

APPENDIX B: GLOSSARY OF ACRONYMS, DEFINITIONS AND WEBSITES

ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials	CA	Certification Acceptance
AADT	Average Annual Daily Traffic	CAA	Clean Air Act of 1970
AAR	American Association of Railroads	CAAA	Clean Air Act Amendments of 1990 (previously 1977)
ARRA	American Recovery and Reinvestment Act – February 17, 2009	CADD	Computer Aided Design and Drafting
ACS	Advanced Communication System	CAFE	Corporate Average Fuel Economy Standards of 1975
ACS	American Community Survey	CBD	Central Business District
ADA	Americans with Disabilities Act of 1990	CBO	Community-Based Organization
ADT	Average Daily Traffic	CBP	Comprehensive Business Plan
ADP	Advance Detail Plans	CDL	Commercial Driver’s License
AFC	Automated Fare Control	CDBG	Community Development Block Grant
AFV	Alternative Fuel Vehicle	CFC	Chloroflourocarbon
A/I	Accident Incident	CH ₄	Methane
AICP	American Institute of Certified Planners	CHAS	Comprehensive Housing Affordability Strategy
ALIS	Accident Location Information System (NYS DOT)	CIP	Capital Improvements Program
APA	American Planning Association or Adirondack Park Agency (New York State)	CLEAR	Crash Location & Engineering Analysis & Reporting – NYS
AQMP	Air Quality Management Plan	CMAQ	Congestion Mitigation and Air Quality program
APTA	American Public Transit Association	CMP	Congestion Management Plan
APTS	Advanced Public Transportation System	CMS	Congestion Management System
ARTS	Advanced Rural Transportation Systems	CNG	Compressed Natural Gas
ARRA	American Recovery and Reinvestment Act of 2009	CO	Carbon Monoxide
ASCE	American Society of Civil Engineers	CO ₂	Carbon Dioxide
ATIIP	Active Transportation Infrastructure Investment Program Grant	COG	Council of Governments
ATIS	Advanced Traveler Information System	CPI	Consumer Price Index
ATMS	Advanced Traffic Management System	CPMIS	Capital Program Management Information System
ATS	Automated Transportation Systems	CRA	Community Redevelopment Agency
ATV	Accurate Traffic Volume	CRP	Carbon Reduction Program
ATV	All Terrain Vehicles	CSS	Context Sensitive Solutions
AVCS	Advanced Vehicle Control System	CSSQ	Cost, Schedule, Scope and Quality
AVI	Automated Vehicle Identification	CSSQA	Cost, Schedule, Scope and Quality Agreement
AVO	Average Vehicle Occupancy	CTAA	Community Transportation Association of America
BAC	Bicycle Advisory Council	CTPP	Census Transportation Planning Package
BFU	Bicycle Facilities Unit	CVO	Commercial Vehicle Operations
BIL	Bipartisan Infrastructure Law (aka: IIJA)	CU	Cornell University
BPM	Best Management Practice	DA	Design Approval
BMS	Bridge Management System	DAD	Design Approval Document
BNAM	Bridge Needs Assessment Model	db	Decibels
BPAC	Bicycle Pedestrian Advisory Committee	DBE	Disadvantaged Business Enterprise
BSA	Bridge Safety Assurance	DDR	Draft Design Report
BTP	Bicycle Transportation Plan	DEC	New York State Department of Environmental Conservation
BTS	Bureau of Transportation Statistics (USDOT)	DEIS	Draft Environmental Impact Statement
BUILD	Better Utilizing Investments to Leverage Development Grant	DIA	Downtown Ithaca Alliance
		DOD	U.S. Department of Defense
		DOE	U.S. Department of Energy
		DOT	Department of Transportation
		DSS	Department of Social Services

EA	Environmental Assessment	LHI	Local Highway Inventory
EAP	Environmental Action Plan	LNG	Liquefied Natural Gas
ECO	Employee Commute Options	LOS	Level of Service
EIS	Environmental Impact Statement	LPG	Liquefied Petroleum Gas
EPA	U.S. Environmental Protection Agency	LRP	Long Range Plan
EV	Electric Vehicle	LRRT	Light Rail Rapid Transit
FAA	Federal Aviation Administration (USDOT)	L RTP	Long Range Transportation Plan
FARS	Fatal Accident Reporting System (USDOT)	LTC	Local Transportation Commission
FDR	Final Design Report	LULU	Locally Unwanted Land Use
FEIS	Final Environmental Impact Statement	MAB	Metropolitan (Planning) Area Boundary
FFY	Federal Fiscal Year	MAP-21	Moving Ahead for Progress in the 21st Century
FHWA	Federal Highway Administration (USDOT)	MSA	Metropolitan Statistical Area
FIPS	Federal Information Processing Standards	MOVES	Motor Vehicle Emission Simulator
FISH	Friends in Service Helping	MOU	Memorandum of Understanding
FLIC	Finger Lakes Independence Center	MPG	Miles Per Gallon
FRA	Federal Railroad Administration (USDOT)	MPH	Miles Per Hour
FTA	Federal Transit Administration (formerly UMTA, USDOT)	MPO	Metropolitan Planning Organization
FTIP	Federal Transportation Improvement Program	MTIS	Major Transportation Investment Study
FTS	Freight Transportation Study	MTP	Metropolitan Transportation Plan
FY	Fiscal Year	MUTCD	Manual of Uniform Traffic Control Devices
GAO	General Accounting Office	N ₂ O	Nitrous Oxide
GDP	Gross Domestic Product	NAAQS	National Ambient Air Quality Standards
GHG	Greenhouse Gas	NEPA	National Environmental Policy Act
GIS	Geographic Information Systems	NESTS	North East Subarea Transportation Study
GNP	Gross National Product	NHB	Non-Home Based (trip type)
GPS	Global Positioning Satellite	NHPP	National Highway Performance Program
HBRR	Highway Bridge Rehabilitation & Replacement	NHS	National Highway System
HBW	Home-Based Work (trip type)	NHTS	National Household Travel Survey
HC	Hydrocarbons	NHTSA	National Highway Traffic Safety Administration (USDOT)
HCM	Highway Capacity Manual	NIMBY	Not In My Back Yard
HEV	Hybrid Electric Vehicle	NO _x	Nitrogen Oxides
HNW	Home Non-Work (trip type)	NPS	National Park Service
HOT	High Occupancy Toll Lane	NTPP	NESTS Transit Planning Project
HOV	High Occupancy Vehicle	NTS	National Transportation System
HPMS	Highway Performance Management System	NYPTA	New York Public Transit Association
HRDB	Human Resource Development Bureau	NYSDOT	New York State Department of Transportation
HSC	Human Services Coalition	O ₃	Ozone
HSIP	Highway Safety Improvement Program	OMB	Office of Management and Budget
HUD	U.S. Department of Housing & Urban Development	OPPM	Office of Planning and Program Management (NYSDOT Main Office)
IC	Ithaca College	OPRHP	New York State Office of Parks, Recreation & Historic Preservation
ICC	Interstate Commerce Commission	OTAQ	Office of Transportation and Air Quality
IIJA	Infrastructure Investment and Jobs Act (aka: BIL)	PE	Professional Engineer
IM	Interstate Maintenance	PFR	Project Feasibility Report
IMS	Intermodal Management System	PIN	Project Identification Number
INAM	Infrastructure Needs Assessment Model	PIP	Public Involvement Procedures
IPP	Initial Project Proposal	PM	Project Manager
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991	PMP	Project Management Plan
ITCTC	Ithaca-Tompkins County Transportation Council	PMS	Pavement Management System
ITE	Institute of Transportation Engineers	PMSA	Primary Metropolitan Statistical Area
ITS	Intelligent Transportation System	PMT	Person Miles of Travel
JTW	Journey-to-Work (US Census survey)		
KPH	Kilometer Per Hour		

PRT	Personal Rapid Transit	TEP	Transportation Enhancement Program
PS&E	Plans, Specifications and Estimate	TIA	Transportation Improvement Area
PTMS	Public Transportation Management System	TIF	Transportation Improvement Fund
RFB	Request for Bids	TIGER	Topologically Integrated Geographic Encoding and Reference System
RFP	Request for Proposals	TIGER	Transportation Investment Generating Economic Recovery (Federal Grant Program)
RFQ	Request for Qualifications	TIP	Transportation Improvement Program
RHME	Regional Highway Maintenance Engineer	TMA	Transportation Management Area (metropolitan areas over 200,000 pop.)
ROW	Right of Way	TMA	Transportation Management Association
RPPM	Regional Planning and Program Manager	TOD	Transit Oriented Development
RREGGAE	Roadway & Rail, Energy& Greenhouse Gas Analysis Extension	TOS	Traffic Operation System
RSTP	Regional Surface Transportation Program	TP	Total Particulate Matter
RTIP	Regional Transportation Improvement Program	TPA	Transportation Planning Agency
RTPA	Regional Transportation Planning Agency	TPB	Transportation Planning Board
RTP	Regional Transportation Plan	TRB	Transportation Research Board
SAFE	Service Authority for Freeways and Expressways	TSM	Transportation System Management
SAFETEA-LU	Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users	TSZ	Traffic Survey Zone (see TAZ)
SDF	State Dedicated Fund	UA	Urbanized Area (Census Bureau)
SDL	Safety Deficient Location	UBC	Uniform Building Code
SEQR	New York State Environmental Quality Review	UNIPCC	United Nations Intergovernmental Panel on Climate Change
SEQRA	New York State Environmental Quality Review Act	UOP	Unified Operations Plan
SFY	State Fiscal Year (April 1 - March 31)	UPWP	Unified Planning Work Program
SHPO	State Historic Preservation Officer	USC	United States Code
SIC	Standard Industrial Classification	USDOT	U.S. Department of Transportation
SMART	Strengthening Mobility and Revolutionizing Transportation Grant	USGS	U.S. Geological Survey
SMS	Safety Management System	USTTA	U.S. Travel and Tourism Information Association
SMSA	Standard Metropolitan Statistical Area	UZA	Urbanized Area (FHWA, revised)
SOV	Single Occupant Vehicle	V2V	Vehicle to Vehicle Technologies
SOx	Sulfur Oxides	V/C	Volume to Capacity Ratio
SPDS	State Pollution Discharge Elimination System	VHT	Vehicle Hours Traveled
SRTP	Short Range Transit Plan	VLS	Vehicle Location System
SS4A	Safe Streets and Roads for All Grant	VMT	Vehicle Miles Traveled
STBG	Surface Transportation Block Grant	VNTSC	Volpe National Transportation Systems Center
STIP	State Transportation Improvement Program	VOC	Volume Over Capacity
STOA	State Transit Operating Assistance	VPD	Vehicles Per Day
STP	Surface Transportation Program	VPH	Vehicles Per Hour
STPP	Surface Transportation Policy Project	VPHH	Vehicles Per Household
SWS	Statewide Significant	VOC	Volatile Organic Compounds
TAC	Technical Advisory Committee	WBE	Women (owned) Business Enterprise
TAP	Transportation Alternatives Program	WIC	Women, Infants and Children
TC3	Tompkins Cortland Community College		
TCI	Transit Capital Improvement		
TCM	Transit Control Measure		
TAZ	Traffic Analysis Zone (see TSZ)		
TCAT	Tompkins Consolidated Area Transit		
TCM	Transportation Control Measure		
TCRP	Traffic Congestion Relief Program		
TDC	U.S. Travel Data Center		
TDM	Transportation Demand Management		
TEA-21	Transportation Equity Act for the 21st century		

DEFINITIONS

The definitions below are for commonly used terms and concepts in transportation planning. The listing below may be supplemented by an online glossary maintained by the Federal Highway Administration at: http://www.fhwa.dot.gov/planning/glossary/glossary_listing.cfm.

Accelerated Retirement of Vehicles (a.k.a. "Cash for Clunkers") - programs that allow industries that exceed federal emission standards to purchase older model vehicles from the general public to remove them from the road (for air quality and energy reasons).

Access, Accessibility - The opportunity to reach a given destination within a certain time frame, or without being impeded by physical or economic barriers. Accessible also means, with respect to vehicles and facilities, complying with the accessibility requirements of 49 CFR parts 37 and 38 (ADA transportation provisions).

Aggregate Demand Model - Model obtained by combining travel observations for individuals into geographic zones.

Air Quality Conformity Analysis - Analysis that determines if certain transportation plans and programs conform to federal air-quality goals, namely that the plans and programs won't increase vehicular emissions. Federal Clean Air Act requires these analyses for areas that in non-attainment of federal air quality standards.

Allocation - An administrative distribution of funds among the States, done for funds that do not have statutory distribution formulas. The State of New York also allocates funds among its eleven administrative regions.

Alternative Fuels - Any motor fuel other than ordinary gasoline which generally results in lower levels of air pollutants (e.g., reformulated gasoline, methane, ethanol, natural gas, liquid propane, and vegetable oils). See "Clean Fuels" and "Oxygenated Fuels", below.

Americans with Disabilities Act of 1990 (ADA) - Federal Law which requires accessible public transportation services for persons with disabilities, including complementary or supplemental paratransit services in areas where fixed route transit service is operated. Expands definition of eligibility for accessible services to persons with mental disabilities, temporary disabilities, and the conditions related to substance abuse. The Act is an augmentation to, but does not supersede, Section 504 of the Rehabilitation Act of 1973 which prohibits discrimination on the basis of disability against otherwise qualified individuals in programs receiving federal assistance.

Annual Element (A.E.) - The section of the Transportation Improvement Program which lists all transportation improvement projects proposed for the first year of the program.

Apportionment - A term that refers to a statutorily prescribed division or assignment of funds. An apportionment is based on prescribed formulas in the law and consists of dividing authorized obligation authority for a specific program among the States.

Appropriations Act - Action of a legislative body that makes funds available for expenditure with specific limitations as to amount, purpose, and duration. In most cases, it permits money previously authorized to be obligated and payments made, but for the highway program operating under contract authority, appropriations specify amounts of funds that Congress will make available to liquidate prior obligations.

Arterial - Roadways designed to carry large volumes of traffic to and from collector streets. The emphasis is on mobility, not access to adjoining land uses.

Assignment - The last step in a transportation model in which the estimated trips are loaded on to the simulated travel network (e.g., highway or transit).

Attainment Area - An area considered to have air quality that meets the National Ambient Air Quality Standards for a given pollutant. An area may be in attainment for one pollutant while being in non-attainment for others.

Average Daily Traffic (ADT) - The average number of vehicles passing a fixed point in a 24-hour time frame. A convention for measuring traffic volume.

Average Annual Daily Traffic (AADT) - The total number of vehicles passing a fixed point in a 365-day time period divided by 365. AADT figures may also be derived from ADT counts using monthly adjustment factors derived from continuous count station readings.

Average Vehicle Occupancy (AVO) - A measure of the number of people using each automobile. A higher AVO assists in the reduction of traffic congestion and improving air quality.

Base Year - The first year of data and analysis used in a study (usually the current year).

Bicycle Boulevard - A roadway that has been modified to enhance bicyclists' safety and convenience. Bicycle Boulevards are ideally incorporated into a network that allows bicyclists to travel between major points activity. Bicycle Boulevards frequently incorporate traffic calming strategies to enhance multi-modal transportation, especially bicycling.

Bikeway - Any road, path, or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

Bike Facilities - A general term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling, including parking facilities, mapping all bikeways, and shared roadways not specifically designated for bicycle use. See "Shared Roadway", below.

Bike Lane - A portion of a roadway, which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.

Bike Path - A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right of way or within an independent right of way.

Bike Route - A segment of a system of bikeways designated by the jurisdiction having authority with appropriate directional and informational markers, with or without specific bicycle route number.

Budget Authority - Empowerment by the Congress that allows federal agencies to incur obligations to spend or lend money. This empowerment is generally in the form of appropriations. However, for the major highway program categories, it is in the form of "contract authority." Budget authority permits agencies to obligate all or part of the funds that were previously "authorized." Without budget authority, federal agencies cannot commit the Government to make expenditures or loans.

Bus Lane - A lane reserved for bus use only. Also known as a "diamond lane."

Capacity - The maximum number of vehicles that can pass over a given section of a lane or roadway in one direction (or in both directions for a two-lane or three-lane highway) during a given time period under prevailing roadway and traffic conditions. It is the maximum rate of flow that has a reasonable expectation of occurring. In the absence of a time modifier, capacity is an hourly volume.

Capacity Restraint - The modeling process by which the assigned volume on a link is compared with the practical capacity of that link and the speed of the link adjusted to reflect the relationship between speed, volume, and capacity. The procedure is iterative until a realistic representation of traffic flow is achieved.

Carbon Monoxide (CO) - A colorless, odorless gas emitted primarily from the incomplete combustion of fossil fuels. CO is absorbed into the bloodstream through the respiratory tract and reacts primarily with the hemoglobin in the red blood cells, decreasing the blood's oxygen carrying capacity.

Carsharing - A model of car rental where people rent cars for short periods of time, often by the hour. They are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day.

Catenary - The overhead power line system for electrically propelled rail vehicles, including light-rail cars.

Central Business District (CBD) - The most intensely commercial sector of a city.

Clean Air Act (CAA) - Originally adopted in 1970, substantially amended in 1977. The act established maximum allowable emission levels for various pollutants and required the development of State Implementation Plans (SIPs) that monitor air quality and enforce emission standards.

Clean Air Act Amendments of 1990 (CAAA) - Federal law establishing criteria for attaining and maintaining National Ambient Air Quality Standards. A nonattainment area is a region that fails to meet one or more of the standards. The CAAA have shifted the emphasis of conformity analysis from a system-level review of the SIP towards a more project-oriented approach. Transportation agencies are concerned with projects that help to reduce pollutant levels by reducing vehicle congestion and vehicle miles of travel.

Clean Fuels - Blends and/or substitutes for gasoline. Compressed natural gas (CNG), methanol, ethanol, and others are considered clean fuels. The addition of oxygenated compounds directly to gasoline can improve the efficiency of combustion and lower the output of CO and reactive organic emissions. See "Alternative Fuels", above and "Oxygenated Fuels", below.

Closed Barrier System - A type of toll collection system in which vehicles pay at toll booth "barriers" across the highway, rather than at toll booths at each exit from the highway.

Collector - A roadway that both provides access to adjoining land uses, as well as conducts traffic from local streets to arterial streets and freeways.

Commercial Driver's License (CDL) - A standard state requirement for trucking, bus, and some for-profit passenger bus services. The CDL is becoming a standard driver qualification for employment in professional paratransit organizations.

Commuter Rail - Local and regional passenger train operations between a central city, its suburbs, and/or another central city. Commuter

rail usually has only one or two stations in the CBD. Also known as "suburban rail".

Complete Streets - In urban planning and highway engineering, roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users. Pedestrians, bicyclists, motorists and public transport users of all ages and abilities are able to safely and comfortably move along and across a complete street.

Conformity - Process to assess the compliance of any transportation plan, program, or project with air quality control plans. The conformity process is defined by the Clean Air Act.

Congestion Management and Air Quality Improvement Program (CMAQ) - A categorical type of funding program which directs funding to projects within air quality nonattainment areas that contribute to meeting national air quality standards. CMAQ funds generally may not be used for projects which result in the construction of new capacity available to SOVs (single occupant vehicles).

Congestion Management Process (CMP) - Each Transportation Management Area (see "TMA", below) is required to develop a CMP that provides for effective management of new and existing transportation facilities through the use of travel demand reduction and operational management strategies.

Consolidation - Restructuring transportation services to serve the same market with fewer service providers.

Context Sensitive Solutions - A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. CSS is an approach that considers the total context within which a transportation improvement project will exist.

Contract Authority - A form of budget authority that permits obligations to be made in advance of appropriations. The Federal-Aid Highway Program operates mostly under contract authority rules due to the existence of a dedicated trust fund.

Controlled Access - A roadway design that permits no access to adjoining land, just access to other public roads.

Coordination - When agencies share responsibilities related to transporting clients (e.g., carrying other clients, arranging with other agencies to carry clients, sharing vehicles or vehicle support services including maintenance, etcetera). For example, a provider whose major activity is transporting elderly clients may make mid-day schedule space to serve clients of an AFDC, WIC, or substance abuse prevention program.

Core-Based Statistical Area - An area defined by the Census Bureau for statistical reporting purposes. Such areas have an urban core of 10,000 persons or more, as well as adjacent counties that are socioeconomically linked to the urban center due to commuting patterns. See "Metropolitan Statistical Area" below.

Corporate Average Fuel Economy Standards (CAFE) - Refers to the federal fuel efficiency standards for automobiles.

Crosswalk - A point along a street that is identified by striping, signage, and/or signal lights that designate it as a spot for pedestrians to cross the street.

Curb Cut - a ramp leading smoothly down from a sidewalk to a street, rather than abruptly ending with a curb and dropping roughly 4-6 inches.

Deadhead - Refers to bus travel between a garage and a passenger route. Less deadhead time means more efficiency.

Demand-Responsive System - Any system of transporting individuals, including the provision of designated public transportation service by public entities and the provision of transportation service by private entities, including but not limited to specified public transportation service, which is not a fixed route system. Trips are usually requested and scheduled in advance by the trip maker. See "Dial-A-Ride" and "Paratransit", below.

Desire Line - The straightened path between the origin and destination of a trip. Desire lines are mapped by analysts, where the width of the line is correlated to the patterns of travel intensity.

Dial-a-Ride - A door-to-door, demand responsive transit operation similar to a taxicab (zone cab) service. Trip reservations may be required. See "Demand-Responsive", above and "Paratransit", below.

Discretionary Funding - Projects are selected for construction or reconstruction at the discretion of the U.S. Secretary of Transportation. These projects usually involve high cost or require long periods of construction time.

Ecological Sustainability - Based on the principles of ecology which recognize the connectedness and interrelationship of all living things. Long-term survival (sustainability) of any species in an ecosystem depends on a limited resource base. See "Sustainable Society", below.

Energy Descent - is the post-peak oil transitional phase, when humankind goes from the ascending use of energy that has occurred since the industrial revolution to a descending use of energy. Commonly used to refer to the retraction of oil use after the peak oil availability.

Environmental Capacity - Environmental capacity (EC) quantifies the impact that traffic has on the human environment (noise, air pollution, vibration, pedestrian safety, etc.). It was first quantified by Buchanan (Traffic in Towns, HMSO, 1963, London), and has been expanded and refined by many authors since. A road's environmental capacity is determined by both the physical environment through which the road passes (land use, building set-back, vegetation, etc.) and by the characteristics of the road itself (width, number of lanes, traffic speed, percent trucks, etc.). As a rule, roads in residential areas have a low EC (200-300 vph, 800-1200 vpd), while commercial areas have higher ECs (perhaps twice as high). Environmental capacity is rarely a limiting factor in undeveloped or heavy industrial areas. Many methods can be used to keep a road operating within its EC: reduce the amount of traffic, reduce vehicle speeds, reduce pavement width, plant trees and shrubs along the road, or move the road further from the land-use focal point (e.g., building, playground, etcetera). While it is possible to modify a road to make it operate within its EC without necessarily decreasing the amount of traffic, typical carrying capacity improvements (e.g., wider, straighter, faster) decrease the road's EC. Local examples of successfully implemented measures to improve EC include: prohibiting through-trucks in some residential areas, reducing speed limits near schools, restricting through-traffic from the Cornell University campus, and eliminating all traffic from the Ithaca Commons. [Source: Bruce Brittain]

Environmental Impact Statement (EIS) - A written report that (1) details any adverse economic, social, and environmental effects of a proposed project for which federal funding or approval is sought, (2) examines alternatives to the project, and (3) discusses possible mitigation measures for the negative impacts of the project. It is intended to be a disclosure document, to provide decision-makers with necessary information to make an informed decision. Adverse effects could include air, water, or noise pollution; destruction or disruption of

natural resources; adverse employment effects; injurious displacement of people or businesses; or disruption of desirable community or regional growth.

Environmental Protection Agency (EPA) - EPA is the source agency of air quality control regulations affecting transportation.

Expressway - A divided arterial highway for through traffic with controlled access, the intersections of which are usually separated from other roadways by differing grades.

Federal-Aid Highway Program - An umbrella term generally referring to all activities funded through the FHWA and administered by the States' highway/transportation agencies or, in some cases, by local transportation agencies. While there are many components to the Program, the principal categories are: (1) the Interstate Maintenance Program, (2) the National Highway Performance Program (NHPP), (3) the Surface Transportation Block Grant Program (STBG), and (4) the Congestion Mitigation and Air Quality Improvement Program (CMAQ).

Federal Fiscal Year (FFY) - Since FFY 1977, the yearly accounting period beginning October 1 and ending September 30 of the subsequent calendar year. Fiscal years are denoted by the calendar year in which they end (e.g., FY 2020 began October 1, 2019, and ended September 30, 2020). See "Fiscal Year" and "State Fiscal Year", below.

Federal Highway Administration (FHWA) - The agency within the U.S. Department of Transportation responsible for the administration of the Federal-Aid Highway Program.

Federal Transit Administration (FTA) - The agency within the U.S. Department of Transportation responsible for administering the provisions of the Urban Mass Transportation Act of 1964 (as amended). Formerly named the Urban Mass Transportation Administration (UMTA).

Fiscal Year - The program and budget year of a given business, agency, or other enterprise. See "Federal Fiscal Year", above and "State Fiscal Year", below.

Fixed Route - A system of transporting individuals (other than by aircraft), including the provision of designated public transportation service by public entities and the provision of transportation service by private entities, including, but not limited to, specified public transportation service, on which a vehicle is operated along a prescribed route according to a fixed schedule.

Fragmentation - A situation stemming from the lack of effective and efficient integration of programs, facilities and services.

Freeway - A divided arterial highway designed for the unimpeded flow of large traffic volumes. Access to a freeway is rigorously controlled; grade separated intersections are the rule.

Gasohol - A special motor fuel that is a blend of 90% ordinary gasoline and 10% ethanol which is fermented from biomass (e.g., corn).

Headway - Time spacing between transit vehicles (e.g., 10-minute headways means a bus comes by a particular location every 10 minutes).

High Accident Location - A location that has experienced eight or more accidents within the previous three years and that has a "critical rate" of accidents greater than 1. "Critical rate" is a statistic that compares the accident experience among similar locations. A "critical rate" greater than 1 indicates a higher than average rate of accidents for the location given its traffic volume and other characteristics.

High Occupancy Vehicles (HOVs) - Generally applied to vehicles carrying three or more persons. Freeways, expressways and other large volume roads may have lanes designated for the exclusive use of HOVs

(carpoolers, vanpools, and buses). The term HOV is also sometimes used to refer to high occupancy vehicle lanes themselves.

Highway - Term applies to roads, streets, and parkways, and also includes rights-of-way, bridges, railroad crossings, tunnels, drainage structures, signs, guard rails, and protective structures in connection with highways.

Home-Based Work (HBW) - A trip for the purpose of one's employment, with either trip end being one's home.

Home Non-Work (HNW) - A trip for a purpose other than employment (e.g., shopping, recreation, social, school, etcetera), with either trip end being at one's home.

Infrastructure - A term connoting the physical underpinnings of society at large, including, both human made -- including, but not limited to: roads, bridges, transit, water systems, public housing, sidewalks, utility installations, parks, public buildings, and communications networks -- and the natural (environmental) infrastructure of land, water, air, and life-forms.

Initial Project Proposal (IPP) - The first step in developing NYSDOT capital project, the IPP begins as a two-page form that provides a thumbnail sketch of the proposed improvement. The IPP describes the specific problem, possible solutions to it, and the possible benefits and costs resulting from the project's implementation. It serves as the point of departure for subsequent planning and design.

Intelligent Vehicle Highway Systems (IVHS) - Uses computer and communications technology to provide information to travelers about road and transit conditions and to monitor, guide, or control the operation of vehicles. Included concepts such as "freeway management systems," "urban signal control systems," and "automated highways." Similar to Intelligent Transportation System.

Intermodal - A term that refers to connectivity between modes as a means of facilitating linked trip making. It emphasizes connections (transfers of people or freight in a single journey), choices (provisions of transportation options to facilitate trip making), and coordination and consolidation (collaboration among transportation organizations).

Intermodal Facility - A transportation element that accommodates and interconnects different modes of transportation and serves intrastate, interstate, and possibly international movement of people and goods.

Interstate System - That system of highways which connects the principal metropolitan areas, cities, and industrial centers of the United States. The interstate system also connects at suitable border points with routes of continental importance in Canada and Mexico. The routes of the interstate system are selected by joint action of the state highway department of each state and the adjoining states, subject to the approval of the U.S. Secretary of Transportation. May be referred to as the Dwight D. Eisenhower National System of Interstate and Defense Highways.

Land Use - The way specific portions of land or the structures on them are used. Basic land use categories are: single family residential, multi-family residential, retail, commercial/office, industrial, agricultural, recreation, and so on.

Letting - The term used to describe the acceptance of a contract bid. The letting date follows or coincides with the obligation of funds and is followed by a notice to proceed. See "Obligation Date", below.

Level of Service (LOS) - A qualitative measure of the degree of mobility on a roadway. There are six levels of service defined, ranging from LOS "A" to LOS "F":

- LOS A:
free-flow conditions; delays are minimal or nonexistent
- LOS B:
stable flow, but motorists begin to experience some delays
- LOS C:
flow is still stable, but delays lengthen and maneuvering within the traffic stream is noticeably more difficult
- LOS D:
flow is still stable, but speed and maneuverability are severely restricted; moderately long delays (25 to 40 seconds per vehicle) at intersection
- LOS E:
road is at or near capacity; speeds are reduced to low, uniform flow; delays at intersection of 40 to 60 seconds per vehicle
- LOS F:
roadway is operating under "breakdown" conditions; intersection delays of more than 60 seconds per vehicle

Link - The abstract representation of a discrete roadway or transit route segment in a travel demand model network. See "Network", below.

Local Street - A street intended only to provide access to abutting properties.

Long-range - Typically, long-range plans address a period of at least twenty years. Federal regulations specify that transportation plans must address "at least a twenty-year planning horizon". See "Metropolitan Transportation Plan", below.

Maintenance Area - Any geographic region of the United States designated nonattainment pursuant to the Clean Air Act, and subsequently re-designated in attainment and required to develop a maintenance plan.

Matching Funds - Funds which one funding source requires from others as a condition of receiving the funds from that funding source. Generally, the match is set as a percentage of the total project, or project phase, cost. Federal legislation establishes a 20% matching share for nearly all federal-aid transportation programs.

Metropolitan Planning Area Boundary (MAB) - The geographic area in which the metropolitan transportation planning process must be carried out. This area must, at minimum, include the Census defined Urbanized Area and the area expected to be urbanized within twenty years. The MAB may encompass the entire metropolitan statistical or consolidated metropolitan statistical area (defined by the Census Bureau) and shall include the boundaries of air quality nonattainment and maintenance areas, if applicable. In addition, the MAB should be defined to reflect a comprehensive and effective transportation planning process that ensures connectivity between modes, reduces access disadvantages experienced by modal systems, and promotes efficient overall transportation investment strategies.

Metropolitan Planning Organization (MPO) - The organizational entity designated by law with lead responsibility for developing transportation plans and programs for urbanized areas of 50,000 or more in population. MPOs are established by agreement of the Governor and units of general purpose local government which together represents 75% of the affected population of an urbanized area.

Metropolitan Statistical Area (MSA) - An area defined by the Census Bureau for statistical reporting purposes. Such areas have a core City of 50,000 persons or more and an Urbanized Area of 50,000 persons or more (provided total county/counties population is 100,000 persons or more). MSAs may also be designated on the basis of various economic variables (i.e., regional employment destinations). See "Core-Based Statistical Area" above.

Metropolitan Transportation Plan - A long-range transportation plan, which federal legislation requires be completed by Metropolitan Planning Organizations (MPOs). See "Long-range", above.

Mobility - The ease with which desired destinations can be reached.

Mobility Impaired - A descriptive, non-regulatory definition that generally applies to those persons who, for one reason or another (e.g., age, physical, economic, or other), do not have personal access to or the ability to use an automobile. In general, these persons are elderly, disabled, youths, or economically disadvantaged.

Modal Balance - The percentage of all forms of transportation in use (e.g., 85% autos, 7% pedestrian, 5% bus, 3% bicycle) that represents an optimal mix of modes. Modal balance is influenced by such factors as price, speed, ease of access, demographics (age, economics, education, occupation, etcetera), and land use composition.

Modal Interface - The interaction between two or more modes of transportation (e.g., the ability to change from the pedestrian to bicycle to bus modes in order to complete a trip).

Mode - Means of travel, whether by automobile, transit, bicycle, walking, or other available methods of transportation. Modes also apply to freight movements.

Mode Choice Model - A mathematical model used as part of the transportation modeling process to determine what mode of transportation (principally automobile or mass transit) a specific trip is inclined to use. May also be referred to as "mode split".

Model - A mathematical and geometric projection of activity and the interactions in the transportation system in an area. This projection must be able to be evaluated according to a given set of criteria which typically include criteria pertaining to land use, economics, social values, and travel patterns. The transportation planning process relies heavily on the use of travel demand models that predict travel behavior in order to assess the feasibility, effectiveness, and efficiency of current and future transportation alternatives.

National Ambient Air Quality Standards (NAAQS) - Those standards established pursuant to section 109 of the CAAA and included standards for carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide.

National Highway System (NHS) - Federal legislation specifies that "the purpose of the National Highway System is to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities, and other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel". The NHS is comprised of the Interstate Highway System, urban and rural principal arterials, and the strategic defense highway system.

Network - A graphic and/or mathematical representation of multimodal paths in a transportation system. Highway network representations used in travel demand modeling are comprised of "links", representing the discrete roadway or transit route segments, and "nodes", representing roadway intersections or activity locations.

Node - Designates intersections or changes in characteristics/attributes in a network representation. Nodes may also represent areas of concentrated activity in both network or land use terms.

Nonattainment Area - Any geographic region of the United States that the Environmental Protection Agency (EPA) has designated as a nonattainment area for transportation related pollutant(s) for which a National Ambient Air Quality Standard (NAAQS) exists. Nonattainment is generally declared when air quality monitors reveal that the NAAQS levels have been exceeded for one or more hours on two or more separate days.

Non-Home-Based (NHB) - A trip that takes place between two points, neither of which is the home end of the trip-maker.

Obligation Date - The point in the life of a project at which the administering agency (usually the state DOT) commits a portion of its allocated federal funds to a project. See "Letting", above.

Obligations - Commitments made by Federal agencies to pay out money as distinct from the actual payments, which are "outlays." Generally, obligations are incurred after the enactment of budget authority. However, since budget authority in many highway programs is in the form of contract authority, obligations in these cases are permitted to be incurred immediately after apportionment or allocation. The obligations are for the Federal share of the estimated full cost of each project at the time it is approved regardless of when the actual payments are made or the expected time of project completion.

Operating Cost - The costs of operating a transportation system. These are separate from capital costs, and include such items as: wages, fuel, oil, maintenance, etcetera.

Operating Revenues - Money received from users of a transportation system such as fares, tolls, charter fees, etcetera.

Origin-Destination Survey (O-D Survey) - A survey typically undertaken of travelers (motorists or transit passengers) to identify travel patterns, habits and needs.

Oxygenated Fuels - Gasoline blended with alcohol or ether containing oxygen. Use of such fuels reduces carbon monoxide production and other emissions. See "Alternative Fuels" and "Clean Fuels", above.

Paratransit - Comparable transportation service required by the ADA for individuals with disabilities who are unable to use fixed route transportation services. See "Demand-Responsive System" and "Dial-A-Ride", above.

Park-and-Ride Lots - Commuter parking lots located on the periphery of the urban area adjacent to major travel corridors, where commuters may park their cars and ride transit to the CBD or other major employment centers/destinations.

Peak Hour - The sixty-minute period observed during either the AM or PM peak period that contains the largest amount of travel.

Peak-Hour Factor - The fraction of the average daily traffic volume occurring during the highest volume sixty-minute period during the day.

Peak Hour-Peak Direction - The travel direction which, during the sixty-minute peak hour, contains the highest percentage of travel.

Peak Period - The two consecutive AM or PM sixty-minute periods which collectively contain the maximum amount of AM or PM travel. Peak period can be associated with person-trip movement, vehicle trip movement, or transit stops.

Pedestrian Walkway - Secured walkway provided as an alternate to auto travel. Sidewalks.

Performance Measures - Indicators of how well the transportation system is performing regarding such things as mode share, accident rates, congestion, etc. Used as feedback in the decision-making process.

Person-Trips - The sum of trips made as passengers of an automobile, bus, taxi, truck, and the like, plus as an automobile driver. Auto person-trips are trips made as a passenger or driver in an automobile.

Personal Rapid Transit (PRT) - A public transportation concept that offers on-demand, non-stop transportation, using small, automated vehicles on a network of specially-built guideways.

Planner - In the transportation field, a title likely having to do with the management and analysis of data which directly supports qualitatively oriented, strategic, or "macro" decision-making.

Plans, Specifications and Estimate (PS&E) - The preliminary data submitted by the state to FHWA so that federal funds are set aside for a specific highway project.

Podcars – see Personal Rapid Transit

Preliminary Engineering (PE) - The cost of preparing the detailed design of a project. PE entails surveying, mapping, preparation of plans and contract documents, environmental analyses, all required public hearing, and any other required state or federal procedures. In addition, PE may include "right-of-way incidental activity" which is the field and office work preparatory to the actual purchase of property.

President's Budget - A document submitted annually (due by the first Monday in February) by the President to Congress. It sets forth the Executive recommendations for the Federal budget for the upcoming fiscal year.

Privatization - Concept or theory having to do with for-profit business supplying goods and services for government, public programs or systems, with the intent of enhancing cost-efficiency.

Project Identification Number (PIN) - Identification number given to each project by NYSDOT.

Programmed Funds - Funds proposed for use on the transportation improvement projects which appear in the Transportation Improvement Programs of the State and/or MPOs.

Provider - An agency that provides services that causes clients to be transported, as opposed to an agency whose role is limited to funding programs.

Public Authority - A Federal, State, city, county, town, township, Indian tribe, municipal or other local government or instrumentality with authority to finance, build, operate, or maintain toll or toll-free transportation facilities. Authorities usually have some type of enabling legislation and are usually authorized to fund projects through the sales of bonds with its dedicated revenue stream (tolls, taxes, etcetera) pledged to repayment of the bonds.

Public Participation - The active involvement of the public in the development of transportation plans and improvement programs. Federal legislation requires that state departments of transportation and MPOs "shall provide citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, and other interested parties with a reasonable opportunity to comment on the development of the long-range plan and the TIP".

Public Road - Any road or street open to public traffic, which is under the jurisdiction, ownership, and maintained by a public authority.

Regionally Significant Project – A project that has significant impact on regional transportation due to its location, operational impacts and/or cost.

Request for Bids, Proposals, Qualifications (RFB, RFP, RFQ) - Preliminary stages of a competitive procurement process, most commonly associated with procurement of capital items or consulting services. The RFP is a request for project proposals and includes a description of cost and methodology; the RFQ is a request for information on the qualification of the proposing firm; the RFB is a request to receive project bids.

Rescission - A legislative action to cancel the obligation of unused budget authority previously provided by Congress before the time when the authority would have otherwise lapsed. Rescission may be proposed by the executive branch but requires legislative action to become effective.

Ridesharing - Sharing a ride (and related costs), usually to an employment location, with other commuters, usually by carpooling or vanpooling.

Right-of-Way (R/W or ROW) - Priority paths for the construction and operation of transportation facilities (highways, rail, trails, etc.). Right-of-Way is usually acquired by the public authority either by fee title or by easement real estate transactions.

Scenic Byway Program - Roadways that provide an enjoyable and relaxing experience or that offer cultural or historical enrichment to travelers are legislatively designated as part of a Scenic Byway System. Scenic byways are typically secondary roads having significant cultural, historic, scenic, geological, or natural features. They often include vista, rest areas, and interpretive sites in harmony with the scenic characteristics of the road. The Federal-Aid Highway Program includes limited funding for such statewide systems.

Shared Roadways - Any roadway upon which a bicycle lane is not designated, and which may be legally used by bicycles regardless of whether such facility is specifically designated as a bikeway.

Shuttle - Usually a service provided with a 20-or-less passenger vehicle connecting major trip destinations and origins on a fixed- or route-deviation basis. Shuttles can provide feeder service to main transit routes or operate in point-to-point or circular fashions.

Single Occupant Vehicles (SOVs) - A SOV is a vehicle used to get just one person to a destination.

Social Equity, Justice - The provision of affordable, efficient and accessible transportation services to all people regardless of race, ethnicity, income, gender, or disability. A socially equitable transportation system provides all people with convenient access to meaningful jobs, services and recreational opportunities.

State Environmental Quality Review Act (SEQR or SEQRA) - New York State law and regulations (Article 8 of the Environmental Conservation Law and Part 617 of 6NYCRR) that requires that every state and local agency examine the environmental impacts (including social and economic factors) and mitigation methods in agency decision-making.

State Implementation Plan (SIP) - A portion (or portions) of an applicable implementation plan approved or promulgated, or the most recent revision thereof, under the Clean Air Act. The SIP establishes emissions budgets, monitoring and enforcement procedures, and other procedures designed to control air pollution in order to meet the national air quality standards established by the Clean Air Act.

Statewide Transportation Improvement Program (STIP) - Required by federal legislation as a prioritized, fiscally constrained list of

transportation projects that covers at minimum a three-year period. STIPs are compiled by the state DOT in order to program authorized levels of federal funding.

Surface Transportation Block Grant Program (STBG) - A categorical funding program in federal legislation. Funds may be used for a wide variety of purposes, including: roadway construction, reconstruction, resurfacing, restoration, and rehabilitation; roadway operational improvements; capital costs for transit projects; highway and transit safety improvements; bicycle and pedestrian facilities.

State Fiscal Year (SFY) - The State of New York operates on a fiscal year beginning April 1 and ending March 31. This period may be referred to by the two affected years (e.g., SFY1019-20 began April 1, 2019 and will end March 31, 2020) or by the calendar year in which it ends. See "Federal Fiscal Year" and "Fiscal Year", above.

Tax Incentives - A means of employing the tax code to stimulate investment in or development of a socially desirable economic objective without the direct expenditure from the budget of a given unit of government. Such incentives can take the form of tax exemptions or credits.

Toll Booth Collection system - A type of toll collection system in which vehicles pay at toll booth "barriers" across the highway, rather than at toll booths at each exit from the highway.

Tompkins Consolidated Area Transit (TCAT) - Authorized by New York State Legislature in 1996, to combine Tompkins County transit services into one service.

Traffic Analysis Zone (TAZ) - The smallest geographically designated area for analysis of transportation activity. Zones vary greatly in size depending on such factors as: homogeneity of land use, amount of transportation network, level of analysis desired, and physical geography. Zones can range in size from a city block to very large rural areas (census tract size).

Traffic Calming - A variety of techniques designed to reduce the speed of motor vehicles by affecting driver behavior rather than through enforcement. Traffic calming creates an environment that facilitates the mix of different transport modes and allows a form of "peaceful coexistence" between them.

Transit - Public mass transportation such as buses, subways, commuter rail, etc.

Transit Dependent - Persons who must rely on public transit or paratransit services for most of their transportation. Typically refers to individuals without access to a personal vehicle.

Transit Oriented Development (TOD) - is a mixed-use residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership.

Transportation Control Measures (TCMs) - Local actions to adjust traffic patterns or reduce vehicle use in order to reduce air pollutant emissions and ease congestion. These may include: transportation system management techniques (e.g., signal optimization, ramp metering, incident detection, special events planning, etcetera), transportation demand management techniques (e.g., reduced transit fares, preferential parking, telecommuting, compressed work hours, etcetera), facilities development (e.g., HOV lanes, fixed guideway transit, on-site child care facilities, etcetera), or growth management policies (e.g., mixed use developments, transit corridor development, job/housing balances, etcetera).

Transportation Demand Management (TDM) - The reduction of traffic congestion by reducing the number of automobiles, especially SOVs,

on the road. Measures that can reduce demand include: ridesharing, mass transit, "flex" time, telecommuting, employer incentives to use alternative modes, and restriction on the amount of free or cheap parking, among others.

Transportation Improvement Program (TIP) - Required by federal legislation as a prioritized, fiscally constrained list of transportation projects that covers at minimum a three-year period. TIPs are compiled by the MPO in order to program authorized levels of federal funding. The state DOT is responsible for creating a statewide version of the TIP called the Statewide Transportation Improvement Program (STIP).

Transportation Management Association (TMA) - A voluntary association of public and private agencies and firms joined to cooperatively develop transportation-enhancing programs in a given area. TMAs are appropriate organizations to better manage transportation demand in congested suburban communities.

Transportation Modeling - A computerized procedure to predict future trip making. Also referred to as a travel demand model. The traditional model has four steps: trip generation, trip distribution, mode choice, and assignment to a simulated transportation network (e.g., highway or transit).

Transportation System Management (TSM) - The concept of managing the existing transportation system for increased efficiency through the use of generally lower cost projects such as exclusive bus lanes, improved traffic signal systems, improvements to increase capacity of the facility, intersection channelization, and provisions for parking.

Trip Distribution - The process by which the movement of trips between zones is allocated in a travel demand model. Trip distribution is generally based on a gravity model.

Trip Length Frequency Distribution - The array which relates the trips, or the percentage of trips made at various time intervals or various trip distances.

Trust Funds - Accounts established by law to hold receipts that are collected by the Federal Government and earmarked for specific purposes and programs. These receipts are not available for the general purposes of the Federal Government. The Highway Trust Fund is comprised of receipts from certain highway user taxes (e.g., excise taxes on motor fuel, rubber, and heavy vehicles) and reserved for use for highway construction, mass transportation, and related purposes.

Trip Generation - The process by which the number of trips within each analysis zone are estimated in a transportation model. Trips are generated on the basis of demographic (number of households, household size, income, etcetera) and economic (number and type of employers, commercial activities, etcetera) attributes, and are given in the form of attractions and productions.

Unified Operations Plan (UOP) - The by-laws of an MPO.

Unified Planning Work Program (UPWP) - A document describing the transportation planning activities for an urbanized/metropolitan area for a fiscal year. Federal legislation requires that each MPO develop this document as a prerequisite for obtaining federal planning funds.

U.S. Department of Transportation (DOT) - The principal direct federal funding and regulating agency for transportation facilities and programs. Contains FHWA and FTA.

Urban - The Census Bureau defines urban as: (a) the population living in urbanized areas; plus (b) the population in other incorporated or census designated places of at least 2,500 population at the most recent national census.

Urbanized Area (UA) - An area defined by the Census Bureau according to specific criteria, designed to include the densely settled area around a large place. The definition is based primarily on population density rather than governmental unit boundaries. An urbanized area must have a total population of at least 50,000 persons.

Vehicle Hours Traveled (VHT) - A measure of motor vehicle use over some period of time, usually a day or a year. It represents the total time spent on the roadway system by all vehicles combined, over the specified period of time.

Vehicle Location System (VLS) - Information Technology enabling the ever-changing locations of vehicles to be monitored at a central location. For public transit, VLS enables passengers waiting for rides to continuously be informed of the status of service.

Vehicle Miles Traveled (VMT) - An areawide measure of motor vehicle use. VMT is calculated by summing data on a link basis or by multiplying average trip length (in miles) times the total number of vehicle trips.

TRANSPORTATION RELATED WEB PAGES

There are too many transportation related web sites to include them all in a document such as the LRTP. The list below includes some of the organizations and agencies where ITCTC staff have found useful sources of information, and others that address different transportation components in Tompkins County.

Local

Bike Walk Tompkins - www.bikewalktompkins.org

Cayuga Lake Scenic Byway - <http://cayugalake.com>

Cornell Bicycles - <https://fcs.cornell.edu/content/cycling-campus> information about bicycling at Cornell University

Finger Lakes Cycling Club - <https://fingerlakescycling.org>

Finger Lakes Trail Conference - <http://www.fingerlakestrail.org/>

Finger Lakes Rideshare - <https://511nyrideshare.org/web/finger-lakes-ridership> ridesharing for travelers to, from and in Tompkins County, surrounding regions and academic institutions

Ithaca Carshare - www.ithacacarshare.org

Ithaca-Tompkins County Transportation Council <http://www.tompkinscountyny.gov/itctc>

Tompkins Consolidated Area Transit, Inc. (TCAT) - <http://www.tcatbus.com/>

Tompkins County - <http://www.tompkinscountyny.gov/>

Tompkins County Comprehensive Plan - <http://tompkinscountyny.gov/planning/comprehensive-plan>

Tompkins County Department of Planning and Sustainability - www.tompkinscountyny.gov/planning

Way2Go of Tompkins County - <http://ccetompkins.org/community/way2go> Way2Go works collaboratively to help people save money, stress less, go green and together, improve our mobility options.

State

New York State Association of MPOs (NYSAMPO) - <http://www.nysmpos.org/> links to all New York State MPOs.

New York Department of Transportation (NYSDOT) - <http://www.dot.ny.gov/>

National

American Public Transportation Association - www.apta.com

America's Byways - National Scenic Byways - <http://www.byways.org/>

Association for Commuter Transportation - www.actweb.org

Association of MPOs - national - www.ampo.org

Car Sharing Network - <http://www.carsharing.net/> includes links to car sharing programs nationwide and international.

Center for Neighborhood Technology - <http://www.cnt.org/> "The Neighborhood Works" site

Congress for New Urbanism - <http://www.cnu.org/>

Federal Highway Administration (FHWA) - <https://www.fhwa.dot.gov/> FHWA Home Page

FHWA Office of Environment and Planning - <http://www.fhwa.dot.gov/environment>

Federal Transit Administration (FTA) - <http://www.fta.dot.gov/> FTA Home Page web site

Institute of Transportation Engineers (ITE) - <https://www.ite.org/>

National Highway Traffic Safety Administration - <http://www.nhtsa.dot.gov/>

National Transportation Library-bts – <https://ntl.bts.gov/>

National Transit Institute at Rutgers University (NTI) - [https://www.ntionline.com/-](https://www.ntionline.com/)

Rails to Trails Conservancy - <http://www.railstotrails.org>

USDOT Research and Technology - <https://www.transportation.gov/policy/OST-R>

Victoria Transport Policy Institute - <https://www.vtpi.org/> “an independent research organization dedicated to developing innovative and practical solutions to transportation problems.”