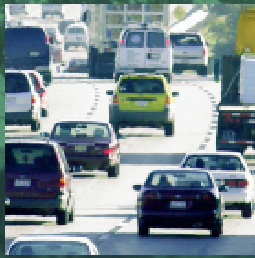
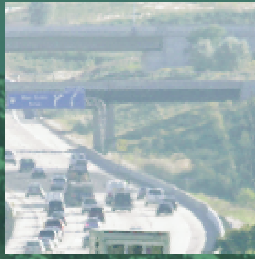




OTIG

Oregon Transportation
Improvement Group

Feasibility Assessment



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OVERVIEW:

- Purpose of the Preliminary Feasibility Review is:
 - **To investigate** whether the Newberg-Dundee Transportation Improvement Project is a technically and financially viable transportation solution for the state of Oregon.
 - **To establish** issues surrounding the Newberg-Dundee bypass, including funding, tolling and extension options, design and construction costs, and possible next steps in the analysis process.
 - **To identify** the issues, which require further focus and analysis, NOT to reach conclusions at this stage.
 - **To present** a preliminary review of the feasibility issues likely to be associated with each of the alternatives that are discussed and that it is based on incomplete information.

FUNDING OPTIONS:

- There are several potential revenue streams available to support the development, construction and operation of the project:
 - Federal earmarks and Oregon STIP funding
 - Gas tax revenues
 - Regional tax increment financing
 - Land value capture
- These funding sources are **unlikely** to provide significant amounts of funding for the foreseeable future and may require new legislation to be enacted.
- Revenue from direct tolls is the largest source of potential revenue for the project. The bypass project and use of tolls as a funding mechanism for the project enjoy strong local support. This approach is likely to have greater public acceptance than increases in property or gas taxes, and more certainty than federal or state funding.

EXTENSION OPTIONS:

- **McMinnville**
 - Largest costs are the interchanges and additional right of way.
 - Additional design and research would need to be done along with a separate environmental assessment if this option were to go forward.
- **Tualatin – Sherwood (I-5/99W Connector)**
 - Additional design on the I-5 interchange is required to verify the cost on this project and the alignment along 99W would need to be evaluated with both traffic and environmental concerns taken into account.
 - The amount of right of way required would need to be verified if this project were to go forward. At this point it is highly unlikely that the project would go forward as an extension to the base project.
- **OR18 Beyond McMinnville**
 - No cost estimates have been prepared by ODOT for this project.
 - It would be premature to provide recommendations as no work has been done on this extension option at this time.

DESIGN AND CONSTRUCTION COSTS & SCHEDULE:

- **Design & Construction Costs:**

- Construction costs for the Newberg-Dundee Bypass are currently estimated at approximately \$325 to \$425 million.
- There are several critical areas that have yet to be finalized as part of the NEPA process.
- The Interchange Area Management Plan (IAMP) process should not significantly impact the project costs, however, efforts need to be made to ensure that it does not impact the schedule.

- **Schedule:**

- Schedule for the base project shows a Record of Decision (ROD) for the Tier 2 in February 2008.
- If any of the extensions prove feasible, separate environmental documents will be prepared.
- Delays could be caused by the NEPA process or the IAMP process.

COST & SCHEDULE REDUCTION OPTIONS:

- To date, cost has not been used as evaluation criteria to evaluate proposed design alternatives, some of which have proven to be quite costly.
- Reductions in the schedule will depend on interagency reviews, the public involvement and review process, and other factors, all of which will need to be carefully managed.

DESIGN & ENVIRONMENTAL ISSUES:

- **Newberg–Dundee**

- Vertical alignment needs to be evaluated, pavement design and soil stabilization need to be reviewed along with the number of bridges and their span. Some interchanges and overpasses may need to be re-evaluated.

- **McMinnville Extension**

- Additional design should be done at the interchanges to verify type, layout and cost, and research on existing bridges should be conducted to verify if they need to be replaced or if they can be widened.
- Existing network of collector-access roads should be reviewed and discussed with the local communities and Yamhill County to verify the timing and need, and an Environmental Classification Assessment should also be conducted.

- **I-5/99W Connector**

- Additional design on the I-5 Interchange is required to verify the cost, and the alignment along 99W and the amount of right of way required need to be evaluated.

TOLLING ISSUES:

- Three basic toll options possible:
 - Distance
 - Trip (exit or point)
 - Period
- In addition, OTIG has defined two general tolling options:
 - **Access Tolling** - A toll plaza could be located near the proposed East Newberg.
 - Ensures that the project meets the NEPA Purpose and Need statement.
 - Utilizes capacity of the Newberg-Dundee project and reduce the impact of traffic through the city centers of Newberg and Dundee.
 - **Tolling the Bypass** - A toll plaza could be located at the proposed East Newberg Interchange at the entry of the new Bypass to toll only the Bypass.

TOLLING ISSUES:

- Two methods of payment are under consideration:
 - Barrier
 - Open Road Tolling
- Both could employ non-stop electronic toll collection systems that are popular with motorists worldwide.
- Several toll levels and vehicle classification approaches are reviewed and outlined.
- The issue of “interoperability” is particularly important in Oregon where there are no tolled facilities at present.
- Ideally the system would be designed to allow electronic toll collection customers to use any toll road in the state with a single e-sticker or transponder toll collection device.

PRELIMINARY TRAFFIC & REVENUE FORECASTS:

- Preliminary traffic and revenue forecasts have been prepared for OTIG as an initial overview of issues relevant to traffic and revenue projections to the Newberg Dundee Bypass and I-5/99W Connector.
- Preliminary forecasts have provided initial estimates of annual revenue under numerous scenarios including:
 - different levels of tolls
 - concession periods
 - local traffic make-up
 - anticipated growth in traffic
- Analysis indicates that tolling the Newberg-Dundee bypass and the 99W through a corridor tolling option would result in the greatest revenue and is likely to be the best option to finance the project.

INVESTMENT GRADE TRAFFIC & REVENUE FORECASTS:

- Forecasts will be developed using an approach that quantifies the proportion of traffic likely to be to use the facility, which depends on:
 - Traffic data
 - Economic, demographic and market trend data
 - The advantages (or benefits) of the toll road over the existing road
 - The willingness of drivers to pay for those advantages
- A detailed survey program, which will begin in May 2006, will form the basis for the development of the forecast.

TOLLING POLICY LEGAL ISSUES:

- It has been determined that since there is no state tax in Oregon, tolls would not be liable for state tax.
- Enforcement of tolls can take the form of penalties similar to those applied to motorists who violate rules on free roads,
 - Including financial penalties
 - Collection processes
 - Cancellation
 - License renewal/plate denial (as a last measure)

FINANCIAL MODEL OVERVIEW:

- The financial model takes the revenues identified from the potential funding sources and uses them to support potential financing for the project.
- The model can analyze:
 - Upfront grant funding of design and construction costs
 - Public sector tax exempt or taxable bond issues
 - Private Activity Bonds (tax exempt)
 - Private taxable debt and equity financing
- As a primary assumption, the amount of debt as a percentage of total capital employed (debt plus equity) is assumed to be 70% at the completion of construction, implying that 70% of all construction costs are funded by debt.
- By extension, the remaining 30% of construction costs would be funded by equity.

FUNDING GAP:

- Funding Gap exists as a result of:
 - Increased construction cost estimates
 - Reduction in potential toll revenue because of proposed discounts for local traffic
- The funding gap varies considerably according to the type of tolling option that is employed.
- Potential methods to bridge the funding gap include:
 - Higher tolls
 - Longer concession
 - Reduced local discounts
 - Increased real growth in the toll rates

RECOMMENDED OPTIONS FOR STAGE 2 ASSESSMENT:

- OTIG recommends engaging in further engineering studies of certain areas to reduce the overall construction cost of the project and the extensions, with the goal of seeking to reduce costs while maintaining an acceptable design.
- OTIG also recommends further collaboration with ODOT to identify areas of the project that could be scaled back.