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Engineering
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TRB TRANSPORTATION RESEARCH BOARD

TRB Webinar: Know Before You Mow—Roadside Asset Management Solutions

October 6, 2025

12:00 – 1:30 PM



PDH Certification Information

1.5 Professional Development Hours (PDH) – see follow-up email

You must attend the entire webinar.

Questions? Contact Andie Pitchford at TRBwebinar@nas.edu

The Transportation Research Board has met the standards and requirements of the Registered Continuing Education Program. Credit earned on completion of this program will be reported to RCEP at RCEP.net. A certificate of completion will be issued to each participant. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the RCEP.



Purpose Statement

This webinar will highlight current practices and challenges in roadside landscape design, asset management, and maintenance. Presenters will discuss strategies to enhance the health, functionality, and resilience of roadside landscapes and share perspectives on how collaboration across disciplines can support sustainable highway systems.

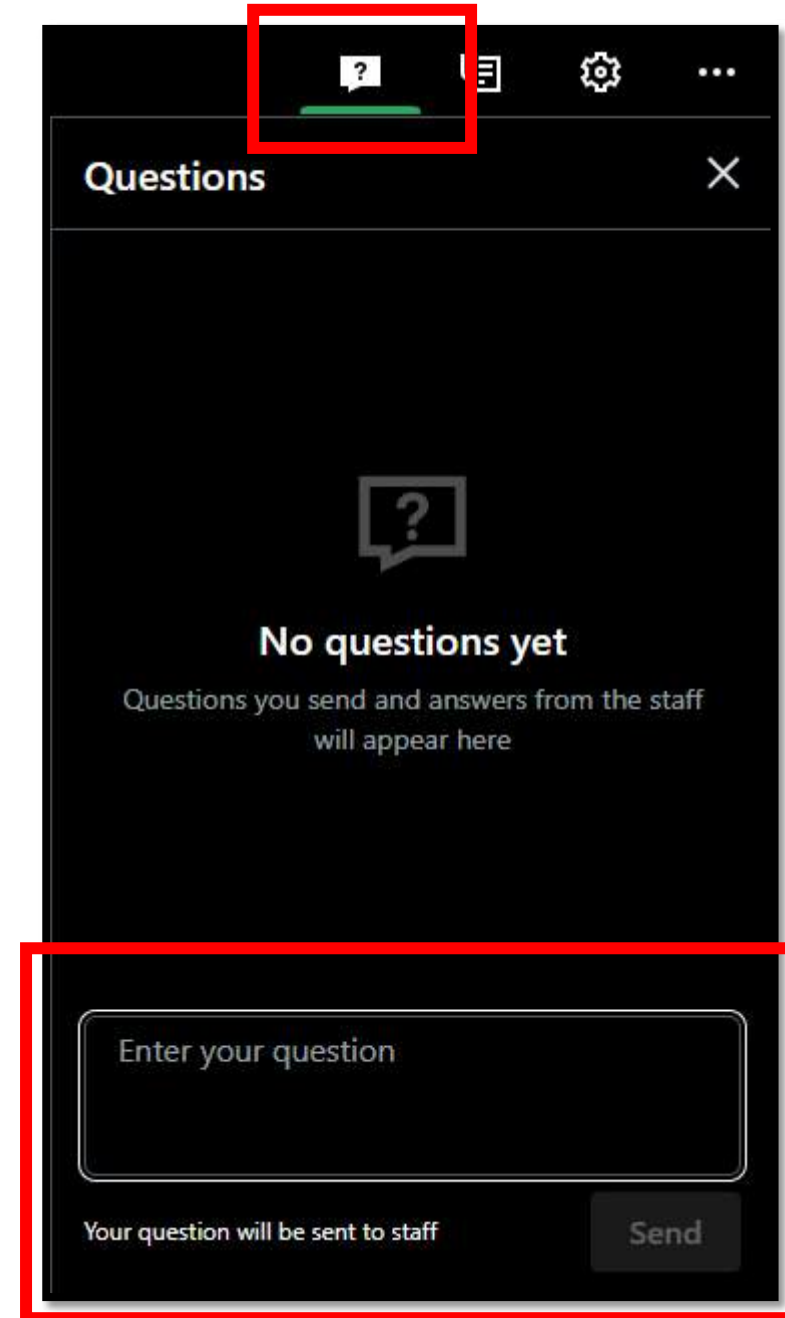
Learning Objectives

At the end of this webinar, you will be able to:

- Understand tools and technologies available for use in roadside asset management
- Find common themes in state DOT efforts to create geographic inventories of roadside land use types
- Identify emerging technologies and the application of AI to transportation asset management systems

Questions and Answers

- Please type your questions into your webinar control panel
- We will read your questions out loud, and answer as many as time allows



The screenshot shows a dark-themed mobile application interface for a webinar Q&A session. At the top, a navigation bar contains several icons: a question mark icon (highlighted with a red box), a list icon, a settings gear icon, and a three-dot menu icon. Below the navigation bar is a header section with the word "Questions" and a close button (X). The main content area displays a large question mark icon and the text "No questions yet" followed by "Questions you send and answers from the staff will appear here". At the bottom, there is a text input field with the placeholder "Enter your question" (highlighted with a red box). Below the input field, the text "Your question will be sent to staff" is displayed next to a "Send" button.

Today's Presenters



Ray Willard

ray.willard@wsdot.wa.gov



Chris Harris

chris.harris@tn.gov



Cheryl Daniels

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Kris Gade

kris.gade@pima.gov



NCHRP 14-47

Tools and Technology for Roadside Vegetation Asset Management

Project Objectives

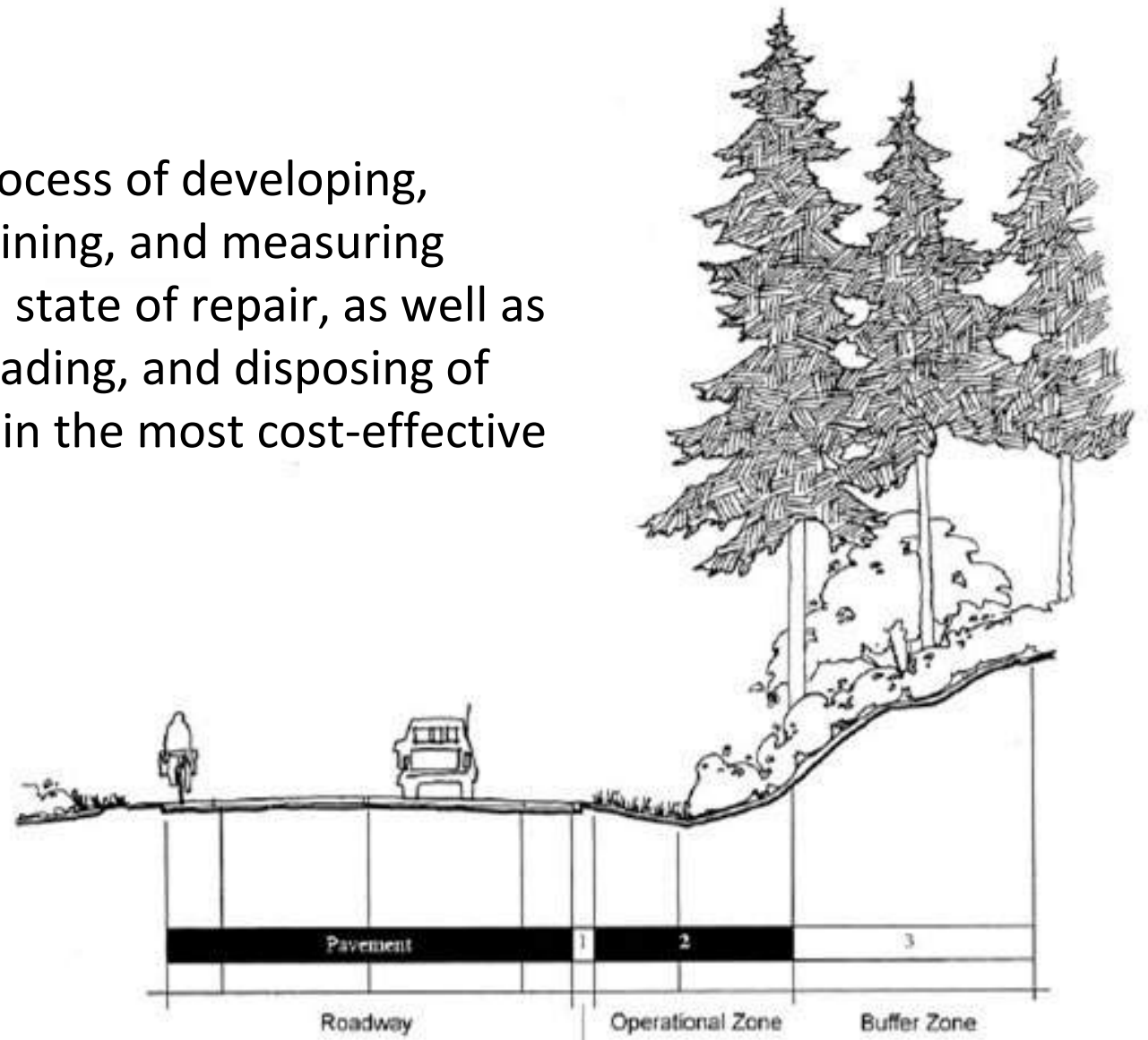
- Develop a guidebook for performance-based vegetation management strategies covering **tools and technology** for:
 - Planning and decision making
 - Estimation and benefits optimization
 - Enhancing maintenance operations efficiency and effectiveness
- Provide a roadmap for the advancement of RVAM

RVAM

Definition

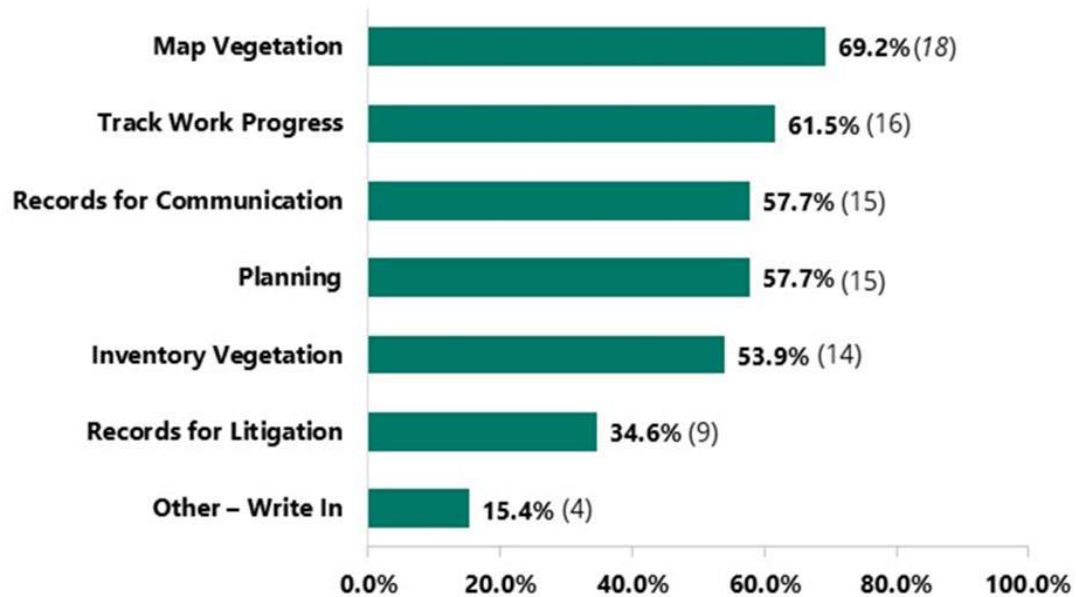
The systematic process of developing, operating, maintaining, and measuring vegetation assets' state of repair, as well as planning for, upgrading, and disposing of vegetation assets in the most cost-effective manner.

*Washington State Department of Transportation,
Maintenance Operations Division, 2023.*



Surveys - Overview

What do you want your tools and technology to assist with that they cannot do currently?
Number of respondents: 26



- RVAM prioritization often differs between central office and local staff
- Mapping software is the most commonly used technology
- Lack of tracking of work hours, work completed or needed
- Additional training needed in several states
- Contractors and In-house staff utilized

Lit Review Findings - RVAM Benefits



DRG, 2021

- Can Help Reduce:
 - Erosion
 - Landslides
 - Flooding on the roadway
 - Invasive species
 - Vehicle-animal collisions
- Provide fire-resilient ground / fire-breaks
- Provide habitat for pollinators

Lit Review Findings - Functional Plantings



<https://wisconsindot.gov/Pages/doing-bus/local-gov/hwy-mnt/winter-maintenance/living-snow-fence.aspx>

- Snowdrift control
- Visual screens
- Noise reduction barriers
- Delineators
- Erosion control
- Improving air quality
- Impact attenuators; depending on location and type of plant
- Improving motorist temperament and reducing vehicle speeds

Lit Review Findings - Tools and Tech

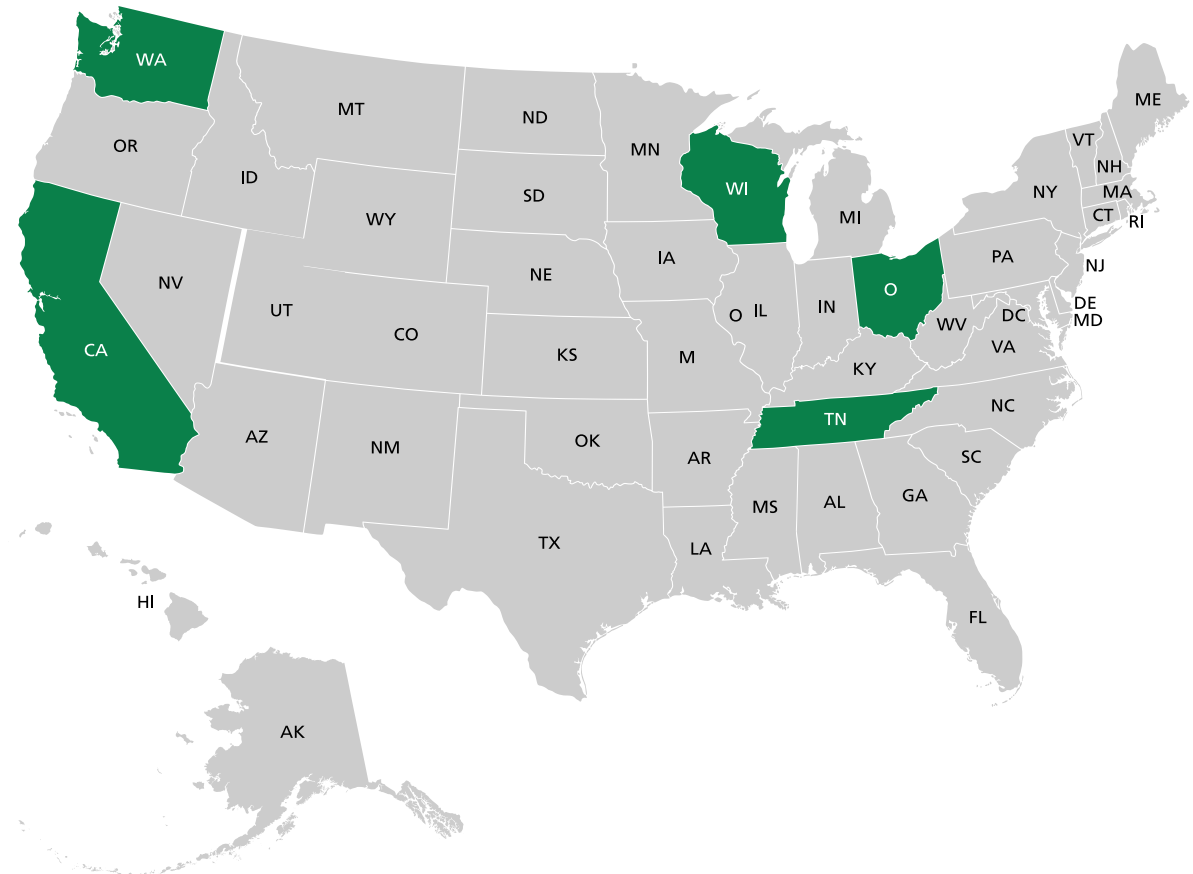


DRG, 2023

- GPS/AVL systems
- Software systems should interface
- Access to geodatabases for construction and maintenance field staff

Case Studies - Overview

- States beginning to add additional assets into state Transportation Asset Management Plans (TAMPs)
- Tools and tech can help to reduce maintenance costs
- Operations staff helpful in plan development
- Consider IT needs when selecting software
- Low funding for RVAM common
- More information is needed for ROI on RVAM tools and tech



Created with mapchart.net

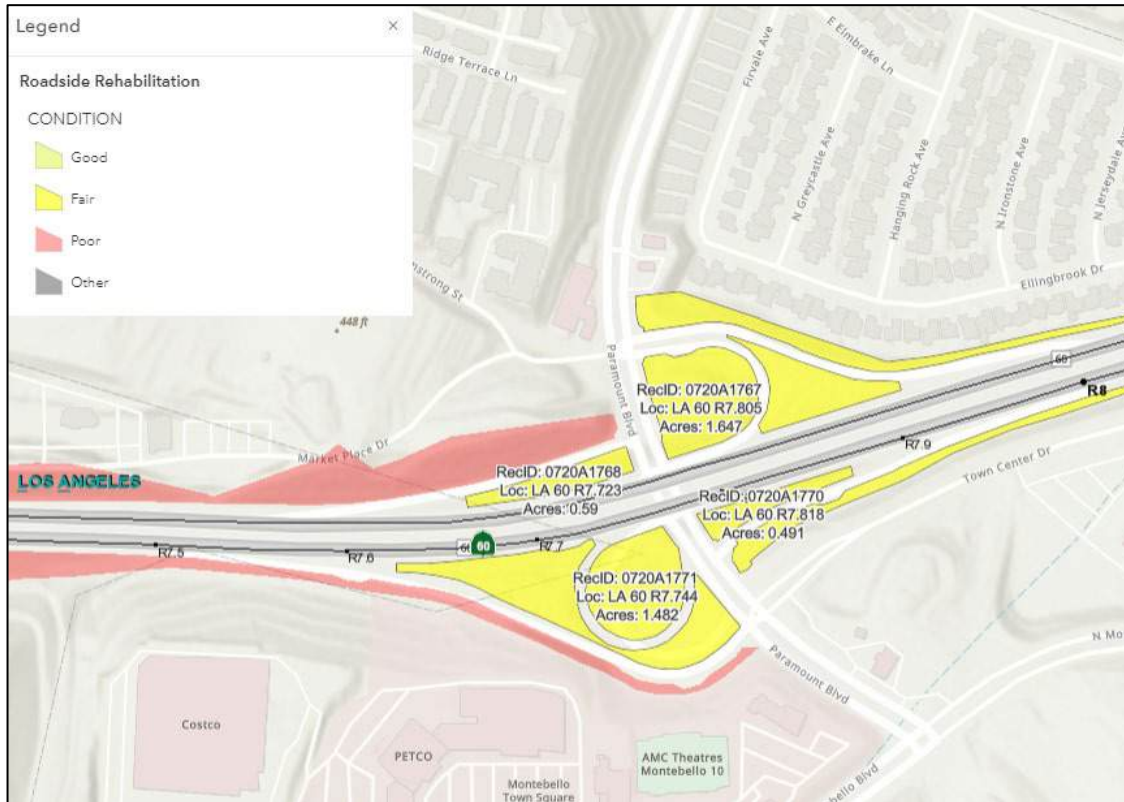
Implementation Recommendations:

Link RVAM and TAMP

Features	Definition	Recommended Vector Type	Reason for Vector Type
Areas for PGR and Herbicide	Areas treated with plant growth regular or herbicide	Polygon	Indicate the managed areas size & determine if the size is changing over time
Clear Zone Mowed Areas	Areas adjacent to the road edge mowed for sight distance. Can be 15 or 30 ft depending on state guidelines or requirements.	Polygon	Indicate the size of the managed area

- Standardize common vegetation and vegetation-related safety feature terms
 - Use **Data Dictionary**
- Use a **proactive** management approach
- Standardize asset condition rating

Implementation Recommendations: **Asset Condition**



- Set up & define rating system as needed for organization
- Define thresholds for maintenance needs
- Use life-cycle planning for maintenance planning
- Conduct regular inventories

Caltrans Division of Design and Division of Maintenance, 2023

Implementation Recommendations:

IT Department

The screenshot displays a GIS application interface. On the left, a map shows a highway interchange with a green line indicating a specific location. A data entry form is overlaid on the map. The form has two tabs: 'Attributes' and 'History'. The 'Attributes' tab is active, showing a table with columns for Activity, Orgcode, Name, and Comments. The 'History' tab is also visible, showing a table with columns for Activity, Orgcode, Name, and Comments. The form includes a 'Details' button and a 'Basemap' button. The map is labeled 'City of Yakima, County of Kittitas, Masar, Microsoft, Esri, HERE, IFC'.

Activity	Orgcode	Name	Comments
1331 - Level One Inspection	455110	Timothy Baug	06-28-2022 08:06 AM

History - WSDOT0001242680

Activity: 1331 - Level One Inspection

Apron/Footing: Good

Can you see through to the other end of the culvert: Yes

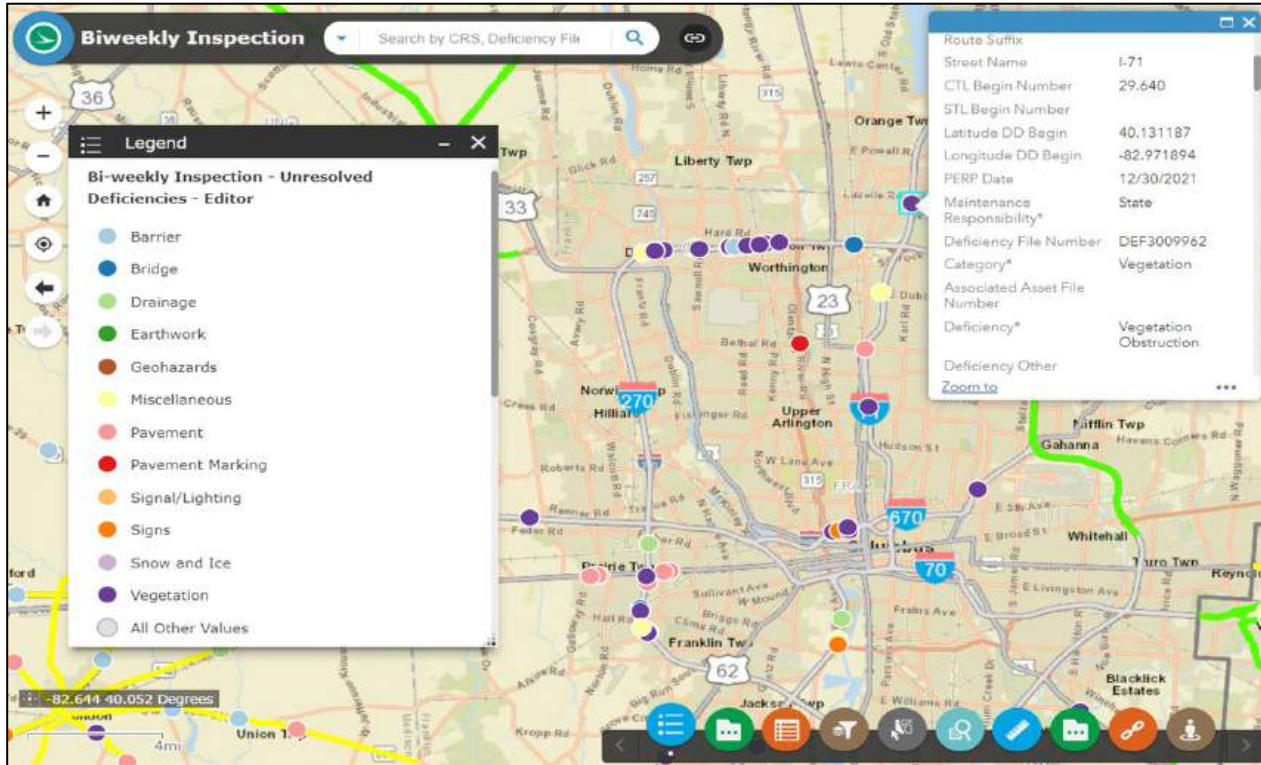
Corrosion: Good

Cracking: Good

Cross Section Deformation: Good

- Consult IT department
- Ensure security permissions met prior to purchase
- Allow third-party IT support when needed
- Office staff need access to GIS software
- Field staff need access to collection systems
- Interfacing systems are more efficient

Implementation Recommendations - Tools and Technology



Ohio Department of Transportation Office of Maintenance Operations, 2023.

- Plan to upgrade hardware/software every 3-4 years
- Install GPS/AVL-enabled systems in vehicles
- Tablets and cellular devices or data collection
- Use mapping software that updates locations in system automatically
- Use LiDAR to map large vegetation assets
- Artificial Intelligence
- UAVs

Implementation Recommendations:

Staff and Training



DRG, 2015

- Customer service representatives:
 - Aware of DOT goals
 - Have access to vegetation management timelines
- Increase staff morale and retention
- Provide annual and specialized training
- Communicate the benefits of RVAM to staff and public
- Collaboration between design, construction, and maintenance staff

Possible Funding Sources



DRG, 2024

- Infrastructure Investment and Jobs Act (2022-2026)
- State taxes
 - Gas Tax
 - Vehicle Miles Traveled Tax
 - Usage Fees
 - Tolls
- EPA
- FHWA

Projects Types

Eligible for Funding



Google, 2025

- Flood prevention
- Noxious/invasive species eradication
- Stormwater
- T&E Species protection
- Tree Inventories
- Wetland protection

Keep an Eye Out for Publications:

- **Guidebook: Research Report 1155**
- **Report: Web Only Document 429**

Questions?

Thank you for your time!

	Cheryl Daniels
	<u>cheryl.daniels@davey.com</u>

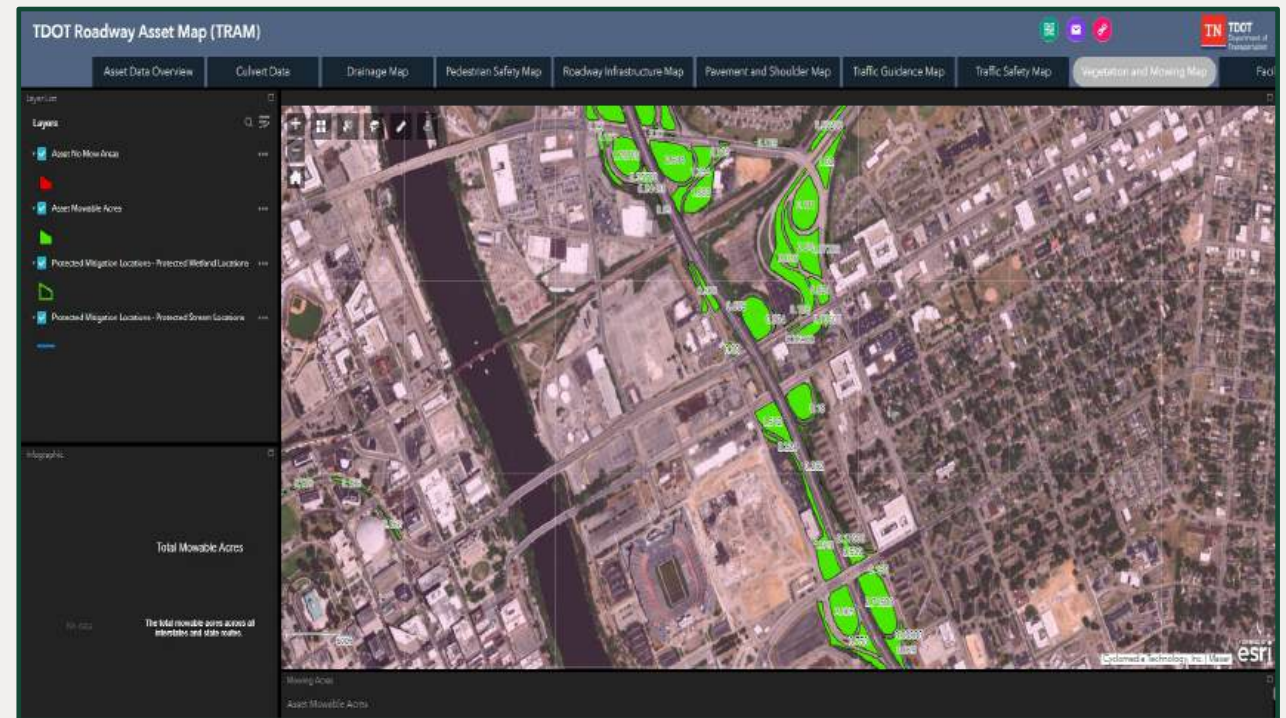
Tennessee Department of Transportation

Case Study



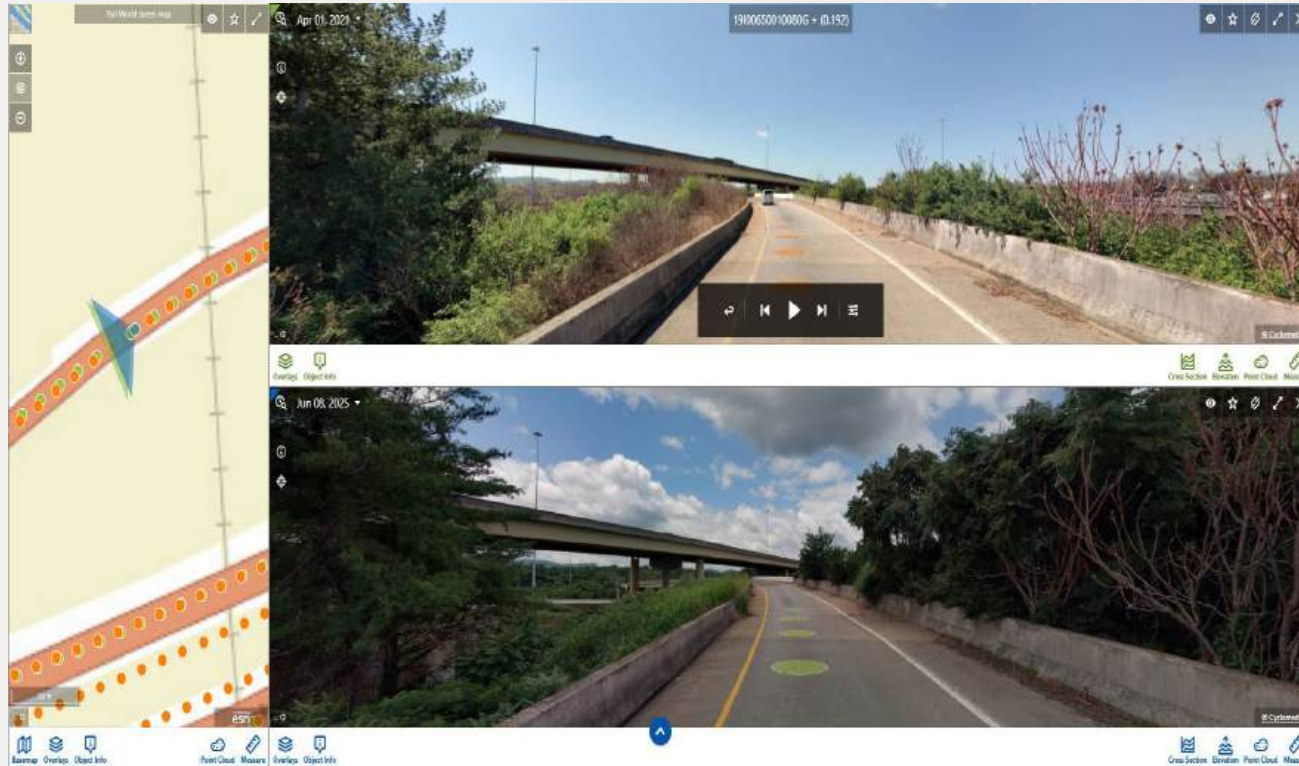
Benefits of Tools and Technology

- Making GIS data available to non-GIS field staff with TRAM
- PowerBi dashboards
- Use LiDAR imagery to complete vegetation surveys and plan tree work
- Track labor with MMS
- Map the ROW and determine maintenance acreage with GPS/AVL system



TDOT Roadway Asset Map (TRAM) interface showing Vegetation and Mowing Assets

Street-Level, High-Resolution Imagery



Street-level, high-resolution imagery from Cyclomedia showing changes across multiple collection cycles along TDOT ROW

- Collected by contractor annually
- Compare images across multiple years
- Analysis via LiDAR and imagery
- Information overlaid on mapping software
- Take direct measurement within images
- Data drives decision-making

Mapping Software and Asset Tracking

- LiDAR data and imagery results are integrated into the TDOT Roadway Asset Map (TRAM)
- Used for pre-project reconnaissance
- Data not available to all field staff - need for more IT support



TRAM map showing the locations of trees (green) along an interstate route that require removal (blue) based on street-level, high-resolution imagery

Labor Tracking and Budgeting

GPS on Trucks and
Mowing Equipment



Maintenance Management System (MMS)

Field Operations Work Status Reports Special Programs Planning Tables Admin Print Screen Mainform Help Window Exit

08-SEP-2023 13:36:54

Organization Unit: 3801 - DIST 38 MNTCE - CHEATHAM CO District: 38 Date: THURSDAY - SEP 07, 2023 Report Number: Prior Rpts

Activity: 437 - CHEMICAL CONTROL OF VEG Work Description: IN-HOUSE TARGET SPRAYING County: CHEATHAM Project Number: 11000410004

Asset Group: Route: Asset: Special Event:

Route: 10040 SC: 0 CS: 1 Begin LM: 185.00 End LM: 186.00 Length: 1.00 Direction: E Position: RIGHTWY Off System Description: Accident: N

Labor: 0 Equipment: 0 Material: 0 Total \$: 0 Link Work Req Comments

Performance

Accomplishment Unit: GALLONS

Units of Accomplishment: 500.000

Unit Cost: 0.00

DWR Cost: 0

Historical Averages

County	District	Region	State	Period Covered
144.273	144.166	424.869	477.937	From: 07/01/21 To: 05/31/23
8.76	6.94	4.69	4.90	
1,264	1,001	1,991	2,343	

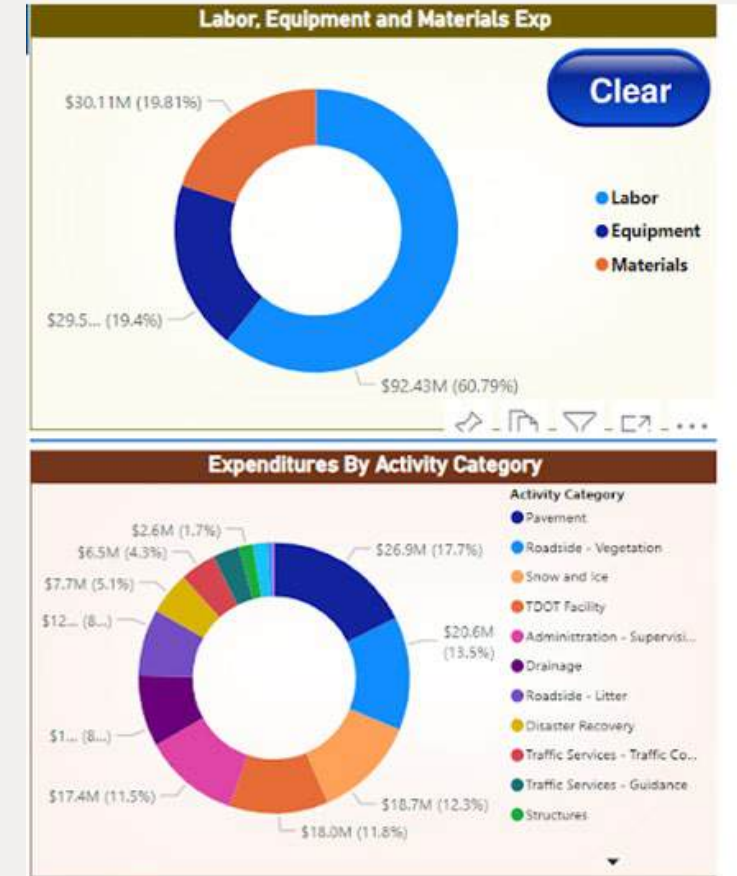
Year To Date Status

Work			Cost		
Planned	Actual	% Plan	Planned	Actual	% Plan
0	0	.0	0	0	.0

Save Performance Leave Scheduled Budget Status Apply Ideal Mix Reported Hours Resource Detail DWR Selection

Return Run Report Delete DWR New DWR

Power BI



Next Steps for TDOT

- Performance Based Maintenance Inspections (PBMI)
- Modernize Maintenance Management System to integrate GIS & Condition data
- Develop data-driven, performance-based annual plans & budgets for maintenance
- Provide access to tools to field staff to improve communication up and down
 - Provide access to maps and data
 - Improve ticket response and claim mitigation

PBMI Condition Survey123 Form

10:48
Field Maps

PBMI Segments

No more than 2% of the vegetation exceeds a uniform height of 18 inches. Minimum height not less than 4 inches. (If no potential for grass in ROW, use N/A)

☒ Pass ☐ Fail ☐ N/A

Brush and Trees, Overhang - Pass-Fail: *

Trees or woody growth do not overhang the pavement or shoulder on roadways.

☒ Pass ☐ Fail

Brush and Trees, Vertical Clearance - Pass-Fail: *

Vertical clearance over the roadway including any paved shoulder is not less than 16'-6".

☒ Pass ☐ Fail

Brush and Trees, Sign Visibility - Pass-Fail: *

No obstructions of sign visibility (see manual for distances).

☐ Pass ☒ Fail

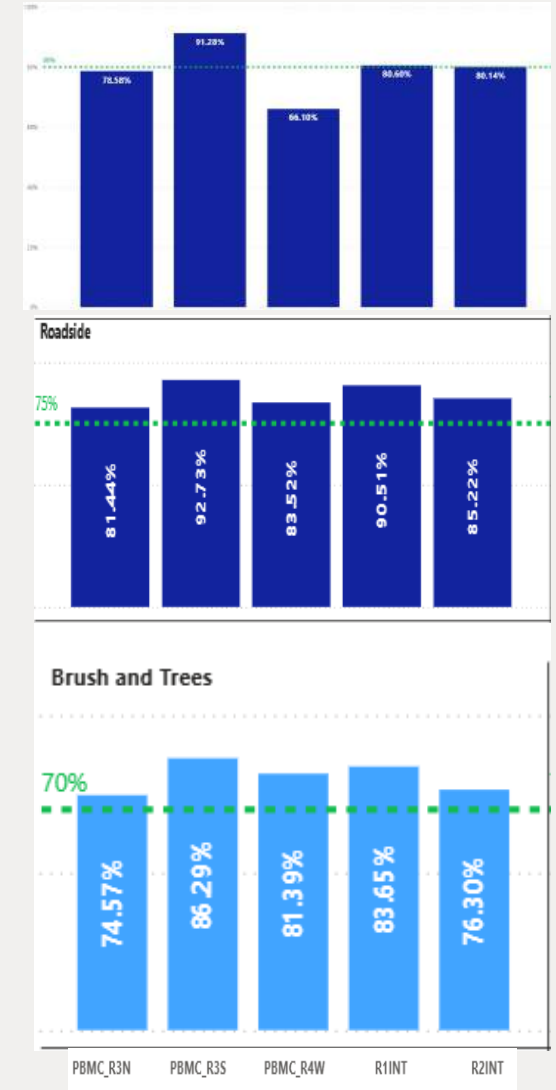
Brush and Trees, Sign Visibility - Image: *

1 of 1

TREES_SIGN_VISIBILITY_IMG-20250826-154837.jpg

5 of 7

PBMI Condition Scores Dashboard



THANK YOU!



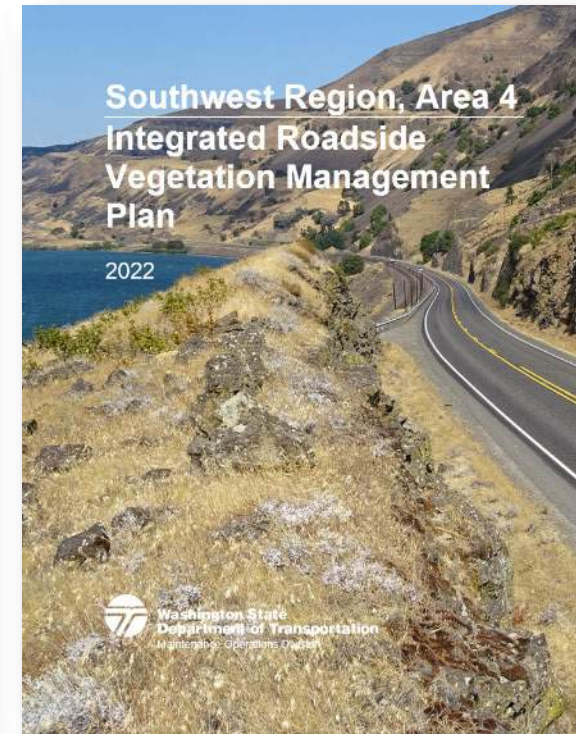
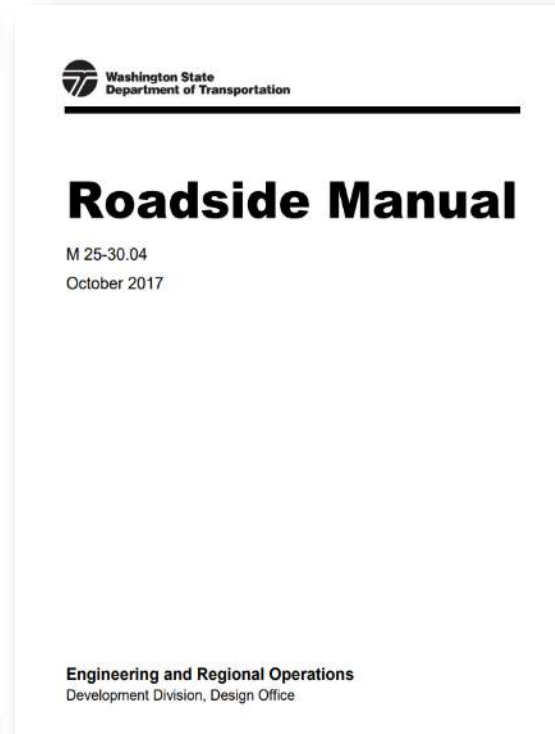
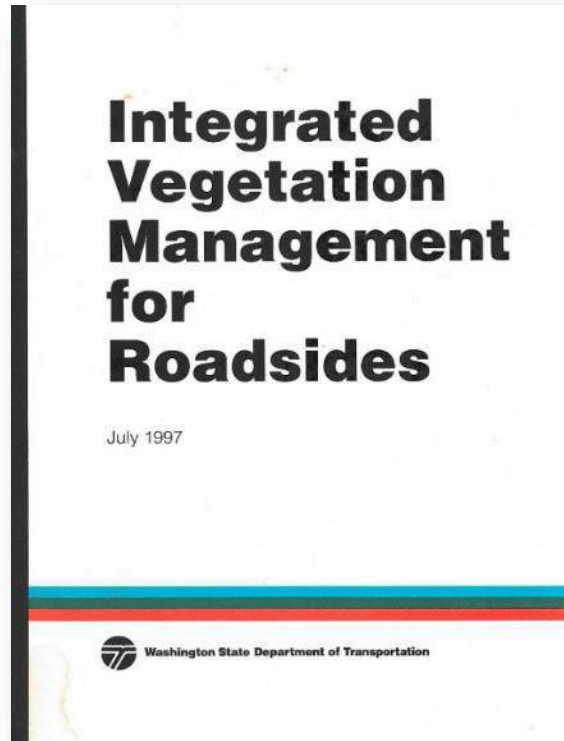
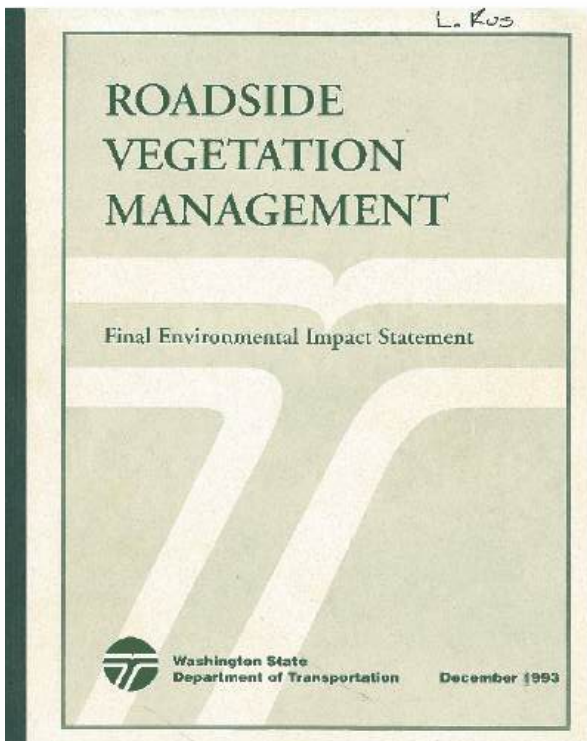
Chris Harris, P.E. | Tennessee Department of
Transportation
Statewide Transportation Engineer
chris.harris@tn.gov

Know Before You Mow

Roadside Vegetation Asset Management Solutions

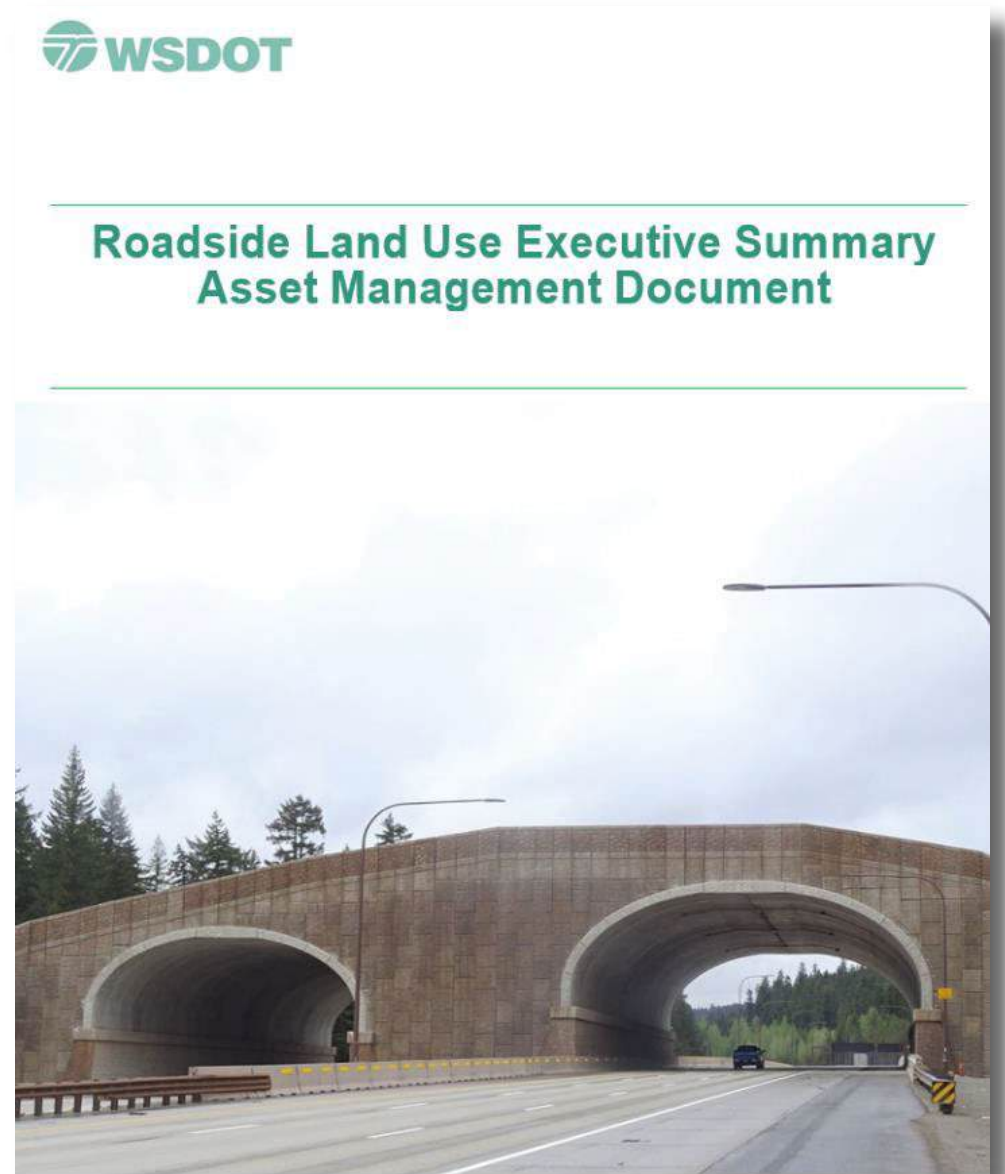
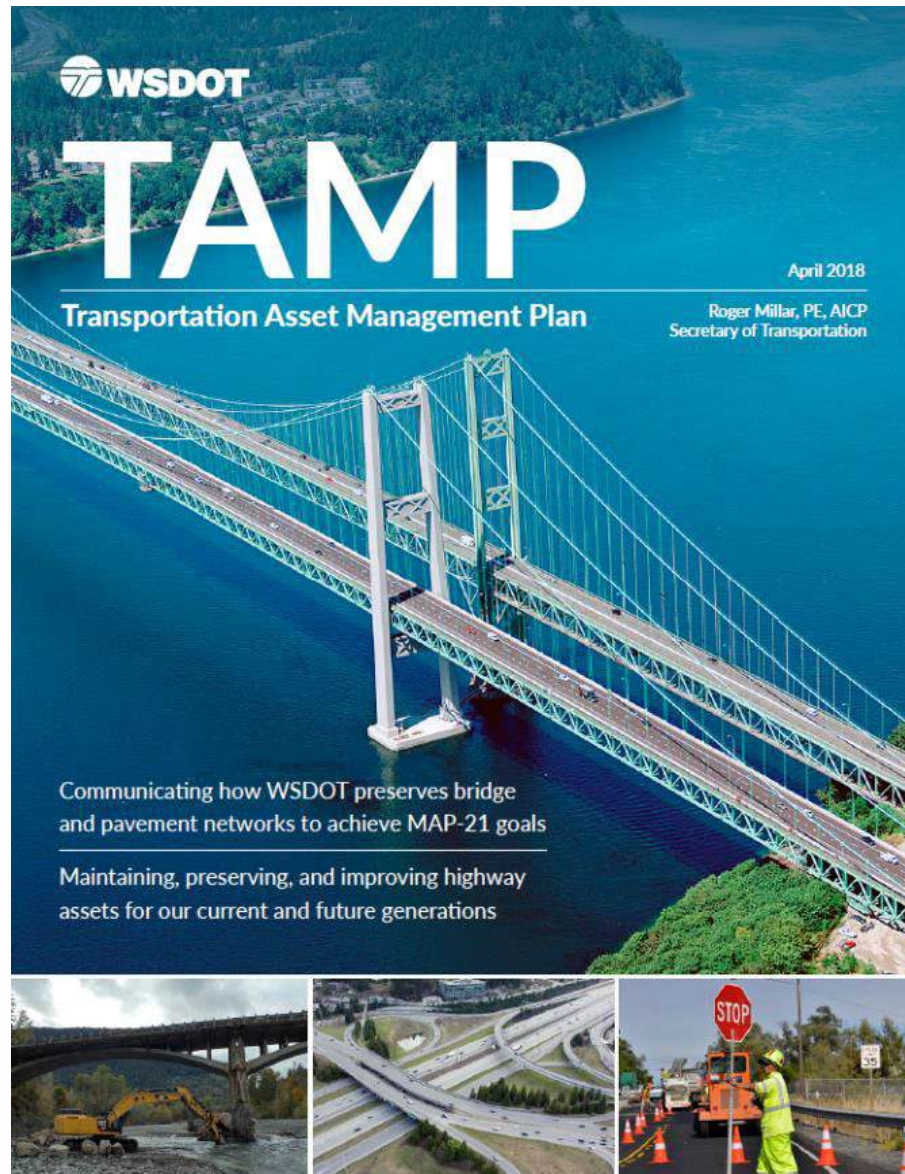


Evolution of WSDOT Roadside Landscape Asset Management 1993 – 2025



www.wsdot.wa.gov/maintenance/roadside

Evolution of WSDOT Roadside Landscape Asset Management 1993 – 2025

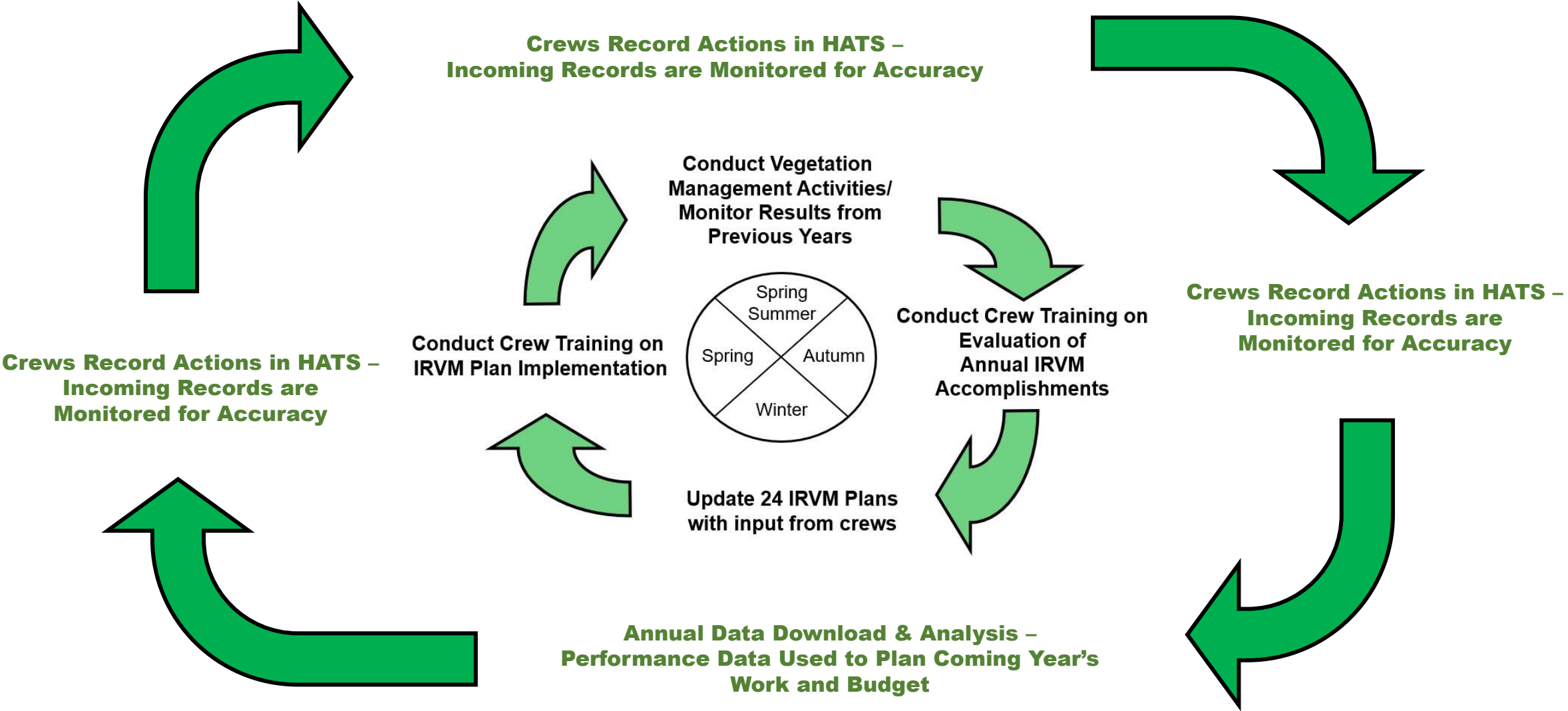


Planning for Maintenance of Washington's Highway Roadside Assets



<https://wsdot.wa.gov/construction-planning/protecting-environment/maintaining-vegetation-along-our-highways>

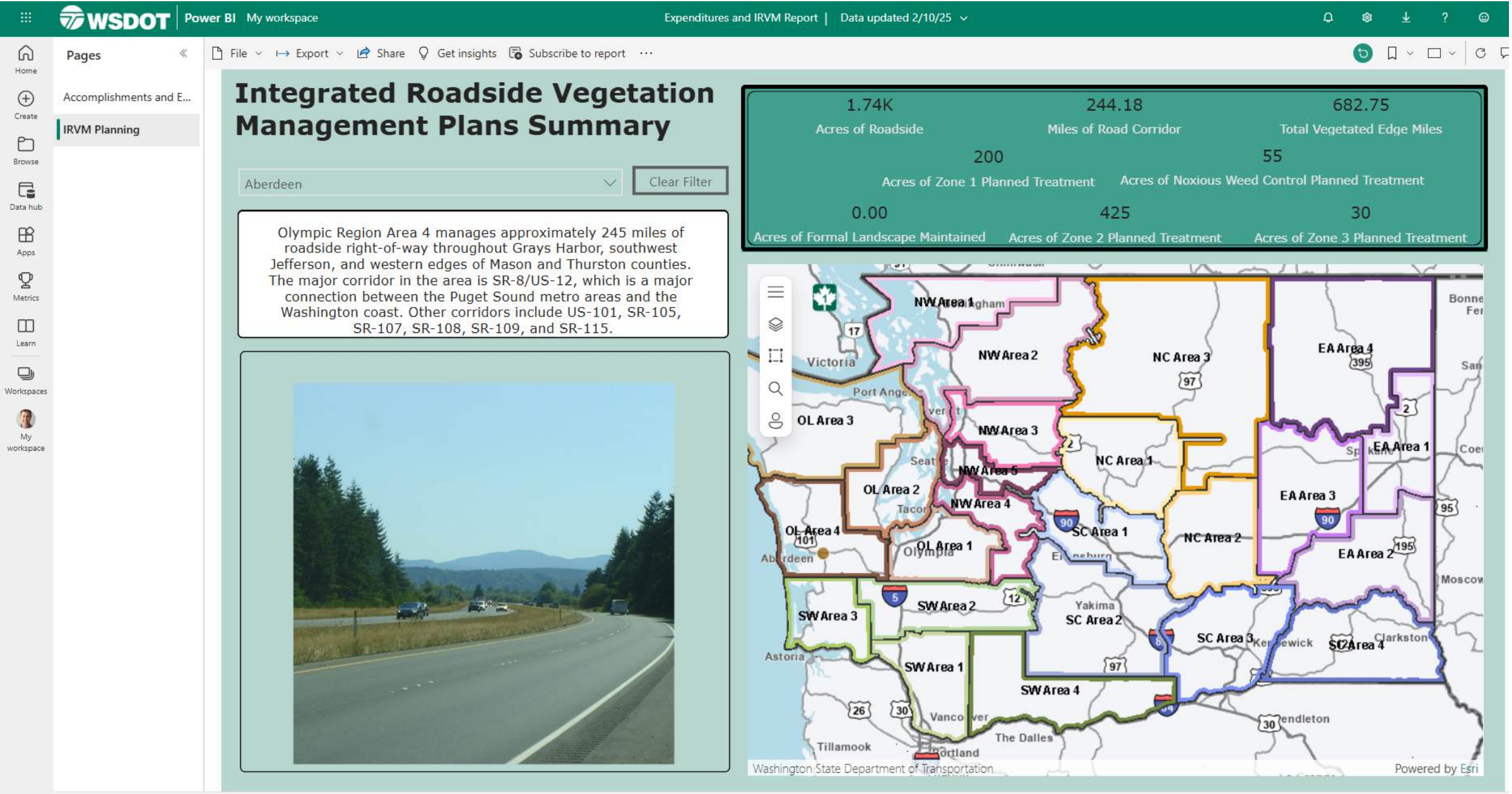
WSDOT's Annual Roadside Landscape Asset Management Cycle



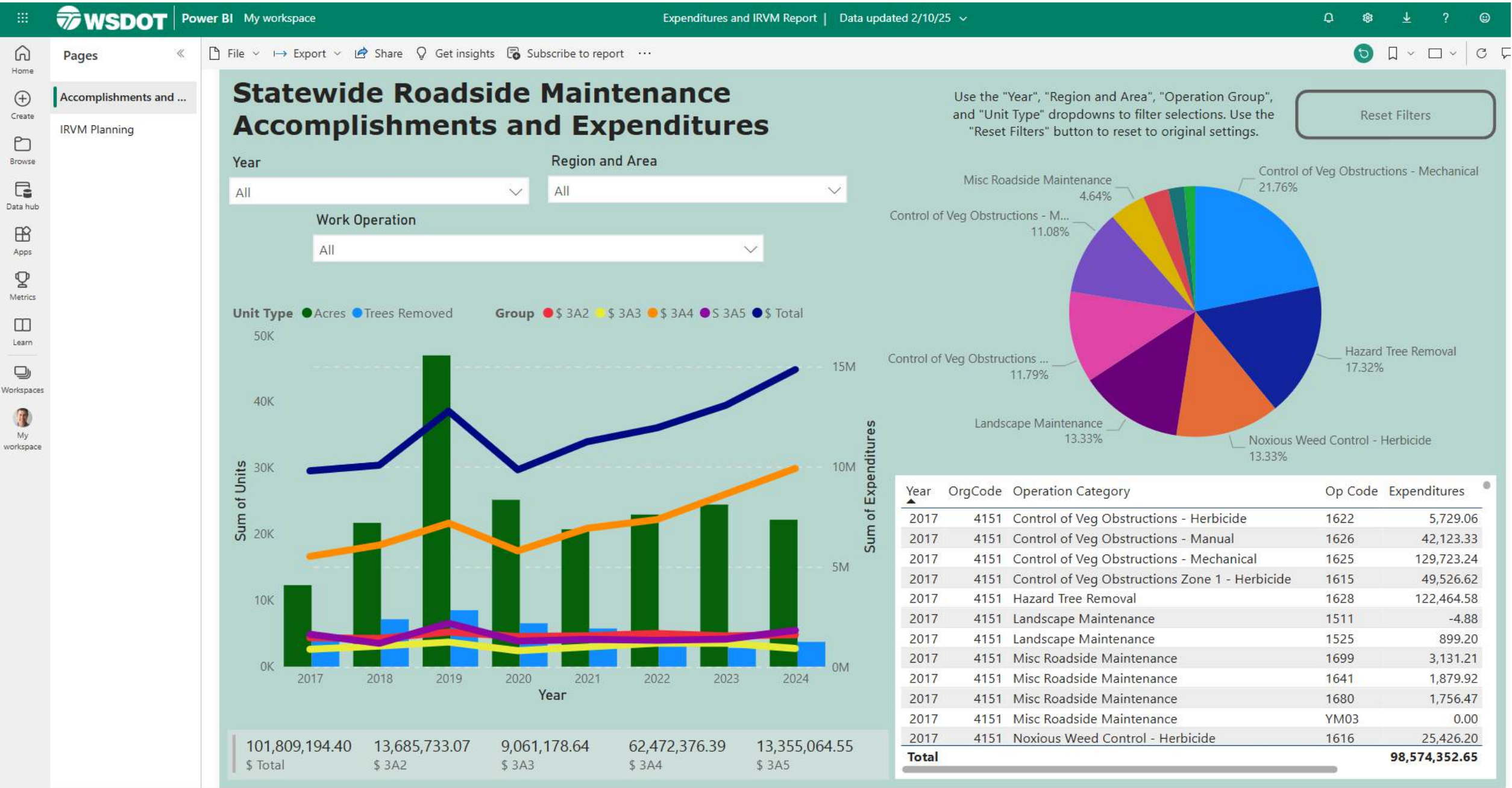
Recording the Story – WSDOT's Highway Activity Tracking System



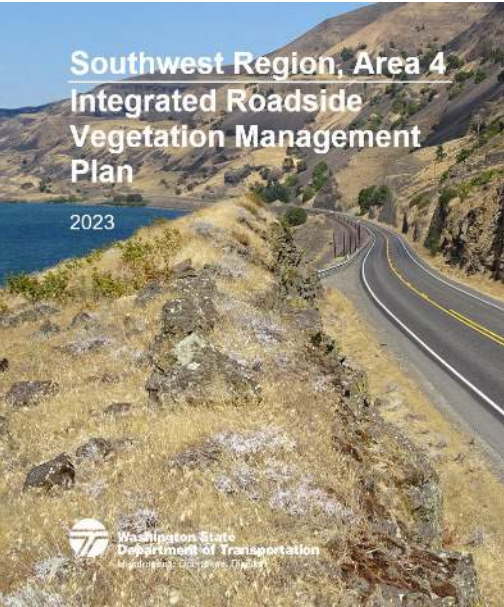
Telling the Story with Planned vs. Accomplishment Data and Dollars



Telling the Story with Planned vs. Accomplishment Data and Dollars

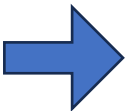


WSDOT's Roadside Landscape Asset Management System Components



Annual Workplan
and Crew Training

Demonstrated Performance of
RLAM and Resulting System
Condition



Annual Record of Accomplished Units of Work and LEMO Costs



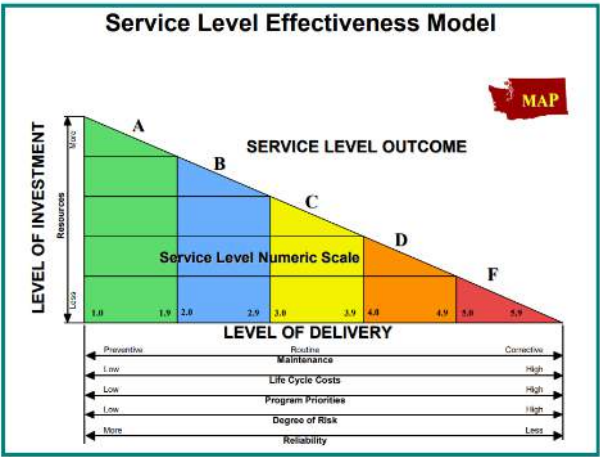
[Go To Budget Queries](#)

[Go To Expenditures Queries](#)

Username: WILLARR Name: Ray Willard Role: User

Please send comments to: [FIRS Support](#)

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Annual Measurement
of System Condition

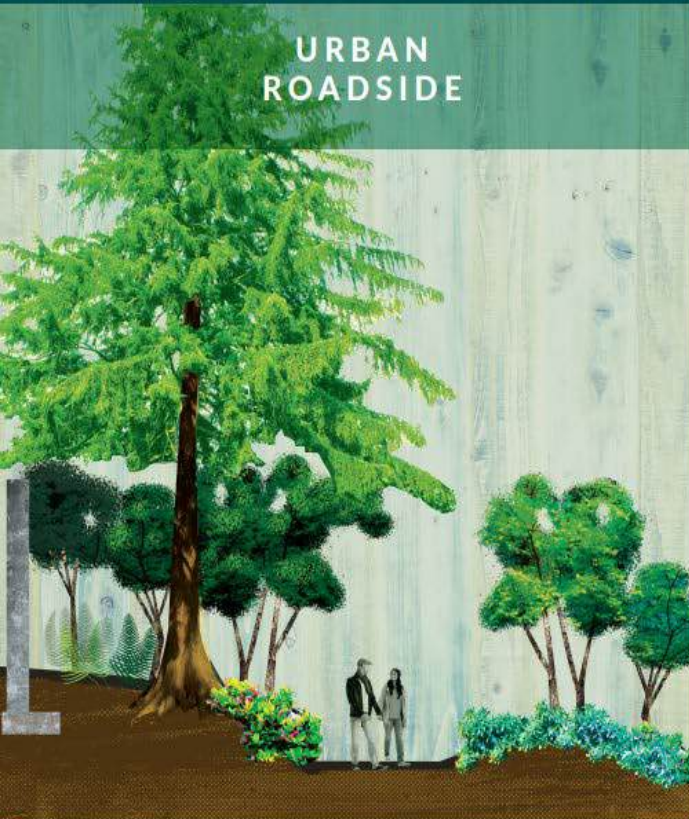
VISUALIZING ROADSIDES AS TRANSPORTATION ASSETS



WSDOT owns and maintains approximately 100,000 acres of unpaved land.

As part of the agency's overall Transportation Asset Management Plan, WSDOT has classified and mapped roadside land use areas as shown on this poster.

This geographic inventory of six specific roadside land use types provides the basis for budgeting, planning, tracking, monitoring, and evaluating maintenance actions, and for measuring agency performance.



URBAN
ROADSIDE



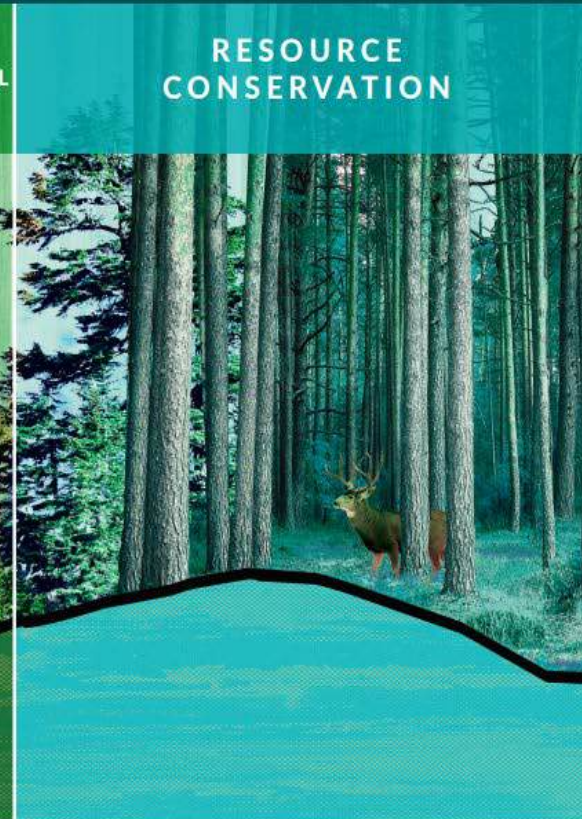
OPERATIONAL
ROADWAY



OPERATIONAL
SAFETY
AND DRAINAGE



VISUAL/
ENVIRONMENTAL
BUFFER



RESOURCE
CONSERVATION



ENVIRONMENTAL
MITIGATION

FORMAL LANDSCAPE

Only maintained along some urban freeway corridors and around Safety Rest Area facilities. Plantings are designed as public amenities, and constructed to be routinely maintained in a set condition which provides for both safe highway operation and safety for controlled public access.

AVERAGE
COST/ACRE/YEAR

\$5,300

TOTAL
ACRES

1,100

ZONE 1

Vegetation-free edge, maintained as required where shoulders are designed for stormwater sheet flow.

ZONE 2

Low-growing vegetation, maintained throughout the system, width is determined by highway design and local site constraints.

ZONE 3

Present where there is extra right of way beyond the outside edge of Zone 2, between divided highway alignments, and at freeway interchanges.

AVERAGE
COST/ACRE/YEAR

\$233

TOTAL
ACRES

8,000

AVERAGE
COST/ACRE/YEAR

\$166

TOTAL
ACRES

33,500

AVERAGE
COST/ACRE/YEAR

\$109

TOTAL
ACRES

55,000

RESOURCE CONSERVATION AREAS

Relatively undisturbed natural areas adjacent to the right of way, purchased for preservation during construction of the interstate system. These areas require little to no maintenance.

AVERAGE
COST/ACRE/YEAR

\$0

TOTAL
ACRES

820

ENVIRONMENTAL MITIGATION

Sites maintained for 10+ years, in response to highway construction environmental permit requirements (Once permit requirements are fully met, sites are classified and maintained as part of Zone 3).

AVERAGE
COST/ACRE/YEAR

\$4,900

TOTAL
ACRES

2,000

*Data Sources: WSDOT HATS and FIRS – Calendar Year 2022

Routine Annual Maintenance vs. Integrated Vegetation Management



ZONE 1

Vegetation-free edge, maintained as required where shoulders are designed for stormwater sheet flow.

ZONE 2

Low-growing vegetation, maintained throughout the system, width is determined by highway design and local site constraints.

ZONE 3

Present where there is extra right of way beyond the outside edge of Zone 2, between divided highway alignments, and at freeway interchanges.



ZONE 1

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Present where there is extra right of way beyond the outside edge of Zone 2, between divided highway alignments, and at freeway interchanges.



*Calendar Year 2022

*Calendar Year 2024

Education and Training for Highway Maintenance Technicians

Desirable vs. undesirable roadside vegetation



Education and Training for Highway Maintenance Technicians

Desirable vs. undesirable roadside vegetation



Education and Training for Highway Maintenance Technicians

Caring for desirable roadside vegetation



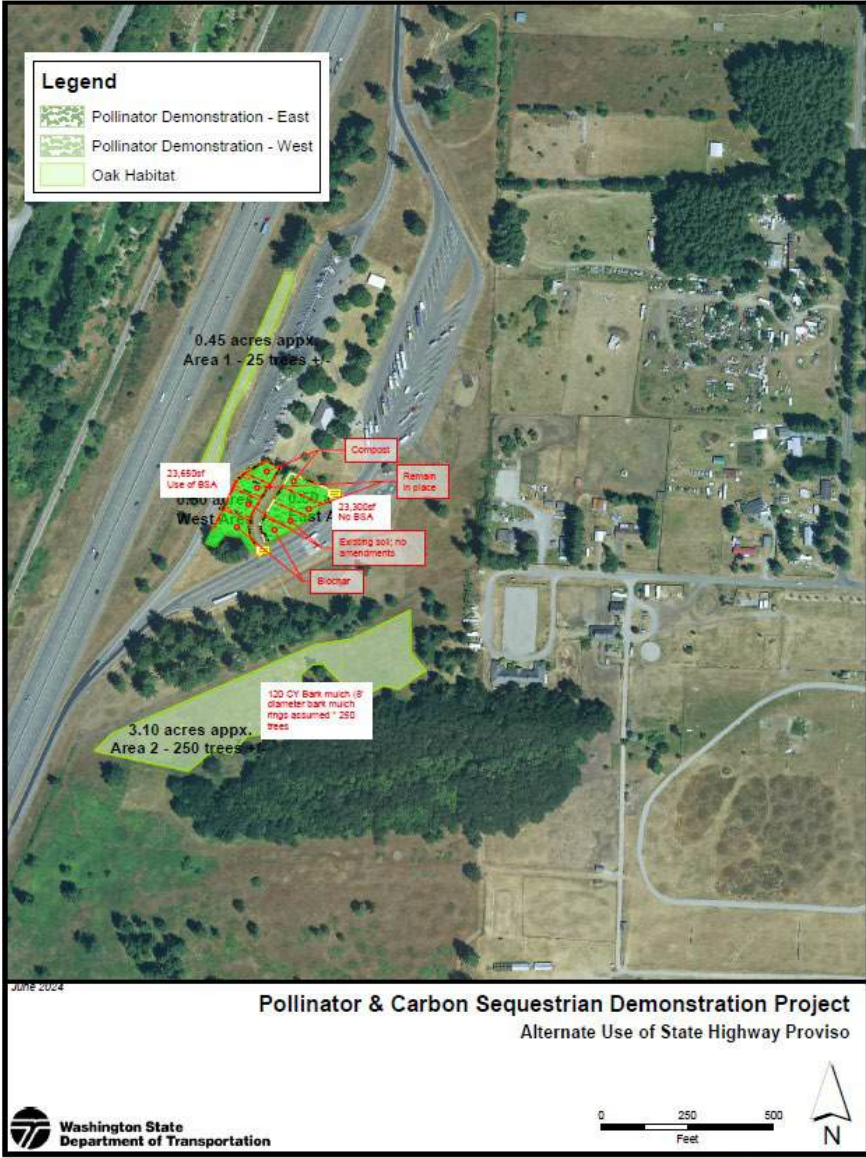
Education and Training for Highway Maintenance Technicians

Caring for desirable roadside vegetation



Demonstrating the Potential in Roadside Landscape Management

Using Integrated Vegetation Management to establish native ecosystems



Demonstrating the Potential in Roadside Landscape Management
Using Integrated Vegetation Management to establish native ecosystems



Welcome to the Scatter Creek Roadside Research Lab

In 2024, Washington state legislation funded a research project to demonstrate best restoration practices that:

- Maximize carbon sequestration
- Develop habitat and forage for native pollinators, Monarch butterflies and honeybees
- Use native, non-invasive flowering plants and grasses along state highway rights-of-way and at safety rest areas

For the past 50 years, the Scatter Creek Rest Area and surrounding prairie along I-5 have been demonstrating the state legislature's intent. Over 50 acres of the highway right-of-way in this area have been managed to control invasive species like Scotch broom to promote a sustainable roadside of native species like Camas and Oregon White Oak. This research project intends to expand the early foundation of this past work by fostering a stable ecosystem for decades to come.



Pollinator meadow

A nearly one-acre habitat area was created to study the success of typical roadside restoration methods. The site consists of eight fenced plots, each prepared uniquely to compare outcomes. The plots use native soil amended with biochar and compost while others remained unaltered or unamended. The southern most plots did not get amended to determine the level of growth establishment compared to the amended plots. The northern most plots were not changed serving as a control for comparison and pollinator recruitment potential. All plots were seeded with the same pollinator species, but only the west plots received biotic soil amendment.

Data is continuously collected using environmental sensors to monitor weather, soil chemistry, plant growth and pollinator presence, including Monarch butterflies and honeybees, to assess differences in establishment and ecosystem benefits.



Carbon Sequestration

Washington State Department of Transportation planted over 500 native Oregon White Oak trees in the South Puget Sound Scatter Creek Prairie to restore an endangered ecosystem and enhance carbon sequestration throughout a 4 mile area of the rest area. Additionally, WSDOT is testing assisted species migration by planting Coastal Redwood and Giant Sequoia trees, known for their resilience and high carbon storage capacity in response to changing climate conditions.



Creating beautiful and beneficial roadside landscapes

Pollinator meadows

You are looking at a series of pollinator meadow test plots planted by the Washington State Department of Transportation.

These meadows aren't just visually stunning, they also provide incredible environmental benefits that go beyond aesthetics.

Pollinator meadows are planted with native, non-invasive flowering plants and grasses that attract vital pollinators, such as bees, butterflies, and birds. Meadows like these are crucial for our ecosystems as they support the pollinators responsible for approximately one-third of the food we eat. From fresh fruits to vegetables, our family farms rely on healthy pollinator populations to produce the food that sustains us.

In addition to adding beauty to our highways, these meadows are part of a broader effort to restore native plant species, like Camas and Oregon White Oak and combat invasive

plants such as Scotch Broom. This project will help create long-term, stable ecosystems that will thrive for decades to come.

Pollinator meadows require far less mowing and upkeep compared to traditional turf grass, which helps conserve resources, reduce emissions and lower maintenance costs.

While the meadow takes a break from blooms in the winter, it remains a valuable habitat. Overwintering insects find refuge in the meadow, using it as a home to survive through the colder months. To ensure the ongoing health of this ecosystem, these meadow plots will be kept in a natural condition as much as possible without mowing. If mowing does occur it will be for weed control and promotion of the planted native vegetation.

By providing food and shelter for pollinators year-round, our meadow plays a critical role in supporting the biodiversity of Washington State and demonstrating the beauty and practicality of native plant landscapes.

A year-round blooming habitat: Pollinator meadow

Our pollinator meadow is alive with color and activity throughout much of the year, providing a rich and varied habitat for pollinators and other wildlife.

Early spring to summer blooms

(March – July)



MINIATURE LUPINE
(*Lupinus bicolor*)

This perennial wildflower graces the meadow with vibrant blue blooms from early spring to early summer.



BLUE-EYED GRASS
(*Sisyrinchium bellum*)

A delicate, grass-like flower with brilliant purple hues.



WESTERN YARROW
(*Achillea millefolium*)

Known for its feathery leaves and clusters of yellowish-white (rarely pink) flowers.



FAREWELL TO SPRING
(*Clarkia amoena*)

A lovely wildflower that flourishes as the season shifts.



RED AND CALIFORNIA POPPY
(*Papaver rhoeas* and *Eschscholzia californica*)

Bright, bold blooms that attract bees, birds and butterflies.



OREGON SUNSHINE
(*Eriophyllum lanatum*)

A golden-yellow flower that thrives in summer.



BLUE GILIA
(*Gilia capitata*)

Known for its lavender-blue, round clusters that serve as a beacon for pollinators.



SHOWY MILKWEED
(*Asclepias speciosa*)

A favorite for Monarch butterflies and other pollinators, its pinkish flowers provide essential nectar.



SLENDER CINQUEFOIL
(*Potentilla gracilis*)

A late-blooming plant with bright yellow flowers that provide food for pollinators heading into fall.



ASPEN FLEABANE
(*Erigeron speciosus*)

Another late bloomer that continues to attract pollinators until the cooler weather sets in.

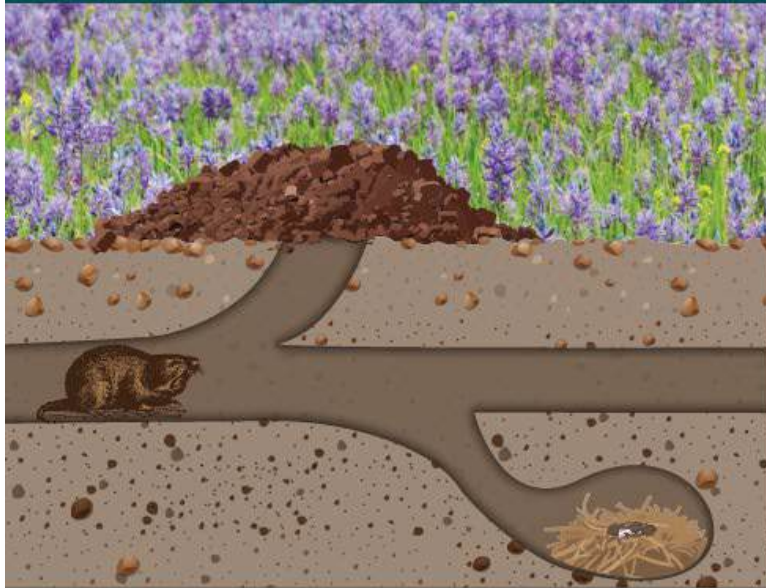


Washington State
Department of Transportation

Scan the QR code
for more information.



Prairie ecosystems along the roadside



How roadsides work for you

Open prairie ecosystems have been a defining feature of Western Washington and the Puget Sound Basin since the end of the last Ice Age. The sections of open prairie landscape were formed in part by the forces of ancient glaciers and the activities of the indigenous people in the area. For thousands of years, Native American communities relied on these prairies for hunting, foraging and navigation, using them to move through the old-growth forests that once dominated the overall landscape.

Camas

One of the most important native species in Washington's prairie landscapes is Camas (*Camassia quamash*), a blue-flowering plant in the asparagus family. Camas serves as a key food source for Mazama pocket gophers. For thousands of years, Native American communities carefully cultivated and harvested Camas as a staple food in their diets.

As part of our commitment to prairie restoration, the meadow plots and surrounding freeway roadsides in our roadside research lab will be planted to encourage dense Camas populations over time.

By preserving native prairie ecosystems, we support biodiversity, cultural heritage and long-term environmental sustainability along Washington's highways.

When properly established and managed over time, Camas forms a stunning blue carpet of pollinator-friendly blooms each spring.

Mazama Pocket Gophers

These small, reddish-brown rodents measure up to 10 inches in length, with long front teeth, sharp claws and cheek pockets for storing food. Washington is home to seven subspecies, named after their geographic locations. Of these, the Olympia, Tenino, Yelm, and Roy subspecies are prominent in the Puget Sound region and are listed as threatened in Western Washington.

In modern times, the productivity of these prairies is maintained in part by the efforts of the Mazama pocket gopher (*Thomomys mazama*). Mazama pocket gophers are seldom seen. They dig extensive tunnel systems with multiple entrances searching for the roots of grasses and flowering plants like Camas which they pull underground and use for food and bedding material. Pocket gophers are a critical part of the prairie ecosystem. Their excavations till the soil and distribute nutrients that promote plant productivity.



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Trees, carbon storage, and wildfire resilience

In addition to the pollinator meadow plots in our Scatter Creek Roadside Research Lab, we are enhancing the landscape by planting hundreds of native Oregon White Oak trees and testing assisted species migration in response to climate change. This includes the introduction of Coast Redwood and Giant Sequoia trees, species known for their resilience to wildfire and large carbon storage capacity. You can spot some of the redwoods planted in the open area beyond the rest area access road to the east.



Carbon balance and roadside reforestation

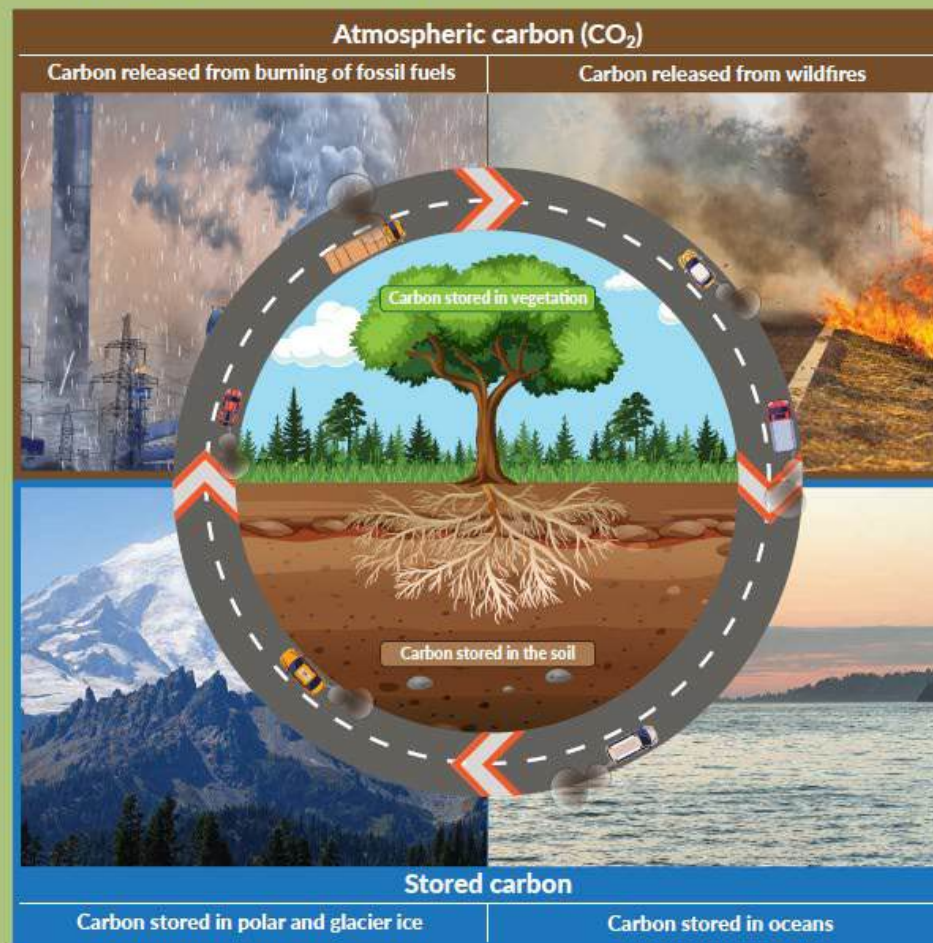
Vehicles, buses and semi-trucks are a major contributor to carbon emissions, a key driver of climate change. To help counteract this, WSDOT is working to capture and store carbon in trees and soils along our roadsides. Oregon White Oaks, Coast Redwoods, Giant Sequoias and Douglas Firs are particularly effective at absorbing atmospheric carbon and converting it into organic matter. A significant portion of this carbon is stored not just in the visible tree growth, but also in extensive root systems, helping to lock carbon in the soil for long-term storage.



Fire prevention and fire-resilient roadsides

Wildfires are a major source of atmospheric carbon, and in some cases, roadside vegetation can catch fire from vehicle sparks or overheated engines. As part of the roadside demonstration lab, we are testing strategies for enhancing wildfire resilience through planting strategies that reduce potential for fire starts and slow fire spread. This demonstration lab extends two miles north and south along I-5, beyond what you see here at the safety rest area. Through pollinator habitat restoration, invasive species management, carbon sequestration and wildfire prevention, we are working to create a more resilient and sustainable roadside ecosystem.

Recycling and storing carbon



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Demonstrating the Potential in Roadside Landscape Management

Using Integrated Vegetation Management to establish native ecosystems



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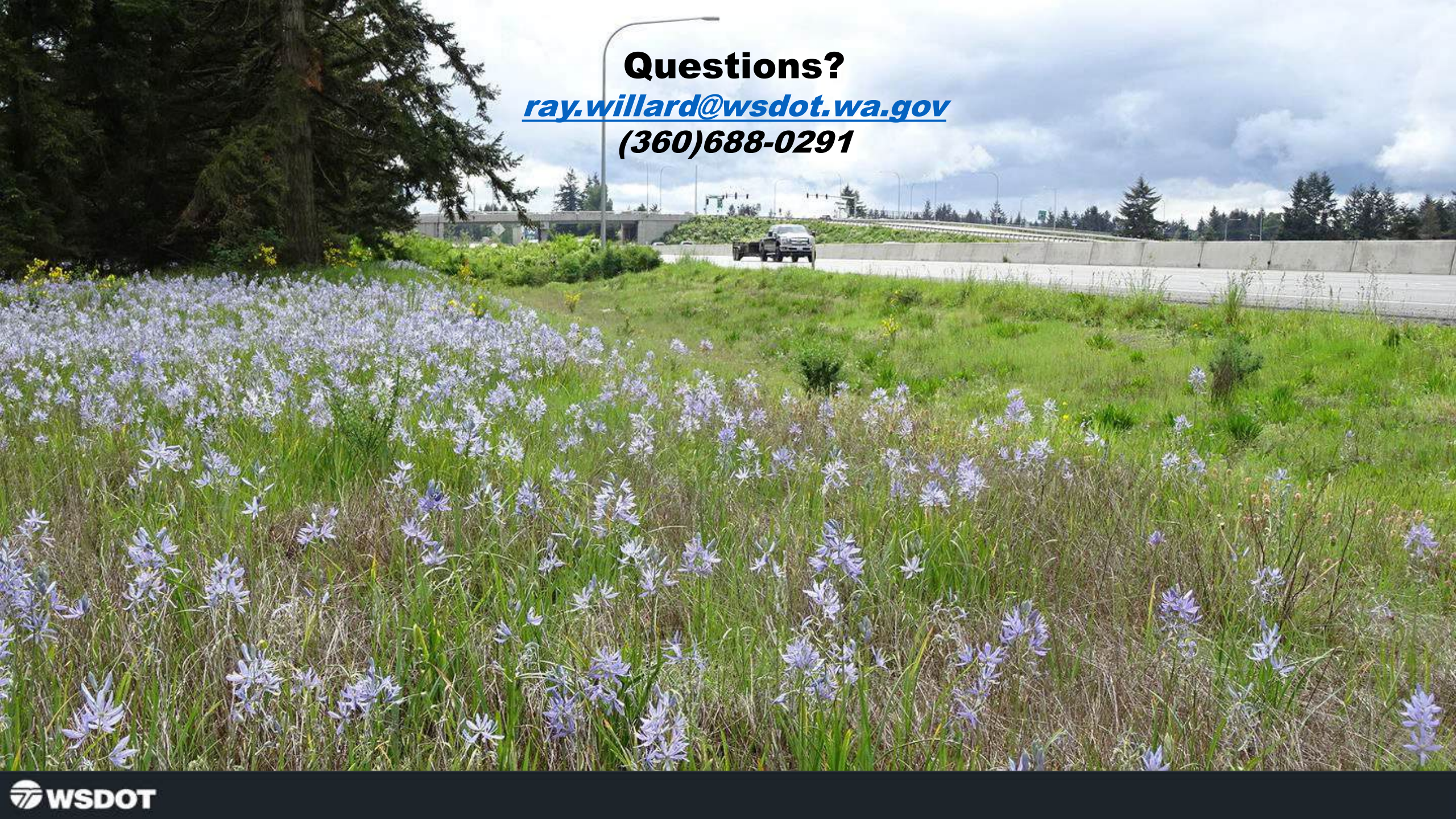
Using Integrated Vegetation Management to establish native ecosystems



Demonstrating the Potential in Roadside Landscape Management

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A landscape photograph showing a highway interchange in the background with a concrete barrier and a car. In the foreground, there is a large field of purple flowers, likely camas, growing in tall grass. A large evergreen tree is on the left side of the frame. The sky is overcast with grey clouds.

Questions?

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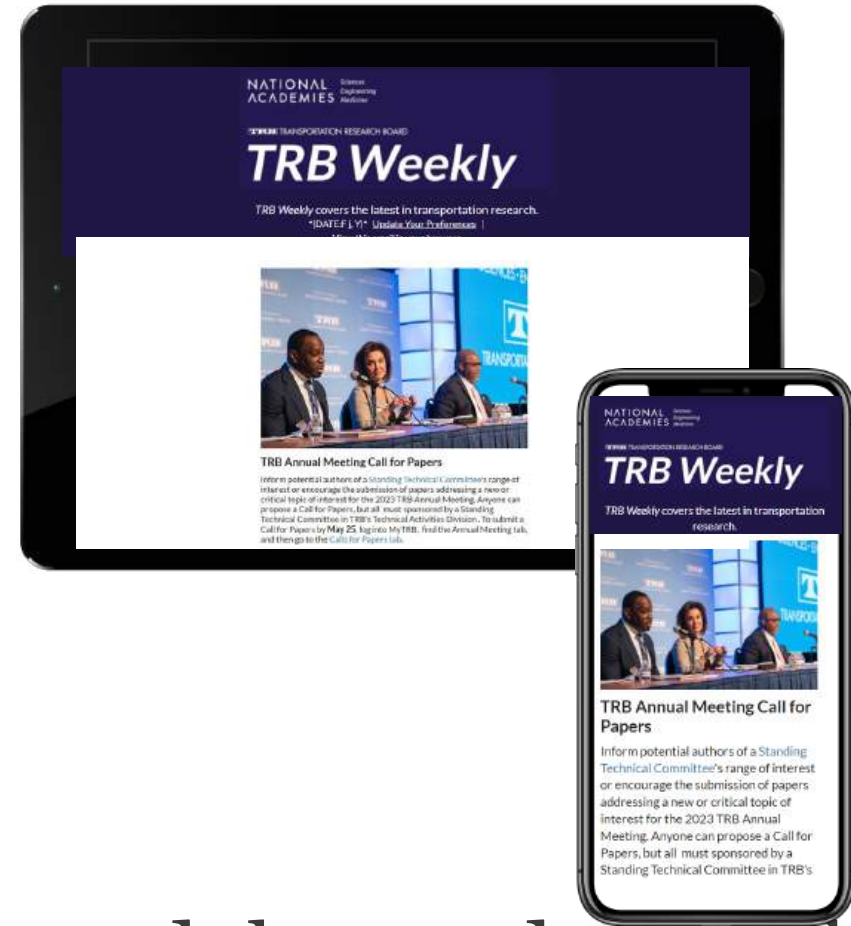


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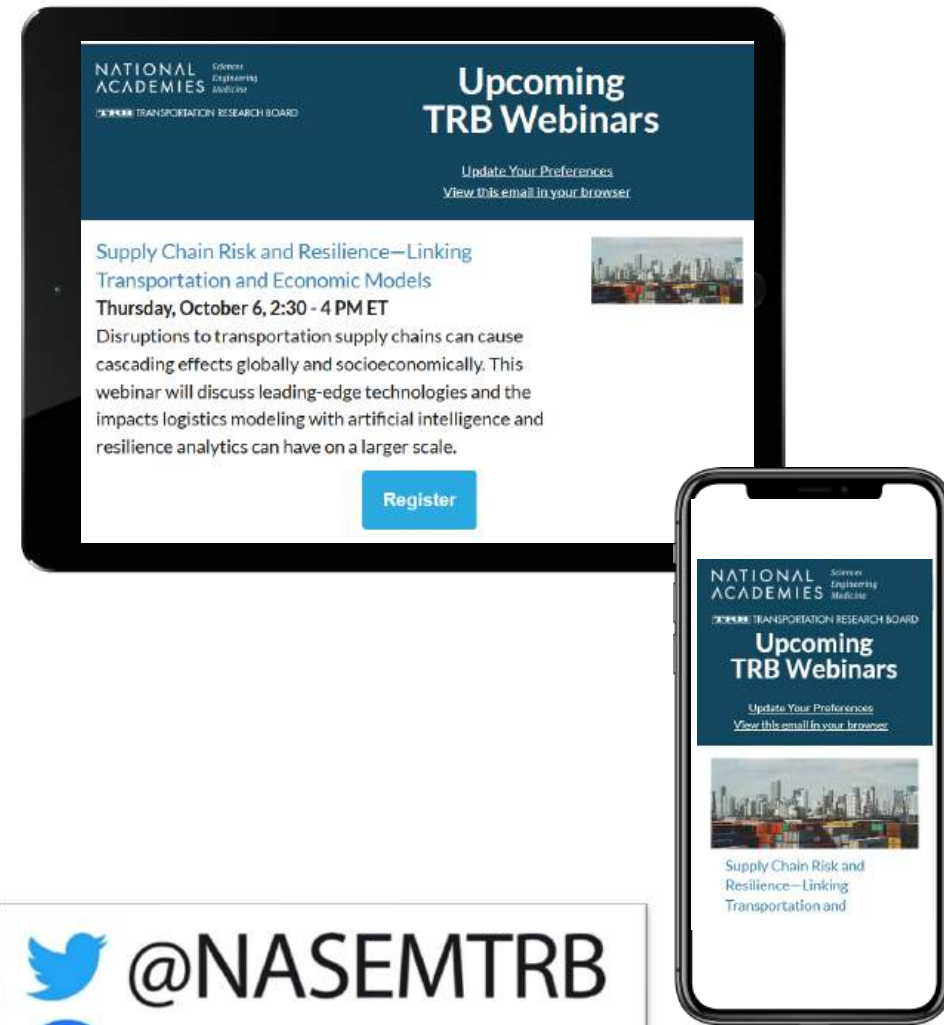
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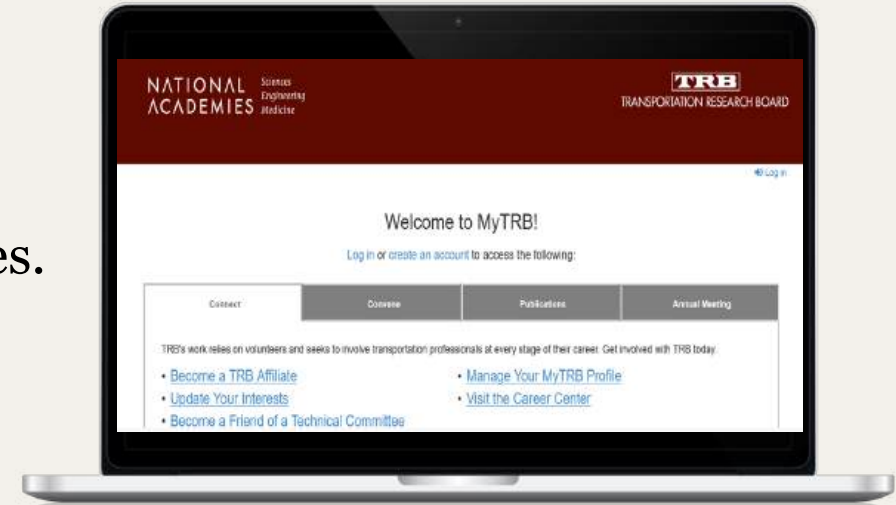


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