

Task Force Meeting 23

January 25, 2023



Agenda

- Housekeeping & Introductions 10 minutes
- Vision Zero Community Engagement Scierra Bratton 15 minutes
- Mohamed Kaddoumi & Jon Shaben Speed Corridor Efforts 20 minutes
- Projects Update Angela 15 minutes
- Gwendolyn Newell, AAA Safety Efforts 20 minutes
- Fatal Crash Statistics for 2022 10 min
- VZ Challenge of the Quarter Alex 15 minutes
- Wrap Up Angela 5 minutes



Speed Corridor Efforts

Mohamed Kaddoumi Sr. Engineering Project Manager CDOT Regional Planning

and

Jon Shaben

Engineering Project Coordinator
CDOT Traffic Safety Section

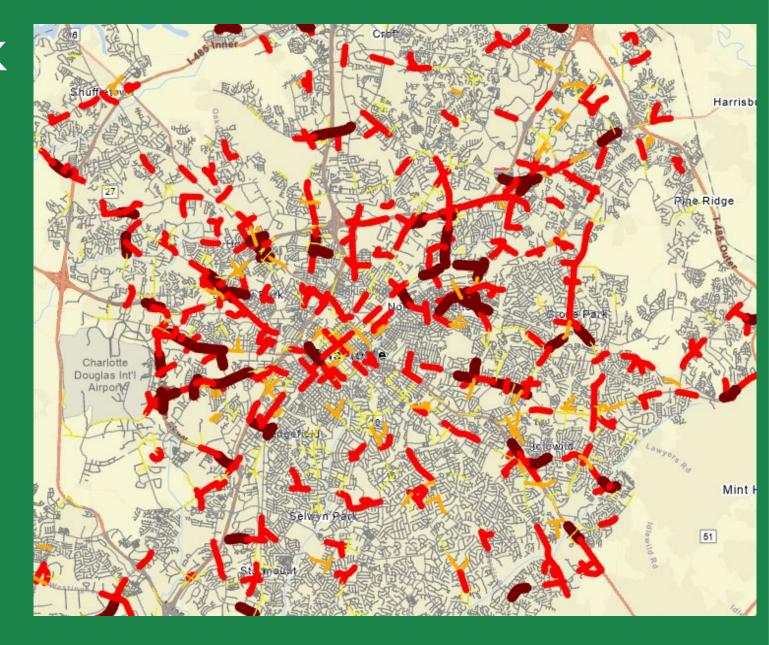


High Injury Network

Highlighting the street network using crash data

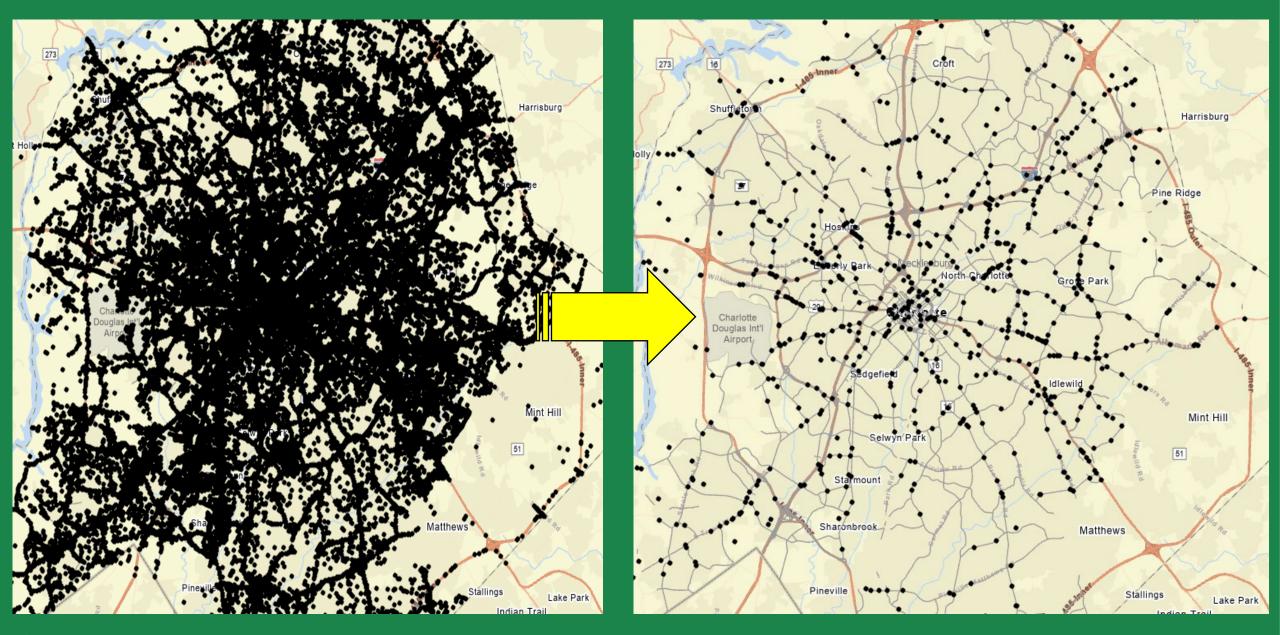
High Injury Network

A network of streets that have a higher incidence of severe and fatal collisions



All Charlotte area crashes

Fatal and SI Charlotte area crashes



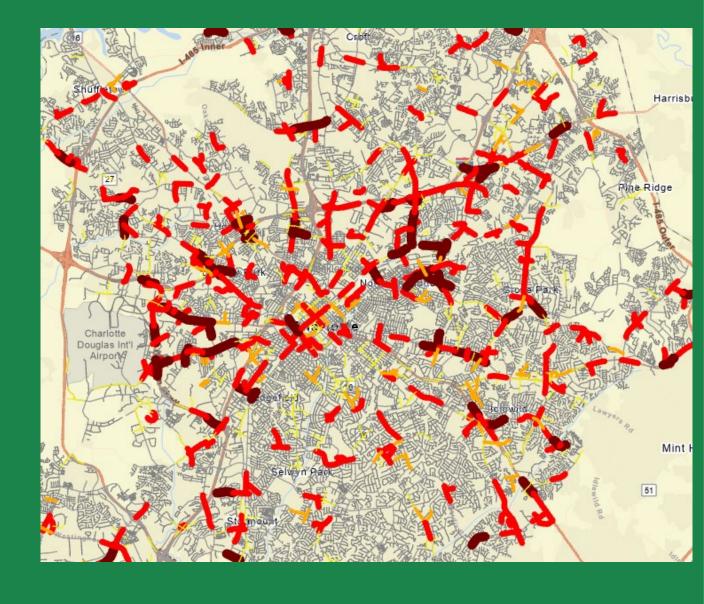
Methodology

Weights

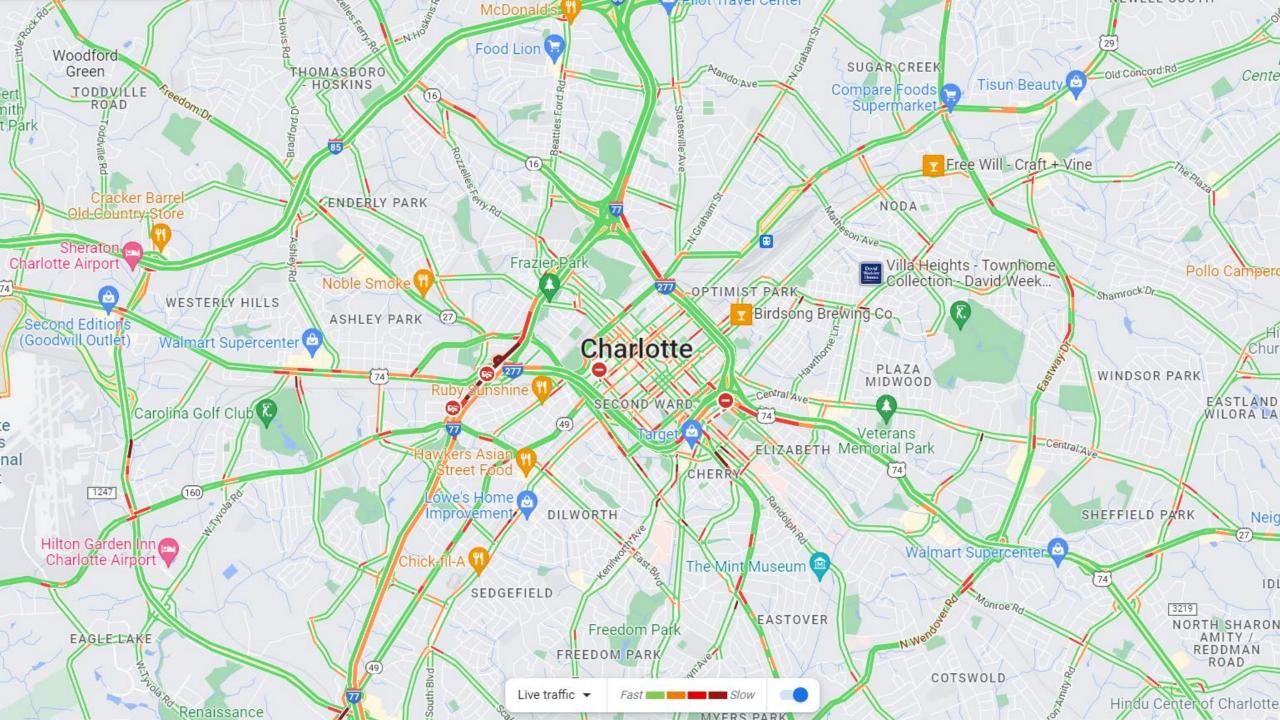
- 1 for Vehicle Serious Injury Crashes
- 3 for Bike and Ped Serious Injury Crashes
- 5 for Fatalities (All Modes)
- Sum Killed Serious Injury (KSI) weighted crash totals for each link
- Segments evenly divided with max length of ½ mile Crashes at intersection are applied to each leg of intersection

High Injury Network

10% of the total street network 68% on Thoroughfares 15% on Collectors 17% on Local



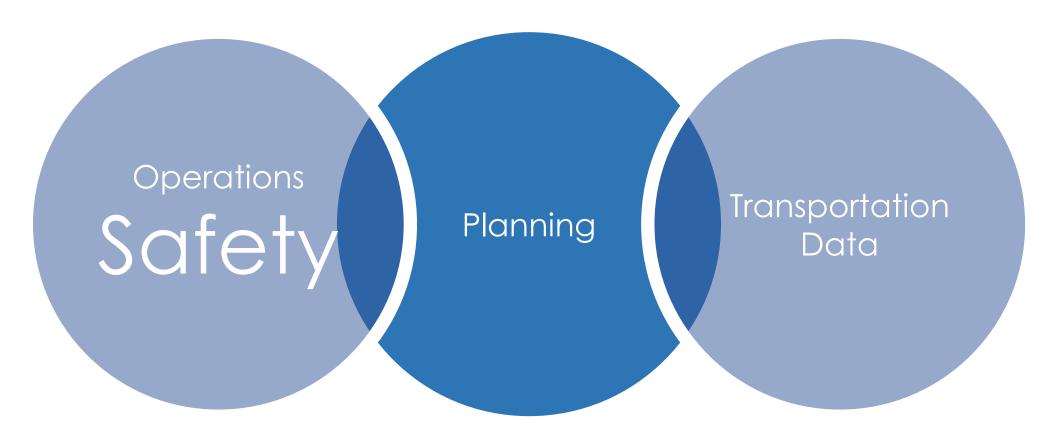
Speed Data



Performance Measures

- Speed
- Reference Speed
- Travel Time
- Planning Time
- Buffer Time
- Congestion
 - Free Flow Speed
 - Posted Speed Limit
- Historic Average Speed
 - Free Flow Speed
 - Posted Speed Limit
- Travel Time Index

- Free Flow Speed
- Posted Speed Limit
- Planning Time Index
 - Free Flow Speed
 - Posted Speed Limit
- Delay
- Cost

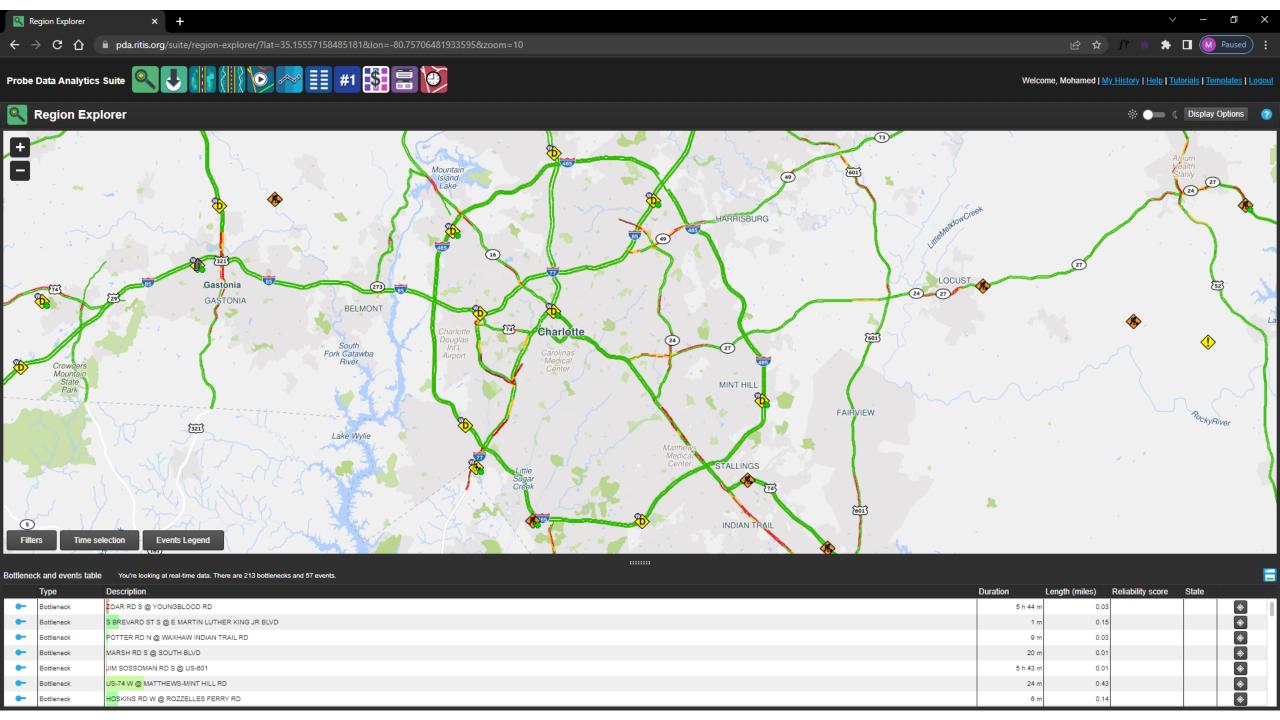


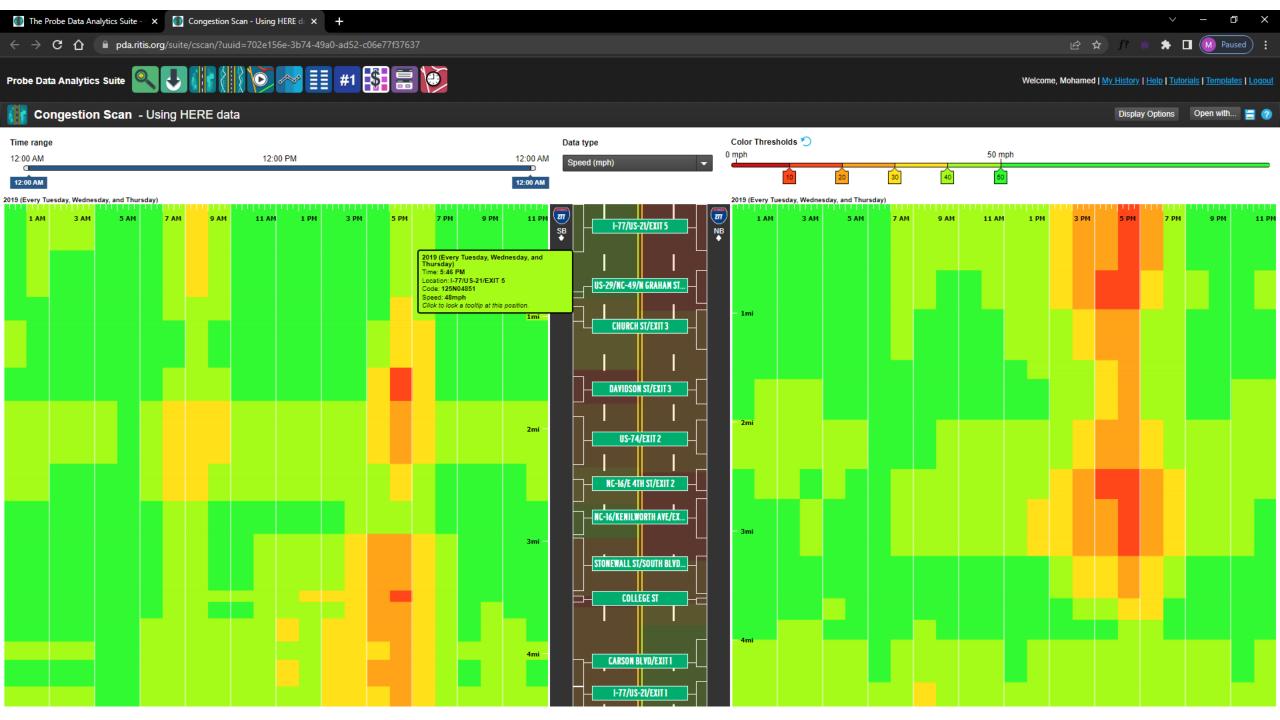
Before/After
Speed Analysis
Signal Timing/Retiming
Speed Enforcement

Project Identification
Bottleneck Identification
Corridor Analysis
Project Impact Analysis
Congestion Scans
Model Calibration
Origin/Destinations

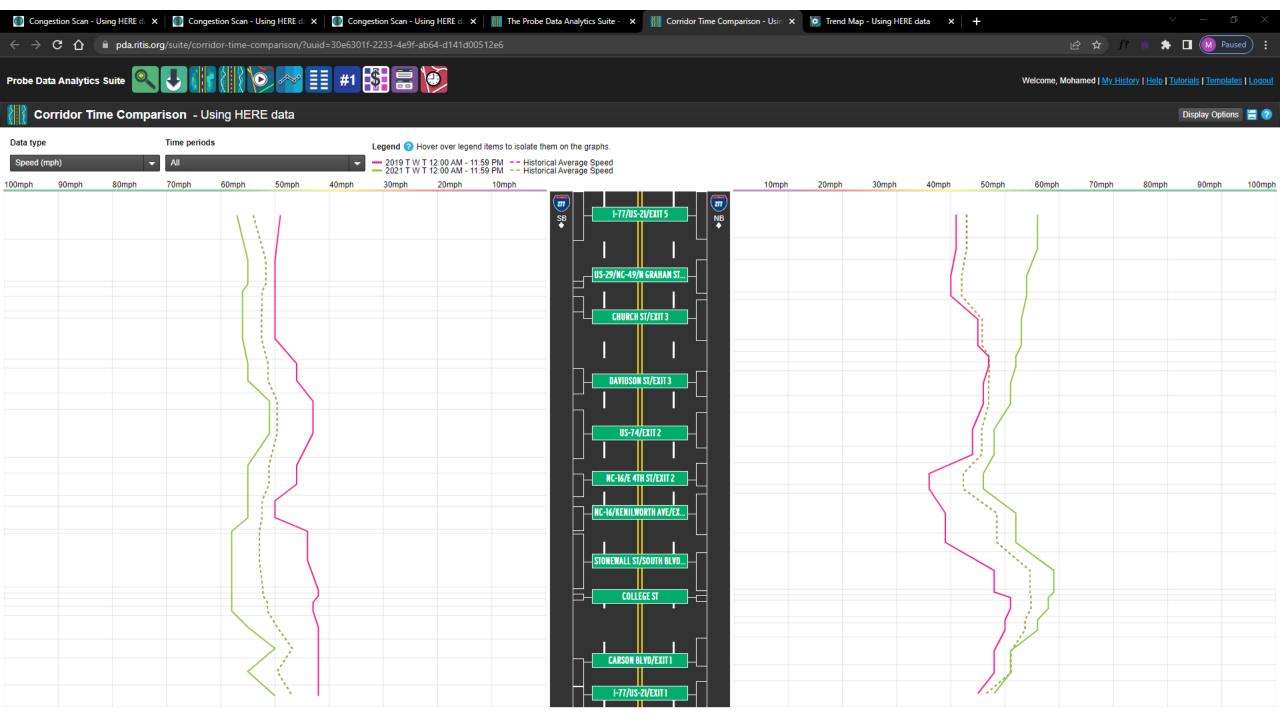
Map-21 Reporting
Congestion/Reliability
Holiday/Event Forecasting
Corridor/Network Health Metrics
Work Zone Monitoring

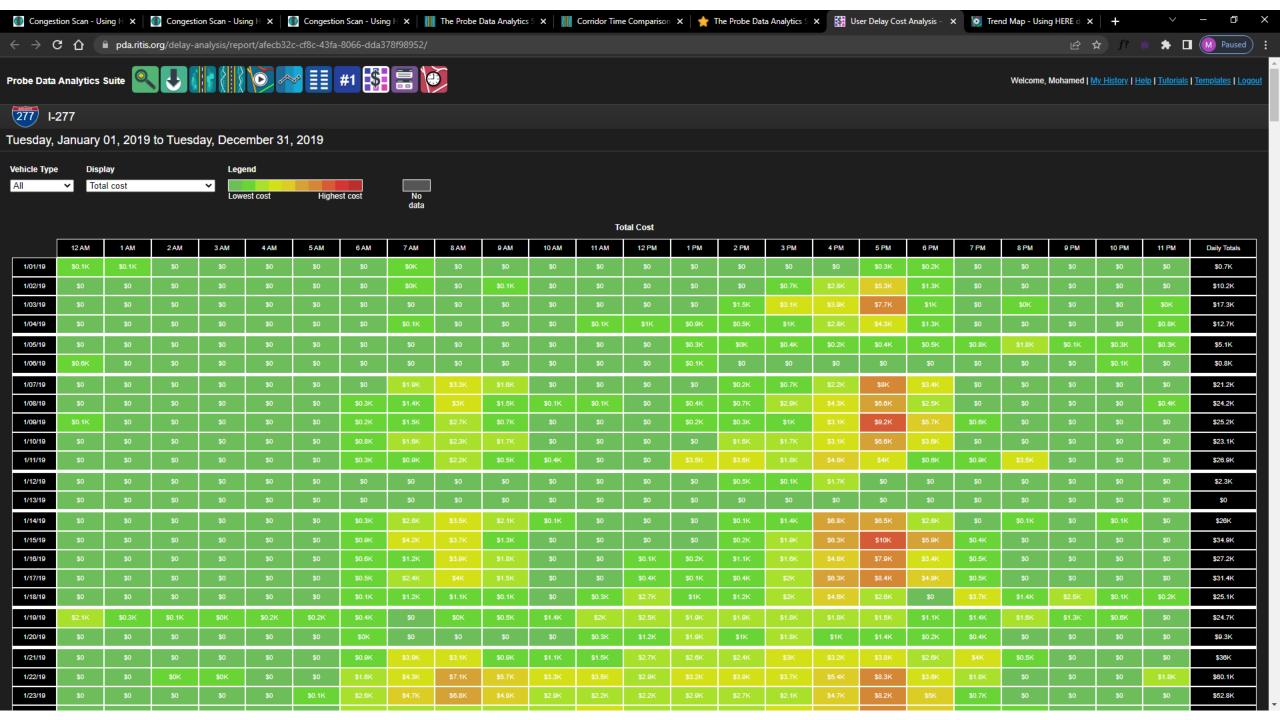
Examples

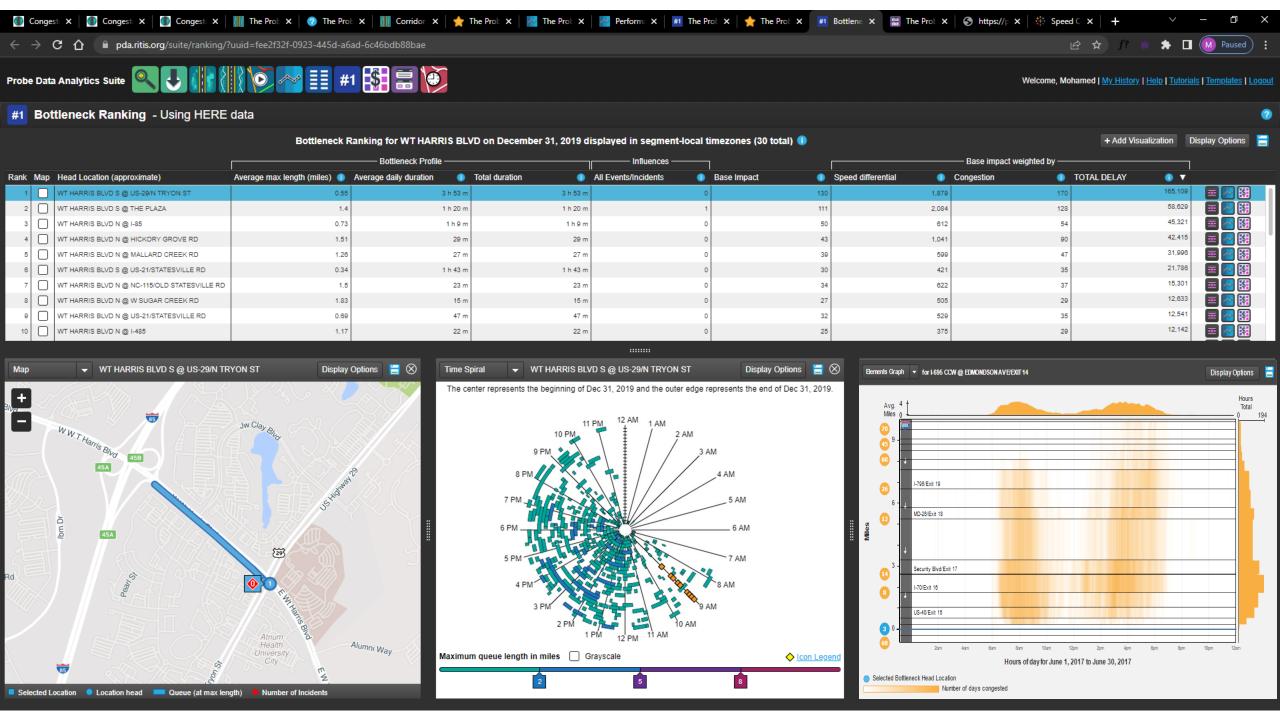












\Box		[
	5/2000	

Congestion (T2021 HCL I... High1

High2
High3
Moderate1
Moderate2
Moderate3
Recurring1

Recurring2

HCL1

V (All)

Null

High1

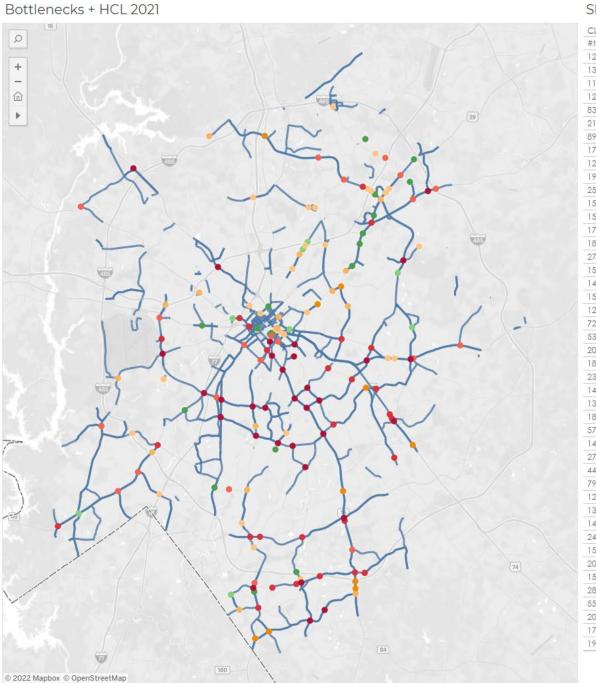
High2

High3

Moderate1

✓ Moderate2
✓ Moderate3
✓ Recurring1
✓ Recurring2

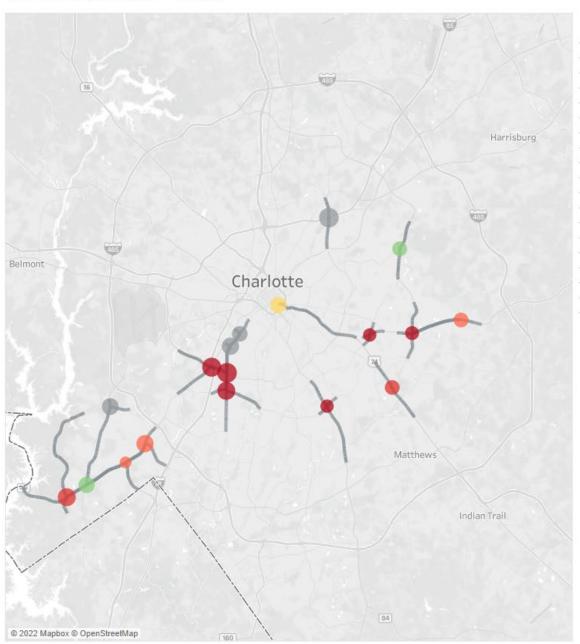
Total Delay 🗐



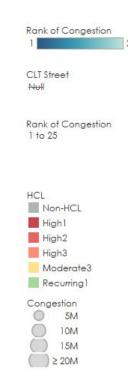
C	hoot	/.
0	heet	4

CLT Unitid1	CLT Street1	HCL1	Distinct cou		
#N/A	#N/A	Null	4		257,589,50
12792	E HILL ST_S TRYON ST_W HILL ST	Null	2	123,165,389	
13410	ARMORY DR_CHARLOTTETOWNE AV	Null	2	77,839,931	
11521	N CHURCH ST_W 11TH ST_W BROOKSHIRE RA	Null	1	75,554,407	
12662	S MINT ST_W JOHN BELK RA	Null	2	74,958,106	
8394	BROOKSHIRE BV_N I-85 EXIT 36 RA	Null	2	61,965,191	
21992	S TRYON ST_WESTINGHOUSE BV	High3	3	60,545,703	
B925	E W T HARRIS BV_THE PLAZA	Recurring1	2	50,831,008	
17739	E WOODLAWN RD_SOUTH BV	High1	4	49,609,094	
12991	E MOREHEAD ST_S TRYON ST_W MOREHEAD ST	Null	3	48,933,539	
19925	FAIRVIEW RD_PROVIDENCE RD_SARDIS RD	High1	4	48,457,292	
25034	SHOPTON RD WEST_YORK RD_YOUNGBLOOD R	High2	4	47,832,021	
15287	ALBEMARLE RD_N SHARON AMITY RD	High1	4	45,661,711	
15253	ALBEMARLE RD_E W T HARRIS BV	High1	4	43,992,604	
17273	BILLY GRAHAM PY_S TRYON ST_W WOODLAWN	High1	2	43,295,373	
18776	SOUTH BV_TYVOLA RD	High1	2	39,250,318	
27490	BALLANTYNE COMMONS PY_JOHNSTON RD	High1	2	37,237,369	
15070	IDEAL WY_REMOUNT RD_SOUTH BV	Null	2	36,877,180	
14770	E INDEPENDENCE BY_E INDEPENDENCE/BRIAR	Null	2	36,244,703	
15833	CLANTON RD_SOUTH BV	Null	1	34,221,546	
12896	E 6TH ST_N MCDOWELL ST	Moderate3	1	33,525,159	
7280	N I-85 EXIT 41 RA W SUGAR CREEK RD	Null	2	33,343,056	
53211	CONFERENCE DR E INDEPENDENCE BV	Null	1	32.634.259	
20422	S TRYON ST W ARROWOOD RD	High2	2	31,395,814	
18778	E INDEPENDENCE BV E W T HARRIS BV	High2	3	30,643,062	
23277	CAROWINDS BY JOHN PRICE RD_S TRYON ST	High3	2	30,508,460	
14469	E MOREHEAD ST_KENILWORTH AV	High2	2	30,140,889	
13912	CHARLOTTETOWNE AV E JOHN BELK RA KENIL	High1	2	27,798,026	
18956	N I-77 EXIT 5 RA TYVOLA RD	Null	1	27,504,265	
5704	E W T HARRIS BV N TRYON ST W W T HARRIS B	Moderate2	2	27,028,182	
14078	EAST BV SOUTH BV	High3	2	26,432,388	
27177	BALLANTYNE COMMONS PY MCKEE RD PROVI	High2	4	25,401,439	
44555	N TRYON ST UNIVERSITY CITY BV	High2	4	25,185,064	
7969	BROOKSHIRE BV N HOSKINS RD	Null	4	23,806,230	
12504	E 5TH ST N BREVARD ST	Null	2	23,391,468	
13579	E STONEWALL ST S MCDOWELL ST	Null	3	23,235,991	
14442	CENTRAL AV IN SHARON AMITY RD	High2		21,206,496	
24455	S TRYON ST. STEELE CREEK RD			20,812,048	
15763		Recurring1	2	20,405,872	
	MONROE RD_N WENDOVER RD	High2			
20934	I-485 RA_S TRYON ST	Null		20,182,016	
15616	ALBEMARLE RD_E INDEPENDENCE BV	Null		19,943,170	
28389	ARDREY KELL RD_LANCASTER HY	Moderate1		18,937,733	
55715	E INDEPENDENCE BV	Null		18,440,356	
20439	FAIRVIEW RD_SHARON RD	High1	/77 /	18,359,411	
17742	PROVIDENCE RD_S WENDOVER RD	High1		18,106,485	
19625	BROWN-GRIER RD_STEELE CREEK RD	Null	4	17,117,103	

BOTTLENECKS - 2021



			2021 Qu	varter	
CLT Street	HCL	Q1	Q2	Q3	Q4
ALBEMARLE RD_E W T HARRIS BV	High1	15	20	19	19
ALBEMARLE RD_HARRISBURG RD	High3	10	21	24	13
ALBEMARLE RD_N SHARON AMITY RD	High1	3	10		24
BILLY GRAHAM PY_S TRYON ST_W WOODLAWN RD	High1	12	6	5	2
BROWN-GRIER RD_STEELE CREEK RD	Non-HCL	11	13	4	
CAROWINDS BV_JOHN PRICE RD_S TRYON ST	High3	17		25	21
CLANTON RD_SOUTH BV	Non-HCL	2	5	8	17
E 6TH ST_N MCDOWELL ST	Moderate3	9	7	18	- 11
E INDEPENDENCE BV_E W T HARRIS BV	High2	24	22	17	12
E W T HARRIS BV_THE PLAZA	Recurringl	19	14	14	16
E WOODLAWN RD_SOUTH BV	High 1	1	3	3	3
FAIRVIEW RD_PROVIDENCE RD_SARDIS RD	High1		17	16	14
IDEAL WY_REMOUNT RD_SOUTH BV	Non-HCL		16	6	6
N I-85 EXIT 41 RA_W SUGAR CREEK RD	Non-HCL	4	4	2	5
S TRYON ST_STEELE CREEK RD	Recurring1	16	8		7
S TRYON ST_WESTINGHOUSE BV	High3		811	1	18
SHOPTON RD WEST_YORK RD_YOUNGBLOOD RD	High2	21	2	- 11	4
SOUTH BV_TYVOLA RD	High1	13	9	12	1

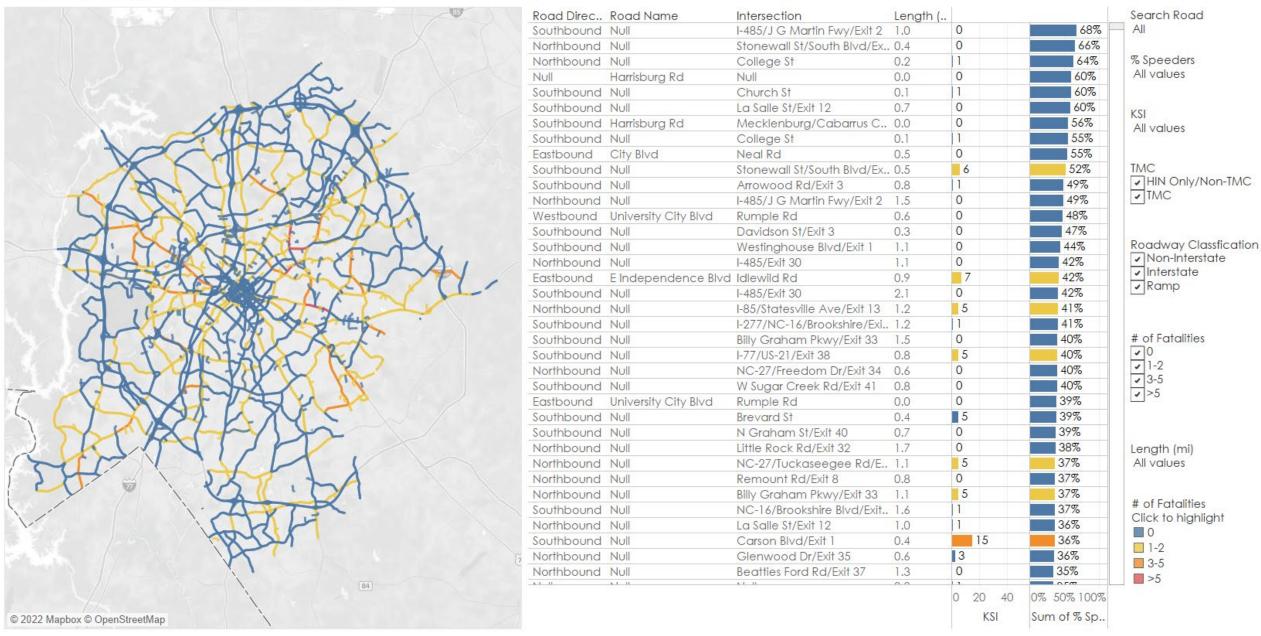


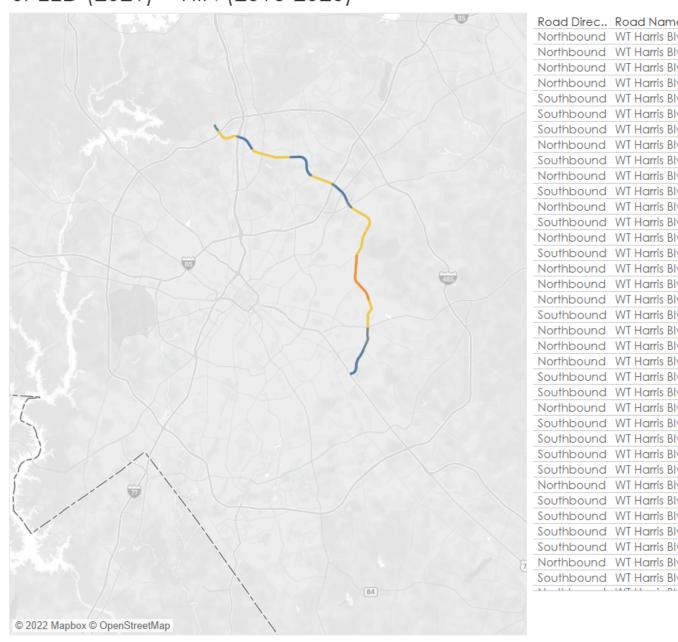
SPEED CORRIDORS

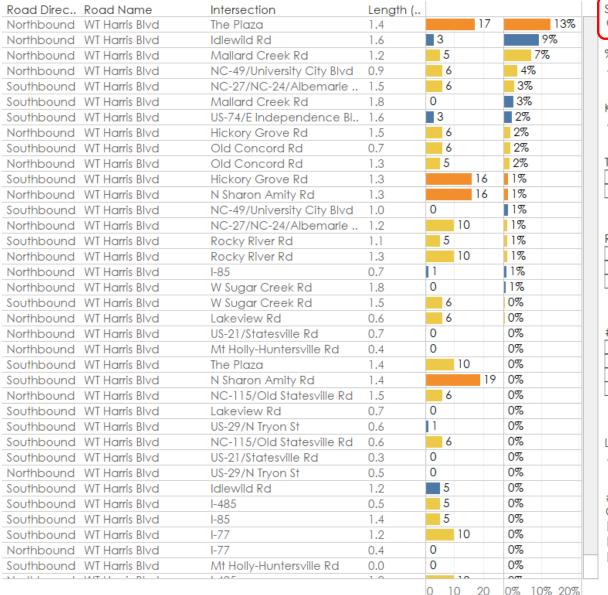
Process

- Compare speed limits to probe data
- Excessive Speeding (>10 mph)
- Compare/Blend with High-Injury Network
- Targeted Enforcement
- Before & After









Search Road Contains "WT Harris"

% Speeders All values

KSI All values

TMC

HIN Only/Non-TMC **→**TMC

Roadway Classfication → Non-Interstate

→ Interstate

Ramp

of Fatalities

V 0

√ 1-2 ₹ 3-5

✓ >5

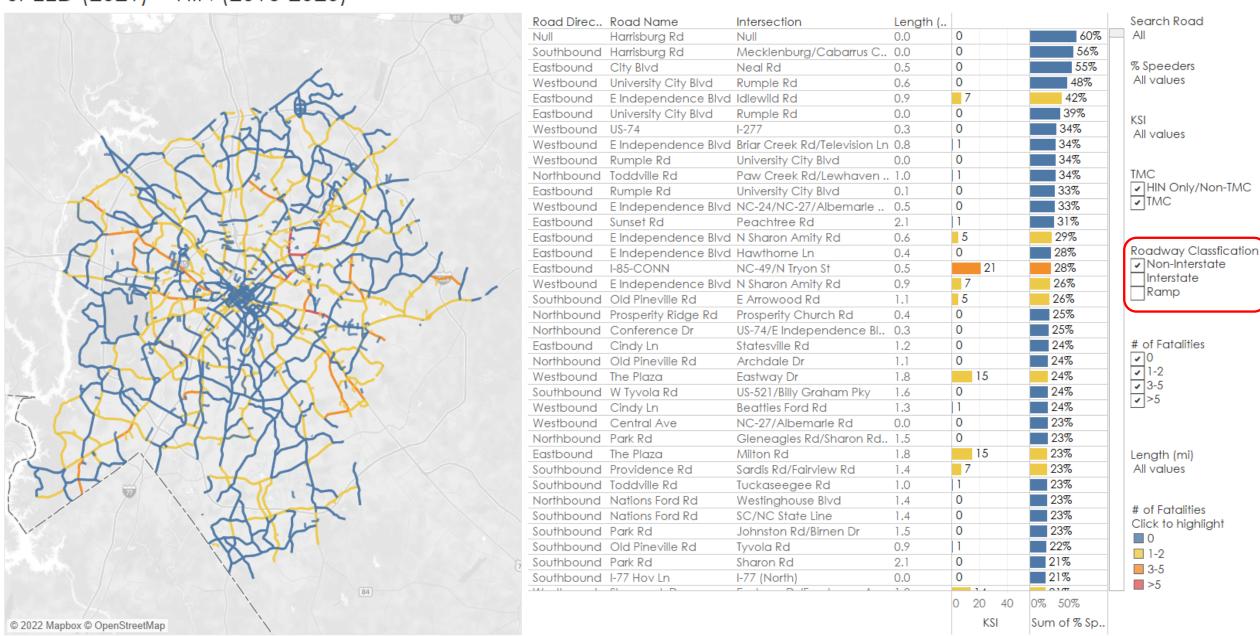
Length (mi) All values

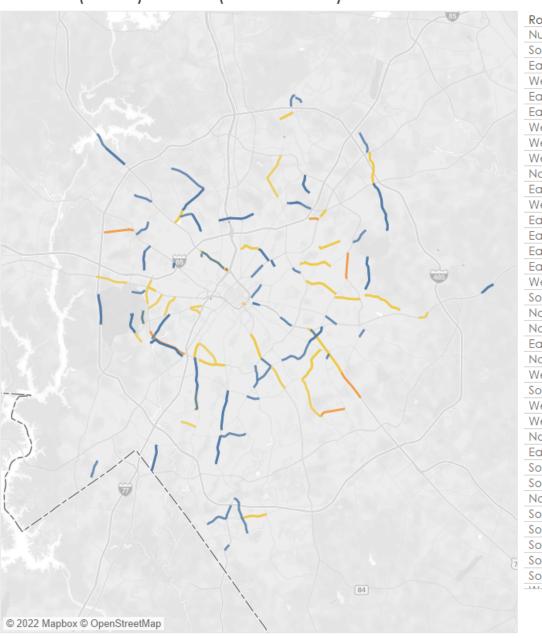
of Fatalities Click to highlight

0 1-2

3-5

Sum of % Sp.,





	Road Name	Intersection	Length (
Null	Harrisburg Rd	Null	0.0	0		60%
Southbound	Harrisburg Rd	Mecklenburg/Cabarrus C	0.0	0		56%
Eastbound	City Blvd	Neal Rd	0.5	0		55%
Westbound	University City Blvd	Rumple Rd	0.6	0		48%
Eastbound	E Independence Blvd	Idlewild Rd	0.9	7		42%
Eastbound	University City Blvd	Rumple Rd	0.0	0		39%
Westbound	US-74	I-277	0.3	0		34%
Westbound	E Independence Blvd	Briar Creek Rd/Television Ln	8.0]]		34%
Westbound	Rumple Rd	University City Blvd	0.0	0		34%
Northbound	Toddville Rd	Paw Creek Rd/Lewhaven	1.0	1		34%
Eastbound	Rumple Rd	University City Blvd	0.1	0		33%
Westbound	E Independence Blvd	NC-24/NC-27/Albemarle	0.5	0		33%
Eastbound	Sunset Rd	Peachtree Rd	2.1	1		31%
Eastbound	E Independence Blvd	N Sharon Amity Rd	0.6	5		29%
Eastbound	E Independence Blvd	Hawthorne Ln	0.4	0		28%
Eastbound	I-85-CONN	NC-49/N Tryon St	0.5		21	28%
Westbound	E Independence Blvd	N Sharon Amity Rd	0.9	7		26%
Southbound	Old Pineville Rd	E Arrowood Rd	1.1	5		26%
Northbound	Prosperity Ridge Rd	Prosperity Church Rd	0.4	0		25%
Northbound	Conference Dr	US-74/E Independence Bl	0.3	0		25%
Eastbound	Cindy Ln	Statesville Rd	1.2	0		24%
Northbound	Old Pineville Rd	Archdale Dr	1.1	0		24%
Westbound	The Plaza	Eastway Dr	1.8	1.	5	24%
Southbound	W Tyvola Rd	US-521/Billy Graham Pky	1.6	0		24%
Westbound	Cindy Ln	Beatties Ford Rd	1.3	1		24%
Westbound	Central Ave	NC-27/Albemarle Rd	0.0	0		23%
Northbound	Park Rd	Gleneagles Rd/Sharon Rd	1.5	0		23%
Eastbound	The Plaza	Milton Rd	1.8	1,	5	23%
Southbound	Providence Rd	Sardis Rd/Fairview Rd	1.4	7		23%
Southbound	Toddville Rd	Tuckaseegee Rd	1.0	1		23%
Northbound	Nations Ford Rd	Westinghouse Blvd	1.4	0		23%
Southbound	Nations Ford Rd	SC/NC State Line	1.4	0		23%
Southbound	Park Rd	Johnston Rd/Birnen Dr	1.5	0		23%
Southbound	Old Pineville Rd	Tyvola Rd	0.9	1		22%
Southbound	Park Rd	Sharon Rd	2.1	0		21%
Southbound	I-77 Hov Ln	I-77 (North)	0.0	0		21%

Search Road

% Speeders 10% to 68% and Null values

All values

TMC
HIN Only/Non-TMC
TMC

Roadway Classfication
Non-Interstate
Interstate Ramp

of Fatalities

0
1-2
3-5
>5

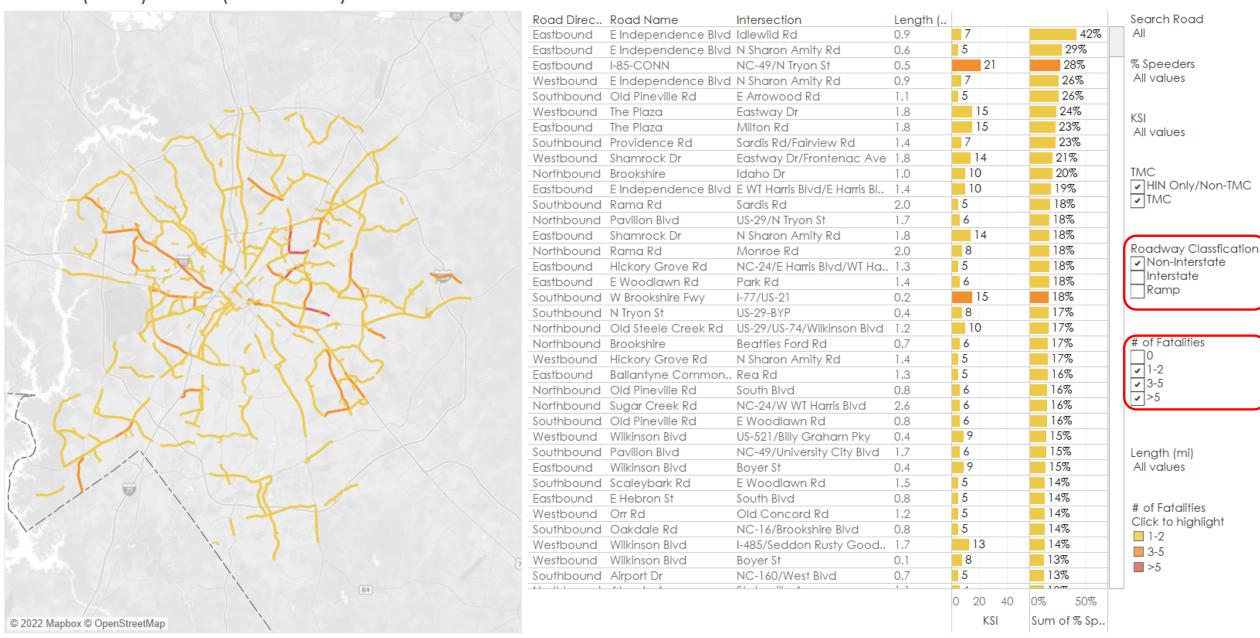
Length (mi) All values

of Fatalities Click to highlight

0 1-2

3-5

Sum of % Sp..



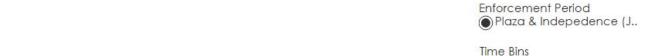


% Over Speed Limit by 10 mph



Segment

Source Id	Direction	Road	Intersection			
125+05811	EASTBOUND	US-74	IDLEWILD RD			38%
125-10232	WESTBOUND	US-74	BRIAR CREEK RD/TEL			36%
125-05809	WESTBOUND	US-74	NC-24/NC-27/ALBE			31%
125-12137	WESTBOUND	THE PLAZA	EASTWAY DR		23%	
125+12138	EASTBOUND	THE PLAZA	MILTON RD		23%	
125-07476	WESTBOUND	NC-27	US-74	11%		
125+05790	FASTBOUND	NC-27	US-74/F INDEPENDE	7%		



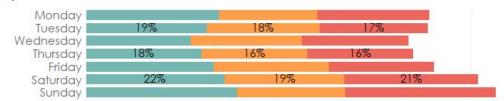
Before

During

After



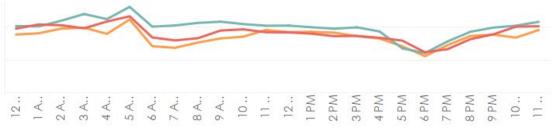
Daily



Exact Date



Hourly



% Over Speed Limit by 10 mph



Segment

Source Id	Direction	Road	Intersection	
125+12138	EASTBOUND	THE PLAZA	MILTON RD	23%

Weekly



Enforcement Period

Time Bins

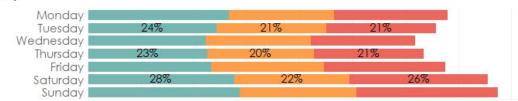
Before

During

After

Plaza & Indepedence (J..

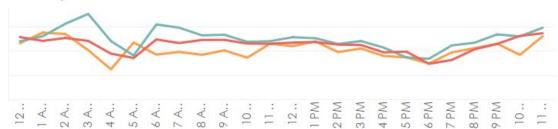
Daily



Exact Date



Hourly



% Over Speed Limit by 10 mph Weekly RAVEN NODA 24% 24% 24% 23% 23% 23% 20% PLAZA SHAMROCK VILLA PARI BELMONT Charlotte 1/17/22 1/24/22 1/31/22 12/13/21 12/20/21 12/27/21 1/3/22 1/10/22 12/6/21 WINDSOR PARK PLAZA-Daily Monday Tuesday 24% 24% 21% Wednesday GRIER EASTOVERHEIGHTS Thursday 23% 19% Friday 22% Saturday 24% 26% MYERS Sunday PARK Exact Date © 2022 Mapbox © OpenStreetMap Segment Source Id Direction Intersection Road 23% 125-12137 WESTBOUND THE PLAZA EASTWAY DR



Enforcement Period

Time Bins

Before

During

After

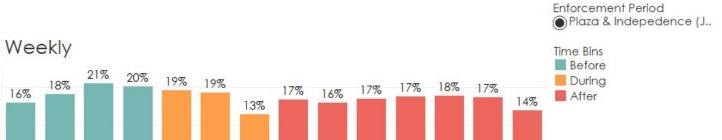
Plaza & Indepedence (J..

% Over Speed Limit by 10 mph



Segment

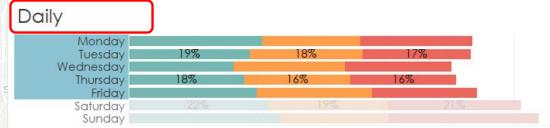
Source Id	Direction	Road	Intersection			
125+05811	EASTBOUND	US-74	IDLEWILD RD			36%
125-10232	WESTBOUND	US-74	BRIAR CREEK RD/TEL			34%
125-05809	WESTBOUND	US-74	NC-24/NC-27/ALBE			30%
125-12137	WESTBOUND	THE PLAZA	EASTWAY DR	53	22%	
125+12138	EASTBOUND	THE PLAZA	MILTON RD		22%	
125-07476	WESTBOUND	NC-27	US-74	10%		
125+05790	EASTBOUND	NC-27	US-74/E INDEPENDE	6%		



2/7/22

2/14/22

2/28/22



1/17/22

1/10/22

1/24/22

1/31/22

Exact Date

12/13/21

12/6/21

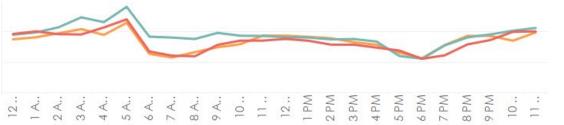
12/20/21

12/27/21

1/3/22





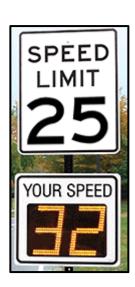


Questions?

Jon Shaban | Traffic Safety Mohamed Kaddoumi | Travel Modelling & Analysis

Vision Zero Efforts

- Driver Feedback Sign Program
- Neighborhood Traffic Calming
- APS/LPI on The Plaza
- HIN Streetlighting
- Travel Safely Pilot
- Safe Routes to School
- Duracurb/Flexposts at Rail crossings





New Infrastructure

Full Traffic Signals

- Harris Houston/University City
- Parkwood/Seigle
- Carmel/Carmel Commons
- Carolina Academy/Lancaster Hwy
- 25th/N Davidson
- Alleghany/Wilkinson
- Wilkinson/Walmart DW
- Mockingbird Ln/Park Rd
- Donald Ross/Wilkinson
- 5th/Irwin
- West Bv/Walton
- WT Harris/Davis Lake Pkwy RCI
- Sugar Creek/The Roman Rd
- Bennett/N Tryon
- ► Goose Creek/Ridge Rd

Pedestrian Hybrid Beacons

- The Plaza/Duncan
- S Tryon/Dunavant
- N Tryon/Northcase
- West Bv/Ridge

RRFBs

- Lattimore/Scott
- Lattimore/Kenilworth
- Tuckaseegee/Yahtzee
- ▶ 805 Seneca Pl
- 5th St/Clarkson
- 7th St/ inbound of Caswell
- Park Rd/Blue Heron
- Pence near Palo Verde
- Tremont/Camden

Upcoming Infrastructure

Full Traffic Signals

- Carmel/Camilla
- 8th/Caldwell
- Shopton Rd W/Sledge
- Mint/Summit
- N Tryon/Terraces Dwy
- Baxter St/McDowell St
- Peachtree/Sunset
- Ballantyne CommonsPkwy/Summit CommonsBv

PHBs

- 3631 Central Ave
- Park Rd/Huntingtowne Farms
- Sharon Amity/Woodlark
- Monroe/Ashmore
- The Plaza btwn Downs/35th
- The Plaza/Sweetbriar
- Sugar Creek/Merlane
- Randolph/Mint Museum
- ▶ 1437 E Sugar Creek
- S Tryon/Herman
- Central near Progress

RRFBs

- Archdale/Cherrycrest
- Margaret Wallace @ greenway
- Morehead/Julian Price
- Grier/Nicolet Glen
- Hucks/Hucks Landing
- ► 36th/Cullman
- ▶ 36th/Spencer
- Queens Rd West/Wellesley
- Hawthorne/Kennon
- Cross Charlotte Trail



AAA Safety Efforts

Gwendolyn Newell Public Affairs Specialist AAA Carolinas



AAA Foundation for Traffic Safety

Dedicated to providing resources on Traffic Safety issues with the goal to improve driver behavior and highway safety in the Carolinas.



Disconnect & Drive

An educational campaign to heighten the awareness of how distracted driving inhibits the ability to drive safely, regardless of experience.



School's Open Drive Carefully

Should your child walk to school or the bus stop?



Move Over For Me

A safety campaign that advocates for the protection of all drivers on the roadside, not just First Responders, by increasing awareness of existing 'Move Over' laws in each state.



AAA PROMise

A program offered to keep teens and others safe on the roadway during prom and graduation season by raising awareness of the dangers of distracted and/or impaired driving.



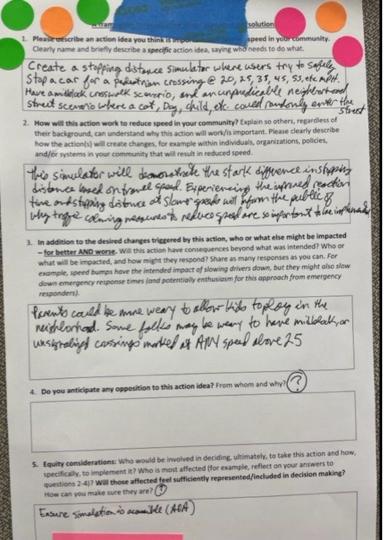
Total Fatal Crashes

Total Fatal Crashes



The Task Force **Quarterly Challenge**

- 4 Submissions
- Wild & crazy ideas at the VZ Leadership Institute



The Task Force Quarterly Challenge

- Our doable/wild crazy winner
 - = Mary-Jo Gellenbeck!



A framework for evaluating speed management solutions

Please describe an action idea you think is important for reducing speed in your community.
 Clearly name and briefly describe a specific action idea, saying who needs to do what.

A Pace Car policy: All gov vehicles are designated pace cars to maintain traffic speeds on public roads. Gov staff are required to not exceed the posted speed limit. Gov vehicles <u>include</u>: passenger vehicles, cargo van, trucks, transit vehicles, police vehicles, and fire trucks.

By requiring staff to not exceed the posted speed limit, the staff practice good driving behavior that leads to good driving habits when not working. When driving consistently under the posted speed limit, the mind builds an awareness for how a travel speed feels. When you feel it, you're able to consciously respond to it.

How will this action work to reduce speed in your community? Explain so others, regardless of
their background, can understand why this action will work/is important. Please clearly describe
how the action(s) will create changes, for example within individuals, organizations, policies,
and/or systems in your community that will result in reduced speed.

The motor vehicle is a traffic calming element on roads. By deploying multiple pace cars on roads, the vehicles work to maintain a legal driving speeds. To note, the best pace car is the police vehicle. The public is cognizant of police enforcement. When a driver sees a police vehicle, the majority react by maintaining legal driving behaviors. When a police vehicle breaks the law by driving above the speed limit, it informs drivers that they may break the law too.

When gov vehicles travel above the speed limit, the driver must inform the public by turning on its warning lights and/or sirens. This is not the case I witness on a daily basis.



Decision Sprint for Task Force Engagement

"Friendly Quarterly Challenge"

- Alex
- Pedestrian Crossing Committee for 3 months
- Art project involvement \$12,600 with ASC

Vision Zero & Social Media

Connect to us on Social Media

Facebook: @CLTtransportation

Twitter: @CharlotteDOT

Hashtag: #VisionZero



