



Canada Energy  
Regulator

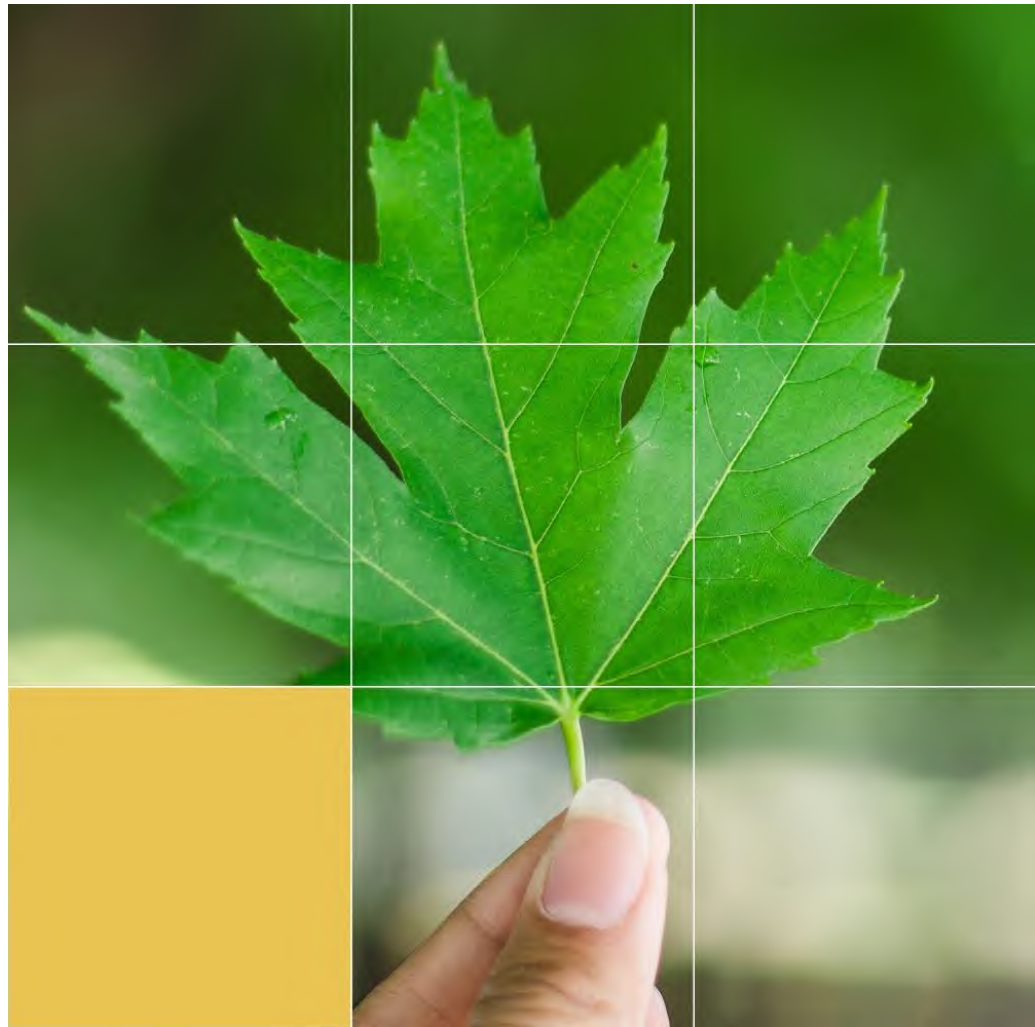
Régie de l'énergie  
du Canada

# CER Pipeline Damage Prevention Regulations Workshop

25 November 2021

**Introduction to  
DPR Contraventions Data**

Canada





# Today's Introduction to DPR Data

- Data Moment – Unicorn Indicators (presented by Andrew Benson)
- Purpose
- Overview of DPR events since 2020
- From UX to DPR Events – Highlighting the new data fields
- Overview of causes and corrective actions
- Repeat occurrences



# Data Moment

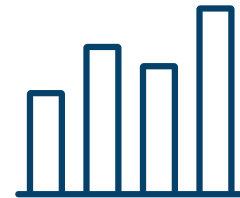
- **Presented by Andrew Benson – Unicorn Indicators**



# Purpose

- **Overview on the use of data to improve companies' DP Programs**

- What are we doing with our data?
- What can we learn from the data?
- How can data drive continual improvement?



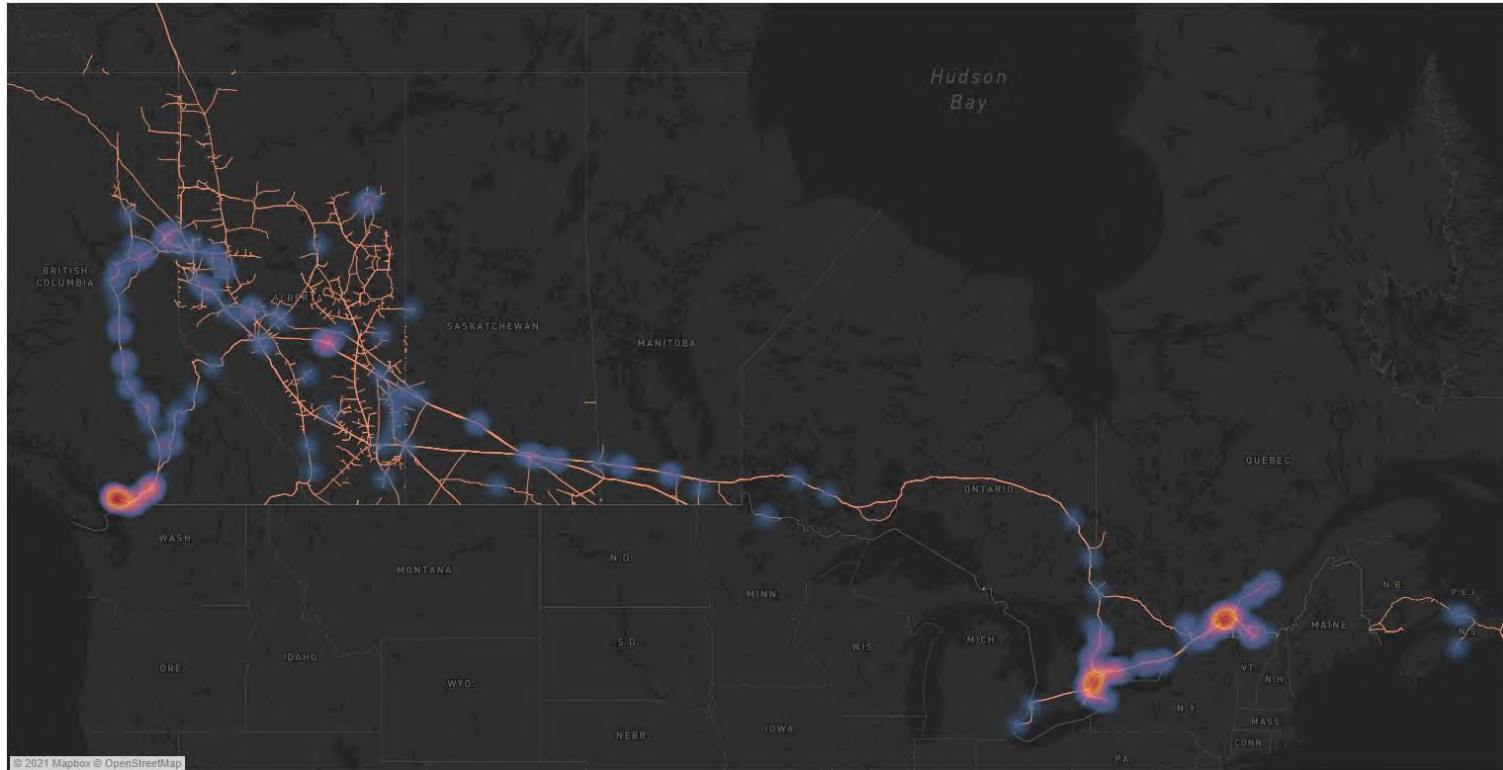
- **Get your feedback – We want to hear from you!**

- What data can be helpful to you?
- Any ideas for future data analysis?
- What are you learning from your data?



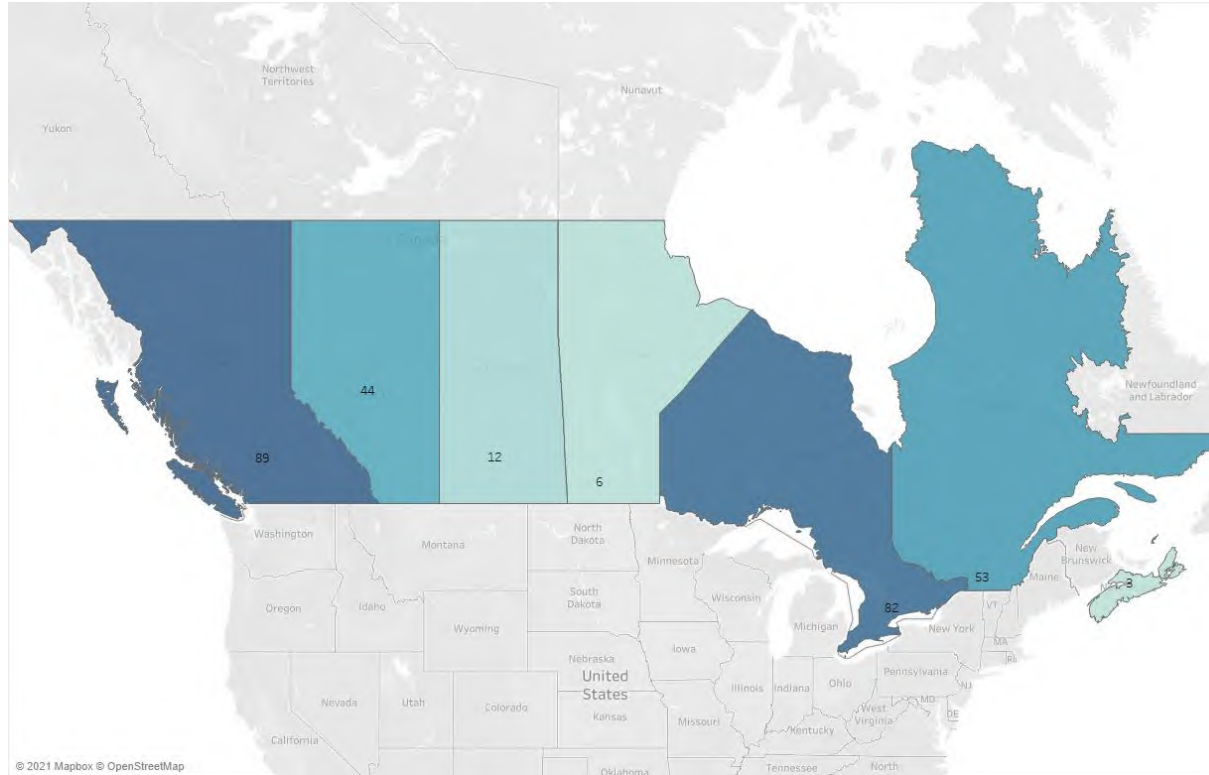


# All DPR Events 2020-2021 – Canada Heat Map





# All DPR Reports since 2020-2021 – Per Province



© 2021 Mapbox © OpenStreetMap

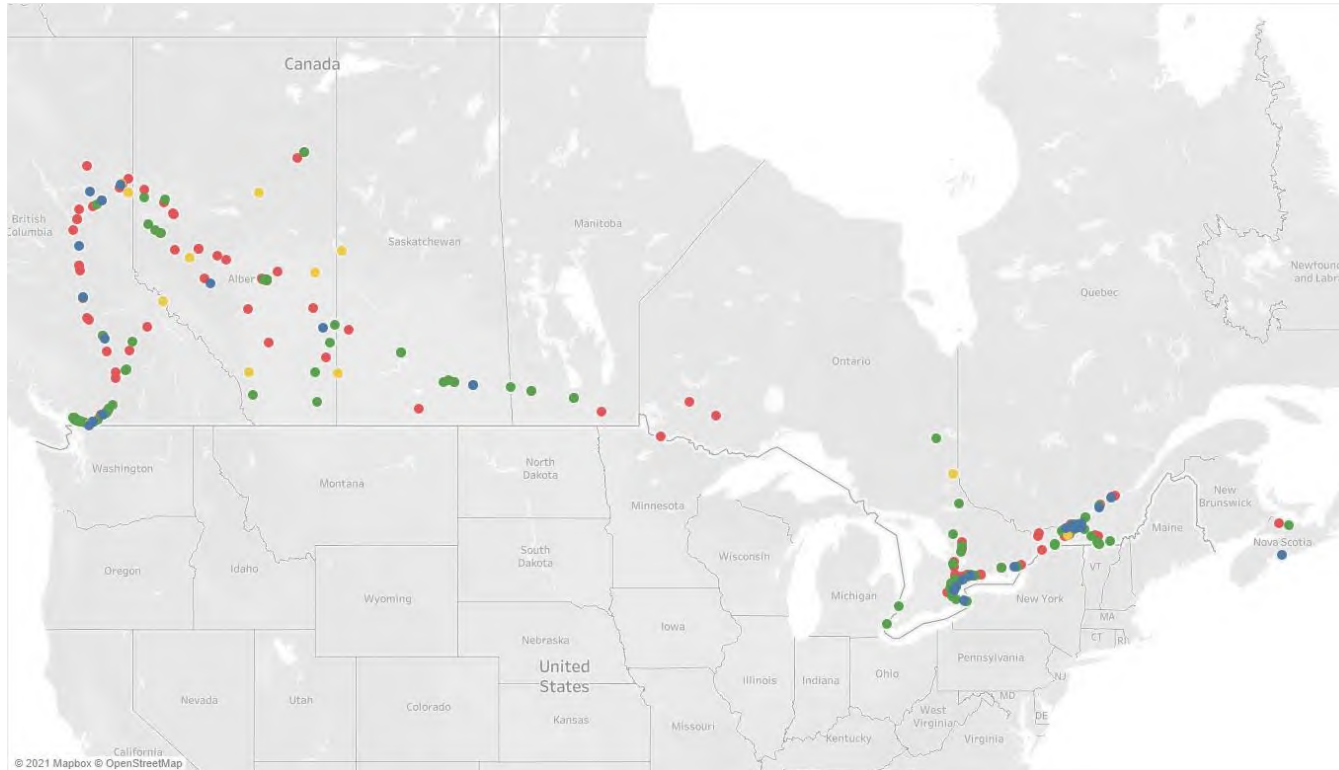


# DPR Events 2020-2021 – Ground Disturbances



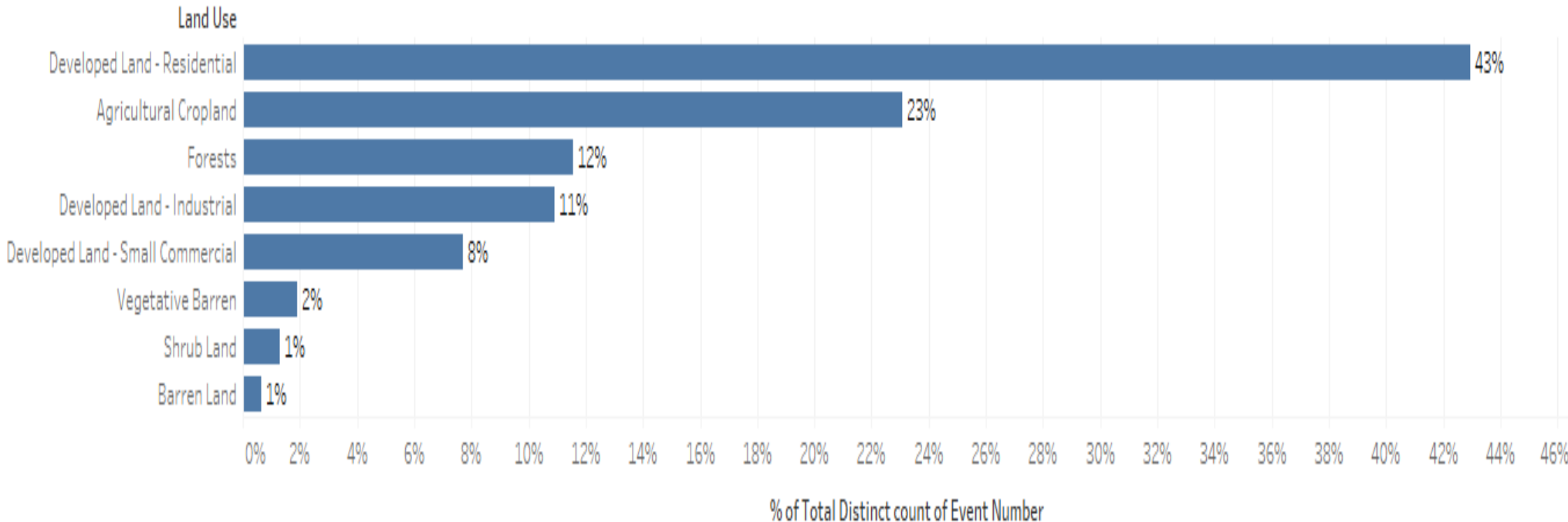


# DPR Events 2020-2021 – All Event Types





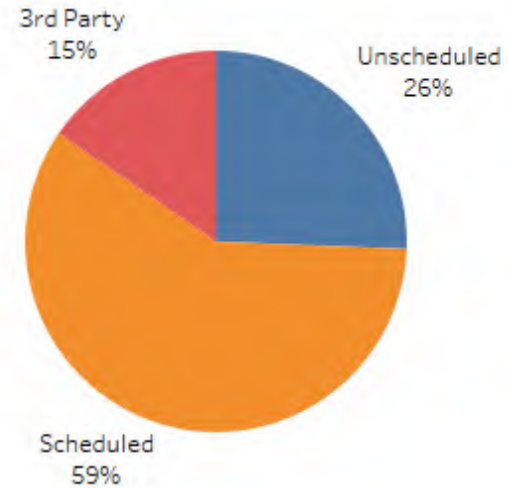
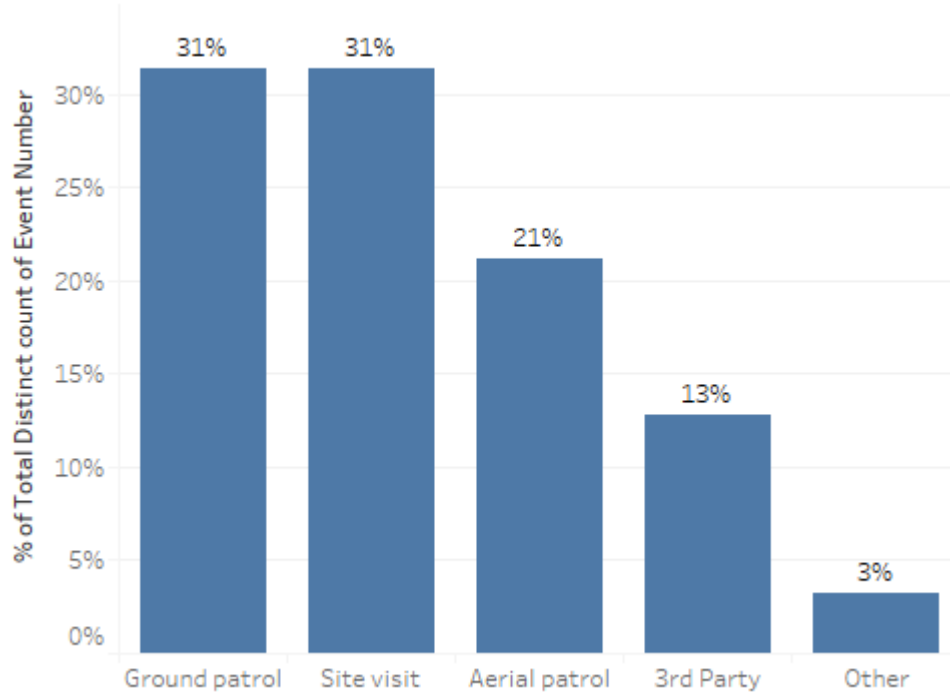
# Ground Disturbances – Land Use





# Ground Disturbances – Method of Discovery

Event Discovery Way





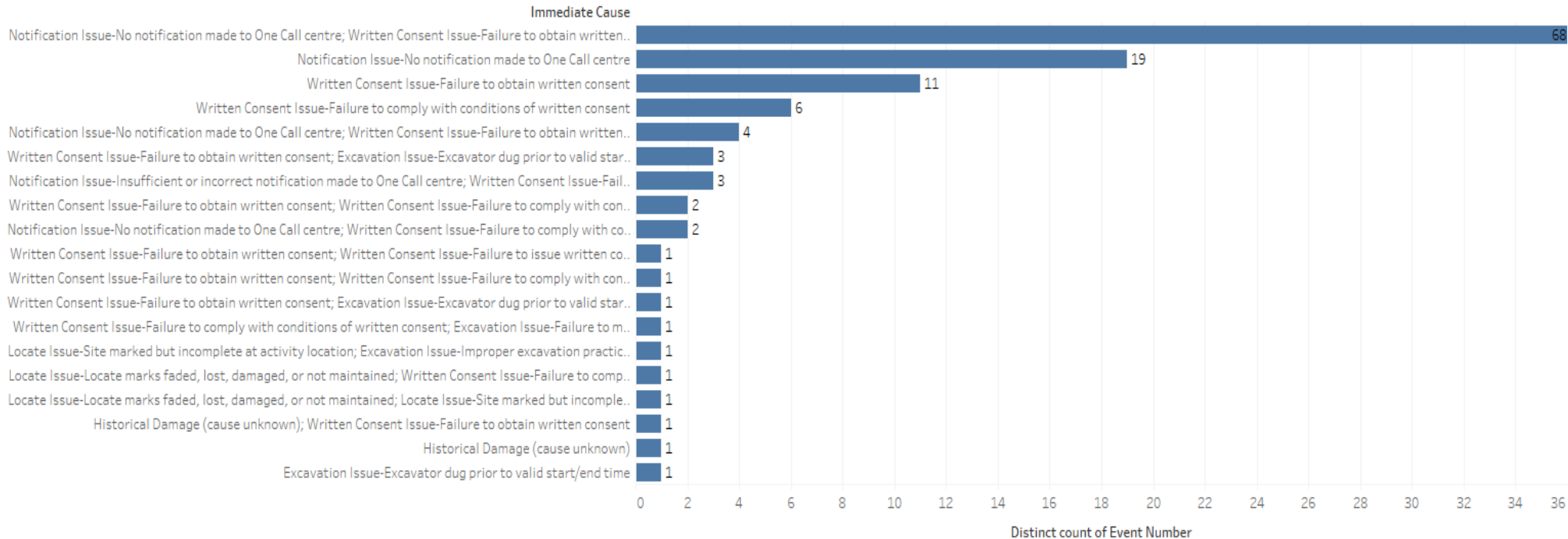
## From UX to DPR Events – Highlighting the new data fields

Before (UX)	Now (DPR)
Reason for violation and general follow-up	Root cause and contributing factors, and corrective or preventative actions
Activity details section regardless of selected event type	Separate section per event type
Violator section	Parties Involved - Ground disturber, Facility Constructor, Vehicle Operator, Project Owner
Many text fields for data entry	More drop-down menus, checkmarks, single-value fields for data entry



# Overview - Immediate and Basic Causes

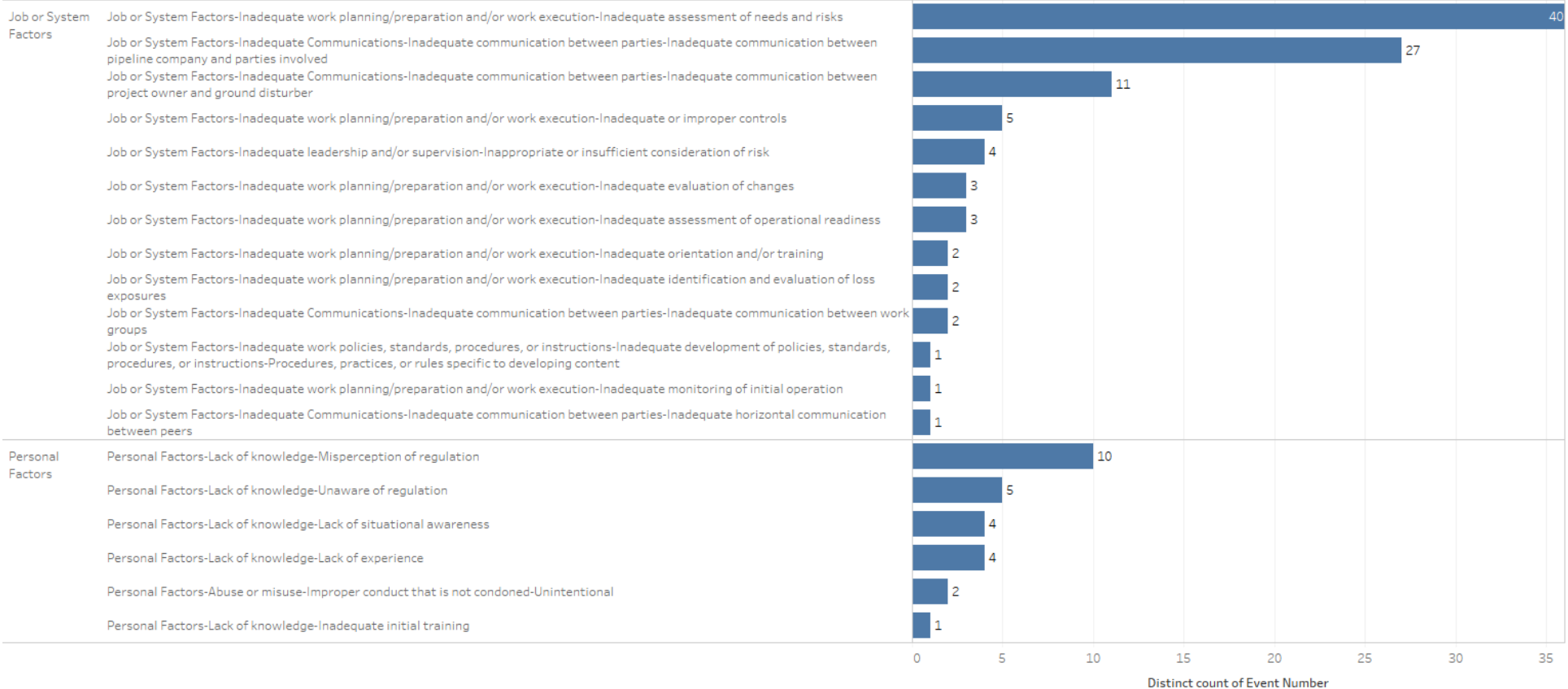
## Immediate Causes for Ground Disturbances





## Basic Causes for Ground Disturbances

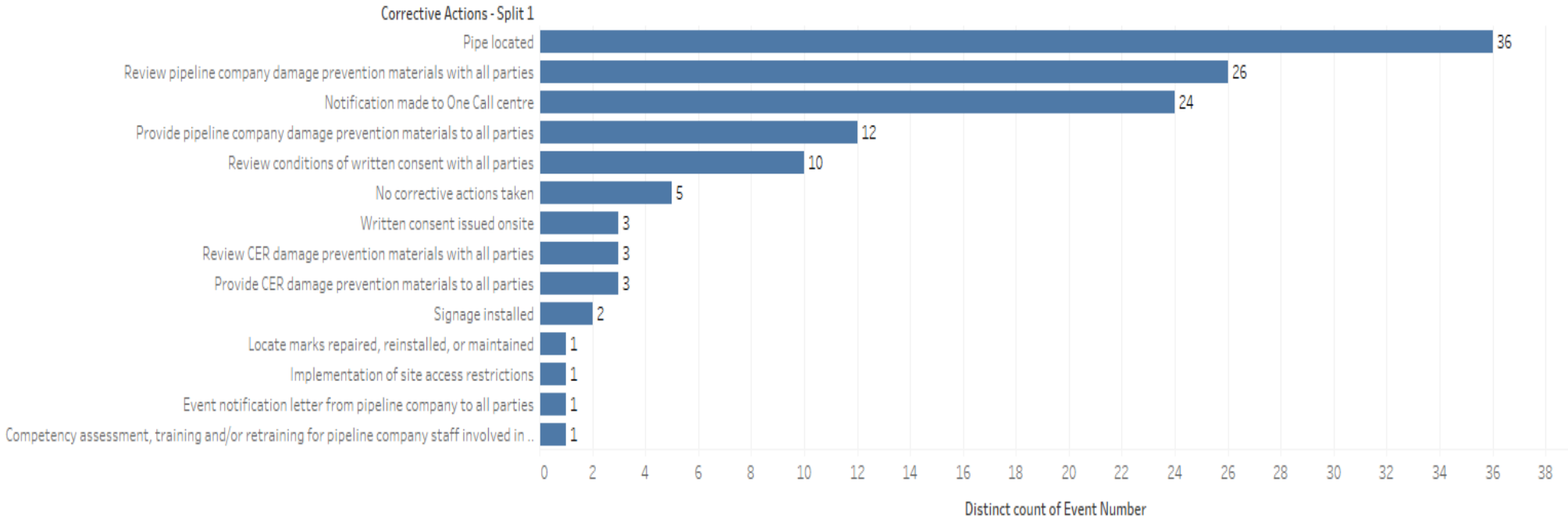
### Basic Cause - S.. Basic Cause - Split 1





# Overview - Corrective actions

## Corrective Actions for Ground Disturbances

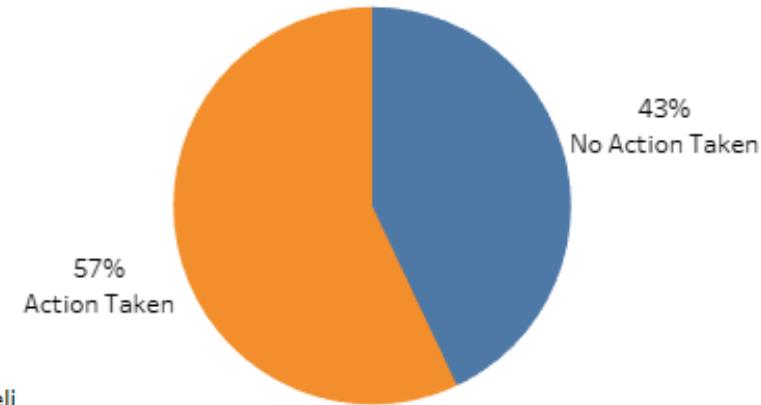




# All Event Types – Tier 1 Preventive Actions

**Tier 1 Preventive Actions - actions taken to address causes at additional locations where similar/identical situations exist in order to proactively eliminate the identified risk**

- No tier 1 preventive actions taken
- Event data included in holistic analysis to determine if company-wide processes or procedures require modification
- Local/regional communication to pipeline company staff
- Competency assessment, training and/or retraining at more than one location
- Correct role responsibilities at more than one location
- Increase inspection/review frequency at more than one location
- New policy/standard/procedure/instruction at more than one location
- Update policy/standard/procedure/instruction at more than one location
- Repair/replacement made at more than one location
- Schedule/plan modification for more than one location
- Pipeline company follow up conducted with all parties to review how to work safety around a pipeli
- Competency assessment, training and/or retraining with external parties involved
- Communication to external stakeholders

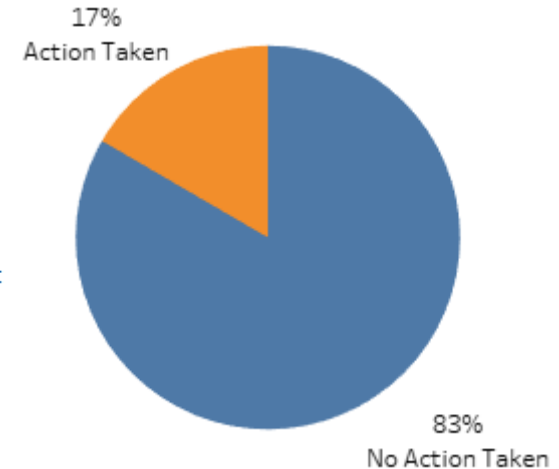




# All Event Types – Tier 2 Preventive Actions

**Tier 2 Preventive Actions - actions taken to address systemic causes; typically associated with changes that impact the entire company or pipeline.**

- No tier 2 preventive actions taken
- Modify and implement company-wide/system-wide processes or procedures for awareness/communication of key information
- Modify and implement company-wide/system-wide processes or procedures for control and management of documentation/records including policy/standard/procedure/instruction
- Modify and implement company-wide/system-wide processes or procedures for control of identified hazards
- Modify and implement company-wide/system-wide processes or procedures for developing competency requirements, training programs, and verification of competency
- Modify and implement company-wide/system-wide processes or procedures for hazard identification or risk assessment
- Modify and implement company-wide/system-wide processes or procedures for identifying and inventorying legal requirements
- Modify and implement company-wide/system-wide processes or procedures for inspecting and monitoring the companies activities and facilities
- Modify and implement company-wide/system-wide processes or procedures for management of change
- Modify and implement company-wide/system-wide processes or procedures for setting and achieving goals, objective and targets
- Staff or internal communication across company/system





# Repeat Contraventions (CEPA DP CoP June 2021)

## The « Ask » - CER Information about « Repeat Offenders »

### 1. Your Role in Data Quality



Parties Involved Section

**Project Owner**

Select the type that best describes the party \*

3rd party (no connection to the pipeline company) ▼

**Third Party Type \***

Contractor ▼

**Is this a repeat occurrence for the party? \***

No ▼

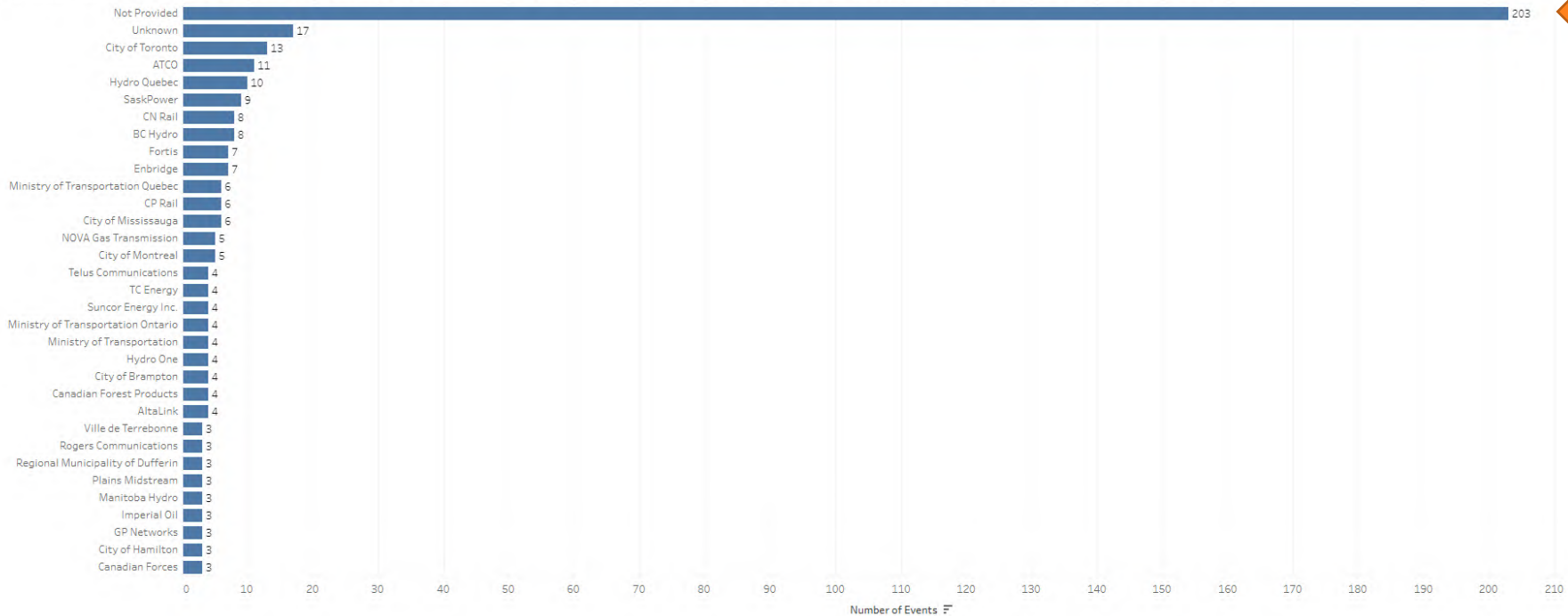
**Company (if applicable)**



# Since 2015

## Repeat Violators

Includes those companies with 3 or more total events over 2 or more regulated companies. Does not include landowners. Data from Jan 1, 2015 to June 10, 2021.





## 2. Types of Offenders

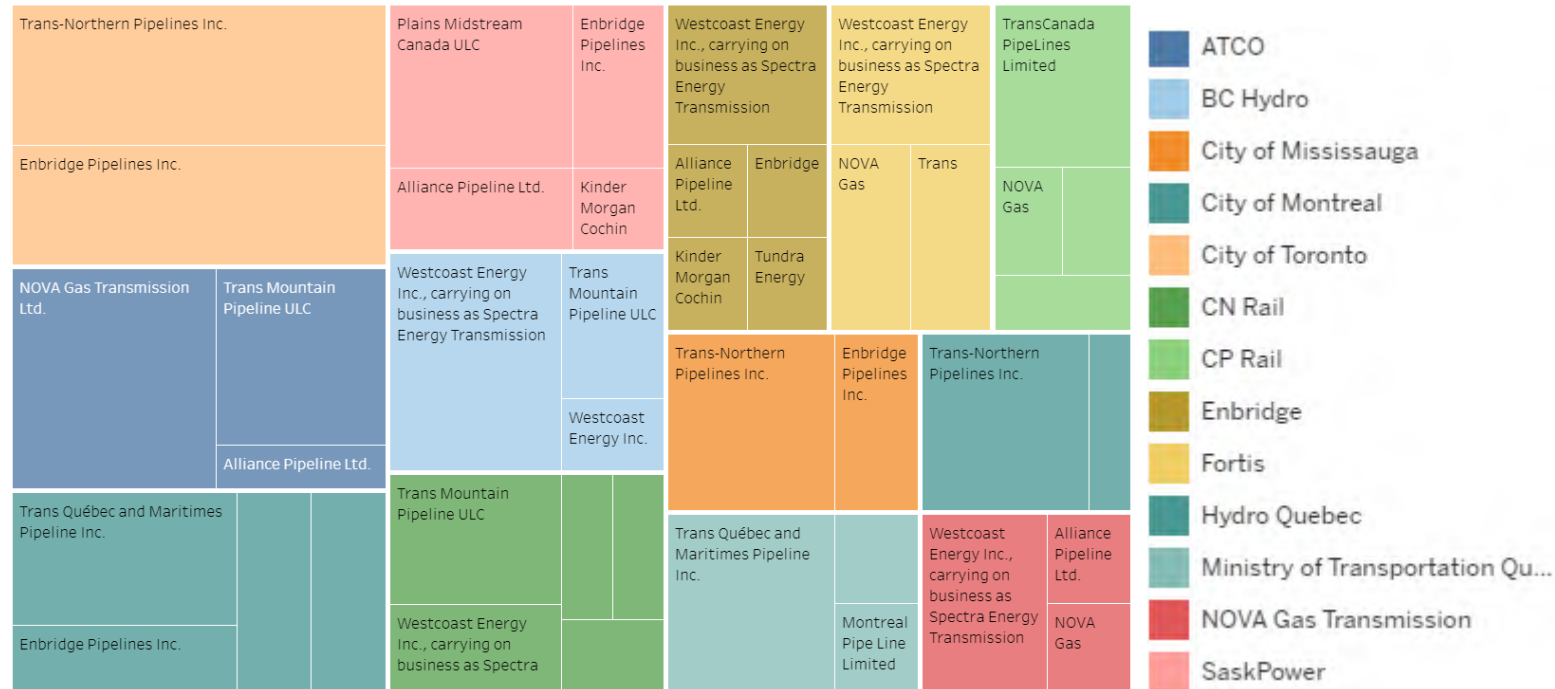
- **Power and utility companies:**
  - ATCO, SaskPower, Hydro-Quebec, Fortis, BC Hydro, Hydro One
- **Provincial transport ministries:**
  - Ministry of Transportation Ontario, Transport Québec
- **Municipalities:**
  - City of Toronto / Mississauga, City of Montreal
- **What do they have in common?**
  - High volume of work (increased frequency)
  - Shared RoW



# 3. Proximity between Pipelines

## Repeat Contraveners and Regulated Companies

Includes those contraveners with 5 or more total events over 2 or more regulated companies. Does not include landowners.  
Data from Jan 1, 2015 to June 10, 2021.





Canada Energy  
Regulator

Régie de l'énergie  
du Canada

# Questions?

Canada





Canada Energy  
Regulator

Régie de l'énergie  
du Canada

[www.cer-rec.gc.ca](http://www.cer-rec.gc.ca)

1-800-899-1265

**Twitter:** @CER\_REC | @REC\_CER

**LinkedIn:** @CER-REC | @REC-CER

**Facebook:** @CER.REC | @REC.CER

Canada 