

DRAFT

Ithaca-Tompkins County Transportation Council

Transportation Plan

2019



PLAN GOALS AND OBJECTIVES

SUSTAINABLE ACCESSIBILITY

The 2040 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 are responsive to pedestrians, bicyclist, transit, rail, freight, and motorists while meeting the 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 service all communities equitably.

Sustainable Accessibility integrates transportation with land use planning to promote land use development patterns that reduce dependency in the automobile as a 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, bicycle, 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 self-evolving.

2040 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 non-point 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**

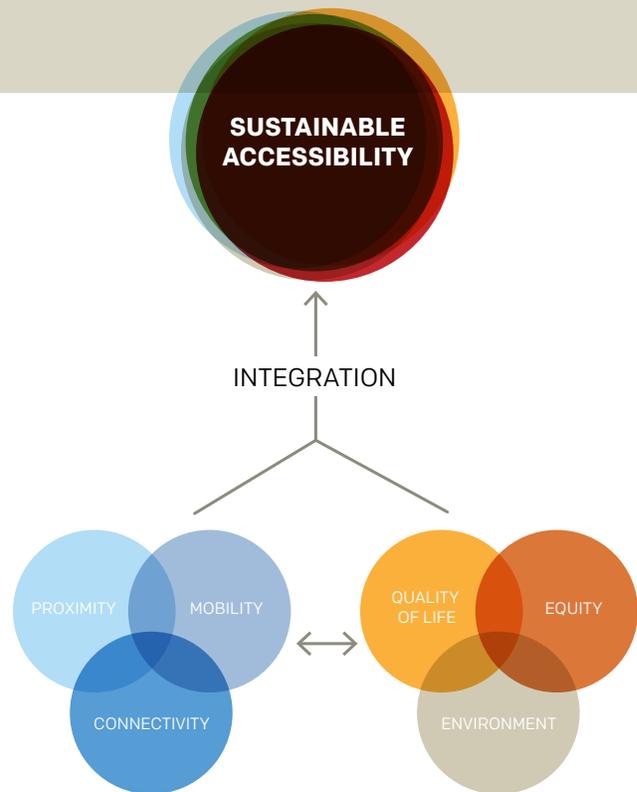


FIGURE 3.1: lays out the general relationships that are defined by the Tompkins County Transportation Report Long Range Goals

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 focusing 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 a 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 with reductions in congestion, vulnerability to fuel supply fluctuations, tail pipe emissions, and motor vehicle related deaths and injury, along with enhancements in mobility.

Accessibility Components

Mobility

Goal: To promote 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 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, etc.).

Proximity

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

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 car use become more feasible. Higher proximity allows for more efficient use of transit (including fixed-route service, car share and vanpools), bicycling and even walking, resulting in a lower-cost, more accessible and resilient transportation system.

The relationship between connectivity, mobility, 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.

Integration

Goal: To develop an integrated transportation system for Tompkins County that is seamless, multimodal and coordinated to achieve greater operational efficiencies and increase the safety and convenience of users.

Increasing coordination between modes in order to achieve greater operational efficiencies and to increase the convenience to users. Coordination between modes extends to all aspects of operation including the provision of single payment forms, seamless intermodal connections, and quality information for customers. Integration works best when it is customer based and centered on providing ease of access, comfort, safety, reliability and convenience. Integration 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 Integration

Integration 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 to integration are the communication technologies that provide traveler information, trip planning assistance, freight tracking, shared transportation and many travel demand management programs.

Sustainability Components

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 (accidents) - 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 the 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 emissions from fossil fuel based engines, impacts on water quality from non-point runoff from roads and increase in impervious surfaces. 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) studying the environmental impacts from manufacture, 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 vehicles and vehicle miles traveled inherent in a more efficient and integrated transportation system.

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.

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FEDERAL REQUIREMENTS

The federal Fixing America's Surface Transportation Act (FAST-Act), signed in December 2015, lists seven national Federal highway program performance goals:

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

Infrastructure Condition: To maintain the highway infrastructure asset system in a state of good repair.

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

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.

In addition, federal legislation stipulates that "the metropolitan transportation planning process shall.....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 included in the FAST-Act. 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

Regulations also require that the L RTP include a System Performance Report evaluating the condition and performance of the transportation system with respect to the required performance targets. Plans adopted or amended after the following dates must include performance targets for the measures associated with the following performance management rulemakings:

- May 27, 2018 – Highway Safety Improvement Program (HSIP) and Highway Safety
- October 1, 2018 – Transit Asset Management
- May 20, 2019 – Pavement and Bridge Condition
- May 20, 2019 – System Performance/Freight/Congestion Mitigation & Air Quality Improvement Program (Note: the ITCTC area is in air quality attainment and therefore exempt from the Congestion Mitigation & Air Quality program)

For HSIP, Pavement and Bridge Condition and System Performance/Freight the ITCTC, along with other MPOs across the state, has agreed to support NYSDOT statewide targets. For Transit Asset Management the ITCTC agreed to support targets established by Tompkins Consolidated Area Transit (TCAT), the public transportation provider for Tompkins County.

This section of the plan describes the baseline condition/performance and progress toward the achievement of the targets for the associated measures.

HSIP and Highway Safety

On March 15, 2016, FHWA published the final rule for the HSIP and Safety Performance Management (Safety PM) Measures in the Federal Register with an effective date of April 14, 2016.

The 2017 New York Strategic Highway Safety Plan (SHSP) is intended to reduce "the number of fatalities and serious injuries resulting from motor vehicle crashes on public roads in New York State." The SHSP guides NYSDOT, the MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out across New York State. The NYSDOT Highway Safety Improvement Program (HSIP) annual report documents the statewide performance targets.

The ITCTC agreed to support the NYSDOT statewide 2018 targets for the following Safety PM measures based on five year rolling averages per Title 23 Part 490.207 of the Code of Federal Regulations on October 24, 2017 via Resolution 2017-05:

- Number of Fatalities: 1,087
- Rate of Fatalities per 100M Vehicle Miles Traveled (VMT): .87

- Number of Serious Injuries 10,635
- Rate of Serious Injuries per 100M VMT: 8.53
- Number of Non-motorized Fatalities and Serious Injuries: 2,833

The ITCTC agreed to support the NYSDOT statewide 2019 targets for the following Safety PM measures based on five year rolling averages per Title 23 Part 490.207 of the Code of Federal Regulations on September 11, 2018 via Resolution 2018-04:

- Number of Fatalities: 1,068
- Rate of Fatalities per 100M Vehicle Miles Traveled (VMT): .86
- Number of Serious Injuries 10,442
- Rate of Serious Injuries per 100M VMT: 8.39
- Number of Non-motorized Fatalities and Serious Injuries: 2,716

Description of Progress

Safety is a critical component of the ITCTC’s mission, and a primary consideration in the selection of projects to be included in the TIP. The Objectives and Measures table below shows the latest local data for the Safety Performance Measures.

Bridge and Pavement Conditions

On January 18, 2017, FHWA published the final rule for the Bridge and Pavement Condition Performance Management Measures in the Federal Register Vol. 82, No.11, with an effective date of May 20, 2017.

NYSDOT established statewide performance targets for Bridge Condition on the National Highway System (NHS) and Pavement Condition on the NHS (by Interstate and Non-Interstate) effective on May 20, 2018. It is important to note that Tompkins County has no Interstate highways and only two Non-Interstate NHS roads, State Route 13 and the eastern section of SR-79, comprising a total of approximately 40 centerline miles or 3% of the approximately 1,293 miles in the Federal Aid System in Tompkins County.

The ITCTC agreed to support these NYSDOT statewide targets per Title 23 Part 490.105 of the Code of Federal Regulations on September 11, 2018 via Resolution 2018-05. The established targets are as follows:

NYSDOT TARGETS FOR BRIDGE PERFORMANCE MEASURES ON THE NHS
NHS Bridge Condition Targets by Deck Area

MEASURE	BASELINE	YEAR 2	YEAR 4
GOOD	20.2%	23%	24%
BAD	11.7%	11.6%	11.7%

NYSDOT TARGETS FOR PAVEMENT PERFORMANCE MEASURES ON THE NHS
NHS Pavement Condition Targets by Interstate and Non-Interstate Facility

MEASURE	BASELINE	YEAR 2	YEAR 4
INTERSTATE % GOOD	52.2%	46.4%	47%
INTERSTATE % POOR	2.7%	3.1%	4.0%
NON-INTERSTATE % GOOD	20.4%	14.6%	14.7%
NON-INTERSTATE % POOR	8.3%	12%	14.3%

Description of Progress

A key component of the ITCTC’s action plan, included in the agency’s 20-year Long Range Transportation Plan, is to maintain existing critical infrastructure and systems, including bridges and pavement. A focus on infrastructure will result in safety benefits and lower costs for users, improved movement of commerce and traffic in all modes and a more resilient transportation system. Tompkins County is a hilly area and maintaining its bridges is critical to protecting the functional integrity of the transportation system. The Objectives and Measures table below shows the latest local data on bridge and pavement conditions.

System Performance and Freight

On January 18, 2017, FHWA published the final rule for Performance of the NHS, Freight and CMAQ Measures in the Federal Register Vol. 82, No.11, with an effective date of May 20, 2017.

NYSDOT established statewide performance targets for System Performance on the NHS (by Interstate and Non-Interstate and Freight movement on the NHS (by Interstate) effective on May 20, 2018. The ITCTC agreed to support these NYSDOT statewide targets per Title 23 Part 490.105 of the Code of Federal Regulations on September 11, 2018 via Resolution 2018-05. The established targets are as follows:

NYSDOT TARGETS FOR SYSTEM PERFORMANCE MEASURES ON THE NHS

NHS System Performance Targets by Level of Travel Time Reliability (LOTTR)

YEAR	LOTTR INTERSTATE	LOTTR NON-INTERSTATE
2018 (Baseline)	81.3%	77%
2020	73.1%	N/A
2022	73%	63.4%

NYSDOT TARGETS FOR FREIGHT PERFORMANCE MEASURES ON THE INTERSTATE SYSTEM

Interstate Freight Performance Targets by Truck Travel Time Reliability (TTTR)

YEAR	TTTR INTERSTATE
2018 (Baseline)	1.38
2020	2.00
2022	2.11

Description of Progress

It is important to note that the ITCTC planning area, Tompkins County, is in attainment for air quality and does not participate in the CMAQ process. Similarly, Tompkins County does not have any interstate highways so the Freight targets, although supported by the ITCTC, cannot be addressed through project programming by the ITCTC. However, it is recognized that the System Performance target, Level Of Travel Time Reliability (LOTTR), on non-interstate roads is an important measure for Tompkins County. LOTTR impacts freight movement in our busiest state routes which connect to the interstate system in neighboring counties. LOTTR is also an important measure for commuter traffic and impacts the quality of life of all residents and travelers in Tompkins County. The Objectives and Measures table below shows the latest local data on number of miles congested in NHS roads in Tompkins County.

Transit Asset Management

On July 26, 2016, the Federal Transit Administration (FTA) published the final Transit Asset Management rule. This rule applies to all recipients and sub-recipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term “state of good repair,” requires that public transportation providers develop and implement transit asset management (TAM) plans, and establishes state of good repair (SGR) standards and performance measures for four asset categories: rolling stock, equipment, transit infrastructure, and facilities. The rule became effective on October 1, 2016.



Tompkins Consolidated Area Transit (TCAT) set the following transit asset management targets as included in:

SGR performance measures:

1. No more than 25% of TCAT's bus fleet (rolling stock) exceeds useful life benchmark (ULB).
2. No more than 25% of TCAT's equipment (#1801 snow plow, #1201 service truck, #99 cube van) and service vehicles (9 total cars used to transport bus operators to and from relief points) exceeds useful life benchmark (ULB).
3. No more than 10% of support facilities - maintenance, administrative - and passenger facilities (including Green Street Station and all bus shelters) are rated below 'adequate' on the FTA's Transit Economic Requirements Model (TERM) scale.

ITCTC Resolution:

The Ithaca-Tompkins County Transportation Council (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 ITCTC works closely with TCAT to implement their transit asset management priorities. Targets for this measure were established recently. Through the TIP and future plans the ITCTC and TCAT will track progress in achieving established targets.

ITCTC OBJECTIVES AND MEASURES

The ITCTC has been tracking a series of performance measures since 2014, in advance of federal performance management regulations. There 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.



* latest TREND - compared to baseline and last 3 Data points

ITCTC OBJECTIVE AND MEASURES TABLE

FACTOR/OBJECTIVE	MEASURE	DATA SOURCE	BASELINE	TREND 1	TREND 2	TREND 3	TREND 4	TREND*	NEXT UPDATE
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 = 9.4	2010-2014 = 9.8 fatalities	2011-2015 = 10.0 fatalities	2012-2016 = 12.0 fatalities	2013-2017 no data yet, but ALIS = 10.2		October 2018
CRASH FATALITY RATE	Number of average annual crash fatalities per 100MVT in the last five years	FARS	2009-2013 = 1.58 fatalities	2010-2014 = 9.8 fatalities	2011-2015 = 1.73 fatalities	2012-2016 = 12.0 fatalities	2013-2017 no data yet, but ALIS = 1.72		October 2018
CRASH SEVERE INJURIES	Number of average annual serious injuries in the last five years	ALIS	Serious Injuries: 2009-2013 = 562; 5 year avg = 111.4	2010-2014 = 9.8 fatalities	2010-2014 = 117.6 ser inj	2012-2016 = 120.6 ser inj	2013-2017 = 115.6 ser inj		April 2019
CRASH SEVERE INJURY RATE	Number of average annual serious injuries per 100MVT in the last five years	ALIS	Serious Injuries: 2009-2013 = 562; 5 year avg = 111.4	2010-2014 = 9.8 fatalities	2010-2014 = 117.6 ser inj	2012-2016 = 120.6 ser inj	2013-2017 = 115.6 ser inj		April 2019
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	2009-2013 = 290 5 year avg = 57.8 bike/ped	2010-2014 = 57.8 bike/ped	2011-2015 = 58.6 bike/ped	2012-2016 = 59.6 bike/ped	2013-2017 = 55.8 bike/ped		April 2019
BICYCLE / PEDESTRIAN	Number of average annual bicycle/ pedestrian crashes with serious injuries in the last five years	ALIS	Bike-Ped serious Injuries: 2009-13=46; 5 year avg = 9.2	2010-2014 = 57.8 bike/ped	2010-2014 = 1.2 bike/ped	2011-2015 = 8.4 bike/ped	2012-2016 = 10.4 bike/ped		April 2019
3. Progressively reduce the number of annual bicycle and/or pedestrian fatalities to zero in 2025.									
BICYCLE / PEDESTRIAN	Number of average annual bicycle/ pedestrian fatalities	ALIS	Bike-Ped fatalities: 2009-2013 = 4; 5 year avg = 0.8	2010-2014 = 1.2 bike/ped	2011-2015 = 1.8 bike/ped	2012-2016 = 2.4 bike/ped	2013-2017 = 2.6 bike/ped		April 2019
INFRASTRUCTURE CONDITION (SYSTEM CONDITION)									
4. Progressively reduce the number of structurally deficient bridges in Tompkins County.									
BRIDGE CONDITION	Number of structurally deficient bridges	NYS DOT	2014 = 80 bridges	2015 = 78 bridges	2016 = 83 bridges	2017 = 84 bridges	2018 = 55 bridges		April 2019
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	NYS DOT	2012 = 877 lane miles	2013 = 76.9 lane miles	2014 = 62.3 lane miles	2015 = 82.1 lane miles	2016 = 93.7 lane miles		September 2019
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	Number of miles of congested NHS roads – miles >60% volume-to-capacity (VOC)	TDM + Census CTPP	2012 = 13.69 miles	2013 = 76.9 lane miles	2014 = 62.3 lane miles	2015 = 82.1 lane miles	2018 = 15.61 miles		May 2019
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	2014 = 120,657 hours	2015 = 121,193 hours	2016 = 122,624 hours	2017 = 121,630 hours		June 2019
	TCAT: rides per revenue hour	TCAT	2013 = 36.4 rides/rev hr	2014 = 35.6 rides/rev hr	2015 = 34.5 rides/ rev hr	2016 = 32.8 rides/ rev hr	2017 = 32.8 rides/ rev hr		June 2019
	TCAT: annual number of bicycles on buses	TCAT	2013 = 33,543 bikes	2014 = 34,024 bikes	2015 = 34,990 bikes	2016 = 33,891 bikes	2017 = 30,947 bikes		June 2019
BICYCLE/PEDESTRIAN FACILITIES	Miles of multi-use trails	ITCTC + Municipalities	2014 = 14.03 miles	2015 = 17.14 miles	2016 = 27.47 miles	2017 = 29.63 miles	2018 = 15.61 miles		October 2019
BICYCLE/PEDESTRIAN FACILITIES	Miles of on-road bicycle travel dedicated facilities	ITCTC + City + Cornell	2014 = 5.287 miles	2015 = 6.398 miles	2016 = 6.648 miles	2017 = 6.648 miles			October 2019
TRANSIT PROXIMITY	% of population living within 1/2 mile of transit with at least hourly bus service	ITCTC + Census CTPP	2012 = 52.11%						Dec 2022 or TCAT changes
COMPLETE STREETS	Miles of "complete streets" (bus, bike and pedestrian facilities)	ITCTC + Municipalities	2014 = 9.255 miles	2015 = 10.558 miles	2016 = 10.937 miles		2018 = 11.525 miles		October 2019
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	2010 = 7,179.0 miles traveled per capita (16yrs +)	2012 = 7,062.3 miles traveled per capita (16yrs +)	2014 = 6,939.4 miles traveled per capita (16yrs +)	2016 = 7,270.4 miles traveled per capita (16yrs +)	2018 = 7,161.6 miles traveled per capita (16yrs +)		December 2019
CARBON DIOXIDE	Metric Tons of system-wide carbon dioxide emitted	TDM + MOVES 2014	2014 = 334,000 CO2 Equivalent						December 2019
LAND USE/REDEVELOPMENT	% of population located in the urbanized areas and villages	Census ACS	2000 = 58.4%	2010 = 56.8%		2016 = 56.6%			December 2019
VEHICLES PER HOUSEHOLD	Number of personal vehicles per household / number of households	Census ACS	2010 = 1.577 vehicles household	2014 = 1.514 vehicles/HH	2015 = 1.505 vehicles/HH	2016 = 1.517 vehicles/HH			December 2019
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 OBLIGATION	Average number of years between first inclusion in the TIP and funds obligated for the final phase of the project - usually construction and construction inspection - for previous 5 year period	ITCTC, NYSDOT & Local Project Sponsors	2010-2014 = 53 months (4.4 years)	2011-2015 = 32 months (2.6 years)	2012-2016 = 30 months (2.5 years)		2013-2017 = 43.93 months (3.66 years)		September 2019

ACTION PLAN

Transportation touches nearly all of people's daily activities. In Tompkins County, we would like to expand the number of options available to people for safe, efficient, and healthy transportation. Our goal is to provide more people with good choices on how to get places, including biking on a path, walking on sidewalks, hopping on a bus, connecting for a shared ride, driving electric or hybrid cars, or just driving on well-maintained roads. To make it so the best solution for how to get somewhere isn't always "drive there alone," we as a community need to make it easy, safe and even fun, for people to choose other ways to move from place to place.

Besides expanding choice, broadening transportation alternatives can result in a healthier population, less traffic congestion and emissions, fewer accidents, and fewer environmental impacts. A sustainable transportation system seeks to minimize negative impacts while providing a good level of service and will require insight into the social structure as well as the infrastructure of the community, so that the enhancements to the transportation system service all communities equitably. Much work is being done in the transportation sector to bring innovative technologies into use. Numerous communication technology applications are in different level 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 ride 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. 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, 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
 - Coordination of Transportation Services
 - Education/Outreach
 - Marketing

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