

NJDOT Safety Voyager Demonstration

Local Road Safety Plans Webinar II

September 28, 2023



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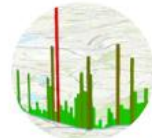
North Jersey Transportation Planning Authority

NJDOT Safety Voyager

Safety Voyager

Notice: 2002-2019 data is complete, 2020 data is not all-inclusive

The screenshot displays the Safety Voyager interface. On the left is a map with a location pin. In the center is a pie chart and a button labeled 'Download 21 Available NJTR1 Reports'. Below this is a table with columns for 'Case Number', 'DLN', and 'Year'. On the right, a table shows crash details with various checkboxes for vehicle status and driver information. A 'Crash Map' overlay is visible on the right side of the screenshot, with the text 'Interactively select and filter crash data.' and a 'Start Mapping' button.



Crash Map beta!

Interactively select and filter crash data.

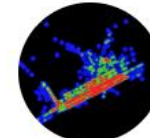
[View Map »](#)



Pedestrian Dashboard

Instant synthesis of pedestrian and bicyclist related crashes.

[View Dashboard »](#)



Pedestrian Heatmap

Dynamic map based visualization of crashes involving pedestrians and bicyclists.

[View Heatmap »](#)



Safety Calendar

View crash data aggregated by the NHTSA Safety Calendar themes. Access to this feature is at the discretion of NJDOT. Please contact the administrator for access to the safety calendar.



Reports

Generate a crash attribute report that compares a jurisdiction with the statewide crash data.

[View Reports »](#)



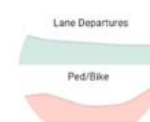
Updates and Tutorials

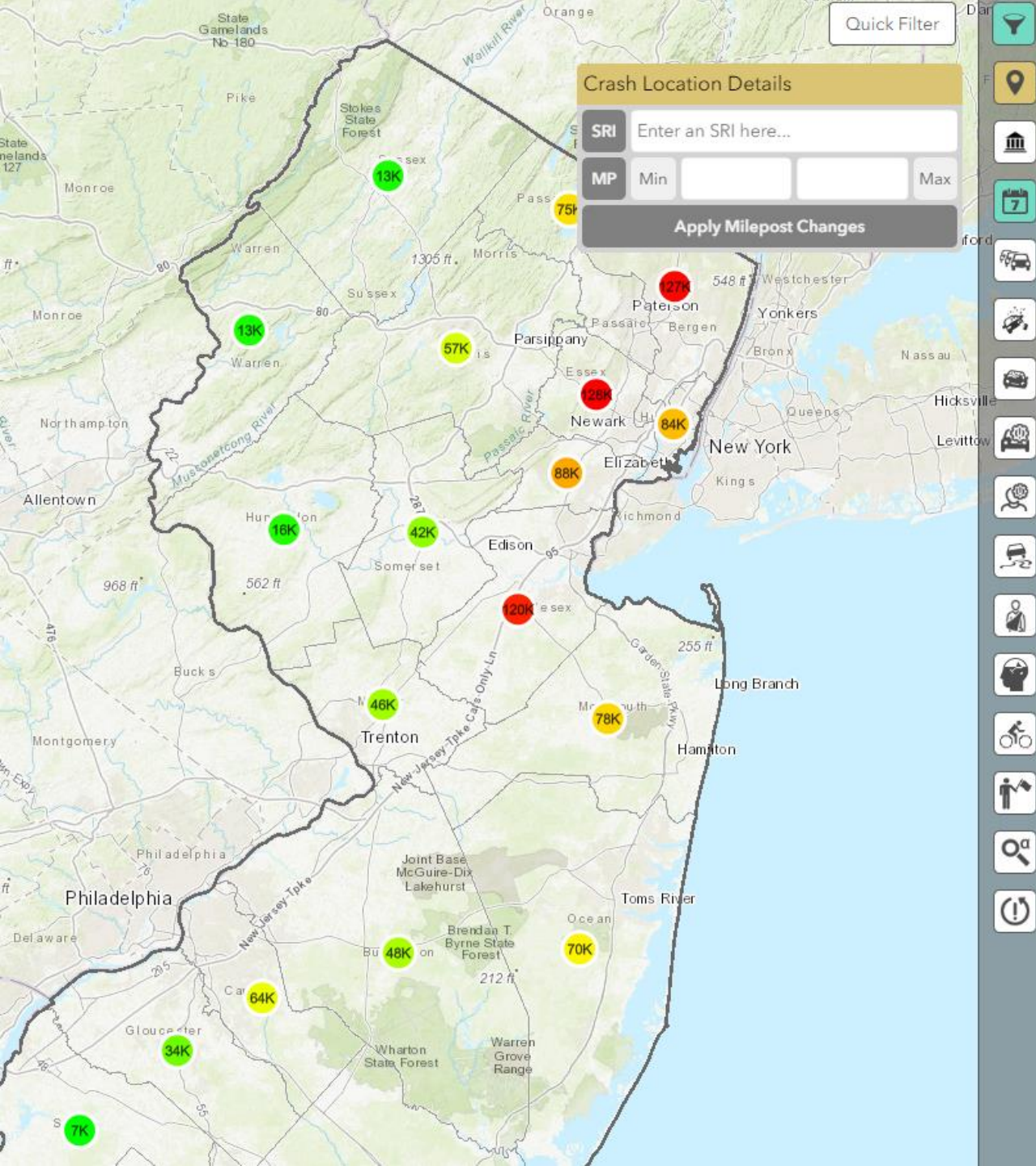
updated!
See the latest news and updates about Safety Voyager.

[View Blog »](#)

For Access Email

admin@njvoyager.org

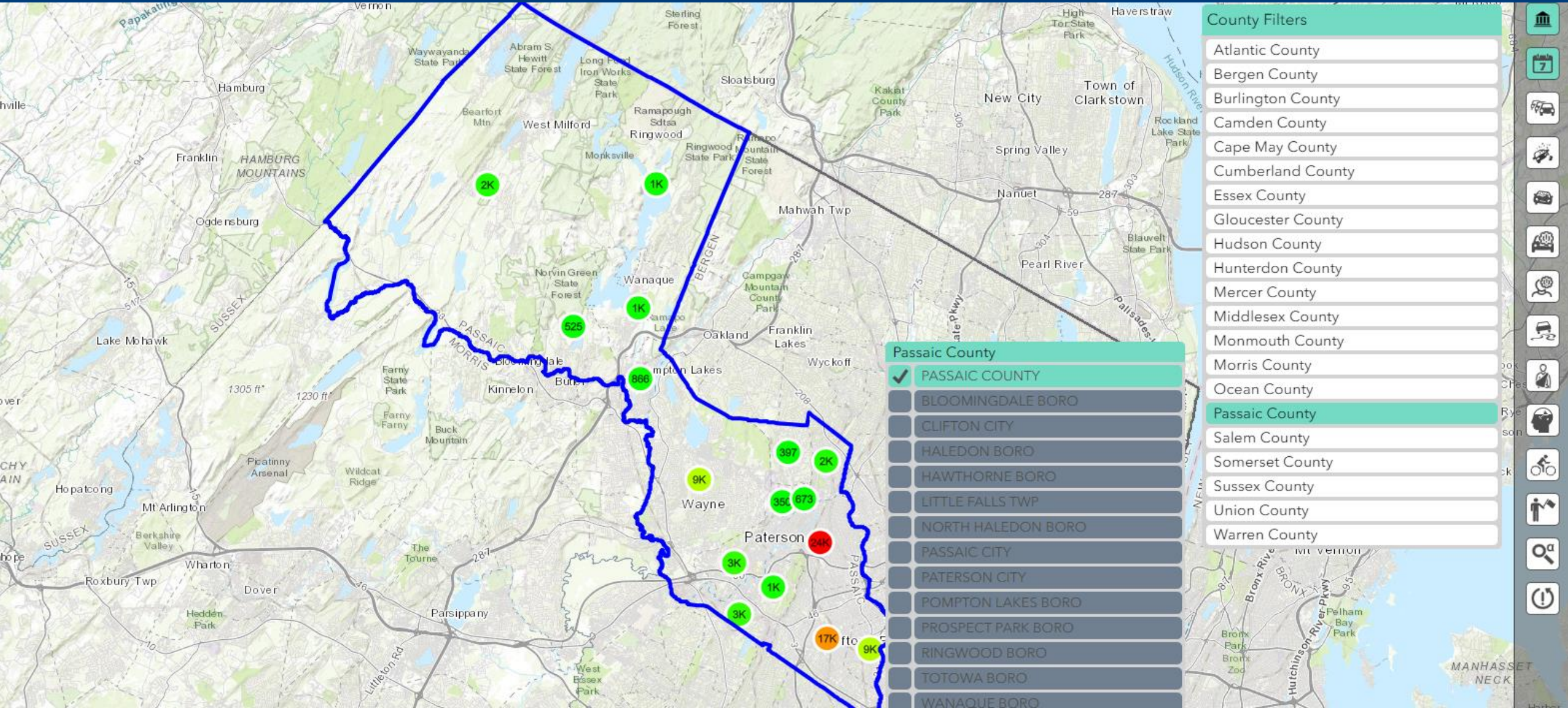




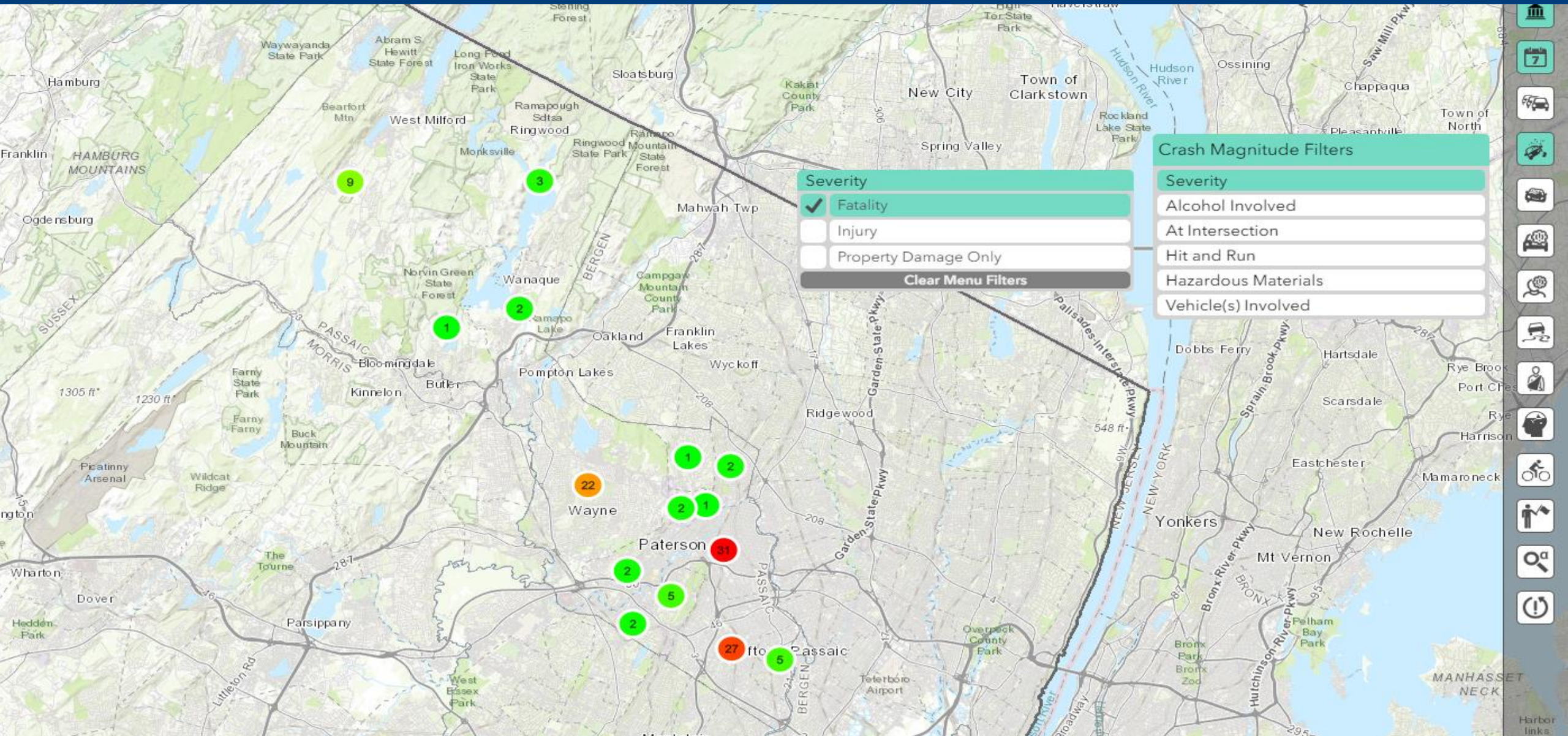
Crash Map Features

- Crash cluster selection
- Crash record selection
- Filter options
- Advanced visualization
- Crash grid
- Crash report summary

LSAP Use Case: Passaic County

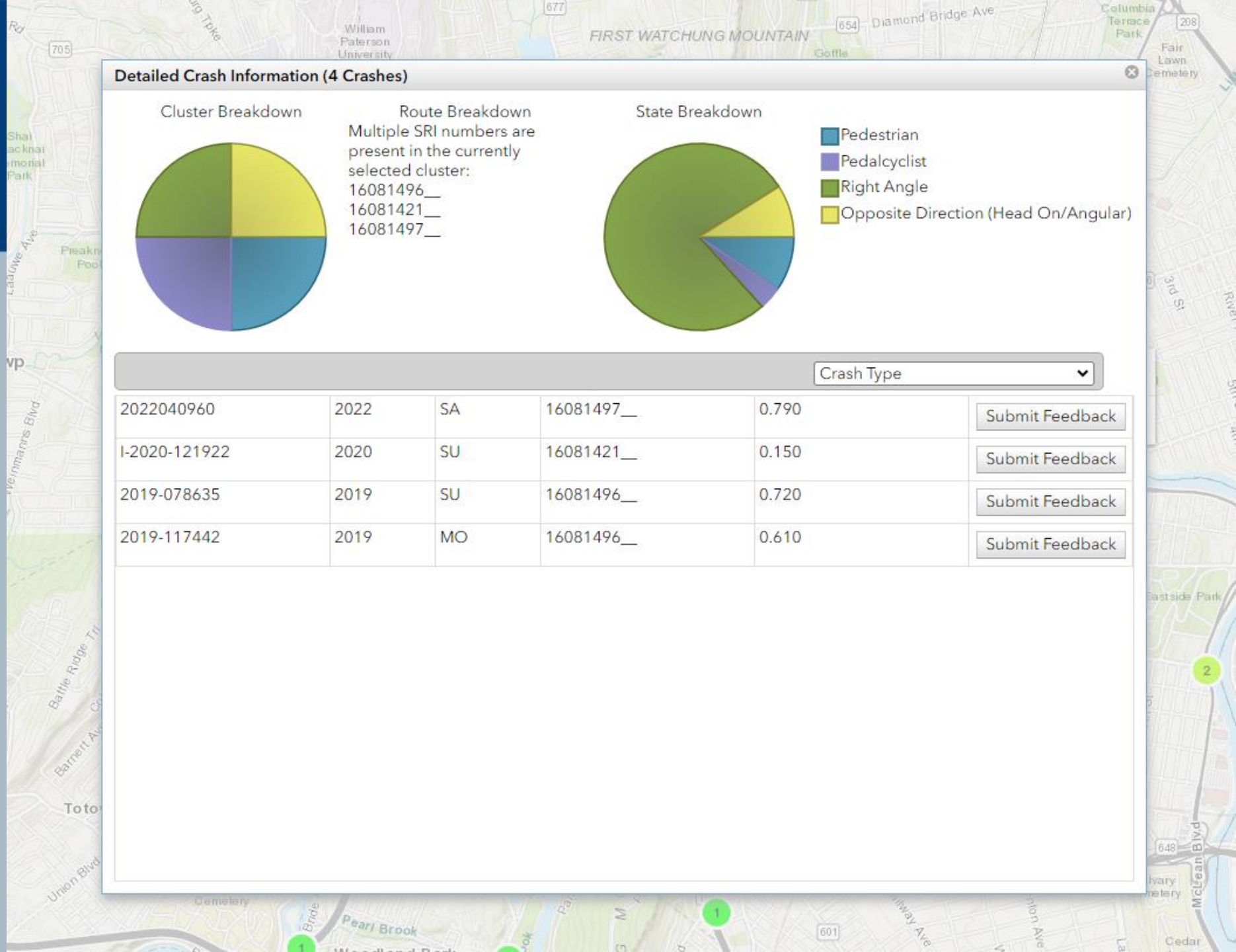


Filter: Severity



Crash Clusters

On-screen summary of crash clusters



Detailed Crash Information (4 Crashes)

Cluster Breakdown

Route Breakdown

Multiple SRI numbers are present in the currently selected cluster:
 16081496__
 16081421__
 16081497__

State Breakdown

Crash Type ▼

2022040960	2022	SA	16081497__	0.790	Submit Feedback
I-2020-121922	2020	SU	16081421__	0.150	Submit Feedback
2019-078635	2019	SU	16081496__	0.720	Submit Feedback
2019-117442	2019	MO	16081496__	0.610	Submit Feedback

Crash Records

On-screen summary of individual crashes

- Vehicle
- Driver
- Occupant
- Pedestrian
- Cyclist



Detailed Crash Information (1 Crashes)

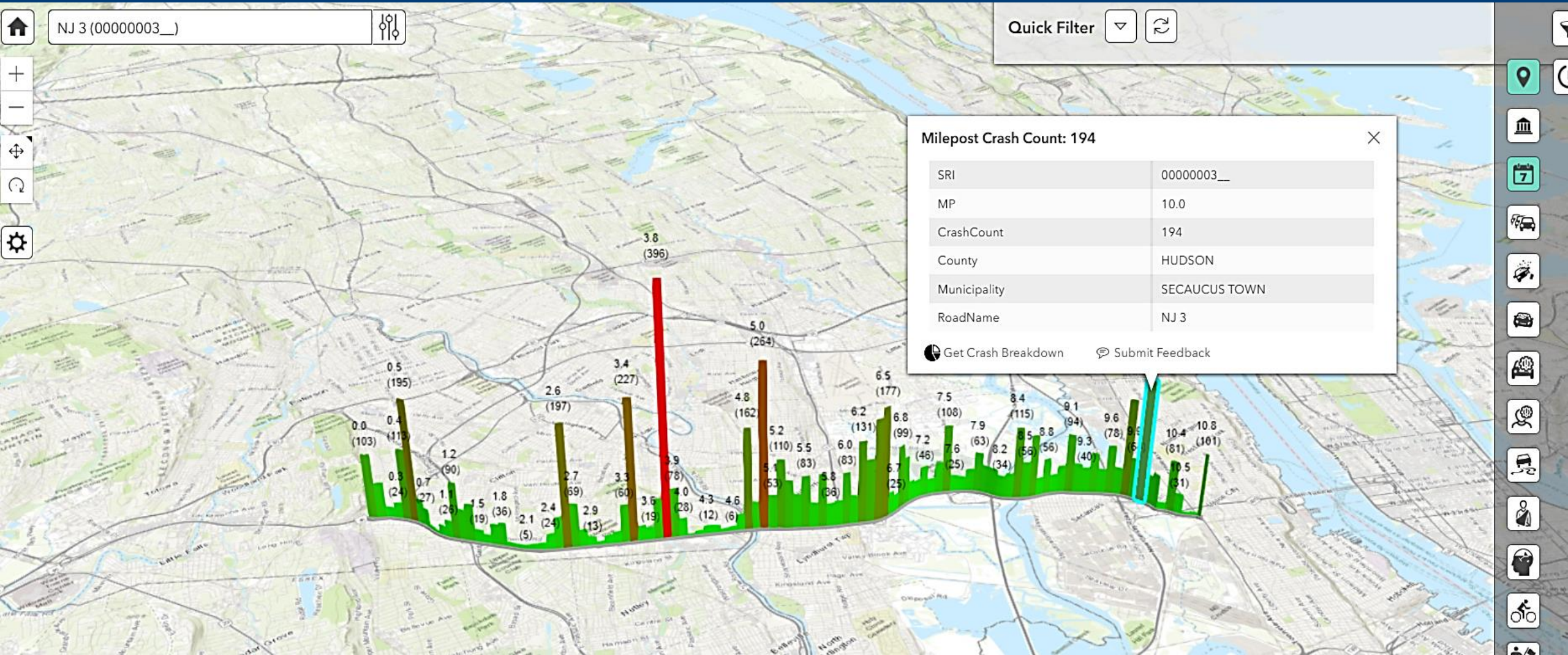
Cluster Breakdown Route Breakdown State Breakdown

Struck Parked Vehicle

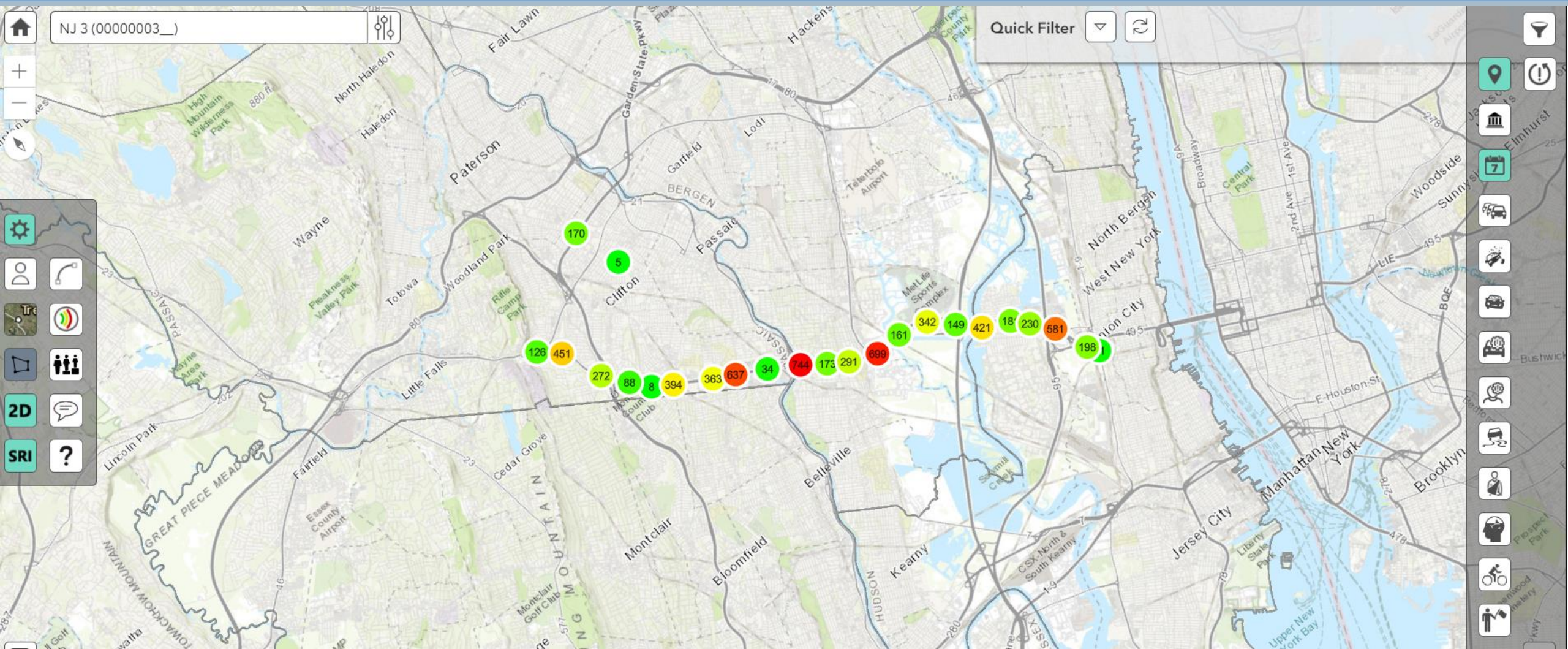
Detailed Crash Information

Field	Value
Case Number	I-2020-113161
CrashID	16-08-2020-I-2020-113161
Document Locator Number	20184073
Severity	Fatality
Severity Rating 5	Fatal Injury
Vehicle(s) Involved	7
Date	11/15/2020 00:00:00
Year	2020
Month	11
Day	SU
Time	354
Latitude	40.918285
Longitude	-74.146624
Standard Route Identifier	16081447
Route Number	
Route Suffix	
Milenost	1.380

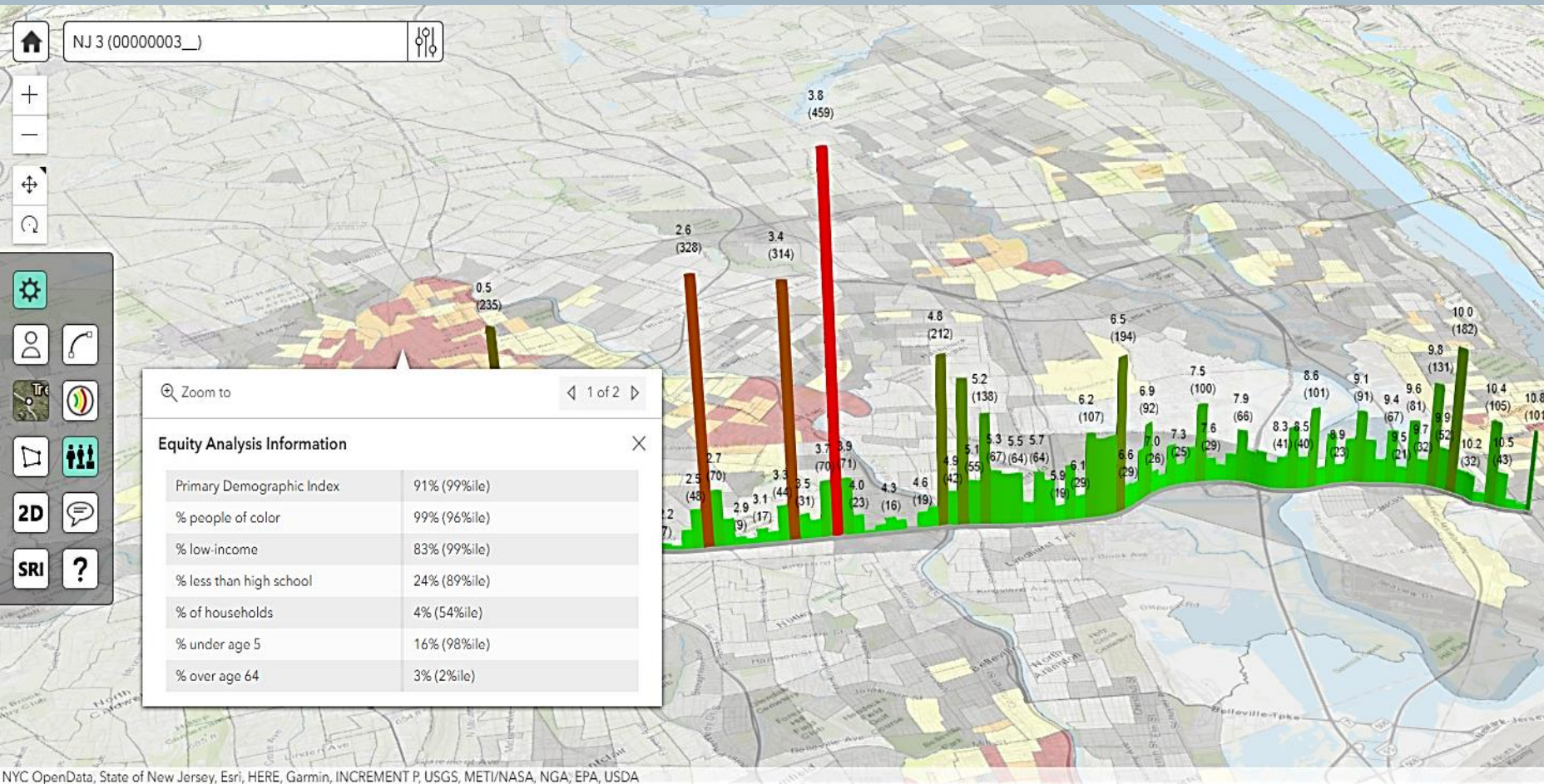
Corridor Selection



Corridor Selection

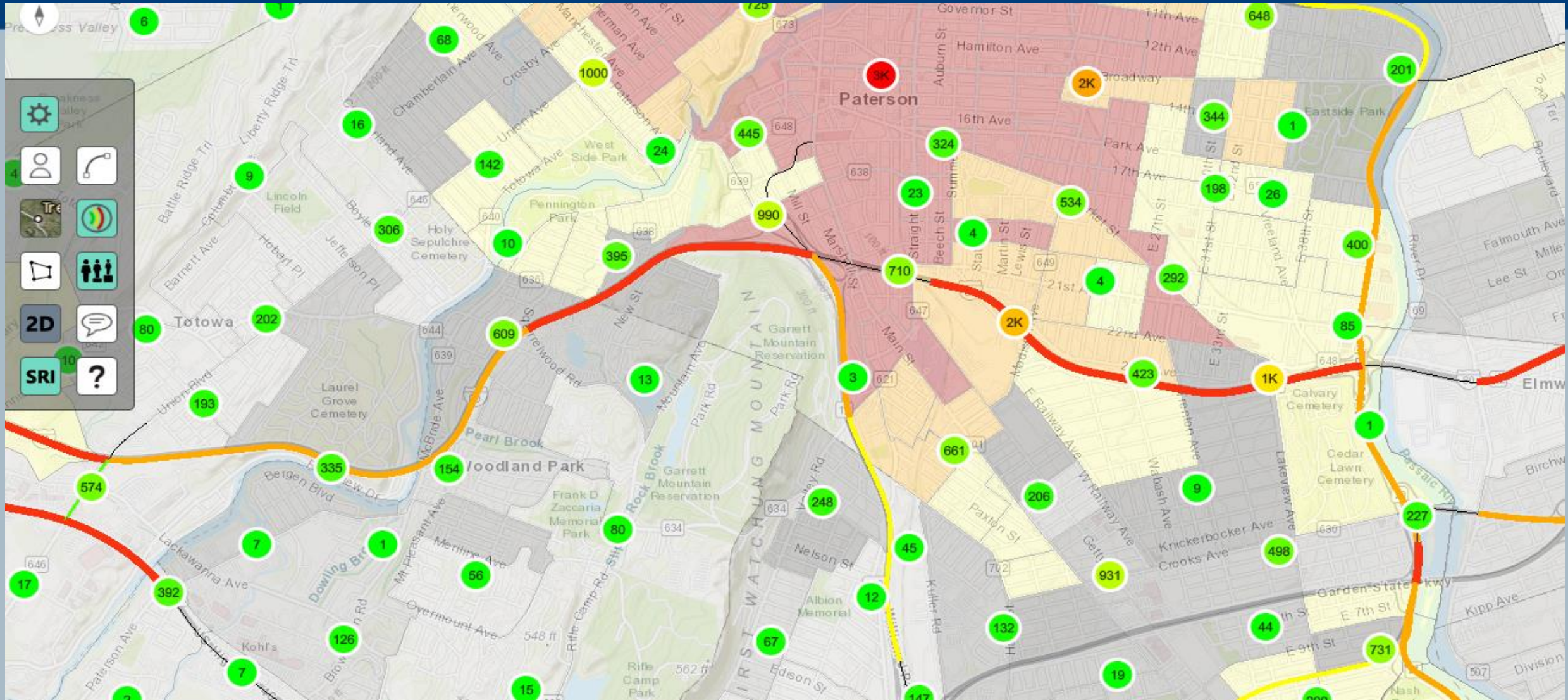


Advanced Visualizations: Equity



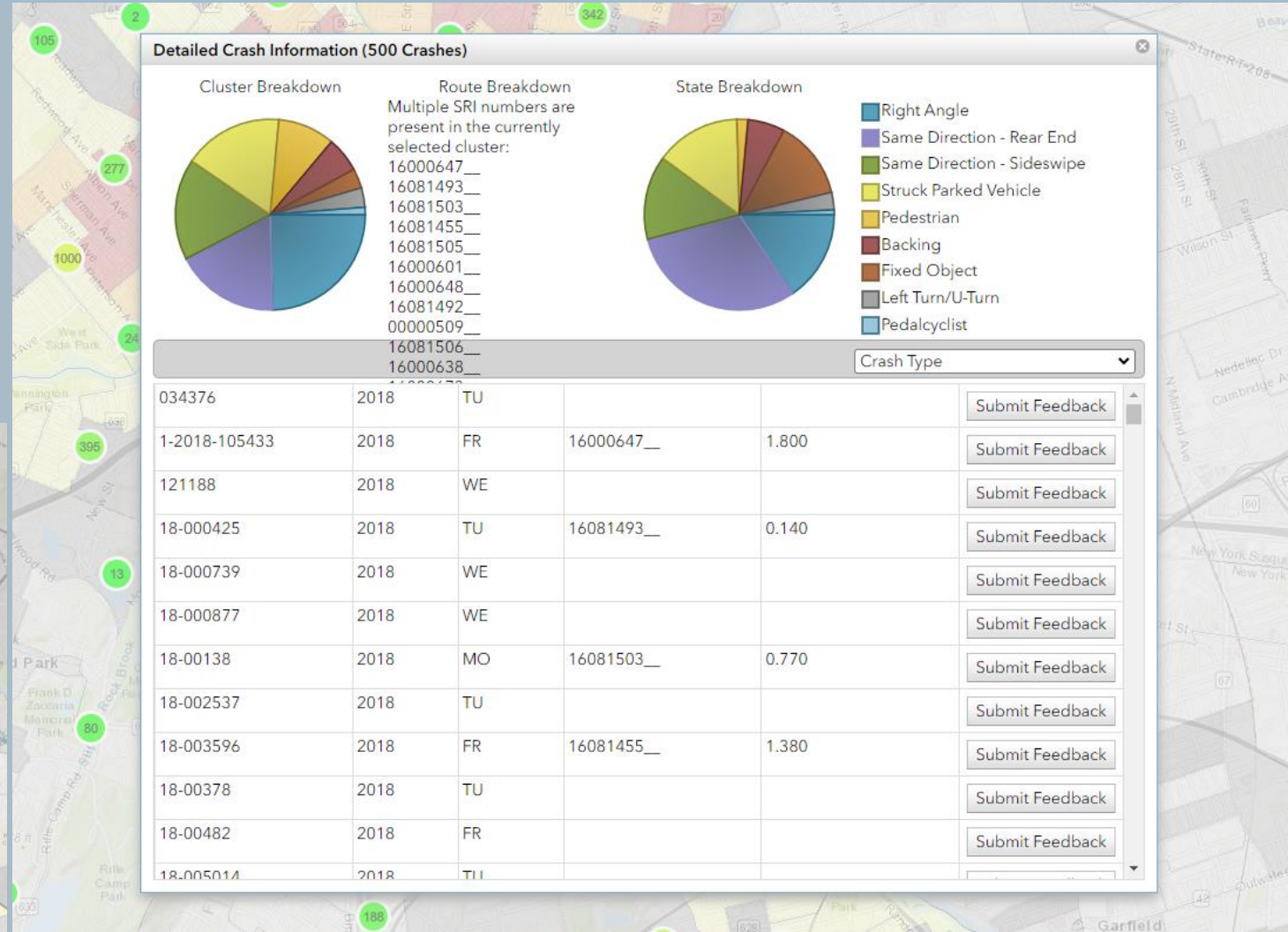
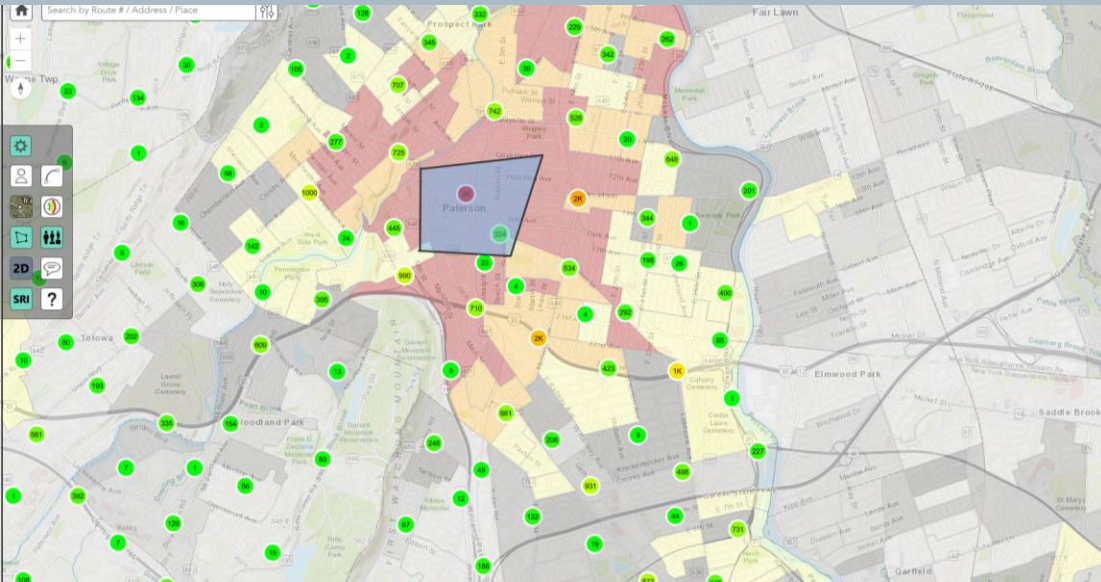
- Demographic Index
- Percent:
 - Race
 - Education
 - Income
 - Language
 - Age

Advanced Visualizations: AADT

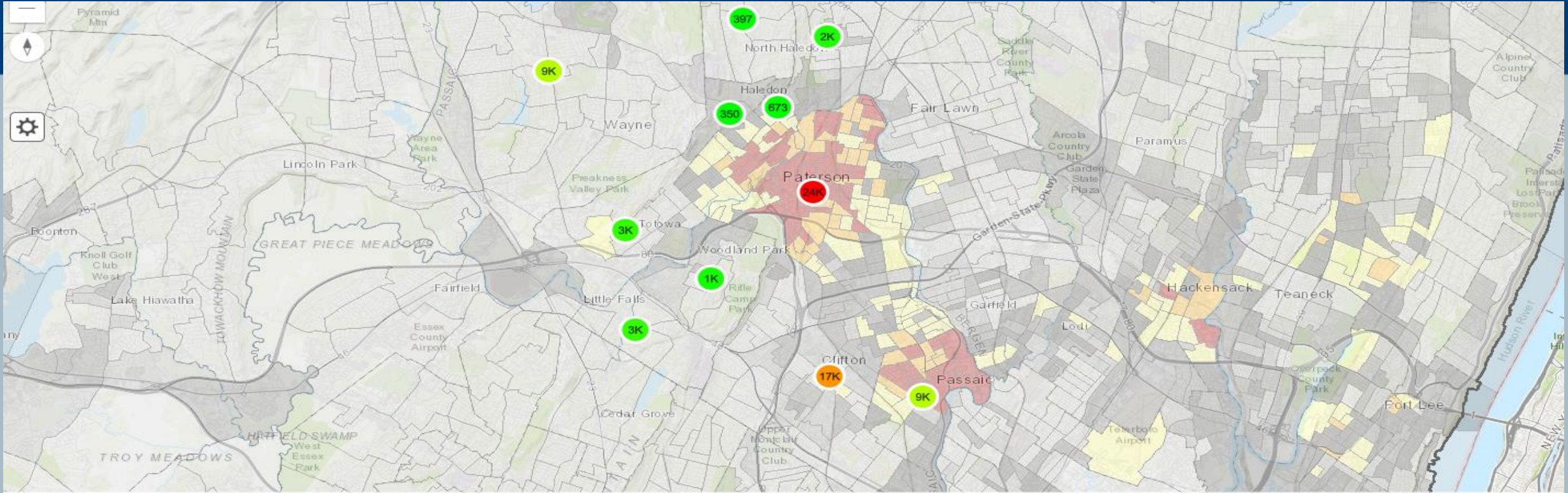


Advanced Visualizations

Crash Cluster Selection



View or Export Raw Data



NYC OpenData, State of New Jersey, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Crash Count: 69,385 Passaic County: (PASSAIC COUNTY); Date: (2018,2019,2020,2021,2022)

Name	Cluster Type	Count
PATERSON CITY	Municipality	24145
CLIFTON CITY	Municipality	17343
PASSAIC CITY	Municipality	8959
WAYNE TWP	Municipality	8904
LITTLE FALLS TWP	Municipality	2828
TOTOWA BORO	Municipality	2713
HAWTHORNE BORO	Municipality	1859

Crash Report Summary

Safety Voyager

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Passaic County Comparison Summary 2016 - 2020

LEGEND

Difference between Passaic County % and State %

2% - 5% > 5%

PEDESTRIAN & PEDACYCLIST TABLES

CRASH CHARACTERISTIC	COUNTY #	COUNTY %	STATE %
GENDER			
Female	949	33.45%	34.98%
Male	1619	57.07%	59.59%
Unknown	269	9.48%	5.43%
Total	2837	100.00%	
AGE			
0-9	140	4.93%	3.64%
10-19	538	18.96%	16.39%
20-29	424	14.95%	15.18%
30-39	333	11.74%	12.45%
40-49	340	11.98%	10.91%
50-59	345	12.16%	13.11%
60-69	261	9.20%	9.14%
70+	152	5.36%	6.27%
Unknown	304	10.72%	12.90%
Total	2837	100.00%	
PRE-CRASH ACTION			
NOT RECORDED	437	15.41%	19.32%
Unknown	40	1.41%	1.18%
Going Straight Ahead	421	14.84%	20.40%
Making Right Turn (not turn on red)	11	0.39%	0.52%
Making Left Turn	24	0.85%	1.28%
Making U Turn	3	0.11%	0.06%
Starting from Parking	1	0.04%	0.01%
Starting in Traffic	2	0.07%	0.15%
Slowing or Stopping	1	0.04%	0.17%
Stopped in Traffic	1	0.04%	0.15%
Parking	0	0.00%	0.02%

Safety Voyager

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Male	80292	56.31%	56.92%
Unknown	7799	5.47%	3.36%
Total	142579	100.00%	
AGE			
0-9	24	0.02%	0.01%
10-19	9441	6.62%	6.67%
20-29	35707	25.04%	22.90%
30-39	26645	18.69%	18.62%
40-49	22295	15.64%	16.42%
50-59	20812	14.60%	15.84%
60-69	13011	9.13%	9.95%
70+	7851	5.51%	6.42%
Unknown	6793	4.76%	3.17%
Total	142579	100.00%	

VEHICLE TABLES

CRASH CHARACTERISTIC	COUNTY #	COUNTY %	STATE %
CONTRIBUTING CIRCUMSTANCES			
NOT RECORDED	2424	1.43%	2.15%
Unknown	6994	4.14%	4.50%
Unsafe Speed	2889	1.71%	2.50%
Driver Inattention	50793	30.04%	22.86%
Failed To Obey Traffic Control Device	1136	0.67%	1.04%
Failed To Yield ROW to Vehicle/ Pedes.	3871	2.29%	3.50%
Improper Lane Change	2538	1.50%	2.60%
Improper Passing	1511	0.89%	1.01%
Improper Use/ Failed to Use Turn Signal	87	0.05%	0.06%
Improper Turning	1348	0.80%	1.23%
Following Too Closely	5867	3.47%	5.63%
Backing Unsafely	2107	1.25%	1.58%
Improper Use/ No Lights	20	0.01%	0.02%
Wrong Way	132	0.08%	0.07%
Improper Parking	737	0.44%	0.36%
Failure To Keep Right	322	0.19%	0.28%
Failure To Remove Snow/Ice	15	0.01%	0.02%
Failed to Obey Stop Sign	809	0.48%	0.52%



Thank You

Defining the Vision. Shaping the Future.



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