

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2002-38

Endorsement of I-405 Corridor Program High Capacity Transit Elements (Bus Rapid Transit System Development) included in the Final Environmental Impact Statement's Preferred Alternative

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Executive Committee Board	4/4/02 4/11/02	Discussion/Possible Action to Recommend Board Approval Action	Paul Matsuoka, Policy and Planning Officer Barbara Gilliland, Program Manager Brian O'Sullivan, Project Manager, Phase II Planning	(206) 398-5070 (206) 398-5051 (206) 398-5292

Contract/Agreement Type:	3	Requested Action:	3
Competitive Procurement		Execute New Contract/Agreement	
Sole Source		Amend Existing Contract/Agreement	
Memorandum of Agreement		Contingency Funds Required	
Purchase/Sale Agreement		Budget Amendment Required	

4 Applicable to proposed transaction.

OBJECTIVE OF ACTION

- Obtain Board endorsement, as a co-lead agency, of the high-capacity transit (HCT) elements (Bus Rapid Transit system [BRT] development) contained in the I-405 Corridor Program Final Environmental Impact Statement (FEIS) preferred alternative, scheduled for publication in April 2002

ACTION

- Approve a motion endorsing the HCT-related elements contained in the I-405 Corridor Program's FEIS preferred alternative and authorizing the Executive Director to take all necessary steps to implement this endorsement

KEY FEATURES

- Authorizes the Executive Director to inform the Washington State Department of Transportation that, as a co-lead agency, the Board endorses the FEIS preferred alternative's HCT-related elements (BRT development). This opens the way to Sound Transit's signing the I-405 FEIS, scheduled for publication in April 2002.

BUDGET

Not Applicable

FINANCIAL IMPACTS

Impact on Current Year Budget:

Not Applicable

Impact on Sound Move Budget:

Not Applicable

Impact on Cost-to-Complete:

Not Applicable

Impact on Subarea(s) Budget(s):

The current availability of unanticipated revenues of the East King subarea has created the potential for certain HCT-related projects identified in the I-405 FEIS to be incorporated in the Sound Move Phase I program (1997-2006).

M/W/DBE AND/OR SMALL BUSINESS PARTICIPATION

Not Applicable

HISTORY OF PROJECT

Sound Transit has been a co-lead agency with WSDOT (lead), King County, the Federal Transit Administration, and the Federal Highway Administration for over two years on this “programmatic” multi-modal corridor planning effort for I-405’s future out to 2020 and beyond. We have helped to shape and evaluate the HCT-related elements now being advanced as part of the FEIS Preferred Alternative.

In October 2001, staff briefed the Board on the project and described the alternatives reviewed in the Draft EIS. At that time, staff informed the Board that it recommended that BRT (and BRT related HCT elements) be identified as the preferred alternative and that staff intended to carry this recommendation to the other project co-leads for the purpose of fashioning a preferred multi-modal alternative. The Board also passed a motion authorizing Sound Transit’s representative on the I-405 project Executive Committee to voice this position in order to shape the preferred alternative advanced to FEIS analysis (attached as Exhibit I).

Staff has since worked with the other co-leads of the project and BRT is now the identified preferred HCT option for the corridor. The FEIS is now being prepared for publication, and staff needs the Board’s formal action on the HCT recommendation, which will then permit the Executive Director to take the necessary actions on the FEIS with the other co-leads.

**Prior Board or Committee Actions
and Relevant Board Policies**

Motion or Resolution Number	Summary of Action	Date of Action
Motion M2001-113	A motion of the Board of the Central Puget Sound Regional Transit Authority to authorize Sound Transit's I-405 Executive Committee representative to recommend specified HCT related elements be incorporated into the I-405 Preferred Alternative.	October 2001
Briefing	I-405 Draft EIS and HCT-related elements (joint presentation with WSDOT staff)	October 2001
Briefing	I-405 briefing and BRT presentation	August 2001
Voice vote (no associated motion)	I-405 and Trans-Lake Co-lead participation authorization	April 2000

CONSEQUENCES OF DELAY

Lack of formal Sound Transit Board endorsement of the HCT elements contained in the preferred alternative would delay our ability to sign off on the FEIS as a co-lead agency, thereby possibly delaying its publication and the subsequent completion of a Record of Decision.

REGIONAL PARTNERSHIP AND COOPERATION

Ongoing:

- 3 Co-lead agency participation on the project management team
- 3 Member, Technical Steering Committee Member
- 3 Executive Committee (Board Member Chuck Mosher)

PUBLIC INVOLVEMENT

In concert with WSDOT, the project management team and committee-related activities, Sound Transit staff has been actively engaged since 1999 in an extensive array of I-405 program public involvement activities, both with individual corridor jurisdictions, public open houses, and public hearing events. The public involvement process has been extensive. It has included work with three project committees including an Executive Committee made up of local elected officials; Steering Committee with local jurisdiction and permitting agency staff; and a citizens Advisory Committee. In addition, ongoing meetings and briefings to local jurisdictions and participation in Open Houses and EIS Public Hearings were conducted.

DESCRIPTION OF POLICY

The Regional Transit Long Range Vision, Adopted May 31, 1996, generally depicts a future regional HCT system by subarea, potential technology and corridor alignment. The I-405 corridor is identified as a key corridor in the system vision, and as a candidate for HCT investments such as HOV/Direct Access facilities, Regional Express bus service and park and ride facilities; and potential rail extensions of light rail, commuter rail, or comparable guideway technology.

Sound Move is implementing a portion of this vision in the I-405 Corridor in the 1997-2006 timeframe.

The I-405 FEIS preferred alternative identifies a set of future HCT investments out to 2020 that are focused on the development of a Bus Rapid Transit system along the length of I-405 comprised of: a “buffered” HOV lane for BRT (and carpools); expanded and more frequent all day express “trunk” bus service; additional direct access and in-line station facilities; expanded transit center and park and ride capacity; and improvements in intelligent transportation systems for transit.

The I-405 FEIS also acknowledges that given projected east–west (cross-lake) transit ridership levels, the “central Eastside core” may warrant more intensive HCT system investments before 2020, and that this potential need should be studied further.

IMPLICATIONS OF POLICY

The I-405 FEIS preferred alternative identifies a Bus Rapid Transit system-based set of improvements that will in large part define future (2020) HCT investments proposed for the corridor in a Sound Transit Phase II plan.

FACTORS TO CONSIDER

With the possible exception of HCT solutions yet to be determined for the “central Eastside core,” Board endorsement of the I-405 FEIS preferred alternative specifies BRT as the HCT technology of the future for the Eastside over the next 20 years.

ALTERNATIVES

The Board was briefed in October 2001 on the four alternatives evaluated in the DEIS, each of which contained different HCT technology elements and investment emphases, including fixed guideway (rail) and bus solutions. At that time, the Board expressed support for BRT system development. The FEIS preferred alternative now before the Board for endorsement is consistent with the HCT elements presented at that time.

RECOMMENDATION (S)

The Sound Transit Board should endorse BRT system development for the I-405 corridor as described in the I-405 FEIS preferred alternative.

LEGAL REVIEW

JW 3/21/02

SOUND TRANSIT

MOTION NO. M2002-38

A Motion of the Board of the Central Puget Sound Regional Transit Authority endorsing the development of a Bus Rapid Transit system (BRT), including BRT supportive high capacity transit investments, as described in the preferred alternative for the I-405 Corridor Program Final Environmental Impact Statement and authorizing the Executive Director to take the necessary steps to implement this endorsement and to direct Sound Transit staff to provide the Board with a feasibility study regarding Sound Transit's purchase and use of the Burlington Northern Santa Fe right of way that runs from Tukwila north to Woodinville.

Background:

In April 2000, the Sound Transit Board authorized the participation of Sound Transit as co-lead in the I-405 Corridor Program project, a WSDOT coordinated programmatic environmental assessment of transportation investment options out to the year 2020. The draft environmental impact statement was published in August 2001.

In October, the Sound Transit Board received a briefing on those high capacity transit elements (specifically BRT related) recommended by staff for inclusion in the preferred alternative. The Board also passed a motion authorizing its representative on the project executive committee to urge incorporation of these recommendations.

Late in November 2001, the I-405 project executive committee identified a preferred alternative for advancement to the final environmental impact statement (FEIS) stage that contained the full range of high capacity elements identified as priorities by Sound Transit.

Based on staff review of the upcoming FEIS preferred alternative's high capacity elements about to be published as part of a broader multi-modal transportation program, Sound Transit's interests appear adequately addressed.

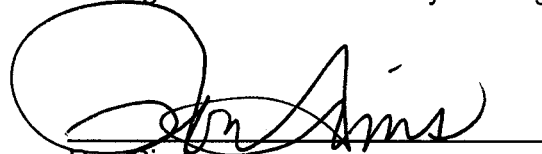
The I-405 project is now at the point of seeking concurrence from cooperating entities on the I-405 FEIS preferred alternative. As a matter of policy it is appropriate to obtain formal Sound Transit Board endorsement of the preferred alternative's HCT related elements included and in the FEIS; and to authorize the Executive Director to transmit a letter of support for those elements to WSDOT on behalf of the Board. The preferred alternative will form the basis of a final recommendation by the I-405 Executive Committee in April/May and the record of decision, now expected in Summer 2002.

Motion:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that Sound Transit endorses the development of a Bus Rapid Transit system (BRT), including BRT supportive high capacity transit investments, as described in the I-405 Corridor Study FEIS preferred alternative and that the Executive Director be authorized to take the necessary steps


to implement this endorsement and to direct Sound Transit staff to provide the Board with a feasibility study regarding Sound Transit's purchase and use of the Burlington Northern Santa Fe right of way that runs from Tukwila north to Woodinville.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on April 11, 2002.



Bob Sims
Board Chair

ATTEST:



Marcia Walker
Board Administrator

EXHIBIT I

PRIOR SOUND TRANSIT BOARD ACTIONS OF SIGNIFICANCE RELATING TO THE I-405 CORRIDOR PROGRAM

SOUND TRANSIT

MOTION NO. M2001-113

A motion of the Board of the Central Puget Sound Regional Transit Authority to authorize Sound Transit's I-405 Executive Committee representative to recommend specified HCT related elements be incorporated into the I-405 Preferred Alternative.

Background:

The WSDOT I-405 Corridor Programmatic DEIS effort began in 1999. The project was charged with establishing a 20-year multi-modal vision of capital and operational improvements along the I-405 facility for its entire length. Access to Redmond and Issaquah along the corridor was also considered for evaluation.

Sound Transit, along with WSDOT, King County, FTA, and FHWA, is a designated "co-lead" agency and a member of the I-405 Steering Committee and project management team.

The project established three standing committees at the outset: Executive Committee (elected officials), Steering Committee (agency & jurisdictional staff) and Citizens (appointed). The Executive Committee is responsible for making final I-405 program recommendations to co-lead agencies. Sound Transit Board Member Rob McKenna represents Sound Transit on the Executive Committee as co-chair (Sound Transit Board Member Ron Sims is also a committee member). Sound Transit staff also participates at the Steering Committee and project management team levels.

The I-405 programmatic DEIS is currently out for public review and comment (the comment period ends 10/24/01). The Executive Committee is slated to recommend a preferred alternative in November 2001 for advancement into the FEIS stage. A Record of Decision is expected by June 2002.

Motion:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that Sound Transit's I-405 Executive Committee representative convey support for the HCT related elements as identified in Attachment A.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on the 25th day of October 2001.

David Earling
Board Chair

ATTEST:

Marcia Walker
Board Administrator

SOUND TRANSIT

MOTION NO. M2001-113

Attachment A Summary of Staff Recommended HCT Elements

A. Preferred Alternative HCT Recommendations

The information provided below relates only to those HCT related elements being identified by Sound Transit staff for inclusion in the identified I-405 Program DEIS “preferred alternative.” The majority of these elements are contained in one or more of the four action alternatives formally being assessed in the programmatic DEIS, which is currently out for public comment (through 10/24/01). In addition, several new or refined HCT related elements emerged over the course of the DEIS development process, but are not explicitly included in any of the four DEIS alternatives. These recommendations will be shared with the I-405 Project Management Team and forwarded to the Program Steering and Executive Committees.

As a co-lead agency, Sound Transit ultimately will be requested to approve the HCT related elements contained in the preferred alternative. This “sign off” will indicate Sound Transit’s agreement with the transit recommendations that will direct future transit investments in the I-405 corridor.

1. Bus Rapid Transit System Concept

The general I-405 corridor length HCT concepts evaluated in the DEIS were: Fixed guideway HCT system (modeled as rail technology) located primarily within the existing Burlington Northern Santa Fe right of way and a bus rapid transit (BRT) system operating on the I-405 facility in a mixed express bus/carpool/vanpool HOV lane environment.

Given 2020 transit ridership estimates, cross Lake Washington HCT route and technology uncertainty, and projected cost and mode share estimates, the BRT concept, outlined in Alternative 3, is considered by staff to be preferred. This Alternative best handled projected demand for a reasonable cost and provided implementation flexibility for Sound Transit when future project proposals within the corridor are detailed and taken for future voter approval. The table below outlines the key information used in making this recommendation.

I-405 DEIS Alternatives: Cost Estimate and Projected Ridership Summary

Alternative	Capital	Annual O&M	Daily Person Transit Trips
Alt. 1. HCT/TDM Emphasis: <ul style="list-style-type: none"> • Total • HCT Elements 	\$ 5.3B \$ 4.0B	\$150M \$ 96M	31,500
Alt. 2. Mixed Mode/HCT Emphasis: <ul style="list-style-type: none"> • Total • HCT Elements 	\$ 8.6B \$ 4.0B	\$150M \$ 96M	30,900
Alt. 3. Mixed Mode Emphasis: <ul style="list-style-type: none"> • Total • Local and BRT/HCT Transit* 	\$ 6.8B \$440M	\$123M \$101M	33,900
Alt. 4. General Capacity Emphasis: <ul style="list-style-type: none"> • Total • Local and ST Transit 	\$11.3B \$154M	\$59M \$38M	26,700

* This estimate includes costs associated with increasing overall transit service hours by up to 100%. The estimate does not account for all projected costs associated with the development and full build out of all BRT systems such as those associated with BRT stations and transit center, direct access, and arterial HOV improvements.

Alternative 3 outlines a BRT/HOV environment operating with a mix of carpools and vanpools and emphasizing service, speed, and reliability capital facility improvements linking urban and employment centers. Other than fleet and service hour estimates, the system's new identity, station locations, implementation phasing, and right of way exclusivity requirements are not addressed in detail in Alternative 3.

Sound Transit would implement the majority of the primary corridor length BRT system express service concepts. More specific capital and service phasing and financing will be dependent on access to new "early action" resources and the outcome of a future phase Sound Transit vote.

Sound Transit recommends that the Preferred Alternative incorporates a BRT service concept as the basic HCT transit strategy to guide capital and service investments in the I-405 corridor out to 2020. Sound Transit also suggests that BRT operations on the I-405 facility would receive additional speed and reliability benefits by providing greater visual and/or physical HOV lane separation from adjacent lanes, perhaps in concert with WSDOT's HOV/express "managed lanes" concept.

2. BRT/Express Service Level Increases

The maximum 2020 service level increases are up to 100% – distributed over local, express/commuter, and BRT transit services. However, refined technical analyses indicate that slightly more than a 50% increase in service hours can generate comparable daily transit person trips in 2020. Of the projected increase of 1.4 million annual hours, the BRT share would be approximately 0.5 million.

Sound Transit recommends that the Preferred Alternative commit to providing up to a 50-60% corridor-wide transit service hour increase out to 2020, of which the Sound Transit share would be in the range of 35-40% to supply corridor length and Central eastside core service consistent with the BRT system concept.

3. Expanded Transit Center and Park and Ride Lot Capacity

Under several DEIS action alternatives transit center capacity is acknowledged to require expansion in order to accommodate general transit service, especially under the BRT/Express concept. However, there is no detailed assessment of the magnitude of investment or the locations likely requiring new capital facilities or expansions in order to handle substantial service increases. Similarly, expanded park-and-ride lot capacity increases of several thousand parking stalls within the corridor are also identified as necessary.

Sound Transit recommends that the Preferred Alternative commit to refine, as necessary, estimates for the extent and location of capital expansion requirements for transit centers and park and ride lot facilities assuming implementation of a BRT/Express bus system concept meeting both corridor length and eastside central core needs.

4. Intelligent Transportation System Investments

All DEIS action alternatives contain a generic array of ITS enhancements focuses on freeway traffic flow without specific reference to BRT/Express transit operations.

Sound Transit recommends that the Preferred Alternative incorporate the full range of ITS enhancements designed to improve transit reliability as identified in all the DEIS action alternatives. Specifically, the Preferred Alternative should target ITS enhancements specifically for the on-road operation of the BRT system (freeways and arterial HOV) as well as at supporting transit centers, in-line stations, and park-and-ride lot facilities.

5. Non-freeway to Freeway HOV/Direct Access Connections

Besides committed projects, three non-freeways to freeway HOV direct access locations are recommended in DEIS alternatives. These are located in Renton (I-405/Lind), Kirkland (NE 85th), and Newcastle (inline station at 112th St. SE).

Sound Transit recommends that the Preferred Alternative acknowledge opportunities for providing new I-405 access facilities at three new locations (Renton, Kirkland, and Newcastle) in support of BRT system development.

6. Freeway to Freeway HOV/Direct Access Connections

A series of direct access ramps facilitating freeway to freeway connections are proposed in six corridor locations: I-5/I-405 (Swamp Creek); I-5/I-405 (Tukwila); I-405/SR520; I-405/I-90; I-405/SR522; and I-405/SR167.

Sound Transit recommends that the Preferred Alternative support the completion of six new HOV freeway-to-freeway interchanges to benefit BRT/Express bus services. Sound Transit recommends these types of improvements in keeping with the overall state responsibility for the development of the state sponsored HOV system.

7. Arterial HOV and Transit Priority Improvements

Seventeen arterial improvements are included in the DEIS at selected Bellevue, Kirkland, Bothell, and Renton locations in the corridor.

Sound Transit recommends that the Preferred Alternative support the creation of lanes, queue jumps, and signals that provide priority to BRT/Express bus services requiring arterial access to and from corridor area park-and-ride lots and transit centers. Additional locations may be warranted beyond those already identified.

8. Eastside Central Core HCT System Development Opportunities

Transit ridership forecasts for the I-405 corridor in 2020 show the greatest patronage growth occurring on I-405 between Totem Lake and I-90. This is a result of east-west connections across Lake Washington and out to the Overlake area. The eastside central core has emerged as a transit market ripe for potential additional HCT investments by 2020.

Sound Transit recommends that the Preferred Alternative designate this eastside “central core” area as a high priority and a candidate for more intensive HCT treatments than the proposed baseline BRT improvements prior to 2020. Such actions may include the provision of greater transit exclusivity and possibly greater capacity HCT technologies appropriate to meet projected rider demand.

B. Other I-405 Corridor HCT Issues of Concern

Burlington Northern Santa Fe Right of Way Preservation Strategy:

The BRT system development activities supported by Sound Transit in the I-405 corridor assume that the majority of capital and service investments will occur within the I-405 right of way and on associated direct access facilities.

A separate corridor right of way owned by BNSF parallels the I-405 roadway for much of its length (Tukwila to Totem Lake). There is limited freight and dinner train service currently operating in this corridor.

Sound Transit believes there is a regional long-term value in preserving the BNSF right of way for future transportation uses, some of which may not be pursued until well beyond 2020.

However, various jurisdictions engaged in the I-405 project deliberations have different, and at times conflicting, concerns and interests about what transportation uses should be specified, if any, and over what timeframe.

Sound Transit's primary interest in the BNSF corridor pertains to the segment parallel to I-405 between I-90 and Totem Lake. This is because I-405 corridor and cross Lake Washington transit ridership forecasts suggest that a higher order HCT investment (more than basic BRT) may be justified before 2020. The ability to utilize all or portions of the BNSF central core right of way for HCT would provide Sound Transit with greater future phase flexibility about how to meet future transit demand.

Sound Transit is not advancing corridor length BNSF preservation as a recommended Preferred Alternative element at this time and suggests the issue be further addressed outside the context of the I-405 DEIS project. Sound Transit therefore recommends that WSDOT assume the lead responsibility for coordinating inter-jurisdictional discussions in the corridor about possible strategies for preserving all or portions of this corridor for future transportation uses. These BNSF preservation consultations, at minimum, should address:

- Use
- Prospective preservation agent(s)
- Legal and Institutional mechanisms
- Timing/Phasing
- Funding