JTC Freight Investment Study Second Policy Group Meeting

presented to **Freight Financing Study Policy Group** presented by Michael Fischer, Cambridge Systematics, Inc. Gill Hicks, Gill V. Hicks and Associates, Inc. October 30, 2007 Transportation leadership you can trust.



Agenda

| Welcome and Opening Remarks | (1:30-1:40) |
|---|-------------|
| Self-Introductions | (1:40-1:45) |
| Stakeholder Issues with Study Objectives | (1:45-2:00) |
| WSDOT Freight Systems Division Strategic Planning | (2:00-2:10) |
| Coordination of Freight Strategic Plan with JTC Study | (2:10-2:45) |
| • BREAK—15 minutes | (2:45-3:00) |
| Issues with Project Evaluation & Funding Process | (3:00-3:15) |
| Example Processes to Evaluate & Prioritize Freight Investments | (3:15-3:30) |
| Discussion of Select Freight Projects in Washington State | (3:30-4:10) |
| • Schedule, Next Steps | (4:10-4:30) |
| • Adjournment | CAMBRIDGE |

Study Objectives & Stakeholder Issues

Study Objectives:

- Review the state's current transportation finance structure and planned transportation system infrastructure improvements
- Examine institutional arrangements for identifying freight congestion relief projects
- Identify and evaluate funding sources to improve freight movement in the state

Stakeholder Issues:

- Economic growth vs. congestion relief
- Focus on international cargo vs. regional economies vs. local delivery
- This study's project selection vs. integration with the Strategic Freight Plan
- Accounting of Private industry funding versus current freight investment

Study Products & Stakeholder Issues

Study Products:

- Preferred mechanisms for freight project identification, prioritization, and coordination
- Finalize a process for identification of beneficiaries and apportionment of costs and funding
- Specific options and recommendations for the Legislature to fund existing and future freight mobility projects



Guiding Principles & Stakeholder Issues Freight Project Funding

Guiding Principles

- Projects for which costs exceed expected benefits should not be funded
- Project level benefit-cost analysis will support negotiations between stakeholders, but allow flexibility for larger strategic goals
- Funding packages will be structured in accordance with expected benefits to the state-wide population, local jurisdictions, and private sector



Developing Washington State's Strategic Plan for Freight Systems

Paula Hammond Secretary Steve Reinmuth
Chief of Staff

Barbara Ivanov

Director
Freight Systems Division

Scott Witt

Director
State Rail and Marine

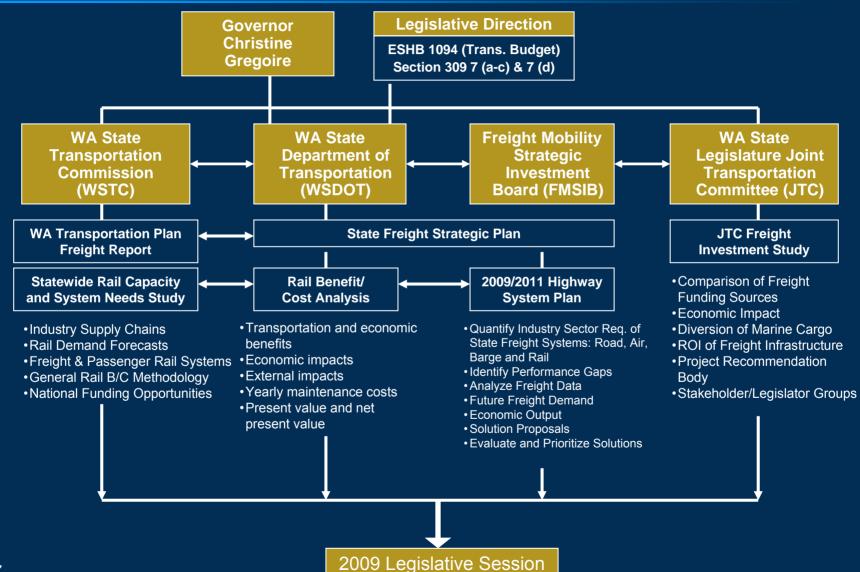
Joint Transportation Committee Freight Investment Study Policy Group October 30, 2007



Why Does Washington State Need a Strategic Plan for Freight Systems?

- There are investment constraints:
 - political,
 - financial, and
 - economic.
- Washington State's freight systems strategic plan must:
 - Balance the cost of investments with resulting economic output;
 - Direct limited resources to their most productive use; and
 - Set clear priorities linked to the growth of jobs and the state's economy.

Washington State Freight Strategic Plan WSDOT Work Program 2007-2009



Washington State Freight Strategic Plan Highway Strategic Planning Timeline

2007 Transportation Budget Section 309 7(d) states that: "The department (WSDOT) and the freight mobility strategic investment board (FMSIB) shall submit a report to the office of financial management and the transportation committees of the legislature by September 1, 2008, listing proposed freight highway and rail projects. The report must describe the analysis used for selecting such projects..."



JUNE 2008

WSDOT Freight
Systems Division
identifies current
freight system deficits
and determines future
demand.

WSDOT Regions develop highway solution proposals for consideration.

AUGUST 2008

WSDOT executive team, working with OFM, sends 2009/11 Highway System Plan proposals to the Governor's Office.

SEPTEMBER 2008

Joint WSDOT and FMSIB report describing analytic method and listing proposed freight highway and rail projects to OFM & Transportation Committees.

Washington State Freight Strategic Plan Freight Rail Cost/Benefit Analysis Timeline

2007 Transportation Budget Section 7(a)-7(c) states that: "The department (WSDOT) shall develop a standardized format for submitting requests for state funding for rail projects that includes an explanation of the analysis undertaken, and conclusions derived from the analysis."

DECEMBER 2007 OCTOBER 2007 WSDOT pilots WSDOT completed application of draft Rail System methodology to Benefit/Cost evaluate new rail methodology. project proposals. 2006 **OCTOBER 2007 – WSTC JANUARY 2008** Rail WSDOT convenes rail Study B/C work group. FEBRUARY -2008 **APRIL 2008 WSDOT WSDOT** drafts develops policy. implementation 2009 2008 plan. **WSDOT WSDOT** implements completes

implementation

plan.

policy.

Next steps.....

For more information: www.wsdot.wa.gov/freight

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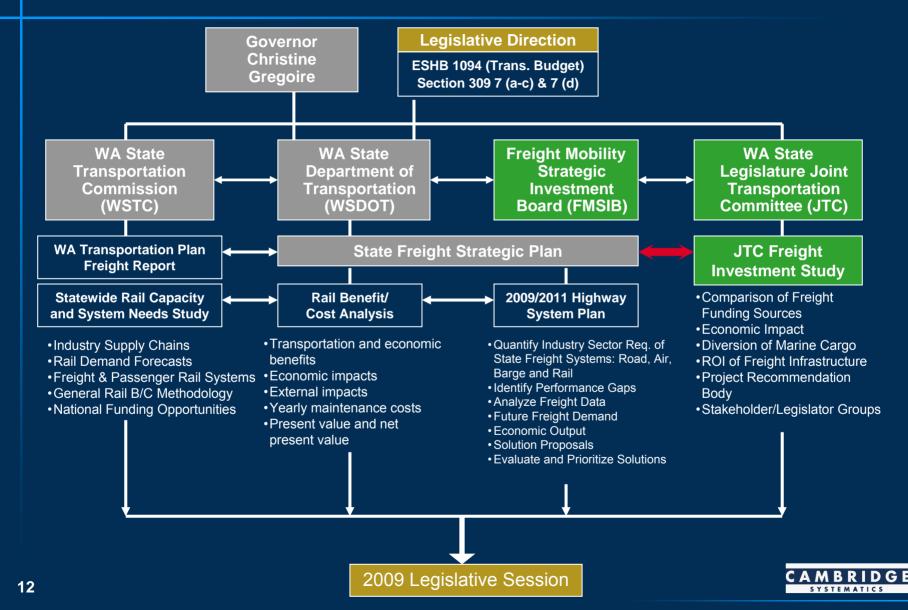


Coordination of WSDOT Freight Strategic Plan with JTC Freight Investment Study

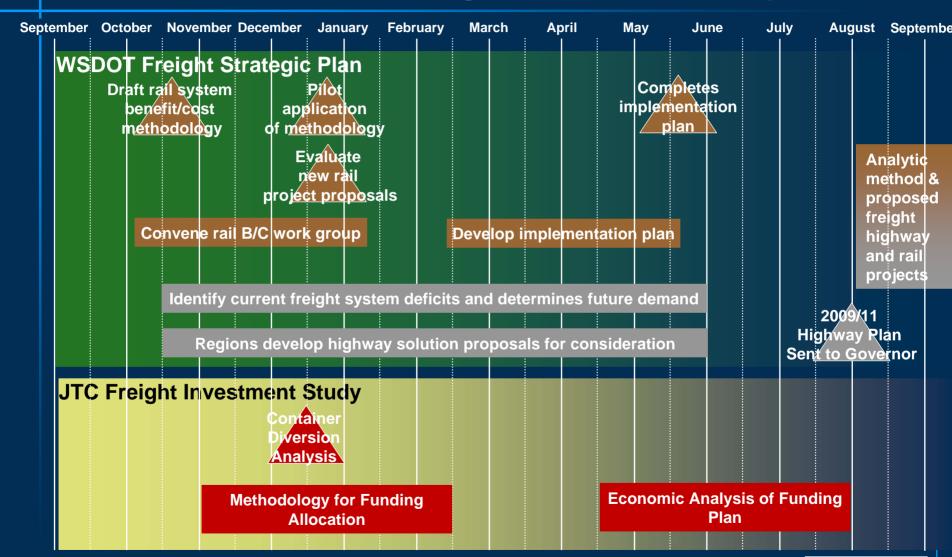
- Synchronizing schedules and workscopes
- Other actions that will affect Freight Investment Study



Washington State Freight Strategic Plan Coordination with JTC Freight Investment Study



Washington State Freight Strategic Plan Coordination with JTC Freight Investment Study





Break



Project Evaluation & Funding Process Private Stakeholder Issues

- Stakeholder Concerns Regarding Freight Bottlenecks
- Economic Impacts of private funding



Project Evaluation & Funding Process WSDOT and Legislature Issues

- Determining private sector benefits
- Clarification of project selection as part of the Strategic Plan



Example Processes to Evaluate and Prioritize Freight Investments

- FMSIB
- Washington State Rail Capacity & Systems Needs Study
- Office of Financial Management (OFM) Input-Output Model
- Washington State Freight Strategic Plan
- Out of State Examples
 - USDOT Economic Impact of Large Scale Freight Investment
 - Highway Economic Analysis Tool (HEAT)
 - Florida SIS



Example Processes FMSIB Project Evaluation Criteria

| Project Evaluation Criteria | <u>Weight</u> |
|--|---------------|
| Freight Mobility for the Project Area | 35 Max |
| Freight Mobility for the Region, State, & Nation | 35 Max |
| General Mobility | 25 Max |
| Safety | 20 Max |
| Freight & Economic Value | 15 Max |
| Environment | 10 Max |
| Partnership | 25 Max |
| Consistency with Regional & State Plans | 5 Max |
| Cost | 10 Max |
| Special Issues | 8 Max |
| TOTAL | 188 pts |
| | |



Example Processes WA Rail Study Benefits Analysis Framework

Identify Users / Beneficiary Groups of Project

Assign Metrics to Measure Benefit / Impact to Each User Group

Evaluate Benefits / Impacts: Quantitatively if possible, Qualitatively if not

Compare Benefits Among User Groups

Assign Appropriate Level of Participation / Response to Each User Group

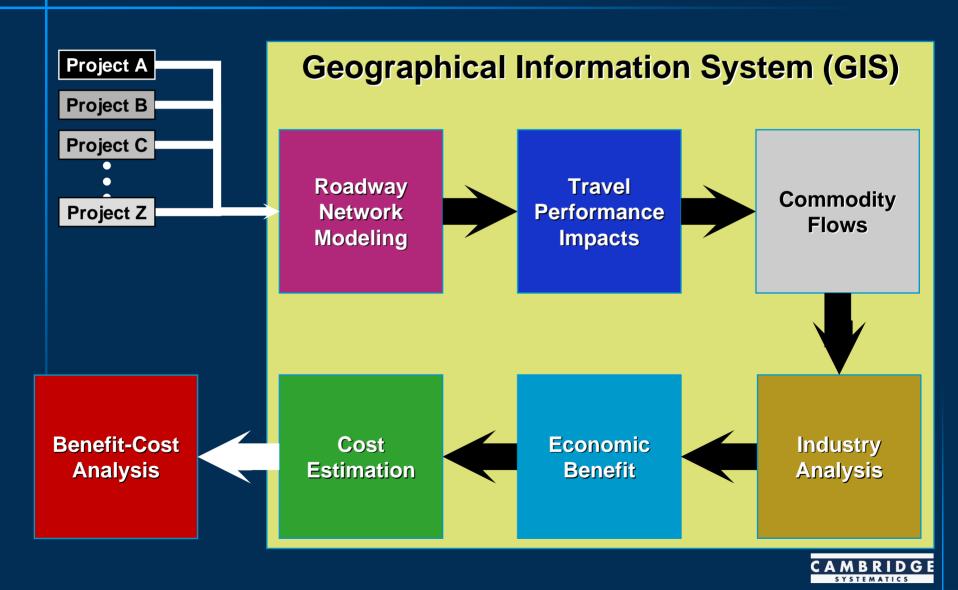


Example Processes OFM Input-Output Model

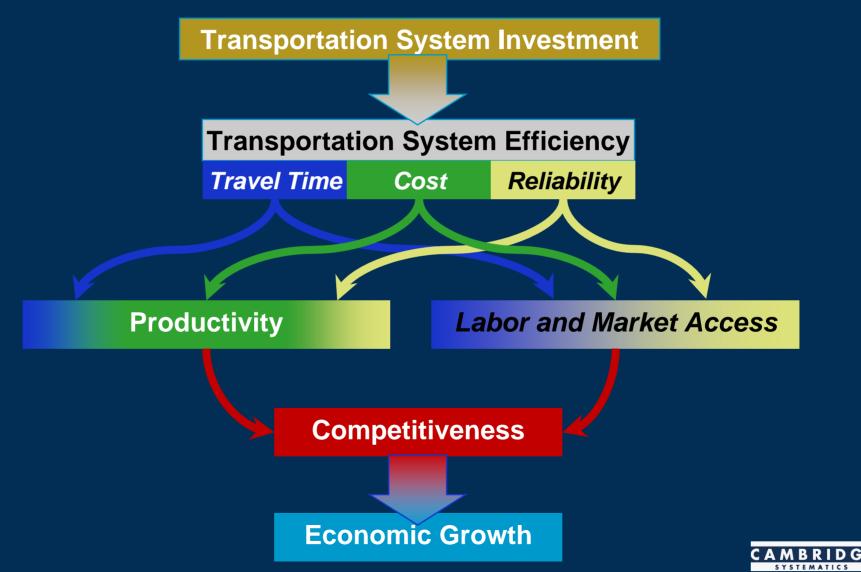
- OFM Input-Output Model:
 - Estimates how direct spending will ripple through the state economy, resulting in:
 - Indirect effects on other business sectors (employment, earnings)
 - Consumption effects from additional household income
 - Data Requirements (in dollars):
 - Total and in-state purchases of construction materials
 - Number of project staff and wages
 - Equipment, transport, and other expenses
- Current model is based on 1997 data (i.e., Economic Census, Commodity Flow Survey) by industrial sector (both SIC and NAICS codes). Model updates are underway to reflect 2002 data



HEAT Structure Seven Linked Analytical Modules



Freight Infrastructure and Economic Growth Role of Public Sector Investment & Policy



Discussion of Sample Freight Projects Stampede Pass

- Case study of East-West Capacity Improvements:
 - Improve Stampede Pass to allow for double-stack containers
 - Restore Old Milwaukee line from Ellensburg to Lind
 - "Bridging the Valley" improvements between Spokane & Sandpoint, ID



- Three Alternatives Evaluated:
 - Do Nothing
 - Alternative A: \$350 million for selective capacity improvements (about 25% more capacity)
 - Alternative B: \$1.5 billion for comprehensive capacity improvements (about 60% more capacity)



Stampede Pass Example (continued) User & Beneficiary Groups

| User & Beneficiary Groups | Metrics |
|--------------------------------------|---|
| The State | JobsTax BenefitsEnvironmental ImpactsSafety Impacts |
| Shippers | Service ReliabilityTransit TimeCost |
| Passengers | Travel CostsTravel TimeIncreased Modal Choice |
| Railroads | Train DelayIncreased Revenue TrafficEquipment Availability |
| Ports | ThroughputMarket Share |
| Communities | Environmental ImpactsSafety ImpactsLocal JobsReduced Delay |



Stampede Pass Example (continued) Qualitative Measures of Benefits to Stakeholders

| | No Action | Alternative A | Alternative B |
|-------------|-----------|---------------|---------------|
| State | Low | Medium | Low |
| Shippers | Low | Medium | High |
| Passengers | Low | Low | Medium |
| Railroads | Low | Medium | High |
| Ports | Low | High | High |
| Communities | Low | Medium | Medium |
| National | Low | Medium | High |



Stampede Pass Example (continued) Identification of Beneficiaries

- State: Benefits from additional jobs, partially offset by increased emissions
- <u>Communities:</u> Benefits from additional jobs, partially offset by increased rail traffic
- Ports and Railroads:
 - Primary beneficiaries
 - Ports: increased imports and exports
 - Railroads: increased revenue from additional trains, reduction in congestion-related costs

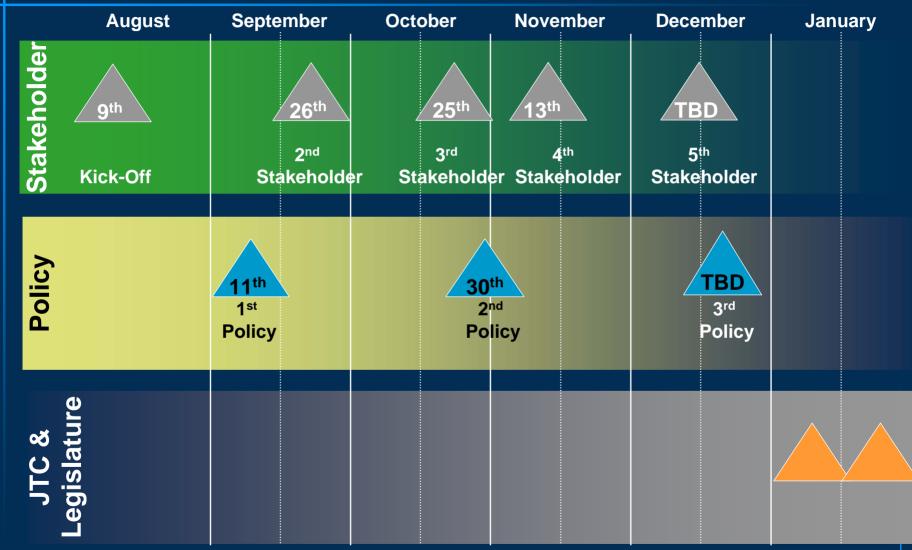


Stampede Pass Example (continued) Possible Refinements to Benefit/Cost Methodology

- Fully Quantify Economic Benefits of Jobs Created and Maintained:
 - REMI Model
 - Input-Output Model (IMPLAN, OFM Model)
- Fully Quantify Impact of Any Trucks Diverted to Rail:
 - Use Highway Economic Requirements System (HERS) model to quantify impacts to highway system
- Justify Planning Horizon:
 - This case study was based on a 10-year planning horizon



Schedule of Stakeholder & Policy Group Meetings



Adjournment

