



Comparative Analysis of Arterial Characteristics to Evaluate Road Diet Lane Reduction Potential

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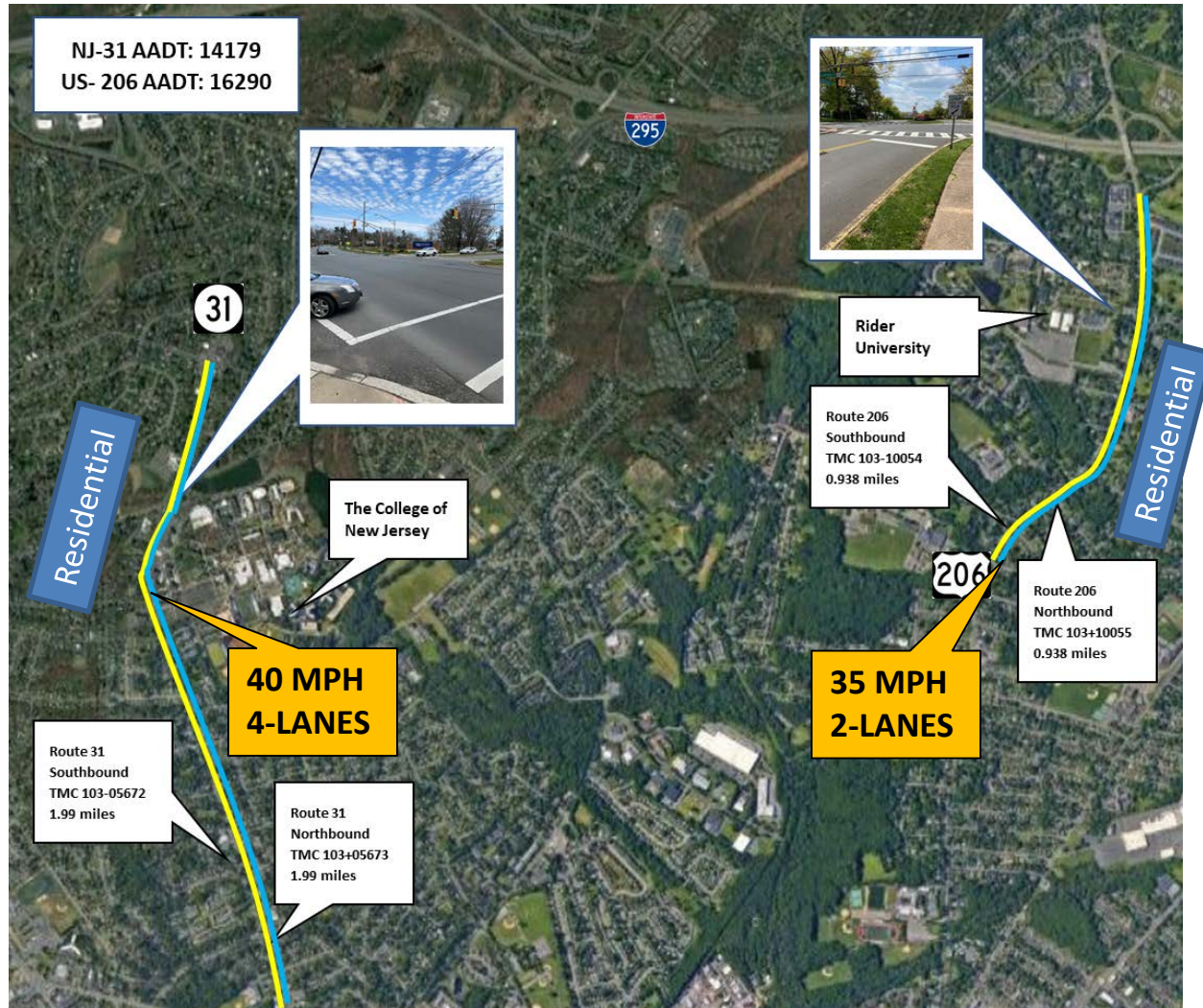
Why Lane Reductions/Diet

Quick Video



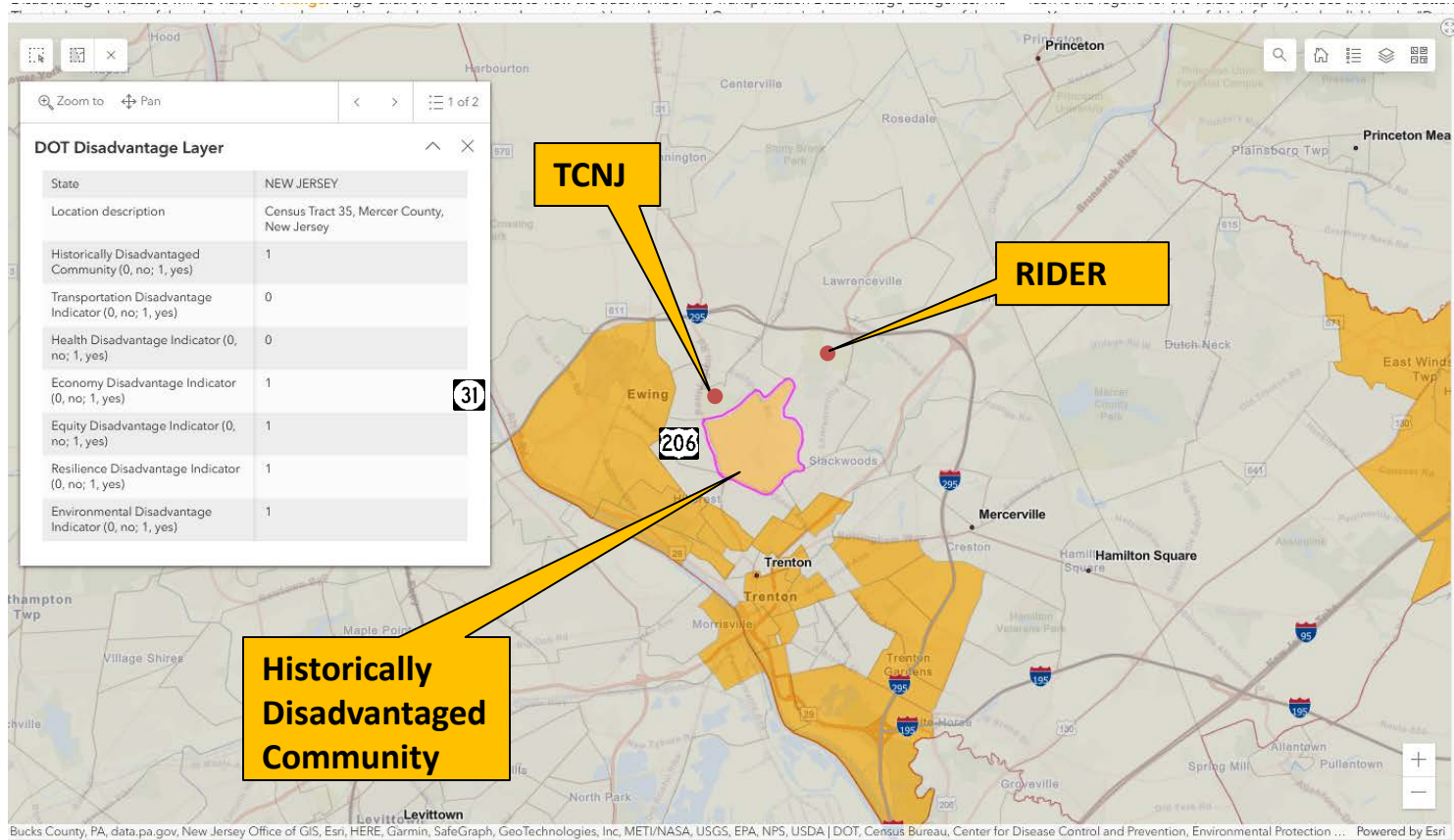
Study Site

Comparing Two Similar Roadways in the Same Region



Study Site

Historically Disadvantaged Areas



6,905

Total Population Selected

1

Total Selected Census Tracts

6,905

Total Population of Selected Disadvantaged Census Tracts

1

Total Selected Transportation Disadvantaged Census Tracts

101.2%

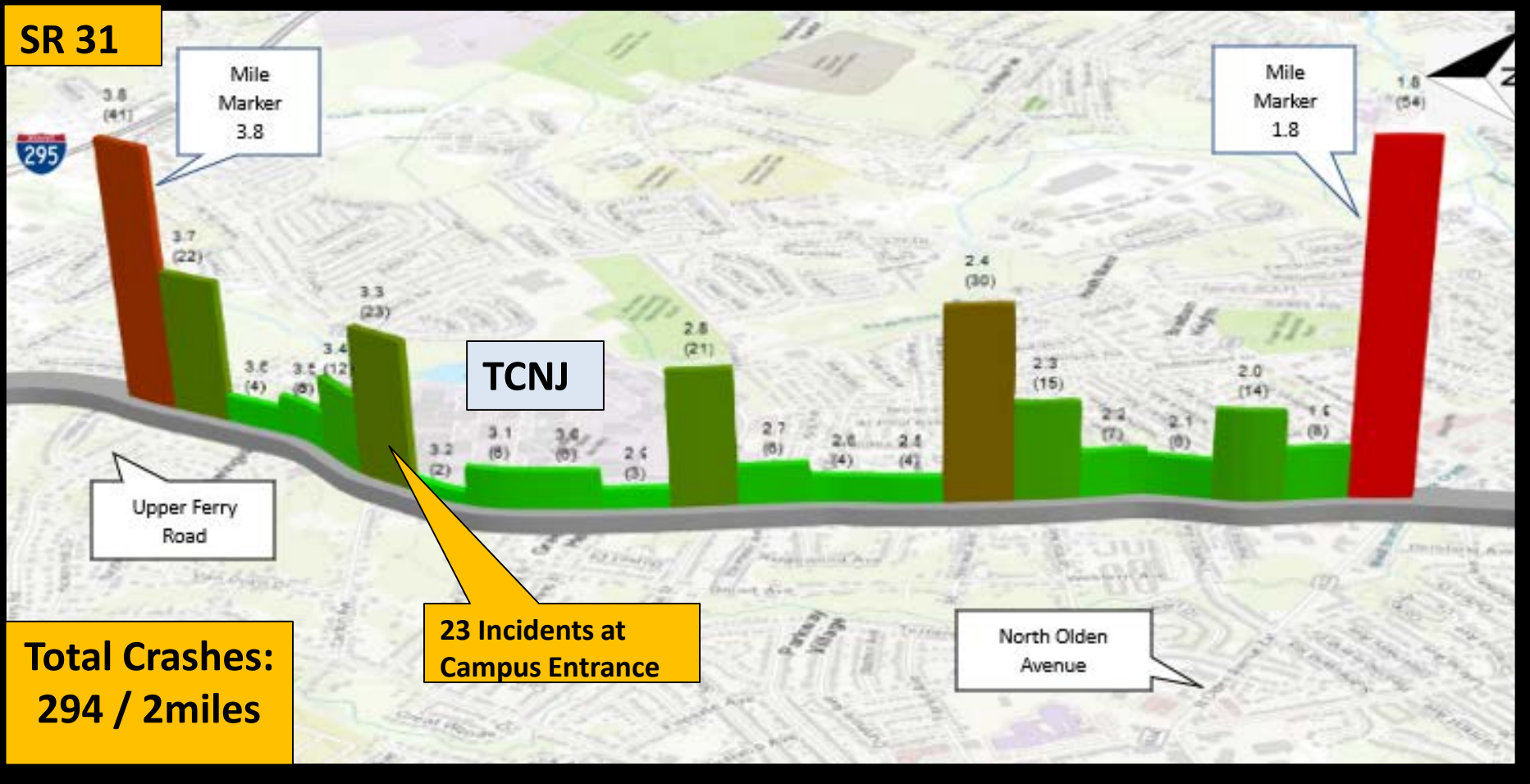
Percent of Population in Disadvantaged Census Tracts In Selected Area

100.0%

Percent of Transportation Disadvantaged Census Tracts in Selected Area

Study Site Crashes

Crashes 2018 -2021 SR31



Study Site Crashes

Crashes 2018 -2021 US206



US 206

**18 Incidents at
Campus Entrance**

Mile
Marker
47.6

295

47.6
(1)

47.7
(3)

47.8
(18)

47.4
(8)

47.1
(6)

47.1
(4)

47.1
(2)

47.0
(7)

46.6
(5)

46.6
(8)

Mile
Marker
46.7

46.7
(1)

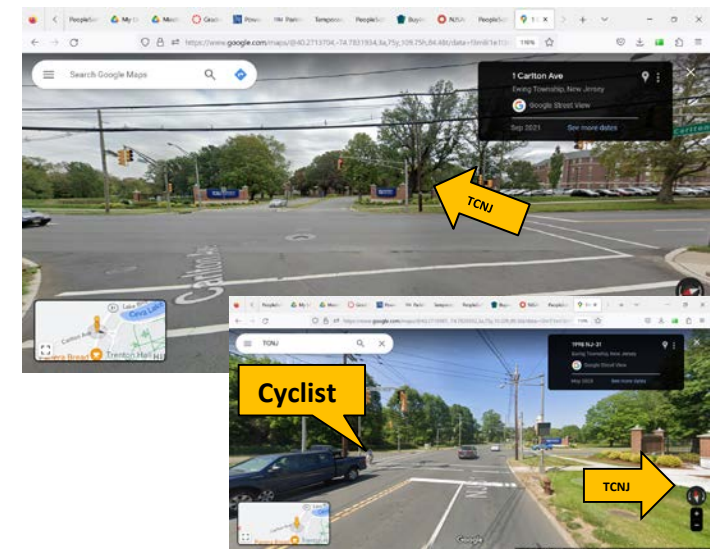
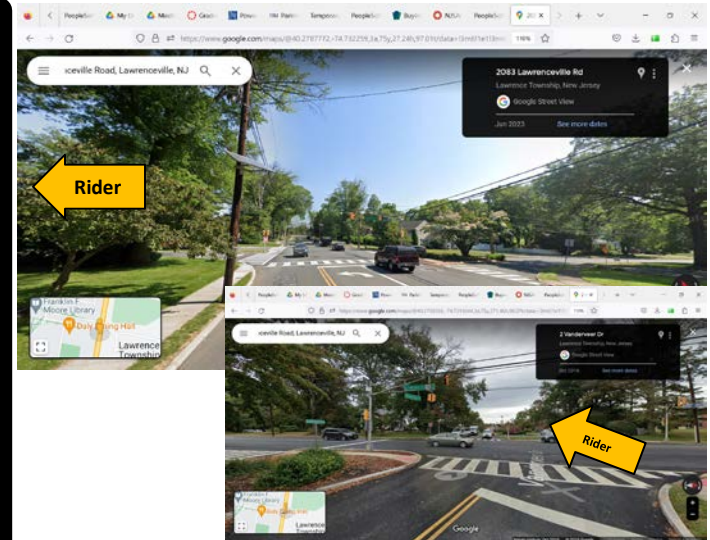
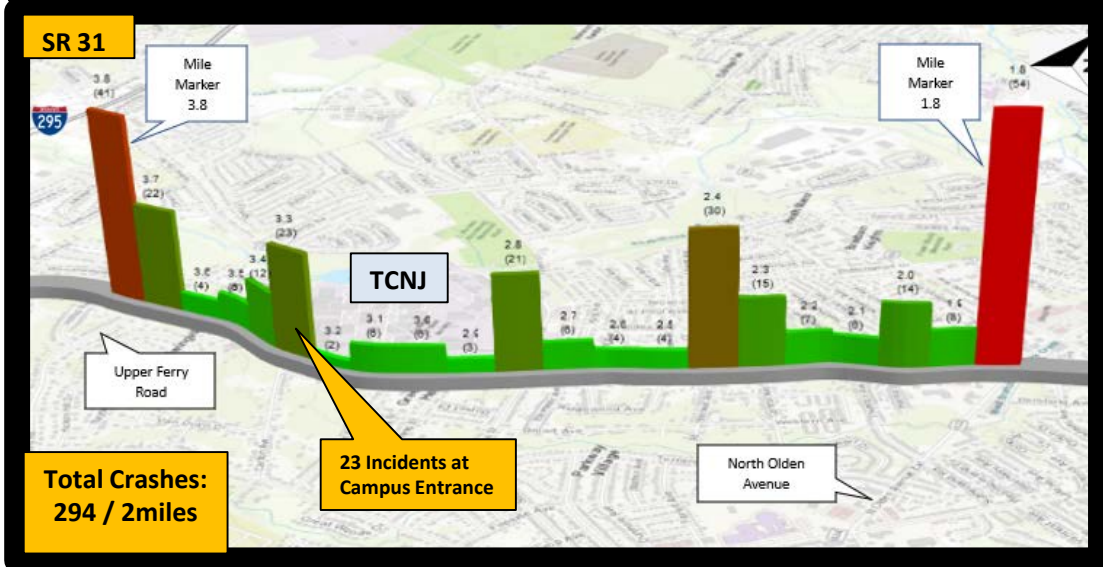
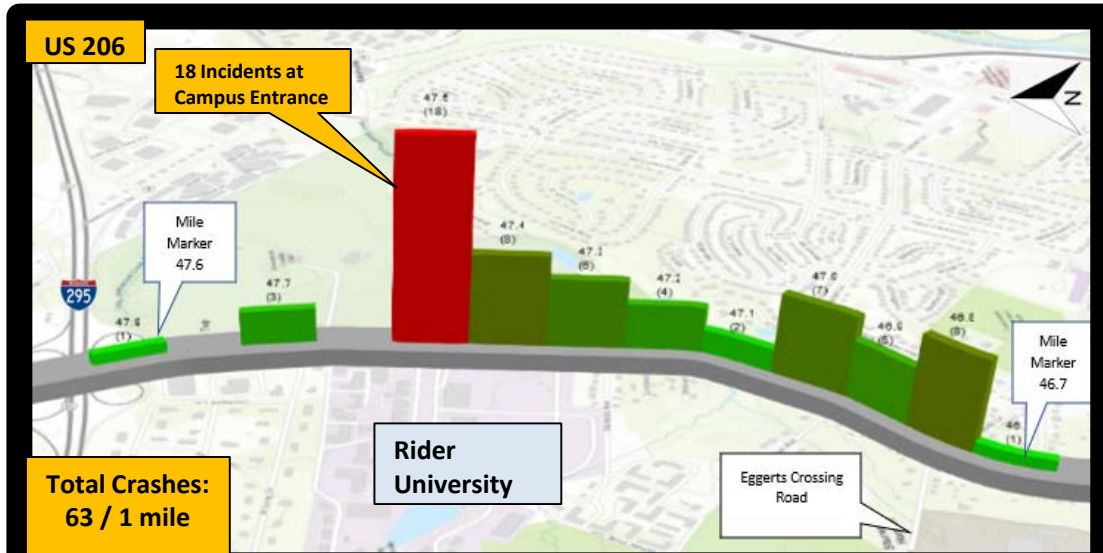
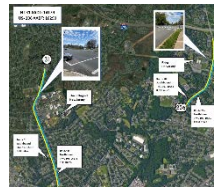
**Total Crashes:
63 / 1 mile**

**Rider
University**

Eggerts Crossing
Road

Study Site Crashes

Crashes 2018 -2021



Site Metrics for Research

Route 31 – Route 206



Fixed Entities Per Mile	Route 31	Route 206
Pedestrian Crossing	12.0	7.1
Intersecting Roads	14.5	12.2
Residential Driveways	49.7	34.6
Commercial Entrances	9.5	2.0
School Entrances	2.0	3.0
Church Entrances	1.5	1.0
Crashes	147.5	64.0
AADT	14179	16290
crash/AADT Lanes	0.0104	0.0039

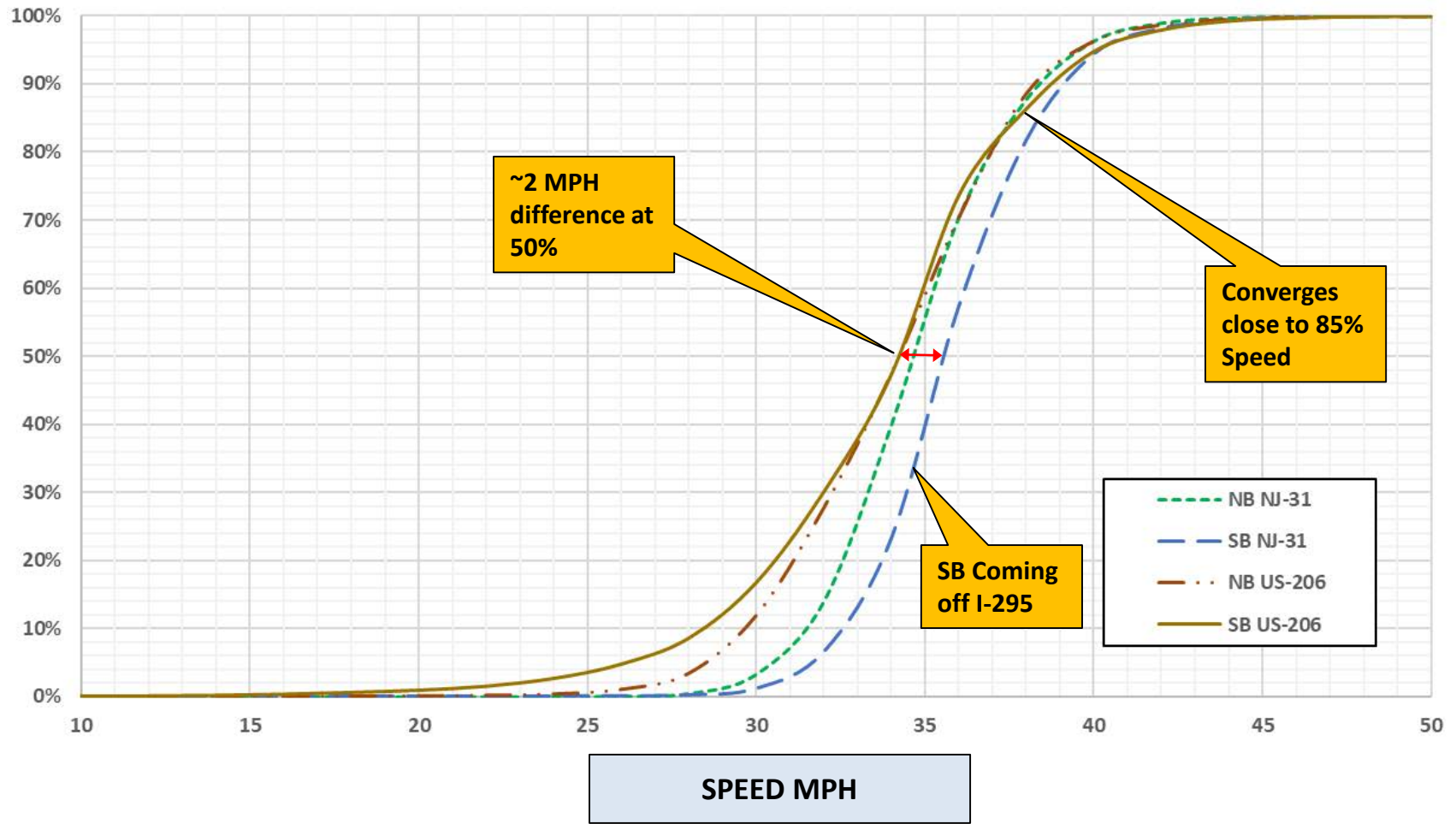
**Higher Crashes
Per Mile SR31**

**Higher AADT
at US206**

**Change from 40 MPH to 35 MPH Increases TT by 25
seconds over 2 miles**

Site Metrics for Research

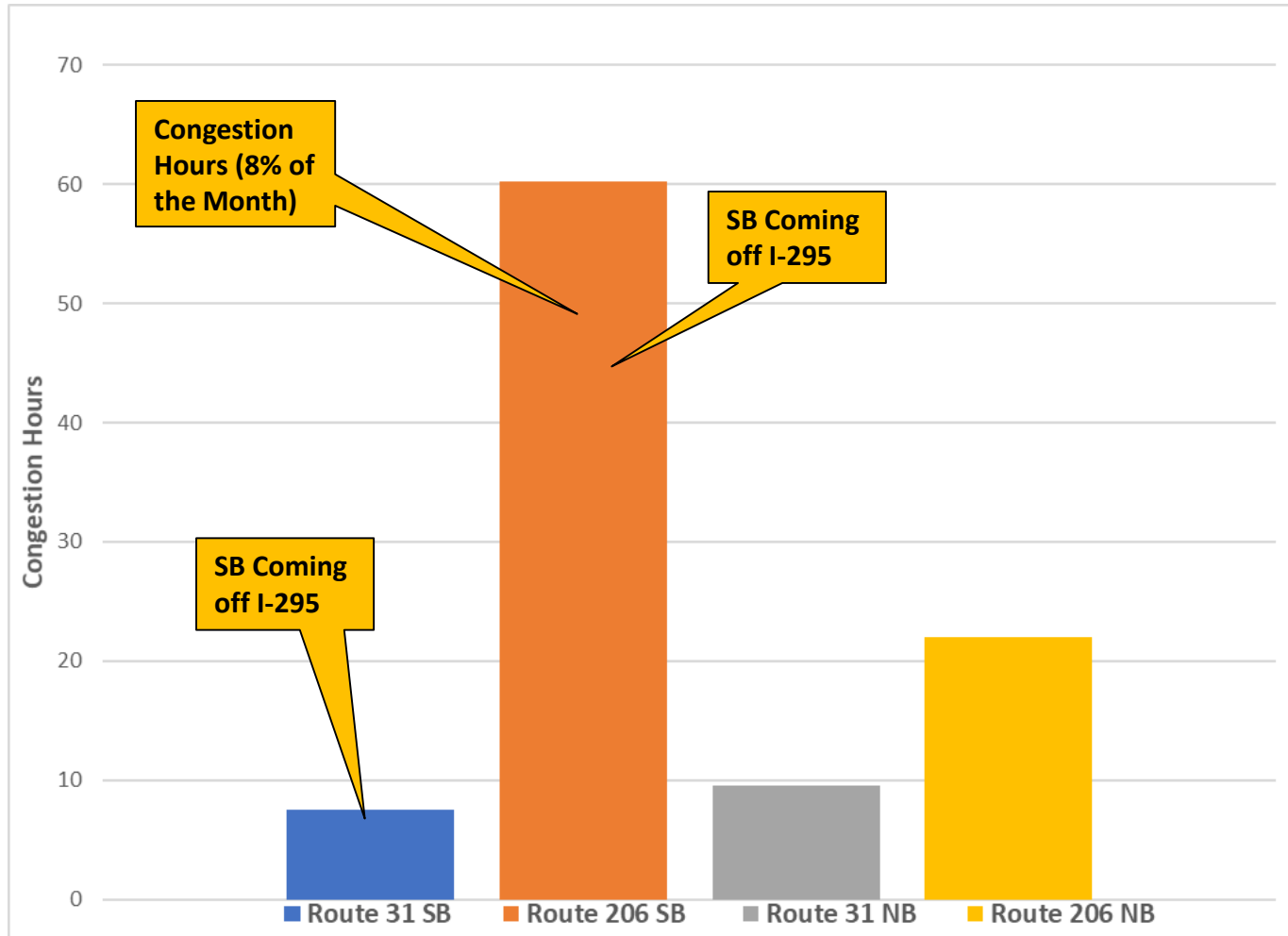
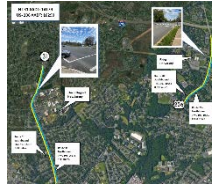
Route 31 – Route 206



Commercially Available Probe Vehicle Data
used for assessing speeds along corridor.

Site Metrics for Research

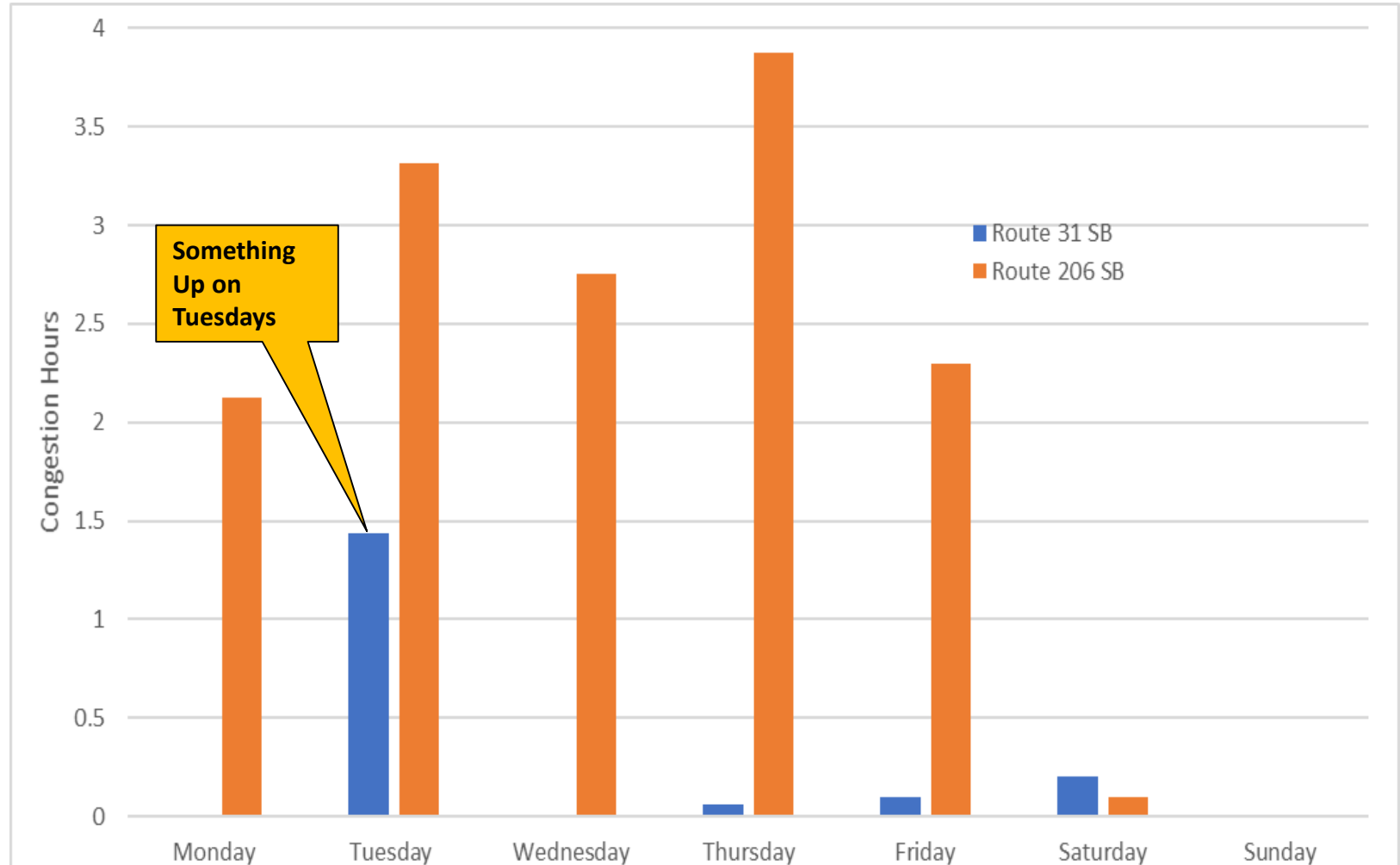
Congestion for April 2022 (Aggregated in 15-Min Increments)



NB ~12 hours
Congestion Difference

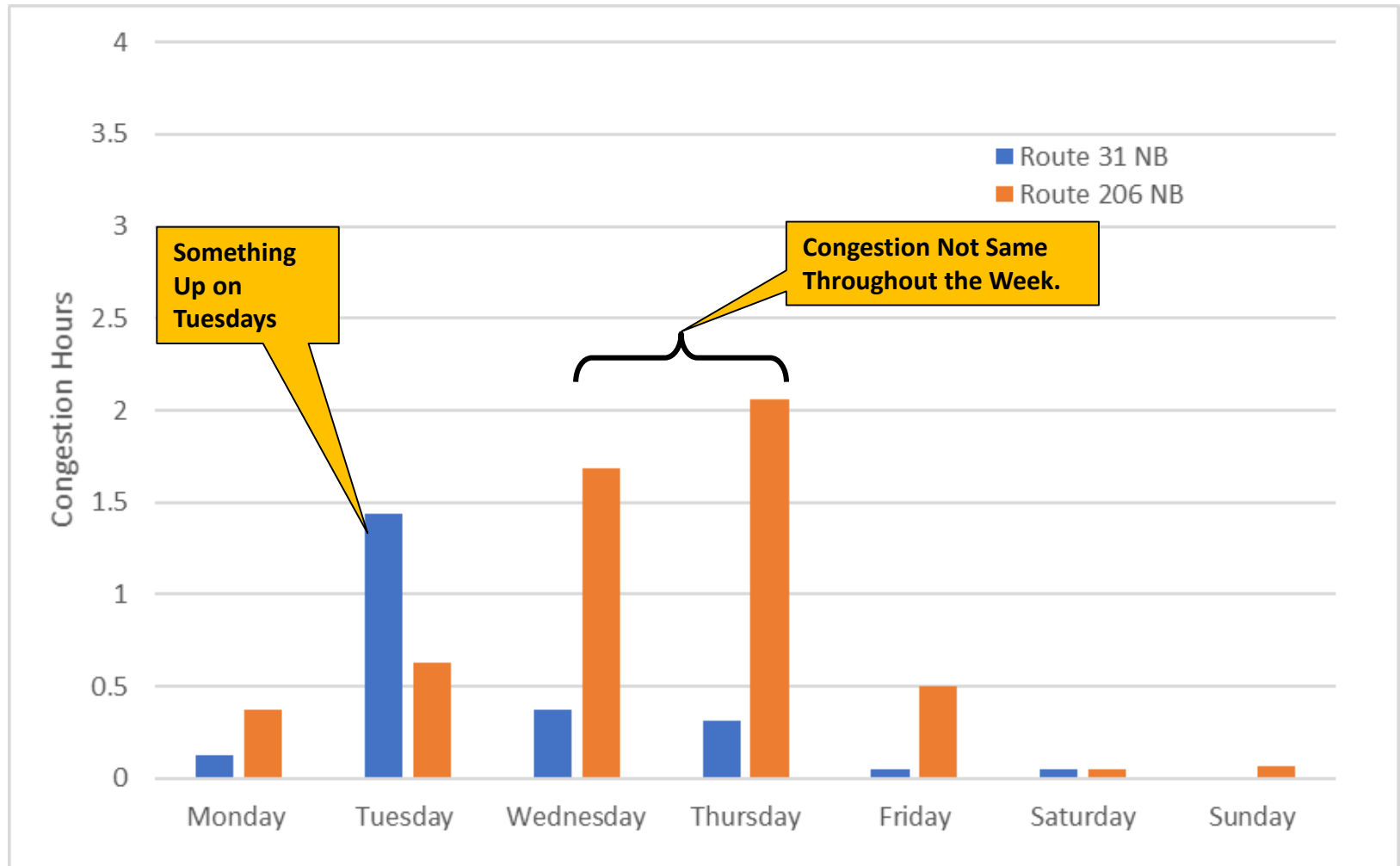
Site Metrics for Research

Congestion for April 2022 SB 31/206



Site Metrics for Research

Congestion for April 2022 NB 31/206



Conclusions

- **Further Research Needed to Evaluate Lane Reduction Potential for SR 31**
- **US 206 had higher AADT, More Congestion, Lower Speed, and Much Lower Number of Crashes per mile.**
- **Determination need to be made based on presented data is further research is needed.**
- **The Proximity to Schools, Residential Neighborhoods, and similar site statics indicate that SR 31 should be considered for land reduction (road diet).**
- **Improvements to Local Infrastructure Could Benefit Historically Community in the immediate region.**
- **At what point are the trade offs between the number of crashes, and travel-time satisfied to justify increasing congestion for a more safe, accessible route?**

