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**APPENDIX C**

**GLOSSARY OF ACRONYMS, DEFINITIONS, AND  
TRANSPORTATION RELATED WEB SITES**

**2025 LONG RANGE TRANSPORTATION PLAN  
Ithaca-Tompkins County Transportation Council**

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**APPENDIX C**  
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## **ACRONYMS**

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<b>AASHTO</b>	American Association of State Highway and Transportation Officials
<b>AADT</b>	Average Annual Daily Traffic
<b>AAR</b>	American Association of Railroads
<b>ADA</b>	Americans with Disabilities Act of 1990
<b>ADT</b>	Average Daily Traffic
<b>ADP</b>	Advance Detail Plans
<b>AE</b>	Annual Element
<b>AFDC</b>	Aid to Families with Dependent Children
<b>AICP</b>	American Institute of Certified Planners
<b>AMFA</b>	Alternative Motor Fuels Act of 1988
<b>APA</b>	American Planning Association <i>or</i> Adirondack Park Agency (New York State)
<b>APTA</b>	American Public Transit Association
<b>APTS</b>	Advanced Public Transportation System
<b>ARTS</b>	Advanced Rural Transportation Systems
<b>ARC</b>	American Recreation Coalition
<b>ASCE</b>	American Society of Civil Engineers
<b>ATMS</b>	Advanced Traffic Management System
<b>ATS</b>	American Travel Survey
<b>ATIS</b>	Advanced Traveler Information System
<b>ATV</b>	Accurate Traffic Volume
<b>AVCS</b>	Advanced Vehicle Control System
<b>AVI</b>	Automated Vehicle Identification
<b>AVO</b>	Average Vehicle Occupancy
<b>BAC</b>	Bicycle Advisory Council
<b>BMS</b>	Bridge Management System
<b>BNAM</b>	Bridge Needs Assessment Model
<b>BSA</b>	Bridge Safety Assurance
<b>BTS</b>	Bureau of Transportation Statistics (USDOT)
<b>CA</b>	Certification Acceptance
<b>CAA</b>	Clean Air Act of 1970
<b>CAAA</b>	Clean Air Act Amendments of 1990 (previously 1977)
<b>CADD</b>	Computer Aided Design and Drafting
<b>CAFE</b>	Corporate Average Fuel Economy Standards
<b>CBD</b>	Central Business District
<b>CDL</b>	Commercial Driver's License
<b>CE</b>	Categorical Exclusion
<b>CFC</b>	Chloroflourocarbon
<b>CH<sub>4</sub></b>	Methane
<b>CHAS</b>	Comprehensive Housing Affordability Strategy
<b>CMAQ</b>	Congestion Mitigation and Air Quality program
<b>CMS</b>	Congestion Management System
<b>CNG</b>	Compressed Natural Gas
<b>CO</b>	Carbon Monoxide
<b>CO<sub>2</sub></b>	Carbon Dioxide

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<b>COE</b>	U.S. Army Corps of Engineers
<b>COFC</b>	Container on Flat Car
<b>CPI</b>	Consumer Price Index
<b>CPM</b>	Critical Path Method
<b>CPMIS</b>	Capital Program Management Information System
<b>CRP</b>	Combined Road Program
<b>CSSQ</b>	Cost, Schedule, Scope and Quality
<b>CSSQA</b>	Cost, Schedule, Scope and Quality Agreement
<b>CTPP</b>	Census Transportation Planning Package
<b>CVO</b>	Commercial Vehicle Operations
<b>DA</b>	Design Approval
<b>DAD</b>	Design Approval Document
<b>DBA</b>	Decibels ( <i>dBA</i> )
<b>DBE</b>	Disadvantaged Business Enterprise
<b>DDR</b>	Draft Design Report
<b>DEC</b>	New York State Department of Environmental Conservation
<b>DEIS</b>	Draft Environmental Impact Statement
<b>DOB</b>	Division of Budget
<b>DOD</b>	U.S. Department of Defense
<b>DOE</b>	U.S. Department of Energy
<b>DOT</b>	Department of Transportation
<b>DQAB</b>	Design Quality Assurance Bureau
<b>DTM</b>	Digital Terrain Model
<b>EA</b>	Environmental Assessment
<b>EAP</b>	Environmental Action Plan
<b>EC</b>	Environmental Capacity
<b>ECO</b>	Employee Commute Options
<b>ECPC</b>	Executive Capital Program Committee
<b>EDPL</b>	Eminent Domain Procedure Law
<b>EIS</b>	Environmental Impact Statement
<b>EPA</b>	U.S. Environmental Protection Agency
<b>EPP</b>	Expanded Project Proposal
<b>EV</b>	Electric Vehicle
<b>FAA</b>	Federal Aviation Administration (USDOT)
<b>FARS</b>	Fatal Accident Reporting System (USDOT)
<b>FAUS</b>	Federal Aid Urban System
<b>FDR</b>	Final Design Report
<b>FEIS</b>	Final Environmental Impact Statement
<b>FERC</b>	Federal Energy Regulatory Commission
<b>FFY</b>	Federal Fiscal Year
<b>FHWA</b>	Federal Highway Administration (USDOT)
<b>FIPS</b>	Federal Information Processing Standards
<b>FM</b>	Functional Manager
<b>FMIS</b>	Financial Management Information Systems
<b>FONSI</b>	Finding of No Significant Impact
<b>FRA</b>	Federal Railroad Administration (USDOT)
<b>FTA</b>	Federal Transit Administration (formerly UMTA, USDOT)
<b>FTS</b>	Freight Transportation Study

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<b>FY</b>	Fiscal Year
<b>GAO</b>	General Accounting Office
<b>GBF/DIME</b>	Geographic Base File/Dual Independent Map Encoding
<b>GDP</b>	Gross Domestic Product
<b>GIS</b>	Geographic Information Systems
<b>GNP</b>	Gross National Product
<b>GPS</b>	Global Positioning Systems
<b>HBRR</b>	Highway Bridge Rehabilitation & Replacement
<b>HBW</b>	Home Based Work (trip type)
<b>HC</b>	Hydrocarbons
<b>HEV</b>	Hybrid Electric Vehicle
<b>HNW</b>	Home Non Work (trip type)
<b>HOV</b>	High Occupancy Vehicle
<b>HPMS</b>	Highway Performance Management System
<b>HRDB</b>	Human Resource Development Bureau
<b>HUD</b>	U.S. Department of Housing & Urban Development
<b>I/M</b>	Vehicle Inspection/Maintenance Programs
<b>ICC</b>	Interstate Commerce Commission
<b>IM</b>	Interstate Maintenance
<b>IMS</b>	Intermodal Management System
<b>INAM</b>	Infrastructure Needs Assessment Model
<b>IPA</b>	Individual Project Assessment
<b>IPP</b>	Initial Project Proposal
<b>ISTEA</b>	Intermodal Surface Transportation Efficiency Act of 1991
<b>ITCTC</b>	Ithaca-Tompkins County Transportation Council
<b>ITE</b>	Institute of Transportation Engineers
<b>ITS</b>	Intelligent Transportation System
<b>JM</b>	Job Manager
<b>JTW</b>	Journey-to-Work (US Census survey)
<b>KPH</b>	Kilometer Per Hour
<b>LHI</b>	Local Highway Inventory
<b>LNG</b>	Liquefied Natural Gas
<b>LOS</b>	Level of Service
<b>LPG</b>	Liquefied Petroleum Gas
<b>LRP</b>	Long Range Plan
<b>LRPCF</b>	Long Range Plan Conceptual Framework
<b>LRRT</b>	Light Rail Rapid Transit
<b>LULU</b>	Locally Unwanted Land Use
<b>MAB</b>	Metropolitan (Planning) Area Boundary
<b>MSA</b>	Metropolitan Statistical Area
<b>MIS</b>	Management Information System
<b>MOA</b>	Memorandum of Agreement
<b>MOU</b>	Memorandum of Understanding
<b>MPG</b>	Miles Per Gallon
<b>MPH</b>	Miles Per Hour
<b>MPO</b>	Metropolitan Planning Organization
<b>MUTCD</b>	Manual of Uniform Traffic Control Devices
<b>N<sub>2</sub>O</b>	Nitrous Oxide

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<b>NAAQS</b>	National Ambient Air Quality Standards
<b>NEPA</b>	National Environmental Policy Act
<b>NESTS</b>	North East Subarea Transportation Study
<b>NHB</b>	Non Home Based (trip type)
<b>NHS</b>	National Highway System
<b>NHTSA</b>	National Highway Traffic Safety Administration (USDOT)
<b>NIMBY</b>	Not In My Back Yard
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NPIAS</b>	National Plan of Integrated Airport Systems
<b>NPS</b>	National Park Service
<b>NPTS</b>	National Personal Transportation Survey
<b>NSDI</b>	National Spatial Data Infrastructure
<b>NTPP</b>	NESTS Transit Planning Project
<b>NTS</b>	National Transportation System
<b>NYPTA</b>	New York Public Transit Association
<b>NYSDOT</b>	New York State Department of Transportation
<b>O<sub>3</sub></b>	Ozone
<b>OCST</b>	Office of Commercial Space Transportation (USDOT)
<b>OMB</b>	Office of Management and Budget
<b>OPP</b>	One Person Plowing (Highway Maintenance)
<b>OPPM</b>	Office of Planning and Program Management (NYSDOT Main Office)
<b>OPRHP</b>	New York State Office of Parks, Recreation & Historic Preservation
<b>OST</b>	Office of the Secretary (USDOT)
<b>PAC</b>	Program Analysis Control
<b>PD</b>	Project Developer
<b>PE</b>	Preliminary Engineering
<b>PIL</b>	Priority Investigation Location
<b>PIN</b>	Project Initiation Number
<b>PIP</b>	Public Involvement Procedures
<b>PIR</b>	Project Initiation Report
<b>PM</b>	Project Manager
<b>PMP</b>	Project Management Plan
<b>PMS</b>	Pavement Management System
<b>PMSA</b>	Primary Metropolitan Statistical Area
<b>PMT</b>	Person Miles of Travel
<b>PNRS</b>	Project Notification and Review System
<b>PPMG</b>	Planning & Program Management Group
<b>PS&amp;E</b>	Plans, Specifications and Estimate
<b>PSP</b>	Project Screening Process
<b>PTMS</b>	Public Transportation Management System
<b>R/W</b>	Right of Way
<b>RAA</b>	Regional Analysis Area
<b>RCPC</b>	Regional Capital Program Committee
<b>RE</b>	Resident Engineer
<b>RFB</b>	Request For Bids
<b>RFP</b>	Request For Proposals
<b>RFQ</b>	Request For Qualifications
<b>RHME</b>	Regional Highway Maintenance Engineer

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<b>ROW</b>	Right of Way
<b>RPM</b>	Revenue Passenger Mile
<b>RPPM</b>	Regional Planning and Program Manager
<b>R&amp;P</b>	Restoration and Preservation
<b>SDF</b>	State Dedicated Fund
<b>SDL</b>	Safety Deficient Location
<b>SEQR</b>	New York State Environmental Quality Review Act
<b>SEQRA</b>	New York State Environmental Quality Review Act
<b>SFY</b>	State Fiscal Year (April 1 - March 31)
<b>SHPO</b>	State Historic Preservation Officer
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan (under CAAA)
<b>SMPG</b>	Seat Miles Per Gallon
<b>SMS</b>	Safety Management System
<b>SMSA</b>	Standard Metropolitan Statistical Area
<b>SOV</b>	Single Occupant Vehicle
<b>SO<sub>x</sub></b>	Sulfur Oxides
<b>SPDS</b>	State Pollution Discharge Elimination System
<b>SSM</b>	Scope Summary Memorandum
<b>STIP</b>	State Transportation Improvement Program
<b>STP</b>	Surface Transportation Program (part of ISTEA)
<b>STPP</b>	Surface Transportation Policy Project
<b>SWS</b>	Statewide Significant
<b>TAC</b>	Technical Advisory Committee (part of MPO)
<b>TASS</b>	Term Agreement for Surveying Services
<b>TAZ</b>	Traffic Analysis Zone (see TSZ)
<b>TCAT</b>	Tompkins Consolidated Area Transit
<b>TCM</b>	Transportation Control Measure
<b>TDC</b>	U.S. Travel Data Center
<b>TDM</b>	Transportation Demand Management
<b>TEA-21</b>	Transportation Equity Act for the 21 <sup>st</sup> century
<b>TEA</b>	Transportation Enhancement Activity (part of STP)
<b>TIGER</b>	Topologically Integrated Geographic Encoding and Reference System
<b>TIP</b>	Transportation Improvement Program
<b>TMA</b>	Transportation Management Area (metropolitan areas over 200,000 pop.)
<b>TP</b>	Total Particulate matter
<b>TPB</b>	Transportation Planning Board
<b>TQM</b>	Total Quality Management
<b>TRB</b>	Transportation Research Board
<b>TSM</b>	Transportation System Management
<b>TSZ</b>	Traffic Survey Zone (see TAZ)
<b>UA</b>	Urbanized Area (Census Bureau)
<b>UMTA</b>	Urban Mass Transportation Administration (now FTA, USDOT)
<b>UOP</b>	Unified Operations Plan
<b>UPWP</b>	Unified Planning Work Program
<b>USC</b>	United States Code
<b>USDOT</b>	U.S. Department of Transportation
<b>USGS</b>	U.S. Geological Survey

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<b>USTTA</b>	U.S. Travel and Tourism Information Association
<b>UZA</b>	Urbanized Area (FHWA, revised)
<b>VHT</b>	Vehicle Hours Traveled
<b>VKT</b>	Vehicle Kilometers Traveled
<b>VLS</b>	Vehicle Location System
<b>VMT</b>	Vehicle Miles Traveled
<b>VNTSC</b>	Volpe National Transportation Systems Center
<b>VPD</b>	Vehicles Per Day
<b>VPH</b>	Vehicles Per Hour
<b>VPHH</b>	Vehicles Per Household
<b>VOC</b>	Volatile Organic Compounds
<b>WBE</b>	Women (owned) Business Enterprise
<b>WIC</b>	Women, Infants and Children
<b>WIM</b>	Weight In Motion

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## ***DEFINITIONS***

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**Accelerated Retirement of Vehicles (a.k.a. "Cash for Clunkers")** - A program of the Environmental Protection Agency which allows 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.

**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.

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**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.

**Analysis Area** - Any geographic area such as a zone or group of zones combined for the purpose of making an analysis.

**Analyst** - In the transportation planning field, a title likely pertaining to a position having to do with quantitative information management and analysis.

**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).

**Attached/Detached** - Used in reference to sidewalks as physically connected or not physically connected to a street.

**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.

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

**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.

**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.

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**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.

**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 new categorical funding program created by ISTEA. CMAQ directs funding to projects within air quality nonattainment areas which contribute to meeting the 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 System (CMS)** - ISTEA requires that each Transportation Management Area (see "TMA", below) develop a CMS that provides for effective management of new and existing transportation facilities through the use of travel demand reduction and operational management strategies. Unless included in a CMS, future highway projects which significantly increase capacity for single occupant vehicles (SOVs) may be ineligible for federal funding.

**Consolidated Metropolitan Statistical Area (CMSA)** - A metropolitan statistical area having 1 million or more in population in which two or more primary metropolitan statistical areas are identified. See "Metropolitan Statistical Area", "Primary Metropolitan Statistical Area", and "Standard Metropolitan Statistical Area", below.

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

**Consultation** - One party confers with another identified party and, prior to taking action(s), considers that party's views.

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**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.

**Cordon Line** - An imaginary line enclosing a study area, along which external interviews are conducted for the purpose of conducting model validation.

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

**Corridor** - A service or planning area through which a major transportation route passes.

**Cutline** - An imaginary line placed at strategic location to intercept all the links in an identified corridor. Traffic counts and trips assigned to the corridor are compared as a check of survey accuracy or model calibration. See "Screenline", below.

**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. Advance 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.

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**Environmental Action Plan (EAP)** - FTA and FHWA have designated three classes of action (refer to 23 CFR Part 771):

- EAP I / CLASS I: Actions that may significantly affect the environment require an Environmental Impact Statement.
- EAP II / CLASS II: Categorical exclusion, no significant impact.
- EAP III / CLASS III: Environmental Impact not established; Environmental Assessment needed to determine if an EIS is needed.

**Environmental Capacity** - Environmental capacity (EC) quantifies the impact that traffic has on the human environment (noise, annoyance, air pollution, vibration, pedestrian safety, etcetera). 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, etcetera) and by the characteristics of the road itself (width, number of lanes, traffic speed, percent trucks, etcetera). As a general 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 so as to make it operate within its EC without necessarily decreasing the amount of traffic, typical carrying capacity improvements (e.g., wider, straighter, faster) actually 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. The Federal-Aid Highway Act of 1970 implemented the National Environmental Policy Act of 1969 for highways requiring the Secretary of Transportation to "promulgate guidelines designed to assure that possible adverse economic, social, and environmental effects" be fully considered.

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

**Expenditures (outlays)** - A term signifying disbursement of funds for repayment of obligations incurred. An electronic transfer of funds, or a check sent to a state or local transportation agency for voucher payment, is an expenditure or outlay.

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

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**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 System (NHS), (3) the Surface Transportation Program (STP), and (4) the Congestion Mitigation and Air Quality Improvement Program (CMAQ). Projects are reviewed for eligibility on the basis of an approved functional classification system. [note: The *ISTEA* legislation repealed the previous Federal-Aid programs (primary, secondary, and urban systems) and declared the final authorizations and appropriations for the completion of the Dwight D. Eisenhower National System of Interstate and Defense Highways.]

**Federal Fiscal Year (FFY)** - Since FFY 1977, the yearly accounting period beginning October 1 and ending September 30 of the subsequent calendar year. Prior to FFY 1977, the federal fiscal year started on July 1 and ended the following June 30. Fiscal years are denoted by the calendar year in which they end (e.g., FY 2001 began October 1, 2000, and ended September 30, 2001). See "Fiscal Year" and "State Fiscal Year", below.

**Federal Highway Administration (FHWA)** - The agency within of 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).

**Financial Capacity, Capability** - Refers to U.S. Department of Transportation requirement that an adequate financial plan for funding and sustaining transportation improvements be in place prior to programming federally-funded projects. Generally refers to the stability and reliability of revenue in meeting proposed costs.

**Findings of No Significant Impact (FONSI)** - A FONSI results from the determination that a EAP III/CLASS III action will not significantly affect the environment.

**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.

**Funder** - Organization that purchases transportation service, and/or related programs or work from another or other agencies.

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

**Gravity Model** - A mathematical model of distribution based on the premise that trips produced in any given area will distribute in accordance with the accessibility of other areas and the opportunities they offer. Distribution is a function of the relative attractiveness of the activity in a given area as a proportion of total activity and as acted upon by a friction factor (such as travel time).

**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.

**Import Substitution** - An economic policy or practice whereby the use of locally/regionally produced goods or services are preferred to similar goods or services produced outside of the region. See "Regional Self-Sufficiency", below.

**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.

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**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." ATMS, ATIS, APTS, AVCS, CVO, ARTS, and VLS are all examples of specific IVHS applications.

**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.

**Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)** - Landmark federal legislation that substantially revises the pertinent transportation codes governing the planning for and funding of mass transit, highways, and highway safety, research, and aviation projects. It replaced the old Federal-Aid Highway Program with a new series of Federal-Aid programs, including a block grant program in which the State and local governments are given flexibility to determine transportation solutions that best meet their needs.

**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.

**Laneage** - The number and configuration of travel lanes.

**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

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**Limitation on Obligations** - Any action or inaction by an officer or employee of the United States that limits the amount of Federal assistance that may be obligated during a specified time period. A limitation on obligations does not affect the scheduled apportionment or allocation of funds, it just controls the rate at which these funds may be used.

**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. The ISTEA regulations specify that transportation plans must address "at least a twenty year planning horizon". See "Metropolitan Transportation Plan", below.

**Long Range Conceptual Framework** - A document created for the sole purpose of specifying the procedures and schedule to be followed in order to complete a long-range planning process; a "plan to plan".

**Maintenance area** - Any geographic region of the United States designated nonattainment pursuant to the CAA Amendments of 1990 (Section 102(e)), 42 U.S.C. 7410 et seq., and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the Clean Air Act as amended (CAA), 42 U.S.C. 7410 et seq.

**Major Metropolitan Transportation Investment** - A high-type highway or transit improvement of substantial cost that is expected to have a significant effect on capacity, traffic flow, level of service, or mode share at the transportation corridor or subarea scale.

**Management System** - A systematic process, designed to assist decision makers in selecting cost-effective strategies/actions to improve the efficiency and safety of, and protect the investment in, the nation's infrastructure. The ISTEA legislation mandates the establishment of separate management systems that specifically address safety, pavements, bridges, congestion, intermodal needs, and public transportation. A seventh informal management system, the metropolitan transportation system, concentrates on traditional traffic data collection/analyses.

**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. The ISTEA legislation established 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 required by 23 U.S.C. 134 and section 8 of the Federal Transit Act 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 so as to reflect a comprehensive and the most effective transportation planning process that ensures

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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 a 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 "Consolidated Metropolitan Statistical Area", above and "Primary Metropolitan Statistical Area" and "Standard Metropolitan Statistical Area", below.

**Metropolitan Transportation Plan** - A long-range transportation plan, which the federal ISTEA 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.

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**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)** - The ISTEA 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. The NHS is limited to 155,000 miles (+/- 15%) and must be approved by Congress prior to September 30, 1995.

**Northeast Subarea Transportation Study (NESTS)**- The *Northeast Subarea Transportation Study* (NESTS) was a public participation planning process initiated in 1997 and completed in 1999. The purpose of the NEST study was to develop recommendations for improving our local transportation network. The recommendations of the study are multimodal in nature and stress the maintenance and improvement of livability in the study area. This study was coordinated by the ITCTC, sponsored by the Town and Village of Lansing, the Village of Cayuga Heights, and the Towns of Ithaca and Dryden, with additional participation by Cornell University and NYSDOT.

**Northeast Subarea Transportation Study Transit Planning Project (NTPP)** – A follow-up study to NESTS which studied transit service in the northeast area of Tompkins County. The study made specific recommendations for transit improvements and addressed the requirements to increase the transit share of modal split in the area.

**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.

**Obligational Authority** - See "Limitation on Obligations", above.

**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.

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**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 actually 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** - The point or locale where a trip begins.

**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.

**Penalty** - An action that does not allow a State to use the full amount of its apportioned funds. The action may be a withholding of project approvals or withholding of a percentage of the State's apportionment. The action, usually a specific percentage of withholding, may be taken when the State does not comply with a required provision of law (e.g., non-enforcement of national maximum speed limit, national minimum drinking age, use of safety belts and motorcycle helmets, etcetera).

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**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.

**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.

**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.

**Primary Metropolitan Statistical Area (PMSA)** - Any group of cities and towns that was recognized as a standard metropolitan statistical area on January 1, 1980 or a group of cities/towns that contain: (a) a population of 75,000 or more; (b) a city with at least 15,000 persons, an employment/residence ratio of at least .75, and at least 40% of its employed residents working in the city; (c) core communities with at least 50% of its population living in the urbanized area and which together have less than 40% of their resident workers commuting to jobs outside the core; and (d) each community in the core also has at least 5% of the resident workers working in the component core city or at least 10% working in the component core city of places already qualified for this core, and at least 20% commuting interchange with the component core city together with other cities and towns already qualified for the core. See "Consolidated Metropolitan Statistical Area" and "Metropolitan Statistical Area", above and "Standard Metropolitan Statistical Area", below.

**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.

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**Public Participation** - The active involvement of the public in the development of transportation plans and improvement programs. The ISTEA 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.

**Purchase of Service** - Term in social services field referring to purchase of program services from other agencies. One such service is transportation.

**Regional Self-Sufficiency** - A term that refers to local economic policies and practices that focus on the priority use of internal resources. See "Import Substitution", above.

**Regionally Significant Project** - A project (other than projects that may be grouped in the STIP/TIP pursuant to Sec. 450.216 and Sec. 450.324) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etcetera, or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including, as a minimum, all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel.

**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)** - (1) Priority paths for the construction and operation of transportation facilities (highways, light and heavy rail, railroads, etcetera). Right-of-Way is usually acquired by the public authority either by fee title or by easement real estate transactions. (2) Priority use of a facility granted to one user over other(s) such that the others must yield.

**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.

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**Screenline** - An imaginary line, usually along a physical barrier, such as a river or railroad tracks, splitting the study area into a few parts. Traffic counts and possibly interviews are conducted along this line, and the crossings are compared to those calculated from the interview data as a check of survey accuracy.

**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.

**Standard Metropolitan Statistical Area (SMSA)** - The term used from 1959 to 1983 to describe the statistical system of metropolitan areas, and the areas as individually defined. It was preceded by Standard Metropolitan Area (SMA) from 1950 to 1959, and superseded by Metropolitan Statistical Area (MSA) in 1983. The term was adopted when the current system formally recognizing consolidated metropolitan statistical areas and their component primary metropolitan statistical areas was put in place. The term Metropolitan Area (MA) is now used to describe the system and the areas collectively, but the individual areas will retain the MSA, CMSA, and PMSA nomenclature.

**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 Highway Department** - That department, commission, board, or official of any State charged by its laws with the responsibility of highway construction. See "State Transportation Department", below.

**State Implementation Plan (SIP)** - A portion (or portions) of an applicable implementation plan approved or promulgated, or the most recent revision thereof, under sections 110, 301(d) and 175A of the Clean Air Act (42 U.S.C. 7409, 7601, and 7505a). 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.

**State Transportation Department** - Similar to a State Highway Department, except that its mission and jurisdiction has been broadened to include all modes of transportation. See "State Highway Department", above.

**Statewide Transportation Improvement Program (STIP)** - Required by the ISTEA 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.

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**Study Area** - The area delimited for the purpose of data collection by a transportation study. This area contains the central city and surroundings, which will become urbanized in 20 to 30 years and is the area for which forecasts of travel are made. See "Subarea", below.

**Subarea** - A focused or windowed section of a study area used to conduct more detailed analyses.

**Surface Transportation Program (STP)** - A new categorical funding program created by ISTEA. 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; scenic and historical transportation facilities; and, preservation of abandoned transportation corridors. See "Federal-Aid Highway Program", above.

**Sustainable Society** - A society that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or social systems of support. In order to be socially sustainable, the combination of population, capital, and technology in the society would have to be configured so that the material living standard is adequate and secure for everyone. The rate of use of renewable resources does not exceed their rates of regeneration; the rate of use of nonrenewable resources does not exceed the rate at which sustainable renewable substitutes are developed; and the rate of pollution emission does not exceed the assimilative capacity of the environment. See "Ecological Sustainability", above.

**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., SFY94-95 began April 1, 1994 and will end March 31, 1995) or by the calendar year in which it ends. See "Federal Fiscal Year" and "Fiscal Year", above.

**TEA-21**- TEA-21 is federal legislation that replaces the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). TEA-21 improves on enhancement programs and encourages advancement of transportation planning.

**Title I** - Refers to the first title of the ISTEA legislation which amends the surface transportation programs (i.e., highway programs) of Title 23 of the United States Code (USC).

**Title III** - Refers to the third title of the ISTEA legislation which amends the Urban Transportation Act of 1964 (i.e., transit programs), Title 49 of the United States Code (USC).

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

**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. Examples traffic calming strategies and techniques include:

*Pedestrianization:* (Europe, 1960's) Short stretches of streets (300-1,000 ft.) reserved for the exclusive use of pedestrians, usually located in central city/shopping areas (i.e. the Ithaca Commons).

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*Woonerven:* (Holland, 1970's) Woonerf literally means "living yard". No segregation between motorized and non-motorized traffic (i.e., no sidewalks), but pedestrians have priority. Playing is also permitted. Drivers may not drive faster than a walking pace. Parking allowed only at specified locations, which is screened by plantings and alternates from side to side creating a nonlinear travel line. Informational signs tell drivers they are entering a Woonerf.

*Verkehrsberuhigung:* (Germany, 1980's) Similar to Woonerven. Traffic speeds controlled at 18 miles per hour (30 kph).

*Safe Routes to School:* (Denmark, 1980's) City of Odense has a ten-year program to implement "slow speed areas" of 13-30 mph (20-25 kph), along with various other calming techniques, in areas close to schools or on popular school routes.

*Community Street:* (Japan, 1980) Similar to Woonerven.

*Road-Pia:* (Japan, 1984) Areawide traffic calming resulted in reduced vehicular traffic volumes/increased bicycle and pedestrian traffic, reduction in accidents and average vehicle speeds.

*Traffic Cells:* (Sweden, 1969) City of Gothenburg divided itself into five cells. Auto traffic was prevented from crossing the boundaries between cells except at specific ring-roads. Transit, bicycles, and pedestrians were allowed to cross. Parking was reduced and public information efforts increased.

*Auto-free Zones:* (Italy) Florence and Milan have instituted (following citizen referenda) a permit process that limited all but essential traffic. Traffic volumes were reduced by 50%. Bologna tightened access restriction to streets in the historic central district while improving bus, trolley, and metro services.

*Road Humps and Speed Tables:* Raising the surface of the road over a short distance, generally to the height of the adjacent curb. Humps can be round or flat-topped. The latter being known as speed tables, which can extend over many feet.

*Chicanes:* Physical obstacles or parking bays, staggered on alternate sides of the highway so that the route for vehicles is tortuous.

*Traffic Throttles (pinch points):* The narrowing of a two-way road over a short distance to a single lane. Sometimes these are used in conjunction with a speed table and coincident with a pedestrian crossing.

*Curb Extensions (sidewalk widening):* The sidewalk on one or both sides of the road is extended to reduce the highway to a single lane or minimum width for two-lane traffic. This reduces crossing distances and discourages parking close to intersections and crosswalks.

*Central Refuges (medians):* Islands situated in the middle of the road to reduce lane widths and provide a refuge for pedestrians and bicyclists crossing major roads.

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*Mini-Roundabouts (traffic circles):* Small roundabouts situated at an intersection. Some have raised centers, others are just painted circles on the road.

*Raised Intersections:* The highway is raised at an intersection, usually by brickwork or a plateau with a ramp on each approach. The platform is at curb level and may well have distinctive surfacing.

*Entry Treatments Across Intersections:* Surface alterations at side road intersections, generally using brickwork or other textured surface materials. The level of the road may be raised to the level of the sidewalk.

*Environmental Road Closures:* Road closures, generally in residential streets, designed to remove through traffic or prevent undesirable turns.

*No entry - with "cycle slip":* Access to a road is barred in one direction by a No-entry sign. The rest of the road remains two-way, and bicyclists and pedestrians can pass the No-entry sign.

*Textured Surface:* The use of nonasphalt surface, such as brickwork, paving or cobbles to reinforce the concept of a traffic restricted area.

*Shared Surfaces:* The traditional distinction between sidewalk and pavement is removed, leaving pedestrians, bicyclists and motor vehicles to share a common space.

*Tortuous Roads:* Roads that are designed to meander, occasionally quite sharply, reducing the view of any stretch of "open road" and thereby encouraging lower vehicle speeds.

*Rumble Strips:* Lines of cobbles or other raised surfacing designed to warn drivers of excessive speed or of the proximity of a hazard area where lower speeds are desirable.

*Transverse Bands:* Painted lines oriented as transverse bands across the highway at decreasing intervals. They are intended to give drivers the impression they are traveling with increasing speed, so they will react and slow down.

*Channelization Changes:* Changing the lane configuration of a street to create more space for bicycle traffic. For example, Seattle, Washington has converted several streets from 4-lanes to 2-lanes with a center turn lane (some of which have later been changed to planted medians).

*Slow Streets:* Various efforts have been made to slow sections of specific streets. For example, Berkeley, California has used a combination of speed humps, shifting travel lanes, and channelization to achieve a six block long slow street.

*Transit Street and Pedestrian Zones:* Motor vehicle traffic is limited to commercial deliveries while transit "circulators" act as "horizontal elevators". This concept has worked well in Madison, Wisconsin and Denver, Colorado (note: bicycles are prohibited in the Denver example).

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*Signing Techniques:* Informational signs, such as "residential street", "local access only", "no through traffic" are in common use. Stop signs placed frequently throughout a residential area can significantly slow traffic. The City of Saint Paul, Minnesota employs a "basket weave" pattern whereby stop signs are placed in such a way that the only unimpeded path is quite circuitous.

*Bicycle Boulevards:* Barriers are used to restrict or prohibit through motor vehicle traffic, but allow through bicycle traffic. Stop signs are often removed to make this route more attractive to cyclists. A local street parallel to an arterial street is best for this application. Bryant Street is a two mile example in Palo Alto, California.

*Traffic Diverters:* Traffic diverters, curb extensions, cul-de-sacs, and neckdowns are used to discourage cut-through traffic in residential areas. Curb extensions (which change the end of a two-way street to a one-way street) and neckdowns (provide "pinch points", but allow two-way traffic) are used at entrances to neighborhoods to discourage/slow motor vehicle traffic from entering. Traffic diverters and cul-de-sacs are placed to prevent through traffic. Traffic diverters may be diagonal (allowing only a single 90 degree turn from all approaches) or truncated (allows a right turn movement around one end of the diverter).

*Corner Radii Treatments:* Normal curb radii (20-24 ft.) have been designed to facilitate turning movements by trucks and larger vehicles, allowing faster automobile movements as a side-effect. Reducing the size of the radii (7-15 ft.) can significantly slow traffic and increase pedestrian safety.

(Source: Traffic Calming, Auto-Restricted Zones and Other Traffic Management Techniques, A. Clarke and M. Dornfeld)

**Transit** - Public mass transportation such as buses.

**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.

**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.

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**Transportation Enhancement Activities** - The TEA-21 legislation mandated that a minimum of 10% of each state's allocation of Surface Transportation Program (STP) funds must be used for transportation enhancement activities. The legislation established an exclusive list of these activities: *"The term 'transportation enhancement activities' means, with respect to any project or the area to be served by the project, provision of facilities for pedestrians and bicycles, acquisition of scenic easements and scenic or historic sites, scenic or historic highway programs, landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails), control and removal of outdoor advertising, archaeological planning and research, and mitigation of water pollution due to highway runoff."* (23 USC §101(a), as amended).

**Transportation Improvement Program (TIP)** - Required by the ISTEA 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.

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**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. ISTEA 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 density (i.e., a contiguous area having 1,000 persons/mile<sup>2</sup>) rather than governmental unit boundaries. An urbanized area must have a total population of at least 50,000 persons. Under the ISTEA regulations, local areas are asked to make minor revisions to the UA boundary in order to smooth the census lines and to facilitate planning activities (e.g., data collection, etcetera). This revised urbanized area is noted by the acronym **UZA**.

**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.

**Zone** - 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).

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## ***Transportation Related Web Pages***

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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 that ITCTC staff has found useful sources of information, and others that address different transportation components in Tompkins County.

1. American Public Transportation Association – [www.apta.com](http://www.apta.com)
2. America’s Byways – National Scenic Byways - <http://www.byways.org/>
3. Car Sharing Network - <http://www.carsharing.net/> - includes links to car sharing programs nationwide and international.
4. Cayuga Waterfront Trail - <http://cayugawaterfronttrail.com/>
5. [Center for Neighborhood Technology](http://www.cnt.org/) – <http://www.cnt.org/> - "The Neighborhood Works" site
6. Center for Transportation Excellence – [www.cfte.org](http://www.cfte.org)
7. Census Transportation Planning Package (CTPP) – <http://www.fhwa.dot.gov/ctpp/>
8. Congress for New Urbanism - <http://www.cnu.org/>
9. Cornell Bicycles – information about bicycling at Cornell University
  - <http://www.bike.cornell.edu/CAMPUS.htm>
  - [http://www.transportation.cornell.edu/Commuter\\_and\\_Parking\\_Services/tms3\\_bike.html](http://www.transportation.cornell.edu/Commuter_and_Parking_Services/tms3_bike.html)
10. [Federal Register](http://www.access.gpo.gov/su_docs/aces/aces140.html) – [http://www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html)
11. Federal Highway Administration (FHWA) – <http://www.fhwa.dot.gov/index.html> - FHWA Home Page web site
12. [FHWA Office of Environment and Planning](http://www.fhwa.dot.gov/environment/) – <http://www.fhwa.dot.gov/environment/>
13. Federal Transit Administration (FTA) - <http://www.fta.dot.gov/> - FTA Home Page web site
14. Finger Lakes Cycling Club - <http://www.flcycling.org/>
15. Finger Lakes Trail Conference - <http://www.fingerlakestrail.org/>
16. [ITE](http://www.ite.org) – <http://www.ite.org> - Institute of Transportation Engineers
17. Ithaca Tompkins Regional Airport - <http://www.ithaca-airport.com/>
18. Trail Links – <http://www.millenniumtrails.org/default.asp>
19. National Association of MPOs – [www.ampo.org](http://www.ampo.org)

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20. National Highway Traffic Safety Administration - <http://www.nhtsa.dot.gov/>
  21. [National Transportation Library-bts](http://ntl.bts.gov/) – [http://ntl.bts.gov /](http://ntl.bts.gov/)
  22. New York State Association of MPOs – <http://www.nysmpos.org/> - links to all New York State MPOs.
  23. [NTI, Rutgers](http://www.ntionline.com/) – <http://www.ntionline.com/> - National Transit Institute at Rutgers University
  24. [NYSDOT](http://www.dot.state.ny.us/) – [http://www.dot.state.ny.us /](http://www.dot.state.ny.us/) - New York Department of Transportation web site
  25. Rails to Trails Conservancy - <http://www.railtrails.org/default.asp>
  26. Tompkins Consolidated Area Transit, Inc. (TCAT) - <http://www.tcatbus.com/>
  27. Tompkins County – [www.tompkins-co.org](http://www.tompkins-co.org)
  28. Tompkins County Comprehensive Plan – [www.tompkins-co.org/planning/compplan](http://www.tompkins-co.org/planning/compplan)
  29. Tompkins County Planning Department – [www.tompkins-co.org/planning](http://www.tompkins-co.org/planning)
  30. Transportation and Land Use Coalition - <http://www.transcoalition.org/>
  31. Transportation Research Board – <http://trb.org>
  32. Transportation Information and Decision Engineering (TIDE) web site - [www.njtide.org/links/index.html](http://www.njtide.org/links/index.html) - Transportation Related Links
  33. Travel Model Improvement Program (TMIP) – <http://tmip.tamu.edu>
  34. Surface Transportation Policy Project – <http://www.transact.org/> - Information on transportation alternatives and sustainable communities
  35. [USEPA: Sustainable Ecosystems and Communities](http://www.epa.gov/ecocommunity/) – [http://www.epa.gov/ecocommunity /](http://www.epa.gov/ecocommunity/)
  36. Victoria Transport Policy Institute – [www.vtpi.org](http://www.vtpi.org)
  37. [Welfare to Work-Department of Labor](http://wtw.doleta.gov) – <http://wtw.doleta.gov> - DOL regulations and other information dealing with Welfare to Work