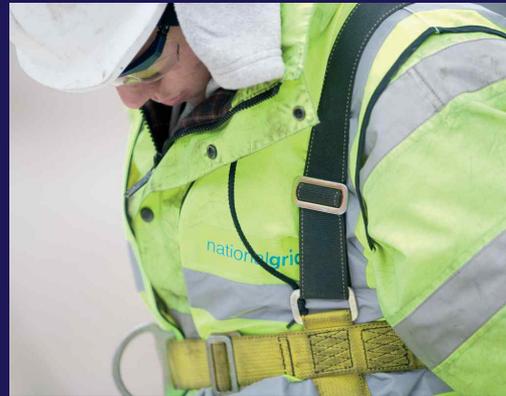


# Damage Prevention



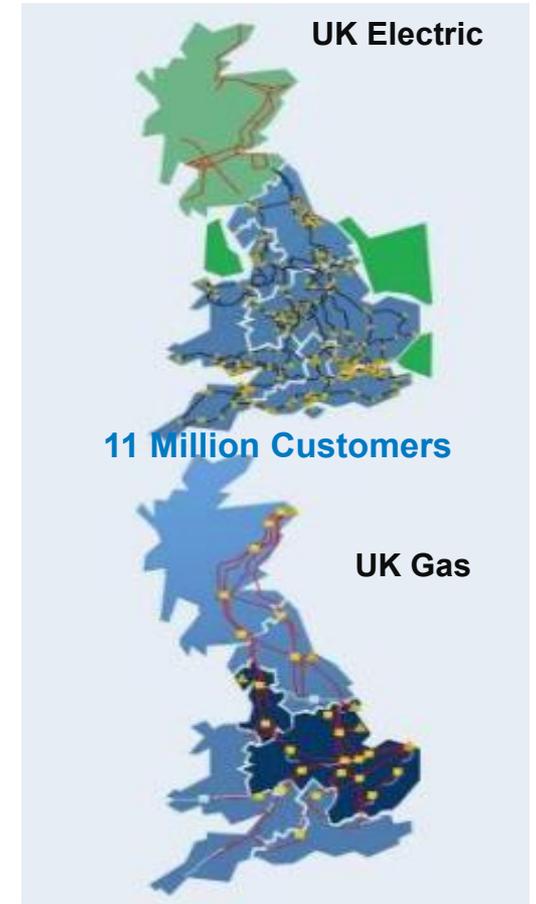
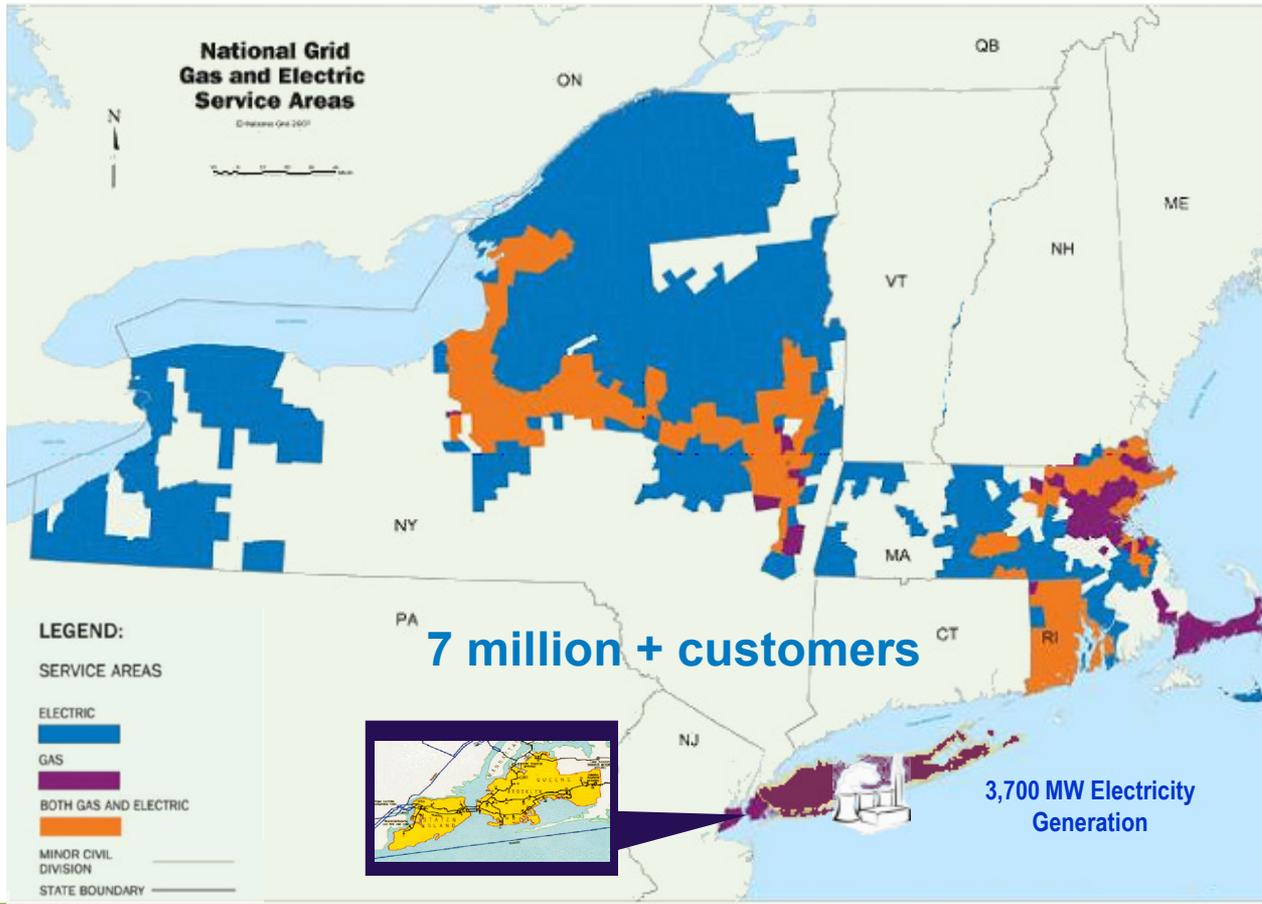
## John Fiume

Natural Gas STAR & Methane Challenge Programs Technology Transfer Workshop  
May 17, 2017

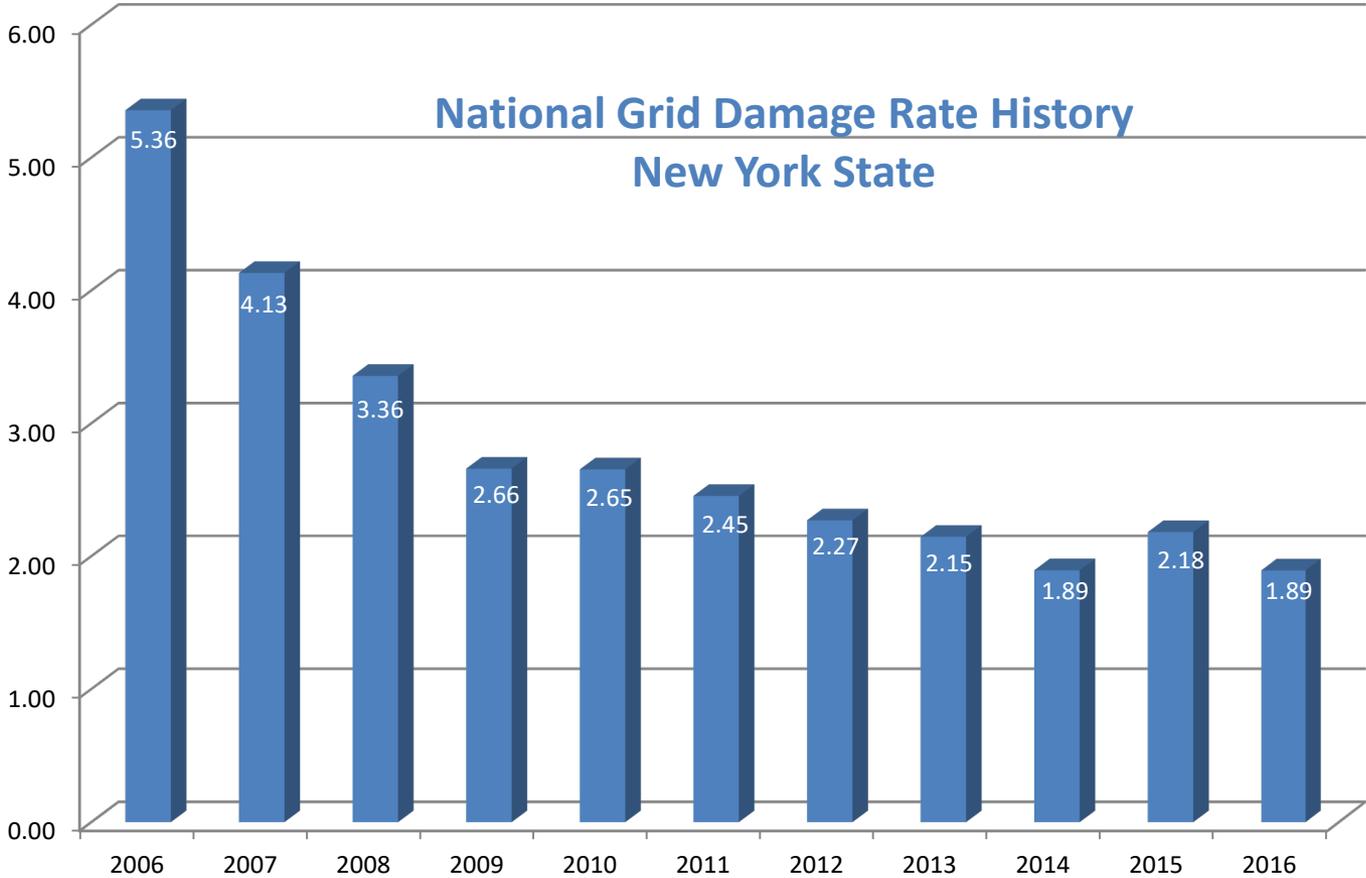
# An International Energy Company

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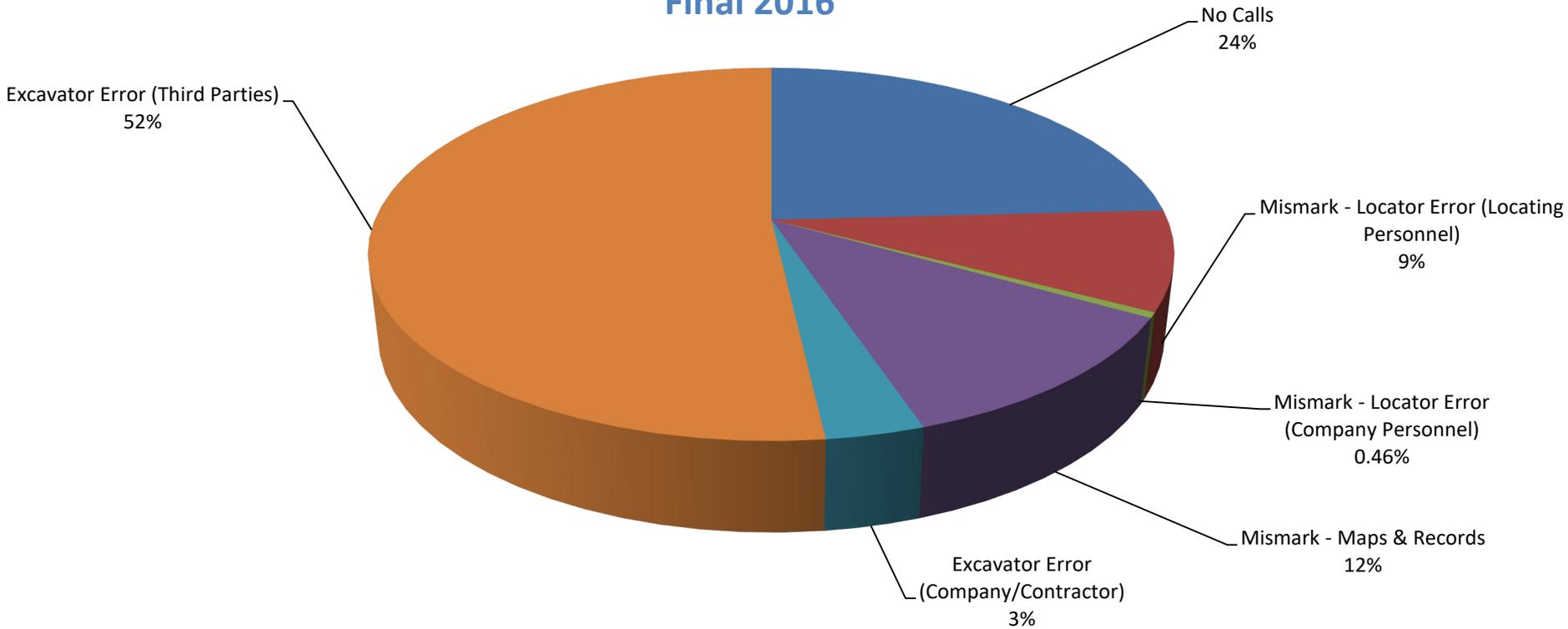


# Damage Prevention Data



# Damage Prevention Data

## New York State Root Cause Breakdown Final 2016

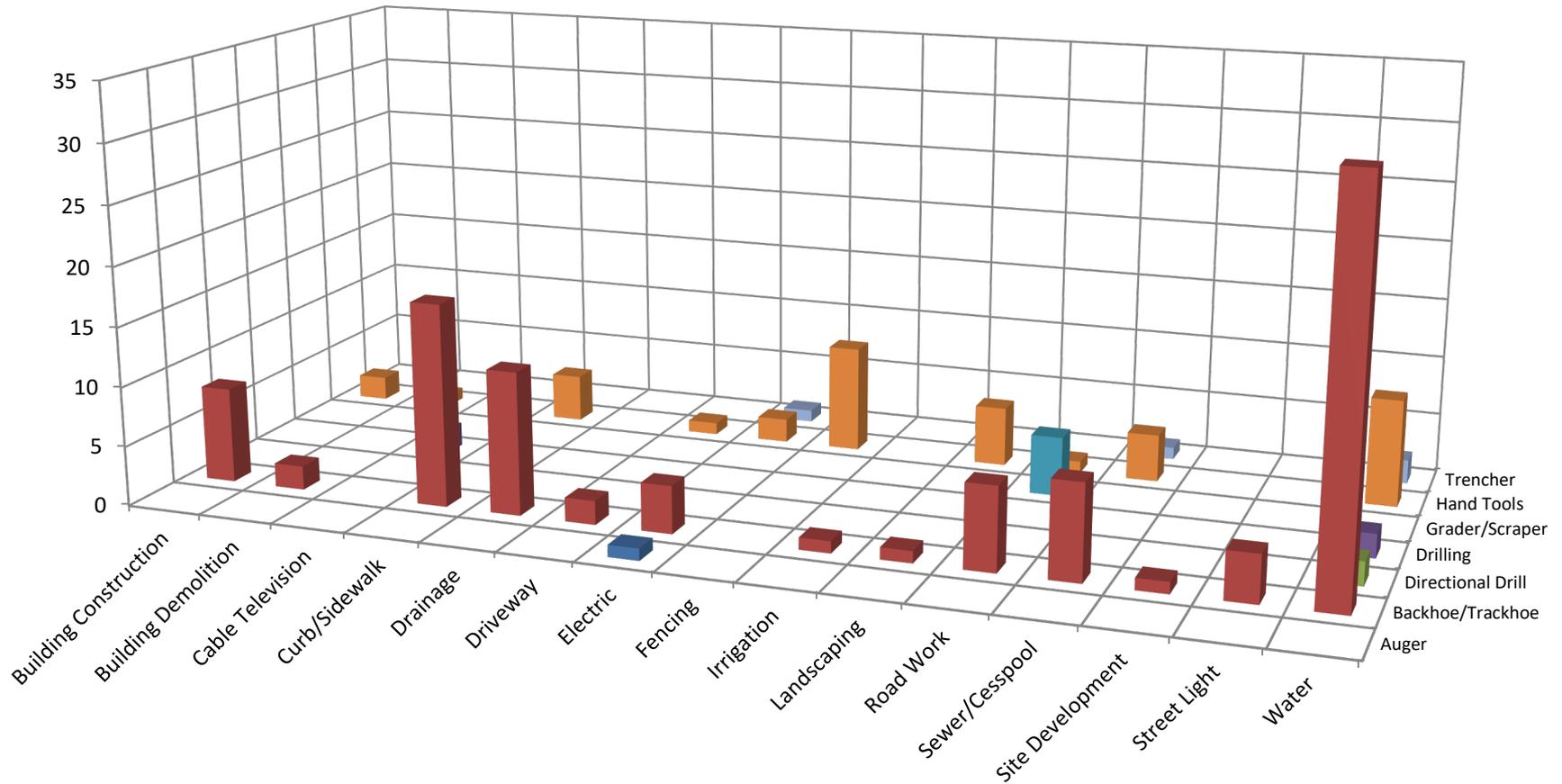


# Long Island "Excavator Error" Damages

## Type of Work / Equipment

June 2016

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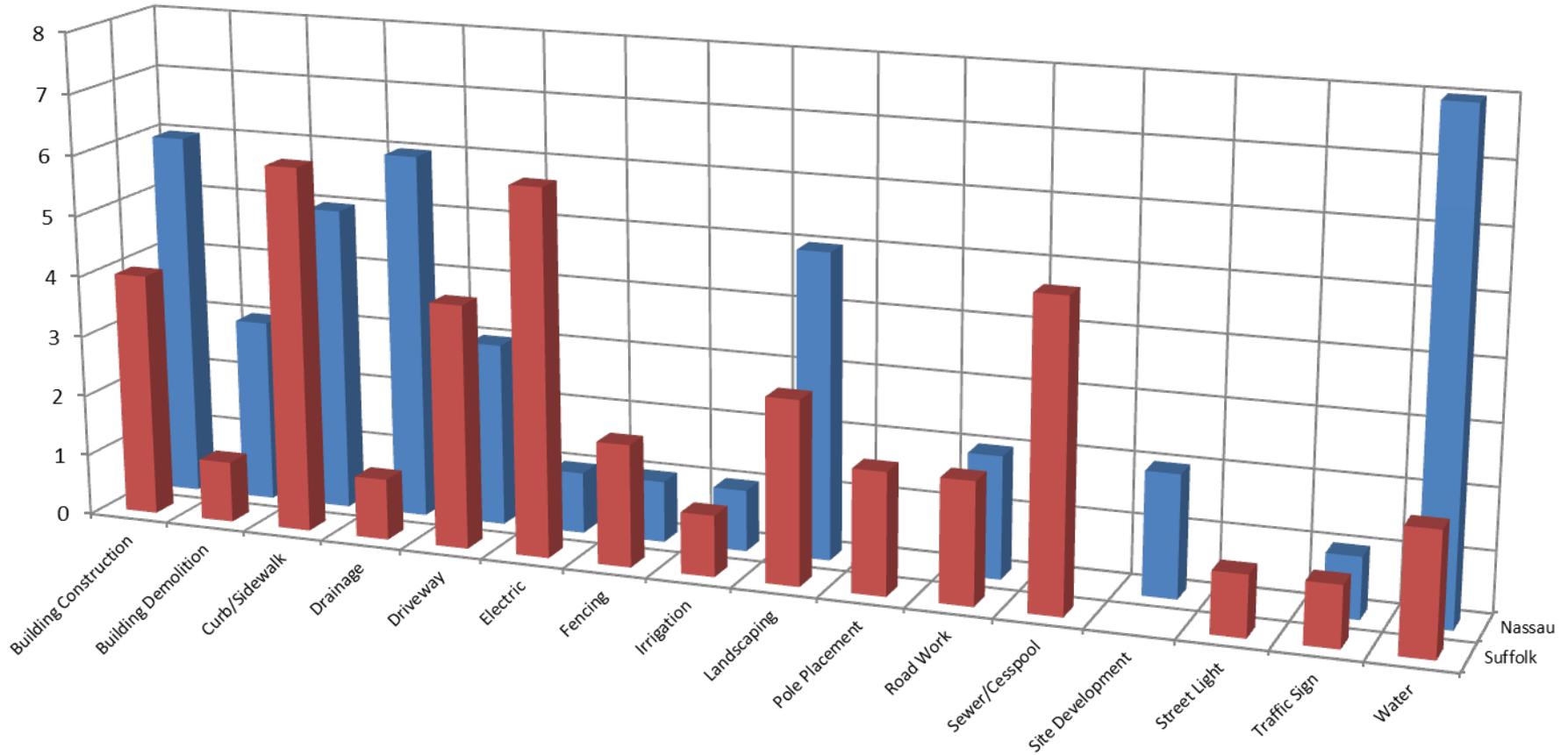


# Long Island "No Call" Damages

## Type of Work / County

June 2016

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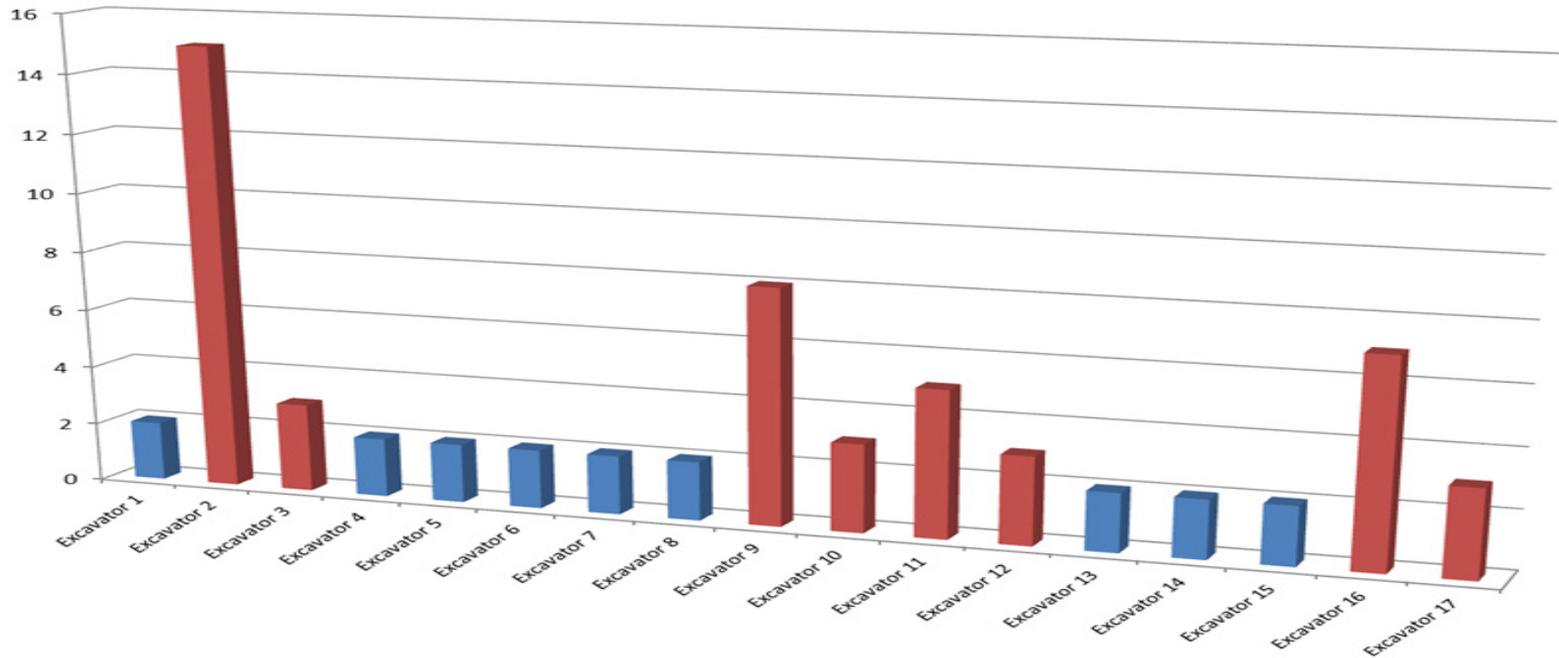
# Long Island "Repeat Offender" Excavator At-Fault Damages

April 2017

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Long Island Repeat Offender  
Excavator At-Fault Damages  
Rolling 12 Months  
April 2017

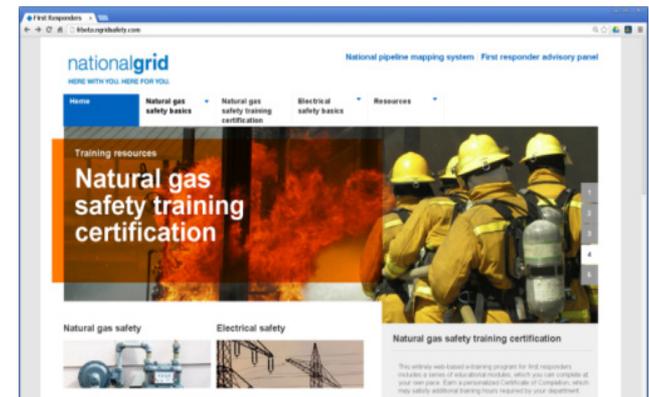


# Damage Prevention Initiatives & Partnerships

- Utility
- Locate & Markout Contractor
- Municipality/Regulator
- One Call Centers

# Public Safety Awareness

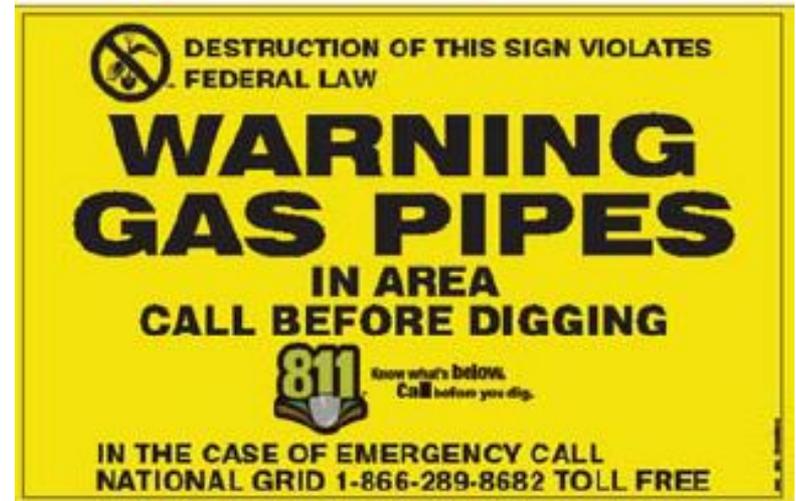
- **Schools**
- **First Responders**
  - E-learning Training system-wide
- **Annual PPAP Mailing**
  - Consumers along the ROW (IMP)
  - Excavators
  - Emergency Officials
  - Public Officials
- **Other Outreach**
  - Cross bore safety - plumbers
  - Carbon Monoxide safety



# Damage Prevention Initiatives & Partnerships

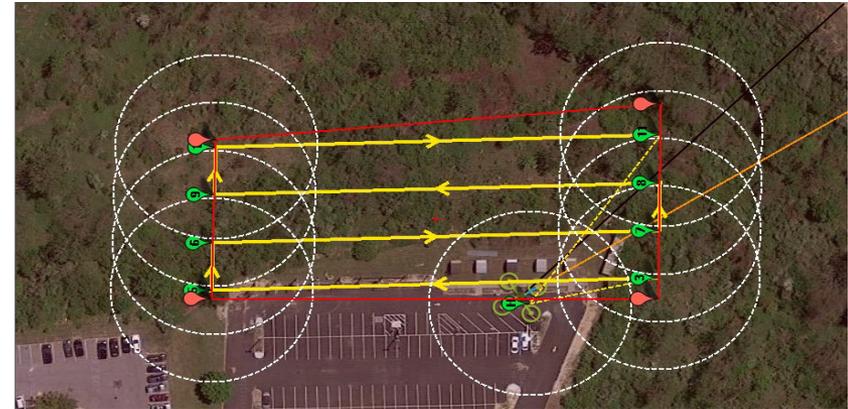
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- 3<sup>rd</sup> Party Watchguard
- Pole Wraps
- 8-day Patrol Cycle
- Ultrasonic Proximity Sensors
- Drones

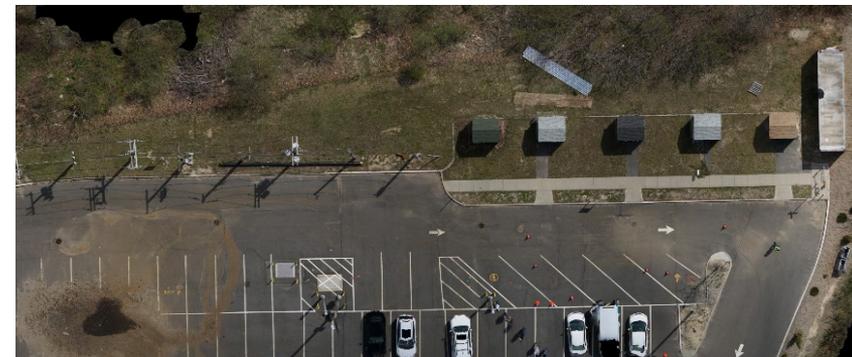


# Drone Training Site Testing

- Using a UAV set-up for mapping flights, a site survey mission was conducted.
- The flight covered the NG training site and surrounding areas which was approximately 1 acre.
- The fully autonomous flight was conducted at an altitude of 100 feet, and lasted approximately 2 minutes.
- The high definition geo-referenced images captured with ULC's DSLR camera were then processed into a spatial model for further review.
- This 3D-spatial model allows for in-depth inspections



Mission plan over NG training site



Orthomosaic map of NG's training site

# Damage Prevention Initiatives

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- Damage Prevention Advisor Program
- Ticket Risk Analysis



# Damage Prevention Initiatives & Partnerships

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- Municipalities
  - Permit Requirements
- Regulators
  - Investigations
  - Repeat Offenders
  - Enforcement

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## Proposed Permit Language for 753 Requirements

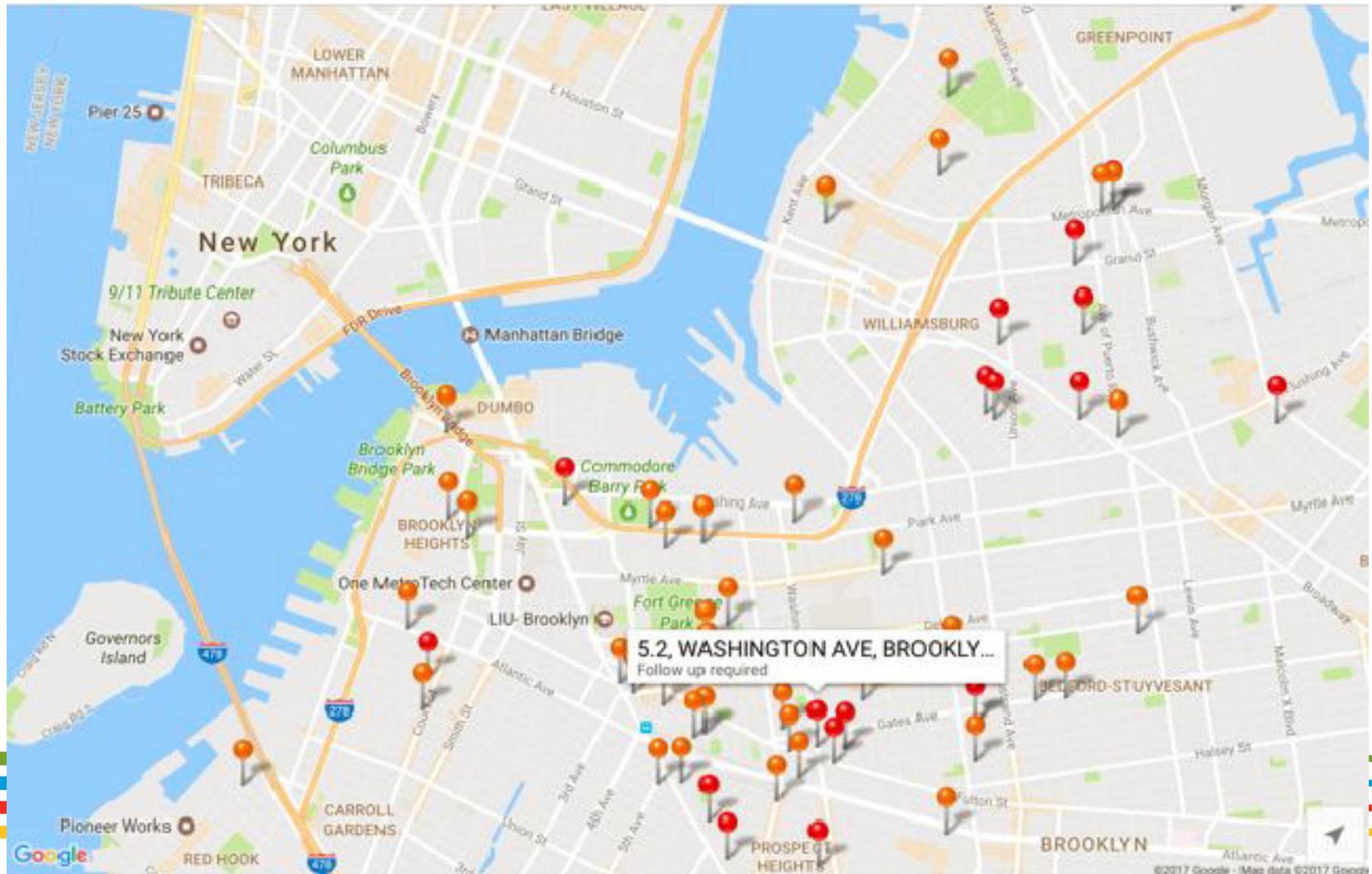
The contractor is cautioned to the possible presence of underground utilities in the project area. Under Rules set forth in 16 NYCRR Part 753 (Code Rule 753), the contractor must obtain a full mark-out of underground utility lines by calling 811 at least 2 business days in advance but no more than 10 business days prior to the start of any work. Failure to have a valid and active markout request that covers you every day of your project may void this permit.

Know what's below.  
Call before you dig.

# Damage Prevention Initiatives

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# Damage Prevention Initiatives & Partnerships

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- Education/Outreach
  - TV, Radio, Seminars
- NY Mets Partnership - 8/11 Day



# Damage Prevention Initiatives & Partnerships

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## Why the Mets?

- Long Island contractors are:
  - 42% more likely than general public to attend a Mets game
  - 5% more likely than the general public to attend a Yankees game



## Why SNY?

- MGH and New York 811 conducted an excavator survey and learned:
  - 85% of respondent contractors said they watch television in the evenings
  - Mets broadcasts are among the top-rated primetime programs in the NY market during the spring/summer for Men 25-54

# Damage Prevention Initiatives & Partnerships

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