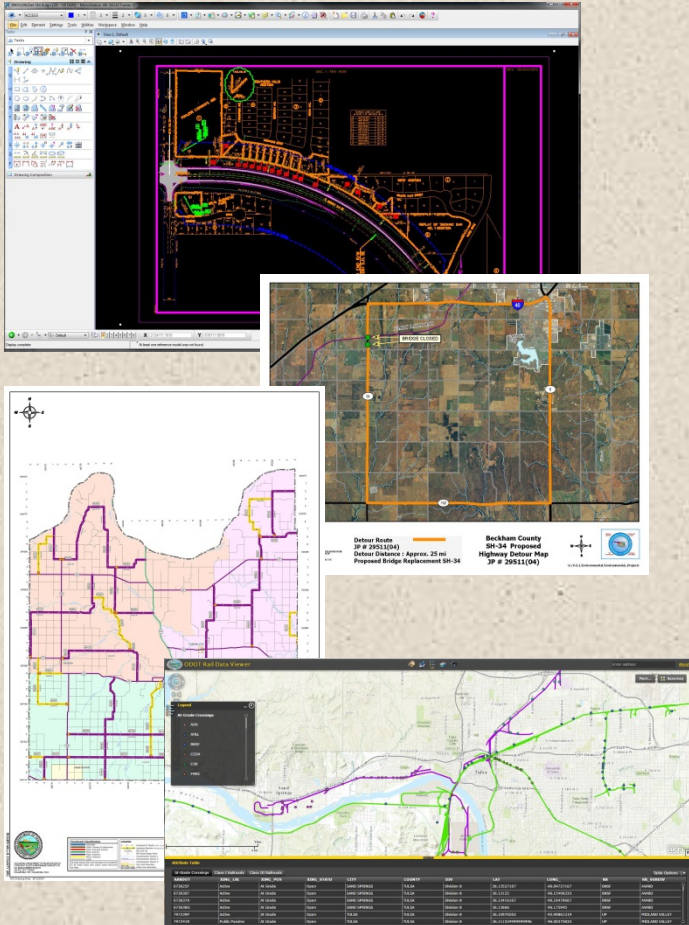


# Oklahoma DOT: An Agency in Transition



Jeremy Planteen, GISP

# Background



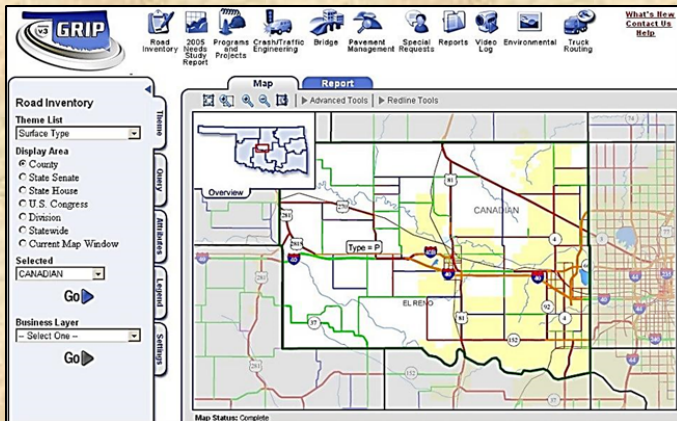
- GIS Development, part of GIS Mgmt. Branch
- Strategic Asset and Performance Mgmt.
- Custom maps
- On-demand web mapping applications
- CAD Integration
- Mobile data collection
- Training
- Other services as needed

# “Enterprise Solutions?”

- Applicable to everybody
- Answers a question, solves a problem
- Cross-platform compatibility
- Ease of use
- Agile, maintainable, upgradeable
- “makes sense” to all users



# Past Efforts



- GRIP
- ‘Geographical Resource Intranet Portal’
- Planning & Design in 1999
- Launched in 2000
- Several minor redesigns



# Past Efforts

- Public-facing 'GRIPLite'
- In service through 2013
- Ultimately limited by SVG Support
- Served as a baseline for the design and implementation of new application

The screenshot displays the GRIPLite application within a Microsoft Internet Explorer browser window. The address bar shows the URL <http://glsrvigrip3/>. The application interface includes a sidebar with navigation links such as 'Attributes', 'Map', 'Overview', 'Inventory', '2005 Needs Study Report', 'Programs and Projects', and 'Crash/Traffic Engineering'. The main content area displays a detailed inspection report for a bridge, titled 'OKLAHOMA DEPARTMENT OF TRANSPORTATION BRIDGE INSPECTION REPORT'.

**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
BRIDGE INSPECTION REPORT**

Inspection Date: 3/5/2005      FO/SR: Not Deficient      Sufficiency Rating: 96.9  
Federal ID: 16811      Structure No: 0005 3276 X

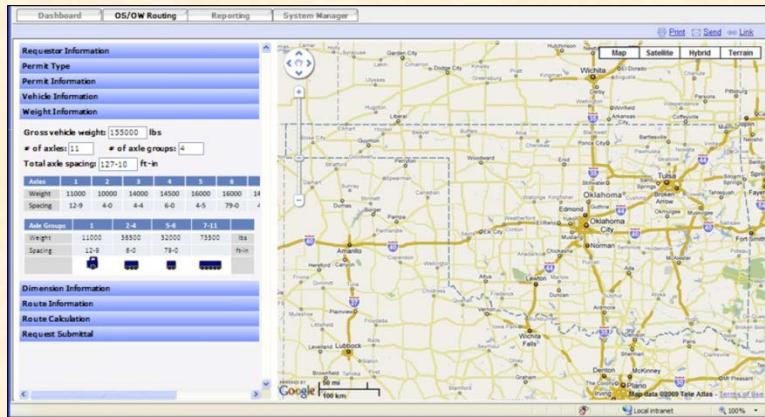
IDENTIFICATION		APPRAISAL	
Description	5013 @ 10" CONTIGUOUS PLATE GIRDER SPANS SK. 331000. 1030 WITH 2-10' SAFE	Bridge Rail	0
Country Code	Canadian [317]	Transition	1
Facility Carried	HWY 10 ST.	Approach Rail	1
Bridge District	04	Approach Rail Ends	0
		Str. Evaluation	Better than Min. Critical [7]
		Deck Geometry	0
		Underclearance Vertical & Horizontal	4
Deck	Satisfactory [6]	Waterway Adequacy	Not Applicable [4]
Super Rating	Good [7]	Approach Alignment	Equal Desirable Criteria [3]
Sub Rating	Good [7]	Scour Critical	N
Channel/Channel Protection	Not Applicable [4]		
Culvert	Not Applicable [4]		
		NAVIGATION	
		Navigation Control	N
		Pier Protection	1

STRUCTURAL UNIT								
Element	Description	Quantity	Unit	% State 1	% State 2	% State 3	% State 4	% State 5
12	Base Concrete Deck	13100.00		0	100	0	0	0
107	Flare SB Open Order	1100.00		95.3	2.7	2	0	0
205	R/C Conc Column	12.00		75	25	0	0	0
215	R/C Conc Abutment	125.00		100	0	0	0	0

# Past Efforts

- OSOW (OkiePros)
- Permitting system & route planner for Oversize/Overweight vehicles
- Dramatically increased efficiency
- Paid for itself in the first year of operation
- Leveraging GIS technology to tackle a real-world problem for non-GIS people



# The Transportation Asset Browser (TAB)

- Framework for this effort was to ‘build a replacement for GRIP’
- What does that mean?
- What do we need?
- Is this a tool for our internal users?
- Is the public using this?
- How do we meet these goals?



# The Transportation Asset Browser (TAB)

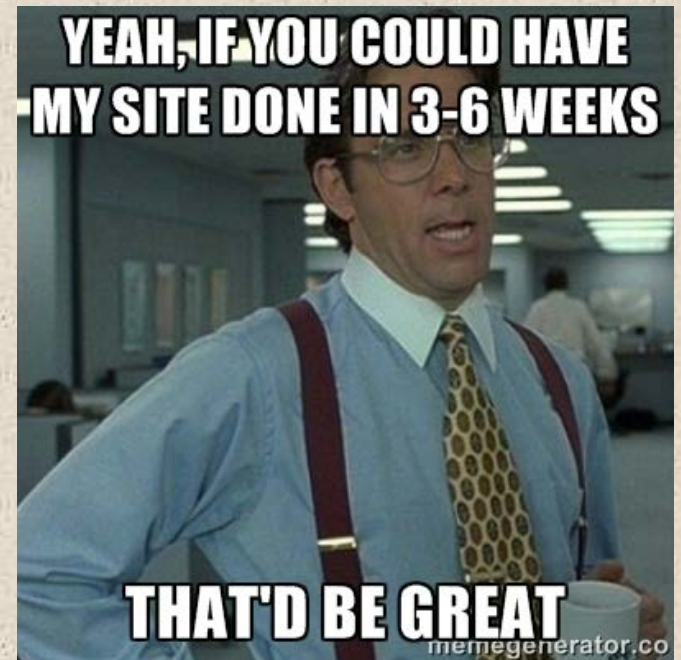


- Early discussions 2010/2011
- RFP put out mid-2013
- Awarded Sept. 2013
- Intergraph selected
- Work began March 2014

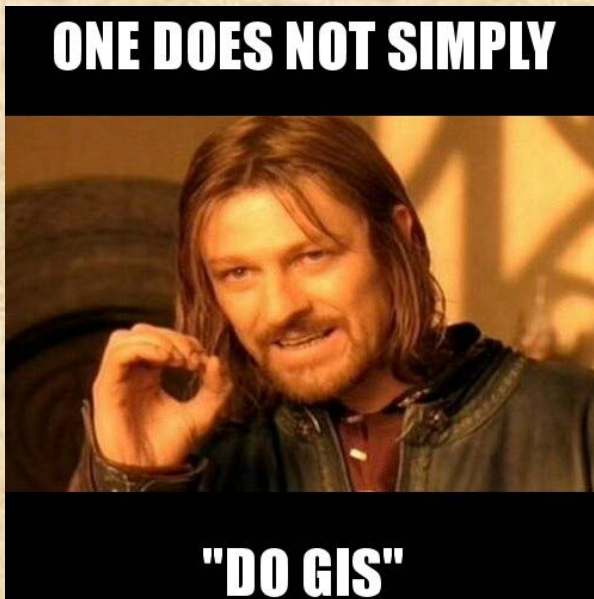


# The Transportation Asset Browser (TAB)

- Fully custom product
- Pros – Tailored to our requirements, customization options
- Cons – Slow dev time, expensive, no COTS-type support after the fact
- Centered around specific hypothetical use cases



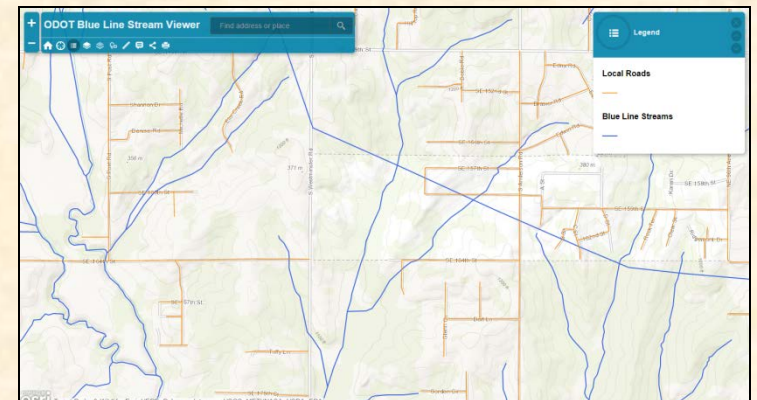
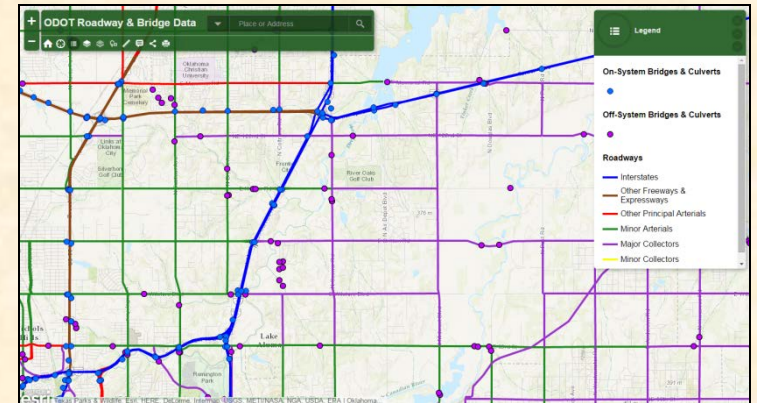
# ArcGIS Online



- Simple, easily integrated with rest of agency
- Early on, some light usage
- Initially held back because integration issues with existing software
- Transition to ESRI platform agency-wide

# ArcGIS Online

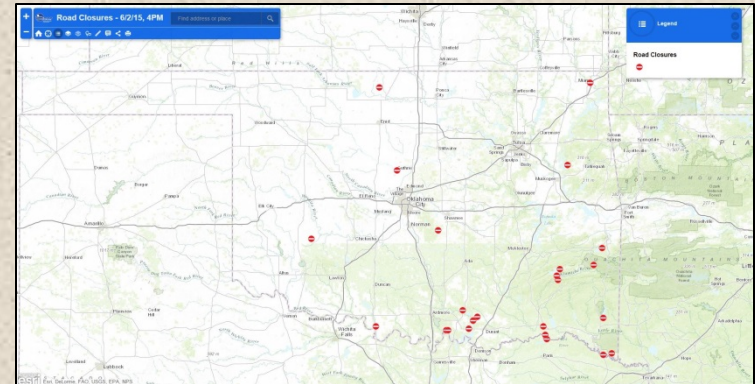
- Roadway and Bridge Data Viewer
- Blue line stream viewer
- Redlining tools
- Construction project maps for the public





# ArcGIS Online

- Flooding map
- Late May/Early June
- Our main line of communication to the public and our internal people
- ~18,000 views per day at peak
- Drove home the need for the product





# ArcGIS Online



- What does this mean for our users?
- How has the dynamic, on-demand environment changed how we do things?
- What does that mean for the GIS people?
- What does the custom application process look like in the future?

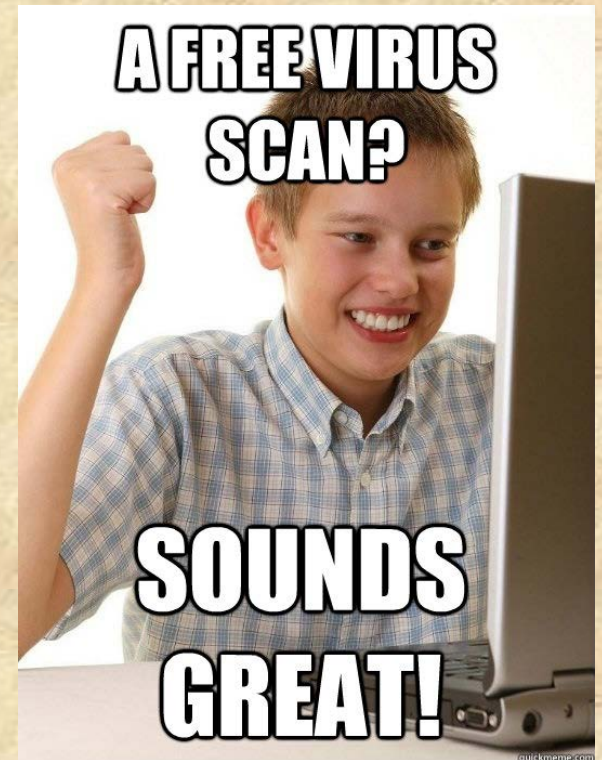
# Managing Expectations



- Who is 'selling' the project to senior staff?
- What are the underlying expectations?
- What is getting promised?
- What can be delivered?
- Do the expectations match the agreed upon scope of work?
- If not, now what?

# Understanding Your Users

- We think this is cool, does anybody else?
- What is really getting used?
- Are current workflows better or worse?
- Does this design fit with current tech and expected usability?
- Is the 'obvious' functionality really all that obvious?



# Understanding Your Users



- GRIP offered very little in the way of understanding who was using what and why
- Importance for usage and unique IP logging in TAB and AGO maps
- Better handle on who is using what
- Critical for design, important for ROI metrics