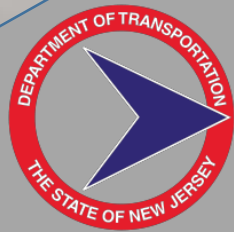


SAFETY VOYAGER

Email Address

Password



Safety Voyager

December 6, 2017



U.S. Department of Transportation
Federal Highway Administration

GPI

WHAT IS SAFETY VOYAGER?

Safety Voyager is a online portal for statewide analysis of roadway safety related data including crashes, AADT data and ball bank data.

THE ROAD SO FAR...

Project Initiation
April 2016

Version 1
December 2016

Update 1
August 2017

Update 2
November 2017

- 90% data geocoded
- Export to CSV

- October 2017 Data Set Published
- 93% data has been geocoded
- Match SLD Network to correspond with Crash Records based on the year (2011-2016)
- Increased records export up to 50,000

USER INTERFACE

The screenshot displays the Safety Voyager user interface. At the top, there is a search bar labeled "Search by Route # / Address / Place" and a "Filters by:" menu with icons for County, Route Number, Municipalities, Case numbers, and Landmarks. A central map shows the Northeast United States with various cities and crash data points represented by colored circles (green, yellow, red) with numerical values (e.g., 63K, 301K, 55K, 254K, 507K, 457K, 324K, 316K, 468K, 323K, 216K, 186K, 65K, 248K, 203K, 262K, 114K, 28K, 78K, 153K, 52K). On the left side, there is a vertical toolbar with icons for settings, 3D view, street view, crash records, ball banking, and AADT. A "Data Grid" icon is highlighted with a blue arrow. On the right side, there is a "Data Filters:" menu with a list of filter options. The bottom of the interface shows the Esri logo and "Powered by Esri".

Filters by:

- County
- Route Number
- Municipalities
- Case numbers
- Landmarks

Data Filters:

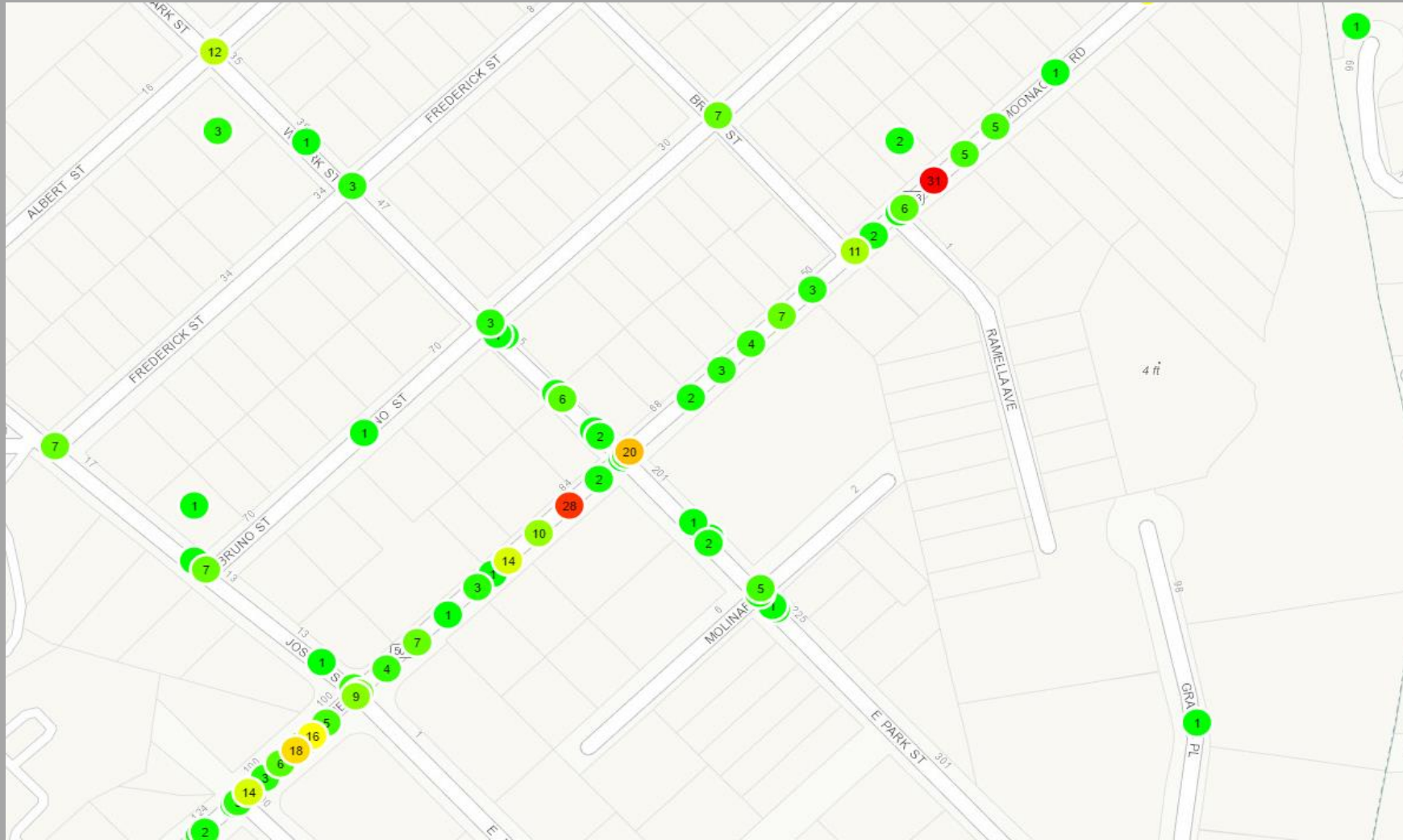
- Crash Location Details
- Crash Dates Range
- Crash Magnitude
- Crash Types
- Road Condition
- Physical Condition
- Driver Physical Status
- Median Type
- Pedestrian / Cyclist
- Traffic Control
- Advanced Filters

Map Labels: Scranton, Middletown, Newburgh, Danbury, New Haven, Bridgeport, Greenwich, Stamford, White Plains, Yonkers, New York, Hicksville, Brentwood, Levittown, West Babylon, Edison, Tom's River, Philadelphia, Allentown, Reading, Lancaster, Chambersburg, Hagerstown, Martinsburg, Frederick, Baltimore, Germantown, Columbia, Annapolis, Washington, Dover, Delaware Bay, Atlantic City, Vineland, Wharton State Forest, NEW JERSEY, NEW YORK, MARYLAND, DELAWARE, Pennsylvania, New Jersey, New York, Maryland, Delaware.

Map Data Points: 63K, 301K, 55K, 254K, 507K, 457K, 324K, 316K, 468K, 323K, 216K, 186K, 65K, 248K, 203K, 262K, 114K, 28K, 78K, 153K, 52K.

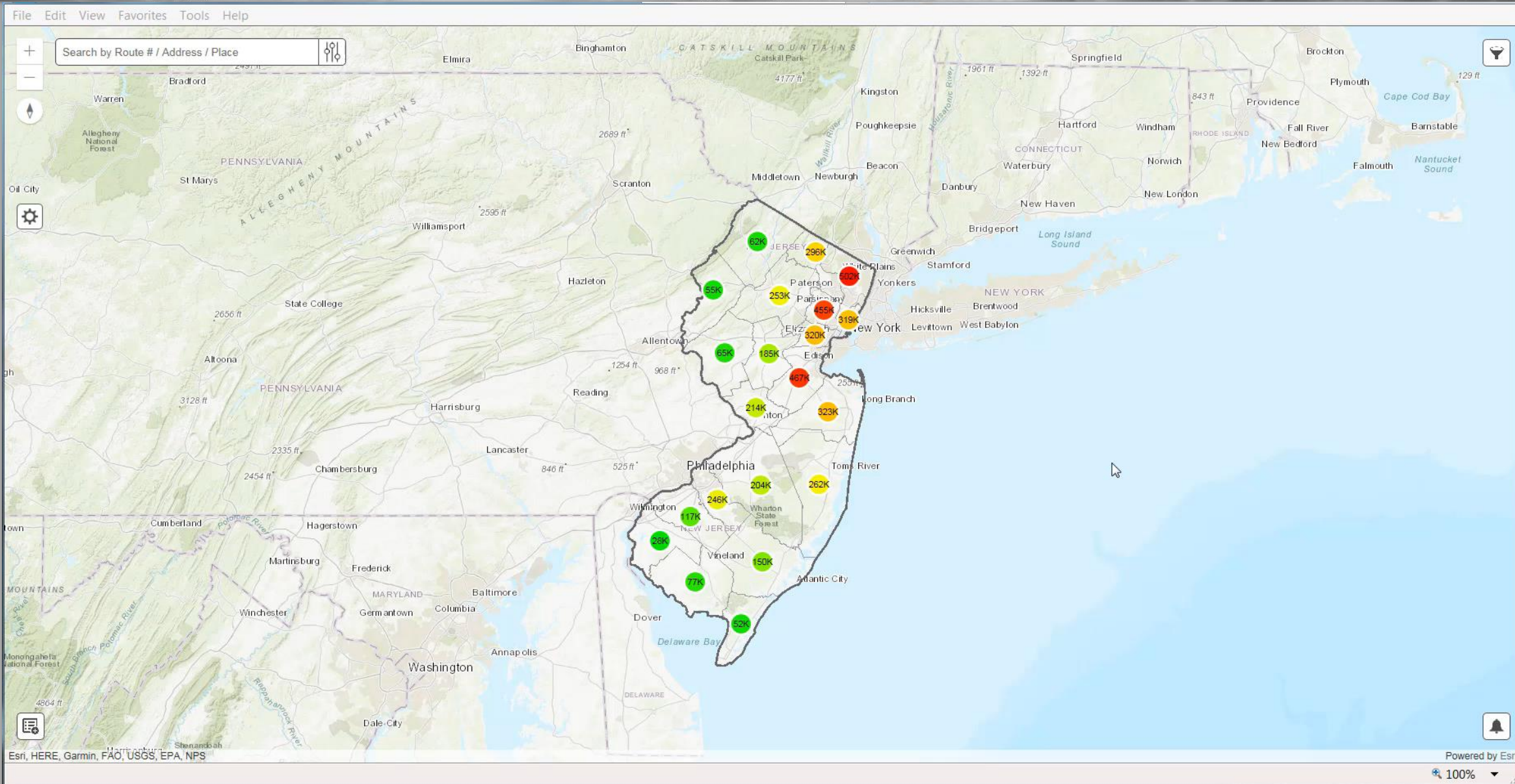
UI Elements: Search by Route # / Address / Place, Filters by: (County, Route Number, Municipalities, Case numbers, Landmarks), Toggle 2D/3D view, Street View, Crash Records Layer, Ball Banking Layer, AADT Layer, Data Grid, Data Filters: (Crash Location Details, Crash Dates Range, Crash Magnitude, Crash Types, Road Condition, Physical Condition, Driver Physical Status, Median Type, Pedestrian / Cyclist, Traffic Control, Advanced Filters), Esri, HERE, Garmin, FAO, USGS, EPA, NPS, Powered by Esri.

2D VISUALIZATION



Safety Voyager

2D VISUALIZATION VIDEO

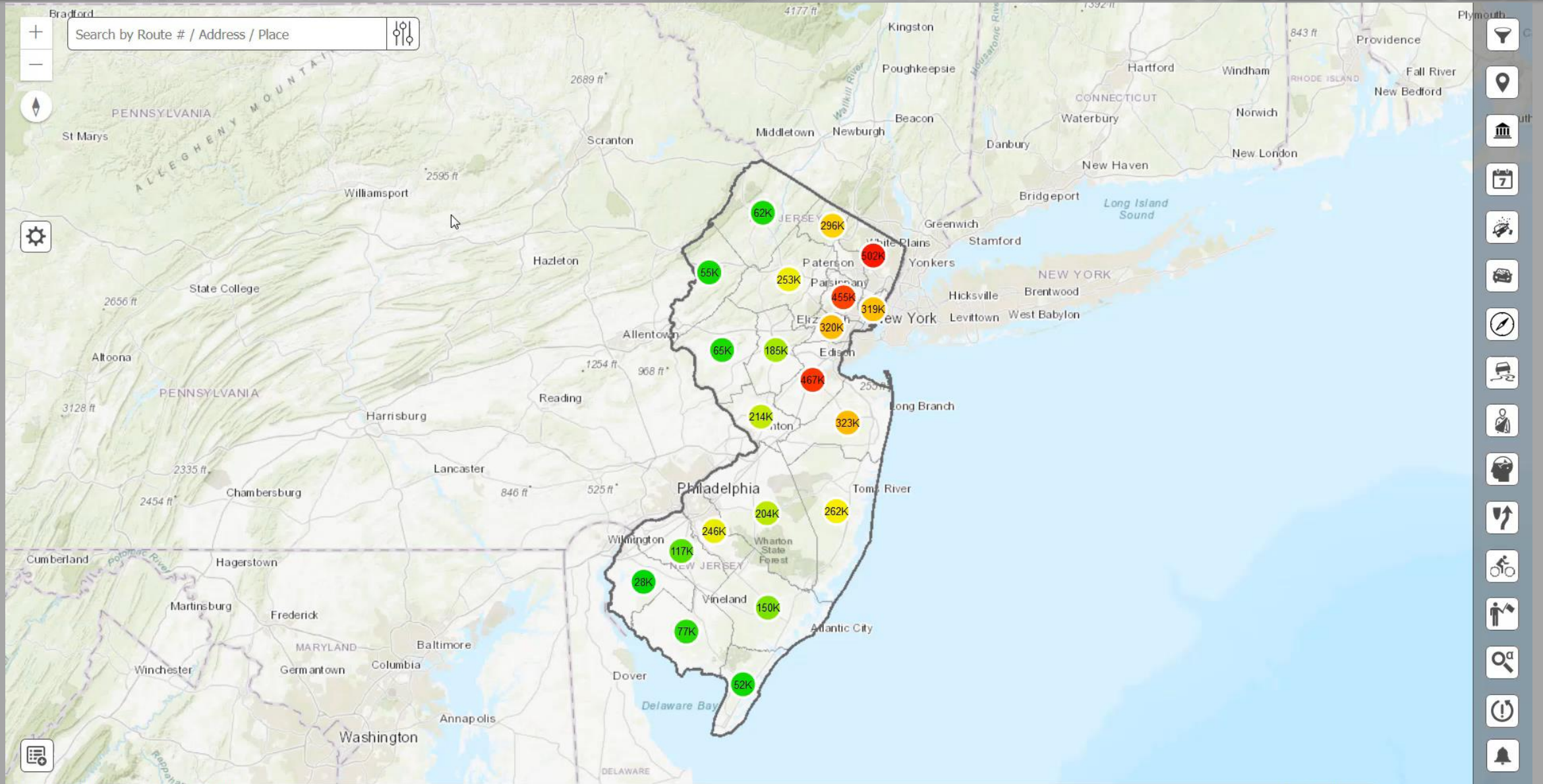


3D VISUALIZATION



Safety Voyager

3D VISUALIZATION-VIDEO



GEOCODING ISSUES

SRI: 00000049 — +
MP 1.500

16 S FRANCES AVE

COUNTY ROAD 90
@ OVER LOOK DR

PRIVATE PROPERTY
? PARKING LOT @
BAYSHORE RD

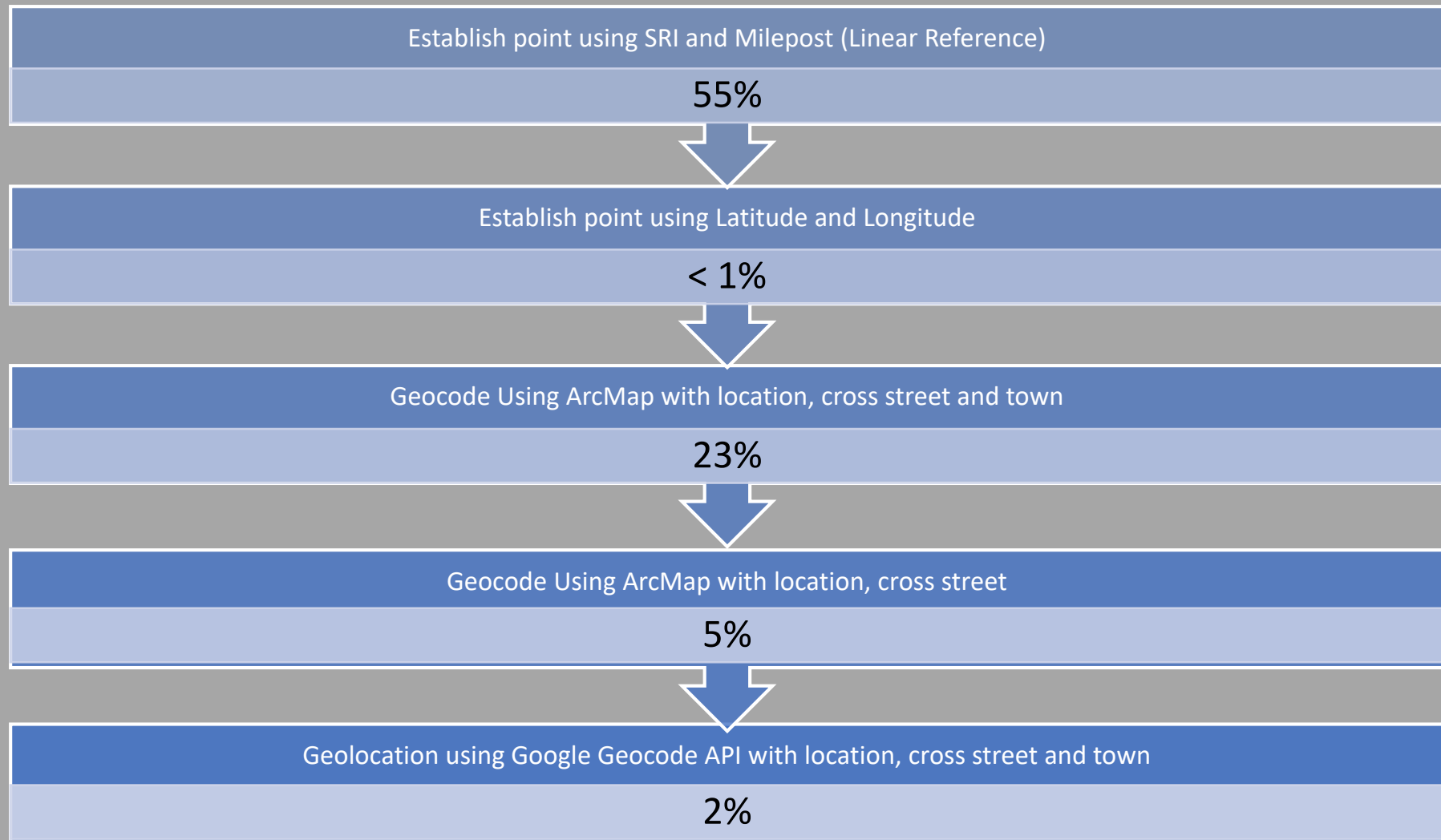
STRAWBERRY
VILLAGE OFFICE
BUILDING

TRYTON
MOTEL/511
E.13TH. AVE. NE.
WILDWOOD NJ. BRI

CROSS KEYS RD
(PARKIGN LOT)

A TREE AND A
BRICK WALL

DATA STORY



THE ROAD AHEAD...

County V

Muni V

Safety – Calendar

Drowsy & Distracted

Aggressive Driving

Ped/Bike

Impaired Driving

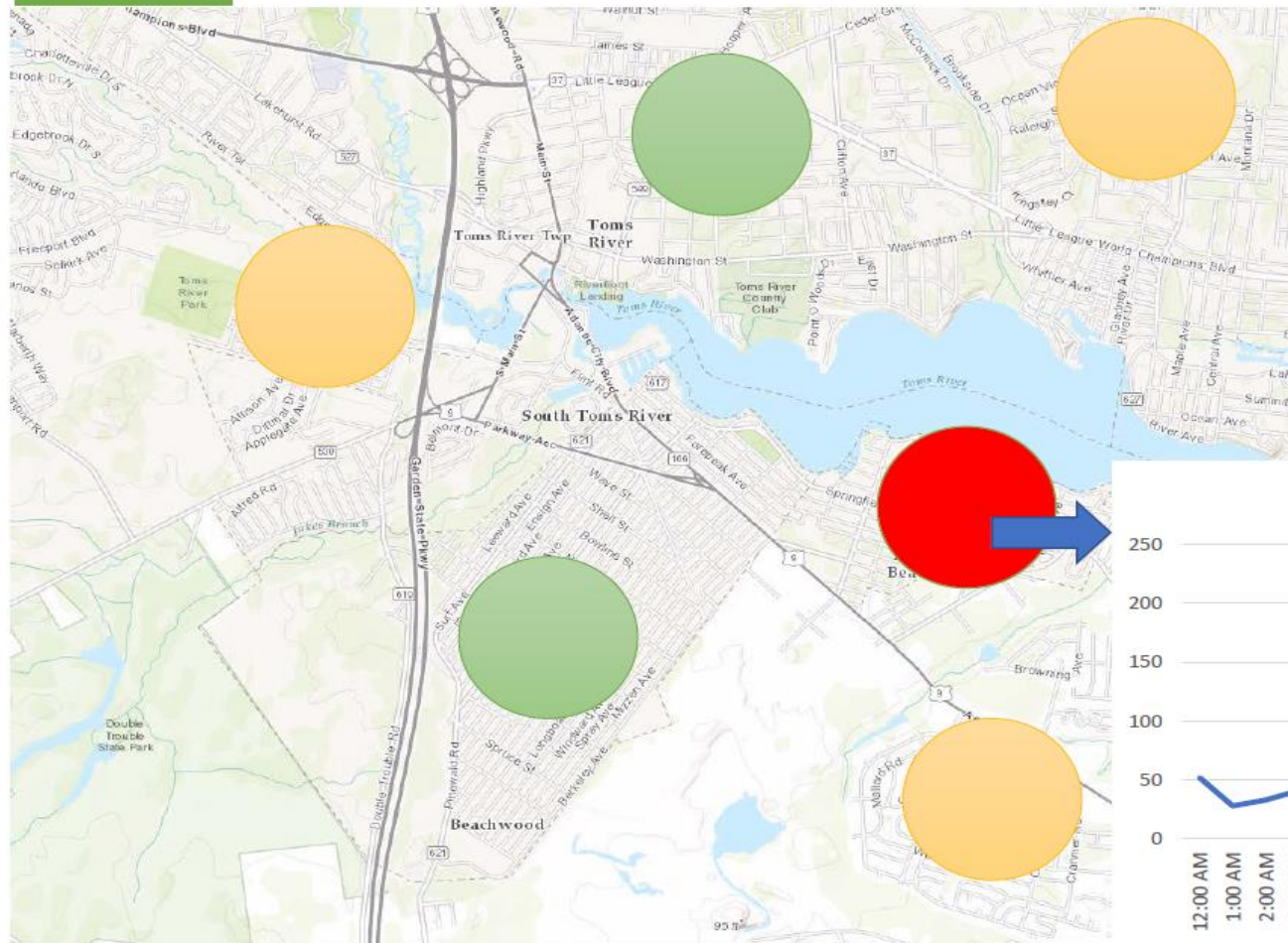
Older Drivers

Unbelted

Young Drivers

Work Zone

Impaired Driving



Intersection

Liquor Stores Bars

Schools

Buffer size slider
200ft to 2miles

Time of Day



THE ROAD AHEAD...

Safety Trends – By Jurisdiction

State

County

Muni

NJTPA

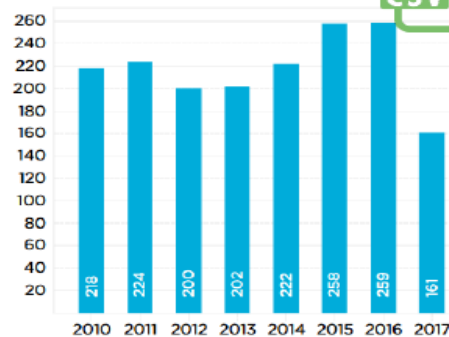
SJTPO

DVRPC

Filters

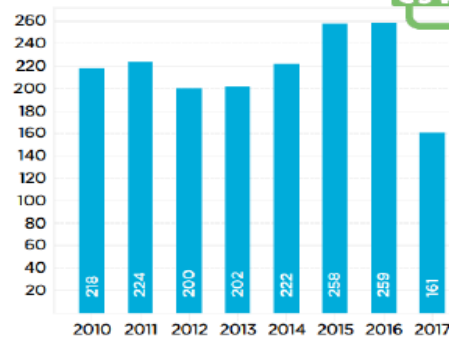
- Year Range
- Collision Type
- Time of Day

Fatal Crashes By Year



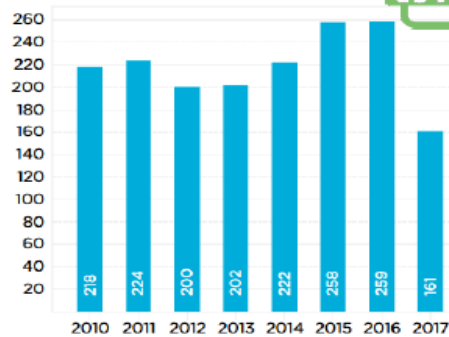
Total fatal crash trends over the last 5 years.

serious injuries by year



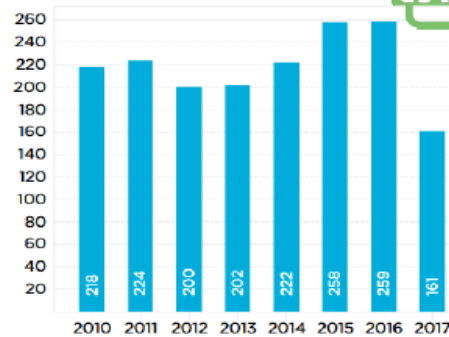
Total fatal crash trends over the last 5 years.

Pedestrian / cyclist killed



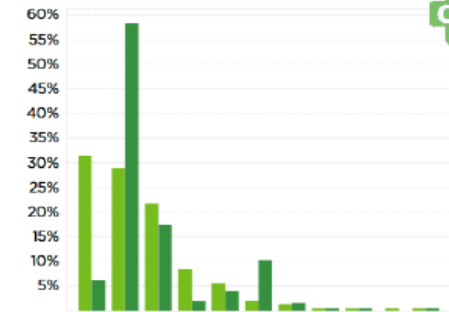
Total fatal crash trends over the last 5 years.

Pedestrian / cyclist involved



Total fatal crash trends over the last 5 years.

Crashes By Manner Of Collision



Percent of all crashes and fatal crashes for each manner of collision.

Distracted Driving
Teen Driver Analysis
Others?



QUESTIONS

Thank you for
your attention

Contact info:

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chris.zajac@dot.nj.gov

Safety Voyager
