

# **UI Reliability & Resilience Scorecard**



## **UI Reliability & Resilience Scorecard**

# **State Level Scorecard**

## 2024 State Level Reliability Scorecard

#### **Total Customers Served:**

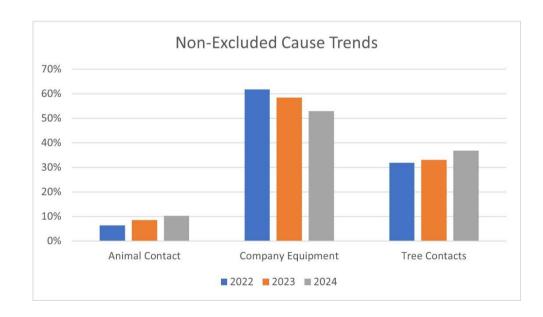
346k Customers 4,000 miles of distribution lines



http://www.uinet.com/ourcompany/r eliableservice/reliability projects

#### **Outage causes and historical trends**

The top 3 causes of customer outages are Animal-related, Equipment-related, and Tree-related. Equipment-related outages trended marginally lower in 2024, while Animal and Tree-related increased.



# What did the customer outage experience look like in 2024? During storms:

The average customer experiences 1 outage every 68 months

The average outage duration was 412 mins (6.87 hours)

#### **During blue sky days:**

The average customer experiences 1 outage every 20 months

The average outage duration was 79 mins (1.32 hours)

#### **Compared to other New England States:**

The average customer experiences 1 outage every 19 months

The average outage duration was 70 mins (1.17 hours)

#### **Budget for Reliability and Resilience:**

UI spent \$7.2 million (10% of total budget) on reliability and resilience, including ...

UI spent \$13 million (17% of total budget) restoring power after outages

Reliability and resilience average bill impact: \$2.13

<u>To see more details on UI's reliability projects, go to</u>
<a href="http://www.uinet.com/ourcompany/reliableservice/reliability">http://www.uinet.com/ourcompany/reliableservice/reliability</a> projects



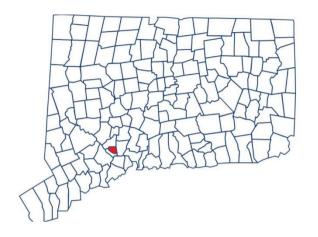
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# **Reliability & Resilience Scorecard**

# **Town Level Scorecards**

## **UI 2024 Town-Specific Performance Scorecard: Ansonia**



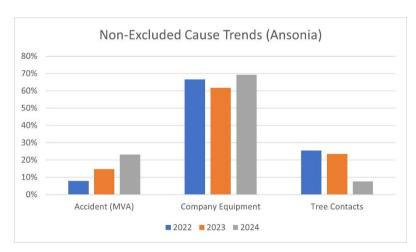
## **Customers Served In Town:**

8,800 Customers

The average Ansonia customer experienced 17 minutes of outages in 2024

The average outage duration in Ansonia was 67 minutes (1.12 hours)

The average Ansonia customer experiences 1 outage every 48 months.



For statewide performance go to

http://www.uinet.com/ourcompany/reliableservice/reliability\_projects

122 Ansonia customers experienced 3 or more outages in 2024

87 Ansonia customers experienced outages lasting 7 hours or more

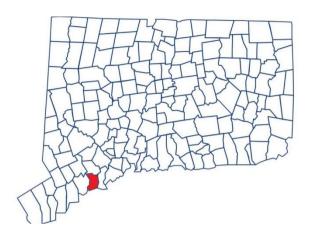
#### **How does Ansonia compare to the rest of Connecticut?**

Ansonia outages are less frequent than the state average of 1 outage every 20 months

Ansonia outages are shorter than the state average of 79 minutes (1.32 hours)



## **UI 2024 Town-Specific Performance Scorecard: Bridgeport**



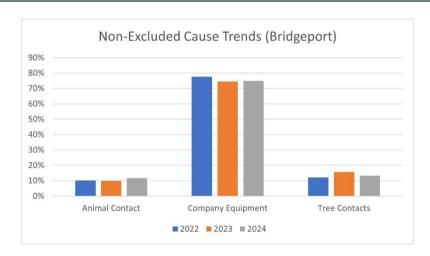
## **Customers Served In Town:**

62,070 Customers

The average Bridgeport customer experienced 56 minutes of outages in 2024

The average outage duration in Bridgeport was 79 minutes (1.32 hours)

The average Bridgeport customer experiences 1 outage every 17 months.



5,983 Bridgeport customers experienced 3 or more outages in 2024 784 Bridgeport
customers experienced
outages lasting
7 hours or more

#### **How does Bridgeport compare to the rest of Connecticut?**

Bridgeport outages are more frequent than the state average of 1 outage every 20 months

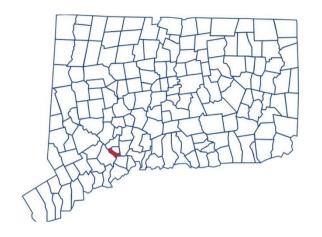
Bridgeport outages are as long as the state average of 79 minutes (1.32 hours)

For statewide performance go to http://www.uinet.com/ourcompany/reliableservice/reliability\_projects



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## **UI 2024 Town-Specific Performance Scorecard: Derby**



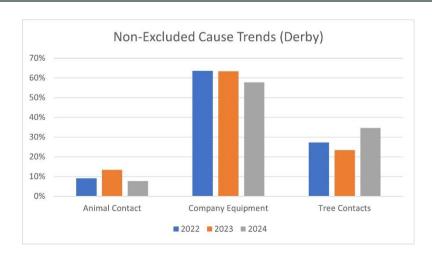
## **Customers Served In Town:**

6,607
Customers

The average Derby customer experienced 9 minutes of outages in 2024

The average outage duration in Derby was 49 minutes (0.82 hours)

The average Derby customer experiences 1 outage every 64 months.



1,383 Derby customers experienced 3 or more outages in 2024

1,623 Derby customers
experienced outages
lasting
7 hours or more

#### **How does Derby compare to the rest of Connecticut?**

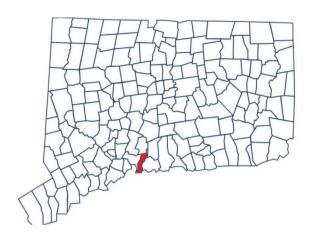
Derby outages are less frequent than the state average of 1 outage every 20 months

Derby outages are shorter than the state average of 79 minutes (1.32 hours)

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## **UI 2024 Town-Specific Performance Scorecard: East Haven**



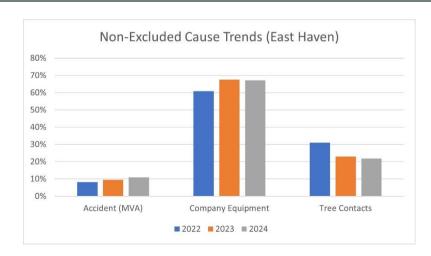
## **Customers Served In Town:**

13,598
Customers

The average East Haven customer experienced 28 minutes of outages in 2024

The average outage duration in East Haven was 120 minutes (2.00 hours)

The average East Haven customer experiences 1 outage every 51 months.



O East Haven customers experienced 3 or more outages in 2024 87 East Haven customers
experienced outages
lasting
7 hours or more

#### How does East Haven compare to the rest of Connecticut?

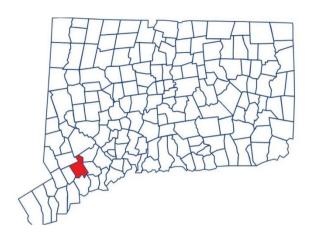
East Haven outages are less frequent than the state average of 1 outage every 20 months

East Haven outages are longer than the state average of 79 minutes (1.32 hours)

For statewide performance go to



## **UI 2024 Town-Specific Performance Scorecard: Easton**



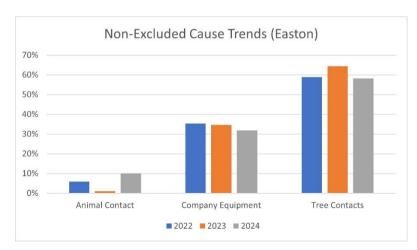
## **Customers Served In Town:**

3,006
Customers

The average Easton customer experienced 222 minutes of outages in 2024

The average outage duration in Easton was 102 minutes (1.70 hours)

The average Easton customer experiences 1 outage every 6 months.



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http://www.uinet.com/ourcompany/reliableservice/reliability\_projects

1,362 Easton customers experienced 3 or more outages in 2024

492 Easton customers
experienced outages
lasting
7 hours or more

## **How does Easton compare to the rest of Connecticut?**

Easton outages are more frequent than the state average of 1 outage every 20 months

Easton outages are longer than the state average of 79 minutes (1.32 hours)



## **UI 2024 Town-Specific Performance Scorecard: Fairfield**



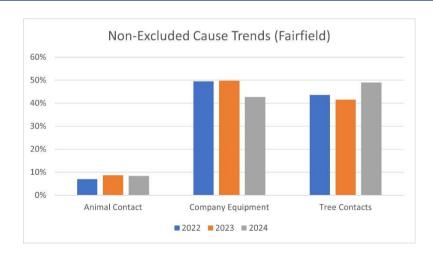
## **Customers Served In Town:**

24,816 Customers

The average Fairfield customer experienced 91 minutes of outages in 2024

The average outage duration in Fairfield was 100 minutes (1.67 hours)

The average Fairfield customer experiences 1 outage every 13 months.



3,275 Fairfield customers experienced 3 or more outages in 2024

520 Fairfield customers
experienced outages
lasting
7 hours or more

#### **How does Fairfield compare to the rest of Connecticut?**

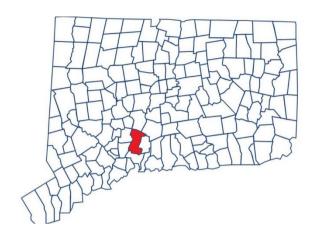
Fairfield outages are more frequent than the state average of 1 outage every 20 months

Fairfield outages are longer than the state average of 79 minutes (1.32 hours)

For statewide performance go to



## **UI 2024 Town-Specific Performance Scorecard: Hamden**



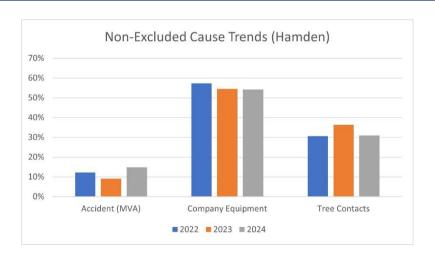
## **Customers Served In Town:**

27,144
Customers

The average Hamden customer experienced 38 minutes of outages in 2024

The average outage duration in Hamden was 66 minutes (1.10 hours)

The average Hamden customer experiences 1 outage every 21 months.



120 Hamden customers experienced 3 or more outages in 2024

141 Hamden customers
experienced outages
lasting
7 hours or more

#### **How does Hamden compare to the rest of Connecticut?**

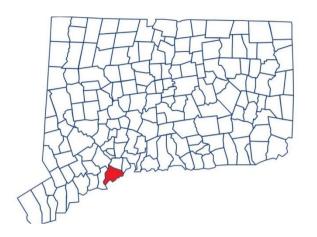
Hamden outages are less frequent than the state average of 1 outage every 20 months

Hamden outages are shorter than the state average of 79 minutes (1.32 hours)

For statewide performance go to



## **UI 2024 Town-Specific Performance Scorecard: Milford**



## **Customers Served In Town:**

28,272 Customers

The average Milford customer experienced 26 minutes of outages in 2024

860 Milford customers

experienced 3 or more

outages in 2024

The average outage duration in Milford was 72 minutes (1.19 hours)

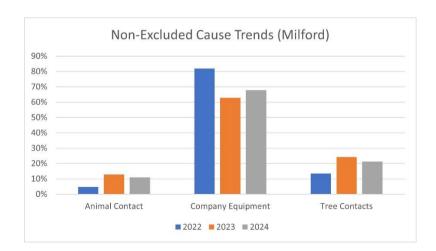
520 Milford customers

experienced outages

lasting

7 hours or more

The average Milford customer experiences 1 outage every 34 months.



frequent than the state average of 1 outage

Milford outages are shorter than the state average of 79 minutes

**How does Milford compare to the rest of Connecticut?** 

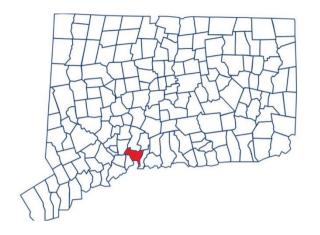
Milford outages are less every 20 months

(1.32 hours)

For statewide performance go to



## **UI 2024 Town-Specific Performance Scorecard: New Haven**



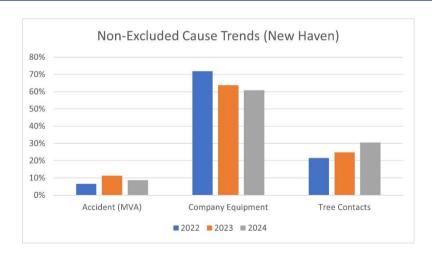
## **Customers Served In Town:**

62,672
Customers

The average New Haven customer experienced 36 minutes of outages in 2024

The average outage duration in New Haven was 74 minutes (1.24 hours)

The average New Haven customer experiences 1 outage every 25 months.



1,056 New Haven customers experienced 3 or more outages in 2024

186 New Haven customers experienced outages lasting 7 hours or more

#### **How does New Haven compare to the rest of Connecticut?**

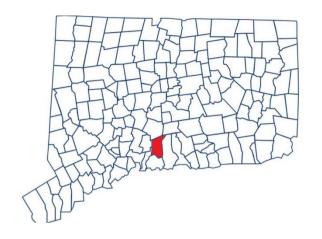
New Haven outages are less frequent than the state average of 1 outage every 20 months

New Haven outages are shorter than the state average of 79 minutes (1.32 hours)

For statewide performance go to



## **UI 2024 Town-Specific Performance Scorecard: North Branford**



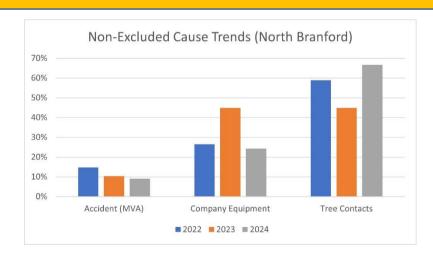
## **Customers Served In Town:**

3,486
Customers

The average North
Branford customer
experienced 71 minutes
of outages in 2024

The average outage duration in North
Branford was 97 minutes
(1.61 hours)

The average North Branford customer experiences 1 outage every 16 months.



61 North Branford customers experienced 3 or more outages in 2024

75 North Branford customers experienced outages lasting 7 hours or more

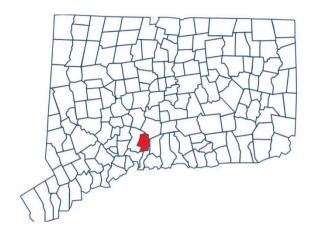
#### **How does North Branford compare to the rest of Connecticut?**

North Branford outages are more frequent than the state average of 1 outage every 20 months North Branford outages are longer than the state average of 79 minutes (1.32 hours)

For statewide performance go to



## **UI 2024 Town-Specific Performance Scorecard: North Haven**



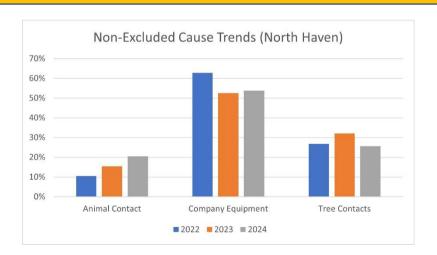
#### **Customers Served In Town:**

12,130 Customers

The average North
Haven customer
experienced 26 minutes
of outages in 2024

The average outage duration in North Haven was 55 minutes (0.92 hours)

The average North Haven customer experiences 1 outage every 25 months.



53 North Haven customers experienced 3 or more outages in 2024

21 North Haven customers experienced outages lasting 7 hours or more

#### **How does North Haven compare to the rest of Connecticut?**

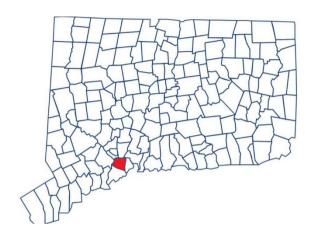
North Haven outages are less frequent than the state average of 1 outage every 20 months

North Haven outages are shorter than the state average of 79 minutes (1.32 hours)

For statewide performance go to



## **UI 2024 Town-Specific Performance Scorecard: Orange**



## **Customers Served In Town:**

6,629 Customers

The average Orange customer experienced 47 minutes of outages in 2024

886 Orange customers

experienced 3 or more

outages in 2024

The average outage duration in Orange was 79 minutes (1.31 hours)

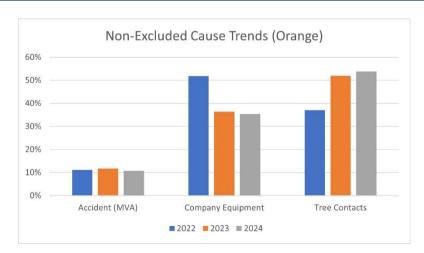
698 Orange customers

experienced outages

lasting

7 hours or more

The average Orange customer experiences 1 outage every 20 months.



Orange outages are as long as the state average of 79 minutes (1.32

**How does Orange compare to the rest of Connecticut?** 

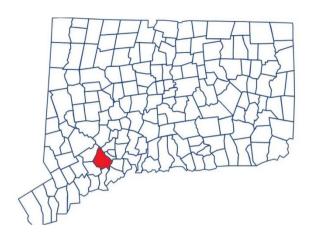
Orange outages are as frequent as the state average of 1 outage every 20 months

hours)

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## **UI 2024 Town-Specific Performance Scorecard: Shelton**



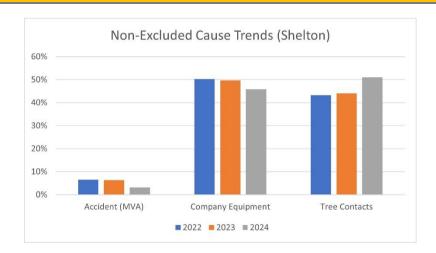
## **Customers Served In Town:**

19,301 Customers

The average Shelton customer experienced 115 minutes of outages in 2024

The average outage duration in Shelton was 80 minutes (1.34 hours)

The average Shelton customer experiences 1 outage every 8 months.



8,870 Shelton customers experienced 3 or more outages in 2024

5,997 Shelton customers
experienced outages
lasting
7 hours or more

#### **How does Shelton compare to the rest of Connecticut?**

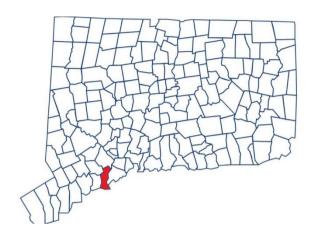
Shelton outages are more frequent than the state average of 1 outage every 20 months

Shelton outages are longer than the state average of 79 minutes (1.32 hours)

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## **UI 2024 Town-Specific Performance Scorecard: Stratford**



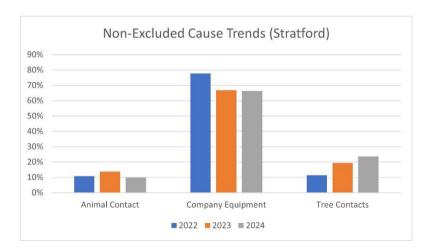
## **Customers Served In Town:**

24,021 Customers

The average Stratford customer experienced 23 minutes of outages in 2024

The average outage duration in Stratford was 78 minutes (1.31 hours)

The average Stratford customer experiences 1 outage every 40 months.



585 Stratford customers experienced 3 or more outages in 2024

443 Stratford customers
experienced outages
lasting
7 hours or more

#### How does Stratford compare to the rest of Connecticut?

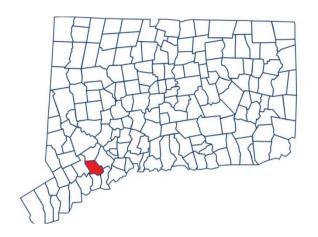
Stratford outages are less frequent than the state average of 1 outage every 20 months

Stratford outages are shorter than the state average of 79 minutes (1.32 hours)

For statewide performance go to



## **UI 2024 Town-Specific Performance Scorecard: Trumbull**



## **Customers Served In Town:**

14,763 Customers

The average Trumbull customer experienced 88 minutes of outages in 2024

The average outage duration in Trumbull was 73 minutes (1.22 hours)

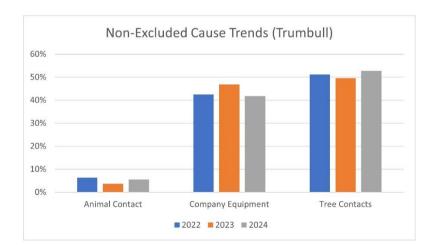
3,524 Trumbull

customers experienced

outages lasting

7 hours or more

The average Trumbull customer experiences 1 outage every 10 months.



state average of 1 outage every 20 months

Trumbull outages are shorter than the state average of 79 minutes (1.32 hours)

customers experienced 3 or more outages in 2024

1,965 Trumbull

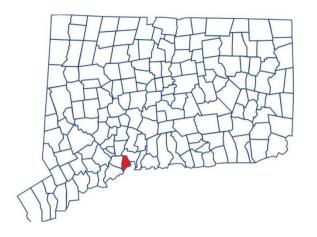
How does Trumbull compare to the rest of Connecticut?

Trumbull outages are more frequent than the

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## **UI 2024 Town-Specific Performance Scorecard: West Haven**



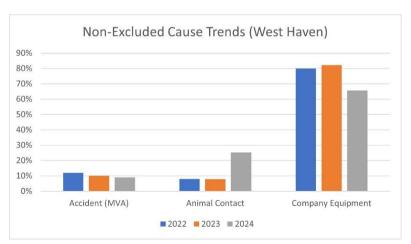
## **Customers Served In Town:**

25,171 Customers

The average West Haven customer experienced 13 minutes of outages in 2024

The average outage duration in West Haven was 50 minutes (0.84 hours)

The average West Haven customer experiences 1 outage every 46 months.



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http://www.uinet.com/ourcompany/reliableservice/reliability\_projects

44 West Haven customers experienced 3 or more outages in 2024

92 West Haven customers experienced outages lasting 7 hours or more

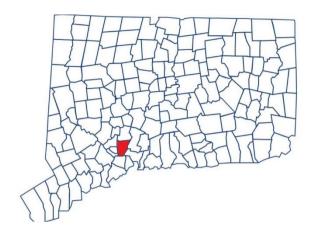
## **How does West Haven compare to the rest of Connecticut?**

West Haven outages are less frequent than the state average of 1 outage every 20 months

West Haven outages are shorter than the state average of 79 minutes (1.32 hours)



## **UI 2024 Town-Specific Performance Scorecard: Woodbridge**



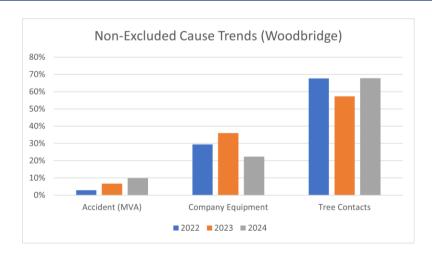
## **Customers Served In Town:**

3,802
Customers

The average Woodbridge customer experienced 136 minutes of outages in 2024

The average outage duration in Woodbridge was 111 minutes (1.84 hours)

The average Woodbridge customer experiences 1 outage every 10 months.



846 Woodbridge customers experienced 3 or more outages in 2024

529 Woodbridge customers experienced outages lasting 7 hours or more

#### How does Woodbridge compare to the rest of Connecticut?

Woodbridge outages are more frequent than the state average of 1 outage every 20 months

Woodbridge outages are longer than the state average of 79 minutes (1.32 hours)

For statewide performance go to





# Reliability & Resilience Scorecard

# **Town Reliability Data**

# **UI Reliability Data – Town Level Information**

| TOWN           | SAIDI | SAIFI | CAIDI | CELID-7 | CEMI-3 |
|----------------|-------|-------|-------|---------|--------|
| Ansonia        | 0.28  | 0.25  | 1.12  | 0.0099  | 0.0139 |
| Bridgeport     | 0.93  | 0.70  | 1.32  | 0.0126  | 0.0964 |
| Derby          | 0.15  | 0.19  | 0.82  | 0.2456  | 0.2093 |
| East Haven     | 0.47  | 0.24  | 2.00  | 0.0064  | 0.0000 |
| Easton         | 3.70  | 2.17  | 1.70  | 0.1637  | 0.4531 |
| Fairfield      | 1.52  | 0.91  | 1.67  | 0.0210  | 0.1320 |
| Hamden         | 0.64  | 0.58  | 1.10  | 0.0052  | 0.0044 |
| Milford        | 0.43  | 0.36  | 1.19  | 0.0184  | 0.0304 |
| New Haven      | 0.60  | 0.49  | 1.24  | 0.0030  | 0.0168 |
| North Branford | 1.18  | 0.73  | 1.61  | 0.0215  | 0.0175 |
| North Haven    | 0.44  | 0.48  | 0.92  | 0.0017  | 0.0044 |
| Orange         | 0.78  | 0.60  | 1.31  | 0.1053  | 0.1337 |
| Shelton        | 1.91  | 1.43  | 1.34  | 0.3107  | 0.4596 |
| Stratford      | 0.39  | 0.30  | 1.31  | 0.0184  | 0.0244 |
| Trumbull       | 1.47  | 1.21  | 1.22  | 0.2387  | 0.1331 |
| West Haven     | 0.22  | 0.26  | 0.84  | 0.0037  | 0.0017 |
| Woodbridge     | 2.26  | 1.23  | 1.84  | 0.1391  | 0.2225 |



Internal Use 23

## Reliability Data – Glossary of Terms

- SAIDI: System Average Interruption Duration Index. SAIDI is the average outage duration for each customer served.
- SAIFI: System Average Interruption Frequency Index. SAIFI is the average number of interruptions that a customer would experience.
- CAIDI: Customer Average Interruption Duration Index. CAIDI gives the average outage duration that any given customer would experience. CAIDI can also be viewed as the average restoration time.
- CELID-7: Percentage of customers experiencing one or more interruptions of seven hours.
- CEMI-3: Percentage of customers experiencing More than 3 Outages.



Internal Use



## Reliability & Resilience Scorecard

# Reliability & Resilience Projects Details

# UI Reliability Projects Details (Table 19, 17-12-03RE08 Final Decision)

| Reliability                | Category                 | 2024 Spend (\$k) - <i>Actuals</i> |
|----------------------------|--------------------------|-----------------------------------|
|                            | Bulk substation          | 4,722                             |
|                            | Overhead system          | 15,870                            |
| Infrastructure replacement | Underground system       | 4,407                             |
|                            | Distribution transformer | 12,090                            |
|                            | Pole replacement         | 574                               |
|                            | Other                    | 50                                |
| Capacity                   | Peak load                | 4                                 |
| New customer additions     | New customer load        | 14,494                            |
|                            | DER interconnections     | 13,932                            |
| Enhancement programs       | Various                  | 7,218                             |
| Maintenance programs       | Inspections              | 480                               |
|                            | Surveys                  | 64                                |
|                            | Vegetation management    | 1,021                             |



Internal Use 2

## **UI Resilience Projects Details**

#### Cost estimates for planned resilience work per resilience area

Please refer to PURA's Final Decision on Docket 17-12-03RE08 for a definition of the areas of resilience projects.

| Resiliency Area | 2024 Spend (\$k) - <i>Actuals</i> |
|-----------------|-----------------------------------|
| Mitigation      | \$1,630                           |
| Preparedness    | \$1,214                           |
| Response        | \$643                             |
| Recovery        | \$4,081                           |

**Status of federal funding applications (Grid Resilience and Innovation Partnerships)** 

## **CONCEPT PAPER SUBMITTED**

Next step: DOE encouragement notification



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