

Roadside Features Inventory Program

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**Washington State
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What Is The Roadside Feature Inventory Program? (RFIP)

Roadside Features Inventory Program



A system wide corporate program of limited scope for collecting, storing and reporting locations of roadside assets for the main purpose of safety analysis

For more detailed Info: <http://www.wsdot.wa.gov/mapsdata/tdo/rfip/>

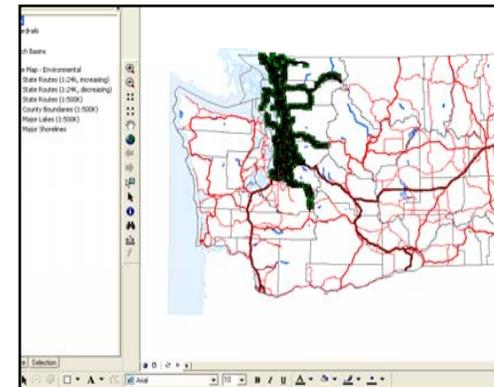
Collecting



Storing

OBJECTID	SRID	BeginSRMP	BeginSRMPAB	EndSRMP	EndSRMPAB	BegARM
1	005	166.28		166.35		166.34
2	101	363.93		365.33		362.08
3	005	166.21		166.28		166.27
4	005	165.83		166.21		165.89
5	005	167.35		167.51		167.41
6	005	167.51		167.67		167.57
7	005	167.67		167.72		167.73
8	005	167.72		167.8		167.78
9	005	165.67		165.83		165.73
10	008	13.54		16.66		13.54
11	005	165.63		165.67		165.69
12	005	167.0		166.10		167.06
13	005	168.18		168.34		168.24
14	005	168.34		168.56		168.4
15	005	168.56		169.16		168.62
16	005	169.16		169.18		169.22
17	005	169.18		169.31		169.24

Reporting



Why is the RFIP Needed?

- To create a mapping level accuracy “corporate database” where analysis can be done to compare severity of “vehicles leaving roadway” road accidents to density of fixed objects
- To provide information on the number, types and locations of fixed object type roadside features
- To meet a commitment to Federal Highway Administration (FHWA) that roadside features will be more easily accessible for safety analysis
- To enhance future safety investment decisions

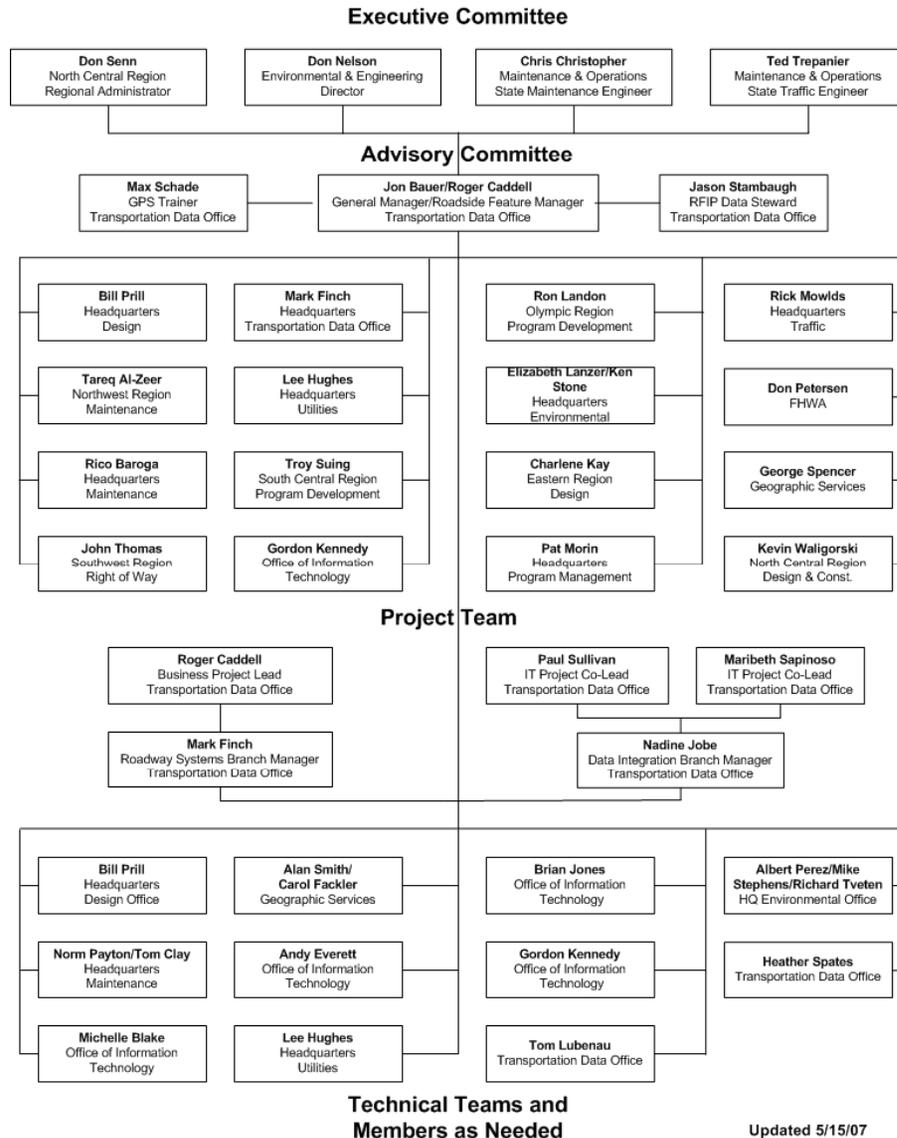


What are the Realized Benefits?

- **Established consistent data definitions and formats throughout the department**
- **Established collection and storage methods and procedures**
- **Minimized the cost of collection and maintenance of roadside feature data by eliminating redundant data collection efforts**
- **Facilitated the linking of RFIP data with other data bases (culvert and SWIM) that store agency specific information about roadside features**
- **Increased the efficiency of project development through more efficient data collection and reporting**
- **Providing Program Managers better information for program prioritization**

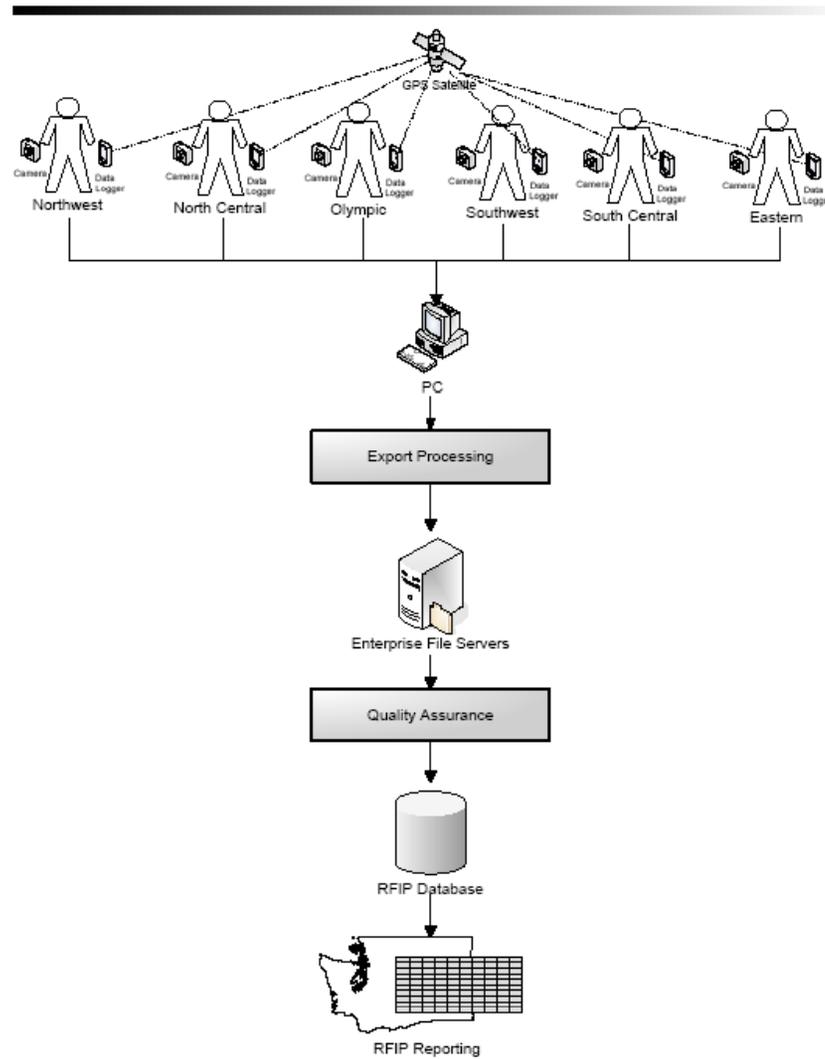
Roadside Features Table of Organization

Roadside Features Inventory Program - Table of Organization



- Executive Committee
- Advisory Committee
- Project Team
- Technical Teams

Roadside Features Work Flow



RFIP is currently collecting these 37 features

Bridge Rail	Intersection
Bridge Structure	Mailbox
Cabinet	Miscellaneous Fixed Object
Cable Barrier	Pedestal
Concrete Barrier	Pipe End
Culvert	Re-Directional Land Form
Culvert End	Regulatory Outfall
Curb	Road Approach
Ditch	Roadside Slope
Down Guy	Rock Outcropping
Down Guy Anchor	Special Use Barrier
Drainage Inlet	Stormwater Pond
Drywell	Stormwater Vault
Fence	Support
Glare Screen	Tree
Guardrail	Tree Group
Guy Wire	Wall
Hydrant	Water Hazard
Impact Attenuator	

Focused Data Collection Priority

- At the start of the program, rural areas were selected for safety reasons and to allow the field crews time to learn the new program
- Later, areas of high numbers of collisions with fixed objects were the collection focus and were selected and prioritized by each Region



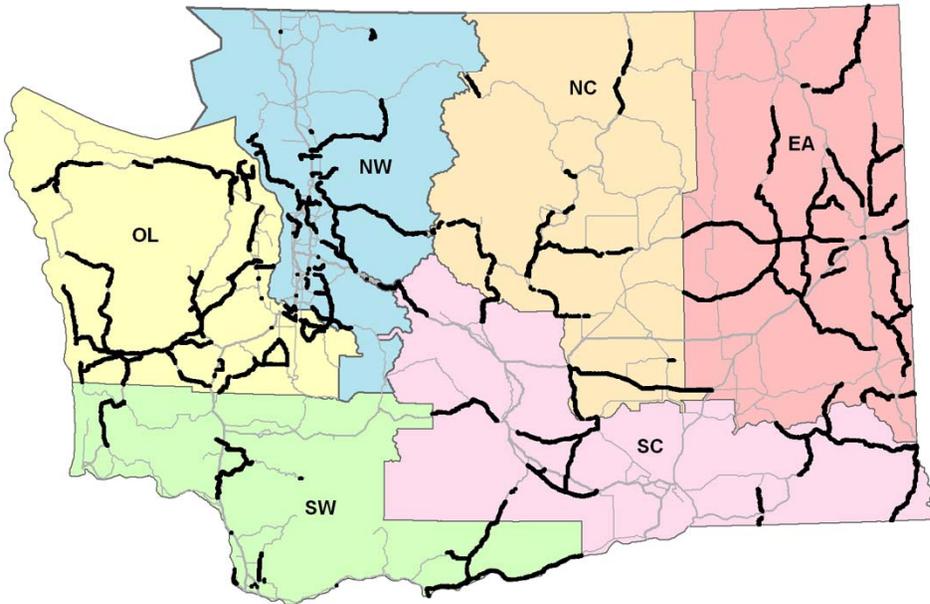
What Has Been Accomplished So Far?

“Phase 1” was completed on schedule - June 1, 2006

- **GPS Equipment was tested and selected for program use**
- **Features and attributes were identified and modeled in a database**
- **A physical database was created to store the data**
- **A data dictionary was created for statewide use**
- **Tools were developed to ensure GPS coordinate data is properly associated to the correct State Route location**
- **Ability for end users to view the data in either a GIS or tabular report**
- **Providing program support, GPS training and responding to other needs**
- **Developed a training/procedures manual and informational web site**

What Data Has Been Gathered So Far?

- From June 2006 over 345,000 features were collected
- Over 63,000 supplemental still images have been collected
- The RFIP program averages 12 data collectors statewide
- A total of 2603 route miles have been collected. This represents 37% of the state route system of 7042 miles
- \$5,671,818 have been spent. This equals \$16.44/Feature and \$2,179/Mile



Time to Completion Estimate

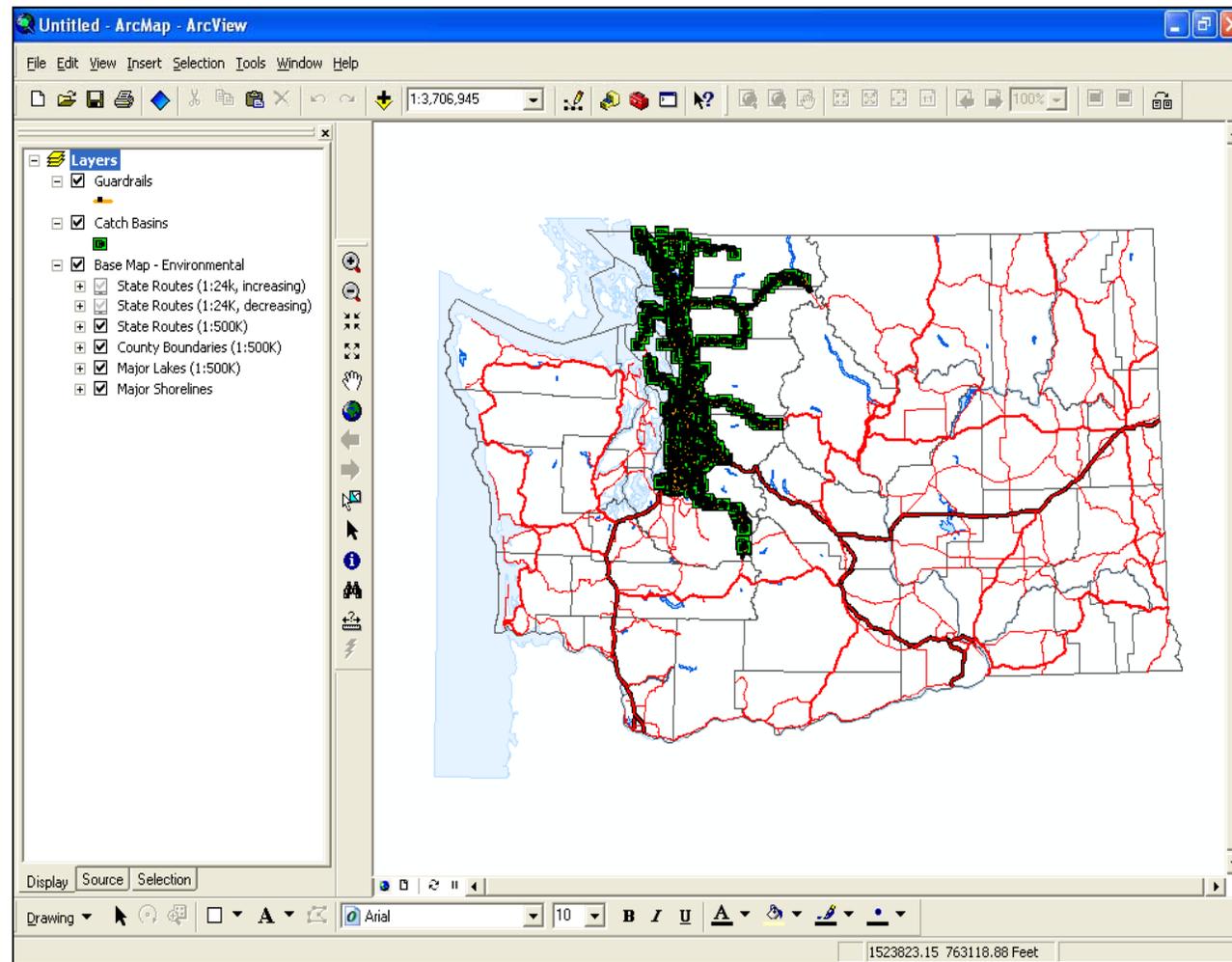
Time To Completion Estimate (March 2009)						
	Total Route Miles	Route Miles Completed	Months Since Collection Started	Route Miles Per Month Average	Estimated Months to Completion	Estimated Date of Completion
Northwest	1178.30	257.47	10 ¹	25.75	36	Mar-2012
South Central	1067.72	284.09	33	8.61	91	Oct-2016
Olympic	1103.83	543.24	34	15.98	35	Feb-2012
North Central	1140.82	294.63	33	8.93	95	Feb-2017
Southwest	984.61	203.30	34	5.98	131	Feb-2019
Eastern	1566.84	641.01	34	18.85	49	Mar-2013
Statewide	7042.12	2223.74	34	65.40	74	May-2015 ²

¹ Northwest Region started RFIP data collection in June 2008

² Statewide Estimated Date of Completion is based on statewide route miles completed and not regional averages

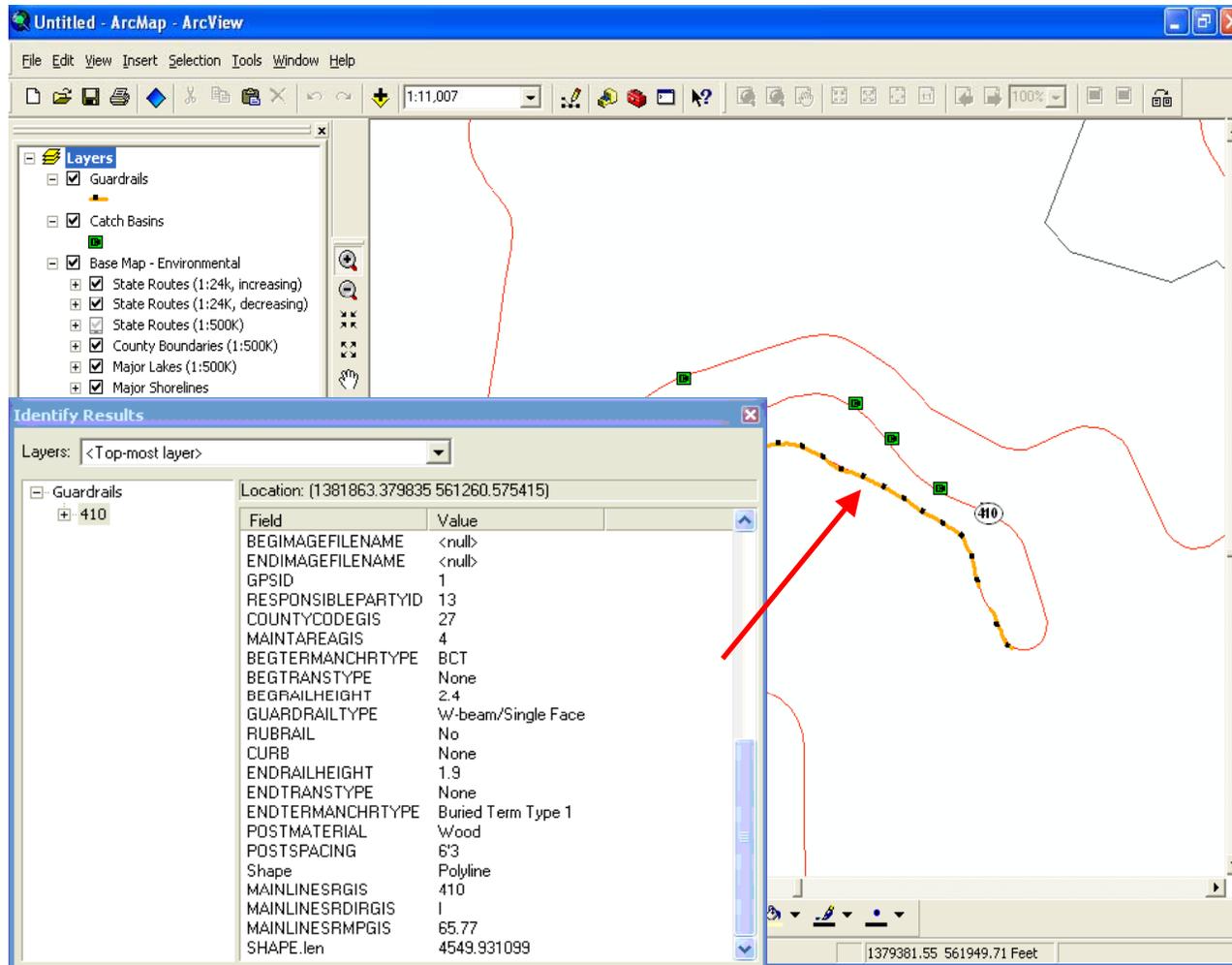
What Will The Customer Expect To See?

Sample of Guardrails and Drainage Inlets in the GIS Workbench



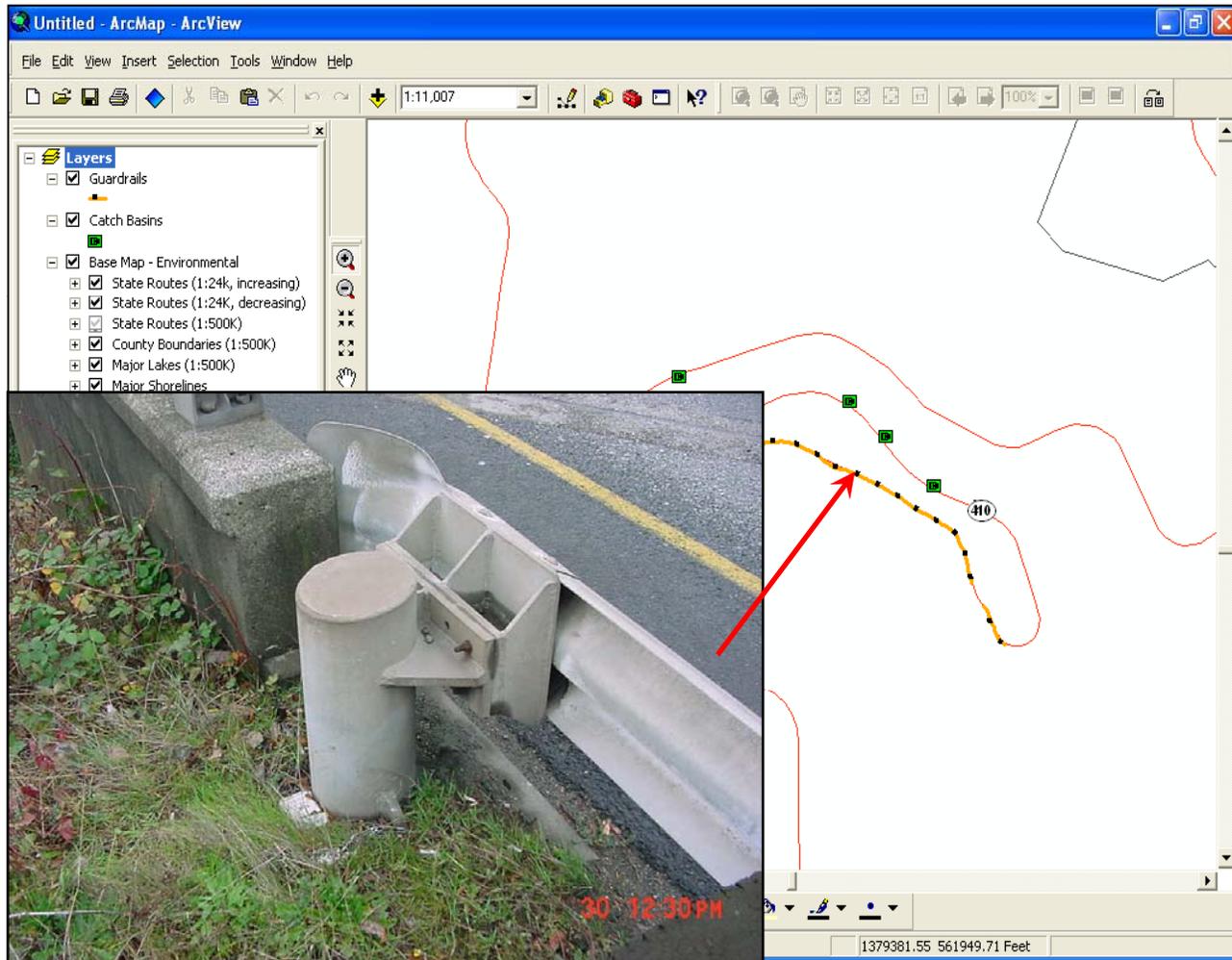
What Will The Customer Expect To See?

Attribute data is available on all features



What Will The Customer Expect To See?

Images are available on some features



Questions?

WSDOT - RFIP Contacts

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