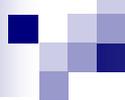


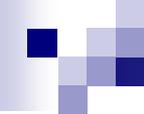
GIS Steering Committee Meeting

September 29, 2011



Agenda Items

- Agenda overview
 - Approve meeting minutes (handout)
 - Action Log (handout)
 - Project Status Report (handout)
 - Reports (handout)
- Project Requests
- ELA Status
- End of biennium report
- Mobile RES/RAZ Demo
- Adjourn



***11-13 ESRI
Enterprise License Agreement
(ELA) Status***

Currently

- A determination of who uses and needs ESRI software is done
- The agency upgrade to ArcGIS 10 has been completed.
- DAS has completed negotiations with ESRI
- The budget estimate is still at \$328,000 but a final cost should be available soon

Currently

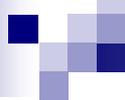
- Alternatives to ESRI software such as the free ArcGIS Explorer and the new TransGIS 2.0 web interface are still being communicated
- \$300,000 of the total cost has been paid by ODOT to DAS out of the 09-11 budget
- It is estimated that having the ESRI Statewide ELA since 2009 has saved ODOT at least \$300,000 in new software purchases.

Next Steps

- The remainder of ODOT's estimated \$28,000 ELA costs will be paid for out of the 11-13 biennium budget
- Decision Point: Does this committee agree that the remaining \$28,000 and the costs generated by future additions of ESRI software be paid for by the division making the request?
- Final status will be reported at the next GIS Steering Committee meeting



***Biennium Report
(FY 09-11)***



End of Biennium Report

ODOT GIS Project Report (FY 2009 – 2011)

Accomplishments

- Built an Enterprise GIS
- Migrated to ArcGIS server and ESRI version 10 software
- Deployed TransGIS 2.0
- Supported Field to Web workflows for spatial data

Challenges

- Project resourcing
- Lifecycle maintenance
- Infrastructure management to support an enterprise GIS
- Training and support for a quickly increasing user base

End of Biennium Report

FY 09-11 GIS

Partnering with other agencies:

OSP-CAD (Data sharing, basemap sharing, creating relationship between OSP and TOCS: TowZone data maintenance)

DAS GEO (ORTrans and Tax Lot agreements)

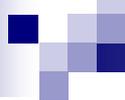
OR-Trans Framework Distribution Portal (OSU and DAS GEO)

Developing Experienced Contractors

Over time, working with a variety of contractors, has developed a group of external staff with Knowledge of:

- *State Government operations (security, SDC, servers, etc)*
- *Transportation network knowledge (ie. LRS)*
- *ODOT program requirements*
- *Data availability*
- *State, ODOT and GIS Standards*
- *And successful access through VPN*

These outcomes increase efficiencies, they enable us to work on simultaneous projects, and help us to meet tight schedules.



End of Biennium Report

ODOT GIS Project Report (FY 2009 – 2011)

GIS Program Areas

- Spatial Data Administration
- Map Production
- Mapping Applications
 - Field (GPS)
 - Desktop (ArcGIS)
 - Web (ArcGIS Server)
- Oregon Transportation Network (OR-Trans)
- Environmental Data Management System (EDMS)

End of Biennium Report

ODOT GIS Project Report (FY 2009 – 2011)

Web Application Development

- American Recovery and Reinvestment Act
- US Coast Guard Internet Application
- ODOT Properties Web Tool
- STIP Project Tracking Web Map
- Oregon Coordinate Reference System
- Transportation Planning Online Documentation
- FACS-STIP Data Requests
- Safety Priority Index System
- Transportation Data Portal
- EDMS - Archaeology Web
- EDMS - Wetlands Web Application
- Unstable Slopes Web Application
- TransGIS 2.0

Map Production

- American Recovery and Reinvestment Act
- County/City/Emergency Mapping Templates
- Oregon Transportation Commission
- State Transportation Improvement Program
- Official State Map
- Maintenance Map
- Traffic Flow Map
- Electric Vehicle Potential Charging Stations
- Lifeline/Tsunami
- Solar Highway
- EDMS – RES/RAZ Maps

User Support Services

- Help Desk Support
- Training
- ODOT GIS Toolbar
- Inaugural ODOT GIS User Workshop
- GPS Data Partnerships

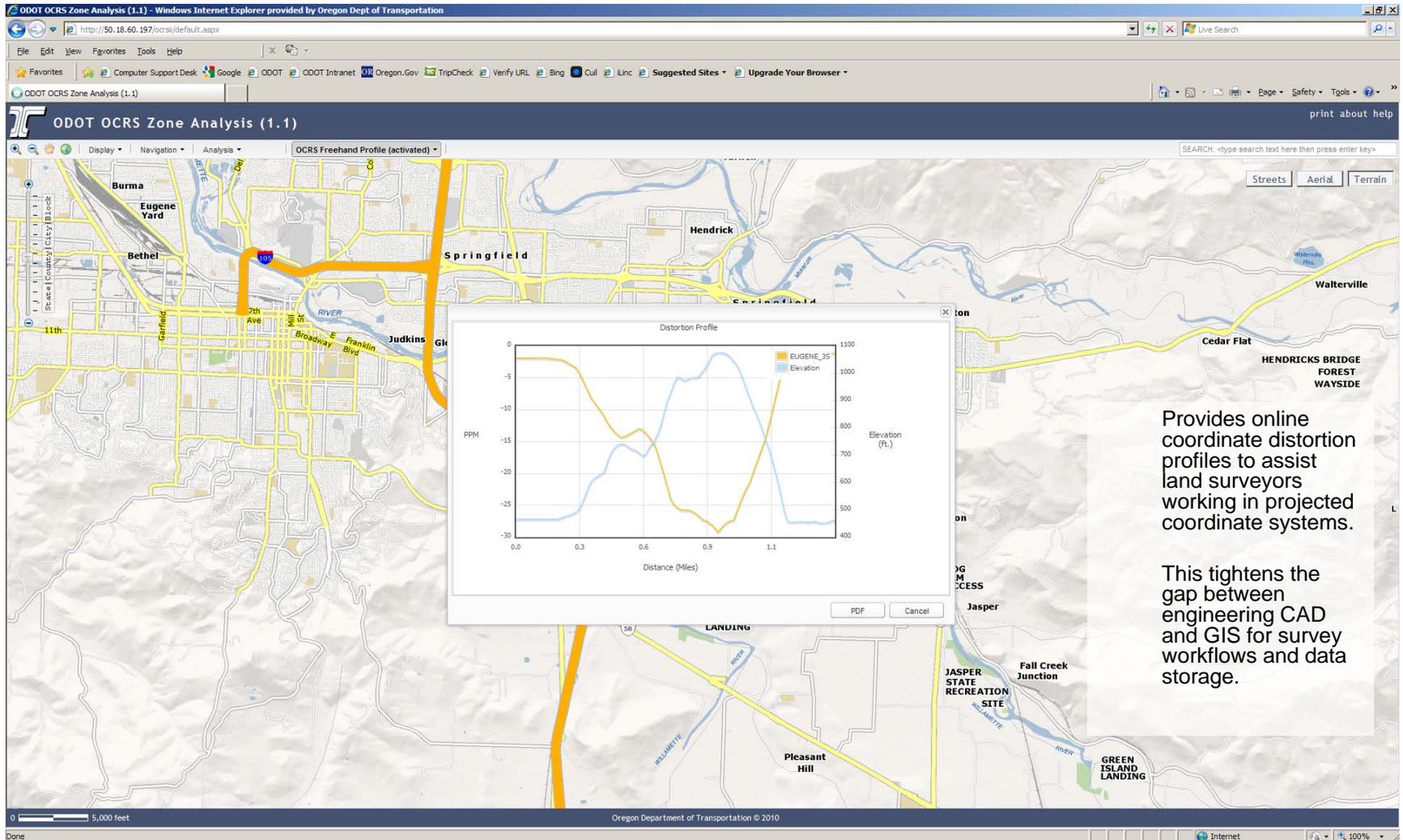
Enterprise GIS Infrastructure

- Documentation (server diagrams, metadata, web pages, and reporting)
- Data Sharing Agreements
- Hardware Updates (monitors, desktops, laptops)
- Enterprise License Agreement (ELA)
- Environmental Systems Research Institute (ESRI) Version 10 Migration
- Spatial Data Engine (SDE) Deployment
- FME Workbench Deployment

Spatial Data Services

- Layer Design, Development, Processing, & Storage
- Data Automation
- Global Positioning System (GPS) Data
- Vector Data
- Raster Data (LiDAR and Imagery)
- House Bill 2001 Support
- City Limits and Standard Layers Maintenance
- Data Support for OBDP & DAS GEO
- Precipitation Models and ArcReader
- Traffic Volume Analysis
- Work Zone Traffic Analysis (WZTA)
- Oregon Wireless Infrastructure Network (OWIN)
- Right Of Way Document Management System
- Earthmine Pilot

Biennium Report: Oregon Coordinate Reference System (OCRS)



Biennium Report: TransGIS 2.0

The screenshot displays the TransGIS 2.0 web mapping interface within a Windows Internet Explorer browser. The browser's address bar shows the URL <http://wpdotappl21.odot.state.or.us/transgis/>. The interface includes a menu bar (File, Edit, View, Favorites, Tools, Help) and a toolbar with navigation and analysis options. The main map area shows a topographic view of the La Grande, Oregon area, with a prominent orange route highlighted. A pop-up window titled "Identify Map Features" is open, listing various geographic features and their properties. The map includes labels for streets, landmarks like "Union County Fairgrounds", and geographical features like "Quarry". A scale bar at the bottom left indicates 0 to 2,000 feet. The bottom right corner shows the Oregon Department of Transportation copyright (© 2009-2011) and coordinates (-118.0998° E, 45.3245° N).

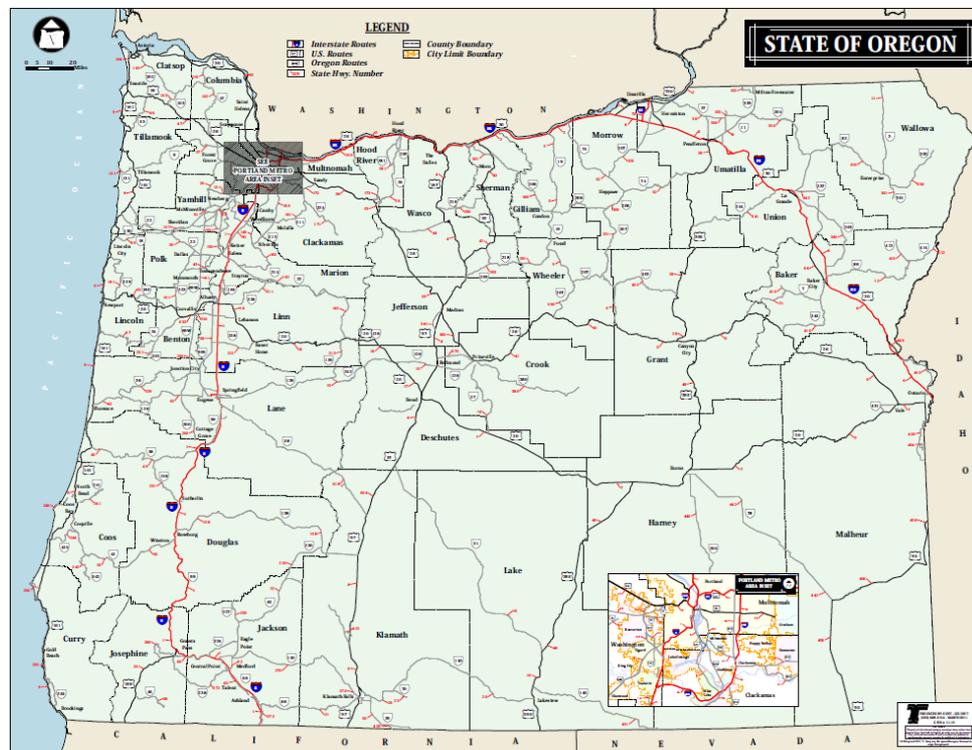
Identify Map Features

- Area Commission on Transportation
- Public Ownership
- State Representative District
- State Senate District
- Congressional District
- USGS Quads
 - Hilgard
 - Quad Name = Hilgard
 - Ohio Code = 45118c2
 - Shape = Polygon
- Section/PLS

Biennium Report: County/City/Emergency Mapping Templates

■ Summary

- Production Mapping
- Reusable Template
- Facilitates Automation
- Provides Consistency
- Expedient and repeatable results



OREGON SOLAR HIGHWAYS



ODOT's Solar Highways Initiative

ODOT is an agency on the move – to renewable energy. It takes 45,000 megawatts hours of electricity annually to run Oregon's state transportation system, energy used for signals, illumination, buildings, ramp metering and more. Today this energy comes from mostly non-renewable sources. Oregon Governor Ted Kulongoski has directed state agencies to secure 10% of their electricity from renewable sources, and ODOT responded by building the nation's first Solar Highway. With 16,000 acres under its right of way and many other properties under its ownership, ODOT buildings and lands provide a ready, cost-effective site for the siting and development of solar energy.

Property locations, size, access and environmental attributes, electricity need (load), access to the transmission network – all must be studied in selecting the sites for ODOT's solar display road. Using these study solar power proposals which can take advantage of state and federal tax credits and utility incentives, will allow ODOT to develop its solar resources at costs to be less than what the prices are paying for electricity today. Moreover, the potential exists for ODOT to negotiate rates which might allow it to get electricity below cost, freeing up funds for mission-critical activities.

The ODOT Office of Innovative Partnerships, the ODOT Geographic Information Services Unit, Portland General Electric and PacifiCorp are working together to identify the most beneficial locations for solar photovoltaic installations.



This map displays annual average daily total solar resources averaged over surface cells of 0.1 degrees using the SUNY Satellite Radiation Model. The model uses data from the incoming photons to concentrate systems that track the sun throughout the day. This data uses hourly radiation images from geostationary weather satellites, daily snow cover data, and monthly averages of atmospheric water vapor, cloud cover, and the amount of aerosols in the atmosphere to calculate the hourly total insolation (sun and sky) falling on a horizontal surface. The data collected is averaged from hourly models output over 8 years (1998-2005).

The State University of New York-Albany satellite radiation model (SUNY) was developed by Dr. Richard Perez and collaborators at the National Renewable Energy Laboratory and other universities for the U.S. Department of Energy.

- Location of Solar Array
- Current Solar Analysis Areas with PG&E
- Current Solar Analysis Areas with PacifiCorp

Enlargement of Solar Array Location



The Nation's First Solar Highway Array

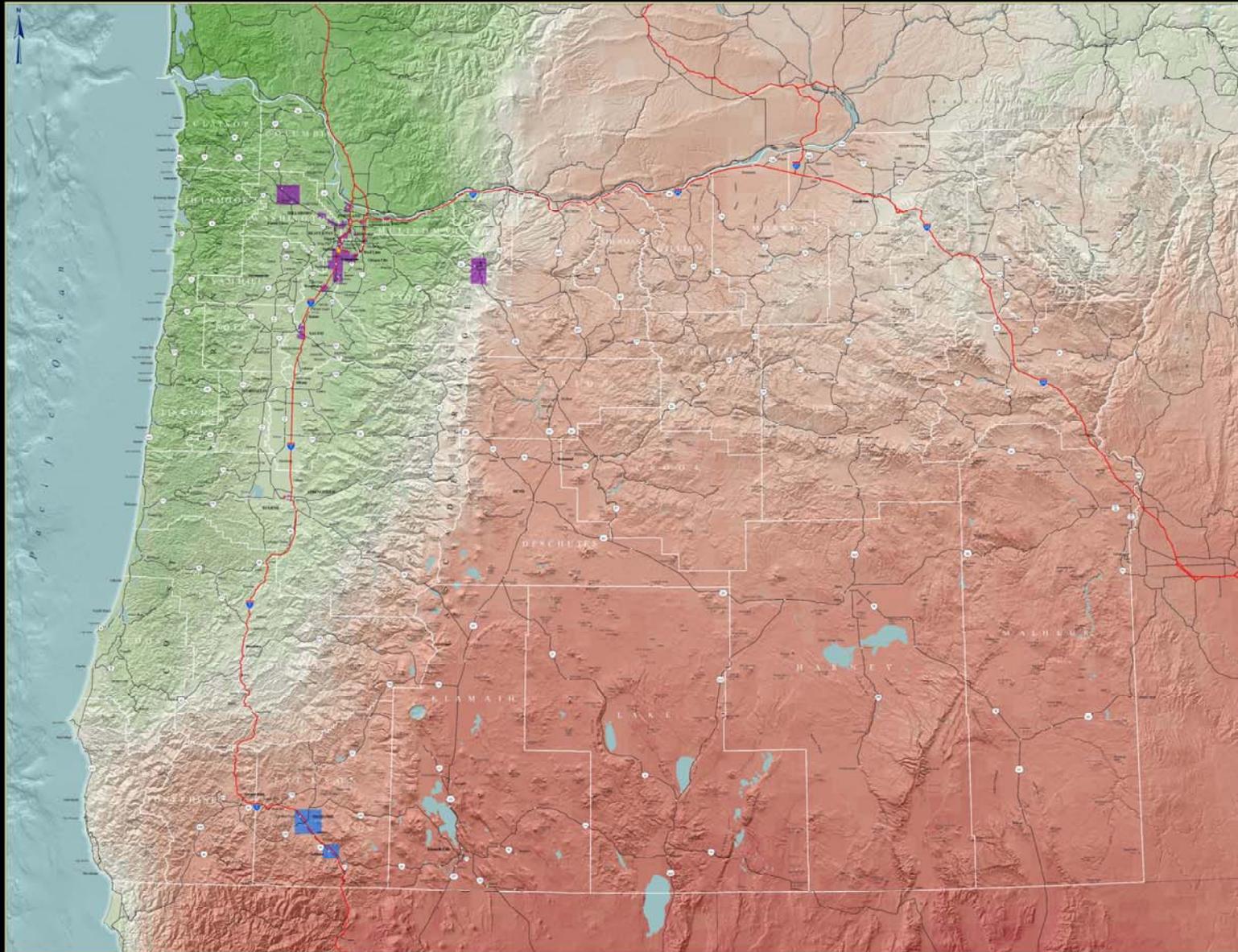


Photo courtesy of Gary Moore, ODOT

Base Data Legend

- Interstate Highways
- Oregon and US Routes
- City Population
- 100,000
- Over 25,000
- 10,000 to 25,000
- 5,000 to 10,000
- 1,000 to 5,000
- Less than 1,000
- Incorporated Place
- Unincorporated Place

Map Source: Department of Transportation, U.S. GIS, GIS 11/11/11, 11/11/11

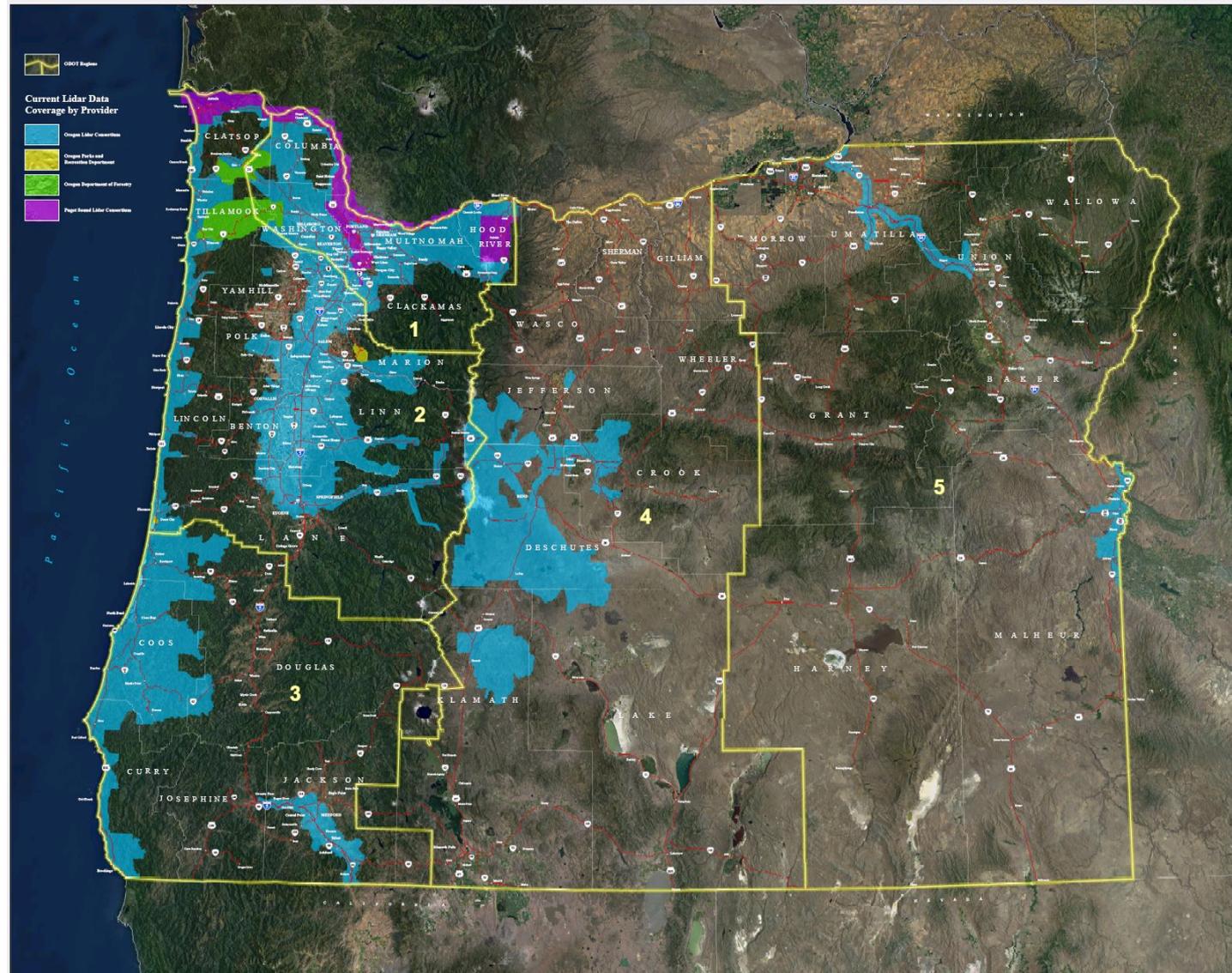


Biennium Report: Data acquisition (LiDAR and Imagery)

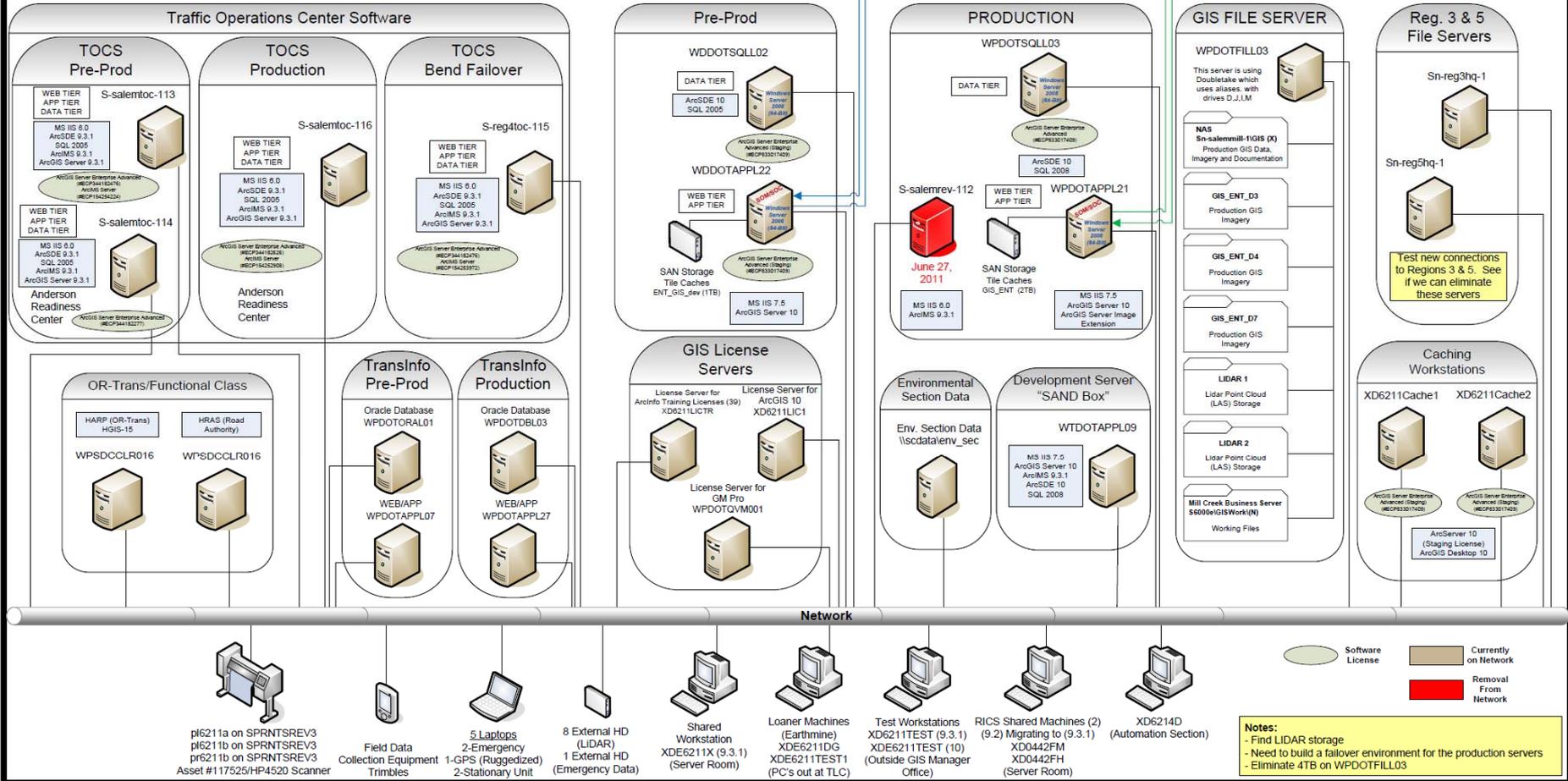
ODOT now has LiDAR data in all 5 regions. The most recent deliveries are the Deschutes and Umatilla County areas.

GIS recently added additional external hard drives to store this data. This brings our LiDAR data storage to about 16 TB. The next deliveries will be the Eagle Point and Newberry areas.

We are also going to receive the entire Columbia River Gorge that was collected for the Army Corps of Engineers. There are several remaining completed project areas complete that we are trying to obtain. The most significant areas include large parts of Klamath County and Crater Lake National Park.



ODOT Enterprise GIS Infrastructure as of 8/24/2011





EDMS FY 11-13 Work Plan

EDMS Report / 11-13 Plan

TransGIS 2.0

Interagency
Collaboration

Web-based
Maps and
reporting

Original
Source Data

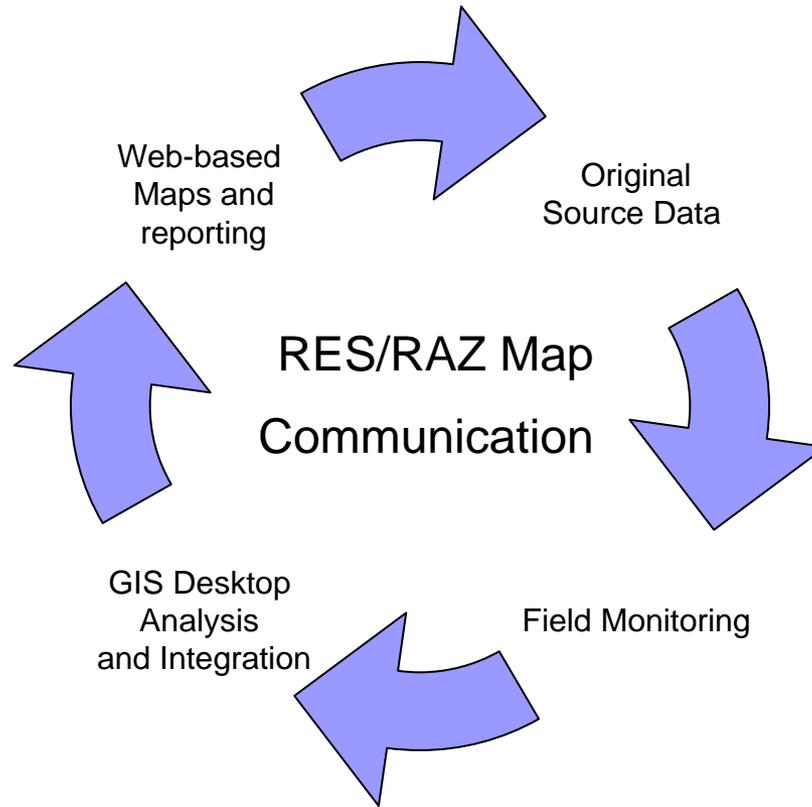
RES/RAZ Map
Communication

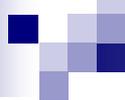
GIS Desktop
Analysis
and Integration

Field Monitoring

ArcGIS
Support

ArcPad
Support





EDMS Report / 11-13 Plan

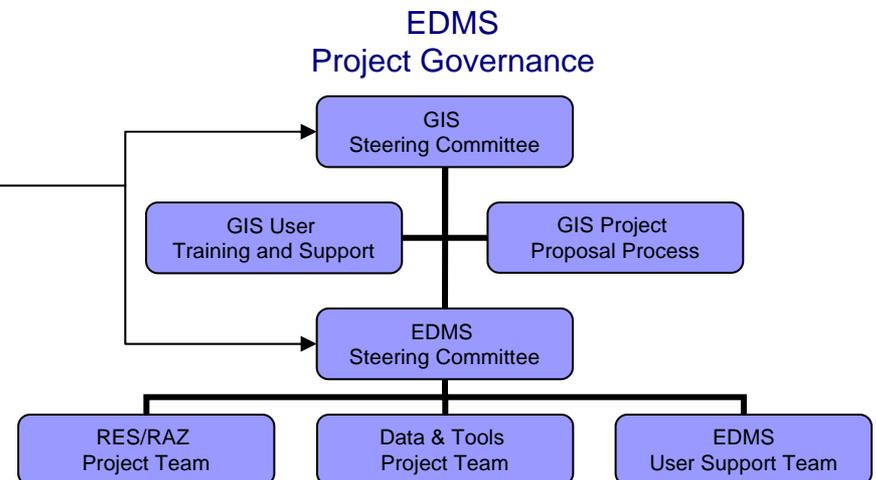
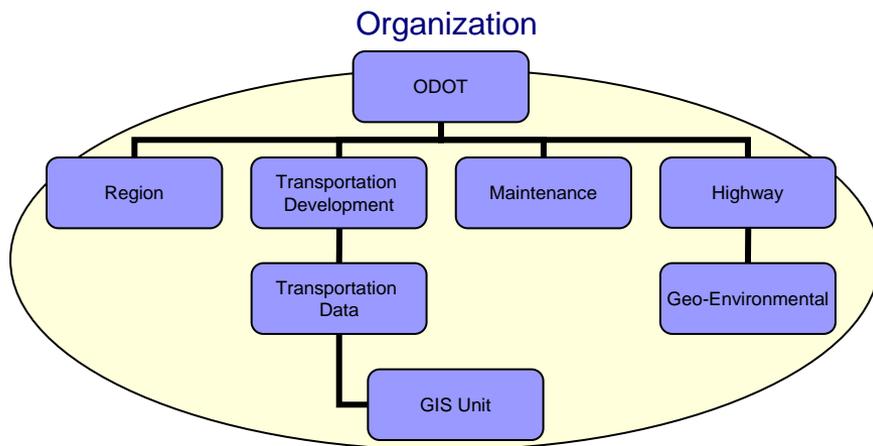
- **Goal 1:** Communicate with all program stakeholders the tools, data, activities and services provided by the EDMS program.
- **Goal 2:** Provide and maintain RES/RAZ map products with current, accurate, and precise data to Office of Maintenance, Geo-Environmental Services, and Region Technical Center staff.
- **Goal 3:** Support GIS required environmental spatial data development from original external regulatory sources where available and develop supplemental spatial data as deemed necessary by ODOT environmental teams.
- **Goal 4:** Develop and maintain GIS web applications supporting TransGIS 2.0 environmental mapping, query and reporting tools.
- **Goal 5:** Develop and maintain field (GPS) data collection applications that support enterprise GIS and TransGIS 2.0 framework.

Rank	Goal	Effort (%)	Funding (\$)	Resource	Partner	WBS	Activity Area
1	Communicate with all program stakeholders the tools, data, activities and services provided by the EDMS program.	25%	\$100,000		TBD	1	EDMS - Communications (Programmatic and User Support)
						1.1	ODOT - GIS Steering Committee
						1.2	ODOT - Geo-Environmental Services Section
						1.3	ODOT - Office of Highway Maintenance and Operations
						1.4	ODOT - Region Technical Centers
						1.5	EDMS - Steering and Working Committees
						1.6	EDMS - User Training
						1.7	EDMS - User Support
2	Provide and maintain RES/RAZ map products with current, accurate, and precise data to Office of Maintenance, Geo-Environmental Services, and Region Technical Center staff.	25%	\$140,000		TBD	2	EDMS - Update and Maintain RES/RAZ map products (electronic and hardcopy)
						2.1	Region 5 - RES/RAZ
						2.2	Region 3 - RES/RAZ
						2.3	Region Special Management Area (SMA) maps statewide
						2.4	Requested Region and Geo-environmental project maps
3	Support GIS required environmental spatial data development from original external regulatory sources where available and develop supplemental spatial data as deemed necessary by ODOT environmental teams.	20%	\$120,000		Agencies	3	EDMS - GIS Data Development (Collaborative Original External Source Data)
					ODFW	3.1	Statewide Fish/Aquatics dataset (ODFW- IGA)
					SHPO	3.2	Statewide revised SHPO dataset
					SHPO	3.3	SHPO - IGA
					SHPO	3.4	SHPO - WOC (IDS)
					ORBIC	3.5	ORBIC
					SHPO	3.6	Archaeological Predictive Modeling
					DOGAMI	3.7	Statewide Imagery including populated areas LiDAR datasets
					DOJ	3.8	UIC Outfalls
					ODFW	3.9	Custom SLC layer for field and web application workflows
4	Develop and maintain GIS web applications supporting TransGIS 2.0 environmental mapping, query and reporting tools.	15%	\$90,000		TBD	4	EDMS - Web Application Development (Query and Reporting Tools)
						4.1	Wetlands - revision
						4.2	PAST (Archaeology) - revision
						4.3	RES/RAZ map access
						4.4	New interfaces: fish passage, RECs, and baseline reporting
						4.5	SMA sites
						4.6	Historic sites
						4.7	Unstable Slopes GIS 68 (added by CBW 01/27/11 no resources assigned yet)
5	Develop and maintain field (GPS) data collection applications that support enterprise GIS and TransGIS 2.0 framework.	15%	\$90,000		TBD	5	EDMS - Field (GPS) Data Collection
						5.1	Revised GPS tools for mitigation, delineations, and archaeology
						5.2	Wetland Mitigation
						5.3	Biology Mitigation
						5.4	Archaeology
						5.5	Geo-Enviro/Maintenance GPS apps. Scoping, botanical, aquatics, SMA
						5.6	SMA
						5.7	Aggregate sites
						5.8	Historic Sites Field Application
						5.9	RES/RAZ Mobile Application

EDMS Report / 11-13 Plan

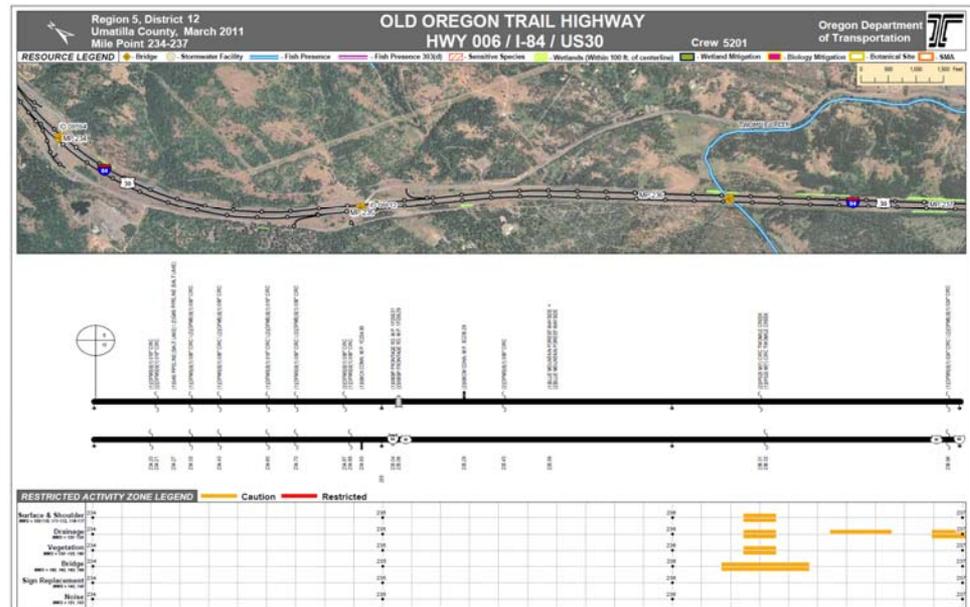
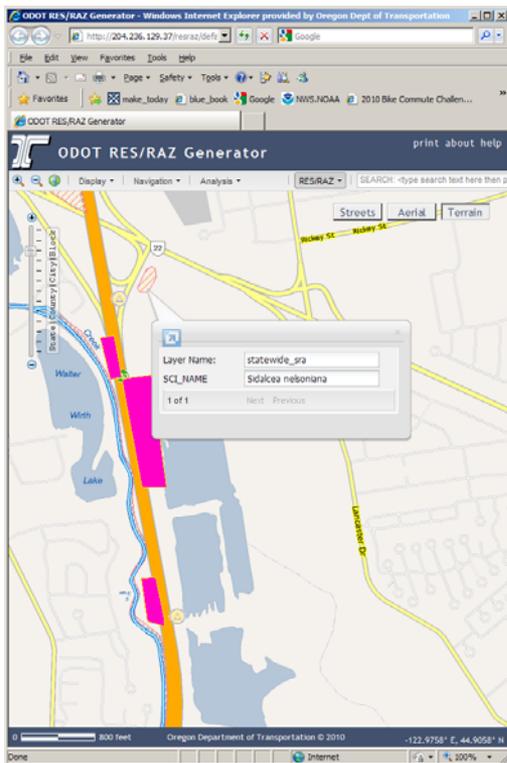
1. EDMS - Communications

- ODOT - GIS Steering Committee
- ODOT - Geo-Environmental Services Section
- ODOT - Office of Highway Maintenance and Operations
- ODOT - Region Technical Centers
- EDMS - Steering and Working Committees
- EDMS - User Training
- EDMS - User Support



EDMS Report / 11-13 Plan

2. EDMS - Update and Maintain RES/RAZ map products (electronic and hardcopy)



EDMS Report / 11-13 Plan

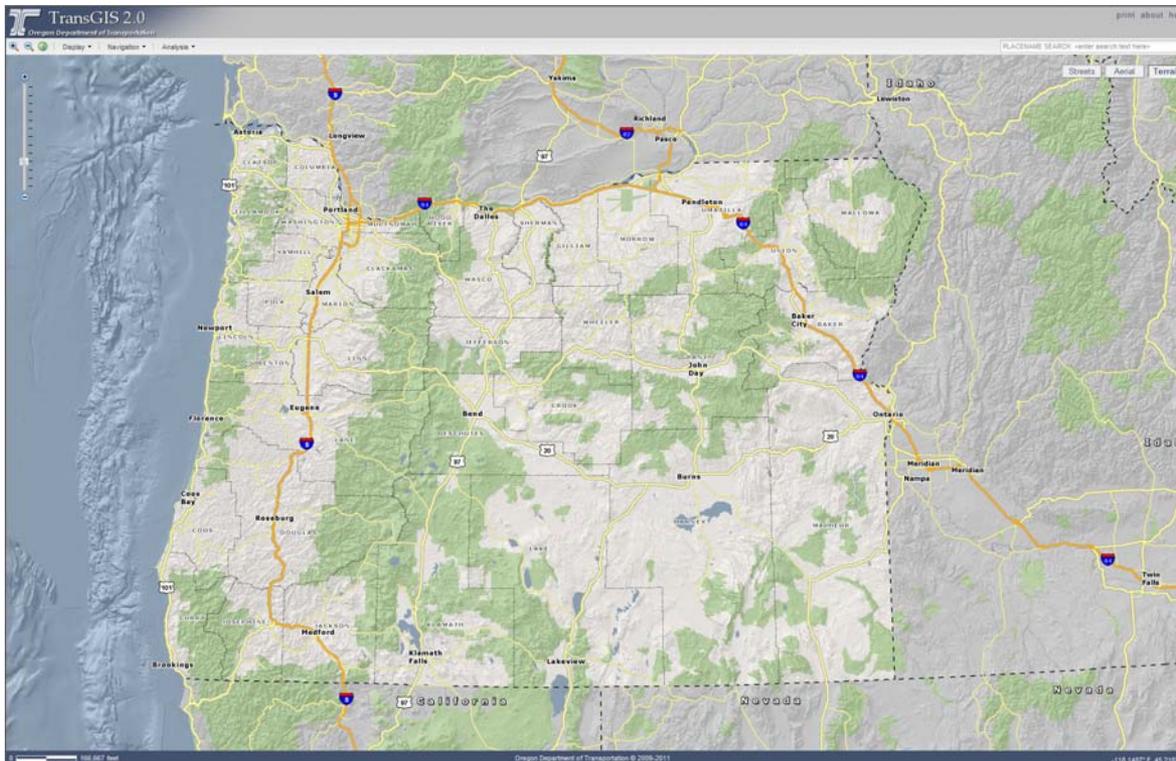
3. EDMS - GIS Data Development

Collaborate with multiple agencies on developing mutually beneficial and accepted source data

<i>Layer</i>	<i>Source</i>	
Archaeology	SHPO	
Fish Passage Barriers	ODF&W	
Rare Species	ORBIC	
LiDAR	DOGAMI	
Highway Inventory (Straightline Charts)	ODOT	

EDMS Report / 11-13 Plan

4. EDMS - Web Application Development (Query and Reporting Tools)



- RES/RAZ
- Wetlands
- PAST
- Watersheds (HUC)
- FHWA Programmatic

EDMS Report / 11-13 Plan

5. EDMS - Field (GPS) Data Collection



- Wetlands Delineations
- Wetlands Mitigation Site Monitoring
- Biological Mitigation Monitoring
- Archaeology Site Assessments
- Special Management Areas (SMA)
- Historic Sites/Cultural Resources
- Material Sources



Mobile RES/RAZ Demo

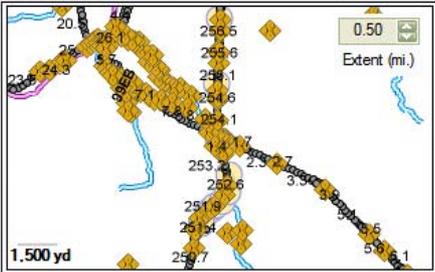
Mobile RES/RAZ Demo



Mobile RES/RAZ Demo

ODOT In-Vehicle RES/RAZ Viewer Prototype (BETA 1.0)

Main Display | Map Detail | Settings | References



Extent (mi.) 0.50

GPS Disconnected

SLC Mode

- Auto (SLC drawn for closest highways)
- Lock (SLC drawn only for locked highway)

Location Information

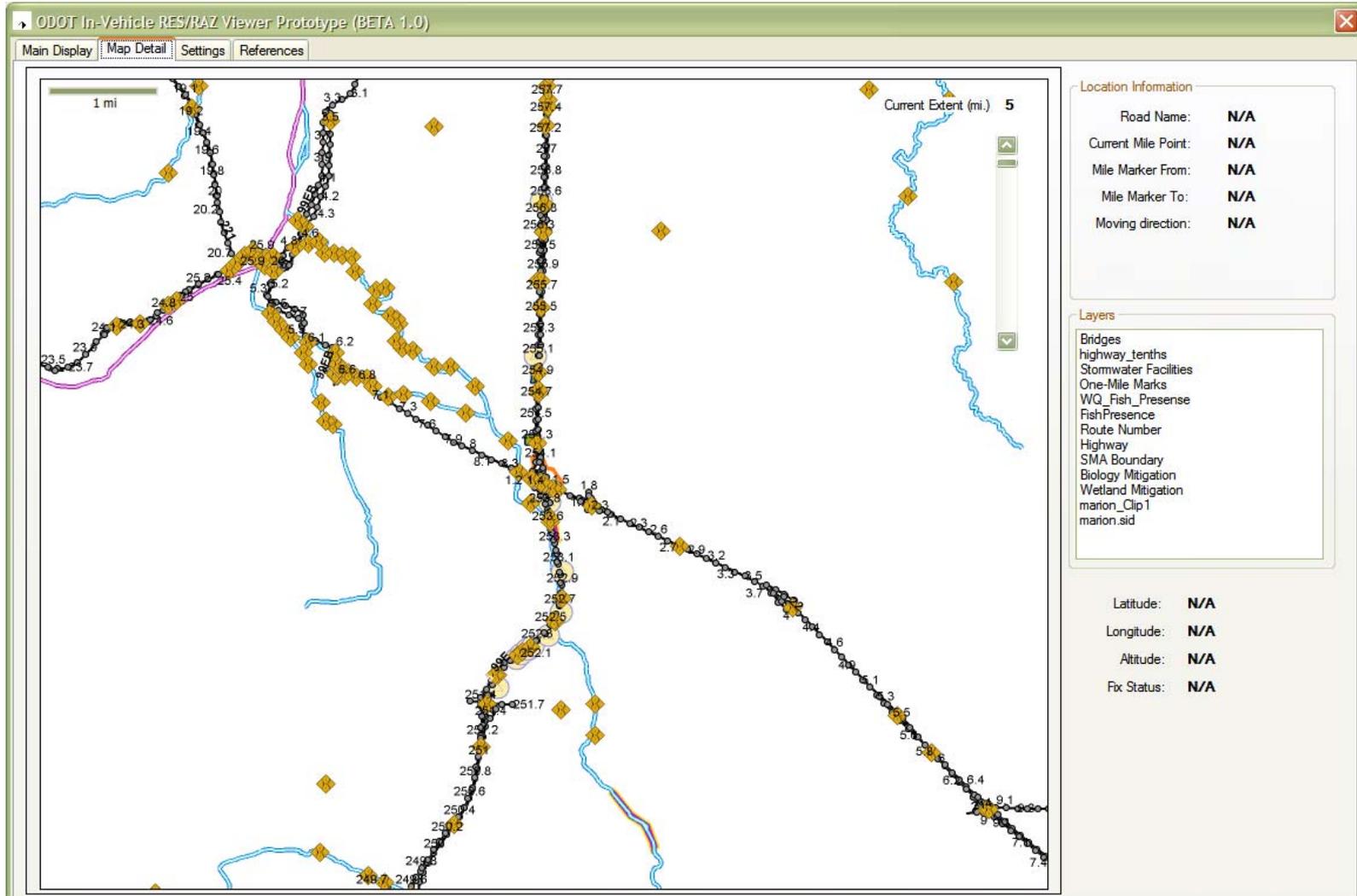
Road Name: **N/A**
Current Mile Point: **N/A**
Mile Marker From: **N/A**
Mile Marker To: **N/A**
Moving direction: **N/A**

Blue Book Information

Hover over RAZ Thematic Chart labels to get basic information, click labels to open Blue Book section in browser

[Surface-Shoulder](#)
[Drainage](#)
[Vegetation](#)
[Bridge](#)
[Sign Replacement](#)
[Noise](#)

Mobile RES/RAZ Demo



Mobile RES/RAZ Demo

ODOT In-Vehicle RES/RAZ Viewer Prototype (BETA 1.0)

Main Display | Map Detail | **Settings** | References

GPS Information

Latitude: N/A	Time: N/A
Longitude: N/A	Date: N/A
Altitude: N/A	Local DateTime: N/A
Fix Status: N/A	PDOP: N/A
	HDOP: N/A
	VDOP: N/A

Simulated GPS Files (For Testing Only)

Testing Select GPS file to read: Highway_047_Mp35-75_40ft_Pts_WGS84.bt

File Read Interval (milliseconds): 500

GPS Settings

GPS Com Port: [Dropdown] GPS error logging

GPS Connection Information

NA

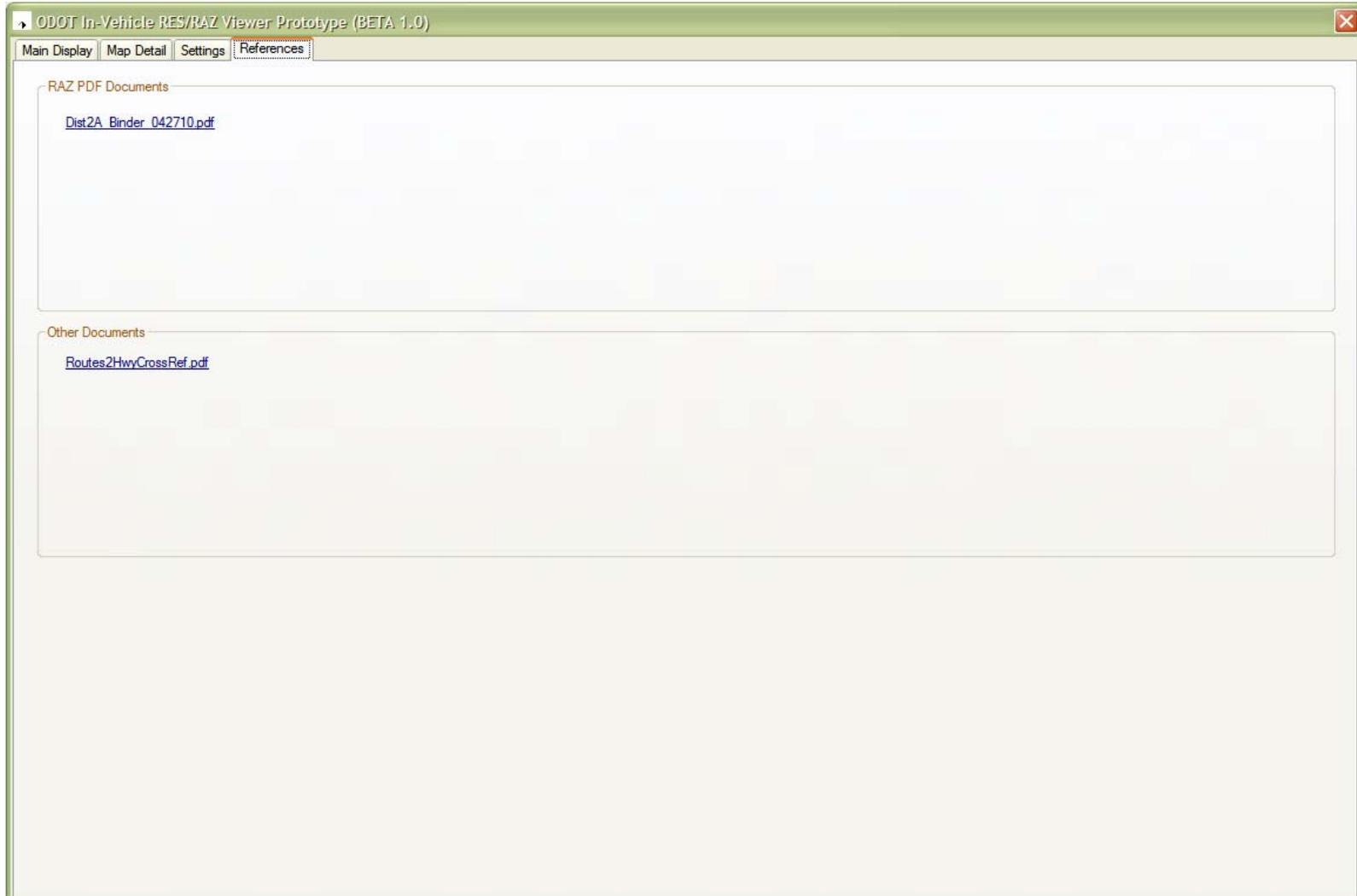
GPS Fix Satellites Count NA

Resources

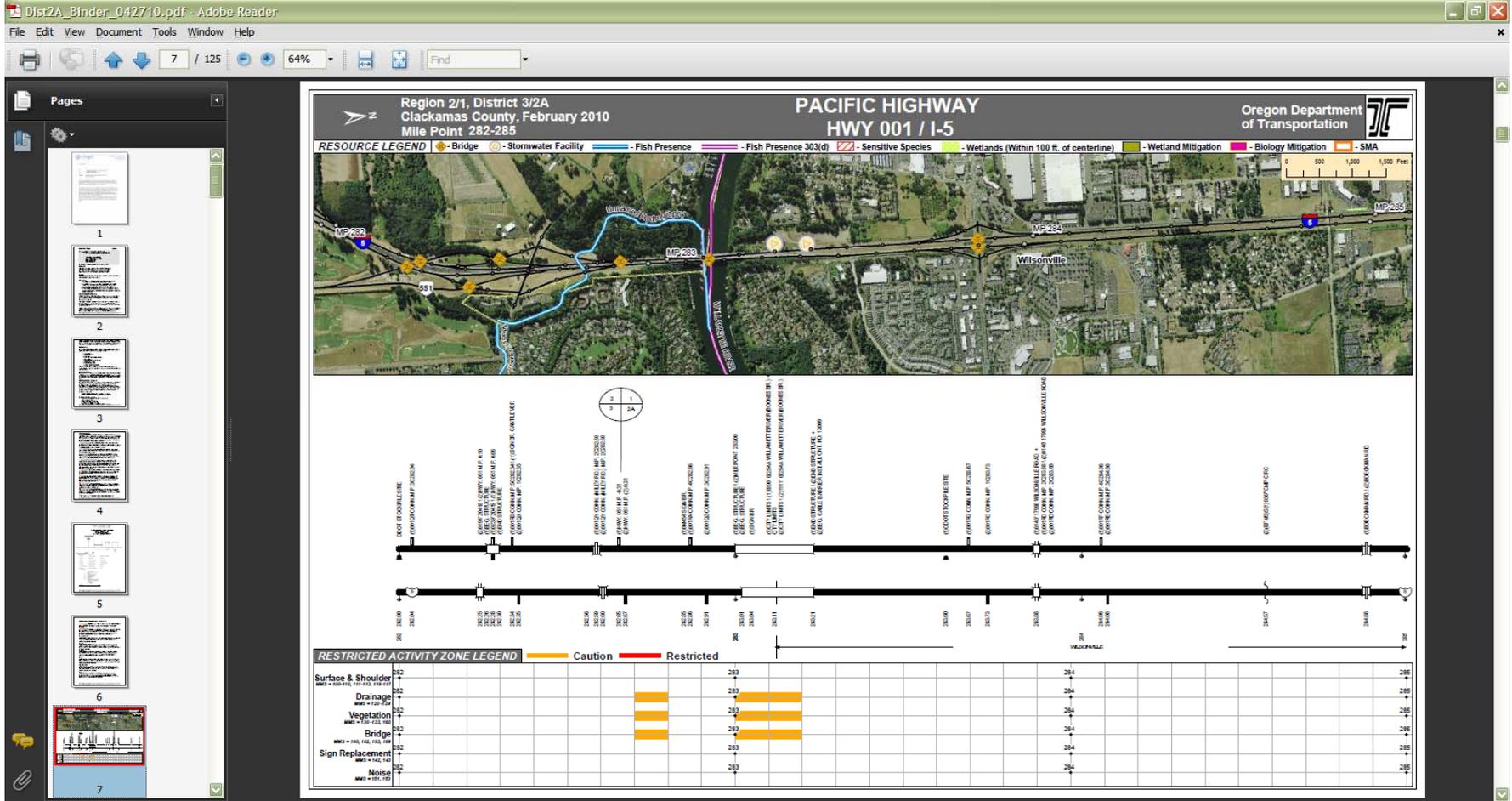
	Last modified Date:
File Geodatabase: C:\Program Files\ODOT\In-vehicle_RES-RAZ_Viewer\Data\FileGeodatabase\MobileSource.gdb	-
Main Mobile Cache: C:\Program Files\ODOT\In-vehicle_RES-RAZ_Viewer\Data>MainMobileCache>Main_Cache\MobileCache	6/22/2011 11:06:16 AM
RAZ Mobile Cache: C:\Program Files\ODOT\In-vehicle_RES-RAZ_Viewer\Data\RAZMobileCache\MobileCache	6/23/2011 11:49:34 AM

RAZ Surface Shoulder Layer Name:	SurfaceShoulderRAZ
RAZ Drainage Layer Name:	DrainageRAZ
RAZ Vegetation Layer Name:	VegetationRAZ
RAZ Bridge Layer Name:	BridgeRAZ
RAZ Sign Replacement Layer Name:	SignReplacementRAZ
RAZ Noise Layer Name:	NoiseRAZ
Road ID Field Name:	RD_ID
Hwy Tenths Layer Name (in Main Mobile Cache):	highway_tenths

Mobile RES/RAZ Demo



Mobile RES/RAZ Demo



Mobile RES/RAZ Demo

ODOT In-Vehicle RES/RAZ Viewer Prototype (BETA 1.0)

Main Display | Map Detail | Settings | References

GPS Information

Latitude: N/A	Time: N/A
Longitude: N/A	Date: N/A
Altitude: N/A	Local Date Time: N/A
Fix Status: N/A	PDOP: N/A
	HDOP: N/A
	VDOP: N/A

Simulated GPS Files (For Testing Only)

Testing Select GPS file to read: Highway_047_Mp35-75_40ft_Pts_WGS84.bt

File Read Interval (milliseconds):

- HWY001_RDWY2_sub_DensP102Mi_WGS84_sub_GPS_2.bt
- Highway_80ft_Pts_WGS84.bt
- Highway_047_Mp35-75_80ft_Pts_WGS84.bt
- Highway_047_Mp60-35_40ft_Pts_WGS84.bt
- Highway_047_Mp35-75_40ft_Pts_WGS84.bt

GPS Settings

GPS Com Port:

GPS Connection Information

NA

GPS Fix Satellites Count NA

Resources

File Geodatabase: C:\Program Files\ODOT\In-vehicle_RES-RAZ_Viewer\Data\FileGeodatabase\MobileSource.gdb	Last modified Date: -
Main Mobile Cache: C:\Program Files\ODOT\In-vehicle_RES-RAZ_Viewer\Data\MainMobileCache\Main_Cache\MobileCache	6/22/2011 11:06:16 AM
RAZ Mobile Cache: C:\Program Files\ODOT\In-vehicle_RES-RAZ_Viewer\Data\RazMobileCache\MobileCache	6/23/2011 11:49:34 AM

RAZ Surface Shoulder Layer Name:

RAZ Drainage Layer Name:

RAZ Vegetation Layer Name:

RAZ Bridge Layer Name:

RAZ Sign Replacement Layer Name:

RAZ Noise Layer Name:

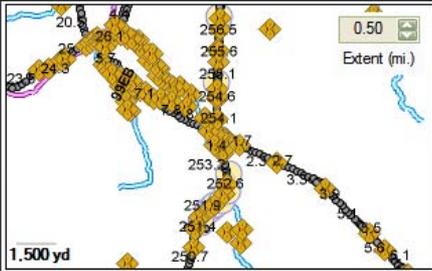
Road ID Field Name:

Hwy Tenths Layer Name (in Main Mobile Cache):

Mobile RES/RAZ Demo

ODOT In-Vehicle RES/RAZ Viewer Prototype (BETA 1.0)

Main Display | Map Detail | Settings | References



Extent (mi.) 0.50

1,500 yd

GPS Disconnected

SLC Mode

- Auto (SLC drawn for closest highways)
- Lock (SLC drawn only for locked highway)

Hwy 001 / PACIFIC
Hwy 002 / COLUMBIA RIVER
Hwy 003 / OSWEGO
Hwy 004 / THE DALLES-CALIFORNIA
Hwy 005 / JOHN DAY
Hwy 006 / OLD OREGON TRAIL
Hwy 007 / CENTRAL OREGON
Hwy 008 / OREGON-WASHINGTON

Location Information

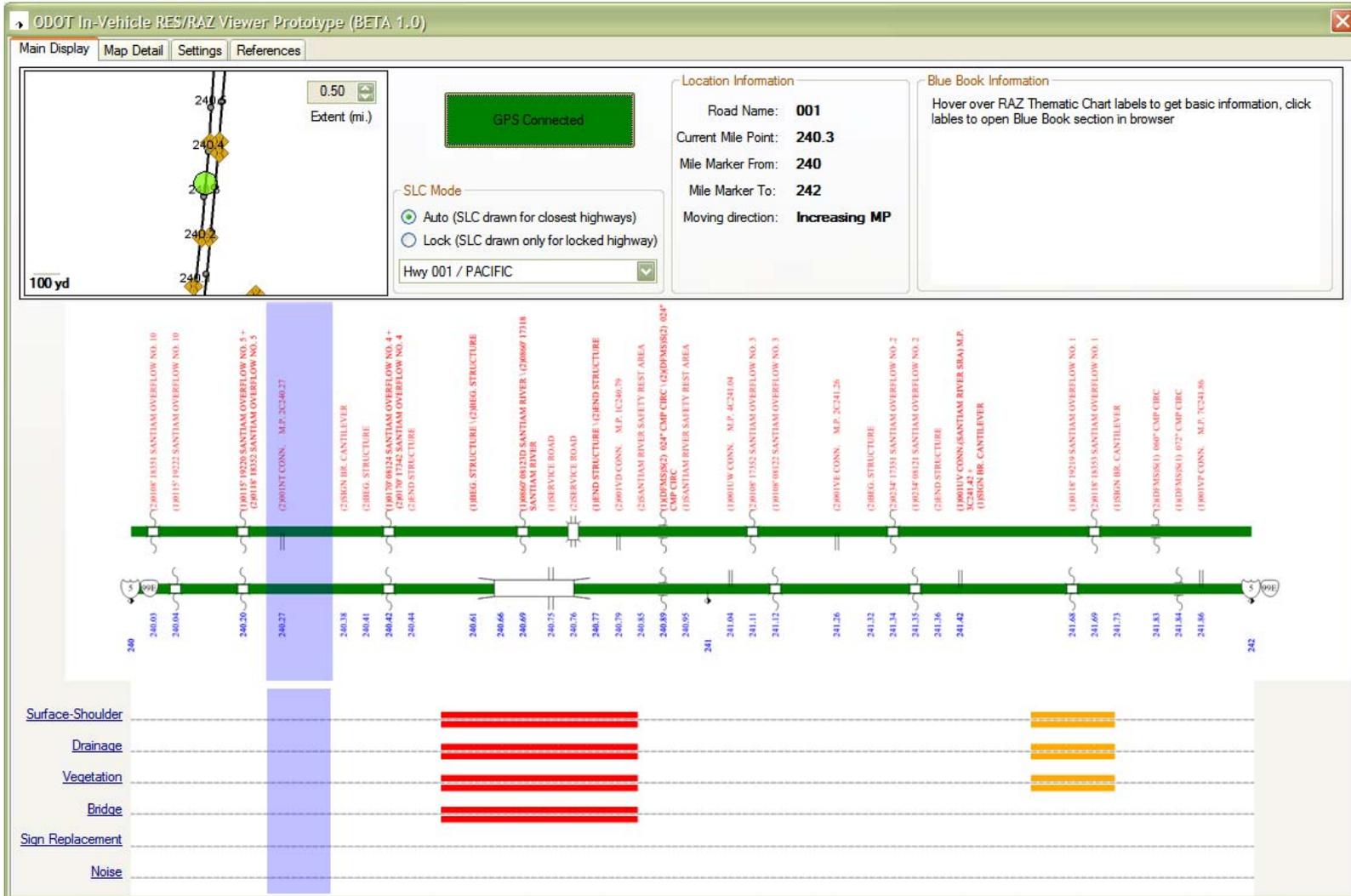
Road Name: **N/A**
Current Mile Point: **N/A**
Mile Marker From: **N/A**
Mile Marker To: **N/A**
Moving direction: **N/A**

Blue Book Information

Hover over RAZ Thematic Chart labels to get basic information, click labels to open Blue Book section in browser

[Surface-Shoulder](#)
[Drainage](#)
[Vegetation](#)
[Bridge](#)
[Sign Replacement](#)
[Noise](#)

Mobile RES/RAZ Demo



Mobile RES/RAZ Demo

ODOT In-Vehicle RES/RAZ Viewer Prototype (1.0.14)

Main Display | Map Detail | Settings | References



0.50
Extent (mi.)

GPS Connected

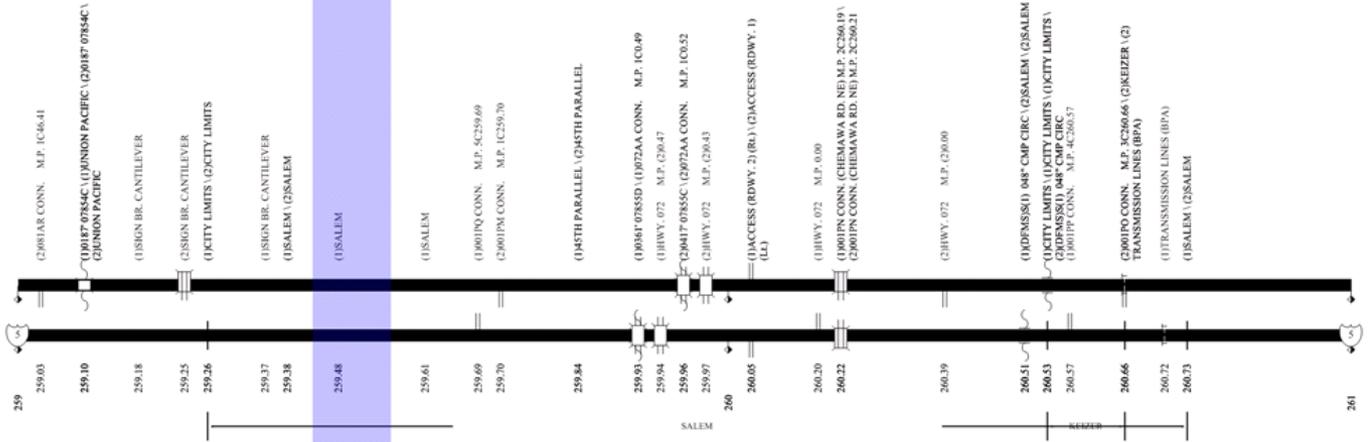
SLC Mode
 Auto (SLC drawn for closest highways)
 Lock (SLC drawn only for locked highway)

Location Information

Road Name: **001**
 Current Mile Point: **259.5**
 Mile Marker From: **259**
 Mile Marker To: **261**
 Moving direction: **Increasing MP**

Blue Book Information

Hover over RAZ Thematic Chart labels to get basic information, click labels to open Blue Book section in browser



259 259.03 259.10 259.18 259.25 259.26 259.37 259.38 259.48 259.61 259.69 259.70 259.84 259.94 259.96 259.97 260.06 260.20 260.22 260.39 260.51 260.53 260.57 260.66 260.72 260.73 261

SALEM SCOTTS

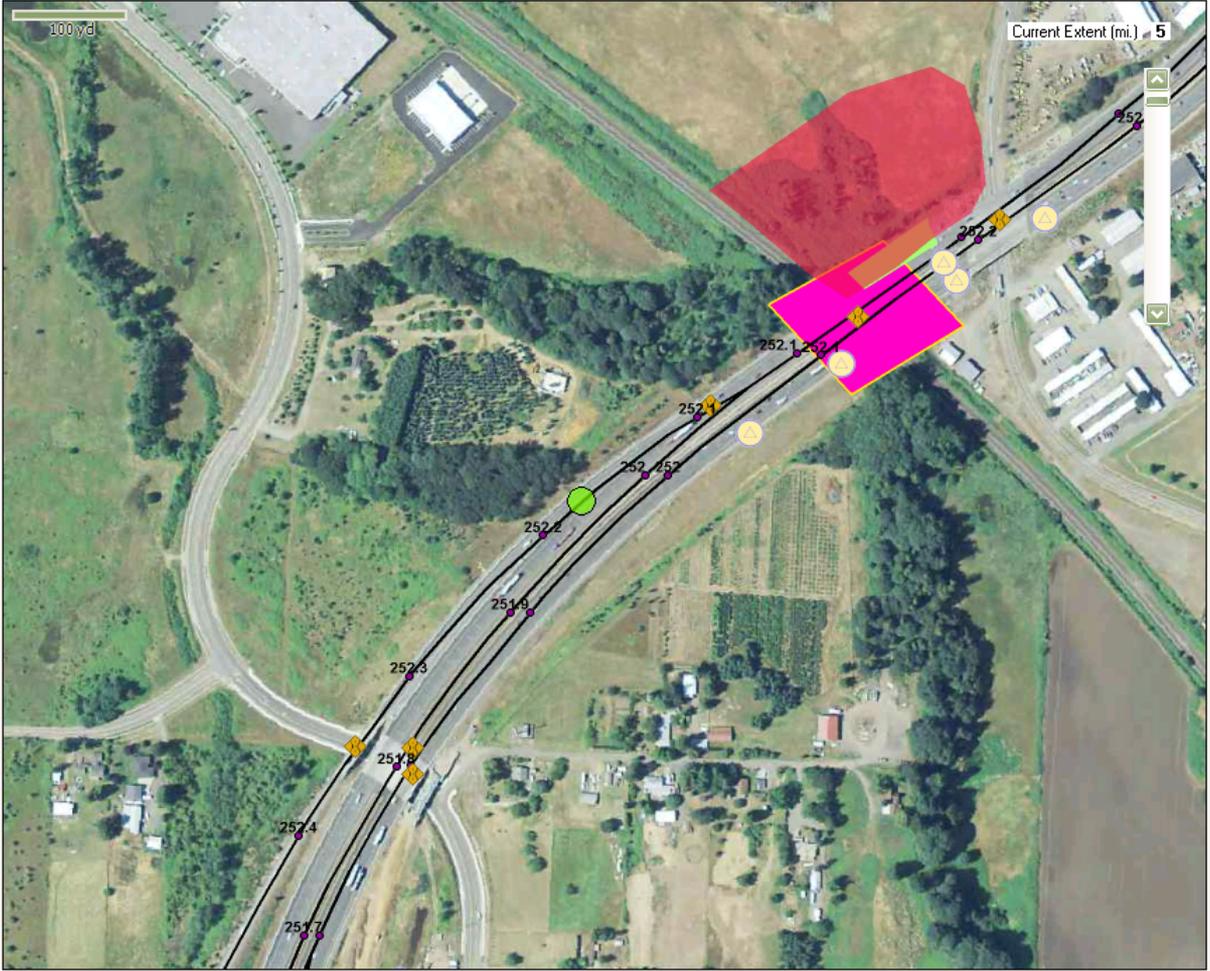
(2)981AR CONN. M.P. 1C:66.41
 (1)0147 07854C (1)UNION PACIFIC (2)0147 07854C (1)UNION PACIFIC
 (1)SIGN BR. CANTILEVER
 (2)SIGN BR. CANTILEVER
 (1)CITY LIMITS (1)CITY LIMITS
 (1)SIGN BR. CANTILEVER
 (1)SALEM (1)SALEM
 (1)SALEM
 (1)001PQ CONN. M.P. 5C:259.69
 (2)001PA CONN. M.P. 1C:259.70
 (1)45TH PARALLEL (1)45TH PARALLEL
 (1)0161 07855D (1)072AA CONN. M.P. 1C:0.49
 (1)HWY. 072 M.P. (2)04.7
 (2)0417 07855C (2)072AA CONN. M.P. 1C:0.52
 (2)HWY. 072 M.P. (2)04.3
 (1)ACCESS (RDWY. 2 (RL) (2)ACCESS (RDWY. 1 (L))
 (1)HWY. 072 M.P. 0.00
 (1)001PA CONN. (CHEMAWA RD. NE) M.P. 2C:260.10 (2)001PA CONN. (CHEMAWA RD. NE) M.P. 2C:260.21
 (2)HWY. 072 M.P. (2)04.00
 (1)0161 07855D (1)072AA CONN. M.P. 1C:0.49
 (1)CITY LIMITS (1)CITY LIMITS (1)CITY LIMITS (1)CITY LIMITS
 (1)001PP CONN. M.P. 4C:260.57
 (2)001PO CONN. M.P. 2C:260.66 (2)KEIZER (2) TRANSMISSION LINES (BPA)
 (1)TRANSMISSION LINES (BPA)
 (1)SALEM (1)SALEM

Surface-Shoulder	259.10 - 259.18	259.37 - 259.48	260.06 - 260.22	260.51 - 260.57	260.66 - 260.73
Drainage	259.10 - 259.18	259.37 - 259.48	260.06 - 260.22	260.51 - 260.57	260.66 - 260.73
Vegetation	259.10 - 259.18	259.37 - 259.48	260.06 - 260.22	260.51 - 260.57	260.66 - 260.73
Bridge	259.10 - 259.18	259.37 - 259.48	260.06 - 260.22	260.51 - 260.57	260.66 - 260.73
Sign Replacement	259.10 - 259.18	259.37 - 259.48	260.06 - 260.22	260.51 - 260.57	260.66 - 260.73
Noise	259.10 - 259.18	259.37 - 259.48	260.06 - 260.22	260.51 - 260.57	260.66 - 260.73

Mobile RES/RAZ Demo

ODOT In-Vehicle RES/RAZ Viewer Prototype (1.0.14)

Main Display | Map Detail | Settings | References



Location Information

Road Name:	001
Current Mile Point:	252.2
Mile Marker From:	252
Mile Marker To:	254
Moving direction:	N/A

Layers

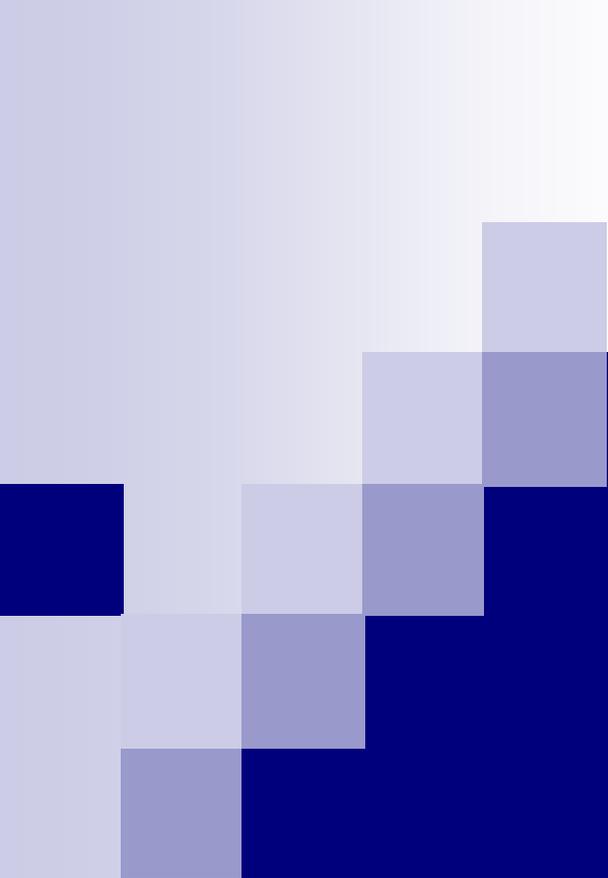
- Bridges
- Tenth Mile Marker
- Stormwater Facilities
- WQ_Fish_Presense
- statewide_sra
- Highway
- SMA Boundary
- statewidet_wetland
- Biology Mitigation
- Wetland Mitigation
- marion_Clip1

Latitude: **44.89095**

Longitude: **-122.99463**

Altitude: **0**

Fix Status: **GpsFix**



Next Meeting:

Wednesday, December 14th
Mill Creek Bldg – Crown Point