connections and an integrated fare system between different types of public transportation including buses, trains, shuttles and ferries.

### **SNOHOMISH COUNTY**





### SEATTLE/NORTH KING COUNTY LEGEND Potential 2015 rail exte \*\*\* Burlington Northern Union Pacific Erneway HOV lanes Candidate transit corridor Community transit centers Rail stations Access Improvement LEGEND Possible passenge Community transit ce Rail stations **Regional and Community Service Capital Improvements**

### 5. TRANSIT STATIONS

The plan commits to cooperative planning with local jurisdictions and communities in designing stations and their surrounding areas and to preserve and enhance existing neighborhoods.

### 6. MANAGING TRANSPORTATION DEMAND

The plan commits to expanding partnerships with employers to encourage transit-use, ridesharing and reductions in drive-alone commuting. The plan places priority on transportation investments that reinforce land-use patterns that can effectively be served by transit.

### 7. INNOVATION

The plan encourages increasing the effectiveness of the transportation system by encouraging flexibility to try new technology and transit service delivery systems. It commits to more evaluation of possible passenger ferry services to supplement other public transportation services.

### 8. DIAMOND LANE SYSTEM

The plan recommends completing the regional system of diamond lanes for buses, vanpools and carpools. It provides guidance for building new diamond lanes and converting existing general traffic lanes for high-occupancy-vehicle use. The

plan recommends improved access to diamond lanes. It also recommends features to ensure longterm effectiveness, especially in areas where future rail extensions are planned.

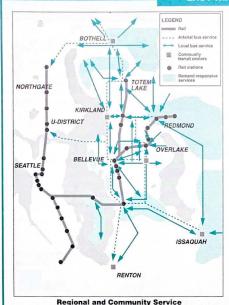
### 9. RAPID RAIL AND COMMUTER RAIL SYSTEMS

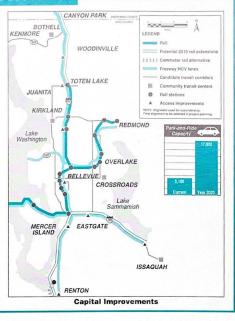
The plan recommends a regional rapid rail system linking regional activity centers from Everett to Tacoma, and the area east of Lake Washington. It also recommends a commuter rail system using existing tracks in south King and north Pierce counties. The plan recommends physical and operating features that guarantee fast, reliable service as a compelling transportation alternative to drive-alone commuting.

### 10. IMPLEMENTATION

The plan identifies responsibilities and coordination between the Regional Transit Authority, local transit agencies, cities, counties, and the Puget Sound Regional Council. It commits to developing appropriate land-use guidelines and an effective community involvement process for designing specific routes and stations. ▲

### **EAST KING COUNTY**





### **SERVICE CONCEPTS**

he draft system plan recommends a combination of transit services and vehicle types to improve neighborhood to neighborhood transit and to create a multidestination network throughout Snohomish, King and Pierce counties.

- · Regional rail: A rapid, high-frequency, all-day regional rail system will connect centers throughout the region. Trains will run every 2 to 12 minutes during peak-use periods and at least every 8 to 20 minutes at other times. The commuter rail line will initially run every 30 minutes in peak-use periods. Connections to community feeder services and regional bus services will be provided at rail stations.
- Regional bus: The regional bus system will provide high-frequency, all-day service linking neighborhoods, employment centers and the regional rail system. Buses will run at least every 10 to 15 minutes during peak-use periods and every 15 to 30 minutes at other times. There will be more two-way commuter services.
- · Local bus: Two-way, all-day services between communities will connect neighborhoods to regional centers and the regional transit system.

- Buses will run every 15 to 60 minutes throughout the day (depending on the area served) and more frequently during peak-use periods.
- · Demand-responsive services: Services such as dial-a-ride will run in areas where fixed-route bus service is not feasible or is impractical. These would serve local destinations and connect with the regional systems.
- · Vanpool and rideshare: Vanpool and rideshare services will increase to meet both local and regional commuter needs. Increases will include more vans and supporting services. A

### CAPITAL IMPROVEMENTS

he draft system plan includes capital improvements to support the integrated bus/rail service plan, improving the physical environment for people using transit to move in and around communities and centers throughout the region by transit.

- · Regional rail: A frequent, rapid rail system will connect major regional destinations in Snohomish, King and Pierce counties.
- · Regional diamond lane system: The freeway diamond lane system will improve regional bus service and carpool/vanpool access between centers

REGIONAL TRANSIT SYSTEM DRAFT PLAN SUMMARY

and other regional destinations. Better freeway ramp access to diamond lanes will be developed in key locations not directly served by rail. Park-andride lots will be expanded to serve rail stations and the diamond lane system.

· Community service improvements: Transitfocused centers and arterial corridors are recommended where major investments in all-day transit services are proposed. Public and private partnerships are suggested to support peopleoriented development linked to transit. Traffic controls will give priority to moving transit and carpools through congestion while making a series of improvements for pedestrians (mixed-use development, street lights, widened sidewalks. street trees, etc.) for security, walking and waiting.

### THE FINANCING PLAN

he Regional Transit System Draft Plan also recommends a financing plan to pay for system elements. The financing plan includes:

1. New local revenues-The plan recommends a combination of local taxes, including sales tax. license tab tax, and possibly a tax on fuel, the

### Rail system characteristics

### **RAIL RAPID TRANSIT SYSTEM:**

maximum speed 55-70 m.p.h. average speed 35-40 m.p.h. service frequency every 2-10 minutes during the day

power source electricity train capacity

station spacing

alignments

power source

implementation

four-car train/560 people per train (140 per car) 22,000 people in peak hour, peak direction 1.5 to 2 miles, closer together in high transit volume

right-of-way runs primarily in separate right-of-way/mixed traffic segments may be considered in some areas

> maximize pedestrian access to the system and minimize redundant routes with the diamond lane

### COMMUTER RAIL LINE:

79 m.p.h. maximum speed service frequency

average speed 35-55 m.p.h

every 30 minutes in peak-use periods, increasing to 15 minutes with off-peak service added

initially diesel/electric, with ability to convert to alternative fuels or all electric in future

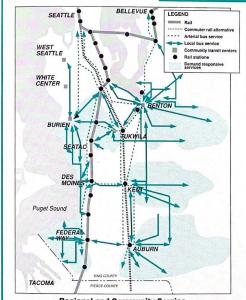
train capacity 3-5 car trains/375-1000 people per train 4,000 people in peak hour, peak direction

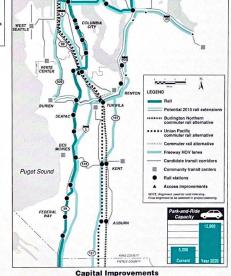
about 5 miles, closer in high-employment centers station spacing right-of-way sharing freight tracks, with signalized grade crossings

phased implementation of service and related capital investments will be developed with a procureme

process and negotiated agreement.

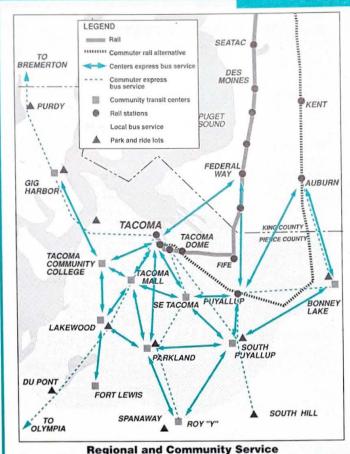
### SOUTH KING COUNTY

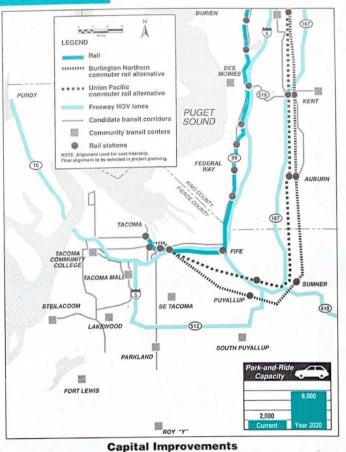




**Regional and Community Service** 

### PIERCE COUNTY





combined total generating the equivalent of .9 percent sales tax, or about \$300 million annually.

- 2. Distribution of new local tax revenues—The plan recommends the following distribution of new revenues:
- 22 percent would go to local transit agencies for improved service and fleet expansion
- \$1.2 billion (1991\$) would go to local transit agencies for facilities that improve transit speed, capacity, reliability and convenience, including possible rail service on city streets in some areas
- the remainder of the new local revenues would be used by the Regional Transit Authority for the regional rail systems.
- 3. Rail system funding—The plan recommends the \$6.2 billion (1991\$) cost of the rail system be paid for by the following sources:
- 33 percent from federal funds
- · 2 percent from the state
- 5 percent from joint private/public development
- 60 percent from voter-approved local taxes
   Fares are to cover 40 percent of rail service costs.
- 4. Diamond lane system funding—The plan recommends priority funding be programmed to complete the freeway diamond lane system. It also supports legislative action to provide more funds for the diamond lane system. Whether any of the new local revenues should be used for the diamond lane system is still being discussed.

# What's next?

ollowing public review and comment, and release of a final Environmental Impact Statement, the JRPC expects to approve a final Regional Transit System Plan in early 1993. The participating counties may then form a new Regional Transit Authority to finance, build and run the regional facilities and services. The RTA could propose a financing plan to voters as early as fall 1993.

The release of the draft Regional Transit System Plan and the draft Regional Transit System Plan EIS is your opportunity to tell us what you think about the recommendations. There will be a series of open houses/public hearings in King, Pierce and Snohomish counties to invite your comments. Written comments can be sent to:

Gregory M. Bush, Manager, Environmental Compliance and Right-of-Way Division, Metro, 821 Second Ave., M.S. 120, Seattle, WA 98104.

You may also FAX comments to 684-1486. The comment period ends Nov. 30, 1992.

If you have questions about the recommended draft Regional Transit System Plan or the Regional Transit System Plan draft Environmental Impact Statement call the Regional Transit Project at 1-800-894-9844.