



DTE Energy®

**DTE Gas
Damage Prevention**

**Regional UPSA Conference
November 2, 2018**



UPSA

UTILITY PUBLIC SAFETY ALLIANCE

Agenda



7:50 am	Welcome, Safety, and Introductions – Scot Runke, Manager Damage Prevention, DTE Energy and Samantha Williams, Supervisor Damage Prevention, DTE Energy
8:00 am	Executive Perspective – Mark Stiers, President and Chief Operating Officer, DTE Gas
8:30 am	DTE Public Safety Program Overview – Scot Runke, Manager Damage Prevention, DTE Energy and Samantha Williams, Supervisor Damage Prevention, DTE Energy
9:15 am	Emergency Official Perspective – Chris Bush, Assistant Division Commander, Emergency Management and Homeland Security Division, Michigan State Police
10:00 am	Break
10:15 am	Damage Prevention and Third-Party Contractor Outreach – Bruce Campbell, CEO, MISS DIG System and Paul Harding, Education Specialist/Stakeholder Liaison, MISS DIG System
11:00 am	Public Safety Regulations, Emerging Issues, and Best Practices Roundtable
11:45 am	Lunch – Sponsored by Culver Company
12:45 pm	Teacher and Student Outreach Program – Michelle Mitchell, Education Program Lead, Consumers Energy
1:30 pm	Public Safety Trends and Outreach Effectiveness – Darcy Newton, Senior Account Manager, Culver Company and Kate Leese, Managing Partner, Kinetics Consulting
2:15 pm	Break
2:30 pm	Regional Case Study: Trenton Damage – DTE Energy
3:15 pm	Participant Feedback & Closing Remarks – Scot Runke, Manager Damage Prevention, DTE Energy and Samantha Williams, Supervisor Damage Prevention, DTE Energy

Executive Perspective - Mark Stiers, President & Chief Operating Officer, DTE Gas



DTE Energy - Company overview

The importance of public safety and what's next / new initiatives

Safety culture and accomplishments at DTE

Programs that will enhance public safety

How public safety program managers can engage with their executives in public safety

- what executives are looking for in order to best champion public safety

The evolution of Damage Prevention at DTE Gas

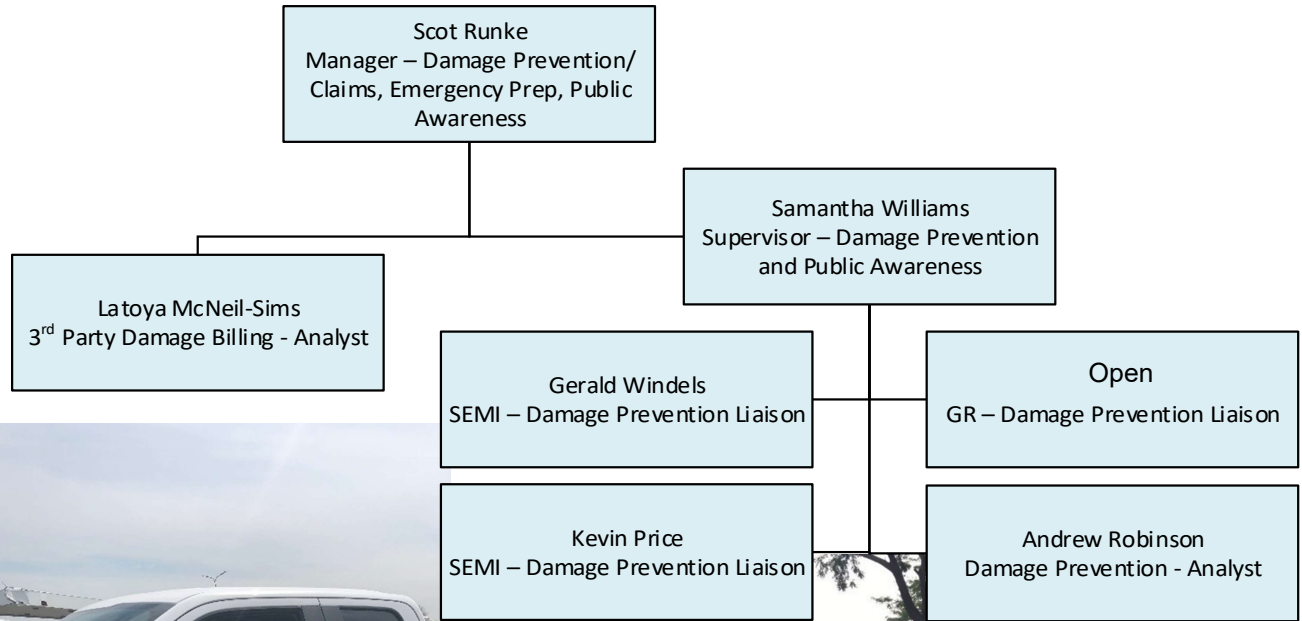


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What was our old strategy for damage prevention?



The current DTE Damage Prevention team



Our Damage Prevention team perform many different functions to serve our customers and ensure community safety



- MPSC ride-a-longs to began in October & will be continuous
- Educate contractors/municipalities:
 - Over 1,000 different interactions
 - Use of MISS DIG ticket website and PA174 requirements
 - Training on safe excavation
- Resolve concerns in the field
 - Escalate staking concerns with DTE Staking group
 - Provide mapping information on DTE Gas facilities
 - Facilitate resolution of shallow services/other concerns
 - Manage customer satisfaction between contractors and DTE
- Damage investigation
 - Timely response to requests for assistance
 - Work with crews to identify root cause of damage
- Shutdown unsafe excavation sites
- Promote and assist contractors/municipalities/DTE Electric with Gold Shovel Standard certification
- Educate DTE employees and first responders on identifying unsafe excavation sites and how to respond
- Escalate poor performing excavation companies to municipalities/MPSC
- Provide locating teams staking audit findings
- Bill contractors for repair costs of damaged gas assets
- Outreach to elementary schools to provide information (“respect the flags”) for kids to bring information home

DTE Gas Damage Prevention team was redesigned in late 2016

A field presence was piloted in October 2016; expanded in 2018 with additional expansion planned for 2019

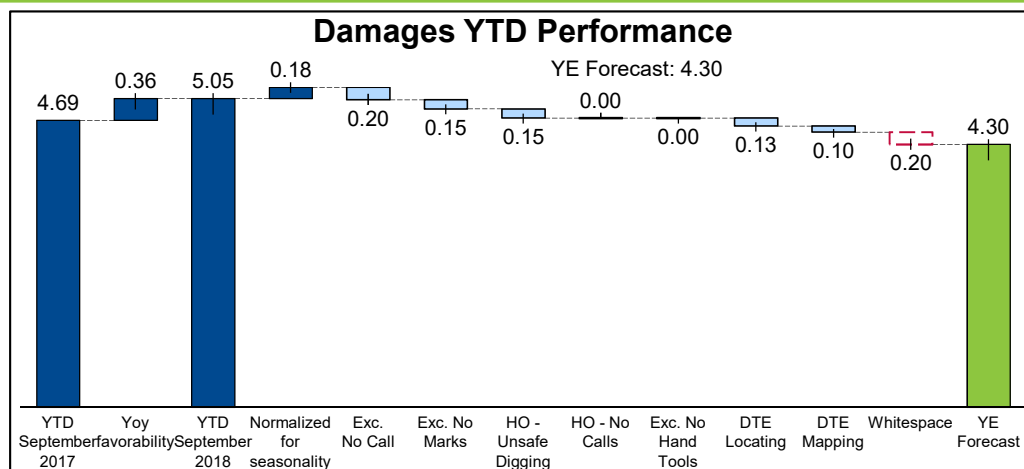
Our liaisons field approximately 20 phone calls daily from excavation companies asking for assistance

We have conducted over 4,200 site visits YTD

Our team has shuts down an average of 2 unsafe excavation sites daily (nearly 400 YTD)

President Priorities Update:

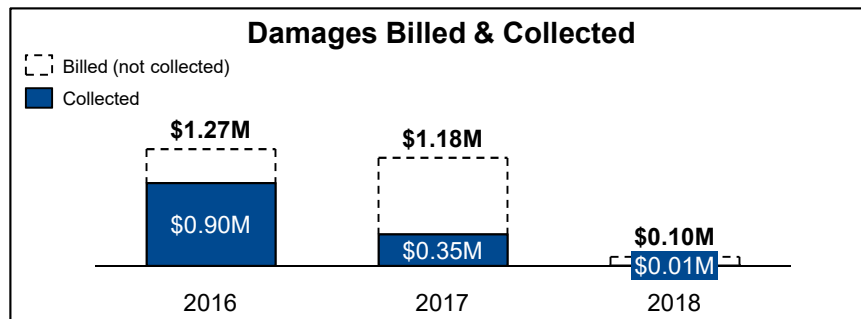
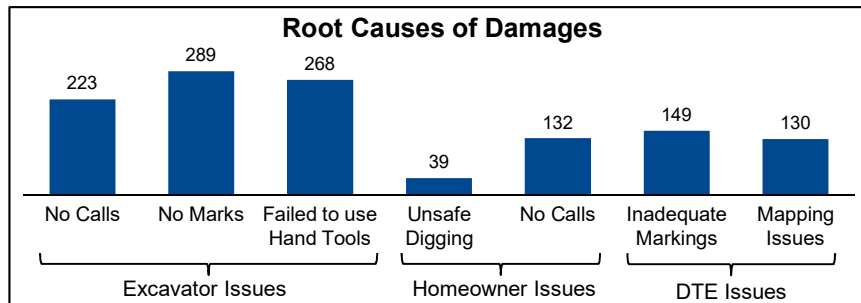
● 2nd and 3rd Party Damages – SEMI/GRMI



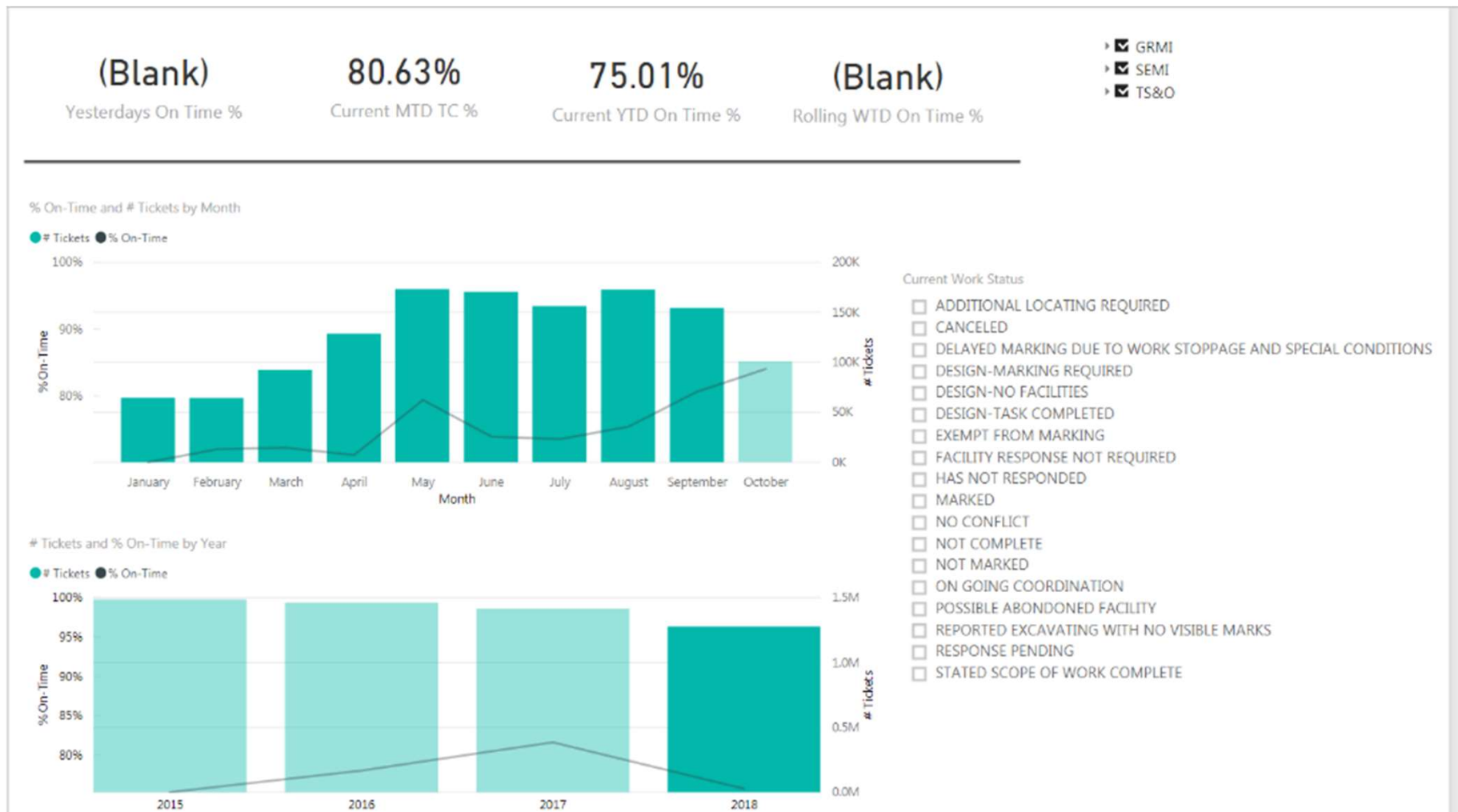
Additional Metrics and Data

Metrics	YTD Actual	YTD Target	YE Target	2017 YTD Actual
● Damages / 1,000 tickets	5.05	3.12	3.30	4.69
Total Damages	1235	704	950	1051
Total Tickets	244,489	225,694	290,000	223,916
● Staked on Time	98%	98%	98%	98%
● Total Cost of Damages (\$)	\$1655K	\$916K	\$1250K	\$1616K
Average Cost / Damage	\$1,340	\$1,300	\$1,316	\$1,538

Category	Countermeasures	YTD 2018	YE Target
● Exc. No Call	Continue efforts of frequent site visits to educate excavation companies on PA174. These efforts appear to have impacted excavator behavior as damages related to excavator no calls to MD is down by 20% from 2017	223	260
● Exc. No Marks	User acceptance testing starting late Nov for risk modeling technology to identify riskier locate requests and excavators prior to start projects; continue on-site safety presentations	289	245
● Exc. No Hand Tools	Continued enforcement when unsafe digging practices are identified by Damage Prevention team leading to shutting down active sites and leveraging the MPSC complaint process. Team has conducted >3,800 site visits YTD and have shut down nearly 300 active excavation sites	268	200
● DTE Locating	Pilot augmented reality location software to provide performance feedback to DTE Staking team, and provide better mapping information to excavation companies. Launching mid September	149	150
● DTE Mapping	Pilot software integration into existing locating devices to allow field techs to capture GPS data to map asset positions, update legacy mapping and enable GPS assisted relocates	130	145



New locating performance measurement dashboard



Optimain – Ticket risk-ranking technology

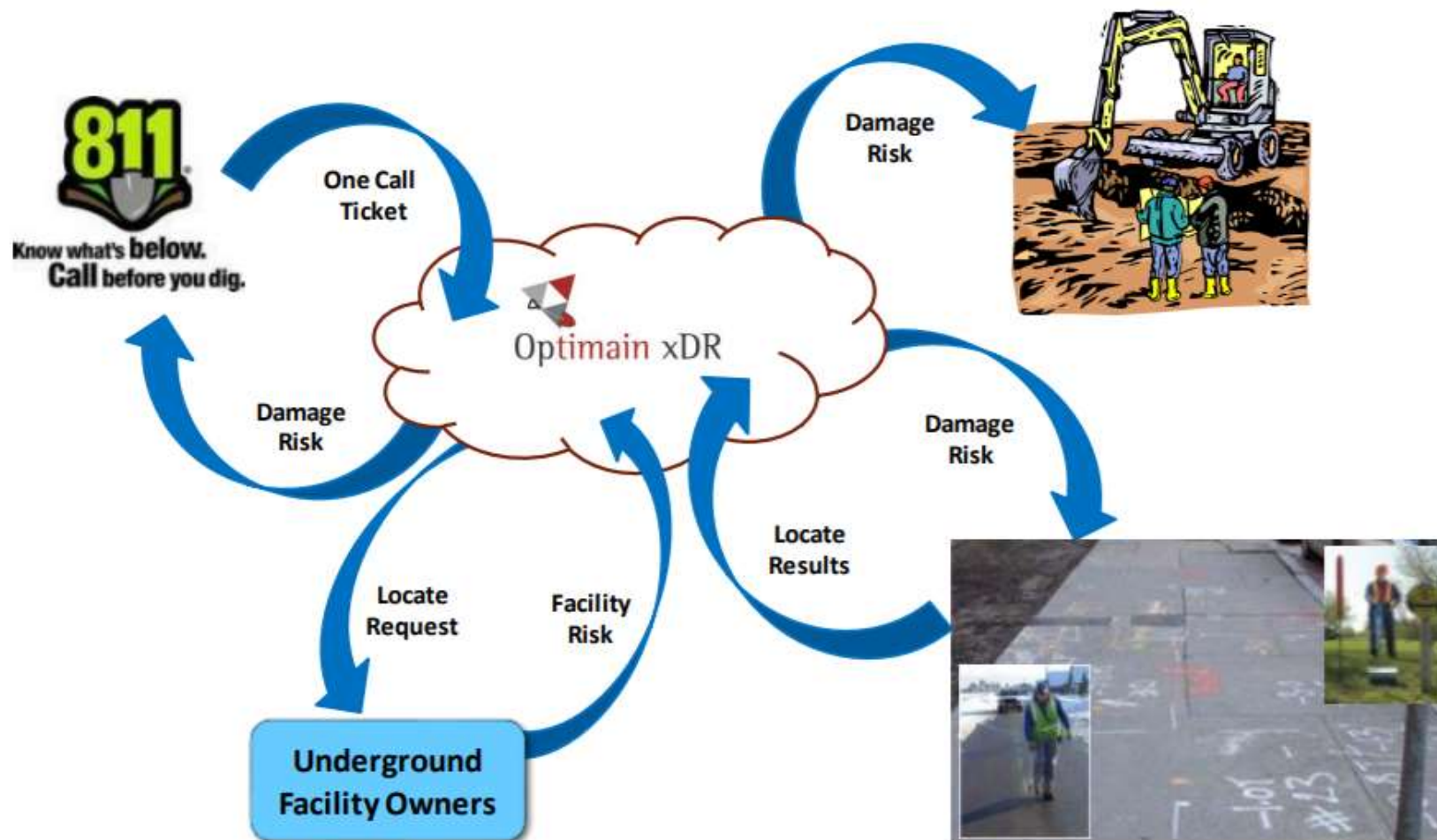
Should allow both Damage Prevention and Staking teams to identify which Miss Dig tickets are most likely to lead to a damage

Using **Predictive Analytics** to Prevent Excavation Damage

More than half of all excavation damages will occur on fewer than 10% of the locate requests sent to utilities by the nation's 811 call centers.

Optimain^{xDR} can tell you *which* 10% to focus on. Opvantek's robust cloud-based software engine provides risk-based predictive analytics on all 811 notifications sent from one call centers to underground facility owners. Our backtests and real-world results across the country show that more than 50% of damages occur on tickets ranked in the top 10% by the Optimain^{xDR} engine. This profound insight allows every stakeholder involved in the damage-prevention process to focus activities on higher-risk tickets. Leverage the power behind Optimain^{xDR} and significant damage reduction is not just possible-it's proven!

Optimain – Ticket risk-ranking data flow



Optimain – What should be the focus of our damages prevention efforts

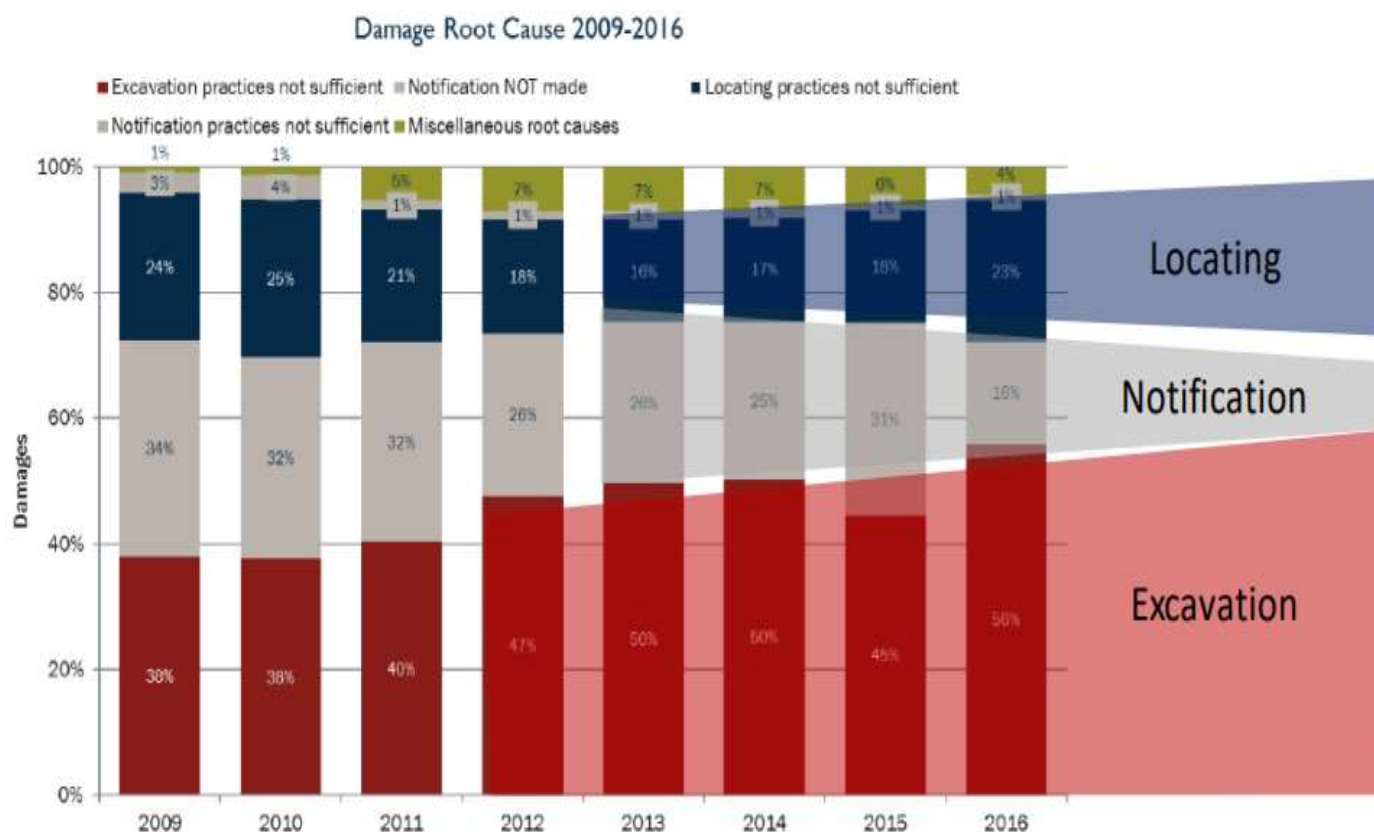
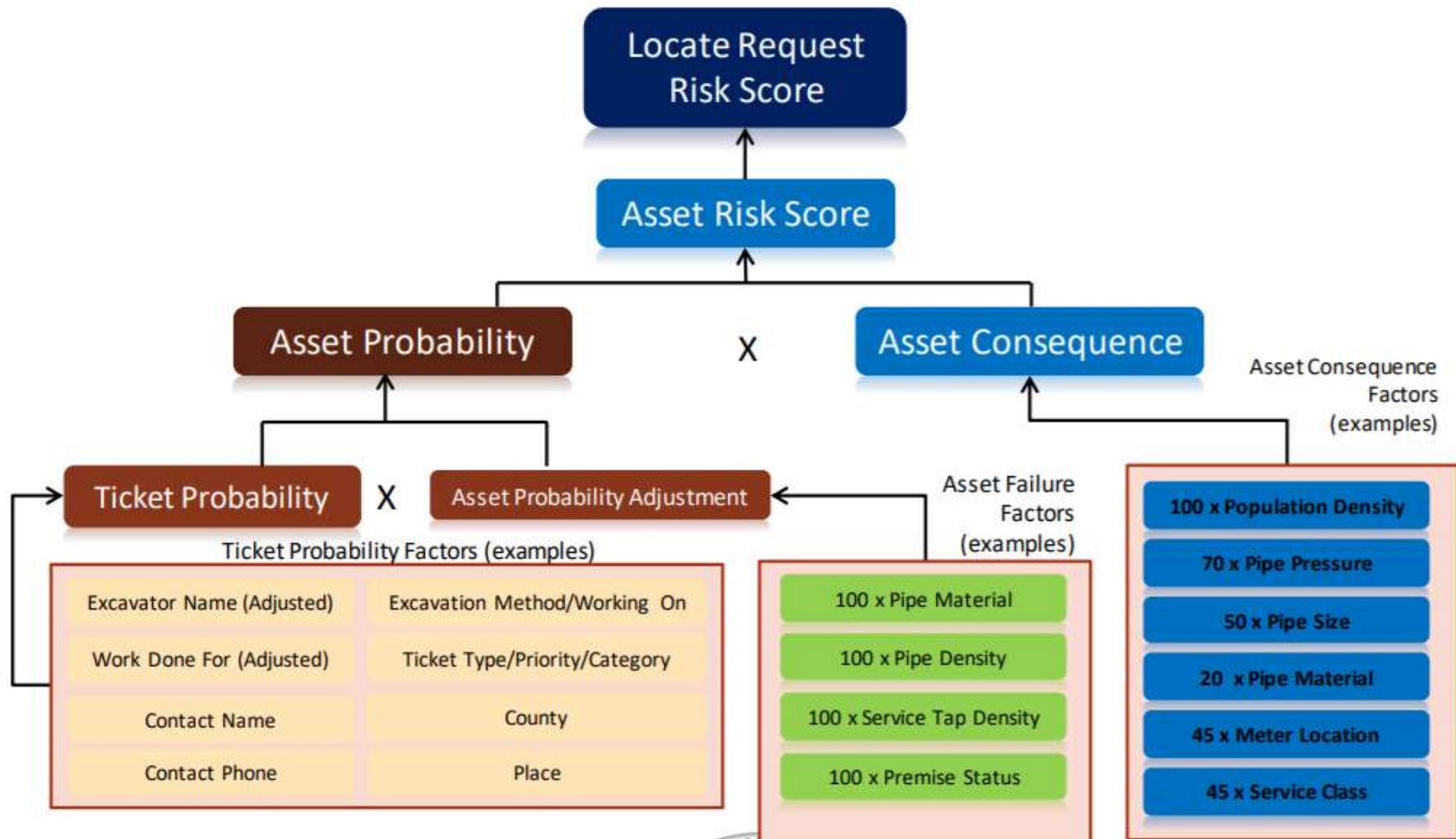


Chart © 2017, Common Ground Alliance, all rights reserved

Focus damage prevention efforts on the increasing trends
Excavation Practices and Locating Practices

Optimain – Methodology used by this ticket risk-ranking technology



Optimain – What this technology should do for DTE Gas damage prevention response



Rely on a predictive risk model that learns from your data.

Determine exactly where to focus limited damage-prevention resources.

Bring immediate visibility to high-risk excavation sites on maps that include your facilities.

Mine the statistics yourself to proactively fix the underlying problems (educate the most frequent offenders, train poorly performing locators, fix inadequate records).

Understand relative risk as you screen your tickets.

Assign your best locators to sites with higher risk.

Improve customer safety and satisfaction by reducing service disruptions and avoiding potential incidents.