

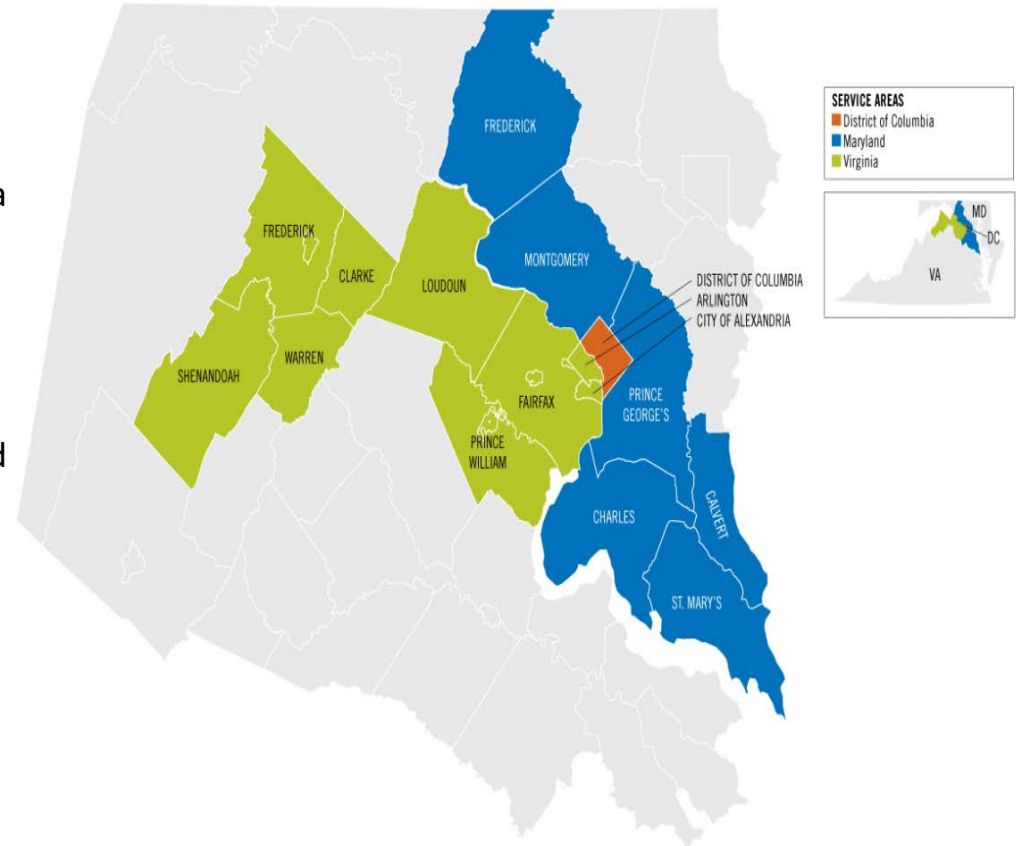
# Reducing Methane Release Through Effective Damage Prevention Programs

Hillery Kelly

OCTOBER 24, 2017

# WG Overview

- Washington Gas was founded in 1848
- Franchise area covers 6,213 square miles
- Distribution system in District of Columbia  
Maryland, and Virginia
- Over 1.1 million customers
- 1,000,000+ services
  - 93% residential and 7% commercial and industrial customers
- Over 14,500 miles of main  
and 12,500 miles of service

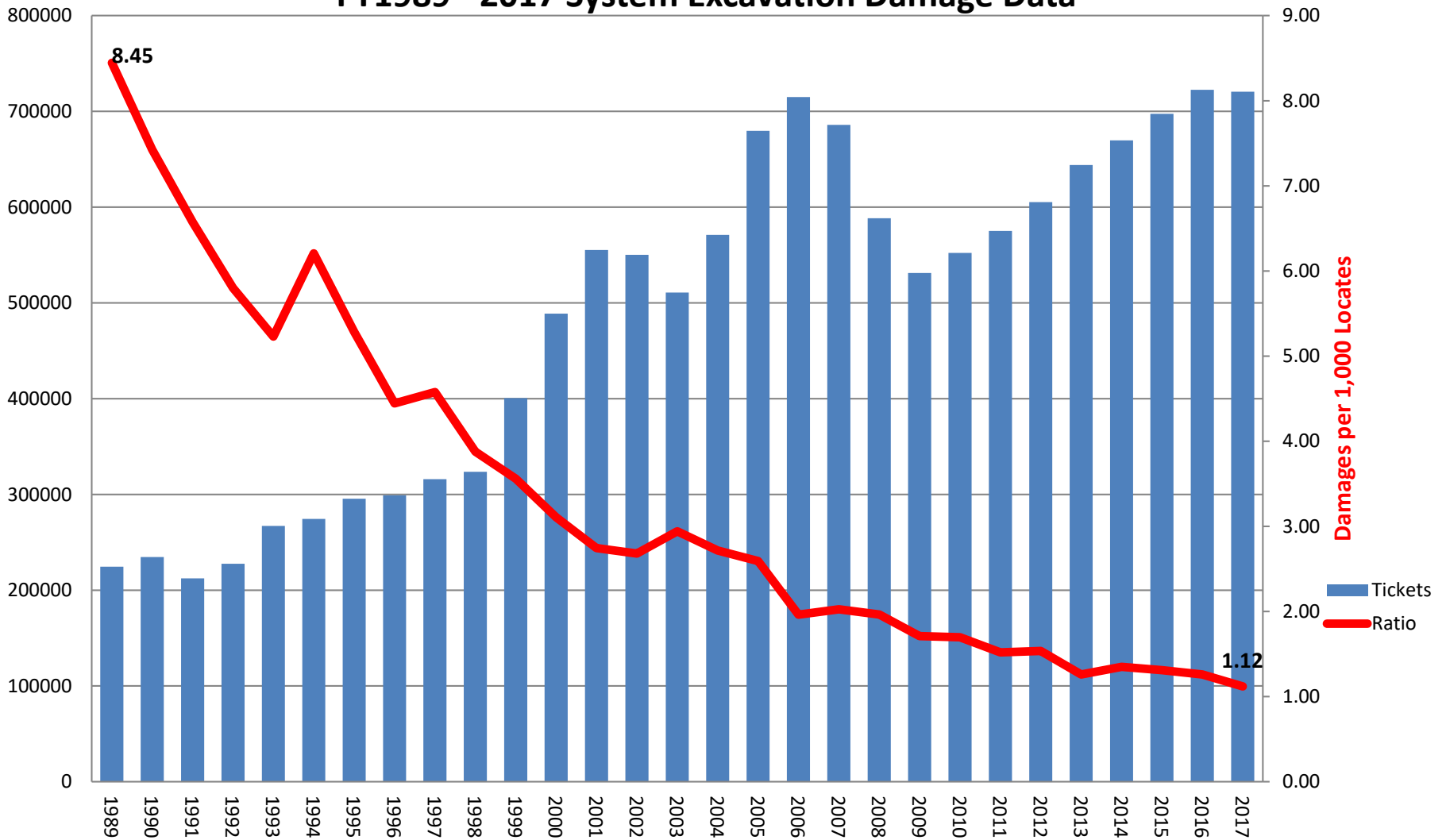


# Most Recently...

				3 Year
	FY14	FY15	FY16	TOTALS
<b>TOTAL DAMAGES</b>	<b>901</b>	<b>917</b>	<b>909</b>	<b>2727</b>
<b>LOCATE REQUESTS</b>	<b>669748</b>	<b>697418</b>	<b>722494</b>	<b>2089660</b>
<b>DAMAGES PER 1000 LOCATES</b>	<b>1.35</b>	<b>1.31</b>	<b>1.26</b>	<b>1.30</b>

# We Have Come a Long Way

## FY1989 - 2017 System Excavation Damage Data



# How did we accomplish this?

# Five Key Elements of Damage Prevention



## Executive buy-in

- Weekly operations call
- Scorecard presence
- Identifying the total cost of damage to WG
- Integral component of WG safety program

## Long term relationship with locator (32 years)

- Supportive of career development program, employee retention, long term investments
- Locator audits 100% of locates against WG GIS looking for inconsistencies or omissions

## Field presence

- Excavator tailgate training (FYTD14: 1,400)
- Outreach stops (FYTD14: 3,860)
- Standby field education (FYTD14: 4,195)

## Collaborative stakeholder relationships

- Rewrote MD law and rewriting DC law to comply with PHMSA 9 Key Elements of DP program
- Collaborative development of DP programs
- WG Homeowner Ambassador Program

## Leveraging technology

- Utilize RFID for all new installations (plastic pipe)
- GPS enabled locating documentation; layer on our GIS with ortho photography
- Development of GPS enabled paint wand

# Damage Prevention PARTNERING TOGETHER WITH EXCAVATORS

- To prevent loss of life, injuries, damage to property and the environment by damage to underground utility lines.
- To protect from damage thousands of miles of underground utility lines that provide essential services to DC & MD citizens and businesses.



# EPR

## Enhanced Positive Response



- Damage prevention is an ongoing journey
- Requires ongoing commitment, focus and accountability
- The next step in the evolution of damage prevention is EPR
- providing enhanced communication between ALL stakeholders



# EPR

## Enhanced Positive Response



Washington Gas is sharing previously confidential information to help excavators safely excavate around our facilities.

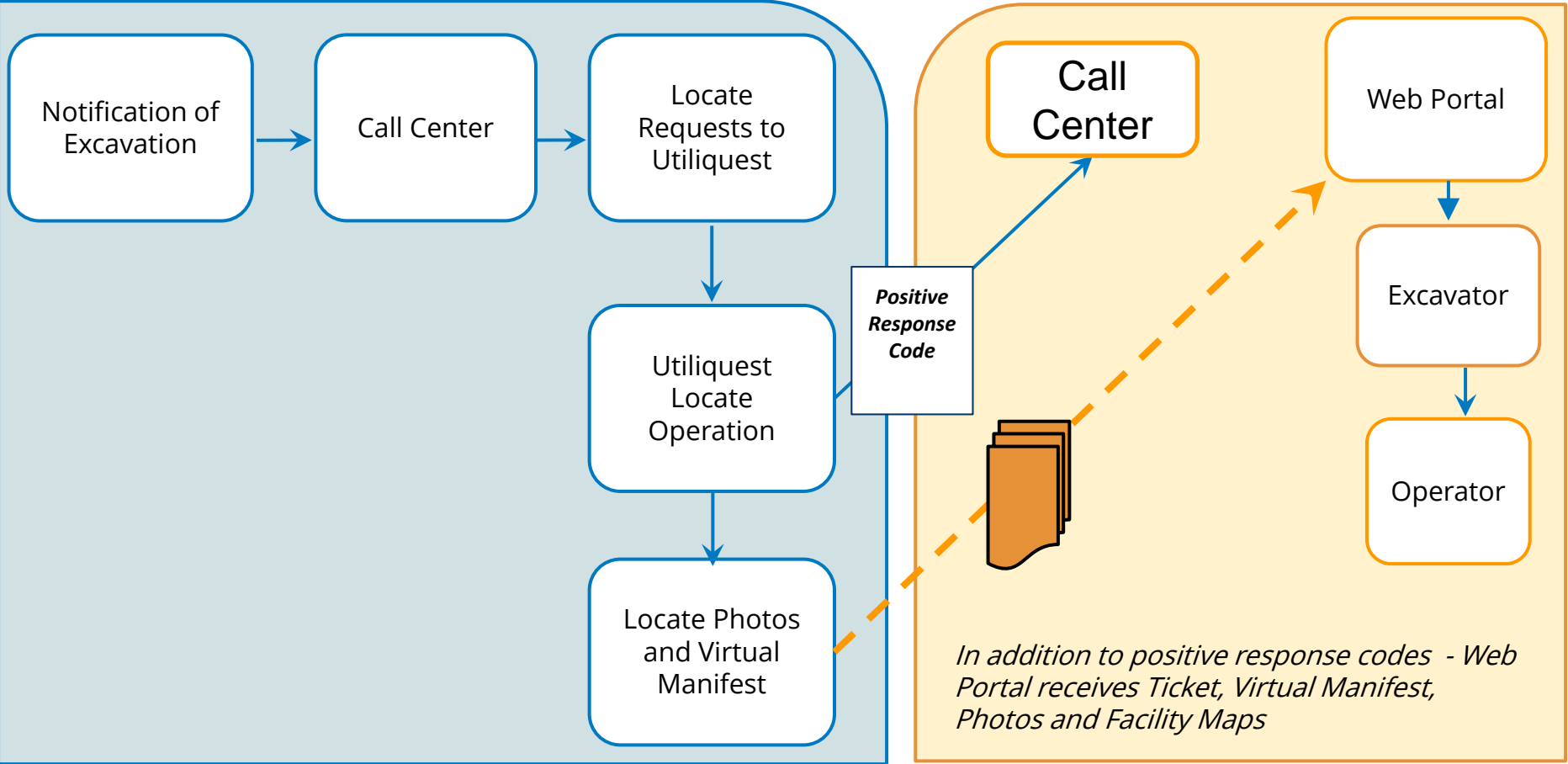
The EPR is designed to reduce damages and provide a safer, more efficient work environment for us all.

Washington Gas believes this new process will soon become the industry standard.

# EPR Information Flow

## Current Process Today

## Enhanced Positive Response



*In addition to positive response codes - Web Portal receives Ticket, Virtual Manifest, Photos and Facility Maps*

# This Is What We Keep In case of Damage



- Facility Maps
- Virtual Manifest
- Photographs
- Ticket Data

**14110494** Received date: Mar 4, 2014, 7:06 pm  
Due date: Mar 6, 2014, 11:00 pm

VIEWER OF WORKS TO KNOWLEDGE

WORKER	DATE	TIME	OPERATION
Wagner	03/04/14	07:18 AM	Op. work
Wagner	03/04/14	07:24 AM	Op. work
Wagner	03/04/14	11:53 AM	Op. work
Wagner	03/20/14	11:53 AM	Op. work

Place: DRIVE WAGON VILLAGE  
Address: E Street EAST BEND STREET  
PROJECT: LEASING (LINE) STREET: COMMERCIAL PHOTOS

Type of Work: ELECTRICAL GAS MAIN (IS) SERVICE SERVICES  
Notes of Work: LOCATE THE UTILITIES PRESENT. THE NOTING SHOULD BE IN FIRST PART THE SUBJECTIVE DATA TO BEING THE NOTING AND SERVICE FROM THE NOTES TO THE METER.

NOTE ALL UTILITIES WITH PLUMB AND ENDS. MARK AND NUMBER HOLES AND MATERIALS.  
FOLLOWING MARK END. IF THE WORK ANY QUESTIONS ABOUT THE WORK COMPANY.  
MANAGER NUMBER # 441-477-9243 OR BRUCE BEEM # 571-221-2171.  
CLICK HERE TO SEE THE TICKET HISTORY FOR SERVICE:  
http://mbl.ile.com/...002124P-PC2-CME  
CLICK HERE TO SEE THE TICKET HISTORY FOR TRNG:  
http://mbl.ile.com/...004202124P-PC2-CME  
CLICK HERE TO SEE THE TICKET HISTORY FOR TRNG:  
http://mbl.ile.com/...004202124P-PC2-CME  
CLICK HERE TO SEE THE TICKET HISTORY FOR TRNG:  
http://mbl.ile.com/...004202124P-PC2-CME  
CLICK HERE TO SEE THE TICKET HISTORY FOR TRNG:  
http://mbl.ile.com/...004202124P-PC2-CME

Summary:  
Company: WASHINGTON GAS & ELECTRIC  
Contract Name: JEFF BECK Pkt: (201)229-8101  
Contract Number: (201)229-8102  
Contract Address: 6130 OGDONIA ENDE ROAD  
Contract Address: HENDRYVILLE, MO 64789  
Email Address: wagner@wgl.com  
Alt. Contact: BRUCE BEEM Alt. Phone: (571)221-2171  
Work Order Number: 14110494  
Status: RT County: MORGANTOWN  
MFO:

Traveling: Hqd Show: Hqd: Solid Color:  
Computer Connected: Hqd Show: Hqd: Solid Color:

Sat: Lon: Sqr: Sqr:  
EPR: Model No: Sat: 38.973333 Lon: -77.076667 Alt: Sat: 38.886667 Lon: -77.073333  
Map/Profile: W  
GPS/PRO: MABLE  
User ID: F2200C User No: 6574 Job No:  
User: KNS  
Job: 1411  
User: MCHS  
Job: 1371

EPR technology is licensed by UtiliQuest from CertusView Solutions. [www.certusview.com](http://www.certusview.com)

# How the EPR Process Works

# You will receive an email after you request a locate ticket:

- [Noreply <eprmailer@utilquest.com>](mailto:eprmailer@utilquest.com)
- Subject line enhanced positive response ticket # address

COMPOSE ENHANCED POSITIVE RESPONSE - A522600153 8824 CALBERA CT WG EPR

- Inbox (294)
- Starred
- Important
- Sent Mail
- Drafts (2)
- Spam (435)
- Circles
- Columbia Gas (2)
- Search people...
- Bellin, Tobi
- Dennis Tarosky
- Michelle Maurer
- Richard Krauss
- Jeff Farr

NO\_REPLY <EprMailer@utilquest.com> 10:50 AM (11 minutes ago)

**\*\*\*\*\*DO NOT REPLY TO THE EMAIL\*\*\*\*\***

<b>Ticket:</b>	A522600153	<b>Type:</b>	NORM NEW GRID LREQ
<b>Due date:</b>	8/19/2015 7:00:00 AM		
<b>Street Addr:</b>	8824 CALBERA CT	<b>X-Street:</b>	ESTATE MANOR DR
<b>Place:</b>		<b>Lot No:</b>	94-95
<b>State:</b>	VA	<b>County:</b>	PRINCE WILLIAM
<b>Type of work:</b>	FENCE - INSTALL, REPAIR OR REPLACE		
<b>Company:</b>	YESENIA FENCE		
<b>Caller:</b>		<b>Phone:</b>	5712696741
<b>Alt Cont:</b>		<b>Phone:</b>	
<b>Fax:</b>		<b>Email:</b>	joelrosales1004@gmail.com
<b>Done for:</b>	HO/ERIC BAN/386-748-4404		

The locate request for the following utilities have been update:  
**Washington Gas (WGL904)**

Click [LINK](#) for the utility locate details. (This link expires on 9/16/2015)

Click [Survey Link](#) Please take our survey after viewing the page.  
Utilquest may update this information as necessary.

**\*\*\*\*\*DO NOT REPLY TO THE EMAIL\*\*\*\*\***  
Contact the One Call Center for Changes and/or to add additional information to this Ticket

Ticket information, facility maps, electronic locate manifests and any associated aerial images ("Materials") provided to the excavator during the "Enhanced Positive Response" pilot are for internal excavator planning and communication purposes only and are not authorized to be redistributed to any third party. The Materials are distributed and transmitted on an "as is" and "as available" basis, without warranties of any kind, either express or implied. They are not to be used to determine where excavation can occur and do not substitute for the physical markings at the excavation site. They are not to be relied upon to determine whether or where facilities exist at the excavation site. Excavators are required to comply with the Virginia, District of Columbia, and Maryland Underground Facilities Damage Prevention laws as applicable.

Click here to [Reply](#), [Reply to all](#), or [Forward](#)

Ticket Information	Ticket Image
<p><b>Ticket Number/Type:</b> 17531578 --</p> <p><b>Caller:</b> KAREN MALDONADO  <b>Company:</b> NORTHERN PIPELINE  <b>Call Date:</b> 8/15/2017 3:55:00 PM  <b>Done For:</b> WASHINGTON GAS</p> <p><b>Street Address:</b> 10105 FLEMING AVE  <b>Place:</b> BETHESDA  <b>County:</b> MONTGOMERY  <b>State:</b> MD</p> <p><b>Nature of Work:</b> INSTALLING GAS MAINS AND/OR SERVICES</p>	<p>NOTICE OF INTENT TO EXCAVATE  Ticket No: 17531578  Transmit Date: 08/15/17      Time: 04:02 PM      Op: webusr  Release Date: 08/15/17      Time: 03:55 PM      Op: webusr  Response Due By: 08/17/17      Time: 11:59 PM  Expiration Date: 08/31/17      Time: 11:59 PM</p> <p>State : MD      County: MONTGOMERY  Place : BETHESDA  Subdivision:  Address: 10105      Street: FLEMING AVE  Nearest Intersecting Street: LONE OAK DR</p> <p>Type of Work: INSTALLING GAS MAINS AND/OR SERVICES  Extent of Work: LOCATE AN 100FT RADIUS OF 10105 AND 10107 FLEMING AVE.  :  : MARK ALL UTILITIES WITH FLAGS AND PAINT.</p>

**The locate request for the following utilities ONLY have been updated by UtiliQuest**

Company	Utility	Status	Notes
Potomac Electric (PEPCOMC)	Electric	<b>Marked</b>	
Comcast Montgomery Co (TRU01)	CATV	<b>Clear</b>	
Comcast Montgomery Co (TRU02)	CATV	<b>Clear</b>	
Washington Gas Maryland (WGL06)	Gas	<b>Marked</b>	
Verizon (VMG)	Phone/Communications	<b>Marked</b>	





# VIRTUAL MANIFEST

Image Number 1  
Virtual Manifest™

e-Sketch® 3.1.2.0 Copyright © 2008-2017 CertusView Technologies™ LLC  
© 2008, Digital Globe  
For internal use only. Not for resale.

<p><b>Shapes:</b></p> <ul style="list-style-type: none"> <li><span style="color: yellow;">■</span> Gas (Yellow)</li> <li><span style="color: orange;">■</span> Phone (Orange)</li> <li><span style="border: 1px dashed white; display: inline-block; width: 15px; height: 15px; vertical-align: middle;"></span> ExcavationScope (White)</li> </ul>	<p><b>Materials:</b> Paint</p> <p><b>Actions:</b> Conditions:</p>
<p><b>Symbols:</b></p>	
<p style="text-align: center;"><b>Ticket Details</b></p> <p>Ticket #: 17531578                  Completed By: 809053                  Completed On: 8/17/2017 04:33 PM G                  PlaceStamp : 39.0205627,-77.1112708</p>	<p style="text-align: center;"><b>Signature</b></p>

Uploaded by FireCracker

**Ticket Notes**

Date: \_\_\_\_\_ Notes: \_\_\_\_\_

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# PHOTOGRAPH OF SITE

Image Number 7



Ticket Notes

[x Prev](#) [Print](#) [Close](#) [Next >](#)

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Image Number 5



Ticket Notes

[x Prev](#) [Print](#) [Close](#) [Next >](#)

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Image Number 4



Ticket Notes

[x Prev](#) [Print](#) [Close](#) [Next >](#)

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# Communication

Additional information EPR allows us to share with the excavator:

- Access issues**- Through the notes attached to the ticket we can share what address is involved and include a photograph of the issue.
- Site conditions**- Debris, weather conditions, and any ongoing excavation taking place at the time of the locate.
- Additional facilities that may not be evident in the excavator’s job folder.
- What additional equipment, materials, or resources may be needed to complete the work.

# What this means to the locator...

- We need to ensure that our documentation accurately represents the marks we've placed.
- We need to white line the area of construction on our sketch.
- We need to ensure our locate pics support our work and capture the size and type of facility marked.
- Document any access issues, or anomalies on the job site.

# What's Next FOR EPR?



- We believe that “EPR will become as important to the future of damage prevention as creating 811 was, 10 years ago”.
- We will see EPR become the standard
- Additional responsibility and accountability for the locator, operator and the excavator
- We know that use of EPR will reduce damages and provide a safe work site for the excavators the community, the First responders and our repair personnel

# Concluding Thoughts

85% Reduction in damages since 1989 due to DP Programs = 85% reduction in methane gas loss from third party damages.

Success has been attributed to:

- Executive buy-in
- Long term relationship with contract locator,
- Leveraging technology
- Field presence
- Collaborative relationships with excavators and stakeholders

Thank you!



Know what's **below.**  
**Call** before you dig.