

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2001-113

I-405 Corridor DEIS Preferred Alternative Development

| Meeting: | Date: | Type of Action: | Staff Contact: | Phone: |
|-----------------|--------------|----------------------------|---|----------------------------------|
| Board | 10/25/01 | Discussion/Possible Action | Barbara Gilliland, Program Manager Brian O'Sullivan, Project Manager | 206-398-5051 206-398-5292 |

OBJECTIVE OF ACTION

- Obtain Board input on preliminary staff recommendations for those high capacity transit (HCT) related elements Sound Transit should actively support for incorporation into the I-405 Corridor Programmatic DEIS' Preferred Alternative.
- Obtain Board authorization for Sound Transit's I-405 Executive Committee representative to support these HCT elements in upcoming Preferred Alternative deliberations.
- Outlines the I-405 DEIS project decision process for advancing the HCT related preferences of Sound Transit into the Executive Committee's Preferred Alternative recommendation, now scheduled for November 2001.
- Alert the Board that formal concurrence (sign-off) with the recommended HCT elements of the Preferred Alternative will be requested in December 2001.
- Explore the key policy and programmatic implications of the I-405 Preferred Alternative on Sound Transit future phase (2006+) HCT planning for the I-405 corridor.

ACTION

- Provides Board input on staff's preliminary recommendations for those HCT related elements of the Preferred Alternative which will be shared by staff with the I-405 Corridor DEIS Project Management Team and the Project Steering and Executive Committees.
- Obtain Board authorization for Sound Transit's I-405 Executive Committee representative to support these HCT elements in upcoming Preferred Alternative deliberations.

KEY FEATURES

Highlights of Action:

- Identifies the recommended HCT related elements that staff feel should be incorporated, at minimum, into the I-405 program Preferred Alternative. These key HCT elements include:
 1. Bus Rapid Transit (BRT) System Development Concept.
 2. BRT/Express Bus Service Level Increases.
 3. Expanded Transit Center and Park and Ride Capacity.
 4. Intelligent Transportation System Investments.
 5. Freeway to Freeway HOV/Direct Access Connections.
 6. Miscellaneous HOV/Direct Access Connections.
 7. Arterial HOV and Transit Priority Improvements.
 8. Eastside Central Core HCT System Development Opportunities.
- Summarizes the content of each HCT related element recommended for inclusion in the Preferred Alternative (Attachment A).
- Highlights other HCT issues of concern, specifically Burlington Northern Santa Fe right-of-way preservation opportunities.
- Discusses the implications of this package of HCT related elements on Sound Transit future phase program.

FINANCIAL IMPACTS

Impacts on Current Year Budget: N/A

Impacts on Sound Move Budget: The proposed I-405 HCT investments are largely subject to the outcome of a regional Sound Transit future phase public vote. The date for a vote is unknown at this time.

Early implementation of some HCT related components in lieu of a regional voter approved program would require Sound Transit to identify other revenue sources beyond those already allocated to the approved Sound Move program and project budgets. One such source of potential significance is East King County's unanticipated revenues.

Impacts on Cost-to-Complete: N/A

Impacts on Subarea(s) Budget(s): N/A

HISTORY OF PROJECT

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 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 I-405 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.

Project Timeline

| | |
|---|----------------------|
| Scoping | October 1999 |
| Alternatives Identified | June 2000 |
| Public Opinion Survey | February 2001 |
| Draft EIS Issued | August 2001 |
| Preferred Alternative Recommendation (I-405 Executive Committee) | November 2001 |
| Lead Agency Concurrence | December 2001 |
| Final EIS Issued | March 2002 |
| Record of Decision | June 2002 |

Prior Board or Committee Actions and Relevant Board Policies

| Motion or Resolution Number | Summary of Action | Date of Action |
|------------------------------------|--|-----------------------|
| Voice vote (no associated motion) | I-405 and Trans-Lake Co-lead participation authorization | 4/27/00 |
| Information briefing | I-405 briefing and BRT presentation | 8/23/01 |

CONSEQUENCES OF DELAY

The Program Executive Committee is scheduled to recommend a Preferred Alternative on November 15, 2001, which will be referred to Sound Transit and the other co-leads for their concurrence.

The Sound Transit Board will be requested to provide concurrence with the HCT elements of the Preferred Alternative recommendation in December 2001. A delay by Sound Transit or any other co-lead in providing formal concurrence in a timely manner would likely alter the 2002 FEIS development and Record of Decision completion schedule.

REGIONAL PARTNERSHIP

Sound Transit is a full-fledged co-lead agency (with WSDOT, KC, FTA, FHWA) in the development of the I-405 Programmatic DEIS, the identification of a preferred alternative for the FEIS, and finalizing the Record of Decision.

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.

DESCRIPTION OF POLICY

Sound Transit's adopted Regional Transit Long-Range Vision identified the need for an HCT corridor along I-405. That vision includes a potential for fixed guideway rail and express bus system approaches. Among the options evaluated in the I-405 Draft EIS were two rail technologies as well as bus oriented investments. Bus Rapid Transit (BRT) appears to address a majority of the corridor transit needs to 2020 and would be the most cost-effective investment strategy for the future.

However, the central core of this corridor (Bellevue, Redmond, and Kirkland) will be affected by improvements being considered across Lake Washington. In fact, the I-405 analysis does show that by 2020 some additional capacity investments may be warranted.

Staff recommends the Sound Transit Board to support a Preferred Alternative that:

1. Narrows for Sound Transit the range of future HCT investment choices in the corridor to BRT;
2. Outlines the BRT capital and service requirements shaping future I-405 HCT investments;
3. Provides for flexibility in addressing additional capacity needs in the Bellevue, Redmond, and Kirkland area based on future east/west cross-lake decisions;
4. Provides the Board with the information necessary to consider new I-405 HCT corridor investments funded as a part of Sound Move through unanticipated East King subarea revenues; and
5. Provides the Board with direction for identifying new I-405 corridor HCT projects associated with a future phase Sound Transit program vote.

ALTERNATIVES

The following options are available to the Board at this time.

1. Affirm the BRT system concept as the preferred 2020 HCT future for the entire I-405 corridor;
2. Generally affirm BRT in the I-405 corridor as the preferred 2020 HCT future, but reserve Sound Transit's flexibility to pursue other higher capacity technology solutions in the eastside core area within that timeframe (the proposed action);
3. Affirm fixed guideway rail in the I-405 corridor rather than BRT; and
4. Take no action now, but wait until the I-405 Executive Committee sends a preferred alternative recommendation to Sound Transit for their concurrence.

RECOMMENDATION(S)

Staff recommends that BRT be the base HCT investment in I-405 corridor out to 2020. However, the DEIS analysis also indicates that some flexibility in that commitment is warranted in the Eastside Core--between Totem Lake and I-90 for higher capacity technologies that could be required before 2020. This core area of I-405 will be heavily influenced by the outcomes of other recommendations from the Trans-Lake Washington project. These recommendations will be subject to Board approval in the future.

INTERNAL AND EXTERNAL CONSULTATIONS

Staff-level internal and external consultations on I-405 issues are occurring through regularly scheduled meetings. Board-level briefings have been limited to date; individual board members familiarity with and knowledge of program details as they relate to agency interests are likely to vary widely. Legal, environmental, and technical planning resource consultations within Sound Transit have been frequent.

LEGAL REVIEW

JDW 10/17/01

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.

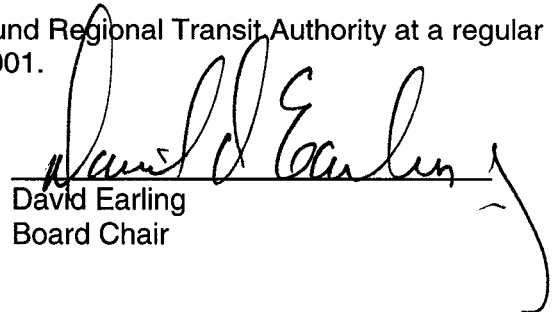
The project established three standing committees at the outset: Executive Committee (elected officials), Steering Committee (agency & jurisdictional staff) and Citizens (appointed). The Executive Committee is responsible for making final I-405 program recommendations to co-lead agencies. Sound Transit 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

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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