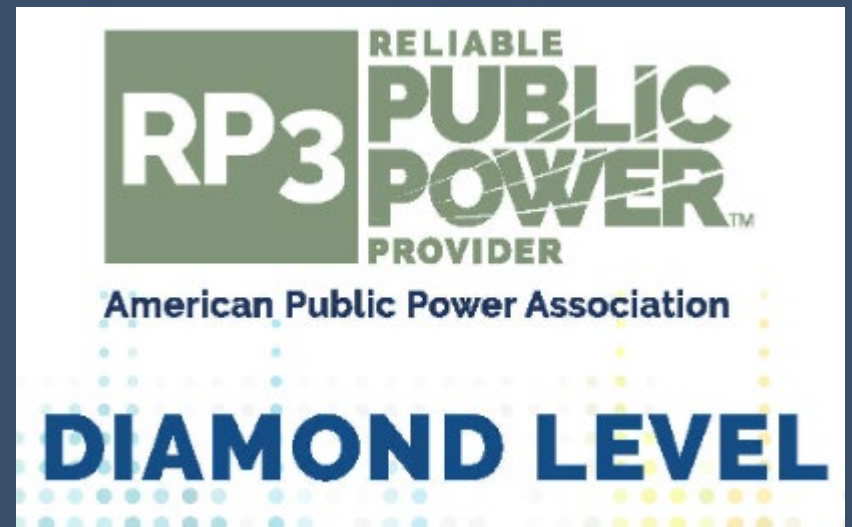


# VPU Reliability Metrics



September 12, 2024

# Reliable Public Provider National Recognition

## Excellence in Reliability

- Nationally recognized for Excellence in Reliability in 2020, 2021, 2022, 2023, and 2024
- VPU ranked in top 25% of utilities nationwide (based on the average duration of its electrical outages over a rolling five-year period)

## Diamond Level Reliable Public Power Provider

- 4-time recipient of Reliable Public Power Provider (RP3) award
- Diamond Level – the highest designation – since 2016
- RP3 award measures utilities in safety, reliability, workforce development, and system improvement



# Distribution Reliability Definitions



## **Average System Availability Index or ASAI**

measures the percentage of time electric service was available to customers in a year.



**System Average Interruption Duration Index or SAIDI** measures the average amount of time that an average customer experiences power outages in a year.



**System Average Interruption Frequency Index or SAIFI** represents the average number of power outages an average customer experiences in a year.



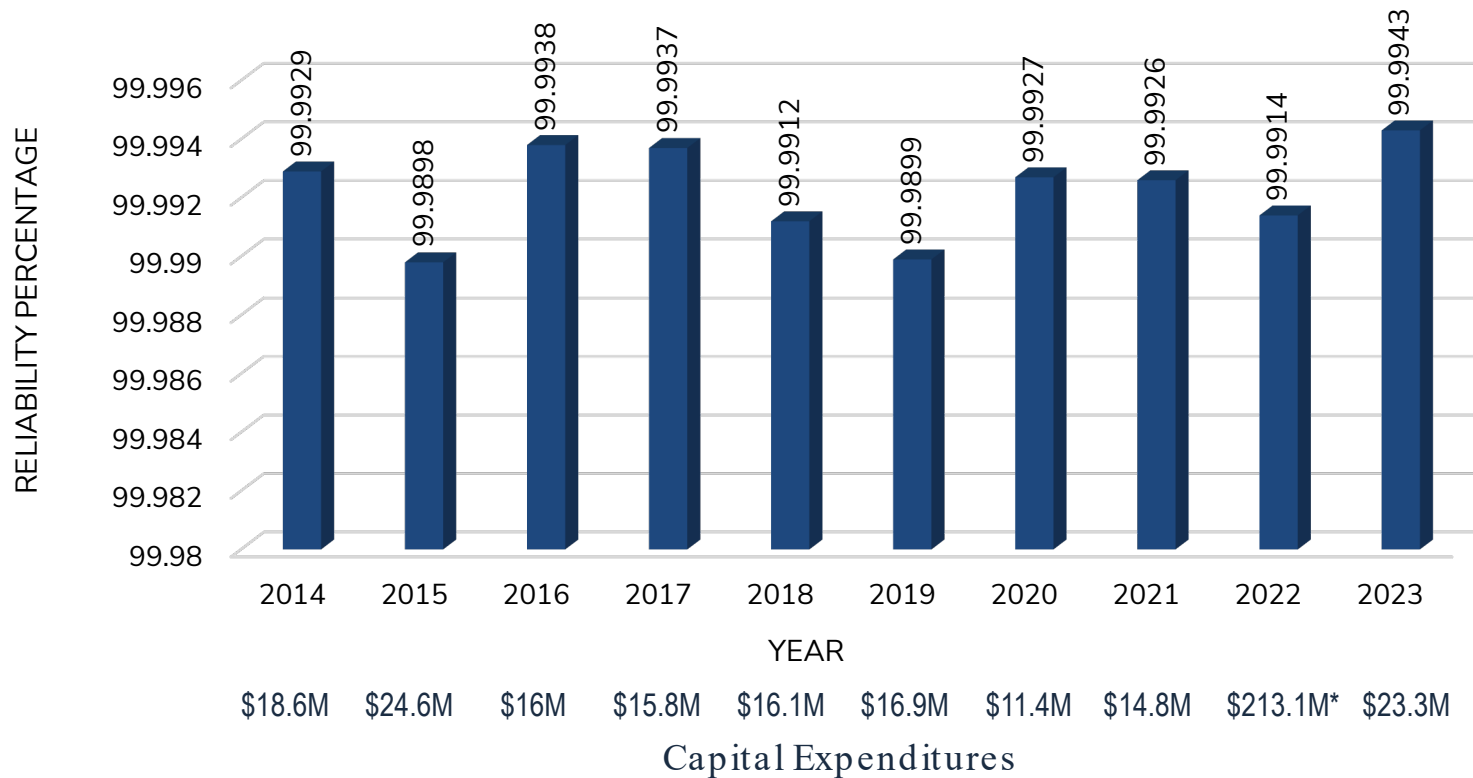
**Customer Average Interruption Duration Index or CAIDI** measures the average length of time it takes for a customer's power to be restored after an outage.

# Reliability Performance System Availability

Vernon Public Utilities' electric system is available over 99.99% of the time.



**Average System Availability Index or ASAI** measures the percentage of time electric service was available to customers in a year

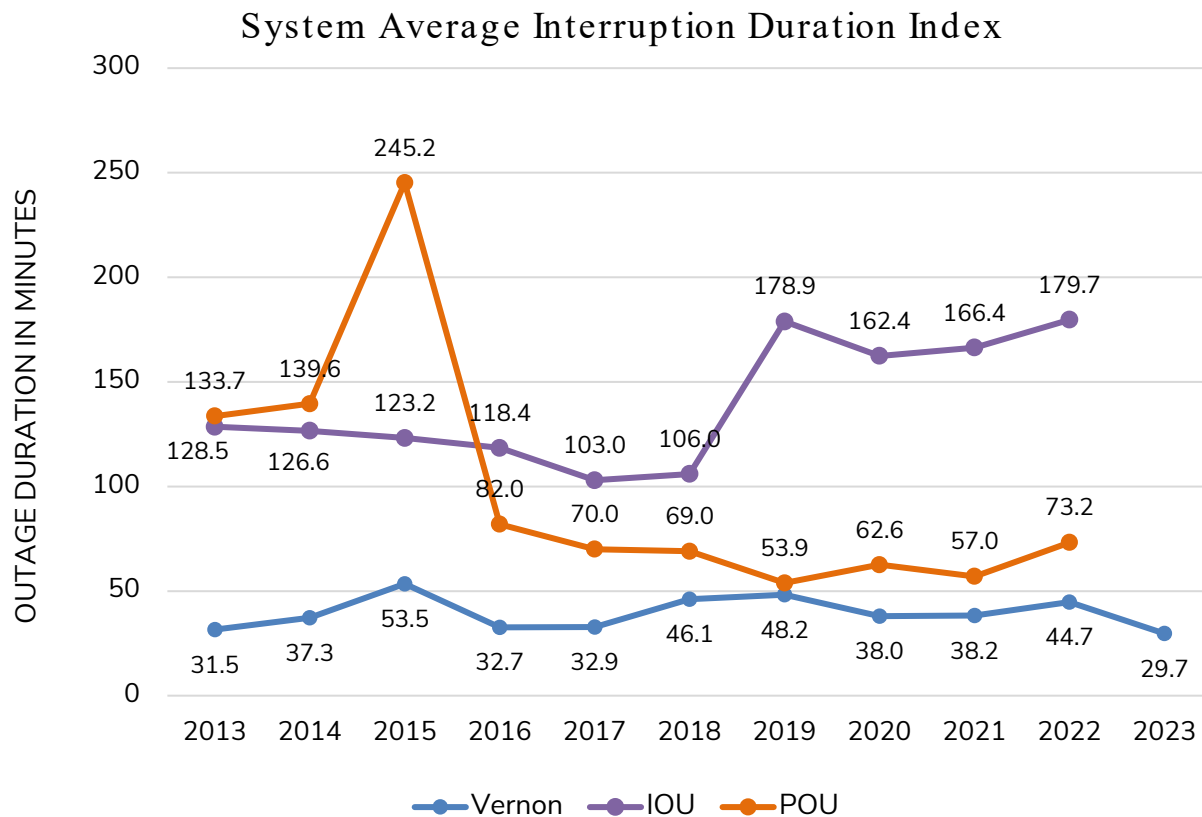


# Reliability Performance Average Duration

System improvements and technology yields a more reliable system.



**System Average Interruption Duration Index or SAIDI** measures the average amount of time that an average customer experiences power outages in a year



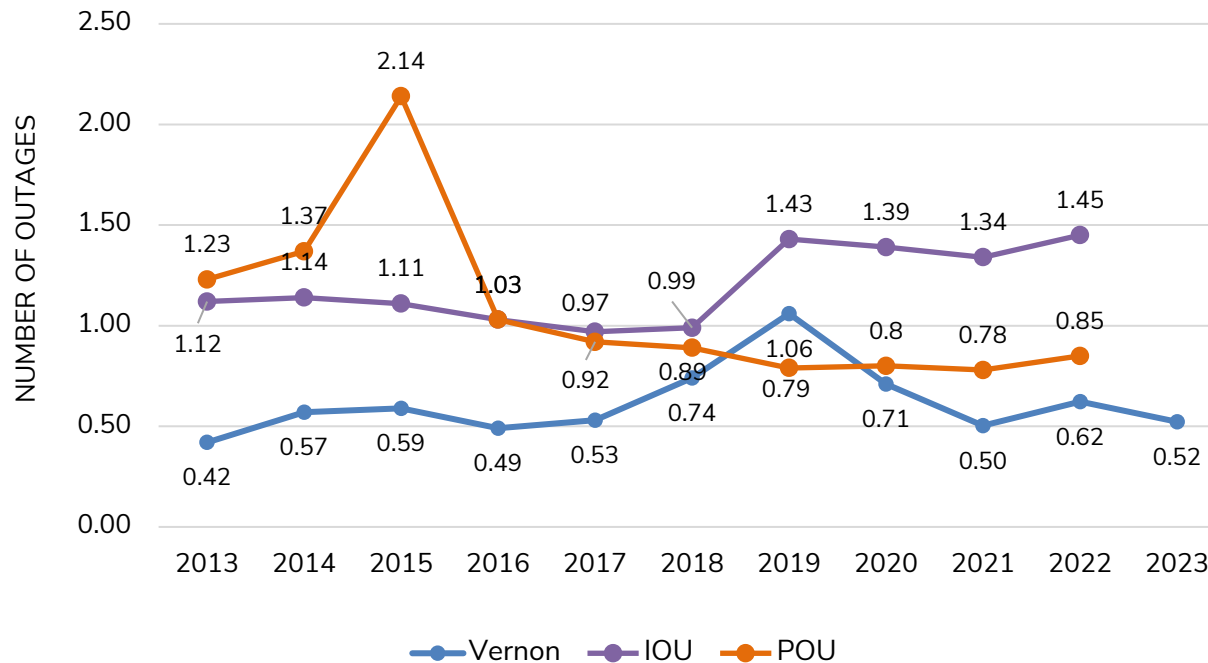
# Reliability Performance Average Frequency

VPU's outage frequency is significantly lower than the national average.



**System Average Interruption Frequency Index or SAIFI** represents the average number of power outages an average customer experiences in a year.

### System Average Interruption Frequency Index



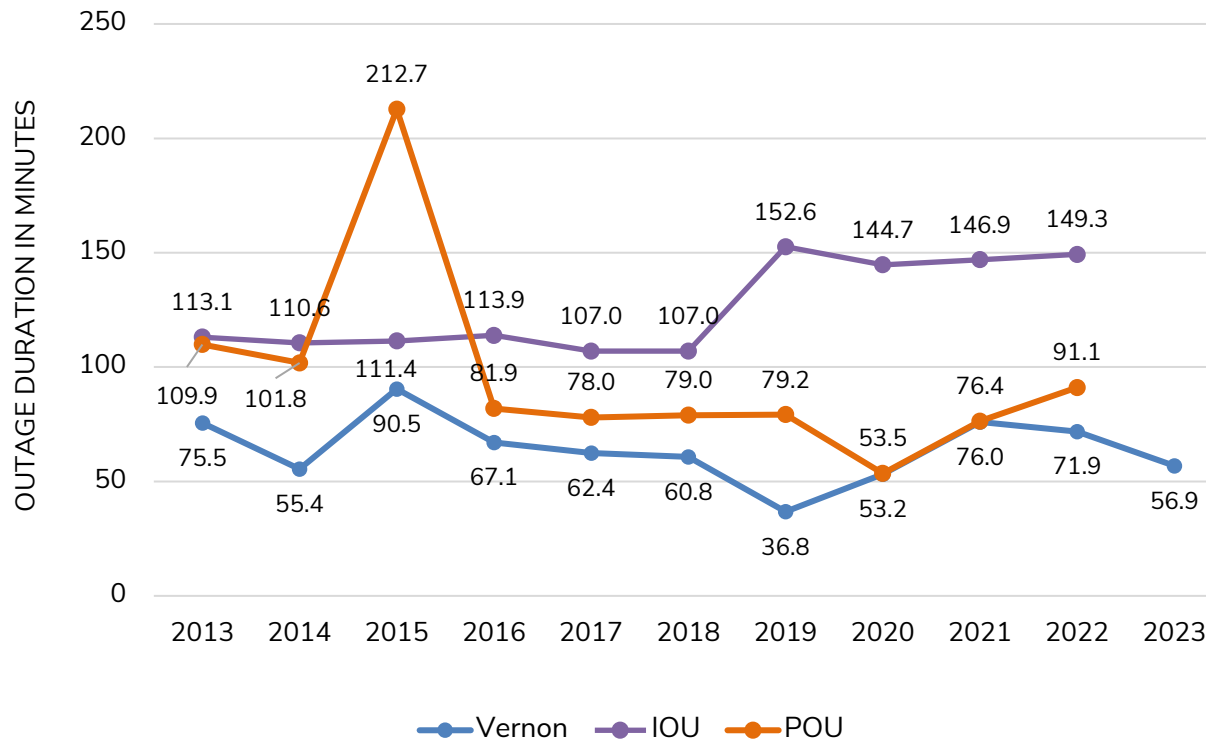
# Reliability Performance Restoration Time

VPU's outage duration is significantly lower than the national average.



**Customer Average Interruption Duration Index or CAIDI** measures the average length of time it takes for a customer's power to be restored after an outage.

### Customer Average Interruption Duration Index

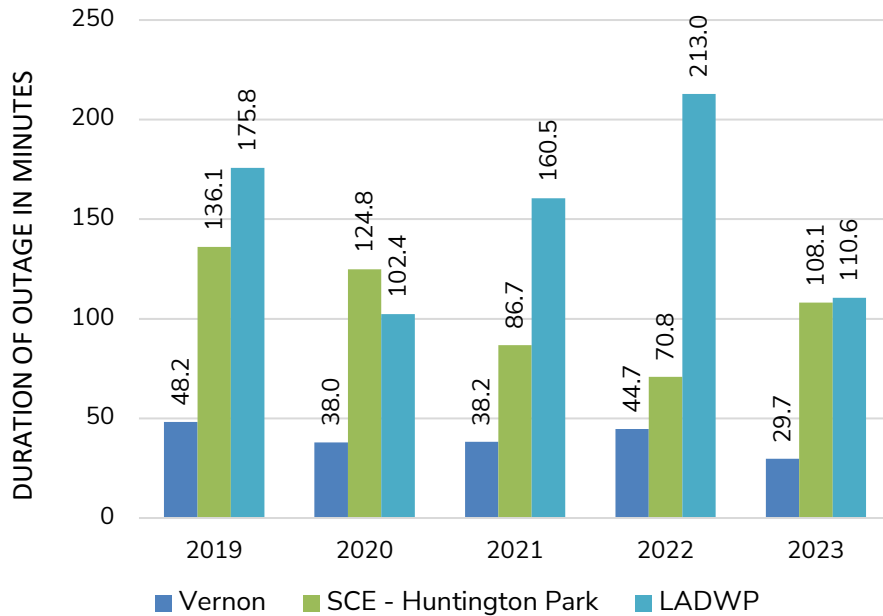


# Reliability Regional Performance Trends

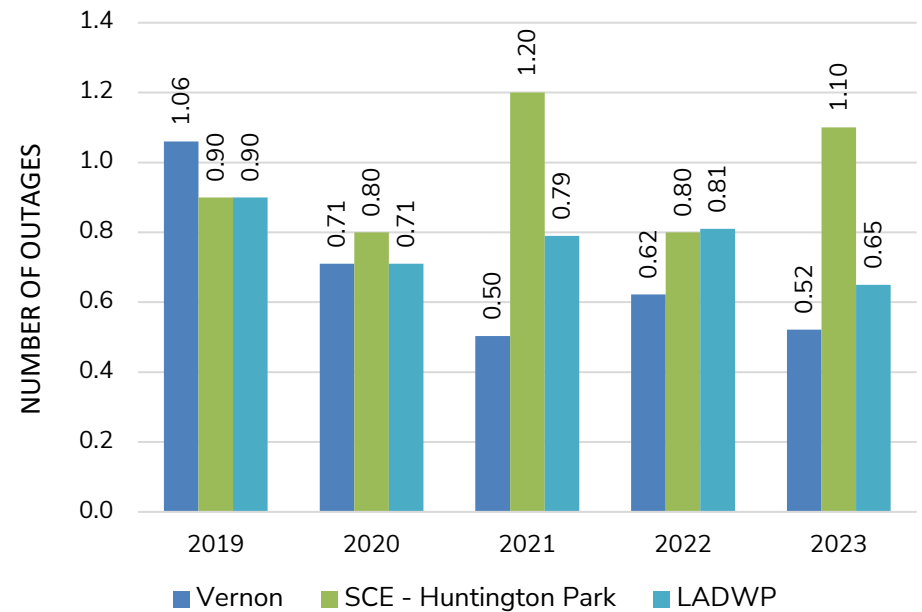
Performance Against Neighboring Competitors



System Average Interruption Duration Index



System Average Interruption Frequency Index

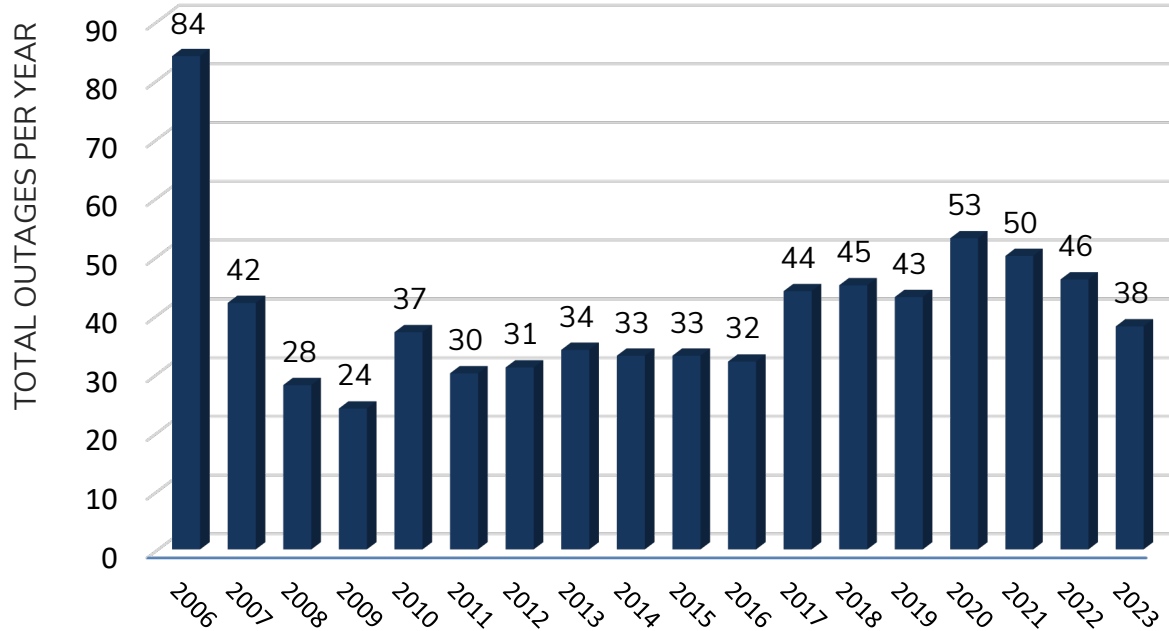


# Reliability Outage Counts

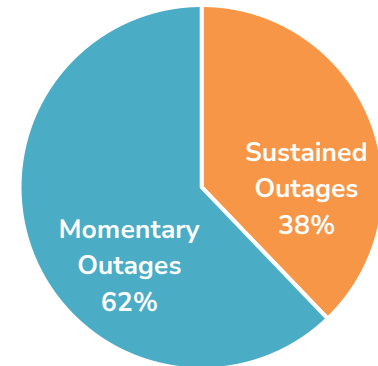
Over half the outages are momentary (less than 5 min).



### Outage Count 2006 - 2023



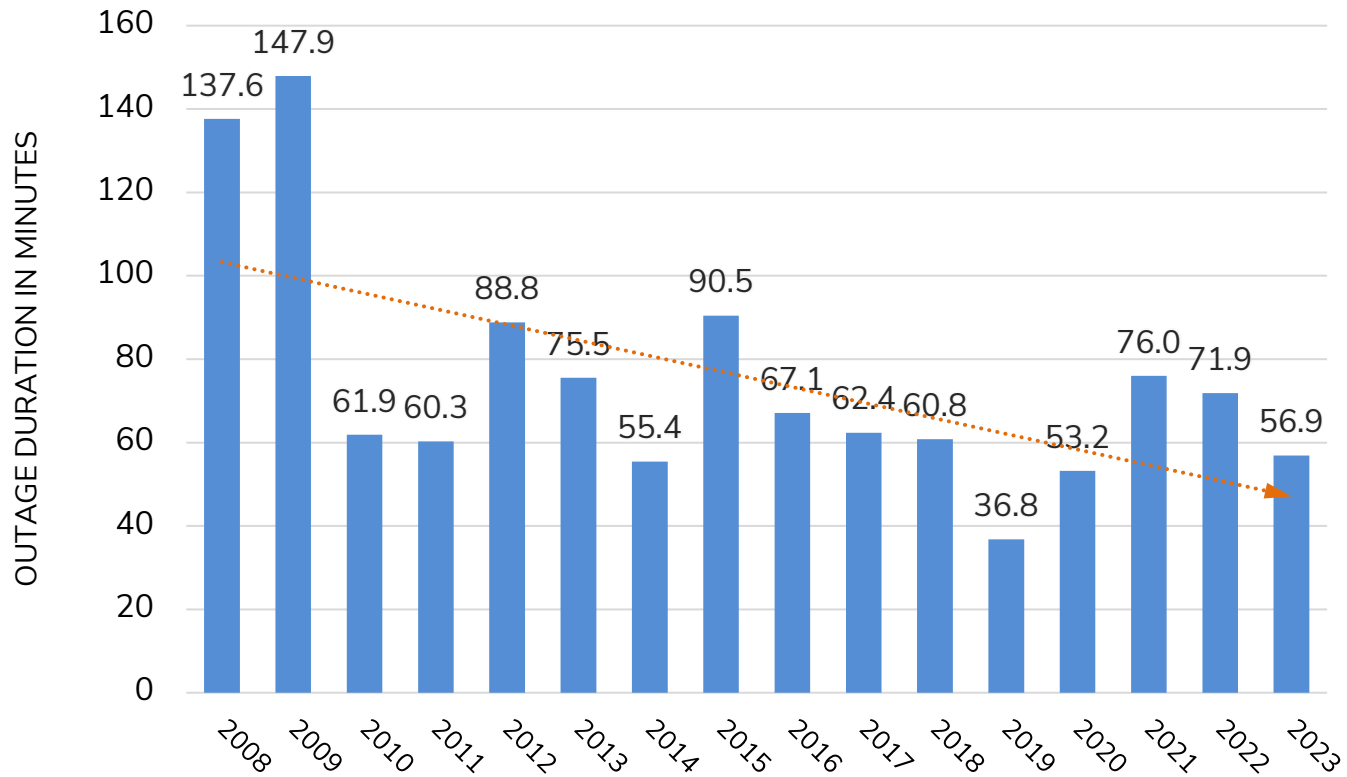
### Types of Outages in 2023



# Reliability Restoration Time

Trends and Details

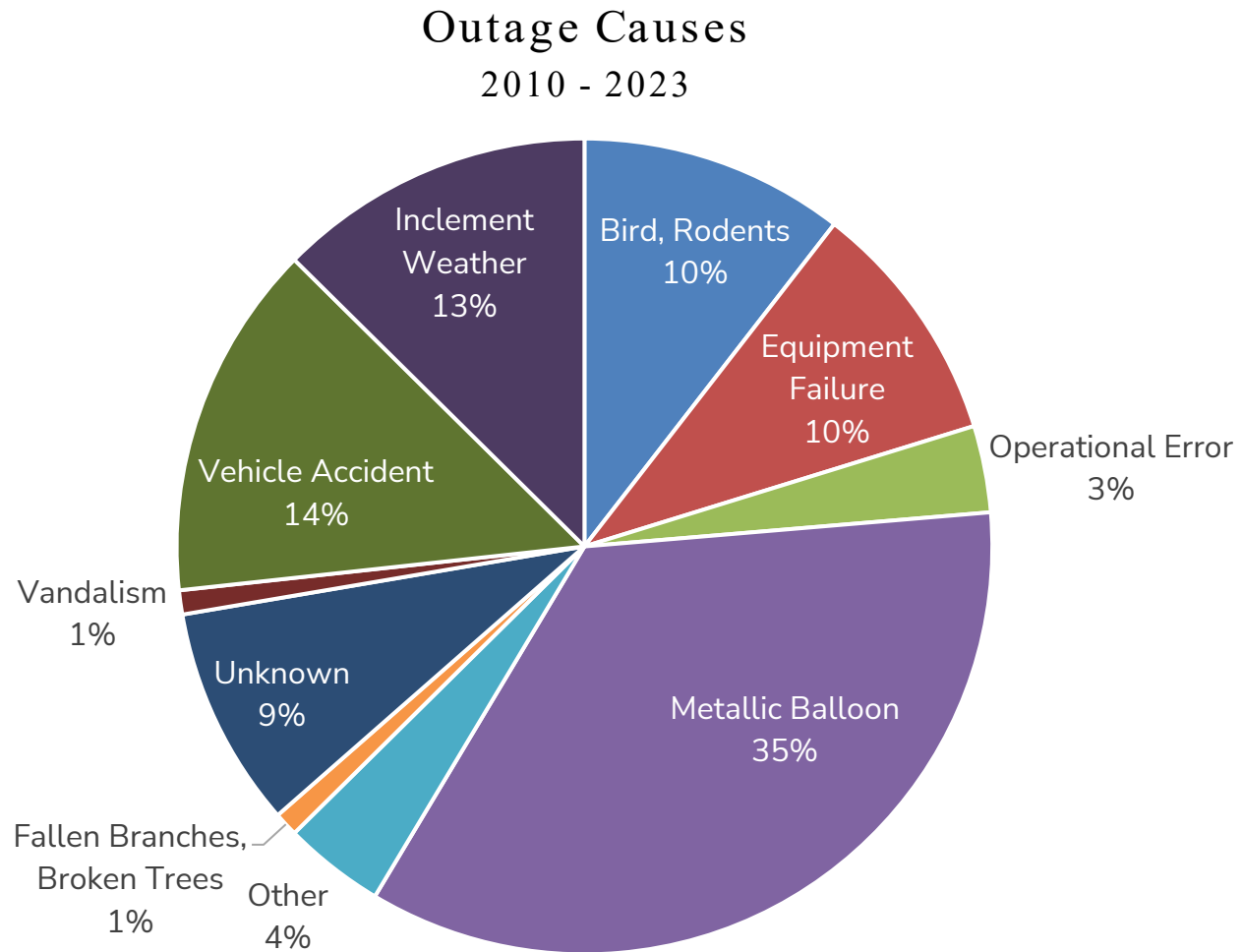
## CAIDI 2008 - 2023



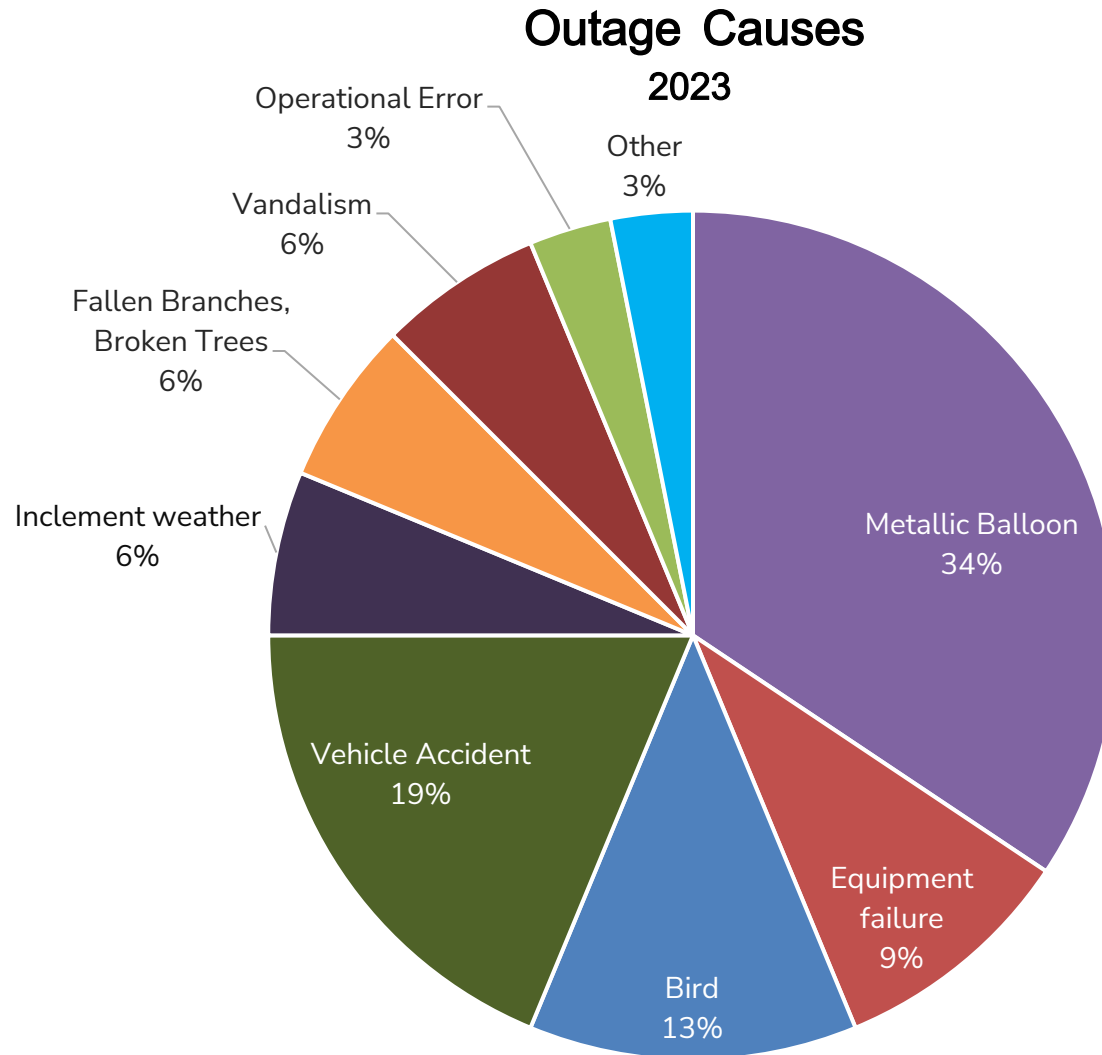
CAIDI has been steadily improving over the last 15 years.

# Reliability Outage Causes

Primary cause of outages are metallic balloons, followed by vehicles accidents and weather.



# Reliability Outage Causes



# STAY CONNECTED

## Sign up for Outage Notifications

1. Go to [cityofvernon.org/everbridge](http://cityofvernon.org/everbridge) (or scan the QR Code)
2. Create an account
3. Profile Information - Enter your Customer Number and preferred contact methods
4. Subscriptions – Select the alerts you'd like to receive

Scan for  
Everbridge

