

Additional Tools (not funded)

511 Enhancements

This project adds HOV/ transit and Park & Ride information into the 511 Traveler Information System, providing another venue for travelers to obtain impact information.

Total Cost: \$5,000

Cell Phone/PDA Alerts

This project builds on the WSDOT cell phone/PDA pilot program to provide real-time information to personal wireless devices enabling immediate decision making by drivers. It will be implemented in two phases: Phase 1 updated existing maps with expanded camera snapshots. This expansion will require additional server and software support. Phase 2 will expand the site to allow for travel information and size requirements for cell phone/PDA displays. Project costs could be shared by other corridor projects.

Total Cost: \$70,000

Enhanced Business Coordination

Building on the collaboration and partnerships established early in the project, this project provides intensive employer outreach to both CTR and multi-tenant sites to increase awareness and specifically form carpools and vanpools. This project would be delivered through King County Metro Rideshare Operations and Employer Services

Total Cost: \$60,000

VMS Replacement

- SB I-5 at Interurban Ave. (ex. VMS-071)
- EB SR 518 between SR 99 and I-5 (ex. VMS-596)
- SB I-5 at Swamp Creek (ex. VMS-206)
- WB SR 520 between 140th Ave and 130th Ave. (ex. VMS-532)
- NB I-5 at Southcenter Hill (ex. VMS-058)
- WB I-90 at 142nd Ave. (ex. VMS-905)

Total Cost \$960K (\$160K each)

New VMS

- EB SR 520 between Lake Washington and I-405.
- WB SR 522 in Woodinville or Monroe.
- I-90 near E. Mercer Way.
- EB SR 522 near UW-Bothell.

Total Cost \$1.2M (\$300K each)

Other

- New CCTV on SR 520, between Bellevue Way and I-405. -\$50K
- New VMS and CCTV on NB SR 169 in Renton. -\$300K
- New VMS and CCTV on WB SR 908 in Kirkland. -\$300K

Total Cost \$650K

Public Outreach

To help achieve the TDM targets, public outreach will focus on educating the public, businesses and regional agencies about the resources available. As part of an active I-405 corridor communications program over the 2005-07 biennium, project team members will incorporate travel solution messaging into public scoping meetings, open houses, EA hearings, neighborhood meetings, business outreach, project fact sheets, email listservs, HAR radio messages, variable messaging signs, and the website. The focus will be on construction mitigation for Kirkland Stage 1 and other I-405 projects, highlighting increased bus service for areas with available capacity, increased Park & Ride availability, up-to-date construction information, increased incident response service, carpool staging areas, and enhanced real-time web/personal wireless features.

For More Information

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I-405 Construction Mitigation TDM Work Plan Summary – Kirkland Project

Over the next 10 years, the I-405 corridor will experience the highest level of construction activity since it was first built over 40 years ago. To offset the impacts of construction, the Washington State Department of Transportation (WSDOT) has teamed up with communities and transit agencies to offer travel solutions to maintain existing vehicle speeds and person throughput in the I-405 construction area.

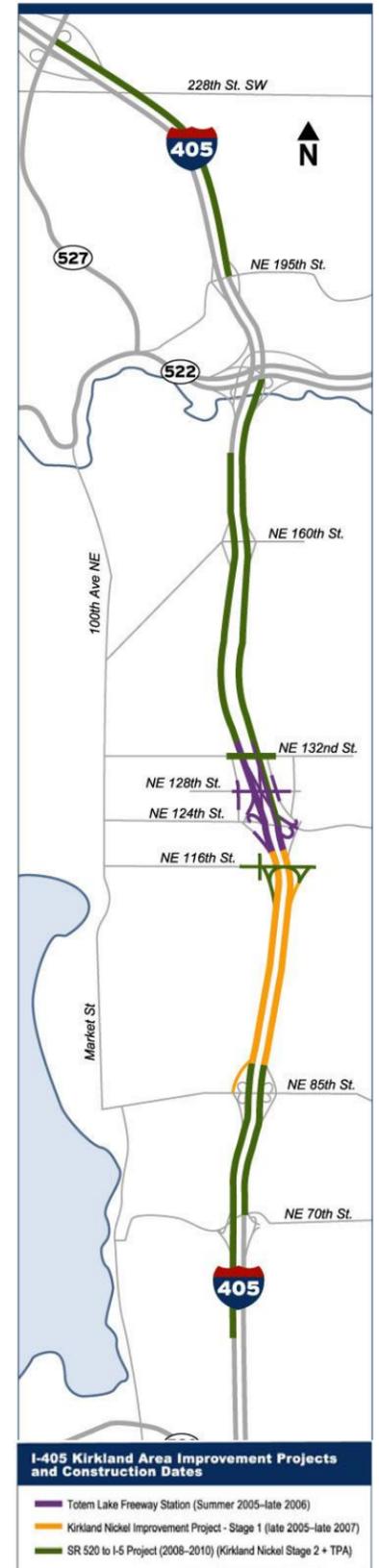
The I-405 Kirkland Nickel Stage 1 Project, which breaks ground in Spring 2006 and continues through Fall 2008, is the first project out of the chute. While the project does not require extensive lane closures during the peak periods, all lanes will be narrowed in width and shoulders will be reduced to 2 feet for extended periods of time. This narrowing has the potential to reduce speeds and person throughput.

The I-405 TDM Construction Mitigation work plan relies on four main integrated elements:

- **Maintain roadway capacity** with increased bus service, maximized HOV (vanpool, vanship and carpool) use, and enhanced incident response
- **Shift trips** to HOV with park & ride enhancements, including new, expansion of current and alternative locations
- Engage and inform the public through **expanded real-time travel information** on TV/radio, internet, personal wireless devices, email and variable messaging
- **Target** outreach to **specific** geographic and trip **markets** to ensure the most people have the right knowledge about the situation (including key employment worksites and property management organizations).

TDM Construction Mitigation is delivered based on the objective of helping maintain the traffic flow consistent with pre-construction conditions.

In the case of the I-405 Kirkland Nickel Stage 1 Project, travelers will encounter narrowed lanes and two foot shoulders during the daytime. As this construction area experiences its greatest congestion southbound during the morning commute, these efforts will be focused on shifting trips and turning drive alone traffic from the north into HOV trips



I. Maintain roadway capacity with increased bus service, maximized HOV (vanpool and carpool) use, and enhanced incident response

Expanded Transit Service

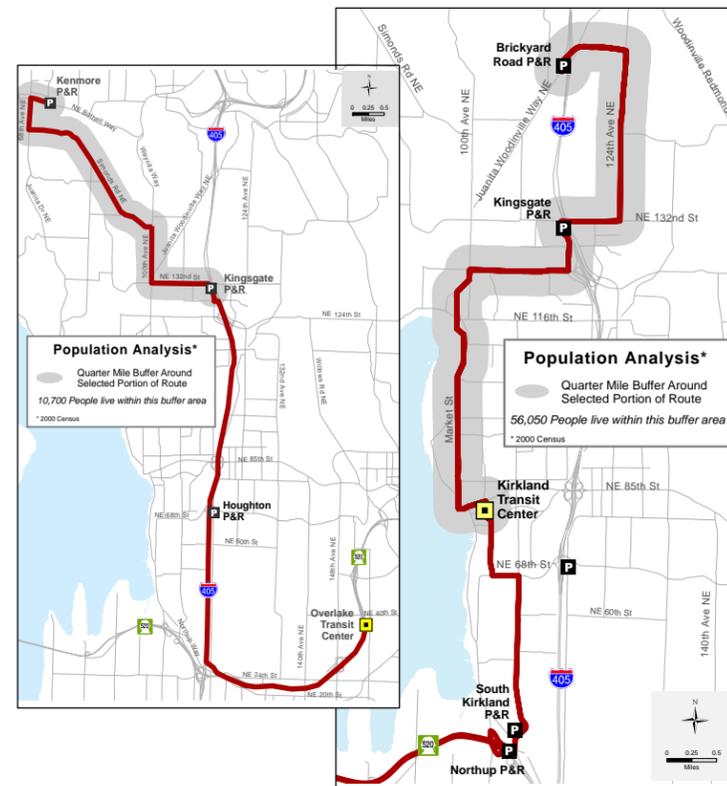
I-405 commuters are limited in their transit options by both available service and Park & Ride capacity (4 of the 5 Park & Ride lots north of the construction site are at or exceed 100% utilization). In an effort to expand the options available while shifting auto trips from the corridor a new peak period Kenmore/Kingsgate/Overlake bus service and an extension of Route 255 Seattle/Kirkland to Kingsgate/Brickyard are provided.

Annual Cost: \$880,000

Increased Incident Response Services

To reduce the congestion associated with vehicle incidents, it is recommended that an additional roving Incident Response Patrol be provided. This enhanced service could possibly have expanded work hours or be made available during any high impact weekend construction in the planned area.

Total Cost: \$150,000



II. Shift trips to HOV with park & ride enhancements, including new, expansion of current and alternative locations

Increased Park and Ride Opportunity

With Park and Ride facilities in the area at capacity, limitations and access challenges exist to transit usage as well as carpool/vanpool formation. In an effort to maintain roadway capacity through transit ridership as well as other HOV usage, new park and ride spaces are being strategically identified in association with King County to move carpool and vanpool staging from traditional lots. Additionally, residential areas are being identified for VanShare marketing and deployment to entirely remove vehicles from the park and ride facilities.

Estimated Cost: \$50,000

III. Engage and inform the public through **expanded real-time travel information** on TV/radio, internet, personal wireless devices, email and variable messaging

Real-time Travel Information for Roadway and Transit

When travelers have more information they have demonstrated that they make travel choices based on real time conditions. As such the Traveler Information resources would be enhanced with new technology to offer commuters better access to traffic and incident data.

Variable Message Information on Real Time Traffic Maps

This feature provides public and local transportation agencies with access through animated GIF files to on-the-road information about incidents and construction to support their trip planning. Since the icons (about 40) would overlap existing cameras, it is possible that additional maps or views may be required, such as an overlay map with only VMS icons.

Total Cost: \$5,000

On the Web

By April 30th 2006, it is proposed that WSDOT deploy new HOV databases to revamp the Travel Time web pages to show the benefits of HOV usage. This data will allow for implementation of a trip-planning tool by April 2007 that combines real-time GP, HOV and transit data. This information will allow travelers to maximize use of HOV travel and avoid delays caused by construction.

Labor Cost: \$5,000

By April 2008, a second phase will be initiated to include information about delays caused by incidents. This information will be added to the email system for automatic transmission based on user choices.

Total Cost: \$105,000

Implement incident icons on the existing maps.

Incident icons are proposed that link to descriptions of the incidents to help users access HOV travel options to avoid impact from incidents. This two-phased project connects to the existing CARS database. Phase 1 adds the CARS data to the current website in tabular form. Phase 1 cost is \$30,000 with a completion deadline of April 2007. The second phase, linking incident descriptions to existing maps and icon inclusion would be complete by April 2008.

Total Cost: \$50,000

Travel Condition Email

A personalized public email service for traffic information is proposed to notify users about incidents, changes in travel time, or whether they should take their selected alternate route. The system would include public information for construction and maintenance projects in the area of interest. Project costs could be shared by other corridor projects.

Total Cost: \$90,000

Highway Advisory Radio

Building on the public's use of the Highway Advisory Radio system, dual portable transmitters will be utilized to complement fixed radio transmitters, variable message signs, and incident web information tools already in use in the corridor. This portable system will enable localized transmission of current impacts to those traveling the corridor.

Total Cost: \$60,000

IV. Target outreach to specific geographic and trip markets to ensure the most people have the right knowledge about the situation (including key employment worksites and property management organizations).

Increased Coordination with Businesses in North I-405 Corridor

Businesses served by the north I-405 Corridor provide excellent opportunities to promote commute options through the following activities:

- Promote carpool, vanpool and transit use with Commute Trip Reduction (CTR) affected businesses in the north I-405 corridor. Including Bothell, Kirkland, Bellevue and Redmond almost 80,000 commuters are represented by 158 CTR businesses.
- Establish partnership with property management organizations to promote HOV use during construction in corridor.
- Build on the successes of existing vanpool and transit programs.

Estimated Cost: \$10,000

Increased Awareness of Corridor Users in North I-405 Corridor

Based on analysis of origin and destination information for residents of the north I-405 corridor, households within the represent a primary opportunity to enhance project awareness and promote commute options general geographic area contained within 2.5 miles of Kenmore, Kingsgate and Brickyard Park and Rides through the following activities:

- Promote new transit plus carpool and vanpool programs via direct mail.
- Build on existing City relationships with neighborhoods to promote HOV use during construction in corridor.

Estimated Cost: \$95,000