

Collecting Roadside Data: Is it worth the cost?

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Yes! But why?

- **Legislative Requirements**
- **Transportation Policy Goals**

Legislative Policy

...”deficiencies on the state highway system shall be based on a policy of priority programming having as it’s basis the rational selection of projects and services according to factual need and an evaluation of life cycle costs...”– **RCW 47.05.010**

Figure 1. Transportation Policy Goals

- » **Preservation:** To maintain, preserve and extend the life and utility of prior investments in transportation systems and services;
- » **Safety:** To provide for and improve the safety and security of transportation customers and the transportation system;
- » **Mobility:** To improve the predictable movement of goods and people throughout Washington State;
- » **Environment:** To enhance Washington's quality of life through transportation investments that promotes energy conservation, enhance healthy communities and protect the environment;
- » **Stewardship:** To continuously improve the quality, effectiveness and efficiency of the transportation system.

Source: RCW 47.01.012

What Does Stewardship Mean?

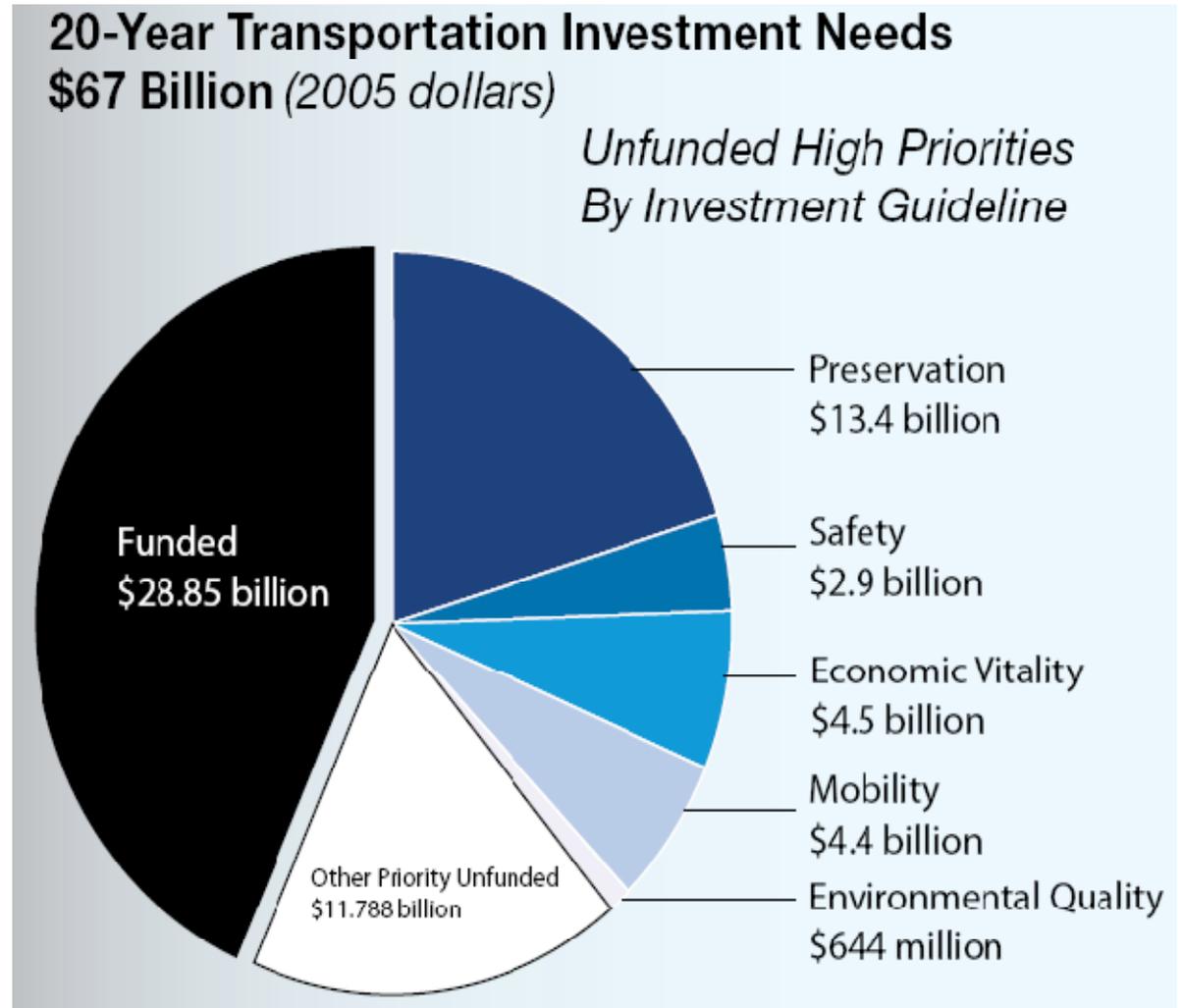
- Efficiency – Change in performance per dollar spent
- Effectiveness - Does it work as planned?
 - Certain performance assumptions are made for benefit cost calculation to use in prioritizing projects
 - WSDOT has begun measuring everything it builds against those performance assumption
- Why did the Legislature choose this approach?

Policy Planning & Prioritization

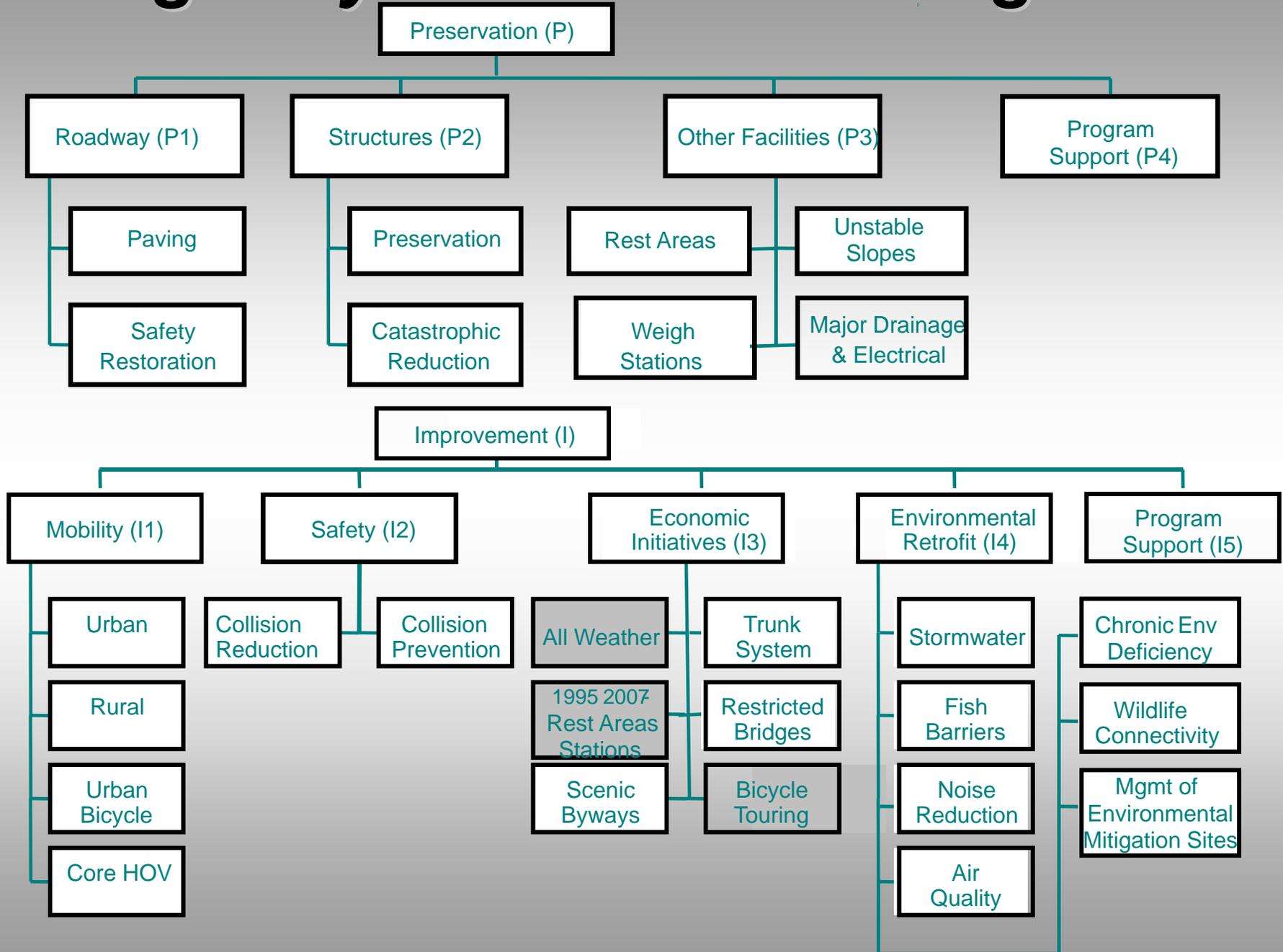


Prioritized Investment Guidelines:

- Preservation
- Safety
- Economic Vitality
- Mobility
- Environment



Highway Construction Program

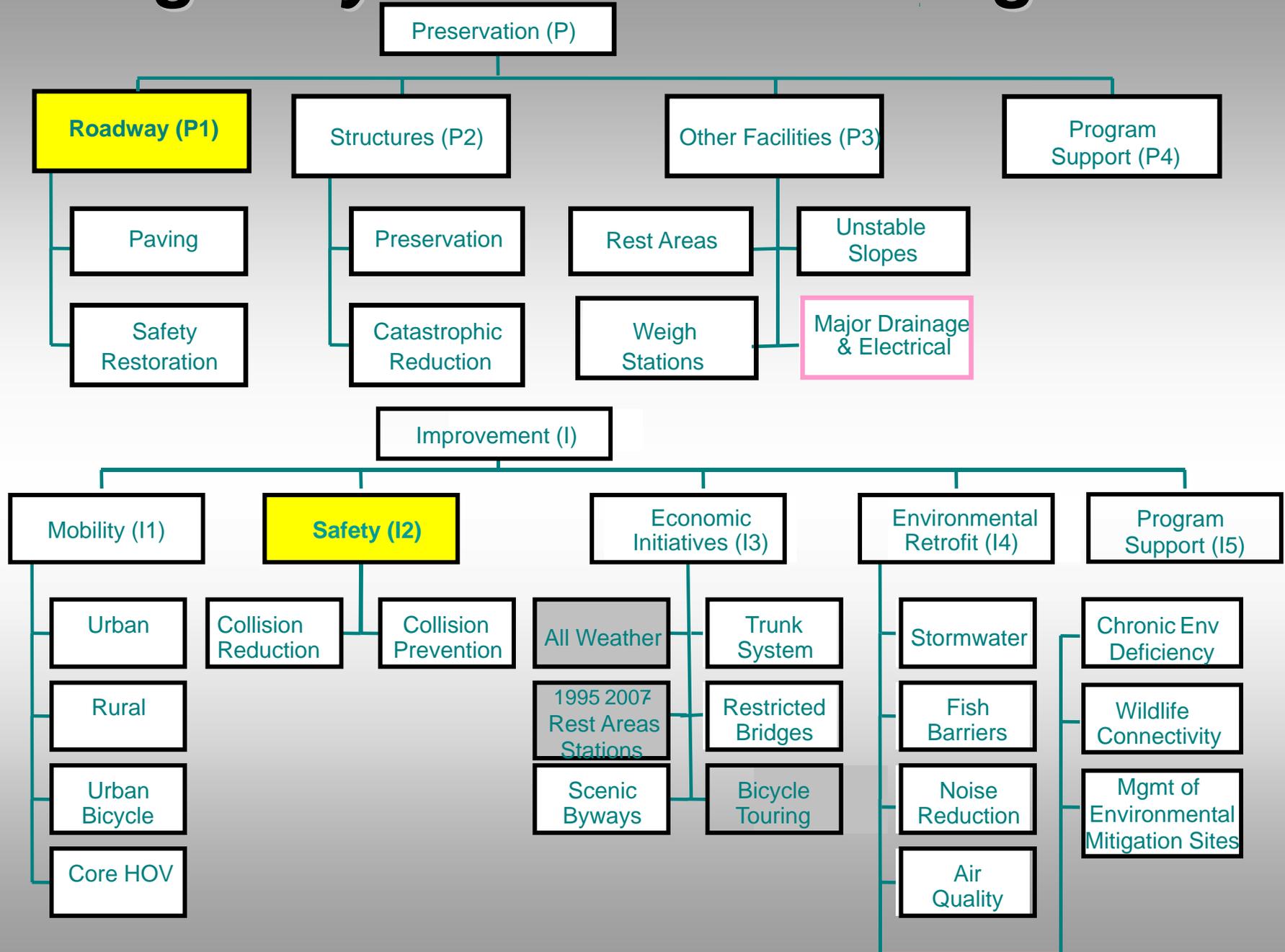


 Strategy no longer active

Technical Expert Assistance (Risk Avoidance)

- Established technical experts to assist our office with the following steps;
 - Policy Issue development
 - Performance goals & measures
 - Needs criteria (data specific & based on performance goal)
 - Strategy development
 - Benefit cost parameters
 - Prioritization approach

Highway Construction Program

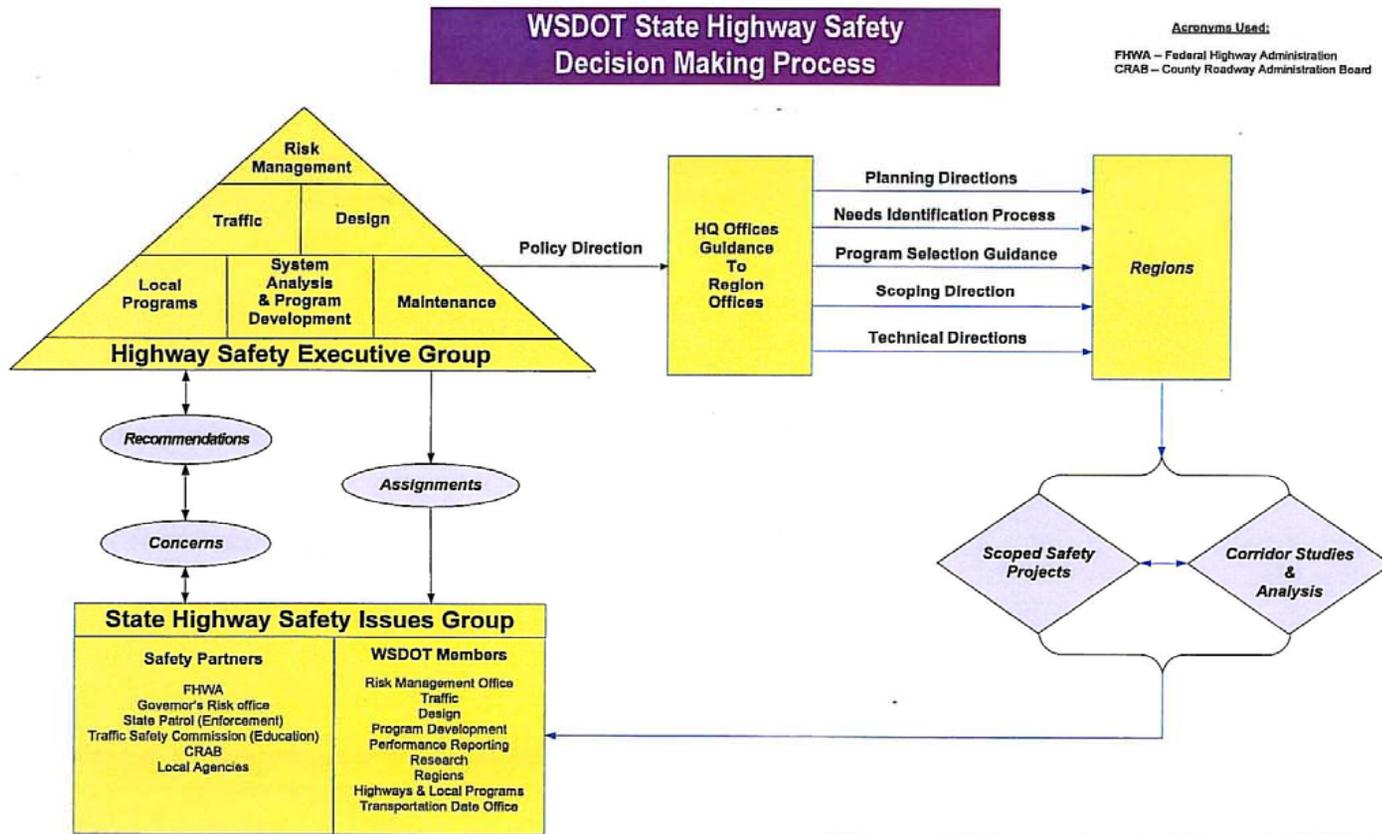


□ Strategy no longer active

Safety Stewardship Agreement

- WSDOT entered into a stewardship agreement with FHWA in 1994
- Will invest an amount equivalent to what was historically invested as part of “3R” paving projects
- Roadway Preservation program will restore worn out safety features such as; signing, guardrail, median barrier and fencing
- Safety funds will be invested at strategic locations based on collision data to reduce the number of fatal and serious collisions (consistent with safety goal signed by the Governor in Washington’s Strategic Highway Safety Plan)

Highway Safety Decision Making



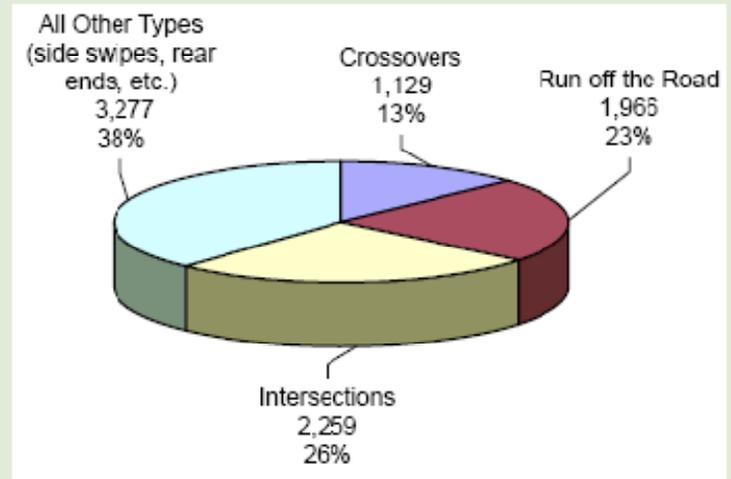
Adopted by Highway Safety Executives on August 28, 2009
 Signature: *J.C. Milton* Date: *Sept 30, 2009*
 John C. Milton, Ph.D., P.E.
 Highway Safety Executives Chair

9/22/2009

Target 0

- Identify
- Guide Investment Decisions
- Reduce fatalities
- Reduce serious injuries

Figure 35. Total Fatal and Disabling Collisions, 1999-2005



Federal law 23 USC § 409 prohibits the discovery or admission into evidence of "reports, surveys, schedules, lists, or data" compiled or collected for the purpose of highway safety improvement projects that might qualify for federal safety improvement funding.

Strategic Highway Safety Plan Goal

Figure 36. Target Zero: Traffic Deaths In Washington State

Target Zero: Traffic Deaths in Washington State

1980-2005 Actual, 2006-2030 Projected



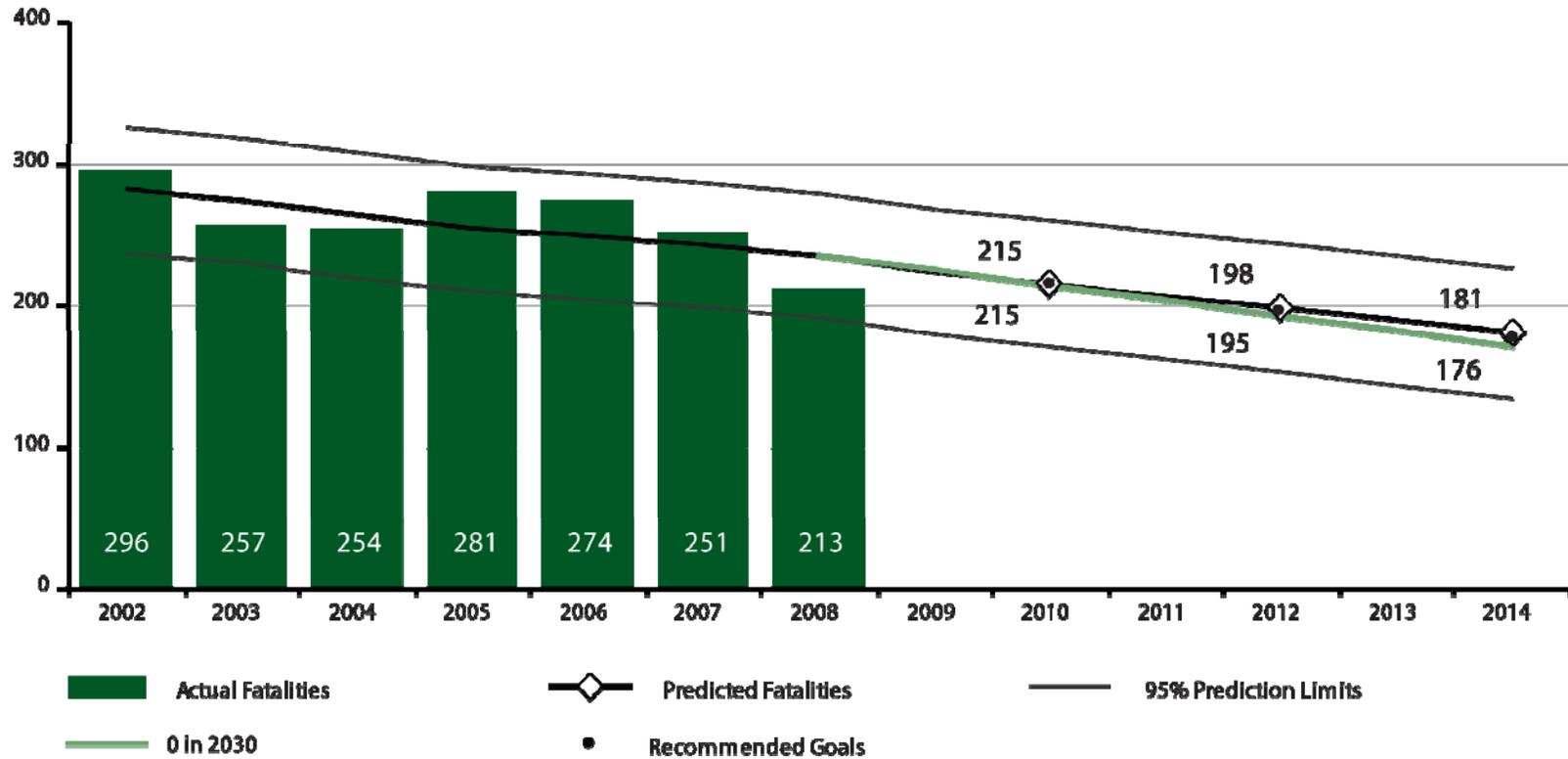
Source of data for actual traffic deaths: Fatal Accident Reporting System (FARS)
Provided by: Washington State Traffic Commission

Data Note: Preliminary Data for 2005

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Analyze the Data

Run-Off-The-Road Fatalities: Trends, Forecasts, and Goals



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Improving Highway Safety (Capital Investment)

Approaches to Improving Highway Safety are led by the Strategic Highway Safety Plan and include; Continuing Corridor Safety Program Reduce the Risk of Run off the Road Collisions and Improve the Roadside:

- Install Guardrail where needed
- Flatten Slopes
- Remove Fixed Objects from the roadside
- Install Shoulder Rumble strips
- Widen Shoulders

Improve intersections:

- New Signal Systems
- New Roundabouts
- New or Better Lighting
- Turn Lanes

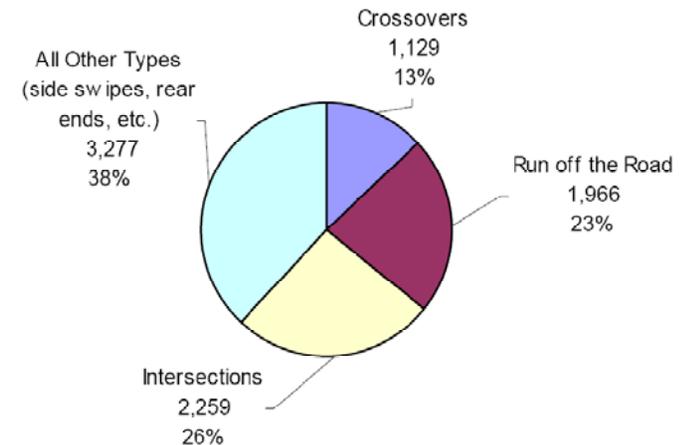
- Complete Median Crossover Prevention Program on Interstate and Non-interstate Highways
- Reduce the Risk of Crossover Collisions on Two Lane Highways by Installing Rumble Strips
- Provide Passing Opportunities on Rural Highways by Constructing Passing Lanes where cost effective
- Eliminate At-grade intersections where warranted
- Provide Adequate Pedestrian Facilities
- Improve work zones
- Modernize Highway Safety Features and Geometrics

Figure 5. Washington Motor Vehicle Total Fatalities and Fatality Rates 1910-2005

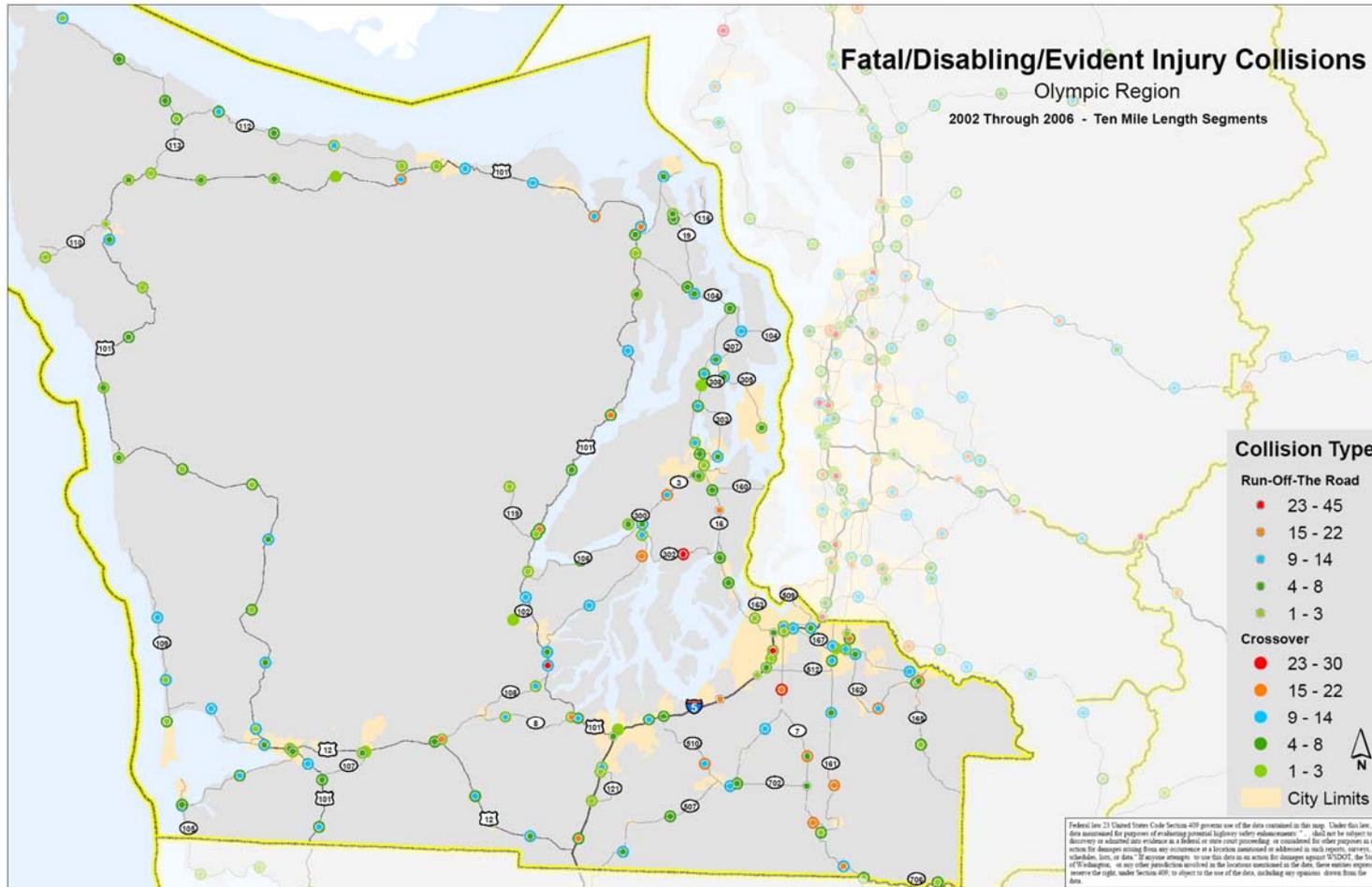


Sources: Washington State Highway Transportation Commission, Washington State Patrol, Fatality Analysis Report System (FARS), Office of Financial Management, Dept. of Licensing, WSDOT

Total Fatal & Disabling Collisions 1999-2005

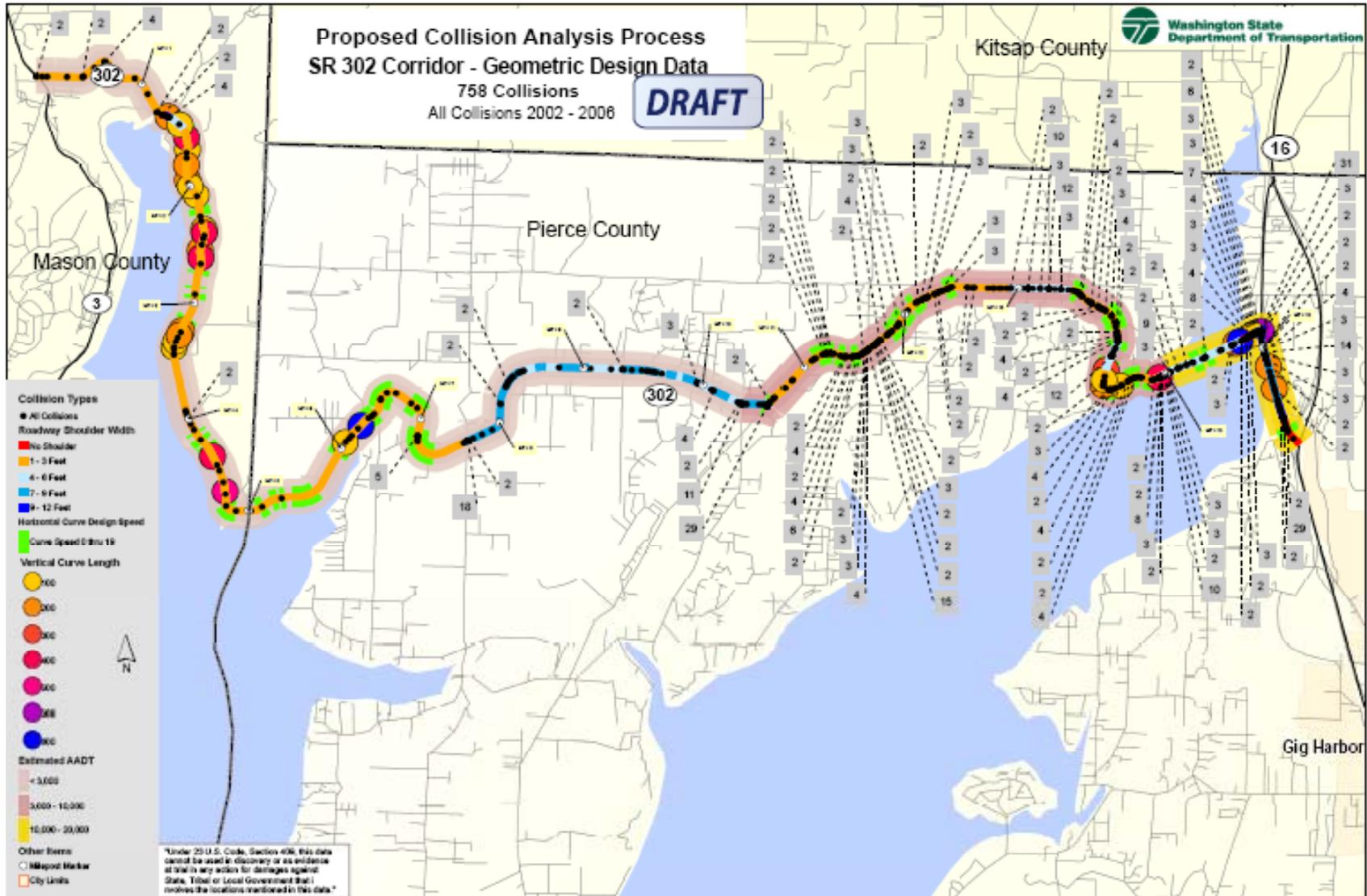


Analyze Collisions by Corridor



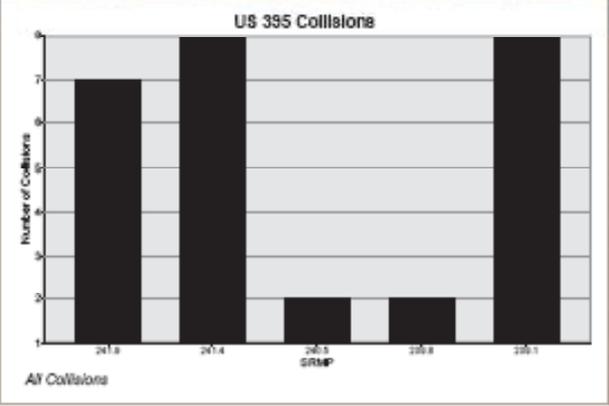
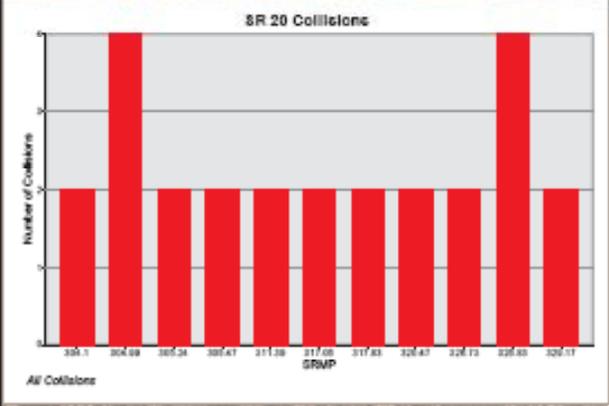
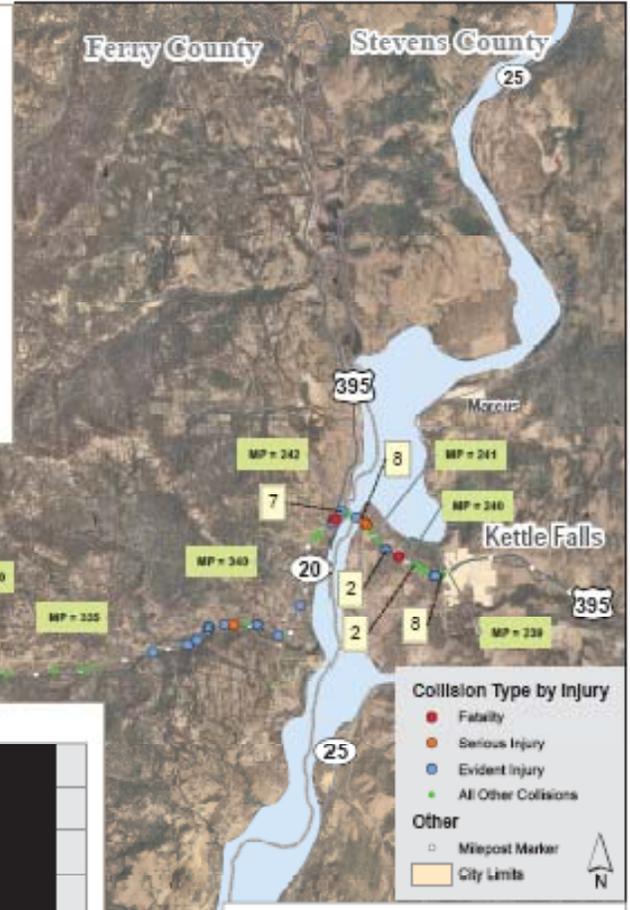
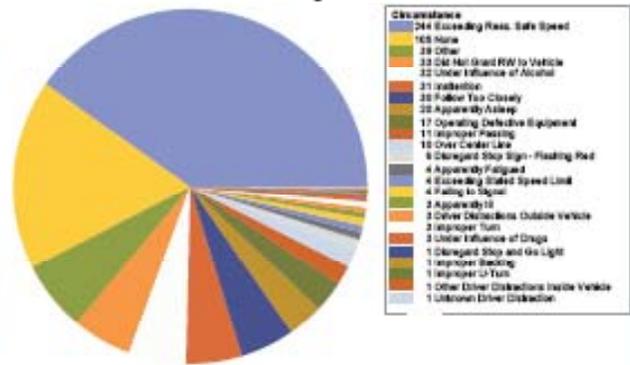
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Analyze the Roadway



Under 23 U.S. Code, Section 402, this data cannot be used to identify or an evidence of fault or an action for damages against State. This is Local Commuter's license the license is not used.

SR 20 - US 395 Collision Contributing Circumstances



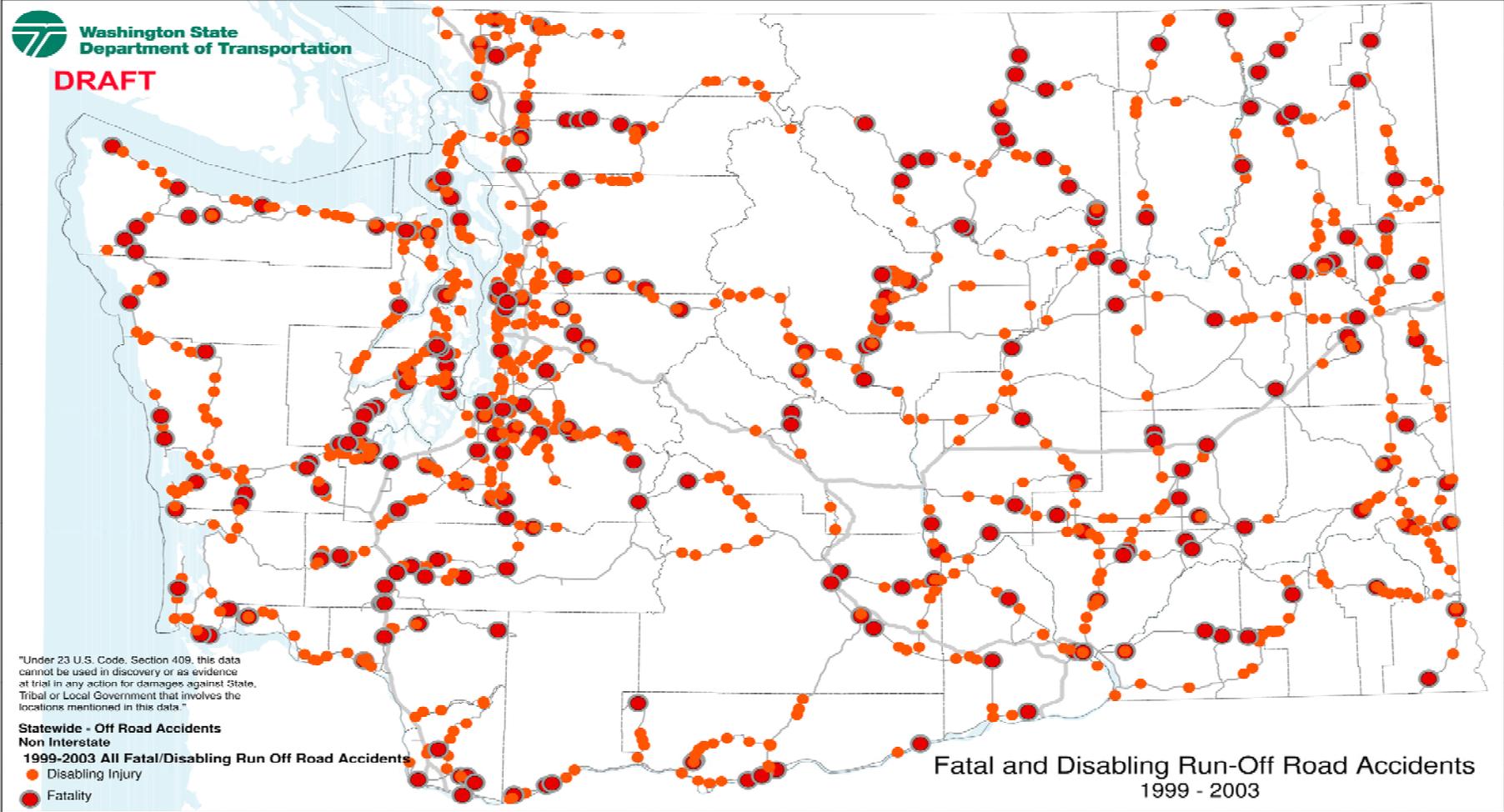
DRAFT

Washington State Department of Transportation
Systems Analysis and Program Development

SR 20 - Republic to Kettle Falls Fatal, Serious, and Evident Injury Collisions

WAS/SR20 REP-KETTLE COLLISION 3/15/20

System Wide Analysis

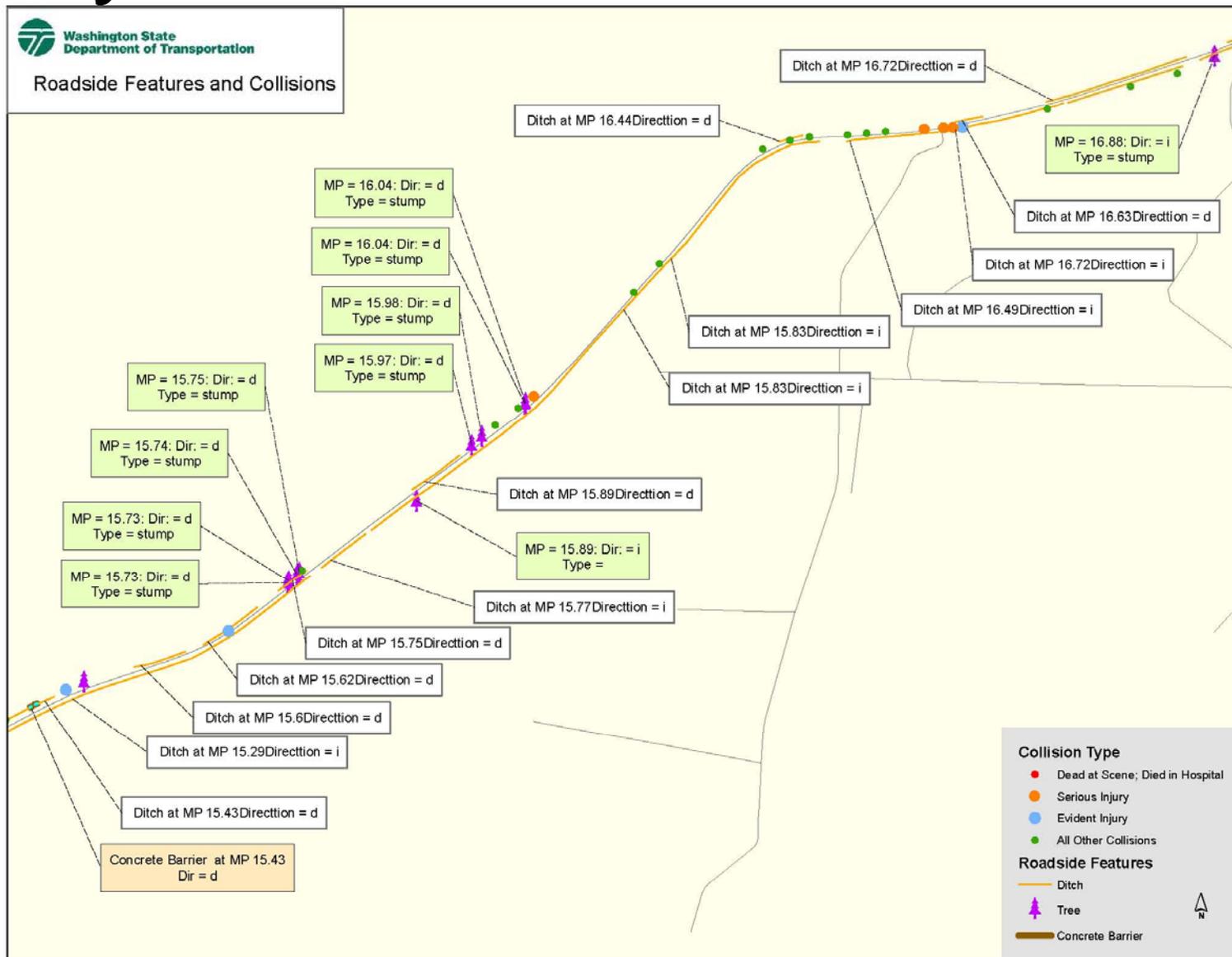


Roadside Features Inventory Program's Goals

A statewide roadside feature inventory program where the data becomes a corporate asset by:

- Having consistent data definitions and values throughout the department
- Having methods and procedures that everyone follows which will minimize the cost of collection and maintenance of data
- Allowing the sharing of accurate and timely data

Analyze the Roadside Features



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**Washington State
Department of Transportation**