

Columbia River **CROSSING**

Transportation Demand Management for the CRC Project

Project Sponsors Council
March 12, 2010



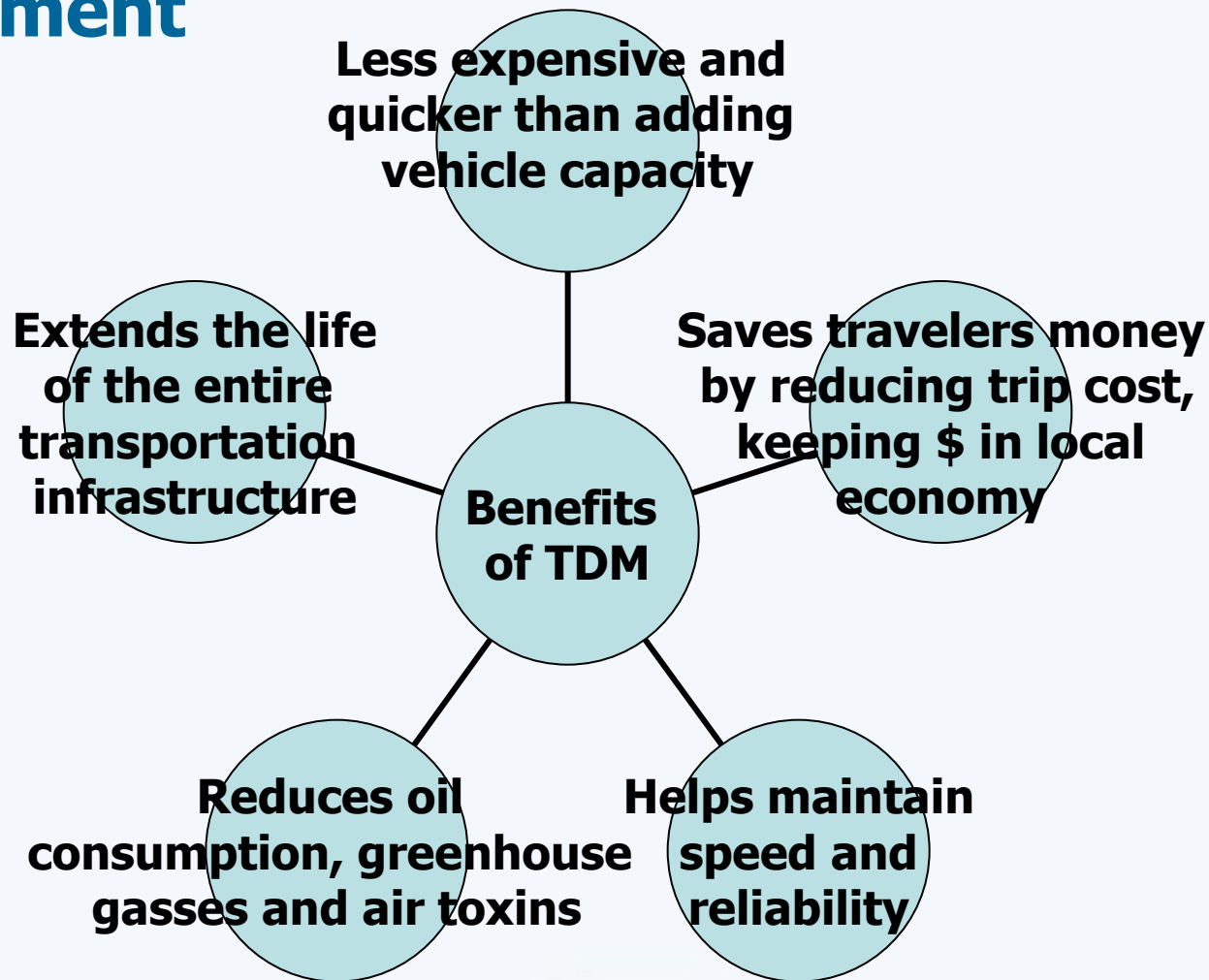
Transportation Demand Management Working Group

- Cities of Vancouver and Portland
- TriMet and C-TRAN
- RTC and Metro
- ODOT and WSDOT

Transportation Demand Management is:

- Modal shifts
 - Transit
 - Bikes and Pedestrians
 - Carpooling and Vanpooling
- Trip substitution
 - Telecommuting, Compressed Work Week
 - Shorter trips
- Time shifts
 - Shifting trips to outside the peak: flexible work schedules, reduced costs

Benefits of Transportation Demand Management



Northwest projects that have successfully used TDM during construction

- I-5 Bridge Trunnion Replacement
- I-405 in Kirkland and Bellevue
- SR 520 in Bellevue/Seattle (planned)

TDM Works Beyond Construction

WSDOT Commute Trip Reduction (CTR) Program Results:

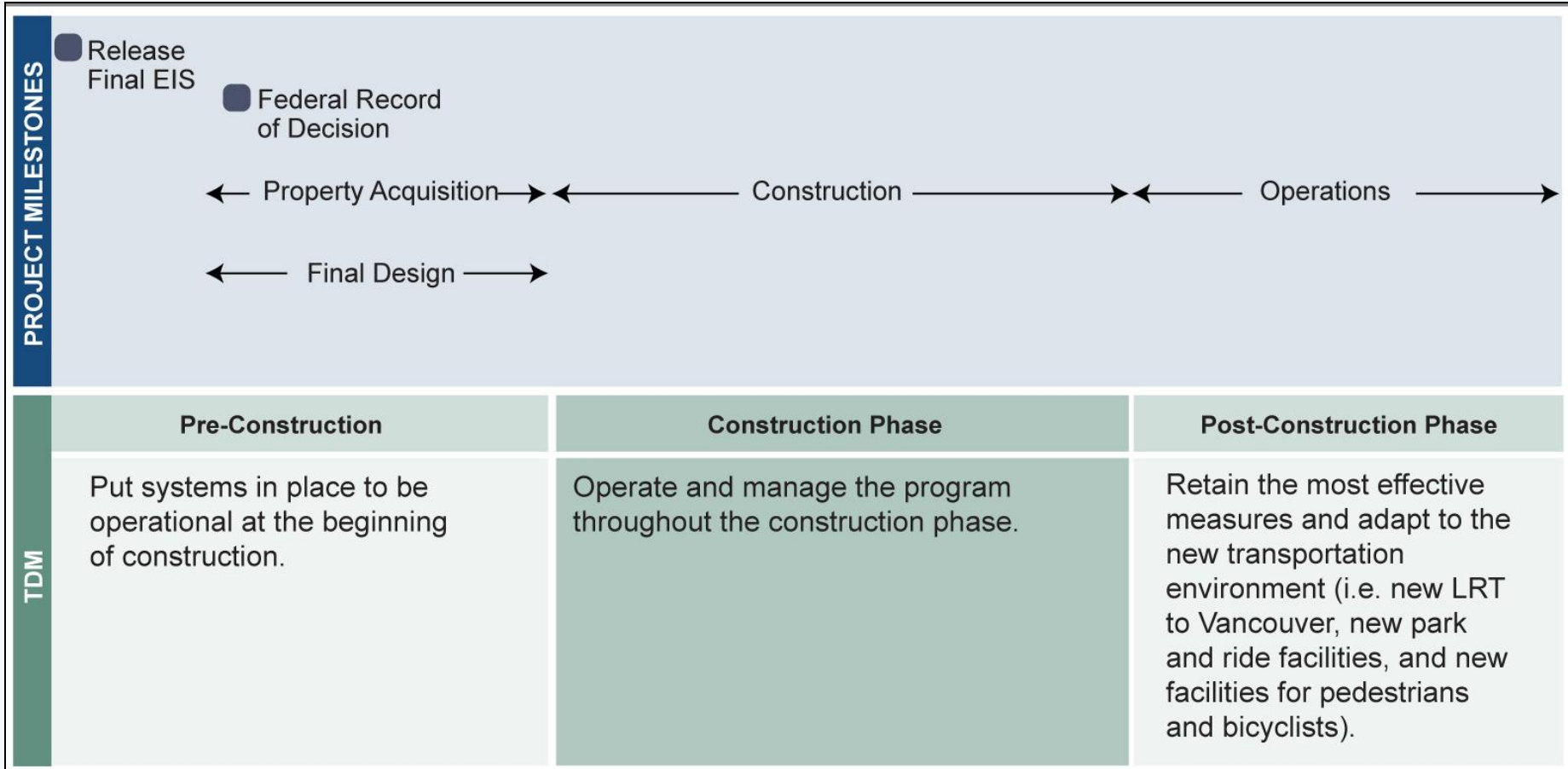
- Removes an average of 28,000 vehicles each weekday morning peak from Washington's most congested state highways
- Prevented 12,900 hours of delay in Central Puget Sound in 2009, saving \$99 million for the region in congestion costs and fuel
- CTR is a \$35 to \$1 return on state investment in terms of congestion benefits alone

Source: *2009 CTR Report to the Washington State Legislature*

Summary of Working Group Recommendations

- Implement a targeted three-phase CRC TDM program: pre-construction, construction and post-construction.
- Deliver a mix of expanded transit, vanpool, carpool, telecommute, bike/pedestrian, and flexible work schedules focused on peak period commuters using employer outreach and individualized marketing programs.
- Develop an institutional structure to coordinate program delivery, monitor results and adapt strategies.
- Actively monitor TDM program performance and make changes in response.

Phases of the CRC TDM Plan



“Vehicle Trips Saved” Target for CRC Construction Phase

- Offset the loss in I-5 capacity during construction caused by narrower shoulders, lane shifts, and gawking at construction activity.
- Greater “trips saved” would accommodate regional traffic growth during the multi-year construction phase.
- TDM Working Group’s Proposed Target = 1200-1700 vehicle trips saved in the peak direction during each AM and PM peak period.

Predicted “Vehicle Trips Saved” Results

(one-way trips during each 4-hour AM southbound and PM northbound period)

By Mode	“Vehicle Trips Saved”
Telecommuting and Flexible Schedules	100 - 150
Increased Vanpooling	300 - 500
Increased Carpooling	300 - 400
Increased Transit	450 - 650
Increased Bikes and Pedestrians	20 - 40
Peak Period Total (during each peak period)	1200 - 1700

Funding Needed for TDM Implementation

- One-Time Capital Programs - \$9.1 Million
 - Acquisition of buses for additional service and minor transit facility improvements
 - Acquisition of additional vans beyond the WVIP funding level
- Annual Operating Expenses - \$4.1 Million
 - Expanded employer outreach and focused marketing
 - Expanded area-wide and corridor marketing and promotions (e.g. Drive Less / Save More, Southbound Solutions)
 - Short-term incentives for vanpool start-ups
 - Operating costs for higher frequency local bus service connecting to MAX
 - Monitoring and adaptive management costs

Limitations/Opportunities to achieve higher TDM Results

- The lack of HOV lane and/or ramps, as in the Puget Sound area, limits the attractiveness of carpooling, vanpooling and transit because travel time advantages are not realized.
- Implementation of HOV ramps and/or shoulder lanes during construction would boost bus, vanpool and carpool performance.
- If advance tolling were to be implemented, the TDM program would need to expand to meet demand for options to driving alone and paying a toll.
- Capacity of existing park-and-ride facilities is limited. New facilities would be needed to accommodate additional bus and vanpooling use.

TDM Elements of the CRC Project and 2005-2030 Comparisons

- **Transit** is forecast to carry 6100 people northbound during the 4-hour PM peak period in 2030. This is 17 percent of total person trips, up from 6 percent in 2005.
- **Pedestrian** use of the bridge is forecast to increase at least seven-fold over 2005 use.
- **Bicycle** use of the bridge is forecast to increase by 240 to 1700 percent over 2005 use.
- **Participants in carpools** are expected to increase by 36 percent.
- **Tolling** is predicted to reduce daily I-5 traffic by 17 percent relative to the no-toll scenario.