

# GLOSSARY

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**Alamo Regional Mobility Authority (Alamo RMA):**

The Alamo Regional Mobility Authority is an independent governmental agency created by the Texas Transportation Commission and the Bexar County Commissioners Court in December 2003. Their purpose is to provide Bexar County with opportunities to accelerate needed transportation projects, through the direction of a local board making local choices about local mobility needs that enhance the quality of life and economic growth for all residents in this region.

**Alternative:** A general term that refers to possible approaches to meeting the need for and purpose of the project, including corridor, transportation mode, and alignment. It typically refers to the No-Build and the Build Alternatives.

**Alternative Alignment:** An alignment that refers to a proposed routing of a Build Alternative.

**Ambient Air Quality:** The state of quality of the air in the surrounding environment.

**Aquatic Resources:** For the purpose of this study, aquatic resources are defined as both adjacent and isolated wetlands.

**Aquifer:** A water-bearing geologic unit of permeable rock, sand, or gravel that yields considerable quantities of water to springs and wells.

**Area of Influence (AOI):** The geographic boundary within which possible indirect development and potential indirect impacts could occur.

**Area of Potential Effect (APE):** The geographic area within which an undertaking may cause changes in the character or use of any resources present.

**Artesian Zone:** An area where pressurized groundwater rises to create springs, seeps, and artesian wells.

**At-Grade:** Describes a roadway that will be relatively close to the existing ground elevation and not elevated on a bridge structure.

**At-Grade Intersection:** A point where two roadways meet and traffic is controlled by a traffic signal or stop sign.

**Attainment:** The status of the various pollutants described in the National Ambient Air Quality Standards (NAAQS). A condition where a pollutant meets NAAQS.

**Average Daily Traffic (ADT):** The average traffic volume in a 24-hour period on a particular roadway.

**Benthic:** A characteristic that describes the lowest level or sediments of a body of water or pertaining to bottom-dwelling organisms.

**Biodiversity:** The variety and abundance of species, their genetic composition, and the communities, ecosystems, and landscapes in which they occur.

**Biotic:** An attribute that pertains to life and living organisms.

**Build Alternative:** A Build Alternative is an alternative that requires programming and construction of improvements to fulfill the need for and purpose of the project.

**Carbon Monoxide (CO):** A colorless, odorless, poisonous gas that is formed as a product of the incomplete combustion of carbon and is emitted directly by automobiles and trucks.

**Circumferential Roadway:** A facility that is oriented in a circular manner such as a beltway (Examples: IH 410 and Loop1604).

**Collector Roadways:** These roadways provide service to any county seat, large towns, or other major traffic generators not served by the arterial system. They provide links to the higher classified routes and serve as important intra-county travel corridors.

**Community Cohesion:** The connections between and within communities, which are essential for serving the needs of the residents.

**Complex Encroachments:** Continuous linear impacts that are mixtures of both longitudinal and transverse impacts.

**Contributing Zone:** The surface area of the Edwards Plateau where rainfall flows to the recharge zone of the Edwards Aquifer.

**Control-Section-Job (CSJ) Numbers:** CSJ numbers are numbers assigned to all on-system public highways

in Texas. The CSJ is a unique, nine-digit identification for a project.

**Corridor:** A corridor is a broad geographical band with no predefined size or scale that follows a general directional flow connecting major sources of trips. It involves a nominally linear transportation service area that may contain a number of streets, highways, and transit route alignments. For the Loop 1604 EIS, the corridor extends along Loop 1604, from US 90 West to IH 35 North.

**Cultural Resources:** The patterned physical remains of human activity distributed over the landscape through time.

**Cumulative Effect/Impact:** An impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions.

**Direct Impact:** Direct effects are caused by the action and occur at the same time and place (40 CFR 1508.8).

**Environmental Assessment:** A formal document prepared under the requirements of the National Environmental Policy Act of 1969 (NEPA), Section 102(2)(c) to determine if a proposed action, or its alternatives, may have significant environmental effects. If significant effects may occur, an EIS is prepared. If not, a Finding of No Significant Impact (FONSI) is issued

**Environmental Impact Statement (EIS):** A formal document prepared under the requirements of the National Environmental Policy Act of 1969 (NEPA), Section 102(2)(c) that considers significant environmental impacts expected from implementation of a major federal action

**Electronic Toll Collection (ETC):** Technology that charges tolls electronically, so as to reduce delays at toll booths and increase driver convenience. The TxTag system is electronic toll collection technology.

**Endangered Species:** Species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register

**Environmental Constraints/Sensitive Resources:** Ecological, socio-economic, or cultural areas that may restrict or confine the placement of a project. Examples

include areas of sensitive habitat, wetlands, cemeteries, or parks.

**Environmental Justice (EJ):** In accord with Executive Order 12898, the avoidance of actions that cause disproportionately high and adverse impacts on minority and low income populations with respect to human health and the environment.

**Flood Hazard Zone:** The area inundated during a 100-year flood event.

**Floodplain:** The portion of a river or stream valley, adjacent to the channel, which is covered with water when the river or stream overflows its banks at flood stage. It is also defined as lowland and relatively flat areas adjoining inland and coastal waters, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year (the 100-year floodplain).

**Floodway:** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

**Grade Separated Intersection:** A point where two highways or a highway and railroad meet, and the through traffic/train from each facility is separated by an overpass/underpass.

**Groundwater:** Subsurface water that occurs beneath the water table in soils and geologic formations that are fully saturated.

**Habitat Evaluation Procedure:** A method created by the U.S. Fish and Wildlife Service (USFWS) to evaluate the quantity and quality of habitat for selected wildlife species.

**Higher Class Roads:** Facilities that are mostly free-flowing with controlled or limited access and higher speeds. Examples are Interstate Highways/Freeways and Principal Arterials.

**Historic Archeological Site:** Any subsurface cultural manifestation dated post-European contact.

**Impact/Effect:** In environment analyses, the words "impact" or "effect" are used to express the extent or severity of an environmental problem, e.g., the number of persons displaced by a new transportation facility. As indicated in the Council on Environmental Quality (CEQ)

Section 1508.8, impacts and effects are considered to be synonymous. Impacts or effects may be ecological, aesthetic, historic, cultural, economic, social, or health related, and they may be direct, indirect, or cumulative.

**Indirect Effect/Impact:** An impact that is caused by an action and is later in time or farther in distance but is still reasonably foreseeable.

**Interstate Highways (IH)/Freeways:** These are divided highways with two or more lanes designated for the exclusive use of traffic in each direction. These roadways are intended to provide uninterrupted flow. There are no signalized or stop-controlled at-grade intersections. Direct access from adjacent properties is not permitted. Access is limited to ramp locations and opposing directions are separated by a raised barrier, a median, or a raised traffic island. Examples of Interstate Highways are IH 10, IH 35, and IH 410. The term "freeway" in this document is consistent with terminology in the Transportation Research Board's (TRB) Highway Capacity Manual (2000). Any divided arterial with complete access control and unimpeded traffic flow is designated a freeway, *whether it is tolled or not*.

**Karst Feature:** Topography shaped by the dissolution of a layer or layers of soluble bedrock, usually carbonate rock such as limestone or dolomite. Karst features include sinkholes, gorges and caverns and are often associated with aquifer recharge features for the Edwards Aquifer.

**Level of Service (LOS):** Operating conditions within a stream of traffic describing safety, traffic interruptions, speed, freedom to maneuver, comfort, and convenience. Six levels of service are defined, designated A through F, with A representing the best conditions and F the worst.

**Logical Termini:** The Federal Highway Association (FHWA) memorandum *Guidance on the Development of Logical Project Termini* (FHWA, 1993) defines termini as: (1) rational end points for a transportation improvement, and (2) rational end points for a review of environmental impacts.

**Low-Income Population:** A population whose household income is below the Department of Health and Human Services (HHS) poverty guidelines.

**Lower Class Roads:** Facilities with multiple at-grade intersections, minimal access management, and lower

speeds. Examples are minor arterials and collector roadways.

**Major Facilities:** Roadways that carry a large number of vehicles, possibly serving more regional traffic.

**Managed Lane Facility:** Highway facilities or a set of lanes in which operational strategies are implemented and managed (in real time) in response to changing conditions. Managed lanes are proactively implemented, managed, and may involve using more than one operational strategy; Possible examples of *managed lanes* may include the following: High Occupancy Toll (HOT) lanes with tolls that vary based on demand; exclusive bus- and truck-only lanes; High Occupancy Vehicle (HOV) and clean air and/or energy-efficient vehicle lanes; and HOV lanes that could be changed into HOT lanes in response to changing levels of traffic and roadway conditions.

**Metropolitan Planning Organization (MPO):** The MPO is a federally designated, regional agency that works with state and local governments, the private sector, and the region's citizens to plan coordinated transportation systems designed to move goods and people affordably, efficiently, and safely.

Major products produced by the MPO include a long-range Regional Transportation Plan (RTP), a shorter-term Transportation Improvement Program (TIP), a Congestion Management System (CMS), and a Unified Planning Work Program (UPWP).

**Minor Arterials:** These roadways interconnect and supplement the principal arterial system with a greater emphasis on land access and a lower level of traffic mobility. They provide intra-community service and connect rural collector roadways to the urban highway system.

**Mobile Source Air Toxics (MSAT):** A category of substances in the air that are known or suspected of causing cancer or other health problems in humans, and for which an NAAQS (National Ambient Air Quality Standard) does not exist (i.e., excluding ozone, carbon monoxide, particulate matter, sulfur dioxide, nitrogen oxide).

**Modal Transportation Improvements:** Modal transportation improvements include bus transit, high-

occupancy vehicle (HOV) lanes, rail, bicycle, and pedestrian.

**National Register:** The National Register of Historic Places (NRHP), as maintained by the United States Department of the Interior, pursuant to 16 USC § 470a.

**NEPA Document:** Any document or report prepared by or on behalf of a federal agency pursuant to the National Environmental Policy Act (NEPA) for a project, including, but not necessarily limited to, any Environmental Assessment (EA), Finding of No Significant Impact (FONSI), Draft Environmental Impact Statement (DEIS), Final EIS (FEIS), or Record of Decision (ROD), but not including any pre-decisional, deliberative, or privileged materials.

**Nitrogen Oxide (NO<sub>x</sub>):** Colorless gas emitted directly by automobiles and trucks.

**No-Build Alternative:** This represents a continuation of the existing transportation facilities, which incorporates the execution of planned and/or committed roadway improvements, Transportation System Management (TSM), Transportation Demand Management (TDM) and modal transportation improvements, new planned roadway construction, and Smart Streets.

**Non-Attainment:** An area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for criteria pollutants.

**Notice of Intent (NOI):** An NOI is published in the Federal Register to notify the public that an agency is preparing an EIS.

**Ozone:** Unstable blue gas with a pungent odor formed principally in indirect reactions involving volatile organic compounds, nitrogen oxides and sunlight.

**Physiographic Province:** A region that is generally consistent in geologic structure and climate and which has had a unified geomorphic history.

**Prehistoric Archeological Site:** Any cultural manifestation predating European contact.

**Principal Arterials:** These roadways provide an integrated network of roads that connect principal metropolitan areas and serve virtually all urban areas with a population greater than 25,000. They serve long distance travel demands such as statewide and interstate travel. Principal arterials can be grouped into

freeway principal arterials and non-freeway principal arterials.

**Project:** The whole of an action that has a potential resulting in a physical change in the environment, directly or ultimately, and that is any of the following:

- (1) An activity directly undertaken by any public agency, including but not limited to public works construction and related activities, clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700.
- (2) An activity undertaken by a person, which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- (3) An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

**Project Area:** The area that encompasses alternative alignments.

**Project Coordination Plan (PCP):** In an effort to provide more efficient environmental reviews for project decision making, Section 6002 of Public Law 109-59, "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users," (SAFETEA-LU), enacted August 10, 2005, implemented the development of a coordination plan for all projects for which an Environmental Impact Statement (EIS) is prepared under the National Environmental Policy Act of 1969 (NEPA). The purpose of the SAFETEA-LU Coordination Plan, commonly referred to as the PCP, is to describe the roles of the lead agencies and the cooperating and participating agencies and to coordinate public and agency participation in and comment on the environmental review process for the project.

**Project Office:** Office location where day to day project management and support activities occur.

**Radial Roadway:** These are roadway facilities that radiate outward from the core of the metropolitan area like spokes on a wheel. The radial facilities typically become less dense in outer suburbs. Examples of radial roadways include SH 151, IH 10, US 281, and IH 35.

**Recharge Zone:** The area from which a body of water is recharged or refilled. The Edwards Aquifer recharge zone is an area where surface flow enters the aquifer via permeable surface formations.

**Regulatory Floodway:** The portion of the 100-year floodplain within which the majority of the flood waters are carried and where flooding hazards are the highest.

**Riparian:** A trait pertaining to anything connected with or immediately adjacent to the banks of a stream.

**Section 106:** Section 106 of the National Historic Preservation Act of 1966, 16 USC § 470f pertains to the protection and preservation of historic resources.

**Section 4(f):** Section 4(f) of the Department of Transportation Act of 1966, 49 USC § 303(c) pertains to the protection of a Section 4(f) resource.

**Section 4(f) Document:** Any finding, evaluation, report, or other document prepared by or on behalf of FHWA or TXDOT pursuant to Section 4(f) with respect to a project, including, but not necessarily limited to, any finding of no constructive use and any approval of the use of a Section 4(f) resource, but not including any predecisional, deliberative, or privileged materials.

**Section 4(f) Resource:** Any park, recreation area, wildlife or waterfowl refuge or historic site that is protected under Section 4(f).

**Segment of Independent Utility (SIU):** Segments of Independent Utility (SIUs) must meet the requirements of 23 CFR 771.111(f), as follows, "In order to ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated in each EIS...shall: (1) Connect logical termini and be of sufficient length to address environmental matters on a broad scope; (2) Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and (3) Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements."

**Superstreets:** Innovative safety and operational improvements that do not add capacity, but can act as a short-term solution to help alleviate traffic congestion. Safety improvements can also help to decrease the number of accidents and move traffic more quickly.

**Special Interest Organizations:** Those groups that have the potential to be specially benefited or harmed by the proposed project.

**Study Area:** The large area within which corridor selection takes place for the development of alternatives to address the need for and purpose of the project.

**Study Team:** The consultant team consisting of Michael Baker Jr., Inc. (Prime); Blanton & Associates; Community Awareness Services; Cox / McLain Environmental Consulting; LBG – Guyton and Associates; Lockwood, Andrews & Newnam, Inc.; Poznecki-Camarillo, Inc.; RJ Rivera & Associates; Rodriguez Transportation Group; Surveying and Mapping, Inc.; and Zara Environmental, LLC.

**System Linkage:** The connection of major facilities within a highway system.

**Threatened Species:** Species defined through the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range and published in the Federal Register

**Traffic Analysis Zone (TAZ):** A traffic analysis zone is the unit of geography most commonly used in conventional transportation planning models. The size of a zone varies, but for typical metropolitan planning software, a zone of under 3,000 people is common. The spatial extent of zones typically varies in models, ranging from very large areas in the exurbs to as small as city blocks or buildings in central business districts.

**Traffic Analysis Study Area:** An area used in analyses of traffic conditions that includes all major roadways wherein potential transportation improvements to the corridor would affect travel. **Transportation Demand Management (TDM) Alternatives:** Behavioral changes to commuters' travel habits that result in fewer vehicles during peak hours. Examples would be carpooling/vanpooling, employee trip reduction programs, compressed work weeks, telecommuting, flex-time, and employer incentives.

**Transportation System Management (TSM) Alternatives:** Management to make the existing transportation system as efficient as possible. Examples would be park-and-ride lots, ridesharing, HOV facilities, traffic signal coordination, and intersection improvements.

**Travel Demand:** The number of users desiring to travel the highway system based on the available roadway network.

**Upland Habitat:** Land that has sufficient dry conditions for hydrophytic vegetation, hydric soils, and /or wetland hydrology to be lacking. Any area that is not a wetland, deepwater aquatic habitat, or other special aquatic site is considered upland habitat.

**Volume to Capacity (V/C):** The ratio of current traffic flow rate to capacity of a specified roadway or section of roadway.

**Vehicle Hours Traveled (VHT):** The time (in hours) that users spend on the roadway system during a specific time period.

**Viewshed:** All land seen from one static point.

**Vehicle Miles Traveled:** The measurement of the total miles traveled by all vehicles in a specified area during a specified time.

**Watershed:** A specific geographic area drained by a major stream or river.

**Wetland (Adjacent):** Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated conditions. Adjacent wetlands also lie within the 100-year floodplain and/or have a hydrologic connection to navigable waters.

**Wetland (Isolated):** Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated conditions. Isolated wetlands do not lie within the 100-year floodplain nor do they have a hydrologic connection to navigable waters.

**NOTE:** For further reference, please consult the TxDOT website at: <http://onlinemanuals.txdot.gov/txdotmanuals/glo/index.htm>.