
5. PROJECTS FOR IMPLEMENTATION

INTRODUCTION

The purpose of this chapter is to list selected transportation related initiatives and projects for implementation. Where possible, the narratives will define the appropriate party(ies) to implement the project or initiative. This plan tries to capture the activities of all parties dealing with transportation in Tompkins County. Therefore, principal project responsibility may lie with municipalities, State agencies, other public/private agencies or a combination of these. When there is sufficient detail or previous experience in conducting such projects or initiatives, a dollar cost estimate will be included.

The initiatives and projects that are presented here are intended to help advance the community's vision as expressed in the Goals, Sub-goals and objectives.

This section of the Long Range Transportation Plan, is organized around the functional headings of:

- *Planning Efforts*
- *Mobility Efforts*
- *Infrastructure Efforts*
- *Operations and Maintenance Efforts*

While not every initiative fits neatly under one of these headings, they provide a useful organizational framework. The projects and initiatives listed in this chapter exist at different stages of implementation. Many are listed as desirable projects but have not been implemented. Others have been started and exist at some stage of implementation. The action item description will indicate if implementation is ongoing. Otherwise, the expected implementation time interval is indicated following the project title as short, intermediate, or long as represented below. It is understood that implementation for many of these projects will be continuous in nature, stretching over several years:

- Short = 1-5 years
- Intermediate = 5-10 years
- Long = 10-20 years

Priority Areas

Of the activities listed in this Chapter the ITCTC has selected the following to be priority areas to facilitate implementation:

- Expand and Promote Multimodal Mobility Options and Integration
- Maintain Existing Transportation Infrastructure and Systems

These priority areas seek to secure existing infrastructure investments while enhancing the efficiency of the current transportation system through technology and physical enhancements while providing for alternatives to automobile use.

Expand and Promote Multimodal Mobility Options and Integration

Federal legislation since ISTEA in 1991 has been supportive of development of a multimodal transportation network that stresses efficiency of operations and diversion of automobile trips to other modes. The LRTP goals and objectives stress the need to enhance the level of service and facilitate the use of alternative modes of transportation. Having more options for transportation would have multiple beneficial impacts on our community such as: cost savings from reduced private automobile dependency; reduced Greenhouse Gas emissions and fossil fuel consumption; reduced congestion; less traffic accidents; health improvements from active transportation; transit enhancements; more equitable access to transportation; etc.

In Tompkins County the main strategy for improving mobility is founded on reducing drive-alone trips and miles traveled through the diversion of trips to alternative modes of transportation, primarily transit, ridesharing, walking and bicycling. As an area with moderate growth rates and a relatively small population base, there is the opportunity to develop and market effective programs that address the needs of different population groups.

As of 2014, surface transportation options to the private automobile in the Tompkins County area include transit (TCAT), intercity bus service, taxi, car rental, car sharing, ride sharing and van pooling. The adequacy of walking and bicycling facilities varies across the county. Opportunities exist to enhance and expand the vanpool and ridesharing programs. In addition, the provision of public transportation needs to be constantly evaluated to ensure that service is always optimized and supported. Having robust alternatives to the private automobile for transportation will make Tompkins County more efficient, and economically and environmentally resilient.

Maintain Existing Transportation Infrastructure and Systems

Even as we work towards a future of reduced car dependency it is understood that the transportation system is and will continue to be heavily dependent on car and trucks for the movement of people and goods. The road/bridge infrastructure in Tompkins County is a valuable existing asset that needs to be maintained for use by all modes of transportation. As we move to a transportation paradigm with increased complexity and expanded use, this plan proposes continued work with partner agencies and municipalities to maintain and manage the transportation system for maximum efficiency across all modes. This includes implementation of projects such as traffic signal

systems upgrades, intersection safety improvements, dedicated paths for different modes, etc. It is well understood that you cannot build yourself out of congestion. But through increased efficiency and innovation, the multimodal capacity of the existing networks can be expanded and functionality maintained.

Completed Initiatives from 2030 LRTP

The projects and initiatives listed below were implemented in the period between 2009 and 2014.

- *Complete Streets Network Plan* – completed by an adhoc committee of the ITCTC. Identified a potential Complete Streets Network for the Ithaca urbanized area. A ‘Complete Street’ is a street designed and operated to enable safe access for all users – pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to move safely along and across a complete street. The ITCTC will work with local project sponsors to facilitate the incorporation of Complete Streets features in the roads identified in the network.
- Support Way2Go Community Wide Program for Transportation Information – (<http://ccetompkins.org/community/way2go>) The Way2Go program has been established within the structure of the Cornell Cooperative Extension as a strategic, user-friendly point of contact for transportation information in Tompkins County. The program will also serve the critical role of collecting transportation related information and comments from the public. The ITCTC will continue its support of the Way2Go program as a key partner in the provision and collection of transportation related information for members of the public.
- Rideshare (ride-matching) Program – <http://www.zimride.com/tompkins/> - implemented by the ITCTC in association with Cornell Univ., Ithaca College, TC3, TCAT, Tompkins County DSS and Way2Go. Used a NYSERDA grant to establish a web based rideshare system – Zimride Tompkins. The system provides three college portals plus a community wide portal to provide computerized ride-matching services in support of carpooling for commuters and for one-time ride needs.
- Integrated Information Technology Services – Implemented by TCAT. Completed a study to identify needs and requirements for new internal and external information technology systems. This project studied TCAT’s existing technology implementation, identified needs, and made

recommendations regarding new technologies needed and integration of technologies.

- Regional Transportation Initiative – <http://www.tompkinscountyny.gov/itctc/RTS>. A consultant based Regional Transportation Study (RTS) was implemented by the Regional Transportation Coalition composed of representatives from government, higher education and private agencies in Tompkins, Schuyler, Cortland, Tioga and Chemung and Cayuga Counties. The Coalition completed a consultant based study in 2013 for a broad spectrum of integrated regional public transportation services in the region. The feasibility study considered a range of strategies and proposed recommendations for implementation and continued coordination.
- Traffic Signals Upgrade Program for Downtown Ithaca – the City of Ithaca has programmed in the TIP the second phase of a traffic signals upgrade project.

Completed Initiatives from 2025 LRTP

The projects and initiatives listed below were implemented in the period between 2005 and 2010.

- *SR-13/366 Corridor Management Plan* – implemented by Tompkins County Planning Dept (TCPD). Completed 2008.
- *SR-96 Corridor Management Plan* – implemented by TCPD. Completed 2009.
- *Enhanced Downtown Ithaca Transit Facilities* - As of late-2009 the Seneca Street stop has been completed and Green Street bus stop work is near completion.
- *Develop a Coordinated Annual Traffic Count Program* – implemented by ITCTC with cooperation from local partners and NYSDOT. Annual traffic count report in production since 2006.
- *Develop a Bicycle Suitability Map for Tompkins County* – implemented by the ITCTC. First map published in 2007. Map will continue to be updated.
- *Study Implementation of Car Sharing Program* – implemented by Ithaca Carshare in partnership with NYSDOT/NYSERDA, Cornell University, Ithaca College, ITCTC, City of Ithaca, EcoVillage and other local supporters. Ithaca Carshare program was launched in June 2008.

- *Accident Reporting System* – the ITCTC has access to information to the Accident Location Information System (ALIS), a statewide database of vehicular accident information. ALIS is managed by NYSDOT and came on-line in 2009.

TRANSPORTATION INITIATIVES

A. PLANNING EFFORTS

I. Transportation Data Collection Activities

New data gathering technologies are becoming available that could change the methodology used for obtaining data as proposed in items 1 and 2 below. ITCTC staff will continue to monitor data gathering technologies to take advantage of opportunities that would increase the financial and technical feasibility of obtaining data for analysis.

1. Conduct a household travel survey for Tompkins County

Implementation interval = Intermediate

To be conducted by the ITCTC.

Cost: \$100,000 estimated.

Household travel surveys are used to gather trip-related data such as mode of transportation, and duration, distance and purpose of trips. It also gathers demographic, geographic, and economic data for analysis purposes. The data can be used to gauge the extent and patterns of travel, to plan new investments, and to better understand the implications for the region's transportation infrastructure. The data is also valuable to calibrate the trip type and trip rate tables used in the ITCTC travel demand model.

2. Conduct Travel Time Assessments Selected High Traffic Volume Routes

Implementation interval = Intermediate

To be conducted by the ITCTC.

Cost: to be determined.

Travel Time Assessments gather trip time data that can be used for enhancements to the ITCTC travel demand model and as measures of congestion along certain routes.

II. Promotional and Educational Strategies

1. Safety Education

Implementation interval = Short

To be jointly conducted by various participants.

Cost: To be determined.

General safety education has been identified as a priority. Education efforts may be low-cost to implement and can be directed towards a variety

of audiences, which may range from elementary school programs to programs for seniors. The recommendation is for the ITCTC to establish a subcommittee on safety. This subcommittee would be charged with reviewing current efforts in the area, determining additional "target audiences", and investigating implementation mechanisms. Community partners can include health services providers, County Health Department, public transportation operators, Way2Go and active transportation advocacy groups.

2. Transit Promotions

Implementation interval = Short/ongoing

Ongoing project managed TCAT Marketing Division.

Cost: Varying, to be determined

TCAT follows a marketing strategy with comprehensive public outreach. In addition to advertising, TCAT operates a website (www.tcatbus.com) that includes an automated trip planner and on-line bus pass sales. In addition, TCAT updates schedule information at bus stops and distributes printed schedules and route maps. ITCTC will provide support and assistance in continuing and expanding promotion of public transportation.

3. Bicycle Promotions

Implementation interval = Short to become ongoing

To be jointly conducted by various participants.

Cost: To be determined.

Recent efforts, such as the organization of Streets Alive! and Bike to Work and School day events, have been promising in communicating a positive message for bicycling, but continue to be in need of improved coordination. ITCTC will provide support of local government and civic groups promoting the expansion of bicycling in Tompkins County. Efforts should address the 5 E's: engineering, education, encouragement, enforcement, and evaluation & planning. This effort should be linked to promotional programs for other mutually supportive modes of active transportation. All programs should ensure that bicycling safety is addressed.

The presence of a dedicated full or part-time bicycle/pedestrian coordinator for Tompkins County would help achieve this outcome. Such a person would review projects for their multimodal impact, and coordinate training, education, and outreach and provide assistance to local municipalities. The ITCTC supports the creation of a bicycle/pedestrian coordinator position and will work with the County, City of Ithaca and other member agencies to determine the best administrative option to locate such a position and secure its funding.

4. Pedestrian Promotions

Implementation interval = Short to become ongoing

To be jointly conducted by various participants.

Cost: To be determined.

In general, pedestrian groups are not well organized or are extremely low-profile. ITCTC will provide full support of local government and civic groups promoting the expansion of walking in Tompkins County. This effort should be linked to previously discussed education programs to ensure that pedestrian safety is addressed. This effort should be linked to promotional programs for other mutually supportive modes of active transportation. All programs should ensure that walking safety is addressed.

III. **Transportation Infrastructure**

Work with municipalities and other local partners to assess transportation infrastructure needs, including roadways, transit, bicycles and pedestrians, to support local planning efforts.

1. Model Based Roadway Needs Assessment

Implementation interval = Ongoing/On Request

To be conducted by the ITCTC and participating local governments.

Cost: Varying, to be determined

Utilizing the travel demand model, the ITCTC will work with local governments to assist in analyzing the roadway network impact of future land use plans and anticipated development.

2. Bicycling Facilities Planning and Improvements

Implementation interval = Ongoing/On Request

To be completed by various participants in conjunction with the ITCTC.

Cost: To be determined.

The ITCTC will assist with efforts to enhance the provision of bicycling infrastructure such as: bike lanes, bike lifts, bicycle boulevards, bicycle parking facilities, etc. The ITCTC will also support efforts to produce bicycle plans at the local and regional levels.

4. Pedestrian Facilities Planning and Improvements

Implementation interval = Ongoing/On Request

To be completed by various participants in cooperation with the ITCTC.

Cost: To be determined.

The ITCTC will assist with efforts to enhance the provision of pedestrian infrastructure such as: sidewalks, multiuse and hiking trails. The ITCTC will assist local governments interested in facilitating planning for their pedestrian facilities and will help identify funding sources.

5. Transit Infrastructure

Implementation interval = ongoing

To be completed by TCAT in cooperation with Tompkins County and the ITCTC.

Cost: To be determined.

TCAT has a detailed capital needs plan that addresses the acquisition/replacement of vehicles, communications equipment, transit facility equipment, safety and security equipment, and bus stops and shelters. The ITCTC will work in coordination with TCAT and Tompkins County to ensure that its facilities and equipment needs are met in order to provide the highest quality public transportation system for the residents of Tompkins County.

6. Complete Streets Network

Implementation interval = Long/ongoing

To be completed by highway project sponsors in cooperation with the ITCTC.

Cost: To be determined.

A 'Complete Street' is a street designed and operated to enable safe access for all users regardless of their mode of transportation, so that pedestrians, bicyclists, motorists or public transportation users of all ages and abilities are able to move safely along and across the street.

The Planning Committee of the ITCTC created a Complete Streets ad hoc committee to identify a well coordinated network of roads to form a Complete Streets Network for the urbanized area of Tompkins County. This work was completed and the Complete Streets Network is shown in FIGURE 27A on Chapter 4. The ITCTC will work with local project sponsors to facilitate the incorporation of Complete Streets features in the roads identified in the network.

7. Identification of Critical Transportation Infrastructure

Implementation interval = Intermediate

To be completed by the ITCTC in coordination with the Tompkins County Planning Department and other transportation partners.

Identify the most critical elements of the transportation infrastructure (highway, transit, other mobility components) in Tompkins County for use in prioritizing investment of funds.

B. MOBILITY EFFORTS

I. Transportation Demand Management Programs

1. Implement a Coordinated Traveled Demand Management Program (TDM) for the Ithaca Urbanized Area

Implementation interval = Intermediate

Lead agency to be determined. To be implemented with participation from the ITCTC, TCAT, Downtown Ithaca Alliance, Way2Go, Ithaca Carshare and other interested civic groups, with the cooperation of local municipalities and employers.

Cost: To be determined.

The Ithaca Urbanized Area, particularly the City of Ithaca downtown business district, would benefit from a coordinated TDM program. A number of services and programs are currently available (transit, car sharing, etc.) but close coordination of services and outreach to potential users is missing. This project seeks to create a TDM program structure that is effective, well funded and generated multiple benefits for the community.

2. Employer and Employee Commute Education Program

Implementation interval = Short/Ongoing

Lead agency Way2Go. To be conducted with participation from the ITCTC, TCAT and other interested civic groups, with the cooperation of local employers.

Cost: To be determined.

Way2Go has engaged in efforts to reach out to employers and human resources managers with transportation information and education that benefits employers and their employees. This project seeks to promote and support continued outreach to employers and their employees.

3. Rideshare (Ride-Matching) Program

Implementation interval = Short

To be conducted jointly by Way2Go, Tompkins County, Cornell University, Ithaca College, Tompkins Cortland Community College and the ITCTC.

Cost: To be determined

Although the community has an ongoing community wide program to provide computerized ride-matching services, this program is not secure for the long term. The ITCTC and other partners in the Tompkins County Rideshare Coalition need to continue their work to secure a sustainable automated rideshare program for Tompkins County and the surrounding area.

4. Voluntary Variable Work Hours Program

Implementation interval = Long

Lead agency to be determined. To be conducted with participation from the ITCTC, Way2Go, TCAT and NYSDOT with the cooperation of local employers.

This could be a sub-component of that larger effort See I.1 (above).

5. Guaranteed/Emergency Ride Home Program

Implementation interval = Short

Lead agency to be determined.

Develop a Guaranteed Ride Home program in support of other TDM initiatives.

5. Roadside Ridesharing Program

Implementation interval = Intermediate

Lead agency to be determined.

Cost: To be determined.

Roadside ridesharing, is envisioned as an app based assisted hitchhiking program with vetted riders and drivers. Pilot implementation in Lawrence, Kansas has shown promising results in urban, suburban and rural areas.

II. Community Based Projects

1. Parking Management in the City of Ithaca

Implementation interval = Short/Intermediate

To be conducted by the City of Ithaca in cooperation with the ITCTC and other affected parties.

Cost: To be determined.

The City of Ithaca has taken concrete steps to enhance their parking management capacity and capabilities. The ITCTC will be supportive of ongoing City efforts to implement a well designed parking management strategy that addresses the demands from different sectors of the community: local businesses, permanent and temporary (rental housing) residents, commuting employees, etc.

2. Study of Transportation Needs of Mobility Limited Population

Implementation interval = Intermediate

To be conducted by the ITCTC in association with interested agencies, including members of the Coordinated Plan committee.

Cost: To be determined.

Mobility limited persons are generally those persons who do not have adequate transportation resources at their disposal. In general, these persons are elderly, disabled, youths, and economically disadvantaged. This project is meant to work with mobility limited populations of Tompkins County to determine the nature and extent of need for transportation resources in the area.

3. Study of Electric Vehicle Technology Adoption

Implementation interval = Short/Intermediate

To be conducted by the ITCTC in association with Tompkins County, Cornell University and other interested parties.

Cost: To be determined.

The LRTP has identified the need to improve community wide fleet efficiency as an important component of a transportation system with reduced environmental impacts and energy demand. Recent developments in electric vehicle (EV) technology show great potential. One of the issues that need to be addressed with EVs is providing recharge stations on the community. This project will analyze the potential for EV adoption in the principal employment centers in Tompkins County, identifying adequate locations, feasible technologies, and estimated costs and financing strategies.

4. Unified Fare System

Implementation interval = Short

To be conducted collaboratively by TCAT, Ithaca Carshare, taxi companies, and other transportation providers in association with the ITCTC and other interested parties.

Cost: To be determined

The purpose of this project is to facilitate the implementation of a 'seamless' transportation system in Tompkins County through customer use of single fare cards to pay for all transportation options including public transit, car share and taxi. Additional transportation providers can be added as needed. TCAT is implementing a digital magnetic stripe/ RFID-based pass system that can be expanded to include car share, taxi, employee incentive programs, and other transportation options.

III. Transit Programs

1. Operational Improvements & Customer Information Services

Implementation interval = Short/Intermediate

To be conducted by TCAT.

Cost: Up to \$4.9 Million over 5 years depending on what technological services are implemented.

TCAT has completed an information technology needs assessment. That study includes an implementation plan to provide a variety of technology improvements for transit operations (eg. automated scheduling, payroll, bus fleet management, etc.) and customer service (eg. multi-format real-time access to next bus information, schedules, etc.). The ITCTC will work with TCAT and other community partners to facilitate the timely implementation of these technology improvements.

2. Passenger Facilities Improvements

Implementation interval = Short

To be conducted by TCAT

Cost: Up to \$2.5 Million over 5 years to complete planning and installation of facility improvements.

The project will assess needs at passenger stops and shelters for signage, ADA and pedestrian access, lighting, safety, communications, bike storage and physical and design integration with surroundings, including the need for bus pull-offs and road shoulder improvements. These efforts will be coordinated with planned pedestrian facility improvements. In addition, TCAT would like to explore passenger facility luxuries, such as wireless internet access at key stops and on vehicles, energy-efficient lighting and heating, etc. Finally, TCAT will work toward improved coordination with relevant agencies, such as NYSDOT, County Highway Department, and other municipalities.

3. Transit Infrastructure & Capital Needs

Implementation interval = Ongoing

To be completed by TCAT in cooperation with Tompkins County and the ITCTC.

Cost: Up to \$20.7 million over 5 years if all needs are met.

TCAT has a detailed capital needs plan that addresses the acquisition/replacement of vehicles, communications equipment, transit facility equipment, safety and security equipment. The ITCTC will work in coordination with TCAT and Tompkins County to ensure that its facilities and equipment needs are met in order to provide the highest quality public transportation system for the residents of Tompkins County. Finally, TCAT hopes to achieve a sustainable and realistic bus replacement schedule.

4. Rural Transportation Services

Implementation interval = Intermediate

To be conducted by TCAT in association with the ITCTC and other interested parties.

Cost: up to \$1.2 Million depending on service provided.

TCAT sees provision of rural commuter transportation service as a key need and growth opportunity over the next ten years. The components of TCAT's rural transportation strategy include: First, coordination of TCAT's fixed-route services with service in neighboring counties. Second, TCAT is implementing a vanpool program targeted toward very long-distance commuters who, because of their distance from Ithaca, are difficult to serve with traditional fixed-route transit. Third, TCAT will explore the feasibility of implementing alternative service delivery models in rural areas such as the expanded park-and-ride system and the demand-response van feeder service.

IV. Transportation Systems Management

1. Traffic Signal Upgrade Program for Downtown City of Ithaca

Implementation interval = Short/Intermediate
To be conducted by the City of Ithaca in cooperation with NYSDOT.
Cost: Up to \$2 Million depending on scope of work and technologies implemented.

The upgrade of the traffic signal system in the core urban area of the City of Ithaca is one of the most important capital projects facing the area. The current system causes substantial delay and congestion despite constant efforts to keep the system in synchronization. Use of sensors to actuate signals in the presence of vehicles, bicycles, and pedestrians should be explored. In addition, it is recommended that the use of emergency vehicle and transit priority systems be studied and considered for implementation in the central business district. Two phases of this project, providing for upgrade of traffic signal hardware, have been funded through the ITCTC's TIP. Additional resources are needed to address the continuing deployment of the advanced traffic signal system.

2. State Route 13 Signal Management Program
Implementation interval = Short Term
To be conducted by the NYSDOT in cooperation with the City of Ithaca.
Cost: To be determined.

Develop a program to review and revise signal system operations in the West End area of the City of Ithaca. This projects needs to be repeated periodically to respond to changing traffic conditions.

V. Assistance to Local Trail Development Efforts

1. Implementation of Trail Development Strategy
Implementation interval - ongoing
To be conducted by ITCTC staff, in coordination with the Tompkins County Planning Department, in support of local trail development efforts.

Development of a comprehensive multi-use trails network in Tompkins County has the potential for a significant positive impact on the transportation system. In addition, multi-use trails serve as a regional asset, providing harder to quantify but no less important, economic and quality of life benefits to residents of Tompkins County.

On March 1996 the ITCTC completed the Transportation Trail/Corridor Study. The ITCTC has expressed its support and priority for the aggressive and effective implementation of the trail network described in the Trail/Corridor Study.

More recently, in 2013, a trails coalition representing municipalities, Tompkins County, the ITCTC, numerous community organizations and

interested private individuals, prepared a plan called the Tompkins Priority Trails Strategy: a vision for networked trails in Tompkins County (see Appendix X). This 5-year plan identifies a network of trails, the Tompkins County Priority Trails and Urban Connectors, and specifies steps needed to reach trail development. The ITCTC will continue to work and support the work of the trails coalition, including working towards implementation of the Tompkins Priority Trails Strategy.

The ITCTC will provide trail development technical assistance, i.e. mapping, data, grant applications, funding information, to interested municipalities and other government and civic agencies advancing development of the Tompkins County Priority Trails and Urban Connectors network.

C. OPERATIONS & MAINTENANCE EFFORTS

I. Local Resource Sharing

Implementation interval = Ongoing
The ITCTC is available to provide assistance, technical support and facilitation for intermunicipal local resource sharing efforts. These efforts may include work in the areas of equipment acquisition or sharing, materials purchasing and storage, snow plowing plans, review of highway jurisdictions.

II. Enforcement Actions

Implementation interval = Ongoing
The ITCTC is available to provide assistance, technical support and facilitation for implementation of enforcement actions that advance the safety of the transportation system. These efforts may include work in the areas of identification of priority enforcement areas, use of remote enforcement options, incident management planning, hazardous materials routing, improving coordination between law enforcement and public works and planning efforts.