

MEMORANDUM

TO: Planning Committee Members & Alternates
FROM: James Stack, Executive Director JS
DATE: February 2, 2023
SUBJECT: Recommendation to the GTC Board concerning amending the *National Performance Measures Report for the Genesee-Finger Lakes Region* and the *2023-2027 Transportation Improvement Program* by revising the HSIP and Highway Safety Performance Targets / Proposed Council Resolution 23-6

Highway Safety Performance Targets

The Highway Safety Performance Targets are updated on an annual basis. Since the first adoption of the Highway Safety Performance Targets, GTC has included the agreed upon targets in both the *National Performance Measures Report for the Genesee-Finger Lakes Region* and the *Transportation Improvement Program (TIP)*, per the federal guidance.

NYS DOT has conducted its annual analysis of crash data and has coordinated with the Governor’s Traffic Safety Committee (GTSC) to establish safety targets for 2023, based upon a five-year history of crashes through 2020. The 2023 safety targets reported by GTSC via its Annual Highway Safety Report and 2023 safety targets reported by NYS DOT via its Highway Safety Improvement Program (HSIP) report, respectively have been submitted to the United States Department of Transportation. As GTC has agreed to support the State’s safety targets, the *National Performance Measures Report for the Genesee-Finger Lakes Region*, incorporated into LRTP 2045 by reference, and the *2023-2027 Transportation Improvement Program* need to be updated to reflect the 2023 targets.

Table 1 – 2023 Highway Safety Targets

Measure	Targets	
	2022	2023
Number of Fatalities	1005.4	988.2
Rate of Fatalities per 100M Vehicle Miles Traveled (VMT)	.818	.836
Number of Serious Injuries	11,173.9	11,086.2
Rate of Serious Injuries per 100M VMT	9.084	9.337
Number of Nonmotorized Fatalities and Serious Injuries	2,644.1	2,633.4

As part of this update, GTC staff will make editorial changes to the *2023-2027 TIP* where there are references to Resolution and/or dates of GTC Board action.

The following items are included for your consideration:

- Proposed Resolution 23-6** (Amending the *National Performance Measures Report for the Genesee-Finger Lakes Region* and the *2023-2027 Transportation Improvement Program* by revising the HSIP and Highway Safety Performance Targets)

2. **Fact Sheet** – NYS Safety Target Setting Methods – 2023 Targets (NYSDOT Office of Traffic Safety)
3. **Table 2** – NYS Annual Performance Measures and Targets (2011-2023)

Recommended Action:

Recommend action by GTC Board on proposed Council Resolution 23-6, amending the National Performance Measures Report for the Genesee-Finger Lakes Region and the 2020-2024 Transportation Improvement Program.

GENESEE TRANSPORTATION COUNCIL

RESOLUTION

Resolution 23-6 **Amending the *National Performance Measures Report for the Genesee-Finger Lakes Region* and the *2023-2027 Transportation Improvement Program* by revising the **HSIP and Highway Safety Performance Targets****

WHEREAS,

1. The Genesee Transportation Council (GTC) has been designated by the Governor of New York State as the Metropolitan Planning Organization responsible for transportation planning for the nine-county Genesee-Finger Lakes Region, including the Rochester Metropolitan Planning Area (MPA);
2. Title 23, Section 134 of the United States Code requires that each MPO undertake a transportation planning process that shall provide for the establishment and use of a performance-based approach to transportation decision making to support the national goals;
3. Title 23, Section 134 of the United States Code requires that each MPO establish performance targets that address the performance measures to use in tracking progress toward attainment of critical outcomes for the region;
4. GTC adopted the *National Performance Measures Report for the Genesee-Finger Lakes Region* (PM Report) on September 6, 2018 and has since amended the PM Report to formally incorporate the agreed upon performance targets into GTC's planning documents and planning process;
5. The PM Report allows GTC to be able to respond to changes in targets made by RGRTA and/or NYSDOT in the most efficient manner possible;
6. GTC adopted the *2023-2027 Transportation Improvement Program* (TIP) on August 25, 2022 and expects to amend the TIP on February 23, 2023;
7. The TIP has been developed in accordance with the adopted *GTC Transportation Improvement Program Procedures Manual* and the *Agreement by and among GTC, New York State Department of Transportation, and Rochester Genesee Regional Transportation Authority*, which identifies and specifies the responsibilities and cooperative procedures for carrying out transportation planning (including without limitation corridor and subarea studies) and programming consistent with Title 23 Section 450 (23 CFR 450) Subpart C of the Code of Federal Regulations;
8. 23 USC §134(j)(2)(D) states that MPO TIPs "shall include, to the maximum extent practicable, a description of the anticipated effects of the transportation improvement

program toward achieving the performance targets established in the metropolitan transportation plan, linking investment priorities to those performance targets”;

9. Long-Range Transportation Plans (LRTP) and TIPs adopted or amended after January 26, 2018 must include those targets for the Highway Safety Improvement Program and Highway Safety;
10. GTC agreed to support the NYSDOT targets for Highway Safety Improvement Program and Highway Safety per Title 23 Part 490.307 of the Code of Federal Regulations;
11. The proposed changes to the PM Report and the TIP are depicted in Exhibit 1 of this Resolution;

NOW, THEREFORE, BE IT RESOLVED

1. That GTC hereby amends the *National Performance Measures Report for the Genesee-Finger Lakes Region* and the *2023-2027 Transportation Improvement Program (TIP)* by revising the HSIP and Highway Safety targets and associated narrative;
2. That the 2023 HSIP and Highway Safety targets table for the TIP is hereby amended as shown in Exhibit 1;
3. That all associated references to GTC actions and dates are revised as appropriate; and
4. That this resolution takes effect immediately.

CERTIFICATION

The undersigned duly qualified Secretary of the Genesee Transportation Council certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting of the Genesee Transportation Council held on February 23, 2023.

Date _____

CHRISTOPHER REEVE, Secretary
Genesee Transportation Council

Exhibit 1 – 2023 Highway Safety Targets

Measure	Targets
	2023
Number of Fatalities	988.2
Rate of Fatalities per 100M Vehicle Miles Traveled (VMT)	.836
Number of Serious Injuries	11,086.2
Rate of Serious Injuries per 100M VMT	9.337
Number of Nonmotorized Fatalities and Serious Injuries	2,633.4

NYS SAFETY TARGET SETTING METHODS – 2023 TARGETS

NYS Department of Transportation, Office of Traffic Safety

Overview

As per the Highway Safety Improvement Program final rule (23 CFR Part 490); States are required to set targets for five safety performance measures.

The measures are the 5-year rolling averages for:

1. Number of Fatalities*
2. Rate of Fatalities (Fatalities / 100M VMT) *
3. Number of Serious Injuries*
4. Rate of Serious Injuries (Serious Injuries / 100M VMT)
5. Number of Non-motorized Fatalities and Non-motorized Serious Injuries

** Must be identical to the National Highway Traffic Safety Administration's Highway Safety Plan targets set annually by the Governors Traffic Safety Committee (GTSC).*

MPO Requirements

MPOs establish safety targets by either:

- Agreeing to plan and program projects that contribute toward the accomplishment of the State DOT target or
- Committing to a quantifiable safety target for the metropolitan planning area.

Timeline

- GTSC reports targets in the annual HSP on July 1 each year.
- NYSDOT establishes safety targets in the HSIP annual report on August 31, 2022.
- MPOs must agree to support state targets or establish their own within 180 days of the State establishing and reporting its safety targets. The MPO targets are due February 27, 2023.

NYSDOT's Target Setting Framework

1. Estimate existing trend
 - A linear trendline is used as the forecasting method. It is a clear, straightforward method recommended by FHWA.
 - The five-year moving average (current year plus four preceding years) is used as the data point for each year.
2. Adjust forecast for reasonability
3. Adjust forecast based on external and other factors where necessary

Step 1: Estimate existing trend

- Forecast 2023 using a 5-yr moving average linear trendline.
- Calculate a % change for 2019-2023 vs. 2016-2020.

Step 2: Adjust for reasonability

- Round the % change between 2019-2023 vs. 2016-2020.
- Apply a -1% cap.
The cap allows for a target that forecasts a significant reduction but recognizes that large decreases are difficult to sustain year after year.

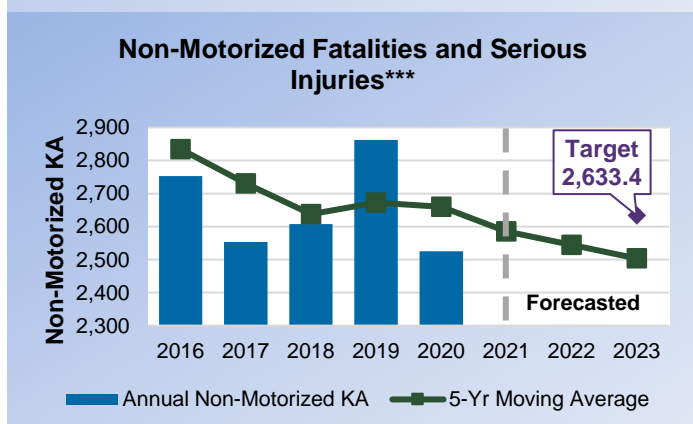
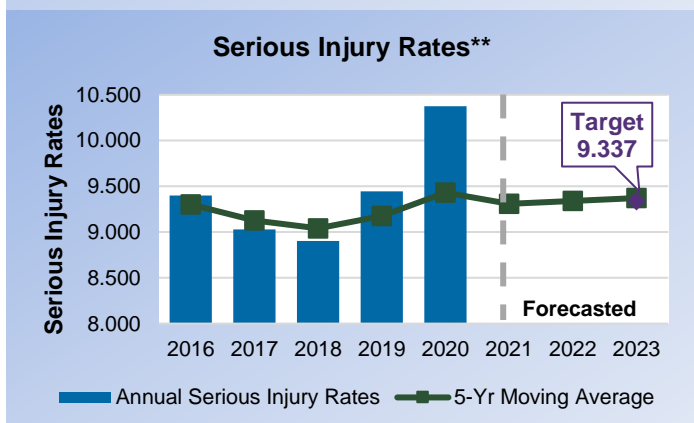
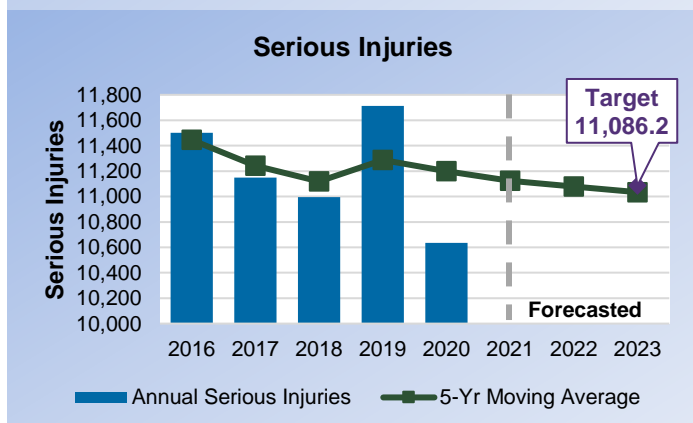
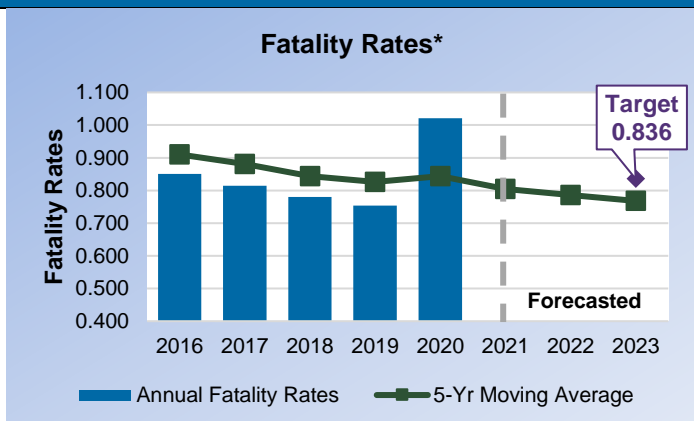
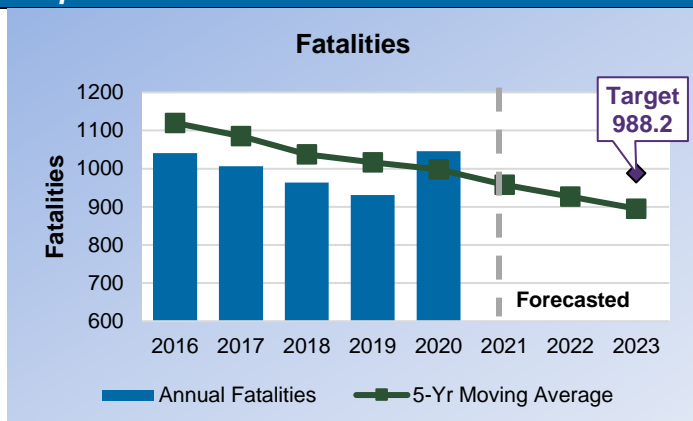
Step 3: Adjust trend for external and other factors

- NYS has a host of safety programs designed to reduce fatal and serious injury crashes including the HSIP program, NYC's Vision Zero and the NYSDOT Pedestrian Safety Action Plan (PSAP).
- The safety program goal is to continue to reduce crashes despite the impacts of COVID-19.

2023 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 1% Cap	
	2020 Annual	2020 Baseline 2016-2020 avg.	2023 Forecast	% Change 2019-2023 vs. 2016-2020	Rounded / Capped Percent	NYS DOT Target 2023
Number of Fatalities	1,046	998.2	895.1	-11.46%	-1.00%	988.2
Fatality Rate	1.021	0.844	0.768	-9.01%	-1.00%	0.836
Number of Serious Injuries	10,634	11,198.2	11,034.1	-1.47%	-1.00%	11,086.2
Serious Injury Rate	10.377	9.431	9.370	-0.65%	-1.00%	9.337
Number of Non-Motorized Fatalities and Serious Injuries	2,525	2,660.0	2,503.3	-5.89%	-1.00%	2,633.4

Graphs



Note: The 5-yr. trend was generated using the FORECAST function in Excel. The 5 yr. trend used the 5-yr. averages on 2012-2016, 2013-2017, 2014-2018, 2015-2019, and 2016-2020 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.

Table 2 - NYS Annual Performance Measures and Targets (2011-2023)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Number of Fatalities													
Annual	1,171	1,180	1,202	1,041	1,136	1,041	1,006	943	938	1,046			
5-Yr Avg					1,146	1,120	1,085	1,033	1,013	995			
Target								1,086.0	1,072.1	1,040.4	1,012.7	1,005.4	988.2
Fatality Rate													
Annual	0.956	0.963	0.967	0.84	0.933	0.853	0.815	0.763	0.755	1.021			
5-Yr Avg					0.932	0.911	0.882	0.841	0.824	0.841			
Target								0.870	0.858	0.826	0.824	0.818	0.836
Number of Serious Injuries													
Annual	12,012	12,163	11,609	10,874	11,077	11,501	11,148	10,996	11,712	10,634			
5-Yr Avg					11,547	11,445	11,242	11,119	11,287	11,198			
Target								10,854.0	10,987.0	11,017.0	10,896.8	11,173.9	11,086.2
Serious Injury Rate													
Annual	9.804	9.924	9.335	8.771	9.102	9.427	9.028	8.903	9.425	10.377			
5-Yr Avg					9.387	9.312	9.133	9.046	9.177	9.432			
Target								8.540	8.620	8.709	8.865	9.084	9.337
Number of Non-Motorized Fatalities and Serious Injuries													
Annual	2,949	3,078	3,078	2,692	2,593	2,764	2,558	2,603	2,875	2,525			
5-Yr Avg					2,878	2,841	2,737	2,642	2,679	2,665			
Target								2,843.0	2,726.0	2,626.8	2,583.5	2,644.1	2,633.4