

© 2011 National Academy of Sciences. All rights reserved.

This case study was developed in 2007 through SHRP 2 Capacity Project C01: A Framework for Collaborative Decision Making on Additions to Highway Capacity. It is integrated into Transportation for Communities: Advancing Projects through Partnerships, a website that is a product of research conducted under Capacity Project C01 (www.transportationforcommunities.com).

The Transportation for Communities website provides a systematic approach for reaching collaborative decisions about adding highway capacity that enhance the environment, the economy, and the community and improve transportation. It identifies key decision points in four phases of transportation decision making: long-range transportation planning, corridor planning, programming, and environmental review and permitting.

The case studies for Capacity Project C01 were prepared by ICF International, Research Triangle Park, North Carolina; URS Corporation, Morrisville, North Carolina; and Marie Venner Consulting, Lakewood, Colorado.

This work was sponsored by the Federal Highway Administration in cooperation with the American Association of State Highway and Transportation Officials. It was conducted in the second Strategic Highway Research Program (SHRP 2), which is administered by the Transportation Research Board of the National Academies.

#### **COPYRIGHT INFORMATION**

Authors herein are responsible for the authenticity of their materials and for obtaining written permissions from publishers or persons who own the copyright to any previously published or copyrighted material used herein.

The second Strategic Highway Research Program grants permission to reproduce material in this publication for classroom and not-for-profit purposes. Permission is given with the understanding that none of the material will be used to imply TRB, AASHTO, or FHWA endorsement of a particular product, method, or practice. It is expected that those reproducing material in this document for educational and not-for-profit purposes will give appropriate acknowledgment of the source of any reprinted or reproduced material. For other uses of the material, request permission from SHRP 2.

#### NOTICE

Capacity Project C01 was a part of the second Strategic Highway Research Program, conducted by the Transportation Research Board with the approval of the Governing Board of the National Research Council.

The members of the technical committee selected to monitor this project and to review this case study were chosen for their special competencies and with regard for appropriate balance. The case study was reviewed by the technical committee and accepted for publication according to procedures established and overseen by the Transportation Research Board and approved by the Governing Board of the National Research Council.

The opinions and conclusions expressed or implied in this case study are those of the researchers who performed the research and are not necessarily those of the Transportation Research Board, the National Research Council, or the program sponsors.

The Transportation Research Board of the National Academies, the National Research Council, and the sponsors of the second Strategic Highway Research Program do not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the object of the case study.

#### THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine

The nation turns to the National Academies—National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council—for independent, objective advice on issues that affect people's lives worldwide.

www.national-academies.org

## Case Study

# WASHINGTON I-405 CORRIDOR PROGRAM

# **Reinventing NEPA**

Executive Summary 1
Background 3
Institutional Framework for Decision Making 6
Transportation Decision-Making Process and Key Decisions 10
Lessons Learned 16
Conclusions 21
References 22

#### **EXECUTIVE SUMMARY**

In 1998, the Washington State Department of Transportation (WSDOT) joined the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Central Puget Sound Regional Transit Authority (Sound Transit), King County, and local governments to assess a multimodal solution to reduce traffic congestion and improve mobility in the Interstate 405 (I-405) corridor.

Aptly named the Interstate 405 Congestion Relief and Bus Rapid Transit Projects, the I-405 Corridor Program is not a large construction project; it is a \$10.9 billion long-range master plan of coordinated multimodal transportation projects that can be implemented as funding becomes available. The program is currently funded at \$1.5 billion, but additional sources of funding have yet to be identified. Over the next 20 or more years, the I-405 Corridor Program will include improvements to all transportation modes. Two lanes will be added in each direction to increase capacity by 110,000 trips per day. Improvements to key arterials, 1,700 new vanpools, a 50% increase in local transit service, and enhanced freight mobility will save the average user more than 40 hours per year and provide economic benefits in the form of new jobs, travel time savings, and decreased traffic accident costs (1).

The I-405 Corridor Program, named Reinventing NEPA, was a pilot study for an improved transportation decision-making process developed by WSDOT and FHWA that attempted to move the National Environmental Policy Act (NEPA) decision making into the early stages of long-range planning. WSDOT engaged the affected regulatory agencies and jurisdictions by introducing a series of coordination and consensus points at key milestones and decision points throughout the environmental analysis, documentation, and review process.

WSDOT developed the I-405 Corridor Program as a programmatic environmental impact statement (EIS). A programmatic EIS, or Tier I EIS, reviews the broad environmental impacts of a long-term investment program such as multiple improvements along a major transportation corridor. Subsequent project-specific, or Tier II, EISs then review the impacts of individual projects. This approach allowed WSDOT to focus on broad corridorwide transportation issues and policy-level decisions, such as service characteristics of the corridor, corridor selection, general location of improvements, and combinations of improvements to solve corridorwide transportation problems.

WSDOT structured the decision-making process for the I-405 Corridor Program as a collaborative flow of information, recommendations, and approvals between three committees: the executive committee, the steering committee, and the citizen committee. Members of the committees represented local jurisdictions, resource agencies, businesses, transit providers, and the general public. The process was marked chronologically by a system of three concurrence points and nine consensus points. From the establishment of the committees in 1999 to the signing of the Record of Decision (ROD) in October 2002, the Corridor Program took a little more than 3 years to complete (2).

One concurrence point became particularly problematic. Difficulty reaching concurrence on the preferred alternative (PA) and mitigation concept nearly derailed the process. To overcome the reluctance of the resource agencies to render decisions before having project-level design details, WSDOT committed to funding a comprehensive mitigation plan in advance of construction.

As a result, the I-405 Corridor Program successfully moved NEPA decisions into the planning phase. Stakeholders agree that the I-405 Corridor Program was successful because NEPA decisions were effectively made in the planning process. This achievement is helping to streamline project development and environmental review of the individual projects currently under way. The

early involvement of state and federal regulatory resource agencies improved coordination between agencies, and a transparent decision-making process helped build the relationships and trust that continue today.

By all accounts, the extensive public involvement process was successful at keeping stake-holders informed at each step in the process and helping to build trust with the public. However, opinions on the success of the overall process varied widely. Some members of the project management team (PMT) and local governments feel that the resource agencies' role in the decision-making process was too strong and believe that the process would have gone more smoothly had the agencies been in a more advisory role. On the other hand, resource agency representatives feel that they did not have a strong enough voice in the process and would still like to see a more balanced consideration of transportation improvements and environmental impacts.

Since the completion of the I-405 Corridor Program, WSDOT no longer uses the Reinventing NEPA pilot process. WSDOT concluded that the requirement for written agreement from resource agencies was too onerous. Resource agencies were reluctant to approve investments without more specific information on environmental impacts; and the pilot process was structured so that lack of concurrence from a single agency would stall the process completely. Under the redesigned process, WSDOT will continue to seek agreement at key decision points from the agencies with jurisdiction, but written concurrence will not be necessary for a project to move forward. Currently, WSDOT and the FHWA Washington State Division are redesigning the process to meet the requirements of the most recent federal transportation funding bill, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

#### **BACKGROUND**

Over the past 20 years, Washington State has experienced tremendous economic and population growth, but transportation investments have not kept pace. In particular, the I-405 corridor east of Seattle has experienced major increases in traffic congestion that threaten the quality of life and economic future of the corridor. Beginning in the late 1980s, a coalition of residents, businesses, and developers pressed WSDOT to develop a comprehensive transportation strategy for the entire corridor.

#### **Project Overview**

Washington's I-405 was originally constructed in the 1960s as a freight bypass for the I-5 freeway, which runs through the heart of Seattle. Interstate 405 parallels I-5 on the east side of Lake Washington and intersects with I-5 at both ends (Figure 1). At the northern terminus, I-405 intersects I-5 just north of Lynnwood. Traveling south, I-405 passes through 15 cities in Snohomish and King Counties where it again intersects I-5 near Tukwila. The 30-mi-long corridor has become the region's dominant north-south travel route and the second-most-traveled corridor in the state. This area has been identified as one of the fastest growing areas in Washington State and includes a highly developed urban-suburban corridor along the I-405 freeway.

The corridor passes through two major watersheds with lakes and streams that support fish species protected by the Endangered Species Act, as well as fishing areas protected by tribal treaty rights for three federally recognized tribes. Of particular concern are several species of salmon and their aquatic habitats.

#### **Project Drivers**

WSDOT initiated the I-405 Corridor Program in response to concerns about traffic congestion and requests from community members for improvements to transportation infrastructure. Eastside residents, businesses, developers, and the Eastside Transportation Partnership called for action on the part of transportation planning agencies to address concerns about severe congestion; effects of traffic on neighborhoods

and business districts; safety; air quality and noise; access problems for low-income, young, and elderly people; and poor transit performance. Moreover, the increase in traffic congestion and mobility issues threatened to limit potential future economic growth.

Rapid growth in the area was a root cause of congestion issues on I-405. Between 1970 and 1990, employment in the corridor area increased more than 240%, and the population grew nearly 80%. Throughout the 1990s, population and employment continued to increase at an annual rate of 3.5%. Forecasts for the I-405 corridor are for this rapid growth to continue, with an expected increase in population and employment of more than 35% by 2020.

#### Severe Traffic Congestion

With increasing frustration, the I-405 commuters face some of the worst traffic congestion in the state. The I-405 freeway carries 60% to 70% of the daily north-south traffic passing through the 230-squaremi study area. Capacity varies from four to six lanes in each direction, and traffic volumes (in 2000) reached as high as 205,000 vehicles per day near the center of the corridor. The effects of high traffic volumes are exacerbated by limited capacity and varying travel demands. About two-thirds of the trips are intracorridor.

Traffic congestion goes well beyond the typical morning and afternoon peak periods. Congestion lasts from 2 to 7 hours in much of the corridor, but it can be as long as 10 to 12 hours per day in the vicinity of Tukwila. The substantial traffic congestion not only affects I-405 but also spills over onto local arterials where it affects business districts and residential neighborhoods. Variations in congestion levels also result in unpredictable travel times and increased accident rates. In January 2006, responding to frequently asked questions about the I-405 Corridor Program, WSDOT explained that the ripple effects of the severe congestion include travel time delays of up to 40 hours per year and an estimated \$930 per user in wasted time and fuel; increased accident rates; traffic intrusion into neighborhoods and business districts as drivers seek alternative routes around traffic congestion; reduced bicycle and pedestrian safety; degradation of air quality and increased noise levels;

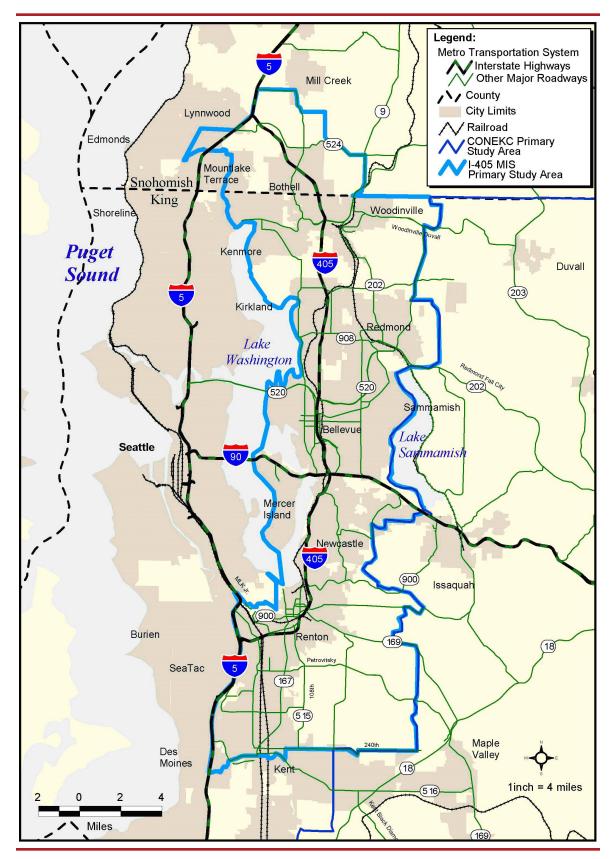


Figure 1. Study area (3).

limited access to jobs, health care, recreation, and other services for low-income, young, and the elderly populations; and severe limits on the ability of transit to provide timely levels of service at a reasonable cost (1).

The decreasing reliability of the regional transportation system also affects freight mobility. As many as 8,000 truck trips per day occur on I-405. By 2020, truck volumes are expected to increase by up to 75%. WSDOT estimated that congestion delays cost the region's businesses up to \$700 million a year, and the costs will continue to climb as congestion gets worse.

# Potential Negative Impacts on Economic Growth

In 1990, rapid growth led the Washington legislature to enact the Washington State Growth Management Act (GMA). The GMA requires local jurisdictions to balance new development with adequate transportation facilities to ensure an adequate level of service. New development projects cannot be approved without the necessary transportation infrastructure and services available to handle the increased demand. Consequently, the increasing congestion and mobility issues in the I-405 corridor threaten to limit economic growth unless substantial improvements are made to the system.

#### **Initial Concept and Planning**

In 1992, the Eastside Transportation Program requested that WSDOT develop options to meet future mobility needs along the I-405 corridor. As a result, in 1994, WSDOT began the I-405 Multimodal Corridor Study (MCS) to evaluate ways to improve mobility, maximize the performance of the roadway system through the use of high-occupancy vehicles (HOV) and transit to balance the use of other corridors, and enhance safety in the corridor. With a budget of \$800,000, the study evaluated a segment of I-405 about 5 mi long. Through a series of workshops, a technical advisory committee made up of 25 participating jurisdictions and agencies identified 72 issues and challenges to guide the project's goals and objectives. Key issues included the integration of the project with local land use plans, safety

improvements, interchange and arterial improvements, transit and freight needs, coordination with the regional transit authority, and funding. Federal, state, and local agencies funded the study.

The 1994 MCS was plagued by disagreement over highway-capacity versus arterial-capacity solutions and discontent with the decision-making process. The program did not find a long-term solution to congestion on I-405.

Concurrently, there was growing local and national recognition that building additional highway capacity would not be enough to solve increasing congestion problems. In 1991, the federal transportation funding program, the Intermodal Surface Transportation Efficiency Act (ISTEA), required that multimodal transportation solutions be considered to reduce transportation demand. The Clean Air Act Amendments of 1990 also required the assessment of alternatives to the expansion of general-purpose lanes for projects such as the I-405 study in order to help reduce emissions.

In 1999, WSDOT and FHWA decided to include the I-405 corridor as a pilot project in the newly developed Reinventing NEPA process, which merged the planning phase with the NEPA process using a programmatic EIS. A programmatic EIS, or Tier I EIS, reviews the broad environmental impacts of a long-term investment program, such as multiple improvements along a major transportation corridor. Subsequent project-specific, or Tier II, EISs then review the impacts of individual projects. A programmatic EIS allows project proponents and stakeholders to identify and address corridor-level impacts of transportation alternatives, before individual projects reach the design stage.

The PMT used some of the concepts developed in the 1994 MCS as a baseline for initiating the programmatic I-405 Corridor Program EIS. WSDOT hoped that the new decision-making process could overcome previous disagreements among the stakeholders on the best long-term solution. The process allowed citizens, technical experts, and elected officials to reach consensus on a long-term multimodal master plan of projects to be implemented in phases as funding becomes available. In 2001, with the adoption of the new MTP, some elements of the program

were included as major projects. At an estimated cost of \$10.9 billion, the program is still in the plan as a series of about 90 smaller projects as either unprogrammed parts of the regional transportation plan or in the strategic plan, which is fiscally constrained.

# INSTITUTIONAL FRAMEWORK FOR DECISION MAKING

WSDOT and FHWA developed the I-405 Corridor Program as a pilot study for an improved transportation decision-making process that attempted to move NEPA decision making into the early stages of longrange planning. While serving as a pilot, the effort on I-405 also modified the original process somewhat. The ultimate decision-making framework was a system of three committees, representing executives, technical staff, and citizens and other stakeholders.

#### Reinventing NEPA

WSDOT conducted a customer survey before 1998 in which the organization asked respondents to rank WSDOT service areas according to their satisfaction. From the results of this survey, WSDOT determined that it needed to improve in the areas of communication, clarity, flexibility, soliciting input at the right points, and reliability. To address these concerns, WSDOT developed a process to integrate the planning and NEPA processes. State and federal resource and regulatory agencies collaborated in the design of the process.

The process improvement effort became known as Reinventing NEPA. FHWA and WSDOT established a process improvement team to design the improved decision-making process. The team originally consisted of representatives of FHWA, Puget Sound Regional Council, WSDOT regions, and the WSDOT Olympia Service Center. The team later expanded to include representatives of resource and regulatory agencies. The group became known as the Joint Process Improvement Team (JPIT). The JPIT had the responsibility for designing the new decision-making framework and overseeing its implementation in pilot projects.

Reinventing NEPA moved NEPA decision making into the early stages of long-range planning. The objective of the revised process was to eliminate redundancies in the planning and NEPA processes, address environmental concerns earlier in the process before project commitments were made, and save time and money without decreasing the value of the product or the quality of environmental decisions. To achieve this objective, Reinventing NEPA engaged the affected regulatory agencies and jurisdictions by introducing a series of coordination and consensus points at key milestones and decision points throughout the environmental analysis, documentation, and review process. The process improvements provided a longer window within which to resolve environmental issues than the traditional NEPA process. The decision makers were able to consider a greater range of environmental solutions before design decisions were made. The establishment of consensus points improved the certainty that decisions would not have to be revisited later during project development and permitting.

As designed by the JPIT, Reinventing NEPA involved four main groups:

- Transportation decision makers, composed of WSDOT, FHWA, and FTA;
- The PMT, composed of WSDOT staff members selected by the WSDOT regional administrator, which oversaw the day-to-day needs of the corridor studies;
- Steering committee, which guided decisions through a consensus-based process and was composed of various stakeholder groups selected by the PMT; and
- Agencies and tribes with jurisdiction, which are
  the resource and regulatory agencies that have
  the ability to stop projects through permit or
  regulatory action, and which served as a working
  group and approved key decisions throughout the
  process.

Figure 2 shows the groups involved in decision making under Reinventing NEPA, as conceived by the JPIT. The graphic is not intended to precisely represent the final decision-making structure of the I-405 Corridor Program.

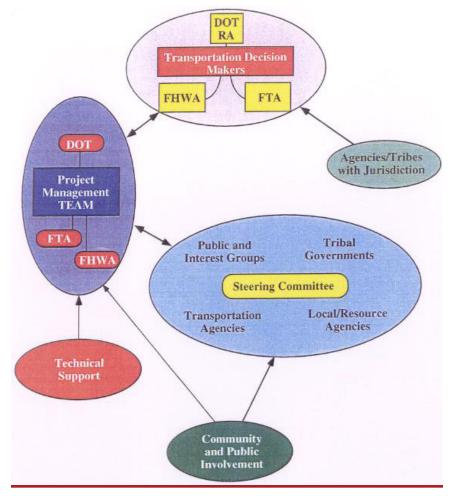


Figure 2. Reinventing NEPA decision-making groups (4).

#### I-405 Corridor Program

In implementing the Reinventing NEPA process for I-405, WSDOT made a few changes to the overall structure, including

- Introduction of an executive committee of elected officials:
- Formalization of a citizen advisory committee; and
- Addition of co-lead agencies.

The primary innovation of the I-405 process was to separate different types of stakeholders, such as executives, technical staff, and laypeople, into different committees. In that way, WSDOT was able to tailor information to meet the needs of each group.

WSDOT conceived the I-405 decision-making process as a collaborative one with the following participants:

- One lead agency (WSDOT);
- Four co-lead agencies (FHWA, FTA, King County, and Sound Transit);
- A project team consisting of 17 staff members and consultants at WSDOT and the co-lead agencies;
- An executive committee consisting of 21 elected officials;
- A steering committee consisting of 35 members from local jurisdictions, permitting agencies, and the co-lead agencies; and
- A citizen committee consisting of members of the public and representatives of businesses, neighborhood associations, and interest groups.

# WSDOT and Co-Lead Agencies

As the owner and operator of the Washington State highway system, WSDOT acted as the lead agency for the I-405 Corridor Program. WSDOT provided the majority of staff for the PMT, supported by staff from the four co-lead agencies. The PMT oversaw the day-to-day development of the cor-

ridor study, including managing committee meetings and interactions, conducting analysis and development of alternatives, and responding to specific concerns from stakeholders.

The co-lead agencies were those that would ultimately need to be involved in the final decision. FHWA and FTA were involved as signatories to the ROD. Because of the early emphasis on transit, two local transit agencies also participated as co-lead agencies: Sound Transit, which provides regional services; and King County, which provides transit services within the county boundaries. The five agencies did not sign a memorandum of understanding; however, all five agencies signed the EIS.

The four co-lead agencies generally provided review and oversight functions for WSDOT through the PMT. Senior staff from the co-lead agencies also contributed to the analysis and drafting of documentation for the study. This high-level involvement ensured the early buy-in of the co-lead agencies. The agencies met weekly to review the program's progress.

# Local Jurisdictions and Resource Agencies

A majority of formal representation in the I-405 Corridor Program came from local jurisdictions and resource agencies. Representatives from those agencies served on the steering committee as technical advisers or on the executive committee as decision makers. Table 1 lists the agencies involved in these capacities.

Involvement of local jurisdictions and resource agencies in the decision-making process was a key aspect of the I-405 Corridor Program. These agencies ultimately have the ability to stop or deny projects. Their early buy-in was seen as crucial to the program's overall success.

#### Committee Structure

#### **Executive Committee**

The executive committee was composed of 21 high-level officials from WSDOT and the co-lead agencies, elected officials from the local jurisdictions, Washington state legislators, and representatives from the Washington State Transportation Commission and the Transportation Improvement Board. The executive committee served as a political sounding board for decisions and as an access point to legislators and policy makers. The executive committee did not include representation from resource agencies.

#### Steering Committee

The steering committee was composed of 35 senior technical staff representing area municipalities, environmental and regulatory agencies, and transportation service providers, all from local jurisdictions and resource agencies. In addition, the lead and co-lead agencies were represented on the steering committee, generally by their staff members, who also served on the project team. Involvement of local jurisdictions and resource agencies in the decision-making process was a key aspect of the I-405 Corridor

Table 1.	Agency	Representation	
----------	--------	----------------	--

Local Jurisdictions	Resource Agencies	Other Agencies
City of Renton City of Kirkland City of Bellevue City of Hunts Point City of Bothell City of Redmond City of Woodinville City of Tukwila City of Bothell City of Bothell City of Kenmore City of Mercer Island City of Newcastle City of Bellevue City of Lynnwood City of Clyde Hill City of Kent Town of Yarrow Point Snohomish County King County	U.S. Fish and Wildlife Service Puget Sound Clean Air Agency Washington Fish and Wildlife U.S. Environmental Protection Agency National Marine Fisheries Service U.S. Army Corps of Engineers Washington Department of Ecology	Puget Sound Regional Council Community Transit Washington Department of Community, Trade, and Economic Development

Program. Their early buy-in was seen as crucial to the program's overall success.

Many of the agencies on the executive committee were also represented on the steering committee by staff members rather than elected officials and policy makers. This dual representation served as a conduit for information between the steering and executive committees. The steering committee served the dual purposes of providing technical input and feedback on transportation options and engaging agencies with regulatory powers over projects.

#### Citizen Committee

The citizen committee included public volunteers from business, environmental, freight, modal, and neighborhood groups, as well as other citizens. Although attendance at meetings of the citizen committee fluctuated, the committee counted a total of 38 members. Organizations represented on the committee included

- United Parcel Service;
- Kennydale Neighborhood Associated;
- Kirkland Planning Commission;
- Bellevue Network South;
- Factoria Mall;
- Bridle Trails C.C.;
- Renton Chamber of Commerce;
- People for Modern Transit;
- Kemper Development;
- Sterling Realty Organization;
- Snohomish County Tomorrow;
- Little Bear Creek Protective Association;
- Microsoft:
- Transportation Choices;
- Washington Trucking Associations;
- Cascade Bicycle Club;
- Puget Sound Energy;
- PACCAR;
- AAA;
- Bellevue Transportation Commission; and
- Boeing.

The citizen committee provided an access point for individuals and interest groups not otherwise involved in the

decision-making process. The committees interacted with each other through joint meetings as well as formal and informal communications. All committee meetings were open to the public and included time for public comment. The committees met more than 80 times in total, including formal meetings and informal information-sharing and discussion forums.

#### **Decision-Making Roles**

WSDOT designed the decision-making process as a circular flow between the three committees and the general public. The steering committee provided technical recommendations based on a variety of land use, economic, environmental, and transportation data. The citizen committee provided recommendations to the steering and executive committees based on the needs of users of the transportation system. The executive committee then provided final recommendations to WSDOT based on input from the other committees as well as political and processoriented considerations. The public helped to refine the decisions throughout the process by providing input on likely decisions.

Interaction was designed to facilitate information flow between all parties. Figure 3 broadly

# The Decision-Making Process in the I-405 Corridor Program THE PUBLIC STEERING COMMITTEE Decision Process Information Flow

Figure 3. Flow of information between committees and the public (5).

illustrates the decision-making concept, in which each group exchanges information and recommendations with all other groups. The following sections explain in more detail how individual decisions were made.

Several groups shared the power to make decisions under the I-405 Corridor Program. The executive committee, as elected officials and lawmakers, had the final power to draft decisions at key points. Although these decisions generally conformed to the recommendations from the other two committees, the executive committee held responsibility for them.

The steering committee held what might have amounted to veto power over the decisions of the executive committee. It was left to members of the steering committee to achieve consensus or concurrence on key decisions. When unanimous concurrence was required, a refusal to concur by any one agency could theoretically have sent the decision back to the executive committee for revision. The steering committee ultimately approved all key decisions.

WSDOT and the co-lead agencies, as signatories of the EIS, held the ultimate responsibility to approve or reject the outcome of the Corridor Program. In addition, FHWA and FTA, as the signatories to the ROD, held an additional level of decision-making authority. These agencies were also involved in actually shaping the outcome through the project team and through the steering committee.

# TRANSPORTATION DECISION-MAKING PROCESS AND KEY DECISIONS

WSDOT structured the decision-making process for the I-405 Corridor Program as a flow of information, recommendations, and approvals. A system of three concurrence points and nine consensus points marked the project chronologically. From the establishment of the committees in 1999 to the signing of the ROD in October 2002, the Corridor Program took a little longer than 3 years.

The following two sections describe the basic decision-making process of concurrence and

consensus points and the public involvement program. The third section provides a chronology of decisions in the I-405 Corridor Program.

#### **Key Decision Points**

Concurrence and consensus points served as milestones in the decision-making process. Concurrence was defined as unanimous formal written determination by the resource, regulatory, and jurisdictional agencies that the information was adequate for the respective phase of the process. Each agency agreed not to revisit decisions unless there were substantial changes to the project proposal, the environment, or laws and regulations. Ultimately WSDOT settled for concurrence with conditions, rather than unconditional concurrence. That is, agencies were allowed to include in their statements of concurrence provisions under which they would accept the decision.

Consensus points coincided with key milestones in the NEPA process. Consensus was defined as the substantial agreement among the agencies with jurisdiction; it did not require a unanimous decision. Consensus on a decision meant that all agencies could at least live with the decision.

Concurrence and consensus points sometimes coincided. In chronological order, the concurrence and consensus points for the I-405 Corridor Program were as follows:

- Consensus Point 1 and Concurrence Point 1: Statement of purpose and need;
- Consensus Point 2: First-level screening criteria;
- Consensus Point 3: Fatal flaw elimination of solutions:
- Consensus Point 4: Identification of additional data needs;
- Consensus Point 5: Second-level screening criteria;
- Consensus Point 6 and Concurrence Point 2: Alternatives to include in draft EIS;
- Consensus Point 7: Decision to publish draft EIS;
- Consensus Point 8: Preferred alternative; and
- Consensus Point 9 and Concurrence Point 3: Preferred alternative and mitigation concept in final EIS.

Throughout the process, WSDOT met individually with resource agencies and jurisdictions or

convened smaller subcommittees to address specific issues. By allowing for negotiation and problem solving outside of the formal committees, WSDOT streamlined committee proceedings.

The members of the steering committee were those that formally signed the concurrence documents and provided consensus. Ultimately, WSDOT, FHWA, FTA, Sound Transit, and King County were responsible for approving the final EIS.

#### **Public Involvement Program**

The I-405 Corridor Program included an extensive public involvement program. The previous effort to solve the corridor's traffic problems with the 1994 MCS saw limited success, in part because of the lack of participation by all communities in the corridor. Consequently, WSDOT recognized public involvement as a critical component of this effort.

WSDOT hired Pacific Rim Resources (now PRR), to manage the public involvement program. WSDOT and Pacific Rim Resources drafted a public involvement plan at the beginning of the process. The document laid out a process to inform and engage the public in the I-405 decision-making process at all steps along the way. The mission of the public involvement program was to establish informed public consent for the I-405 Corridor Program (4).

Throughout the course of the 3-year corridor study, WSDOT

- Held nine public meetings in cities along the corridor, including open houses and public hearings on the EIS;
- Held four special-topic workshops on specific issues:
- Published and distributed eight program newsletters to thousands of residents and businesses in the corridor;
- Held more than 175 speaking and Q&A engagements with public groups;
- Published updates monthly on the program on a detailed project website;
- Conducted outreach to the media, resulting in approximately 150 news stories in the print and broadcast media about the program efforts;

- Conducted a 1,200-person public opinion survey; and
- Sent regular program updates to city, neighborhood, business, and special interest groups.

In addition, the project team worked with community service organizations to reach special populations including the elderly and low-income residents and non-English-speaking communities. About 25% of the \$7 million budget for consultant services went to public involvement activities. Goals of the public involvement program were to

- Build ownership of the solutions by all stakeholders;
- Generate a range of acceptable solutions; and
- Comply with legal requirements for public involvement.

Most of the public involvement activities occurred early in the process, during scoping, or later in the process, during the development of alternatives and subsequent stages.

# Key Decision Points and the Project Timeline

The I-405 Corridor Program kicked off in December 1998. The PMT conducted interviews over a 6-month period with stakeholders and community groups to identify corridor issues and select committee members. The executive committee held its first meeting in July 1999. Figure 4 illustrates the decision-making process for the I-405 as it was proposed in the July 1999 public involvement plan. The diagram illustrates the basic stages of the NEPA process as they coincided with the public involvement program and with the committee meetings. Over the course of the process, the timeline and committee meeting schedules changed somewhat.

The executive committee met in July 1999 to review the committee's responsibilities as well as the decision-making process and schedule. Throughout the process, the committees reviewed the proposed approach for making decisions at each step. The following sections describe the decision-making process chronologically. The process is roughly divided into periods that correspond to the key decision points.

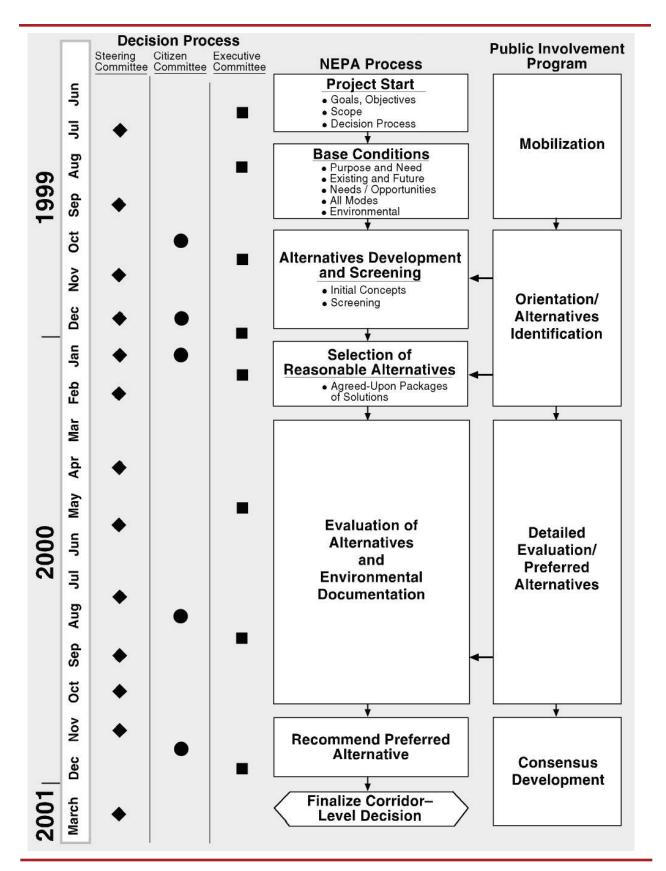


Figure 4. I-405 Corridor Program timeline (4).

The basic flow of decisions was planned as (1) the steering and citizen committees made recommendations, (2) the executive committee drafted decisions, and (3) the steering committee approved decisions. In practice, the actual process did not necessarily follow these three steps in that order at each key decision point. The executive committee generally accepted the recommendations of the steering committee without making major changes. Thus the steering committee could often achieve consensus or concurrence on a recommended decision before it was reviewed and approved by the executive committee. Still, the balance of decision-making power remained more or less constant even as the schedule of meetings and information flow shifted.

#### Purpose and Need

The PMT drafted the original purpose and need statement based on its understanding of corridor issues and feedback from stakeholders and community groups. The executive committee and the steering committee discussed the statement in two separate meetings in August 1999. The steering committee then refined and reached concurrence on it in September 1999. The executive committee subsequently approved the refined purpose and need statement (6).

It was determined that the project was needed to improve personal and freight mobility and reduce foreseeable traffic congestion in the corridor that encompasses the I-405 study area from Tukwila to Lynnwood in a manner that would be safe, reliable, and cost-effective. The purpose of the proposed action was to provide an efficient, integrated, and multimodal system of transportation solutions within the corridor that met the need in a manner that

- Provided for maintenance or enhancement of livability for communities within the corridor;
- Provided for maintenance or improvement of air quality, protection or enhancement of fish-bearing streams, and maintenance of regional environmental values, such as continued integrity of the natural environment;
- Supported a vigorous state and regional economy by responding to existing and future travel needs; and
- Accommodated planned regional growth.

During this period, the executive committee and steering committee reviewed the approach to the decision-making process and the integration of the corridor study with the NEPA document. The project team developed 14 working papers that provided the technical background for transportation deficiencies and the approach for the environmental review process.

#### First-Level Screening Criteria

The steering and executive committees initially considered alternatives and screening criteria in separate meetings in October 1999. At that time the citizen committee convened for its first meeting. The project team held several scoping meetings that were open to all members of the public. Also in October 1999, the citizen committee had an alternatives development workshop in which it worked to identify key issues and concepts for the corridor. From the scoping meetings and alternatives development workshop, as well as meetings with local communities, stakeholder interviews, previous studies, and corridor cities' transportation plans, the project team collected more than 300 initial concepts for solutions.

The steering and executive committees subsequently met to review the initial concepts and screening criteria in separate meetings in November 1999. The steering committee meeting included a special scoping session with resource agencies. The steering committee achieved consensus on the following first-level screening criteria in December 1999:

- Does the concept meet the program's objectives?
   Does it improve mobility in the corridor? Reduce roadway traffic congestion? Improve safety?
- 2. Can we reasonably mitigate any known environmental impacts?
- 3. Is the concept feasible to implement?

# Fatal Flaw Elimination of Alternatives and Development of Modal Themes

In the next stage of decision making, the project team and stakeholders grouped the more than 300 proposed projects or strategies into 17 major categories ranging from minor improvements to major projects. The participants eliminated from further consideration those that clearly did not meet the purpose

and need or were not feasible. The process did not consider project cost at this stage.

The remaining projects were grouped into seven modal themes:

- 1. Transportation demand management (TDM) strategies;
- 2. Transit/HOV;
- 3. High-capacity transit;
- 4. Arterial improvements;
- 5. Increased general highway capacity;
- 6. Express lanes with control pricing; and
- 7. Increased roadway capacity on I-405 and arterial routes and a parallel corridor in east King County.

The steering and citizen committees worked together to develop these theme packages. The two committees participated in a strategic consensus-building exercise to shape the solution packages in December 1999. This exercise consisted of a Delphi process, in which stakeholders anonymously submit and review recommendations in multiple rounds. In January 2000, the two committees held a joint meeting to further refine the seven themes. The steering committee reached consensus on the solution packages at this meeting. The executive committee subsequently reviewed and approved the recommended themes in January 2000.

#### Additional Data Needs and Second-Level Screening Criteria

During this stage the stakeholders laid the ground-work for the development of the alternatives. WSDOT held two meetings with the resource agencies between January and March 2000 to review corridor themes and second-level criteria and screening. The steering committee met in February 2000 and discussed additional data that would be needed for the second-level screening. The committee achieved consensus on the additional data needs at this meeting. It also drafted an initial list of second-level screening criteria. The executive committee reviewed these screening criteria in a meeting in March 2000.

Also in March 2000, the citizen committee met to review the preliminary results of the second-level screening criteria as proposed by the steering committee. The citizen committee made

recommendations on the second-level screening criteria and data needs. The steering committee achieved consensus on the second-level screening criteria in March 2000. The second-level screening criteria covered the following issues:

- Transportation performance: How many trips are served? How are people traveling? How well would the system work?
- Financial and economic performance: What is the total cost for capital facilities, right-of-way, and operations and maintenance? This measures the cost-effectiveness of the project and strategy.
- Social impacts: What are the effects on the neighborhood? What properties are affected? These questions also address environmental justice issues.
- Land use: Is it consistent with land use plans and policies?
- Environmental impacts: What are the impacts on the natural environment? (7)

#### Alternatives to Include in Draft EIS

All three committees held separate meetings between March and April 2000 to review second-level screening results of the seven modal themes. Also in April 2000, WSDOT held a public open house to gather feedback on community preferences for the seven themes. The steering and citizen committees submitted recommendations to the executive committee on alternatives, which the executive committee reviewed in April 2000. All three committees then held a joint meeting to shape the alternatives. An additional round of review of alternatives and recommendations occurred in May 2000, with all three committees holding separate meetings.

The stakeholders approved an initial three alternatives in these meetings. The possibility of a fourth alternative later emerged. WSDOT held two special meetings with the resource agencies in June and July 2000 to discuss the proposed fourth alternative. The executive and steering committees also held two joint meetings to discuss the fourth alternative.

Also during this period, two workshops were held to work with jurisdictions on selecting projects for the alternatives. One workshop covered the central corridor segment and one covered the south and north corridor segments.

The steering committee achieved concurrence on the range of alternatives in July 2000, including the fourth alternative. These alternatives were developed from the projects and strategies identified in the first phase. Each alternative focused on a specific mode of travel. The alternatives were

- Alternative 1: High-capacity transit/travel demand model emphasis;
- Alternative 2: Mixed mode with high-capacity transit emphasis;
- Alternative 3: Mixed-mode emphasis;
- Alternative 4: General capacity (roadway expansion) emphasis; and
- No action alternative.

#### Decision to Publish Draft EIS

In 2000, the PMT developed the draft EIS. Development of the document took approximately a year. The three committees met repeatedly throughout this period to refine the alternatives, develop evaluation criteria, and review analyses. Also during this period, the project team met on several occasions with each jurisdiction to further refine the definition of the project elements being studied.

One issue that arose at this stage of the process concerned growth projections for the city of Bellevue. The representatives from Bellevue contended that the transportation model provided by the Puget Sound Regional Council (PSRC) did not account for the rapid growth occurring in Bellevue. The WSDOT project team worked specifically with Bellevue on this issue. Ultimately, the PSRC updated its growth assumptions for the model by the time the final analyses were conducted.

The citizen and steering committees first made recommendations to the executive committee on a preliminary preferred alternative (PPA) in January 2001. The executive committee subsequently decided on the PPA. The PPA was based on the mixed-mode emphasis alternative. The committees refined and developed the PPA over the next few months. The steering committee reached consensus on the draft EIS in June 2001, and WSDOT published it in August 2001.

#### Preferred Alternative

In the next period the PPA was developed into a preferred alternative (PA). WSDOT held three formal public hearings to receive public comments on the draft EIS. The PMT and the committees reviewed these comments and incorporated them into the PA. The comments ultimately enhanced the transportation demand management element of the PA.

The Transportation Choices Coalition, which was represented on the citizen committee, submitted a proposed fifth alternative as a comment to the draft EIS. The fifth alternative was a less costly option with an emphasis on transit and high-occupancy toll (HOT) lanes. The PMT evaluated the fifth alternative by the same criteria used for the other alternatives, but it was not included in the final EIS.

At this stage there was a lot of discussion on rail transit versus bus rapid transit (BRT). Ultimately BRT was selected as the transit mode to include in the PA. Some stakeholders felt that BRT did not sufficiently address the need of the corridor for alternative modes. Nonetheless, the steering committee achieved consensus on the PA in November 2001.

#### Preferred Alternative and Mitigation Concept in Final EIS

In the final stage of decision making, WSDOT developed the mitigation concept for the PA and published the final EIS. There was a lot of negotiation surrounding the mitigation concept at this stage. Because the EIS was a programmatic document, there was a lack of significant engineering detail on projects to identify specific mitigation measures. Some of the resource agencies on the steering committee initially withheld concurrence as a result.

The Washington State Department of Ecology was particularly concerned with WSDOT's plan for storm water mitigation. As a result, WSDOT and the Department of Ecology convened a small subcommittee to address issues of storm water mitigation.

As a compromise, WSDOT committed to a program of environmental enhancement and early action mitigation, whereby WSDOT would identify

likely mitigation needs for wetlands, streams, and floodplains and would work with resource agencies and stakeholders to come up with mitigation projects in advance of starting any construction. With this compromise, the resource agencies granted concurrence. Concurrence on the PA and mitigation concept was achieved in April 2002.

The PA in the final EIS is similar to Alternative 3, the mixed mode. The PA proposes the following main elements:

- A new BRT system;
- Substantial expansion of local bus transit service;
- Up to two added general-purpose lanes in each direction;
- Improvements to arterial capacity and connectivity in the wider study area; and
- Other general-purpose and HOV roadway improvements.

Ultimately the I-405 decision makers found the PA to be superior in transportation performance, to provide opportunities for environmental mitigation or even enhancement, to have the most favorable ratio of benefits to costs, and to provide a mix of modal investments that constitute a reasonable long-term solution to mobility needs.

FHWA and WSDOT approved the I-405 Corridor Environmental Program in March 2002. The plan contained goals and objectives for enhancing the I-405 corridor's natural and built environments. Among other things, the objectives included the following:

- Avoid and minimize impacts to fish and wildlife habitat;
- Seek a net gain in the functions of fish and wildlife habitat, wetlands, and other waters of the state;
- Establish an agreement between WSDOT and the regulatory agencies for mitigation strategies and schedules;
- Improve air quality;
- Improve water quality; and
- Design and implement appropriate mitigation projects in advance of transportation project construction activities.

WSDOT published the final EIS in June 2002. FHWA and FTA signed the ROD in October 2002 (2).

#### **Next Steps**

Since the completion of the corridor study and programmatic EIS, the I-405 process has moved into project development and WSDOT is issuing project-level studies. There are more than 100 small projects associated with the Corridor Program. A few of these projects, at the time this case study was written, were already under construction.

#### LESSONS LEARNED

WSDOT chartered a transportation decision-making process improvement team to improve the application of the NEPA process during the early stages of long-range planning for transportation projects. The team identified eight strategic goals for the process:

- Provide for the best environmental decisions for transportation strategies;
- Move NEPA decision making into the planning process where many decisions are made (previously without the benefit of environmental review);
- Reduce duplication of effort by all agencies;
- Reduce project cost;
- Reduce project time;
- Improve agency coordination;
- Improve public coordination; and
- Improve the public's perception of WSDOT.

Not only did the process improvement team identify goals for the process, but they also developed a detailed conceptual implementation plan, a public involvement plan, and conflict resolution procedures to guide the EIS PMT through the new decisionmaking process. WSDOT modified the guidance somewhat to meet project-specific needs, but the guidance provided a clear direction to help keep the project on track. The I-405 corridor was WSDOT's first project to successfully move through the process and complete a large, complex, and controversial programmatic EIS in 3 years. Although not formally tracked during the NEPA process, a preliminary internal assessment of the process and interviews with internal and external stakeholders indicated that most participants felt the process was successful.

Beyond just the development of the goals and conceptual guidance, the new process required the PMT to be flexible, open to new ideas, and willing to try things it had not done before, while staying within the bounds of the process. The following discussion describes the key factors in the PMT's successful negotiation of the revised decision-making process.

#### Success Factors

#### Use of a Programmatic EIS to Move NEPA Decision Making into the Planning Process

The I-405 Corridor Program used a programmatic EIS to improve the application of NEPA during the early stages of long-range planning and reduce the redundancies of the planning phase and the NEPA process. Among other objectives, the intent of the Reinventing NEPA process was to consider environmental and permitting issues early enough in the planning process for decision makers to understand the environmental consequences of transportation investment decisions before legislators made funding commitments that would be difficult to change late in the NEPA analysis.

The I-405 Corridor Program accomplished this objective with the early and regular participation of 31 federal and state regulatory agencies and jurisdictions. A series of written concurrences on the purpose and need statement; selection of alternatives to advance for detailed study in the draft EIS; and selection of the PA and mitigation concepts that became the selected alternative ensured the participation of the agencies. The Reinventing NEPA process ensured that the agencies' concerns were considered and addressed at each decision point, and that there were no last-minute surprises requiring additional analysis or a change in direction. The process intended that written concurrence by the agencies with jurisdiction on the I-405 Corridor Program would ensure that agreements made at the key decision points will not be revisited in the future unless there are significant changes to the project or the regulations.

The permit application and review process will occur as projects are advanced for design and construction. Nevertheless, with only a corridor level of design detail, resource agencies were able to make some conclusions about environmental impacts and mitigation commitments. These conclusions allowed the project to move forward and ensured that the range of alternatives will not require further review or analysis in project-level studies. A few of the more notable decisions follow:

- The selected alternative had the lowest impact on wetlands of any action alternative. With the program's proposed wetland mitigation measures, the I-405 Corridor Program met federal wetland requirements for avoidance, minimization, and mitigation of impacts to wetlands on a planning level.
- Consideration of potential impacts at the programmatic level of analysis met both the spirit and intent of the Coastal Zone Management Act.
- A preliminary determination ensured that the selected alternative incorporated all possible planning to minimize harm to Section 4(f) land and resources to the extent allowable based on the level of detail available. There were no feasible and prudent alternatives to avoid the use of Section 4(f) land and resources, and no other alternative was more effective in minimizing potential harm to Section 4(f) resources.
- Air quality emissions would be below emission budgets for all pollutants in 2010, 2020, and 2030 for the Metropolitan Transportation Plan.
- Because specific project scopes are not known, the impacts, if any, on endangered species and ecosystems cannot be fully or finally evaluated at the corridor-level EIS stage (however, coordination with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service and the U.S. Fish and Wildlife Service will be ongoing); and
- WSDOT began consultation with Native American tribes to fulfill both the spirit and intent of Section 106 to take into consideration, at the earliest possible time, the potential effects of the selected alternative on eligible historic properties.

The ROD gave the resource agencies further assurance that mitigation measures agreed on in the final EIS will be carried out before or during

project construction (2). The mitigation measures were incorporated into the definition of the project and will therefore be implemented. WSDOT will provide funding for the implementation of all mitigation measures or ensure that other agencies fund and implement the mitigation commitments. The project sponsors are prohibited from withdrawing or substantially changing any of the mitigation measures identified in the environmental record for the project without the express written approval of FHWA or FTA or both.

#### Joint Decision Making

WSDOT engaged four key agencies as co-leads in the NEPA process to help ensure that the final decision would be an inclusive and balanced plan that had the buy-in of highway and transit agencies. FHWA, FTA, Sound Transit, and the King County DOT had regulatory jurisdiction over the highway and transit systems in the corridor and had the ability to stop or deny the project either through a permit action or through project objection with regulatory weight. As federal agencies, FHWA and FTA held responsibility for the final decision, but in reality, the decisionmaking process was shared between the lead agencies and the policy, technical, and citizen committee members who provided input at every key decision point in the process (see Figure 3). Through these collaborative efforts the program made record progress and completed the ROD in 3 years, a rapid turnaround compared with similar transportation improvement projects across the country.

The success of the I-405 Corridor Program is primarily attributed to the early and continuous involvement of all the stakeholders and a transparent and collaborative decision-making process. Critical to the success was regularly having the members of the three committees at the table sharing information and fostering relationships while building trust in order to reach consensus on key decisions. Each committee represented an important perspective in the development of the comprehensive program. The executive committee rallied public and political support, the steering committee ensured that the environmental objectives were included in the program, and the citizen committee provided an access point

for individuals and interest groups not otherwise involved on one of the committees. All parties invested a significant amount of time to attend dozens of meetings and remained committed to finding a mutually agreeable solution. The success of this intensive collaboration is evident in the fact that there was only one comment on the final EIS. The comment letter came from the U.S. Environmental Protection Agency, which still had some major concerns but decided not to oppose the decision. Also, given the long history of controversy on this project, it is quite possible that the ROD would have ended in a legal challenge were it not for the dedication and collaboration of the diverse committee members.

The most difficult key decision point was reaching concurrence on the range of alternatives to include in the draft EIS. For example, some stakeholders preferred a high-capacity rail alternative that was screened out while a BRT alternative moved forward. This stakeholder set viewed the BRT alternative as "just adding more concrete." The resource agencies also expressed frustration that they had no representation on the executive committee, which was made up primarily of elected officials. In their opinion, the executive committee lacked the technical and regulatory expertise with natural resource issues, and the agencies felt that decisions were made without serious consideration of the agencies' concerns. Nevertheless, good relationships with the WSDOT PMT enabled the resource agencies to work through their major issues and provide written agreement at the three points of concurrence. In fact, WSDOT facilitated a subcommittee and separate resource agency meetings to work through concerns about wetlands, water quality, storm water runoff, and fisheries throughout the process.

# Commitment to Fund Comprehensive Mitigation

For a large corridor such as the I-405 corridor, a programmatic EIS is appropriate to evaluate a range of potential alternatives and identify the general location and modal solution(s) at a policy level. As such, most of the design details are deferred to the project-level studies. A programmatic EIS presents mitigation concepts and opportunities but does not have the

level of specificity to identify mitigation details. This presents a problem for many resource agencies that typically require impact analyses with a greater level of detail in order to determine appropriate mitigation. Resource agencies often get caught between a combination of their regulatory requirements and the limitations of a programmatic EIS analysis and planning-level data. Because of this, reaching concurrence at the point of selecting the PA and mitigation concept became one of the most difficult issues for the I-405 project team to resolve.

In the end, WSDOT's commitment to fund a comprehensive set of mitigation measures was a pivotal factor that allowed the resource agencies to reach concurrence and keep the project moving forward. This commitment covered not only the new program but also historical losses to some degree. WSDOT committed to restoration of key habitat lost in urban development and transportation projects during years past. The I-405 Corridor Program committed to leaving the environment better than it had found it. The opportunity to achieve those benefits eventually outweighed initial resource agency concerns that giving concurrence to the total program would undermine or predetermine their ability to fairly assess project-level NEPA documents in the future.

# Shared Commitment to Timely Completion of the Study

The agencies that participated in the I-405 Corridor Program were committed to the timeline as set out and carried through by the PMT. A shared sense of urgency in working through the process and finding a solution to congestion problems was essential. Without this urgency, individual agencies or groups of agencies could have delayed and ultimately disrupted the process. The PMT made it clear to all the committees that the process would move forward at a steady pace and that the active participation of all stakeholders was essential.

#### Strong Political Support

Proactively giving local and state elected officials an active role in the process via the executive committee ensured that political support was institutionalized in the decision-making process. The executive committee

focused on what they believed to be reasonable alternatives consistent with local land use planning, which also helped to get through the process in a timely manner. The elected officials took ownership of the decisions and became advocates for the PA to their constituents, and also to the Transportation Commission, the legislature, and the governor to ensure subsequent funding support for the I-405 program.

#### Structured Public Involvement Program

Key strategies in the public involvement program provided the public with a clear understanding of the transportation problems, instilled confidence in the program, gave special interest groups opportunities for meaningful dialogue, and maximized the availability and delivery of information. Recognizing a job well done, the program has earned multiple regional and national awards for achieving extensive regional cooperation and practicing an outstanding community outreach program.

Extensive public involvement in the process helped to ensure that the selected alternative took into account public desires, and public comments helped shape the PA, particularly in regard to the transit component. Although many transit proponents would have preferred some type of rail solution as opposed to BRT, they did feel that as a result of public involvement, the PA had a larger transit component than it would otherwise have had. Subsequent to the EIS, a number of transit-specific discussions have occurred and a consultant has been hired to evaluate corridors north and south of I-90.

The public involvement process allowed for a greater public discourse of alternatives before selection of the PA and allowed the transit proponents to present their position to the public. Through this process, they were also able to get some additional funding for transit.

#### Strong Leadership

The project manager championed the process and had a clear vision of how the process would be implemented. He communicated the objectives and expectations to the consultant, committee members, and the project team. He took a hands-on approach that kept the project moving forward.

The project manager also had strong leadership skills. He took on the role of a facilitator, negotiating with WSDOT as much as with other groups to focus the process on building agreement. When the process started to get bogged down, he met one-on-one with the individuals, and through his leadership and consensus-building skills he built a level of trust and gave reassurance that issues would be dealt with in the future.

#### Other Key Success Factors

Other key factors identified as important to the success of the project include the following:

- Good relationships and trust building were accomplished via an open and transparent process;
- The study was completed as quickly as possible to minimize problems with staff turnover;
- Authority was delegated to WSDOT staff to make decisions in a timely manner;
- Meetings were well organized and had clear objectives;
- The project team tried to make the effort enjoyable for the participants, shared information in an interesting way, encouraged informal interaction, and promoted the idea that participants take ownership of the project; and
- The PMT defined the new mitigation approach well.

#### **Key Innovations**

The Reinventing NEPA process represented a substantially different way of doing business for WSDOT. The most notable aspect of this process is its efficiency coupled with the level and style of public involvement. WSDOT and the committees did some things well, such as encouraging public involvement, coming to consensus or concurrence at each key decision point, and taking only 3 years from publication of the Notice of Intent to the completion of the ROD, but nothing else stood out to stakeholders as being particularly new or innovative.

WSDOT modified the committee structure envisioned in the original guidance for the I-405 Corridor Program. Initially, the Reinventing NEPA process called for one large committee of stakeholders composed of elected officials and the technical experts

from the regulatory agencies. The expectation was that all the committee members would be at the table to reach consensus and make decisions together. However, WSDOT had already learned from two other pilot projects that this was an ineffective process that had people attending meetings on topics for which they had no expertise, which often resulted in gridlock at key decision points. Instead, the I-405 Corridor Program implemented the three-tiered committee structure that separated elected officials, technical experts, and citizens. Each committee was responsible for its own area of expertise, at specific points in the process, but the committees met together as needed to discuss issues and exchange information. Most members agree that this was a much more efficient decision-making process.

#### **Barriers Encountered and Solutions**

There do not appear to have been any major barriers to completing the I-405 Corridor Program EIS, and interviewees do not recall having had to use the conflict resolution process. Interviewees acknowledged that there were some key decision points that were more difficult to reach agreement on than others—for example, getting concurrence from some of the regulatory agencies on the PA and some initial concerns about the accuracy of the travel model. Interviewees attributed the absence of major barriers to the structure of the decision-making process wherein early involvement of the stakeholders resulted in issues being brought forth and addressed as they evolved rather than submitted as comments at the end of the process, which often results in additional time and effort. Agreements reached through numerous committee meetings and one-on-one meetings and negotiations with the PMT allowed everyone to feel that they had gotten at least part of what they needed, and, as a result, reach consensus that kept the project moving forward.

#### Recommended Process Improvements

Opinions on the success of the decision-making process varied widely. Some members of the PMT felt that the resource agencies had too strong a role in the decision-making process and thought the process

would have gone more smoothly had the agencies been in more of an advisory role. On the other hand, at least one resource agency representative, a member of the steering committee, felt that the resource agencies did not have a strong enough voice in the process. Decisions at the consensus points were made by a vote of the committee members, and the majority vote determined the outcome. Local government planning and transportation representatives far outnumbered resource agency representatives. When it came to making decisions based on a majority vote, the agencies felt that decisions were made without giving enough consideration to nontransportation concerns. The minority had an opportunity to present its concerns and have additional discussion before the final vote.

The following were offered as recommendations for process improvement:

- Establish and maintain a balance of elected officials and transportation and agency representatives on the executive and steering committees. Although WSDOT funds a number of positions at several of the resource agencies to give priority to WSDOT projects, the resource agencies made up less than 20% of the steering committee. There were no resource agency representatives on the executive committee.
- Allow more flexibility in the process to obtain a conditional concurrence with the steering committee. Getting concurrence with every agency proved difficult. Some felt it should only be necessary to get concurrence from the executive committee and not the steering committee.
- Anticipate challenges and draw out concerns with more rigorous scoping.
- Broaden the study to determine how the project fits into the whole transportation system.
- Allow steering committee members to forward dissenting opinions or minority reports to the regional administrator or executive committee before decisions on any environmental issues.
- Allow more flexibility in the schedule so that the schedule does not dictate the course of action.
- Allow committee members to get input from experts in their respective organizations before making decisions.

 Clarify the roles and responsibilities of the differing committees.

In July 2002, WSDOT prepared a draft report that attempted to evaluate the success of the new transportation decision-making process at meeting the original goals as well as the lessons learned from the three pilot projects. WSDOT never finalized the report, but the summary of comments echoed those noted above.

Respondents were also asked to rate their level of satisfaction with the process. On average, respondents gave the process for the I-405 project a 6.4 (out of 10) satisfaction rating. The PMT members tended to have the lowest level of satisfaction and the resource agency members the highest level. The I-405 Corridor Program also had a moderate score for the goal of reducing project time, but a number of people commented on how quickly the process had been completed.

#### **CONCLUSIONS**

WSDOT no longer uses the Reinventing NEPA decision-making process. Currently, WSDOT and FHWA are revising the process to be more consistent with the requirements of the most recent federal transportation funding bill, SAFETEA-LU. FHWA's final guidance for implementing Section 6002 of SAFETEA-LU makes clear that the lead agency is responsible for determining the final purpose and need for the action and the range of alternatives, after considering input from the public and participating agencies. The guidance further directs lead agencies "to renegotiate or dissolve a merger agreement that calls for other agencies to concur in purpose and need statements or the range of alternatives if the agreement is not expediting project development." WSDOT and FHWA have interpreted this to mean that requiring written concurrence is not necessary and may hinder the streamlining of objectives because it can give other agencies the power to stop a project when they do not concur with the purpose and need statement or the range of alternatives.

The most significant change to WSDOT's process will be the elimination of the requirement for a written agreement at the three concurrence points. When completed, WSDOT's new guidance will establish a minimum baseline decision-making process for an EIS; however, WSDOT may occasionally have to expand the process for large, complex projects. The details are still to be developed, but the new process will leave more room for nonconcurrence, thereby allowing a project to move forward in the absence of complete agreement from all parties. Instead, the intent is to have a standing forum for resource agencies to periodically present their concerns. The redesigned process will not be signed by other regulatory agencies, but it will become part of WSDOT's environmental procedures manual.

#### **REFERENCES**

1. Washington State Department of Transportation. I-405 Congestion Relief and Bus Rapid Transit Projects—Project FAQs. www.wsdot.wa.gov/Projects/i405/corridor/faq.htm. Accessed Jan. 14, 2011.

- 2. U.S. Department of Transportation, Federal Highway Administration, and Federal Transit Administration. *I-405 Corridor Program: Record of Decision*. October 9, 2002. www.wsdot.wa.gov/NR/rdonlyres/AC2D34D8-43AA-4760-92B8-DF85E3D190AA/0/I405\_RecordOfDecision\_Final.pdf. Accessed Jan. 27, 2011.
- 3. Pacific Rim Resources. *I-405 Corridor Program Public Involvement Plan*. Working Paper #1. Washington State Department of Transportation, Olympia, Wash., July 19, 1999.
- 4. Transportation Decision Making Process Improvement Handbook: Pilot Projects Handbook. Washington State Department of Transportation, Olympia, Wash., October 9, 1998.
- 5. I-405 Corridor Program Final Recommendation Report. Washington State Department of Transportation, Olympia, Wash., 2002.
- 6. Washington State Department of Transportation. I-405 Congestion Relief and Bus Rapid Transit Program—Final Environmental Impact Statement. www.wsdot.wa.gov/Projects/i405/corridor/library/feistoc.htm. Accessed Jan. 25, 2011.
- 7. Samdahl, D. Making the Right Decisions in the I-405 Corridor. Mirai Associates, Kirkland, Wash., n.d.

### THE NATIONAL ACADEMIES

#### Advisers to the Nation on Science, Engineering, and Medicine

The National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. On the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Ralph J. Cicerone is president of the National Academy of Sciences.

The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. Charles M. Vest is president of the National Academy of Engineering.

The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education. Dr. Harvey V. Fineberg is president of the Institute of Medicine.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purposes of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both Academies and the Institute of Medicine. Dr. Ralph J. Cicerone and Dr. Charles M. Vest are chair and vice chair, respectively, of the National Research Council.

The Transportation Research Board is one of six major divisions of the National Research Council. The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied activities annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation. www.TRB.org