



Oregon Department of Transportation



Sunrise Project and South I-205 Report Results

Presented to

***Clackamas County
Coordinating Committee
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James Whitty, Manager
Office of Innovative Partnerships
and Alternative Funding





BRIEF BACKGROUND

- **Late 2005, ODOT signed contracts with the Oregon Transportation Improvement Group (OTIG), a Macquarie-led consortium for pre-development work on the Sunrise Project, the South I-205 Widening Project, and the Newberg-Dundee Bypass**
- **OTIG began “Milestone Zero” – high level scoping work – on Sunrise and I-205 in early 2006**
- **Initial traffic and revenue data review, design and environmental review, and initial public outreach work performed**



BRIEF SUMMARY

- **The Oregon Transportation Improvement Group (OTIG) recently finished its “Milestone Zero” scoping studies for the South I-205 Widening Project and the Sunrise Project**
- **Results were presented to the Oregon Transportation Commission in January 2007**
- **Today’s presentation will speak to those results and what’s ahead**



MILESTONE ZERO...

- Established *preliminary* feasibility of Projects as Public Private Partnerships – whether they can work or not
- Identified major issues that must be addressed
- Provided a basis for agreement between ODOT and OTIG on development requirements for Projects
- Determined whether OTIG and ODOT should move to Milestone One



MILESTONE ZERO – SCOPING STUDY FIRST STEP IN THE SERIES:

- **Milestone One: Commercial and Financial Viability Assessment**
Establishes commercial and financial viability of the Project in greater detail
- **Milestone Two: Implementation Development**
Develops the Implementation Agreement and the procurement approach for the Design-Build and financing elements of the Project
- **Milestone Three: Closing**
Negotiates and finalizes the Implementation Agreement, Design-Build and Operations procurement process, and Financial Plan elements leading to Commercial and Financial close

ODOT and OTIG have the ability to take an “off-ramp” at completion of any of the milestones, at which point all work product produced by OTIG becomes the property of ODOT



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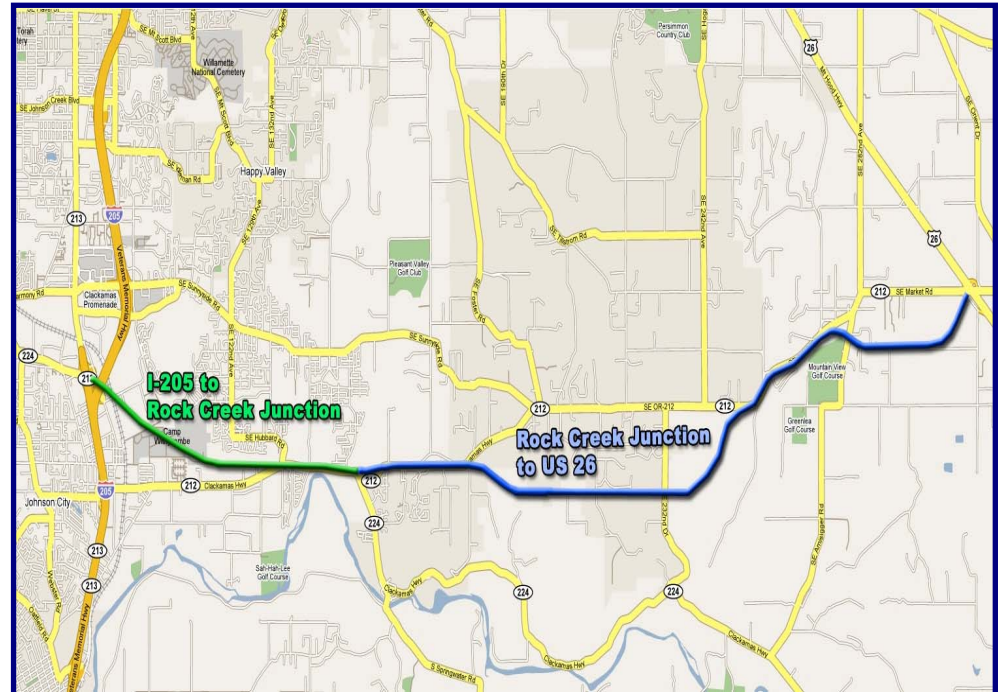


**SUNRISE PROJECT
and
SUNRISE PARKWAY**

MILESTONE ZERO RESULTS

PROJECT BACKGROUND

- OR 212/224 is one of the main routes in the Portland area experiencing unacceptable levels of congestion and delay
- Employment to nearly double by 2015 - forecast to experience continued strong traffic growth and further congestion
- OR 212/223 near I-205 ranked in the top 10% of state routes for vehicle accident rates
- Critical freight hub for local and regional industry
- Lack of sufficient funding at present and in foreseeable future





- OTIG examined 6 alternatives differing in the type of tolling utilized, length (Sunrise Project vs. both Sunrise Project and Parkway), both with and without the interchange at 122nd Ave
- Each option studied included 2 lanes in each direction with an additional auxiliary lane
- Sunrise Project would address congestion in one of Oregon's busiest truck centers
- Sunrise Corridor would route regional through-traffic around Damascus Town Center and meet long-term population growth needs

| Option | 122 Ave Interchange | Type of Tolling |
|-------------------------------|---------------------|---|
| Option 1a Sunrise Project | Yes | Distance – all vehicles on Sunrise Project |
| Option 1b Sunrise Project | No | Distance – all vehicles on Sunrise Project |
| Option 1c Sunrise Project | Yes | Corridor – all vehicles on Sunrise Project and OR212/224 |
| Option 2a Sunrise Corridor | Yes | Distance – all vehicles on Sunrise Corridor |
| Option 2b Sunrise Corridor | No | Distance – all vehicles on Sunrise Corridor |
| Option 2c Sunrise Corridor | Yes | Corridor – all vehicles on Sunrise Corridor and OR212/224 |



Traffic and Revenue Study

- Traffic figures are strong near I-205, however drop off dramatically by Rock Creek Junction
- Sunrise Project would have to compete with the free alternative and would not generate sufficient volumes unless corridor tolling were utilized
- Corridor tolling would be difficult to implement due to multiple access and egress points
- The region is growing but current traffic volumes are not sufficient to support a toll project

Construction Cost Estimates

- The project costs range from approx. \$400 to over \$900 million, depending on whether Sunrise Project only, or entire Sunrise Corridor
- Sunrise Interchange alone with I-205 estimated at **\$100 million**
- 122nd Ave Interchange cost was estimated at \$20 million



MILESTONE ZERO CONCLUSIONS for SUNRISE CORRIDOR

- Both Sunrise Project and Sunrise Parkway are needed due to significant congestion, and current and projected strong growth in travel demand
- But these projects are not self-supporting through tolls at this time
 - Current VMT not enough to pay for project construction, much less operations and maintenance
 - Too many free alternatives – with system diversion impacts
 - Could be viable as “shadow tolling” PPP – no diversion since drivers themselves don’t pay the toll – if alternative sources of funding could be identified
- Sunrise Project could be coupled with other potential toll projects in the greater Portland Metro region that could possibly generate excess revenue
- Sunrise Interchange could potentially be funded as part of a toll project on I-205

ODOT and OTIG jointly elected to take the off-ramp for Sunrise...



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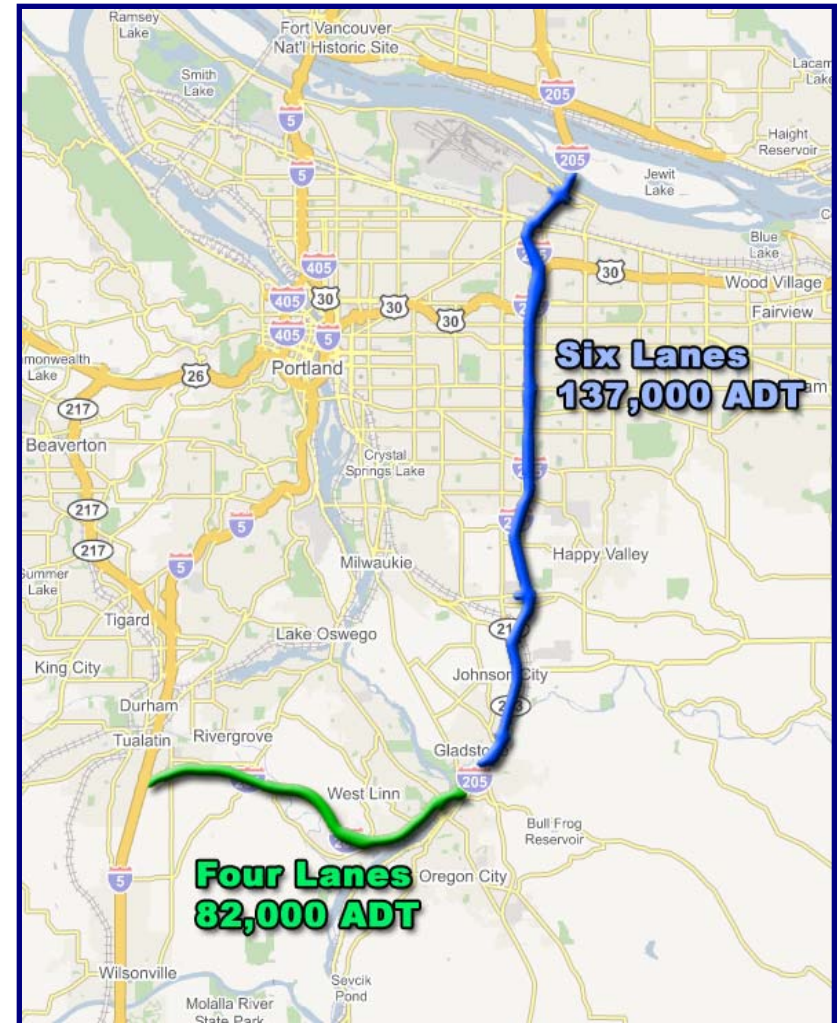
SOUTH I-205 WIDENING PROJECT

MILESTONE ZERO RESULTS



PROJECT BACKGROUND

- I-205 is a 25.5 mile long major north-south freight and commuter route experiencing significant traffic issues
- The transition from 6 lanes to 4 lanes at the Willamette River crossing creates a pinch point contributing to significant congestion along the corridor
- I-205 is forecast to experience continued strong traffic growth and further congestion
- Project lacks sufficient funding at present and in foreseeable future
- ODOT and OTIG have identified several alternatives including adding two new lanes in each direction in the southern section and one new lane in each direction in the northern section





Thirteen alternatives tested differing in type of tolling utilized and number of new lanes proposed in each section:

Managed Lane Tolling

- 1-2 lanes are tolled; the rest are general purpose
- Most complex of the alternatives

Corridor Tolling

- All traffic using the highway pays a toll
- Most commercially straightforward solution

Bridge Tolling

- All traffic crossing the Abernethy Bridge pays a toll
- Oregonians have had a positive experience with bridge tolling

Shadow Tolling

- Involves payments by the government to a private concessionaire
- Based on traffic volumes and service levels

| Scenario | Southern Section (I-5 to Hwy 213) | | | Northern Section (Hwy 213 to I-84 East) | | |
|--|--------------------------------------|---------------|-------------|--|---------------|-------------|
| | New Lanes | Managed Lanes | Total Lanes | New Lanes | Managed Lanes | Total Lanes |
| Option 1a One Managed Lane in the South | 1 | 1 | 3 | | | |
| Option 1b One Managed Lane Throughout | 1 | 1 | 3 | 1 | 1 | 4 |
| Option 1c Two Managed Lanes in the South | 2 | 2 | 4 | | | |
| Option 1d Two Managed Lanes Throughout | 2 | 2 | 4 | 1 | 2 | 4 |
| Option 1e Two Managed Lanes in the North One Managed Lane in the South | 1 | 1 | 3 | 1 | 2 | 4 |
| Option 2a Corridor Tolling in the South | 1 | n/a | 3 | | | |
| Option 2b Corridor Tolling Throughout | 1 | n/a | 3 | 1 | n/a | 4 |
| Option 2c Bridge Tolling with new lane in North and South | 1 | n/a | 3 | 1 | n/a | 4 |
| Option 2d Bridge Tolling with new lane in South only | 1 | n/a | 3 | | | |
| Option 3a Shadow Tolling in the South | 1 | n/a | 3 | | | |
| Option 3b Shadow Tolling Throughout | 1 | n/a | 3 | 1 | n/a | 4 |
| Option 3c Shadow Tolling of the Abernethy Bridge with new lane in North and South | 1 | n/a | 3 | 1 | n/a | 4 |
| Option 3d Shadow Tolling of the Abernethy Bridge with new lane in South only | 1 | n/a | 3 | | | |



PRELIMINARY COST ESTIMATES

- Estimated costs based on square footage, and/or linear foot costs, and/or unit prices from experience and by using recent ODOT bid tabulations
 - The information is typically historical based on the bid prices over a preceding 12 month period
- ROW costs estimated at \$20 million for the southern section and \$60 million for the northern section. Most additional width is within the existing ROW
- Operations and maintenance costs assume OTIG maintains the existing and new lanes
- Managed lane construction costs dramatically increase for segregated lanes and exclusive on and off ramps

| Construction Cost | General Purpose | Managed Lane |
|----------------------------------|-----------------|---------------|
| Additional Lane in South | \$207 million | \$364 million |
| Additional Lane in North | \$209 million | \$484 million |
| Additional Lane in North & South | \$416 million | \$848 million |



KEY RESULTS

● Managed Lanes

- Managed lane options generate the lowest revenue as lanes are only used during peak congestion
 - Distance toll tested at \$0.30 per mile however revenue maximization point is likely to be higher and should be examined in Milestone 1
 - Absolute toll revenue collected is relatively low and unable to cover operating costs in several options
- Managed lane time savings affected by weaving at intersections; likely to require lane barriers and exclusive on / off ramps to enforce payment and maximize time savings – this dramatically increases cost
- Managed lane options are not likely financially feasible

● Corridor and Bridge Tolling

- Bridge tolling is most likely to be publicly acceptable as historical precedent
- Results in much higher revenues than managed lane options with excess funds able to support additional improvement projects in the corridor
- Variable pricing of \$2.50 during peak and \$1.50 during off-peak utilized as part of the study; can incorporate congestion pricing – including free usage during off-peak hours
- Variable pricing maximizes revenues and is generally seen as more equitable

● Shadow Tolling

- Studied only as a “bookend” since there is no source of funding for this option



REVENUE **GAP** / SURPLUS

OPTION

GAP / SURPLUS

- Managed Lanes..... (\$790 to \$921M)
- Corridor Tolling..... \$104 to \$694M
- Bridge Tolling..... \$247 to \$490M
- Shadow Tolling..... \$494M to \$1B



MILESTONE ZERO CONCLUSIONS for I-205

- **Improvements to the I-205 Corridor are needed now**
 - Current congestion and strong traffic growth forecast

- **Growing public support for the use of tolling**
 - Emerging understanding of a lack of conventional funding and growing acceptance for limited use of tolling

- **The Project can be delivered as a PPP**
 - Construction could commence as early as April 2009

- **The Project could be self-supporting**
 - Surplus funding could be used for long-needed capital projects (such as a phase of Sunrise) and/or transit goals

- **Use of electronic tolling is key to ensuring public support**
 - Interoperability, customer service centers and violation enforcement must be addressed



KEY PUBLIC OUTREACH RESULTS

- Sunrise area business leaders are highly informed about need for transportation improvements in the area; seem generally supportive of and interested in the project as a solution
- I-205 project not yet defined – initial project-specific outreach needed
- While perceptions of PPPs and use of tolls to fund project are still being formed, most people contacted think this is a step in the right direction
- There is a definite need for further education in residential and business communities about tolling and its benefits for individual users, regional transportation system in general, and overall community
 - People generally unfamiliar with Electronic Toll Collection – they still see long lines and coin basket
 - Time of Day or Congestion Pricing not well understood
- There is a definite need to educate the public about lack of funds available for transportation projects and the cost to build major projects today



OREGON TRANSPORTATION COMMISSION PERSPECTIVE as of 1-24-07

- Pull Back and Think Carefully
- Good Reports, Good Information...Needs Thoughtful Review
- 80% of trips on I-205 are 5 miles or less – Any Solution Must Account for This
- Continue Working on Policy
- Go Through Regional Processes Already in Place



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***Website for Oregon Innovative
Partnerships Program***

www.odot.state.or.us/oipp

