

WSDOT Capital Project Prioritization Process Overview

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Priority Programming

RCW 47.05.010

The legislature finds that solutions to state highway deficiencies have become increasingly complex and diverse and that anticipated transportation revenues will fall substantially short of the amount required to satisfy all transportation needs. Difficult investment trade-offs will be required. It is the intent of the legislature that investment of state transportation funds to address deficiencies on the state highway system be based on a policy of priority programming having as its basis the rational selection of projects and services according to factual need and an evaluation of life cycle costs and benefits that are systematically scheduled to carry out defined objectives within available revenue.

Priority Programming

RCW 47.05.010

Priorities developed within or in concert with:

- Policy Direction
- Stakeholder Interests
- Financial Considerations

Methods to use or achieve:

- Selection Using Cost/Benefit Analysis
- Performance Outcome

Policy Direction

- Legislative Policy Goals
 - RCW 47.04.280
- Washington Transportation Plan
- Statewide Multimodal Transportation Plan
 - Federal compliance
- Governor Priorities & Strategies
 - Connecting WA Task Force

Stakeholder Interest

including WSDOT state-owned/interest plans

Stakeholder plans:

- Metropolitan Transportation Plans
- Regional Transportation Plans
- Tribal Transportation Plans
- Strategic Highway Safety Plan (Target Zero)

WSDOT plans:

- WSF Plan
- Bike/Ped Plan
- ITS Plan
- Scenic & Recreational Freight and Goods
- Rail Plan
- Public Transportation
- Studies/RDPs

Stakeholder Interest

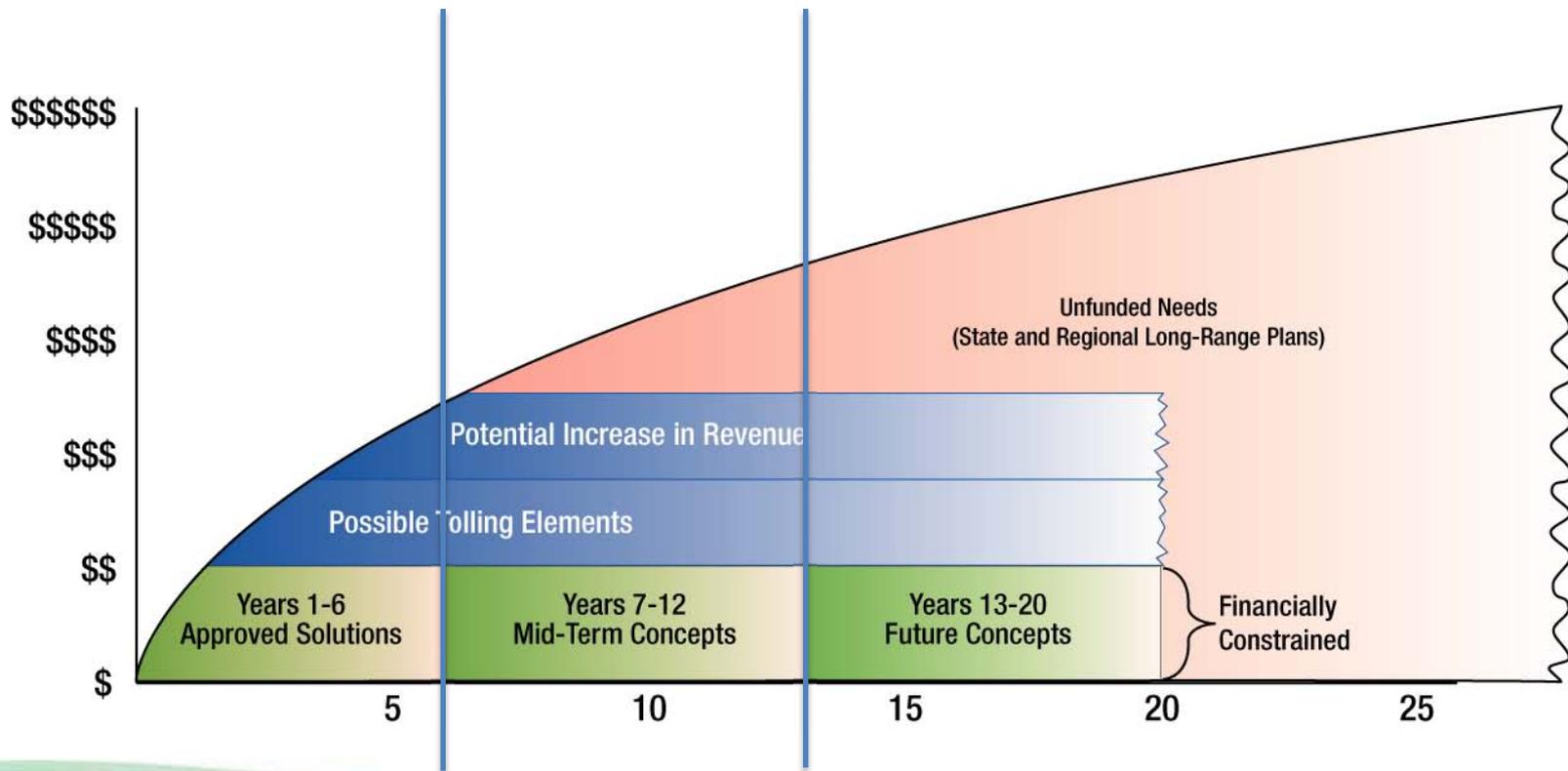


- WSDOT strategy to address congestion
- Operate, maintain, & preserve what we have
- Multi-discipline approach and coordination before adding capacity

Financial Considerations

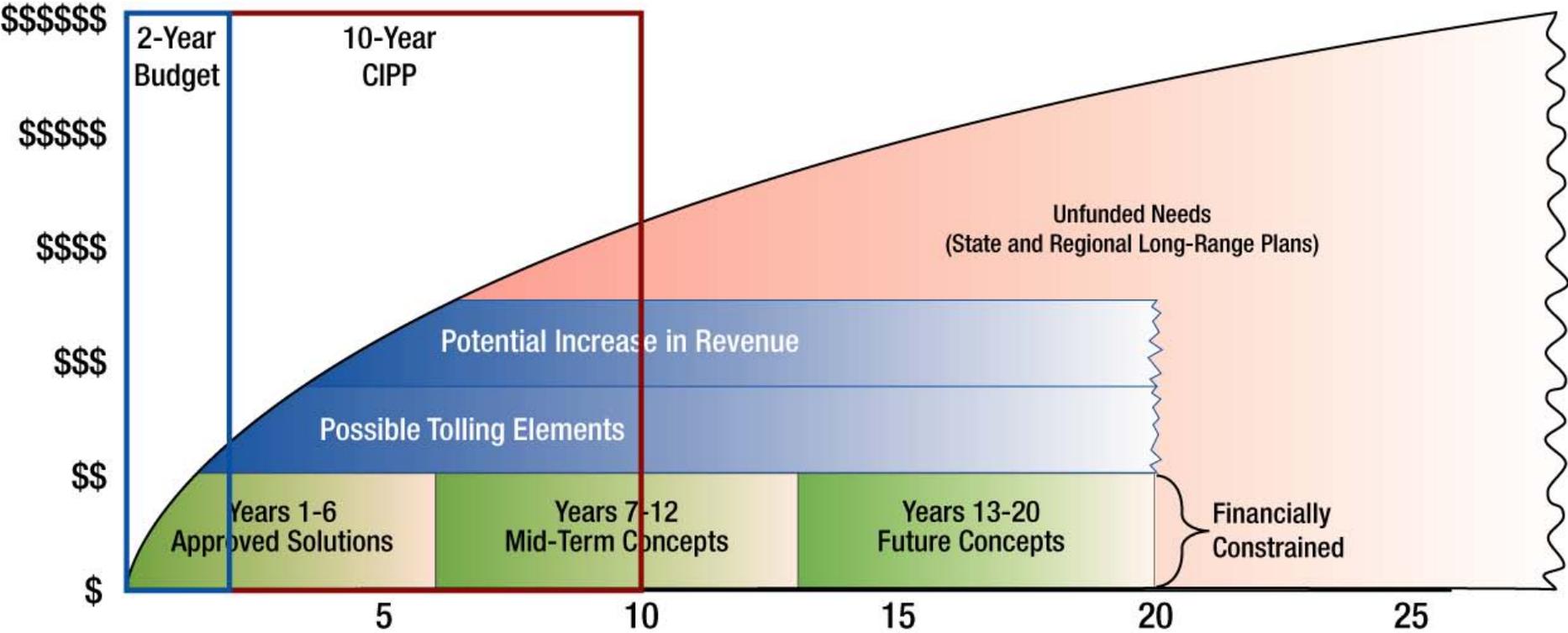
“Delivering the right project at the right time”

Solution Progression & Funding Concept



Financial Considerations

Alignment with the budget and forecast projections



Priority Programming Process

General Steps:

- Performance criteria
- Needs identification and ranking
- Strategies for achieving performance
- Identify and test alternatives
- Prioritize: Benefit/Cost or Lowest Life Cycle

Priority Programming Process

- Program focus:
 - Operations
 - Maintenance
 - Preservation
 - Roads
 - Bridges
 - Other
 - Safety
 - Improvement
 - Mobility
 - Environmental
- Program details on:
 - Description of issues or challenges being faced
 - Identification of needs and performance criteria to address the issues
 - Strategies used as the basis to implement solutions for attaining performance goals
 - Practices used to promote sustainability

Purpose of the Program Structure

- Link each program/category to an approach in Washington Transportation Plan and Highway System Plan.
- Allow investment decision making and trade-off discussion to occur at higher level.
- Group investments addressing similar needs to be grouped for management purposes.

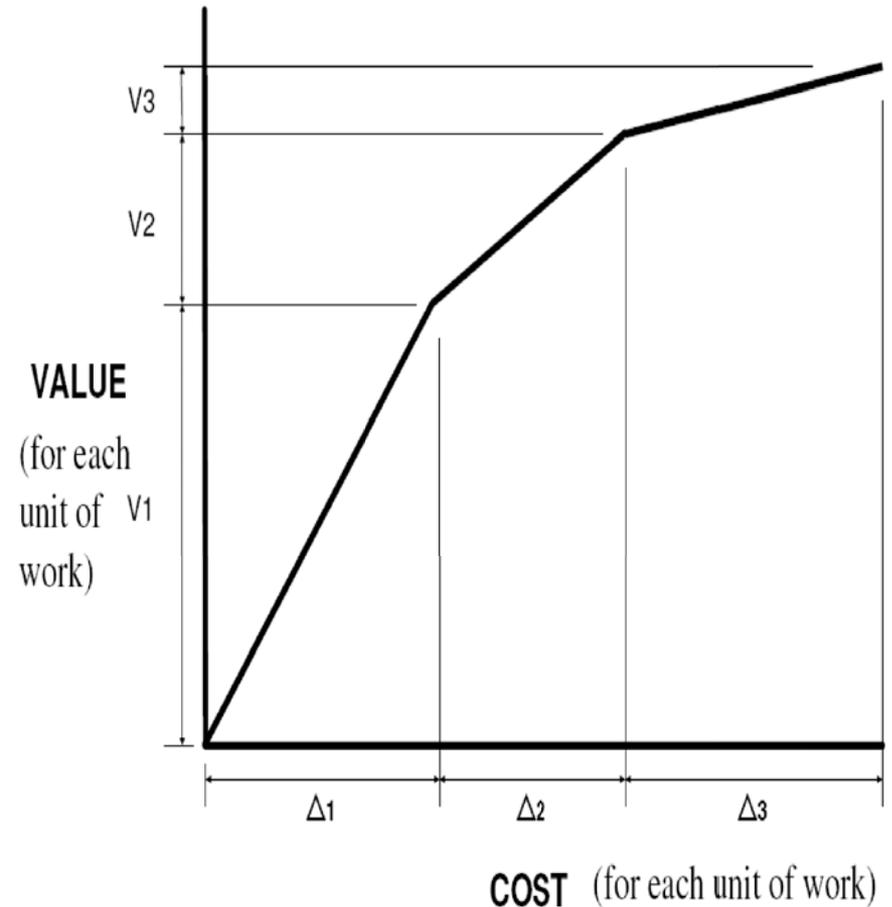
Priority Programming

Areas of Focus or Emphasis

- **Roadway Preservation**
 - Current Strategies
 - Future Directions
 - Concrete Plan
- **Bridges and Structures**
 - Bridge Painting
 - Seismic Retrofit
 - Bridge Replacement
- **Other Highway Assets**
 - Major Electrical Rehabilitation
 - Major Drainage Rehabilitation
- **Highway Safety**
 - Target Zero
 - New Methodologies
- **Economic Vitality**
 - Movement of Freight
 - Tourism and Scenic Byways
 - Community Economic Development
- **Health and the Environment**
 - Stormwater
 - Fish Passage
 - Climate Change/Sustainability

Steps to Identify Projects for Programming

- Rank Needs
- Establish Level of Development
- Scope Project
- Determine Change in Performance
- Relate Change (value) to Cost
- Prioritize Based on Change (value) / Cost



Pavement Preservation

Prioritization Strategies

- **Priority:** Lowest Life Cycle Cost
- **Analysis:** Cost evaluated on an annual basis
 - Order of Implementing: Chip seal, critical concrete, asphalt (due), asphalt (past due), other concrete
- **Emerging Issue:** Concrete Life

Bridge Preservation

Prioritization Strategies

- **Priority:** Asset Condition
- **Analysis:** Identify deficiencies based on analysis of current and projected deterioration
 - Order of Implementing:
 - Scour prevention
 - Repair
 - Prevention Strategies: Bridge deck protective overlays, Painting, Seismic Retrofit
 - Rehabilitation & Replacement

Highway Facilities & Other Features

Prioritization Strategies

- **Priority:** Asset Condition
- **Unstable Slopes:** Address the highest risk locations.
- **Major Drainage:** Address the highest priorities based on the inventory and condition assessment.
- **Major Electrical:** Address the highest priorities based on the inventory and condition assessment.
- **Weigh Stations:** Evaluate new strategies to meet regulatory requirements without investing in new facilities.
- **Rest Areas:** Continue lowest life cycle cost preservation of structures and pavements.

Safety Improvements

Prioritization Strategies

- **Priority:** Eliminate deficiencies based on factual analysis and estimated reduction per dollar spent.
- **Collision Reduction:** Known accident locations using collision data analysis.
- **Collision Prevention:** Potential problem locations based on roadway conditions with limited collision history.
- **Bike-Ped:** Analysis of incident history with consideration to high risk locations.
- **ADA:** Ensuring compliance for state responsibility locations.

Environmental Retrofit

Prioritization Strategies

- **Priority:** Cost effective solutions for system locations inventoried.
- **Stormwater:** Amount of untreated water entering lakes, rivers, and streams.
- **Chronic Deficiencies:** Amount of maintenance required and fish habitat impacted.
- **Fish Barriers:** Type of fish and length of habitat opened up.
- **Noise Reduction:** Number of receptors impacted.
- **Habitat Connectivity:** Emerging issue – focus on locations with vehicle collisions.

Mobility Improvements

Prioritization Strategies

- **Priority:** Eliminate congestion deficiencies based on factual analysis and estimated reduction per dollar spent.
- **Analysis:** Identify congested locations, duration of congestion, and length of back-ups.
- **Solutions:** Consider low cost strategies that have the greatest reduction in delay for the dollar spent; Moving Washington focus area.

Economic Initiatives

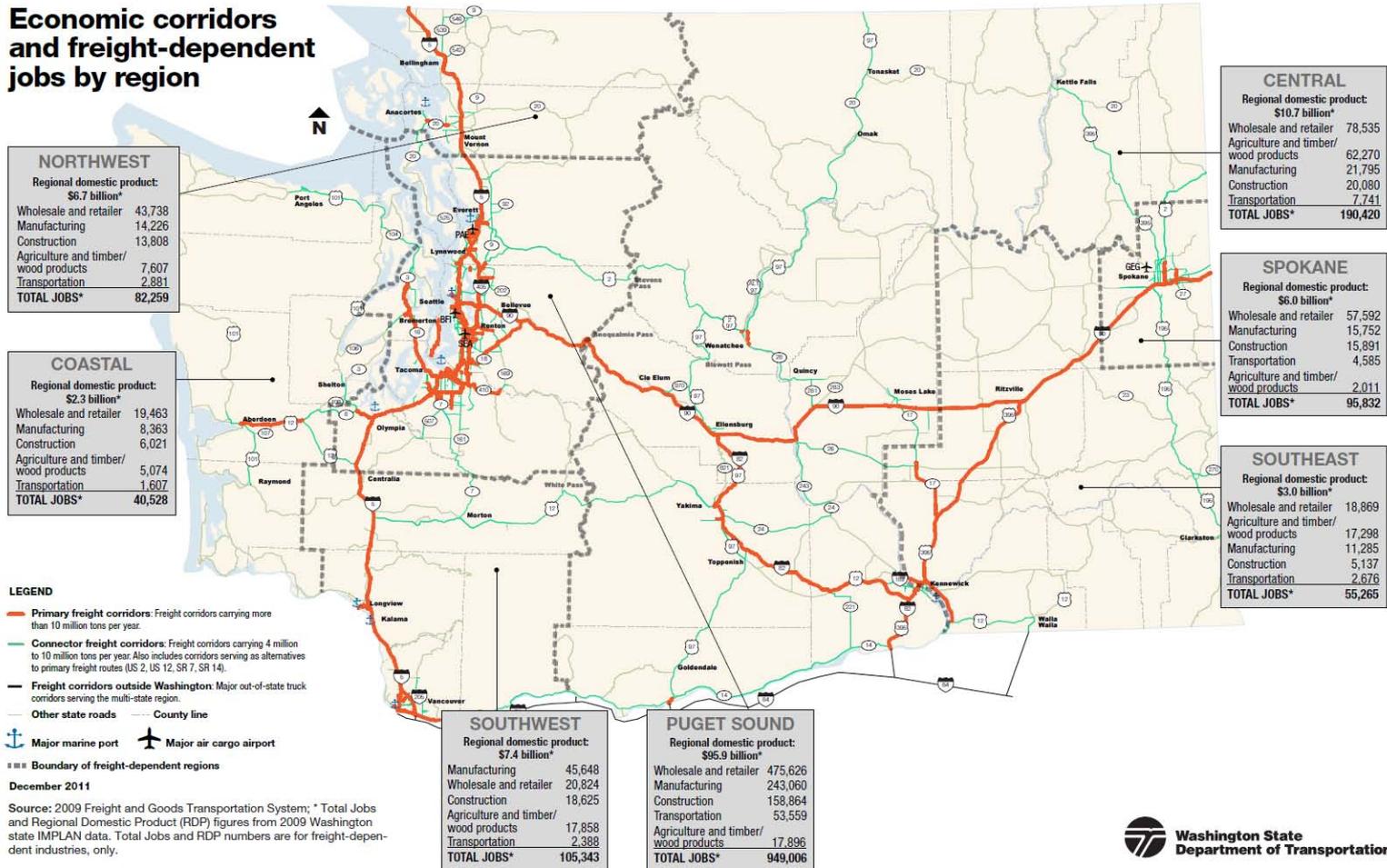
Prioritization Strategies

- **Priority:** Job creation and community development
 - Locations with no congestion or safety deficiencies
- **Analysis:** Working to develop criteria and tool to evaluate and prioritize based on various levels of investment

Connecting WA

Improving the movement of people and goods

Economic corridors and freight-dependent jobs by region



Priority Programming

RCW 47.05.010

The priority programming system for improvements must incorporate a broad range of solutions that are identified in the statewide transportation plan as appropriate to address state highway system deficiencies, including but not limited to highway expansion, efficiency improvements, non-motorized transportation facilities, high occupancy vehicle facilities, transit facilities and services, rail facilities and services, and transportation demand management programs.

Moving Washington

Corridor Performance Review

- Focus on Freight Routes
- Review anticipated corridor performance
- Evaluate relationship of program investments
- Stage and sequence investments
- Operations
 - Incident response, TMC operations, signal ops, low cost enhancements, ITS
- Demand Management
 - Tolling, HOT lanes/ETL, transit service
- Capacity Projects
- Modal Connections

Questions?

For more information regarding
the WSDOT Highway Project Prioritization, contact:

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