



APPENDIX E

Glossary of Terms





Access management: when used in traffic and traffic engineering circles, generally refers to the regulation of interchanges, intersections, driveways and median openings to a roadway. Its objectives are to enable access to land uses while maintaining roadway safety and mobility through controlling access location, design, spacing and operation. Planners, engineers, architects, developers, elected officials, citizens and attorneys all play a significant role in access management.

American Association of State Highway & Transportation Officials (AASHTO): is a standard setting body which publishes specifications, test protocols and guidelines which are used in highway design and construction throughout the United States. Despite its name, the association represents not only highways but air, rail, water, and public transportation as well.

American Recovery and Reinvestment Act of 2009 (ARRA): An economic stimulus package enacted by the 111th United States Congress in February 2009. The Act of Congress was based largely on proposals made by President Barack Obama and was intended to provide a stimulus to the U.S. economy in the wake of the economic downturn.

Americans with Disabilities Act (ADA): Federal law designed to protect the rights of people with virtually any physical or mental disability. It protects consumers in that it makes discrimination against the disabled illegal in public accommodations, transportation, and telecommunications.

Bike Lane: a part of a road marked off or separated for the use of bicyclists.

Bike Path: a path, as one alongside a roadway, for the use of bicyclists and physically separated from motorized vehicle traffic.

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.

Bikeway: a path, lane, or route set aside for bicycle riders.

Bus-Only Lane: is a lane restricted to buses, and generally used to speed up public transport otherwise held up by traffic congestion.

Bus Rapid Transit: is a relatively new umbrella term for urban mass transportation services utilizing buses to perform premium services on existing roadways or dedicated bus rapid transit corridors.

Carpooling and Vanpooling: Carpools and vanpools are transportation services that can be provided by public or private entities, or arranged by a group of individuals. In this mode, people organize a group to share a ride to work. Carpooling is typically organized at





the individual level with carpool members working out all arrangements. Vanpooling is typically organized by a local company or transit agency that facilitates the organizational process.

Central Business District (CBD): also called a central activities district and in North America a "downtown") is the commercial and often geographic heart of a city.

Center for Transportation Research (CTR): A top university-based transportation research centers at the University of Texas which undertakes relevant transportation research, provides significant educational opportunities for University of Texas students, and provides a public service by conducting research that responds to the transportation needs of U.S. travelers. CTR undertakes investigations that seek practical solutions to various state mobility problems.

Census Transportation Planning Package (CTPP): is a set of special tabulations from decennial census demographic surveys designed for transportation planners. The CTPP contains data summarizing worker and household characteristics, worker characteristics, and journey-to-work flow data.

Clean Air Act (CAA): is a piece of United States environmental policy relating to the reduction of smog and air pollution. It follows the Clean Air Act in 1963, the Clean Air Act Amendment in 1966, the Clean Air Act Extension in 1970, and the Clean Air Act Amendments in 1977. It was enacted by the 101st United States Congress and authorized the establishment of federal and state regulations that limit emissions stationary and mobile sources of air pollutants.

Commercial Vehicle Only lanes (CVO): A traffic lane that can be used only by commercial vehicles such as trucks and vans transporting products, mail, building materials or other forms of freight for business purposes.

Congestion Management Process (CMP): A systematic process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs. A CMS includes methods to monitor and evaluate performance; identify alternative action; access and implement cost-effective action; and evaluate the effectiveness of implemented actions.

Congestion Mitigation and Air Quality Improvement Program (CMAQ): provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide (CO), and particulate matter (PM-10, PM-2.5) which reduce transportation related emissions.





Council of Governments (COG): is a voluntary association of municipal and county governments, enabled by state law to promote regional issues and cooperation among members.

Dedicated sales tax: Financing method that allows local governments to use tax revenue income to match or leverage federal transportation funds for implementing transportation improvements. In high-growth areas, earmarked sales taxes can produce a secure revenue stream with which to support bond financing for certain kinds of projects, for example, highway and transit infrastructure projects that may not generate sufficient operating income to cover construction costs. Dedication of sales tax for transportation purposes requires voter approval.

Department of Transportation (USDOT): Federal agency established by act of congress in 1966 and responsible for highways, mass transit, aviation and ports. The DOT includes the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

Developer impact fees: is a fee that is implemented by a local government on a new or proposed development to help assist or pay for a portion of the costs that the new development may cause with public services to the new development within the United States. This type of fees can be used for development of transit centers near planned office buildings or highway interchanges constructed in the vicinity of land which is zoned for malls or shopping centers.

Disadvantaged Business Enterprise (DBE): program intended to ensure nondiscrimination in the award and administration of DOT-assisted contracts in highways, transit, airport and safety during financial assistance programs.

Electronic tolling system: a technological implementation aimed to eliminate the delay on toll roads by collecting tolls electronically. This feature debits the accounts of registered car owners without requiring them to stop.

Environmental Assessment (EA): is an assessment of the possible impact—positive or negative—that a proposed project may have on the environment; considering natural, social and economic aspects.

Environmental Impact Statement (EIS): A report required by the National Environment Policy Act of the potential effect of plans for land use in terms of environmental, engineering, esthetic, and economic aspects of the proposed objective.

Environmental Protection Agency (EPA): an agency of the federal government charged with a variety of responsibilities relating to the protection of the quality of the natural environment, including research and monitoring, promulgation of standards for air and





water quality, and control of the introduction of pesticides and other hazardous materials into the environment.

Farm to Market (FM): An identifier for a roadway designated by the Texas Transportation Commission to be part of the statewide highway system. Normally associated as a 2-lane roadway in rural areas, but are located in urban areas and can be a 4 or 6 lane divided roadway. The FM roadway designation is typically given to roads that are located east of IH-35.

Federal Highway Administration (FHWA): is a division of the United States Department of Transportation that specializes in highway transportation. This component administers, plans, funds and regulates the federal highway system.

Federal Transit Administration (FTA): is an agency within the United States Department of Transportation (DOT) that provides financial and technical assistance to local public transit systems. This component provides financial and technical assistance to local transit systems.

Freight Rail: an extensive network of **railway** lines and yards to serve **freight** traffic and provides transportation of cargo nationwide.

Geographic Information System (GIS): A geographical information **system** that captures, stores, analyzes, manages, and presents data that is linked to location.

Grade separated intersection: is the process of aligning a junction of two or more transport axes at different heights (grades) so that they will not disrupt the traffic flow on other transit routes when they cross each other.

Highway Capacity Manual (HCM): is a publication that contains concepts, guidelines, and computational procedures for calculating the capacity and quality of service of various highway facilities, including freeways, highways, arterial roads, roundabouts, signalized and unsignalized.

Historically Underutilized Business (HUB): Sole proprietorship businesses which are at least 51% minority or women owned and certified by the General Services Commission.

Incident Management: An incident is a non-recurrent event that causes reduction of roadway capacity or abnormal increase in demand. Incident management involves six major tasks: detection, verification, and response, removal/restoration of capacity, traffic management, and information to motorists. An incident such as a serious freeway traffic accident will generally require a coordinated effort by many different organizations involving police, fire, emergency, and transportation personnel.





Intelligent Transportation System (ITS): A system that enables people and goods to move safely and efficiently through a state-of-the-art, intermodal transportation system that includes information processing, communications, control, and electronics. Automatic vehicle location systems, advanced signal timing, and other new and emerging advanced technology can be used with public transportation systems.

Intermodal freight operations facility: A facility that involves the transportation of freight in an intermodal container or vehicle, using multiple modes of transportation (rail, ship, and truck), without handling of the freight itself when changing modes. The method reduces cargo handling, and so improves security, may reduce damages and loss, and may allow freight to be transported faster.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA): A bill that provides authorization for highways, highway safety, and mass transportation for Fiscal Years 1992-1997. The purpose of the Act was to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy efficient manner. Metropolitan Planning Organizations, in cooperation with the State and key transportation providers, must develop transportation plans and programs for metropolitan areas.

Inter-regional Transportation: Inter-regional public transportation service includes long distance passenger train and bus service that connects two or more metropolitan areas.

Level of Service (LOS): A description of the quality of service that can be expected by users of transportation facilities. For highways “A” means traffic is flowing freely and “E” or “F” means the highway is very congested. Highway LOS can be determined based on “Density” (average number of passenger cars located in a single lane within a one mile section), “Speed” (the average attainable speed in miles per hour), or “Maximum Service Flow” (average number of passenger cars that pass by every hour in one lane).

Local option fuel tax: With State Legislature approval, municipalities can tax fuel purchases along with the State and Federal governments. Fuel taxes are a natural revenue source for transportation improvements but they are typically opposed by the trucking industry, the American Automobile Association, and educators in Texas, whose portion of the state's gasoline levy could be affected by a reduction in fuel usage.

Local Buses: Local buses are the dominant mode of public transportation around the country and in the Hidalgo County Metropolitan Area. In general, they are large over-the-street vehicles that can carry many riders. They typically offer two-way service, with stops spaced every two or three blocks. The average operating speed is usually between 10 and 25 miles per hour.





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Long-Range Plan (LRP): A plan referring to transportation planning for a time span of more than twenty years.

Major Investment Study (MIS): A study, required under SAFETEA-LU, done on major transportation improvement projects such as fixed guide way transit projects and controlled access highways that would involve the use of federal funds. The study includes factors that would justify a proposed project, such as its cost effectiveness and overall effectiveness, and evaluates various modes of travel to solve a transportation problem.

Major Transfer Center: A multimodal transportation node that connects two or more transit routes with pedestrian, bicycle or automobile modes of travel. The transfer distance between different modes of transport should be no more than 300 feet wherever possible, with an absolute maximum of 600 feet.

Metropolitan Planning Organization (MPO): This is a federally funded agency that has the responsibility to provide development, planning, and programs to the county in a continuous, cooperative, and comprehensive manner regarding transportation systems.

Metropolitan Transportation Plan (MTP): this plan will serve as a blueprint for the necessary investments that the region will need to undertake. This is a 25 year forecast of the MPO's future projects and or tasks.

Minor Arterial (MNR): A secondary facility to meet local access and circulation requirements. Low priority is given at significant intersections.

Minority-owned Business Enterprise (MBE): A business whose ownership is comprised of at least 51% minorities.

Municipal Utility District (MUD): Political entities that provides one or all of these utilities: electricity, natural gas, sewer, waste collection, wholesale telecommunications, water, etc., to the residents of that district. Entities have authority to construct and maintain improvements, incur debt and tax the land within its boundaries to pay operating expenses and repay debts.

National Highway System (NHS): A system developed by the Department of Transportation in cooperation with the states, local officials and metropolitan planning organizations (MPOs) that identifies major intermodal highways that connect to major intermodal facilities (ports, airports, rail transit, etc.) and are important to the Nation's economy, defense and mobility.

Nitrogen Oxides (NOx): A chemical term for nitrogen oxides produced during combustion. This binary compound of oxygen and nitrogen contributes to ground-level ozone.





North American Free Trade Agreement (NAFTA): is a trilateral trade bloc in North America created by the governments of the United States, Canada, and Mexico. The agreement created the trade bloc that came into force on January 1, 1994

Ozone (O₃): is a triatomic molecule, consisting of three oxygen atoms. Therefore, hydrocarbon emissions caused by the operation of trucks, automobiles, lawn mowers, and other gasoline powered equipment, can contribute to the production of ozone. Ground-level ozone is an air pollutant with harmful effects on the respiratory systems of animals.

Paratransit: is an alternative mode of flexible passenger transportation that does not follow fixed routes or schedules and is typically a demand-response door-to-door transportation service intended to meet the needs of persons with a physical or mental impairment that substantially limits one or more life activities. This service is required by law in each transit provider's service area.

Park-and-Ride Lot: Any designated parking lot that is serviced with express or limited-express transit service.

Parking Management: is a variety of strategies that encourage more efficient use of existing parking facilities, improve the quality of service provided to parking facility users and improve parking facility design. A strategy for discouraging solo driving and encouraging use of ridesharing, transit, biking, and walking.

- *Parking Management approaches include:*
 - Preferential parking for car and vanpool patrons.
 - Replacement of subsidized employee parking with a cash payment.
 - Reduced minimum requirements in parking codes.
 - Maximum parking requirements in parking codes.
 - Caps on the overall supply of parking.
 - Timed curb parking.
 - Peripheral parking combined with shuttles.

Passenger Rail: The term "passenger rail" is used in this plan to refer to high capacity regional transit provided by rail. Passenger rail routes may include one or a combination of the following technologies:

Commuter Rail: Railroad local and regional passenger train operations between a central city, its suburbs and/or another central city. It is characterized by multi-trip tickets, specific station-to-station fares, railroad employment practices and usually only one or two stations in the central business district. Also known as "suburban rail." This service utilizes locomotive-hauled or self-propelled railroad cars on traditional rail lines. Stations are typically spaced at least 4 miles apart and use boarding platforms. Service can be limited to "rush-hour(s)" or it can be run all day and on weekends and holidays.





Light Rail Transit: An electric railway with a “light volume” of traffic capacity compared to heavy rail and also known as “streetcar”, “trolley car” and “tramway”. Light Rail Transit uses rail cars singly or in short trains, powered by electricity usually supplied by over-head wires. The vehicles allow for rapid acceleration, automatic or manual control systems, and platforms at track or car level. Although they can operate in mixed traffic, most light rail vehicles have the exclusive use of their own rights-of-way or lanes on city streets. This allows them to avoid congestion and offer faster, more reliable service. Stations may be located a few blocks apart in dense areas, but are typically spaced about a mile apart.

Public Involvement Program (PIP): Established guidelines developed to disseminate

Information to all metropolitan area citizens, groups, agencies, and transportation providers to assure their input in the decision making process of transportation programs, projects, etc. for the Hidalgo County metropolitan area.

Railhead: The end of a rail spur where trains are serviced, stored, loaded and unloaded.

Ranch to Market (RM): Identifier for a roadway designated by the Texas Transportation Commission to be part of the statewide highway system. Normally associated as a 2-lane roadway in rural areas, but are located in urban areas and can be a 4 or 6 lane divided roadway.

Reversible travel lane: A traffic lane which is used to carry traffic in one direction during a specific period of the day, and carries traffic in the opposite direction, or is restricted to turning movements, during another period of the day. Changeable electronic signs are used to inform motorists of how the lane can be used.

Reformulated Gasoline (RFG): Gasoline with a different composition from conventional gasoline (e.g., lower aromatics content) that cuts air pollutants.

Reid Vapor Pressure (RVP): An indicator of the volatility of gasoline and is measured in pounds per square inch (psi).

Revolving loan fund: Financing tool that recycles funds by providing loans, receiving loan repayments, and then providing further loans. Austin could capitalize its own revolving fund with grants or bond proceeds secured by independent revenue sources.

Right of Way (ROW): Public land reserved for locating infrastructure such as a roadway or a utility line. **Sale/leaseback agreement:** Used by public agencies as a cash flow management technique. Government owned facilities, such as bus maintenance facilities, can be sold to private investors, who will expand or rehabilitate the facility and then lease it back to the public agency over a fixed period of time.





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Sale of development rights: Used by the public sector to capture the potential value of real estate at highway interchanges and along arterials, without giving up ownership of the land.

Shared Roadway: A roadway which is open to both bicycle and motor vehicle travel. This may be an existing roadway, street with wide curb lanes, or road with paved shoulders.

Single Occupant Vehicle (SOV): Any vehicle that contains just one person, the driver.

Special districts: Special Assessment Districts, Benefit Assessment Districts, and Road Utility Districts are used to help recover the capital costs of street or roads or to capture part of the potential value of these improvements for adjoining landowners or commercial businesses. As public entities, these districts can issue bonds secured only by fee income. This affects or benefits specific constituents and can be politically sensitive. Revenues derived from special districts are potentially a good source of funds for maintenance reserve accounts.

Special Infrastructure Development Unit: A working group of planning, engineering and financial specialists which oversees a limited number of major transportation projects that are financed with public and private sector funds. Through a Joint Powers Resolution the Unit's governance could be shared among local agencies such as the TxDOT Pharr District and a city and/or county transportation department, and the Unit would manage a single pipeline of public/private sector projects for the region. Project implementation would remain with the relevant state and local agencies. The Unit would finance its operations through fees payable at a financial closing.

Standard Metropolitan Statistical Area (SMSA): Census Bureau delineation for major metropolitan areas in the U.S.

State Data Center (SDC): The official repository of census data and demographic data for the State of Texas.

State Highway (SH): Roads, streets and highways maintained by the State.

State Implementation Plan (SIP): A plan required by the 1977 Clean Air Act Amendments which describes how the State of Texas will meet air quality standards.

State Transportation Improvement Program (STIP): A staged, multi-year statewide, Intermodal program of transportation projects which is consistent with the Statewide Transportation Plan and planning processes and metropolitan plans, TIPs and processes.

Statewide Transportation Plan (STP): The official statewide, intermodal transportation plan that is developed through the statewide transportation planning process.





Surface Transportation Program (STP) (part of ISTEA and TEA 21): A federal program designed to create flexible funding for transit and highway construction.

Surface Transportation --Transportation Enhancement (STP TE): A funding category used to address projects that are above and beyond what could normally be expected in the way of enhancements to the transportation system.

Surface Transportation Program --Metropolitan Mobility (STP MM): A funding category used to address transportation needs within the metropolitan area boundaries of MPOs having urbanized areas with populations of 200,000 or greater.

Tax exempt revenue bonds: Widely used by state and local governments to finance revenue producing facilities such as airports, toll roads, sports complexes, hospitals, and wastewater plants. It is generally secured only by project revenues, without a back-up pledge, and is regarded as off balance sheet financing for the public agency issuing the bonds. Under appropriate arrangements, revenue bonds can also be used for street rehabilitation and maintenance.

Texas Department of Transportation (TxDOT): The State agency responsible for construction and maintenance of all interstate, U.S, state highways, ranch-to-market (RM) and farm-to market (FM) roads within the state.

Texas Natural Resource Conservation Commission (TNRCC): A state agency charged with protecting water and air resources, including regulation of hazardous material sites.

Texas Transportation Institute (TTI): A state agency that is a member of the Texas A&M University system and engages in research pertaining to all forms of transportation, including all phases of activities concerned with the movement of people, goods, and services, and identifies and helps to solve major state and national transportation problems.

Toll Road: A road in which one must pay a toll or a fee to use.

Traffic Serial Zone (TSZ): The smallest geographically designated area used for analysis of transportation activity such as data collection and travel movements within, into, and out of the urban area.

Transit-Oriented Development (TOD): Types of development that enhance or support public transit use.

Transportation Demand Management (TDM): An effort to reduce the number of people traveling by single-occupant vehicles (SOV) by promoting non-SOV modes of transportation (e.g., carpools, vanpools, transit). TDM efforts may also discourage the use of SOVs by imposing tolls or taxes.





Transportation Enhancement Program (TEP): A federal program that provides funds for nontraditional improvements adjacent to or within the right of way of a transportation facility. Some examples of improvements are preserving an historic structure, installing bicycle and pedestrian facilities, landscaping, and incorporating environmental protection systems.

Transportation Equity Act for the 21st Century (TEA 21): A law authorizing highway, safety, transit and other surface transportation programs for FY1998 – 2003. This new law combines the continuation and improvement of current ISTEA programs with new initiatives to meet the challenges of improving safety as traffic continues to increase at record levels, protecting and enhancing communities and the natural environment and advancing America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

Transportation Improvement Program (TIP): A document prepared by an MPO that identifies funding for specific transportation projects and studies to be implemented in an area over a three-year period.

Transportation Management Area (TMA): Term for all urbanized areas with a population of over 200,000.

Transportation Policy Committee (TPC): The governing body of HCMPO consisting of locally elected officials and representatives from the Texas Department of Transportation and the LRGVDC.

Unified Planning Work Program (UPWP): An annual work plan prepared by the MPOs describing transportation planning activities and funding sources that will occur within their specific jurisdiction.

Unified Transportation Program (UTP): A ten-year planning document that guides and controls project development for TxDOT in a feasible and economical manner.

Union Pacific Railroad (UPRR): headquartered in Omaha, Nebraska, is the largest and oldest operating **railroad** network in the United States. **Union Pacific** operates North America's premier **railroad** franchise, covering 23 states in the western two-thirds of the United States.

Volatile Organic Compounds (VOC): Toxic residual chemicals from fossil fuel combustion, solvents, paints, glues and some dry cleaning processes which contribute to ozone formation.





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