GBNRTC

Greater Buffalo Niagara Regional Transportation Council

GBNRTC Policy Committee Meeting

Monday, November 13, 2023

10am-Noon

Live Option – Aquarium of Niagara
701 Whirlpool St, Niagara Falls, NY 14301

Please note that the GBNRTC Policy meeting will be broadcast live for public viewing on GBNRTC's Facebook Page facebook.com/GBNRTC. You may watch the live stream at this link, whether or not you have a Facebook account. However, in order to leave a comment on Facebook Live, you will need a Facebook account. You can also send any questions or comments to staff@gbnrtc.org.

A glossary of transportation terms is available at https://www.gbnrtc.org/glossary-of-terms

Draft Agenda

1. Roll Call
2. Public Comment on Action Items
3. Approval of Agenda
4. Approval of Previous Meeting Minutes
5. Action Items
   A. Resolution 2023-21 Safety Performance Targets
   B. Resolution 2023-22 Public Participation Plan Update
   C. Resolution 2023-23 SFY 22-24 Unified Planning Work Program (UPWP) Amendment Climate Pollution Reduction Grant (CPRG) – Planning Grant
   D. Resolution 2023-24 Member MOU
   E. Resolution 2023-25 Coordinated Human Services Transportation Plan
6. Discussion Items
   A. 2023 Road Scores Results
   B. Safe Systems Approach for Speed Limits
   C. Safe Streets for All
   D. Bicycle and Pedestrian Traffic Counts
   E. EV Website Rollout
7. Other Business
8. Next Meeting/ Adjournment of Policy Meeting

Minutes of the May 5, 2023 meeting of the
Greater Buffalo-Niagara Regional Transportation Council (GBNRTC) Policy Committee

A meeting of the Greater Buffalo-Niagara Regional Transportation Council Policy Committee was held on May 5, 2023 at 10:30 am.

The following GBNRTC Policy Committee members/representatives were present:

1. NFTA — Tom George (Alternate)
2. NYSTA — John Boser (Alternate)
3. NYSDOT — Frank Cirillo
4. Buffalo — Nate Marton (Alternate)
5. Niagara Falls — Kevin Forma (Alternate)
6. Erie County — Darlene Svilokos (Alternate)
7. Niagara County — Garret Meal (Alternate)

Others present:

- NYSDOT — Dave Hill
- Athena Hutchins — NITTEC
- Karen Hoak — Erie County
- James Cuozzo — NYSDOT
- Nolan Skipper — Buffalo
- Gautam Mani — FHWA
- Steve Burget — STI
- Jim Gordon — Citizens for Regional Transit
- GBNRTC Staff (10)

Public Attendees:

- 8 members of the public viewed through Facebook Live link.

Chairman George (NFTA) called the meeting to order.

1. Roll Call
    1. NFTA — Present
    2. NYSTA — Present
    3. NYSDOT — Present
    4. Buffalo — Present
    5. Niagara Falls — Present
    6. Erie County — Present

7. Niagara County Present

2. Public Comments on Action Items
    - There were no public comments.

3. Approval of Meeting Agenda
    - *Motion to Approve. Approved.(TWY/EC)*

4. Approval of Previous Meeting Minutes
    - *Motion to Approve. Approved.(NC/COB)*

5. ACTION ITEMS

A) Resolution 2023-11: Transportation Conformity Determination – Grabau
- On April 4, 2023, the Interagency Consultation Group (ICG) concurred with all project air quality classifications in the draft 2050 Metropolitan Transportation Plan document.
- A 30-day public comment period was held from April 5-May 4, 2023. No comments were received.
- Transportation Conformity Determination was recommended by PCC on 5/5/23.
- *Motion to approve Resolution 2022-8: Transportation Conformity Determination. Approved. (DOT/EC)*

B) Resolution 2023-12: 2050 Metropolitan Transportation Plan Update - Weymouth
- 30-day public comment period from April 5-May 4, 2023. Two public meetings held on April 25, 2023. All comments received from the public were reviewed, summarized and provided to members for consideration prior to Plan approval. Comments received will be documented in the final document.
- MTP Update was recommended by PCC on 5/5/23.
- *Motion to approve Resolution 2023-12: 2050 Metropolitan Transportation Plan Update. Approved. (NFTA/DOT)*

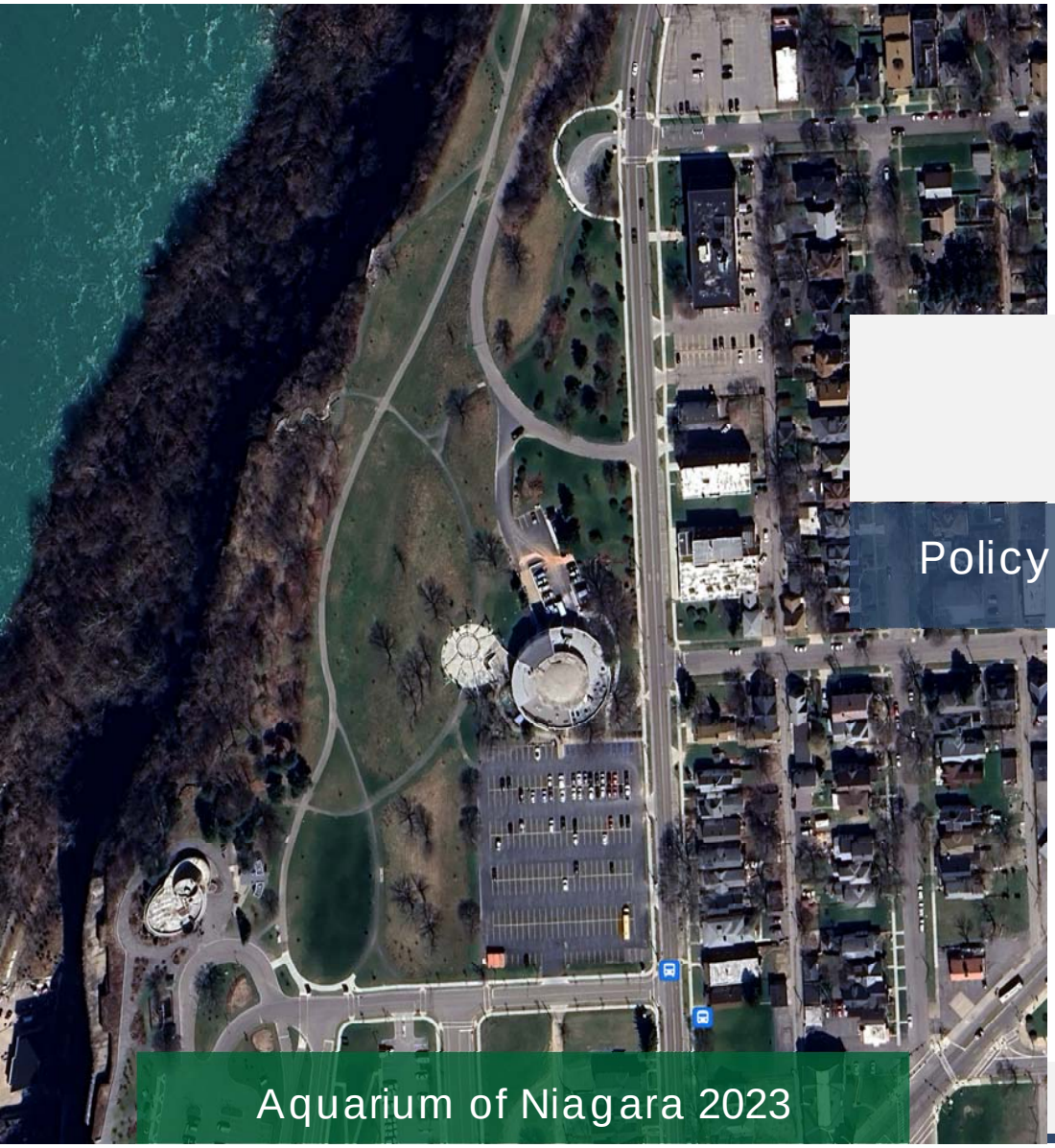
C) Resolution 2023-14: TIP Change Control Guidelines - Guarino
- Change controls govern the procedures and governing body approvals required to make any changes to the TIP and are reviewed every 2 years.
- Proposed change federal to non-federal fund source changes:
    - Currently
        - Under $150K requires AdMod (PCC Approve)
        - Over $150K requires Amendment (PCC Approve)
    - Proposed
        - Under $150K requires RPPM (reported at TPS)
        - Over $150K requires AdMod (approved by TPS and reported at PCC)
- Proposed changes were recommended by PCC on 5/5/23.
- *Motion to approve Resolution 2023-14: TIP Change Control Guidelines. Approved. (DOT/EC)*

6. Other Business
    - None

7. Next Meeting/Adjournment

- It was noted that the next Policy Committee meeting will take place in the fall. Time, location and date will be determined at a later time.
- *Motion was made to adjourn. Approved. (DOT/TWY)*

Meeting will begin shortly, thank you for your patience



Aquarium of Niagara 2023

Welcome

Policy Committee Meeting – November 13, 2023

GBNRTC
Greater Buffalo Niagara Regional Transportation Council

Policy Committee Meeting

November 13, 2023

Greater Buffalo-Niagara Regional Transportation Council

Policy Meeting Agenda

1. Roll Call
2. Public Comment on Action Items
3. Approval of Agenda
4. Approval of Previous Meeting Minutes
5. Action Items (Approve)
    A. Resolution 2023-21 Safety Performance Targets (Approve)
    B. Resolution 2023-22 Public Participation Plan update (Approve)
    C. Resolution 2023-23 UPWP Amendment – Climate Pollution Reduction Grant
    D. Resolution 2023-24 Member MOU (Approve)
    E. Resolution 2023-25 Coordinated Human Services Transportation Plan (Approve)
6. Discussion Items
    A. 2023 Road Scores Results
    B. Safe Systems Approach for Speed Limits
    C. Safe Streets for All
    D. Bicycle and Pedestrian Traffic Counts
    E. EV Website Rollout
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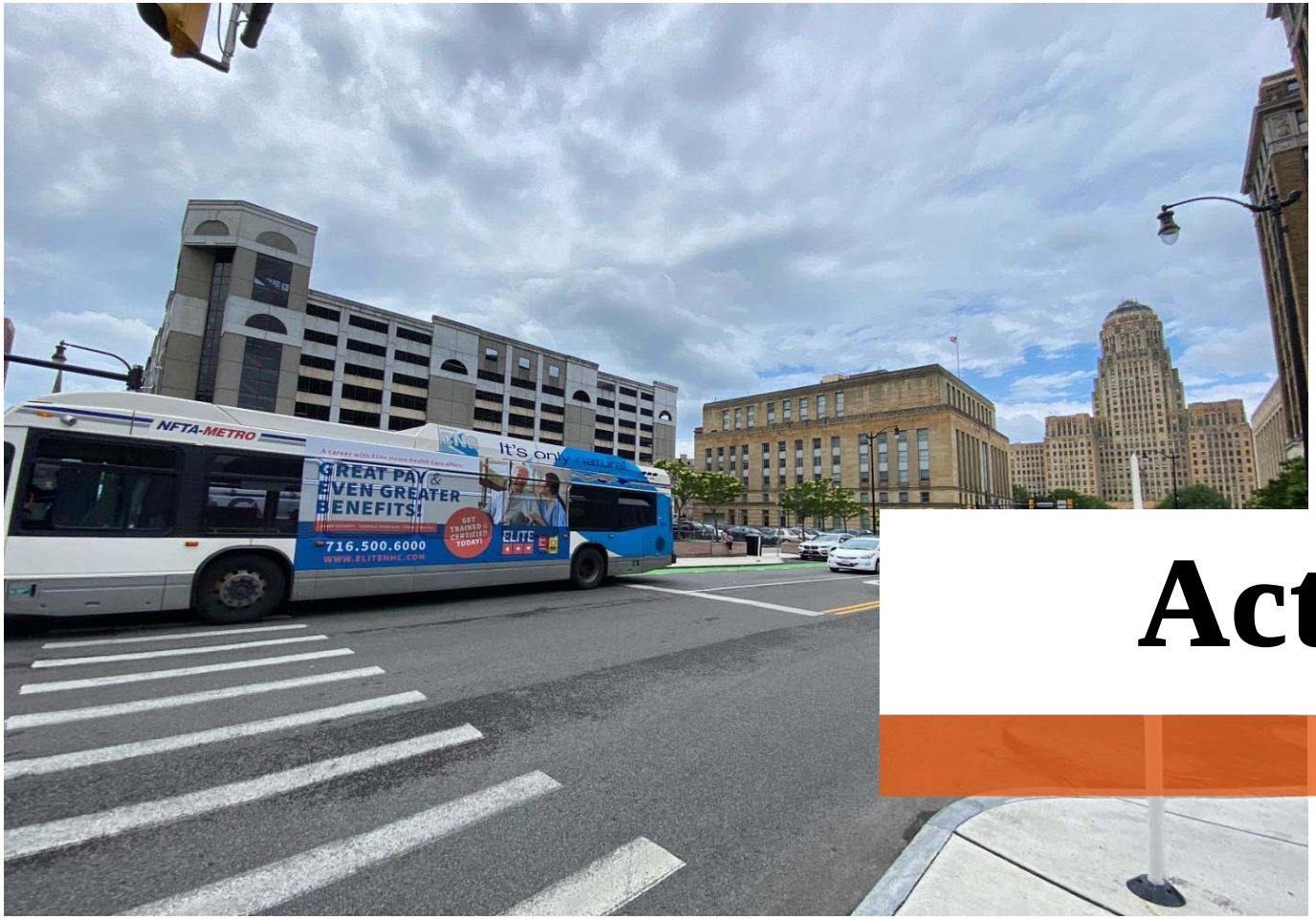


Action Items

A. Resolution 2023-21 Safety Performance Targets (Approve)

2024 Updated Safety Performance Measure Targets

- The Highway Safety Improvement Program (HSIP) final rule (23 CFR Part 490) requires States to set targets for five safety performance measures by August 31, 2023, and update annually
- New York State Department of Transportation (NYSDOT) has established 2024 targets for five safety performance measures
  - Number of Fatalities – 1,016.1
  - Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT) – 0.886
  - Number of Serious Injuries – 11,089.9
  - Rate of Serious Injuries per 100 million VMT – 9.606
  - Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries – 2,628.4

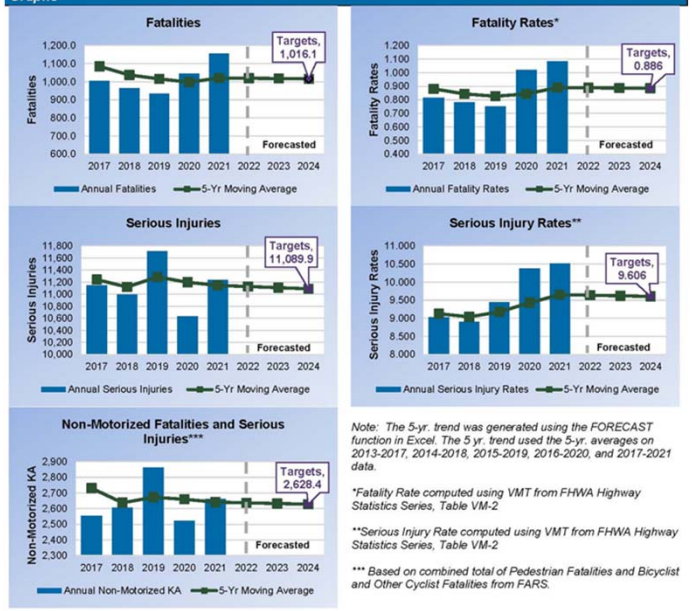
A. Resolution 2023-21 Safety Performance Targets (Approve)

- The 5-year trend was generated by NYSDOT using the FORECAST function in Excel.
- The 5-year trend used the 5-year averages on 2013-2017, 2014-2018, 2015-2019, 2016-2020, and 2017-2021 data.
- This action was approved at the October 4, 2023 PCC meeting.
- Today's Policy action is to approve these updated safety PM targets as Resolution 2023-21 GBNRTC 2024 Safety Performance Measure Targets.

2024 Targets and Supporting Data

Measure	Last Annual and 5 yr. baseline		Step 1: Forecast Using 5-Yr Moving Average Trendline		Step 2: Round and apply 0.50% Cap	
	2021 Annual	2021 Baseline 2017-2021 avg.	2024 Forecast	% Change 2020-2024 vs. 2017-2021	Rounded / Capped Percent	NYSDOT Target 2024
Number of Fatalities	1,157	1,021.2	894.9	-12.4%	-0.50%	1,016.1
Fatality Rate	1.083	0.890	0.768	-13.7%	-0.50%	0.886
Number of Serious Injuries	11,238	11,145.6	11,034.1	-1.0%	-0.50%	11,089.9
Serious Injury Rate	10.516	9.654	9.370	-2.9%	-0.50%	9.606
Number of Non-Motorized Fatalities and Serious Injuries	2,663	2,641.6	2,502.9	-5.3%	-0.50%	2,628.4

Graphs



Note: The 5-yr. trend was generated using the FORECAST function in Excel. The 5 yr. trend used the 5-yr. averages on 2013-2017, 2014-2018, 2015-2019, 2016-2020, and 2017-2021 data.

**Fatality Rate computed using VMT from FHWA Highway Statistics Series, Table VM-2*

***Serious Injury Rate computed using VMT from FHWA Highway Statistics Series, Table VM-2*

**** Based on combined total of Pedestrian Fatalities and Bicyclist and Other Cyclist Fatalities from FARS.*

B. Resolution 2023-22 Public Participation Plan Update (Approve)

- Addition of virtual meeting option via Facebook live.
- Affordable housing organizations added to the list of MPO stakeholders for direct public engagement.
- GBNRTC member agencies are given a minimum of 30 calendar days to review draft planning documents and provide comments to GBNRTC staff prior to initiating the public review and comment period.
- Advance notice of meetings and agendas are distributed no later than one week prior to the meeting to members of the public.
- Engagement metrics revised to align with USDOT new guide, Promising Practices for Meaningful Public Involvement in Transportation Decision-Making released in October 2022.
- The public review and comment period for TIP, MTP and UPWP amendments changed from 20 days to 30 days for consistency with FTA requirements.

B. Resolution 2023-22 Public Participation Plan Update (Approve)

- Pubic Review and Comment Period (September 7, 2023 – October 21, 2023)
- Two public meetings held:
  - **Thursday, September 21, 2023 – Hybrid 10:30-11:30am**

    In-person in the Downtown Central Library – West Room (Main Floor)

    Virtually on Facebook: http://facebook.com/GBNRTC
  - **Tuesday, September 26, 2023 – Virtual Only 5:30-6:30pm**

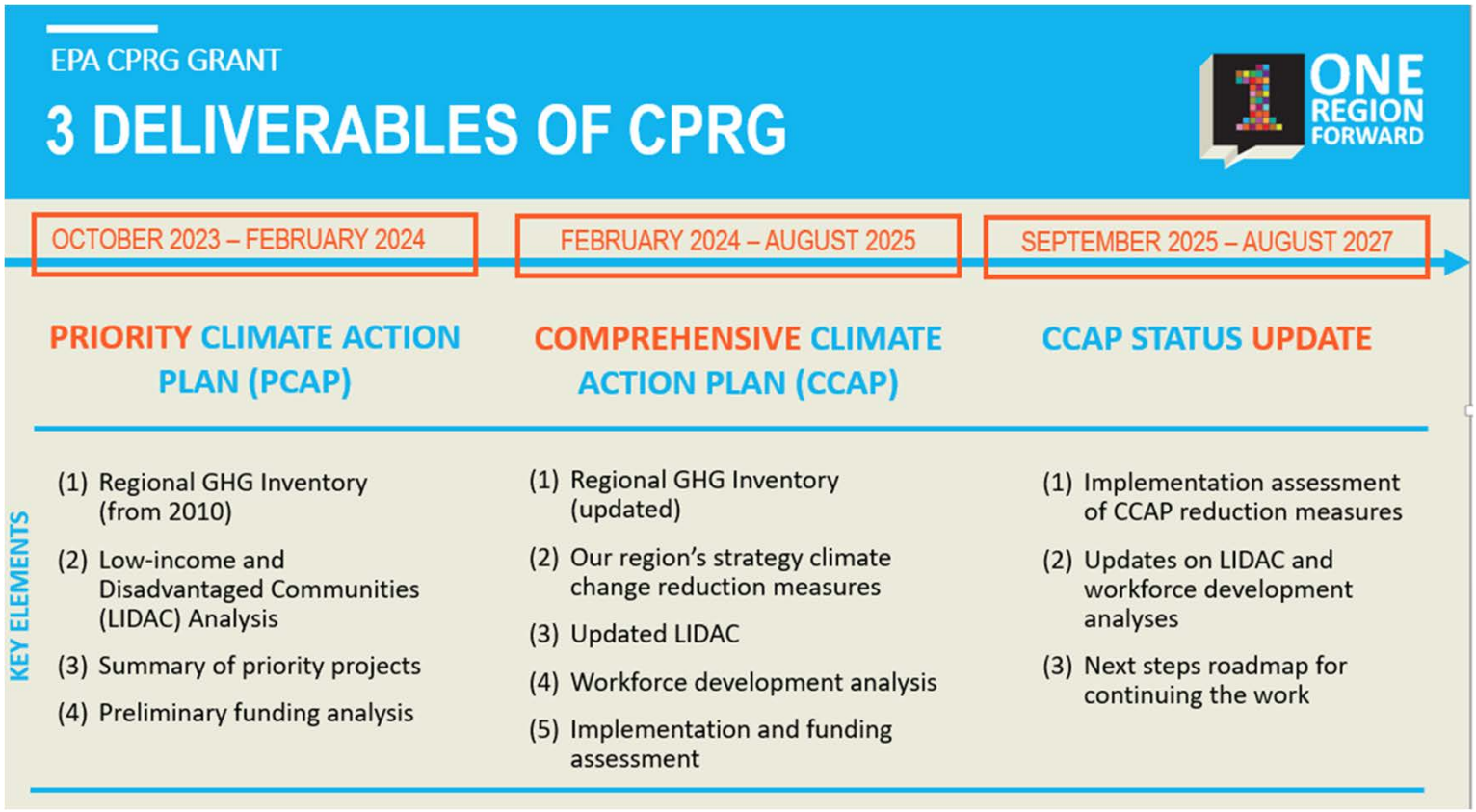
    Virtually on Facebook: http://facebook.com/GBNRTC
- No comments received.
- Today's Policy action is to approve Resolution 2023-22 Public Participation Plan Update.

C. Resolution 2023-23 UPWP Amendment for CRPG (Approve)

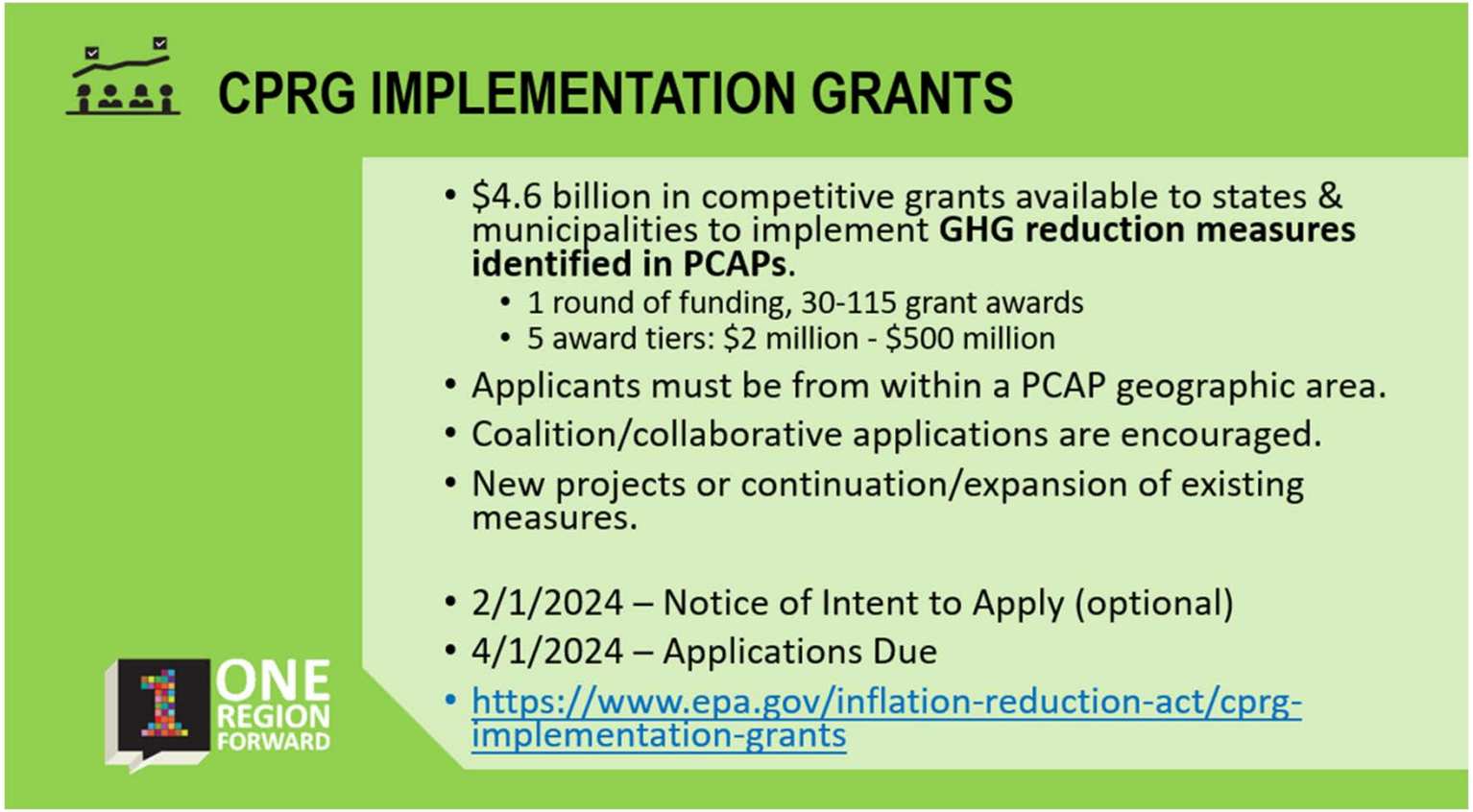
GBNRTC has been awarded a grant from the United States Environmental Protection Agency (EPA):

- $1,000,000 for GBNRTC to oversee the development of a Priority Climate Action Plan (PCAP), a Comprehensive Climate Action Plan (CCAP) a CCAP Status Report two years after the completion of the CCAP
- $990,000 pursuant to the terms of the grant agreement with EPA.
- Research Foundation for SUNY on behalf of the University of Buffalo is the legal entity to accept the grant funds for the University at Buffalo Regional Institute (UBRI) who will be performing the work. This sub-recipient designation is further pending approval of the NFTA Board of Directors
- $10,000 of the grant budget is allocated for the Niagara Frontier Transportation Authority (NFTA) for administrative costs related to NFTA's role as Host Agency for GBNRTC

C. Resolution 2023-23 UPWP Amendment for CRPG (Approve)



C. Resolution 2023-23 UPWP Amendment for CRPG (Approve)



C. Resolution 2023-23 UPWP Amendment for CRPG (Approve)

- Today's action is to approve SFY 22-24 Unified Planning Work Program (UPWP) Amendment Climate Pollution Reduction Grant (CRPG) Planning Grant via Resolution 2023-23.

D. Member Agency Memorandum of Understanding (Approve)

- Member Agency MOU
  - Formalizes the responsibilities of member agencies and MPO staff
  - Projects are development based on three C's
  - Air quality conformity addressed by the MPO
  - Open planning and programming process
- Subject to amendment/reaffirmation annually
- Most recently affirmed Sept 7, 2022, Resolution 2022-22
- Proposed amendments:
  - Replace FAST Act references with IIJA
  - Update the date of the current Host Agency Agreement to 4/1/22
- PCC recommended approval of the amended MOU at the Nov 1, 2023 meeting
- Today's action is to approve the amendments of the member agency MOU as Resolution 2023-24

E. Resolution 2023-25 Coordinated Human Services Transportation Plan (Approve)

- Provide the framework for improving transportation services for persons with disabilities, older adults and individuals with lower incomes.
- Strives for communities to coordinate transportation resources provided through multiple organizations and agencies.
- Serves as a mechanism for Section 5310 – Enhanced Mobility for Seniors and Individuals w/Disabilities Grant Program.

E. Resolution 2023-25 Coordinated Human Services Transportation Plan (Approve)

2023 Coordinated Human Services Transportation Plan Updates includes:

- Demographics Analysis of the target population
- Updated transportation needs and gaps assessment
- Strategies and actions to address identified needs and gaps
- Regional Transportation Provider Inventory
- 30-Day Public Review Completed
- Received PCC ballot approval on the plan update.
- Today's action is to approve the 2023 Coordinated Human Services Transportation Plan Update via Resolution 2023-25

Discussion Items

Description Of The Highway Condition Scoring Process

- The pavement condition survey is based upon visual scoring procedures developed and previously used by the New York State Department of Transportation (NYSDOT). NYSDOT now uses an automated system to rate the roadways.
- The surface condition rating reflects the extent of scaling, cracking, patching, raveling, and faulting. The ratings of these measures are made on a 1 – 10 scale, where 1 represents the "poorest" roadway condition and 10 the "best" roadway condition.
- Pavement scores above 6 are considered a satisfactory pavement condition. A score of 6 (fair) denotes minor deterioration, which is expected to need attention in the near future. Surface scores of 5 and below indicate conditions that should be corrected immediately to prevent further deterioration and the need for complete reconstruction at a much higher cost.
- A two-person survey crew conducted the actual survey of the federal-aid highway system throughout the summer of 2023. The survey crew drove each section of FA highway with the help of the local agencies.
- The results of the survey reflect the dates the roads were surveyed. Therefore, current road surface conditions may not reflect the scores used for this report, since various repairs or further deterioration may have occurred since that time.

Generalized Verbal Descriptions of Conditioned Rating Scores for Roadway Surface Scores

General Score Condition	Condition Rating Description Surface
10 Excellent	There are no visual derivations from a smooth surface. Pavement recently constructed, reconstructed, or overlaid within the last years.
9 Excellent	Pavement should have no cracks or patches. Flexible pavement recently resurfaced within the past year or two. Overlay pavements may show evidence of some hairline reflection cracking. Rigid pavement joints function properly.
8 Good	Pavements give an excellent ride but show infrequent to occasional signs of surface deterioration. Flexible pavements begin to show very slight evidence of raveling, cracking, and wheel track wear. Rigid pavements begin to show very slight evidence of surface deterioration such as cracking, joint spalling, or scaling. Overlay pavements show evidence of very slight reflection cracking.
7 Good	Pavements give a good ride but show infrequent to occasional signs of surface deterioration. Flexible pavements show evidence of slight rutting, random cracking and some raveling. Rigid pavements show evidence of slight joint spalling, scaling, or minor cracking. Overlay pavements show evidence of slight reflection cracking and multiple cracking at reflection cracks.
6 Fair	Riding quality is noticeably inferior to new pavements, showing infrequent to occasional signs of distress. Surface defects of flexible pavements may include moderate rutting, cracking, and raveling: patching is apparent. Overlay pavements show evidence of slight to moderate cracking and raveling along cracks.
5 Poor	Riding quality is noticeably inferior to new pavements but may be tolerable for high speed traffic. Pavements show occasional to frequent signs of distress. Surface defects of pavements are the same as under the 6 rating but are more severe.
4 Poor	Pavements have deteriorated to a point where resurfacing is required, showing occasional to frequent distress. Rideability, even at slow speeds, is impaired. Surface defects on flexible pavements include sever rutting, cracking, raveling, and patching. Surface defects of rigid pavements include severe joint spalling, cracking, scaling and patching. Overlay pavements show evidence of severe surface delamination.
3 Poor	Pavements have deteriorated to a point where resurfacing is required immediately. Flexible pavements show evidence of severe and frequent scaling, joint spalling, faulting cracking, and patching. Rigid pavements show signs of frequent and severe joint spalling, cracking and scaling.
2 Poor	Pavements are in extremely deteriorated condition and may require complete reconstruction. Motorists experience discomfort and travel speeds will decrease.
1 Poor	Pavements are in extremely deteriorated condition and are in need of immediate corrective action. There facilities are considered impassable at posted speeds.

A. 2023 Road Scores Results

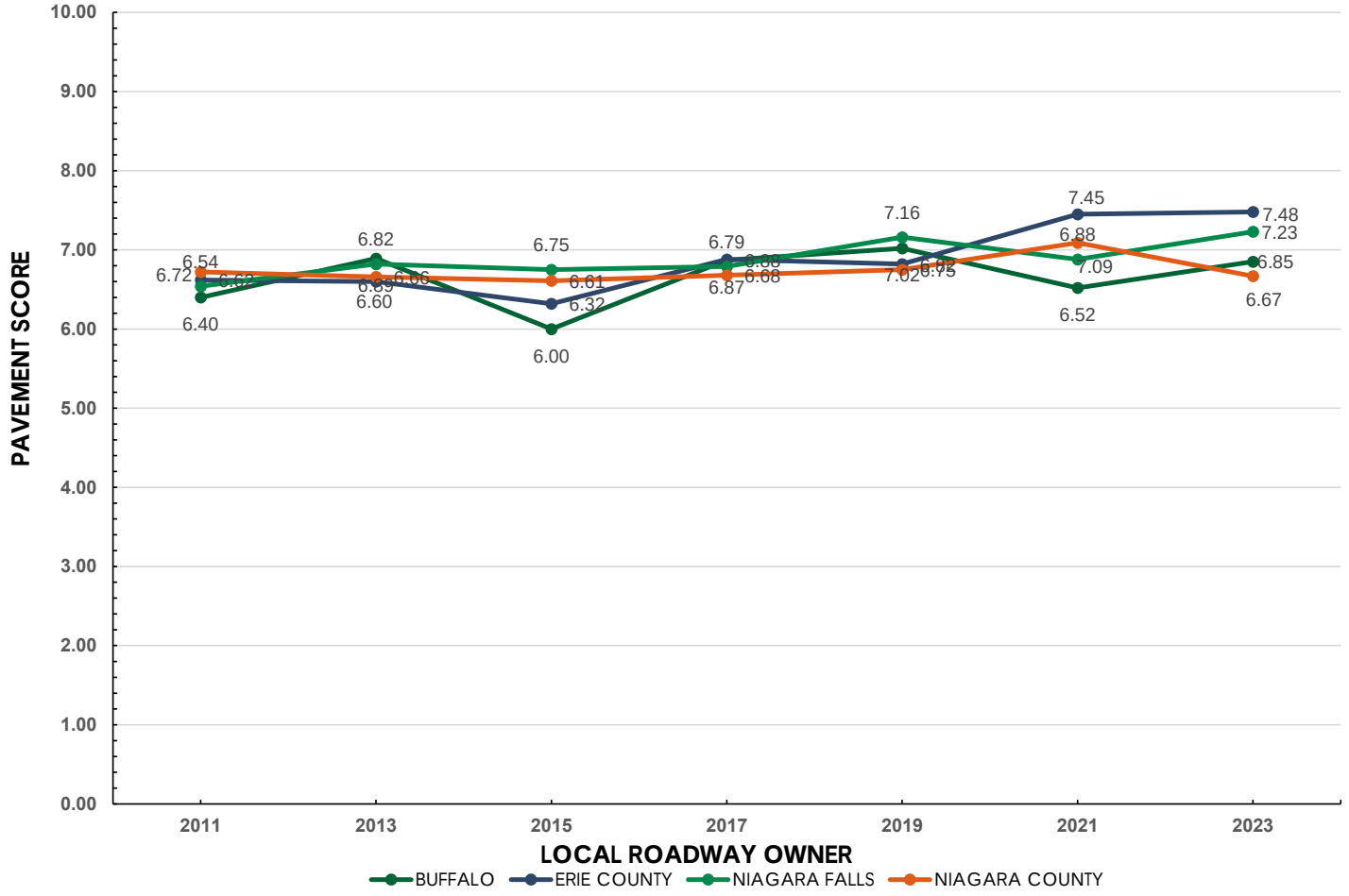
2023 Local Agencies & NYSTA Average Pavement Scores

AGENCY	SCORE	CL MILES	LANE MILES
Buffalo	6.85	187.01	485.22
Erie County	7.48	615.69	1,365.49
Niagara Falls	6.67	41.02	99.41
Niagara County	7.23	250.87	517.72
NYSTA	8.05	73.06	327.80

2023 Local Agencies & NYSTA NHS and STP Pavement Scores

NHS	7.31	184.73	708.37
STP	7.17	1,006.53	2,178.73

Historical Pavement Scores For Local FA Roadways

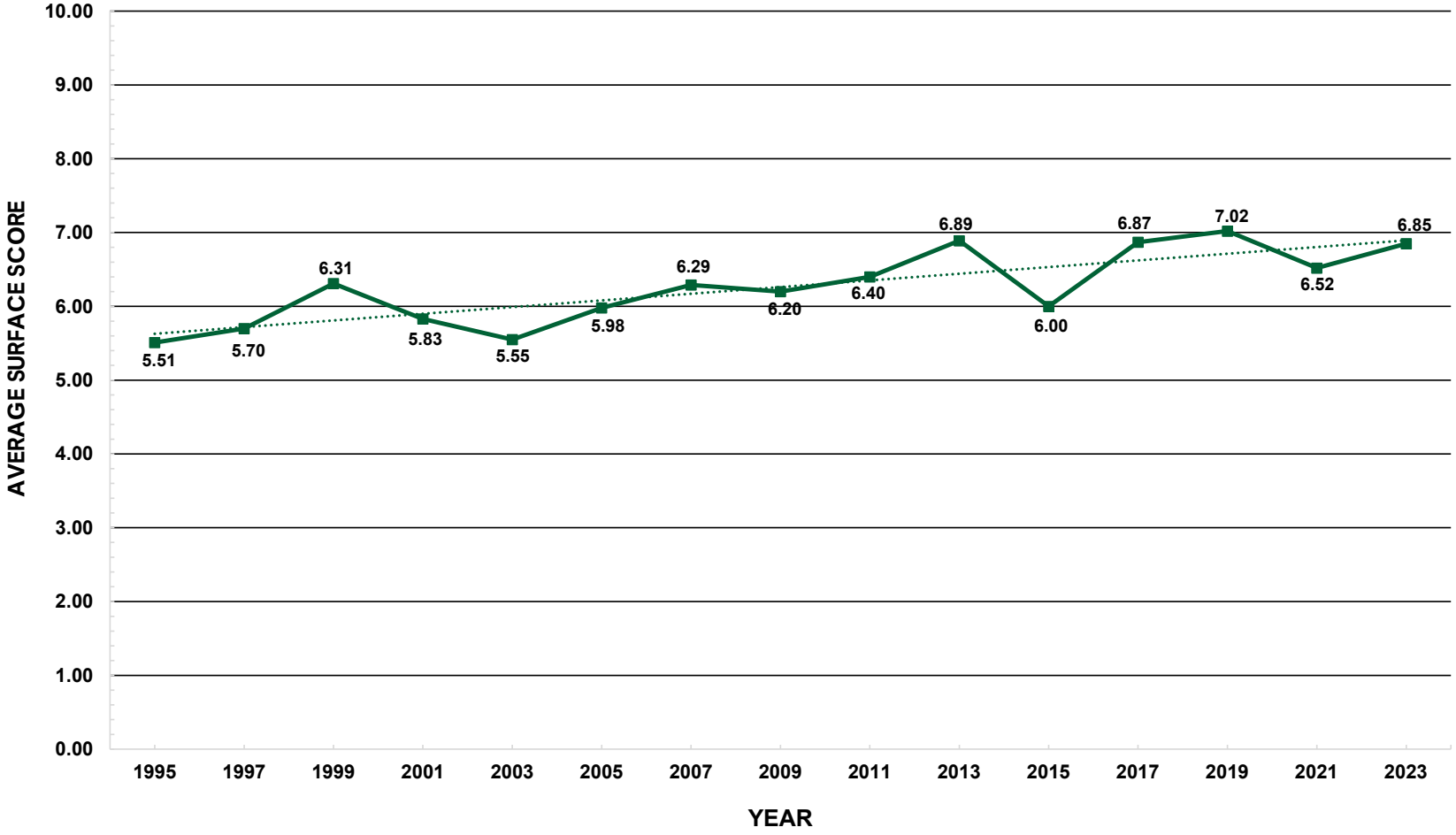


BUFFALO HIGHWAYS - ALL FA ROADS
FEDERAL-AID ELIGIBLE
2023 SURFACE CONDITION

CONDITION LEVEL	SCORE	LANE MILES	PERCENT	
EXCELLENT	10	35.79	7.4%	15.8%
	9	41.04	8.5%	
GOOD	8	68.79	14.2%	31.2%
	7	82.37	17.0%	
FAIR	6	129.33	26.7%	26.7%
POOR	5	111.04	22.9%	26.3%
	4	16.76	3.5%	
	3	0.00	0.0%	
	2	0.00	0.0%	
	1	0.00	0.0%	
NOT RATED	NR	0.10	0.0%	0.0%
UNDER CONSTRUCTION	UC	0.00	0.0%	0.0%
TOTAL:		485.22	100.0%	100.0%

AVERAGE ROAD SCORE: 6.85
VMT: 1,442,480

City of Buffalo Surface Score Averages



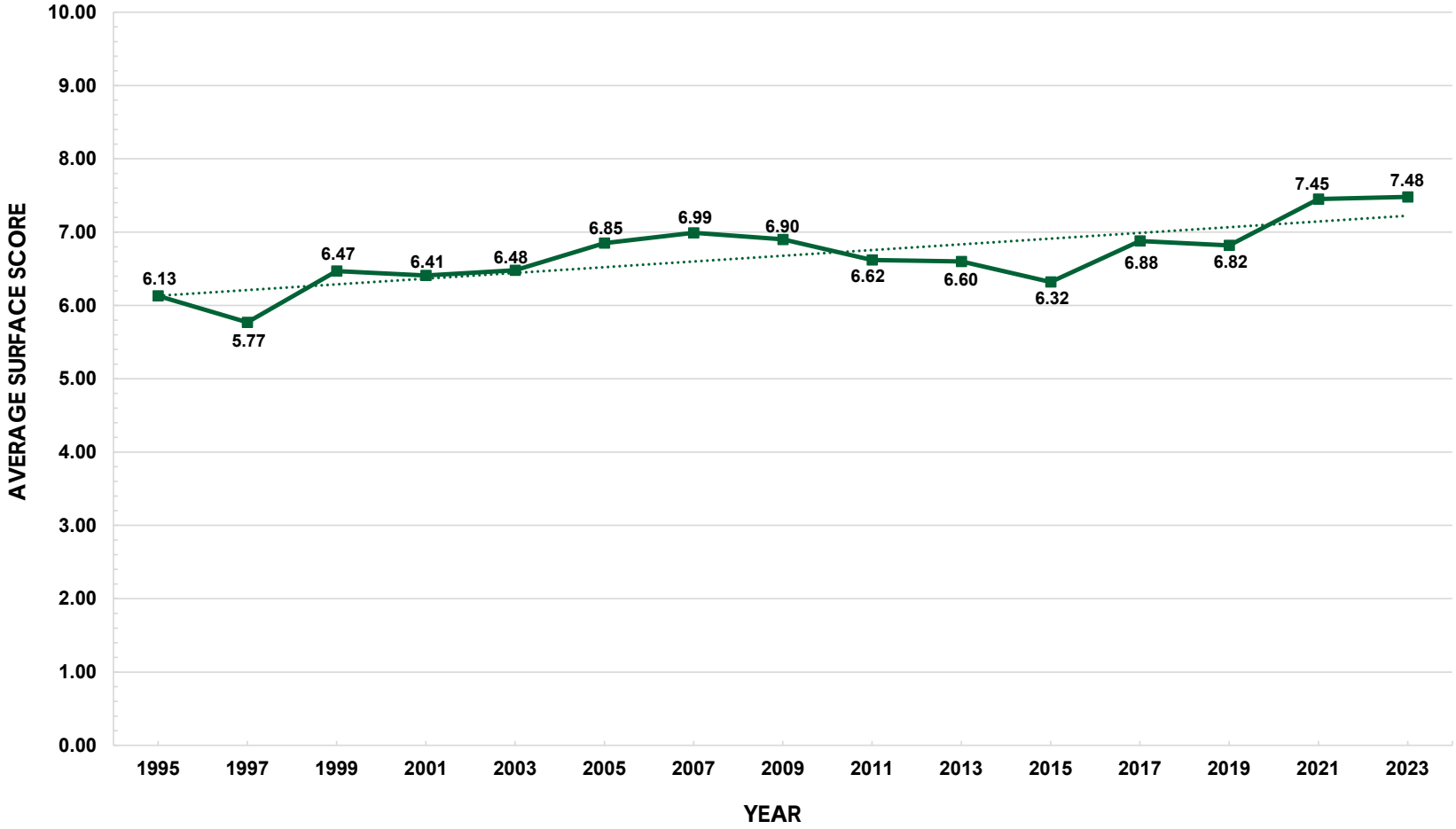
ERIE COUNTY & LOCAL HIGHWAYS - ALL FA ROADS
FEDERAL-AID ELIGIBLE
2023 SURFACE CONDITION

CONDITION LEVEL	SCORE	LANE MILES	PERCENT	
EXCELLENT	10	100.92	7.4%	25.8%
	9	250.86	18.4%	
GOOD	8	287.34	21.0%	46.1%
	7	342.02	25.0%	
FAIR	6	280.20	20.5%	20.5%
POOR	5	101.62	7.4%	7.6%
	4	1.71	0.1%	
	3	0.00	0.0%	
	2	0.00	0.0%	
	1	0.00	0.0%	
NOT RATED	NR	0.00	0.0%	0.0%
UNDER CONSTRUCTION	UC	0.82	0.1%	0.1%
TOTAL:		1365.49	100.0%	100.0%

AVERAGE ROAD SCORE: 7.48

VMT: 3,498,712

Erie County Surface Score Averages



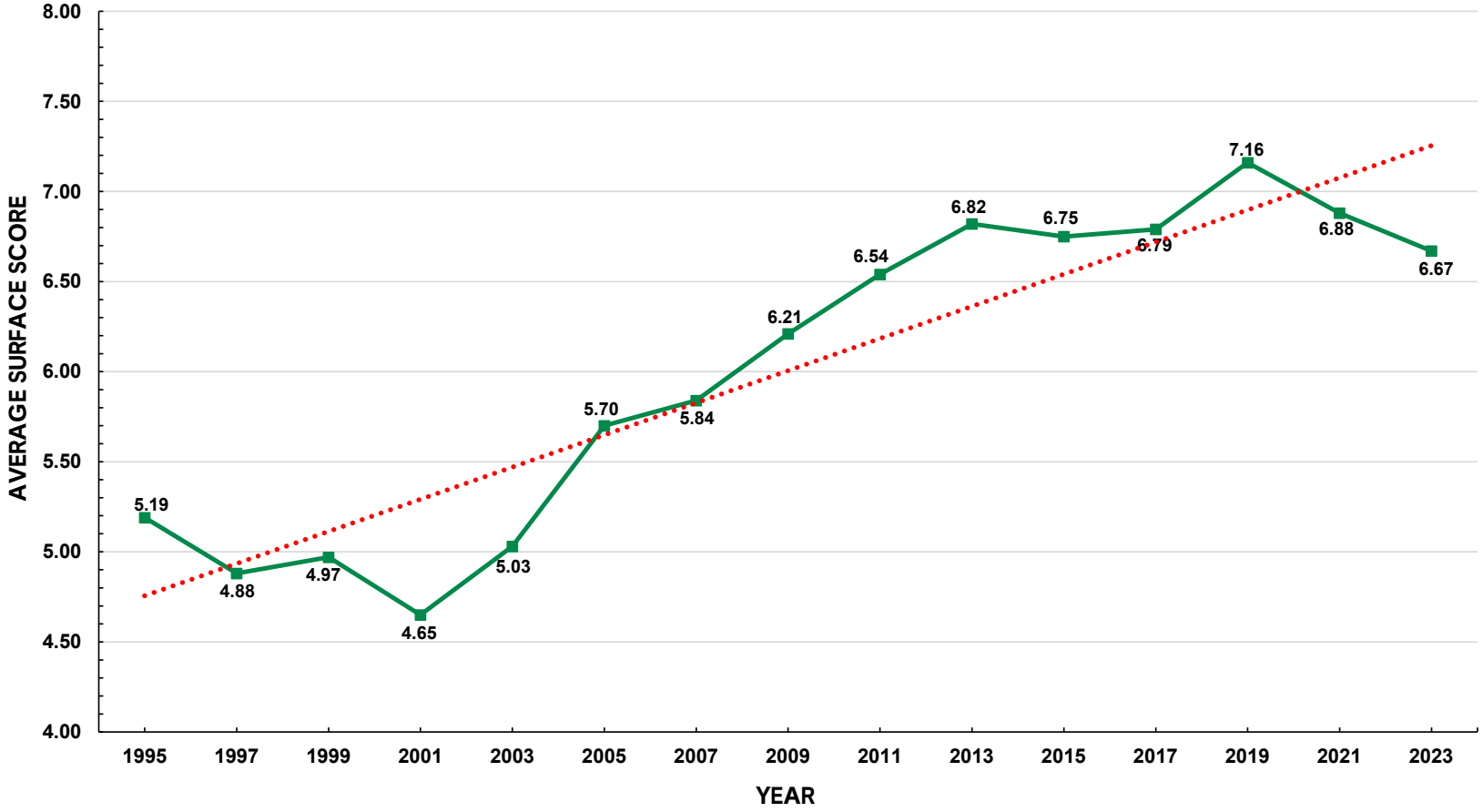
NIAGARA FALLS HIGHWAYS - ALL FA ROADS
FEDERAL-AID ELIGIBLE
2023 SURFACE CONDITION

CONDITION LEVEL	SCORE	LANE MILES	PERCENT	
EXCELLENT	10	0.08	0.1%	14.8%
	9	14.61	14.7%	
GOOD	8	22.32	22.5%	39.7%
	7	17.14	17.2%	
FAIR	6	29.27	29.4%	29.4%
POOR	5	13.98	14.1%	16.1%
	4	2.01	2.0%	
	3	0.00	0.0%	
	2	0.00	0.0%	
	1	0.00	0.0%	
NOT RATED	NR	0.00	0.0%	0.0%
UNDER CONSTRUCTION	UC	0.00	0.0%	0.0%
TOTAL:		99.41	100.0%	100.0%

AVERAGE ROAD SCORE: 6.67

VMT: 181,165

Niagara Falls Surface Score Averages



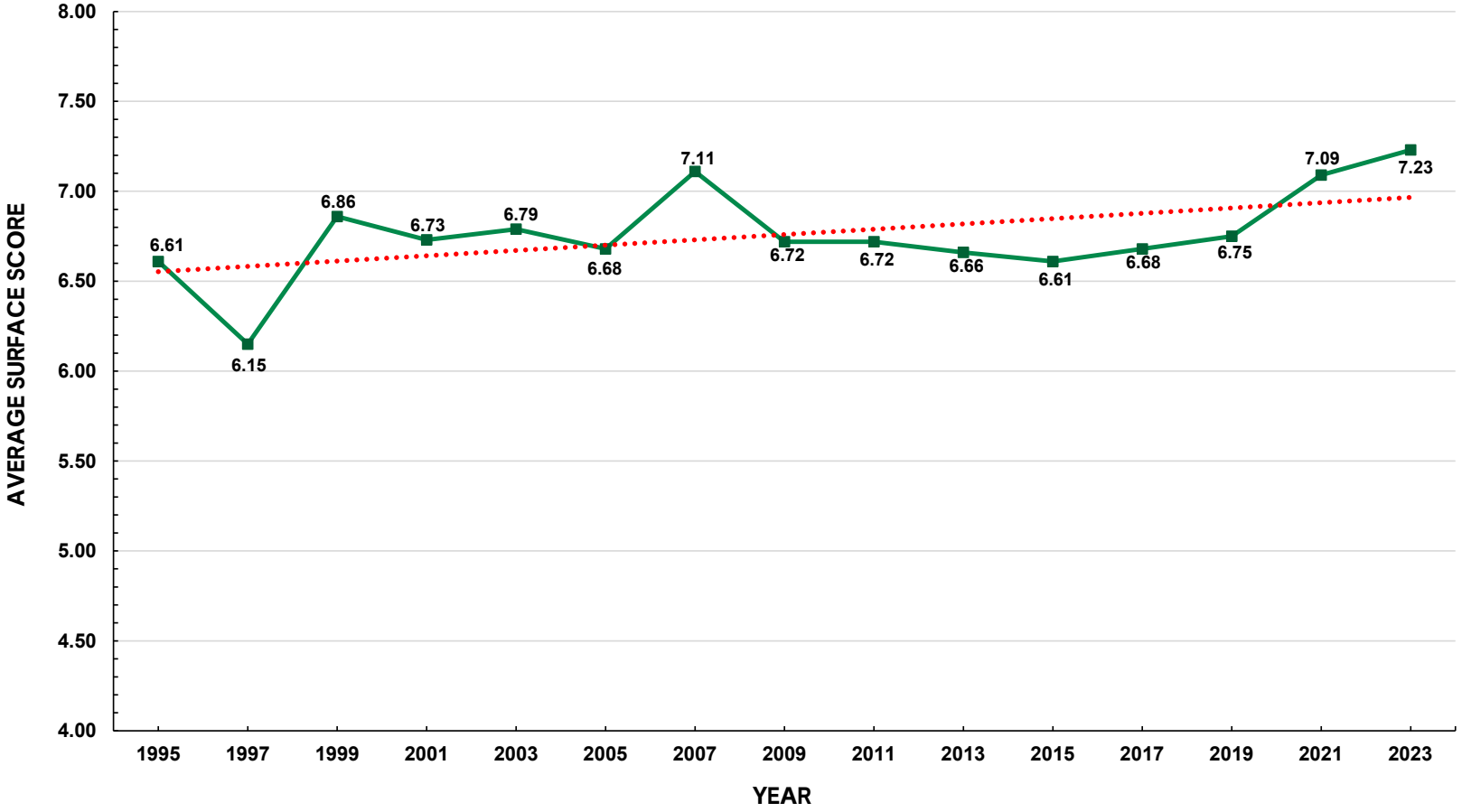
NIAGARA COUNTY & LOCAL HIGHWAYS - ALL FA ROADS
FEDERAL-AID ELIGIBLE
2023 SURFACE CONDITION

CONDITION LEVEL	SCORE	LANE MILES	PERCENT	
EXCELLENT	10	52.50	10.1%	19.8%
	9	50.20	9.7%	
GOOD	8	102.85	19.9%	47.4%
	7	142.51	27.5%	
FAIR	6	132.58	25.6%	25.6%
POOR	5	34.34	6.6%	7.2%
	4	1.17	0.2%	
	3	1.57	0.3%	
	2	0.00	0.0%	
	1	0.00	0.0%	
NOT RATED	NR	0.00	0.0%	0.0%
UNDER CONSTRUCTION	UC	0.00	0.0%	0.0%
TOTAL:		517.72	100.0%	100.0%

AVERAGE ROAD SCORE: 7.23

VMT: 882,675

Niagara County Surface Score Averages



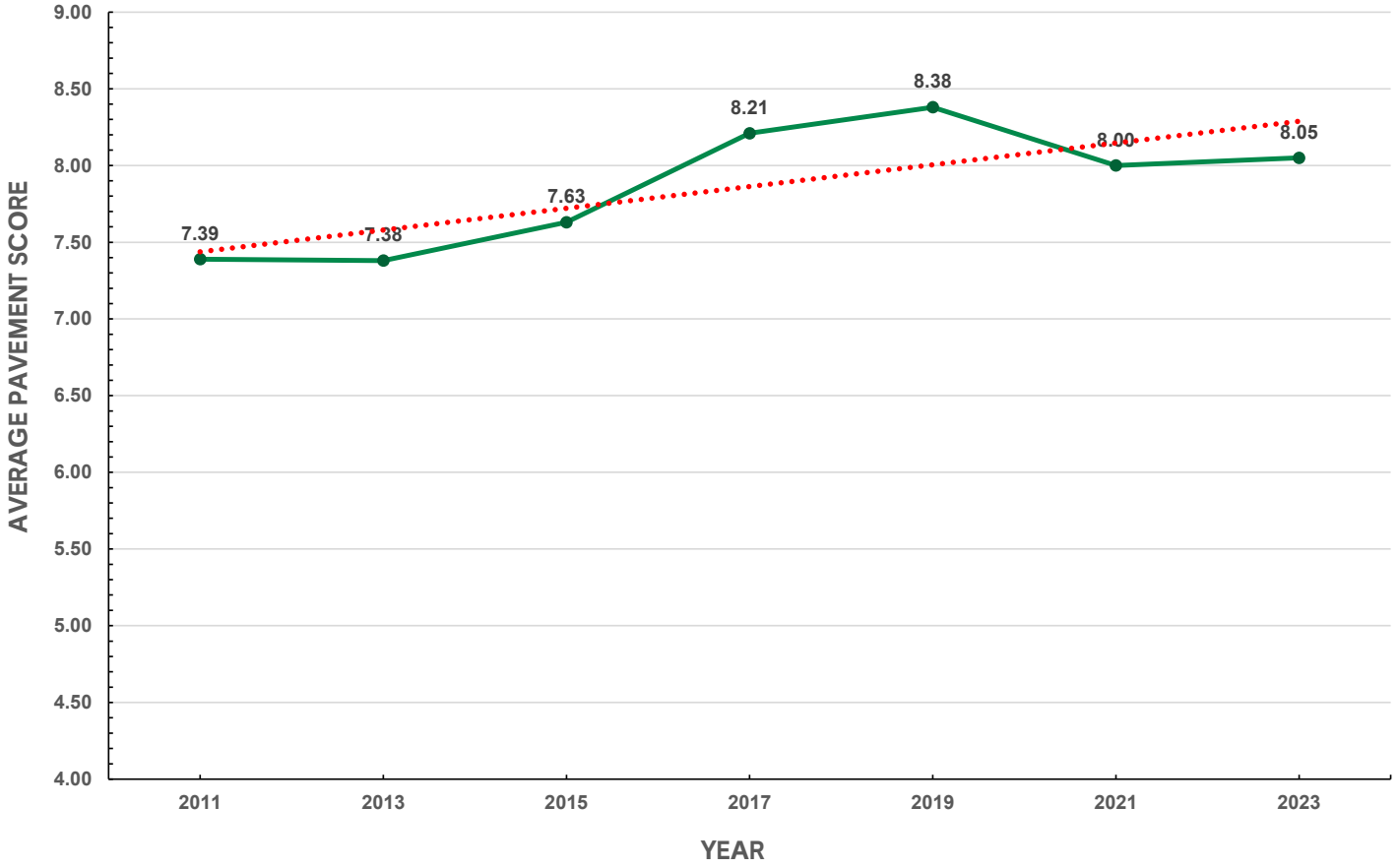
NYSTA HIGHWAYS
FEDERAL-AID ELIGIBLE
2023 SURFACE CONDITION

CONDITION LEVEL	SCORE	LANE MILES	PERCENT	
EXCELLENT	10	38.26	11.7%	59.2%
	9	155.76	47.5%	
GOOD	8	66.65	20.3%	36.2%
	7	51.94	15.8%	
FAIR	6	15.19	4.6%	4.6%
POOR	5	0.00	0.0%	0.0%
	4	0.00	0.0%	
	3	0.00	0.0%	
	2	0.00	0.0%	
	1	0.00	0.0%	
NOT RATED	NR	0.00	0.0%	0.0%
UNDER CONSTRUCTION	UC	0.00	0.0%	0.0%
TOTAL:		327.80	100.0%	100.0%

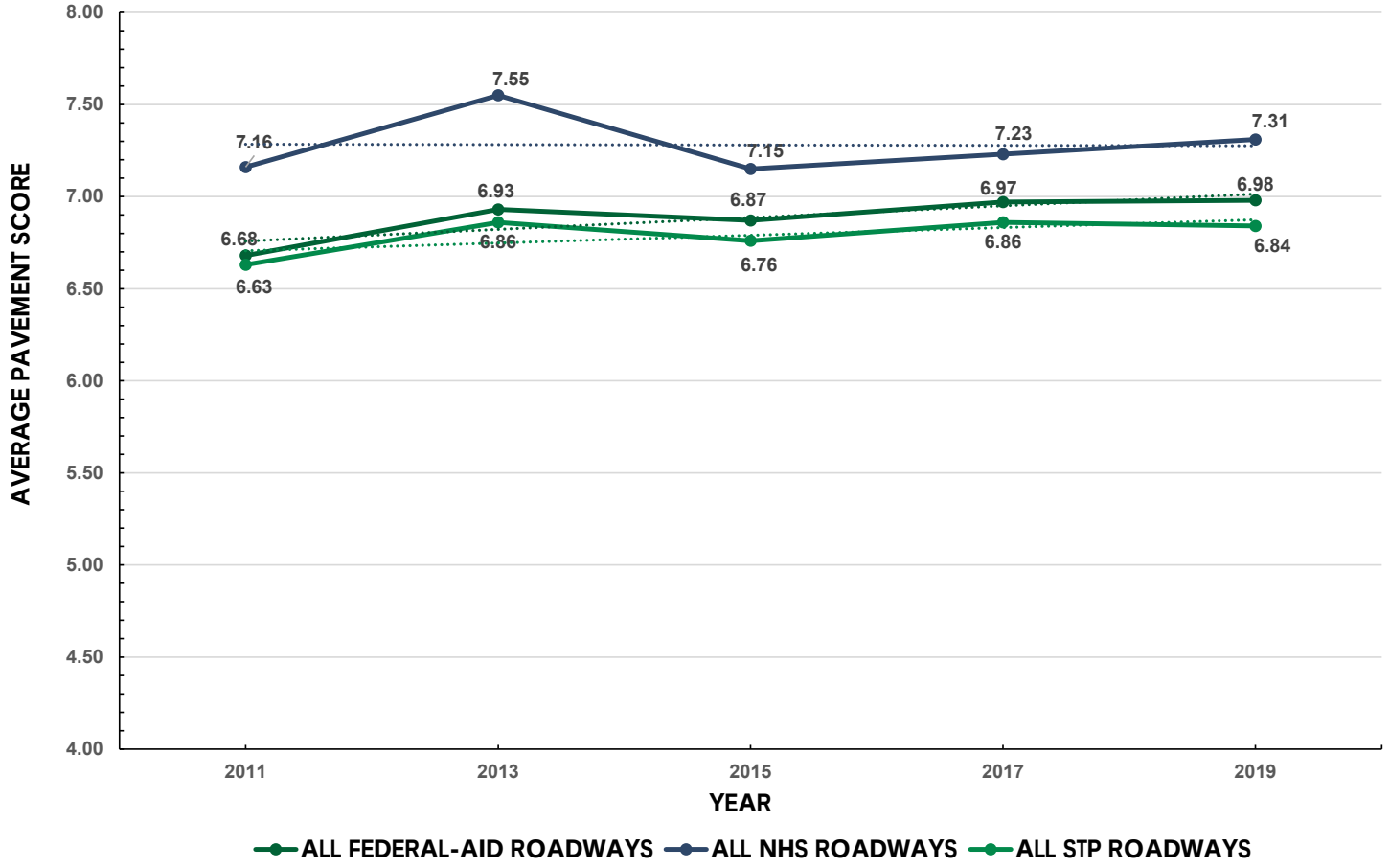
AVERAGE ROAD SCORE: 8.05

VMT: 4,313,868

NYSTA Surface Score Averages



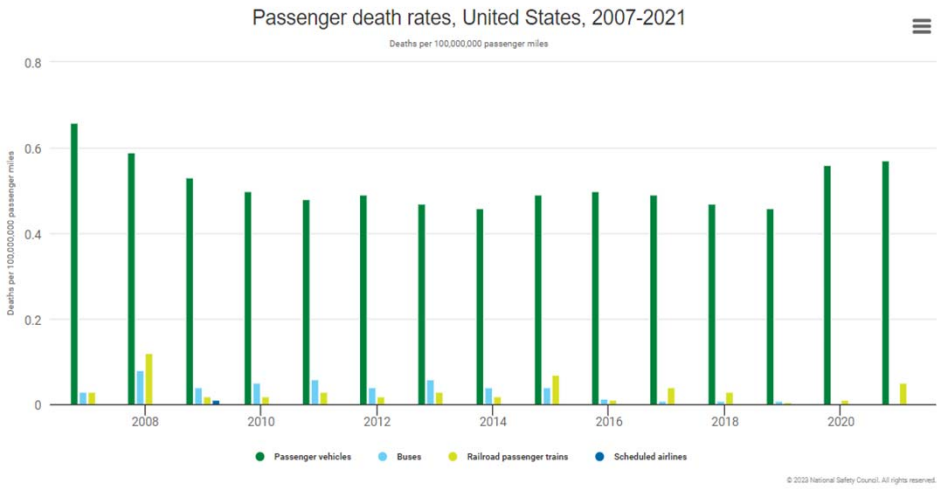
Comparison of all FA, NHS, & STP Roadway Pavement Scores

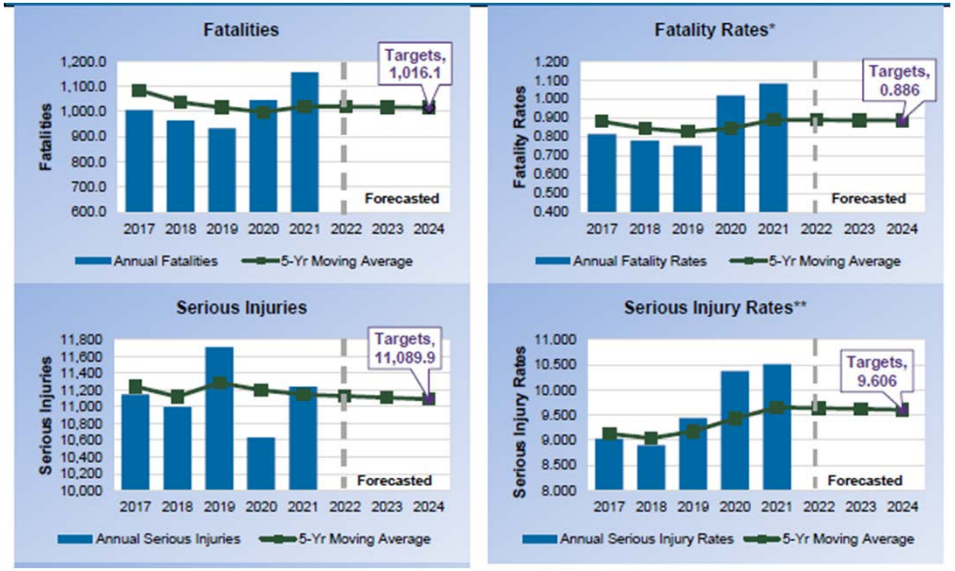


C. Safe Systems Approach for Speed Limits

- Safe System Approach
- FHWA Countermeasure – Appropriate Speed Limits for All Road Users

American Attitude Toward Road Safety





Safe Systems Approach – Key Principles

- Death and serious injuries are unacceptable
- Safety is shared responsibility of all stakeholders
- Humans make mistakes
- Humans are vulnerable
- Redundancy is crucial
- Safety is proactive

Safe Systems Approach – Key Components

- Safe Road Use
- Safe Road and Roadsides
- Safe Speeds
- Safe Vehicles
- Post-Crash Care

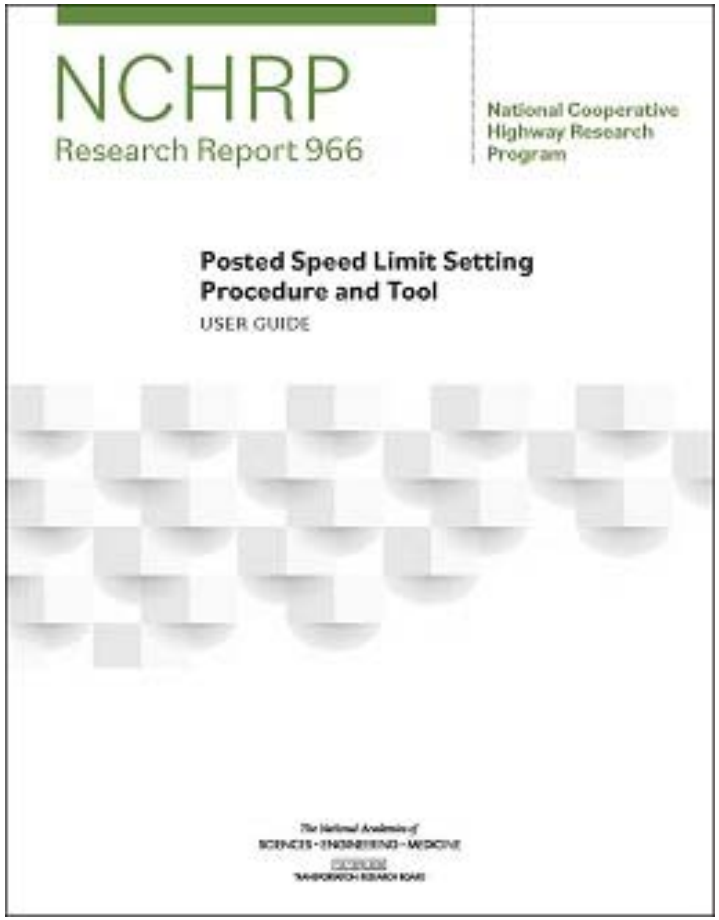
Photo credit: Roadwaysafet.org

Safe Roads and Roadsides

- The transportation system is designed to account for human error
  - Physically separating people at different speeds
  - Providing dedicated times for different users to move through the space
- We already do this in some aspects of transportation design

Photo Credit:
Ameristar Perimeter Security

Photo Credit:
FHWA



Safe Speeds

- Human beings are less likely to survive high speed crashes
- Three ways that reduce speeds to provide for human injury tolerance
  - Reducing impact forces
  - Providing additional time for drivers to stop
  - Improving visibility

Applications of Safe Systems Approach

- FHWA Proven Safety Countermeasures
  - Speed Management
    - **Appropriate speed limits for all road users**, speed safety cameras, variable speed limits
  - Pedestrian/Bicyclist
    - Bike lanes, Leading Pedestrian Interval, Medians and Refuse Islands, **Road Diets**, RRFB
  - Roadway Departure
    - Rumble Strips, Median barriers, roadside design at curves, SafetyEdge^{SM}
  - Intersections
    - Signal face backplates, Dedicated turn lanes, Roundabouts
  - Crosscutting
    - Lighting, **Local Road Safety Plans**, Pavement Friction Management

Appropriate Speed Limits for All Road Users

FHWA Proven Countermeasure Website

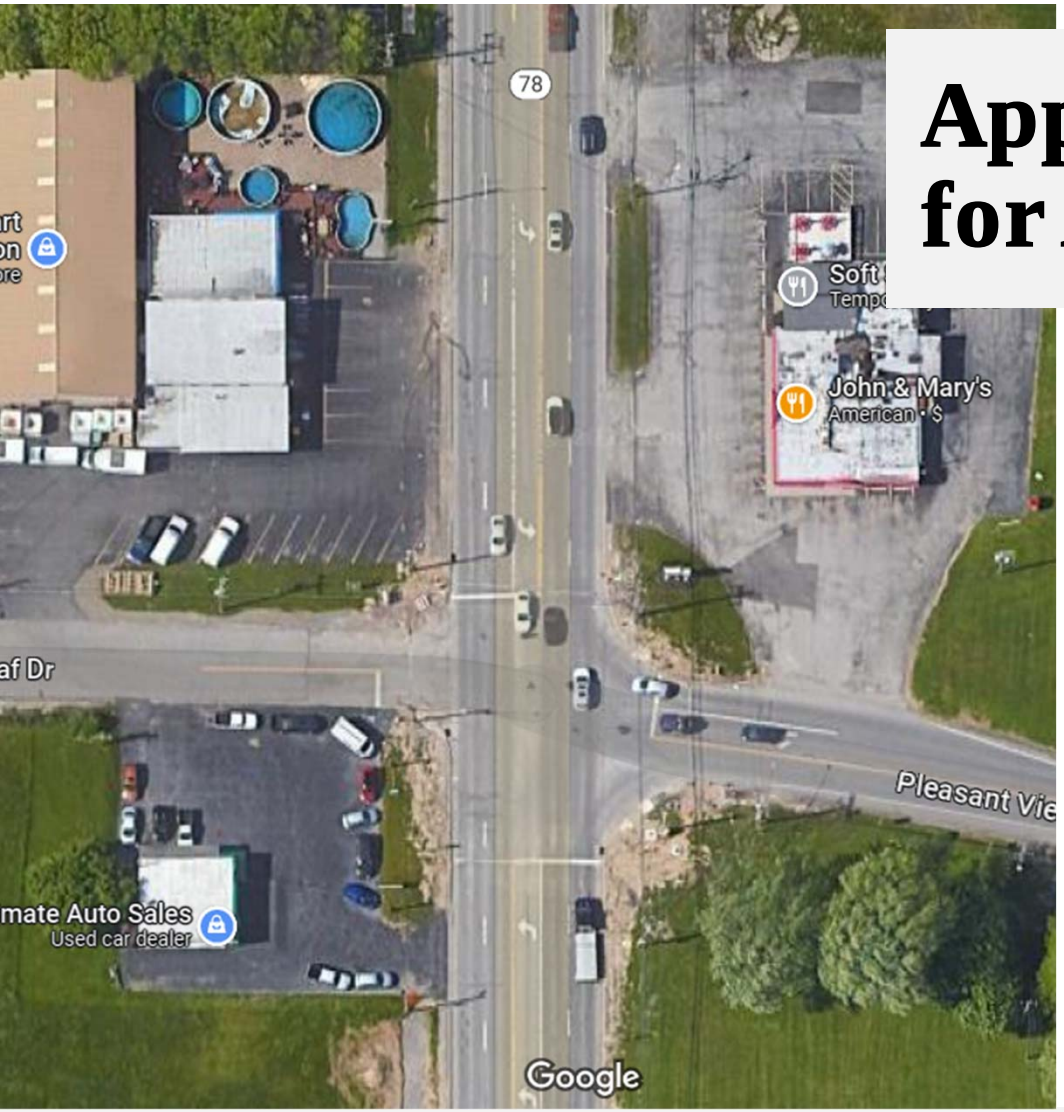
- "States and local jurisdictions should set appropriate speed limits to reduce the significant risks drivers impose on others – especially vulnerable road users – and on themselves."

MUTCD

- Standard: "Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering study that has been performed in accordance with traffic engineering practices. The engineering study shall include an analysis of the current speed distribution of free-flowing vehicles"

Appropriate Speed Limits for All Road Users

- NCHRP 966: Posted Speed Limit Setting Procedure and Tool (2021)
  - "Crashes were lowest when the operating speed was within 5 mph of the average operating speed"
  - Developed a Speed-Limit-Setting (SLS) Procedure and tool for industry use

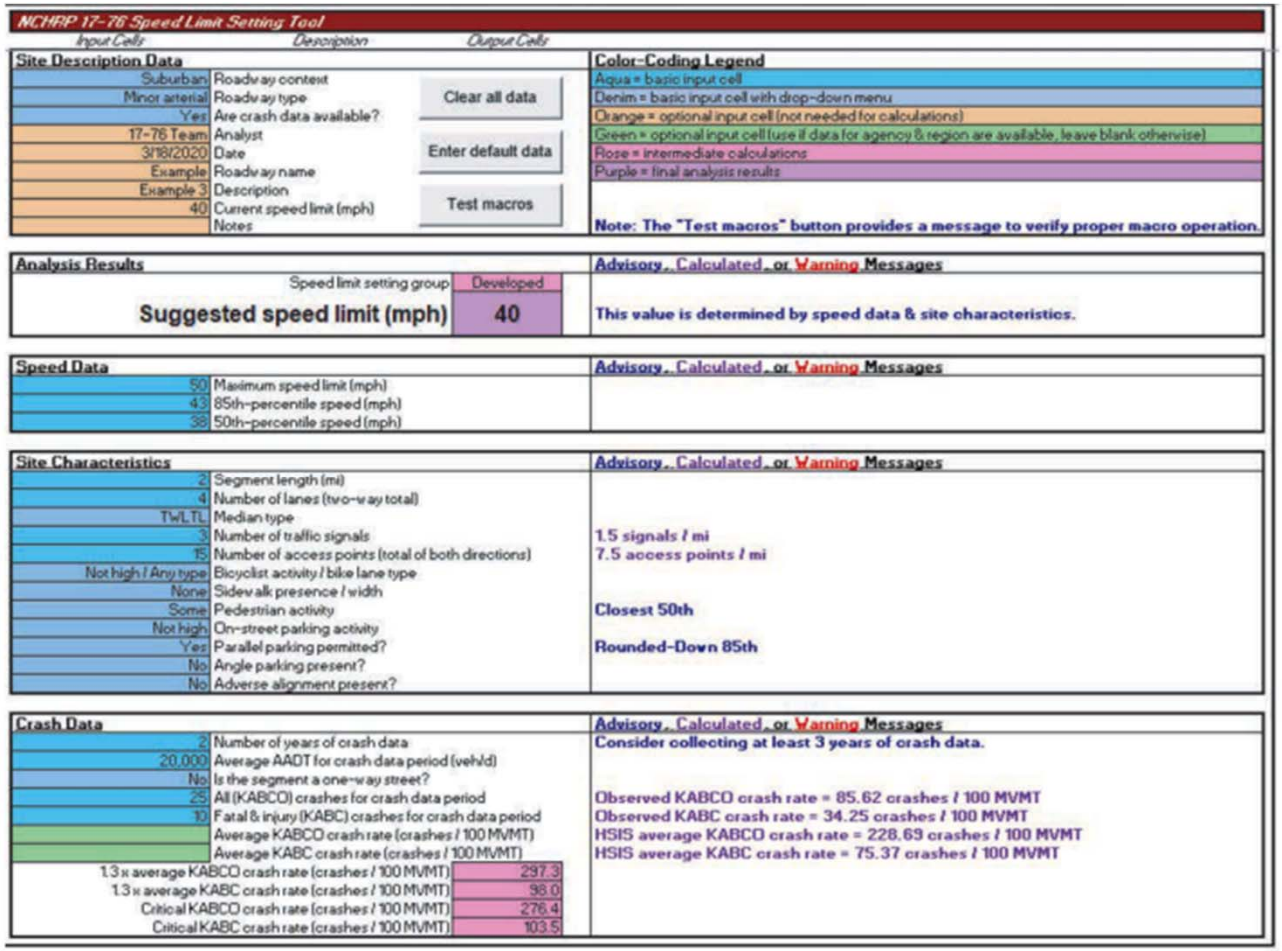


Appropriate Speed Limits for All Road Users

- Principal arterial in a suburban area
  - Current posted speed limit – 40 mph
  - 85th percentile – 43 mph
  - 50th percentile – 38 mph
  - Number of lanes – 4
  - Median type – TWLTL
  - Bicyclist activity – not high
  - Sidewalk presence – none
  - Pedestrian Activity – Some
  - On-street parking - Allowed
  - AADT – 20,000

Appropriate Speed Limits for

All Road Users



NCHRP 17-76 Speed Limit Setting Tool

Input Cells | Description | Output Cells

Site Description Data		
Suburban	Roadway context	Clear all data
Minor arterial	Roadway type	
Yes	Are crash data available?	
17-76 Team	Analyst	Enter default data
3/18/2020	Date	
Example	Roadway name	
Example 3	Description	Test macros
40	Current speed limit (mph)	
	Notes	

Color-Coding Legend
Aqua = basic input cell
Denim = basic input cell with drop-down menu
Orange = optional input cell (not needed for calculations)
Green = optional input cell (use if data for agency & region are available, leave blank otherwise)
Rose = intermediate calculations
Purple = final analysis results

Note: The "Test macros" button provides a message to verify proper macro operation.

Analysis Results		Advisory, Calculated, or Warning Messages
Speed limit setting group	Developed	
Suggested speed limit (mph)	40	This value is determined by speed data & site characteristics.

Speed Data		Advisory, Calculated, or Warning Messages
50	Maximum speed limit (mph)	
43	85th-percentile speed (mph)	
38	50th-percentile speed (mph)	

Site Characteristics		Advisory, Calculated, or Warning Messages
2	Segment length (mi)	
4	Number of lanes (two-way total)	
TWLTL	Median type	
3	Number of traffic signals	1.5 signals / mi
15	Number of access points (total of both directions)	7.5 access points / mi
Not high / Any type	Bicyclist activity / bike lane type	
None	Sidewalk presence / width	
Some	Pedestrian activity	Closest 50th
Not high	On-street parking activity	
Yes	Parallel parking permitted?	Rounded-Down 85th
No	Angle parking present?	
No	Adverse alignment present?	

Crash Data		Advisory, Calculated, or Warning Messages
2	Number of years of crash data	Consider collecting at least 3 years of crash data.
20,000	Average AADT for crash data period (veh/d)	
No	Is the segment a one-way street?	
25	All (KABCO) crashes for crash data period	Observed KABCO crash rate = 85.62 crashes / 100 MVMT
10	Fatal & injury (KABC) crashes for crash data period	Observed KABC crash rate = 34.25 crashes / 100 MVMT
	Average KABCO crash rate (crashes / 100 MVMT)	HSIS average KABCO crash rate = 228.69 crashes / 100 MVMT
	Average KABC crash rate (crashes / 100 MVMT)	HSIS average KABC crash rate = 75.37 crashes / 100 MVMT
1.3 x average KABCO crash rate (crashes / 100 MVMT)	297.3	
1.3 x average KABC crash rate (crashes / 100 MVMT)	98.0	
Critical KABCO crash rate (crashes / 100 MVMT)	276.4	
Critical KABC crash rate (crashes / 100 MVMT)	103.5	

Conclusion

- We ALL must do our part as stakeholders
- Pursue design options for holistic approach
- Mentality shift – there are no accidents

Safe Streets For All

Erie-Niagara Comprehensive Roadway Safety Action Plan

presented to
Greater Buffalo-Niagara Regional Transportation Council

presented by
Cambridge Systematics, Inc.
Alex Kone

November 13, 2023

Project Team

CAMBRIDGE SYSTEMATICS

PLANNING 4 PLACES

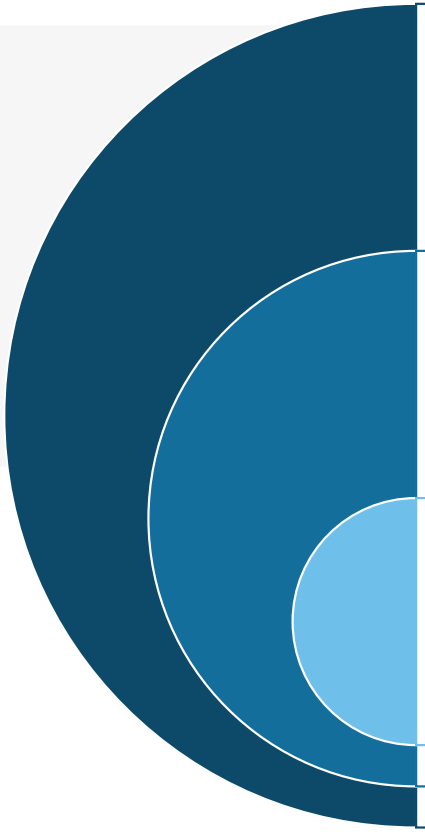
Assisting communities since 2009

PARSONS®

Key Outcomes

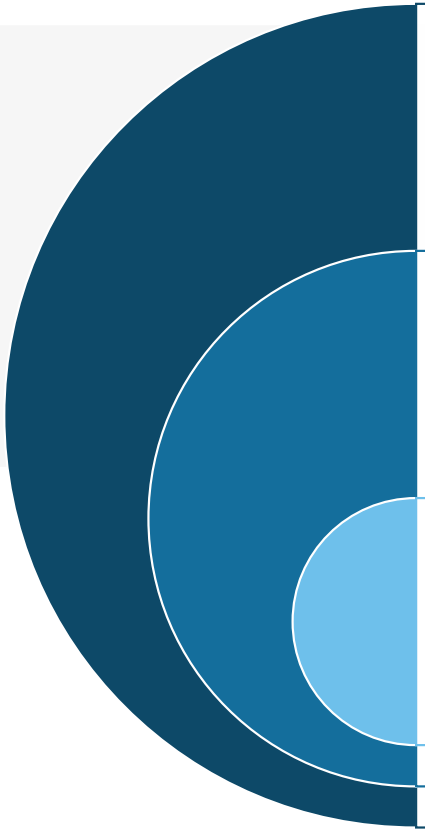
- Build a shared vision of roadway safety in the Erie-Niagara Region
- Establish interjurisdictional partnerships across the 4 E's
  - Engineering, Enforcement, Education, and Emergency Response
- Identify priorities for Safe Streets and Roads for All Implementation Grant(s) (applications due in Summer 2024)
- Develop a comprehensive Safety Implementation Program
- Annual reporting on Implementation Program

Integration of Safety Plans and Projects



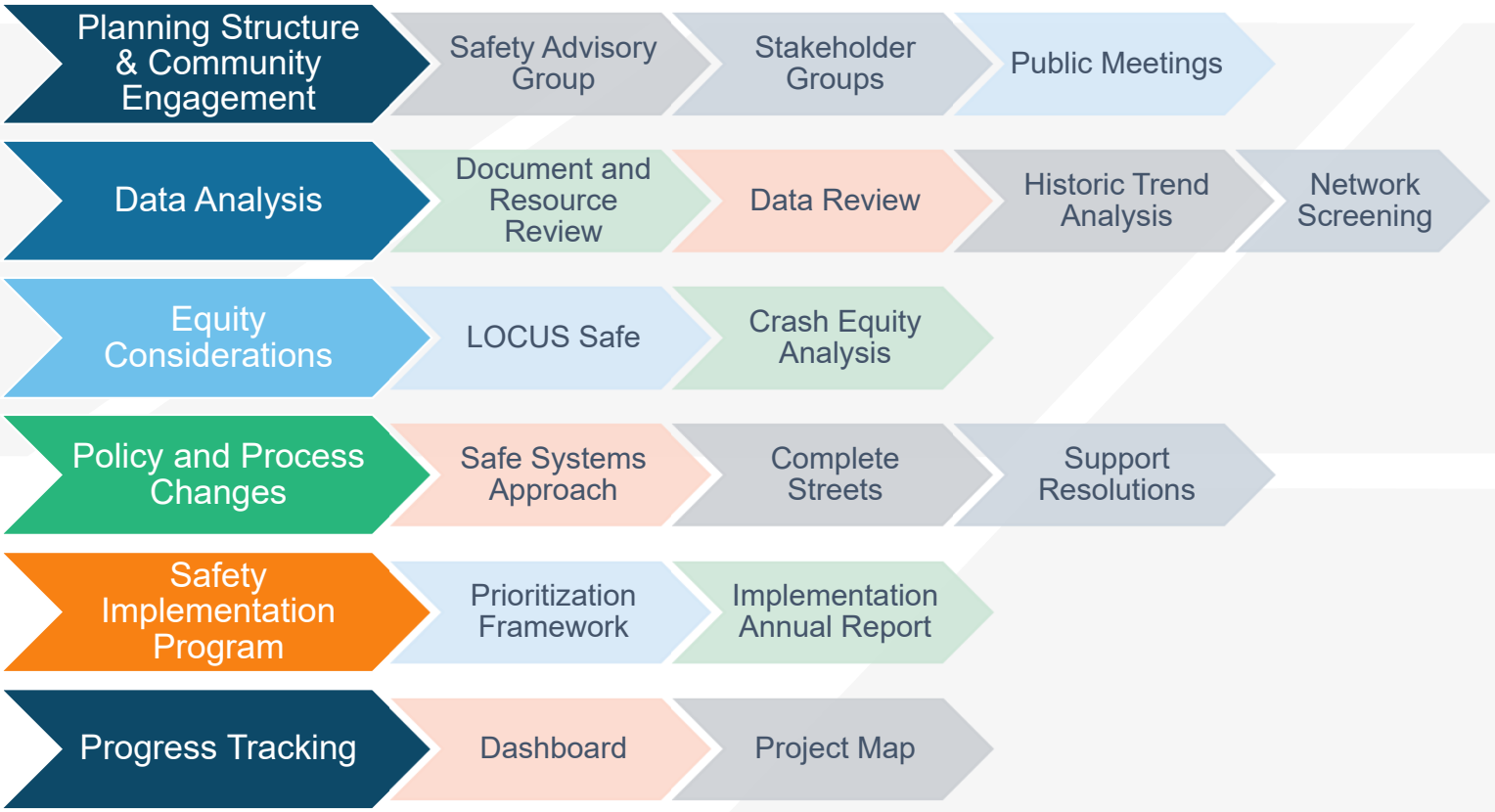
NYS Strategic Highway Safety Plan	• Emphasis Areas • Statewide initiatives
GBNRTC Comprehensive Roadway Safety Action Plan	• Focused network analysis • Engagement and collaboration
Implementation Projects	• Site-specific improvements • Implementation of programs

Integration of Safety Plans and Projects



NYS Strategic Highway Safety Plan	• 2023 update to be approved by FHWA
GBNRTC Comprehensive Roadway Safety Action Plan	• Kick-off in November
Implementation Projects	• Grant application in Summer 2024 • TIP update

Scope of Work



Planning Structure & Community Engagement

Safety Advisory Group

Member Agencies

- Cities of Buffalo and Niagara Falls
- Counties of Erie and Niagara
- Niagara Frontier Transportation Authority
- NYSDOT – Region 5
- NYS Thruway Authority

Strategic Stakeholders

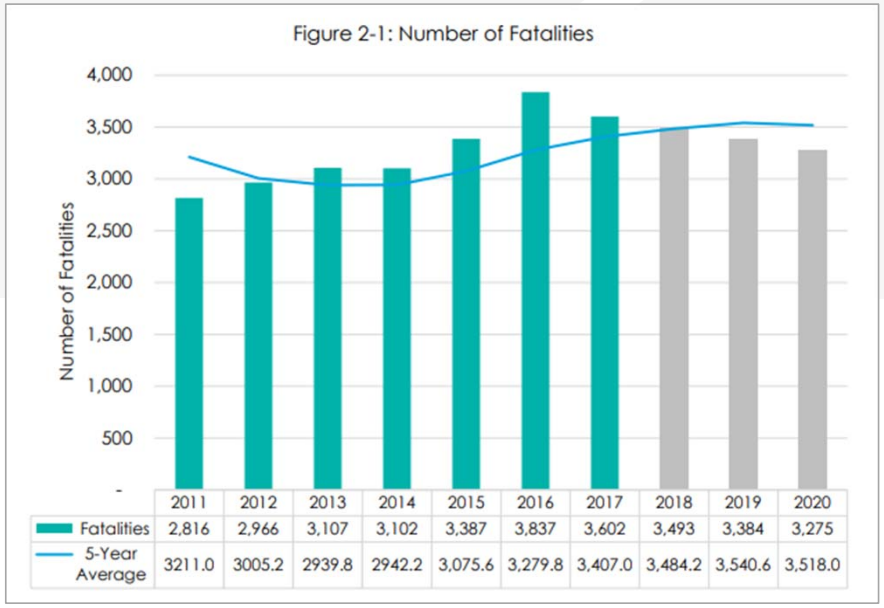
- Empire State Development
- Buffalo Niagara Partnership
- Seneca Nation of Indians

Traffic Safety Board representatives

Other community groups and institutions

Data Analysis

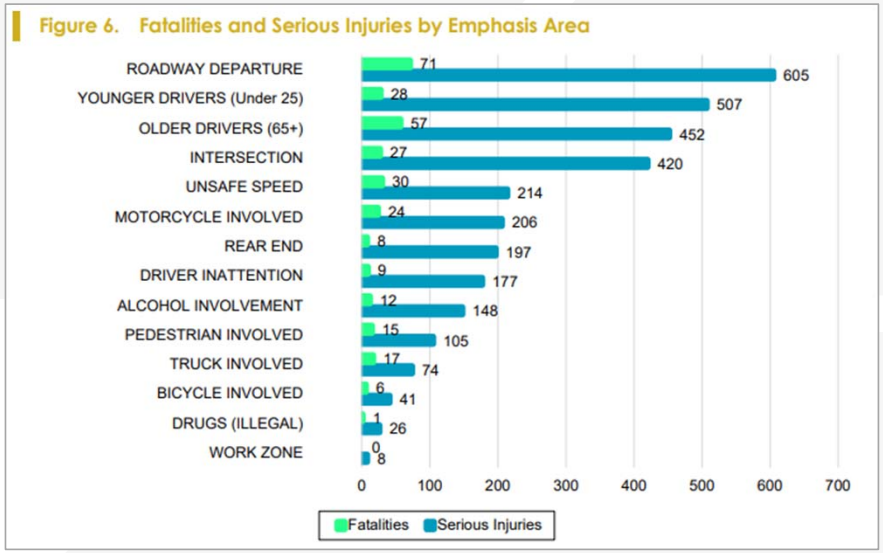
1. Historical Trends



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatalities	2,816	2,966	3,107	3,102	3,387	3,837	3,602	3,493	3,384	3,275
5-Year Average	3211.0	3005.2	2939.8	2942.2	3,075.6	3,279.8	3,407.0	3,484.2	3,540.6	3,518.0

Source: California Highway Safety Improvement Program Implementation Plan

2. Emphasis Areas



Source: Ulster County Road Safety Plan

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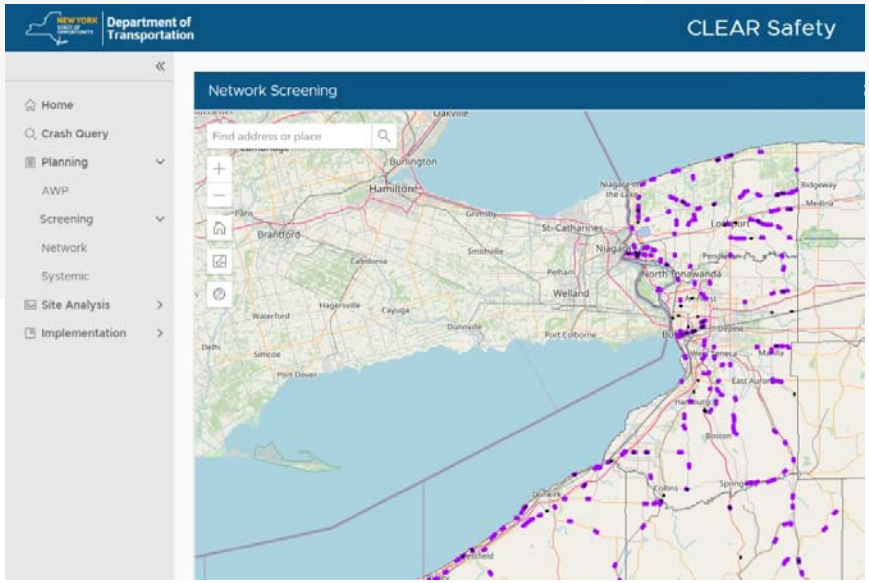
Data Analysis

3. Hotspot Analysis



Source: NYSDOT Crash Location and Engineering Analysis Repository (CLEAR)

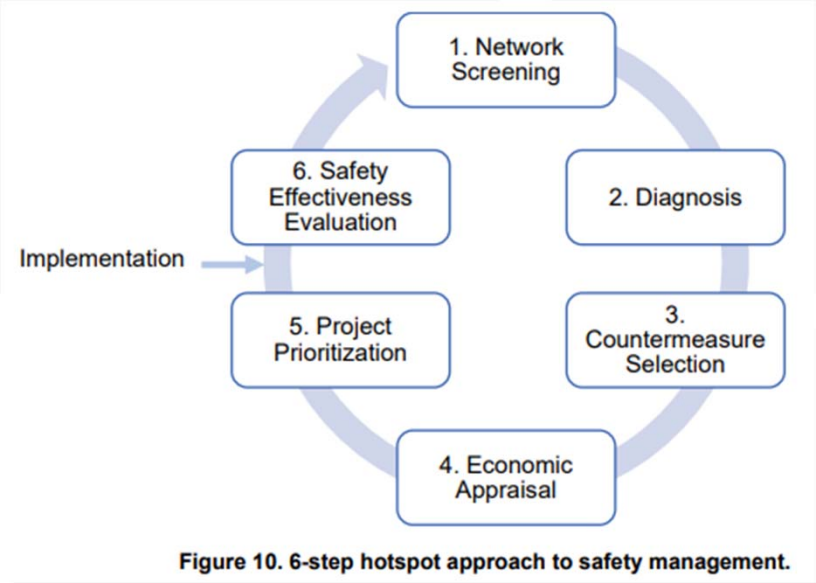
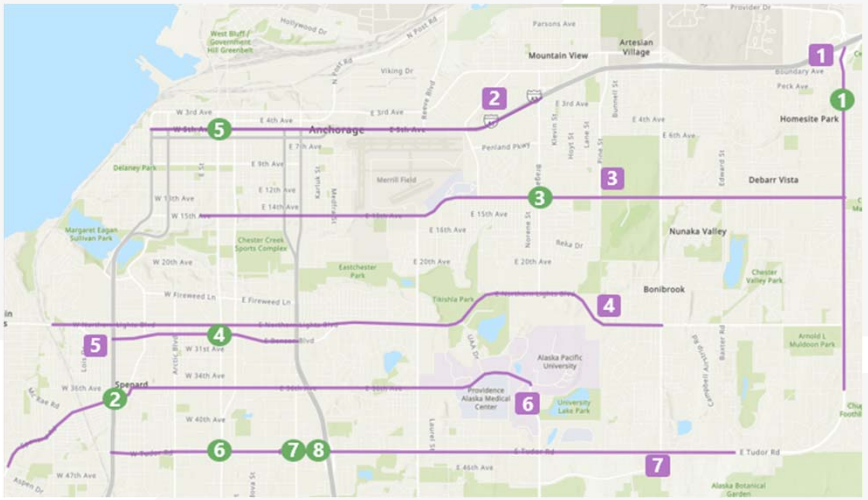


Figure 10. 6-step hotspot approach to safety management.

Data Analysis

Network Screening

High Injury Network



Source: Alaska Vulnerable Road User Safety Assessment

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Data Analysis

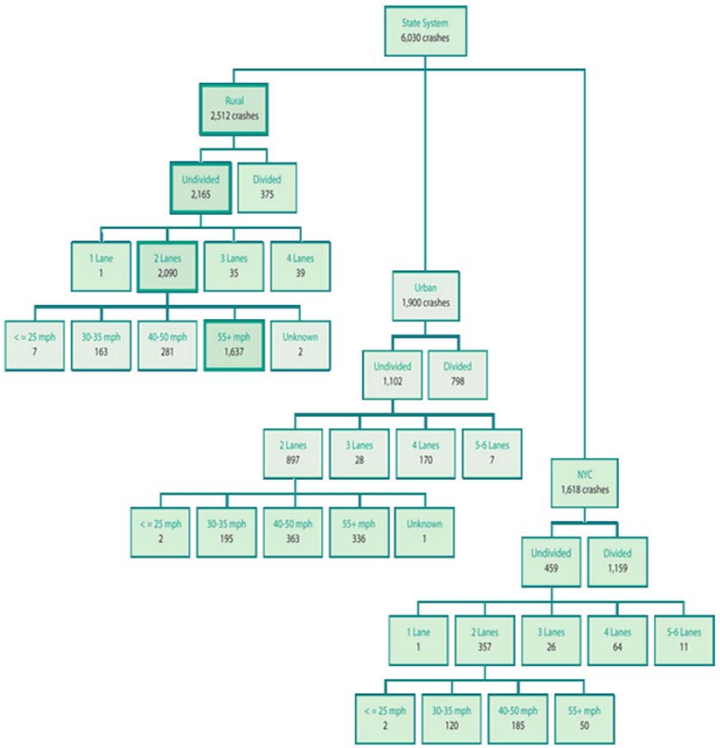
4. Systemic Analysis

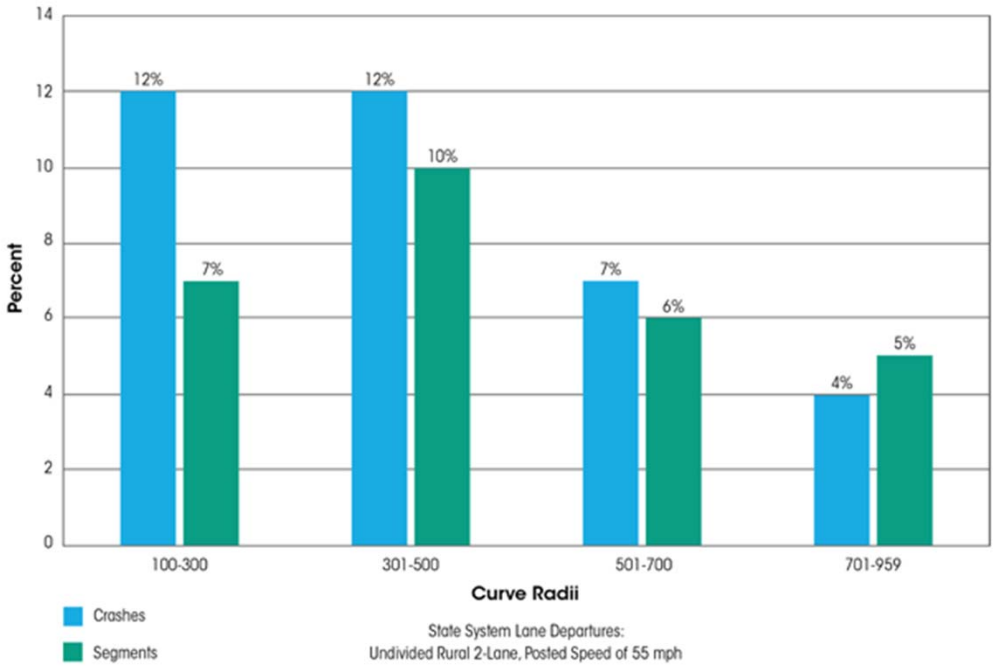
Source: Systemic Safety Project Selection Tool (CS for FHWA)

Case Study: New York (2007-2011)

1. Identify Focus Crash Types
   - ➢ Emphasis Area: Roadway Departures
     - 26% of Crashes Statewide
2. Select Focus Facilities
   - ➢ Rural, Undivided, Two-Lane, 55 mph speed limit
     - 27% of Roadway Departures
3. Identify Risk Factors
   - ➢ Curve Radii less than 300 feet
     - 12% of crashes vs 7% of segments

Data Analysis





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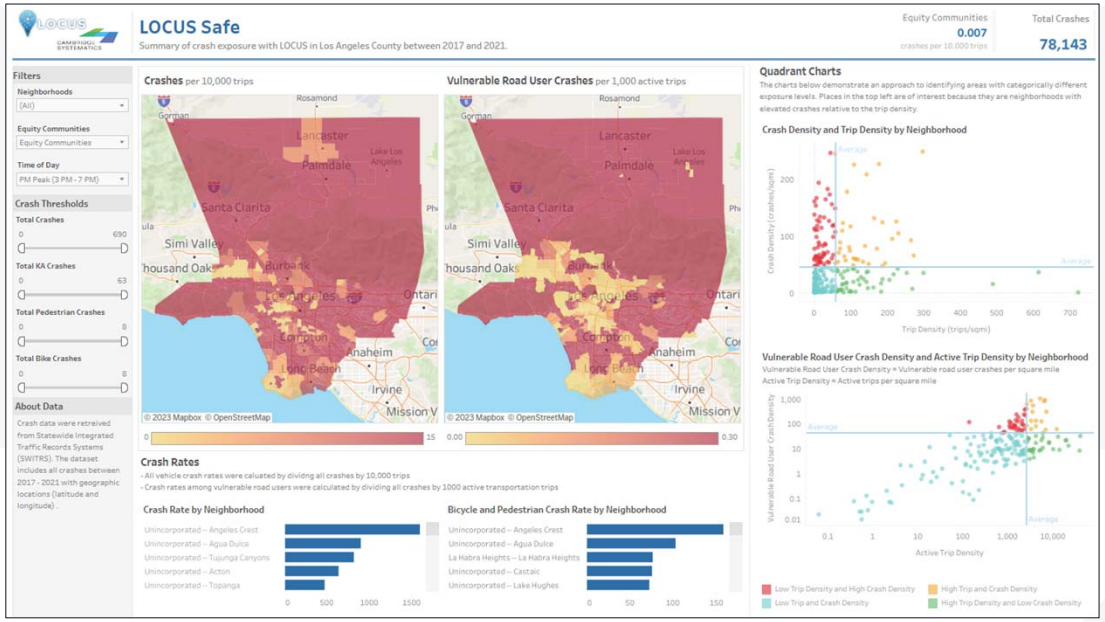
Equity Considerations



LOCUS Safe
for Southern California Association of Governments

Communities of Concern

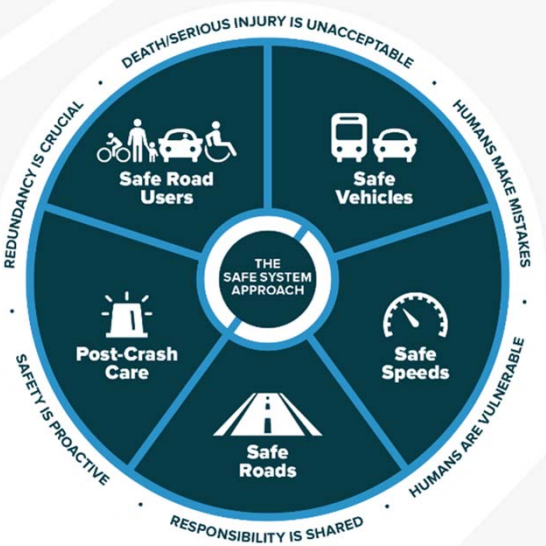
1. GBNRTC Equity and EJ Analysis (2023)
2. NYS Disadvantaged Communities
3. Justice 40

Communities of Concern will be a key factor in the Prioritization Framework, Policy and Process Changes, and Progress Tracking

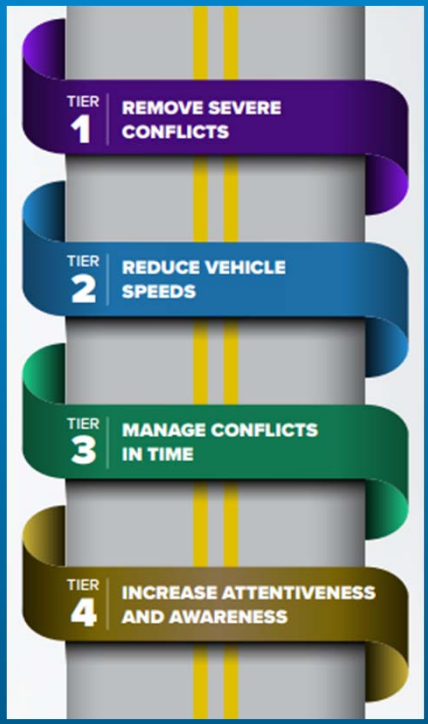
CAMBRIDGE SYSTEMATICS

Policy and Process Changes

- Organize the Comprehensive Roadway Safety Action Plan around the Safe System Approach
- Commit to Target in MPO performance-based planning and programming



Safe System Design Hierachy



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Safety Implementation Program

LEGEND

Engineering | Education | Encouragement | Evaluation | Enforcement

		Timeframe	Cost
Design and Operate Safer Infrastructure			
	Install pedestrian hybrid beacon and advanced yield signs, stop markings and signs, high visibility crosswalk markings.	Mid-term	$
	Conduct pedestrian road safety audits in areas with a higher than average pedestrian crashes. Ensure sidewalks and facilities meet ADA requirements.	Ongoing	$
	Reduce motor vehicle speeds by using data driven, effective, and equitable enforcement methods that utilize available technology.	Long-Term	$$
	Reduce motor vehicle speeds by utilizing other traffic calming strategies such as narrower lanes, adding roundabouts, reducing the number of traffic lanes, planting trees, and implementing roadway reconfiguration.	Ongoing and Long-Term	$$$

Source: El Paso County (CO) Road Safety Plan

Table 7. SR-208 & Wallkill Avenue Countermeasure Summary

Treatment	Cost	Crash Modification Factor	Benefit/Cost Ratio	Notes
Install Traffic Signal	$500,000	0.56	6.0	
Roundabout	$1,500,000	0.18 (FSI)	3.5	
LED-Enhanced Stop Signs	$15,000	0.87	59.5	
Intersection Conflict Warning Signs	$100,000	0.70	20.6	Assist with any sight distance limitations and slow SR-208

Source: Ulster County Road Safety Plan

Figure 17. SR-208 & Wallkill Avenue Crash Diagram

Prioritization Framework

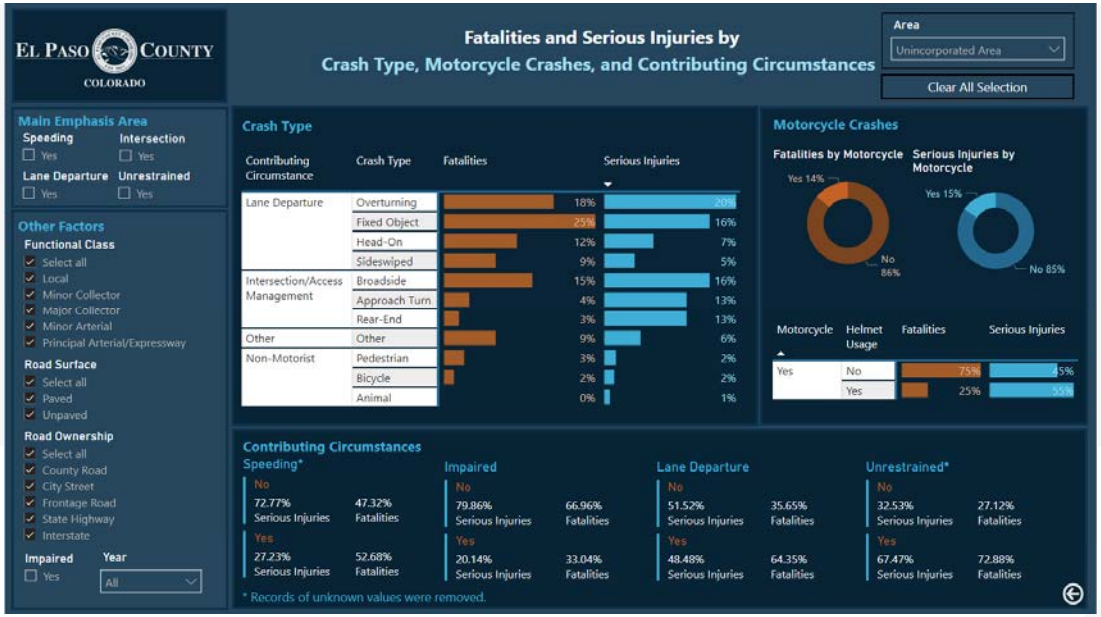
1. Safety effectiveness
2. Communities of Concern
3. 2050 MTP Vision and Goals
4. …and more

Safety Implementation Program

SS4A Implementation Grant

CAMBRIDGE SYSTEMATICS

Progress Tracking



Dashboard for El Paso County (Colorado)

Implementation Program Annual Report

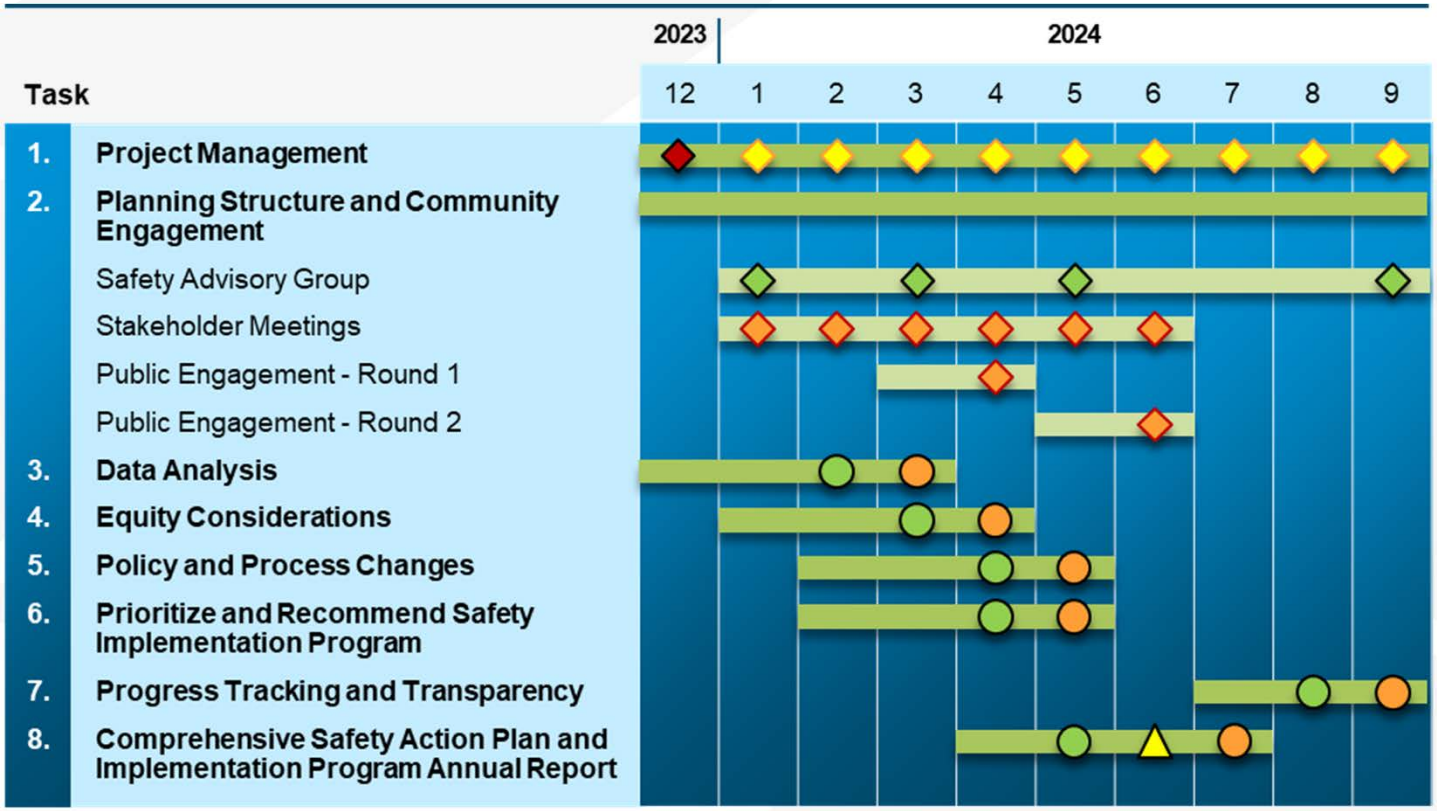
The Annual Report will track action items the partners will undertake to improve safety in the region as identified in the Safety Implementation Program.

These actions will indicate staff involved, level of effort, estimated cost and will be aligned with the 2023 New York SHSP.

Performance measures for each action will be identified to allow the municipality to track efforts related to that action.

CAMBRIDGE SYSTEMATICS

Project Schedule



Disclaimers:

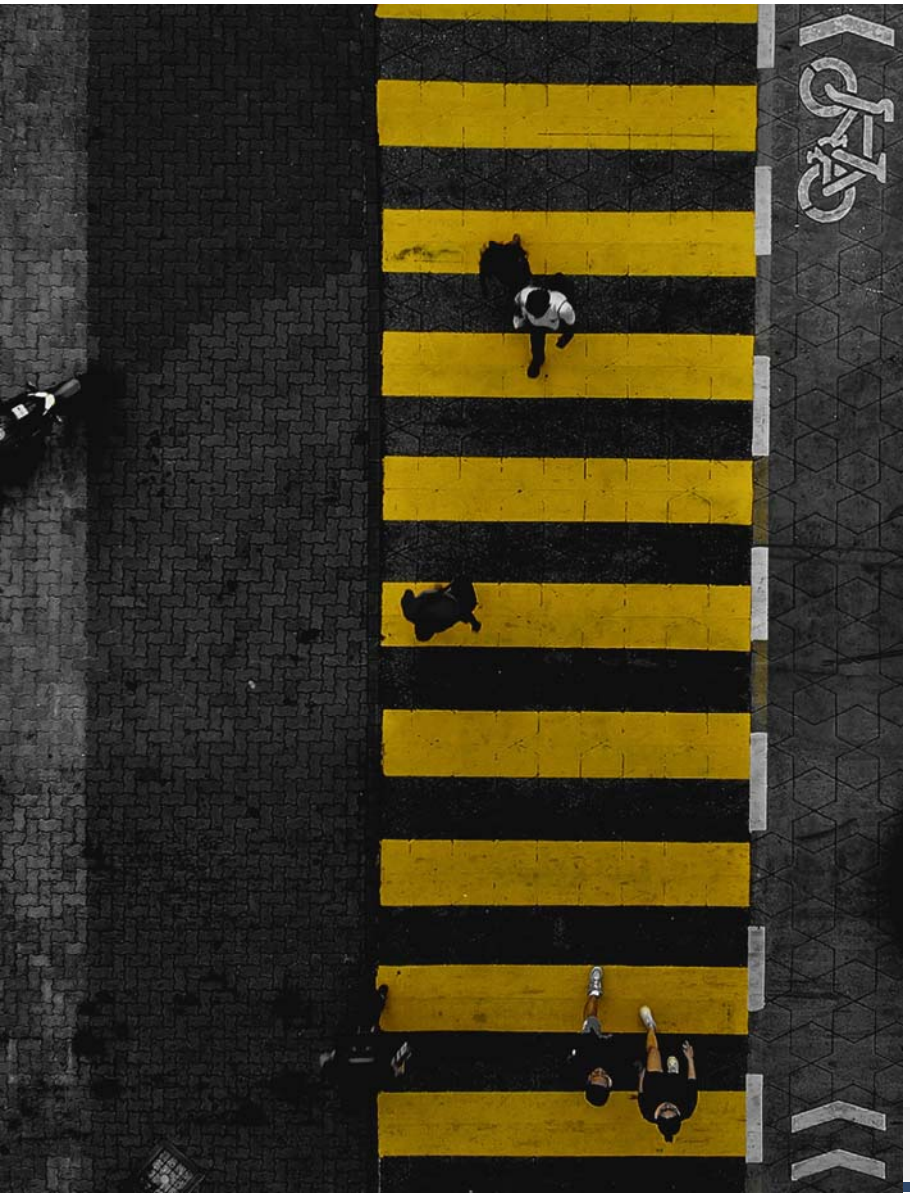
Kickoff Meeting dependent upon Notice to Proceed in December
Deliverables from Task 2–6 including Recommendations to be provided for Board approval

Regional Bicycle and Pedestrian Count Program

GBNRTC
Greater Buffalo Niagara Regional Transportation Council

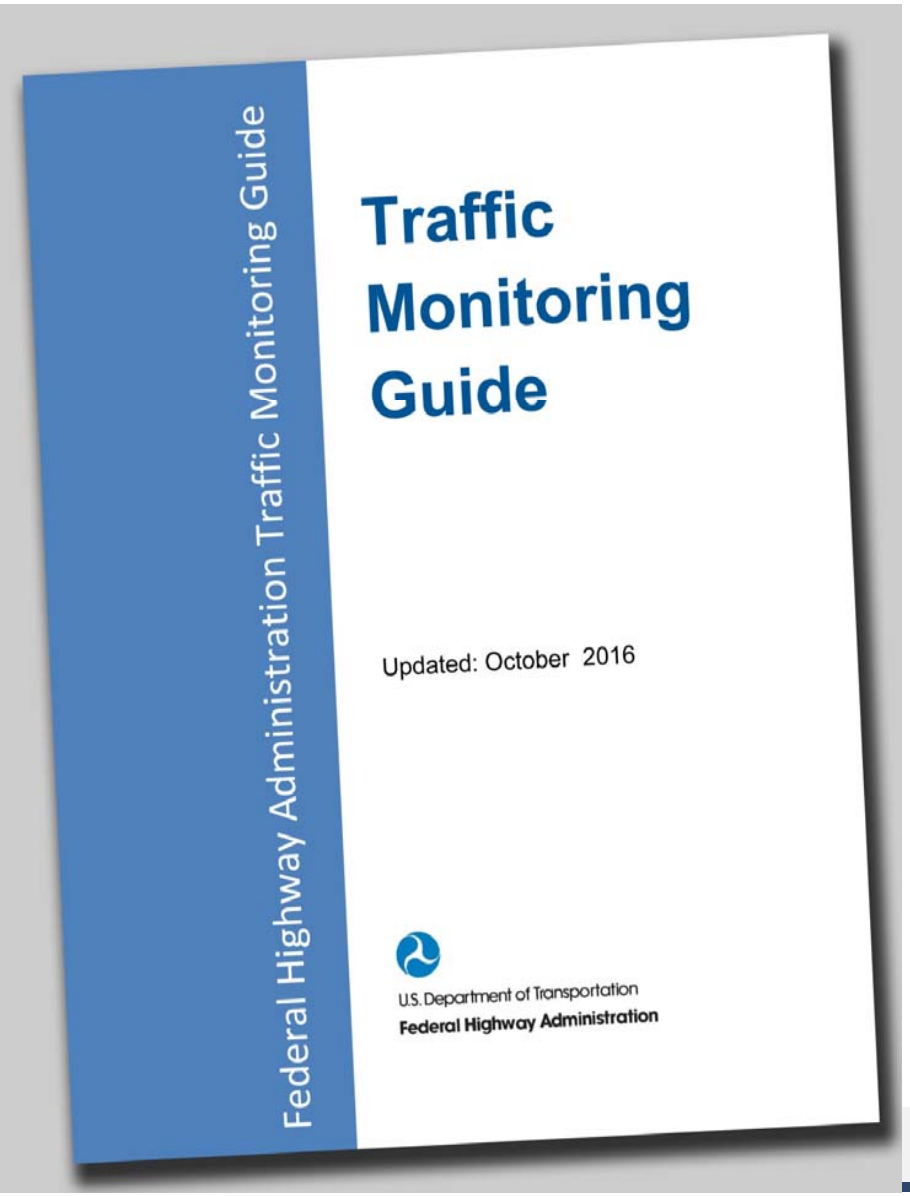
Bicycle & Pedestrian Counts

- Non-motorized modes of transportation like walking and bicycling have been around much longer than the automobile.
- However the monitoring of non-motorized traffic has not been systematic or widespread in the U.S.
- Currently, non-motorized traffic monitoring is not nearly as comprehensive as motorized traffic monitoring.



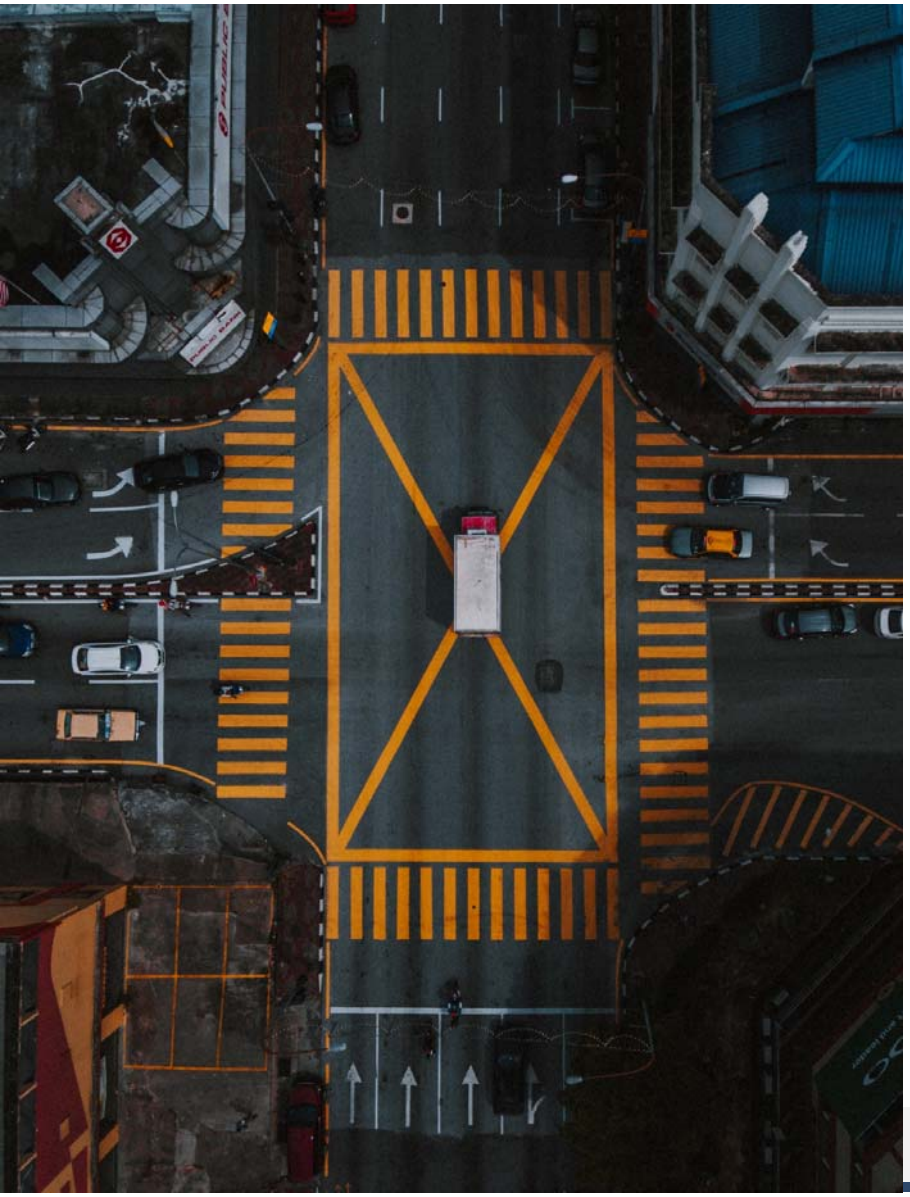
Bicycle & Pedestrian Counts

- There is a national interest in quantifying bicycling and walking on roads, paths, sidewalks and trails.
- Many counties, cities, parks, and downtown business districts are turning their focus on better understanding active, non-motorized transportation.
- Pedestrian and bicycle counts can provide the foundation for estimating non-motorized travel on a path, road, network, or city level.



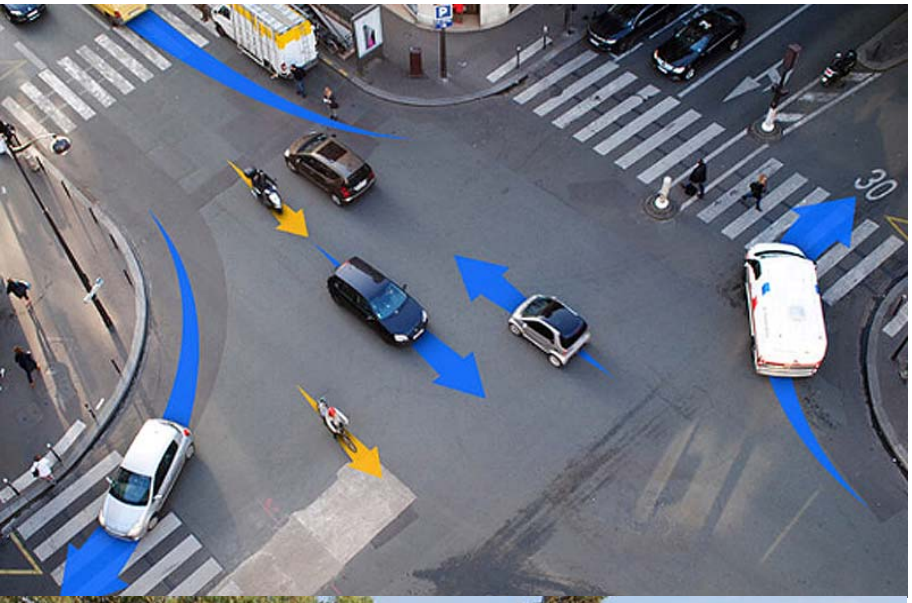
Bicycle & Pedestrian Counts

- The 2016 FHWA *Traffic Monitoring Guide* included information and guidance on the monitoring of pedestrians, bicyclists, and other non-motorized road and trail users for the first time.
- Systematic monitoring of pedestrians and bicyclists is still an emerging area that requires more research.
- Limited information is known about the best and most cost-effective ways to automatically collect non-motorized traffic data, especially because non-motorized traffic levels are typically much lower and more variable than motorized traffic levels.



Why Do We Count?

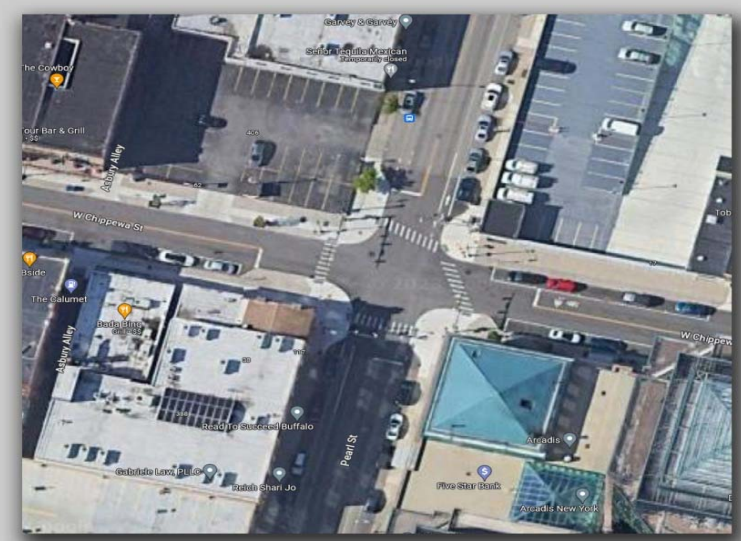
- GBNRTC counts bicyclists and pedestrians to help us understand and plan for the role bicyclists and pedestrians play in the transportation network.
- Similar to how planners and engineers use vehicular traffic counts to analyze roadway facilities, bicycle and pedestrian counting allows planners and engineers to:
  - Measure existing levels of bicycling and walking
  - Monitor travel trends
  - Plan for new or improved facilities
  - Measure outcomes of bicycle and pedestrian projects
  - Evaluate the effects of new infrastructure on pedestrian and bicycle activity.
  - Better understand crash & safety data.

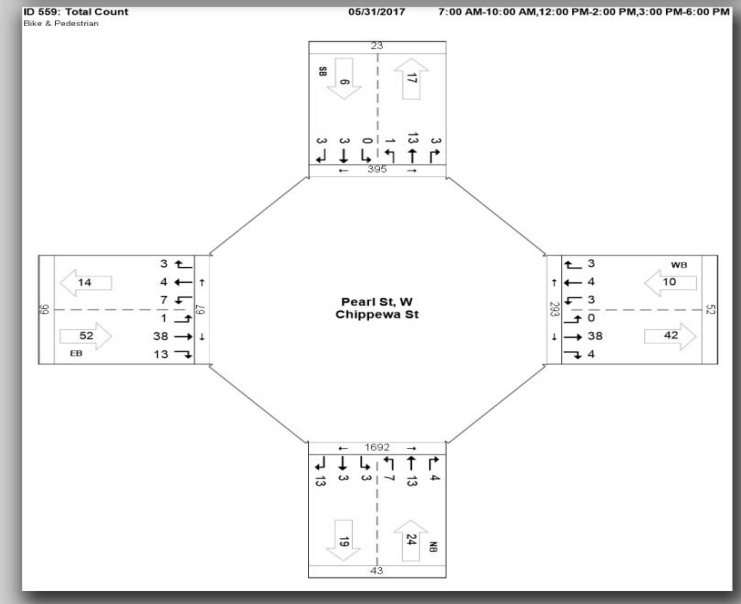


Current Count Program

- Consists of three types of counts:
  - Cyclical Counts
  - Project Counts
  - Permanent Counts

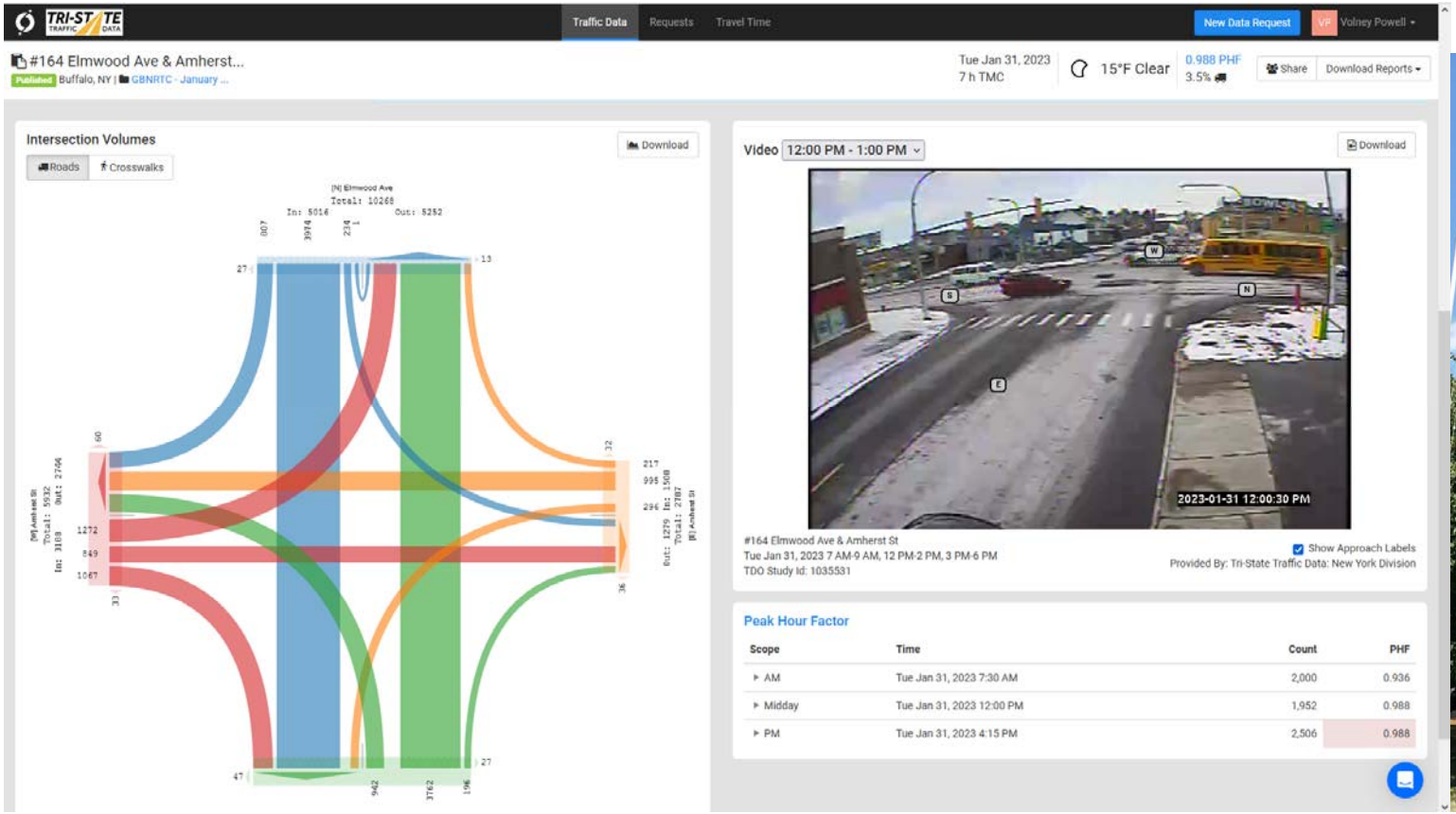
- Data Sources
  - Annual Traffic Count Program
  - Streetlight Data, Location Based Service data
  - Miovision



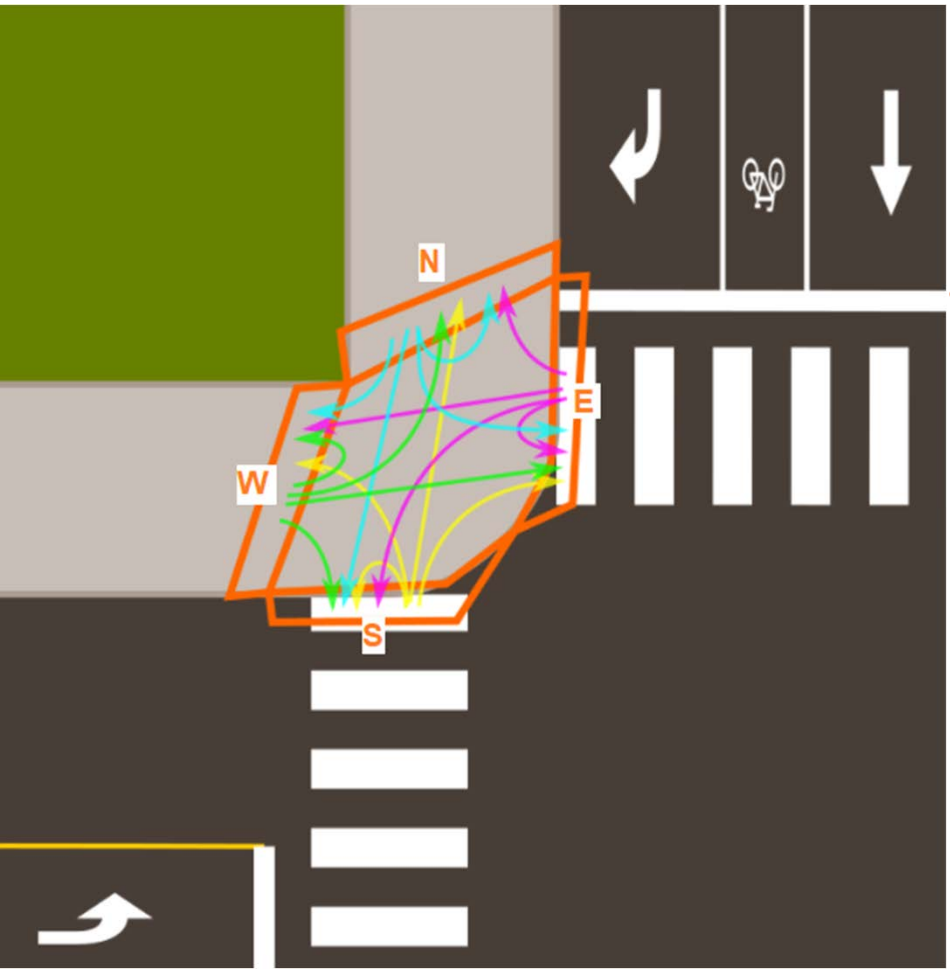


Annual Traffic Count Program

- Approximately 450 Automatic Traffic Recorder counts (tube counts)
- Approximately 150 Intersection turning movement counts
- Bicycles and pedestrians are included in signalized intersection turning movement counts when crossing an intersection approach during Peak Hour traffic.



- Over 140 Permanent Miovision cameras already deployed in the Buffalo Niagara region.



Corner Junction Count

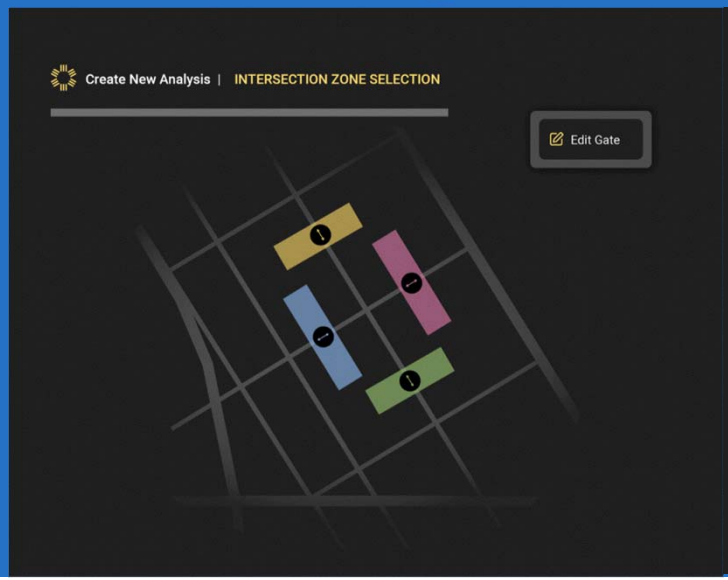
Processes one sidewalk corner of an intersection to determine how many people go from the sidewalks to the crosswalks, turning the corner, or crosswalk to crosswalk.

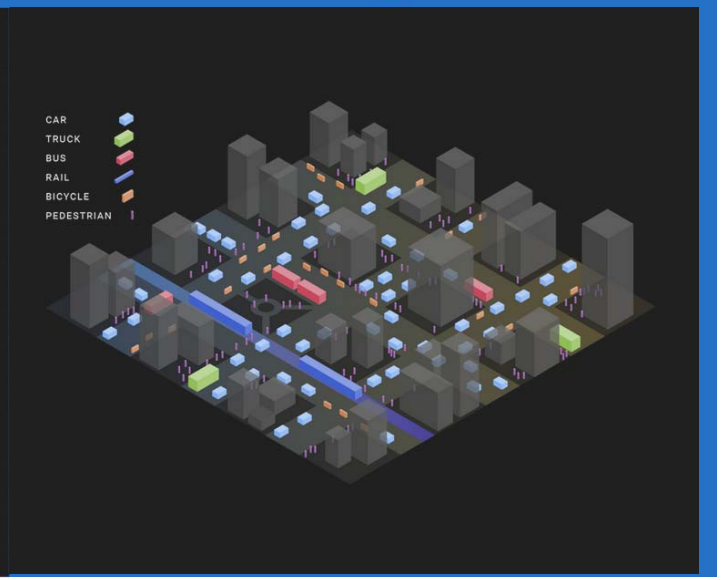
STREETLIGHT DATA
Big Data for Mobility

Monitor active transportation trends and measure the impact of infrastructure changes

Comprehensive Bicycle and Pedestrian Volumes

Get the data you need to justify infrastructure decisions and showcase success to constituents and stakeholders.





URBAN LOGIQ Data Platform Solutions Resources Data Privacy and Security Company Contact Request a Demo Sign In

Harness your data. Elevate your community.

Join governments of all sizes in transforming fragmented data into unified, actionable insights with UrbanLogiq.

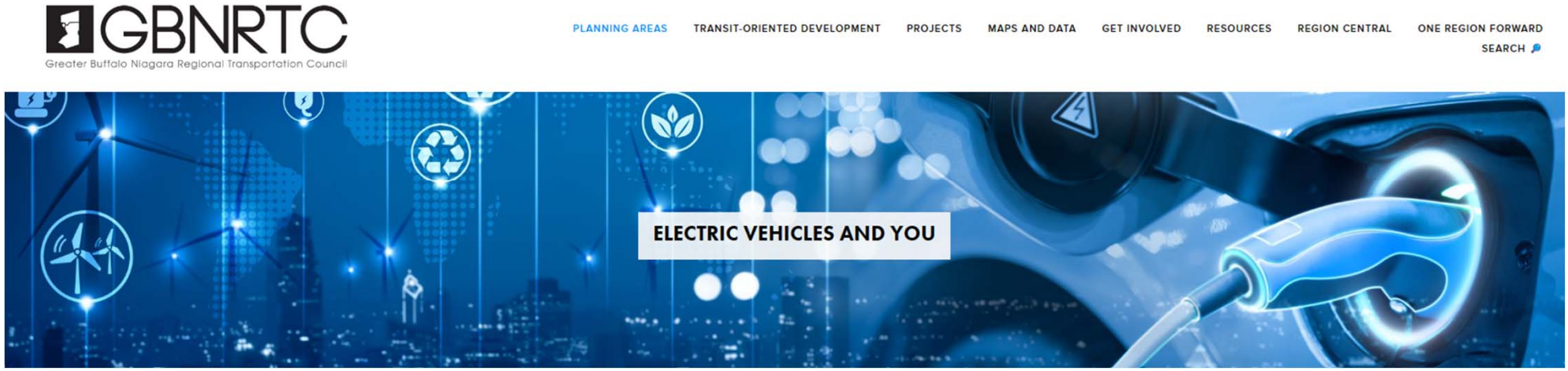
Request a Demo

Manage all traffic data in one unified platform through robust data visualizations, reports, and automated metrics. Integrate reports, tube counts, speed sensors, computer vision, loops and more.

Next Steps

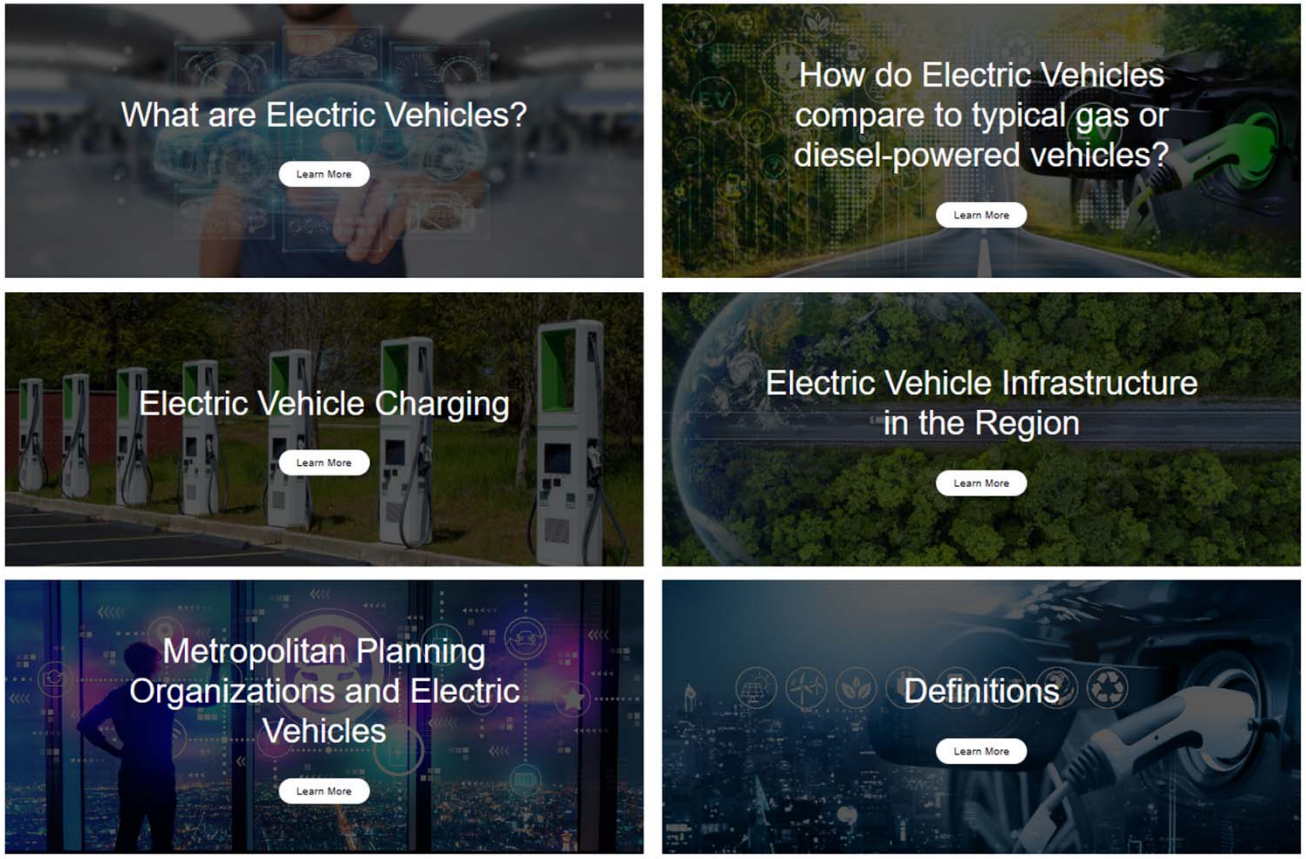
- Continue deployment of Miovision in the Buffalo Niagara Region.
- Purchase of portable scout camera for quick turnaround counts and off road trails.
- Miovision Scout cameras can be used for specialized Bike & Pedestrian counts.
- User friendly Data Management Platform.

E. EV Website & Rollout



https://www.gbnrtc.org/electric-vehicles-and-you

E. EV Website & Rollout



E. EV Website & Rollout

Digital Marketing Treatment and Campaigns

Social Media

- EV Rollout Program - Initial post announcing the official rollout of the EV Website to all of our social media platforms with link to direct all audiences to the site
- Follow up marketing and campaigns will be guided in accordance to new information and/or funding opportunities

Mass Email Marketing

- EV Rollout Program - Initial email blast announcing the official rollout of the EV Website with link to direct all audiences to the site
- Target Audience: Municipalities and general public
- Follow up mass marketing emails will be guided in accordance to new information and/or funding opportunities

Other Business

Adjournment

NEXT POLICY MEETING: TBD

Greater Buffalo-Niagara Regional Transportation Council

Thank You!