

2022 MISS DIG Annual Meeting

January 19, 2022

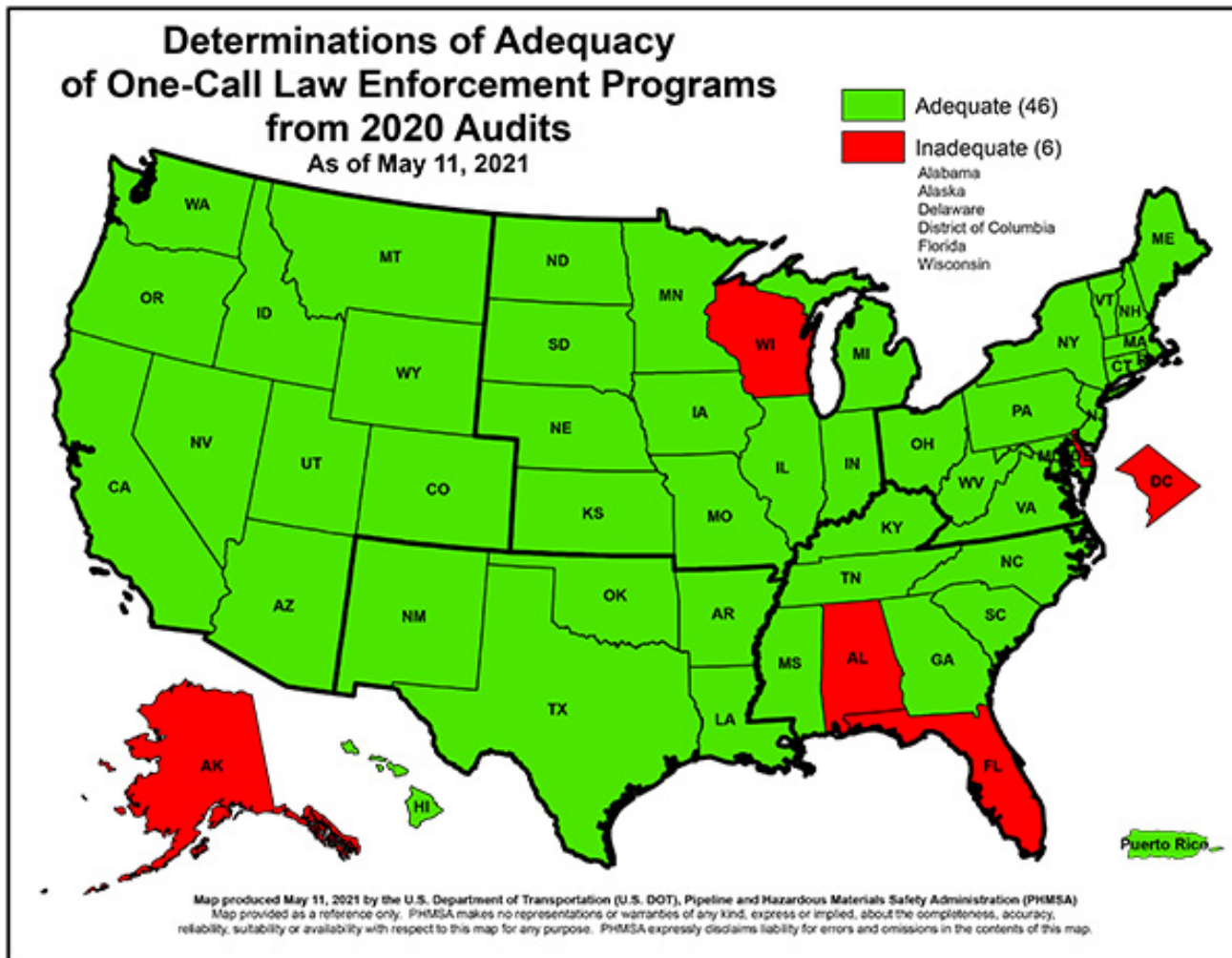


Agenda

- Authority
- Damage Reporting
- Damage Prevention Statistics
- PHMSA Audit
- Complaints
- Enforcement Activity
- Strategic Planning
- Incidents

- State
 - Public Act 174 of 2013
 - Michigan Underground Facility Owners and Operators (Rule 460.11 *et seq.*)
 - Public Act 165 of 1969
 - Michigan Gas Safety Standards (Rules 460.20101 *et seq.*)
- Federal
 - Protecting our Infrastructure of Pipelines Enhancing Safety (PIPES) Act of 2020
 - 49 CFR Part 196
 - No Exemptions

Authority



Damage Reporting

- In 2018, the Common Ground Alliance made significant changes to the Damage Information Reporting Tool (DIRT) field form.
- Effective January 1, 2020, MPSC adopted the changes.
 - Updated Damage Reporting Manual and CSV File available on MPSC website or upon request.
 - Damage Data submission deadlines are as follows:

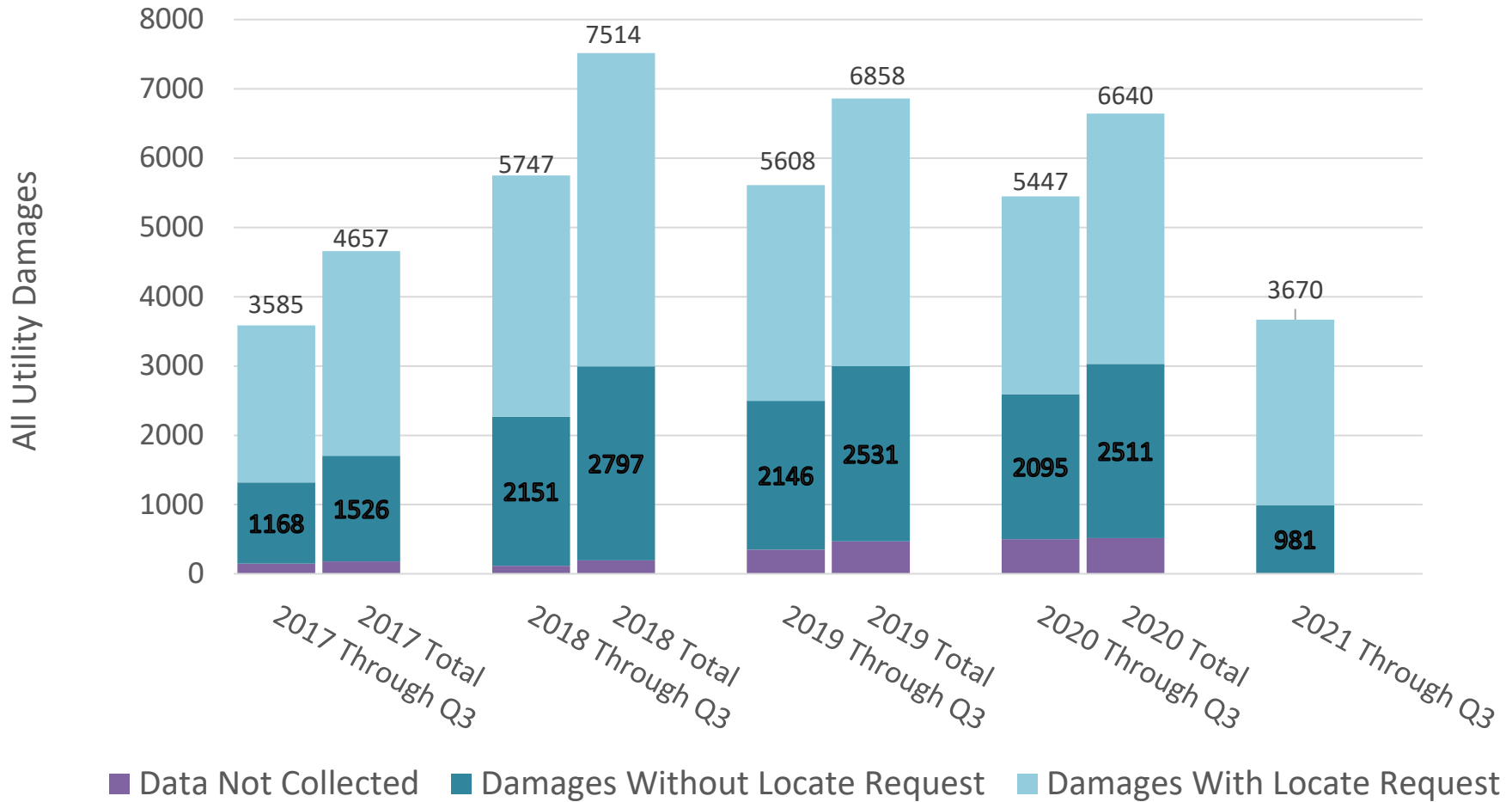
Reporting Period	Due Date
First Quarter	May 15 th
Second Quarter	August 15 th
Third Quarter	November 15 th
Fourth Quarter	February 15 th

Damage Reporting

- On April 15, 2019, the MPSC launched a new pipeline safety database.
- Utilizes the Operations email account (LARA-MPSC-Operations@michigan.gov).
 - Replies to database emails should contain the case reference (e.g., “ref:_00Dr08vPn._500r04lQ1o:ref”), which will direct to the appropriate database case.
- Quarterly damage data submittals automatically generate a case.

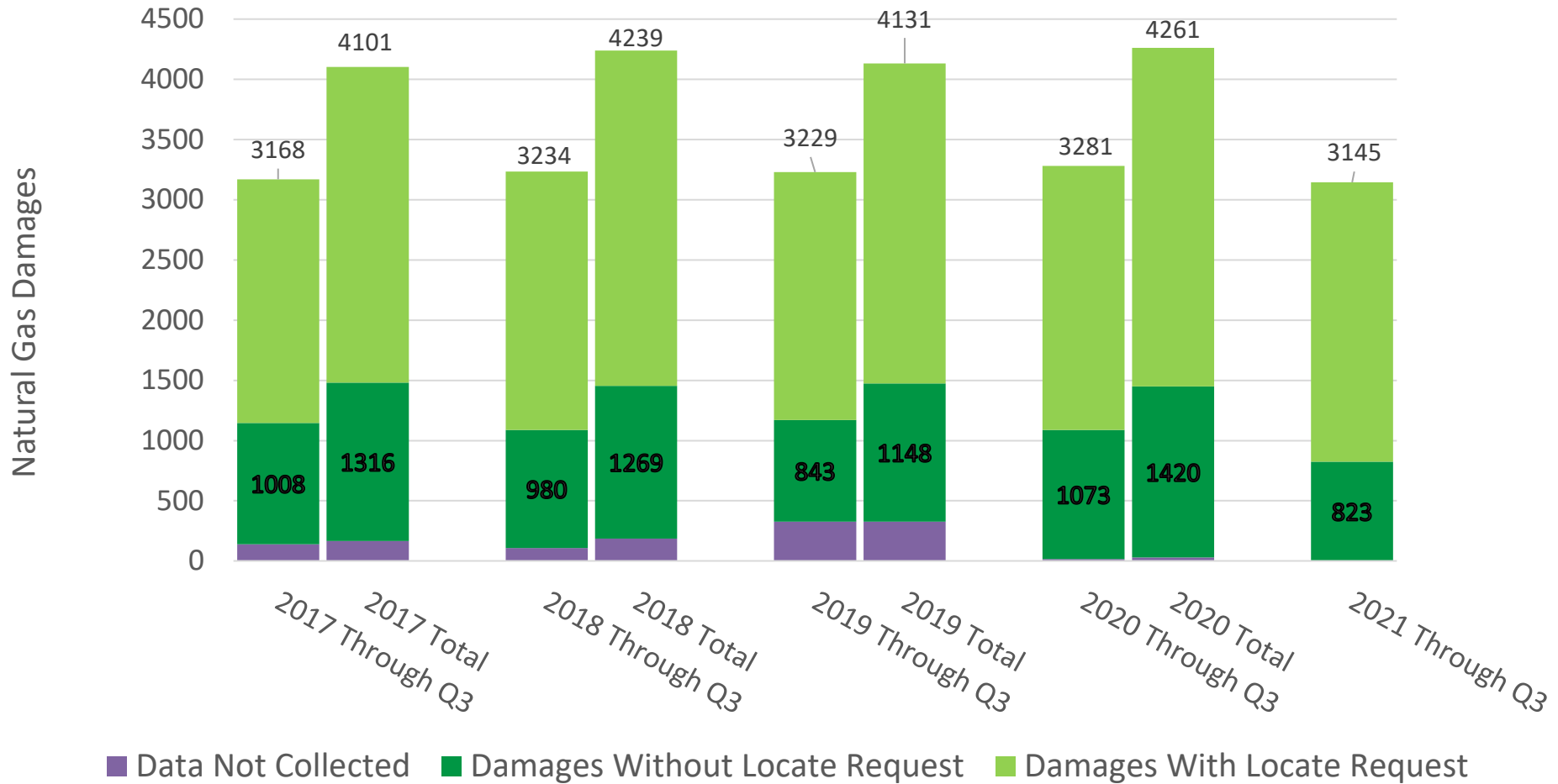
Damage Prevention Statistics

All Utility Damage Data



Damage Prevention Statistics

Natural Gas Damage Data



Damage Prevention Statistics

(Gas Distribution) 2020 Excavation Damages

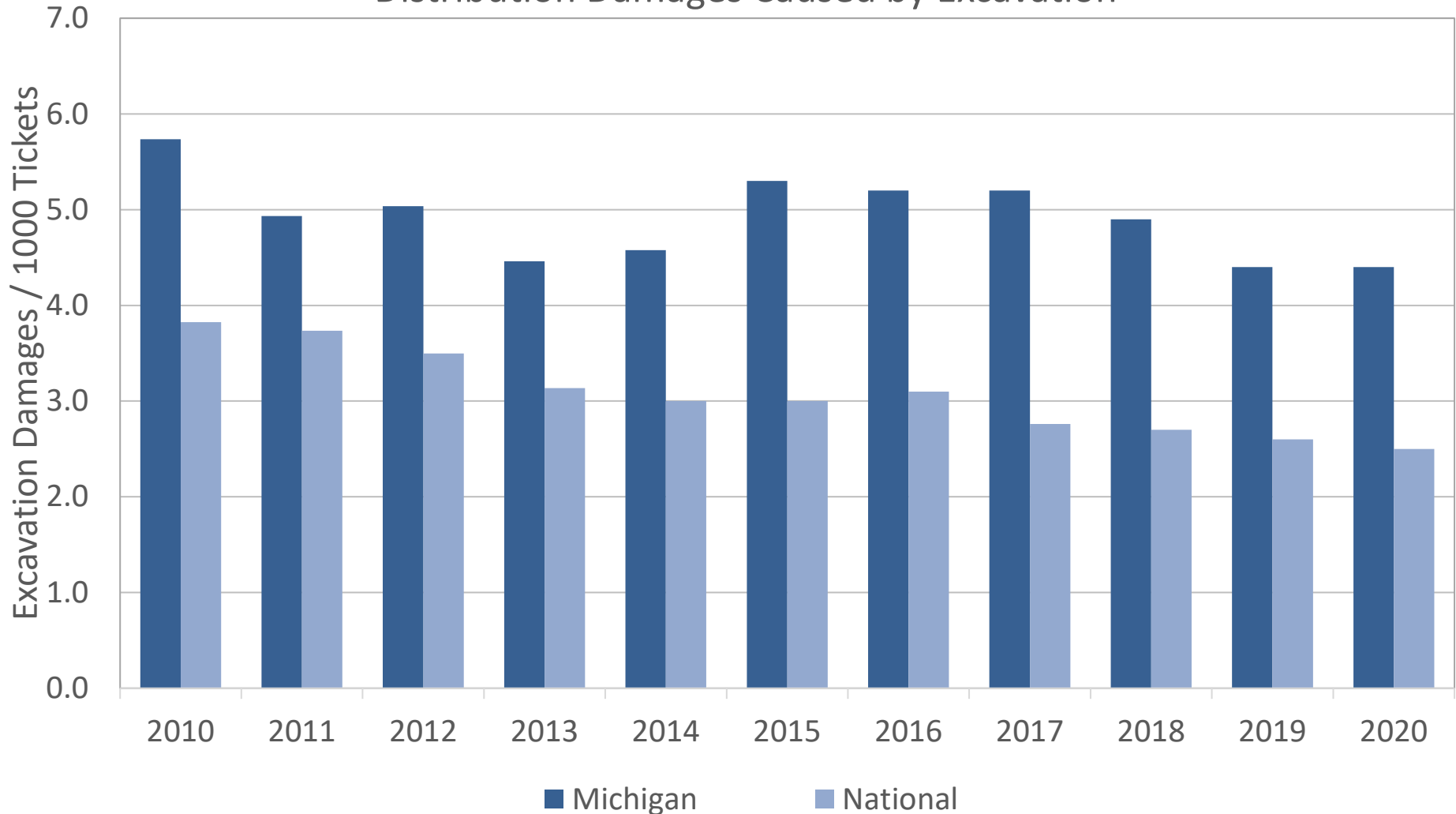
Michigan	
Total Excavation Damages	4,359
Total Excavation Tickets	1,000,022
Excavation Damages / 1000 Tickets	4.4

National	
Excavation Damages / 1000 Tickets	2.5

Damage Prevention Statistics

Gas Facility Damages Per 1000 Tickets

Distribution Damages Caused by Excavation



Damage Prevention Statistics

Gas Leaks Per Unit of Infrastructure

2020 Michigan Leak Summary

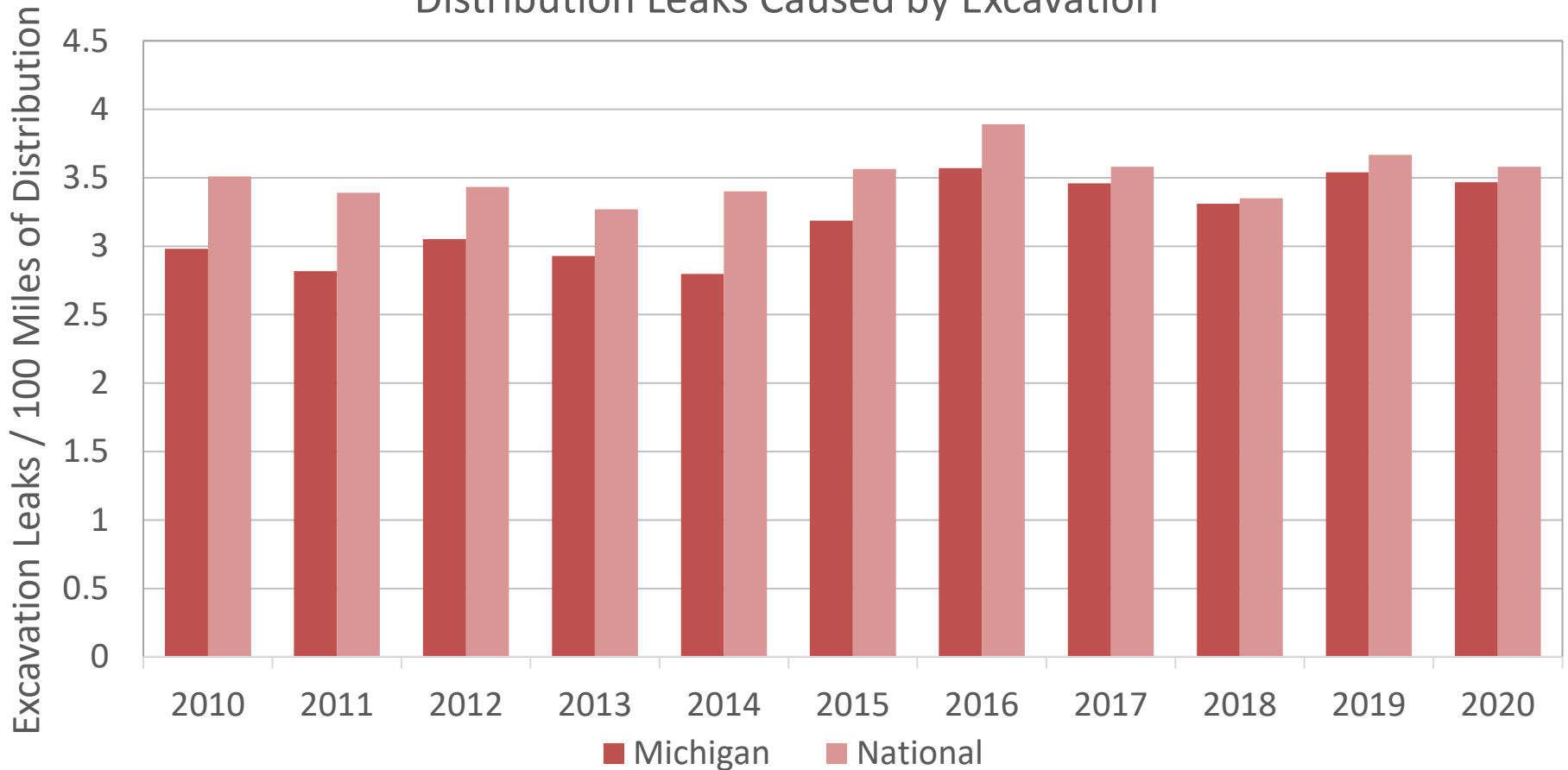
Mains	
Excavation Leaks	483
Leaks / 100 Miles of Main	0.80

Services	
Excavation Leaks	3678
Leaks / 1000 Services	1.10

Damage Prevention Statistics

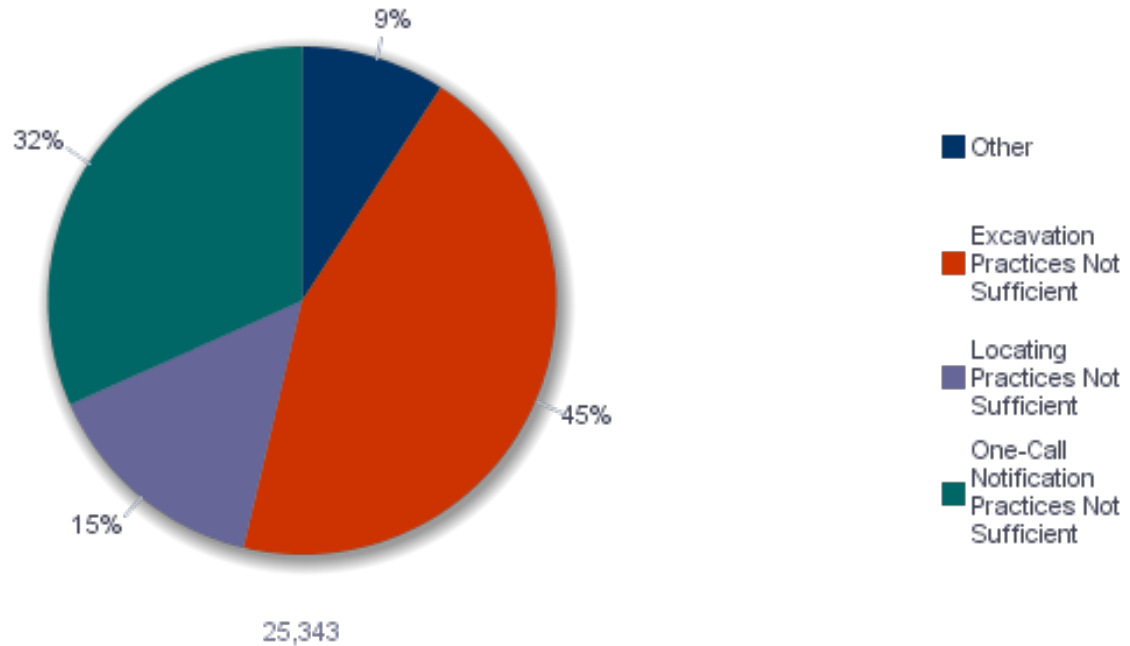
(Gas Distribution)

Distribution Leaks Caused by Excavation



Damage Prevention Statistics

Michigan Gas Distribution Pipeline Excavation Damages by Root Cause



Calendar Year	Number of Excavation Tickets	Number of Excavation Damages	Damages per Thousand Tickets	One-Call Notification Practices Not Sufficient	Locating Practices Not Sufficient	Excavation Practices Not Sufficient	Other	One-Call Notification Practices Not Sufficient	Locating Practices Not Sufficient	Excavation Practices Not Sufficient	Other
2020	1,000,022	4,362	4.4	1,446	762	1,941	213	33%	17%	44%	5%
2019	928,529	4,117	4.4	1,362	716	1,556	483	33%	17%	38%	12%
2018	819,538	4,054	4.9	1,177	633	1,954	290	29%	16%	48%	7%
2017	822,578	4,271	5.2	1,238	636	2,108	289	29%	15%	49%	7%
2016	827,516	4,272	5.2	1,361	466	1,999	446	32%	11%	47%	10%
2015	796,641	4,267	5.4	1,451	481	1,727	608	34%	11%	40%	14%

- PHMSA Conducted an Adequacy Evaluation of Michigan's Enforcement of PA 174 on July 29, 2021 for CY2020.
 - Letter received November 5, 2021 deeming the Program adequate.

PHMSA Audit

- Areas to focus on:
 - Hand digging and soft excavation damages.
 - Making enforcement actions publicly available.
 - Locator performance.
 - Mismatching
 - Late marking
 - 1st and 2nd party damages
 - Data quality
 - Unknown/Other

Complaints

- Damage Prevention Complaint Form is available on the MPSC website: www.michigan.gov/MPSC
 - **Users must use a browser other than Internet Explorer**
- Attachments can be provided via replying to the complaint submission confirmation email.
 - Replies should contain the case reference (e.g., “ref:_00Dr08vPn._500r04lQ1o:ref”), which will direct to the appropriate database case.

Complaints

- PA 174 complaints filed

Year	Complaints Received	Issued NOPV with Penalty	Issued NOPV	Warning
2019	47	4	1	2
2020	90	14	8	2
2021	34	17	2	4

Frequent Issues

- In 2021, 12 complaints were received against contract locators.
 - Public Act 174 pertains to facility owners and excavators.
- All complaints must have an attempt at resolution prior to filing.
 - 460.17(2): “Before filing a complaint, the complainant shall make a good faith attempt to settle the dispute with the respondent using any reasonable means of resolution acceptable to the involved parties.”
 - If facility owner contact information is unknown can contact MISS DIG.

Enforcement Activity

- In 2021, 14 reportable pipeline safety incident cases involving damage prevention were opened.
 - A total of \$32,500 in penalties were assessed in 2021.

Type of Letter	Excavator	Facility Operator
NOPV with Penalty	7	4
NOPV	-	3
Warning	1	-

Enforcement Activity

- In 2021, proactive damage prevention inspections leading to enforcement actions.
 - A total of \$54,000 in penalties were assessed.

Type of Letter	Excavator	Facility Operator
NOPV with Penalty	17	10
NOPV	5	6

Strategic Planning

1. Soft Excavation and Exemptions
2. Increased Field Presence
3. Increased Enforcement
4. Data Sharing and Quality
5. Performance Metrics
6. Stakeholder Engagement
7. Staffing

- The MPSC goal to have a greater field presence.
 - Provide education to excavators.
 - Site visits to ensure compliance with PA 174 for excavators and facility owners.
 - Investigate damages as they occur.

Investigation Process

- Complaints
 - Formal
 - Informal
- Onsite Damage Investigations
 - Reported incidents under Public Act 165 of 1969
 - Staff initiated/real time damage notifications
- Data Analysis
 - Late or no positive response
 - Quarterly damage reporting

Investigation Process

- Evidence typically requested
 - Damage report or field notes
 - Correspondence between the complainant/respondent
 - Facility operator staking records or maps
 - Photographs: before and after the damage, timestamped
 - Any other pertinent information

Evidence and Documentation

- Photographs
 - Pre-job walk through, staking and re-stakes, post-damage
 - Ensure a complete picture is painted
 - Timestamped and location shown, preferably
- Correspondence
 - Phone calls with facility owners, stakers
- Damage reports
 - Describe what occurred and why
 - Take measurements

Incidents

- September 15, 2020
- 20-inch steel transmission line, 630 psig
- Directional drilling to install cable
- Operator enforcement
 - 192.614: Failure to mark facility
- Excavator enforcement
 - MCL 460.725(9): Failure to stop excavation when positive response indicates presence of a facility with no marks visible



Incidents

(Continued from previous slide)

- Directional drilling parallel to distribution main
- No damage.
- MCL 460.725(5): “For excavations in a caution zone parallel to a facility, an excavator shall use soft excavation at intervals as often as reasonably necessary...”
- Recommendation to establish a set interval to hand expose.



Incidents

- December 8, 2020
- Six-inch plastic distribution main
- Excavator hand exposed marked main and was digging outside the caution zone when unmarked main was hit.
- Estimated property damage \$213,274
- 1,314 customer outages
- Operator Enforcement
 - 192.614(a) – Inaccurate staking.
 - Recommendations:
 - Provide as-builts to staking contractor until mapped.
 - Provide staking contractor abandoned pipeline maps.
 - Label locating wires in test stations.



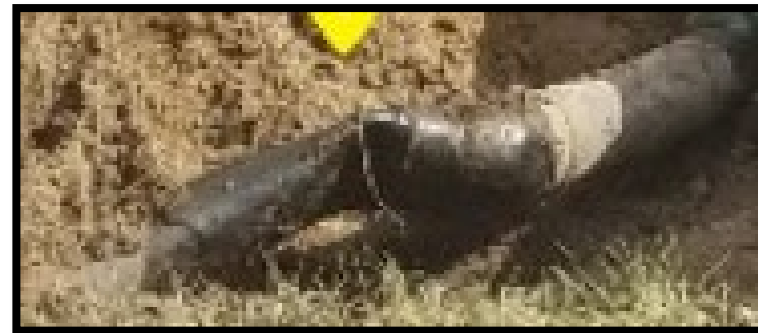
Incidents

- December 15, 2020
- House Explosion
- Threaded/Coupled Distribution Main
- City working on sewer lateral repair.
- Gas main separated during backfill/compacting.
- Excavator Enforcement
 - MCL 460.725(6): Failure to brace facilities.



Incidents

- March 31, 2021
- 4" plastic main
- Low pressure
- Not marked
- Operator enforcement
 - 192.614(c)(5) – Failure to provide temporary marking of buried pipelines.



Incidents

- June 1, 2021
- Test tube valve within valve box
- 100 psig
- 1 Mmcf gas loss
- “Mill and Fill” operations
- Excavator enforcement
 - 460.725(1) – Failure to provide dig notice.
- Operator enforcement
 - 192.614(a) – Failure to provide dig notice.



Incidents

- July 7, 2021
- 4" main
- 10 MAOP
- Facilities hand located. Damage occurred during excavation with mini-excavator to further expose.
- Service tee broken off, and electric cable for streetlights severed.
- Gas ignited.
- Employee injured.
- Under investigation.



Incidents



Lessons Learned

- Contact MISS DIG for additional assistance
 - Destroyed markings; unmarked facility; facility owner contact information
- Ensure soft excavation is adequate
 - Parallel excavations; if facility becomes covered hand expose again
- When a facility is damaged protect self and others
 - If it is safe, shut down equipment; do not move equipment; evacuate the area; contact 911 and the facility owner
- If in doubt, place a ticket
 - Saw cutting, milling, landscaping, driving stakes

Questions?