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MIDWEST DAMAGE PREVENTION TRAINING CONFERENCE
Indiana 811
FRENCH LICK ★ INDIANA ★
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ON THE SPOT
UTILITY RESOURCES LLC

2021 MIDWEST
DAMAGE PREVENTION
TRAINING CONFERENCE

Data Visualization Basics

November 2021
French Lick, Indiana

Darby Miller

Who am I?

IURC Underground Plant Protection Account (UPPA) Fund Program Manager

What do I do?

Plan UPPA spending, research outreach opportunities, write media items, coordinate training sessions, review UPPA requests, maintain UPPA website

Today

Data Basics

Data Visualization 101

Examples of Data Visualization

Data Errors

How to get help from the IURC

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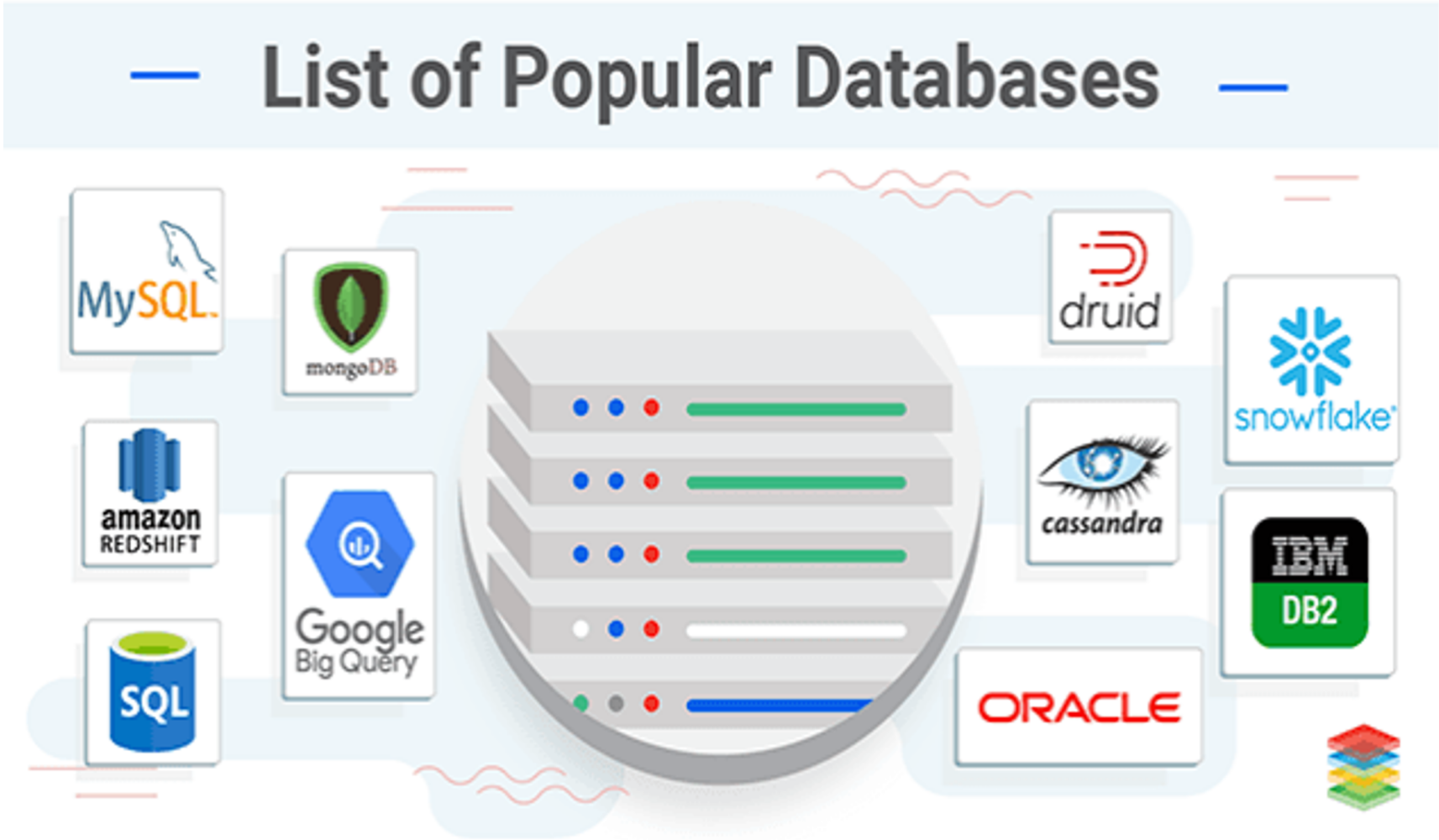
Data everyday



Or, Excel is a great place to start!

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Standardize!

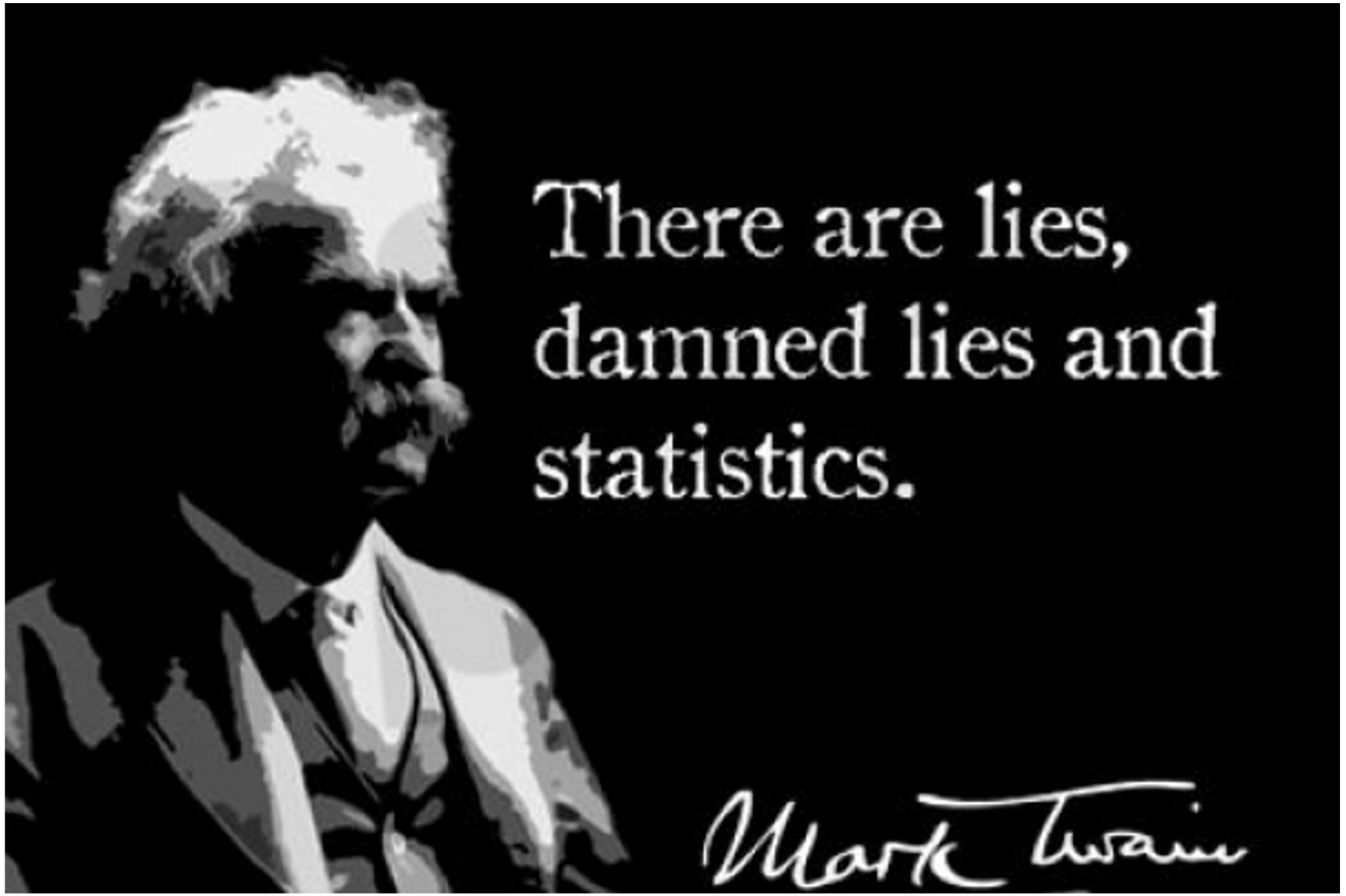
Are you using a damage investigation form?

Freely available if you need one

- Pipeline Safety
- Baker Utility Partners
- Local utility operators
- Create your own

What are you collecting?

Quantitative	Qualitative
The “what”	The “why”
Can be measured	Observed, but not measured well
Length, height, volume, cost, time	Feelings, smells, appearances
Deals with numbers	Deals with descriptions



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Dirty Data!

Outliers

Misinterpretations:
Correlation Vs Causation

Confounding Variables:
age, income, inexperience, training

Self-Selection Bias

Sample Size

Data Security

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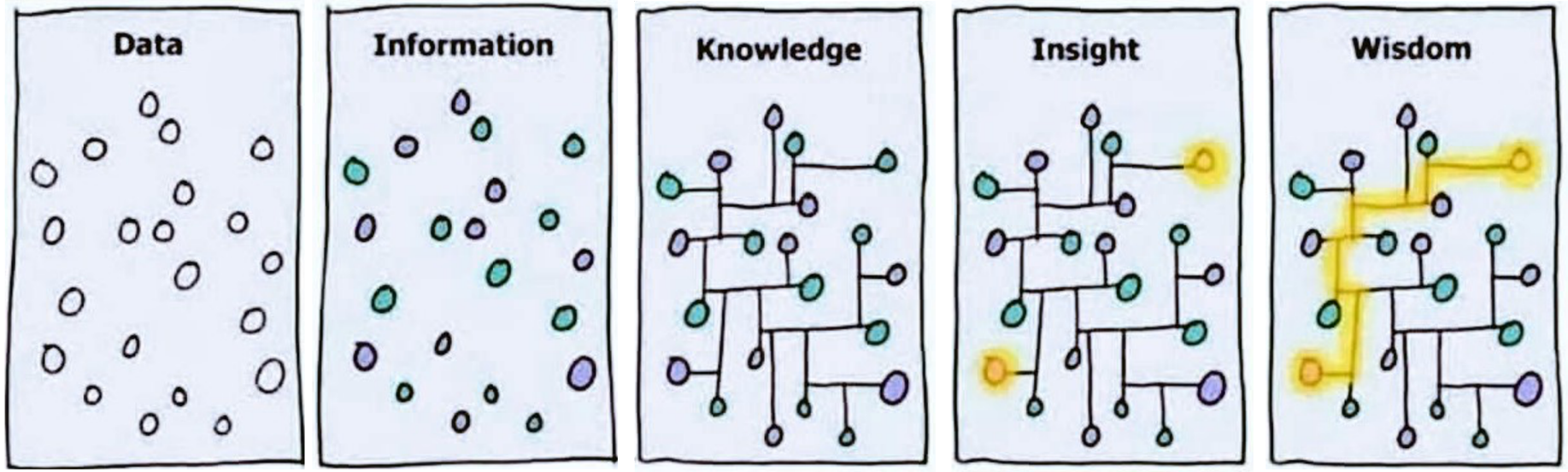
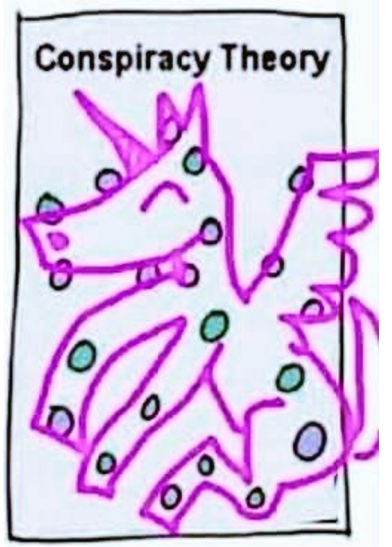
Visualize your data

Why visualize your data?





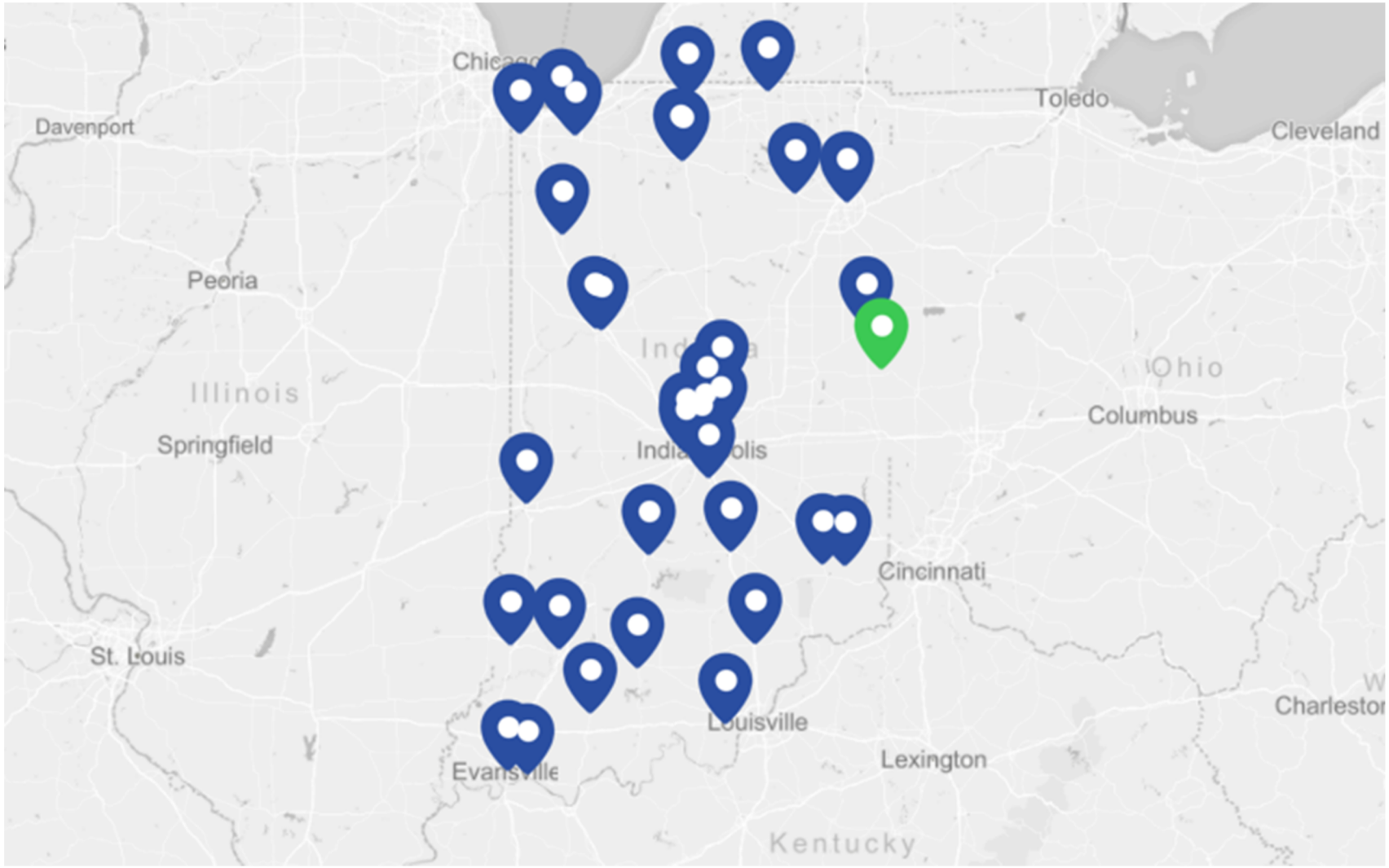
How to visualize your data

Good old graphs	Free versions of powerful software	Free (but less user friendly)
Pie Charts	Tableau	Python
Bar Charts	Google Data Studio	R
Scatter Graph	Microsoft Power BI	
Tables		

https://commongroundalliance.com/DIRT-Dashboard

IURC Examples

UPPA Fund – Geographic Distribution

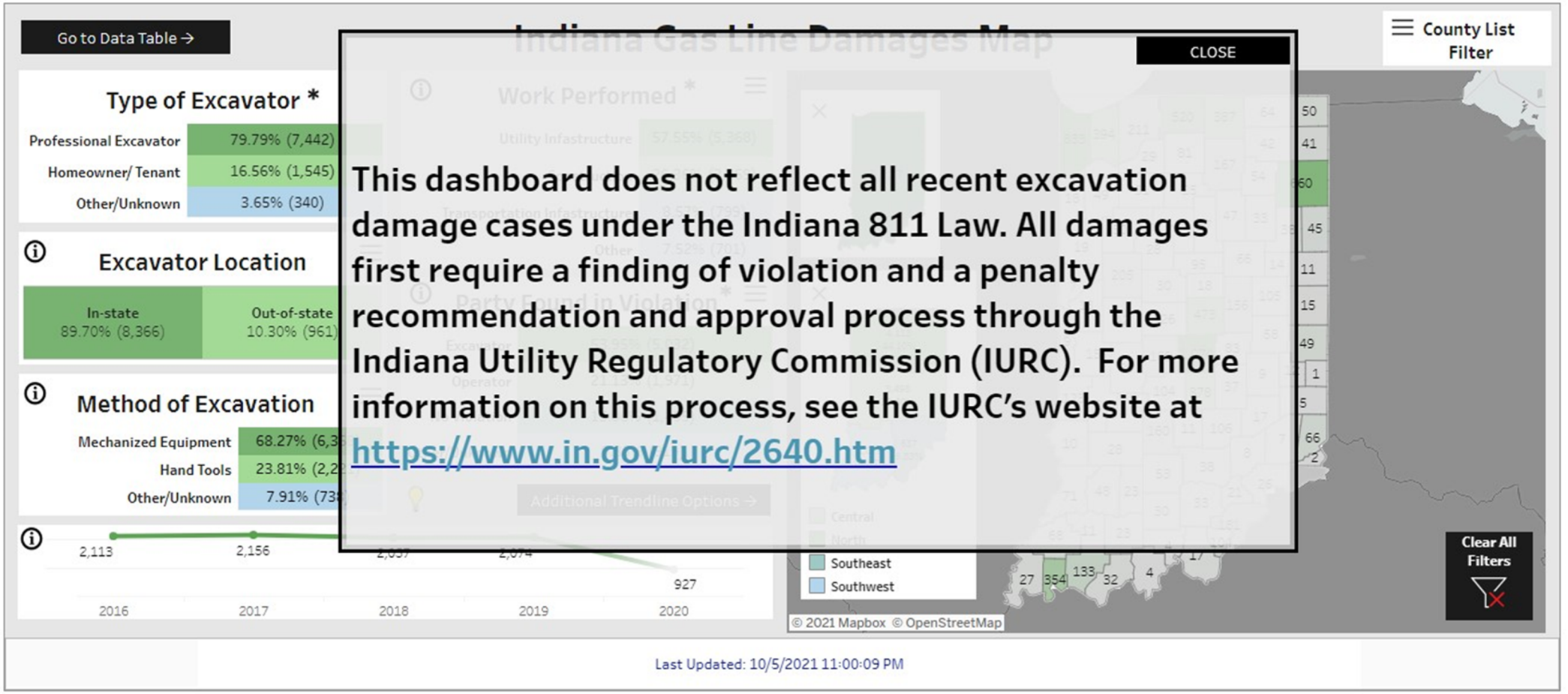


https://maphub.net/IURC/UPPA-Spending

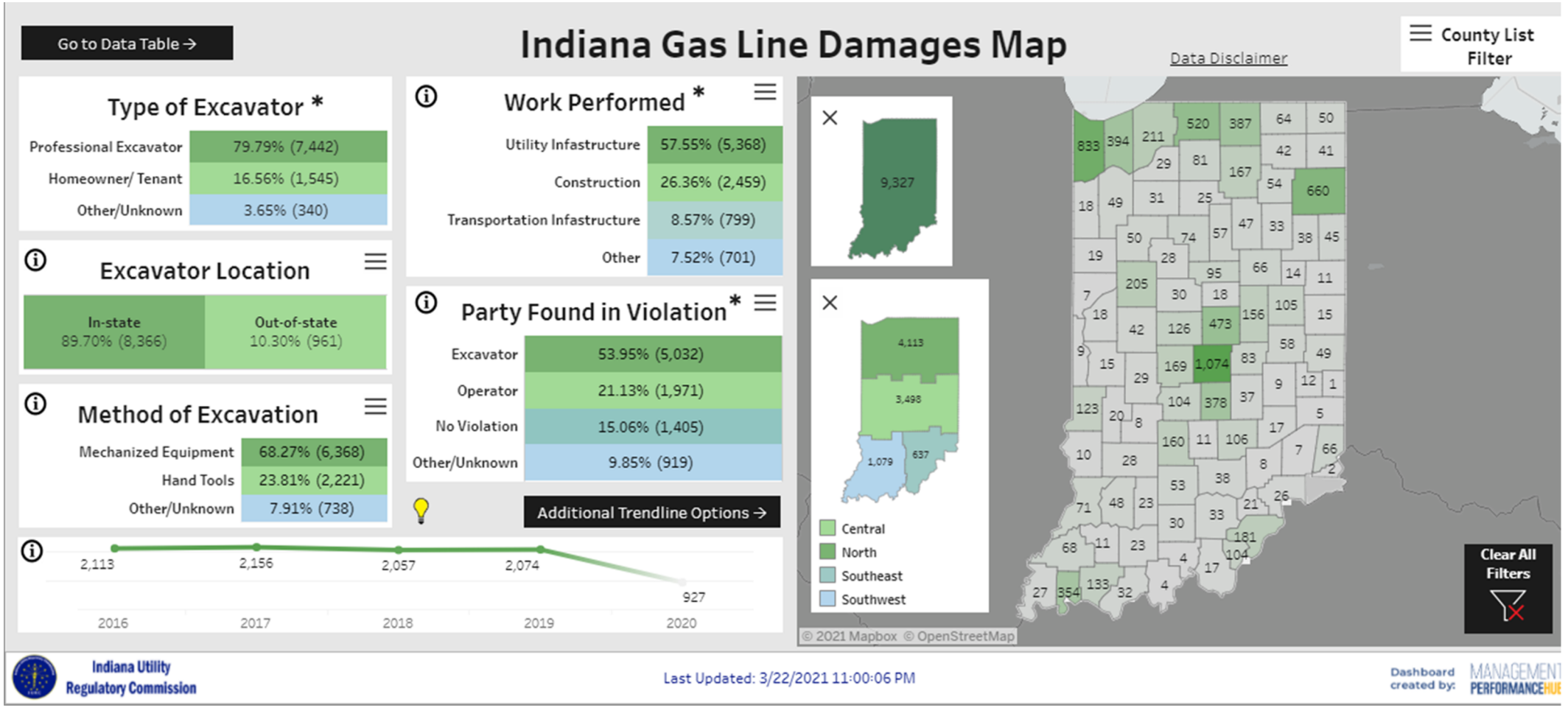
Partnership: IURC and MPH

- Pipeline Safety Division investigation data is linked to the Management Performance Hub (MPH)
- MPH uses a cloud-based Tableau system to visualize Pipeline data
- The map is updated whenever a tracked database column changes

Indiana Gas Line Damages Map



Indiana Gas Line Damages Map



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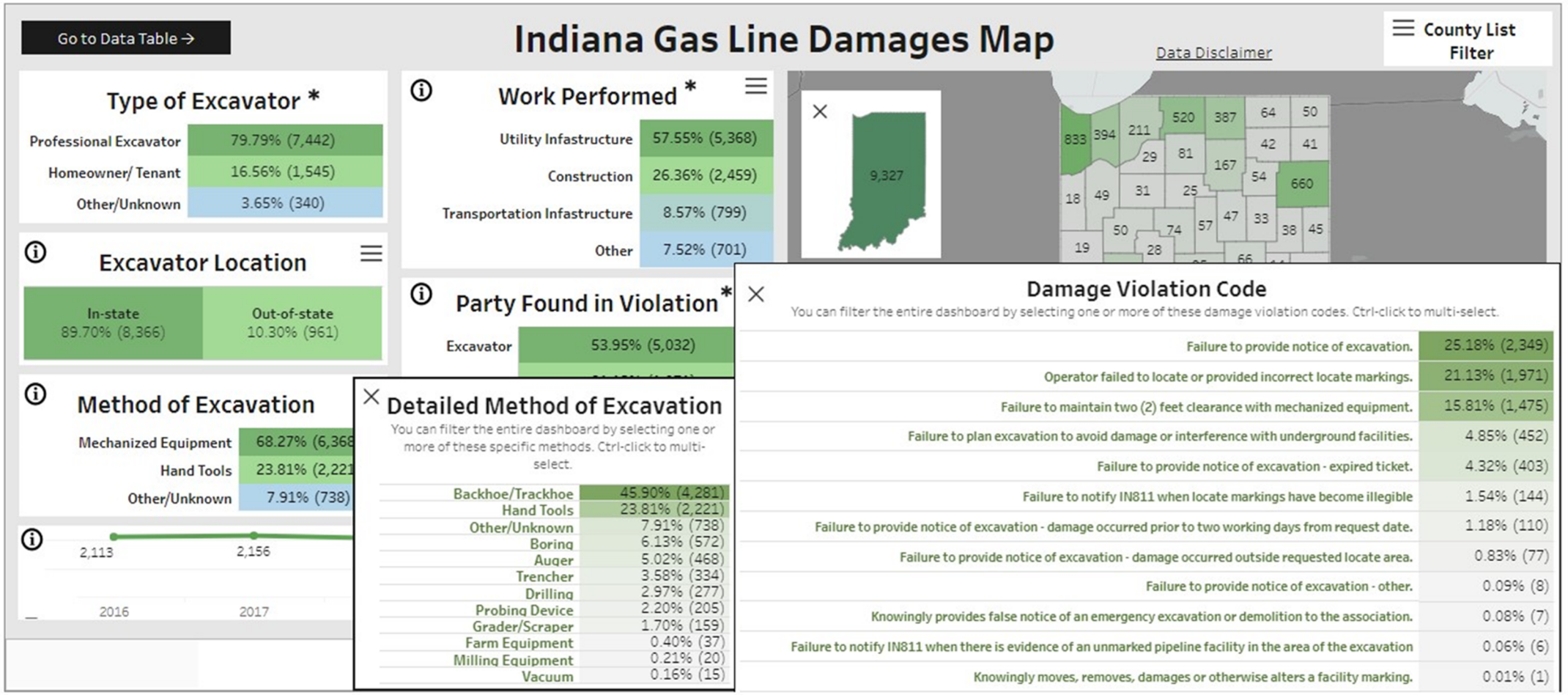

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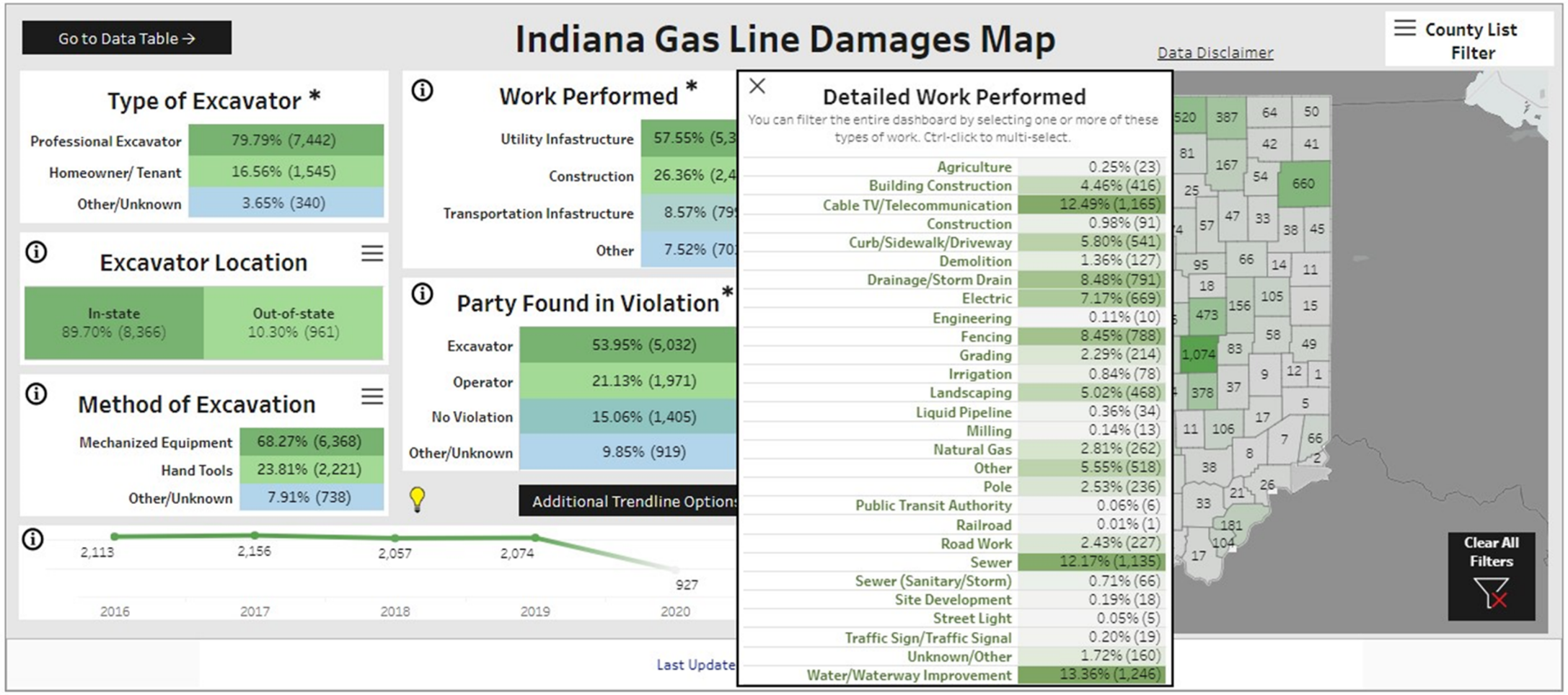

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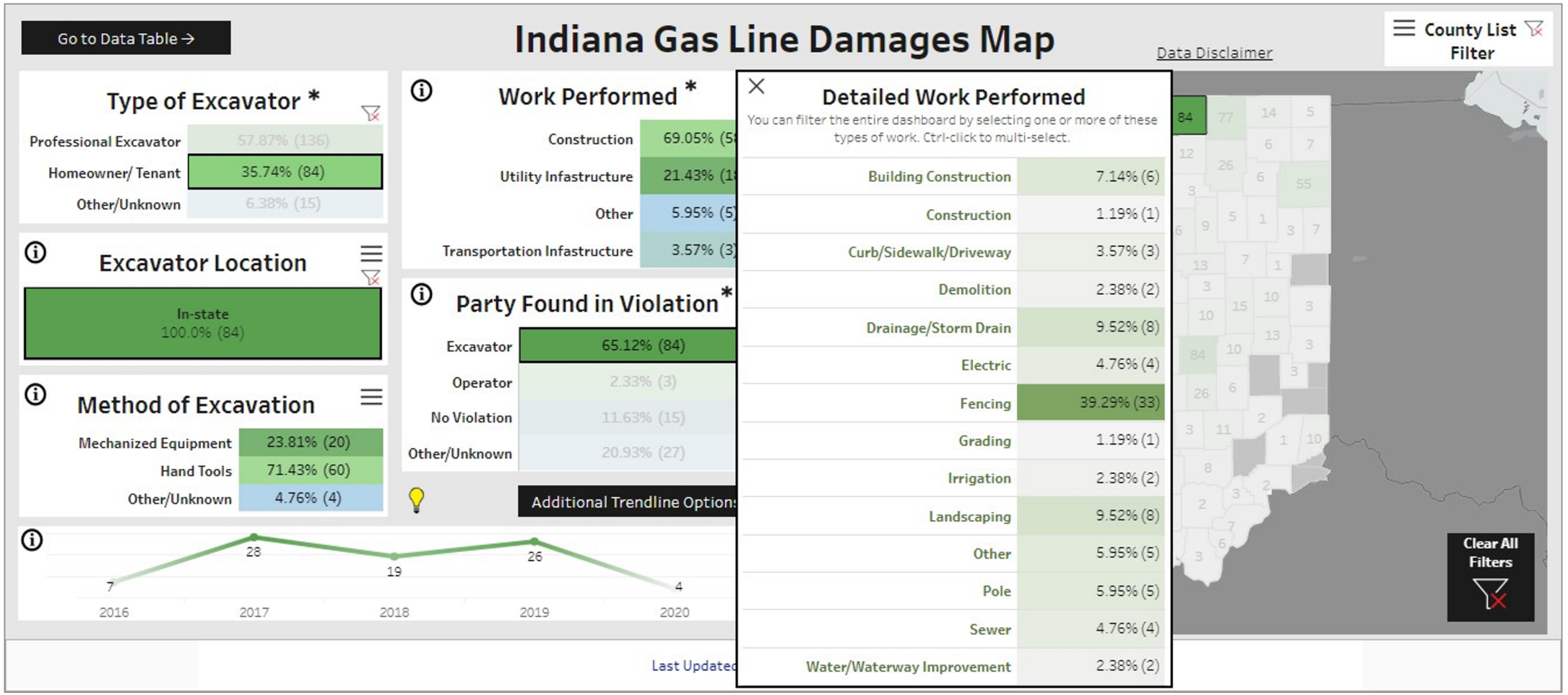

https://www.in.gov/iurc/pipeline-safety-division/damage-to-underground-facilities/indiana-pipeline-damages-map/

Partnership: IURC and MPH

Near term

Create IURC media spots map for marketing awareness coverage

Allow PSD to study damage trends across the state

Long Term

Link to Indiana 811 cloud-based Tableau data

Allows for real time tracking of dig ticket volume and work location data

UPPA Fund

- Underground Plant Protection Account (UPPA)
- The UPPA fund is the accumulation of fines issued under Indiana Code Chapter 8-1-26
- The fund is managed by the UPPA Program Manager and overseen by the UPPA Committee. The Committee is made up of different Commission department representatives
- Fund deposits and expenditure reports are made available online for transparency
- Balance as of September 29th: $1.2 Million

UPPA Fund spending

IC 8-1-26 lists three program types that must be established and administered by the IURC.

- Public awareness
- Training and education
- Incentives

Apply for grants

The IURC also provides grants to outside applicants – see IURC website - also contracts for services.

Always looking for new ways to invest in damage prevention efforts.

YOU can apply too!

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