

# Damage Prevention Risk Assessment Using Real-time Call-Before-You-Dig and Natural Gas GIS Data: Case Study



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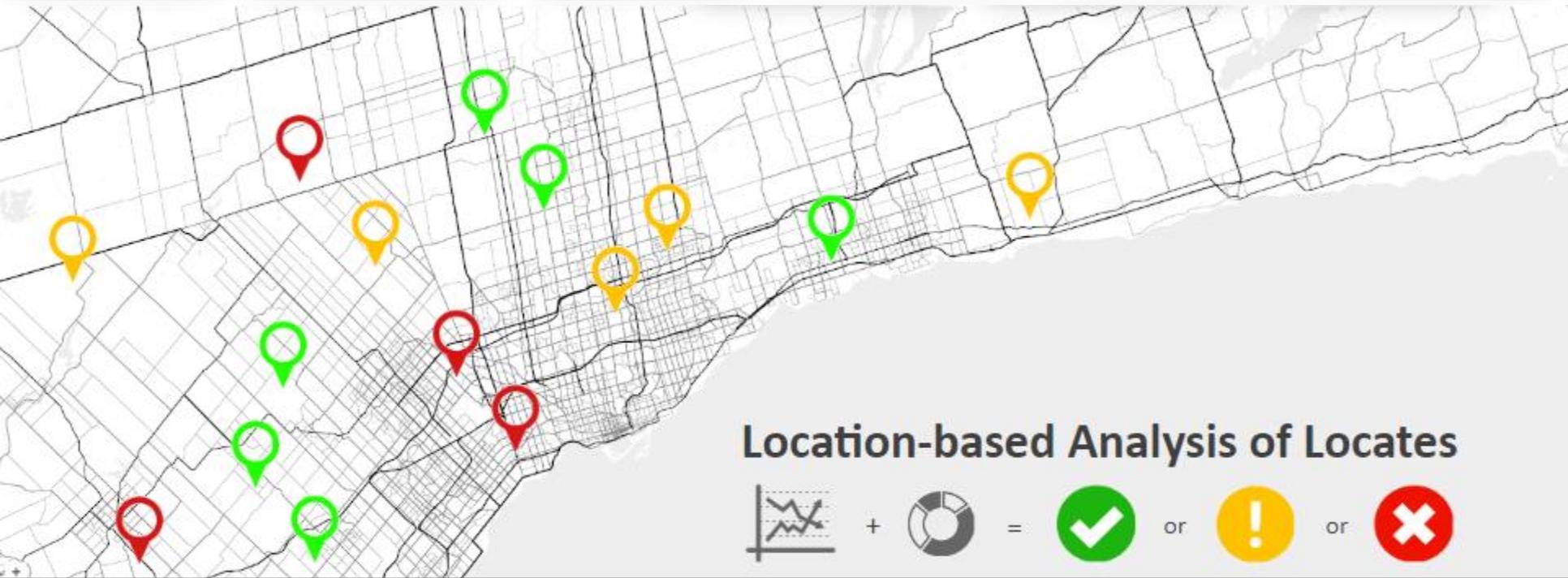
**Click  
Before  
You Dig**



# Probability vs Impact Analytics

Risk = Probability × Impact





## Location-based Analysis of Locates



# Proactive Damage Prevention

## Case Study 1

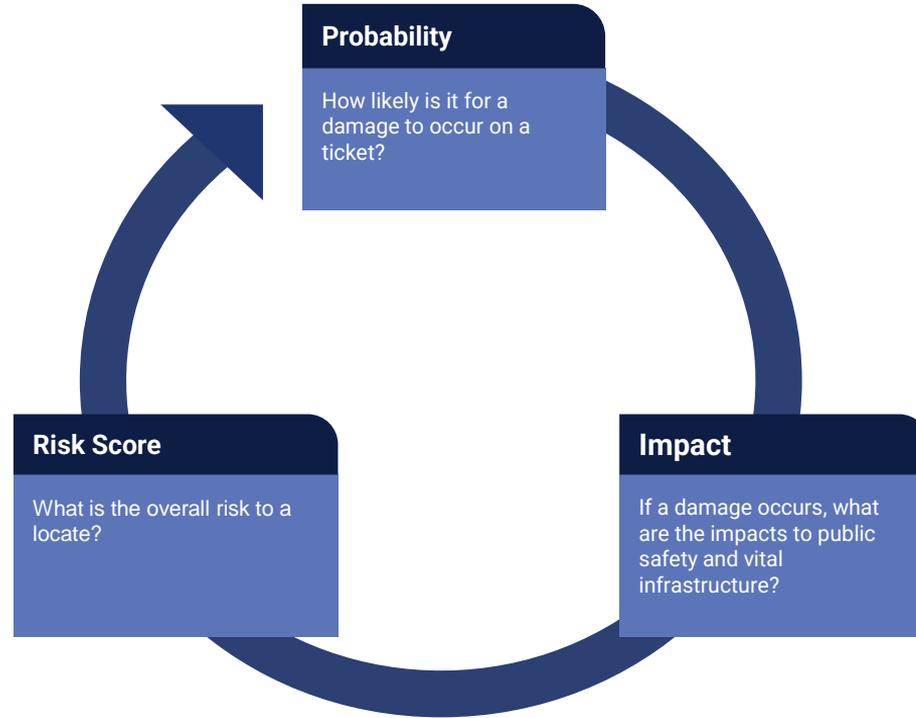
- Predicted >70% of damages

## Case Study 2

- Predicted >73% of damage costs
- Reduced large impact damages
- Reduced cost of Lookup/Clearing services



# Analysis Workflow



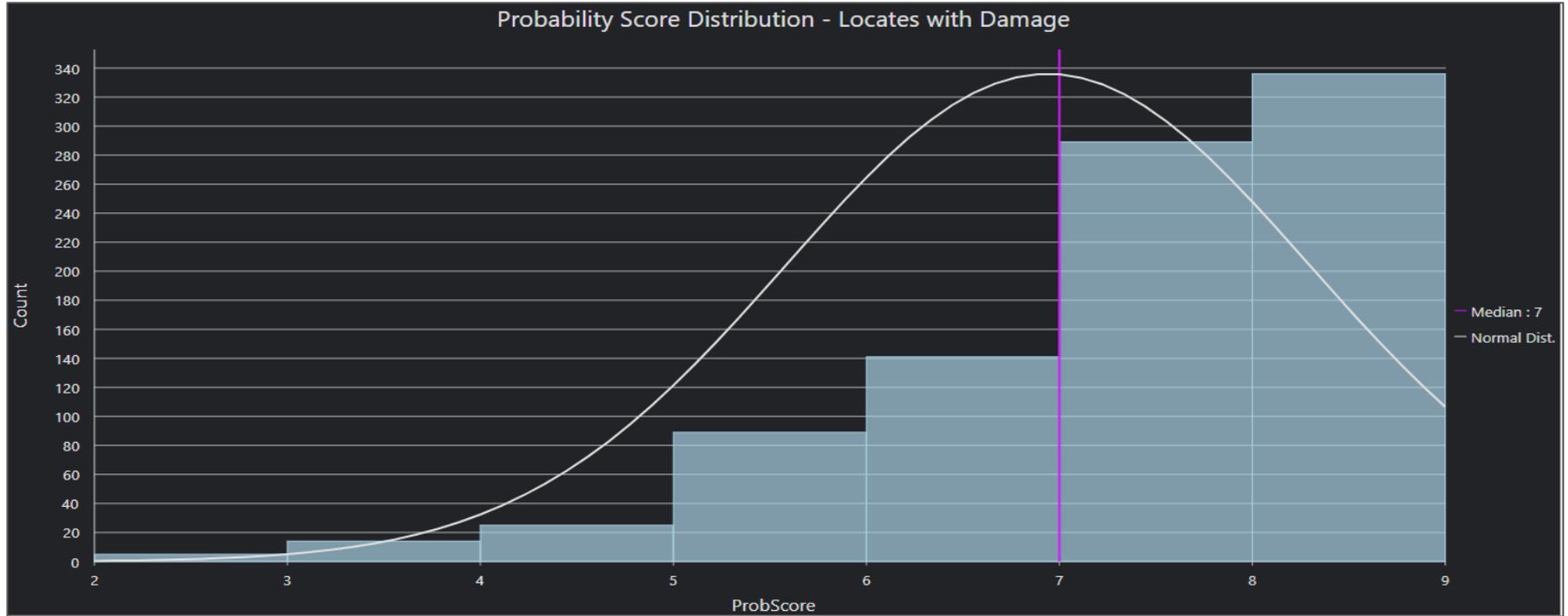
## Probability

- Asset Types
- Equipment being used
- Dig Depth
- Proximity to assets

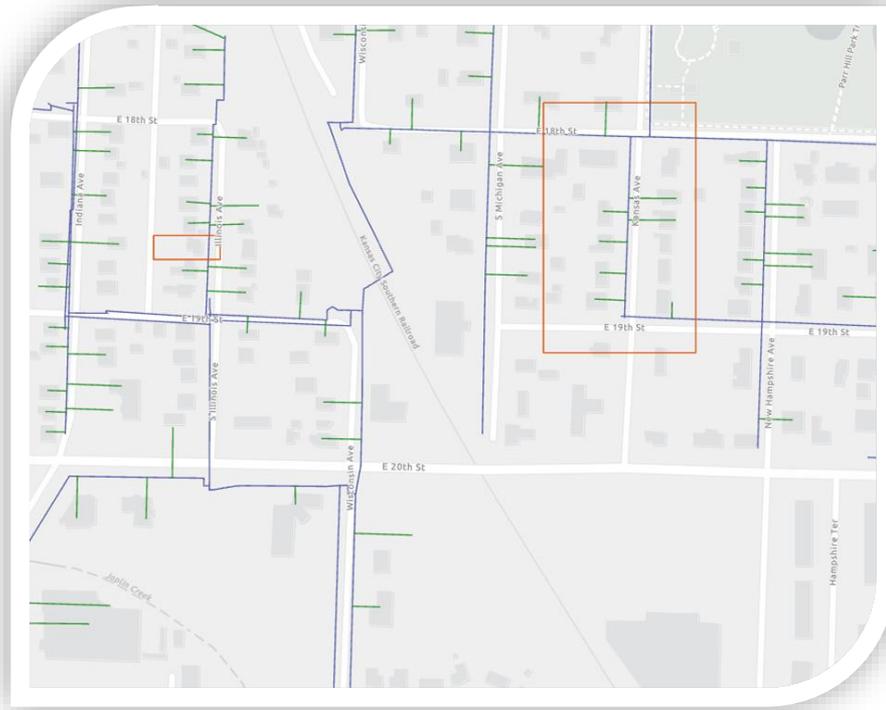
## Impact

- Proximity to sensitive public facilities
- Proximity to residential population
- Proximity to high-pressure assets

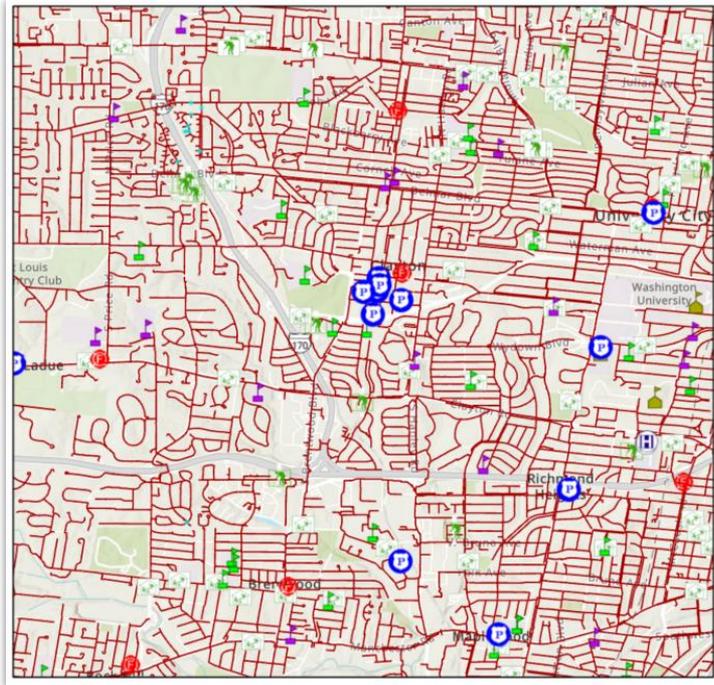




# Impact: Proximity



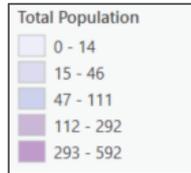
# Impact: Sensitive Facilities



3% of tickets were within 500 ft of a sensitive public facility

- Airport
- Hospital
- Law Enforcement
- Fire Stations
- Public School
- School - Private
- School - Severely Handicapped
- School - Higher Education
- Nursing Home
- Daycare - Adult
- Day Care - Child

# Impact: Population Density





**LOW RISK**



**MEDIUM RISK**



**HIGH RISK**



**MAX RISK**

# Low Risk Locate Clearing

### Locate Ticket Management

**Tickets on Hold**  
**565**  
Last update: 1 minute ago

**Tickets Sent**  
**4**  
Last update: 1 minute ago

**Tickets Under Review**  
**5**  
Last update: 1 minute ago

**Tickets Cleared**  
**60**  
Last update: 1 minute ago

### Locates by Status

*Workload Outstanding*

Status	Count	Percentage
HOLD	565	99%
CLEAR	60	9%
IN REVIEW	5	1%
SENT	4	1%

Last update: 33 seconds ago

**Legend**

**WORKLOAD OUTSTANDING**

Status

- CLEAR
- HOLD
- SENT
- IN REVIEW

**RISK**

- [Red Triangle]

Powered by Esri

(1 of 4)

**CLEAR [20210816131905]**

Locate # 2021343572

Ref Locate #

PV Processed Date 6/16/2610, 7:35 AM

Status

Workload

Priority

Remarks

Addit Dig Info

[Zoom to](#)

(1 of 4)

**CLEAR [20210816131905]**

Company

Caller Name Cindy Fleming

Work Done For

County SIMCOE

City ORILLIA

Neighborhood ORILLIA

Editor Date

Editor

Related tables:

- NOTIFICATION
- TICKET
- ATTACHMENTS
- WORKLOAD\_LOG

[Zoom to](#)

(1 of 4)

**CLEAR [20210816131905]**

Locate # 2021343572

Ref Locate #

PV Processed Date 6/16/2610, 7:35 AM

Status **CLEAR**

Workload Manual Clearing

Priority STANDARD

Remarks

Addit Dig Info CORLOT=N New sump pump discharge line to be run from middle of bay window on east side of house running 65 ft south east across property. Marked with orange spray paint.

[Zoom to](#)

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# QUESTION AND ANSWER



# Please fill out your survey!

Open the **Attendee Hub App**,  
tap on **Agenda** and then tap on

**Damage Prevention Risk Assessment Using Real-time Call-  
Before-You-Dig and Natural Gas GIS Data: Case Study**

and complete the survey for this session.

OR

If you are unable to download the app, a paper survey is  
available.