Sound Move

Launching a Rapid Transit System for the Puget Sound Region

The Ten-Year Regional Transit System Plan

Sound Move

Launching a Rapid Transit System for the Puget Sound Region

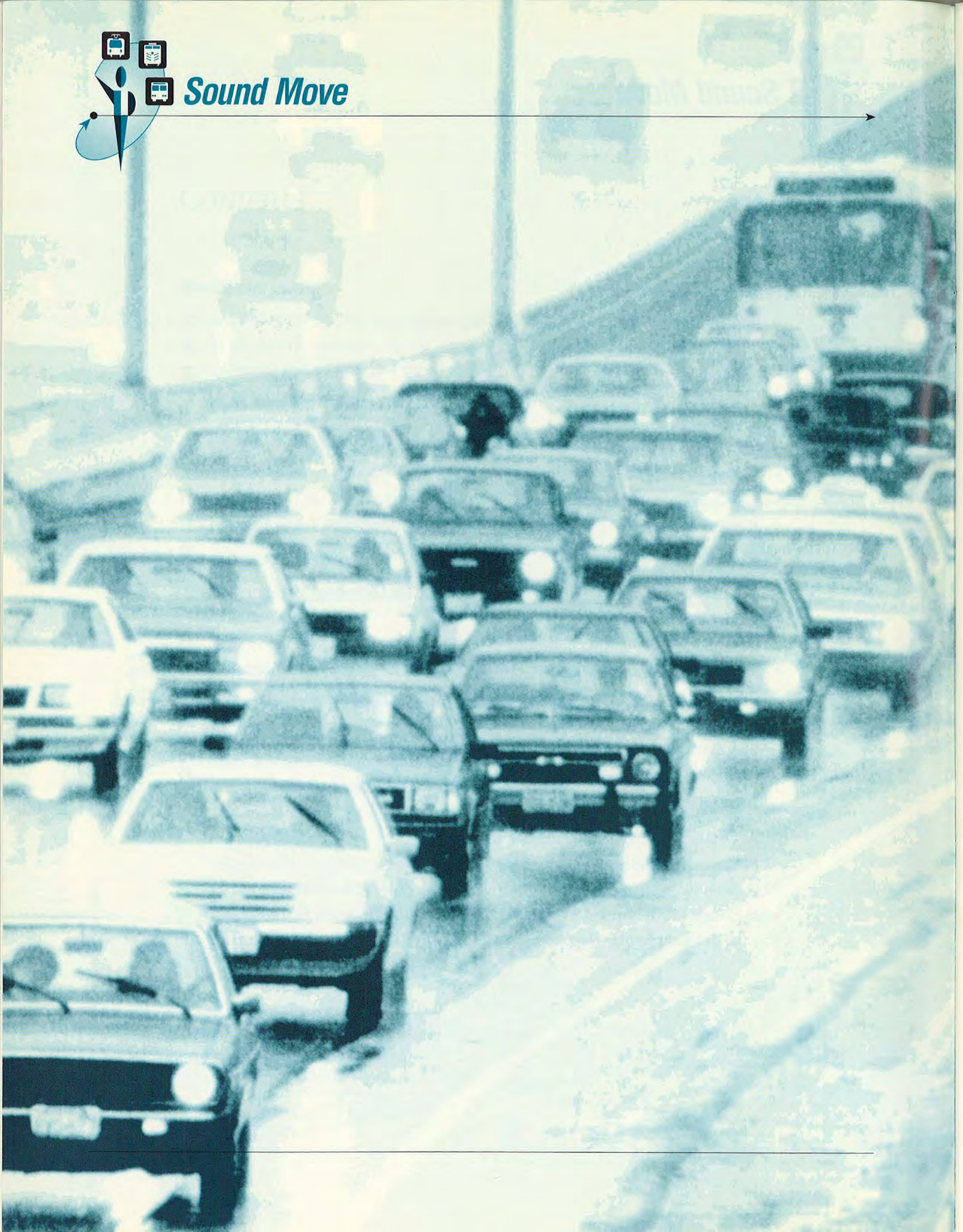
The Ten-Year Regional Transit System Plan

As adopted May 31, 1996

Sound Move

Contents

Sound Move



Why regional transit?

There's an old saying that advises "if it ain't broke, don't fix it." But if you are one of thousands of people traveling on our region's overburdened and clogged highways each day you can probably relate to a modified version of that proverb — it's broke, let's fix it.

The problem is traffic congestion. Our region rates some of the worst traffic in the country (ranking behind only such major cities as Los Angeles, San Francisco, Chicago and New York). We've outgrown our transportation system. In the time it took to build our current freeway system, the region's population grew by two-thirds. At the same time, the number of miles people travel each day grew by a whopping 450 percent. Today's increased number of two-worker households, more frequent job changes and longer work commutes are putting more demand on our transportation system than it can handle.

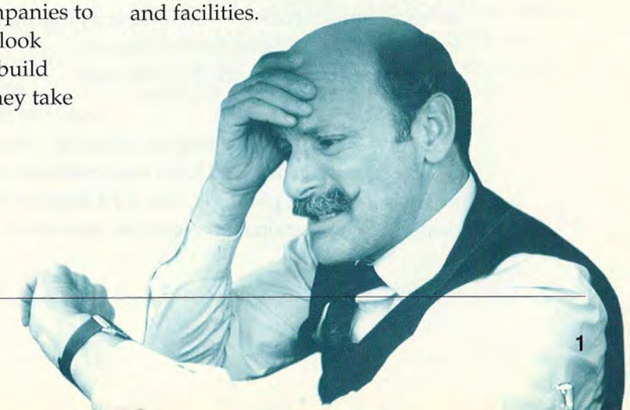
No one likes traffic. It takes a frustrating toll on our time and our nerves. But much more sobering and far reaching is the impact congestion has on our jobs, economy and environment. Congestion reduces productivity by making it harder for employees to get to work on time. Those same traffic jams also make it more difficult to get goods to market. Such impacts can cause existing companies to relocate and potential businesses to look elsewhere for places to expand and build factories. And as companies leave they take vital jobs with them.

Just building more roads won't solve the problem. There isn't enough space or money to build enough roads to keep up with growing transportation needs. Southern California learned a costly lesson that investing billions in more roads and freeways doesn't eliminate congestion.

The answer is to take a cost-effective and balanced approach to increase the capacity of the existing system by offering a package of transportation options — including improving transit and increasing road capacity in some areas. Collectively that system of options could actually slow congestion growth, reduce the growing strain on our roads and provide a reliable, efficient and congestion-free alternative for those that use it.

Sound Move — the ten-year system plan

Sound Move — the Ten-Year Regional Transit System Plan being proposed by the Central Puget Sound Regional Transit Authority — takes just such an approach to begin "fixing" our transportation system. It's the first, ten-year step toward a long-range Regional Transit Vision. That vision is to expand the capacity of our region's major transportation corridors by adding new high-capacity transportation services and facilities.



Sound Move includes a mix of transportation improvements — High-occupancy-vehicle Expressway, regional express bus routes, commuter rail and light rail. The plan includes new community "gateways" — connections in urban and suburban areas for communities to connect to the rest of the region.

Sound Move is an opportunity for the region to test drive a regional transit system before deciding how much more of the vision to commit to.

One piece of the puzzle

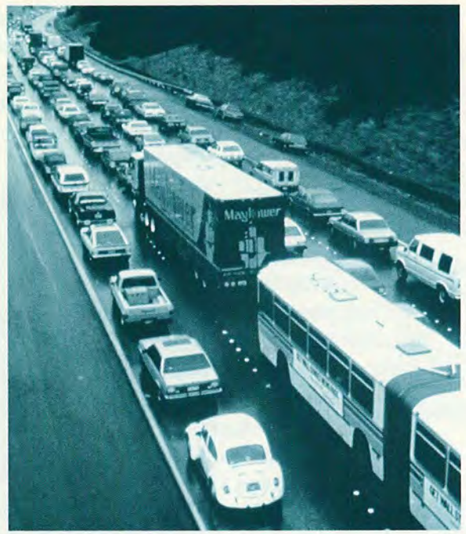
Sound Move isn't the only thing planned to fix our regional transportation system, nor has it been prepared in a vacuum without coordination with other regional efforts and agencies. The plan was developed to fit within the region's comprehensive Metropolitan Transportation Plan. That plan includes all forms of transportation — high-capacity transit, local transit, HOV lanes, ferries, airports, automobiles, freight traffic, bicycles, and pedestrians.

Sound Move also fits with the plans of local transit agencies who have been partners in regional transit planning. The RTA has designed new regional services that are

coordinated with services provided by local transit and transportation agencies, offering a regionwide integrated system of routes, schedules and fares.

Growing and growing and growing...

Growth in any area is desirable and is the by-product of a strong, healthy and competitive economy. In another 25 years there will be 1.4 million more people living here. In addition to being part of the comprehensive Metropolitan Transportation Plan, Sound Move fits in with the region's adopted vision for guiding future growth in ways that maintain our region's high quality of life and preserve its environment. The high-capacity transit system's purpose is to improve mobility within the urban areas by providing travel alternatives so they may grow comfortably while preserving rural areas for future generations.



The benefits

Investing in mobility

Transit today carries 40 percent of the trips through our region's most congested areas at the most congested times. If all of the people currently using transit switched to driving alone they would create a line of bumper-to-bumper cars almost 700 miles long (enough cars to completely fill all the lanes of the Interstate 5 and Interstate 90 within the region).

Sound Move will expand on existing local transit services with a convenient, reliable, easy-to-use regional system that is less susceptible to congestion than current services. By year 2010, Sound Move will increase transit system ridership to a level that equals a line of cars more than 950 miles long (a line of cars that could easily stretch to San Francisco, and then some).

Sound Move can make public transportation a viable and attractive alternative to driving alone by offering fast, frequent service and a wide array of transportation options with regionwide connections. And Sound Move includes a single-fare system allowing people to travel around the region using a variety of transit services with a single ticket or pass.

Investing in regional connections

Sound Move creates more and better regionwide connections providing access to job sites, schools, shops, museums, parks, theaters and sports arenas to everyone regardless of whether they have access to an automobile. Sound Move can help attract large special events to the region. Atlanta was selected to host the 1996 Summer Olympics in part because it had a rapid transit system capable of handling large numbers of people.

Sound Move can provide direct connections to the Kingdome, the new baseball stadium, Husky Stadium, the Tacoma Dome, Meydenbauer Center and the Washington State Convention and Trade Center. Those connections will provide the capacity to handle large crowds and ridership surges.

Investing in our economy

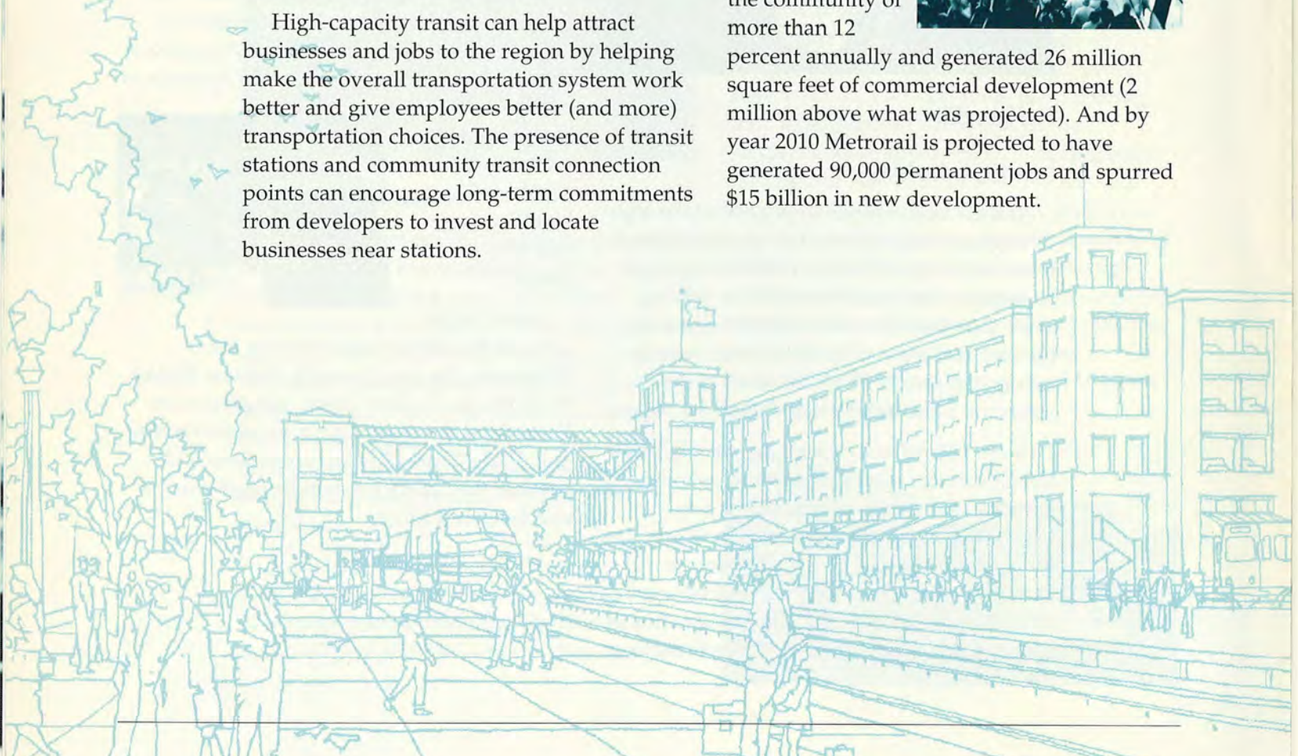
An investment in transit is an investment in our region's long-term mobility and economic stability. The alternative to investing in our transportation system is worse congestion. And congestion already costs our region an estimated $1.2 billion a year in wasted time, money and resources.

Sound Move includes a new HOV expressway system and two new rail systems — electric light-rail and commuter rail. It is estimated that a $100 million investment in transit capital improvements generates some 6,000 direct and indirect jobs and a threefold increase in business revenues.

High-capacity transit can help attract businesses and jobs to the region by helping make the overall transportation system work better and give employees better (and more) transportation choices. The presence of transit stations and community transit connection points can encourage long-term commitments from developers to invest and locate businesses near stations.

Investing in reliable, easy-to-use transit to keep pace with our growing population will enhance economic stability and actually add to the tax base of the region, thus enabling us to address other needs, including other transportation improvements.

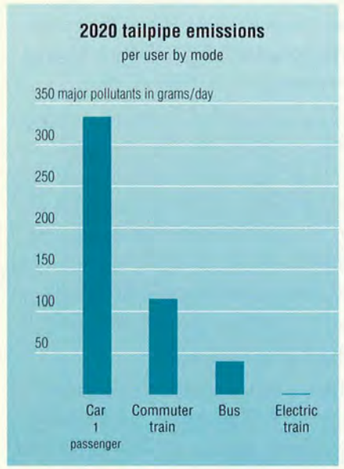
For example, the Commonwealth of Virginia invested in its Metrorail heavy-rail system (serving Washington D.C.) starting in 1974. Twenty years later they found that the investment provided a net rate of return to the community of more than 12 percent annually and generated 26 million square feet of commercial development (2 million above what was projected). And by year 2010 Metrorail is projected to have generated 90,000 permanent jobs and spurred $15 billion in new development.



Sound Move

Investing in our environment

Transit already accounts for 75 million trips a year regionwide, or about 258,000 trips daily 365 days a year. Imagine the effects on our air and water quality if those trips were made by car instead? Cars are our largest source of air pollution and energy use. All types of public transportation (trains, buses, carpools and vanpools) produce far less grams of air pollutants per rider than a single-occupant car. Sound Move provides several convenient and reliable energy-efficient alternatives to driving alone.



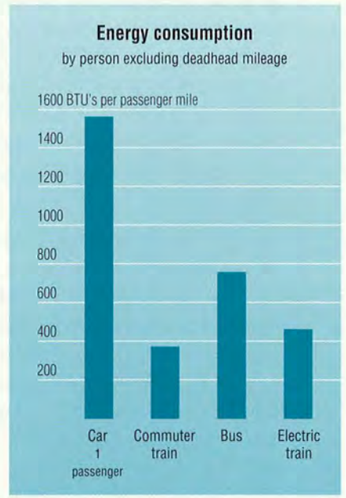
Sound Move's rail components require only one-third of the right-of-way of a six-to eight-lane freeway but provide the people-moving capacity of a 12-lane freeway. Because less land is needed, natural resources and scarce open space are easier to preserve and protect.

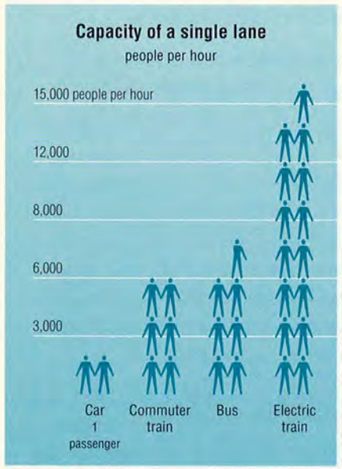
Sound Move provides the tools to make the region's growth management plan work by connecting cities and major centers. The regional transit system plan also supports adopted land-use plans and helps meet transportation demand management goals. Similarly, transit-supportive local land-use planning and implementation are critical to the success of ten-year system plan investments.

Principles and commitments

By adopting this ten-year plan, the RTA commits to the following principles:

- **Regional scope** — the RTA's plan is a regional system designed to recognize regional as well as local needs throughout the three-county RTA District. The RTA recognizes that investments in any particular subarea yield benefits throughout the region, and that these shared benefits help tie the RTA District together.
- **Conservative funding assumptions** — the primary funding sources will be modest voter-approved local tax increases, federal grants and long-term bonding.
The RTA assumes no state funds, thus placing no additional demand on limited state resources that are needed for other regional transportation investments.





The RTA assumes federal funding for new rail starts of $55 million per year and other federal funding sources of $18 million per year. Additional funds will be requested but the plan does not speculate beyond current sound estimates of federal support.

Local tax rate increases will include a local sales tax increase not to exceed 4/10 of one percent and a motor vehicle excise (license tab) tax increase not to exceed 3/10 of one percent.

- **Equitable distribution of revenues** — local tax revenues will be used to benefit the five subareas of the RTA District (Snohomish County, North King County, South King County, East King County and Pierce County) based on the share of revenues each subarea generates. This distribution formula will apply to all future phases.
- **Simultaneous work on projects in all subareas** — work will begin on projects in each of the subareas so benefits will be realized throughout the region as soon as possible. Projects likely to be implemented in the latter part of the ten-year period are those requiring extensive engineering and community planning.
- **Coordinated services** — regional and local transit services will be coordinated and a single fare structure will be used.
- **System completion within ten years** — different parts and segments of the plan will be implemented in stages and be operational as soon as possible; the entire system will be completed and operational within ten years.
- **System expansion or tax rollback** — Any second phase capital program which continues local taxes for financing will require voter approval within the RTA District. If voters decide not to extend the system, the RTA will roll back the tax rate to a level sufficient to pay off the bonds and operate and maintain the investments made as part of Sound Move.
- **Annexations and extensions of service outside the RTA District** — the RTA may provide services outside the taxing district by contracting with local agencies. Areas that would benefit from RTA services may be annexed into the RTA District if citizens within those areas vote for annexation.
- **Public accountability** — the RTA will hire independent auditors and appoint a citizen committee to monitor RTA performance in carrying out its public commitments. Citizens will be directly involved in the placement, design and implementation of facilities in their communities.

The Regional Transit District

The RTA District boundary is shown on the RTA District map (see page 8). It defines the service area as required by state law. The RTA District currently includes the most congested "urban" areas of King, Pierce and Snohomish counties.

The RTA District boundary lines generally follow the urban growth boundaries created by each county in accordance with the state Growth Management Act. The urban growth boundaries guide how and where growth will take place in each county. The RTA District boundary was adjusted in some places in consideration of voter precinct boundaries, city limit lines, and geography.

The RTA boundary:

- shows the area where high-capacity transportation (HCT) services will be added to our transportation system
- establishes representation on the RTA Board as prescribed by state law
- shows the area in which local taxes authorized by voters to help finance the Regional Transit System will be collected
- demonstrates how regional services and facilities can support growth management goals and adopted land-use plans.

For planning and budgeting purposes the RTA has divided the district into five geographic subareas. The system components in Sound Move address unique needs in each of these areas. The local tax revenues generated in each of these areas will be spent on the investments that benefit those areas.

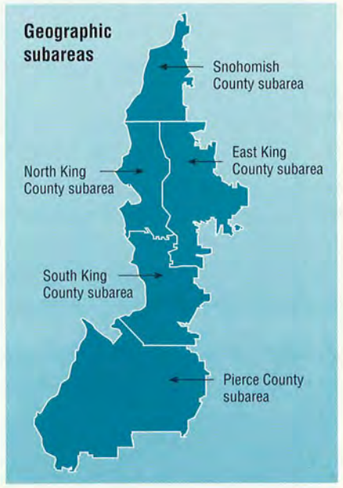
Annexing new areas and extending RTA services

Annexations

According to state law, after voters within the district boundaries have approved a ballot proposition authorizing local taxes to support the ten-year system plan, the RTA Board may approve resolutions calling for elections to annex areas outside, but adjacent to, the RTA District. An annexation may require adoption of a revised RTA *Regional Transit Long-Range Vision*.

The following legal requirements are required to annex areas into the RTA:

- **Board membership** — If the RTA District changes, a change in the make-up of the RTA Board membership may be required. Board membership must be "representative" of the proportion of the population from each county that falls within the RTA District.



- **Areas that may be annexed** — Areas that would benefit from RTA services may be annexed into the RTA District. Services or projects proposed must be consistent with the central Puget Sound region's Metropolitan Transportation Plan.
- **Adoption by RTA Board and City/County councils** — The RTA Board may call for annexation elections after consulting with any affected transit agencies and with the approval of the legislative authority of the city or town (if the area is incorporated) or with the approval of the area's county council (if it is unincorporated).
- **Tax vote by area citizens** — Citizens in areas to be annexed are permitted to vote on annexation and imposition of taxes at rates already imposed within the RTA District boundaries.

Because the RTA encourages areas to annex into the district as early as possible to expand access to regional transit system benefits, the authority will include the following policies in annexation agreements:

- the RTA will not attempt to recover the capital costs from annexed areas of facilities put in place before the annexations
- the RTA commits that, when annexed, the taxes from areas joining the RTA District will be used only for specific facilities and services for up to 5 years as described in an inter-local agreement with that area. After 5 years, the tax revenues from an annexing area would be combined with funds from the appropriate subarea.

Extending RTA services beyond district boundaries

The RTA will commit to extending new services beyond its boundaries to make connections to significant regional destinations contingent on agreements with local government agencies. Such service extensions would be implemented at a mutually agreeable cost.

This option would permit areas outside of the RTA District to function as part of the regional system. Extending RTA services outside of its district would require agreements with the affected local transit agency or other appropriate government agencies.

The RTA will enter into agreements with agencies beyond the district boundary to integrate fares. This will allow flexible transfers between various transit operators and prevent citizens who live outside the district from being penalized for making regional trips via transit instead of an automobile.

Sound Move — the Ten-Year Regional Transit System Plan

A system of HCT corridors and new community connections

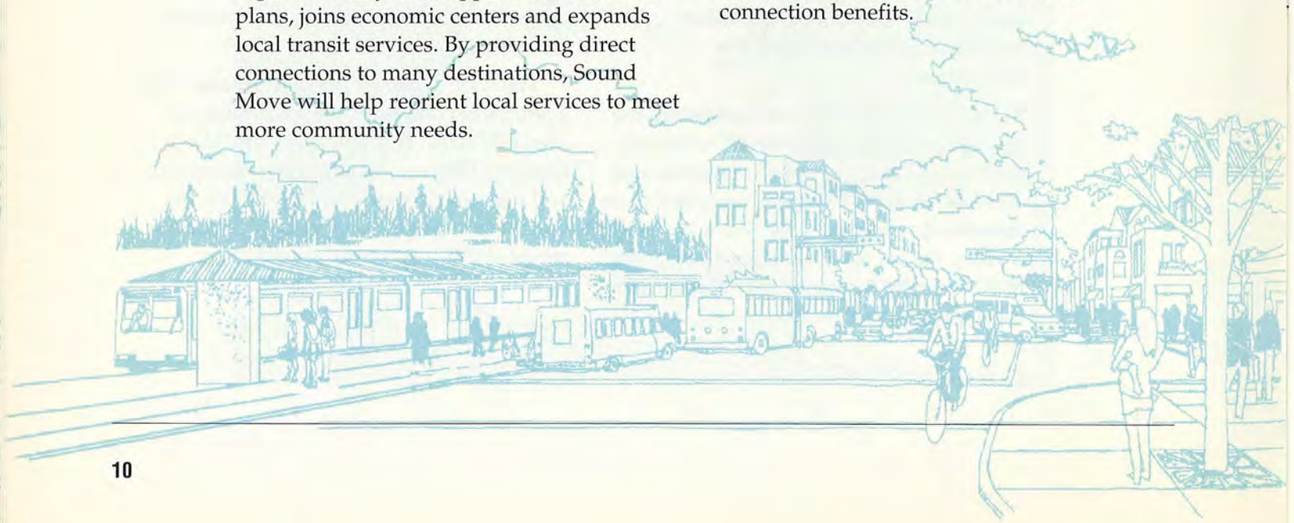
Sound Move is the first step toward improving the way we, as a region, move. In turn, the plan maintains our region's economic strength locally and globally. It focuses on the most congested areas of our region, creating a comprehensive, regional high-capacity travel network. Whether people are traveling to work, school, recreational opportunities or shopping, the goal is to provide more options — dependable alternatives for getting around in our communities and the region.

One of the most important features of Sound Move is that it provides a network of frequent, convenient and dependable services that can be used with a single ticket (see the ten-year system plan map). The services are tailored to the unique needs of the diverse subareas within our region.

Think of Sound Move as the tie that binds the region together, connecting the communities of the Central Puget Sound region in a way that supports local land-use plans, joins economic centers and expands local transit services. By providing direct connections to many destinations, Sound Move will help reorient local services to meet more community needs.

New regional transit services will free up significant bus service hours now provided by local transit agencies. The RTA will work with local transit agencies to identify local service and/or community connections such as park-and-ride lots that support the regional transit system. These local resources will be distributed to subareas based on the investment each makes in the regional service responsible for freeing local bus service hours.

Transit centers, park-and-ride lots, commuter rail and light rail stations will be developed to encourage and promote joint development through public/private partnerships and partnerships with local jurisdictions. These partnerships will provide opportunities to attract and shape development at and around community connections in ways that benefit both transit users and adjacent communities. The joint development program will encourage services and businesses that support transit-use, walking and bicycling. Paired with improved access for pedestrians and persons with disabilities, the joint development program will broaden the scope of community connection benefits.



High-capacity travel corridors

In developing a comprehensive transportation plan, planners look at the main travel corridors or routes that people use to go from one point in the region to another. For example, Interstate 5 is a major north-south travel corridor in the region. Sound Move expands on existing travel corridors and creates new high-capacity transportation (HCT) corridors linking our economic centers and communities. The types of investments made to create this system of HCT corridors have three objectives:

- do more with what we have
- build on existing facilities
- begin building new corridors.

High-occupancy-vehicle Expressway with regional express buses

The HOV Expressway will be developed through a partnership between the RTA and the state Transportation Department. It expands and improves upon a network that the region has already begun, creating a permanent part of our regional transit system. The HOV Expressway includes the state's program to fill the gaps and extend the existing HOV-lane system to create a continuous inside-lane HOV network.

The RTA will fund special access ramps to make it easier for transit and carpools to reach and use the HOV Expressway. Traffic flow will also improve in general purpose lanes since buses and carpools will no longer have to weave through several lanes of traffic to reach the HOV lanes.

The HOV Expressways create new links between suburban centers serving our region's fastest growing areas with fast efficient transportation options. A single HOV lane carries the same number of people as three general traffic lanes.

New regional express bus routes will take advantage of the improved speed and reliability the HOV Expressway will offer. The new high-speed regional express bus routes will offer frequent, two-way service throughout the day. The regional express buses will serve major regional centers and destinations and provide connections to other transportation components of Sound Move.

Working with the state Transportation Department and through the annual budget review process, the RTA will fund construction of new access ramps to the existing and already funded HOV lanes or fund other appropriate alternatives. The state Transportation Department will then move all HOV lanes in those corridors to the inside lane of the road.

The RTA Board views completion of the state's freeway HOV lane "core system" in the Puget Sound region as an important priority. However, the RTA assumes the state will complete construction of the core HOV lane system in accordance with its freeway HOV policy.

If the state does not fulfill its funding obligation, the RTA Board will conduct an open and public process to determine whether RTA funding is available (e.g. from savings realized in other program elements) and should be used to help complete the core HOV lane system.

Because the RTA will be making a significant investment in the state high-occupancy vehicle system, it will have an on-going interest in how that system functions. Before committing funds for HOV projects, the RTA Board must be satisfied that the HOV system will be managed in a way that maintains adequate speed and reliability for transit into the future.

The RTA will negotiate an agreement with the state Transportation Department and the Puget Sound Regional Council similar to the state Transportation Commission's existing Statewide Freeway High-Occupancy Vehicle Policy to specify mutually acceptable speed and reliability standards, and how those standards will be monitored and maintained. In negotiating this agreement the RTA will seek to specify how it will be compensated if those standards are not maintained and the advantages to transit created by its investment are reduced.

The RTA will develop park-and-ride lots and transit centers that support the HOV Expressway and regional bus systems through a joint development program designed to establish and promote public/private partnerships and partnerships with local jurisdictions. The RTA will look at ways to develop facilities that are pedestrian-friendly and easier to reach from adjacent communities by alternatives to the car (i.e. walking, biking and transit). Access improvements that extend the benefits and the scope of transit system to more people and to more places will be considered eligible for RTA funding as part of individual project budgets.

Commuter rail

The commuter rail component adds two-way rush-hour train service using existing railroad tracks between Everett, Seattle, Tacoma and Lakewood. Commuter rail will offer a fast, dependable and easy-to-use commute option, linking major destinations in Snohomish, Pierce and King counties.

The 81-mile commuter rail system includes 14 stations (and three provisional stations) as part of Sound Move. Additional stations may be built in future phases. Commuter rail will share several stations with Amtrak and the state's expanding intercity rail service between Portland and Vancouver, B.C., creating opportunities for interstate and local connections.

Commuter rail builds on a railroad network already in place, increasing the transportation system's people-moving capacity and, by making necessary track and signal improvements, improving the capacity of those lines for other passenger and freight trains as well.

Recognizing the on-going siting and design process for a new ballpark and other potential sports complex improvements in the Kingdome area, the RTA will also explore the possibility of providing special event commuter rail service if funding is available.

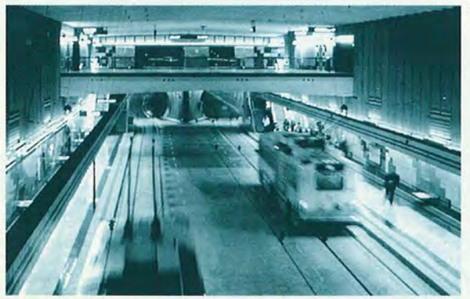
The RTA will develop park-and-ride-lots, transit centers and stations that serve and support the commuter rail system through a joint development program promoting public/private partnerships and partnerships with local jurisdictions. The goal of the program will be to encourage transit and pedestrian access to stations by establishing and promoting partnerships with parties interested in locating in areas served by commuter rail. The joint development program will try to establish transit and pedestrian-friendly improvements and land uses in surrounding areas. Access improvements that extend the benefits and the scope of transit system to more people and to more places will be considered eligible for RTA funding as part of the budget for each station.

Electric light rail

The electric light rail component adds a new form of high-capacity transit for our region. The service is designed to connect Northgate, Roosevelt, the University District, Capitol Hill, First Hill, downtown Seattle, the Rainier Valley area and SeaTac (terminating at South 200th Street) — the state's highest employment areas with the highest transit ridership in the region.

Sound Move includes 25-miles of a starter light rail system with 26 stations within walking distance of major destinations as well as connections to local bus service. Some stations will include connections to regional express buses, commuter rail, the Monorail and the Waterfront Streetcar. The most significant investment required for the electric light-rail system — the downtown Seattle transit tunnel and its five stations — is already in place.

Recognizing the on-going siting and design process for a new ballpark and other potential sports complex improvements in the Kingdome area, the RTA will explore the possibility of providing special event electric light-rail service, including a potential light-rail spur serving the sports facilities if funding is available.

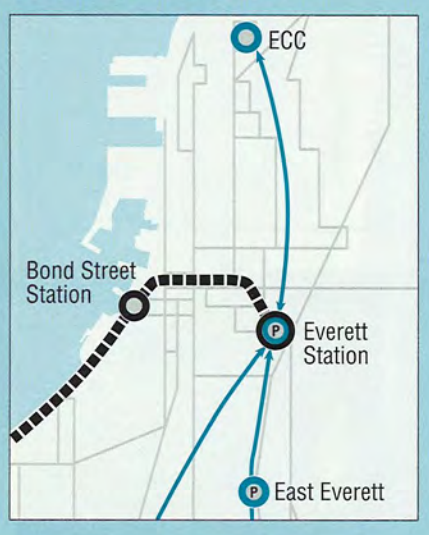


Sound Move also includes light-rail service connecting downtown Tacoma with the regional transit terminal near the Tacoma Dome where riders can connect with regional express services, commuter rail and Amtrak. Four stations will serve downtown Tacoma destinations.

The RTA has identified reliable funding sources for building the light-rail line between the University District and SeaTac (South 200th Street). The RTA expects to find, and will aggressively seek, additional funding sources to build the segment of the light-rail line between the University District and Northgate. If additional funds are not found, the University District to Northgate segment will not be built. If voters authorize additional capital programs after the ten-year system plan is otherwise in place, this segment will be the first to be built under the new program.

Sound Move

Downtown Everett detail



Downtown Seattle detail

Downtown Tacoma detail

Note: Full implementation of the HOV Expressway requires partnership with the Washington State Department of Transportation.

* Provisional station subject to funding availability from within the North King County subarea.

As adopted May 31, 1996

Map key:

Electric Light-Rail Service

Electric light-rail trains in the region's most densely-developed areas. Dashed line indicates the portion of the light-rail system that will be built if additional funding is secured.

Commuter Rail Service

Trains using existing railroad tracks between Everett, Seattle, Tacoma and Lakewood.

HOV Expressway

A continuous system of HOV lanes with special access ramps for transit and carpools. Diamonds indicate direct access ramps or flyer stops.

Regional Express Bus Service

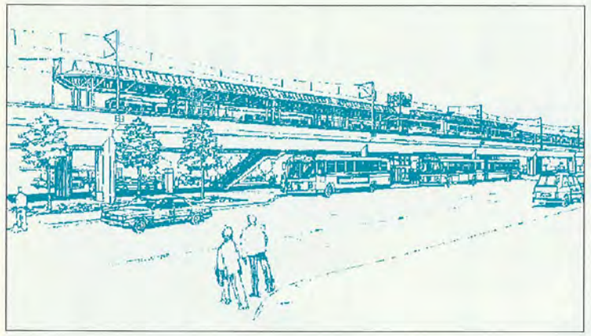
New express bus routes using the HOV Expressway, major arterials and expanded system of park-and-ride lots.

Local Bus Service

Network of bus routes provided by local transit agencies.

Community Connections

Major points where local and regional transit services connect. "P" indicates park-and-ride enhancements or new capacity.



The electric light-rail line is a cost-effective way to serve the core of the regional system where transit ridership is the highest. This new transportation link provides a stepping stone for expansion into the next century (a two-way light-rail line can carry the same number of people as 12 freeway lanes).

The Northgate to SeaTac (South 200th Street) light-rail line will be built in three segments. The first segment will be a line south between downtown Seattle and the airport serving the Rainier Valley area. That part of the system will be built primarily on aerial structures and on the surface through southeast Seattle. The south light-rail line will include connections at the Boeing Access Road station to regional express buses and commuter rail. Between Boeing Access Road and SeaTac, the RTA will evaluate an alignment using State-Route 99 and an alternative route using Interurban Avenue to Southcenter.

The second segment will be built between downtown Seattle and the University District via a tunnel under First Hill, Capitol Hill and the Ship Canal. The engineering work for the north line will take longer to complete than the south line so construction of the north line will likely not begin until the south line is already under construction. The third segment of the light-rail line will be between the University District and Northgate, and will be built when construction funds have been identified and guaranteed.

Innovation fund

Since we live in an age of continual change, Sound Move provides flexibility to consider new ideas, services and technology innovations.

The RTA will evaluate and fund innovative ways to provide transit service, reduce dependency on single-occupancy vehicles, improve public transportation's cost-effectiveness, and better respond to customer needs. The RTA will evaluate technological innovations (alternative fuels and propulsion systems, quieter equipment, lighter vehicles, energy efficient engines, and ways to improve passenger comfort) and ways to reduce impacts on the environment. The RTA will also explore incentives and programs to encourage people to use regional transit more.

The RTA will work with the community and the private sector to take part in a demonstration of personal rapid transit (PRT) or other technologies. PRT is an experimental type of automated transit consisting of small cars running on a guideway carrying two to six passengers per car. The demonstration could show how PRT or other new technologies could be appropriate investments in future transit system phases.

Photo courtesy of Titan PRT Systems, Inc.

Working together — a coordinated system of services

By coordinating with local transit and other transportation services Sound Move will make it convenient and easy to move around the region. Crucial to the ten-year system plan and the entire regional transportation system are the mechanisms that make different transportation components work together to create an efficient network connecting the entire region. These mechanisms include:

- coordinating local and regional transit schedules, tying services together and creating important regionwide connections
- building transit centers, park-and-ride lots and stations where different types of transportation come together to make connections simple and efficient
- developing a uniform pass or ticket that can be used on local buses, regional express buses and trains, making transfers easy.

Gateways to the region — community connections

Combined, new regional HCT corridors and services will link our economic centers and provide new connections for local communities. Sound Move will create new "gateways" from communities to the region and from the region to communities. Those gateways include transit stations, park-and-ride lots, transit centers and rail stations that create community connections where people can reach their destination on foot, by bicycle, or by accessing other transportation services.

New park-and-ride lot capacity improvements will be prioritized at locations where HOV direct access and regional bus service increases demand and where no surplus capacity exists. Criteria used to guide park-and-ride lot investments include: HOV direct access, adequate regional and/or local bus service levels and achieving standards for current and projected use.

The following matrix shows the hundreds of connections that will be possible at these new gateways (note: some facilities listed are existing but will be served by new regional RTA services under the Ten-Year Plan):

Snohomish County	Com. Rail	Reg. Bus	Local Bus	Park & Ride	HOV Access	Ferry	Amtrak	Ped./Bike
Everett Multi-Modal Station	●	●	●	●				●
Bond Street Station	●		●				●	●
East Everett Park-and-Ride		●	●	●				
N. Everett Transit Center		●	●					●
S. Everett Transit Center		●	●					●
112th Park-and-Ride & flyer stop (Everett)		●	●	●	●			
Mukilteo Station	●		●	●		●		●
Swamp Creek Park-and-Ride		●	●	●	●			
Ash Way Park-and-Ride		●	●	●	●			
Mountlake Terrace flyer stop		●	●	●	●			
Mill Creek		●	●					
Lynnwood Park-and-Ride enhancements		●	●	●	●			
Lynnwood Transit Center		●	●	●	●			●
Edmonds Multi-Modal Station	●		●			●	●	●

Other projects: Pacific Avenue overpass (Everett); Lynnwood Transit Center/Park-and-Ride lot connection

North King County	Lt. Rail	Com. Rail	Reg. Bus	Local Bus	HOV Access	Amtrak	Ped./Bike
Aurora Village Transit Center			●	●			●
Richmond Beach		*		*			*
Shoreline			●	●			●
Lake Forest Park			●	●			●
Lake City			●	●			●
Northgate Transit Center			●	●			●
Northgate Station	*		*	*			*
Roosevelt Station	*			*			*
Ballard Station		*		*			*
N. University District Station (45th)	●		●	●			●
S. University District Station (Pacific)	●		●	●			●
Capitol Hill Station	●			●			●
First Hill Station	●			●			●
Convention Place Station	●		●	●			●
Westlake Station	●		●	●			●
University Street Station	●		●	●			●
Pioneer Square Station	●		●	●			●
King Street/International District Station	●	●	●	●	●	●	●
I-90/Rainier Station (Atlantic St.)	●		●	●			●
McClellan Street Station	●			●			●
Columbia City Station (Edmonds St.)	●			●			●
Othello Street Station	●			●			●
Henderson Street Station	●			●			●
Georgetown Station		*		*			*
West Seattle Junction			●	●			●
Fauntleroy			●	●			●

* Provisional station subject to funding availability from within the North King County subarea.

South King County	Lt. Rail	Com.Rail	Reg. Bus	Local Bus	Park & Ride	HOV Access	Ped./Bike
Boeing Access Road Station	●	●	●	●	●		●
Tukwila Commuter Rail Station		●	●	●	●	●	●
Tukwila Light Rail Station	●			●			●
N. SeaTac Station	●			●	●		●
Sea-Tac Airport Station	●		●	●			●
SeaTac Station (S. 200th St.)	●			●	●		●
Burien Transit Center			●	●	●		●
Kent/Des Moines			●	●	●		●
Kent Commuter Rail Station		●	●	●	●		●
Auburn Station		●	●	●	●		●
Federal Way Transit Center			●	●	●	●	●
Star Lake Park-and-Ride (Federal Way)			●	●	●	●	●

East King County	Reg. Bus	Local Bus	Park & Ride	HOV Access	Ped./Bike
Canyon Park Park-and-Ride	●	●	●	●	●
Bothell Transit Center	●	●	●		●
Woodinville Park-and-Ride	●	●	●		●
Kirkland Transit Center (124th)	●	●	●	●	●
S. Kirkland Park-and-Ride	●	●	●		
Redmond Park-and-Ride	●	●	●		●
NE 40th Transit Center (Redmond)	●	●	●		●
Eastgate Park-and-Ride	●	●	●	●	●
Bellevue Transit Center	●	●		●	●
S. Bellevue Park-and-Ride	●	●	●	●	
Mercer Island Park-and-Ride	●	●	●	●	●

East King County *(continued)*	Reg. Bus	Local Bus	Park & Ride	HOV Access	Ped./Bike
Issaquah Transit Center & Park-and Ride	●	●	●	●	●
Newport Park-and-Ride		●	●		
Newcastle Transit Center		●	●		●
Renton Transit Center	●	●	●	●	●

Other projects: Willows HOV (Redmond); Woodinville arterial HOV enhancements; I-90 two-way center roadway; SR 522 HOV enhancements

Pierce County	Lt. Rail	Com. Rail	Reg. Bus	Local Bus	Park & Ride	Amtrak	Ped./Bike
Sumner Station		●	●	●	●		●
Puyallup Station		●	●	●	●		●
Tacoma Dome Multi-Modal Station	●	●	●	●	●	●	●
S. 24th Street Station	●			●			●
University & Museum Station (S. 19th St.)	●			●			●
S. 13th Street Station	●			●			●
Theater District Station (S. 9th St.)	●			●			●
TCC Transit Center			●	●			●
South Tacoma Station		●	●	●	●		●
Lakewood Station		●	●	●	●		●
SR 512 Park-and-Ride			●	●	●		●
Dupont Park-and-Ride			●	●	●		●
Parkland			●	●			●
South Hill Park-and-Ride			●	●	●		●

Using the system

Easy system access

Sound Move will create a regional transit system that is easy to reach and use by everyone including pedestrians, bicyclists, people with disabilities and other public transportation customers.

The RTA will work with local public transportation agencies, communities and local governments to place and design transit facilities that fit with local community plans. This will include making improvements within one-half mile of each station for safe, easy transit, pedestrian and bicycle access.

Transit facility designs will be flexible, allowing each station to reflect and fit into the community it serves while providing standard features for transit customers such as:

- security and safety design standards
- consistent route and schedule information
- easy-to-read and consistent signs
- pedestrian-friendly design and full access for people with disabilities
- bicycle access and storage
- transit-friendly access to allow smooth transfers from one type of public transportation to another (i.e. bus to rail, or bus to bus).
- convenient taxi access.

A one-ticket ride

Since high-capacity transit is just one part of the overall regional transportation system, it is important that Sound Move work well with services already being provided or planned at the local and statewide level. One way to make sure Sound Move provides a smooth connection with other services in the region is to develop a uniform, single-ticket fare system among local and regional transit providers. This will allow customers to use a single ticket or pass to travel on any and all of the types of transit within the region (i.e. local bus, regional bus, light rail, commuter rail and ferries). The RTA will work with public transportation providers in the region to develop an integrated fare policy for the entire public transit service network.

Coordinated routes and schedules

Simple and coordinated connections are necessary between all parts of the regional transportation network — buses, rail, ferries, carpools, vanpools, shuttles, circulators, intercity rail lines, taxis, airports, bicycles and pedestrians. These simple and coordinated connections can be achieved by sharing stations, simplifying transfer policies and using common fares.

An important part of integrating these services is providing several stations or transit centers where many transportation services come together, making transfers and connections convenient and expanding the scope of the entire transportation system.

For example: Say you live in Bellevue and want to go to the University of Washington. You catch a local bus to the Bellevue Transit Center, transfer to a regional express bus which takes you directly to the University — all accomplished with a single ticket.

Or say you want to take advantage of the state's new intercity rail service between Portland and Vancouver, B.C. but don't live near an Amtrak station but do live near a commuter rail station. You can take commuter rail to one of three combined commuter rail, intercity rail and Amtrak stations and purchase a ticket for either an intercity rail or Amtrak interstate destination. Those stations will also be served by local and regional bus service as well as taxis.

The RTA will work with local transportation providers to make sure that local and regional transit schedules mesh and that parallel, competing services are avoided.

Putting the system in place

Implementing the plan in stages

The ten-year timeframe for putting the plan in place begins the day after voters approve funding for the new regional transit system. The plan that is presented to the voters represents the RTA's preferred system based on extensive system-level planning and public involvement conducted to date. As the RTA proceeds to more detailed planning and engineering levels, it will continue to identify and evaluate alternatives that might achieve the same system goals and benefits more cost-effectively.

Individual parts of the system will come on line as they are completed and the entire system should be up and running within 10 years. While putting each part of the plan in place, the RTA will use a variety of techniques to make sure that the system is developed and operated as cost-effectively as possible. Techniques could include: value engineering, citizen committees, technical review committees and expert review committees. As services begin operating, the RTA will monitor system performance and productivity and make changes to service plans when appropriate.

HOV Expressway

Working with the state Transportation Department and through the annual budget review process, the RTA will fund construction of new access ramps to the existing and already funded HOV lanes or fund other appropriate alternatives. The state Transportation Department will then move all HOV lanes in those corridors to the inside lane of the road.

The RTA Board views completion of the state's Freeway HOV Lane "core system" in the Puget Sound region as an important priority. However, the RTA assumes the state will complete construction of the core HOV lane system in accordance with its freeway HOV policy.

If the state does not fulfill its funding obligation, the RTA Board will conduct an open and public process to determine whether RTA funding is available (e.g. from savings realized in other program elements) and should be used to help complete the core HOV lane system.

HOV access ramps are the preferred investment for improving speed and reliability of regional express buses by eliminating the need to weave across general purpose lanes to reach HOV lanes. Before building individual HOV access ramps, the RTA will work with the state Transportation Department, local transit operators, local jurisdictions and citizen committees to assess each facility's location and function. This assessment will determine whether there are ways to achieve equivalent transit speed, reliability and ridership at a lower cost or by making transportation system management

improvements instead. Regional and local land-use objectives and comprehensive plans will also be considered in the assessment.

Actual design and construction of all HOV lanes and ramps will be done by the state Transportation Department. Each HOV segment and direct access ramp will open as soon as the state Transportation Department completes it, with all of the RTA funded improvements operational by the end of ten years.

Regional express buses

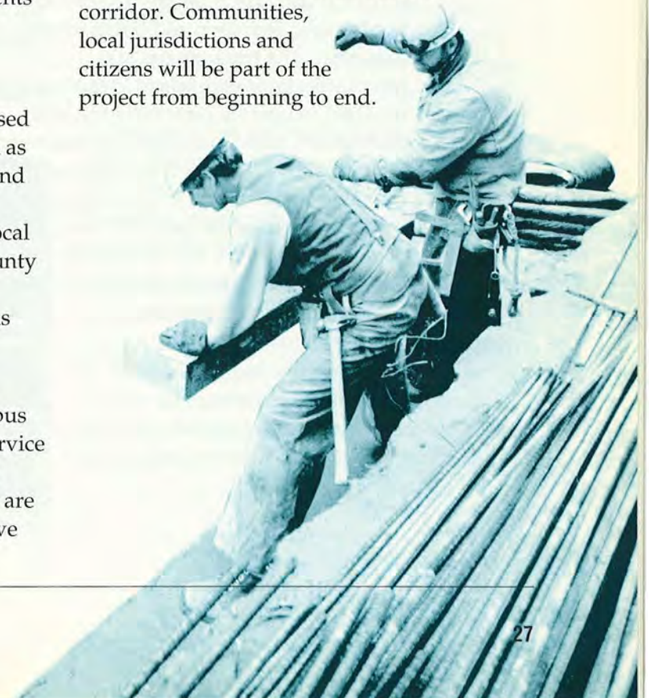
Regional express buses will be purchased immediately and begin operating as soon as the vehicles are delivered. Maintenance and passenger facilities will be expanded as necessary. The RTA will enter into interlocal agreements with Pierce Transit, King County Metro, Community Transit and Everett Transit to operate the regional express bus routes using a single-ticket policy.

The RTA will work closely with local transit operators to put regional express bus services in place. Regional express bus service will be expanded along with local transit service changes to make sure the services are fully coordinated and that subareas receive maximum improvements while the region receives maximum mobility.

In areas where existing transit markets or capital facilities don't currently support the planned new service levels, those services will be added in increments to match demand. The RTA and local transit agencies will monitor system performance and recommend changes to subarea service plans that are consistent with the RTA's adopted financial policies.

Commuter rail

The RTA Board and citizens from throughout the region have discussed and reviewed the benefits and costs of commuter rail during the entire system planning process. Because commuter rail is a major regional investment, there must be continued, deliberate and careful consideration given to developing this new north-south HCT corridor. Communities, local jurisdictions and citizens will be part of the project from beginning to end.



The commuter rail line between Tacoma and Seattle will begin operating first, followed soon after by the lines between Everett and Seattle and between Tacoma and Lakewood. Since a network of rail tracks is already in place, the necessary track and signal improvements needed for commuter rail service could take between two and four years to complete. Service could begin shortly thereafter. The track, signal and communications equipment improvements required to operate commuter rail will provide the speed and reliability necessary to offer attractive passenger service and build ridership in the corridor. These improvements will also improve the capacity, reliability and dependability of the state's intercity rail service, regular Amtrak interstate passenger service and freight train traffic.

Stage I —

Within the first two years following voter approval of funding for Sound Move, the RTA will:

- Develop contractual cost-sharing relationships with affected organizations and jurisdictions before putting commuter rail service in place (affected organizations and jurisdictions could include but are not limited to the Burlington Northern Santa Fe and Union Pacific railroads; the ports of Tacoma, Seattle and Everett; the state Transportation Department; Amtrak; the federal government; and local governments). These partnerships will result in lower capital costs than would occur if the RTA were to fund the improvements alone.
- Further analyze projected operating and maintenance costs to try to reduce costs. The goal is to achieve operating and maintenance subsidy levels that come as close as possible to regional bus service subsidy levels.
- Establish performance objectives to monitor and evaluate commuter rail service productivity related to cost, ridership and other relevant measures.
- Assess the results of the preceding tasks and make final decisions about what modifications — if any — should be made to the commuter rail program before any contracts are awarded (local jurisdiction review and public input will be an integral part of this process).

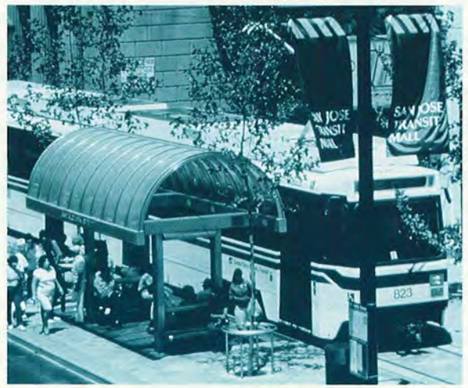
Stage II —

- The RTA will negotiate service-provider contracts as part of commuter rail operations to make sure the authority is reimbursed for capital facilities and equipment costs it may no longer need to use.
- Based on system performance and productivity monitoring, the RTA may choose to modify service (i.e. increase or decrease service; add or drop stations; add or delete segments; change days and times of service, etc.).

In keeping with RTA financial policies, any savings realized by modifying or reassessing the commuter rail program will be reallocated to the subarea originally assessed with that portion of program cost.

Electric light rail

The region has discussed and reviewed the benefits and costs of various electric light-rail alignments throughout system planning. Based on extensive public and jurisdictional discussion and review, the starter system



presented to the voters is the RTA's preferred alternative. However, since this is a major regional investment and provides the region with significant new transportation capacity, there needs to be continued deliberate and careful consideration of the alignments, markets served and station locations.

The Northgate to SeaTac (South 200th Street) electric light-rail line will be built in three segments that will be developed in several stages. The preferred alignment for the first segment is from downtown through the Rainier Valley to SeaTac (South 200 Street). Between Boeing Access Road and SeaTac, the RTA will evaluate an alignment using State-Route 99 and an alternative route using Interurban Avenue to Southcenter.

The preferred alignment for the second segment is from downtown Seattle through First Hill and Capitol Hill to the University District. The preferred alignment for the third segment is through the Roosevelt District to Northgate.

The first implementation stage will include environmental review, preliminary design and preferred alternative refinement for each of the three segments. This stage will also include an extensive community process to refine the preferred alternatives for each segment and define potential alternative alignments.

Before supporting construction of the preferred alternative, alternative alignments will be evaluated to determine which maximize ridership, minimize capital and operating cost per passenger trip and create the greatest economic net benefit. In particular, special attention must be paid to which alignment generates the most new ridership as opposed to riders simply shifting from one type of transit to another.

Once preliminary engineering and environmental review is completed the RTA will begin the next stage — final design and right-of-way acquisition followed by construction. The RTA intends to begin building the south segment first while final engineering is completed on the two north segments. When final engineering is complete, the RTA will conduct a major review of project funding status to make sure the authority's equity principle can be met before construction contracts are awarded. If the cost is lower than estimated and/or additional funds have been appropriated, the RTA will build the light-rail segment between the University District and Northgate.

When electric light-rail service begins operating in the downtown Seattle transit tunnel, the number of people using the tunnel will triple. This may require some buses to be shifted to surface streets. The RTA will work with Seattle and King County to address bus operational issues that may arise as a result of this shift.

As with any major construction project the community will be involved in the project from beginning to end. Opportunities for public and technical review will be included in each stage of the implementation plan.

Community connections

To maximize public access to the regional system, the RTA will fund a variety of community connection facilities including transit centers, transit access improvements, and park-and-ride lots. These facilities are intended to improve local access to the regional system while improving connections to local transit services.

The RTA intends to maximize the local benefits of these facilities by promoting designs and locations that encourage joint development and maximize pedestrian access. The RTA also intends to evaluate the degree to which these facilities reduce the need for people to drive. The objective of the evaluation will be to produce a mix of investments within the available budget which maximize public transportation benefits in the area around the proposed community connection facilities. The location, design and construction of these facilities will be determined through a collaborative process involving the public, local jurisdictions and local transit agencies.

Park-and-ride lots

Sound Move adds park-and-ride lot capacity in some areas to get the best performance out of the transit system while providing convenient access for transit customers. The demand for expanded park-and-ride lot capacity can be reduced if the RTA, local transit agencies, local jurisdictions and the public can successfully:

- encourage as many people as possible to reach the transit system using local transit or other HOV modes
- develop land-use polices that are transit- and pedestrian-friendly and encourage mixed-use development around transit stations
- encourage joint use and development of park-and-ride lots
- allow park-and-ride lots to be converted to other uses when transit- and pedestrian-friendly development patterns make the specific site inappropriate for continued park-and-ride use
- develop ways other than park-and-ride lots that are as efficient and effective in achieving ridership goals with less effect on the environment.

Keeping on track and within budget

Sound Move is based on extremely conservative cost and ridership assumptions and methodologies reviewed by an independent expert review panel appointed by the governor, the state Legislature and the state Transportation Department. In addition, the RTA has adopted strict cost management control principles to make certain Sound Move stays on schedule and within budget. Those principles include:

- hiring independent auditors and appointing a citizen oversight committee to monitor RTA performance and make sure the authority maintains full public accountability
- rewarding contractors for excellence and penalizing them for cost overruns or not completing projects on schedule
- using outside or independent professional "value" engineers to analyze preliminary designs and identify, wherever possible, less expensive ways of completing projects.

A community effort

Citizens played a key role in shaping the ten-year system plan and will play an even greater role in its implementation. Sound Move reflects the dynamic nature of our region. It therefore needs the ideas and collaboration of the region's diverse interests to put the many new transportation services and facilities in place.

The RTA will provide the resources and support necessary to involve the public at all levels of planning (local, corridor, regional) and during all phases of putting the plan in place (environmental, preliminary engineering, final design, construction, operation). The RTA will also support independent citizen and/or technical review committees to oversee and provide advice to the RTA during detailed electric light-rail segment planning.

One of the first tasks of a citizen committee for the north light-rail line will be to consider and to help identify an alternative northern route which can be evaluated against the preferred alternative during environmental review and preliminary engineering stages. At a minimum the evaluation will include performance criteria such as ridership, cost, cost-effectiveness, compatibility with local community plans, direct service to the University District, speed and capacity, and impacts to existing transportation capacity in the corridor. The time and resources devoted to the task of identifying an alternative northern route shall be established at the beginning of the citizen process.

Public involvement principles

The RTA will work with local public transportation agencies, local jurisdictions and agencies to create an open public involvement process with ample opportunities to inform and involve the community. Citizens and groups will have extensive opportunities to interact with, and receive a response from, appointed and elected officials on issues of interest or concern. The RTA will ensure that:

- citizens have access to the planning process
- citizens' input is actively sought at all stages of planning and development
- a representative cross-section of interests is engaged
- all programs and activities are publicized and the proceedings and records made available for public review
- citizens have opportunities to affect decisions before they are finalized
- citizens' inquiries, suggestions and ideas are answered or accounted for in the decision-making process.

The environmental process

A goal of the plan is to maximize the positive effects we can make on our region's economic, social and physical environments. The RTA will work with the community to carefully evaluate the short and long-term effects of implementing and operating Sound Move investments. Citizens will be involved in community-level environmental review of each facility as it is planned in greater detail. The RTA will fully comply with all federal, state and local environmental evaluation processes.

Sound Move

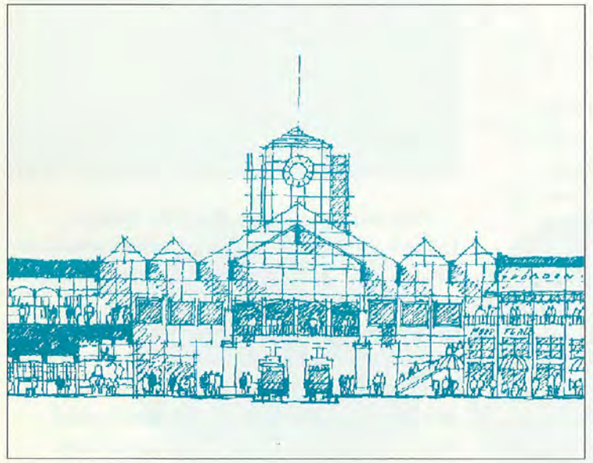
Paying for the system

RTA taxing and bonding authority

State law allows the RTA to ask voters in the Central Puget Sound region to increase their local taxes to pay for a regional HCT system. The law allows the RTA to ask voters within the RTA District for up to a 9/10 of one percent sales tax, 8/10 of one percent motor vehicle excise (license tab) tax, and an employer tax of $2 per employee.

The financial plan assumes the local funding for Sound Move at less than 40 percent of the authorized level. Funds will come from a 4/10 of one percent increase in sales tax and a 3/10 of one percent increase in the license tab tax to be collected within the RTA District.

State law also allows the RTA to issue municipal bonds. The financial plan for Sound Move includes long-term bond financing at a level significantly lower than state law allows.



Financial plan framework

The proposal to be placed before the voters will be a ten-year construction plan financed in part by long-term bonds. As elements are completed, they will begin operating during that ten-year period. After the ten-year period, the RTA's tax revenues will be used to continue transit operations and pay for debt service. Any second phase capital program which continues local taxes for financing will require approval by a vote of those citizens within the RTA District.

The RTA is committed to building and operating a ten-year system plan that can be confidently funded and completed as promised to the region's citizens. To carry out this commitment, the RTA adopted the following guidelines for the financial plan:

- **local tax rates** — Sound Move will be funded in part by local revenues, generated within the RTA District boundaries, including a local sales tax increase not to exceed 4/10 of one percent and motor vehicle excise (license tab) tax increase not to exceed 3/10 of one percent.
- **state and federal program funding** — The RTA assumes no state funds, thus placing no additional demand on limited state resources that are needed for other regional transportation investments.

  The RTA assumes federal funding for new rail starts of $55 million per year and other federal funding sources of $18 million per year. Additional funds will be requested but the plan does not speculate beyond current sound estimates of federal support.

- **conservative borrowing levels** — The RTA Board has established financial policies to ensure conservative use of long-term debt (bonding). Because transit facilities provide benefits over a long span of time, it is reasonable to finance their construction over a period that extends beyond the ten-year system plan construction timeframe.
- **subarea benefits** — The RTA is committed to invest revenues to benefit the areas where they are raised. The amount of long-term debt financing used to benefit each subarea will be based on its financing capacity (defined by revenues generated and ability to repay debt after covering operating expenses).
- **ten-year implementation** — Different parts and segments of the plan will be implemented in stages and be operational as soon as possible. The RTA is committed to the entire system being completed and operational within 10 years.

Costs and schedule

Table 1 summarizes the cost of putting Sound Move in place and operating regional express bus routes and rail lines. The costs associated with construction include markups to cover potential mitigation, engineering, administration, project management, insurance, and other overhead costs, as well as contingencies for unforeseen expenses. Operating and maintenance costs include overhead and administration expenses, and an operating reserve account equal to two months operating costs set aside for unexpected expenses.

Table 1. Costs — All figures in $millions

HOV Expressway access ramps	$377
Regional express bus	$361
Commuter rail	$669
Electric light rail	$1,801
Community connections	$255
Regional fund/reserves	$280
Debt service	$171
TOTAL	**$3,914**

Table 2. Revenues — All figures in $millions

Local taxes	$1,980
Bonding	$1,052
Federal	$727
Farebox/other	$155
TOTAL	**$3,914**

The schedule for funding the system follows the general implementation schedule described in the "Putting the System in Place" section. Actual future cash flow will determine detailed scheduling priorities. The long-term cash flow analysis assumes that debt financing (bonds) will be necessary during the concentrated construction and implementation stages when capital costs alone exceed annual revenues.

Funding

The financial principles provide the foundation for determining what revenue sources should be relied upon to pay for Sound Move. The system plan will be paid for with a combination of voter approved local taxes, federal grants, farebox revenues, borrowed funds (bonds), and interest revenues (see Table 2). System operating costs beyond the ten-year implementation period will be paid for with local taxes, farebox revenues, interest earnings, private sources, and federal operating assistance.

Risk assessment

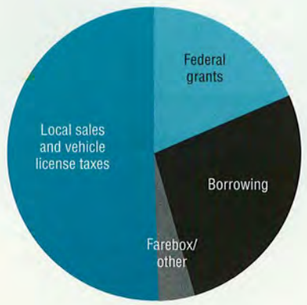
The assumptions used to project costs and revenues for Sound Move are consciously conservative. The assumptions have been carefully analyzed to provide a cushion in case there are adverse changes in one or more of the revenue or expense projections. Experience shows that if one assumption changes, other key indicators would likely change in a similar manner. For example, if inflation were to escalate projected costs, interest rates and earnings and tax revenues would also be higher than plan projections. The RTA, however, has adopted several strategies within its financial polices to reduce the impact of any imbalance between planned expenditures and available revenues.

Financial policies

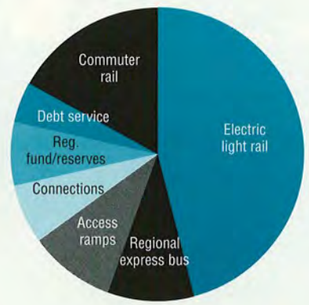
The financial policies provide important tools to the RTA to make sure that Sound Move is financed on time and within budget, and that principles and commitments to the public are met.

- **Distributing revenues equitably** — Since local tax revenues will be used to benefit the RTA District's five subareas based on the share of revenues each subarea generates, adopting this ten-year plan represents an equitable distribution of revenues and benefits. Budgets for each of the five subareas, including the subarea's projected share of local taxes, borrowed funds, federal grants, farebox revenues, and related expenditures, will be monitored and adjusted on an annual basis to make sure that equitable distributions of revenues are maintained.

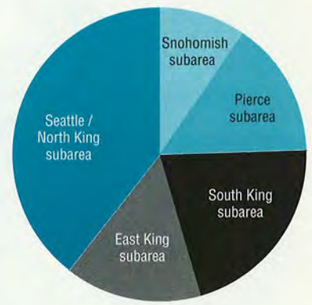
Revenues



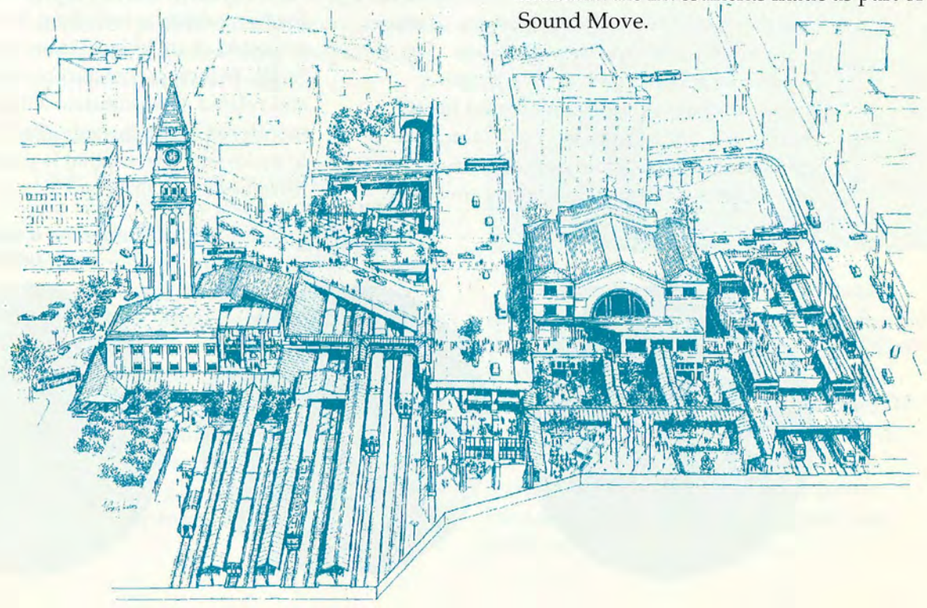
Expenditures



Revenues & expenditures by subarea



- **Regional fund** — The regional fund will pay for systemwide elements of Sound Move. These elements include the integrated fare policy that creates a single-ticket ride, innovative technologies, and planning for any future capital investments that will be placed before the region's voters. The regional fund will also pay for RTA administration. The fund will be created with an equal percentage of local tax revenues contributed by each of the five subareas plus interest earnings.
- **Conservative borrowing levels** — The RTA is committed to placing limits on its use of long-term debt. It has adopted several policies to make sure this commitment is met. These policies establish the conservative approach the RTA will use to calculate the cash flow available to service debt, set a debt service coverage ratio policy, and reserve a portion of the RTA's debt financing capacity to provide a future potential funding source for unforeseen circumstances.
- **Public accountability** — The RTA will hire independent auditors and appoint a citizen oversight committee to monitor RTA performance in carrying out its public commitments.
- **System expansion or tax rollback** — Any second phase capital program which continues local taxes for financing will require voter approved within the RTA District. If voters decide not to extend the system, the RTA will roll back the tax rate to a level sufficient to pay off the outstanding bonds and operate and maintain the investments made as part of Sound Move.



Sound Move — The Ten-Year Regional Transit System Plan

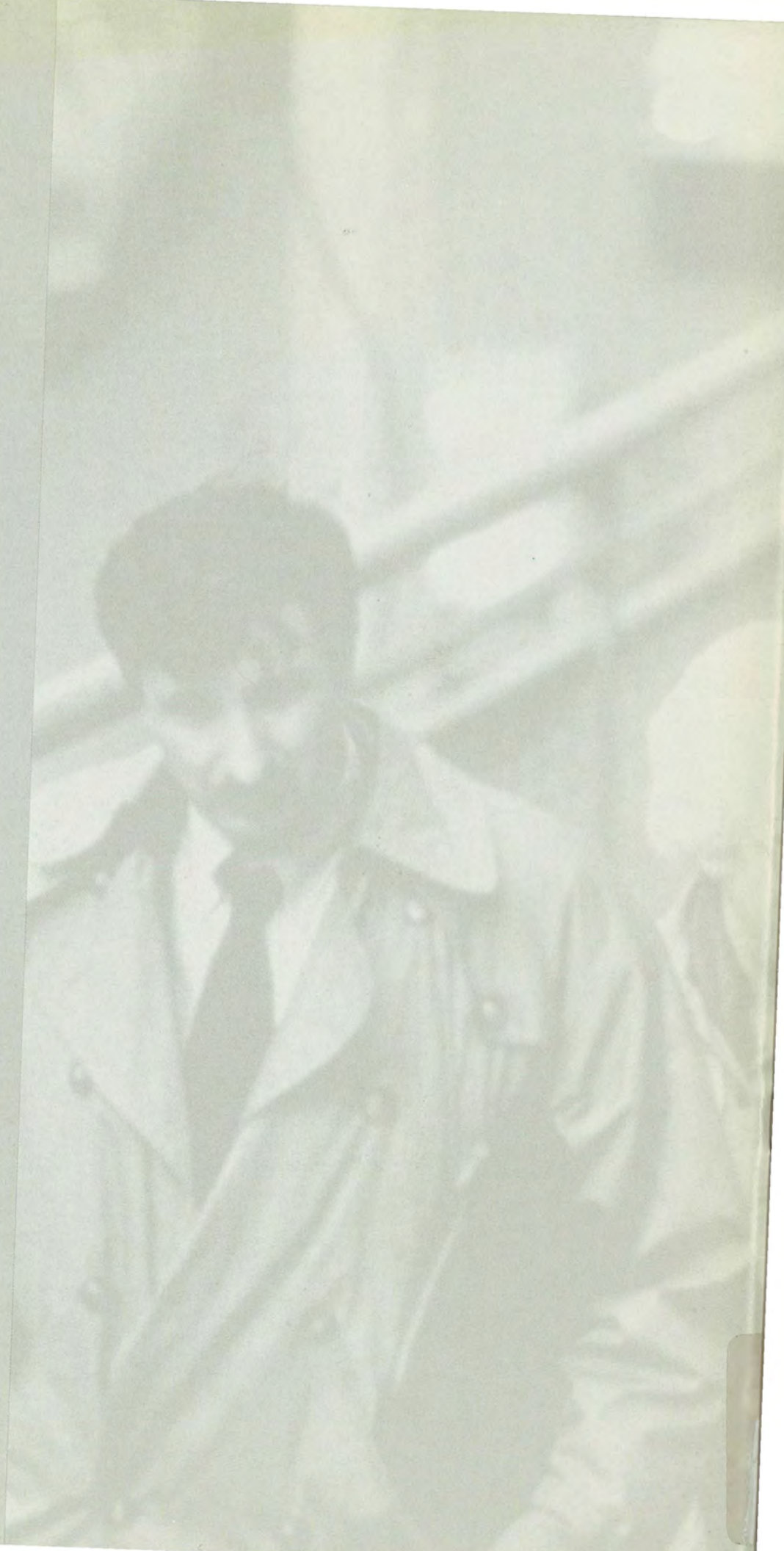
Prepared May 1996.

Executive Director: Bob White
Editor: Tim E. Healy
Designer: Kathryn DeMeritt

Central Puget Sound
Regional Transit Authority
Union Station
401 S. Jackson St.
Seattle, Washington 98104-2826
E-mail: main@soundtransit.org
1-800-201-4900

This information is available through the Worldwide Web at http://www.soundtransit.org.

This information is available in accessible formats by request at 206.398.5000 (voice) or 206.398.5410 (TTY/TDD).



CENTRAL • PUGET • SOUND
Regional Transit Authority