SOUND TRANSIT

Motion No. M99-68

Sounder Commuter Rail Service Launch Approaches BACKGROUND AND COMMENTS

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Executive Committee	10/15/99	Discussion/Possible Action to Recommend Board Approval	Paul W. Price	(206) 398-5111
Board	10/28/99	Action		

ACTION:

Through this motion the Board of Directors establishes for staff a timeline for the launch of the Sounder commuter rail services in the Tacoma-to-Seattle corridor.

BACKGROUND:

Sound Move and the Implementation Guide (1997) provide the blueprint and the schedule for the design, construction, and operation of the Sound Transit (ST) system. Both documents state that Sounder commuter rail service builds upon the railroad network already in place, increasing both the people-moving and freight capacity of the system by making necessary track and signal improvements. An initial challenge for Sounder has been to make sure that all parties using track capacity in the region can indeed operate in a safe and unimpeded manner. Another challenge has been to meet the initial service dates forecasted in Sound Move and the Implementation Guide.

Sound Move and subsequent Board actions have signaled a continuing commitment to working with the Burlington Northern Santa Fe Railway (BNSF), Union Pacific Railroad (UP), Amtrak, WSDOT, and the Ports of Tacoma and Seattle to insure the continuation of unimpeded freight and inter-city passenger rail in the region. Operating and capital agreements with BNSF (approved by the Board through Resolution No. R99-22 on August 26, 1999) are nearing completion and execution by both parties. These agreements put in place ST's funding of a variety of track and signal improvements necessary to ensure capacity for freight and passenger trains in the Tacoma-to-Seattle corridor. The negotiations leading to this agreement have been more complex and have required more time than originally planned. However, negotiation of the business terms of the agreements are largely concluded, and the terms reflect strong agreements providing improvements that will increase efficiency, capacity, and safety for the next 40 years. In addition, the agreements have increased Sounder's capacity to add additional trains (up to 30 in Tacoma–Seattle), beyond the 18 trains per day called for by Sound Move, while requiring no additional future capital costs for signals and track improvements.

The BNSF, as the owner of the right-of-way, insists that commuter service can only be implemented in **phases** consistent with the completion of track and signal improvements. In

recognition of this practical need to phase-in service as the BNSF-required track and signal improvements are completed, staff has prepared three approaches to a service launch. Any approach must be based on the following realities of the project construction and implementation schedule:

- The design for the track and signal improvements was completed in August 1999.
- Because of the need to assign and train railroad crews, among other needs, Sounder service of one roundtrip per day between Tacoma and Seattle could begin four months after execution of the operating and capital agreements with BNSF.
- Ten months after execution of the agreements, the connection from the BNSF mainline to the Tacoma Dome Station will be completed. Any service prior to this milestone must terminate at the existing Tacoma Amtrak Station or another location such as Puyallup or Sumner stations.
- Eleven to thirteen months after execution of the agreements, sufficient track and signal improvements will be completed to allow up to three roundtrips per day.
- Eighteen to twenty-two months after execution of the agreements, sufficient track and signal improvements will be completed to allow a ramp up of service to nine roundtrips per day called for by Sound Move.
- Delivery of the 38 passenger cars now on order for Tacoma-to-Seattle service will begin in October 1999 and will extend until the summer of 2000. Locomotives will begin arriving in December 1999.

In essence, the above realities translate into the following three alternative approaches for launching the Sounder commuter rail service:

- A low level of service (one roundtrip per day) that can be implemented at the earliest possible opportunity. This approach exposes riders to several stations at which construction is incomplete and parking unavailable for some months, as well as to the risk of unreliable service due to track and signal construction along the railway.
- A moderate level of service (three roundtrips per day) that can be implemented only after some of the most critical track and signal improvements have been completed. With this approach, stations and an adequate supply of parking would be complete upon service launch. Because construction of track and signal improvements will still be underway, a risk of unreliable service schedules remains.
- A high level of service, representing the full service promised by Sound Move (nine roundtrips per day), that can be implemented only after all the track and signal improvements considered essential by the BNSF are in place and functional.

For simplicity and clarity, this "Background and Comments" paper in support of Motion No. M99-68 discusses alternative Sounder service levels in terms of "roundtrips" per day. A roundtrip is defined as a train between Tacoma and Seattle (making stops at intervening stations) in the AM peak period paired with a mirror image train in the PM peak period. Thus the term "roundtrip" as used here is equivalent to the roundtrip a commuter would make consisting of a trip from their home to work in the morning with a mirror image return trip in the evening.

RELEVANT BOARD POLICIES AND PREVIOUS ACTIONS TAKEN:

- Adoption of Sound Move, the Ten-Year Regional Transit System Plan (May 31, 1996)
 Calls for commuter rail service to be implemented within two to four years of voter approval, and establishes a ten-year program budget.
- Adoption of Motion No. 32, the Sound Move Implementation Guide (May 22, 1997) Establishes targets for the implementation of Sounder service.
- Adoption of Resolution No. R98-25, (June 11, 1998)
 Authorizes the execution of a contract with Bombardier Transit Corporation for purchase of passenger coaches and cab cars.
- Adoption of Resolution No. R98-38, (July 23, 1998)
 Authorizes the execution of a contract with General Motors Corporation, Electro-Motive Division, for the purchase of locomotives.
- Adoption of Resolution No. R98-49, the 1999 Fiscal Year Budget, (November 12, 1998) Establishes the Sounder program budget for 1999 and through the remaining years of Sound Move implementation.
- Adoption of Resolution No. R99-22, (August 26, 1999)
 Authorizes execution of contracts with BNSF for the operation of the Tacoma-to-Seattle commuter rail line and for a capital investment package of track and signal improvements.
- Adoption of Resolution No. R99-23, (August 26, 1999)
 Authorizes execution of Amendment No.1 of the ST/BNSF final engineering agreement, for purchase of capital items with long lead times needed for the Tacoma-to-Seattle commuter rail project.

KEY FEATURES:

The ability to provide Sounder Tacoma-to Seattle commuter rail service at differing levels of service quality is influenced by several factors that change through time over the next one to two years. These factors include:

- Travel time, influenced by the degree to which planned capacity improvements (track and signal) have been completed along the railway between Tacoma and Seattle.
- Service reliability, also influenced by the completion of capacity improvements.
- The degree to which stations and supporting facilities (e.g., parking lots) are complete and available for use by riders. (In addition to other factors, the lack of an executed agreement with the BNSF is delaying construction of station elements located on railroad property. These elements include some platforms and canopies.)
- Connections to other transit (Pierce Transit and King County Metro), including appropriate changes to the bus service networks and schedules.
- Completion of the new rail connection from the BNSF mainlines to the Tacoma Dome Station, permitting use of that major terminal.

• Availability of the Sounder fleet.

Staff has developed three service launch options for Board consideration:

Option 1:

Launch of a low level of service, starting four months after execution of the ST/BNSF agreements

Option 1 would introduce the Sounder commuter rail service with one roundtrip per day on the Tacoma-to-Seattle route. The timing of an Option 1 launch would help alleviate the perception of Sounder being behind schedule. However, an Option 1 launch may cause other problems such a lack of seating capacity to meet demand, and unreliability due to ongoing and extensive construction of track and signal improvements along the railway during the hours of operation.

Option 2:

Launch of a moderate level of service, starting 11 to 13 months after execution of the ST/BNSF agreements

Option 2 would consist of three roundtrips per day. While not full service as described in Sound Move, three roundtrips would provide the public with schedule flexibility, and adequate seating capacity for a start-up service. Promotions and publicity could provide exposure during this time, augmented by carefully targeted advertising. The risk of service unreliability remains with an Option 2 launch, though not as great as with Option 1 because of completion some critical track and signal improvements during the period between four and thirteen months following execution of the ST/BNSF agreements.

Option 3

Launch of a high level of service, starting eighteen to twenty-months after execution of the ST/BNSF agreements

Option 3 would consist of implementing service with a rapid ramp-up to nine roundtrips per day along the corridor, and would offer a greater opportunity for meaningful reverse-commute service (service that terminates in Tacoma in the morning and in Seattle in the evening). Option 3 is also the level of service called for in Sound Move, but the timing is delayed well beyond the schedule called for in the Implementation Guide. However, by timing the service launches with the completion of essential tack and signal projects, service would be as fast and reliable as promised.

Each of the three options presents particular opportunities and issues for Sound Transit. These are presented in Exhibits A and B, attached.

FUNDING:

The "Proposed 2000 Budget" document presented to the Board recently includes funding adequate to accomplish either service launch approach "Option 1" or "Option 2" (see page 55, second paragraph). As described here, "Option 3" does not necessitate any operating funds in year-2000.

Within the currently proposed budget, the Sounder "Transit Operations Budget" (page 69) includes the following funding directly related to the operation of trains by the BNSF and along their railway:

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$2,500,000 for maintenance of right-of-way,
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- \$ 95,165 for leased space for crew layover,
- \$ 271,000 for fuel (budgeted within "Materials and Supplies"), and
- + \$1,717,100 for purchased transportation services \$4,583,265

When all related costs are considered, the "Proposed 2000 Budget" includes the following funding directly related to Sounder service operated during calendar year 2000:

- \$ 4,583,265 for BNSF-related costs,
- \$ 440,000 for marketing,
- \$ 2,330,000 for maintenance of equipment (Amtrak),
- \$ 856,441 for maintenance of stations,
- \$ 1,415,874 for security,
- \$ 1,250,000 for insurance, and
- + \$\frac{\$2,037,072}{\$12.912,652}\$ for all other operating costs

ALTERNATIVES:

The operating characteristics of three alternatives for launching Sounder commuter rail service in the Tacoma-to Seattle corridor are described throughout this background paper in support of Motion No. M99-68. These three alternatives are those that appear to be acceptable to the owner of the railway, the BNSF.

Opportunities and issues presented by the three alternative launch approaches are summarized in Exhibits A and B, respectively.

CONSEQUENCES OF DELAY:

The launch of Sounder service is primarily tied to two actions. The first, is a Board decision regarding the level of service to be implemented -- one, three or nine roundtrips per day. The second, is the execution of the ST/BNSF capital and operating agreements -- for that action

marks the practical start of any service launch schedule. Staff is working to settle all remaining issues with the BNSF so that execution of the agreement can occur as soon as possible.

The launch service option needs to be selected as quickly as the Board can become comfortable with this important decision. Should the Board select the "Option 1" launch approach, ST will have only four months following execution of the ST/BNSF agreement to put in place marketing and all other necessary programs (e.g., "Ambassador" recruitment and training) now on hold.

LEGAL REVIEW:

The Legal Department has reviewed and approved the Background and Comments and the Motion as to legal sufficiency.

SOUND TRANSIT

MOTION NO. M99-68

A motion of the Board of the Central Puget Sound Regional Transit Authority establishing a timeline for the launch of the Sounder commuter rail services in the Tacoma-to Seattle corridor.

Background:

Both Sound Move and the Implementation Guide (1997) state that Sounder commuter rail service should build upon the railroad network already in place, increasing both the peoplemoving and freight capacity of the system by making necessary track and signal improvements. The increase in capacity is necessary to ensure that all parties using track capacity in the region can indeed operate in a safe and unimpeded manner. Subsequent Board actions have signaled a continuing commitment to the continuation of unimpeded freight and inter-city passenger rail in the region. Operating and capital agreements with BNSF (approved by the Board through Resolution No. R99-22 on August 26, 1999) are nearing completion and execution by both pacties. These agreements put in place Sound Transit's funding of a variety of track and signal improvements necessary to ensure capacity for freight and passenger trains in the Tacoma-to-Seattle corridor.

The Burlington Northern and Santa Fe Railway, as the owner of the right-of-way, has consistently insisted that commuter service can only be implemented in phases, consistent with the completion of necessary track and signal improvements. In recognition of this practical need to phase-in service as the required track and signal improvements are completed, the Board has considered three alternative approaches to a launch of Sounder service in the Tacoma-to-Seattle corridor.

Motion:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that staff implement Sounder commuter rail service in the Tacoma-to-Seattle corridor in accordance with the Executive Committee recommendation as stated below:

Launch a modified approach Option 2. This option would introduce the Sounder commuter rail service with three roundtrips per day on the Tacoma-to-Seattle route, provided that the Sound Transit/Burlington Northern Santa Fe Railway capital and operating agreement approved by the Board through Resolution No. R99-22 (August 26, 1999) specifies a commitment that service will begin in September, 2000. Staff is directed to inform the Board as soon as possible if a September 2000 service launch date cannot be met. If Burlington Northern does not commit to a 2000 start-up date, the Board will reconsider Option 1.

Possible Alternative Options considered by the Executive Committee:

Launch Approach Option 1. Option 1 would introduce the Sounder commuter rail service with one roundtrip per day on the Tacoma-to-Seattle route within four months after execution of the Sound Transit/Burlington Northern Santa Fe Railway capital and operating agreement approved by the Board through Resolution No. R99-22 (August 26, 1999).

OR

Launch Approach Option 2. Option 2 would introduce the Sounder commuter rail service with three roundtrips per day on the Tacoma-to-Seattle route within eleven to thirteen months after execution of the Sound Transit/Burlington Northern Santa Fe Railway capital and operating agreement approved by the Board through Resolution No. R99-22 (August 26, 1999).

OR

Launch Approach Option 3. Option 3 would introduce the Sounder commuter rail service with nine roundtrips per day on the Tacoma-to-Seattle route within eighteen to twenty-two months after execution of the Sound Transit/Burlington Northern Santa Fe Railway capital and operating agreement approved by the Board through Resolution No. R99-22 (August 26, 1999).

Approved by the Board	of the Central	Puget S	Sound Regional	l Transit Authority	at a regular
meeting thereof on the	11		October ,		· ·

Paul E. Miller Board Chair

ATTEST:

Marcia Walker

Board Administrator

EXHIBIT A

OPPORTUNITIES ASSOCIATED WITH EACH ALTERNATIVE SOUNDER SERVICE LAUNCH APPROACH

	OPTION 1 one roundtrip	OPTION 2 three roundtrips	OPTION 3 nine roundtrips
PERCEPTION	 Introduction very close to <i>Implementation Guide</i> dates* Time between delivery (and first sighting) of trains and service start minimized Launch of service very nearly on the <i>Implementation Guide</i> schedule 	Relatively comprehensive service delivered consistent with Sound Move goals*	 First image of train and facilities is a complete system * First experience with schedule most positive High capacity and frequency of service
SERVICE QUALITY	Gradual introduction allows time to address any problems with service or equipment	 Gradual introduction allows time to address any problems with service or equipment All stations and parking complete 	 Time to work through problems detected in trial runs All stations and parking complete Closer to start of Lakewood-Tacoma and Seattle-Everett service
MARKETING	 May be able to tie marketing strategy to the millenium and new era for service Earliest introduction allows earliest impact from press coverage 	 Early success stories in media Time to pre-sell service and tickets Partial service date close to full launch 	 Advertising budget can be concentrated Full service launch is a big splash in media Ad campaign would merge into additional service

^{*} Surveys show majority of population does not know when service will be introduced

EXHIBIT B

ISSUES ASSOCIATED WITH EACH ALTERNATIVE SOUNDER SERVICE LAUNCH APPROACH

	OPTION 1	OPTION 2	OPTION 3
	one roundtrip	three roundtrips	nine roundtrips
PERCEPTION	 Public has higher expectations about level of service First impression is of partial project Minimal promotions possible because of limited service capacity Because of fixed costs, the "per unit" operating costs will 	Public/media may want to know why early service delayed First impression will be of "limited" service and schedule flexibility	An earlier launch date has been announced, some public criticism will occur Time between train delivery and service would be one year
SERVICE QUALITY	 be high Lack of schedule flexibility Capacity may not be adequate for demand Only 4 of 7 stations will be operable 4 months from this date. No stations will have a large parking supply available. The connection to Tacoma Dome Station will not be complete. Grade crossings improvements will not be complete, increasing travel times (3-5 minutes) 	Some grade crossing improvements are not complete occasionally increasing travel times. Track & signal construction will be ongoing, somewhat affecting service reliability	May prove difficult to launch full-service all at once, rather than through gradual implementation.
	Track & signal construction will be ongoing, affecting service reliability		
MARKETING	 Have to conserve marketing budget for service ramp-ups Media may focus on limited schedule 	Media efforts less focused than with a full service launch	• None