CHAPTER 1

PLAN GOALS AND OBJECTIVES

PLAN GOALS AND OBJECTIVES

SUSTAINABLE ACCESSIBILITY

The 2045 vision for the future of the Tompkins County transportation system continues to embrace the concept of Sustainable Accessibility initially presented in the 2030 plan. This concept expands our vision of transportation, transforming transportation systems into mobility networks that meet the needs of pedestrians, bicyclists, transit users, rail, freight, and motorists while addressing vehicular congestion, equity, energy and environmental concerns. Sustainable Accessibility can be defined as the ability to get to a destination or complete a task in an efficient, convenient, and reliable way, while using technologies and services that minimize environmental impacts, promote economic vitality and ensure equity in the provision of transportation to the community.

The challenge of implementing the vision of Sustainable Accessibility is to identify opportunities

and begin to integrate transportation modes (i.e. transit, bikes, walking, cars, car sharing, van pool, trucks, rail, etc.) so they address personal transportation and commercial needs in ways that will enhance our quality of life and promote sustainable growth in Tompkins County. The vision of Sustainable Accessibility will require insight into the social structure as well as the infrastructure of the community so that the enhancements to the transportation system can serve all communities equitably.

Sustainable Accessibility integrates transportation with land use planning to promote development patterns that reduce dependency on the automobile as the sole source of transportation. With Sustainable Accessibility at its core, the transportation network will integrate multiple modes of transportation so that traveling by transit, walking, bicycling, car share, car pool, etc. becomes as attractive, convenient and cost effective as using a private car. By bringing all modes to bear, the transportation system becomes more efficient and more resilient. A vision of Sustainable Accessibility will also embrace new transportation options, technologies and programs as they emerge.

The components of Sustainable Accessibility affecting accessibility include: Mobility, Proximity and, Connectivity. Environment, Equity and Quality of Life are components of sustainability. The integration of these components contributes to the ultimate goal of achieving a transportation system that is sustainable and resilient.

2045 Long Range Transportation Goals

Overarching goals that pervade all other goals:

- To improve the safety of the transportation system
- To enhance coordination among transportation providers to the benefit and convenience of users
- To minimize negative environmental impacts of transportation including: dependency on fossil fuel energy use, emissions, noise pollution and nonpoint source pollution
- To reduce vehicle miles of travel and the number of drive-alone trips
- To ensure the equitable availability of mobility options in the community



Sustainable Accessibility

Goal: To develop a transportation system for Tompkins County that is sustainable, equitable and efficient, resulting in Sustainable Accessibility for all travelers.

The LRTP lays out a process to achieve Sustainable Accessibility that focuses on utilizing transportation resources in a manner that optimizes the choice of modes, minimizes environmental impact and enhances the quality of life of all users. An outcome of this approach is to reduce dependency on the private automobile as the principal mode of transport by expanding the transportation mode choices available to travelers and promoting more transport-efficient land use patterns. This will result in a more resilient transportation system that promotes enhanced mobility and reduces congestion, vulnerability to fuel supply fluctuations, tail pipe emissions, and traffic related deaths and injuries.

Accessibility Components

Mobility

Goal: To promote the implementation of transportation services, programs and projects that enhance mobility.

Mobility refers to the movement of people or goods (freight). Mobility increases as travelers and freight have more transportation mode options and increased convenience to access their destinations. Enhanced coordination between transportation modes also leads to increased mobility. Modern communication and wireless technologies can serve as substitutes for travel and help individuals access their destinations and complete tasks without the need to be physically present. These technologies can be considered to increase mobility by enhancing accessibility.

Connectivity

Goal: To maintain and improve transportation networks to enhance safety, multimodal and intermodal connectivity and facilitate the movement of people and goods.

Connectivity refers to the different transportation networks serving an area and the density of connections between different origins and destinations. A well-connected area has transportation networks with many links, numerous modal options, and minimal service dead-ends. As connectivity increases, travel times decrease and route options and transportation mode options increase, allowing for more direct travel between destinations, and creating a more accessible and resilient system. Connectivity is achieved through networks of infrastructure (i.e. roads & bridges, sidewalks, trails, bicycle routes, transit, etc.) and communications (wireless services, internet access, etc.).

Proximity

Goal: To achieve land development patterns that enable the efficient and equitable provision of multimodal transportation services.

Proximity refers to the location of different trip origins and destinations. Proximity is considered greater in areas with mixed land uses (i.e. residential close to shops and employment) and higher development densities. As proximity increases, travel times decrease and transportation options other than personal car use become more feasible. Increased proximity allows for more efficient use of transit (including fixed-route service, car share and vanpools), bicycling and walking, resulting in a lower-cost, more accessible and resilient transportation system. The relationship between mobility, connectivity, and proximity supports land use settlement patterns that promote compact, mixed use development which can impact physical movement by both shortening travel distances and prompting travelers to use modes other than the automobile, i.e. walking, bicycling, transit, etc.

Coordination of Accessibility Components

Goal: To develop a coordinated transportation system for Tompkins County that is multimodal and seamless, that achieves greater operational efficiencies, and increases the safety and convenience of users.

Increasing coordination between modes achieves greater operational efficiencies and increases the convenience to users. Coordination between modes extends to all aspects of any operation including the provision of single payment forms, seamless intermodal connections, and quality information for customers. Transportation works best when it is customer based and centered on providing ease of access, comfort, safety, reliability and convenience. This goal brings together components of connectivity (networks) and mobility (travel modes and freight) in a dynamic format that seeks to improve efficiency and convenience for users.

Technology and Accessibility

Accessibility includes consideration of technologies such as the internet, wireless networks, etc., that allow users to have access to their destinations and complete their desired tasks remotely. This not only relates to telecommuting, but also the numerous tasks that can be completed via the internet and wireless services such as bank transactions, retail purchases, and other forms of e-commerce.

Also critical are the communication technologies that provide traveler information, trip planning assistance, freight tracking, and facilitate shared transportation and many travel demand management programs.

Sustainability Components

Equity

Goal : To achieve equity in transportation policy and projects that spur fundamental improvements in communities across Tompkins County.

Equity (also called justice or fairness) refers to the balance in the distribution of impacts (benefits and costs) of transportation projects and policies. Transportation planning decisions often have significant equity impacts, and equity concerns often influence planning debates. Accessible, affordable transportation is disproportionately important to low income and minority communities, whether rural or urban. Equity considerations must be part of all transportation policy and project decisions.

Quality of Life

Goal: Develop a transportation system that sustains and enhances the quality of life for Tompkins County residents and visitors.

Quality of life is the degree of well-being felt by an individual or group of people. Unlike standard of living, it is not a tangible concept, and so cannot be measured directly. It is virtually impossible to predict the quality of life of a specific individual, since the combination of attributes that leads one individual to be content is rarely the same for another individual. However, one can assume with some confidence that the higher average level of diet, shelter, safety, as well as freedoms and rights a general population has, the better overall quality of life it experiences.

Transportation affects quality of life in many ways. Our transportation systems generate various negative impacts - congestion, noise, water quality, air quality, health/safety (crashes) - which can negatively affect quality of life at the street, neighborhood, city or regional level. A transportation system that contributes positively to the quality of life in an area will seek to minimize negative impacts by enhancing the components for Sustainable Accessibility.

Environment

Goal : To work progressively towards a transportation system that will have zero-net negative impact on the environment.

The transportation sector has direct impacts on the environment, including among others tail pipe emissions from fossil fuel based engines, and impacts on water quality from runoff from roads and other impervious asphalt and concrete surfaces. The indirect environmental impacts of transportation are many due to the complexity of systems involved, including networks (roads, rail, etc.) and vehicles (cars, trucks, trains, bicycles). A life cycle assessment (LCA, also known as life cycle analysis and cradle-to-grave analysis) of the environmental impacts from manufacturing, construction, use, and on to eventual disposal, would show massive environmental impacts from the transportation sector. Implementation of Sustainable Accessibility minimizes these direct and indirect negative environmental impacts through the reduction in the number of motor vehicles and vehicle miles traveled inherent in a more efficient and integrated transportation system.

ACTION PLAN FOR SUSTAINABLE ACCESSIBILITY

Transportation touches nearly all of people's daily activities. Efforts should be made to expand the number of options available to people for safe, efficient, and healthy transportation. The Sustainable Accessibility goals included in this plan, seek to expand the variety of effective options to meet the community travel needs, including biking on dedicated bicycling facilities, walking on sidewalks, hopping on a bus, connecting for a shared ride, driving electric or hybrid cars, as well as driving on safe roads. To make sure that "driving alone" is not always the best transportation solution to get somewhere, it is important to make it easy, safe and even fun, for people to choose other more sustainable means to move from place to place.

Besides expanding choice, broadening transportation alternatives can result in a healthier population, less traffic congestion and emissions, fewer crashes, and fewer environmental impacts. A sustainable transportation system seeks to minimize negative impacts while providing a good level of service to all in the community. This will require insight into the social structure of the community, as well as the infrastructure components, to ensure that enhancements to the transportation system service all communities equitably. Much is being done in the transportation sector to bring innovative technologies into use. Numerous communication technology applications are at different levels of development and implementation. Vehicle and infrastructure innovations are constantly being developed. The ITCTC and its partners will monitor and take advantage of new technologies and program concepts that can serve the Tompkins County area.

Tompkins County has a long history of multijurisdictional collaboration in transportation. For example, TCAT, Gadabout, car sharing and bike sharing are four important ongoing programs that were developed through collaboration by different parties.

Ongoing initiatives with higher education institutions, human service agencies, health and transportation advocates continue to energize transportation planning and program implementation in support of many of the goals of the LRTP.

The LRTP has been developed in coordination with the Tompkins County Comprehensive Plan. (www.tompkinscountyny.gov/planning/ comprehensive-plan).

These documents share data and have policies, objectives and suggested actions based on similar fundamental goals.

The key implementation areas listed below, when taken together, will best and most realistically implement the Sustainable Accessibility goals of the Long Range Transportation Plan.

• Maintain Existing Critical Transportation Infrastructure and Systems

- Roads
- Bridges
- Transit
- Active transportation trails, bicycle lanes, etc.
- Operating systems traffic lights, signs, wayfinding, etc.
- Expand and Promote Multimodal Mobility Options and Integration
 - Active transportation
 - Transit
 - Shared transportation
 - New technologies and programs
- Collaboration
 - Transportation Demand Management (TDM)
 - · Mobility as a Service/Mobility Management
 - Coordination of Transportation Services
 - Education/Outreach
 - Marketing

The different aspects of the Action Plan are explored throughout the LRTP.

LRTP ACTION PLAN



FEDERAL REQUIREMENTS

Background

Pursuant to federal transportation planning requirements, states, Metropolitan Planning Organizations (MPOs), and transit providers must employ a transportation performance management approach in carrying out their federally required planning and programming activities. Title 23 Section 150(b) of the United States Code [23 USC §150(b)] includes seven national performance goals for the Federal-Aid Highway Program and Chapter 49 Section 5301 of the United States Code [49 USC §5301] specifies general purposes of Federal-Aid Transit Program. Combined, these include:

Safety: To achieve a significant reduction in traffic fatalities and serious injuries on all public roads and public transportation systems.

Condition: To maintain the highway infrastructure and transit capital assets (e.g., rolling stock, equipment, infrastructure, and facilities) in a state of good repair.

Congestion Reduction: To achieve a significant reduction in congestion on the National Highway System (NHS).

System Reliability: To improve the efficiency of the surface transportation system.

Freight Movement and Economic Vitality: To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

Environmental Sustainability: To enhance the performance of the transportation system while protecting and enhancing the natural environment.

Reduced Project Delivery Delays: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

MPOs must promote **continuing**, **cooperative**, **and comprehensive planning** that improves the performance of the transportation network.

USDOT established several performance measures that states, MPOs, and public transportation providers must use to conduct a performance-based approach to transportation decision making to support the national goals described above. The performance measures address highway safety, pavement and bridge condition, passenger and freight travel reliability, congestion and mobile source emissions, transit asset condition, and transit safety.

In addition, federal legislation stipulates that "the metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the following factors":

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

2. Increase the safety of the transportation system for motorized and non-motorized users;

3. Increase the security of the transportation system for motorized and non-motorized users;

4. Increase accessibility and mobility of people and freight;

5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

7. Promote efficient system management and operation;

8. Emphasize the preservation of the existing transportation system;

9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and

10. Enhance travel and tourism.

The Sustainable Accessibility vision of this plan presents a structure for Tompkins County that is supportive of the seven national goals and ten planning factors. Federal regulations require the use of a performance-based approach in the long-range transportation plan that will support the seven national goals. Performance-based planning and programming (PBPP) refers to the application of performance management within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system. Under this directive, plan objectives are specific, measurable statements that support achievement of goals. Performance Measures are used to support objectives and serve as a basis for comparing alternative improvement strategies (investment and policy approaches) and for tracking results over time.

System Performance Report

The Ithaca-Tompkins County Transportation Council's 2045 Long-Range Transportation Plan was adopted on December 17, 2024. LRTPs must include performance targets associated with the following FHWA and FTA performance measures rulemakings:

- Highway Safety Improvement Program (HSIP) and Highway Safety (PM1)
- Transit Asset Management
- Pavement and Bridge Condition (PM2)
- System Performance/Freight/Congestion Mitigation & Air Quality Improvement (CMAQ) Program (PM3)
- Transit Safety

MPOs must also include a system performance report in the LRTP that describes the condition and performance of the transportation system with respect to required performance targets, and reports on progress achieved in meeting the targets compared to baseline data and previous system performance reports. This portion of the adopted/amended LRTP meets these requirements.

Highway Safety (PM1)

The Federal Highway Administration (FHWA) Highway Safety (PM1) rule established five performance measures for safety on all public roads.

The performance measures are five-year rolling averages:

- Number of Fatalities
- Rate of Fatalities per 100M Vehicle Miles Traveled (VMT)
- Number of Serious Injuries
- Rate of Serious Injuries per 100M VMT
- Number of Nonmotorized Fatalities and Serious Injuries

Baseline Safety Conditions and Performance Targets

Table 1 presents the 2023 and 2024 targets, as well as the last five years for which final data is available. To be consistent with the performance 2017 2018 2019 2020 2021 2023 Targets

2024

Table 1. Statewide Safety Performance, 2023 And 2024 Targets

						Targets	Targets
Number of Fatalities	1,085	1,038	1,016	998	1,021	988.2	1,016.1
Rate of Fatalities per 100 Million VMT	0.881	0.844	0.827	0.844	0.890	0.836	0.886
Number of Serious Injuries	11,242	11,119	11,287	11,198	11,146	11,086.2	11,089.9
Rate of Serious Injuries per 100M VMT	9.127	9.041	9.176	9.431	9.654	9.337	9.606
Number of Combined Non-Motorized Fatalities and Non-Motorized Serious Injuries	2,731	2,638	2,672	2,660	2,642	2,633.4	2,628.4

measures, all data shown below is a five-year rolling average. The Ithaca-Tompkins County Transportation Council agreed to support the New York State Department of Transportation (NYSDOT) statewide 2024 targets on December 19, 2023 via Resolution 2023-09: Supporting NYSDOT's 2024 Targets for Safety Performance Measures.

Description of Progress

As shown in Table 1, the five-year rolling average for number of fatalities, number of serious injuries, and number of non-motorized fatalities and serious injuries in 2021 is lower than 2017. However, the rate of fatalities and serious injuries in 2021 is higher than 2017. FHWA annually completes an assessment of progress toward achieving safety targets for each state. A state makes significant progress toward its safety targets when at least four of the five targets have been met, or the actual outcome was better than the baseline performance. If a state has not met or made significant progress toward meeting performance targets, the State DOT must comply with 23 U.S.C. 148(i) for the subsequent federal fiscal year. This requires minimum investments in highway safety projects through the Highway Safety Improvement Program (HSIP) and submission of an HSIP Implementation Report.

The 2045 LRTP addresses safety needs, strategies, and programs within the ITCTC and safety is identified as an overarching goal of the plan. The ITCTC Objectives and Performance Measures table at the end of this chapter shows a variety of safety measures that have been tracked since 2014. Safety is a primary consideration in the selection of projects to be included in the 5-year Transportation Improvement Program of surface transportation projects funded with through the metropolitan planning process. In addition, the ITCTC prepares crash data summary reports as data becomes available and communicates analysis results to partner agencies and the community as whole.

Transit Asset Management

The Federal Transit Administration (FTA) Transit Asset Management (TAM) rule established the transit asset performance measures presented in Table 2.

FTA defines two tiers of public transportation providers based on number of vehicles and mode parameters. Tier I transit agencies, which are generally larger providers, establish their own TAM targets, while Tier II providers, generally smaller agencies, may participate in a group plan where targets are established by a plan sponsor (NYSDOT) for the entire group. NYSDOT's 2022 Group TAM Plan is available at ttps://www.dot.ny.gov/ divisions/policy-and-strategy/publictrans-respository/NYSDOT%20%20 Group%20TAM%20Plan%20July%20 22_v7_Final.pdf

ASSET CATEGORY	PERFORMANCE MEASURES AND ASSET CLASS
Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either met or exceeded their Useful Life Benchmark (ULB)
Equipment	Percentage of non-revenue, support-service and maintenance vehicles within a particular asset class that have met or exceeded their ULB
Infrastructure	Percentage of track segments with performance restrictions
Facilities	Percentage of facilities within an asset class rated below condition 3.0 on the Transit Economic Requirements Model (TERM) scale

Table 2. FTA TAM Performance Measures

The ITCTC area has a two Tier II providers operating in the region: Tompkins Consolidated Area Transit (TCAT) and Gadabout Transportation Services, Inc. (Gadabout). Gadabout is the paratransit provider for TCAT. Gadabout is included in the group TAM plan developed by NYSDOT; TCAT developed its own TAM Plan and establishes its TAM targets.

Baseline Conditions and Performance Targets

Table 3 presents the baseline performance/ conditions and the 2025 targets for transit assets in the ITCTC planning area. TCAT set the transit asset targets listed in Table 3 on April 2, 2021. The ITCTC agreed to support these transit asset targets on June 19, 2018 via Resolution 18-03: Endorsing the Targets Established by TCAT for the State of Good Repair Performance Measures for Capital Assets.

Description of Progress

The LRTP reflects the goals, objectives, performance measures, and targets as they are described in other public transportation plans and processes, including TCAT's Tier II Transit Asset Management Plan, and the current ITCTC 2045 LRTP. The LRTP strongly supports a transportation system that helps reduce car dependency. An effective public transportation system is essential to advance this position. The mobility, connectivity, equity and quality of life goals in the LRTP are particularly supportive and dependent of public transportation. The Objectives and Measures table at the end of this chapter includes transit measures under the System Reliability section.

Pavement and Bridge Condition Measures (PM2)

The FHWA Pavement and Bridge Condition rules (PM2) established the following six performance measures for all bridges and pavements on the National Highway System (NHS):

- · Percent of Interstate pavements in good condition;
- Percent of Interstate pavements in poor condition;
- · Percent of non-Interstate NHS pavements in good condition;
- · Percent of non-Interstate NHS pavements in poor condition;
- · Percent of NHS bridges (by deck area) classified as in good condition; and
- · Percent of NHS bridges (by deck area) classified as in poor condition.

NYSDOT Pavement and Bridge Condition Baseline Performance and Established Targets

NYSDOT established statewide PM2 targets for 2023 and 2025 on December 16, 2022. The ITCTC agreed to support NYSDOT's PM2 performance targets on April 18, 2023 via Resolution 23-04: Supporting New York State Department Of Transportation's Updated Targets For Performance Measures Related To Bridge And Pavement Conditions and System and Freight Performance. By adopting NYSDOT's targets, the ITCTC agrees to plan and program projects that help NYSDOT achieve these targets. Table 4 presents recent performance for each PM2 measure for New York as well as the 2023 and 2025 statewide targets established by NYSDOT.

The ITCTC planning area includes two roadways in the National Highway System (NHS): all of State Route 13 through Tompkins County, and State Route 79 from the City of Ithaca, southeast to the Tioga County line. These include 26.69 center lane miles urban and 28.67 miles rural sections. NYSDOT and the City of Ithaca have active pavement and bridge maintenance initiatives along the NHS corridors. The SR-79/E. State Street approach to the center of the City of Ithaca was reconstructed in the early 2020's, including reconstruction of a critical retaining wall; while SR-13/Meadow St./Fulton St. and other connector roads through the City of Ithaca are scheduled for repaving/reconstruction in 2025. Additionally, a corridor planning study was conducted for SR-13 northeast of Ithaca from Warren Rd to the Village of Dryden (see https://www.tompkinscountyny.gov/planning/transportation-choicesrt13corridor).

ASSET CATEGORY: PERFORMANCE MEASURE	ASSET CLASS	USEFUL LIFE BENCHMARK	BASELINE CONDITION	2025 TARGET
Rolling Stock				
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life	BUS	X	—	20%
Benchmark (ULB)	CUTAWAY BUS	X	_	20%
Equipment				
	Non-Revenue/Service Automobile	x	_	25%
Age - % of non-revenue vehicles within a particular asset class that have met or	Trucks and other Rubber Tire Vehicles	x	_	25%
exceeded their ULB	Maintenance Equipment	X	—	20%
	Other (On-bus equipment)	x	_	20%
Facilities				
	Administration	N/A	_	10%
Condition - % of facilities with a condition rating below 3.0 on the FTA TERM Scale	Maintenance	N/A	_	10%
	Passenger Facilities	N/A		10%

Table 3. Baseline Transit Asset Performance/Condition and Targets

There are not interstate roads in Tompkins County. The interstate data on Table 4 is shown for information purposes but it is not applicable to the ITCTC planning area. On the non-Interstate NHS system, pavement in good condition decreased slightly from 2017 to 2021, while pavement in poor condition decreased. NYSDOT has made positive progress in increasing the percent of NHS bridge deck area in good condition from 2017 to 2021, from 22.8 percent to 25.3 percent. The percent in poor condition rose slightly over the same time period. The ITCTC 2045 LRTP addresses preservation of the transportation system and identifies infrastructure needs within the Ithaca/ Tompkins region and provides funding for targeted pavement and bridge condition improvements. The Action Plan for implementation of the Sustainable Accessibility goals of the LRTP list as a key implementation area to "maintain existing critical transportation infrastructure and systems". Existing roads and bridges are essential components to achieving goals of Mobility and Connectivity. The bulk of funding included in the ITCTC TIP goes to maintenance of road and bridge infrastructure. Future ITCTC LRTP System

PERFORMANCE MEASURE	2017 BASELINE	2019	2021	2023 TARGET	2025 TARGET
Percent of Interstate pavements in good condition	N/A*	51.1%	45.3%	53.2%	54.3%
Percent of Interstate pavements in poor condition	N/A*	1.1%	1.1%	1.4%	1.7%
Percent of non-Interstate NHS pavements in good condition	20.4%	13.4%	18.9%	22.3%	20.7%
Percent of non-Interstate NHS pavements in poor condition	8.3%	7.5%	7.6%	9.3%	10.9%
Percent of NHS bridges (by deck area) in good condition	22.8%	26.0%	25.3%	24.1%	21.1%
Percent of NHS bridges (by deck area) in poor condition	10.6%	9.6%	11.3%	12.5%	12.8%

Table 4. Pavement and Bridge Condition (PM2) Statewide Performance and Targets

* FHWA did not require states to collect and report baseline performance for the Interstate pavement measures.

Performance Reports will incorporate data from new pavement and bridge performance reports and progress toward achieving targets.

System Performance, Freight, and Congestion, Mitigation & Air Quality Improvement Program Measures (PM3)

The FHWA System Performance, Freight, and Congestion, Mitigation and Air Quality Improvement Program (CMAQ) Performance Measures Final rule (PM3) established the following six performance measures:

For the National Highway Performance Program (NHPP)

- 1. Percent of person-miles on the Interstate system that are reliable;
- 2. Percent of person-miles on the non-Interstate NHS that are reliable;

For the National Highway Freight Program (NHFP)

3. Truck Travel Time Reliability Index (TTTR);

For the CMAQ Program

- 4. Annual hours of peak hour excessive delay per capita (PHED);
- 5. Percent of non-single occupant vehicle travel (Non-SOV); and
- 6. Cumulative two-year and four-year reduction of on-road mobile source emissions for CMAQ funded projects (CMAQ Emission Reduction).

The three CMAQ performance measures listed above are applicable only in areas that do not attain or have only recently attained national air quality standards. The Ithaca-Tompkins County Transportation Council is not subject to establishing targets for these performance measures.

NYSDOT PM3 Baseline Performance and Established Targets

NYSDOT established PM3 targets for 2023 and 2025 on December 16, 2022. The ITCTC agreed to support NYSDOT's PM3 performance targets on April 18, 2023 via Resolution 23-04: Supporting New York State

Department of Transportation's Updated Targets For Performance Measures Related To Bridge And Pavement Conditions and System and Freight Performance. By adopting NYSDOT's targets, the ITCTC agrees to plan and program projects that help NYSDOT achieve the State's targets.

Table 5 presents recent performance for the applicable PM3 measures as well as the 2023 and 2025 targets established by NYSDOT.

The ITCTC planning area includes two roadways in the National Highway System (NHS): all of State Route 13 through Tompkins County, and State Route 79 from the City of Ithaca, southeast to the Tioga County line. These include 26.69 center lane miles urban and 28.67 miles rural sections. There are not interstate system roadways in Tompkins County. The ITCTC recognizes the importance of the NHS roadways as main commuter and freight routes and as connectors to the nearest interstate, I-81, at the City of Cortland and the Village of Whitney Point. The ITCTC supports NYSDOTS efforts to maintain these roadways to ensure they maintain adequate system performance.

PERFORMANCE MEASURE	2017 BASELINE	2019	2021	2023 TARGET	2025 TARGET
Percent of person-miles on the Interstate system that are reliable	83.2%	78.8%	82.2%	75.0%	75.0%
Percent of person-miles on the non-Interstate NHS that are reliable	N/A	80.3%	85.7%	70.0%	70.0%
Truck Travel Time Reliability index (TTTR)	1.39	1.47	1.38	2.00	2.00

Table 5. System Performance and Freight (PM3) Statewide Performance and Targets

As shown in Table 5, the percent of person-

miles on the Interstate system that are reliable decreased slightly from the 2017 baseline to 2021. For the non-Interstate NHS, a 2017 baseline was not required, however, performance increased notably from 2019 to 2021. TTTR performance decreased from 2017 to 2019, but then improved in 2021, remaining essentially flat over the 2017-2021 period.

The ITCTC 2045 LRTP addresses system performance and freight reliability, identifies infrastructure needs within the Ithaca/Tompkins region, and provides funding for targeted improvements. A corridor planning study was completed in 2020 for SR-13 northeast of Ithaca from Warren Rd to the Village of Dryden (see https://www.tompkinscountyny.gov/planning/transportation-choicesrt13corridor). This is the busiest section of road in Tompkins County and congestion threatens to impact system performance. The ITCTC will continue to work with local governments and NYSDOT to implement recommendations of the corridor plan in order to safeguard the functionality of this important roadway.

In October 2024, NYSDOT will report system performance results for 2022-2023 to FHWA, as well as progress toward achieving the 2025 targets. Future ITCTC System Performance Reports will incorporate this information.

Transit Safety

The FTA Public Transportation Agency Safety Plan (PTSAP) rule applies to certain providers of public transportation systems. Providers must develop and implement a PTASP that includes performance targets for the following performance measures:

- · Total number of reportable fatalities by mode.
- · Reportable fatality rate per total vehicle revenue miles by mode.
- Total number of reportable injuries by mode.
- Rate of reportable injuries per total vehicle revenue miles by mode.
- Total number of reportable safety events by mode.
- Rate of reportable safety events per total vehicle revenue miles by mode.
- System reliability mean distance between major mechanical failures by mode.

When the public transportation provider establishes targets, it must make the targets available to MPOs to aid in the planning process. MPOs have 180 days after receipt of the initial PTASP targets to establish transit safety targets for the MPO planning area. The MPO must reflect those targets in any LRTP and TIP updated on or after July 20, 2021, and revisits the MPO targets with each LRTP update.

The PTASP rule applies to all operators of public transportation that are a recipient or sub-recipient of FTA

Urbanized Area Formula Grant Program funds under 49 U.S.C. Section 5307, or that operate a rail transit system that is subject to FTA's State Safety Oversight Program. Agencies that operate passenger ferries that are regulated by the United States Coast Guard or rail service that is regulated by the Federal Railroad Administration are not required to develop a PTASP for those modes of service.

Transit Safety Targets

The following transit provider is subject to the PTASP rule operate in the ITCTC region: Tompkins Consolidated Area Transit (TCAT).

Table 6 presents the transit safety targets established by the provider in the ITCTC planning area. TCAT established the transit safety targets on November 12, 2020.

The ITCTC agreed to support TCAT's transit safety targets on September 14, 2021 Resolution 21-04: Supporting Tompkins Consolidated Area Transit's Transit Safety Targets for Transit Safety Performance Measure, thus agreeing to plan and program projects that are anticipated to make progress toward achieving the targets.

Description of Progress

The LRTP directly reflects the goals, objectives, performance measures, and targets as they are described in other public transportation plans and processes, including TCAT's PTASP.

The 2045 LRTP addresses safety needs, strategies, and programs within the ITCTC and safety is identified as an overarching goal of the plan. In addition, mobility and connectivity goals of the plan are supportive of public transportation as an essential component of the Sustainable Accessibility approach of the LRTP. Throughout the LRTP public transportation is highlighted for its importance in achieving mobility, environmental and equity goals within the transportation sector. Inherent in all is the need for safety in the provision of public transport.

The transit safety performance measures are new. Performance for each measure has only recently been assessed and initial targets have been developed. Accordingly, this System Performance Report highlights the initial targets. Future system performance reports will discuss transit safety performance and progress towards meeting the targets over time.

Table 6. Transit Safety Performance Targets for Tompkins Consolidated Area Transit, 2020

	Fixed-route/ Deviated Fixed-route	Paratransit
Fatalities (total)	0	0
Fatalities (per 100k VRM)	0	0
Injuries (total)	3	0
Injuries (per 100k VRM)	0.18	0
Safety Events (total)	5	0
Safety Events (per 100k VRM)	0.30	0
System Failures	71	0
System Reliability (Failures/VRM)	4.20	0





ITCTC OBJECTIVES AND PERFORMANCE MEASURES

The ITCTC has been tracking a series of performance measures since 2014. They were designed to provide a 'local' measure of progress towards achieving the seven Federal highway program performance goals and are complementary to the information presented in the Systems Performance Report above. The 'local' measures are included in the ITCTC Objectives and Measures Table below and on the next page. The source of the data is referenced under the 'Data Source' column and in the notes following the table.



Trending in a negative direction compared to baseline Trending in a positive direction to achieving goals compared to baseline

- * latest TREND compared to baseline
- ** NYSDOT bridge rating methodology changed 2019, resulting in lower numbers
- *** RT 79 added to NHS in 2018

ITCTC OBJECTIVES AND PERFORMANCE MEASURES

FACTOR/OBJECTIVE	MEASURE	DATA SOURCE	BASELINE	TREND 1	TREND 2	TREND 3	TREND 4	TREND*

SAFETY & SECURITY

1. Progressively reduce the number of motor vehicle crash fatalities and serious injuries in Tompkins County.

CRASH FATALITIES	Number of average annual crash fatalities in the last five years	FARS	2009-2013 = 47 5 year avg = 8.2	2016-2020 = 6.8 fatalities	2017-2020 = 6.4 fatalities	2018-2022 = 6.0 fatalities	2019-2023 = 7.0 fatalities	
CRASH FATALITY RATE	Number of average annual crash fatalities per 100MVMT in the last five years	FARS	2009-2013 = 1.07 fatalities	2016-2020 = 1.13 fatalities	2017-2020 = 0.95 fatalities	2018-2022 = 0.88 fatalities	TBD	
CRASH SEVERE INJURIES	Number of average annual serious injuries in the last five years	ALIS/CLEAR	Serious Injuries: 2009-2013 = 564; 5 year avg = 112.8	2016-2020 = 92.8 ser inj	2017-2020 = 84.6 ser inj	2018-2022 = 83.4 ser inj	2019-2023 = 94.4 ser inj	
CRASH SEVERE INJURY RATE	Number of average annual serious injuries per 100MVMT in the last five years	ALIS/CLEAR	Serious Injuries: 2009-2013 = 14.56	2016-2020 = 15.36 ser inj	2017-2020 = 12.57 ser inj	2018-2022 = 12.21 ser inj	2019-2023 = 11.32 ser inj	

2. Progressively reduce the number of annual bicycle and pedestrian crashes and the number of crashes with serious injuries in Tompkins County.

BICYCLE / PEDESTRIAN	Number of average annual bicycle/ pedestrian crashes in the last five years	ALIS/CLEAR	2009-2013 = 289 5 year avg = 57.8 bike/ped	2016-2020 = 55.8 bike/ped	2017-2021 = 50.8 bike/ped	2018-2022 = 52.0 bike/ped	2019-2023 = 42.6 bike/ped	
BICYCLE / PEDESTRIAN	Number of average annual bicycle/ pedestrian crashes with serious injuries in the last five years	ALIS/CLEAR	Bike-Ped serious Injuries: 2009-13=46; 5 year avg = 11.4	2016-2020 = 9.8 bike/ped	2017-2021 = 8.8 bike/ped	2018-2022 = 9.2 bike/ped	2019-2023 = 8.2 bike/ped	

3. Progressively reduce the number of annual bicycle and/or pedestrian fatalities to zero.

BICYCLE / PEDESTRIAN	Number of average annual bicycle/ pedestrian fatalities	ALIS/CLEAR	Bike-Ped fatalities: 2009-2013 = 2; 5 year avg = 0.4	2016-2020 = 1.8 bike/ped	2017-2021= 2.0 bike/ped	2018-2022 = 0.4 bike/ped	2019-2023 = 1.8 bike/ped	
INFRASTRUCTURE CONDITION (SYSTEM CONDITION)* Bridge rati methodolo change4. Progressively reduce the number of structurally deficient bridges in Tompkins County.** Bridge rational structural								
BRIDGE CONDITION	Number of structurally deficient bridges	NYSDOT	2014 = 80 bridges		2021 = 28	bridges**	2024 = 29 bridges	
5. Progressively reduce the miles of state roads in 'poor' condition in Tompkins County.								
STATE ROAD PAVEMENT CONDITION	Number of miles of State roads in Tompkins County in 'poor' condition	NYSDOT	2012 = 87.7 Iane miles	2020 = 83.4 lane miles	2021 = 140.1 Iane miles	2022 = 127.7 lane miles	2023 = 108.9 Iane miles	

Continued on next page.

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FACTOR/OBJECTIVE	MEASURE	DATA SOURCE	BASELINE	TREND 1	TREND 2	TREND 3	TREND 4	TREN

CONGESTION REDUCTION (SYSTEM PERFORMANCE)

6. Manage congestion to maintain adequate system performance on the National Highway System (NHS) roads (SR-13 and SR-79).

CONGESTION Percentage of miles of congested NHS roads miles >60% volume-to- capacity (VOC)		2021 = 41.2% of 51.24 miles***
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SYSTEM RELIABILITY (ACCESSIBILITY/PLACE MAKING)

7. Progressively increase the provision and access to multiple transportation options.

TRANSIT SERVICE	TCAT: total revenue service hours	TCAT	2013 = 120,663 hours	2019 = 135,934 hours			2022 = 103,868 hours
	TCAT: rides per revenue hour	TCAT	2013 = 36.4 rides/rev hr	2019 = 31.2 rides/rev hr			2022 = 24.1 rides/ rev hr
BICYCLE/PEDESTRIAN FACILITIES	Miles of multi-use trails	ITCTC + Municipalities	2014 = 14.03 miles			2021 = 31.08 miles	2024 = 35.15 miles
BICYCLE/PEDESTRIAN FACILITIES	Miles of on-road bicycle travel dedicated facilities	ITCTC + City + Cornell	2014 = 5.287 miles		2020 = 7.849 miles		2024 = 9.2 miles
TRANSIT PROXIMITY	% of population living within 1/2 mile of transit with at least hourly bus service	ITCTC + Census CTPP	2012 = 52.11%		2020 = 56.01%		TBD
COMPLETE STREETS	Miles of "complete streets" (bus, bike and pedestrian facilities)	ITCTC + Municipalities	2014 = 9.255 miles		2020 = 12.733 miles		2024 = 12.733 miles

ENVIRONMENTAL SUSTAINABILITY (CLIMATE CHANGE / ENERGY USE)

8. Progressively reduce the environmental impact associated with the transportation sector.

VEHICLE MILES TRAVELED	Annual Vehicle Miles Traveled (VMT) per capita	TDM + Census CTPP	2012 = 7,521.8 miles traveled per capita (16yrs +)		2020 = 6,139.4 miles traveled per capita (16yrs +)	2021 = 6,596.2 miles traveled per capita (16yrs +)	2022 = 6,917.8 miles traveled per capita (16yrs +)	
CARBON DIOXIDE	Metric Tons of system-wide carbon dioxide emitted	TDM + VERPAT	2015 = 643,960,888.3 CO2 GM/DAY					
LAND USE/REDEVELOPMENT	% of population located in the urbanized areas and villages	Census ACS	2000 = 58.4%		2020 5 = 56.7%		20215 = 58.5%	
VEHICLES PER HOUSEHOLD	Number of personal vehicles per household / number of households	Census ACS	2010 = 1.577 vehicles household	2019 5 = 1.498 vehicles/HH	2020 5 = 1.220 vehicles/HH		2022 5 = 1.115 vehicles/HH	

REDUCED PROJECT DELIVERY DELAYS

9. Working with Federal, State and local partners, reduce the amount of time it takes for projects to advance to implementation.

YEARS FROM TIP INCLUSION
TO PROJECT FINAL
PHASE OBLIGATIONAverage number of years
between first inclusion
in the TIP and funds
obligated for the final
phase of the project -
usually construction inspection-
for previous 5 year periodITCTC,
NYSDOT &
Local Project
Sponsors2010-2014 = 53 months
(4.4 years)2019-2023 =
37 months
(3.0 years)

ACRONYMS

FARS: Fatal Accident Reporting System –Federal ALIS: Accident Location Information System – NYS NYSDOT: New York State Dept of Transportation Census CTPP: Census Transportation Planning Package-Census transportation data TCAT: Tompkins Consolidated Area Transport ITCTC: Ithaca-Tompkins County Transportation Council Census ACS: Census American Community Survey VERPAT: VisionEval Rapid Policy Assessment Tool land use and transportation computer simulation model CLEAR: Crash Location & Engineering Analysis & Reporting – NYS ITHACA-TOMPKINS COUNTY TRANSPORTATION COUNCIL | 2045 TRANSPORTATION PLAN