

Damage Prevention – One Call Perspective

Steve Light
Virginia Utility Protection Service, Inc.



Agenda

- Challenges for the One-Call Industry
- One-Call Technologies

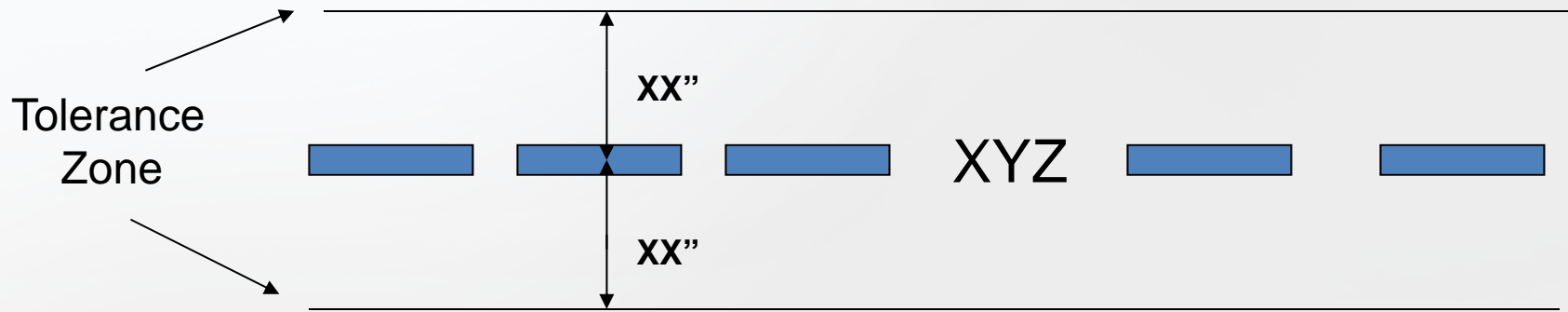
Challenges for the Industry

- Varying state legislation
 - Differing bordering state laws
 - Need for education for out of state excavators

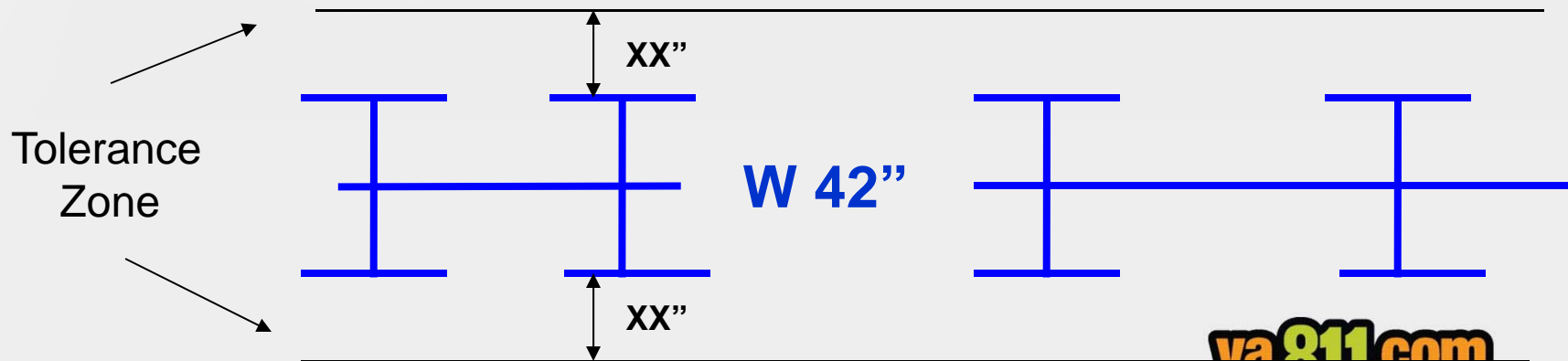
Tolerance Zone

- A strip of land not less than XX inches on either side measured from the outer edge of the exterior surface of the underground facility
 - Measured on a horizontal plane
- When digging w/in the tolerance zone:
 - Plan the work to avoid damage
 - Determine exact location of UG facility utilizing non-invasive excavation methods
 - Maintain clearance between UG facility and cutting edge of mechanized equipment
 - Provide support as needed, including backfill

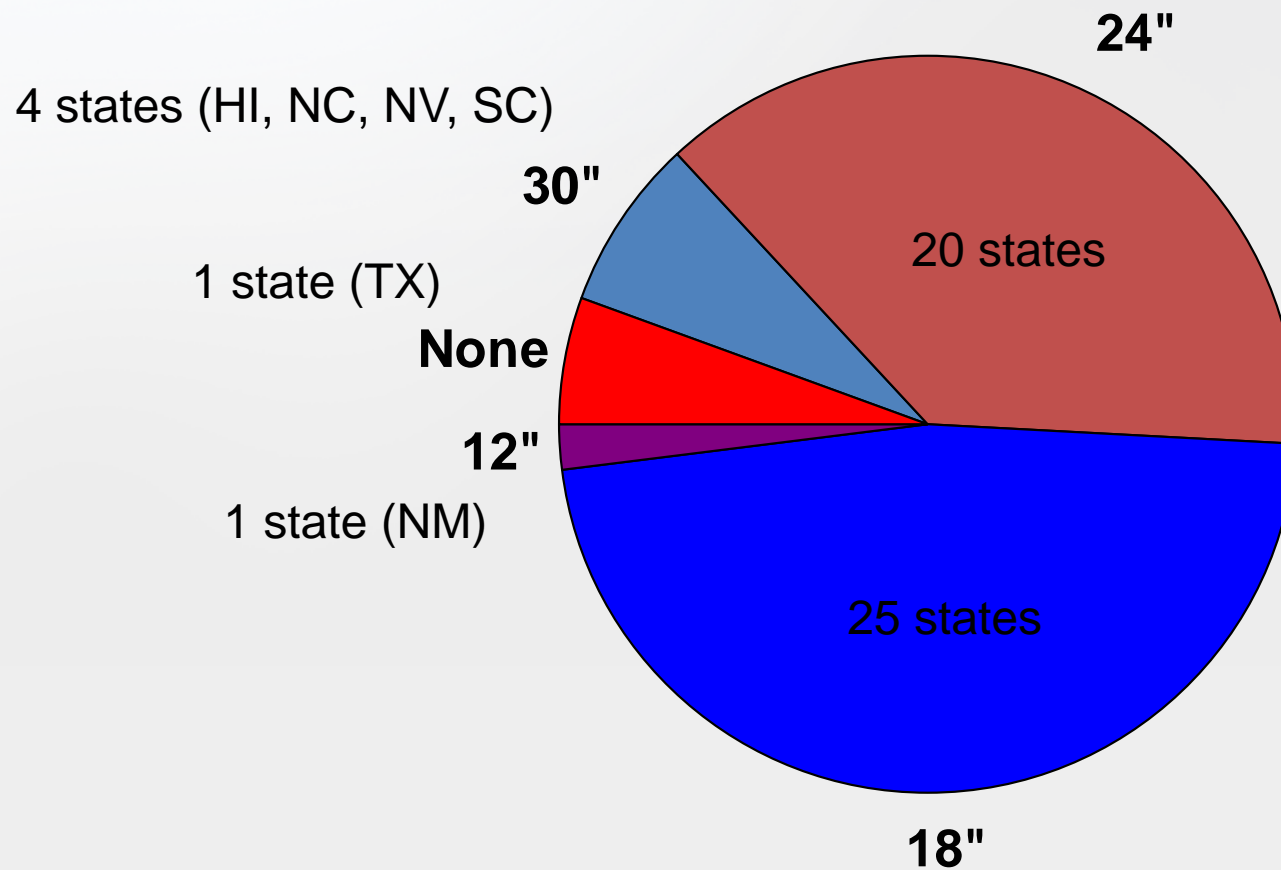
Tolerance Zone (cont'd)



Notes: XX'' represents either 12'', 18'', 24'' or 30''
XX'' measured on horizontal plane from edge of facility



Tolerance Zone (cont'd)



Other Variances

- Positive response
- Mandatory membership
- Hand digging
- Exemptions
- Time requirements for notification requests
- Length of requests
- Differing ticket types
 - Design
 - Damage
 - Meeting

Challenges for the industry

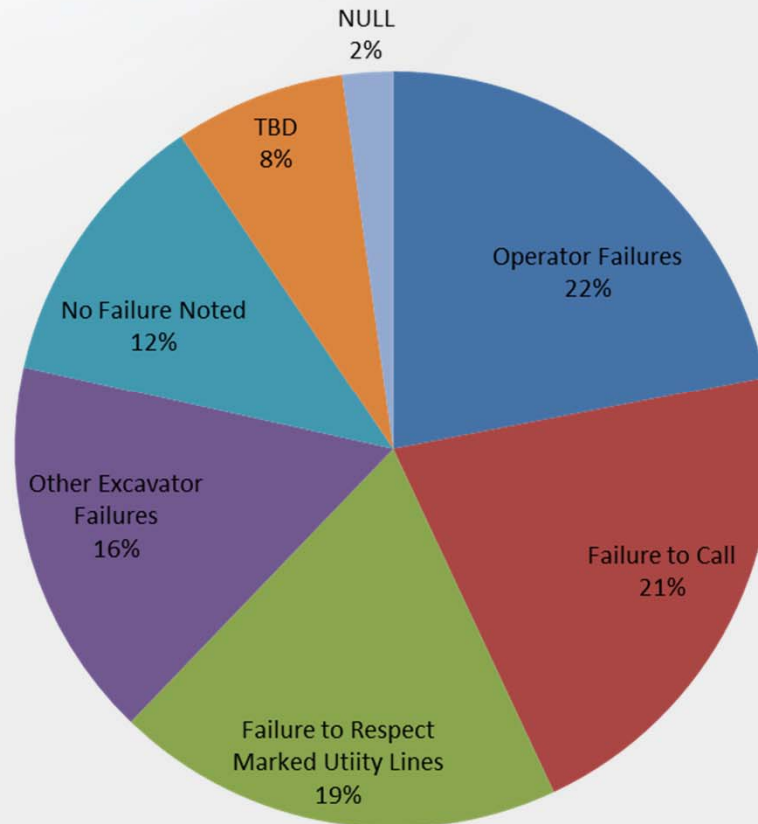
- Lack of effective enforcement in many states

Virginia Enforcement Stats

- Effectiveness of enforcement
 - Strict enforcement started in 1995
 - Mandatory reporting of all damages for regulated gas utilities

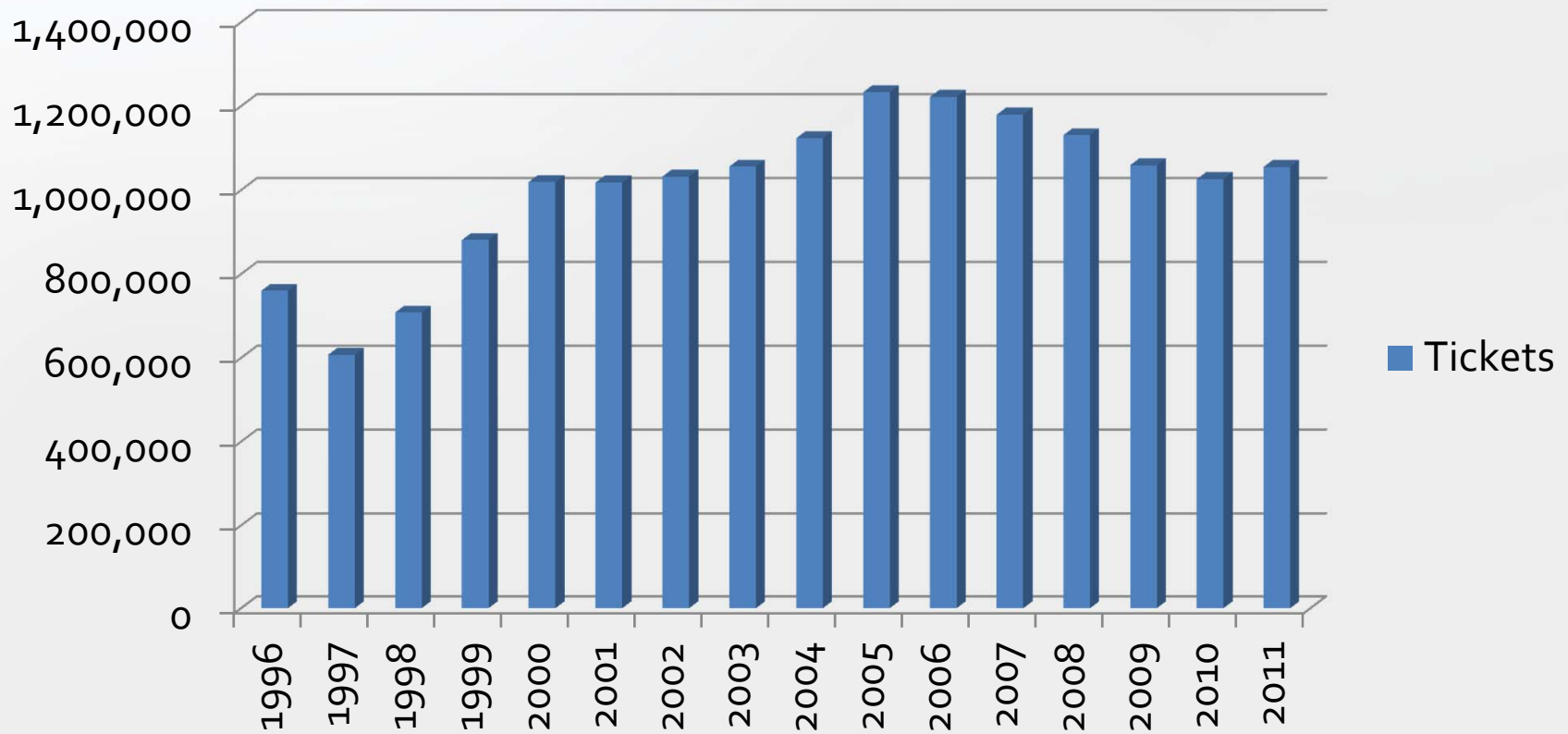
"Probable Violations" of the Underground Utility Damage Prevention Act Jan 2010 – June 2011

18 mo. Damage Cause Breakdown



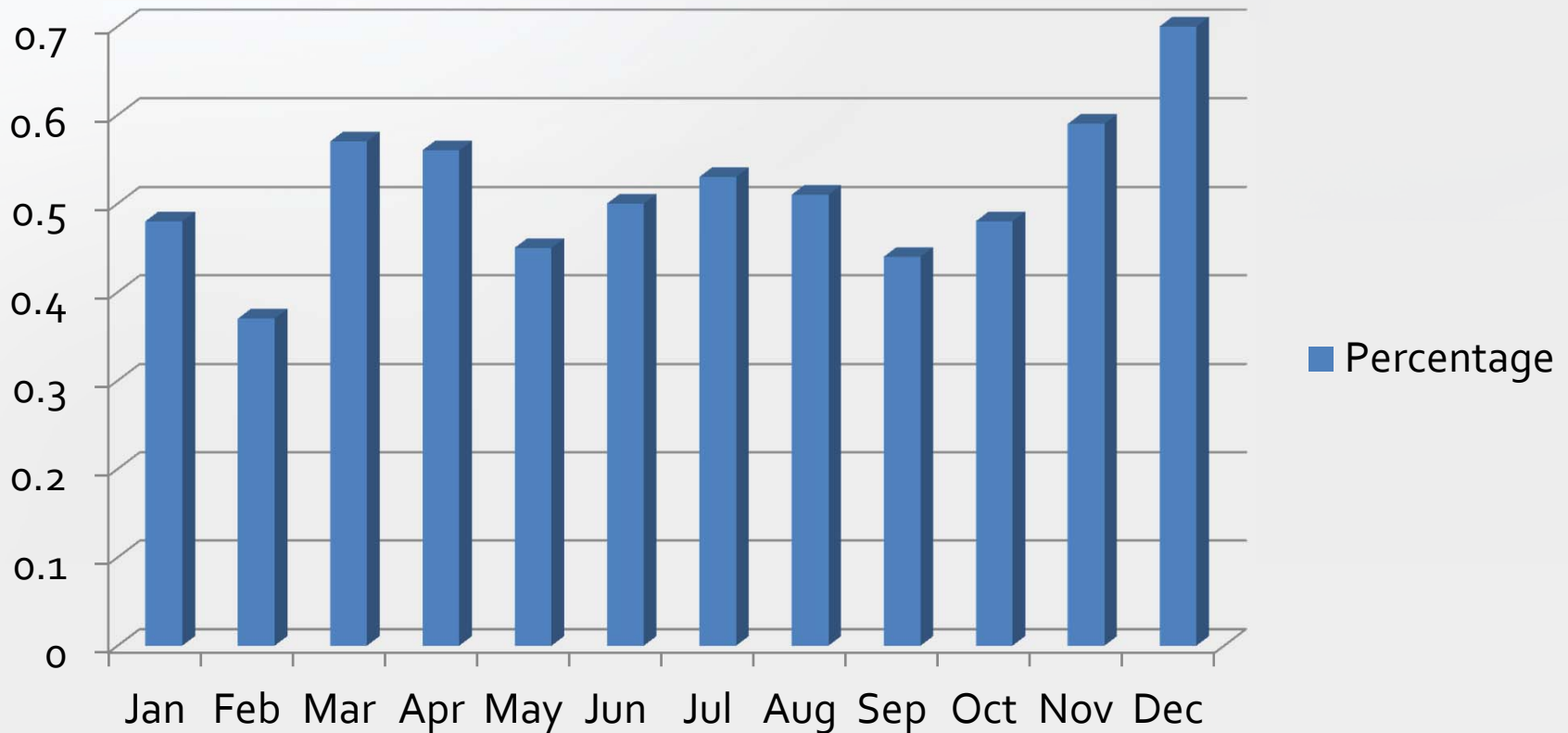
Ticket Requests 1996-2011

Tickets

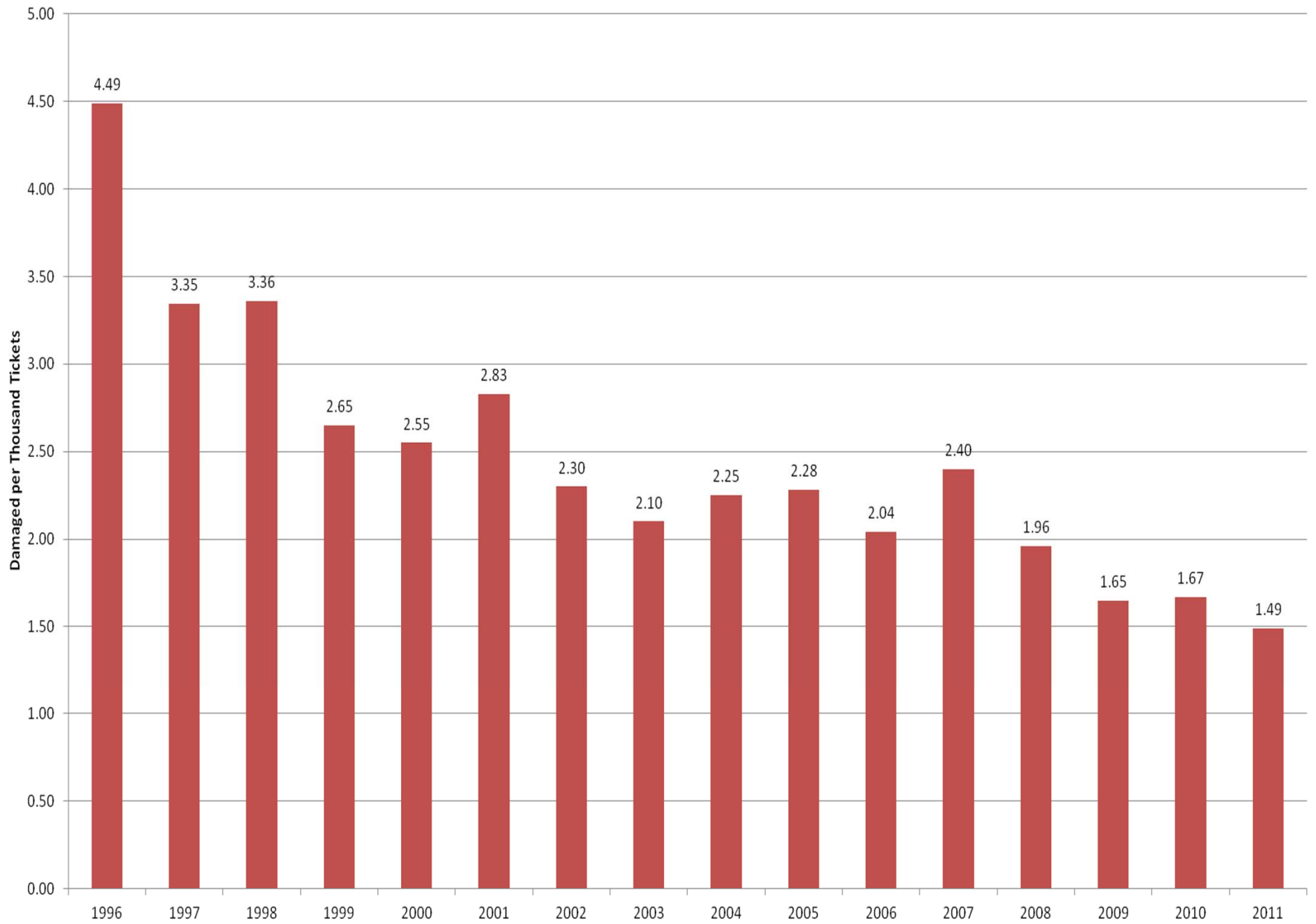


2011 Statewide Total No-show Percentage

Percentage



Gas Damages per 1,000 Gas Tickets



CGA Advocacy Committee

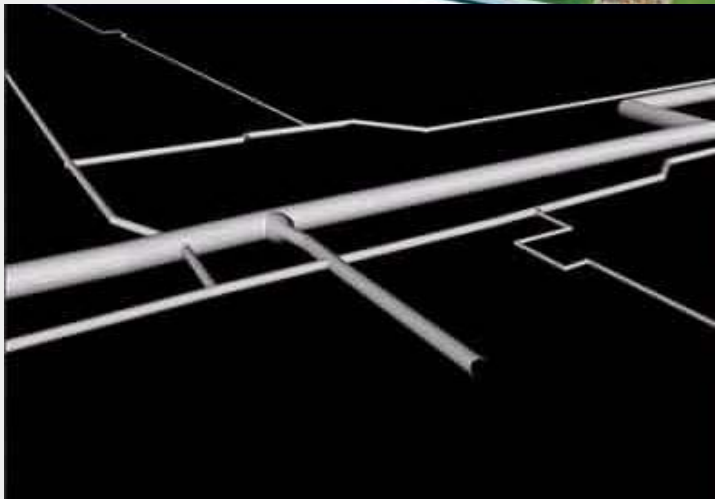
- CGA to work with PHMSA in developing key CGA Best Practices
- Assist individual state stakeholders with the understanding of these Best Practices

One Call Technologies



SHRP (Strategic Highway Research Program)

3-D Modeling



E-911 Alert Server



Main Menu



Server A

Wednesday, June 11, 2008

E911 Alert Server

Enter
Notification

Log Out



QuickMap

Lookup

State County

Place

Address

Street

Cross 1

Cross 2

- 1-Find
- 2-Search
- 3-Intersection
- 4-Grids
- 5-Place
- 6-Lat/Long
- 9-Ortho
- X-Flags

Streets

Transparency

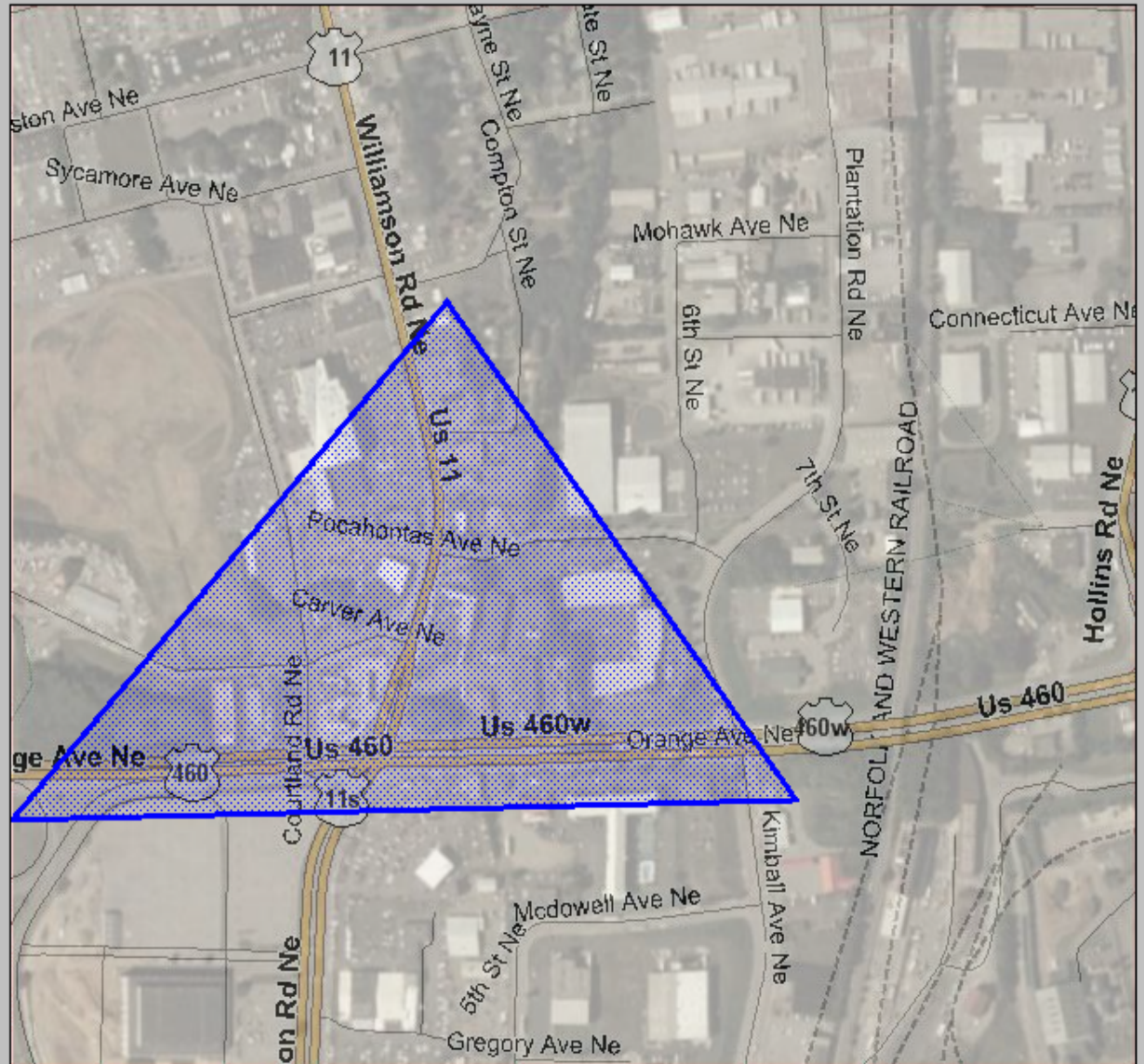
Colors

Red

Green

Blue

Gamma



Mov	Grids	Bulls	Near	Place	Point	+	Poly	Line	Seg	Buff	50	Clear	1	2	3	4	5	Z	A	G
St	C1	C2	Streets	Ints	LL	Fade	Pdrw	Ldrw	Dist	F	+	-	Save	Save All	Cancel					

Area= 0.07 sq mi 2,003,737 sq ft (3 pts)

Inquire Normal

Ticket **E-911**
 Taken Oper TEST06 Chan 007

Company # 540-989-4757 Caller MARCY HUTCHINSON
 Direct Line 540-989-4757 Ext
 Email mhutchinson@VUPS.ORG Fax
 Company VUPS E911 TESTING
 Address 1829 BLUE HILLS CIR NE
 Zip 24012 State VA City ROANOKE

State VA County/City ROANOKE CITY Place
 Subdivision Lot #
 Address Street ORANGE AVE
 Cross Street 1 WILLIAMSON RD
 Cross Street 2
 Instructions Lat Long

FIRE AT THE INTERSECTION OF ORANGE AVE. AND WILLIAMSON RD.
 UNSURE OF UTILITIES INVOLVED

Code	Description	Type	A/R
AEP111	AEP-ROANOKE	R	
CMC069	COMCAST	O	
CXRO68	COX COMM. - PROMARK	O	
ROA853	CITY OF ROANOKE SIGNAL	O	
ROGC62	ROANOKE GAS	Y	
TLC481	TELCOVE OF VIRGINIA, LLC	O	
VZN163	VERIZON-ROANOKE AREA	O	
WW853	WESTERN VIRGINIA WATER	BG	

Get Map Get Mbrs Abort SUBMIT

Notifications to Specific Area

- Submit notification
 - Notifications delivered to utility operators who have underground utilities in the specified area.
- Deliveries
 - E-mail
 - Text Message
 - Voice Delivery
 - Combination of all

E-911 Center Status Monitor

Newtin - B (Roanoke, VA)

E911 Monitor

Exit

Refresh

Refreshed at 12/01/08 13:19:00 Latest response only.

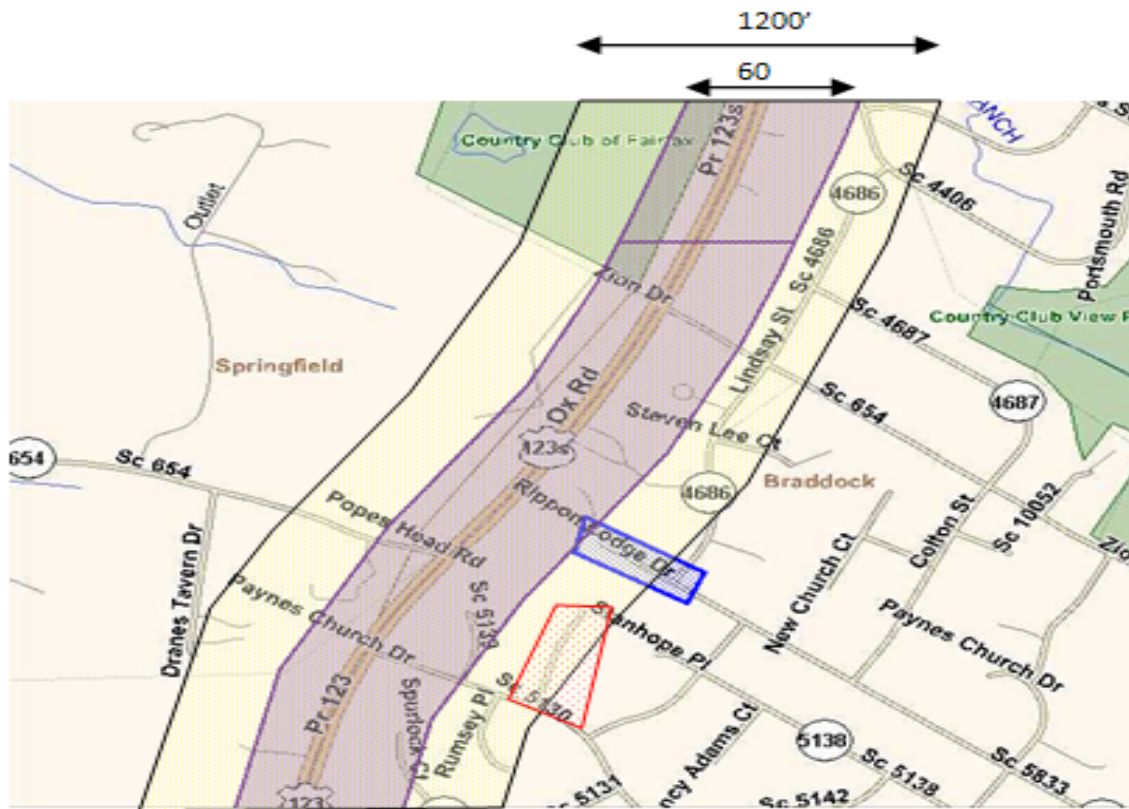
B833600255-00B	12/01/08 08:29:48		
AEP111	APPALACHIAN POWER		
CXRO68	COX COMMUNICATIONS	12/01/08 08:46:58	9888 E911 -- No need to respond to this incident
	E91:1	bob.renaud@cox.com	
	E91:2	joel.lawless@cox.com	
	E91:3	edward.acams@cox.com	
ROGC62	ROANOKE GAS COMPANY	12/01/08 08:40:02	9888 E911 -- No need to respond to this incident
	E91:2	E911@Roanokegas.com	
VZN163	VERIZON	12/01/08 08:32:32	9930 E911 -- ETA to site is 30 minutes
	E91:1	8046442714	
WVW853	WESTERN VIRGINIA WATER AUTHORITY	12/01/08 08:39:16	9888 E911 -- No need to respond to this incident
	E91:1	5403802687	
	E91:1A	5403804659	

Exit

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Encroachment Notification System

Encroachment Notification

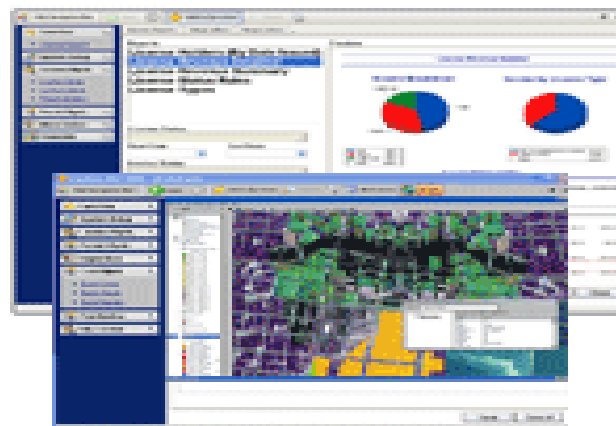
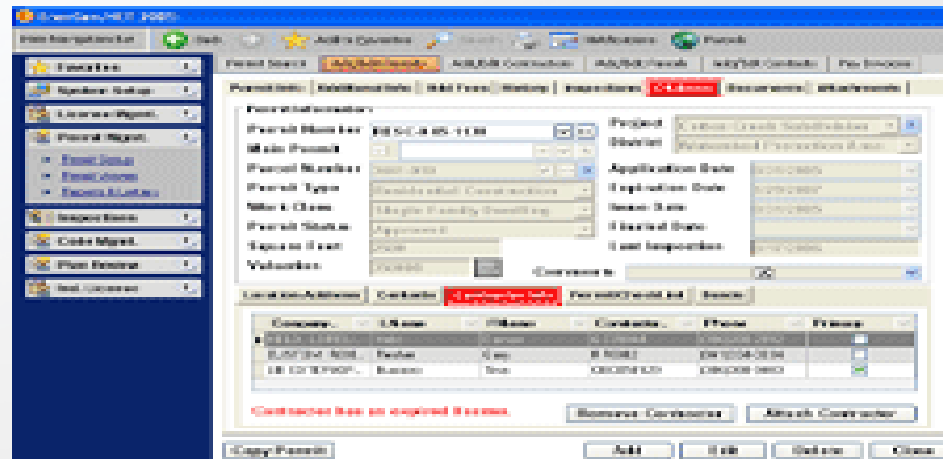


- Purple = Members Normal Notification Area
- Blue = Excavation Area
- Yellow = Encroachment Notification Area
- Red = Excavation Site within the Encroachment Notification Area,

Building Permit Notification System



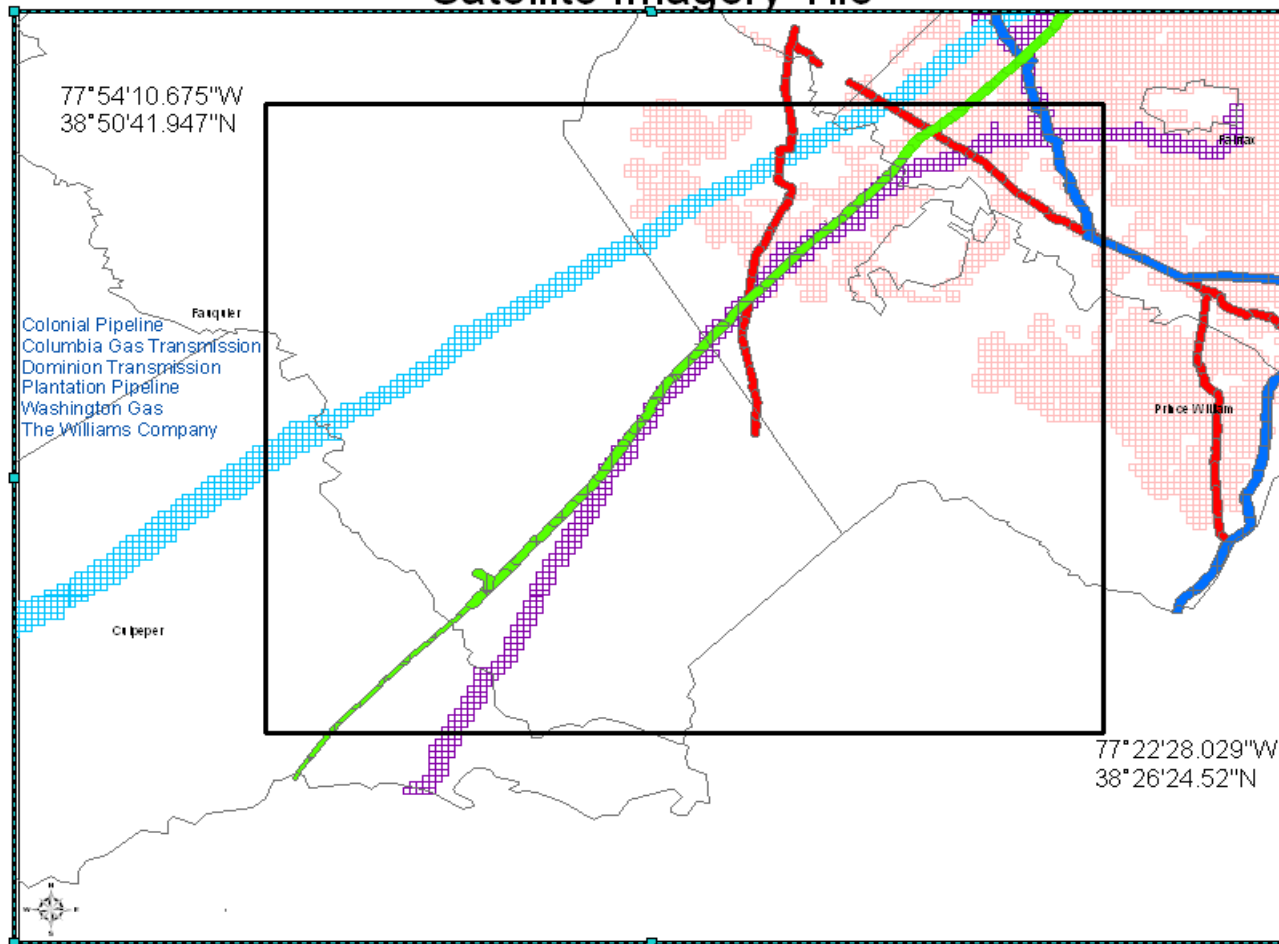
Capture Permit Data



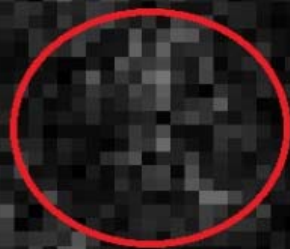
Satellite Imagery

VUPS Pilot Test Area

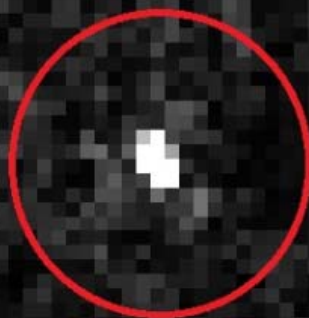
Satellite Imagery Tile



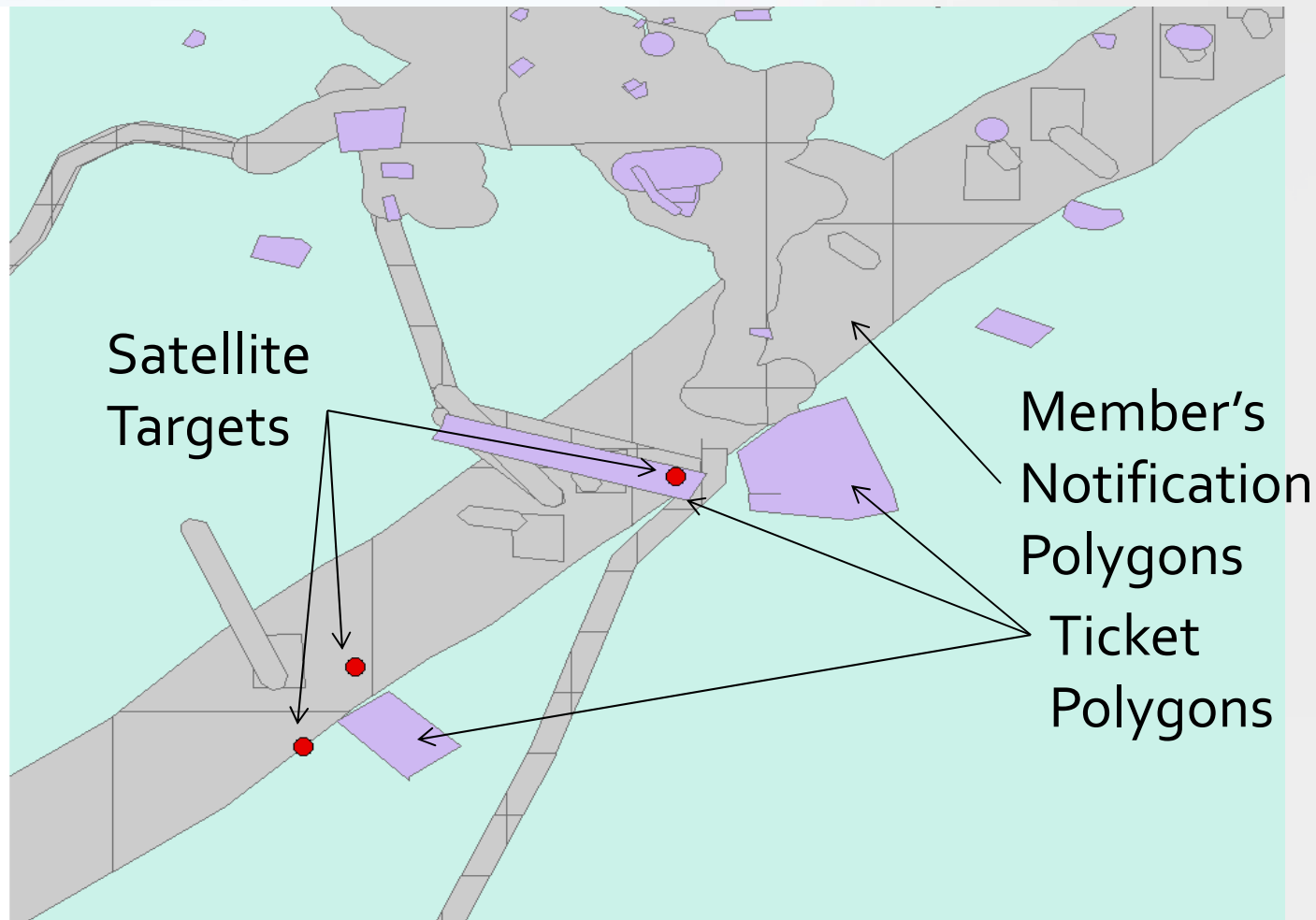
Area Prior To Identifiable Target



Target Identified



Analysis and Notification



EWOS (Excavator Work Order System)



EWOS –Create Work Order

Excavator Work Order System

Dashboard | **Create Work Order** | Scheduling | Manage Crews | Manage Projects | Manage Contractors | Positive Response | Audits

Project File Primary Contractor

Crew Work Order # Sub-Contractor

Invoice # Start Work Date Finish Date

Company # Caller Type

Direct Line Company

City Address

Work Type State County/City

Done For

Street Boring Blasting White Paint

Excavation Area Latitude Longitude

Work Order Notes

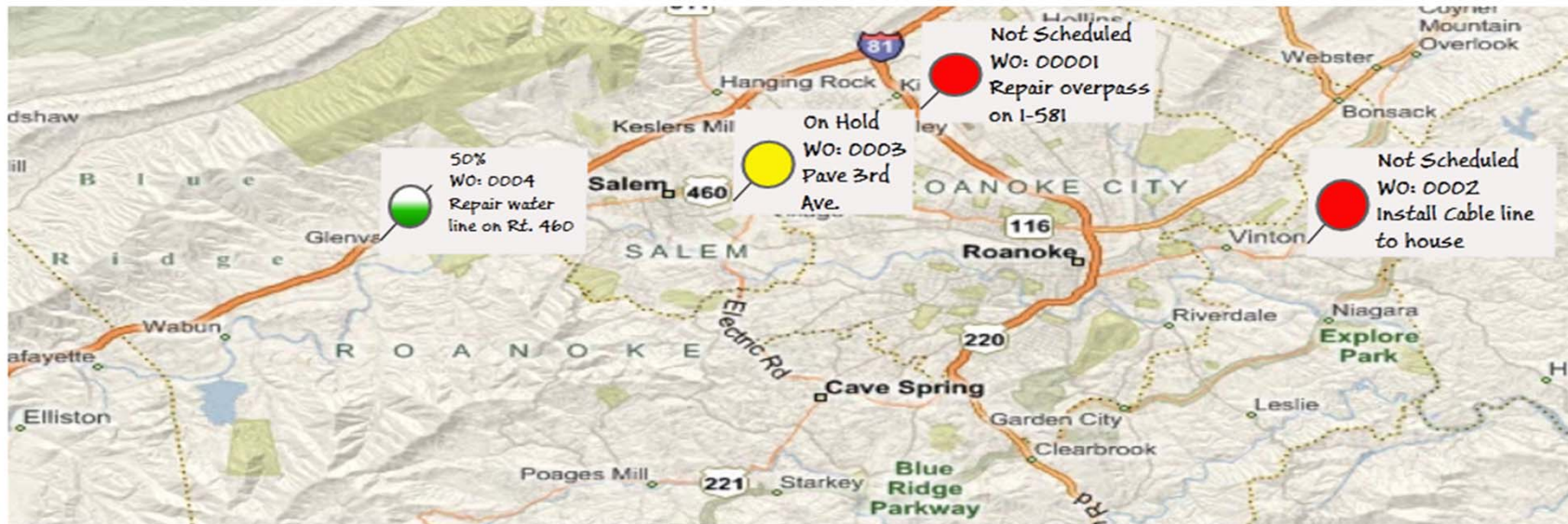
EWOS – Scheduling (Mapping)

Main Page

Dashboard Create Work Order Scheduling Manage Crews Manage Projects Positive Response Manage Contractors Audits

Projects Schedule Status Crew

Mapping Data Calendar



EWOS – Scheduling (Calendar)

Main Page

Dashboard Create Work Order Scheduling Manage Crews Manage Projects Positive Response Manage Contractors Audits

Projects Schedule Status Crew

Mapping Data Calendar

April, 2011						
Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

W/O #	Address	Done For	Work Type
3	1435 E Main St	Tim Smith	Construction - Home

LOMS (Look Over My Shoulder)

LOMS

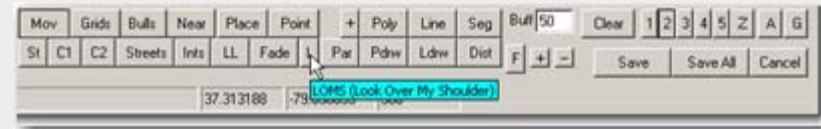
Newtin - A (VUPS Test Server)

LOMS

Code

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Powered by 

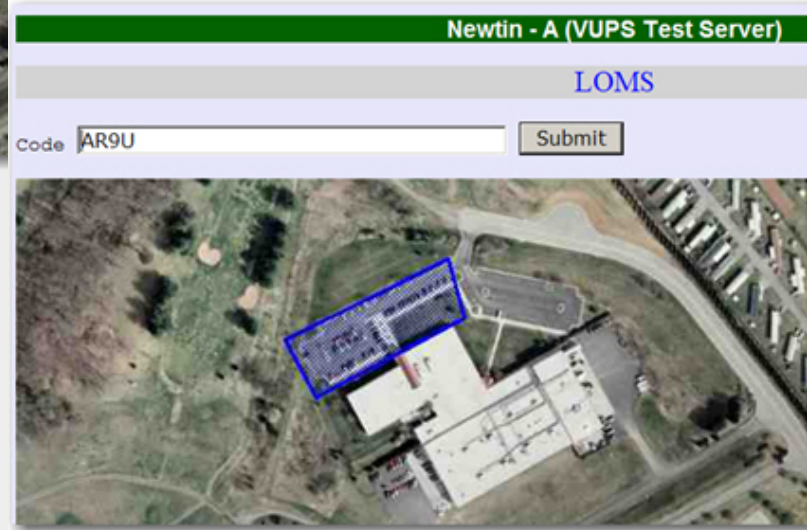
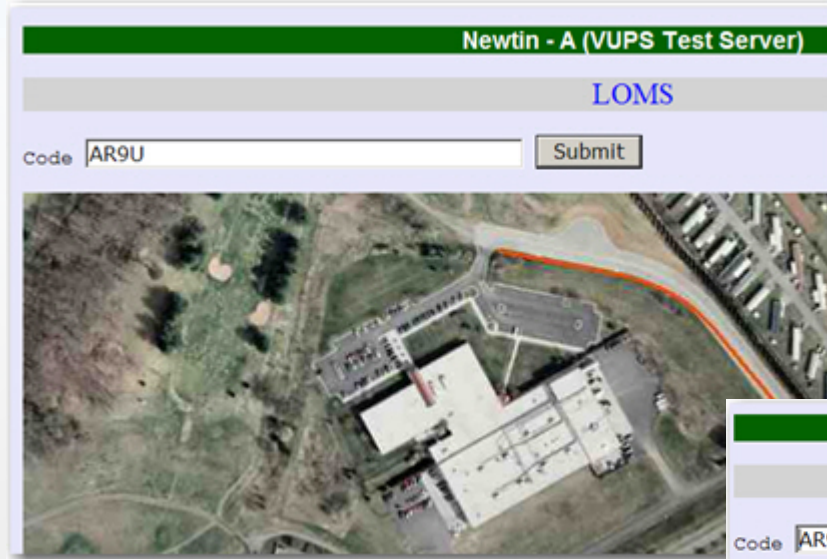


TicketEntry

Image saved at <http://va811.com>

Select LOMS and enter code: AR9U

LOMS



LETS (Location Enhanced Ticket Search)

LETS

Location Enhanced Ticket Search

Advertisement:



GPS Search

Longitude:

Latitude:

Buffer(ft):

Ticket Number:

Ticket Search



LETS

GPS Search

Longitude:

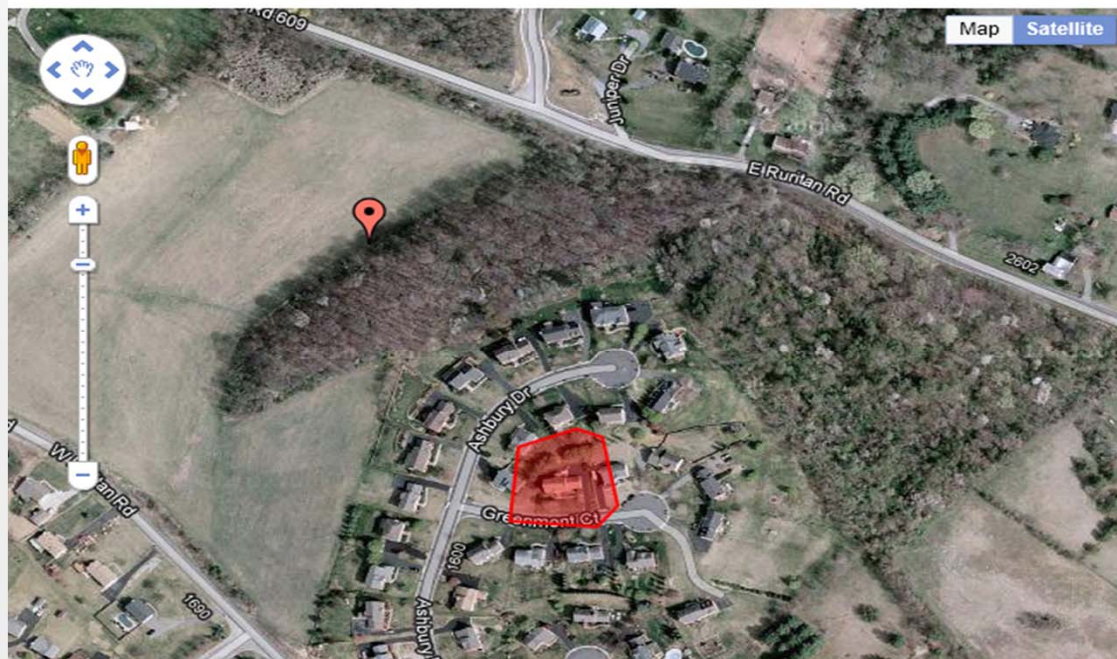
Latitude:

Buffer(ft):

Enter Ticket Number:

Ticket Search

Ticket #	Rev	Type	Completed	Address	Work Type
A126301960	00A	NEW	9/20/2011 3:20:41 PM	0 GOLDEN IVY DR DR	SIGN - INSTALL
B126902122	00B	NEW	9/26/2011 6:35:32 PM	1714 ASHBURY CT CT	CABLE TV SERVICE DROP-INSTALL
A127300112	00A	NEW	9/30/2011 7:41:38 AM	1804 GREENMONT CT CT	POOL - ABOVE GROUND INSTALLATION



LETS

Ticket Number: A127300112 **Old Ticket #:** A127300112

Completed: 9/30/2011 7:41:38 AM

City/Co: ROANOKE **Place:**

Address: 1804 GREENMONT CT

Cross Street 1:

Work Type: POOL - ABOVE GROUND INSTALLATION

Location: ENTIRE REAR OF THE PROPERTY.

Instructions:

Whitelined: N **Blasting:** N **Boring:** N

Company: LARRY COPE

Contact Name:

UCAMS (Utility Coordinating Awareness System)

Conceptual Design

Company: VDOT
Est. Work Start: 9-15-11
Est. Completion: 9-25-11
Contact Email: steve@vdot.va
Contact Phone: 540-555-5555
Additional Information:
Paving Both Lanes of Rt 460

Company: Roanoke Gas
Est. Work Start: 9-15-11
Est. Completion: 9-20-11
Contact Email: Jeff@rogas.com
Contact Phone: 540-555-5555
Additional Information:
Installing low pressure Gas Line

Company: Roanoke City
Est. Work Start: 9-05-11
Est. Completion: 9-20-11
Contact Email: Tim@roanoke.gov
Contact Phone: 540-555-5555
Additional Information:
Paving Blue Hills Dr. segment including intersection



Coordination Alert

VDOT will be notified of the planned work of Roanoke Gas

Management

- “My Job” area
 - Only lists the planned work of user to allow quick review
 - Work mapping will highlight on selection



- Coordination area
 - Lists which planned work mappings have coordinating potential

Questions?

Contact Information

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 - www.va811.com
 - Be sure to check us out on Facebook and Twitter!