A+B Bidding

A+B bidding, also known as cost-plus-time bidding, involves time (with an associated cost) in the low bid determination. Bids consist of two components:

1.) The “A” component is the traditional bid for the contract items and is the dollar amount for all work to be performed under the contract.

2.) The “B” component is a “bid” of the total number of calendar days required to complete the project, as estimated by the bidder. The bid for award consideration is based on a combination of the bid for the contract items and the associated cost of the time, according to the following formula: \((A) + (B \times \text{Road User Cost per Day})\)

The formula is only used to determine the lowest bid for award and is not used to determine payment to the contractor. A disincentive provision, that assesses road user costs, is incorporated into the contract to discourage the contractor from overrunning the time “bid” for the project. In addition, an incentive provision should be included to reward the contractor if the work is completed earlier than the time “bid.” A+B bidding should be considered for critical projects having high road user delay costs.

abandonment

Abandonment is the relinquishment of the public interest in right-of-way or activity thereon with no intention to reclaim or use again for highway purposes.

Abilene District

ABL

The Abilene District is a TxDOT district office including the following counties: Bordon, Callahan, Fisher, Haskell, Howard, Jones, Kent, Mitchell, Nolan, Scurry, Shackelford, Stonewall, and Taylor. Area offices are located in Abilene, Big Spring, Hamlin and Snyder. The Abilene District also has a Vehicle Title and Registration Regional Office in Abilene.

Inside TxDOT

abnormal end

ABEND

An Abnormal End is when a computer job cannot be allowed to continue running. Either the operating system or an operator may give an ABEND condition to a job on the computer. Messages and codes are used to inform the user about what the condition is and in some cases a remedy is indicated.

absorption

Absorption is the amount of either water or asphalt cement absorbed by aggregate. It is expressed as a percent of the oven-dry weight of the same aggregate sample.
Absorption moisture content is the moisture content at saturated surface dry condition. *Manual of Testing Procedures*

**abuse**

Abuse is defined as the intentional deviations from approved procedures. *Quality Assurance Program Manual*

**abutment**

An abutment is the part of a bridge consisting of the cap, backwall, and wingwalls at the ends of a bridge which supports the superstructure, contains the earth in the approach fills, and directly receives the impact loads produced by traffic passing from the roadway onto the bridge. An abutment is a wall supporting the end of a bridge or span, and sustaining the pressure of the abutting earth. *Bridge Detailing Manual*

**acceleration lane**

Acceleration lane is a speed-change lane, including tapered areas, for the purpose of enabling a vehicle entering a roadway to increase its speed to a rate at which it can more safely merge with through traffic. *Access Management Manual*

**acceptable appraisal report**

An acceptable appraisal report is an appraisal report free from errors and omissions developed using methodology appropriate to the property being appraised. *Right of Way Collection*

**acceptable entry conditions**

Acceptable entry conditions are those that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space. *Occupational Safety Manual*

**Acceptance Program**

An Acceptance Program is defined as all factors that comprise the State highway agency’s (SHA) determination of the quality of the product as specified in the contract requirements. These factors include verification sampling, testing, and inspection and may include results of quality control sampling and testing. *Quality Assurance Program Manual*

**access**
1. Access is the means by which a computer gains entry to a network in order to access another computer's resources. Access can also mean to approach, interact with or otherwise make use of information resources.  

*Information Security Manual*

2. Access is the process of seeking data, reading data from, or writing data to a storage unit.  

*Enterprise Data Management*

**access connection**

Access connection is a facility for entry and/or exit such as a driveway, street, road, or highway that connects to the highways under the jurisdiction of the department or municipality.  

*Access Management Manual*

**access control**

Access control is the enforcement of specified authorization rules based on positive identification of user and the systems or data they are permitted to access.

**access criteria**

Access criteria are sets of rules used as procedural controls to protect information resources. The objectives of access criteria are to protect data, software, and other information resources from unauthorized access and to facilitate authorized access for employees whose job functions require use of the information resource.  

*Information Security Manual*

**access path diagram**

An access path diagram is a graphic representation of the data requirements for computer programs, consolidated into a common set of data paths used for the physical database design. As a result, when physical database structures are developed, the Database Analyst (DBA) can utilize the physical implementation options available to obtain the best possible system performance.  

*Enterprise Data Management*

**access rights**

Access rights are the rights of ingress to and egress from a property that abuts upon a street or highway. Access is a private right as distinguishable from rights of the public. It is a well-established law in the United States that the right of access cannot be denied or unreasonably restricted unless other reasonable access is available or provided.

**access roadway**

AR

An access roadway is a connection to a highway or freeway.

**accessor ID**
ACID

An ACID is a mainframe accessor ID consisting of a three-to-seven character identifier used to define a process, organizational element, or individual to CA-Top Secret. See department accessor identification. 
Information Security Manual

accident

An accident is any occurrence involving a vehicle or motorized equipment which results in death, injury or property damage. Unless such vehicle is properly parked; it is intended that those occurrences which occur because of errors in judgment, technique of drivers, or maintenance, be considered accidents. See crash. 
Occupational Safety Manual
Traffic Safety Program Manual

account

A record of debit and credit entries chronologically posted to a ledger page to cover transactions involving a particular item or a particular person, concern, or activity. 
Finance Division

accounting codes

Accounting codes are a list of codes assigned to highway safety program areas by the National Highway Traffic Safety Administration (NHTSA) or the Federal Highway Administration (FHWA). 
Traffic Safety Program Manual

accounts payable

AP

Accounts payable means a liability account to record amounts owed by the fund between incurrence of the liability and preparation of the voucher for payment.

accounts receivable

AR

Accounts receivable means an asset account to record amounts due to the fund.

accounts receivable name

Person or entity owing on an account. 
Finance Division

account total

Accumulation of charges and hours for one month, annually, or life-to-date for a specific account. 
Finance Division
accrual basis

Accrual basis is an accounting system in which costs and revenues are recognized at the time they are incurred without regard to when cash is paid or received. The department uses a modified accrual basis that recognizes revenues when earned and expenditures when incurred.

accrued depreciation

Accrued depreciation is the credit due for expired service life of capital improvements.

ROW Utility Manual

accuracy

Accuracy is the error or deviation of the device’s indicated value from the true value. Error is often expressed as a percentage of the true value.

Manual of Testing Procedures

Achieving Service Excellence

ASE

Achieving Service Excellence is a course developed by the Travel Division to educate travel counselors working in the department’s Travel Information Centers. ASE is the first phase of the professional travel counselor certification program.

acquisition

Acquisition is the process of obtaining right of way by negotiation and/or eminent domain proceedings. Negotiation would involve getting the owner to convey, dedicate, or possibly option the property to the public agency. Just compensation must be paid in all acquisitions or takings.

acronym

An acronym is a word made up of first letters or parts of words of a compound term. At TxDOT, an acronym may also refer to a set of initials pronounced as individual letters.

radar - radio aid to detection and ranging

FTE - full time equivalent

Enterprise Data Management

action plan

An action plan is a schedule of planned activities on a form that indicates in which month during the project period each activity will occur.

activity

An activity is the line item in the Appropriation Bill that identifies a portion of one of the programs of the department.
**activity line item**

ALI

An activity line item is a numerical code supplied by the Federal Transit Administration to identify an eligible expense budgeted within a grant.

Public Transportation Collection

**actual cost advance funding agreement**

An advance funding agreement is used when some portion of a project’s funding is derived from an outside source (third party) other than FHWA. The agreement is entered into between TxDOT and the third party. For an actual cost advance funding agreement, an initial payment is made based upon estimated cost of the work. After a final accounting of project costs, a final adjustment is made based on the actual cost of the project. The adjustment may increase or decrease the cost to the third party when compared to the original estimate. This is referred to as the “standard” funding arrangement in 43 TAC §15.52.

**actual cost basis**

Actual cost basis is the actual reasonable moving expenses that may be paid to a relocatee whose move is performed by a qualified mover. Also, actual cost of replacement housing.

Right of Way Collection

**actual percent density**

Actual percent density is the quotient obtained from the nuclear gauge density of a roadway core divided by the density of the same roadway mix compacted in the gyratory press times 100.

*Manual of Testing Procedures*

**actual quantity item**

An actual quantity item is an item where final quantities of work are determined by actual measurements taken in the field.

**Adaptable Data Base**

ADABAS

An adaptable Data Base is a commercially-available software package used for database computer functions. ADABAS stores information in accordance with prearranged identification keys for retrieval. ADABAS is the primary mainframe management system installed at the Texas Department of Transportation.

**adapters**

Adapters are devices that connect systems through circuits or channels which enable them to be.

Information Services Business Improvement Project Technology 1

**added capacity project**
An added capacity project is work proposed to add one or more through travel lanes to an existing facility.

**addendum**

An addendum is a document used to modify an original proposal and/or plans. Becomes a legal part of the bid proposal.

*Letting Manual*

**additional cost**

Additional cost is the extra cost of sampling in a remote location compared to sampling in a local city.

**additive**

An additive is a substance or agent added in small amounts to the basic ingredients of a mixture.

**ad hoc reporting**

Ad hoc reporting is local programming of customized reports by accessing the FIMS database and the FIMS database file definitions (Data Dictionary) when a standard FIMS report does not contain the needed information.

*Finance Division*

**adjustment cost**

Adjustment cost is the total cost of the utility adjustment, after deduction of applicable credits and eligibility ratio.

*ROW Utility Manual*

**adjustment work**

Adjustment work is the curative measures on remainder property. TxDOT does not perform such work due to inherent liability issues.

*Right of Way Collection*

**administering division, district or office**

An administering division, district or office is the office funding and/or responsible for administering the contract.

*Contract Management Manual*

**Administration**

TxDOT administration includes the Executive Director and Chief Officers.
**administrative documents currency list**

The administrative documents currency list contains administrative documents whose content is current and is not yet incorporated into a policy or procedure manual.

*Records Management Manual*

**Administrative Evaluation Report**

AER

An Administrative Evaluation Report is TxDOT Form 1874.

*Traffic Safety Program Manual*

**administrative license revocation or suspension**

ALR

Administrative license revocation or suspension pertains to the immediate revocation of an driver’s license and replacement with a limited/temporary driver’s license if the offender either refuses or fails a breath test.

**administrative qualification**

1. Administrative qualification is a process identified in the Texas Administrative Code to facilitate the selection and negotiation of contracts with selected professional service providers. Examples include contract with consultant engineering firms, professional land surveyors, etc.
   *Contract Management Manual*

2. Administrative qualification is a department process conducted to determine if a prime provider or subprovider meets the requirements of 23 Code of Federal Regulations (CFR) 172.5(c) concerning the administration of engineering and design related service contracts.
   *Engineering, Architectural and Surveying Services Manual*

**Administrative Services**

ADS

Formerly one of the seven functional areas of TxDOT; included the (former Budget and) Finance Division, the General Services Division and the Technology Services Division.

**administrative settlement**

An administrative settlement is any settlement made or authorized to be made by the responsible acquiring official, which is in excess of the agencies approved value.

*Right of Way Manual*

**administrator**

An administrator is a person appointed by the probate court to settle the affairs of an individual dying without a will; "Administrix", if such a person is a woman.

*Right of Way Manual*
Adopt-a-Highway

AAH

Adopt-a-Highway is a volunteer program that allows approved groups to pick up litter in the right of way on a regular basis during a two year commitment. This program began in 1985 in the Tyler District.

Litter Prevention Manual

advanced highway advisory radio

AHAR

Advanced highway advisory radio is a system where special radio receivers tune themselves to stations carrying traffic, safety, or other information where necessary.

Traffic Operations

advanced compensatory time

Advanced compensatory time is compensatory time that is awarded and taken prior to having been earned (previously referred to as “negative compensatory time”). Available only to construction, maintenance, or other staff who perform construction inspection duties, under special circumstances.

Human Resources Manual

Advanced Traffic Management System

ATMS

The Advanced Traffic Management System is the TxDOT intelligent transportation system (ITS), which runs on the Windows NT operating system.

ATMS Operators Manual

advance warning equipment

Advance warning equipment is a device, with or without motive power, designed to display instructions or an advance warning to motorists of the presence of a vehicular traffic hazard requiring the exercise of care in approaching, overtaking, or passing. It includes arrow boards and changeable message boards.

Equipment Manual

adverse effect

Adverse effect is a determination reached as part of the Section 106 process. An undertaking is considered to have an "adverse effect" on a historic property if it diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling or association. An adverse effect may be direct or indirect. This determination is reached in consultation with the State Historic Preservation Officer. (See also no effect, no adverse effect and Section 106.)

Environmental Manual
adverse personnel action

Adverse personnel action is an action that affects an employee’s compensation, promotion, demotion, transfer, work assignment or performance evaluation.

*Human Resources Manual*

adverse weather condition

Adverse weather condition is severe weather that causes unsafe conditions.

*Travel Manual*

Advisory Council on Historic Preservation

ACHP

The Advisory Council on Historic Preservation is an independent federal agency composed of 19 members charged with advising the President and Congress on historic preservation matters and administering the provisions of Section 106 of the National Historic Preservation Act. Projects in Texas are reviewed at the Advisory Council's Washington, D. C. office.

*Environmental Manual*

aerial photogrammetry

1. Aerial photogrammetry is the science that uses photographs of the earth’s surface and the natural and artificial objects on the earth to make various kinds of maps.
2. A map or survey made using controlled aerial photographs (i.e., photographs showing surveyed control points).

aerial photography

Photos taken from the air at regular, spatial intervals and used in photo interpretation to provide much information about landforms. The topography is distorted, and until corrections are made for the distortion, measurements made from a photograph are not accurate. Aerial photographs can be used to produce aerial photogrammetry and digital orthophotography.

aerial sewer

An aerial sewer is an unburied sewer (generally sanitary type), supported on pedestals or bents to provide a suitable grade line.

affidavit

An affidavit is a certification, sworn before a notary public or other official.

agency fund

The Generally Accepted Accounting Principles (GAAP) definition is a fund used to account for assets held in a custodial capacity for other entities or individuals.

*Finance Division*
agency item number
The agency item number is a location reference on the TxDOT records retention schedule used for indexing and citation of official state records described in the schedule. It consists of the using DDO’s functional account number, a three-letter acronym for the record type or responsible organizational unit, and a number signifying it’s sequence in the TxDOT records retention schedule.
Records Management Manual

agency number
An agency number is a three-digit number assigned to a state agency by the Comptroller of Public Accounts.
The Texas Department of Transportation is agency number 601.
Finance Division

agency voucher
See "highway voucher."
Finance Division

agent
An agent is a person or entity legally acting on the behalf of another.
Right of Way Manual

agreement
An agreement is a meeting of the minds.
Contract Management Manual

aggregate
1. Aggregate is the hard granular material of mineral composition such as sand, gravel, slag, limestone rock, or crushed stone, used for mixing with asphalt to produce asphaltic concrete pavement or other bituminous materials.
2. Aggregate is granular material of mineral composition such as sand, gravel, shell, slag, crushed stone or lightweight. Aggregate may be used with a cementing medium to form mortars or concrete, or alone in base courses or as a surface treatment. NOTE: This definition has been approved by the Specification Committee.
Manual of Testing Procedures

agitator tube
An agitator tube is a device for keeping liquids and solids-in-liquids in motion by mixing and stirring.
Manual of Testing Procedures

air voids
Air voids are the pockets of air trapped between the asphalt-coated particles of aggregate in an asphaltic concrete pavement.

**A-line**

On the plasticity chart, A-line is a sloped line beginning at PI = 4 and LL - 25.5f with an equation of Pi = 0.73 (LL-20).

*Manual of Testing Procedures*

**algorithm**

An algorithm is a mathematical procedure used by encryption processes.

*Information Security Manual*

**Algorithmic Language**

ALGOL

Algorithmic Language is a scientific/engineering programming language very similar to FORTRAN.

**alias**

An alias is an approved alternate name for something, to be used when conditions make it impractical to use the official name.

*Enterprise Data Management*

**alien lawfully present**

Alien lawfully present is an unnaturalized or other non-citizen of the United States, lawfully registered with the Immigration and Naturalization Service (INS) under federal provisions.

*Right of Way Collection*

**alignments**

Alignments refer to the geometric design elements that define the horizontal and vertical configuration of the roadways.

**allocation**

ALLOC

1. Allocation is an administrative distribution of funds among the states. This is done for funds which do not have statutory distribution formulas. Examples include Bridge Discretionary, Emergency Relief, or Federal funds.

2. Allocation is the amount of new transportation planning funds distributed each year. The amount of FHWA metropolitan transportation planning funds allocated to each MPO is based on the urbanized population and air quality designation. Each MPO receives FTA Section 5303 planning funds.

*Transportation Planning and Programming Collection*
**allocation CSJ**

The allocation CJS is the control section job (CSJ) number that will receive cost allocation when construction-engineering charges are coded on input to the primary CSJ number.

Finance Division

**allocation percent**

The allocation percent is the percentage of input amount the control section job (CSJ) number will be allocated.

Finance Division

**alligator cracking**

1. Alligator cracking is an asphaltic concrete pavement distress type. Alligator cracking consists of interconnecting cracks which form small (less than 1 foot by 1 foot), irregularly-shaped blocks which resemble the patterns found on an alligator’s skin. Alligator cracking ranges from 0 to 100 percent of the wheelpath length.

   *Pavement Management Information System Users Manual*

2. Alligator cracking is a type of distress that is generally caused by inadequate base support or brittle asphalt surface. Since cracks allow surface water to enter the subgrade and further destroy the stability of the subgrade, sealing should be accomplished as soon as practical. When cracking has progressed to the extent that failure of the roadway surface is imminent, repairs should be made as soon as possible. The alligator cracked surface material approaching failure will normally have to be removed and replaced with asphalt patching material. Where the base is unstable or wet the base material will need to be removed, replaced or stabilized.

   *Maintenance Collection*

**allotment**

Allotment is the number of FTEs (full time equivalents) that a district/division may have employed at one time.

**alternate bid item**

An alternate bid item is one that may be substituted for the primary item of work and bid on by the contractor. The alternate must be listed on the proposal and plans. The primary bid item and the alternate must be equivalent in quality and performance. The total estimated construction cost must be the same for the primary bid item and its alternative.

*Design and Construction Information System Manual*

**alternate procedure**

Alternate procedure is the term derives from 23CFR §645.119, *Alternate Procedure*, which allows a state transportation department “… to act in the relative position of the FHWA for reviewing and approving the arrangements, fees, estimates, plans, agreements, and other related matters” including “all actions necessary to advance and complete all types of utility work”, with certain
exceptions; (refer to 23 CFR §645.119, (b) (1), et seq.). The term, Alternate Procedure, as a Subprocess of “The Process”, has been renamed to Federal Utility Procedure to differentiate it from the Alternate Procedure relating to the CFR.

**ROW Utility Manual**

**alternating current**

**A.C.**

Alternating current means the current and voltage alternates from maximum positive to maximum negative in a sinusoidal pattern.

*Highway Illumination Manual*

**alternative fuels**

Alternative fuels are the following fuels recognized by statute for use in Texas: compressed natural gas (CNG), liquefied petroleum gas (LPG), liquefied natural gas (LNG), methanol (M-85), ethanol (E-85) and electricity.

*Equipment Manual*

**Amarillo District**

**AMA**

The Amarillo District is a TxDOT district office including the following counties: Armstrong, Carson, Dallam, Deaf Smith, Gray, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Potter, Randall, Roberts, and Sherman. Area offices are located in Amarillo, Borger, Canyon, and Pampa. TxDOT also operates a Travel Information Center in the district.

*Inside TxDOT*

**amendment**

An amendment is a permanent change in one or more of the elements of the contract.

*Contract Management Manual*

**amendment number**

A sequential number assigned to an amendment.

*Finance Division*

**American Association of State Highway Officials**

**AASHO**

The American Association of State Highway Officials, the predecessor to AASHTO, has been terminated, but its past work is still used as a reference.

*American Association of State Highway Officials Road Test*  
AASHO Road Test
The AASHO Road Test was a large-scale road test conceived and sponsored by AASHO in the early 1950s to determine significant relationships between pavement performance and pavement design when roads are subjected to various loads.


American Public Transit Association
APTA
The American Public Transportation Association is a national transit trade association.
Public Transportation Collection

American Railway Engineering Association
AREA
See American Railway Engineering and Maintenance-of-Way Association.

American Railway Engineering and Maintenance-of-Way Association
AREMA
An association for the development and advancement of both technical and practical knowledge and recommended practices pertaining to the design, construction, and maintenance of railway infrastructure. Formed October 1, 1997, as the result of a merger of the American Railway Bridge and Building Association, the American Railway Engineering Association, and the Roadmasters and Maintenance of Way Association.
Bridge Detailing Manual

American Recovery and Reinvestment Act
ARRA
The American Recovery and Reinvestment Act [Pub. L. 111-5] became law on February 17, 2009. ARRA goals include the preservation or creation of jobs and the promotion of an economic recovery, as well as the investment in transportation, environmental protection and other infrastructure providing long-term economic benefits.

Transit capital improvements and limited funding for operating expenses are available through various Federal Transit Administration programs.
Public Transportation Collection

American Society for Testing and Materials
ASTM
The American Society for Testing and Materials is often referred to in specifications and standards documents.

American Standard Code for Information Interchange
ASCII
American Standard Code for Information Interchange (ASCII) is a standardized 7-bit code that includes control characters such as carriage returns and tabs, along with text.

*Information Technology and Services Manual*

**Americans with Disabilities Act Accessible Vehicle**

ADA Accessible Vehicle

An ADA Accessible Vehicle complies with the accessibility requirements of 49CFR Part 38, Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles.

*Public Transportation Collection*

**Americans with Disabilities Act Complementary Paratransit Service**

ADA Complementary Paratransit Service

ADA Complementary Paratransit Service, required by 49CFR Part 37. Each public entity operating a fixed route system must provide paratransit or other special service to individuals with disabilities. This service must be comparable to the level of service provided to individuals without disabilities who use the fixed route system and must be available within a ¾ mile radius of the routes.

*Public Transportation Collection*

**ampere I**

Ampere I is the unit of current strength (flow of electrons)

*Illumination Manual*

**analog**

Analog is a term for a tone grayscale or color image. For better understanding of this effect, look at a black-and-white conventionally produced graphic, not digital (for example, a conventional photograph or a painting or drawing done by hand on paper).

*Communications Manual*

**analysis period**

Analysis period is the period of time for which the economic analysis is to be made; ordinarily will include at least one rehabilitation activity.

*Pavement Design Manual*

**angle of repose**

The angle of repose is the angle which the sloping face of a bank of loose earth, gravel, or other material makes with the horizontal.

*Occupational Safety Manual*

**annexation**
Annexation - A fixture, architecturally part of an improvement, whose individual utility would cease if separated from the improvement.

Right of Way Collection

Anonymous File Transfer Protocol

An anonymous FTP is the use of File Transfer Protocol (FTP) with user identification of “anonymous.”

Information Security Manual

Anonymous File Transfer Protocol Site

An anonymous FTP site is an Internet site that contains files that can be downloaded by anyone using FTP. The directory for an anonymous FTP site is isolated from the rest of the system and generally does not accept uploads from users (see FTP and FTP Site).

Information Security Manual

annual average daily traffic

AADT

1. The annual average daily traffic is 24-hour axle counts for a segment of roadway to which seasonal factors and axle correction factors are applied to develop the AADT. AADT may be further defined as: 1) Historic AADT - A record of AADT for previous years, used to develop growth factors for estimating current and/or future AADT. 2) Current AADT - The most recent AADT estimate for a roadway segment. 3) Forecasted AADT - A 20-year projection of AADT developed using linear regression and 10 years of historic AADT. 4) Modeled AADT - The AADT produced by the travel demand models. Modeled AADT may be for the base year or for a forecast year.

Traffic Data and Analysis Manual

2. The annual average daily traffic is the total traffic for a year divided by 365. Usually, AADT is adjusted for day of the week, seasonal variations, and or vehicle classification. TxDOT records contain information for AADT for all highways on the state maintained system, except frontage roads.

annual budget

1. The annual budget is the total budget as approved by the legislature.

2. The annual budget is a group of appropriations which the department has the authority to expend or encumber in a fiscal year.

annual flood

An annual flood is the highest peak discharge in a water year.

apparent joint spacing
Apparent joint spacing is a Pavement Management Information System term which is the approximate average spacing between transverse joints on a Jointed Concrete Pavement, whether they were originally constructed or not. Apparent joint spacing ranges from 15 to 75 feet.

Pavement Management Information System Rater’s Manual

**apparent specific gravity**

Apparent specific gravity is the ratio of the weight in air of a given volume of the water impermeable portion of a permeable material at a stated temperature to the weight in air of an equal volume of distilled water at a stated temperature.

Manual of Testing Procedures

**application**

An application is a software system that supports a business activity by providing access to stored data and the ability to manipulate and use that data.

**application architecture**

The application architecture identifies the application systems needed to support the business needs and data requirements of the department. It is a model of all applications (existing and future) required to support the actions of the business, with an emphasis on sharing information resources.

Information Systems Business Project Retooling

**application developer**

An application developer is a professional engaged in the creation of computer applications.

Enterprise Data Management

**application development architecture**

The application development architecture provides the framework, principles, guidelines, minimum standards/specifications, and policies/procedures for application development and maintenance. It is a subset of the Technology Architecture and includes those elements directly related to the application development process.

Information Systems Business Project Retooling

**application programming interface**

API

Application programming Interface is a standard protocol enabling one process such as an application program to interact with another process such as a database network.

Enterprise Data Management

**application project manager**

An application project manager is the programmer responsible for the development or maintenance of the application.
application security administrator

Application security administrator is a TxDOT employee responsible for providing security and administrative services for a specific system or application in the production environment. The application security administrator should not be a regular user on the system or application.

Information Security Manual

application server

An application server is a computing platform whose primary function is to provide application-oriented services to users within the business environment.

Information Services Business Improvement Project Technology 1

applicator

An applicator is a facility which performs the epoxy coating of reinforcing steel bar, fabric, or wire.

Manual of Testing Procedures

apportionment

Apportionment is a term which 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. Examples include Interstate Maintenance (IM), National Highway system (NHS), Surface Transportation Program (STP), Congestion Mitigation and Air Quality (CMAQ), and Bridge Replacement and Repair (BRR) programs.

Transportation Planning and Programming Collection

appraisal (ROW)

1. An appraisal is a written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.
2. Appraisals of property involve determining fair market value of property interests by a professional appraiser.

Right of Way Manual

appraisal problem

Appraisal problem is a narrative discussion regarding items or situations that affect the appraisal of the acquisition.

Right of Way Collection

approach nose

An approach nose is the end of an island, or neutral area between two roadways, which faces approaching traffic that passes on one side or both sides.

approach slab
An approach slab is a reinforced concrete slab constructed between a bridge abutment and the adjacent roadway that absorbs the impact of loads produced by traffic passing from the roadway onto the bridge and to the roadway.

**appropriated adjustments**

Appropriated adjustments are revisions to the original appropriation amount.  
Finance Division

**appropriation (state or federal)**

1. Appropriation (state) is the legal authorization to obligate expenditures during a stated period. The state legislature makes appropriations biennially. Payments for the expenditures may be made by the department up to two years after the close of the fiscal year in which the goods or services were received for non-capital budget appropriations and up to four years after the close of the fiscal year in which the goods or services were received for capital budget appropriations.  
Finance Division

2. Appropriations (federal) are funds set aside by the U.S. Congress for specific programs. In most cases, an appropriation allows money previously authorized to be obligated and spent. But for the highway program operating under contract authority, appropriations specify the amounts of funds that Congress will make available to liquidate prior obligations.

**appropriation account**

An appropriation account is an accounting entity established by the comptroller and identified by an appropriation number. It records the total amount appropriated for a purpose, which is established by the legislature, adjustments to that amount, the amounts expended, and any remaining or lapsed amounts.

**Appropriation Bill**

The Appropriation Bill is the basic law of the legislature that authorizes the expenditure of state funds. The bill cannot authorize any expenditure of public money unless there is statutory authority for such expenditure. The Texas Constitution limits the appropriations in this bill to two years.

**appropriation number**

APPROP. XXXX

The appropriation number is the number that identifies the appropriation line item with which the cost center is associated (Ref. FIMS Code Chart 81).  
Finance Division

**appropriation year**

AY

The appropriation year is the year that the legal authorization for the charge was granted by the legislature.
Finance Division

approved appraiser
An approved appraiser is an appraiser approved by the Appraiser Approval Committee who is qualified to provide appraisal services for the department.

apron(s)
Aprons are the floor or lining to protect a surface of the waterway from erosion.

approved manufacturer
An approved manufacturer is a manufacturer certified by TxDOT as having an acceptable quality monitoring program.

approved warehouse
An approved warehouse is a warehouse maintained and operated by an approved manufacturer or an approved manufacturer’s representative, under a contractual agreement with TxDOT, for the purpose of storing tested products for TxDOT projects or purchase orders.

aquifer
An aquifer is the geologic formation or structure that transmits water in sufficient quantity to supply the needs for a water development. The term water-bearing is sometimes used synonymously with aquifer when a stratum furnishes water for a specific use. Aquifers are usually saturated sands, gravel, fractures, cavernous, and vesicular rock.

Arbiter
Arbiter is an electronic data transfer program.

archaeology or archeology
Archaeology is the study of past human societies using material cultural remains.

archaeologist
An archaeologist is a specialist who studies the past to record and analyze earlier human societies using scientific methods.

archeological steward
An archeological steward is an avocational archeologist who has met certain criteria of archeological stewardship and has been appointed an Archeological Steward by the Texas Historic Commission. Texas has approximately 60 such stewards; their names and addresses are among the list of preservation contacts provided to each district by ENV.
Environmental Affairs Division

archaeological survey

An archaeological survey is a systematic attempt to find, identify and record any evidence of past human occupations on the ground in the natural geographic setting and environmental context.  
*Environmental Manual*

Archie

Archie is a tool used to conduct a subject search on a database that holds all known File Transfer Protocol (FTP) sites on the Internet. If you are looking for information or programs on a specific topic, try a search using Archie.  
*Information Security Manual*

architectural assessment

An architectural assessment addresses security requirements and statutory mandates to establish a recommended minimum baseline for security architecture.  
*Information Security Manual*

architectural principal

An architectural principle represents an architectural assumption or foundation that has been documented and around which the technological architecture has been designed and constructed.  
*Information Services Business Improvement Project Technology 1*

architecture

An architecture is a unifying or coherent form or structure. See “information technology architecture.”  
*Enterprise Data Management*

archival

Archival is the process of copying data that is maintained on a operational system in real-time to some other type of storage device such as another system or to a data warehouse and is from that point forward used only for “read-only” historical analysis or a similar type of activity.  
*Information Services Business Improvement Project Technology 1*

archival record

A TxDOT record scheduled to be reviewed by, or that has been approved by, an archive for permanent preservation.  
*Information Security Manual*

archive
An archive is a place where files are stored and made available through a File Transfer Protocol (FTP) session.

*Information Security Manual*

**area of potential effect**

APE

Area of potential effect is the geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist there. This area always includes the actual site of the undertaking and may also include other areas where the undertaking will cause changes in land use, traffic patterns or other factors that could affect historic properties.

*Environmental Manual*

**area type**

a density designation given to each traffic serial zone which assists in quantifying differences in traffic signal spacing, maximum permissible speeds and other factors that ultimately relate to assigning network link speed and capacity. Area types are determined using a formula based on a function of population and employment density.

*Traffic Data and Analysis Manual*

**arterial highway**

An arterial highway is a general term denoting a highway primarily for through traffic, usually on a continuous route.

**as soon as possible**

As soon as possible means that necessary repairs or corrective action will be performed as soon as required materials, equipment, and labor can be assembled. When the safety of the traveling public is comprised, resources will be committed as needed to perform necessary repairs and/or erect signs and barricades to protect traffic.

*Maintenance Collection*

**as soon as practical**

As soon as practical means that repairs will be made or corrective action will be taken when required materials, equipment, and labor are available and the work can be performed in the current work schedule.

*Maintenance Collection*

**as-of-date**

The as-of-date indicates the financial status of an activity or account on a certain date.

**asbestos**
Asbestos is any of several minerals that readily separate into long flexible fibers suitable for use as a noncombustible, non-conducting or chemically-resistant material. When airborne, these fibers become a respiratory hazard.

*Occupational Safety Manual*

**asbestos protection**

Asbestos protection is when fibers of asbestos felt are embedded in the galvanized coating of sheet steel to enable bituminous coatings to adhere more tenaciously and to provide greater corrosion resistance.

*Texas Reference Marker (TRM) System User's Manual*

**ascending reference marker direction**

Ascending reference marker direction is the direction of travel in which the reference marker numbers increase.

*Texas Reference Marker (TRM) System User's Manual*

**ash factor**

Ash factor is an amount of ash that is to be used repeatedly as part of the total aggregate portion of an extraction test. It takes the place of the ash value usually determined for each extraction.

*Manual of Testing Procedures*

**asphalt**

Asphalt is a dark brown to black bituminous material, either natural or refined from petroleum, used to cement aggregate particles together to form asphaltic concrete. Asphalt is a thermoplastic material, because its viscosity changes with temperature.

*Federal Highway Administration*

**asphalt binder**

Asphalt binder, which can be asphalt cement or modified asphalt cement, acts as a binding agent to glue aggregate particles into a cohesive mass.

*Manual of Testing Procedures*

**asphalt cement**

Asphalt cement is that which has been specifically prepared or refined to standards of quality and consistency. It is prepared for direct use in the manufacture of asphalt pavements.

**asphalt leveling course**

Asphalt leveling course is a layer of variable thickness used to prepare an existing pavement for a new uniform surface layer. It is usually called “level-up course.

**asphalt patches**
Asphalt patches are a continuously reinforced concrete pavement distress type in which a localized area of asphalt concrete has been placed to the full depth of the surrounding concrete slab, as a temporary method of correcting surface or structural defects. Asphalt patches range from 0 to 999.

_Pavement Management Information System Users Manual_

**asphaltic concrete**

Asphaltic concrete is a hot mixture of asphalt cement and aggregate compacted into a uniform dense mass.

**asphaltic concrete pavement**

ACP

Asphaltic concrete pavement is a compacted mixture of mineral aggregate and asphaltic materials. An ACP overlay is a supplemental base-pavement or wearing surface placed on an existing base-pavement or wearing surface where major repairs to a pavement structure are required to restore a satisfactory riding surface or upgrade the strength of the pavement structure.

_Assessing Community Traffic Safety_

ACTS

Assessing Community Traffic Safety is a method for analyzing traffic safety problems within a community and a set of plans for implementing proven programs that address the identified traffic safety problems.

_Traffic Safety Program Manual_

**asset inventory**

The asset inventory is a comprehensive identification of all department information services software/hardware

Information Services Business Improvement Project Technology 1

**assignment of payment**

Assignment of payment is the legal transfer of a right or property. An assignment is the transfer of the right to payment. An assignment involves at least two parties: the assignor and the assignee. The assignor (vendor) is the party transferring the right to payment. The assignee is the party receiving the right to payment.

_Purchasing Manual_

**assistant attorney general**

AAG

An assistant attorney general is a member of the legal staff of the Office of the Attorney General who represents the State during litigation.

_Right of Way Manual_
associative entity type

An associative entity type is an entity type that relates two or more entity types having a many-to-many relationship. Minimally, unique identifiers are established by the relationships to the other entity types. Additional attribute type identifiers may be added as appropriate.

Enterprise Data Management

asymmetric digital subscriber line

ADSL

An asymmetric digital subscriber line is a digital subscriber line. It is a new technology, which allows more data to be sent over existing copper telephone lines.

Information Security Manual

asymmetric key cryptography

An asymmetric key cryptography is based on a mathematical discovery in the 1970’s: there exist pairs of numbers, such that data encrypted with one member of the pair can be decrypted by the other member of the pair and by no other means. The number made known to the public is called the public key; the number kept secret is called the private key, which is also called the Public Key Cryptography.


asynchronous transfer mode

ATM

Asynchronous transfer mode is a standard developed for high-speed networking, capable of supporting all types of information flow including voice, data and images.

Information Services Business Improvement Project Technology 1

at-grade

At-grade means a combination of horizontal alignments and vertical grade lines which intersect.

Atlanta District

ATL

The Atlanta District is a TxDOT district office including the following counties: Bowie, Camp, Cass, Harrison, Marion, Morris, Panola, Titus, and Upshur. Area offices are located in Atlanta, Carthage, Gilmer, Marshall, Mount Pleasant, and Texarkana. The district is also home to two Travel Information Centers, one in Texarkana and one in Waskom.

Inside TxDOT

attainment area
1. An attainment area, as defined by the USEPA in the CAAA of 1990, is an area considered to have air quality as good as, or better than, the National Ambient Air Quality Standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a non-attainment for others.

2. An attainment area is a designation given to urban areas which are in compliance with the Clean Air Act Amendments of 1990.

*Traffic Data and Analysis Manual*

**attendant**

An attendant is an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant’s duties assigned in the employer’s permit space program.

*Occupational Safety Manual*

**attenuators**

Attenuators are traffic safety devices such as sand-filled plastic barrels, vermiculite concrete cartridges, and steel drums placed around fixed objects to moderate and cushion vehicle impacts. They are commonly called crash cushions.

*Right of Way Manual*

**attorney ad litem**

An attorney ad litem is a court-appointed attorney who represents the interests of:

- a person or persons whose identity and/or whereabouts are unknown; or
- a mentally incompetent person or persons; or
- a minor or minors.

*Right of Way Manual*

**Attractions**

Attractions are trips to and from a work place made by employees and non-employees. They are computed by trip purpose as well as by mode of travel. Attraction rates refer to the total attractions for a work place divided by the number of employees at the work place. Attraction rates are also developed for households.

*Traffic Data and Analysis Manual*

**attribute**

An attribute is a property or characteristic that describes an entity. It is a fact that has the same format, interpretation, and domain for all occurrences of an entity type. An attribute is a conceptual representation of a type of fact that is implemented as a field in a record, a data element in a database file, or a column in a table. For entity type EMPLOYEE, attributes could be EMPLOYEE.

*Enterprise Data Management*

**attribute name**
An attribute name is the official name of an attribute which has been composed according to standard.
Enterprise Data Management

**audit**

Audit is the formal examination of accounts.
*Travel Manual*

**audit, final**

See [final audit](#).

**audit, interim**

See [interim audit](#).

**audit, pre-negotiated**

See [pre-negotiated audit](#).

**Audit Office**

AUD

The Audit Office conducts independent audits of department operations and contractors for financial contract compliance.
*Inside TxDOT*

**Austin District**

AUS

The Austin District is a TxDOT district office including the following counties: Bastrop, Blanco, Burnet, Caldwell, Gillespie, Hays, Lee, Llano, Mason, Travis, and Williamson. Area offices are located in North Austin, South Austin, Bastrop, Burnet, and Georgetown. The district also has a Travel Information Center and a Vehicle Titles and Registration Regional Office.
*Inside TxDOT*

**authentication**

1. Authentication is to positively verify the identity of a user, device, or other entity in a computer system, often as a prerequisite to allowing access to resources in a system.
2. Authentication is the process that verifies the claimed identity of an automation user as established by an identification process.
*Information Security Manual*

**authorization**

1. Authorization is a positive determination by the Office of Primary Responsibility (OPR) that a specific individual may access a specific information resource.
*Information Security Manual*
2. Authorization is the validation that a positively identified user has the need and the Office of Primary Responsibility’s (OPR) permission to access an information resource. 
   *Information Security Manual*

3. Authorization is the actual amount that the MPO is allowed to spend in each fiscal year. After the FHWA approves the UPWP, a letter of authorization is issued to TxDOT. The authorization may be less than what was programmed due to carryover amounts not being finalized. 
   *Transportation Planning and Programming Collection*

**authorized employee**

An authorized employee is a person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. 
   *Occupational Safety Manual*

**authorized entrant**

An authorized entrant is a trained/qualified employee who is authorized by the employer to enter a permit space. 
   *Occupational Safety Manual*

**auto driver trips**

Auto driver trips are trips made by drivers of personal vehicles. These are usually summed for all members of a household and reported as auto driver trips per household and referred to as the auto driver trip rate. 
   *Traffic Data and Analysis Manual*

**Automated Environmental Data Acquisition System**

AEDAS

The Automated Environmental Data Acquisition System is a system used by the Environmental Affairs Division to obtain information necessary in building highways.

**automated information system**

AIS

Automated information system refers to products and services that are associated with computers or telecommunications systems. 
   *Procurement Manual*

**Automated Purchasing System**

APS

Automated Purchasing System is a fully automated, department-wide, mainframe system administered by the General Services Division, which is used for the request and purchase of all goods and services for TxDOT. 
   *Purchasing Manual*
Automated Receiving Report System
ARRS
The automated receiving report system alerts the Finance Division of the authorization to pay invoices. The system alleviates the need for a manual receiving report.
Procurement Manual

Automated Roadway Inventory diagram
ARI
The Automated Roadway Inventory diagram takes information from the Texas Reference Marker (TRM) System database and:
◆ creates an automated straight-line diagram of the selected route.
◆ replaces the previously hand-drawn RI-1 diagram, which is TPP’s visual roadway record, showing all highways maintained by the department.
◆ allows the TRM user to produce an accurate and current graphical representation of any desired section of highway in the TRM database.
◆ is a computer-generated straight-line diagram of a highway that consists of graphics and text:
  ● Graphics portion of the diagram appears across the middle of the page showing features and readings of the roadway.
  ● Text appears above and below the graphics showing roadbed-specific and administrative data.
*Texas Reference Marker (TRM) System User's Manual*

automated vehicle identification system
AVI
A system in which electronic equipment, such as transponders, on a vehicle sends signals to reader antennae placed at strategic locations that send data back to a central control facility, locating the vehicle and providing other information about its operations or about its mechanical condition. AVI is also referred to as Automatic Vehicle Monitoring System and Automatic Vehicle Location System.

automobile graveyard
An automobile graveyard is an establishment that is maintained, used or operated for storing, buying, or selling wrecked, scrapped, ruined or dismantled motor vehicles or motor vehicle parts.
*Right of Way Manual*

Automobile Theft Prevention Authority
ATPA
ATPA is a section in the Vehicle Titles and Registration Division.

auxiliary lane
Auxiliary lane is a lane striped for use as an acceleration lane, or deceleration lane, right-turn lane, or left-turn lane, but not for through traffic use.  
*Access Management Manual*

**available bidding capacity**

Available bidding capacity is the contractor's approved bidding capacity less uncompleted work under contract, including reductions due to sanctions.  
*Maintenance Contract Manual*

**available personnel**

Available personnel is the total number of personnel employed by the provider proposed to be used on the advertised contract.  
*Engineering, Architectural and Surveying Services Manual*

**average annual daily traffic**

AADT

Average annual daily traffic is 24-hour axle counts for a segment of roadway to which seasonal factors and axle correction factors are applied to develop the AADT.  AADT may be further defined as:

- Historic AADT - A record of AADT for previous years, used to develop growth factors for estimating current and/or future AADT.
- Current AADT - The most recent AADT estimate for a roadway segment.
- Forecasted AADT - A 20-year projection of AADT developed using linear regression and 10 years of historic AADT (see future ADT).

*Transportation Planning and Programming Collection*

**average coach airfare**

Average coach airfare is the arithmetic mean of the unrestricted "Y" class fares offered by all airlines to a particular destination as quoted in American Airlines' Sabre system or in Worldspan's PARS reservation system.  
*Travel Manual*

**average crack spacing**

Average crack spacing is a Pavement Management Information System term which is the approximate average spacing between transverse cracks on a continuously reinforced concrete pavement.  
Average crack spacing ranges from 1 to 75 feet.  
*Pavement Management Information System Rater's Manual*

**average daily traffic**

ADT
Average daily traffic volume represents the total two-way traffic on a roadway for some period less than a year, divided by the total number of days it represents, and includes both weekday and weekend traffic. Usually, ADT is adjusted for day of the week, seasonal variations, and/or vehicle classification.

*Access Management Manual*

**average of ten heaviest wheel loads daily**

ATHWLD

Average 10 heaviest wheel loads is data developed using 18 KESALS data for pavement design.

*Traffic Data and Analysis Manual*

**Aviation Division**

AVN

The Aviation Division is the TxDOT division that receives, disburses, and administers federal and state funds for general aviation airports. The division is responsible for helping small communities build, maintain, and upgrade airports.

*Inside TxDOT*

**axial (major principal stress)**

The axial (major principal stress) is the axial load divided by the average area of the cylindrical specimen.

*Manual of Testing Procedures*

**axial load**

Axial load is the sum of the applied load and the dead load (including the weight of the top porous stone, metal block and bell housing) applied along the vertical axis of the test specimen.

*Manual of Testing Procedures*

**axle load**

An axle load is the total load transmitted by all wheels on an axle unit, the center of which may be included between two parallel transverse vertical planes extending across the full width of the vehicle.

**azimuth**

The azimuth is a surveying observation used to measure the angle formed by a horizontal baseline and geodetic north. When applied to GPS observations, it refers to a normal section azimuth.

*Survey Manual*
back end
The back end is a computer program that performs final edits on transactions to confirm all data is correct for the receiving subsystem.
*Materials And Supplies Management System Manual*

back order
A back order is created when there is not enough available inventory to cover the material request.
*Materials And Supplies Management System Manual*

back slope
The back slope is the ratio of slope on back side of ditch for roadway.

backbone
A backbone is another term for bus. It is a collection of very fast networks that provides access points where other networks interconnect. Consider the Internet as a series of interconnecting roads, and you'll find the backbones are its highways.
*Information Security Manual*

backfill
1) Backfill is the material used to replace other material removed during construction.
2) Backfill is the material placed adjacent to structures.

backup
A backup is a copy of files and applications made to avoid loss of data and facilitate recovery in the event of a system crash.
*Source: Information Security Manual*

balance
A balance is a scientific weighing scale.
*Manual of Testing Procedures*

ballast
A ballast is a device which includes a transformer that modifies incoming voltage and current to provide the circuit conditions necessary to operate electric discharge lamps.
*Highway Illumination Manual*

bandwidth
1. A bandwidth is the amount of data a network link can handle.
2. Bandwidth is the signaling frequency supported by a circuit. It is generally accepted to mean the capacity provided by a particular circuit expressed as a data transfer rate (bits/second). The term is also used to express a requirement for such capacity.

Information Security Manual

**bank gravel**

Bank gravel is found in natural deposits, usually intermixed with fine material, such as sand or clay, or combinations thereof; the terms “gravelly clay,” “gravelly sand,” “clayey gravel” or “sandy gravel” indicate the varying proportions of the materials in the mixture. NOTE: This definition has been approved by the Specifications Committee.

Manual of Testing Procedures

**banner**

A banner is a sign painted or fabricated on fabric mesh or flexible plastic, placed between supports above or along a roadway or highway.

Maintenance Collection

**bank ID**

A bank ID is the routing number assigned to the bank by the Routing Number Administrative Board of the American Bankers Association.

Finance Division

**Barlow’s Formula (Design Pressure)**

Barlow’s Formula (Design Pressure) is the formula used to determine the design pressure for steel pipe.

ROW Utility Manual

**barrel**

Bbl

A barrel is the inner part of a culvert through which the water is discharged.

**barricade**

A barricade is the portable or fixed barrier with diagonally striped markings used to close all or a portion of the right-of-way to traffic.

**barrier**

A barrier is the longitudinal system located on either bridges, medians, or along the roadside that is used to shield vehicles from potential hazards or work areas.
A barrier curb is a curb designed to prevent or discourage vehicles from leaving the pavement.

**base**

1. A base, commonly referred to as a base course, is layer of specified or selected material of planned thickness - constructed on the sub-grade, the natural foundation, or sub-base - for the purpose of distributing load, providing drainage, or upon which a wearing surface or a drainage structure is placed.

2. Base is the layer of material immediately beneath the pavement’s surface layer. It may be a layer of crushed stone, crushed or uncrushed gravel and sand, or various combinations of materials. It may also be treated with asphalt to bind it together, or it may be left untreated (see also Flexible Base and Stabilized Base).

**base curb weight**

Base curb weight is the weight of a vehicle including a full tank of fuel and all standard equipment. It does not include passengers, optional equipment or cargo.

*Equipment Manual*

**base of fill**

The base of fill is the existing ground line that is prepared before embankment is placed.

**base year**

Base year is the year in which the urban saturation counts are made and the to which the model is validated.

*Traffic Data and Analysis Manual*

**basic employment**

Basic employment is employment in businesses classified under the standard industrial classification system as agriculture, mining, manufacturing, construction, wholesale trade, transportation, communications, public utilities.

*Traffic Data and Analysis Manual*

**basis of estimate**

A basis of estimate is the listing of pay items for a project that shows items of work and the amount or quantity of that particular item that is to be used for a project. Items that are listed are those that cannot be directly measured from the plans such as sprinkling, rolling, blading, lime, etc.

**batch**

1. A batch is a quantity of like transactions that have been grouped together to be processed as one lot.

2. A batch is a quantity of like transactions that have been grouped together to be processed as one lot in the Financial Information Management System (FIMS) front-end and back-end.

*Finance Division*
3. A batch is the quantity of finished material produced from each separate mixture of ingredients. 

*Manual of Testing Procedures*

**batch interface**

A batch interface is an interface that is generally used to execute high-volume repetitive tasks during non-peak times as a background process. 

*Information Services Business Improvement Project Technology 1*

**batch plant**

A batch plant is a plant where asphalt hot mix is produced. The plant weighs the hot aggregates to specific proportions by grade, then adds the hot asphalt cement by either weight or volume. These plants are older than drum plants, as well as more expensive to operate and capable of less output. Most hot mix plants in Texas are now drum plants.

**batter**

The batter is the slope or inclination from a vertical plane - as the face or back of a wall.

**bearing**

Bearing is the direction of a line with reference to a meridian.

**Beaumont District**

BMT

The Beaumont District is a TxDOT district office including the following counties: Chambers, Hardin, Jasper, Jefferson, Liberty, Newton, Orange, and Tyler.

*Inside TxDOT*

**bedding**

Bedding is the foundation material providing a bearing for culverts or other structures.

**Beginners All-purpose Symbolic Instruction Code**

BASIC

Beginners All-purpose Symbolic Instruction Code is a programming language oriented towards introducing a person to programming. BASIC is very similar to FORTRAN (formulas translated).

**behavior problem**

A behavior problem is a violation of a general work rule or standard of conduct.

**bench marks**

Bench marks are permanent objects or markers used as a reference indicating elevation.

*Survey Manual*
bending moment

A bending moment is the moment which produces bending in a beam or other structure. It is measured by the algebraic sum of the products of all the forces multiplied by their respective lever arms.

*Geotechnical Manual*

benefit/cost ratio

B/C

B/C is used to compare the benefit versus the cost of proposed alternatives. For highway projects, benefits may include reduced fuel consumption, travel time, and air pollution; costs may include construction, right of way, and maintenance.

bent

A bent is the transverse part of a bridge that transfers lateral as well as vertical loads from the superstructure to the foundation.

*Bridge Design Manual*

berm

1. A berm is a mound of earth, generally of triangular (or trapezoidal) cross-section, that parallels a roadway and serves as a noise barrier.
2. A berm is the area between back slope and the right of way (ROW) line.
3. A berm is a ledge or shelf that breaks the continuity of a slope.

best and final offer

BAFO

Best and final offer is a step in the purchasing process used only with requests for offers and requests for proposals.

*Purchasing Manual*

best management practices

BMPs

The best management practices are schedules of activities, practices, and procedures to prevent or reduce pollution of waters of the United States. Such practices include planning strategies, operating procedures, and physical practices to control site runoff.

best value

Best value is a purchasing process allowing factors other than price to be considered in award of a purchase order to obtain goods or services that provide the best value for the state. Under these guidelines, a vendor is not awarded a purchase order simply because the vendor submits the lowest price to a bid, offer or proposal.

*Purchasing Manual*
betterment

Betterment is a term to describe upgrading of a facility as either elective or forced. **Elective** is any upgrading of the facility being relocated that is not attributable to the highway construction and is made solely for the benefit, and at the election, of the utility. **Forced** is any upgrading of the facility being relocated that is attributable to the highway construction and not made solely for the benefit, or at the election, of the utility, pursuant to local codes, ordinances, documented company policy, or industry standards. Also referred to as non-elective betterments.

*ROW Utility Manual*

bias factor

See **K-Factor**.

bicycle lane

A bicycle lane is a portion of a roadway that has been designated by striping, signing, or pavement markings for the preferential or exclusive use of bicyclists.

*Safe Routes to School Program Guidelines*

bicycle path

A bicycle path is a bikeway separated from motorized vehicular traffic by an open space or barrier, either within the highway right of way or within an independent right of way that may also be used by pedestrians, skaters, joggers, wheelchairs, and other non-motorized users.

*Safe Routes to School Program Guidelines*

bicycle/pedalcycle

A bicycle/pedalcycle is a device propelled solely by human power, having pedals, two or more wheels, and one or more seats.

bicycle route

A bicycle route is a continuous pathway usually on a city street designated for bicycles.

**Bid Analysis Management System**

**BAMS**

The Bid Analysis Management System is a user-oriented, computerized Decision Support System (DSS) that manages and monitors highway construction contract data. Applications include: bid report generation ranging from vendor qualifications to bid tabulations; analysis of bidding patterns from bid distributions to vendor market shares; management of historical bid data for use in planning and forecasting; and system utilities that enable the user to design and generate tailored reports for special applications.

**Bid bond**
Bid bond is a document provided by a contractor and a surety which pledges to reimburse the department for liquidated damages as a result of the contractor failing to enter into a contract with the department.  
*Maintenance Contract Manual*

**Bid code**

See Bid Item.

**Bid error**

Bid error is a mathematical mistake by the prime contractor in the unit price entered into the proposal.  
*Maintenance Contract Manual*

**bidder**

1. A bidder is any firm or company submitting a proposal to provide ROW services based on a qualifications/price method.  
*Right of Way Manual*
2. A bidder is an individual, firm, or corporation or any combination thereof submitting a proposal for obtaining a highway construction contract.

**Bidding capacity**

Bidding capacity is the maximum dollar value a contractor may have under contract at any given time.  
*Maintenance Contract Manual*

**bidding proposal**

A bidding proposal is a proposal for work to be contracted by the department. This document gives the location and type of work along with the governing specifications and bidding requirements. The document is submitted with the contractor's bid prices to ultimately become the contract with the department. A bidding proposal may only be issued to prequalified contractors, or contractors registered under the Bidder's Questionnaire.  
*Letting Manual*

**bid evaluation formula**

A bid evaluation formula is the method used to award a purchase order in accordance with established ratios of qualifications and bid price.  
*Right of Way Manual*

**bid interpretation sheet**

A bid interpretation sheet is a document completed by the Letting Official noting how incomplete, illegible, or smeared information was interpreted for calculating bid amounts.
Letting Manual

**bid item**

A bid item is a unit of work that is specified in the plans to be performed project by the contractor on a particular project and as detailed in the specifications. Bid items are based on standard specifications or special specifications. A descriptive code is used for each bid item to describe the item and define its unit of measurement.

*Design and Construction Information System Manual*

**bid master**

A bid master is a working document used by a purchaser to create a solicitation document in the Automated Purchasing System.

*Purchasing Manual*

**bid proposal**

Bid proposals are documents that contractors need to bid for contracts. The project bid proposal must be accurate and the public and contractors notified so the project can be let to contract.

*Design and Construction Information System Manual*

**Biennial Operating Plan**

**BOP**

The Biennial Operating Plan is a management tool to plan how TxDOT expends appropriated funds to ensure the cost effectiveness of information resources.

*Contract Management Manual*

**bi-fuel vehicle**

A bi-fuel vehicle is a vehicle that can operate on two fuels, but not simultaneously.

*Equipment Manual*

**billing name**

The billing name is the person or entity billed on an account (task). For damage claims, the billing name may be an insurance company.

*Finance Division*

**bill of lading**

A bill of lading is a shipping document that confirms receipt of a shipment.

*Equipment Manual*

**Binary Coded Decimal**

**B CD**
Binary coded decimal is an early computer character coding scheme using six bits per character with 64 possible coding combinations.

**bin-wall**

A bin-wall is a series of connected bins, generally filled with earth or gravel to serve as a retaining wall, abutment, pier, or as protection against explosions or gunfire.

**bisected improvement**

A building or structure that is severed by the proposed right of way line.

*Real Estate Acquisition Guide for Local Public Agencies*

**bisected improvement, Category I**

A building or structure that is severed by the right of way line in such a manner that it would not be economical to reconstruct that portion outside the right of way to restore utility. Such a structure will be appraised as whole and the entire structure will either be acquired by the State or retained by the grantor. This requires special provisions in the instrument of conveyance.

*Real Estate Acquisition Guide for Local Public Agencies*

**bisected improvement, Category II**

A building or structure that is severed by the right of way line in such a manner that would permit that portion outside the right of way to be economically reconstructed. This requires special provisions in the LPA instrument of conveyance.

*Real Estate Acquisition Guide for Local Public Agencies*

**bitmap**

1. A bitmap is a black-and-white only, raster-based image.
2. Bitmap can refer to the stair-stepped look, whether accidental or not, that is the result of displaying, scanning or printing an image at low resolution.

*Communications Manual*

**bits per second**

bps

Bits per second is the number of bits (each character takes approximately 8 bits to represent) a given medium can carry in a second.

*Information Security Manual*

**bitumen**

1. Bitumen is a class of dark brown or black cementitious substances, which contain high concentrations of hydrocarbons. Asphalts, tars, and pitches are common types.

*Manual of Testing Procedures*
2. Bitumen is a mixture of hydrocarbons of natural or pyrogenous origin, or a combination of both, frequently accompanied by nonmetallic derivatives which may be gaseous, liquid, semi-solid or solid; and which are completely soluble in carbon disulphide.

Asphalt Institute

**bituminous**

BIT

Bituminous means resembling or containing bitumen; such as asphalt or tar.

**black base**

Black base is a coarse-graded hot mix used as base material. The methods for preparing black base are similar to those used for surface material.

**blading**

Blading is the process of smoothing roadbed with a blade.

**blanket agreement**

A blanket agreement is an agreement identifying lighting projects authorized under the agreement by making the plans an attachment to the agreement. The agreement must have a statement that appears on the title sheet of the plans identifying the plans as part of the agreement. This statement must be signed by the appropriate city official.

*Highway Illumination Manual*

**blanket categorical exclusion**

BCE

A blanket categorical exclusion is a categorical exclusion for which either no environmental analysis is done or a “memo” BCE is prepared. Typical BCE projects include traffic signals and pavement overlays. BCEs are not sent to FHWA. See also *categorical exclusion*. *Environmental Manual*

**blank-out sign**

BOS

A sign that displays a fixed message when turned “on” and is blank when turned “off”.

**blast furnace slag**

Blast furnace is a non-metallic by-product, developed in a blast furnace simultaneously with iron in a molten condition, essentially consisting of silicates and alumina-silicates of calcium and other bases. NOTE: This definition has been approved by the Specification Committee. *Manual of Testing Procedures*

**blast pressure**
Blast pressure is the regulator pressure.

**blast time**

Blast time is the time necessary for 2 kg (4.4 lbs.) of blast medium to move through the system.

**BLDPREP**

BLDPREP is a program written in Remote Operating System Conversational System Equipment Programming Facility (RPF) to facilitate entry of budget data into the computerized budgeting system.

**bleeding**

Bleeding refers to the upward movement of asphalt in a pavement, resulting in a film of asphalt forming on the pavement surface. It appears in patches of dark smooth surface, usually in the wheel tracks. Bleeding usually occurs in hot weather.

**blend**

Blend is a definite percentage mixture of two materials of different physical characteristics from different locations.

**blockbusting**

Blockbusting is to induce, or attempt to induce, a person to sell or rent a dwelling by representations regarding the entry or prospective entry into a neighborhood of a person or persons of a particular race, color, religion, sex, familial status or national origin or with a handicap.

*Right of Way Manual*

**block cracking**

Block cracking is an asphaltic concrete pavement distress type. Block cracking consists of interconnecting cracks that divide the pavement surface into approximately rectangular pieces, varying in size from 1 foot by 1 foot up to 10 feet by 10 feet. Block cracking ranges from 0 to 100 percent of the lane area.

*Pavement Management Information System Users Manual*

**block sod**

Block sod is sodding for erosion control placed in blocks.

**blood**

Blood is human blood, human blood components and products made from human blood.

*Occupational Safety Manual*

**blood alcohol concentration**

BAC
The blood alcohol concentration is expressed in hundredths of a percent.

**bloodborne pathogens**

Bloodborne pathogens are pathogenic micro-organisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

*Occupational Safety Manual*

**blow-outs**

Blow-outs are the hydraulic condition of “reverse flow” or “bubbling” or “fountain-effect” of storm sewer flow whenever the hydraulic line rises above the top of manholes or gutter invert of an inlet during a design storm.

**blue top (can be red)**

A blue top (sometimes red top) is a grade stake set for finished grade or roadbed at each breakpoint in cross-section. Finished grade must be flush with top of blue (or red) top.

**board**

Board means a board, commission, committee, council, or similar entity in the executive, legislative, or judicial branch of state government that comprises at least two members.

*Travel Manual*

**Board of Control Number**

BOC Number

A Board of Control number is a General Services Commission (formerly Board of Control) contract number.

*Materials And Supplies Management System Manual*

**bolt length**

Bolt length is the distance from the end of the threaded shank to the underside of the bolt head.

**bolt length to bolt diameter ratio**

Bolt length to bolt diameter ratio is obtained by dividing the bolt length by the nominal bolt diameter.

**Boosting Alcohol Consciousness Concerning the Health of University Students**

BACCHUS

Boosting Alcohol Consciousness concerning the Health of University Students is a college-age, campus-based awareness program.

**border district**
A border district is one of the geographical areas of the department managed by a district engineer that is headquartered in El Paso, Laredo or Pharr.  
*Engineering Architectural and Surveying Services Manual*

**boring**

Boring is an earth-drilling process used for installing conduits or pipelines.  
*Geotechnical Manual*

**borrow**

Borrow is suitable material used for embankments. Borrow is excavating, removing and properly using materials obtained from approved sources of the right of way. Delivered borrow is borrow obtained by the contractor from sources other than the right of way.

**borrow pits**

Borrow pits are pits used as a source for borrow.

**bottleneck**

Highway sections that experience operational problems such as congestion. Bottlenecks may result from factors other than reduced roadway width. For example, the close spacing of exit and entrance ramps can cause a weaving pattern that result in congestion. A less obvious example is a steep freeway grade that can slow trucks and cause a localized bottleneck.

**bottom ash**

Bottom ash is the heavy residue from the combustion of ground or powdered coal or lignite.  
NOTE: This definition has been approved by the Specification Committee.  
*Manual of Testing Procedures*

**bottom of the ditch**

Bottom of the ditch is the ditch grade required for drainage.

**bounce**

Bounce is when your email message has not reached the person you sent it to. Instead, it has been sent back to you, informing you that your mail didn't reach its destination.  
*Information Technology and Services Manual*

**breach of contract**

Breach of contract is a failure, not caused by force majeure, to comply with the terms and conditions of the contract; for the purpose of this manual, the terms "breach of contract" and "default" are synonymous.  
*Contract Management Manual*
breakaway support

A breakaway support is a lighting pole support designed to shear easily under vehicular impact. The breakaway feature can be an aluminum transformer base, a frangible insert between pole base foundation, a slip base, or other device. The breakaway support must meet current American Association of State Highway and Transportation Officials and Federal Highway Administration requirements.

*Highway Illumination Manual*

breakpoint

The breakpoint is the point at which slope changes in cross-section.

bridge

1. A bridge is a structure, including supports, erected over a depression or an obstruction, such as water, a highway, or a railway; having a roadway or track for carrying traffic or other moving loads; and having an opening measured along the center of the roadway of more than 20 feet between faces of abutments, spring lines of arches, or extreme ends of the openings for multiple box culverts or multiple pipes that are 60 inches or more in diameter and that have a clear distance between openings of less than half of the smallest pipe diameter.

*Bridge Inspection Manual*

2. A bridge is a product that connects a local area network (LAN) to another local area network that uses the same protocol (for example, Ethernet or Token Ring network.).

*Information Security Manual*

bridge class culvert

A culvert (including multiple boxes) that measures greater than 20 feet (6 m) along the roadway centerline and between the insides of end walls. This includes pipes or pipe arches if the inside opening of a single pipe or pipe arch exceeds 20 feet (6 m).

*Hydraulics Manual*

Bridge Division

BRG

The Bridge Division oversees and provides assistance in bridge program and project development; structural and geotechnical design; plan development; plans, specifications, and estimate (PS&E) review; safety inspection; and bridge construction and maintenance support to the districts.

Source: Bridge Division

bridge folder

A bridge folder is the file for each bridge maintained by the district bridge inspection coordinator. The bridge folder has dividers on which the various bridge record documents can be fastened in a specific order.
**Bridge Identification**

Bridge identification is the unique 12-digit number assigned to any structure meeting the definition of a bridge. The number includes the three-digit county number, the four-digit control number, the two-digit section number, and the three-digit permanent structure number.

**Bridge Inventory File**

The bridge inventory file is the electronic data in TxDOT’s bridge inventory, inspection, and appraisal files for each bridge on a public roadway in Texas.

**Bridge Record**

The bridge record is the over-all collection of data including the bridge folder with completed forms, printout of coded electronic data, sketches, cross-sections, photos, etc. It also includes the bridge inventory file stored on electronic media. The bridge record also includes the bridge plans, if available, copies of which may be in the bridge folder or in TxDOT’s accessible file systems. Some of the bridge plans may also be available on electronic media in the form of computer-aided drafting (CAD) drawings.

**Broadcast Seeding**

Broadcast seeding is a term used to describe any method of planting seeds which scatters the seeds in a random pattern on the surface of the soil.

**Brownwood District**

BWD

The Brownwood District is a TxDOT district office including the following counties: Brown, Coleman, Comanche, Eastland, Lampasas, Mc Culloch, Mills, San Saba, and Stephens. Area offices are located in Brownwood, Eastland and Lampasas.

**Browser**

A browser is a client program that allows users to read hypertext documents on the World Wide Web and navigate between them. Examples are Netscape Navigator and Microsoft Internet Explorer. Browsers can be text-based or graphic.

**Brute Force Attack**
A brute force attack is a type of attack in which every possible key is attempted until the correct key is found.

*Information Security Manual*

**Bryan District**

**BRY**

The Bryan District is a TxDOT district office including the following counties: Brazos, Burleson, Freestone, Grimes, Leon, Madison, Milam, Robertson, Walker, Washington. Area offices are located in Brenham, Bryan, Buffalo, Hearne, and Huntsville.

*Inside TxDOT*

**budget**

A budget is a financial plan, actual or estimated, showing the items on which the expenditure of contract funds are authorized.

*Contract Management Manual*

**budget account**

The budget account is the account against which budgets and expenditures are tracked in the budget monitoring system.

Finance Division

**budget authority**

The budget authority is the empowerment by the U.S. 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 “budget authority.” Budget authority permits agencies to obligate all or part of the funds which were previously “authorized.” Without budget authority, federal agencies cannot commit the government to make expenditures or loans.

**budget code**

A budget code identifies the district or division which has primary responsibility for the funds and expenditures covered by an authorization. Code Chart 3 details the assignment of these codes.

**budget D/D**

The budget D/D is the district, division or office budget to which expenses will be posted.

Finance Division

**Budget Monitoring System**

BMS
The Budget Monitoring System is an automated system that records and maintains expenditures and equipment and stock receipts by district/division, budget activity, budget account, and budget object of expenditure.

Finance Division

**buffer zone**
1. A buffer zone is undeveloped, open spaces which border a highway.
2. A buffer zone is an area which provides a degree of insulation from effects.

**bulb**

A bulb is a reservoir of fluid on one end of the stem of a liquid-in-glass thermometer. The bulb is inserted into the material whose temperature is being determined.

*Manual of Testing Procedures*

**bulk specific gravity**
1. Bulk specific gravity of aggregates is the ratio of the oven-dry weight of the aggregate to the bulk volume of the aggregate particles.
2. Bulk specific gravity of bituminous mixtures is the ratio of the weight of the compacted bituminous mixture specimen to the bulk volume of the specimen

*Manual of Testing Procedures*

**bulk volume (of an aggregate)**

Bulk volume of an aggregate includes both the volume of the impermeable portion of the aggregate particles and the volume of the permeable voids in the particles. The bulk volume of the aggregate is equal to the volume of water displaced by the aggregate in a saturated, surface-dry condition.

*Manual of Testing Procedures*

**Bulletin Board System**

BBS

A bulletin board system is a computer information system that is usually accessed by dialing the BBS with a modem.

*Information Security Manual*

**buoyancy**

Buoyancy refers to the power of supporting a floating body, including the tendency to float an empty pipe (by exterior hydraulic pressure).

**business**

A business is any lawful activity, except a farm operation, that is conducted:

- primarily for the purchase, sale, lease, and/or rental of personal and /or real property, and/or the manufacturing, processing and/or marketing of products, commodities, and any other personal property; or
primarily for the sale of services to the public; or
primarily for outdoor advertising purposes, when the display must be moved as part of the highway project; or
by a nonprofit organization that has established it nonprofit status under applicable Federal and State laws.

Right of Way Manual

business activity
A business activity is a distinct, non-decomposable task within a process.
Enterprise Data Management

business analyst
A business analyst is a person responsible for the analysis and documentation of business processes.
Enterprise Data Management

business area
A business area is a set of logically-related business processes, usually directed towards a common result or set of results.
Information Systems Business Process Retooling

business area computing
Business area computing is any information service that meets the statewide needs of one business area and can be provided by the business area and/or the Technology Services Division.
Technology Services Business Process Retooling

business continuity planning
Business continuity planning is the process of identifying critical data systems and business functions, analyzing the risks and probabilities of service disruptions, and developing procedures to restore those systems and functions.
Information Security Manual

business entity
A business entity is a person, place, thing, event, or other object of interest to the enterprise.
Enterprise Data Management

business entity relationship diagram
BERD
A business entity relationship diagram is a graphic representation (conceptual view) of business entities and the relationships among them.
Enterprise Data Management
business entity relationship model
BERM
A business entity relationship model includes the business entity relationship diagram and any accompanying textual documentation.

business farm to market road
BF
A business farm to market road is a roadway so designated by the Texas Transportation Commission.

business IH highway
BI
A business IH highway is a roadway so designated by the Texas Transportation Commission.

Business Information and Systems Plan
BISP
The business information and systems plan defines guidelines to assure that the investments made by the department in both retooling its business processes and establishing its information systems environment are consistent with the department’s business mission, vision, goals and objectives; justified by the business benefits provided; providing the technology infrastructure necessary to proactively meet future business challenges and opportunities.
Business Information and Systems Plan

business job description
BJD
A business job description is a description that defines the duties and responsibilities of a job. A business job description specifies the appropriate state classification title for each job and includes differences between it and the jobs immediately above and below it on the classification ladder. A business job description also includes the appropriate FLSA exemption status and the minimum qualification requirements an applicant must meet to be considered for that job.
Human Resources Manual

business model
A business model is a representation of information about a business; its data, activities and the interaction between them.
Enterprise Data Management

Business Opportunity Programs Office (former)
BOP
The Business Opportunity Programs Office is responsible for administering the department’s Dis-
advantaged Business Enterprise (DBE) and Historically Underutilized Business (HUB) programs.
In March of 1998, the office became a section of the Construction Division.

NOTE: The Business Opportunity Program has been discontinued. It was replaced by DBE/HUB/SBE Programs.

Inside TxDOT

business process

A business process is a set of activities that are performed continuously and produce one or more major outputs.

Business Information and Systems Plan
Right-of-Way Acquisition

business resumption plan

BRP

A business resumption plan is a plan that has been developed and tested under simulated conditions before it is actually needed and that will be put into operation after a natural or man-made disaster in order to allow a business entity to resume its operations that were temporarily interrupted by the disaster.

Information Services Business Improvement Project Technology 1

business rule

A business rule is a rule, standard, policy or procedure, formal or informal, within which the busi-
ness must operate. Business rules are the context within which knowledge about the data becomes relevant. Business rules may be depicted graphically as relationships on entity relationship dia-
grams, or written in textual descriptions.

Enterprise Data Management

business term

A business term is a word or phrase used at TxDOT to identify a process, event or thing of impor-
tance to the enterprise. It should have a uniform and unambiguous meaning throughout the enterprise. If more than one meaning exists, the different meanings and the context in which they differ.

Enterprise Data Management

Business Title Classification System

The Business Title Classification System is an internal system for naming jobs used by the depart-
ment. Business titles are designed to reflect the specific job duties and responsibilities of each position. Pay rates are determined by matching business job titles to state titles. Managers and supervisors use these descriptions to match types and levels of work in different positions and to ensure that those doing similar work are in the same salary group.
Human Resources Manual

business state highway

BS

A business state highway is a roadway so designated by the Texas Transportation Commission. 

business US highway

BU

A business US highway is a roadway so designated by the Texas Transportation Commission. 

butter batch mix

Butter batch mix is a small quantity of asphalt and aggregate fines used to pre-coat a mixer bowl and whip to offset a similar quantity of the same expected to be left behind as a natural consequence of mixing a new batch using the same equipment. 
Manual of Testing Procedures
cache
A cache is a technological architecture component that exists between a computer system’s main memory and its disk storage system used to speed up references to data.

caisson
A caisson is a watertight box or cylinder used in excavating for foundations or tunnel pits to hold out water so construction can be carried on.

calendar day
A calendar day is a day scheduled for work as defined by a special provision to the Item 1 standard specification. A day is charged to the contractor regardless of weather conditions, material supplies, etc.

calibration
1. Calibration is the process of determining errors or differences from the true value and then either: (a) adjusting the equipment to reduce the errors to an acceptable level, or (b) calculating correction factors to use with the instrument.
   Manual of Testing Procedures
2. Calibration is the process of estimating travel demand model variables such as trip rates, K-factors, mean trip lengths, and trip length frequency distributions based on surveyed or observed data.
   Traffic Data and Analysis Manual
   Transportation Planning and Programming Collection

camber
The camber is the rise or crown of the center of a bridge, or flowline through a culvert, above a straight line through its end.
Bridge Design Manual

Caminos y Puentes Federales de Ingresos y Servicios Conexos
CAPUFE
Caminos y Puentes Federales de Ingresos y Servicios Conexos is the Mexican national toll authority.

cancellation charge
Cancellation charge means a fee, charge, or payment that a private entity assesses or retains because of the cancellation or change of a travel reservation or other travel plan. For example, a non-refundable purchase of an airline ticket becomes a cancellation charge when the ticket becomes unusable because of changed travel plans.
cancellation of a value

Cancellation of a value is a district’s cancellation of the approved value when a parcel or parcel number is changed and the parcel’s value has previously been approved.

Right of Way Collection

candela or candlepower

cd

The candela or candlepower is the unit of luminous intensity (I) emitted by a light source in a given direction.

Highway Illumination Manual

cantilever

A cantilever is the part of a structure that extends beyond its support.

Bridge Design Manual

capable of being locked out

An energy-isolating device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built in.

Occupational Safety Manual

capacitance

C

Capacitance is the ability to store energy in an electrostatic field. Capacitance is measured in farads or microfarads.

Highway Illumination Manual

capacity

Capacity is the number of vehicles that can traverse a point or section of a lane or roadway during a set time period under prevailing roadway, traffic, and control conditions.

Traffic Data and Analysis Manual

capital asset

A capital asset is an item other than a consumable that benefits the current and one or more future fiscal years. Stated differently, a capital asset is an item that does not perish with use, but which may be used after the fiscal year in which it is purchased. Examples include machines, fixtures, books, bookbindings, and microfilms of newspapers are capital assets.

Voucher Manual

capital cost of contracting
Capital cost of contracting is the capital portion of contracted service costs includes depreciation, interest on facilities and equipment, as well as those allowable capital costs that would otherwise be incurred directly, including maintenance.

**Public Transportation Collection**

**career-ladder (noncompetitive) promotion**

A career-ladder promotion is a noncompetitive progression to a higher salary group, generally in the same business job family but with higher levels of responsibilities and requirements. A career-ladder promotion is possible across business job families if the duties and requirements for the families are sufficiently similar or related. In all cases, employees will meet the minimum requirements listed in the business job description for the position.

_Human Resources Manual_

**carpool**

A carpool is an arrangement in which two or more people share the use, cost, or both of traveling in privately-owned automobiles between fixed points on a regular basis.

**carryover**

Carryover is the estimated amount of funds programmed in the UPWP that the MPO does not expect to expend in the fiscal year and wishes to use in the next fiscal year.

_Transportation Planning and Programming Collection_

**carve out**

A carve out is the deduction of values of specific improvements, such as a swimming pool, located at the displacement site but not located at the selected comparable replacement site.

_Right of Way Manual_

**cash basis**

Cash basis refers to an accounting system in which revenues are recorded when received in cash and costs are recognized when paid.

**cast-in-place**

Cast-in-place refers to the method of constructing concrete structures using forms, falsework, and bracing at its final locations.

**causal factor**

Causal factor is an act, omission, condition, or circumstance that either starts or sustains an incident sequence; it may be related to persons or machines. A given act, omission, condition, or circumstance is a causal factor if correcting, eliminating, or avoiding it would prevent the incident or mitigate damage or injury.

_Public Transportation Collection_
catalog purchase
Catalog purchase is a method of purchase established by Texas law to procure specific information and telecommunications systems hardware, software, selected supplies and selected services. Purchases are made only from vendors qualified as qualified information systems vendors by the General Services Commission.

Purchasing Manual

categorical exclusion
Cat Ex or CE
A categorical exclusion refers to a project which involves no significant environmental impacts. They are actions that do not induce significant impacts to planned growth or land use for the area; do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other natural resource; do not involve significant air, noise or water quality impacts; do not have significant impacts on travel patterns; or do not otherwise, either individually or cumulatively have any significant environmental impact.

cathode ray tube
CRT
A cathode ray tube is a vacuum tube on which images are produced by a stream of electrons. CRT often refers to a display device (commonly, a computer monitor) that uses the tube.

cathodic protection
Cathodic protection is a way to prevent corrosion of a pipeline by using special cathodes (and anodes) to circumvent corrosive damage by electric current. It is also a function of zone coating on iron and steel drainage products-galvanic action.

CA-Top Secret
TSS
CA-Top Secret is the access control software the department uses to protect information resources on its mainframe computer.

Information Security Manual

cattle guard
A cattle guard is a structure placed to permit passage of vehicles but not animals over a highway.

causeway
A causeway is a bridge or roadway constructed over marshy land or water. It may be either an earth fill or bridge type structure.

Bridge Design Manual

cement factor
The cement factor refers to the number of sacks of cement used to produce one cubic yard of concrete.

**cement stabilized base**

A cement stabilized base is a mixture of base course, Portland cement and water then compacted to a high density.

**centerline**

C/L, C.L., CL or C-Line

The centerline is a line dividing the roadway from opposite moving traffic. It is a survey line with continuous stationing for the length of the project. Construction plans and right of way maps refer to this line. Horizontal alignment is the center of the roadbed.

**centerline mile**

A centerline mile is a measure of the total length (in miles) of highway facility in-place or proposed, as measured along the highway centerline. *Pavement Management Information System Users Manual*

**centralized master bidders list**

CMBL

1. The centralized master bidders list is a list of vendors registered with the General Services Commission for use by all state agencies for all procurements in which competitive bids are required. *Purchasing Manual*

2. The centralized master bidders list is a Texas bid subscription service listing registered bidders who have paid a maintenance fee to review bid opportunities. *Right of Way Manual*

**central processing unit**

CPU

The central processing unit is the main controlling and operating part of a computer. The CPU contains the arithmetic-logic unit and any other hardware control essential to the central controlling of the computer.

**centroid**

Centroid is the center of activity within each traffic serial zone. May or may not be the geographic center of the zone. *Traffic Data and Analysis Manual*

**centroid connectors**
Centroid connectors are an imaginary roadway network links that connects the zone centroid to the roadway network at nodes.
*TxDOT Glossary*

**certificate authority**

CA

The certificate authority is the “notary public” of digital certificates. It is an objective, in-house or third-party authority that assigns secure encryption keys. The CA provides a point of trust recognized by both parties and validation of a user’s identity.
*Information Security Manual*

**Certificate of Insurance**

Certificate of Insurance is a department-approved form covering standard insurance requirements.
*Maintenance Contract Manual*

**certification**

1. A certification is a document furnished by the manufacturer containing the following information: Name and address of the manufacturer and the location where the manufacturing process occurred (if different from the address), manufacturing step(s) performed by the manufacturer, heat number(s), lot number(s) or any other identification used to identify the material, a notarized statement from the manufacturer attesting to the domestic origin of the material and signed by a person who can legally represent the manufacturer.
*Material Inspection Guide*

2. Certification is a document stating that the device under test meets a specified standard. Calibration certifications shall identify the device tested, the procedure used, the test date, and the name of the person(s) performing the calibration. The certificates may also include the range of values tested, the errors found, and identify the calibration standards used and their relationship to accepted standards.
*Manual of Testing Procedures*

**certified local government**

A certified local government is a local government whose local historic preservation program has been certified pursuant to Section 470a(c) of the National Historic Preservation Act of 1966.
*Environmental Manual*

**certified post-move inventory**

A certified post-move inventory is a department-certified inventory made of personal property after the move to the replacement dwelling in order to certify the validity of the reimbursement of moving expenses. (This term is not widely used anymore.)
*Right of Way Manual*

**certified pre-move inventory**
A certified pre-move inventory is a Department-certified inventory made of personal property before the move to the replacement dwelling in order to establish reimbursement of moving expenses. (This term is not widely used anymore.)

*Right of Way Manual*

certified purchaser

A certified purchaser is a person who has completed the necessary education, experience and examination requirements and has been certified by a recognized national organization that establishes professional purchasing designation programs. Recognized certifications are: certified professional public buyer (CPPB), accredited purchasing practitioner (A.P.P.), certified public procurement officer (CPPO), or certified purchasing manager (C.P.M). Required for specific purchasing positions.

*Purchasing Manual*

chain purchasing

Chain purchasing is the practice of breaking requests or purchases into smaller requests or purchases in order to circumvent any established purchasing threshold. Chain purchasing is prohibited.

*Purchasing Manual*

challenge handshake authentication protocol

Challenge handshake authentication protocol (CHAP) is an access control protocol. For this protocol, the server sends a challenge message to the connection requestor. The requestor responds with a value obtained by using a one-way hash function. The server checks the response by comparing it to its own calculation of the expected hash value. If the values match; the authentication is acknowledged. Otherwise, the connection will usually be terminated. The server can send a new challenge message to the connected party at anytime.

A CHAP can also be a type of authentication in which the authentication agent (typically a network server) sends the client a random value and an ID. At the beginning of the transaction, the client and server agree on a predefined secret. The client concatenates the random value, the ID, and the secret, and calculates a one-way hash value using the MD5 algorithm. The hash value is sent to the authenticator, which in turn builds the same string on its side (random value, ID, and secret). It then calculates the MD5 hash value itself, and compares the result with the value received from the client. If the value from the client and the value from the server match, the client is authenticated to the server.

Source: *Information Security Manual*

changeable message sign

CMS

See Dynamic Message Sign (DMS). CMS is also an acronym used in the planning context to denote Congestion Management System.

*Traffic Operations*
change control

Change control is the procedure to ensure that all changes are controlled, including the submission, analysis, decision making, approval, implementation and post-implementation of the change.

Information Security Manual

change order

Change order is a written agreement entered into between the contractor and the State, covering alterations and changes in contract and/or plans which are necessary to the proper completion of the work.

channel

1. A channel is the bed where a stream of water runs.
2. A channel is a natural or artificial stream that conveys water. Channels are often classified by their size and purpose.

channel stabilization

Channel stabilization refers to erosion prevention and stabilization of velocity distribution in a channel using nonstructural and structural measures.

channelization

Channelization is the separation or regulation of conflicting traffic movements into definite paths of travel by use of pavement markings, raised islands, or other suitable means for the safe and orderly movement of vehicles and pedestrians.

channelized intersection

A channelized intersection is an at-grade intersection in which traffic is directed into definite paths by islands.

charter service

Charter service is a transit vehicle hired for exclusive use by a group of people traveling under a specific itinerary. The vehicle does not operate over a regular route or on a regular schedule, and is not available to the general public.

Public Transportation Collection

check dam

A check dam is a small dam constructed in a gully or other small water-course to decrease the streamflow velocity, minimize channel scour, and promote deposition of sediment.

check sample

A check sample is an additional AQMP, Aggregate Quality Monitoring Program, sample to be tested to replace the original AQMP test results.
**Manual of Testing Procedures**

**chief administrator**

Chief administrator is the person who has the day-to-day-responsibility for managing the agency's operations.

*Travel Manual*

**child passenger violators course**

CPVC

The child passenger violators course is a training course taught by local police officers that a passenger safety seat violator may be taken in lieu of paying a fine.

*Childress District**

CHS

The Childress District is a TxDOT district office including the following counties: Briscoe, Childress, Collingsworth, Cottle, Dickens, Donley, Foard, Hall, Hardeman, King, Knox, Motley, and Wheeler. The district has a North Area Office and a South Area Office.

*Inside TxDOT*

**chord**

A chord is a straight line joining two points on a circular curve.

**circuitry of travel**

Circuitry of travel is a phrase used to describe the fact that a less convenient, more indirect access to and from a property will exist after the right of way acquisition. From a legal standpoint, any alleged damages to the remainder resulting from such are considered noncompensable.

*Right of Way Collection*

**citation by publication**

Citation by publication is when eminent domain proceedings are initiated, and owners of record cannot be located or identified, notice of such proceedings must be published once a week for four consecutive weeks in a widely circulated publication (i.e., newspaper) serving the area in which the property is located and/or where the owner was last known to live.

*ROW Utility Manual*

**Civil Rights, Office of**

OCR

The Office of Civil Rights (formerly the Civil Rights Division; CIV) ensures equal opportunities in employment, promotions, and training. It investigates internal and external complaints.

**city street**
CS

A city street is a road under the jurisdiction a city government or other local entity or incorporated area government, for which that government is responsible for the construction and maintenance of the roadway and associated structures.

_Historic Bridge Manual_

**claimant**

Claimant is the person requesting reimbursement for travel expenditures.

_Travel Manual_

**class and item code**

The class and item code is a breakdown of items from the General Services Commission commodity book.

_Materials And Supplies Management System Manual_

**classification**

Classification is the assignment of business job descriptions to appropriate salary groups within the State Classification Plan.

_Human Resources Manual_

**clay**

Clay is a fine grained soil that can be made to exhibit plasticity (putty-like properties) within a range of water contents and that exhibits considerable strength when air dry. NOTE: This definition has been approved by the Specification Committee.

_Manual of Testing Procedures_

**clay size**

Clay size refers to any material finer than 0.0002 mm (2µm) though not necessarily exhibiting clay characteristics. NOTE: This definition has been approved by the Specification Committee.

_Manual of Testing Procedures_

**Clean Air Act of 1970**

_CAA_

The Clean Air Act of 1970 is a national policy that authorizes programs to safeguard the air resources from pollution by controlling or abating air pollution and emissions of air contaminants consistent with the protection of health, general welfare, and physical property of the people including the aesthetic enjoyment of the air resources by the people and the maintenance of adequate visibility.

**Clean Air Act Amendments of 1990**

_CAAA_
The Clean Air Act Amendments of 1990 is a set of revisions/amendments passed by congress to the Clean Air Act of 1970 (CAA). Includes procedures that apply to all transportation plans, programs, and projects as they relate to air quality. Reference 42 USC §7410 et. seq.

*Transportation Planning and Programming Collection*

**Clean Water Act (federal water pollution control act)**

The Clean Water Act is a national policy that authorizes programs to safeguard surface water sources, including special aquatic sites, by regulating actions which could lead to the destruction or degradation of the quality of these resources. This includes safeguards from pollution by controlling or abating water pollution and sources of water contaminants and from actions that may result in the discharge of storm water, dredged and fill material into these waters consistent with the protection of health, general welfare and physical property of the people including the enjoyment of the water resources by the people and the maintenance of adequate water quality and the protection of fish, wildlife, and critical habitat.

**clearing account**

A clearing account is a Financial Information Management System Segment 70 collection point for expenditures that are later distributed to jobs or other FIMS segments.

*Finance Division*

**clear zone**

The clear zone (also called the clear recovery area) is an area provided along highways to allow vehicles veering off the travel lane opportunity for safe recovery or stopping. The clear zone width (always measured from the edge of the travel lane) depends on several roadway factors.

*Highway Illumination Manual*

**clearing or grubbing**

Clearing or grubbing refers to the removal of vegetation, structures or other objects as an item of highway or transportation facility construction.

**client**

A client is a computing platform component in a client/server architecture that is functioning as the requester of processing services.

**client/server**

Client/server is a networking architecture through which a personal computer or workstation (client) requests information from a Local Area Network file server, mini-computer or mainframe (server). The client supplies the user interface and conducts application processing. The server maintains databases and processes client requests.

**close out**
Close out are the actions required to close out or complete the contract, including receipt and acceptance of deliverables and reports, resolution of audit findings, receipt of outside approvals if applicable, resolution of other contract-related issues, and issuance of final payment. 
*Engineering Architectural and Surveying Services Manual*

**coarse aggregate**

Coarse aggregate is the portion of aggregate retained on the 2.00mm (No. 10 sieve for Bituminous Concrete or retained on the 4.75 mm (No. 4) sieve for Portland Cement Concrete. NOTE: This definition has been approved by the Specification Committee. 
*Manual of Testing Procedures*

**code chart**

A code chart is a list of standard codes used in an automated system to describe department activities. 

*Code of Federal Regulations*

**CFR**

The U. S. Code of Federal Regulations refers to a codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government. The Code of Federal Regulations (CFR) is divided into chapters, which usually bear the name of the issuing agency (e.g., 23 – Highways, 49 – Transportation). Each chapter is further subdivided into parts covering specific regulatory areas. 
*Transportation Planning and Programming Collection*

**coding block**

A coding block is the input to the computerized accounting system and is accomplished by codes which describe district/division operations. A printed coding block on the computer input forms serves to arrange the coding in a computer-processable form. 

**coefficient of curvature**

Coefficient of curvature is the ratio \(\frac{(D30)^2}{D10 \cdot D60}\), where \(D60\), \(D30\), and \(D10\) are the particle diameters corresponding to 60, 30 and 10% finer on the cumulative particle-size distribution curve, respectively. 
*Manual of Testing Procedures*

**coefficient of friction**

The coefficient of friction is the ratio of the force of resistance to the wheel load. The coefficient of friction may be determined from the formula.

**coefficient of uniformity**
Coefficient of uniformity is the ratio (D60/D10), where D60 and D10 are the particle diameters corresponding to 60 and 10% finer on the cumulative particle-size distribution curve, respectively. *Manual of Testing Procedures*

cofferdam

A cofferdam is a barrier built in the water to form an enclosure from which the water is pumped to permit free access to the area within. *Bridge Design Manual*

cohesiometer

A cohesiometer is a piece of laboratory equipment used to measure the ability of compacted asphalt concrete to resist tensile stress.

cohesiometer value

The cohesiometer value denotes the tensile strength of a material which is expressed in grams per inch width for a three-inch high specimen when measured with a cohesiometer.

cohesion

Cohesion is the ability of soil particles to stick together in the presence of moisture.

cohesionless sand

Cohesionless sand is sandy soil whose layer, when wetted to slightly below optimum water content, mixed thoroughly and molded in a 51mm (2 in.) lifts, is sheared or torn by the ram in excess of 215.4 mm (1 in.) on the last (50th) blow. *Manual of Testing Procedures*

collapsed backbone router

Collapsed backbone router is a technology in which a router is used to directly switch Local Area Network traffic from message originator to message addressee, thus making the electronic communications process more efficient.

collection site

A collection site is a place selected by the employer where employees present themselves for providing a urine specimen for a drug test and/or providing breath or saliva for an alcohol test. *Public Transportation Collection*

**College Traffic Safety Program**

CTSP

The College Traffic Safety Program is the college and university campus-based program focusing on two or more traffic safety issues.
collusion

Collusion is an agreement between two or more persons to defraud a person of his rights by the forms of law, or to obtain an object forbidden by law. It implies the existence of fraud of some kind, the employment of fraudulent means, or of lawful means for the accomplishment of an unlawful purpose. A secret combination, conspiracy, or concert of action between two or more persons for fraudulent or deceitful purpose.

Letting Manual

column

A column is a vertical supporting pillar, usually a round shaft.

combined sewer

A combined sewer is one that carries both storm water and sanitary or industrial wastes.

comfort station

A comfort station is one of 19 specifically designated rest areas along hurricane evacuation routes that will be converted during an emergency to offer water and ice (staffed by volunteers) to evacuees. Some may offer additional portable rest room facilities and additional services (snacks, etc.) depending upon volunteer efforts. No fuel services are offered at comfort stations.

Maintenance Division

commencement of construction

Commencement of construction refers to the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

commercial driver’s license

CDL

A commercial drivers’ license is a license issued to an individual that authorizes the individual to drive a class of commercial motor vehicle.

Public Transportation Collection

commercial lodging establishment

Commercial lodging establishment means a hotel, motel, inn, apartment, house, or similar entity that furnishes lodging to the public for pay. This term includes a governmental property controlled by that entity, or a religious organization, or a private educational institute.

Travel Manual

commercial motor vehicle

CMV

A commercial motor vehicle is a motor vehicle or combination of motor vehicles used to transport passengers or property that meets at least one of the following criteria: a gross combination weight
rating of 26,001 or more pounds, including a towed unit with a gross vehicle weight rating of more than 10,000 pounds; a gross vehicle weight rating of 26,001 or more pounds, designed to transport 16 or more occupants, including the driver; and transporting hazardous materials and required to be placarded under 49 CFR Part 172.

Public Transportation Collection

commission

Commission means the Texas Transportation Commission.

Contract Management Manual

commission policy, TxDOT

TxDOT commission policy is initiated by minute order and usually provides internal guidance at the most general level and directly or indirectly helps define the mission of the agency and its relationship with the public. Rule policy is needed when commission policy affects the public.

commission selected projects

Commission selected projects are special projects selected by the commission which are funded by a ten percent set-aside from state funds allocated to transit districts.

Public Transportation Collection

commissioners’ award

A commissioners’ award is the amount of money awarded by the Special Commissioners to the condemnee.

Right of Way Manual

Common Business Oriented Language

COBOL

Common Business Oriented Language is an early high-level programming language designed for business applications.

common ditch agreement

A common ditch agreement is a form of joint use agreement used for the common usage of longitudinal right of way. It usually involves permission to use the drainage or ditch area between two rights of way.

Right of Way Manual

common rule

Common rule is Title 49 of the Code of Federal Regulations, Part 18, "Uniform Administrative Requirements for Grants and Cooperative Agreements with State and Local Governments" (cited as 49 CFR Part 18) as it may be changed or superseded.

Contract Management Manual
Communications management information protocol
CMIP

Communications management information protocol is a network management protocol developed by the International Standards Organization.

Communications ring

A communications ring is a local area network or wide area network based, electronic communications segment that has been organized along some combination of functional, geographical and/or topological boundary.

A particular communications ring may be designed to provide LAN services only for users located within a particular building.

Community Supervision and Corrections Department
CSCD

Community Supervision and Corrections Department is the new designation for local probation departments in Texas.

Community/Corridor Traffic Safety Program
C/CTSP

Community/Corridor Traffic Safety Program is a joint initiatives between the Federal Highway Administration and the National Highway Traffic Safety Administration. All community based multi-issue projects will now be referred to as Community/Corridor Traffic Safety Programs. This means that any identifiable roadways in the area that have worse-than-average traffic safety problems, such as large concentrations of Drinking While Intoxicated, speeding offenses, or other traffic problems will also be included in the safety initiatives developed by the Corridor Traffic Safety Program.

A jurisdiction may decide to do some additional enforcement for a particular stretch of roadway, conduct a public information and education campaign, or provide additional striping or signage.

Commuter rail (transit)
CR or CRT

Commuter rail is urban passenger train service for short distance (local) travel between a central city and adjacent suburbs and long haul (regional) passenger service between cities. It does not include heavy rail service or light rail service. Commuter rail often shares track with freight tracks. Transportation Planning and Programming Collection

Compaction

Compaction is the application of pressure to dirt to result in a dense mass free of excessive voids. Compaction minimizes settlement, decreases permeability, and increases strength.
compaction factor

The compaction factor is the ratio between the volume of naturally existing material to the volume of compacted embankment.

compactive effort

Compactive effort is the total energy, expressed as kilo-Newton-meters per cubic meter (foot-pounds per cubic inch) used to compact the specimen.

Manual of Testing Procedures

comparable replacement dwelling

A comparable replacement dwelling is a dwelling which is:

◆ decent, safe and sanitary
◆ functionally equivalent to the displacement dwelling. This means it performs the same function, and provides the same utility. While a comparable replacement dwelling need not possess every feature of the displacement dwelling, the principal features must be present. Generally functional equivalency is an objective standard, reflecting the range of purposes for which various physical features of a dwelling may be used. If every feature is not present in the comparable replacement dwelling, TxDOT may consider reasonable trade-offs for specific features when the replacement unit is equal to or better than the displacement dwelling.

◆ adequate in size to accommodate the occupants;
◆ in an area not subject to unreasonable environmental conditions;
◆ in a location generally not less desirable than the location of the displacement dwelling with respect to public utilities, commercial and public facilities, and reasonably accessible to the person’s place of employment;
◆ on a site that is typical in size for residential use, with normal site improvements, including customary landscaping. The site need not include special improvements such as swimming pools, greenhouses or other major exterior attributes not necessary for the functional equivalency of the replacement dwelling;
◆ currently available to the displaced person on the private market, except as provided under rules for subsidized housing;
◆ within the financial means of the displaced person (refer to Chapters 16 and 17 of Volume 3 of TxDOT’s ROW Manual);
◆ for a person receiving government housing assistance before displacement, a dwelling that may reflect similar governmental housing assistance. In such cases any requirements of the governmental housing assistance program relating to the size of the replacement dwelling shall apply.

Right of Way Manual
compensable interest

Compensable interest is a right or interest in real property and/or facilities placed upon real property that qualify under State law for reimbursement for some or all of the cost of the relocation of the facilities as necessitated by the Texas Department of Transportation.

ROW Utility Manual

compensatory time

Regular compensatory time is time awarded in lieu of cash payment to eligible employees in compensation for regular or FLSA overtime worked. Declared disaster or emergency compensatory time is time earned for extra hours worked during a time of a disaster or emergency as declared by the appropriate state or federal official.

Human Resources Manual

competitive promotion

A competitive promotion is a promotion in which a vacancy is announced, an employee applies and competes with other applicants who may or may not be current employees of the department, and is selected with the result that his or her new duty assignment is in a higher salary group.

Human Resources Manual

competitive situation

A competitive situation is a situation in which there may be more than one qualified potential applicant for a job.

Human Resources Manual

complete immersion thermometers

A complete immersion thermometer is a liquid-in-glass thermometer designed to read correctly when the entire body is exposed to the same temperature. Thermometers inside ovens are being used as complete immersion thermometers.

Manual of Testing Procedures

complete interchange lighting

Complete interchange lighting means the lighting, within the limits of the interchange, of the main lanes, direct connections, ramp terminals, and frontage road-crossroad intersections. (See partial interchange lighting.)

Highway Illumination Manual

completion

Completion is satisfactory performance of a contract.

Contract Management Manual

composite pavement
Composite pavement is a pavement structure which has flexible and rigid layers. These pavements usually have one or more asphalt concrete layers on top of a portland cement concrete slab, although some have a portland cement concrete slab on top of asphalt concrete.

Pavement Management Information System (PMIS) Users Manual

**compound curve**

A compound curve is a two-arc simple curve having its centers on the same side of the common tangent at the junction.

**compressibility**

Compressibility is the property of soil which permits it to reduce in volume under pressure.

**comptroller journal voucher**

A comptroller journal voucher is a voucher provided by the state comptroller for recording adjusting transactions in the Uniform Statewide Accounting System (USAS).

Finance Division

**comptroller object of revenue**

The comptroller object of revenue is a code designatated by the comptroller to identify a type of revenue. The codes are contained in Reference FIMS Code Chart 54.

Finance Division

**comptroller’s vendor identification number**

The comptroller’s vendor identification number is a 14-digit vendor number assigned by the Texas comptroller of public accounts. The first digit represents the general classification of vendor (business, individual non-profit, etc.) The next nine digits are the vendor’s tax number or the individual’s social security number. The eleventh digit is a check digit and the last three digits constitute an address code.

**computer-assisted instruction**

CAI

Computer-assisted instruction is training assistance provided from a computer that augments other forms of training. Individual instruction can include presentations by computer-prompted questions requiring student responses and participation. Exercises and computer-prompted student involvement are referred to as CAI when total control remains outside of a computer program. Students being able to progress through the materials at their own rate and time schedule is a big advantage of CAI.

**computer-based training**

CBT
Computer-based training is instruction and training oriented completely around a computer-based programmed sequence of instruction and required responses from the student/trainee. CBT consists of computer-prompted exercises that a student/trainee performs and questions that require a response to the computer. CBT refers to instruction that is under total, or almost total, control of computer-prompted sequences presented to the student. Any time the instruction program is active can be a training time for anyone enrolled.

**computer fraud**

Computer fraud is computer-related crimes involving deliberate misrepresentation, alteration or disclosure of data in order to obtain something of value (usually for monetary gain). A computer system must have been involved in the perpetration or cover-up of the act or series of acts. A computer system might have been involved through improper manipulation of input data, output or results, applications programs, data files, computer operations, communications, or computer hardware, systems software, or firmware.

*Source: Information Security Manual*

**computer intrusion response team**

CIRT

A computer intrusion response team is a service organization that is responsible for receiving, reviewing, and responding to computer security incident reports and activity. A CIRT can be a formalized team or an ad hoc team. A formalized team performs incident response work as its major job function. An ad hoc team is called together during an ongoing computer security incident or to respond to an incident when the need arises.

*Information Security Manual*

**computer network attack**

Computer network attack (CNA) is an operation to disrupt, deny, degrade, or destroy information resident in computers and computer networks, or the computers and networks themselves.

*Source: Information Security Manual*

**computer program**

A computer program is a set of instructions which automatically controls the operation of a computer in the solution of a problem.

**computing platform**

Computing platform is used generically to represent a functional combination of computer system hardware, software and all supporting peripherals and services that, when employed together, deliver computing services to a user or group of users.

**concentrated flow**
Concentrated flow means water, usually storm runoff, flowing in a confined feature such as a channel, ditch, swale, river, etc.

**conceptual design**

Conceptual design is a stage in the computer system design, specification and development process. In this context, this term refers to the development stage during which the high level requirements, design implications and recommendations are determined and documented. The end result of this activity is known as the architecturally based “conceptual design.”

**concrete**

Concrete is a composite material consisting of a binding medium within which are embedded particles or fragments of aggregate; in hydraulic cement concrete, the binder is formed from a mixture of hydraulic cement and water. NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**concrete admixture**

Concrete admixture is any material other than Portland cement, water, and aggregates, which is added to concrete before or during mixing.

**concrete median/traffic barrier**

CTB

Concrete traffic barrier.

*Highway Illumination Manual*

**concrete patches**

Concrete patches are a continuously reinforced concrete pavement (CRP) or jointed concrete pavement (JCP) distress type in which a localized area of newer concrete has been placed to the full depth of the existing slab as a method of correcting surface or structural defects. Concrete patches range from 0 to 999 for both CRCP and JCP.

*Pavement Management Information System (PMIS) Rater's Manual*

**concrete pavement contraction design**

CPCD

Concrete pavement contraction design is Portland cement concrete pavement with reinforcement only at the joints, sometimes referred to as a hinged joint design.

**concrete pavement jointed reinforced**

CPJR

Concrete pavement jointed reinforced is Portland cement concrete pavement with joints at appropriate spacing and with significant steel reinforcement to deter excess transverse cracking.
**concurrent routes**

Concurrent routes are two or more highways designated over the same physical roadway.

*Texas Reference Marker (TRM) System User's Manual*

**concurrent users**

Concurrent users are the group of users within a business processing environment that are requesting processing services from the environment all at the same point in time. The size of this group can be equal but is generally less than that of “total users” group.

**condemnation (right of way)**

Condemnation is the process by which property interests are acquired for public purposes through legal proceedings under power of eminent domain (with such legal proceedings providing the process and procedure for both the determination and the payment of just compensation to the property owner). See also *eminent domain*.

**condemnee**

A condemnee is the party in a condemnation action from whom real property is being sought.

*Right of Way Manual*

**condemnor**

A condemnor is any governmental agency bringing condemnation proceedings against a property owner.

*Right of Way Manual*

**condition score**

Condition score is a Pavement Management Information System (PMIS) term which describes the overall condition of a pavement in terms of ride quality and pavement distress. Condition score ranges from 1 (worst condition) to 100 (best condition).

*Pavement Management Information System Users Manual*

**Conditional Grant Program**

The Conditional Grant Program is a department program that provides financial assistance for economically disadvantaged students to attend college and pursue a degree in designated career fields based on critical business operation needs in hard-to-fill job categories.

*Human Resources Manual*

**conductor**

A conductor is electrical wire, bare or insulated.

*Highway Illumination Manual*

**conduit**
A conduit is a pipe or other opening buried or above ground, for conveying hydraulic traffic, pipelines, cables, or other utilities.

**confidential information**

Confidential information is information that is excepted from disclosure requirements under the provisions of the Texas Public Information Act (formerly the Texas Open Records Act) or other applicable state or federal law.

*Information Security Manual*

**confined space**

A confined space is a space that: is large enough and so configured than an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit; and is not designed for continuous employee occupancy. Examples include tanks, vessels, silos, storage bins, hoppers, vaults and pits.

*Occupational Safety Manual*

**conflict of interest**

Conflict of interest is a situation in which an employee’s private interest (usually financial or economic in nature) conflicts or raises a reasonable question of conflict with the employee’s public duties and responsibilities.

*Contract Management Manual*

**conflict monitor**

Conflict monitor is a conflict monitor only.

*Manual of Testing Procedures*

**conforming sign**

A conforming sign is a sign that is lawfully in place in a zoned or unzoned commercial or industrial area and which complies with all current rules and statutes.

*Right of Way Manual*

**conformity**

Conformity or transportation conformity refers to the Clean Air Act requirements that transportation plans and transportation improvement programs in non-attainment or maintenance areas meet the intent of the Texas State Implementation Plan (SIP) and the U.S. Environmental Protection Agency (EPA) conformity regulations contained in 40 CFR Part 51. Emissions caused by transportation plans and programs in these areas must not exceed the level of motor vehicle emissions allowed in the Texas SIP and the EPA regulations.

*Transportation Planning and Programming Collection*

**congestion management system**
CMS

Congestion management system is a systematic process which provides information on transportation system performance and alternative strategies for alleviating congestion and enhancing mobility. Alternative strategies may include: Transportation Control Measures (TCMs), Transportation Systems Management, and Transportation Demand Management. CMS is also an acronym used in the traffic engineering context to denote changeable message sign.

Traffic Operations

Congestion Mitigation and Air Quality Improvement Program

CMAQ

A federal program which provides funds for a project in a non-attainment area that contributes to the attainment of natural ambient air quality standards or will have certified benefits to air quality.

congestion pricing

Congestion pricing involves charging users of transportation or transportation-related facilities (e.g., parking) a fee for the purpose of reducing congestion. Congestion pricing may take the form of variable toll pricing (peak-period surcharges and off-peak discounts) or variable parking price rates.

conglomerate

Conglomerate is the coarse grained clastic, sedimentary accumulation of particles, composed of rounded to sub-angular fragments larger than 2 mm (0.08 in.) in diameter, set in a fine-grained matrix of sand or silt and commonly cemented by calcium carbonate, iron oxide, silica or hardened clay. NOTE: This definition has been approved by the Specification Committee.

Manual of Testing Procedures

connection spacing

Connection spacing is the distance between connections, which is measured along the edge of the traveled way from the closest edge of pavement of the first access connection to the closest edge of pavement of the second access connection.

Access Management Manual

consistency

Consistency describes the degree of fluidity or plasticity of asphalt cement at a particular temperature. The consistency of asphalt cement varies with temperature. Therefore, it is necessary to use a standard temperature (140°F) when comparing the consistency of one grade of asphalt to another.

consolidated metropolitan statistical area

CMSA

Consolidated Metropolitan Statistical Area - If an area that qualifies as a Metropolitan Area (MA) has more than one million persons, primary metropolitan statistical areas (PMSA) may be defined.
within the MA. When PMSAs are designated, the larger area of which the PMSAs are component parts is designated a Consolidated Metropolitan Statistical Area (CMSA). (Bureau of the Census definition)

*Transportation Planning and Programming Collection*

**constructability**

Constructability is the ability of a project to be accurately constructed from information presented in plans and specifications.

*Engineering Architectural and Surveying Services Manual*

**construction data**

Construction data is the information to build completed sub-grade section computed for each station. Cuts and fills are computed using elevation of construction hubs.

*Construction Division*

**CST**

The Construction Division oversees the highway construction and improvement program; provides service and expertise in materials quality and technology; supports pavement management and pavement research projects; and administers the disadvantaged Business Enterprise, Historically Underutilized Business and Small Business Enterprise programs.

*Construction Division Business Opportunity Programs Section*

The Construction Division Business Opportunity Programs Section reviews, coordinates, and determines goals for each contracted project that must adhere to Disadvantage Business Enterprise (DBE) and Historically Underutilized Business (HUB) program requirements. Formerly the Construction Division Business Opportunities Office (CST-BOP).

**NOTE:** The Business Opportunity Program has been discontinued. It was replaced by DBE/HUB/SBE Programs.

*Contract Management Manual*

**construction engineering**

Construction engineering is the interpretation of plans and specifications and formulation of engineering decisions during the period that the project is under construction.

*Engineering Architectural and Surveying Services Manual*

**construction engineering percentage**

**CE %**

Percent of construction engineering for a control section job number.

*Finance Division*

**construction hubs**
Construction hubs are offset points, usually in right of way line on each side of centerline, from which the roadway is referred to by elevation and distance at different points of roadway or existing ground.

**construction inspection**

Construction inspection - Inspection of construction methods and materials by inspectors who report directly to the department’s project manager.  
*Engineering Architectural and Surveying Services Manual*

**construction joint**

A construction joint is a joint made necessary because of interruption in the placing of material during construction.

**construction letting date**

Construction letting date is the date by which bids on a highway construction project are opened.  
*ROW Utility Manual*

**construction license agreement**

A construction license agreement is a temporary agreement, usually between TxDOT and a property owner, for a specific construction-related purpose. Typical agreements cover the construction of earthwork and driveway connections on private property.

**construction management**

Construction management is construction engineering performed by the professional engineer in responsible charge of the construction project to direct the Provider concerning changes, additions, or deletions to the project.  
*Engineering Architectural and Surveying Services Manual*

**Construction Material System**

CMS  
The Construction Material System is a prototype development project for small computers (micro- or minicomputers) scheduled for the time period 1984-1987. This operation is directed to construction-related inspections and record keeping functions.

**construction plans**

Construction plans are the drawings approved by the engineer, or true reproductions thereof, which show the location, character, dimensions, and details of the work and which are a part of the contract.

**Construction and Maintenance Contract System**

CMCS
The Construction and Maintenance Contract System is a contract information system managed by the Construction Division.

Financed Division

**construction speed zone request**

When reduced regulatory speed zoning is desired during construction of a project, TxDOT Form 1204 (revised 12/97), “Request for Construction Speed Zone”, should be submitted to the Design Division along with PS&E. The Design Division will forward the form to the Traffic Operations Division for review and processing for Transportation Commission action.

**construction speed zoning**

Posted speeds during construction can either be advisory or regulatory. Advisory speeds are communicated to the travelling public through speed plates used in conjunction with construction warning signs. Regulatory construction speeds should be used only for sections of construction where speed control is of major importance and enforcement is available. Regulatory speeds must be authorized by either the Transportation Commission or local city ordinance. Speed zones over 60mph in cities must be authorized by a **minute order**.

**constructive use impact**

Constructive use impacts to a Section 4(f) property are impacts such as noise or water runoff that can be quantified as well as visual intrusions that can be qualified. These impacts may occur when a project is close to a Section 4(f) property and result when the Section 4(f) resource’s function or integrity is adversely affected.

**consultant**

Consultant is a service defined in Texas Government Code §2254.021 et seq. (§2155.001) and exempt from the competitive requirements of the Purchasing Act.

*Purchasing Manual*

**Consultant Review Committee**

CRC

The Consultant Review Committee is the department committee that oversees the provider review process.

*Engineering Architectural and Surveying Services Manual*

**consultant selection team**

CST

The consultant selection team is the department’s managing office team that develops the long list and short list, and evaluates proposals and interviews.

*Engineering Architectural and Surveying Services Manual*
consultation
 Consultation is when one party confers with another identified party and, prior to taking action(s), considers that party's views.
 Transportation Planning and Programming Collection

consulting service
 Consulting service
 is the service of studying or advising a state agency under a contract that does not involve the traditional relationship of employer and employee.
 Purchasing Manual

consumable
 Consumable items are those that can be used up or depleted within one year.
 Materials And Supplies Management System Manual

contaminated
 Contaminated means the presence or the reasonably-anticipated presence of blood or other potentially infectious materials on an item or surface.
 Occupational Safety Manual

contaminant
 A contaminant is any solute that enters the hydrologic cycle through human action.
 Environmental Affairs Division

contiguous route segment
 A contiguous route segment is a designated highway section that adjoins a route segment already existing in the TRM Highway Data File, creating a continuous route flow.

continuous lighting
 Continuous lighting is roadway lighting providing uniform illumination on all main lanes and direct connections and complete lighting for all interchanges.
 Highway Illumination Manual

continuous mix plant
 A continuous mix plant is an asphalt plant that produces asphalt paving mixtures by combining the aggregate and asphalt through a continuous volumetric proportioning system. Unlike a batch plant, the mixing is done without regard to specified batch intervals. The mixture is stored in insulated bins until the mix is needed.
continuous two-way, left-turn lane

A continuous two-way, left-turn lane is a lane in the center of the roadway where vehicles from both directions turn left into driveways and side streets from the same lane.

continuously reinforced concrete pavement

CRCP

Continuously reinforced concrete pavement is Portland cement concrete pavement with continuous longitudinal steel reinforcement and no intermediate transverse expansion or contraction joint.

contour

A contour is a line connecting the points on a land surface that have the same elevation.

contour analysis by random triangulation algorithm

CARTA

Contour analysis by random triangulation algorithm analyzes random three-dimensional data and calculates and plots contour maps.

contract

1. A contract is a procurement document between two or more parties which creates an obligation to provide goods or services or perform tasks and which includes offer, acceptance, exchange of consideration, legal sufficiency, a defined contract period, a maximum amount payable, and terms and conditions as appropriate.
   Contract Management Manual

2. A legal contract is a legally binding document that provides determination of responsibilities and liabilities.
   Information Security Manual

contract authority

Contract authority is a form of budget authority which permits obligations to be made in advance of appropriations. The federal-aid highway program utilizes contract authority.

contract cycles

Contract cycles are the indication of the number of times a service is to be performed during a contract period.
   Contract Management Manual

contract fencing

In contractual agreements between TxDOT and a local public agency, contract fencing refers to the option to refence the remainder property to substitute actual property refencing for payment of cost to cure fencing.
   Right of Way Collection
Contract Information System
CIS
The Contract Information System, managed by the Construction Division, is a computerized system of information about TxDOT contracts.
Finance Division

contract manager
The contract manager is a TxDOT employee who oversees the contract and performs required management tasks.
Contract Management Manual

contract number
A contract number is the number that identifies a unique contract in CIS that the subject control-section-job numbers relate to that is obtained from DCIS.
Finance Division

contract period
Contract period is the time span during which the contract will remain active.
Contract Management Manual

contract phases
Contract phases are segments of a project, usually completed in sequence.
Contract Management Manual

contract type
Contract type is a two-digit number that identifies the type of work performed on a contract in FIMS for Professional Engineering Services.
Finance Division

contract year
The contract year is the fiscal year in which work was authorized.
Finance Division

contract, negotiated
See negotiated contract.

contracting activity
Contracting activity is an activity identified in an approved project or program of projects authorized by the commission to be performed by other than department employees.
Contract Management Manual
contraction joint

A contraction joint is a joint at the end of a rigid slab to control the location of transverse cracks.

contractor

1. A contractor is a party to a department contract, not a department employee, who accepts a department offer to participate in a contracting activity; the contract can define the contractor as appropriate to the contract: engineer, surveyor, consultant, the city, the recipient, etc.
   Contract Management Manual

2. The individual, partnership, limited liability company, corporation, or joint venture and all principals and representatives with which the Contract is made by the Department.

contractor-provider

Contractor-provider items are owned and furnished by the contractor for use in a maintenance or construction contract on a department roadway.
   Materials and Supplies Management System Manual

Contraflow

Contraflow is a lane or lanes on which, during certain events and situations, vehicles operate in a direction opposite to that of the normal flow of traffic.
   Maintenance Division

contributes materially

Contributes Materially means during the 2 taxable years prior to the taxable year in which the displacement occurs, or during such other period as the displacing agency determines to be more equitable, a business or farm operation:

- had average annual gross income receipts of at least $5000.00; or
- had average annual net earning of at least $1,000.00; or
- contributed at least 33 1/3 percent of the owner's or operator's average annual gross income from all sources.
   Right of Way Manual

control

A control is any action, device, policy, procedure, technique or other measure that improves security.
   Information Security Manual

control account

A control account is an entity on the general ledger to record the debit and credit postings for a number of related accounts called subsidiary accounts.
control activities

Control activities are the TxDOT policies and procedures that help ensure directives and plans are carried out to meet agency objectives.
*Internal Audit Manual*

control cylinder

Control cylinder is the match cure cylinder used as a feedback mechanism by the match cure system to control the curing temperature of the corresponding match cure cylinders.
*Manual of Testing Procedures*

control environment

Control environment is the foundation and framework for all the other components of our internal control system. It sets TxDOT’s tone, influencing the control consciousness of our workforce and vendors we deal with. Control environment factors include:
- The integrity, ethical values, and competence of our workforce,
- Management’s philosophy and operating style,
- Management’s process for assigning authority and responsibility,
- Staff training and development programs, and
- The attention and direction provided by the Commission.
*Internal Audit Manual*

controlled access highway

A controlled access highway, in accordance with applicable state law, is a state highway on which owners or occupants of abutting lands and other persons are denied access to or from the highway except at such points only and in such manner as may be determined by the department.
*Maintenance Collection*

controlled highways

Controlled highways are those highways officially designated as a part of the Interstate or Primary system of highways.
*Right of Way Manual*

control of access

**COA**
1. Refers to conditions on certain sections of highways where the right to access the highway by abutting property owners or occupants is fully or partially controlled by a public authority. The Texas Department of Transportation (TxDOT) may acquire property for a designated control of access facility or impose a control of access location for safety and design considerations. Control of access is a purchased property interest.
*Real Estate Acquisition Guide for Local Public Agencies*
2. Full control of access means that the authority to control access is exercised to give preference to through traffic by providing access connections with selected public roads only and by prohibiting crossings at-grade or direct private driveway connections.

3. Partial control of access means that the authority to control access is exercised to give preference to through traffic to a degree that, in addition to access connections with selected public roads, there may be some crossings at grade and some private driveway connections.

**control of access fence**

A control of access fence is a section of state-owned fence placed within the right of way to act as a physical barrier restricting access to the through lanes of a controlled access highway.

**control of access line**

A control of access line is a boundary designated by TxDOT to prohibit entrance and exit to an area.

**control-section**

Cont-Sect

Control section is a section or feature of a highway designed and constructed in a standard manner and, as nearly as practicable, under identical conditions so that comparisons can be made with other sections.

**control-section-job numbers**

CSJ numbers

1. Control-section-job numbers are numbers assigned to all on-system public highways in Texas. The control number is assigned to a stretch of highway that often breaks at a county line or a major highway intersection, river or stream, but can also break at any convenient location. The section number is a number within a specific control and is usually assigned sequentially from the beginning of the control. The job number is the sequential number for any type of construction project (bridge, paving, etc) that may have ever occurred on that section of highway. The CSJ is a unique, identifying nine-digit number for a project.

   Bridge Inspection Manual

2. The control-section-job number is the statewide system for identifying a highway project on the state system with the control being the most general and section and job breakdown being more specific as to location. The CSJ is a unique, identifying nine-digit number for a project.

   Finance Division

**control temperature profile**

Control temperature profile is a graph generated by the match cure system representing time versus temperature of the control cylinder.

   Manual of Testing Procedures

**counted rooms**
Counted rooms are the number of rooms in the displacement dwelling utilized for living areas containing significant personal property.  
*Right of Way Manual*

**conventional lighting**

Conventional lighting is a highway lighting system in which the luminaries are typically mounted no higher than 50 feet.  (See also high mast lighting.)  
*Highway Illumination Manual*

**conversion**

1. Conversion is changing the quantity and investment from one DHT number to another.  
   *Materials And Supplies Management System Manual*
2. Conversion is changing to another system or service.  
   *Purchasing Manual*

**conveyance document**

A conveyance document is a legal instrument that conveys, or transfers, various types of real property interests (such as fee title or an easement). Examples would be deeds conveying fee title to the State of Texas (which would allow unrestricted uses, such as for highway facilities, building sites for maintenance yards, or building sites for office complexes etc.), and easements conveying more limited interests in a tract of land, such as for drainage or channel purposes, temporary construction purposes, or for highway purposes (commonly known as a right of way easement, which allows the construction, operation, and maintenance of a highway facility thereon).

**cooperatively-owned utility**

Cooperatively-owned utility is a utility owned by a group of individuals, managed by a legally-implemented Board of Directors, who are responsible to the owner-individuals for the proper management of the utility.  
*ROW Utility Manual*

**coordination**

Coordination is the comparison of the transportation plans, programs, and schedules of one agency with related plans, programs, and schedules of other agencies or entities with legal standing, and adjustment of plans, programs, and schedules to achieve general consistency.  
*Transportation Planning and Programming Collection*

**coordination of services**

Coordination of services is a process where representatives of different agencies and groups work together to achieve any one or all of the following goals: more effective service delivery, increased capacity to serve unmet needs, improved quality of service, or services which are more easily understood and accessed by riders.  
*Public Transportation Collection*
coordinated universal time

CUT

Coordinated universal time is the time at the zero degrees longitude line. This line runs north and south through Greenwich, England. All time zones throughout the world are referenced to this longitude. This name replaces other names such as Greenwich Mean Time and the military “Zulu Time.”

Manual of Testing Procedures

Cops in Shops

Cops in Shops is a project designed to deter underage youth from getting access to or from purchasing alcoholic beverages.

copyright

Copyright is a term referring to the exclusive legal right to reproduce, publish and sell a work.

Information Security Manual

corner clearance

Corner clearance is the distance along the edge of the traveled way from the closest edge of pavement of the intersecting roadway to the closest edge of pavement of the nearest access connection.

Access Management Manual

corner lot

Corner lot is a lot located at the intersection of two roadways that has frontage on each roadway.

Access Management Manual

Corpus Christi District

CRP

The Corpus Christi District is a TxDOT district office including the following counties: Aransas, Bee, Goliad, Jim Wells, Karnes, Kleberg, Live Oak, Nueces, Refugio, and San Patricio. Area offices are located in Alice, Corpus Christi, George West, Karnes City, and Sinton. The district also operates the Port Aransas ferries and has a Vehicle Titles and Registration Regional Office.

Inside TxDOT

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.

Transportation Planning and Programming Collection

corridor preservation
Corridor preservation involves the coordination and application of various measures to obtain control of or otherwise protect the right of way for a planned transportation facility.

**corridor study**

In planning, a corridor is a broad geographical band that follows a general directional flow or connects major sources of trips. It may contain a number of streets, highways and transit lines and routes.

**corrugations**

Corrugations are deviations of the pavement surface from its original cross section which are generally caused by excessive bitumen, improper aggregate gradation in the pavement, insufficient compaction of the mix or low interparticle friction to a degree that causes an unstable pavement with low resistance to traffic loads.

Maintenance Collection

**Cosine Law**

Cosine Law is the mathematical expression of the principle that illumination of a surface is proportional to the cosine of the angle (A) of incidence of the light beam.

*Highway Illumination Manual*

**cost accounting**

Cost accounting is an accounting method that associates all costs incurred to accomplish a given activity, operation, work unit or job and within the time period when the work is performed.

**cost center**

CC or PCA

1. A cost center is an assigned number that relates to a particular appropriation authority (Reference Code Chart 81).
   Finance Division

2. A cost center is a reference number identifying one combination of three elements - agency, appropriation and fund. When any of these elements change, a new cost center is established by the comptroller. A cost center is the lowest level of activity at which revenues and expenditures are recorded by the comptroller.

**cost effectiveness ranking**

Cost effectiveness rank is also known as cost-effectiveness analysis (CEA). It is an analytical technique used to rank and choose the most effective method for achieving a program or policy goal. The costs of alternatives are measured by their requisite estimated monetary expenditures. Effectiveness is defined by the degree of goal attainment and may also be measured in monetary terms.

**cost evaluation**
A review of the individual cost components in a contract proposal to determine their reasonableness and the necessity for each. This is accomplished when there is an estimate of costs available at the time of the evaluation request.

*Contract Management Manual*

**cost of sampling - local city**

CSL

Cost of sampling in a local city is the cost, established by the Materials Section of the Construction Division (CSTM), based on the assumption that the typical warehouse is located 10 miles from the CSTM office, two round trips per sampling will be necessary, and four hours of time will be required.

**cost of sampling - remote location**

Cost of sampling in a remote location is the cost of sampling a specific material in a specific remote location is the actual total of sampling costs incurred at the specific remote location. This sum will include such items as the cost of travel time, mileage from the most practical city to the location, per diem, air fare, auto rental, commercial laboratory fees, sample shipping expenses, containers, etc.

**cost per mile**

Cost per mile is the average expenditure per lane or centerline highway mile.

*Finance Division*

**costs**

Costs are the values of resources consumed.

*Council of Environmental Quality Regulations*

The Council of Environmental Quality Regulations is 40 CFR 1500 – 1508; the procedures to implement the National Environmental Policy Act.

*Environmental Manual*

**counseling**

Counseling is advising or directing an employee regarding expected performance or behavior.

**county road**

CR

A county road is a road under the jurisdiction of a county government, for which that county government is responsible for the construction and maintenance of the roadway and associated structures.

*Historic Bridge Manual*
coverage agreement

A coverage agreement is a written agreement on Form TWCC-81, Form TWCC-82, form TWCC-83, or Form TWCC-84, filed with the Texas Workers’ Compensation Commission which establishes a relationship between the parties for purposes of the Workers’ Compensation Act as one of employer/employee and establishes who will be responsible for providing coverage for persons providing services on the project.

*Occupational Safety Manual*

crack seal

Crack seal is an application of sealing material directly in the cracks of the pavement surface to prevent moisture damage.

*Maintenance Collection*

cracks

Cracks are considered serious when pavement is cracked to the extent that water or foreign material can cause structural damage. Cracks should be sealed as soon as practical. Efforts should be made to avoid a buildup of crack sealing material.

*Maintenance Collection*

crash

A crash is an identified event that produces injury, death, or damage. Highway safety activists have been working to replace the term “accident” with “crash,” which more accurately reflects the potential and actual seriousness of incidents.

*Traffic Safety Program Manual*

criteria of effect

The criteria of effect is the Advisory Council on Historic Preservation's definition of change to historic properties caused by an agency's actions. An undertaking has an effect on a historic property when that undertaking may alter characteristics of the property that qualify it for inclusion in the National Register of Historic Places. For the purpose of determining effect, alterations to features of a property's location, setting or use may be relevant, depending upon the property's significant characteristics.

*Environmental Affairs Division*

critical information resource

Critical information resource is that resource determined by the department’s management to be essential to the department’s critical mission and functions, the loss of which would have an unacceptable impact.

*Information Security Manual*

**Cronaflex**
Cronaflex is DuPont’s trade name for a stable drafting film with a matte surface.

cross drainage

Cross drainage is the runoff from contributing drainage areas both inside and outside the highway right of way and the transmission thereof from the upstream side of the highway facility to the downstream side.

crossing agreement

A crossing agreement is a form of Joint Use Agreement used for the common usage of intersecting rights of way.

Right of Way Manual

cross-post

Cross-posting involves sending an email message to more than one news group.

cross section

A cross section is the view of the vertical plane cutting through the roadway, laterally perpendicular to the center line, showing the relationship of the various components of the roadway.

cross slope

A cross slope is a slope from centerline to crown line.

crosshatching

Crosshatching is a drafting method of drawing lines at 45 degrees at set spacing that represent a legend.

crossover

Crossover is an at-grade connection between opposing lanes of traffic.

crown

The crown is the edge of roadway.

crown line

The crown line is the outside edge of sub-grade.

crushed face

Crushed face is a fractured structure produced by the mechanical crushing of an aggregate. Crushed aggregate faces are identified by fresh fractures and lack of evidence of weathering. NOTE: This definition has been approved by the Specification Committee.

Manual of Testing Procedures
crushed gravel

Crushed gravel is the product resulting from the mechanical cushing of gravel, with substantially all fragments having at least one face resulting from a fracture. NOTE: This definition has been approved by the Specification Committee.

Manual of Testing Procedures

crushed stone

Crushed stone is the product excavated from an in-situ deposit of rock, crushed and processed for construction purposes with substantially all faces resulting from the crushing operation. NOTE: This definition has been approved by the Specification Committee.

Manual of Testing Procedures

cul-de-sac street

A cul-de-sac street is a local street only open at one end with a special provision for turning around. A dead end street with a turn-around.

culvert

A culvert is a structure under a roadway, usually for drainage. It is a bridge-class culvert if it has a clear opening of 20 feet or more measured along the centerline of the roadway between extreme ends of the openings for multiple boxes or multiple pipes that are 60 inches or more in diameter.

Bridge Inspection Manual

curb

A curb is a vertical or sloping member along the edge of a pavement or shoulder forming part of a gutter, strengthening or protecting the edge and clearly defining the edge to vehicle drivers. The surface of the curb facing the general direction of the pavement is called the “face.”

curing

Curing is the period of time during which concrete is subjected to favorable temperature and moisture conditions usually varying from three to 28 days for construction work.

current assets

Current assets are the resources available for use in the current fiscal period.

current funds

Current funds are the funds which may be expended during the current fiscal period.

current month (over) under
The current month (over) under is the difference between the current month actual expenditures or revenues and the budget allotment for the current month. The month allotment would be 1/12 the annual budget unless a month-by-month budget is provided.

**current year**

The present year which may be different from the construction year and/or design year.

**custodian**

A custodian is a guardian or caretaker; the holder of data, the agent charged with implementing the controls specified by the owner. The custodian is responsible for the processing and storage of information. For mainframe applications Information Services is the custodian; for micro and mini applications the owner or user may retain custodial responsibilities. The custodian is normally a provider of services.  
*Information Security Manual*

**customer**

A customer is a person or organizational unit who receives an Information Systems service or product.

**Customer Information Control System**

CICS

Customer Information Control System is the IBM telecommunications control program that controls online mainframe database data. CICS is a large program arrangement that coordinates and communicates with other programs for terminal control, file and data control, and program control.

**cutback asphalt**

Cutback asphalt is asphalt cement which has been combined with petroleum solvents (also called “diluents”) to make the asphalt less viscous. Upon exposure to the atmosphere, the solvent evaporates, allowing the asphalt to harden. Cutback asphalts are classified as a rapid-curing (RC), medium-curing (MC), or slow-curing (SC). This characteristic is specified in the asphalt’s nomenclature. RC-800 or MC-3000.

**cutoff**

Cutoff refers to the luminaire light distribution. It is designated as cutoff when the candlepower per 1,000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees above nadir (horizontal), and 100 (10 percent) at a vertical angle of 80 degrees above nadir. Cutoff type luminaries usually have flat glass lenses.  
*Illumination Manual*

**cutoff wall**

A cutoff is a wall, collar or apron intended to prevent seepage or undermining. (See diaphragm)
**cuts**

Cuts are sections of highway constructed below ground elevation, therefore, requiring excavation during construction. Earth that is removed below the natural ground line.

**cyberspace**

Cyberspace often refers to all the area on the Internet and other networks where people can interact with other computers and their users. William Gibson created this term in his book *Neuromancer.* *Information Technology and Services Manual*

**cyclic inventory**

Cyclic inventory is counting selected stock items weekly, monthly, or quarterly until all stock items are inventoried by the end of the fiscal year. *Materials and Supplies Management System Manual*

**Cyclic Redundancy Code**

CRC

Cyclic redundancy code is a method used to check for errors in a data transmission. *Information Technology and Services Manual*
**Daemon**

Daemon is a UNIX program that executes in the background, ready to perform an operation when required. It is usually an unattended process initiated at startup. Typical daemons (pronounced “demons”) are print spoolers, email handlers, and schedulers that start up another process at a scheduled time.

*Information Technology and Services Manual*

**Dallas District**

DAL

The Dallas District is a TxDOT district office including the following counties: Collin, Dallas, Denton, Ellis, Kaufman, Navarro, and Rockwall. Area offices are located in Corsicana; Denton; Kaufman; McKinney; northeast, northwest, southeast, and southwest Dallas; and Waxahachie. The district also has a Vehicle Titles and Registration Regional Office.

*Inside TxDOT*

**damages**

The loss in value to the remaining property caused by the new facility. The loss in value must be an actual loss in value to the property itself and not to the operation of a business that is located on it or to the owner’s inconvenience or preferences. That loss, which is recognized by persons that buy such property, should not be estimated, but determined by comparing the value of remainder after with the value of remainder before.

*Real Estate Acquisition Guide for Local Public Agencies*

**data**

Data is the representation of facts. It is the raw material of information and used as a basis for reasoning, decision-making, discussion, or calculation.

Enterprise Data Management

**data administration**

DA

Also known as data resource management. Data administration is a functional area responsible for developing and administering the policies, procedures, practices and plans for the definition, organization and efficient utilization of data within an organization. This functional area is chartered to manage data as a valuable corporate resource. Also, data administration is the planning, organization, administration, control and protection of enterprise data.

Enterprise Data Management

**data administration analyst**

DAA
A data administration analyst is a person responsible for training and consulting with project teams in the development of logical data models in accordance with Data Administration plans, policies, procedures and standards.

Data Administration Management Association

DAMA

Data Administration Management Association is a professional society devoted to the data management topics of strategic planning, data architectures, logical models, data dictionaries, and other data issues related to mainframe, mid-tier and personal computers.

Data architecture

A data architecture is the science and method of designing and constructing a data resource that is business-driven, based on real world subjects, and implemented into appropriate operating environments; the overall structure of a data resource that provides a consistent foundation across organizational boundaries to provide easily identifiable, readily available, high-quality data to support business activities.

Data backup

Data backup is the process of copying data that is stored on a computer system to some sort of secondary storage device so that a full or partial restoration of this data to the system from which it came can be enabled at some future point in time if required.

Data Base Management System

DBMS

Data Base Management System is a method for storing and retrieving common information sets or data bases. ADABAS is the primary access and retrieval mechanism for the Management Information System (MIS).

Data Center Management System

DCMS

Data Center Management System is the software module part of the Operating System module in a large computer. DCMS provides facilities for computer processing units (CPU) and non-CPU scheduling, for automatic job submission and tracking, and for the validation of job control language.

data collection section
Data collection section is a Pavement Management Information System (PMIS) term which refers to a segment of highway for which PMIS data is collected and stored. PMIS data collection sections are usually 0.5-mile in length.

Pavement Management Information System (PMIS) Users Manual

data collector

A data collector is the initial creator of data from the data source in the district, division, or office.

Enterprise Data Management

data dictionary

A data dictionary is a directory of the definitions, purpose, policies and structure about data. It is a compilation of information about the data owned by the enterprise. It describes every data item in a database in enough detail for users and application developers to know what the data is and how to make use of it.

Enterprise Data Management

data encryption standard

DES

Data encryption standard is a widely-used method of data encryption using a private (secret) key. There are 72,000,000,000,000,000,000 (72 quadrillion) or more possible encryption keys that can be used. For each given message, the key is chosen at random from among this enormous number of keys. Like other private key cryptographic methods, both the sender and the receiver must know and use the same private key.

Information Security Manual

data entity

A data entity is the detailed representation of a person, place, thing, event or other object of interest to the enterprise. It can be represented as a record in a database or a row in a table.

Enterprise Data Management

data entity relationship diagram

DERD

A data entity relationship diagram is a normalized, detailed graphic representation (logical view) of data entities and the significant relationships among them.

Enterprise Data Management

data entity relationship model

DERM

A data entity relationship model includes the data entity relationship diagram and any accompanying textual documentation (e.g., definitions).

Enterprise Data Management
**data definition**

DD

The data definition serves to give a linking name (the DDNAME) between an actual program coded name and external files of input or output data. This data definition statement also can serve as a link between the eye-readable information on storage devices (magnetic tape reels or disk packs) so operators can mount the proper data files when a job is run.

**data element**

A data element is a unique piece of information broken down to its smallest meaningful part.

**data integrity**

1. Data integrity is the state that exists when computerized information is predictably related to its source and has been subjected to only those processes which have been authorized by the appropriate personnel.
2. Data integrity is a measure of the quality of information. The integrity of data is measured in terms of the following characteristics: accuracy, reliability, timeliness, conciseness, non-redundancy and consistency. Data integrity has been achieved and can be maintained when the data that is stored on a system is physically and procedurally secure from unauthorized and/or unwanted access, protected from concurrent and/or unauthorized or malicious manipulation and current across all locations in which it is maintained and used.

Enterprise Data Management

**data management**

Data management is the business activity of designing, building and maintaining the data resource of an organization and making data readily available to business information users.

Enterprise Data Management

**data model**

A data model is a graphic representation and description of entities and the relationships among them, often accompanied by a description of the attributes of the entities. Data models may represent data in varying degrees of scope and complexity.

**data on terminal spool**

DOTS

The data on terminal spool is the system used to send savings bonds reports and longevity reports.

**data producer**

A data producer is the initial creator of data from the data source in a district, division or office.

Enterprise Data Management

**data resource**
The total data resource for an organization is the total of all data available to the organization. All data in filing cabinets, data files, database management systems, text, hypertext, geographic information systems, executive information systems, and so on, are part of the total data resource. All disparate data are part of the organization’s data resource. A formal data resource is an integrated, comprehensive data resource that makes data readily identifiable and easily accessible by information engineering. It is a subset of the total data resource. It contains data that are identified within a common concept so that people can understand their full content and meaning. The data are formally named, comprehensively defined, well-structured and properly documented.

**data steward**

A data steward is a person in a district, division or office given the responsibility of managing a specific collection(s) of enterprise data as a business asset.

**data warehouse**

A data warehouse is a subject-oriented, integrated, time-variant, non-volatile collection of data in support of management’s decision-making process.

**database**

A database is a physical collection of data organized for flexibility of access, usually under the control of a database management system. Also, a database may be the entire collection of data and/or databases for an enterprise or part of an enterprise.

**database analyst**

A database analyst is a person responsible for implementing and maintaining the physical database files using the logical data models (e.g., Entity Relationship Diagrams) prepared by the project teams and Data Analyst.

**database distribution**

Database distribution is a development approach that places databases in the location or locations and on the platforms that are most efficient for the enterprise in a way that is transparent to the user.

**database management system**

A database management system (DBMS)
A database management system is a set of software that controls the organization, storage, retrieval, security and integrity of data in a database. It accepts requests from the application and instructs the operating system to transfer the appropriate data.

Enterprise Data Management

database migration

Database migration is the planned movement of databases from one platform, location or condition to another.

Enterprise Data Management

database server

A database server is a computing platform whose primary processing activity is centered around that of database processing.

Enterprise Data Management

date of taking

Date of taking is the date that the Commissioners’ Award on a parcel in eminent domain is deposited into the registry of the court. The date of execution of a Possession and Use Agreement is also considered the date of taking.

Right of Way Collection

DBASE

DBASE is a commercially available database management system for microcomputers.

DBE/HUB goal participation

DBE/HUB goal participation is the participation goal for DBE/HUB providers expressed as a percentage of the total cost of the contract.

Engineering Architectural and Surveying Services Manual

DBE/HUB special provision

DBE/HUB special provision is a special provision to the provider contract that identifies DBE/HUB program requirements.

Engineering Architectural and Surveying Services Manual

deadman

A deadman is a buried anchorage for a guy, cable, or other steadying device.

Debar (Debarment)

Debar is to disqualify (the disqualification of) a contractor from bidding on or entering into a contract or from participating as a contractor or subcontractor.

Maintenance Contract Manual
debarment certification

Debarment certification is a certification that the provider and its principals are not debarred from participation and not under consideration for debarment anywhere, and are eligible to perform the contract.

*Engineering Architectural and Surveying Services Manual*

deceleration lane

Deceleration lane is a speed-change lane, including tapered areas, for the purpose of enabling a vehicle that is exiting a roadway to leave the travel lanes and slow to a safe exit.

*Access Management Manual*

decent safe & sanitary

DS&S

A decent, safe and sanitary dwelling is a dwelling that meets applicable housing and occupancy codes and/or that:

- is structurally sound, weathertight, and in good repair; and
- contains a safe electrical wiring system adequate for lighting and other devices; and
- contains a heating system capable of sustaining a healthful temperature (approximately 70°F Fahrenheit) for a displaced person, except in those areas where local climatic conditions do not require such a system; and
- is adequate in size with respect to the number of rooms and area of living needed to accommodate the displaced person. The number of persons occupying each habitable room used for sleeping purposes shall not exceed that permitted by local housing codes or, in the absence of local codes, the policies of TxDOT. In addition, TxDOT shall follow the requirements for separate bedrooms for children of the opposite gender included in local housing codes, or in the absence of local codes, TxDOT’s policy that children of the opposite gender not occupy the same sleeping room if they have reached the age of 12 years old at the time of displacement.
- includes a well lighted and ventilated bathroom which provides privacy for the user, containing a sink, bathtub or shower stall and a toilet, all in good working order and properly connected to appropriate sources of water and to a sewage drainage system; and in the case of a housekeeping dwelling includes a kitchen area that contains a fully usable sink, properly connected to potable hot and cold water sources and to a sewage drainage system, and adequate space and utility service connections for a stove and refrigerator; and
- contains unobstructed access to safe, open space at ground level; and
- in the case of a displaced person with a disability, be free of any barriers which would preclude reasonable ingress, egress, or use of the dwelling by such a displaced person. This includes all physical disabilities, not just those attributable to persons who are motion impaired.

*Right of Way Manual*

decibel

db
A decibel is a basic unit of sound pressure level. Decibels are logarithmic expressions of sound pressure levels.

decision support systems
DSS
A decision support system is a data processing system that provides the end user with the ability to query, extract, manipulate and assimilate data to aid in the decision-making process.

Enterprise Data Management

decontamination
Decontamination is the use of physical or chemical means to remove, inactivate or destroy blood-borne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

Occupational Safety Manual

dedicated funding source
A dedicated funding source, by law, is available for use only to support a specific purpose and cannot be diverted to other uses.

The Highway Trust Fund is a dedicated funding source.

deep rutting
Deep rutting is an asphaltic concrete pavement distress type in which a surface depression in the wheelpath (a rut) is 1-3 inches deep. Deep rutting ranges from 0 to 100 percent of the wheelpath length.


default
Default is failure to comply with the terms and conditions of the contract not caused by force majeure. See breach of contract.

Contract Management Manual

default accessor identification
default ACID
A default accessor identification is provided by the system software for user identification at installation that does not require separate user identifications.

deflection
1. Deflection is the bending or breaking of the surface as a result of a load or pressure.
2. Deflection is the change in shape or decrease in diameter of a conduit, produced without fracture of the material.
**deformed bar**

Deformed bar is a reinforcing bar for rigid slabs conforming to “Requirements for Deformations” in AASHTO Designations M31, M42, or M53.

*Pavement Design Manual*

**degree of curvature**

D

The degree of curvature is the measurement of sharpness of a curve. The angle formed at the center of the circle by two radii subtended by a 100 foot arc. Number of degrees in each one hundred feet of curve.

**delegation of signature authority**

Delegation of signature authority is the assignment of signature responsibility and authority to designated TxDOT employees.

*Contract Management Manual*

**deleterious material**

Deleterious material is defined in various specifications as clay lumps, shale, soft, friable or laminated particles, vegetable matter, or other objectional material.

*Manual of Testing Procedures*

**delineator**

1. A delineator is a reflecting device mounted at the side of the roadway, in series, to indicate the alignment of the roadway.
2. Delineators are drawings or painted lines indicating guidelines for paved roadways. Flexible delineator posts cause little or no damage to a vehicle striking the post.

*Maintenance Collection*

**demand response service**

D/R

Demand response service is a transportation system characterized by flexible routing and scheduling of relatively small vehicles to provide door-to-door, curb-to-curb, or point-to-point transportation at the user’s demand. Synonymous with “dial-a-ride” and “paratransit” service.

*Public Transportation Collection*

**demilitarized zone**

In computer networks, a demilitarized zone (DMZ) is a computer host or small network inserted as a “neutral zone” between a company’s private network and the outside public network. TxDOT establishes a DMZ to prevent outside users from getting direct access to a TxDOT server that hosts internal information resources.

*Source: Information Security Manual*
demonstration

Demonstration is the placing of a product into TxDOT’s operational environment to demonstrate its use, and includes deployment and implementation field testing.

*Research and Implementation Manual*

density

Dens

Density is the unit weight of a material such as pounds per cubic foot.

department accessor identification

department ACID

A department accessor identification groups a user, profiles and resources. Each user ACID must be associated with a department. Departments are equivalent to TxDOT branches, area offices, project offices, units or project teams. See accessor ID.

*Information Security Manual*

department associations

See department authorized organizations.

department authorized organizations

Department associations are organizations and associations identified by the department that are directly related to department functions.

Examples: American Association of State Highway and Transportation Officials (AASHTO), American Society for Testing and Materials, Hispanic Awareness Committee (HAC), Leadership Texas; Texas Alliance for Minority Engineers (TAME), Texas Pre-Freshman Engineering (Tex-PREP), TxDOT Employee Advisory Committee, Western Association of State Highway and Transportation Officials (WASHTO), TxDOT Activities Coordinating Committee (TACC), and TxConnect.

*Human Resources Manual*

**Department of Information Resources**

DIR

1. The Department of Information Resources is a state agency established to aid other state agencies in planning for effective, efficient, and economical use of automated information and telecommunications systems.

   *Procurement Manual*

2. The Department of Information Resources (DIR) was established in a comprehensive state statute that addressed the major aspects of information technology management. The 77th Legislature designated oversight of information resources management to the DIR executive director, who now serves as the state’s chief information officer, with authority for all aspects of information technology for state agencies.
Department of Public Safety

DPS

In Texas, the Department of Public Safety is responsible for, among other duties, criminal law enforcement, driver licensing (including Commercial Drivers Licenses), highway patrol, and statewide vehicular crash recording and reporting.

department project manager

See project manager.

department-owned

Department owned means property owned by the department and created from a department roadway during maintenance or construction.

Materials And Supplies Management System Manual

depersonalized information

Depersonalized information is data/information that has had all references to a person (name, address, telephone, etc.) removed or changed to non-information (all x’s).

Information Security Manual

descending reference marker direction

Descending reference marker direction is the direction of travel in which the reference marker numbers decrease.


descriptive code

1. A descriptive code is a four-digit computer code number placed after a bid item number used to further describe that bid item and is unique to that specific item description.

Letting Management Office

2. A descriptive code is a four-digit number representing different ways to bid an item - such as different units of measurement, different sizes of the item or different types of the item. The code is a part of the estimate and quantity sheet in the project plans and bid inserts in a proposal.

See also Bid Item.

Plans, Specifications and Estimate Preparation Manual

desiccator

Desiccator is a specific, calibrated drying apparatus.

Manual of Testing Procedures

Design and Construction Information System
DCIS

The Design and Construction Information System is part of the major investment study. DCIS is the automated information system for planning, programming, and developing the design criteria for the department’s construction projects. DCIS is an essential part of the process of preparing those construction pieces of contract letting. Projects are identified by control, section and sequence number for the job as a database key description. All project information such as work descriptions, fund requirements, and dates for proposed activities can be identified in DCIS. DCIS has the resources to manage an engineering project from the conceptual stage through the letting stage and, for some project information, through the completion of construction. Each project is coded by Highway Work Class of which DCIS has 17 classes identified.

*Design and Construction Information System Manual*

**design capacity**

Design capacity refers to an estimated capacity, usually based on vehicles per day or design hourly volume that is used to determine the design of a highway, i.e. number of lanes and other considerations.

**design cylinders**

Design cylinders are cylinders used to determine if design concrete strength requirements have been achieved.

*700-I, Structural Test Procedures Manual*

**Design Division**

**DES**

The Design Division serves as a one-stop clearinghouse for project design of roads, bridges, rest areas and landscapes.

*Inside TxDOT*

**design exception**

Documentation of an engineering decision not to comply with certain design requirements. Design exceptions are requested by the district for approval by the Design Division.

**design frequency**

Design frequency is a specified length of time during which a structure will theoretically flood only once, i.e., a structure designed on a 5 year frequency will theoretically flood only once every 5 years, however there is a 20% chance the flood can be exceeded in any year.

**design hourly volume**

The design hourly volume is the thirtieth highest hourly traffic count for the design year.

**design speed**
Design speed is a selected speed used to determine the various design features of a roadway. 
*Roadway Design Manual*

**design standard**

design standard is the policies, guidelines, and criteria which guide and/or control detailed design for normal conditions.

**design standard sheet**

A design standard sheet is a pre-developed plan which is used statewide.

**design vehicle**

A design vehicle is a selected motor vehicle whose weight, dimensions, and operating characteristics are used to establish highway design.

**design waiver**

Similar to a design exception, a design waiver documents an engineering decision not to comply with certain design requirements. Design waivers are documented and approved at the district level.

**design year**

Projects are planned and designed to meet the future, anticipated needs and characteristics of a certain year. This is referred to as the design year. Typically, the design year for roadways is twenty years after the construction year. For bridges, the design year is typically greater.

**designated headquarters**

Designated headquarters is the area within the corporate limits of the city or town in which an employee is required to maintain his or her official headquarters. At a place not within the corporate limits of a city or town, designated headquarters means the area within a five-mile radius of the place at which an employee is required to maintain his or her official headquarters. By department rule, the designated headquarters of Maintenance Forces is the Maintenance Section.

*Human Resources Manual*

**designated recipient**

A designated recipient is the state, an authority, a municipality (not included in an authority), a local governmental body, or a nonprofit entity providing public transportation services, that receives federal or state public transportation money through the department or the Federal Transit Administration, or its successor.

*Public Transportation Collection*

**detail sheets**
Detail sheets are the sheets which contain the numerous design details necessary to complement the typical sections and plan profile sheets. Examples are curb and gutter, sidewalk, geometric details of intersections.

detailed design

Detailed design is a stage in the computer system design, specification and development process. In this context, this term refers to the development stage during which the actual implementation design (the how to do what) is determined and documented. The end result of this activity is known as the architecturally based “detailed design.” Within the TxDOT data architecture, the detailed design is represented by a logical model or Data Entry Relationship Model (DERM).

Information Services Business Improvement Project Technology

detention pond

A detention pond is a man-made feature built to hold and store flood water or other surface runoff for later release.

determination of eligibility

Determination of eligibility is the process of ascertaining a property's eligibility for inclusion in the National Register of Historic Places. A property that is determined eligible for the National Register but not actually listed is afforded the same protection under Section 106 as a listed property.

Environmental Manual

detour

A detour is a temporary route which directs highway traffic around construction work. The detour route is always marked with the proper marker and additional signs to indicate it is a detour route.

detrital (weathered)

Detrital material consists of particles which have been formed through the disintegration of other particles by erosion or weathering. NOTE: This definition has been approved by the Specification Committee.

Manual of Testing Procedures

development

Dev

Development is the translation of new knowledge into a product and may include research field testing.

Research and Implementation Manual

deviator stress

Deviator stress is the difference between the major and minor principal stresses in a triaxial test which is equal to the axial load applied to the specimen divided by the cross-sectional area of the specimen.
specimen, as prescribed in the section on calculations. The major principal stress in the specimen is equal to the deviator stress plus the chamber pressure, and the minor principal stress in the specimen is equal to the chamber pressure.

Manual of Testing Procedures

DHT number

A number assigned to warehouse stock items (from the former department designation “Department of Highways and Transportation”).

Materials and Supplies Management System Manual

dial-up access

Dial-up access is a type of communication between two computer systems in which they communicate with each other via standard telephone lines or through a similar type of medium.

Information Services Business Improvement Project Technology 1

diaphragm

A diaphragm is a metal collar at right angles to a drain pipe for the purpose of retarding seepage or the burrowing of rodents.

dictionary attack

Dictionary attack is used in finding passwords by comparing them to a specific list, such as an English dictionary, foreign dictionary, encyclopedia, bible, etc.

Information Security Manual

dielectric

A dielectric is a non-conductor of direct electric current.

Occupational Safety Manual

differential wear

Differential wear is the measured difference of the amount of abrasion loss to the surface of randomly selected aggregate particles from each type of aggregate in the blend.

Manual of Testing Procedures

digital

Digital is a term for images produced or stored electronically. Any file on the computer.

Communications Manual

digital audio tape drive

DAT

A digital audio tape drive is a hardware device used by system administration staff for backups and restores.
**digital certificate**

A digital certificate represents the certification of an individual, business, or organizational public key used for encrypting and decrypting messages and digital signatures. Public key encryption involves encrypting messages with one key (public key) that can only be decrypted with a second key (private key) and vice versa. Each key unlocks the encryption that the other key creates. For security purposes, the private key is never revealed to unauthorized users. Only the public key is widely known. A digital certificate contains the digital signature of the certificate-issuing authority, enabling anyone to verify the certificate’s validity. Certificate authorities control the public key infrastructure. Digital certificate technology is a primary means of validating electronic transactions over the Internet.

*Information Security Manual*

**Digital Equipment Corporation**

**DEC**

The Digital Equipment Corporation is a computer database used by *Texas Highways* magazine. A major manufacturer of computers and the manufacturer of the VAX equipment used by TxDOT for graphics stations and computers.

**digital orthophotography**

A reconstructed aerial photo in which all scale variations and distortions have been removed through rectification. Thus, digital orthophotos (DOQQs) combine the image characteristics of a photograph with the geometric qualities of a map.

*Survey Manual*

**digital signature**

A digital signature is used to verify the authenticity of the sender of an electronic document. Digital signatures employ an asymmetric cryptographic process to assure the authenticity and non-repudiation of a message originator and/or the integrity of a message.

*Information Security Manual*

**digital terrain model**

**DTM**

A digital terrain model (DTM) is a computer file generated from aerial photography or field survey data containing three-dimensional data (X, Y, and Z coordinates) on terrain. DTM’s can be used to generate contour lines and existing ground cross sections or profiles.

*GPS User’s Manual*

**dike**
A dike is an embankment constructed of earth or other suitable materials to protect land against overflow from streams, lakes, or tidal influences or to protect flat land areas from diffused surface water.

**direct access storage device**

DASD

A direct access storage device is a computer disk storage that allows data storage or retrieval by a reference to its location on a storage volume, rather than relative to the previously stored or retrieved data, so computers can access the data faster.

*Information Security Manual*

**direct costs**

Direct costs are costs that are charged to the outsourced project that include wage rates per personnel category, lodging, per diem, and special equipment or printing requests that are required to complete the project and not included in the performing entity’s audited overhead rate.

*Contract Management Manual*

**direct current**

D.C.

Direct current is a one-direction flow of electricity.

*Highway Illumination Manual*

**direct function code**

A direct function code is a two or three character alphanumeric code identifying a function from one of the menus.

*Materials And Supplies Management System Manual*

**Directional Design Hourly Volume**

DDHV

Typically, the DDHV is the thirtieth highest hourly traffic volume in one direction for the design year, commonly twenty years from the time of construction. DDHV is given in units of vehicles per hour.

**directional distribution**

Directional distribution is the split of traffic during the design hour commonly expressed as percent in the peak and off-peak flow directions.

**directional interchange**

The directional interchange is an interchange, generally having more than one highway grade separation, with direct connections for the major turning movements.
**directional median opening**

Directional median opening is an opening in a nontraversable median that accommodates specific movements, such as U-turn movements and/or left-turn movements from the highway, and physically restricts other movements.

*Access Management Manual*

**disadvantaged business enterprise**

**DBE**

1. A disadvantaged business enterprise is any business certified by the department in accordance with 49 CFR Part 26.

*Engineering Architectural and Surveying Services Manual*

2. A disadvantaged business enterprise is any small business, certified by the department, which is 51 percent owned by one or more minorities or women, or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more minorities or women, and whose management and daily business operations are controlled by one or more such individuals.

*Maintenance Contract Manual*

**disadvantaged communities**

A community that, compared to the whole, has a higher percentage of elderly and/or minority populations, populations with below average per capita income, and/or above average unemployment.

**disaggregation curve**

A disaggregation curve is a graphical or tabular means of relating the distribution of a variable (e.g., households) to a single parameter. For example, the distribution of households by size within transportation analysis zones may be plotted versus the average household size of the zones. There would be one curve in the graph for each household size category. Given the average household size for a zone (or some other subdivision), reading that value on the x-axis, the y-values on the curves in the graph would provide estimates of the percent of households in the size category represented by the curve. These data provide a means for estimating the distribution of a variable (i.e., disaggregating the variable) at a sub-area level given a single parameter for the sub-area.

*Traffic Data and Analysis Manual*

**disaster districts**

Disaster districts are the state’s regional emergency management organizations that serve as the initial source of state emergency assistance for local governments. A chairman, who is the local Texas Highway Patrol commander, directs each District. Disaster District Committees, consisting of state agencies and volunteer groups that have resources within the District’s area of responsibility, assist the Disaster District Chair in identifying, mobilizing, and deploying personnel, equipment, supplies, and technical support to respond to requests for emergency assistance from local governments and state agencies.

*Maintenance Division*
disaster recovery plan  
DRP
See business resumption plan.
Information Services Business Improvement Project Technology 1

dischARGE  
Q
Discharge is the flow from a culvert, sewer, channel, or other watercourse.

discretionary funds  
Discretionary funds are generally controlled by the governing body to satisfy situational needs or policy. Examples include Congressional earmarks and FTA Section 5309 projects.
Public Transportation Collection

discrimination grievance  
A discrimination grievance is an employee's concern about the effect, action, practice, difference in treatment, or denial of privilege because of the employee's age, race, national origin, color, religion, disability, or sex.
Human Resources Manual

disking  
Disking is the cutting and loosening of natural ground or layer of embankment and mixing same with a plow.

disparate data  
Disparate data is any data that does not conform to TxDOT’s data standards.
Enterprise Data Management

displaced person  
A displaced person is any person (individual, family, corporation, partnership, or association) who moves from the real property or moves his/her personal property from the real property:
◆ as a direct result of a written notice of intent to acquire, the initiation of negotiations for, or the acquisition of such real property in whole or in part for a highway project; or
◆ as a direct result of rehabilitation or demolition for a highway project; or
◆ as a direct result of a written notice of intent to acquire, or the acquisition, rehabilitation or demolition of, in whole or part, other real property on which the person conducts a business or farm operation, for a highway project.
Right of Way Manual

displacee
A displacee is a person displaced from a dwelling by virtue of a state highway project.

Right of Way Manual

displacement dwelling
A displacement dwelling is the dwelling from which a person is displaced due to a State highway project.

Right of Way Manual

distance from origin
DFO
Distance from origin is the TRM-generated value of distance from any point on a given route back to the beginning point of the route. This length includes lengths of all linked route segments with local roads and other signed highways occurring up to that point.


distress score
Distress score is a Pavement Management Information System (PMIS) term which describes the overall amount of pavement distress. Distress scores range from 1 (most distress) to 100 (least distress).

Pavement Management Information System (PMIS) Users Manual

distributed data
Distributed data is data that is located in more than one physical location, usually across two or more servers within a client/server or similar type of architectural configuration.

Information Services Business Improvement Project Technology 1

distributed database
A distributed database is a database system that is maintained in more than one physical location within the technological architecture but that is represented to the user community as one logical

Information Services Business Improvement Project Technology 1

distributed processing
Distributed processing is processing that occurs at two or more physical locations within a technical architecture which is dynamically supplied by a variety of different computing platforms.

Information Services Business Improvement Project Technology 1

district
DIST
1. A district is one of the 25 geographical areas, managed by a district engineer, in which the department conducts its primary work activities.

2. A district is an aggregation of traffic serial zones used in travel demand modeling for analysis and reporting.

   Traffic Data and Analysis Manual

**district engineer**

DE

The chief administrative officer in charge of one of the TxDOT geographic districts. The term also may refer to the district engineer’s designee.

**ditch check**

A ditch check is a barrier placed in a ditch to decrease the slope of the flowline and thereby decrease the velocity of the water.

**diurnal emissions**

Diurnal emissions are evaporated gasoline emissions generated by the rise in temperature over the course of a day when the vehicle is not being driven.

Traffic Data and Analysis Manual

**diverging**

Diverging means the dividing of a stream of traffic into separate lanes.

**diverse applicant pool**

A diverse applicant pool is a pool in which more than one gender or ethnic group is represented. To be a diverse applicant pool, at least one applicant in the pool must be of a different ethnicity or different gender than any other applicant in the pool.

A pool of all white males is not diverse; neither is a pool of all black females.

Human Resources Manual

**diversion**

Diversion is a channel with a supporting ridge on the lower side constructed across a slope for the purpose of intercepting and diverting water.

**divided highway**

A divided highway is a highway with a median designed to separate traffic moving in opposite directions.

Access Management Manual

**division accessor identification**

division ACID
A division accessor identification is a 3- or 4-character identifier used to group departments.

**docked pay status**

Docked pay status is the amount of time employees do not work during a work week and for which they do not have applicable paid leave.  
*Human Resources Manual*

**domain**

1. A domain is a set of all possible values for an attribute; it can be text, numeric, date or time, or be specified via permitted values. An example is the official two-character abbreviations for each state.
2. A domain is a cohesive collection of hardware and software that is used to implement the specific function of a system such as the Production System.

**domain name**

A domain name identifies a computer on a network as an active part of that network. This computer can share its resources with other computers on the network. The domain name is part of an email address and indicates which computer system the message should arrive at.  
*Information Security Manual*

**domain name service**

DNS  
A software protocol that provides a means to convert an IP address (such as 140.174.72.241) to a name (such as organic.com) and vice versa.  
*Information Security Manual*

**domestic origin**

Domestic origin means having all manufacturing processes occurring in the United States of America.  
*Inspection Guide*

**Donation**

Property owners whose real property is required for a highway project may donate all or part of such required property to the acquiring agency. Property owners must be fully informed of their right to just compensation as well as their right to have an appraisal made of the property. Property owners may release the acquiring agency from either or both of these obligations; however, it is important to note that this is the property owner’s option. A property owner may not waive an appraisal for property partially donated. All donations must be obtained in the name of the local authority rather than in the name of the State. The local authority will then deed the property to the State.

**Don’t Mess With Texas**
DMWT
Don’t Mess With Texas is TxDOT’s high-visibility litter prevention media campaign, administered by the Travel Division.

Travel Division

Don’t Wreck Your Life
DWYL
Don’t Wreck Your Life is TxDOT’s advertising campaign against drunk and reckless driving.

dots per (linear) inch
DPI
Dots per inch is a measure of resolution.
A digital image defined by 90,000 pixels per square inch is said to have a DPI of 300. That means 300 pixels per vertical inch multiplied by 300 pixels per horizontal inch.

Communications Manual

double layer of security
A double layer of security is a combination of two layers of security used concurrently on separate entry locations. For example, a security card reader is used to enter the building and a combination door lock is then used to enter the office area.

Information Security Manual

dowel
A dowel is a load transfer element, usually a plain round steel bar that projects from one concrete slab or structure into another.

draft environmental impact statement
DEIS
An environmental document that is prepared when it is initially determined that the action/project may cause significant impacts to the environment, when environmental studies and early coordination indicate significant impacts, or when review of the environmental assessment indicates that the impacts anticipated to result from the project may be significant. The DEIS compares all reasonable alternatives to the proposed project and summarizes the studies, reviews, consultations, and coordination to the extent appropriate at the draft stage in the environmental process. This document lists all entities from which comments are being requested.

drainage
Drainage is the removal of water from the highway right-of-way area by use of culverts, ditches, outsell channels and other drainage structures.

drainage area
The drainage area is the defined area to be drained by a given drainage facility.

**drainage coefficients**

Drainage coefficients are factors used to modify layer coefficients in flexible pavements or stresses in rigid pavements as a function of how well the pavement structure can handle the adverse effect of water infiltration.

*Pavement Design Manual*

**drainage factor of a soil**

Drainage factor of a soil is the number of cubic centimeters of water per hour that will drain through a standard size 152 x 203 mm (6 x 8 in.) triaxial specimen, when molded according to Test Method “Tex-113-E, Laboratory Compaction Characteristics and Moisture-Density Relationship of Base Materials,” and subjected to drainage water under the following conditions: Drainage factor apparatus shall be the falling head type with an initial head of water equivalent to 762 mm (30 in.) above the top of the specimen, the water reservoir shall be 127 mm (5 in.) in diameter by 254 mm (10 in.) tall. A pressure of at least 13.8 kPa (2 psi) lateral and vertical shall be maintained on the specimen during the test.

*Manual of Testing Procedures*

**drainage factor of undisturbed soils**

The drainage factor of undisturbed soils is the same as drainage factor (of a soil) except that the core height should be approximately 1.33 times its actual diameter.

*Manual of Testing Procedures*

**drainage slots**

Drainage slots are openings constructed in structures to allow drainage flow through them.

**drilled shafts**

Drilled shafts are reinforced concrete foundation shafts for bridges and retaining walls that are excavated (drilled) and then filled with concrete and reinforcing steel.

*Geotechnical Manual*

**drive for the department**

Driving for the department means driving vehicles and/or operating motor-driven equipment (rollers, tractors, graders, ferries, aircraft, etc.) for the department, regardless of who owns the vehicles or equipment and regardless of the frequency of driving/operating duties. This includes an employee’s personal vehicle when driven during the course and scope of employment. An employee who is paid for mileage is, by definition, driving on department business.

*Occupational Safety Manual*

**driving under the influence of drugs**
DUI
In Texas, driving under the influence of drugs (DUI) is synonymous with driving while intoxicated and includes alcohol.

Drug and Alcohol Management Information System
DAMIS
The Drug and Alcohol Management Information System is a transit agency’s annual report to the Federal Transit Administration on its drug and alcohol testing program. Public Transportation Collection

Drug Evaluation and Classification Program
DECP
The Drug Evaluation Classification Program trains police officers as Drug Recognition Experts (Dress).

drug recognition expert or evaluation
DRE
A drug recognition expert is a peace officer who has received extensive, specialized training in order to detect what category or categories of drugs are impairing an individual.

dual-fuel vehicle
A dual-fuel vehicle is a vehicle that can operate on a mixture of two fuels simultaneously. Equipment Manual

dual homing
A dual-homing utilizes a firewall consisting of a bastion host with two network interfaces, one of which is connected to the protected network, the other is connected to the Internet. Internet protocol (IP) traffic forwarding is usually disabled, restricting all traffic between the two networks to whatever passes through an application proxy. Information Security Manual

due care
Due care is the minimum and customary practice of responsible protection of assets. This is determined by legislative, federal and agency requirements. Information Security Manual

due diligence
Due diligence is the prudent management and execution of due care. Failure to achieve the minimum standards would be considered negligent and could lead to loss of assets and/or litigation. Information Security Manual
durability
Durability is the ability of an asphaltic concrete pavement to resist the effects of weather and traffic and retain the desirable properties. Durable pavements should hold their density and surface texture, remain stable, and resist oxidation. The effects of water, heat, freezing, and thawing should be minimal.

duration of the project
Duration of the project includes the time from beginning of work on the project until work on the project has been completed and accepted by the department.
*Occupational Safety Manual*

duties
Duties are the activities that are done to perform a job, as listed on the business job description under duties and on the job requisition as essential functions.
*Human Resources Manual*

duty point
Duty point means the destination other than a place of employment to which an employee travels to conduct official state business. If the destination is outside the employee's designated headquarters, then the duty point is the area within the city limits of the incorporated area in which the destination is located, or the area within a five-mile radius of the destination if it is located in an unincorporated area.
*Travel Manual*

dwelling site
A dwelling site is the land area that is typical in size for similar dwellings located in the same neighborhood or rural area.
*Right of Way Manual*

dynaflect
Dynaflect is a device designed to exert or impart a cyclic load onto a pavement to measure the resultant surface deflection.

dynamic message sign
DMS
A dynamic message sign (DMS) is used to advise drivers of traffic or roadway conditions ahead and, in some cases, recommend alternate routes. The DMS also reduces driver frustration by providing advance warning. A DMS may also be referred to as a variable message sign (VMS), changeable message sign (CMS) or blank-out sign (BOS).
early ROW release for utilities

Early ROW release for utilities is a type of highway project release from ROW Division which sets a date on which utility investigation charges and preliminary engineering charges, i.e., survey, may begin. However, no physical adjustment of an eligible utility’s facilities can be authorized or accomplished under this release. Acquisition of replacement ROW is not permitted. 
ROW Utility Manual

earthwork

Earthwork includes the operations connected with excavating and placing embankments with soil, earth or rock.

easement

Easement refers to the right to use or control an area of the property of another for designated purposes.

economically disadvantaged county

As determined from data provided to TxDOT by the Texas Comptroller of Public Accounts at the beginning of each fiscal year, a county that meets the requirements of state law and Texas Administrative Code (TAC).

drop-offs

Drop-offs occur when the edge cracking is pavement distress which frequently happens on narrow pavements at the same time drop-offs occur. This distress can be started by shrinkage of the asphalt at the edge of the pavement or shrinkage cracks in the base or subgrade. Edge loads tend to cause failure of this type of cracking by breaking off the pavement edge. 

Edge cracking is pavement distress which frequently happens on narrow pavements at the same time drop-offs occur. This distress can be started by shrinkage of the asphalt at the edge of the pavement or shrinkage cracks in the base or subgrade. Edge loads tend to cause failure of this type of cracking by breaking off the pavement edge. 

Maintenance Collection

educational seminar for state travel officials

An educational seminar for state travel officials is when travel directors from across the United States meet annually to discuss state and national tourism issues and concerns and to attend educational seminars.

effective date

Effective date is the date on which a contractor can begin to incur reimbursable costs under a contract.

Contract Management Manual

effluent

Effluent is the outflow or discharge from a sewer or sewage treatment equipment.
egress
1. Egress is the right to go out or a place for going out, such as an exit. The right to leave a tract of land. Often used interchangeably with access.
2. Egress is any mode of operation, action, reaction or indication on or by the vehicle equipment and/or accessory equipment which degrades the VHF-FM radio receiver effective sensitivity performance by more than six dB.
   *Manual of Testing Procedures*

El Paso District
ELP
The El Paso District is a TxDOT district office including the following counties: Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, and Presidio. The district has three area offices, including rural and urban El Paso offices and one in Alpine. The Anthony Travel Information Center and a Vehicle Titles and Registration Regional Office operate out of the district.
   *Inside TxDOT*

El Protector
El Protector is a traffic safety program that targets primarily Hispanic youth.

elasticity
Elasticity is a property of a soil that causes it to be springy or flexible.

elastomeric material
Elastomeric material is a material, usually synthetic, having elastic properties similar to those of rubber.

Bearing pads made from compounds containing virgin neoprene and water stops made from natural rubber, synthetic rubber or polyvinyl chloride compounds (PVC).
   *Manual of Testing Procedures*

Elderly and Persons with Disabilities
E/PwD or E/D
Federal Transit Administration program grant that provides funding for public transportation services to elderly persons and persons with disabilities. Codified at 49 USC 5310 and often called the Section 5310, E/PwD or E/D program.
   *Public Transportation Collection*

electrical details
ED
Electrical details are TxDOT standard sheets showing specifications for electrical specifications. They are contained in the Traffic Operations Standard Plans.
electrical service

Electrical service is the point of receiving power from utility company. Typical service voltages used on highway electrical systems are 120/240 V AC, 240/480 V AC, and 480 V AC.

Electronic Communications Privacy Act

ECPA

The Electronic Communications Privacy Act is a law that makes it illegal to gain access to a computer system and its information when using an unauthorized or stolen password.

Electronic data interchange

EDI

Electronic Data Interchange is the computer-to-computer exchange between trading partners of business data in standardized document formats.

Electronic document management system

EDMS

An electronic document management system is an electronic document management application that supports the storage, indexing, retrieval, management, and archiving of documents (electronic files) in a controlled environment utilizing a storage subsystem and a catalog subsystem. Also called an enterprise document management system.

Electronic Message System

Electronic Message System is an electronic mail software system that provides for message transfer between computers or terminals of the mainframe or local area network (LAN).

electronic record

An electronic record is any information created, used and retained in a form that only a computer can process. Electronic records may reside on a hard disk, optical disk, CD-ROM or other storage media, such as diskettes or tapes.

Government Code §441.180(11); 13 TAC §6.91(5)

Electronic State Business Daily

ESBD

Electronic State Business Daily is an electronic bulletin board used by all state agencies to post procurement opportunities of $25,000 or more and provide notice of awards.
**Purchasing Manual**

**electronic thermometer**

An electronic thermometer is a device containing electrical circuitry and measures change in some property of a sensor to determine the temperature. Three common sensors are Resistance Temperature Detector (RTD), Thermistor, and Thermocouple.

**element**

An element is a generic term used to refer to a uniquely identifiable component within the core technology architecture whose interpretation is subject to its usage context. Computer system, domain, environment, etc.

Information Services Business Improvement Project Technology 1

**elements data**

Elements data are the supplemental electronic bridge inventory, inspection, and appraisal data taken for the Texas Bridge Management System (BMS). The *Elements: Field Inspection and Coding Manual* describes the step-by-step data entry requirements.

*Bridge Inspection Manual*

**elevation**

Elevation is the vertical distance of a point above or below some arbitrarily assumed level surface or datum. It is the point of known height above mean sea level measured in feet.

**eligible cost**

An eligible cost is an expenditure authorized in accordance with the terms and conditions of a contract or applicable law or regulation.

*Contract Management Manual*

**eligible utility adjustment**

A utility adjustment, required by a highway improvement project, that is eligible, in accordance with federal and state law, for cost reimbursement by TxDOT.

**email**

E-mail or electronic mail is a service that sends messages on computers via local or global networks. E-mail that is sent from one computer system to another or over the Internet must pass through gateways both to leave the originating system and to enter the receiving system.

Source: *Information Technology and Services Manual*

**email address**
An email address is an address such as bclinton@whitehouse.com, or a universal resource locator (URL) such as http://www.dot.state.tx.us, or a host address where information can be found such as dot.state.tx.us

Information Technology and Services Manual

embankment

Emb

An embankment is a raised structure of soil, soil aggregate, rock or combination of the three. Materials used for fill section.

emergency

An emergency is any occurrence (including any failure of hazard control or monitoring equipment) or event internal or external to the permit space that could endanger entrants.

Occupational Safety Manual

Emergency Closings Report

The Emergency Closings report, generated through the Texas Reference Marker System, lists all route or route sections which are closed temporarily for various reasons, including flooding or hazardous material spills.


Emergency Fuel Coordination Team

Emergency Fuel Coordination Team is comprised of a volunteer Industry Committee Lead, who is appointed by the Governor’s Office of Emergency Management, and a group of industry volunteers from the private sector and trade associations. The team is responsible for assisting the State in assuring a reliable fuel supply to support both the general and special needs population (including fuel for special needs buses) during an evacuation.

Maintenance Division

emergency medical technician

EMT

An emergency medical technician is a person specially trained in life-saving medical techniques specifically trauma-related. They are usually affiliated with ambulance service units in local police and fire departments and can provide pre-hospital care for trauma victims, many of whom are crash victims.

emergency purchase

An emergency purchase is a purchase of goods or services so badly needed that an agency will suffer financial or operational damage unless they are secured immediately. [TGC §2155.137, 1 TAC §113.11 (a) (2)]
emergency standby time

Emergency standby time is standby time that is not scheduled but which arises out of an emergency, broadly defined as an unanticipated or unusual event requiring urgent or immediate action. When it is possible to do so, employees will be given advance notice that they will be placed on standby status.

Human Resources Manual

eminent domain

ED

1. Eminent domain is the power of the federal or state government to take private property for a public purpose, even if the property owner objects. See also condemnation.

Right of Way Manual

2. The power to take private property for public use without the owner’s consent upon the payment of adequate (just) compensation. Within the Department, the term eminent domain (proceeding) includes the technical legal processes, proceedings, and all steps that must be taken and followed as required by Chapter 21 of the Texas Property Code in order to properly exercise the eminent domain authority granted to the Department under the law.

Employee Assistance Program

EAP

The employee assistance program is a program designed to assist employees and their immediate family members in dealing with emotional and personal problems — including alcohol, inhalant and drug abuse — that potentially affect an employee's work performance and safety.

Human Resources Manual

employee computing

Employee computing is any information service, typically application development and report generation, that the end user provides for himself or for a very small number of users. While the Information System staffs provide the enabling infrastructure, these employee computing services are not managed by the IS staffs.

Information Systems Business Project Retooling

employee PIN number

The employee PIN number is a 14-digit number that is unique to each employee. The number starts with a two, then the employee’s social security number, a check digit and three zeros.

Employee Status Form 102

The form used to document current employee status with regard to position and compensation level.

Human Resources Manual
emulsified asphalt
   Emul Asph or EA

   Emulsified asphalt is asphalt cement mixed with water to liquefy it. Since water and asphalt do not
   normally mix, an emulsifying agent is issued. When the water evaporates, the emulsion is said to
   "break," and the asphalt hardens. Emulsions are either anionic (electronegatively charged) or cat-
   ionic (electropositively charged), depending upon the emulsifying agent used.

encoding
   Encoding is transferring data from one character structure to another, for example from handwriting
   on paper to computer input.

encroachment (right of way)
   Fixed private property (e.g., building, fence, wall, sign or other real property improvement or fixture)
   located in the public right of way or intruding into or invading upon the public right of way from
   the adjoining private property.

encryption
   Encryption is a process for enciphering or encoding data to prevent illicit entry into a system.

   Information Security Manual

encumbrances
   Encumbrances are the obligations in the form of purchase orders or contracts for which a part of an
   appropriation is reserved. These cease to be encumbrances when they become expenditures or
   when they are canceled. Based on current procedures, purchase requisition is not an encumbrance.

endangered species
   An endangered species is any species that is in danger of extinction throughout all or a significant
   portion of its range.

   Environmental Manual

Endangered Species Act of 1973
   The Endangered Species Act of 1973 was passed in order to check the precipitous decline of the
   plant and animal species in the United States. All federal agencies are charged with utilizing their
   authorities by carrying out programs for the conservation of threatened and endangered species and
   must insure that any action authorized, funded or carried out by them (or authorized agents) does
   not jeopardize the continued existence of these species or result in adverse modification of such
   species habitat.

data management
   Data management includes the collection, organization, and analysis of data to ensure effective use
   and accessibility.

end-of-month reporting
   End-of-month reports are reports that reflect data accumulated since the last end-of-month update
   occurred.
end-of-year reporting

End-of-year reports are reports that reflect data accumulated since the last end-of-year update occurred. Generally the end-of-year is August 31.

end section

An end section is a flared metal attachment on the inlet and outlet of a culvert to prevent erosion of the roadbed, improve hydraulic efficiency, and improve appearance.

ergized

Energized means being connected to an energy source or containing residual or stored energy. *Occupational Safety Manual*

energy dissipater

An energy dissipater is a device used to reduce the energy of flowing water.

energy gradient

Energy gradient is a slope of a line joining the elevations of the energy head of a stream.

energy head

The energy head is the elevation of the hydraulic gradient at any section, plus the velocity head.

energy isolating device

1. An energy isolating device is a mechanical device that physically prevents the transmission or release of energy. Push buttons, selector switches and other control circuit type devices are not energy isolating devices.
2. A manually-operated electrical circuit breaker, a disconnect switch, a manually-operated switch by which the conductors of a circuit can be disconnected from all underground supply conductors, and, in addition, no pole can be operated independently, a line valve, a block, and any similar device used to block or isolate energy. *Occupational Safety Manual*

Energy Policy Act

EPACT

The Energy Policy Act pertains to cities with a population of 250,000 or more.

energy source

An energy source is any source of electrical, mechanical, hydraulic, pneumatic, chemical or thermal energy.
engineer

Engr

The engineer is the qualified, Texas-licensed, professional engineer having responsibility for ensuring the accuracy of the information contained in the bridge record. A pre-qualified consulting firm engaged by TxDOT to perform routine bridge inspections is also considered to be covered by the term engineer.

Bridge Inspection Manual

Engineering/CADD/GIS Architecture

The Engineering/CADD/GIS Architecture provides the framework, principles, guidelines, minimum standards and specifications, and policies/procedures to direct the process of acquiring, constructing, and enhancing TxDOT's engineering applications.

Information Systems Business Project Retooling

engineering controls

Engineering controls are controls that isolate or remove the bloodborne pathogens hazard from the workplace. Sharps disposal containers, self-sheathing needles.

Occupational Safety Manual

engineering programs

Engineering programs are computer software programs that have been developed to aid engineers performing calculations and problem solving needed for plan development.

engineering workstations

An engineering workstation is a mainframe and/or stand-alone computer system which utilizes a sophisticated network communication and multi-tasking operating system with high-resolution graphic monitor(s) for performing design and engineering functions.

engulfment

Engulfment is the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction or crushing.

Occupational Safety Manual

enhancements, general

The enhancements, as a result of the highway project, which accrue to the community at large, to the area adjacent to the improvement, or to other property similarly situated as that taken but which property is not taken.
enhancements, special

Those enhancements, as a result of the highway project, which accrue directly and solely to the advantage of the property remaining after a partial taking.

enterprise computing

Any information service that spans multiple business areas and multiple districts/divisions/offices.

enterprise data

Enterprise data is any factual information used as a basis for reasoning, decision-making, discussion, or calculation that is shared across organizational boundaries and/or is important to the business organization, regardless of whether the data is automated or not, where it is located, how it is physically stored, or who has access.

entrained air

Entrained air is air bubbles in concrete.

entry

Entry is the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant’s body breaks the plane of an opening into the space.

entry access log

An entry access log is any device or means that indicates date and time of entry or access to an information resource, the duration of such access, and the date and time of departure from such access.

entry permit

An entry permit is the written or printed document that is provided by the employer to allow and control entry into a permit space.

entry supervisor

An entry supervisor is the person (such as the employer, foreman or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required.
Occupational Safety Manual

environment

A combination of hardware, software and supporting services that cooperatively function to perform work.

Environmental Affairs Division

ENV

The Environmental Affairs Division is responsible for central coordination and oversight of all TxDOT environmental activities. It is also a liaison with state and federal resource agencies, the public, and other groups.

Inside TxDOT

environmental assessment

EA

An environmental assessment is a document performed for a project in which the significance of impacts on the environment is not clearly exhibited. The EA may lead to either a Finding of No Significant Impact (FONSI) or an Environmental Impact Statement (EIS).

environmental commitment

Environmental commitment is any agreed-upon commitments to avoid, minimize or compensate for a social, economic or environmental impact. See also mitigation.

Environmental Manual

environmental document

An environmental document is a decision-making document which incorporates environmental studies, coordination and consultation efforts and engineering elements. This includes categorical exclusions, environmental assessments and environmental impact statements.

Environmental Manual

environmental impact statement

EIS

An environmental impact statement is a document which is prepared when significant project impacts are evident or identified after analysis in the Environmental Assessment (EA). The EIS requires both a draft and final statement and extensive public involvement.

environmental justice

EJ

Environmental justice is a process that focuses on the development, implementation, and enforcement of environmental laws, regulations and policies, as defined by the Environmental Protection
Agency, by requiring the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income.

Public Transportation Collection

**Environmental Protection Agency**

EPA

The Environmental Protection Agency is a federal agency responsible for developing and administering NPDES regulations. The EPA is the federal agency primarily responsible for environmental protection, including air quality.

*Transportation Planning and Programming Collection*

**environmental site assessment**

ESA

An environmental site assessment is a study to determine the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a part release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. Three ESA phases are described below:

A Transaction Screen Process (ASTM E-1528) – consists of asking questions of owners and occupants of the property, observing site conditions at the property, and conducting limited research regarding certain government records and certain standard historical sources.

A Phase I Environmental Site Assessment (ASTM E-1527) – is closely related to the transaction screening process, but has to be performed by an environmental professional and includes extensive historic and current records review.

A Phase II Environmental Site Assessment – includes intrusive surveys into the ground in a contaminated area to determine the extent of contamination, type, and concentration of material, and to estimate the expected underground movement of the material. The Level II ESA results are used to develop a conceptual remediation plan and associated costs.

**epoxy coated reinforcing steel**

Epoxy coated reinforcing steel is steel (bar, fabric, wire) coated with a fusion bonded epoxy powder.

*Manual of Testing Procedure*

**Equal Employment Opportunity**

EEO

Equal employment opportunity is a policy whereby all employees, applicants for employment and recipients of benefits and services are treated equally without regard to race, color, religion, sex, national origin, disability or age.

*Human Resources Manual*
equalizer
An equalizer is a culvert placed where there is no channel but where it is desirable to have standing water at equal elevations on both sides of a fill.

equation
An equation is those points on the highway centerline in which it is necessary to make one station number equal to another station number.

equipment
1. For accident reporting and liability insurance purposes, equipment means any vehicle, road building/maintenance equipment, boat, air compressor, etc., powered by an internal combustion engine. Only these items are covered by TxDOT’s liability insurance.
   Occupational Safety Manual
2. Equipment means tangible, nonexpendable personal property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit.
   Public Transportation Collection

Equipment Operations System
EOS
Equipment Operations System is the automated system for electronically recording, maintaining and reporting information about the capitalized major equipment fleet.

equivalent single axle loads
ESAL
Equivalent Single Axle Load (18KIP) is a measure developed for pavement design. This measure is an estimate of the number of equivalent 18,000 pound single axle loads expected to traverse a section of pavement during the pavement design life.
Traffic Data and Analysis Manual

erosion
1. Erosion is the process of wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.
2. Erosion is the detachment and movement of soil or rock fragments by water, wind, ice, or gravity. (i.e. accelerated, geological, gully, natural, rill, sheet, splash, impact, etc.)

erosion control
Erosion control includes protection of soil from dislocation by water, wind, or other agents.

errors and omissions
Errors and omissions means a contract clause that requires the performing entity to correct any work or service it performs that does not meet specifications even if the department previously accepted and paid for the service or work it provided.

*Contract Management Manual*

**essential duties**

Essential duties are the job duties that are fundamental to the position and must be performed.

*Human Resources Manual*

**estimate**

An estimate is the approximate quantity and cost of materials, construction items, and labor required for a specific construction project.

**estimated delivery**

Estimated delivery is the date when goods are estimated to be received.

*Finance Division*

**estimate number**

An estimate number is a sequential number assigned to a construction estimate to ensure all preceding estimates for a given construction project have been processed.

**estimate and quantity sheets**

E&Q sheets

Estimate and Quantity sheets provide a list of all the pay items and estimated quantities in the contract. The E & Q sheets are plotted plan tracing sheets that must be in the construction plans. They also provides a space for final quantities once a project has been completed.

*PS and E Preparation Manual*

**ethernet**

Ethernet is a local area network (LAN) used for connecting equipment within the same building or campus.

*Source: Information Security Manual*

**evaluation matrix**

An evaluation matrix is the form used to determine total points accumulated by a bidder based on qualifications.

*Right of Way Manual*

**eviction proceedings**
Eviction proceedings are legal proceedings – pursuant to Property Code, §24.005 – providing for the eviction of persons occupying property acquired by the State but who, after being notified, refuse to vacate the property.

Right of Way Collection

evacuation

Excavation is the act of cutting, digging, or scooping to remove material.

excepted parcels

Excepted parcels are parcels that are excluded from an agreement between a local public agency (LPA) and TxDOT. TxDOT appraises and acquires the parcels on its own without involvement by, or reimbursement to, the LPA.

Right of Way Collection

exception

Exception is the part of the highway or road that does not require work to be done on a given project.

exception code

An exception code is a two-digit code managers use to specify requirements such as excess, hazardous item, etc.

Materials And Supplies Management System Manual

execution date

Execution date is the date on which a party signs a contract.

Contract Management Manual

Executive Director

EXD

The Executive Director of the Texas Department of Transportation or his designee is the top official of the agency.

executor

An executor is a person appointed by the probate court to carry out the terms of a will; "Executrix" if such person is a woman.

Right of Way Manual

exempt damages

Exempt damages are damages to the remainder of a partially acquired parcel exclusive of fencing. Also called special damages.

Right of Way Collection
**exempt employee**

An exempt employee is an employee who is exempt from the overtime provisions of the FLSA as an executive, administrative, or professional employee.  
*Human Resources Manual*

**existing retained right**

Existing retained right is the right of a property owner, retained through agreement with the State, to cross a existing highway or roadway.  
*Right of Way Collection*

**exit interview**

An exit interview is the final interview that the supervisor and others have with the employee when they terminate employment with the department.  
*Human Resources Manual*

**expansion joint**

An expansion joint provides for expansion of a rigid slab without damage to itself, adjacent slabs, or structures.

**expenditure**

An expenditure is the incurrence of a liability for goods or services received. Encumbrances are not expenditures. Expenditures differ from costs in that costs are consumption of resources which may have previously been recognized as expenditures. Expenditures are recognized based on receipt of the goods or services.

**expenditure contract**

An expenditure contract is a contract that at any time in the contract period generates a TxDOT obligation for the expenditure of funds to the contractor as consideration for the performance/service by the contractor to fulfill the financial terms of the contract.  
*Contract Management Manual*

**expenditure transfer voucher**

An expenditure transfer voucher is an accounting document used to make journal adjustment between funds, agencies and appropriation accounts, or to reflect the change of an expenditure or revenue object in the Uniform Statewide Accounting System (SAS).  
*Finance Division*

**expert witness**

An expert witness is one who testifies to value having qualified as a full-fledged appraiser.  
*Real Estate Acquisition Guide for Local Public Agencies*
expired password

An expired password is a password whose interval (time a password is valid), threshold (number of wrong password entries), or history (number of times before the same password can be reused) has been violated. An expired password must be changed before sign-on can be completed.

Information Security Manual

exposure incident

An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee’s duties.

Occupational Safety Manual

expressway

An expressway is a divided arterial highway for through traffic. An expressway has full or partial control of access and generally has grade separations at major intersections.

external binary coded decimal interchange code

EBCDIC

An extended binary coded decimal interchange code is an 8-bit coding scheme using an 8-bit byte that gives 256 possible coding combinations for character representation in a computer.

Extended Text Compositor

ETC

The Extended Text Compositor is an interactive word processing system that executes under Remote Operational System Conversational Online Environment (ROSCOE) or Customer Information Control System (CICS) and is available from every Cathode Ray Tube in the Department's network. ETC operates on the central mainframe as well as the Regional.

external stations

External stations are roadway points at which vehicles can enter and leave the urban area. Thus, external stations are located where a transportation facility crosses the study area boundary.

Traffic Data and Analysis Manual

external-local trip

An external-local trip is a trip originating at a point outside the urban area boundary and destined to a point inside the urban area.

Traffic Data and Analysis Manual

external-through trip

An external-through trip is a trip beginning and ending at a point outside the urban area, but which travels through the urban area.
Extranet

Extranet is a private network that uses the Internet protocol and the public telecommunication system to securely share part of a business’s information or operations with suppliers, vendors, partners, customers or other businesses. An extranet requires security and privacy and therefore requires firewall server management, the issuance and use of digital certificates or similar means of user authentication, encryption of messages, and the use of virtual private networks (VPN) that tunnel through the public network.

Information Security Manual
face of rail
A face of rail is a vertical plane at or near railing which defines the clear roadway width of a bridge or roadway.
_Bridge Design Manual_

facilitated discussion
Facilitated discussion is an informal facilitated conversation between employees, or an employee and the appropriate supervisor or manager, to discuss workplace problems involving a trained mediator/facilitator as a neutral third party assigned by the Human Resources Division to guide the conversation toward a reasonable conclusion.
_Human Resources Manual_

facility
1. Facility is all contiguous land structures, other appurtenances, and improvements on land used for storage or processing of scrap tires.
_Equipment Manual_
2. A facility is the multiple virtual storage subsystems such as time sharing option (TSO), ROS-COE (Remote Operational System Conversational Online Environment), and batch.

failed joints and cracks
Failed joints and cracks are a jointed concrete pavement (JCP) distress type which includes spalled joints or transverse cracks and asphalt patches of spalled joints or transverse cracks. Failed joints and cracks range from 0 to 999.
_Pavement Management Information System (PMIS) Rater’s Manual_

failure stress
Failure stress is the stress in the specimen corresponding to the maximum deviator stress (principal stress difference) attained or by the deviator stress (principal stress difference) at 15% axial strain, whichever is obtained first during the performance of a test.
_Manual of Testing Procedures_

failures
1. Failures are an asphaltic concrete pavement (ACP) distress type in which a localized section of pavement surface has been severely eroded, badly cracked or depressed. This term also refers to a jointed concrete pavement (JCP) distress type in which a localized area does not appear to be transferring traffic loads across the reinforcing bars. Failures range from 0 to 99 for ACP and from 0 to 999 for JCP.
_Pavement Management Information System (PMIS) Rater's Manual_
2. Failures/potholes are an asphaltic pavement distress which is subject to rapid enlargement and may result in considerable pavement loss, objectionable ride, and may affect vehicle control.
Failures and potholes should be repaired as soon as possible after they are observed or reported. In inclement weather temporary repairs should be made and permanent repairs scheduled. Maintenance Collection

**fail-over**

Fail-over is the term that describes when some element within a technological architecture (usually a computer system) has the ability to safely and reliably compensate for its own operational failure by switching its processing load over to some other similar type of element within the architecture that has not been affected by the failure and that is able to assume the operations of the failed element.

**Fair Labor Standards Act**

**FLSA**

The Fair Labor Standards Act is a federal law that defines overtime and establishes standards for compensation of overtime.

*Human Resources Manual*

**Fair Labor Standards Act overtime**

**FLSA overtime**

Fair Labor Standards Act overtime is time worked over 40 hours in one work week by non-exempt employees. FLSA overtime is compensated at the rate of 1.5 hours of pay or FLSA compensatory time for each hour worked over 40 hours in the work week.

*Human Resources Manual*

**Fair Labor Standards Act overtime pay rate**

The FLSA overtime pay rate is a rate of pay one and one-half times regular pay.

*Human Resources Manual*

**fair market rent**

The fair market rent is the amount that a residential dwelling would earn if it were rented to another person under normal circumstances.

*Right of Way Manual*

**falling weight deflectometer**

**FWD**

A falling weight deflectometer is a non-destructive testing device which drops known weights on the pavement surface and uses electronic sensors to measure the resulting deflection at seven equally-spaced locations. FWD data is used in the Pavement Management Information System (PMIS) to measure the overall structural condition of pavement sections.

*Pavement Management Information System (PMIS) Users Manual*
family
A family is two or more individuals living together in a single family dwelling unit who:
- related by blood, adoption, marriage, or legal guardianship who live together as a family unit, plus all other individuals regardless of blood or legal ties who live with and are considered a part of the family unit; or
- not related by blood or legal ties but live together by mutual consent.
Right of Way Manual

family of curves
The family of curves is a series of compaction curves depicting the varying moisture and dry density relationships of similar soils used on the same project.
Manual of Testing Procedures

Farmland Protection Policy Act Of 1981
FPPA
The Farmland Protection Policy Act of 1981 provides protection to farmland as defined in the law. Its purpose is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure the federal programs are administered in a manner that to the extent practicable, will be compatible with state, local government and private programs and policies to protect farmlands.

farm operation
Farm operation means any activity conducted solely or primarily for the production of one or more agricultural products or commodities, including timber, for sale or home use, and customarily producing such products or commodities in sufficient quantities to be capable of contributing materially to the operator's support.
Right of Way Manual

farm or ranch to market road business route
See business farm to market road

farm to market road
FM
A farm to market road is a roadway so designated by the Texas Transportation Commission. A farm to market road spur is also a roadway so designated by the Texas Transportation Commission, which is designated within the description of the farm to market road.

fatality rate
The fatality rate is the number of deaths per vehicle mile traveled.
fatigue

Fatigue is the tendency of materials to break under repeated stress.

feasibility study

FS

A study about a project's feasibility which is summarized in a document. The study addresses issues including the project's benefits, costs, effectiveness, alternatives considered, analysis of alternative selection, environmental effects, public opinions, and other factors.

federal aid funds

Federal aid funds are appropriated by the federal government to assist the department in constructing projects.

federal-aid highways

Federal-aid highways refers to an umbrella term generally referring to all activities funded through the FHWA and administered by the states' highway or transportation agencies or, in some cases, by local transportation agencies.

Transportation Planning and Programming Collection

Federal-Aid Primary System

See Primary Highway System. Right of Way Manual

Federal Aviation Administration

FAA

The Federal Aviation Administration is a federal agency assigned the responsibility of ensuring that the facilities, equipment, and human resources needed for a safe, efficient, and affordable airport and airway network are available to serve the needs of civil aviation.

federal discretionary program

The federal discretionary program is special set-aside funds to be included as line item discretionary projects designated by the United States Congress.

Transportation Planning and Programming Collection

Federal Emergency Management Agency

FEMA

1. Federal Emergency Management Agency: (FEMA), the agency responsible for the National Flood Insurance Program (NFIP) and issuing the Flood Insurance Rate Maps (FIRM) and other
activities related to disaster prevention and recovery. Local jurisdictions participating in the NFIP coordinate with FEMA when a project encroaches on the base floodway or floodplain.

2. The Federal Emergency Management Agency administers programs providing for emergency and permanent repairs to facilities on the state highway system, but off the federal-aid system. (Roads classified Rural Minor Collector or below.) In addition to the actual repairs, FEMA funds may also be used for engineering, planning, supervision, design and inspection.

Maintenance Collection

**Federal funding source**

A federal funding source is the federal agency or federal department which provides funds to the Texas Department of Transportation.

*Contract Management Manual*

**Federal Highway Administration**

FHWA

The Federal Highway Administration administers Federal-Aid System Emergency Relief (ER) Funds for emergency and permanent repairs to facilities on the federal-aid system. This includes city and county roads functionally classified Rural Major Collector or above. Temporary operations, emergency repairs, and preliminary engineering including consultant work may proceed without prior FHWA authorization.

Maintenance Collection

**Federal Motor Carrier Safety Administration**

FMCSA

The Federal Motor Carrier Safety Administration is an agency within the U.S. Department of Transportation whose primary mission is to reduce crashes, injuries, and fatalities involving large trucks and buses. Among other duties, its responsibilities include commercial driver’s licenses, drug and alcohol regulations for motor carriers, and vehicle manufacturing specifications.

Public Transportation Collection

**Federal Project Authorization and Agreement**

FPAA

1. The Federal Project Authorization and Agreement is the official FHWA document that authorizes a project and obligates federal funds for the project. The authorized work may include preliminary engineering, ROW, construction or other activities. Federal reimbursement will not be made for any work accomplished prior to this authorization.

*ROW Utility Manual*

2. The Federal Project Authorization and Agreement is the documentation that authorizes federal funds on state oversight projects, and authorizes federal funds and advertisement for bids or performance of work on federal oversight projects, which allows the department to proceed with a reimbursable activity.
Federal Transit Administration
FTA
The Federal Transit Administration is the federal agency primarily responsible for public mass transportation. The FTA was formerly known as the Urban Mass Transportation Administration (UMTA). It operates under the authority of the Federal Transit Act. The FTA was established as a component of the US Department of Transportation.

federal Treasury list
T-list
The federal Treasury list lists companies authorized to bond contracts to its underwriting limitation. Letting Manual

fee owner
A fee owner is a person having absolute ownership of property to him/herself, his/her heirs and assigns forever. (Also referred to as Owner of Fee Title) Right of Way Manual

fee ownership
Fee ownership is the right or interest that an individual has in lands and chattels to the exclusion of all others. Although technically the term means a right of interest in things rather than the things themselves, common usage makes it applicable to things rather than to the right or interest.

fee schedule
Fee schedule is an attachment to the contract that sets forth the performing entity’s overhead rate, fixed-fee (profit), and direct costs (including wage rates per personnel and miscellaneous expenses) to be used in calculating the maximum amount payable for the contract or work authorization. Contract Management Manual

femme sole
A femme sole is literally, an unmarried female; a single woman or a woman judicially separated from her husband. Right of Way Manual

fetch
Fetch is an execute only command (in Top Secret); the program cannot be viewed.

fiber distributed data interface
FDDI
Fiber distributed data interface is a type of network communications medium that is based upon fiber optic technology and which uses light waves as the signal transport medium.
fiberglass reinforced plastic
   FRP

   Fiberglass reinforced plastic is used for roadside sign supports.

field

   A field is a specified area in a record for a particular type of data such as a name field or an automobile license plate number. A field is usually given a specific size by allocating a number of character positions.

field drive

   Field drive is a limited use driveway for the occasional/infrequent use by equipment used for the purpose of cultivating, planting, and harvesting or maintenance of agricultural land, or by equipment used for ancillary mineral production.
   Access Management Manual

field notes

   Field notes, as referred to in right of way work, are the property description included in an instrument of conveyance. They are written to enable a surveyor to locate on the ground the land being conveyed.
   Right of Way Collection

fifth-wheel trailer

   A fifth-wheel trailer is a semi-trailer that requires a truck tractor equipped with a lower fifth-wheel to accept and hold the kingpin of the semi-trailer.
   Equipment Manual

file server

   A file server is a computer containing files that may be shared by everyone connected to a LAN. A file server usually has software rules for allowing LAN users to get into and out of the files and databases it stores.

file transfer protocol

   FTP

   File transfer protocol is a client/server protocol for exchanging files with a host computer.
   Information Security Manual

file transfer protocol pull

   FTP pull
A file transfer protocol pull is a process by which a file(s) is transferred to an entity external to TxDOT. A TxDOT employee will establish a connection to the outside entity and push the desired file to it, after which the connection and FTP service are terminated.

*Information Security Manual*

**file transfer protocol push**

File transfer protocol push is the process by which a file(s) is transferred to an entity external to TxDOT. An FTP server is set up providing the FTP service. This server waits for outside entities to connect to it and prompts the user with a list of available files, which they can select and download.

*Information Security Manual*

**FTP Site**

On the Internet, a file transfer protocol site is the computer system that maintains files for downloading (see Anonymous FTP Site and FTP)

*Information Security Manual*

**fill**

Fill is the embankment material placed above natural ground line.

**filter fabric**

1. A filter fabric is a special fabric, usually used to surround perforated pipe underdrains and filter material which allows water flow without clogging or blinding by soil particles.
2. A filter fabric is a special fabric usually used in drainage applications, such as to surround perforated pipe and filter material, which allows water flow without clogging or binding by soil particles. The TxDOT specification for filter fabric, Material Specification “6320, Certification of Temporary Sediment Control Fence Fabric and Filter Fabric,” describes a non-woven geotextile for use in the above applications.

*Material Specifications*

**filter material**

Filter material is a porous type backfill, usually used surrounding perforated pipe underdrains, which intercepts water flow and directs it into the pipe.

**FIMS journal voucher**

A Financial Information Management System (FIMS) journal voucher is the TxDOT accounting transaction to distribute or redistribute costs and to make adjustments.

*Finance Division*

**final applicant**

A final applicant is a person who is given a conditional offer of initial employment, or a department employee who is conditionally approved for a transfer or promotion.
Human Resources Manual

final audit

This is an audit that is performed after all costs have been incurred, all products or services have been received and approved, and the contract is ready for close out.

Contract Management Manual

final cost proposal

Final cost proposal is an attachment to the contract or work authorization that shows the calculation of all direct and indirect costs in determining the maximum amount payable for the contract or work authorization.

Contract Management Manual

Final Environmental Impact Statement

FEIS

An environmental document that is prepared following the Draft Environmental Impact Statement (DEIS), which includes the results of the public involvement process and agency input on the DEIS. This document summarizes the substantive comments on social, economic, environmental, and engineering issues made as a result of the public involvement process, and documents compliance with all requirements.

final plans

Final plans are the as-built construction plans that reflect the project as actually constructed.

final stabilization

Final stabilization is when all soil disturbing activities at the site have been completed, and uniform vegetative cover with a density of 70% of the pre-project condition for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent measures such as use of rip rap, gabions, soil retention blanket or other geotextiles, have been employed.

Finance Division

FIN

The Finance Division (formerly the Budget and Finance Division; BUD) manages TxDOT’s accounting, contracts, financial planning, payments and oversees strategic planning activities.

Inside TxDOT

Financial Allocation Monitoring System

FAMS

The Financial Allocation Monitoring System is an accounting system for forecasting programmed allocations by highway safety program areas.
Financial Information Management System
FIMS

The Financial Information Management System, managed by the Finance Division, is the TxDOT accounting system. FIMS is made up of approximately 35 segments and 700 programs.
Finance Division

finding of no significant impact
FONSI

A finding of no significant impact is a decision document by the Federal Highway Administration (FHWA) for federally-funded projects (as defined by 23 CFR 771.121), or by the Environmental Affairs Division (ENV) for projects with state-only funding (as defined by 43 TAC 2.11(f)), that indicates that no significant social, economic or environmental project impacts have been identified. The FONSI follows approval of the environmental assessment and appropriate public involvement.

fine aggregate

Fine aggregate is the portion of the aggregate passing the 2.00 mm (No. 10) sieve for Bituminous Concrete or passing the 4.75 mm (No. 4) sieve for Portland Cement Concrete. NOTE: This definition has been approved by the Specification Committee.
Manual of Testing Procedures

fines

Fines is a collective term referring to fine aggregate and mineral filler in an asphalt mixture.

firewall

A firewall is a hardware or software boundary that prevents unauthorized users from accessing restricted files on a network.
Information Security Manual

firmware

Firmware is an application recorded in permanent or semi-permanent computer memory.

fiscal year
FY

A fiscal year is an accounting or expenditure period of 12 months. For the federal government, this would be October 1 through September 30. Texas’ state fiscal year is from September 1 to August 31.
Voucher Manual

fixed fee
Fixed fee is the performing entity’s profit that is typically negotiated between 10%-15% of the total estimated labor and overhead in the final cost proposal; the fixed-fee percentage may vary from each project depending on the complexity of the project and the degree of risk assumed by the performing entity.

*Contract Management Manual*

**fixed guideway**

A fixed guideway is any public transportation facility which utilizes and occupies a designated right-of-way or rails including (but not limited to) rapid rail, light rail, commuter rail, busways, automated guideway transit, and people movers.

*Transportation Planning and Programming Collection*

**fixed payment**

A fixed payment is a relocation payment derived:

- from a fixed moving cost schedule based on the number of rooms in a dwelling; or
- from the average of 2 years annual net earnings, in lieu of moving costs for businesses and farms; or
- from the average of 2 years annual gross revenues less administrative expenses, in lieu of moving costs for nonprofit organizations.

*Right of Way Manual*

**fixed route**

A fixed route is a transportation service provided on a repetitive, fixed schedule along a specific route with vehicles stopping to pick up and discharge passengers at designated locations.

*Public Transportation Collection*

**fixed sum advance funding agreement**

An advance funding agreement is used when some portion of a project’s funding is derived from an outside source (third party) other than FHWA. The agreement is entered into between TxDOT and the third party. For a fixed sum advance funding agreement, a fixed funding amount is based upon the engineer’s estimate and no adjustment is made unless there are changed site conditions, the work requested by the third party is ineligible for federal participation, or unless an adjustment is agreed to by the parties. This is referred to as the “alternate” funding arrangement in 43 TAC §15.52 and requires the approval of the executive director or his designee.

**flame**

A flame is a very impolite email message or Usenet news group posting that contains a highly charged, personal attack against another person or group.

*Information Technology and Services Manual*

**flashing beacon**
A flashing beacon is a section of a standard signal head, or similar type device, having yellow or red lens in each face, which is illuminated by rapid intermittent flashes.

**Fleet operator**

Fleet operator is an entity that owns or operates more than 15 vehicles and generates 30 or more used or scrap tires per calendar year.

*Equipment Manual*

**Flexible Advanced Computer Traffic Signal System**

**FACTS**

A Flexible Advanced Computer Traffic Signal System is a traffic responsive battery of computer control programs operated in real traffic by traffic detection devices linked in to a responsive mini-/microcomputer.

**Flexible base**

A flexible base is made from natural or mechanically processed materials that have been compacted to a specified density. A foundation course of reasonable well-graded aggregate material and soil binder that is used as a roadway base. It may or may not be treated with hydrated lime, Portland cement or asphalt.

**Flexible funding**

Flexible funding are funds which can be transferred or "flexed" from one federal agency to another.

*Public Transportation Collection*

**Flexible pavement**

A pavement structure that maintains intimate contact with and distributes loads to the subgrade and depends on aggregate interlock, particle friction, and cohesion for stability.

*Pavement Management Information System Users Manual*

**Floodlight**

A floodlight is an aimable luminaire generally employed for spot or wide-angle lighting.

*Highway Illumination Manual*

**Floodplain**

A floodplain is the lowland and relatively flat areas adjoining inland and coastal water including flood prone areas of offshore island, including at a minimum, the area subject to a one percent or greater chance of flooding in any given year.

**Flow chart**

A flow chart is a graphical representation of a sequence of operations using symbols.
flow line
A flow line is the profile of the low point on the inside of a drainage structure or channel.

flow of control
Flow of control is where the reply is essential to the flow of operation for the automated process.

flume
A flume is an open channel or conduit of metal, concrete or wood, on a prepared grade, trestle, or bridge.

flushing
Flushing is an Asphalitic Concrete Pavement (ACP) distress type in which the upward movement of asphalt in a pavement results in a film of asphalt forming on the pavement surface. It appears in patches of dark smooth surface, usually in the wheel tracks. Bleeding usually occurs in hot weather. Flushing ranges from 0 (none) to 3 (most).

fly ash
Fly ash is the finely divided residue from the combustion of ground or powdered coal or lignite that is transported from the firebox through the boiler by flue gases. NOTE: This definition has been approved by the Specification Committee.

fog seal
Fog seal is bituminous material sprayed directly on the surface of the existing pavement. Application of this sealing material directly in the cracks of the pavement surface prevents moisture damage.

footcandle
(FC)
English unit of measurement for the illumination (E) on a surface. (See lux for metric.) One footcandle is the illumination on a surface that is one foot from and perpendicular to a uniform point source of one candela. Combining the inverse square law and the cosine law, the formula for footcandles (FC) is:

\[ FC = \frac{CD \times \cos A}{D^2} \]

where \( CD \) is the candlepower,
\( A \)
is the angle of incidence of the light beam, and D is the distance of the surface from the light source.

*Highway Illumination Manual*

**footing**

A footing is an enlargement at the lower end of a foundation or column to distribute the load.

*Geotechnical Manual*

**force account labor**

Labor performed by non-contracted forces such as city, county, or state employees.

**force account work**

Force account work is prescribed work paid for on the basis of the actual costs and appropriate additions.

**force majeure**

Force majeure is a superior or irresistible force; a cause that is outside the control of the parties and could not be avoided by exercise of due care.

*Contract Management Manual*

**forced treatment**

Forced treatment is a Pavement Management Information System (PMIS) term which refers to a user-selected treatment applied to a Management Section, regardless of the type of treatment (if any) recommended by the Needs Estimate report.

*Pavement Management Information System (PMIS) Users Manual*

**ford**

A ford is a shallow place where a stream may be crossed by traffic.

**forecast year**

The forecast year is the year 20 to 25 years beyond the base year for which travel demand modeling is performed.

*Traffic Data and Analysis Manual*

**Form W-4**

Form W-4 is a form filled out by employees indicating marital status and number of exemptions claimed for calculating federal income tax.

**FORTRAN**

FORTRAN is probably the very first high-level programming language originated during the 1950's and is still used today for scientific applications.
Technology Services Division

**Fort Worth District**

FTW

The Fort Worth District is a TxDOT district office including the following counties: Erath, Hood, Jack, Johnson, Palo Pinto, Parker, Somervell, Tarrant and Wise. Area offices are located in Erath, North and South Tarrant, Palo Pinto, Parker and Wise. The district also has a Vehicle Titles and Registration Regional Office.

*Inside TxDOT*

**foundation**

The foundation is that portion of a structure (usually below the surface of the ground) which distributes the pressure to the soil or to artificial supports. Footing has similar meaning.

*Geotechnical Manual*

**frame relay**

Frame relay is a wide-area communications service that can be used to inter-network most locations found within major world-wide urban areas.

**frangible**

Readily or easily broken.

*Highway Illumination Manual*

**free outlet (as pertaining to critical flow)**

A free outlet exists when the backwater does not diminish the discharge of a conduit.

**freestanding workplace**

A freestanding workplace is a business establishment that is physically separated from other establishments in that it does not use driveways associated with other businesses and its driveways are not used as a street or shortcut to a street.

*Traffic Data and Analysis Manual*

**free (surface) moisture**

Free surface moisture is the moisture in excess of that required for saturated surface dry (SSD) condition in aggregate.

**freeboard**

A freeboard is the vertical distance between the level of the water surface, usually corresponding to design flow and a point of interest such as a low chord of a bridge beam or specific location on the roadway grade.
freeway
1. A freeway is a divided highway with frontage roads or full control of access. A proposed freeway is designated as a freeway when the construction contract has been awarded, regardless of whether the main-traveled way is open to the public. Right of Way Manual
2. A freeway is a divided arterial highway for through traffic with full control of access and with grade separations at intersections.

frequency, recurrence interval
Flood frequency, also referred to as exceedance interval, is the recurrence interval between actual occurrences of a hydrological event of a given or greater magnitude; the percent chance of occurrence, or probability, is the reciprocal of flood frequency (e.g. a 2 percent chance flood is the reciprocal statement of a 50-year flood).

frequently asked questions
FAQ
Frequently asked questions is a list of questions and answers that commonly are asked in a forum. The FAQ for a forum or news group should be read before posting a question to the group. Information Technology and Services Manual

friable
Friable means that it is easily crumbled or pulverized.

frontage road
A frontage road is a local street or road along an arterial highway allowing control of access and service to adjacent areas and property. A frontage road may also be referred to as a service road. Access Management Manual

Front End
A front end performs edits on transactions that are too time-consuming for online use. Materials And Supplies Management System Manual

front slope
The front slope is the ratio defining slope of roadway between sub-grade crown and the ditch on either side of the roadway.

FTP pull
See file transfer protocol pull.

FTP push
See file transfer protocol push.
Full Funding Grant Agreement

FFGA

A Federal Transit Administration FFGA defines the project, including cost and schedule; commits to a maximum level of federal financial assistance (subject to Congressional appropriations); establishes the terms and conditions of federal financial participation; covers the period of time for completion of the project; and helps to manage the project in accordance with federal law. The FFGA assures the applicant of predictable federal financial support for the project (subject to Congressional appropriations) while placing a ceiling on the amount of that federal support.

Public Transportation Collection

full median opening

Full median opening is an opening, in a nontraversable median, that allows all turning movements from the highway and the adjacent connection, as well as crossing movements.

Access Management Manual

full ROW release

Full ROW release is a type of highway project release from ROW Division which allows all ROW acquisition, utility, relocation, and necessary property management work to be performed.

ROW Utility Manual

full time equivalent

FTE

Full time equivalent is the term used to measure work hours paid compared to the standard work hours in a time period (not the same as number of employees). One employee who gets paid for more than the standard work hours in a time period is measured as more than one FTE.

fully allocated cost

Fully allocated cost is the result of a financial planning technique that accounts for all costs of providing transit service, usually expressed as cost per mile or cost per hour.

Grants Management Manual

function codes

Function codes (Segments 70-79 in the Financial Information Management System) describe the activity engaged in when TxDOT resources are being consumed (expenditures), and in some instances the methods used. In addition, the group of accounts known as Functional Accounts (Segment 71) include specific activities in their titles (e.g., District Maintenance Management). Other terms also used for Segment 71 functional accounts are “funded accounts” and “detail accounts.” Segment 71 functional accounts should be used only when the expenditure is not related to Segment 70 or Segments 72-79 accounts.

functional accounts
Functional accounts are Segment 71 accounts in FIMS. Segment 71 is used only for those costs that are not reasonably identifiable to a project, roadway or clearing account.

Finance Division

**functional area (intersection)**

See intersection functional area.

**functional class**

Functional class is a description of a highway segment’s design purpose (interstate, freeway, expressway, arterial, collector or local) and location (urban or rural). Among other things, functional class defines a highway segment’s eligibility for Federal funding.

*Pavement Management Information System (PMIS) Users Manual*

**functional classification**

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service that they are intended to serve; a system that classifies roadways according to traffic flow from the movement function to the access function. At one extreme is the fully access controlled freeway that provides no local access function to the cul-de-sac that provides no through movement.

*Traffic Data and Analysis Manual*

**functional job description**

FJD

A functional job description is a description that defines the duties and responsibilities of a job. A functional job description specifies the appropriate state classification title for each job and includes differences between it and the job immediately above and below it on the classification ladder. A functional job description also includes the appropriate Fair Labor Standards Act (FLSA) exemption status and the minimum qualification requirements an applicant must meet to be considered for the job (see also “business job description,” which replaced this term in July, 1998).

**functionally equivalent dwelling**

A functionally equivalent dwelling is a replacement dwelling which is equivalent to the displacement dwelling with regard to the number of rooms, living area, location, and square footage.

*Right of Way Manual*

**Functional Manual System**

The Functional Manual System is a set of books about TxDOT policy and procedures based on functional areas and user needs rather than by divisions. Manuals are comprehensive within each functional category and written in easy-to-understand style. The focus of each manual is on the end user. Most manuals include procedures from several divisions.
functional profile

A functional profile is an accessor identification (ACID) and all associated authorizations for a specific job function, project, or application.

Functional Review of Austin Divisions

FRAD

A four-year study (1986-1990) of TxDOT divisions that identified weaknesses in policy development, communication and implementation.

functional title classification system

FC

The functional title classification system is an internal system for naming jobs used by the Texas Department of Transportation (see “business title classification system,” which replaced this term in July, 1998).

fund

Fund is a department accounting entity with a self-balancing set of accounts recording cash and other assets together with all related liabilities, encumbrances, reserves, and fund balances which are segregated for the purpose of carrying on specific activities or attaining certain objectives.

Finance Division

fund balance

A fund balance is the excess of the assets of a fund over its liabilities and reserves. In a case of funds subject to budgetary accounting prior to the end of a fiscal period, it represents the excess of the fund’s assets and estimated revenues for the period over its liabilities, reserves, and appropriations for the period. Fund equity is the excess of assets over liabilities.

Finance Division

fund indicator

FI

A fund indicator identifies participating/non-participating work categories used with posting generated by Customer Information System (CIS) interface for contractor payments

Materials And Supplies Management System Manual

fund number

A fund number is a four-digit code assigned by the Comptroller of Public Accounts to a specific fund

Fund 006 is the State Highway Fund.

fund source
The fund source is the source from which receivables will be created as a result of costs charged to a project.

Finance Division

**future average daily traffic**

**future ADT**

Future average daily traffic is average daily traffic calculated over a 20 year period. Current and projected ADTs must be given in order to calculate the future ADT.

*Safe Routes to School Program Guidelines*
gage

A gage is a standard measurement of the thickness of metal sheets or wire (and bearing a relation to the weight of the metal). Also a term for the distance measured between railroad rails; (standard is 4 ft. 8½ in.).

gap analysis

Gap analysis is an analysis and comparison of the desired information systems components (data, applications, technology) which are part of the current information systems inventory. The gap analysis defines desired information systems components that are new or replace/enhance existing components.

gap filler segment

A gap filler segment is a designated highway section adjoining two route segments which already exist in the TRM Highway Data File, creating a continuous route flow.

*Texas Reference Marker (TRM) System User's Manual*

gateway

A gateway is a network point that acts as an entrance to another network. Gateways can translate between different operating platforms to allow connectivity.

*Information Security Manual*

General ledger accounts

The general ledger accounts are accounting structures of the department, based on a series of accounts which comprise the General Ledger, and constitute the official financial record of the department.

General Notes

General Notes are documents that provide information to supplement specifications. These documents are found in the proposal and plans.

*Maintenance Contract Manual*

general purpose weights

General purpose weights are weights meeting the requirements in the “Maintenance Tolerances for General Purposes Weights’ table of Test method “Tex-900-K, Calibrating and Certifying Weights.” These weights are also known as ASTM Class 6 weights. They are used as counter weights in general purpose balances and to calibrate scales to commercial tolerances. Most chrome plated, brass and cast iron weights are general purpose weights.

*Manual of Testing Procedures*
General Services Commission
GSC

See Texas Building and Procurement Commission

General Services Division
GSD

The General Services Division purchases, distributes and maintains equipment, materials, services, and facilities for the department. It also monitors the recycling program.

Inside TxDOT

General Transportation Planning Fund
GTPF

The General Transportation Planning Fund is a subcategory of FHWA metropolitan transportation planning funds, or PL funds, and is used for special projects. Its source is from individual MPOs whose unobligated balance and new allocation exceed the maximum of two years of allocation. The excess unobligated balance is transferred to the GTPF.

Transportation Planning and Programming Collection

generator
1. A generator is an entity or person whose activities produce used oil filters. TxDOT is a generator because of the used oil filters removed from equipment.
   Equipment Manual
2. A generator is an entity, except a scrap tire energy recovery facility and a scrap tire recycling facility, that is a fleet operator, is an automotive dismantler, or is a whole new or used tire retailer, wholesaler, manufacturer, re-capper or re-treader. TxDOT is a generator because of the used and scrap tires removed from equipment and scrap or pieces of tires removed from highway right-of-way.
   Equipment Manual

geodetic survey

A geodetic survey is performed upon the curved surface of the earth, and this curvature must be considered in computations.

geogrid

A geogrid is a synthetic planar structure formed by a regular network of tensile members with appropriate apertures to allow interlocking with surrounding soil or aggregate for the purpose of reinforcement and/or segregation.

Manual of Testing Procedures

geometric design

A geometric design refers to the dimensions and elements of a highway or road.
GEOPAK

GEOPAK is a proprietary roadway design software designed and maintained by Beiswenger, Hock and Asc., Inc.

girder

A girder is a horizontal main structural member to a bridge that supports vertical loads. *Bridge Design Manual*

Global Positioning System

GPS

A GPS is based on a constellation of twenty-four (24) satellites orbiting the earth at a very high altitude. *GPS User’s Manual*

good faith effort

Good faith effort is a how a provider must demonstrate to the department’s satisfaction that sufficient effort on its part was made to obtain DBE/HUB participation. Good faith effort is identified in the DBE/HUB Special Provision to the contract. *Engineering Architectural and Surveying Services Manual*

good used tire

A good used tire is a used tire, not a recapped or retreated tire, that is suitable for continued use for its original purpose. *Equipment Manual*

GOTCHA!

GOTCHA! is an anonymous litter reporting program that allows observers to turn in people they see littering. *Litter Prevention Manual*

Government & Business Enterprise Division

GBE

The Government & Business Enterprise Division (GBE) serves as TxDOT's liaison to federal and state lawmakers, coordinating the department's work with the Texas Legislature, United States Congress and the Governor's office as well as the agency's participation in the state and federal legislative processes. In addition, GBE helps formulate transportation-related legislative policies, coordinates the department's internal legislative activities, oversees comments to the Federal and Texas Registers, and prepares department responses to external organizations as requested by the Commission and Administration.

Source: Government & Business Enterprise Division
Governor’s apportionment

The Governor’s apportionment is FTA Section 5307 funds that are apportioned to the governor of each state for distribution to urbanized areas with a population of less than 200,000.

Public Transportation Collection

Governor’s Community Achievement Awards

GCAA

The Governor’s Community Achievement Awards is an annual program to award $700,000 in landscape incentives to Texas communities in nine population categories. It is administered by Keep Texas Beautiful in conjunction with the Travel Division.

Governor’s Division of Emergency Management

DEM

The Governor’s Division of Emergency Management administers the statewide comprehensive emergency management plan and keeps the Governor informed of emergency situations which might call for the use of state resources. The Governor, by executive order, appointed the director of the Texas Department of Public Safety (DPS) as director of the DEM. The director is also designated Chairman of the State Emergency Management Council. The State Emergency Management Council has been established to include representatives of each agency of state government whose legal functions relate to important phases of emergency management. The Council will advise and assist in all matters relating to disaster preparedness, emergency response, and disaster recovery. The Maintenance Division serves on the Emergency Management Council to coordinate the department’s overall emergency operations.

Maintenance Collection

gradation

Gradation is the property of a soil which describes the distribution of size groups.

grade

1. A grade is the slope of a roadway, channel, or natural ground.
2. A grade is any surface prepared for the support of construction such as that for paving or laying a conduit.

grade controls

Grade controls are automatic controls on an asphalt pavement which compensate for grade variations. A grade control sensor transmits an electronic signal to either thicken or thin out the depth of the asphalt mat. The signals are based upon the grade control sensor resting on the pavement surface or on a stringline.

grade line
A grade line is the slope in the longitudinal direction of the roadbed, usually expressed in percent, which is the number of units of change in elevation per 100 units horizontal distance.

**grade separation**

A grade separations is the crossing of two highways or a highway and a railroad at different levels. *Bridge Project Development Manual*

**grading**

1. Grading means the preparation of a subgrade, in line and elevation, for application of pavement materials including base and surfacing materials.
2. Grading is any striping, cutting, filling, stockpiling, or combination thereof which modifies the land surface.

**granite**

Granite is an igneous rock consisting of quartz and alkali feldspars. NOTE: This definition has been approved by the Specification Committee. *Manual of Testing Procedures*

**grant**

1. A grant is an award of financial assistance to an eligible recipient. *Contract Management Manual*
2. A grant is the overall designation of a work effort containing one or more projects. Finance Division

**grant agreement**

1. A grant agreement is the principal legal document binding two or more persons or parties whereby a fiscal grant is awarded by the grantee agency to a subgrantee in exchange for an expected activity to be performed. *Traffic Safety*
2. Grant agreement is the contract executed between the granting agency and the grantee after a grant application or proposal has been selected and approved for funding under a grant program. *Contract Management Manual*
3. A grant agreement is a legal instrument between an awarding agency and recipient where the principal purpose is to provide funds to the recipient to carry out a public purpose of support or stimulation authorized by law. *Transportation Planning and Programming Collection*

**granular**

Granular refers to (the uniform size of) grains or crystals in rock.

**granularity**
In computer security, granularity is an expression of the relative size of a data object; for example, protection at the file level is considered to be coarse granularity, whereas protection at the field level is considered to be of finer granularity.

**Graphics Interchange Format**

**GIF**

Graphics Interchange Format is a very common graphics file format.  
*Information Security Manual*

**graphical user interface**

**GUI**

A graphical user interface is the way a computer work environment is presented. GUI usually indicates a windowed environment that allows the use of a mouse to effect changes.

An interface such as that provided by Microsoft’s Windows operating system that functions to allow a user community to gain access to available processing activities. This interface is usually characterized by resizeable windows, scroll bars, pushbuttons, etc. and operates in a graphics-based, bit-mapped fashion.  
*Information Security Manual*

**grate**

A grate is a frame of parallel bars or a lattice of crossed ones usually set in the top of an inlet.

**gravel**

Gravel consists of unconsolidated or loose detrital sediment (aggregate resulting from natural disintegration and abrasion of rock) with particle sizes passing the 76.2 mm (3 in.) sieve and retained on the 2.00 mm (No. 10) sieve. NOTE: This definition has been approved by the Specification Committee.  
*Manual of Testing Procedures*

**grayscale**

Grayscale is a raster-based image composed of a maximum of shades of gray, ranging from pure black to pure white.  
*Communications Manual*

**Great Texas Trash-Off**

**GTTO**

The Great Texas Trash-Off is a statewide litter pickup event held the first Saturday in April each year except when Easter is on the first weekend in April) in conjunction with the Adopt-A-Highway program and Keep Texas Beautiful.

**grievance**
Grievance is a formal expression of dissatisfaction filed by an employee in an effort to resolve a specific concern of employment. A grievance may be about any work-related issue including differences with co-workers, supervisors or managers, harassment, unsatisfactory work environment, unsafe working conditions, alleged wrongdoing, or violation of policies or procedures, etc.

*Human Resources Manual*

**grievant**

Grievant is an employee who files a formal grievance and submits it for consideration as required by department policy and procedures.

*Human Resources Manual*

**grip length**

Grip Length is the region between the bearing face of a nut and the bolt head.


**gross axle weight rating**

GAWR

Gross axle weight rating represents the value specified by the vehicle manufacturer as the load-carrying capacity of a single axle system, as measured at the tire-ground interface.

*Equipment Manual*

**gross combination weight rating**

GCWR

Gross combination weight rating represents the entire weight of a vehicle at the ground with a trailer or trailers including the vehicle, equipment, driver, fuel, and payload.

*Equipment Manual*

**gross monthly household income**

The gross monthly household income is the total taxable and nontaxable income, including public assistance payments, pensions, disability and worker compensation payments insurance annuities, etc., but excluding the value of food stamps, of all persons residing in the household.

*Right of Way Manual*

**gross vehicle weight rating**

GVWR

Gross vehicle weight rating is the manufacturer’s maximum total vehicle weight, measured at the tire-ground interfaces, for which the vehicle possesses components adequately rated to safely carry. It includes the weight of the vehicle itself, fuel, other fluids, passengers, and all the cargo.

*Equipment Manual*

**ground cover**
Ground cover is any vegetation producing material on or just above the soil surface. Including forestry, low-growing shrubs, vines, and herbaceous plants under the trees.

**ground water table (or level)**

Ground water table (or level) is the upper surface of the zone of saturation in permeable rock or soil. When the upper surface is confined by impermeable rock, the water table is absent.

**groupware**

Applications programs which run on a network and enable groups of coworkers to interact collectively.

**grout**

Grout is a cement mortar or a watery mixture of fine sand or clay.

**grubbing**

Grubbing is the process of removing tree roots, stumps, and low-growing vegetation.

**guaranteed ride home**

A guaranteed ride home means providing carpool and vanpool patrons a ride to home or to another destination in an emergency. The intent is to overcome one of the barriers to ridesharing - the need for a ride home, to school, day care or other locations in emergencies.

Public Transportation Collection

**guardian ad litem**

A guardian ad litem is a court-appointed guardian who represents the interests of:
- a mentally incompetent person or persons; or
- a minor or minors.

*Right of Way Manual*

**guardrail**

A guardrail is a traffic barrier used to shield potentially hazardous areas.

**guest**

A guest is a TxDOT business partner or potential business partner.

*Information Security Manual*

**guest account administrator**

A guest account administrator is a TxDOT employee who has been granted the authority to create guest wireless network accounts for guests within their respective D/D/O/Rs.

*Information Security Manual*
**guest wireless**

A guest wireless network is a small section of an organization's computer network designed for use by visitors/temporary users. This subnetwork provides full Internet connectivity, but it also strictly limits access to any internal (intranet) Web sites or files.

*Information Security Manual*

**guide sign**

A guide sign is used to direct traffic along a route, toward a destination, or to give information concerning places or points of interest.

**guideline**

A guideline is a general direction to assist the department in the implementation and interpretation of standards, and to recommend effective security practices which should be implemented where such controls are applicable, as determined by departmental management.
Habitat is that location where a plant or animal lives. Also, habitat includes areas that are or may be occupied by a threatened or endangered species.
*Environmental Manual*

**halftone**
A halftone is an analog image, usually a photograph, composed of small spots of varied size, giving the illusion of a continuous tone (for example, a newspaper photograph examined under a magnifying glass).
*Communications Manual*

**handicapped**
Handicapped refers to people who have physical or mental impairments that substantially limit one or more major life activities. In the context of transportation, the term usually refers to people for whom the use of conventional transit facilities would be impossible or would create a hardship. These people are also known as transportation handicapped or as people who have a public transportation disability.

**handling cylinders**
Handling Cylinders are cylinders used to determine when the concrete strength is adequate to remove nonstressed concrete members from the casting forms.
*700-I, Structural Test Procedures Manual*

**hard coding**
Hard coding is a method of eliminating the need for manually coding input data on source documents when the computer has permanently associated certain input data with specific accounting transactions.

**hash function**
A hash is a function that maps keys to integers, usually to get an even distribution on a smaller set of values.
*Information Security Manual*

**haul**
Haul is the distance or route over which a load is transported.

**hazard elimination program**
HES
hazardous atmosphere Hazardous atmosphere is an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more causes. The causes include flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL); airborne combustible dust at a concentration that meets or exceeds its LFL; atmospheric oxygen concentration below 19.5 percent or above 23.5 percent; atmospheric concentration of any substance for which a dose or a permissible exposure limit is published and, any other atmospheric condition that is immediately dangerous to life or health.

hazardous materials
HAZMAT

Hazardous materials are any solid, liquid, or gaseous material that, because of quantity, concentration or physical, chemical, or infectious characteristics, may (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating illness, or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Right of Way Collection

hazardous waste

Hazardous waste, as defined in federal law, is a solid waste or combination of solid wastes that, because of quantity, concentration or physical, chemical or infectious characteristics, may: (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating illness; or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Environmental Manual

hazardous waste operations
HAZWOPER

Hazardous waste operations is an emergency response activity.

head (static)

Head (static) is the height of water above any plane or point of reference. The energy possessed by each unit of weight of a liquid, expressed as the vertical height through which a unit of weight would have to fall to release the average energy possessed. The standard unit of measure shall be the foot.

header bank

The header bank is the embankment placed directly at the beginning or ending of a bridge structure.

Bridge Detailing Manual

headwall
Hdwl
A headwall is the supporting structures at the ends of drainage structures. *Hydraulics Manual*

**headwater**

HW

Headwater is that depth of flood water impounded upstream of a culvert due to the influence of the culvert restriction, friction, and configuration.

**heat or lot**

Heat or lot is the amount of material produced during a certain period of time determined by the producer.

**heat sink**

Heat sink is a solid or liquid placed in the microwave oven to absorb energy after the moisture has been driven from a test specimen. The heat sink reduces the possibility of over-heating the specimen. *Manual of Testing Procedures*

**height of cover**

HC

The height of cover is the distance from crown of a culvert or conduit to the finished road surface or the base of rail.

**hierarchy of Texas highways**

The hierarchy of Texas highways is: Interstate, US, SH, State Loops or Spurs, FM/RM, County Roads (CR), and Business Routes (BR). *Bridge Inspection Manual*

**highly-available, highly-reliable**

Terms which define a condition in which a technological architecture has been constructed with redundant (or backup) systems, components and/or communication pathways such that it is highly resistant to failure.

**High Mast Illumination Details (HMID)**


**high mast lighting**

High mast lighting is lighting fixtures mounted at heights of 100 feet or more. *Highway Illumination Manual*
**high occupancy toll**

A fee charged to vehicles using an HOV facility and carrying fewer than the required number of occupants.

**high occupancy/toll lane**

HOT lane

High occupancy/toll (HOT) lanes serve both HOV users and those willing to pay a toll to use the restricted lane (typically during hours of peak demand).

**high occupancy vehicle**

HOV

A vehicle having more than one occupant. Examples include carpools, vanpools, buses, and minibuses. Transportation systems may encourage HOV use by having designated HOV lanes and designating a minimum number of occupants required to use these lanes.

**high occupancy vehicle lane**

HOV lane

High occupancy vehicle (HOV) lanes provide preferential treatment to carpools, vanpools and buses carrying a minimum number of people in each vehicle. Dedicated lanes are restricted for this purpose, either on a part-time or full-time basis.

**high pressure sodium vapor lamp**

High pressure sodium vapor lamps are electric light sources in which light is generated by an arc discharge in an atmosphere containing sodium mercury and xenon vapors.

**high risk area**

A high risk area is a room or location that contains information resources used to support critical department functions that, if lost, would cause a work stoppage crucial to department operations. The central mainframe computer room is a high risk area.

*Information Security Manual*

**high speed rail**

HSR

A rail service having the characteristics of intercity rail service which operates primarily on a dedicated guideway or track not used, for the most part, by freight, including, but not limited to, trains on welded rail, magnetically levitated (MAGLEV) vehicles on a special guideway, or other advanced technology vehicles, designed to travel at speeds in excess of those possible on other types of railroads. High Speed Rail has exclusive right of way and serves densely traveled corridors at speeds of 90 miles per hour and greater. High speed rail corridors/tracks may be shared with freight trains.
**highway**  
Hwy  
Highway is the entire width between the boundary lines of every way publicly maintained when any part thereof is open to the use of the public for purposes of vehicular travel.  
*Equipment Manual*

**highway advisory radio**  
HAR  
A highway advisory radio refers to dedicated frequencies carrying traffic information.

**Highway Bridge Program**  
HBR  
The Highway Bridge Program is a federal-aid program. The program was once known as Highway Bridge Replacement and Rehabilitation Program (HBRRP).  
*Historic Bridge Manual*

**highway class**  
Highway class is the rural/urban description of the lane characteristics.  
Finance Division

**highway functional classification**  
The highway functional classification of routes according to use, such as arterial, collector, and local. This classification is for transportation planning and design purposes.

**highway cost index**  
HCI  
The highway cost index is a measure of the effect of inflation on the highway dollar. Used until 1985 to determine the amount of transfer from the General Fund.

**highway maintenance and service equipment**  
Highway maintenance and service equipment includes both on-road and off-road equipment.  
*Equipment Manual*

**highway overpass**  
A highway-overpass is a grade separation where the subject highway passes over intersecting highway.  
*Bridge Detailing Manual*

**Highway Safety Plan**  
HSP
A highway safety plan documents top priority highway safety problems and the strategies to address them. The plan is submitted to and approved by the National Highway Traffic Safety Administration and the Federal Highway Administration for funding under the federal 402 program.

**highway structure**

Highway structure is a general term to refer to various highway design features which are of particular concern to utility installations, i.e., bridges.

*ROW Utility Manual*

**highway system designation**

Highway system designation is the description of highways, from point "A" to point "B," including highway system (i.e., FM, IH), highway number, direction, mileage, and counties affected.

*Texas Reference Marker (TRM) System User's Manual*

**Highway Trust Fund**

HTF

The Highway Trust Fund is a federal account established by law to hold receipts collected by the government and earmarked for highway programs and a portion of the federal mass transit program. It is supported by the federal gasoline tax and other user taxes.

**highway underpass**

A highway-underpass is a grade separation where the subject highway passes under an intersecting highway.

*Bridge Detailing Manual*

**highway voucher**

A highway voucher is TxDOT’s voucher number.

Finance Division

**historic**

Historic is Native American and Euro-American archaeological sites in North America dating after A.D. 1492.

*Environmental Manual*

**Historic Bridge Team**

HBT

A Historic Bridge Team is an interdisciplinary team organized by the Bridge Division project manager to handle historic bridge projects.

*Historic Bridge Manual*
**historic properties**
Buildings, structures, objects, sites or districts with historical or archeological significance that are listed in, or eligible for listing in, the National Register of Historic Places.

**historic sign**
A historic sign is a sign that is attached to and is a contributing feature of a historic building or structure.
Maintenance Collection

**historically underutilized business**
**HUB**
1. A historically underutilized business is a business that is formed for the purpose of making a profit and is at least 51 percent owned by one or more persons who are United States citizens and are recognized by the State of Texas as having been economically disadvantaged because of their identification as members of a qualifying group - Asian Pacific, black, Hispanic, native Americans or American women - and who actively participate in the control, operation, and management of the business in proportion to their ownership interest. Owners must be residents of Texas, and the business must have a permanent business office located in Texas.
   *Purchasing Manual*
2. A historically underutilized business is any business so certified by the General Services Commission.
   *Engineering Architectural and Surveying Services Manual*

**home-based work trip**
Home-based work trips are trips between a person’s home and place of employment for the purpose of working.
*Traffic Data and Analysis Manual*

**home-based non-work trip**
Home-based non-work trips are trips between a person’s home and other destinations which are not for the purpose of working.
*Traffic Data and Analysis Manual*

**host-based**
Host-based is information, such as audit data from a single host, which may be used to detect intrusions.
*Information Security Manual*

**horizontal alignment**
Horizontal alignment is the positioning of a roadway, as shown in the plan view, using a series of straight lines called tangents connected by circular curves.
**horizontal curve**

A horizontal curve is a simple, circular arc joining two straight lines known as tangents.

*Survey Manual*

**horizontal (eye) gaze nystagmus**

HGN

The horizontal (eye) gaze nystagmus is an involuntary jerking of the eyes that occurs as a person moves his or her eyes to the side when under the influence of alcohol or certain other drugs. HGN is one of the indicators used in the Standardized Field Sobriety Test.

*Survey Manual*

**horizontal entrance angle**

Horizontal entrance angle is the angle, in a plane parallel to the base of the tile, between a line in the direction of the incident light and a line perpendicular to the leading edge of the reflective surface.

*Departmental Material Specifications*

**hot bins**

Hot bins are aggregate bins that feed directly into the weight-box or the proportioning mechanism.

*Manual of Testing Procedures*

**hot mix**

Hot mix applies to a paving mixture of asphalt cement and aggregate which have been combined while hot. It is also placed and compacted above 175° F. Temperature is a critical factor in the workability of the mix, as well as the durability of the finished pavement.

*Manual of Testing Procedures*

**hot soak emissions**

Hot soak emissions are evaporated gasoline emissions occurring after the end of a vehicle trip due to the heating of the fuel, fuel lines and fuel vapors.

*Traffic Data and Analysis Manual*

**household**

A household is an occupied dwelling unit in which occupants form a single economic unit regarding housing.

*Traffic Data and Analysis Manual*

**household income**

1. The household income is the median or average income earned by all persons living in a single household.

*Traffic Data and Analysis Manual*
2. The total gross income received for a 12-month period from all sources (earned and unearned) including, but not limited to wages, salary, child support, alimony, unemployment benefits, workers compensation, social security or the net income from a business. It does not include income received or earned by dependent children and full-time students under 18 years of age. *Right of Way Manual*

**household size**

The household size is the number of persons living in one household. In travel demand modeling household size is generally referred to as 1, 2, 3, 4, or 5 or more person households. *Traffic Data and Analysis Manual*

**Houston automatic spooling program**

HASP

The Houston automatic spooling program is a control system for submitting jobs to a large scale computer that allows the operators to control the flow of jobs through the system.

**Houston District**

HOU

The Houston District is a TxDOT district office including the following counties: Brazoria, Fort Bend, Galveston, Harris, Montgomery, and Waller. Area offices are located in Brazoria; Fort Bend; Galveston; East, northeast, northwest, and south Harris County, Montgomery and Waller. The Houston district also operates the Galveston/Port Bolivar ferries and houses a Vehicle Titles and Registration Regional Office. *Inside TxDOT*

**hub**

A hub is a place of convergence where data arrives from one or more directions and is forwarded out in one or more other directions. A hub usually includes a switch of some kind. *Information Security Manual*

**HUB Subcontracting Plan**

A Historically Underutilized Business (HUB) Subcontracting Plan is a requirement placed on vendors to encourage their utilization of historically underutilized businesses where subcontracting is practical. Applies to all delegated purchases with an estimated total cost of $100,000 or more where there are subcontracting opportunities for the procurement. [TGC §2161.181-182, 1 TAC §111.11] *Purchasing Manual*

**human environment**

Human environment means interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.

---

*TxDOT Glossary 1-9  TxDOT 10/2013*
Human Resources Division

HRD

The Human Resources Division manages employee services, oversees employee performance planning and evaluation, and administers the department’s recruitment and training program.

Human Resources Management (former SMT)

HRS

Human Resources Management is one of TxDOT’s seven functional areas. The goal of the Human Resources Management is to provide comprehensive human resources services to all TxDOT employees, prospective employees and other users.

Hydraulics

Hydraulics is a branch of engineering dealing with liquids in motion.

Hydric soils

Hydric soils are wetland soils. These soils favor the production and regeneration of hydrophytic vegetation. A hydric soil is either saturated with water and virtually free of oxygen at or near the surface during significant periods of the growing season or the soil is flooded for significant periods when the soil temperature is above 5 degrees centigrade. Field indicators may include gray color or mottling with chrome, manganese or iron concentrations, an organic horizon, free water within the root zone and a sulfur odor in the soil.

Hydrogen ion

pH

Hydrogen ion refers to acidity or alkalinity of water or soil. An ion is a charged atom or group of atoms in solution or in a gas. Solutions contain equivalent numbers of positive and negative ions.

Hydrology

Hydrology is the study of the occurrence and distribution of the natural waters of the earth.

Hydrophytic vegetation

Hydrophytic vegetation refers to wetland plant species. Plants adapted for life within habitats that have permanent or alternating dry and inundated and/or saturated soil conditions.

Hydroseeding

Hydroseeding is a method of broadcasting seed and sometimes lime, fertilizer, and mulch together in a mixture of water.
Hyperlinks are informational pathways that users of an online document can select to summon new topics, or more detailed information by clicking a mouse. Hyperlinks can unite different topics and show their relationships through the retrieval of information from an existing Web site or page, a specific file, or document.

Information Security Manual

hypertext

Hypertext is usually a word or term that is linked to a definition, file or document.

Information Security Manual

Hypertext Markup Language

HTML

Hypertext Markup Language is the language used to publish documents on the World Wide Web portion of the Internet.

Information Security Manual

Hypertext Transport Protocol

HTTP

Hypertext Transport Protocol is an information-serving protocol used to transfer files on the World Wide Web. Graphics, text and sounds can be transmitted.

Information Security Manual
ice point

Ice point is that temperature where the solid and liquid phases of water can co-exist.

*Manual of Testing Procedures*

idle

Idle is the operation of an engine in the operating mode where the engine is not engaged in gear, where the engine operates at a speed at the revolutions per minute specified by the engine or vehicle manufacturer for when the accelerator is fully released, and there is no load on the engine.

*Equipment Manual*

igniter

(See *starter*.)

illegal per se

Illegal Per Se is a legal phrase denoting the concept that it is an offense in and of itself (per se) to operate a motor vehicle while having a blood alcohol concentration (BAC) at or above the specified legal limit.

*Traffic Safety*

**Illuminating Engineering Society of North America**

IESNA, also IES

The IESNA writes many of the industry standard specifications for lighting fixtures.

*Highway Illumination Manual*

imaged file or record

An imaged file or record is one that has been converted from the original hard copy version to a microfilmed or electronic image of the original.

*Records Management Manual*

**immediately dangerous to life or health**

IDLH

Immediately dangerous to life or health is any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual’s ability to escape unaided from a permit space.

*Occupational Safety Manual*

impact

Impact refers to the stress in a structure caused by the force of a vibrating, dropping, or moving load. This is generally a percentage of the live load.
impact analysis

1. Impact analysis in transportation planning is that part of the process in which there is an evaluation of the effects of an existing or proposed transportation project on social, economic, and environmental factors or variables.

2. Impact analysis is a Pavement Management Information System (PMIS) report which takes a user-specified budget and summarized pavement conditions before and after treatment with those funds. This report is used to document the effects of limited funding on future pavement condition and needs. Variables can include air pollution, energy consumption, accidents, and socioeconomic effects.

Pavement Management Information System (PMIS) Users Manual

impermeability

Impermeability refers to the resistance an asphalt pavement has to the passage of air and water into or through the pavement. This is a desirable characteristic. Water and air in excessive quantities trapped in the pavement will shorten pavement life.

impervious

Impervious means impenetrable. Completely resisting entrance of liquids.

implementation year

The year that a project is anticipated to be complete and open to traffic.

inactive file or record

An inactive file or record is one on which all actions have been completed and which is referenced less than one time in a month. Inactive files typically require retention for a period of time specified in a records retention schedule.

Records Management Manual

incident

An incident is a successful or unsuccessful action attempting to circumvent technical controls, organizational policy, or law. This is often called an attack.


incidental expense(s)

1. Incidental expense means a necessary and reasonable expense incurred by an employee while traveling on official state business. This term includes taxes except taxes on meals. Meals, lodging, and transportation, and personal expenses are not included in the definition of incidental expenses.

Travel Manual

2. Incidental expenses are reasonable costs incurred in relocation:
   - in the purchase of replacement dwellings, such as fees for loan applications; and
◆ in the transfer of property to the State through negotiations, such as recording fees and certain other closing costs; but
◆ not including prepaid expenses such as real estate taxes and property insurance or costs for services normally paid by sellers of residential properties or provided by title companies and closing agents as part of other services.

*Right of Way Manual*

**incident response vehicle**

An incident response vehicle is any vehicle whose purpose is to respond to incident situations affecting flow of traffic on a highway maintained by the department.

*Equipment Manual*

**incidents**

1. An incident is a successful or unsuccessful action attempting to circumvent technical controls, organizational policy, or law. This is often called an attack.
   Source: *Information Security Manual*

2. Incidents are those unplanned events involving department personnel, equipment or operations that clearly demonstrate the potential for injury or property damage but which do not produce these results.
   *Occupational Safety Manual*

3. Incidents are intentional or unintentional acts that occur on or in association with transit-controlled property and that threatens or affects the safety or security of an individual or property.
   Public Transportation Collection.

4. Incidents may be any of the following: traffic crash, stalled vehicle, load spillage, or other action that affects one or more lanes of traffic. An incident typically involves a collision of a moving vehicle with another vehicle, person, or object.

**incomplete bid**

An incomplete bid is a bid not reflecting a unit bid price for each bid item, or corresponding alternate bid item. An incomplete bid is considered non-responsive.

*Letting Manual*

**incremental backup**

Incremental backup is a backup in which only the files that have been changed since the last backup are copied to and stored on the backup device.

**incurred cost**

An incurred cost is the cost is incurred when a recorded liability exists or when a cash disbursement has been made under a contract.

*Contract Management Manual*
indefinite deliverable contract

An indefinite deliverable contract is a contract containing a general scope of services that identifies the types of work that will be later required under work authorizations, but does not identify deliverables, locations, or timing in sufficient detail to define the provider’s responsibilities under the contract.

*Engineering Architectural and Surveying Services Manual*

Independent Assurance Program

An Independent Assurance Program is defined as activities that are an unbiased and independent evaluation of all the sampling and testing procedures used in the acceptance program. Test procedures used in the acceptance program, which are performed in the SHA’s central laboratory, would not be covered by an independent assurance program.

*Quality Assurance Program Manual*

independent assurance tests

Independent assurance tests performed by TxDOT personnel who do not normally have direct responsibilities for quality control or quality assurance sampling and testing for a particular project. They are used for the purpose of making independent checks on the reliability of the QC/QA program.

*Manual of Testing Procedures*

Indian tribal organization

An Indian tribal organization is a governing body or a governmental agency of any Indian tribe, band, nation, or other organized group or community certified by the Secretary of the Interior as eligible for the special programs and services provided through the Bureau of Indian Affairs.

*Public Transportation Collection*

inductance

\[ L \]

Inductance is the ability to store energy in electromagnetic field. Measured in henrys or millihenrys.

*Highway Illumination Manual*

industrial activities

Industrial activities mean those customarily permitted only in zoned industrial areas. Industrial activities include manufacturing, warehousing, chemical processing and similar type operations. None of the following shall be considered industrial activities:

- residences;
- activities conducted in a building principally used as a residence;
- commercial activities;
- outdoor advertising structures;
- agricultural, forestry, ranching, grazing, farming and similar activities, including but not limited to wayside fresh produce stands;
- transient or temporary activities;
- activities not visible from the main traveled way;
- activities more than 1000 feet from the nearest edge of the right of way;
- railroad tracks and minor sidings except in the area of a permanent facility for loading and unloading trains; and
- junkyards.

*Right of Way Manual*

**informal resolution**

Informal resolution the initial effort by an employee to resolve a work-related issue of concern on an informal basis at the lowest supervisory level, including the submittal of the concern in writing to the appropriate DE/DD/OD/RD.

*Human Resources Manual*

**information**

Information is any and all data, regardless of form, that is created, contained in, or processed by information resources facilities, communications networks, or storage media.

*Information Security Manual*

**Information for bid**

**IFB**

Information for bid is a procurement process wherein bids are publicly solicited; and a firm fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming to all the material terms and conditions of the invitation for bids, is the lowest in price. This procurement method lends itself to a firm fixed price contract where the selection of the successful bidder can be made principally on the basis of price without additional discussion. Also referred to as “sealed bids”.

*Public Transportation Collection*

**informational proposal**

An informational proposal is a document that gives the location and type of work along with the governing specifications and bidding requirements. An informational proposal is similar to an actual bidding proposal, however does not contain the qualified contractor's name, and should not be used for submitting a bid. This type of proposal can be issued to anyone requesting it.

*Letting Manual*

**informational sample**

An informational sample is a sample taken and tested for informational purposes only, and it cannot be used as a substitute for a project or AQMP, Aggregate Quality Monitoring Program, sample.
informational test(s)

Informational tests are tests not requested by the district for project sample or not required for the maintenance of the AQMP, Aggregate Quality Monitoring Program, but performed on project or AQMP samples by MAT for additional information to establish the quality test history of an aggregate product.

information resource administrator

IRA

An information resource administrator is a TxDOT employee responsible for directing all administrative and transportation/engineering information technology systems in a district, division, or office. The IRA serves as a direct liaison between the district, division, or office and the TxDOT Technology Services Division (TSD), formerly ISD.

information resources

Information resources is considered to be any and all computer printouts, online display devices, magnetic storage media, and all computer-related activities involving any device capable of receiving e-mail, browsing Web sites, or otherwise capable of receiving, storing, managing, or transmitting electronic data including, but not limited to, mainframes, servers, personal computers, notebook computers, hand-held computers, personal digital assistants (PDA), pagers, distributed processing systems, network attached and computer controlled equipment (i.e., embedded technology), telecommunication resources, network environments, telephones, fax machines, printers, and service bureaus. Additionally, it is the procedures, equipment, facilities, software, and data that are designed, built, operated, and maintained to create, collect, record, process, store, retrieve, display, and transmit information.

Information Resources Management Act

The Information Resources Management Act (Texas Government Code, Chapter 2054) is state legislation pertaining to the efficient retrieval and exchange of information within and among the various agencies and branches of state government and from the agencies and branches of state government to Texas residents and their elected representatives.

information resources manager

IRM
In TxDOT, it is the director of the TxDOT Technology Services Division (TSD), formerly ISD, as designated by the executive director in TxDOT Directive 1-97. The IRM oversees all information resources within TxDOT.

*Information Security Manual*

**information resources technology**

Information resources technology includes procedures, equipment and software that are designed, built, operated and maintained to collect, record, process, store, retrieve, display and transmit information, and associated personnel including consultants and contractors.

*Contract Management Manual*

**information security manager**

ISM

The information security manager is the person designated by the information resources manager (IRM) to administer the TxDOT Information Security Program. The information security manager is the manager of the TSD Information Systems Security Branch (ISS) and is the point of contact for all information security matters.

*Information Security Manual*

**information security officer**

ISO

In TxDOT, the IRM, director of TSD (formerly ISD), is the designated ISO. The ISO is responsible for overseeing the information security functions within TxDOT and is the agency’s point of contact for all information security matters. The ISO is responsible for the protection of TxDOT assets and information, which are processed by or stored in TxDOT information resource systems.

*Information Security Manual*

**information security or computer security**

Information security or computer security are those measures, procedures or controls which provide an acceptable degree of protection of information assets from unauthorized disclosure, modification, destruction, or the inability to process that information.

*Information Security Manual*

**information security program**

The information security program is the elements, structure, objectives, and resources that establish an information resources security function within TxDOT.

*Information Security Manual*

**information systems**

IS
Information systems generally consist of computer hardware and software. These systems provide data collection, storage, and reduction capabilities as well as engineering analysis, design, and drafting based upon rules that are encoded in the software.

Information system (IS) is all the electronic and human components involved in the collection, processing, storage, transmission, display, dissemination, and disposition of information.


Information Systems Security Branch

Information Systems Security Branch (ISS) is the organizational unit responsible for the TxDOT Information Security Program


information technology resources

Information technology resources are the information processing hardware, software and services, supplies, personnel, facility resources, maintenance, training, or other related resources.

infrastructure

Infrastructure, in transportation planning, refers to all the relevant elements of the environment in which a transportation system operates.

ingress

1. Ingress is any action, reaction, indication, failure to perform or comply, by vehicle equipment and/or accessory items, caused by the activation of the VHF FM radio transmitter in any mode of operation.
   Manual of Testing Procedures

2. Ingress is the right to enter a highway facility at given points.
   Right of Way Collection

3. Ingress means to enter or go in. The right to enter a tract of land. Often used interchangeably with “access.”

in-house

In-house is the term used when the department uses its own employees to perform a service or work project rather than having it outsourced.

Contract Management Manual

in-house research

In-house research is research conducted by TxDOT employees at TxDOT facilities, as opposed to research conducted by universities or other research agencies at their campuses. However, some in-house research may utilize outside facilities from time-to-time for special testing or other unusual needs.

Research and Implementation Manual
in-house training

In-house training is any training activity provided by and for department employees, such as management, staff development, engineering and maintenance training, regardless of delivery method. 
_Human Resources Manual_

in-kind match

In-kind match is the intrinsic value of goods and services (such as donated equipment, office space, utilities or labor) used to provide the required local participation for federal and state grants. 
_Public Transportation Collection_

initial friction value

Initial friction value is the average of initial British Pendulum Tester (BTP) readings on the test specimens before they are polished. 
_Manual of Testing Procedures_

initial screening

Initial screening is evaluation of the applicant’s education and experience. 
_Human Resources Manual_

initial time of set

Initial time of set is the elapsed time after initial contact of cement and water required for sieved mortar to reach a penetration resistance of 3.5 MPa (500 psi). This definition is according to ASTM C 403, “Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance,” and AASHTO T 197, “Time of Setting of Concrete Mixtures by Penetration Resistance.” 
_Manual of Testing Procedures_

initiation of negotiations

Initiation of Negotiations is the delivery of the initial written offer or just compensation by an agency to the owner or owner's representative to purchase their real property for a transportation project. However, if the agency issues a notice of its intent to acquire the real property, and a person moves after that notice, but before delivery of the initial written purchase offer, the initiation of negotiations means the actual move of the person from the property. 
_Right of Way Manual_

injury-to-death ratio

Injury-to-death ratio is the ratio of the number of deaths to the number of injuries in crashes. Used to measure severity of crashes. 
_Traffic Safety_

inlets

Inlets are structures with an opening allowing for drainage to enter.
in-place density

In-place density is the unit weight of a material when it is measured in its final position.

input

Input is information entered into the computer.

*Information Security Manual*

input documents

Input documents are the completed forms with accounting coding blocks from which data are entered into the accounting system.

insertion loss

Insertion loss is the noise level reduction derived from the construction of a noise barrier.

The actual benefit derived from constructing a sound barrier. It is calculated by subtracting the noise level with a barrier in place from the noise level without a barrier.

*Environmental Affairs Division*

in-situ concrete

In-situ concrete is the actual concrete in the prestressed concrete member.

*Manual of Testing Procedures*

inspection

INSPEC

Inspection is the examination and testing of goods or services to determine conformance to the purchase order requirements, specifications, quality and quantity.

*Purchasing Manual*

inspector

An inspector is any employee who performs inspection of goods or services at any point from the time of delivery through final acceptance.

*Purchasing Manual*

integration/integrate

Integration is the combination of accumulated sick leave and/or vacation time, and/or compensatory time with weekly workers’ compensation benefits as to receive full salary and employee benefits while off work.

*Occupational Safety Manual*

integrated services digital network

ISDN
The integrated services digital network is an international communications standard for sending voice, video, and data over digital telephone lines or normal telephone wires.

_Information Security Manual_

**intelligent transportation system**

ITS

An intelligent transportation system is an integrated system that uses video and other electronic detection devices to monitor traffic flows on major freeways. When problems (called "incidents") are detected, operators may use remote controls to redirect traffic, inform motorists (through the use of dynamic message signs) and notify emergency response services as appropriate. ITS replaces the term intelligent vehicle highway system.

_ATMS Operators Manual_

**intelligent vehicle highway system**

IVHS

See intelligent transportation system.

Interactive Graphics Design System

IGDS

Interactive Graphics Design System is an integrated hardware and software configuration that brings interactive graphics to architectural engineers and urban designers. IGDS provides the tool to compose original designs or to digitize existing designs and then to edit, manipulate, file and recall those designs.

Interactive Graphics Road Design System

IGRDS

Interactive Graphics Road Design System is a comprehensive system that uses computer-aided design and drafting (CADD) technology to assist users in roadway design and drafting functions. Major processes include coordinate geometry, horizontal alignment design, and drafting, and vertical alignment design and drafting.

**interagency contract (or interagency cooperation contract)**

IAC

An interagency contract is a contract between two or more state agencies made in compliance with the provisions of Government Code, Chapter 771, Interagency Cooperation Act.

_Contract Management Manual_

**interagency transaction**

An interagency transaction is a transaction between two or more state agencies when a formal interagency contract is not required.

_Contract Management Manual_
interagency transaction voucher
   ITV
   An interagency transfer voucher is used to reimburse a state agency for costs of providing services or resources to another state agency.
   *Contract Management Manual*

intercepting drain
   An intercepting drain is a ditch or trench filled with a previous filter material around a subdrainage pipe.

interchange
   Interchange is a system of interconnecting roadways in conjunction with one or more grade separations that provides for the movement of traffic between two or more roadways or highways on different levels. A proposed interchange will be designated as an interchange when the construction contract has been awarded, regardless of whether it is open to the public.
   *Right of Way Manual*

intercity bus
   ICB
   Intercity bus is regularly scheduled bus service for the general public, which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity.
   *Public Transportation Collection*

interface
   Interface is two management information subsystems sharing data.
   *Materials and Supplies Management System Manual*

interim audit
   This is an audit that is performed on a contract before expiration of the time period for that contract. It serves the contract manager as a monitoring device.
   *Contract Management Manual*

intermodal
   Intermodal means between or including more than one means or mode of transportation.

intermodalism
   Intermodalism is an integrated view of transportation in which individual modes work together or within their own niches to provide the user with the best choices of service, and in which the consequences on all modes of policies for a single mode are considered.

intermodal integration
Intermodal integration is service coordination between two or more different transportation modes. This arrangement may include joint (transfer) stations, coordinated scheduling, joint fares, and combined public information activities.

**Intermodal Surface Transportation Efficiency Act**

ISTEA

A Transportation Bill passed by Congress in 1991 that provides six year authorizations for development of a National Intermodal Transportation System which consists of all forms of transportation in a unified, interconnected manner. Three major components of ISTEA are the National Highway System, the Surface Transportation Program, and the Congestion Mitigation and Air Quality Improvement Program.

**intermodal transportation**

Transportation of persons and goods that involves the interchange between transportation modes such as automobiles, mass transit, railway, airways and waterways, bicycles and pedestrians.

**internal control**

Internal control is a process, effected by the Transportation Commission, TxDOT’s Administration, and other personnel, designed to provide reasonable assurance of meeting expectations in the following categories:

- accomplishment of operational objectives and goals
- effectiveness and efficiency of operations
- reliability of financial and other information
- compliance with laws and regulations
- safeguarding assets.

*Internal Audit Manual*

**internal control system**

Internal control system is the approach TxDOT uses to achieve its internal control objectives in changing conditions. The agency internal control system is made up of these five components:

- control environment
- risk assessment
- control activities
- information and communication
- monitoring.

*Internal Audit Manual*

**International Adopt-a-Highway**

IAAH

International Adopt-a-Highway is a worldwide consortium of Adopt-a-Highway programs that meets annually to discuss program management.
International Relations Office
IRO
The International Relations Office advises on international transportation in the region on both sides of the 2,000-mile U.S.-Mexico border. The director of IRO reports directly to the executive director.

Internet
The Internet is a global system of interconnecting computers and computer networks. A host of organizations, government agencies, companies, and colleges owns the computers and networks separately. The Internet is the present "information super highway."

Internet protocol
IP
Internet protocol is the protocol used to route a data packet from its source to its destination over the Internet.

Internet protocol address
IP Address
This address contains a network part and a host part (i.e. a user’s machine). An Internet protocol address is usually written as four numbers separated by decimal points. Each of the four numbers is in the range 0-255 (the decimal values possible for a single byte).

Internet protocol security architecture
IPsec
IPsec is a security protocol that provides authentication and encryption over the Internet at the network layer. The Internet protocol security architecture specifies that a set of security services include access control, connectionless data integrity, data origin authentication, protection against replays (detection of the arrival of duplicate datagrams, within a constrained window), data confidentiality, and limited traffic flow confidentiality.

intersection
1. An intersection is any at grade connection with a roadway, including two roads or a driveway and a road.
2. An intersection is the common area at the junction of two highways, other than the junction of an alley and a highway. The dimensions of an intersection include only the common area:

- within the connection of the lateral curb lines or, in the absence of curb lines, the lateral boundary lines of the roadways of intersecting highways that join at approximate right angles; or
- at the place where vehicles could collide if traveling on roadways of intersecting highways that join at any angle other than an approximate right angle.

Each junction of each roadway of a highway that includes two roadways at least 30 feet apart with the roadway of an intersecting highway, including each roadway of an intersecting highway that includes two roadways at least 30 feet apart, is a separate intersection.

**Intersection angle**

An intersection angle is the smallest angle between two intersection legs. The smallest angle of intersecting tangents on curved roadways. Angle between two tangents at their intersecting points.

**Intersection at-grade**

An intersection at-grade is the general area where two or more highways join or cross, within which are included the roadway and roadside facilities for traffic movements in lieu of direct crossings.

**Intersection functional area**

Intersection functional area is the area of an intersection necessary to provide all required storage lengths for separate turn lanes and for through traffic plus any maneuvering distance for separate turn lanes. The functional boundary of an intersection includes more than just the physical area of the intersection.

**Interstate highway**

IH

Interstate highway is a roadway so designated by the Texas Transportation Commission and approved by the American Association of State Highway and Transportation Officials.

**Interstate highway business route**

See **business IH highway**.

**Interstate Highway System**

IHS

The Interstate Highway System is that portion of the national system of interstate and defense highways located within the State of Texas which now or hereafter may be so designated by the Texas Transportation Commission and approved pursuant to United States Code §103.
intranet

The intranet is a private network for communications and sharing of information that, like the Internet, is based on TCP/IP, but is accessible only to authorized users within an organization. An organization's intranet is usually protected from external access by a firewall.

*Information Security Manual*

**Inverse Square Law**

The Inverse Square Law expresses mathematically the relationship between luminous intensity (CD) and illumination (FC). It states that illumination at a point on a surface is directly proportional to the luminous intensity of the light in that direction and inversely proportional to the square of its distance (D) from the source.

\[ FC = \frac{CD}{D^2} \]

*Highway Illumination Manual*

**invert**

An invert is that part of a pipe or sewer below the springing line generally the lowest point of the internal cross section.

**invitation for bid**

IFB

Invitation for bid is a solicitation document used to obtain formal competitive bids.

*Purchasing Manual*

**invoice number**

Invoice number is the invoice number assigned by the contractor when billing the department.

*Finance Division*

**iodine number**

Iodine number is a measure of the unsaturation of fats and oils and is expressed in terms of the number of centigrams of iodine absorbed per gram of sample (percentage by weight of iodine absorbed).

**isolation**

Isolation is the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes or ducts; a double block and bleen system: lockout or tagout of all sources of energy: or blocking or disconnecting all mechanical linkages.

*Occupational Safety Manual*
iso-lux curves

Iso-lux curves (also called iso-footcandle curves) are curves plotted from metered photometric readings for a specific lighting unit, of a particular design and rated wattage, when the unit is mounted at a certain height. These readings are taken on a rectangular grid that is oriented from the center of the light source. From such readings, contour lines are then plotted for identical values in lux (footcandles); and when contours are plotted for equal increments of increase in illumination intensity, the resulting contour lines produce a series of generally concentric semiparabolic curves, described as iso-lux (iso-footcandle) curves.

*Highway Illumination Manual*

issue unit

An issue unit is an abbreviation of up to four characters which designates the unit of measure of an item. This abbreviation must match a standard unit of measure in the “Units” Tables and Characteristics System (TACS) table in order to be accepted.

*Materials and Supplies Management System Manual*

items

Items are listed specifications for construction of highways, streets, and bridges.
jack pipe

A jack pipe is a pipe that is installed using jacks.

jacking (for conduits)

Jacking is a method of providing an opening for drainage or other purposes underground, by cutting an opening ahead of the pipe and forcing the pipe into the opening by means of horizontal jacks.

Java

Java is a programming language from Sun for World Wide Web applications. Java programs are embedded into Hypertext Markup Language (HTML) documents on the web. Netscape Navigator and some other browsers have embedded Java interpreters that allow users to access and run Java programs embedded in web pages.

Information Security Manual

jiggle bar

A jiggle bar is a raised surface that extends generally less than 1” above the normal permanent surface to make any wheel encroachment obvious to the vehicle operator without loss of control of the vehicle. It is usually constructed with asphalt concrete pavement (ACP) or jiggle bar tile.

Job Access and Reverse Commute

JARC

Job Access and Reverse Commute is a Federal Transit Administration grant program targeting new or expanded public transportation services for low income persons or welfare recipients and commutes to suburban employment centers. Codified at 49 USC 5316 and often called the Section 5316 or JARC program.

Public Transportation Collection

job control language

JCL

Job control language expresses the requirements and coordination needed to perform a computer run.

job control tests Job control tests are routinely performed by the districts on a project basis to meet the specification requirements.

Manual of Testing Procedures

job entry subsystem # 2

JES2

A job entry subsystem #2 is just a new up-to-date version of job control language.
job family

A job family is a group of jobs that have the same basic nature of work, but different levels of skill, effort, responsibility or working conditions.

*Human Resources Manual*

job requisition

JR

A job requisition is a written notice of a specific position to be filled in an organization. This includes a brief overview of the job, its essential duties and minimum requirements.

*Human Resources Division*

joinder

A joinder is the joining or uniting of two or more individuals in a legal proceeding.

*Right of Way Manual*

**Joint Photographic Experts Group**

JPEG

Joint Photographic Experts Group is a graphics format that provides for better image compression resulting in less storage space requirements. Because they are compressed, JPEG images take longer to load than their Graphics Interchange Format (GIF) counterparts.

*Information Security Manual*

joint sealer

Joint sealer is a material or device placed in pavement joints to prevent migration of water or debris into a pavement structure.

joint-use agreement

1. A joint use agreement (license agreement) is an agreement between TxDOT and a railroad company whereby one party allows the other permission to use their property for a specific purpose. Does not create a property interest.

   *Right of Way Manual*

2. An agreement allowing TxDOT to utilize property belonging to another entity. Such an agreement might be used to construct and maintain a roadway ditch or bicycle lane in railroad right-of-way, as an example.

jointed concrete pavement

JCP

Jointed concrete pavement is Portland cement concrete pavement with longitudinal steel reinforcement and periodically spaced transverse joints. These joints, which may contain reinforcement, are designed to control cracking and to transfer traffic load between the adjacent slabs.

*Pavement Management Information System (PMIS) Users Manual*
journal

A journal is any book of original entry.

journal request voucher

A journal request voucher is provided by the comptroller for the recording of adjusting transactions on journal registers. Journal request vouchers contain entries, explanations and references to documentary evidence supporting the entries, and the signature or initials of one or more properly authorized officials designated to authorize the transactions.

journal voucher

A journal voucher is a TxDOT accounting device to distribute or redistribute costs to authorizations and projects and to make adjustments.

judgment

A judgment is a decision as to the damages suffered by the condemnee.

Right of Way Manual

Jughead

Jughead is a research tool that is used with Gopher. Jughead scans an index of titles for directory titles or broader subject headings. It then offers you the option to go to one of these directory titles and look for more specific information.

Information Technology and Services Manual

junk

Junk is any old scrap copper, brass, rope, rags, batteries, paper, trash, rubber, debris, waste; junked, dismantled or wrecked automobiles or parts thereof; iron, steel or other old or scrap ferrous or non-ferrous material.

Right of Way Manual

junkyard

A junkyard is an automobile graveyard; an establishment maintained, used or operated for storing, buying or selling junk or processing scrap metal; a garbage dump or sanitary landfill.

Right of Way Manual

just compensation

In condemnation, the amount of the loss for which a property owner has established a claim to compensation. It is the payment of the market value of the part taken.

Real Estate Acquisition Guide for Local Public Agencies

justification
Justification is a statement designed to identify, to describe the use, to explain the benefits, to show the costs, and to state clearly the worth of an automated information and telecommunications systems.
**K**

**K-Factor**

1. A factor, also known as the design hour factor, which represents the proportion of Average Annual Daily Traffic (AADT) expected to occur in the design hour.

2. K-Factors or Bias Factors are zone to zone bias factors other than travel time that are specific to an urban area that affect travel patterns. Also referred to as friction factors, K-factors are estimated based on a comparison of origin-destination surveyed zone to zone movements to the same zone to zone movements estimated using a gravity model.

   *Traffic Data and Analysis Manual*

**keep items**

Keep items are documentation on a ROW project which is retained by the appropriate Office of Record.

*ROW Utility Manual*

**Keep Texas Beautiful**

**KTB**

Keep Texas Beautiful is a grassroots beautification and education program that partners with the TxDOT Travel Division to accomplish litter prevention goals.

*Litter Prevention Manual*

**key official**

Key official means the chief administrator of TxDOT.

*Travel Manual*

**kilobits**

**KBPS**

Kilobits refers to kilobits per second. One kbps equals 1000 bits per second.

*Information Security Manual*

**kilovolt-amp**

**KVA**

A kilovolt-amp is a measure of apparent power. Equipment is rated in KVA when heat dissipation is a concern. Transformers are rated in KVA.

\[
KVA = \text{Volts} \times \frac{\text{Amps}}{1000}
\]

*Highway Illumination Manual*

**kilowatt**

**KW**
Kilowatt is a measure of real power. Generators, lamps, and heating elements are rated in watts or kilowatts.

\[ KW = Volts \times Amps \times \frac{power\ factor}{1000} \]

(1KW = 1.34 horse power)

*Highway Illumination Manual*

**kinds of vouchers**

Kinds of voucher is a numeric code used to identify the different kinds of cash vouchers, journal vouchers, and payrolls.

**kip**

A kip is a stress unit equal to 1,000 lbs.
L2 transfer protocol
L2TP

L2TP defines an encapsulation mechanism for transporting multi-protocol packets across layer 2 (L2) point-to-point links. Typically, a user obtains an L2 connection to a Network Access Server (NAS), using one of a number of techniques (e.g., dial-up POTS, ISDN, ADSL, etc.) and then runs PPP over that connection.

Information Security Manual

labor certification

Labor certification is information provided by an FTA grantee to the US Department of Labor ensuring that fair and equitable labor protection arrangements have been made. The protection includes the employees of the grant applicant, employees of other FTA grantees, and employees of any other public or private transit provider, including providers of transit service by contract.

Public Transportation Collection

laminated elastomeric bridge bearings

Laminated elastomeric bridge bearings consist of layers of elastomer interspersed with non-elastic (steel) laminates.

Manual of Testing Procedures

lamp

See light source.

Highway Illumination Manual

lane line

The lane line is the broken line separating lanes for traffic moving in the same direction or a solid line for delineating traffic lanes and shoulder edge.

lane-mile

Lane-mile is a measure of the total length of traveled pavement surface. Lane-miles is the center-line length (in miles) multiplied by the number of lanes.

Pavement Management Information System (PMIS) Users Manual

lane rental

Like A+B bidding, the goal of the lane rental concept is to encourage contractors to minimize road user impacts during construction. Under the lane rental concept, a provision for a rental fee assessment is included in the contract. The lane rental fee is based on the estimated cost of delay or inconvenience to the road user during the rental period. The fee is assessed for the time that the
contractor occupies or obstructs part of the roadway and is deducted from the monthly progress payments.

**Laredo District**

**LRD**

The Laredo District is a TxDOT district office including the following counties: Dimmit, Duval, Kinney, LaSalle, Maverick, Val Verde, Webb, Zavala. Area offices are located in Carrizo Springs, Del Rio, and Laredo. Other TxDOT offices in the district include the Judge Roy Bean Visitor’s Center and a Travel Information Center.

*Inside TxDOT*

**lateral pressure (minor principal stress)**

Lateral pressure is the pressure supplied by air in the triaxial cell, applied in a radial or horizontal direction.

*Manual of Testing Procedures*

**late residential occupant**

A late residential occupant is any person who occupies a dwelling for less than 90 days immediately before the initiation of negotiations and the property is subsequently acquired, or a person who moves onto the property after the initiation of negotiations and is still in occupancy on the date of acquisition.

*Right of Way Manual*

**layer**

Layer is a horizontal soil structure of uniform or nearly uniform material. When the material changes due to moisture, density or composition, a new layer is considered to have been created.

*Manual of Testing Procedures*

**layer coefficient**

Layer coefficient (a1, a2, a3) is the empirical relationship between structural number (SN) and layer thickness which expresses the relative ability of a material to function as a structural component of the pavement.

*Pavement Design Manual*

**layer of security**

A layer of security is an action, device, or other measure that is used to restrict physical access to information resources, such as a key, guard, camera system, or security card reader.

*Information Security Manual*

**lead time**
1. Lead time is an average of the time from the date of the requisition to receipt, including administrative, bidding, supplier and shipping times.  
*Materials and Supplies Management System Manual*

2. Lead time is the period of time from date of request to date of acceptance. This includes the time required to process the purchase request, issue a solicitation, evaluate bids and award a purchase order, vendor to manufacture or prepare the goods for shipment, delivery, inspection and acceptance.  
*Purchasing Manual*

**lease**

Lease means a long-term contract giving the lessee the exclusive possession and use of property although the lessor retains ownership throughout the duration of the lease. A contract is "long-term" only when its duration is at least one month.  
*Travel Manual*

**leasehold interest**

Leasehold interest is the interest a tenant holds in the property by virtue of a lease or rental of the property. Also termed leasehold estate.  
*Right of Way Collection*

**least necessary privilege**

Least necessary privilege refers to a capability provided only to the person(s) required to have that capability in order to perform required duties.

**leave of absence without pay**

LWOP  
Leave of absence without pay is an authorized unpaid absence from work for a specified period of time.  
*Human Resources Manual*

**ledge**

A ledge, sometimes called rock, is several beds of rock (or a single bed or stratum) occurring in a quarry or outcropping and exposed to view.

**legacy system**

A legacy system, typically, is an existing system based upon older technologies that is functioning to provide key business-related processing for an organization.

**legal contract**

A legal contract is a legally binding document that provides determination of responsibilities and liabilities.
Information Security Manual

legal property description

See property description.

Right of Way Collection

legend material

Legend material, for use as prefabricated pavement marking, is the various words such as LEFT, TURN, ONLY, etc., or the letter “R” when used for a railroad crossing.

Manual of Testing Procedures

Legislative Affairs Office

LAO

The Legislative Affairs Office monitors state executive, legislative, and congressional activities and identifies proposed bills that may affect the department.

Inside TxDOT

length of curve

The length of curve is the measurement of arc from point of curvature (PC) to point of tangency (PT).

Survey Manual

leq

Leq is the energy-averaged sound pressure level in decibels. Leq is usually reported on an hourly basis and written as Leq(h).

Environmental Affairs Division

letter of authority

LOA

Documentation that federal requirements have been met and approval for the department to proceed with performance of work or project advertisement on state oversight projects.

Design Division Letting Management Office

letting

Letting is the process of providing notice, issuing proposals, receiving proposals, and awarding contracts.

Letting Manual

letting official

The letting official is the TxDOT official in charge of conducting the letting and is responsible for making required rulings.
Letting Manual

levee

A levee is a continuous ridge of embankment for confining drainage to the desired area. An embankment to prevent flooding.

level cutters

Level cutters are the elements of a job that distinguish it from a lower-level job in the same job family. Level cutters include distinctions in the extent to which the position is supervised by or supervises other positions, additional duties or advanced levels of responsibility, education and experience requirements, specific degrees(s) or license/certifications requirements, additional competency requirements to include knowledge requirements, and specific skills, abilities and other attributes.

Human Resources Manual

level of service

Level of service is a measure of traffic flow and congestion. As defined in the Highway Capacity Manual - A qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Level of Service analysis

LOS

An LOS analysis determines the LOS for a particular facility usually for three time periods. These periods include existing, construction year, and design year (usually 20 years past the construction year) conditions. Three levels of analysis include planning, design, and operational analysis. A planning LOS analysis involves little detail and is used for preliminary facility sizing. A design LOS analysis is more detailed and tends to be used for sizing a facility given specific traffic and roadway conditions. An operational LOS analysis is typically used to assess current conditions so that improvements can be developed to improve flow. An operational LOS analysis is usually the most detailed.

level-up course

The level-up course is a layer of material constructed directly on the existing pavement surface to eliminate irregularities before placing an overlay course.

liability claims

Liability claims are those requests for reimbursement arising out of the use or operation of department owned, leased, or rented equipment which may or may not have resulted in property damage, injury or deaths to persons outside the department.

Occupational Safety Manual
liabilities

Liabilities are debts or other legal obligations arising out of transactions which must be paid at some future date. The term does not include encumbrances.

lien

A lien is a hold or claim that one person has on the property of another, such as a security for a debt or a charge, judgment, mortgage, or tax.

Right of Way Manual

lienholder

A lienholder is a person who possesses a right of lien on the property of another.

Right of Way Manual

life-cycle costs

Total costs for construction and maintenance, or purchase and operation, over the expected useful life of the asset.

life-cycle cost analysis

An economic assessment of competing design alternatives, considering all significant costs of ownership over the economic life of each alternative expressed in equivalent dollars.

lift

1. Lift is the layer of embankment material to be compacted and used to build a fill section.
2. Lift is a layer or course of paving material applied to a base or a previous layer. This term is used interchangeably with course.

Light Rail Transit or Light Rail

LRT

A railway with a “light volume” traffic capacity compared to “heavy rail.” Light rail may use shared or exclusive rights of way, high or low platform loading, and multi-car trains or single cars traveling on fixed rails. LRT is usually electric-powered and is also known as light rail, streetcar, trolley car, and tramway.

light source

The device that converts electric energy to visible light (also called the lamp).

Highway Illumination Manual

light standard

A light standard, or pole, is the supporting member for a luminaire.

lighting assembly
A lighting assembly is a complete lighting fixture consisting of the housing, reflector, lens and ballast. A lighting assembly may or may not include a lamp.

*Manual of Testing Procedures*

**lightweight aggregate**

Lightweight aggregate consists of expanded shale, clay or slate, and is produced by the rotary kiln method. NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**limestone rock asphalt**

LRA

Limestone rock asphalt is limestone impregnated with naturally occurring asphalt. NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**limited access roadway**

Limited access roadway is a roadway especially designed for through traffic and over, from, or to which owners or occupants of abutting land or other persons have no right or easement of access by reason of the fact that their property abuts such limited access facility or for any other reason. Interstate highways, parkways, and freeways are usually developed as limited-access facilities.

*Access Management Manual*

**limited central security administrator**

LSCA

A limited central security administrator is the highest level of access for the district, division, office, or region (D/D/O/R) security administrators under the distributed security process.

*Information Security Manual*

**limited release for utility work only**

Limited release for utility work only is a type of ROW Division release that allows only utility work costs to be charged against the ROW CSJ (-job) number.

*ROW Utility Manual*

**line art**

Line art is a black-and-white image, whether raster- or vector-based.

*Communications Manual*

**line**

A line is a baseline of roadway.

**line number**
A line number is the sequential number assigned to certain accounting voucher entries, as on the multi vendor voucher detail, which serves as a reference for research and a computer processing control.

**linear material**

Linear material, for use as prefabricated pavement marking, is used for longitudinal markings, crossbars, or markings other than the standard symbol or legend material.

*Manual of Testing Procedures*

**linear shrinkage**

Linear shrinkage means a decrease in a single dimension of specimen of soil mass when moisture content is reduced from liquid limit (LL) to shrinkage limit of the soil; expressed as a percentage of the original dimension of specimen using Test Method TEX-104-E.

**liner plate**

A liner plate is formed steel unit used to line or reinforce a tunnel or other opening.

**link**

Links are segments of the network that connect two nodes.

*Traffic Data and Analysis Manual*

**link impedance**

Link Impedance is a code assigned to each link of the network that represents travel time or a combination of travel time and distance. Link impedance varies in each traffic assignment iteration based on the volume to capacity ratio calculated for each link in the previous assignment.

*Traffic Data and Analysis Manual*

**liquid-in-glass thermometer**

A liquid-in-glass thermometer indicates temperature by the distance a liquid contained in a glass bulb has expanded and traveled into a connecting capillary tube. Mercury or colored alcohols are usually used. The capillary tube above the liquid usually contains a gas such as dry nitrogen. There are three common designs: Complete Immersion, Partial Immersion and Total Immersion.

*Manual of Testing Procedures*

**liquid limit**

LL

A liquid limit is the moisture content expressed as a percentage of the weight of over-dried soil, at which soil changes from a plastic to a liquid state. It is the moisture content of a soil at which two halves of a soil part, separated by a groove of standard dimension (1 cm deep) will join at the length of 1/2 inch under impact of 25 blows using the Mechanical Liquid Limit Device, and Test Method
“TEX-104-E, Determining Liquid Limits of Soils.” The percent of moisture a soil sample where a decrease in moisture changes from a viscous or liquid state to a plastic one. *Manual of Testing Procedures*

**liquid state**

Liquid state is when the material is wet enough to flow under its own weight.

**liquidated damages**

Liquidated damages are charges to a contractor, specified in the contract, to be assessed for each day used over the allotted construction contract time. Liquidated damages reflect the costs associated with project completion delays, including administrative and travel delays.

**lis pendens**

Lis pendens is a written notice that condemnation proceedings have been filed. The notice is usually filed in the county property records office. *Right of Way Collection*

**listed wastes**

Listed wastes are hazardous wastes that have been placed on one of three lists developed by the Environmental Protection Agency. *Environmental Affairs Division*

**LISTSERV**

A LISTSERV is a mailing list program that maintains a variety of mailing lists and distributes information to its subscribers. LISTSERV topics may be carried on a site’s Usenet news groups, or it may come to a user via email. *Information Security Manual*

**lithification**

Lithification is the process of hardening, induration and compaction of sediments, leading to the formation of solid materials. NOTE: This definition has been approved by the Specification Committee. *Manual of Testing Procedures*

**litter**

Litter is trash and/or garbage, including but not limited to scrap metals, rags, paper, wood, plastic, glass, and rubber products including tires that are discarded onto the right of way. *Maintenance Collection*

**loading**

Loading is the load (vertical pressure) per unit area in Kpa (lb/ft²)
2
) from both the structure and overburden of each layer of soil involved.  
*Manual of Testing Procedures*

**loading frame**

A loading frame is a device designed to hold specimens so that controlled force may be applied to them.  
*Manual of Testing Procedures*

**load transfer device**

Load transfer device is a mechanical means designed to carry loads across a joint in a rigid slab.  
*Pavement Design Manual*

**Local Access Management Plan**

Local Access Management Plan is a plan or guideline in a formally adopted municipality rule or ordinance that is related to the application of access management within the municipality’s jurisdiction.  
*Access Management Manual*

**local access road**

A local access road is a local public street or road that is generally parallel to a highway under the jurisdiction of TxDOT. Access for businesses or properties located between the highway and the local access road is provided to the local access road rather than the highway. A local access road may also be called a lateral road, or reverse frontage road, depending on individual location and application.  
*Access Management Manual*

**local area network**

LAN

A local area network is a network that connects computers that are in a small geographic area, such as a district headquarters or campus.  
*Information Security Manual*

**local area network password**

LAN password

A local area network password is a password used to authenticate identity to Novell LAN or Windows NT servers.  
*Information Security Manual*

**Local Area Network Safety Evaluation Report**

LANSER
LANSER is a computer software system incorporating a modular traffic database which enables users to conduct traffic crash analyses and extract historical urban/rural highway and street vehicular crash data that has been reported to and recorded by the Texas Department of Public Safety.

Traffic Operations

local benefit amount
The local benefit amount is the amount of federal funds that will benefit a local jurisdiction as reported during the term of a contract. Upon submission of a final voucher, the costs reported represent the total expenditure amount that will benefit a local jurisdiction.

Finance Division

local city
Local city is a place where MAT maintains an office.

local project
A local project is one whose entire activity is confined within the boundaries of a single TxDOT district. (See also Statewide project.)

local public agency
LPA
A local public agency is any political subdivision of the State such as a city, county or other public agency with legal authority to acquire right of way for highways or public roads and to provide relocation benefits.

Right of Way Manual

local road
A local road is a road that primarily provides access to adjacent land and provides service to motorists over relatively short distances.

Transportation Planning and Programming Collection

local unit cost
LUC
The local unit cost is the cost of sampling one unit in a local city.

local user
A local user is one that is directly connected to the computer system being used through a Local Area Network or similar type of connection.

Information Security Manual

lock seam
A lock seam is a longitudinal seam in a pipe, formed by overlapping or folding the adjacent edges. The seam may be helical.

**lock(ed)**

Locked is when a user is prompted in online terminal session to reenter their password to reactivate the session.

**lockout**

Lockout is the placement of a lockout device on an energy-isolating device, in accordance with an established procedure, ensuring that the energy-isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

*Occupational Safety Manual*

**lockout date**

The lockout date is the date the system is locked and no more entries can be made. Schedules for lockout and unlock dates are sent by the Payroll Branch in August of each year.

**lockout device**

A lockout device is a device that utilizes a positive means such as a lock, either key or combination type, to hold an energy-isolating device in a safe position and prevent the energizing of a machine or equipment. Blank flanges and bolted ship blinds.

*Occupational Safety Manual*

**lodging expense**

Lodging expense means a charge imposed by a provider of lodging as consideration for providing lodging. This term does not include money paid as a donation, gratuity, or tip to the provider.

*Travel Manual*

**logo signing**

Logo signing refers to when the logo of specific services is displayed along eligible highways offering business names or trademarks offering gas, food, lodging and camping to the traveling public.

**long bolts**

Long bolts are bolts that will fit in a direct tension indicator with the required “stick-out.”

**long chord**

A long chord is the chord of the arc being described. The straight line distance between the Point of Curvature (PC) and the Point of Tangency (PT).

**longitudinal cracking**
Longitudinal cracking is an asphaltic concrete pavement distress type in which cracks or breaks run approximately parallel to the pavement centerline. Longitudinal cracking ranges from 0 to 999 feet per station.

*Pavement Management Information System (PMIS) Rater's Manual*

**longitudinal joint**

A longitudinal joint is a joint placed between traffic lanes to control longitudinal cracking and to facilitate construction, where needed.

**longitudinal reinforcement**

A longitudinal reinforcement is a steel bar reinforcement placed parallel to the centerline of the roadway in concrete pavement and bridge decks or parallel to the walls in concrete box culverts.

**long term residential occupant**

A long term, or 180-day, residential occupant is a person who had lawful possession and occupied a dwelling from which he/she is being displaced for at least 180 consecutive days immediately prior to the initiation of negotiations.

*Right of Way Manual*

**lot**

1. A lot is the quantity of identical, finished material presented for inspection at one time. A lot may be composed of one or more batches or may be designated by a specific number of elements according to specific governing rules or specifications.

2. A lot is ten, or fraction thereof, of each model and type, per shipment of traffic signal controller assemblies, traffic signal controllers, and conflict monitors.

3. A lot of ten, or fraction thereof, of each model and type, per shipment of traffic signal controller assemblies, traffic signal controllers, and conflict monitors.

*Manual of Testing Procedures*

**lower tier**

Lower tier debarment certification - A debarment certification form that is completed by subproviders or other lower tier participants.

*Engineering, Architectural and Surveying Services Manual*

**lower tier debarment certification**

Lower tier debarment certification is a debarment certification form that is completed by subproviders or other lower tier participants.

*Engineering, Architectural and Surveying Services Manual*

**lower tier participant**
A lower tier participant is a subprovider or other participant in the contract, other than the state, that is not the prime provider.
*Engineering, Architectural and Surveying Services Manual*

**lowest available airfare**

Lowest available airfare is the lowest available airfare as quoted in American Airlines' Commercial Sabre reservation system or Worldspan's PARS reservation system.
*Travel Manual*

**low-volume road**

Low-volume road is a roadway generally subjected to low levels of traffic.
*Pavement Design Manual*

**Lubbock District**

LBB

The Lubbock District is a TxDOT district office including the following counties: Bailey, Castro, Cochran, Crosby, Dawson, Floyd, Gaines, Garza, Hale, Hockley, Lamb, Lubbock, Lynn, Parmer, Swisher, Terry, and Yoakum. Area offices are located in Brownfield, Littlefield, Lubbock and Plainview. A Vehicle Titles and Registration Regional Office is also in this district.
*Inside TxDOT*

**Lufkin District**

LFK

The Lufkin District is a TxDOT district office including the following counties: Angelina, Houston, Nacogdoches, Polk, Sabine, San Augustine, San Jacinto, Shelby, and Trinity. Area offices are located in Livingston, Lufkin, Nacogdoches, and San Augustine.
*Inside TxDOT*

**lumen**

lm

Alumen is the unit of quantity of light flux; in other words, the total output of a light source.
*Highway Illumination Manual*

**luminaire**

A luminaire is a device that directs, controls, and modifies the light produced by a light source. A luminaire consists of a light source, reflector, refractor, housing, and such support as may be integral with the housing.

**lux**

(lx)
Lux is the metric unit of measurement for the illumination on a surface. (See footcandle for English unit.) One lux is the illumination on a surface one meter from and perpendicular to a uniform point source of one candela.

*Highway Illumination Manual*
main inside lane

The main inside lane, on a multi-lane highway is the extreme left-hand traffic lane, in the direction of traffic flow, of those lanes available for traffic moving in one direction. (Also referred to as left lane).

main middle lane

The main middle traffic lane is between the outside lane and inside lane of a multi-lane highway (also referred to as left middle lane and right middle lane or numbered in consecutive order starting with the outside lane as first lane).

main outside lane

The main outside lane on a multi-lane highway is the extreme right hand through-traffic lane, in the direction of traffic flow, of those lanes available for traffic moving in one direction (also referred to as right lane or first lane).

maintenance

Maintenance includes activities which involve the repair or preservation of an existing facility to prevent that facility’s deterioration to an unsafe or irreparable state, or which involves the treatment of an existing facility or its environs to meet acceptable standards of operation or aesthetic quality.

maintenance agreement

A maintenance agreement is a contract between the department and another person or entity for the maintenance of TxDOT’s property or equipment.

maintenance area

1. A maintenance area for air quality is a geographic area that was previously designated as a non-attainment area.
2. A maintenance area is any geographic region of Texas designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a plan that will assure maintenance in accordance with standards.

Maintenance Division

MNT

The Maintenance Division oversees architectural services and provides general oversight of the letting, management, and administration of maintenance contracts.

maintenance level of service
MLOS

Maintenance level of service is the condition a component of the state highway system should be in under a given level of funding.

Administrative Circular 5-92

Maintenance Management Information System

MMIS

The Maintenance Management Information System is an online system that helps gather and analyze data for a variety of purposes. MMIS is designed to: 1) collect data on selected routine maintenance functions, which together account for the majority of maintenance expenditures, 2) draw data from other computer systems to generate reports relating maintenance costs to specific roadway segments, and 3) maintain an inventory by county of the reference or limits of every state-maintained highway in Texas.

MMIS Manual

maintenance, routine

Routine maintenance is generally restricted to work of a routine nature involving one-half mile or less.

main-traveled way

The main-traveled way is the traveled way of a highway that carries through traffic. In the case of a divided highway, the traveled way of each of the separate roadways for traffic in opposite directions is a main-traveled way. It does not include such facilities as frontage roads, turning roadways, or parking areas.

Right of Way Manual

major category

Major category is a twenty-character field of one or more words that identifies an item. Bolt, washer

Materials And Supplies Management System Manual

major collector

A major collector is an area public way for purposes of vehicular travel, usually interstate or federal highways; includes the entire area within the right of way.

Right of Way Collection

major equipment

Major equipment is any item that meets any of these criteria:

- The unit matches an EOS Class Code and description listed in the TACS table TEOS001
- The cost of owning and operating the equipment is an important consideration.
- There are significant operating costs and/or capital investments for distribution to specific cost centers.
**Purchasing Manual**

**major investment study**

MIS

1. A study of multimodal improvements of substantial cost expected to have significant effect on capacity, traffic, level of service, or mode share at the transportation corridor level. Note: The term MIS will no longer be used under TEA-21.

2. A major investment study is a tool for making better decisions at an early time in the transportation planning process. It provides decision-makers with information on options available for addressing problems before investment decisions are made.  

*Transportation Planning and Programming Collection*

**major items of work**

Major items of work are any individual bid item included in the proposal that has a total cost equal to or greater than 10% of the original contract or $100,000.00, whichever is less.

**major revision**

A major revision is an amendment to the Statewide Transportation Improvement Program involving a reallocation of funds between two or more districts or two or more metropolitan planning organizations or a metropolitan planning organization and a district.  

*Transportation Planning and Programming Collection*

**major work category**

Major work category is a task that constitutes a large amount of a project or is important or critical to completion of work.  

*Engineering, Architectural and Surveying Services Manual*

**Management Information System**

MIS

The Management Information System is a set of large computer programs that consists of EOS, MES, HRMS, FINS, MSMS, SLD, and MMIS.

**management reports**

Management reports are generally under the control of the division to which the reports are related. All of these reports use the information produced by the department’s automated systems.

**management section**

A management section is a Pavement Management Information System (PMIS) term which describes a section of pavement, of similar structure, that the engineer intends to maintain in a uniform manner.  

*Pavement Management Information System (PMIS) Users Manual*
Management Services Office (former)

MAN

The former Management Services Office oversaw efforts to implement the department’s Strategic Plan for 1995 through 1999, coordinated with the Texas Transportation Plan which maps out TxDOT goals for the next 20 years. In March of 1998, MAN became the Strategic Management Section of the Finance Division.

Inside TxDOT

management system

A management system is a systematic process, designed to assist decision-makers in making cost-effective use of limited resources to improve the efficiency of, and protect the investment in, the nation’s existing and future transportation infrastructure. The infrastructure includes identification of performance measures; data collection and analysis; identification of needs; evaluation, selection, and implementation of appropriate strategies/actions to address the needs; and evaluation of effectiveness of implemented strategies/actions.

Transportation Planning and Programming Collection

Management Team (former)

MT

Prior to March of 1998, the Management Team referred to the Senior Management Team, all the district engineers, all the division directors, and all directors of special offices.

TxDOT Directive No. 3-93

manager number

Manager number is the unique three-digit number of the person responsible for an account.

Finance Division

manager summary

Manager summary is a summation of charges to all accounts during a specific reporting period for a specific manager.

Finance Division

management trail

A management trail is the documents which demonstrate that all required internal controls and management practices have been followed. The purpose is to provide the information for management use and review, rather than for an auditor. Frequently inaccurately referred to as “audit trail” because its deficiencies are common discrepancies in audit reports.

managing office
1. Managing office is the D/D/O/R that is funding an outsourced project and/or whose staff (including the project manager, contract manager, as well as contract and accounting personnel) has a role in some aspect of contract administration.  
   Contract Management Manual

2. Managing office is the division, office, or district with the responsibility for awarding and managing the contract.  
   Engineering, Architectural and Surveying Services Manual

managing officer

Managing officer is the division director, office director, or district engineer of the managing office.  
Engineering, Architectural and Surveying Services Manual

mandatory referral

A mandatory referral is a referral to the Employee Assistance Program (EAP) that requires an employee to report to the EAP and complete treatment or be terminated from employment with the department.  
Human Resources Manual

manholes

Manholes are underground structures with an opening for manual access.

man hours

Man hours are hours reported on time sheets as related to an account.  
Finance Division

manifest

Manifest is a five-part Texas Commission on Environmental Quality form, Whole Used or Scrap Tire Manifest. Districts can order the manifest forms from their Regional Distribution Center under DHT # 144766.  
Equipment Manual

Manning’s Formula

Manning’s Formula is an equation for the value of coefficient C in the Chezy Formula, the factors of which are the hydraulic radius and a coefficient of roughness.

Manual on Uniform Traffic Control Devices

MUTCD

The Manual on Uniform Traffic Control Devices is a guide to provide uniformity in the placement of signs, pavement markings and traffic signals.

manufacturer
Manufacturer is a three-character code that identifies the manufacturer. It must match a code on the MFGNAME Table and Characteristics System (TACS) table.

*Materials And Supplies Management System Manual*

**manufacturer’s number**

Manufacturer’s number is a 25-character alphanumeric field used to display either the manufacturer’s part number or the commodity number of a General Services Commission contract item.

*Materials And Supplies Management System Manual*

**marginal distribution**

Marginal distribution is the distribution of a variable (e.g., number of households) by a single characteristic of the variable (e.g., household size). An example would be the number of households distributed by household size. When a variable is distributed by more than two characteristics (e.g., household size and household income), the row and column sums of the two way distribution are referred to as the marginal distributions.

*Traffic Data and Analysis Manual*

**marginal functions**

Marginal functions are job duties incidental to a position or performed infrequently, if at all.

*Human Resources Manual*

**market value**

The price that the property would bring when offered for sale by one who desires, but is not obliged to sell, and is bought by one who is under no necessity of buying it. When establishing a market value, one must take into consideration all of the uses to which it is reasonably adaptable and for which it either is, or in all reasonable probability will become, available within the reasonable future.

*Real Estate Acquisition Guide for Local Public Agencies*

**mass transit**

Mass transit is a transportation system which provides for the movement of a large number of people to various locations, along designated routes.

**mast arm**

MA

A mast arm is an attachment to a lighting pole on the end of which a luminaire is mounted.

*Highway Illumination Manual*

**Master Grant Agreement**

The master grant agreement contains the standard clauses common to public transportation grants. See also project grant agreement (PGA).
Public Transportation Collection

match

A match is state or local funds used to match federal-aid funds for federal-aid program projects. The majority of federal-aid programs require a 20 percent state/local match. Safety projects or those on the Interstate system may have a 10 percent match requirement.

Transportation Programming and Scheduling Manual

match-cure cylinders

Match-cure cylinders are the release of tension strength cylinders heated by the match cure molds along the reference temperature profile of the prestressed concrete member.

Manual of Testing Procedures

match-cure system

Match-cure system is an electronic system capable of monitoring the in-situ concrete temperature and heating corresponding match cure cylinders along the same temperature profile curve.

Manual of Testing Procedures

materially unbalanced bid

A materially unbalanced bid is a bid that generates a reasonable doubt that award to the bidder submitting a mathematically unbalanced bid will result in the lowest ultimate cost to the state.

Letting Manual

Material Safety Data Sheets

MSDS

The material safety data sheet is an information outline for hazardous products used in the workplace.

Occupational Safety Manual

Materials and Tests Division (former)

MAT

The Materials and Tests Division verifies that all the materials used in construction and maintenance are uniformly tested for quality, and conducts research to improve materials. In March of 1998, MAT became a section in the Construction Division.

Inside TxDOT

mathematically unbalanced bid

A mathematically unbalanced bid is a bid containing lump sum or unit bid items that do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder’s anticipated profit, overhead costs, and other indirect costs.

Letting Manual
**maximum density**

Maximum density is the highest density calculated on the basis of dry weight of material per cubic foot.  
*Manual of Testing Materials*

**maximum dry density**

Maximum dry density is the maximum value obtained by the compaction curve using the specified compactive effort.  
*Manual of Testing Procedures*

**may**

May precedes a provision that is permissive; no requirement for implementation is intended though good practice may suggest compliance.  
*Occupational Safety Manual*

**‘may call’ status**

‘May call’ status is the condition in which employees are notified by their supervisors in advance that they may be contacted during off-duty hours to see if they can report to work. Employees on this status are not required to be available for work, their activities are not restricted in any way, and they do not receive standby time credit or compensation for this time. Employees who are called while on this status and who choose to report to work must meet all the usual department employment standards and rules described in the *Human Resources Manual*.  
*Human Resources Manual*

**MD5**

MD5 is an algorithm used to verify data integrity. This is done through the creation of a 128-bit message digest from data input (which may be a message of any length). It is "computationally infeasible" (according to the standard) for any two messages, input to MD5 algorithm, to have output with the same message digest. It is also infeasible for a false message to be created through apprehension of the message digest.  
*Information Security Manual*

**median**

The median is the portion of a divided highway separating the opposing traffic flows. A median may be traversable or nontraversable.  
*Access Management Manual*

**median, depressed**

A depressed median is one that is lower in elevation than the traveled way and designed to carry a certain portion of the surface water.
**median, non-traversable**

A non-traversable median is a physical barrier in a roadway or driveway that separates vehicular traffic traveling in opposite directions. Non-traversable medians include physical barriers (such as a concrete barrier, a raised concrete curb and/or island, and a grass or a swale median) that prohibit movement of traffic across the median.

*Access Management Manual*

**median, raised**

A raised median is one that is higher in elevation than the traveled way and usually outlined with a curb.

**median, traversable**

1. A traversable median is a median that by its design does not physically discourage vehicles from entering or crossing over it. This may include painted medians.

   *Access Management Manual*

2. A traversable median, whether raised, depressed or flush, consists of a visible separation without any physical obstruction and which can be crossed with ease and comfort.

**median barrier, concrete**

A concrete median barrier is a type of median providing a physical obstruction to crossing.

**median blister**

A median blister is a raised median in an area between traffic lanes for control of vehicle movements.

**median opening, crossover**

A median opening, also known as a crossover, is an opening in a median for crossing and turning traffic.

**mediation**

1. Mediation is a process for resolving conflicts between employees or between employees and their supervisor or manager. It is a voluntary problem-solving process that includes a trained mediator as a neutral third party assigned by the Human Resources Division to coordinate a confidential session in an attempt to resolve their differences and develop a mutually satisfactory action plan.

   *Human Resources Manual*

2. Mediation is a settlement procedure in which the property owner and the State attempt to voluntarily settle an eminent domain action after the Commissioners’ Hearing.

   *Right of Way Collection*

**meeting with affected property owners**

MAPO
Meeting with affected property owners is a type of meeting held with property owners anticipated to be affected by a transportation project. A MAPO is usually held for minor projects. See also public meetings.

Environmental Manual

megabits
MBPS

Megabits refer to megabits per second. One megabit per second equals 1 million bits per second.

Information Security Manual

membrane

A membrane is a thin, plastic material used as reinforcement or seal on pavements, bridge decks, or underneath the roadbed surface.

Bridge Design Manual

membrane curing

Membrane curing is the application of a liquid membrane-forming compound suitable for application on the finished surface of freshly-poured concrete to retard loss of water during the early hardening period.

memorandum of understanding
MOU

A memorandum of understanding is a formal document which outlines the relationship between agencies or parties, including responsibilities and jurisdiction of each party, which sets forth within its provisions agreements between parties.

memorial highway

A memorial highway is a segment of a designated highway given a name, by a legislative or local governmental act, as a memorial to a person or group of people; considered a secondary route designation.


merging

Merging is the converging of traffic from a traffic lane or on ramp into another traffic lane.

metes and bounds

Metes and bounds are the limits and boundary of a tract of land. A metes and bounds description usually is a description that uses bearings (the angles East or West of due North or due South) and distances (usually in feet or chains) to describe the perimeter of a tract.

Survey Manual
metric

Meter/kilogram system of units

metropolitan area

MA

A metropolitan area (Bureau of the Census definition): The general concept of a metropolitan area (MA) is one of a large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that nucleus. Some MAs are defined around two or more nuclei. Each MA must contain either a place (as defined by the Bureau of the Census) with a minimum population of 50,000 or a Census Bureau-defined urbanized area and a total MA population of at least 100,000 (75,000 in New England). An MA comprises one or more central counties. An MA may also include one or more outlying counties that have a close economic and social relationship with the central county.

Transportation Planning and Programming Collection

metropolitan area boundary

MAB

A metropolitan area boundary is the delineated boundary that encompasses the Metropolitan Planning Area.

Transportation Planning and Programming Collection

metropolitan area network

MAN

A Metropolitan Area Network is logically a collection of Local Area Networks connected via a high speed link (equal to or greater than Ethernet speed) that provides access to a LAN's resources on another LAN. A MAN is typically used by a small company spread over multiple buildings or a campus.

Information Security Manual

metropolitan district

A metropolitan district is one of the geographical areas of the department managed by a district engineer that is headquartered in Austin, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, Pharr, or San Antonio district.

Engineering, Architectural and Surveying Services Manual

Metropolitan Planning Area

MPA

A metropolitan planning area is the geographic area in which the metropolitan transportation planning process required by 23 USC §134 and 49 USC §5303 of the Federal Transit Act must be carried out.

Transportation Planning and Programming Collection
metropolitan planning area boundary

MPAB

See metropolitan area boundary.

*Transportation Planning and Programming Collection*

**Metropolitan Planning Organization**

MPO

1. A metropolitan planning organization is an association of local agencies established to coordinate transportation planning and development activities within a metropolitan region. Establishment of the MPO is required, by law, in urban areas of over 50,000 population, if federal funds are to be used. The MPO consists of two groups. 1) The Policy board is comprised of officials representing the counties, cities, and state transportation agency. 2) The technical advisory group consists of professional planners and engineers who are usually employees of the same agencies.

2. A metropolitan planning organization is the forum for cooperative transportation decision-making for the metropolitan planning area. It is also a term used generically to mean the organization in urbanized areas over 50,000 population that is responsible for carrying out the transportation planning process for the metropolitan area.

*Transportation Planning and Programming Collection*

**Metropolitan Planning Organization Policy Board**

The Metropolitan Planning Organization Policy Board is the forum and committee structure (e.g., Regional Transportation Council, Steering Committee, Policy Advisory Committee) established under 23 USC §134 49 USC §5303 and the Governor’s Designation Agreement as the group responsible for giving an MPO overall transportation policy guidance.

*Transportation Planning and Programming Collection*

**Metropolitan Statistical Area**

MSA

Metropolitan statistical areas (Bureau of the Census definition) are relatively freestanding MAs. These areas are typically surrounded by non-metropolitan counties.

*Transportation Planning and Programming Collection*

**Metropolitan Transit Authority**

MTA

A metropolitan or regional transit agency created under specific state statutes, supported by a dedicated local sales tax, and providing service in an urbanized area having a population of 200,000 or more. An MTA is commonly referred to as a transit authority.

*Public Transportation Collection*

**Metropolitan Transportation Authority**

MTA
See metropolitan planning area.

*Transportation Planning and Programming Collection*

**Metropolitan Transportation Plan**

**MTP**

The Metropolitan Transportation Plan is the official intermodal transportation plan that is developed and adopted through the metropolitan transportation planning process for the metropolitan planning area.

*Transportation Planning and Programming Collection*

**microcomputer**

Microcomputer is a computer that contains a microprocessor.

*Information Security Manual*

**miles-per-hour**

**MPH**

Miles per hour refers to the rate of speed at which a vehicle is traveling.

*Traffic Safety*

**mill test report**

**MTR**

Mill test report for steel is a report from the producing mill on the base metal listing the chemical analysis, physical analysis; heat or lot number; specification used to manufacture the material; “Domestic Clause” stating that the steel or iron was melted and manufactured in the United States of America. Reporting of the chemical and physical analysis shall be as required by the applicable ASTM, AASHTO, ANSI, etc. Specification

*Inspection Guide*

**mineral filler**

1. A mineral filler is the smallest particles of aggregate used in asphalt mixtures. It consists of dry stone dust, slate dust, Portland cement or other minerals all of which must be free of foreign or injurious matter. At least 55 percent will pass a No. 200 sieve.

2. Mineral filler is a fine aggregate or manufactured material used to supply particle sizes where the mix design is deficient in gradation. NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**minimum allocation funds**

Minimum allocation funds are the funds that the Secretary of Transportation allocates among the states under 23 USC §157(a). These funds are distributed in an amount sufficient to ensure that a state's percentage of the total apportionments in each such fiscal years and allocation for the prior
year for certain programs shall not be less than 90 percent of the percentage of estimated tax payments attributable to highway users in the state paid into the Highway Trust Fund.

*Transportation Planning and Programming Collection*

**minimum allowable percent density**

Minimum allowable percent density is the density allowed on a given black base material based on a sample of freshly gyrated road mix.

**minimum guarantee**

A minimum guarantee is an apportionment of federal funds that ensures each state receives a specific share of the aggregate funding for major highway programs, with every state guaranteed at least a 90.5 percent return on its percentage share of contributions to the Highway Account of the Highway Trust Funds.

*Transportation Programming and Scheduling Manual*

**minimum path**

The minimum path is the shortest route along links of the network in terms of travel time between two zones.

*Traffic Data and Analysis Manual*

**minimum remote quantity**

MRQ

Minimum remote quantity is the minimum quantity of any given material eligible for sampling in a specific remote location.

**minimum standard quantity**

MSQ

Minimum standard quantity is the minimum quantity of any given material eligible for sampling in a local city. MAT establishes the MSQ for each material to be sampled, based on typical lot size, load size and convenience of sampling and testing.)

**minimum turning path**

The minimum turning path is the path of the outermost point on a vehicle making its sharpest turn.

**minimum turning radius**

The minimum turning radius is the radius of the minimum turning path of the outside of the outer front tire.

**minor category**

Minor category is a 20-character field of one or more words that further defines the type of item. For major category item “bolt,” minor categories could be “hex” or “carriage.”
minor equipment

Minor equipment is any non-consumable implement, tool, or device having a unit cost over $1000. Items installed in a permanent manner on highways, rights of way, bridges, and buildings are not considered equipment.

Purchasing Manual

Minor Equipment Operating System

MEOS

The Minor Equipment Operating System is part of the Equipment Operating System (EOS). MEOS deals with minor equipment.

Minor Equipment System

MES

Minor Equipment System is the automated system for electronically recording, maintaining and reporting information about reportable personal property. It is managed by the General Services Division.

minor, state-funded project

Projects funded entirely with state funds consisting of minor work such as preventative maintenance or restoration projects.

minority (populations)

Populations that are under represented in a community, compared to the whole.

minute order

A minute order is a formal expression of opinion, direction, or intent voted by the Texas Transportation Commission to approve various actions by TxDOT.

Miramo

Miramo is the name of software which interprets command files from CMCS to merge PDF documents to create the proposal.

Miscellaneous Contract Information System

MCIS

The Miscellaneous Contract Information System is a computerized management information system used to monitor and control miscellaneous contracts for expenditures which are not construction/maintenance or purchase of service contracts which get entered into CIS/CMCS or APS.

Contract Management Manual
Miscellaneous Contract Information System (MCIS) Segment 41

MCIS Segment 41

MCIS Segment 41 is the department’s automated program used to enter, issue, and track payments made to the performing entity.

Contract Management Manual

mission critical information

Mission critical information is information that is defined by the agency to be essential to the agency’s function(s).

Information Security Manual

mitigation

Mitigation is a technique or means of reducing impacts to resources or to the natural environment. Mitigation includes avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or compensating for the impact by replacing or providing substitute resources or environments.

Environmental Manual

mobile home

Mobile homes include manufactured homes and recreational vehicles used as residences.

Right of Way Manual

mobility management

Mobility Management consists of short-range planning and management activities and projects for improving coordination among public transportation and other transportation-service providers carried out by a recipient or subrecipient through an agreement entered into with a person, including a government entity, under 49 U.S.C. Chapter 53 (other than Section 5309). Mobility management does not include operating public transportation services.

Public Transportation Collection

mobility projects

Mobility projects are transportation projects that add additional lanes to an existing facility and which have a length of at least one mile.

Transportation Planning and Programming Collection

mode
Mode is a security implementation stages used by CA-TOP SECRET which determine the way in which resource access requests are processed. In FAIL mode, attempted access to resources not authorized to the user will not be permitted.

**mode choice**

Mode choice is the physical means of transportation used for a trip. The modes available include auto/truck/van driver, auto/truck/van passenger, public transit, bicycle, school bus, walking, taxi, commercial vehicle and other. Generally, trips are aggregated for similar modes such as private vehicle driver, private vehicle passenger, public transit, school bus, bicycle, walk, taxi, commercial vehicle and other.

*Traffic Data and Analysis Manual*

**Modified Delphi Method**

The Modified Delphi Method is a method of prognostication based on an interactive feedback process and producing a consensus opinion of a number of experts in a given field.

*Traffic Safety*

**Modulus**

Modulus is a flexible pavement backcalculation system for computing the modulus of elasticity of each layer in a pavement system using input from the falling weight deflectometer. The program also contains routines to assess structural strength and analyze remaining life, both of which can be used as the first step in the pavement rehabilitation design process.

*Pavement Design Manual*

**modulus of elasticity**

\[ E \]

The modulus of elasticity is the stress required to produce unit strain, which may be a change of length (Yount’s modulus); a twist or shear (modulus of rigidity), or a change of volume (bulk modulus), expressed in dyne per square centimeter.

**modulus of subgrade reaction**

Modulus of subgrade reaction (k) is Westergaard’s modulus of subgrade reaction for use in rigid pavement design: the load in psi on a loaded area of the roadbed soil or subbase divided by the deflection in inches of the roadbed soil or subbase, psi/in.

*Pavement Design Manual*

**Mohr’s Diagram**

Mohr’s Diagram is a graphical construction of combined principal stresses in static equilibrium.

*Manual of Testing Procedures*

**Mohr’s Failure Circle**
Mohr’s Failure Circle is a stress circle constructed from major and minor principal stresses of the specimen at failure.

*Manual of Testing Procedures*

**Mohr’s Failure Envelope**

Mohr’s Failure Envelope is the common tangent to a series of failure circles constructed from different pairs of principal stresses required to fail the material. The envelope is generally curved, its curvature depending on the factors related to the characteristics of the material.

*Manual of Testing Procedures*

**moist cabinet**

A moist cabinet is a compartment storage facility of moderate dimensions with controlled temperature and relative humidity.

**moist room**

A moist room is a “walk-in” storage facility with controlled temperature and relative humidity. Commonly called a fog room when the prescribed relative humidity is achieved by the atomization of water.

**moisture content**

Moisture content refers to the percent of moisture = wt of water X 100 — wt of dry soil — Where wt of water = wet weight of soil - dry weight of soil, using Test Method TEX-103-E.

**moisture preservation**

Moisture preservation is the use of “Blanket sections” with wide shoulders consisting of granular materials, stabilized soils, or where asphalt membranes are applied for this purpose.

*Manual of Testing Procedures*

**moment of inertia**

Moment of inertia is a function of some property of a body or figure - such as weight, mass, volume, area, length, or position, equal to the summation of the products of the elementary portions by the squares of their distances from a given axis.

**monitor**

Monitor means to assess the quality of performance over time at TxDOT for internal control purposes.

*Internal Audit Manual*

**monitored cylinder**

Monitored cylinder is the match cure cylinder, other than the control cylinder, which has the temperature of the specimen monitored during the curing period.
monitored temperature profile

Monitored temperature profile is a graph generated by the match cure system representing Time versus Temperature of the monitored cylinder.

monitoring

Monitoring is the internal control process that assesses the quality of performance over time at TxDOT.

monument

A monument is any object or collection of objects (physical, natural, artificial) that indicates the position on the ground of a survey station.

mosaic

1. Mosaic refers to an assembly of individual aerial photographs matched together so as to form a continuous photographic view of an area.
2. Mosaic is a program that uses a graphical user interface to present World Wide Web information.

Motor Carrier Division

MCD

The Motor Carrier Division issues oversize/overweight load permits and temporary 72/144-hour registrations. It is also responsible for motor carrier insurance filings, vehicle storage facilities licensing and interstate movement authority.

Motor Vehicle Division

MVD

The Motor Vehicle Division licenses new-car dealers, distributors, converters and manufacturers doing business in Texas. The division also enforces the Lemon Law.
Motorist Services (former SMT)
MSS
Motorist Services is one of TxDOT's seven functional areas. The Assistant Executive Director of Motorist Services has oversight of the Automobile Theft Prevention Authority Office (ATPA), the Motor Carrier Division, the Vehicle Titles and Registration Division, the Motor Vehicle Division, and the Travel and Information Division.

Motorized equipment
Motorized equipment includes, but is not limited to, automobiles, trucks, trailers, aircraft, motor graders, rollers, tractors, power mowers, weed eaters, and other power equipment used in connection with construction/maintenance of state-owned property.

Mountable curb
A mountable curb is one that can be readily climbed by a moving vehicle.

Mounting height
Generally the vertical distance between the base of the pole and the luminaire.

MTRX code
The MTRX code is the last two characters of the project number in FIMS Segment 79 which relates to the federal fund source.

Finance Division

Mulch
Mulch is plant residues, natural, artificial, or other materials placed on exposed earth surfaces to reduce erosion, promote plant growth, conserve moisture, control the occurrence of unwanted vegetation, and to minimize temperature fluctuation.

Multi-function vehicle
Multi-function vehicle is a vehicle-mounted, nondestructive measurement system for pavement surface evaluations which collects, processes, and stores information on ride, rut, and distance traveled in real time at highway speeds. The system controls two to three video recorders which store video from pavement and right-of-way cameras.

Pavement Design Manual

Multilane highway
A multilane highway is a highway with four or more lanes.

**Multimodal Operations Office (former)**

**MMO**

The Multimodal Operations Office is responsible for project planning, policy development and operations pertaining to water, rail, bicycles and pedestrian transportation, and serves as the non-federal sponsor of the Gulf Intracoastal Waterway. In May of 1998, MMO became a section of the Transportation Planning and Programming Division.

*Inside TxDOT*

**Multimodal Transportation (former SMT)**

**MTT**

Multimodal Transportation is one TxDOT's seven functional areas. The Assistant Executive Director for Multimodal Transportation has oversight of the Multimodal Operations Office, the Aviation Division and the Public Transportation Division.

**multiple-use agreement**

An agreement (license) for the use of highway right of way for other than highway purposes by political subdivisions, state and federal agencies.

**Multiple Virtual Storage Integrity Committee**

**MVS**

The Multiple Virtual Storage Integrity Committee is a comprised of members of Operating Systems Software Section and a representative from Central Information Security.

**multiplexing**

Multiplexing is sending multiple signals or streams of information on a carrier at the same time in the form of a single, complex signal and then recovering the separate signals at the receiving end.

*Information Security Manual*

**multiprogramming variable number of tasks**

**MVT**

A multiprogramming variable number of tasks is a feature of large computers that allows more efficient operation by having multiple programs (tasks) present and operating in the mainframe computer simultaneously.

**multipurpose form**

The multipurpose form is an insurance form filled out by employees to make changes in insurance coverage.
National Ambient Air Quality Standards
NAAQS

National Ambient Air Quality Standards are maximum air pollutant levels set by the Environmental Protection Agency, which if attained, allow an adequate margin of safety to protect human health.

Environmental Manual

National Bridge Inventory Sheet
NBI Sheet

A national bridge inventory sheet is a printed copy with abbreviated names of the numerical data in the electronic bridge inspection file. The National Bridge Inventory must include all the information required by the FHWA. Texas captures additional information exceeding that required by the NBI.

Bridge Inspection Manual

National Character Set

The National Character Set is the letters A through Z, numerals 0 through 9, and characters @, # and $.

National Cooperative Highway Research Program
NCHRP

The National Cooperative Highway Research Program is administered by the Transportation Research Board.

Research and Implementation Manual

National Electrical Code
NEC

The National Electrical Code is the nationally recognized rules and regulations for the installation and use of electrical power. The NEC is considered the minimum acceptable standard for a safe installation.

Highway Illumination Manual

National Electrical Manufacturer’s Association
NEMA

The National Electrical Manufacturer’s Association provides specifications and industry standards.

Highway Illumination Manual

National Environmental Policy Act
NEPA
The National Environmental Policy Act is the basic national charter for protection of the environment. It establishes policy, set goals and provides means for carrying out the policy. NEPA is binding upon federal agencies, including the Federal Highway Administration (FHWA), and is usually followed as an environmental guideline by state and local agencies. In general, reference to NEPA includes the Act itself and its subsequent amendments.

**National Environmental Policy Act process**

NEPA process

All measures necessary for compliance with the requirements of NEPA.

**National Highway System**

NHS

1. The national highway system is that portion of connected main highways located within the state of Texas that are so designated by the Texas Transportation Commission and approved pursuant to United States Code §103.

   *Right of Way Manual*

2. A comprehensive federal-aid system including the Interstate System and other routes important to the nation’s economy, defense and mobility.

3. The National Highway System is the system of major highway networks established by 23 USC §101, including Interstate routes, many urban and rural principal arterials, the defense strategic highway network, and strategic highway connectors.

   *Transportation Planning and Programming Collection*

**National Highway Traffic Safety Administration**

NHTSA

The National Highway Traffic Safety Administration is the agency within the United States Department of Transportation that exercises primary responsibility for coordinating federal efforts to ensure the safe design and operation of motor vehicles.

**Traffic Safety**

**National Institute of Governmental Purchasing Code**

NIGP Code

1. The National Institute of Governmental Purchasing designation is an 11-digit code used to classify materials and services.

   *Materials And Supplies Management System Manual*

2. NIGP Code is a numbering system developed by the National Institute of Governmental Purchasing to identify goods and services for purchasing and inventory purposes.

   *Purchasing Manual*

**National Pollutant Discharge Elimination System**

NPDES
The National Pollutant Discharge Elimination System is the program administered by the Environmental Protection Agency (EPA) under federal law to limit and control stormwater discharges from point sources and non-point sources.

**national pooled-fund study**

A national pooled-fund study is a planning or RD&T study or activity expected to solve problems of national significance, usually administered by the FHWA headquarters office in cooperation with states and/or MPO contributions of FHWA planning and research funds, with or without matching funds.

*Transportation Planning and Programming Collection*

**National Register of Historic Places**

**NRHP**

The National Register of Historic Places is a catalog of historic sites and buildings, districts, structures, and objects which have been entered on the list of the nation's outstanding cultural resources. It provides an authoritative guide to federal, state and local governments, private groups and citizens to recognize the nation’s cultural resources, enabling these groups to protect and sustain these resources in the process of planning for the future.

**Nationwide Personal Transportation Study**

**NPTS**

The National Personal Transportation Study, conducted by the Bureau of the Census, has been the primary source of national data on travel patterns and frequency, transit use for all purposes, and the characteristics of transit users versus all travelers.

**Natural Resource Conservation Service**

**NRCS**

The Natural Resource Conservation Service is a federal agency formerly known as the U.S. Soil Conservation Service.

*Environmental Manual*

**navigable stream**

By law, Natural Resources Code §21.001(3), any stream or streambed as long as it maintains from its mouth upstream an average width of 30 feet or more, at which point it becomes statutorily non-navigable (state statues). Relates to property access and construction limitations.

**navigable waterway**

Primarily a regulatory term as it applies to highway drainage planning, design and construction in jurisdictional surface waters. The term is more specifically defined in 33 CFR §329.4. Section 9 of the Rivers and Harbors Act of 1899 requires navigational clearance permits for bridges over navigable waterways. The US Coast Guard is responsible for Section 9 permits. To determine if a
specific waterway is navigable, contact the TxDOT Environmental Affairs Division. More information on navigable waterways can be found in 33 CFR Part 329.

**need to know**
Need to know is strict limit of information, to be released only to the person(s) as necessary to perform required duties.

**needs estimate**
A needs estimate is a Pavement Management Information System (PMIS) report which shows how much money is needed to fix all roads with preventive maintenance or rehabilitation in a single year. This report is used to assess the adequacy of current pavement funding.

*Pavement Management Information System (PMIS) Users Manual*

**neglect**
Neglect is defined as unintentional deviations from approved procedures that may or may not cause erroneous results.

*Quality Assurance Program Manual*

**negligence**
Negligence is failing to exercise the proper care, resulting in accident or injury.

*Occupational Safety Manual*

**negotiated contract**
A negotiated contract is a contract that governs services whose authorizing statute requires the department to select the performing entity using a process other than the use of competitive bids. One or more items must be evaluated, scored and/or negotiated to determine which entity will be awarded the contract.

*Contract Management Manual*

**net carrying capacity**
See payload.

*Equipment Manual*

**net surfing**
See surfing.

*Information Security Manual*

**network**
1) Network is a collection of computers and other devices that is able to communicate or interchange information with each other over a shared wiring configuration. Such components may
include AISs, packet switches, telecommunications controllers, key distribution centers, and technical control devices.


2) Network, in planning, is a system of links and nodes that describes a transportation system. Network is the geocoded representation of the transportation system. Separate networks are defined for auto and transit modes of travel. The network is an abstraction of what is actually on the ground and does not include every local and collector street in the area.

Source: Traffic Data and Analysis Manual

**network addressing**

Each item of equipment or logical entity (i.e., an application or a user) connected to a network must have a unique network address to enable it to communicate. A network addressing scheme is usually devised to facilitate the management of network addressing.

Information Security Manual

**network control center**

NCC

A network control center is a control center located at each of the regional computer centers of TxDOT.

**network control program**

NCP

A network control program is a program that operates in and through the department’s regional computer centers.

**network-level**

1. In pavement management, network-level refers to activities which support decision-making for large groups of pavements. Network-level activities require more extensive, but less detailed, data collection and analysis than that required for project-level.
2. The condition of the interstate highway system.

Pavement Management Information System Users (PMIS) Manual

**network password**

A network password is a combination of numbers, letters and special characters used to gain entry to the network.

Information Security Manual

**network topology**

The network topology is the pattern by which individual items of networking equipment are interconnected. Drivers for particular topologies include service level requirements such as availability.
New Freedom

**NF**

New Freedom is a Federal Transit Administration grant program targeting new public transportation services and public transportation alternatives beyond those required by the American with Disabilities Act that assist individuals with disabilities and with transportation, including transportation to and from jobs and employment support services. Codified at 49 USC 5317 and often called the Section 5317 or NF program.

*Public Transportation Collection*

**neutral axis**

A neutral axis is an axis of no stress.

**new location project**

Work proposed to build a facility on a new location to provide a new segment of highway.

**new product**

A new product is a product or process currently available on the market for immediate acquisition for which TxDOT does not have a current specification, or a product which appears to be equal or superior to existing products covered by a specification.

*Research and Implementation Manual*

**news group**

A Usenet news group contains postings from various readers. The postings contain information relevant to the news group topic.

*Information Security Manual*

**Newton**

**N**

Newton is the unit of force in the metric system. It is the force that will cause a one kilogram mass to accelerate at a rate of one meter per second per second. When a one kilogram weight is placed on a scale, it exerts a force of 9.807 Newtons on the scale (the gravitational acceleration is 9.807 meters per second per second).

*Manual of Testing Procedures*

**90-day residential occupant**

See short term residential occupant.

*Right of Way Manual*

**no adverse effect**

No adverse effect is a determination reached as part of the Section 106 process. If an undertaking will in some way alter a historic property or its setting, but the alteration will not diminish the
integrity of the characteristics that qualify the property for inclusion in the National Register, then the undertaking is considered to have "no adverse effect" on the property. This determination is reached in consultation with the State Historic Preservation Officer. (See also adverse effect, no effect and Section 106.)

Environmental Manual

no damage or injury

No damage or injury is an occurrence which may be a result of a driver’s or operator’s error, but which does not result in a contact involving death, injury or property and is not classified as an accident.

Occupational Safety Manual

no effect

No effect is a determination reached as part of the Section 106 process. An undertaking is considered to have "no effect" on a historic property if it does not have the potential to alter any characteristics of the property that qualify it for inclusion in the National Register. This determination is reached in consultation with the State Historic Preservation Officer. (See also no adverse effect, adverse effect and Section 106.)

Environmental Manual

node

A node is a point at which sections of the network (roadway or transit) intersect.

Traffic Data and Analysis Manual

noise

Noise is a sound of any kind especially when loud or unwanted.

noise abatement criteria

NAC

Noise abatement criteria are absolute sound levels, provided by FHWA, used to determine when a noise impact occurs.

Environmental Affairs Division

noise barrier

A noise barrier is a solid wall or earth berm located between the roadway and receiver location, which breaks the line-of-sight between the receiver and the roadway noise sources.

noise impact

A noise impact occurs when predicted (future) traffic noise reaches a level that requires a consideration of noise abatement measures.

Environmental Manual
nominal maximum aggregate size

1. Nominal maximum aggregate size is the largest sieve that retains 10% or more of the total aggregate mixture.
2. Nominal maximum aggregate size is the largest sieve that retains 10% or more of the total aggregate mixture. Sample sizes should not be more that 400 g (14 oz.) greater than the minimum recommended sample mass. Large samples of fine mixes tend to result in incomplete ignition of the asphalt. When the mass of the test specimen exceeds the recommended maximum capacity of the equipment used, the test specimen may be divided in to suitable increments, tested, and the results appropriately combined for calculation of the asphalt content (weighted average).

Manual of Testing Procedures

nominal maximum size

Nominal maximum size is the smallest sieve which retains more than 10% of the aggregate.

Manual of Testing Procedures

non-attainment area

1. A non-attainment area is an area for which any pollutant exceeds the NAAQS for the pollutant as designated pursuant to 42 United States Code 7407 (Section 107 of the FCAA).

Environmental Manual

2. A non-attainment area is any geographic region of the United States that the Environmental Protection Agency (EPA) has designated as a non-attainment area for a transportation related pollutant(s) for which a National Ambient Air Quality Standard (NAAQS) exists.

Transportation Planning and Programming Collection

non-collision accident

Non-collision accidents of the upset, rollover, jackknife, run-off-the-road type which cause death, injury, or damage are classified as accidents.

Occupational Safety Manual

noncompetitive transfer

A noncompetitive transfer is a transfer for which a job requisition does not have to be posted.

Human Resources Manual

nonconforming sign

A nonconforming sign is a lawfully erected sign that does not comply with the provisions of a law or rule promulgated at a later date, or that later fails to comply with a law or rule due to changed conditions.

Right of Way Manual

non-consumable
1. Non-consumable means having a useful life greater than one year.  
   Purchasing Manual
2. Non-consumable items are those that cannot be used up or depleted.  
   Materials And Supplies Management System Manual

**non-contiguous route segment**

A non-contiguous route segment is a designated highway section which, when added, does not adjoin a route segment already existing in the TRM Highway Data File, but is located on the proposed alignment of the completed route.  

**non-discrimination grievance**

Non-discrimination grievance is an employee's concern that is not related to issues of discrimination.  
Human Resources Manual

**non-exempt damages**

Non-exempt damages are damages relating only to fencing on a partially-acquired parcel. Also called specific damages.  
Right of Way Collection

**non-exempt employee**

A non-exempt employee is an employee who is not exempt from (is subject to) the FLSA and must be paid in compliance with FLSA minimum wage and overtime requirements.  
Human Resources Manual

**non-freestanding workplace**

A non-freestanding workplace is a business establishment that is located on sites that include other establishments or employers such as a site located in a neighborhood shopping center.  
Traffic Data and Analysis Manual

**non-home based trip**

A non-home based trip is a trip that neither begins or ends at a person’s home regardless of the purpose of the trip.  
Traffic Data and Analysis Manual

**non-participating**

Non-participating defines aspects of construction for which a funding party will not be a part. For example, FHWA does not reimburse TxDOT for costs resulting from unclear right of way or utilities. Similarly, minor utility adjustments may be made a part of a TxDOT contract, with TxDOT not participating in the funding of such adjustments.
non-permit confined space

A non-permit confined space is a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

*Occupational Safety Manual*

non-professional services

Non-professional services are skilled or unskilled labor or professional work, but do not include professional and consulting services, as defined in Texas Government Code, Title 10, Subtitle D, Section 2254; services of an employee of a state agency; or services of public utilities.

*Purchasing Manual*

nonprofit organization

A nonprofit organization is an organization that is incorporated under the applicable laws of the State as a non-profit organization, and exempt from paying Federal income taxes under Section 501, Internal Revenue Code (26USC 501). Also, a public or private entity that has established its nonprofit status under applicable Federal or State law and exempt from paying Federal income taxes under Section 501 of the Internal Revenue Code.

*Right of Way Manual*

nonprofit sign

A nonprofit sign is a sign erected and maintained by a nonprofit organization in a municipality or the extraterritorial jurisdiction of a municipality advertising or promoting only the municipality or another political subdivision whose jurisdiction is in whole or in part concurrent with the municipality.

*Public Transportation Collection*

nonrepudiation

Nonrepudiation is ensuring that an individual cannot deny sending or receiving information.

*Information Security Manual*

non-responsive bidders

Non-responsive bidders are those who failed to provide all the required forms, documents, guaranty, signatures, acknowledgments, etc., did not attend a mandatory pre-bid conference, or did not secure proper technical prequalification. Their bids may not be read.

*Letting Manual*

non-stressed concrete

Non-stressed concrete is precast concrete not subjected to prestressing.

*Manual of Test Procedures*
non-traversable median

See median, non-traversable.

nonurbanized area

A nonurbanized area is an area with a population of less than 50,000. Nonurbanized areas are more commonly referred to as those areas outside the bounds of an urbanized area which are officially designated by the U.S. Census Bureau.

Public Transportation Collection

non-working hours

Non-working hours means all the hours in a calendar day except working hours.

Travel Manual

no passing zone

A no passing zone is a section of the highway where overtaking and passing would be hazardous and is therefore prohibited.

normalized gradation

Normalized gradation is a standardized gradation derived from the median of the specified gradation limits and based on 100 percent of the material retained on a designated sieve size.

Manual of Testing Procedures

North American Datum for 1927

NAD27

North American Datum of 1927 is a datum based on the Clarke ellipsoid of 1866.

Survey Manual

North American Datum for 1983

NAD83


Survey Manual

North American Free Trade Agreement

NAFTA

A formal agreement, or treaty, between Canada, Mexico, and the United States of America to promote means for improved and increased free trade between the three countries.

notarized affidavit
A notarized affidavit is an affidavit, signed and sealed by a notary public, stating the name of the displacee receiving a governmental subsidy, the amount of the subsidy for a specific time period, and the name of the governmental agency dispensing the subsidy.

Right of Way Collection

**not to scale**

NTS

Not to scale means no scale was used or defined.

**notice of intent**

NOI

Notice of intent is a notice published to give notice that an Environmental Impact Statement will be prepared pursuant to the National Environmental Policy Act. The NOI includes the proposed action, the scoping process, and the name and address of a person to whom comments may be sent. *Environmental Manual*

**notice of termination**

NOT

A notice of termination is a formal submission to Environmental Protection Agency and any other State or local regulatory agencies indicating that construction activities covered under the National Pollutant Discharge Elimination System general permit have been completed or transferred to another permittee.

**notice to contractor**

Notice to Contractor is the list of upcoming Construction and Maintenance Division projects for bidders. This list provides general project information for monthly mailing and posting to TxDOT's website and the Texas Building and Procurement Commission's website.

**nuclear gauge**

A nuclear gauge is a portable gauge used to determine the in-place density and moisture content of soils and base materials. Caution: It must be operated by a licensed operator, according to Test Method TEX-115-E, Part II.
O

**object code, controller**

An object code, or controller, is a four-digit code for revenues and expenditures but with less detail than is required by the department.

**object of expenditure, departmental**

1. An object of expenditure for the department is a three-digit code whose name, limited to 18 characters, describes the use to which the goods or services received are put. Frequently the object that describes the normal use of the item is appropriate. However, the object used should be based on the actual use to which the goods or service are purchased in the specific case.

   *Materials and Supplies Management System Manual*

2. The object of expenditure is the type of goods or services received and resources utilized (Reference FIMS Code Chart 10).

   Finance Division

**object of revenue, departmental**

An object of expenditure for the department is a four-digit code describing the revenue source (Reference FIMS Code Chart 54).

   Finance Division

**obligation authority**

1. Obligation authority is a limit placed on federal-aid highway and highway safety construction program obligations to act as a ceiling on the obligation of funds that can be made within a specified time period.

   Finance Division

2. Obligation authority is a limit placed on federal-aid highway and highway safety construction program obligations to act as a ceiling on the obligation of funds that can be made within a specified time period, usually the federal fiscal year, October 1 through September 30, regardless of the year in which the funds were apportioned. This limit is imposed by the Federal Highway Administration in order to control the highway program spending in response to economic and budgetary conditions.

   Design Division

**obligations**

Obligations are commitments made by federal agencies to pay out money in the future, 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.
**obligation limitation**

Obligation limitation or obligation authority is the amount of federal assistance that may be obligated during a specified time period. Obligation limitation does not affect the scheduled apportionment or allocation of funds; it just controls the rate at which these funds may be used.

*Transportation Programming and Scheduling Manual*

**observation angle**

Observation angle is the angle at the reflector between the observer's line of sight and the direction of the light incident on the jiggle bar tile.

*Departmental Material Specifications*

**obsolete items**

Obsolete items are those not used by any stock account.

*Materials And Supplies Management System Manual*

**obstruction**

An obstruction is any objectionable material not specifically provided for elsewhere in the plans.

**Occupant Protection Violators Course**

OPVC

The Occupant Protection Violators Course is a safety belt violators course taught by local police officers that can be taken in lieu of paying a fine.

**occupational disease**

An occupational disease is a disease arising out of and in the course of employment that causes damage or harm to the physical structure of the body, including a repetitive trauma injury.

*Human Resources Manual*

**occupational exposure**

Occupational exposure is reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee’s duties.

*Occupational Safety Manual*

**Occupational Safety Division**

OCC

The Occupational Safety Division promotes worker safety, deals with workers’ compensation and insurance matters, and handles tort claims.

*Inside TxDOT*
Odessa District
ODA

The Odessa District is a TxDOT district office including the following counties: Andrews, Crane, Ector, Loving, Martin, Midland, Pecos, Reeves, Terrell, Upton, Ward and Winkler. Area offices are located in Fort Stockton, Midland, Odessa, and Pecos. There is also a Vehicle Titles and Registration Regional Office.

Inside TxDOT

Office of General Counsel
OGC

The Office of General Counsel renders legal advice to every office of the department on all subjects relevant to TxDOT and its operations.

Inside TxDOT

Office of Management and Budget
OMB

The Office of Management and Budget is the federal office responsible for establishing fiscal guidelines for accounting and controlling the use of federal dollars.

Office of primary responsibility
OPR

The office of primary responsibility is the organizational unit or individual(s) responsible for identifying and prioritizing department needs associated with specific information resources.

Information Security Manual

Office of secondary responsibility

The office of secondary responsibility is the district or division office with secondary responsibility for making decisions on behalf of the department with regard to use, classification, and protection of specific information contained on a resource.


Office of the Attorney General
OAG

The attorney general is the lawyer for the people of Texas and is charged by the Texas Constitution to:

◆ defend the laws and the Constitution of the State of Texas
◆ represent the State in litigation
◆ approve public bond issues

To fulfill these responsibilities, the Office of the Attorney General serves as legal counsel to all boards and agencies of state government, issues legal opinions when requested by the governor, heads of state agencies and other officials and agencies as provided by Texas statutes, sits as an ex-
officio member of state committees and commissions, and defends challenges to state laws and suits against both state agencies and individual employees of the State.

*Right of Way Manual*

**Office of the Secretary of Transportation**

OST

The Office of the Secretary of Transportation is part of the U.S. Department of Transportation.

**off-premise sign**

An off-premise sign is a sign displaying advertising copy that pertains to a business, person, organization, activity, event, place, service or product not principally located or primarily manufactured or sold on the premises on which the sign is located.

*Right of Way Manual*

**off-road equipment**

Off-road equipment is equipment used primarily off the roadway. This includes motorgraders, rollers, excavators, pneumatic-tired equipment, mowers or tractors.

*Equipment Manual*

**off-system**

Off system is off the TxDOT-designated highway system.

*Transportation Planning and Programming Collection*

**off-system link**

An off-system link is created when a highway designation stops at a point on a given local road or street and starts again from another point on the same or different local road with a driveable connection between the two points.

*Texas Reference Marker (TRM) System User's Manual*

**official sign**

An official sign is a sign erected by a governmental agency within its territorial jurisdiction for the purpose of carrying out an official duty or responsibility as provided by law.

*Right of Way Manual*

**ohm**

\[ \text{R} \]

Ohm is the unit of electrical resistance.

*Highway Illumination Manual*

**on-call, chauffeured unit**
An on-call, chauffeured unit is a vehicle operated by Riverside Building Services to provide local shuttle services.

*Equipment Manual*

**180-day residential occupant**

See *long term residential occupant*.

*Right of Way Manual*

**one point control**

One point control is a method of deriving an adjusted maximum dry density and optimum water content by molding one compaction specimen and using the one-point moisture-density data to construct a compaction curve which is an approximation of the family of curves.

*Manual of Testing Procedures*

**one-step selection**

One-step selection is a selection process that requires the department to evaluate the entity’s qualifications and fees simultaneously (one step).

*Contract Management Manual*

**online transaction processing**

OLTP

Online transaction processing is the processing of transactions as they are received. Also called online or realtime systems, master files are updated as soon as transactions are entered at terminals or arrive over communication lines.

**online users**

Online users are those who are directly interacting with a computer system in real time.

**on-premise sign**

An on-premise sign is a free-standing sign identifying or advertising a business, person or activity, and installed and maintained on the same premises as the business, person or activity.

*Right of Way Manual*

**on-road equipment**

On-road equipment is equipment used on the roadway. This includes snow removal equipment, aerial devices, paint-stripe equipment, skid-test equipment, sweeping equipment, spraying equipment or high-speed profilometers.

*Equipment Manual*

**on-system**

On-system is on the TxDOT-designated highway system.
on-system link

An on-system link is created when the highway designation of one route stops at the intersection of another route and starts again from a second intersection with the same route.


open-graded friction course

An open-graded friction course is a pavement surface course designed to prevent tire hydroplaning and provide a skid-resistant pavement surface. It consists of a large percentage of one-sized coarse aggregate. The mixture has a high amount of air voids to allow water to rapidly drain through the course and out onto the shoulder.

open market purchase

1. Open market is a purchase made through the General Services Commission for goods, materials, supplies, equipment, or services with an estimated cost above the delegated limits.

   Purchasing Manual

2. Any delegated or non-delegated purchase, either of commodities or services, for which all vendors in the CMBL listed for the commodity or service receive an IFB.

   Purchasing Manual

open system interconnection

OSI

An open system interconnection is a set of network architecture standards created by the International Standards Organization.

open wireless access

Open wireless access is access to the Internet via radio waves rather than wires, usually from a smartphone or similar mobile device. This type of access does not need a user account or password.

Information Security Manual

operating system

OS

The operating system of a computer is a controlling/supervising module which calls user programs into the system from storage devices, activates them, and in general monitors usage of the computer system. The OS also provides scheduling, debugging, input/output control, accounting, data management in the form of file control, and communication with operators including status inquiries.

Operation Buckle Down

OBDA
Operation Buckle Down is a National Highway Traffic Safety Administration sponsored program promoting compliance with safety belt and child passenger safety laws.

**operational plan**

An operational plan is a detailed plan indicating where and when project activities will occur. An operational plan is a required part of law enforcement grants, indicating the location, day of the week, and time of day or night when overtime enforcement will take place.

**opportunity for public hearing**

OPH

An opportunity for public hearing is afforded on projects where public interest in a public hearing is unknown. If no one requests a public hearing, the public involvement process ends with the OPH. If a public hearing is requested, one is held and the public hearing completes the public involvement process.

*Environmental Manual*

**optimum asphalt content**

1. Optimum asphalt content is the recommended percent asphalt taken as the percent asphalt that will produce the maximum density under a fixed compacted effort, and the compacted specimens must satisfy the specified unconfined compressive strength requirements.
2. Optimum asphalt content is the amount of asphalt that corresponds to a mixture density of 96.0%.

*Manual of Testing Procedures*

**optimum water content**

Optimum water content is the water content at which the soil can be compacted to the maximum dry density.

*Manual of Testing Procedures*

**optimization**

Optimization is a Pavement Management Information System (PMIS) report which takes a user-specified budget and lists the pavement sections and treatments which would provide the most benefit for that specified budget. This report is used to simulate the reality of limited funding when making pavement-related decisions.

*Pavement Management Information System (PMIS) Users Manual*

**optimum moisture content**

The optimum moisture content is the percentage of moisture content at which desired compaction (maximum density) is obtained.
An option bid item is a bid item that has several options that a contractor may provide and still meet the specifications.

**organic clay**

Organic clay is a soil that would be classified as a clay except that its LL after oven drying (dry sample preparation) is less than 75% of its LL before oven drying (wet sample preparation).

*Manual of Testing Procedures*

**organic silt**

Organic silt is a soil that would be classified as a silt except that its LL after oven drying (dry sample preparation) is less than 75% of its LL before oven drying (wet sample preparation).

*Manual of Testing Procedures*

**organizational element**

An organizational element is any grouping of employees or resources by unit, section, district, division, or department.

**organizational profile**

An organizational profile is a division accessor identification (ACID) or a department accessor identification (ACID) and all of its associated users and resources.

**other employee organizations**

Other employee organizations are organized groups recognized by TxDOT, including unions, whose membership includes department employees as well as other state or non-state employees. For example: Texas Public Employees Association

*Human Resources Manual*

**other engine**

An other engine is a gasoline, diesel, propane, compressed natural gas, or other petroleum-fuel based vehicle with an internal combustion engine, that is not a motor vehicle, but which is mobile and is utilized in construction, earth-moving, materials management, transportation, or grounds-keeping type operations.

*Equipment Manual*

**outdoor advertising sign**

OAS

An outdoor advertising sign is an outdoor sign, display, light, device, figure, painting, drawing, message, plaque, placard, poster, billboard, logo or symbol, or other thing that is designed, intended, or used to advertise or inform, if any part of the advertising or information contents is visible from the main-traveled way of a regulated highway.

*Right of Way Manual*
**outer separation**

An outer separation is the area between main lanes and frontage roads.

**outfall**

An outfall is the point where water flows from a conduit, stream, drain, site.

**outlet**

An outlet is the point of water disposal from a stream, river, lake, tidewater, or artificial drain.

**out-of-agency training**

Out-of-agency training is any training activity that is not sponsored by the department and is generally open to the public. A registration fee is usually required.

*Human Resources Manual*

**outside ties, survey**

An outside ties, or survey, is the bearing and distance description from a point on the parcel to a known point outside the taking.

*Survey Manual*

**outsourcing**

1. Outsourcing is the practice of contracting work to an entity once it is determined that the work will not be performed in-house.
   *Contract Management Manual*

2. Outsourcing means methods of providing ROW services to TxDOT through a third party agreement.
   *Right of Way Manual*

**overburden**

The overburden is the soil above the layer or layers being investigated. A clay layer covered with 3.1 m (10 ft.) of sand would have 3.1 m (10 ft.) of overburden on it.

*Manual of Testing Procedures*

**overhead**

Overhead, also referred to as an indirect cost; is the expenses that the performing entity incurs to operate its business.

*Contract Management Manual*

**overhead guidelines**

Overhead guidelines are the instructions prepared by the department’s Audit Office to assist the provider in administrative qualification.

*Engineering Architectural and Surveying Services Manual*
overhead transmission line

An overhead transmission line is an overhead power and communication lines.

overlay

An overlay is a layer or layers of paving materials placed on an existing surface where repairs to a pavement structure are required to restore a satisfactory riding surface and/or improve the strength of the pavement structure.

oversize/overweight permits

OS/OW permits

Oversize/overweight permits are permits required on every truck traveling in Texas that is in excess of the state’s size limitations.

overtime

Overtime is work in excess of 40 hours per week (Saturday through Friday).

owned transaction facility

otran

An otran is an owned transaction facility.

owner

The owner is the manager or agent responsible for the function, which is supported by the resource, the individual upon whom responsibility rests for carrying out the program that uses the resources. The owner is responsible for establishing the controls that provide the security. The owner of a collection of information is the person responsible for the business results of that system or the business use of the information. Where appropriate, ownership may be shared by managers of different departments.

Information Security Manual

owner of a dwelling

Owner of a dwelling is any person who purchases or holds any of the following interests in real property:

- fee title, a life estate, a land contract, a 99-year lease, or a lease including any options for extension with at least 50 years to run from the date of acquisition; or
- an interest in a cooperative housing project which includes the right to occupy a dwelling; or
- a contract to purchase any of the interests or estates described in paragraphs (1) or (2) of this definition; or
- any other interest, including a partial interest, which in the judgment of an agency warrants consideration of ownership.

Right of Way Manual
**oxygen-deficient atmosphere**

An oxygen-deficient atmosphere is an atmosphere containing less that 19.5 percent oxygen by volume.

*Occupational Safety Manual*

**oxygen-enriched atmosphere**

An oxygen-enriched atmosphere is an atmosphere containing more than 23.5 percent oxygen by volume.

*Occupational Safety Manual*
panel length
Panel length is the distance between adjacent transverse joints.
*Pavement Design Manual*

parapet
A parapet is a wall or rampart, breast high. A parapet is also the wall on top of an abutment extending from the bridge seat to the underside of the bridge floor and designed to hold the backfill.
*Bridge Railing Manual*

parcel
A parcel is all property that the State will take.
*Survey Manual*

parent tract
A parent tract is the whole of the property of which a parcel taking is being made.
*Survey Manual*

parenteral
Parenteral contact is the piercing of mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts and abrasions.
*Occupational Safety Manual*

Paris District
PAR
The Paris District (PAR) is a TxDOT district office including the following counties: Delta, Fannin, Franklin, Grayson, Hopkins, Hunt, Lamar, Rains and Red River. Area offices are located in Bonham, Greenville, Paris, Sherman, and Sulphur Springs. This district also has the Denison Travel Information Center.
*Inside TxDOT*

park & ride
P&R
Park & ride (P&R) are vehicle parking areas located on the perimeter of urban areas. They provide parking for commuters and an interface with mass transit and/or car pools.
1. A park road (PR) is a roadway so designated by the Texas Transportation Commission. Roadways within state parks are maintained by TxDOT by law, and no designation is necessary. 
*Texas Reference Marker (TRM) System User's Manual*

2. A park road (PR) is on the state highway system and has been constructed with highway funds and is operated and maintained by TxDOT. A park road (PW) includes parking lots, paved camping pads, etc is not on the state highway system and is operated by the Texas Parks and Wildlife Department and is maintained by TxDOT. 
*Maintenance Collection*

**parking area**

A parking area is a TxDOT-operated facility that primarily offers parking for commercial trucks, although passenger vehicles may also use the facility. Picnic tables are provided at some sites. Parking areas are open 24 hours a day, 365 days a year. 
*Maintenance Division*

**part-time employee**

A part-time employee is an individual employed with the department and working between 20 and 39 hours per week. 
*Human Resources Manual*

**partial access**

Partial access means only a portion of a property's total frontage has access to a given road, subject to police power restrictions. 
*Right of Way Collection*

**partial immersion thermometers**

Partial immersion thermometers are liquid-in-glass thermometers designed to indicate correctly when the bulb and stem are immersed to a specified depth. These are marked on the stem to show the immersion depth. Errors are dependent upon the cooling of the glass stem above this mark. 
*Manual of Testing Procedures*

**partial interchange lighting**

The lighting of acceleration and deceleration lanes, ramp terminals, crossroads at frontage road or ramp intersections, and other areas of nighttime hazard. (See complete interchange lighting.) 
*Highway Illumination Manual*

**Partial Tensioning Cylinders**

Partial Tensioning Cylinders are cylinders used to determine when the concrete strength is adequate to apply partial tensioning force by either pretensioning or post-tensioning method, to remove the member from the casting line. 
*700-I, Structural Test Procedures Manual*
particle projected area

Particle projected area is the maximum cross sectional area of the fractured particle.

*Manual of Testing Procedures*

Pascal’s Law

Pascal’s Law is pressure exerted at any point upon a confined liquid is transmitted undiminished in all directions.

pass

A pass is a structure allowing movement of livestock, vehicles or products underneath the roadway.

*Maintenance Collection*

pass through funds

Federal or state funds provided to subrecipients through grants/agreements as defined by OMB Circular A-133 or the State’s Uniform Grant Management Standards. These generally do not include advance funding agreements with local governmental entities involving projects in the department’s Unified Transportation Plan.

*Contract Management Manual*

pass-thru item

A pass-thru item is a non-stock item.

*Materials And Supplies Management System Manual*

passenger car equivalency

PCE

Passenger car equivalency (PCE) is the equivalency of larger vehicles, such as trucks and buses, to a quantity of passenger cars. This value is used in level of service and capacity analysis. The equivalency is dependent upon size, weight, and operating characteristics of the large vehicle, and the design speed and gradient of the highway.

passenger trip

A passenger trip is the number of passengers who board public transportation vehicles. A passenger is counted each time the passenger boards a vehicle even though the passenger might be on the journey from origin to destination.

*Public Transportation Collection*

passing sight distance

Passenger sight distance is the minimum sight distance that must be available to enable a driver of one vehicle, traveling at design speed, to pass another vehicle, traveling 10 mph slower than design
speed, safely and comfortably, without interfering with the speed of an oncoming vehicle traveling at design speed and coming into view after the overtaking maneuver is started.

**password history**

Password history is the previous passwords “remembered” by the security system to prevent a particular password from being reused too frequently.  
*Information Security Manual*

**password interval**

Password interval is the maximum number of days a password may be used before it must be changed.  
*Information Security Manual*

**password source**

Password source is the originator of a password.  
*Information Security Manual*

**password threshold**

Password threshold is the maximum number of consecutive times a wrong password can be entered before the user ID is suspended, disabled or unavailable for use for a period of time.  
*Information Security Manual*

**past due inventory**

A past due inventory is when items scheduled for inventory are not physically counted by the due date.  
*Materials And Supplies Management System Manual*

**patching**

Patching is an asphaltic concrete pavement (ACP) distress type. Patches are repairs made to pavement distress. The presence of patching indicates prior maintenance activity and is thus used as a general measure of maintenance cost. Patching ranges from 0 to 100 percent of the lane area.  
*Pavement Management Information System (PMIS) Rater's Manual*

**pavement**

PMT

Pavement (PMT) is that part of a roadway having a constructed surface for the facilitation of vehicular traffic.  
*Pavement Design Manual*
pavement crack

A pavement crack is a fissure or open seam in pavement which does not necessarily extend through the body of the pavement material. Pavement cracking includes alligator, longitudinal, and transverse cracking.

pavement crown

A pavement crown is a transverse roadway section formed by a plane surface, curved surface, or a combination of the two, for the purpose of insuring proper drainage of the pavement.

pavement design

Pavement design includes two tasks: (1) mixture or materials design and (2) structure or thickness design. These two tasks cannot be cleanly separated at the design stage; there must be interaction between the tasks. Specifications are the link between mixtures and thickness design. 

Pavement Design Manual

pavement distress

Pavement distress is cracking, rutting, distortion or other types of surface deterioration which indicates a decline in the pavement’s surface condition or structural load-carrying capacity.

Pavement Management Information System (PMIS) Users Manual

pavement edge drop off

A pavement edge drop off is a condition frequently occurring on narrow pavement or roads without paved shoulders where the wheels of vehicles frequently traverse off the pavement.

Maintenance Collection

Pavement Evaluation System

PES

Pavement Evaluation System (PES) incorporates visual evaluation, Mays Ride Meter Serviceability Index (SI), optional Falling Weight Deflectometer (FWD) structural evaluation data, optional Skid Resistance Number (SN), and Roadway Information System (RIS) data into a framework designed to calculate, by modeling techniques, pavement condition and rehabilitation needs for statewide evaluation. PES was replaced in Fiscal Year 1993 by the Pavement Management Information System (PMIS). PES is part of the major investment study.

Pavement Management Information System (PMIS) Users Manual

pavement graphic

A pavement graphic is a type of marking, including stock bars, cross walks, railroad crossings, school zones, arrows, etc.
pavement, invert

Pavement, invert, means the lower segment of a corrugated metal pipe provided with a smooth bituminous material that completely fills the corrugations, intended to give resistance to scour and erosion, and to improve flow.

pavement management

Pavement management is a method of finding cost-effective strategies for providing, evaluating and maintaining pavements in a serviceable condition.

Pavement Management Information System (PMIS) Users Manual

Pavement Management Information System

PMIS

The Pavement Management Information System (PMIS) is an automated system for storing, retrieving, analyzing and reporting information to help with pavement-related decision-making processes. PMIS began in fiscal year 1993, and includes Pavement Evaluation System (PES) data collected from fiscal years 1985-1992.

Pavement Management Information System (PMIS) Users Manual

Pavement Management System

PMS

The Pavement Management System (PMS) is a set of tools or methods that can assist decision-makers in finding cost-effective strategies for providing, evaluating and maintaining pavements in a serviceable condition.

Pavement Management Information System (PMIS) Users Manual

pavement markings

Pavement markings are markings set into the surface of, applied upon, or attached to the pavement to inform or guide traffic. Markings intended to guide traffic, including striping, traffic buttons, raised pavement markers and graphics. All markings should be maintained as soon as practical according to the latest department standards.

pavement reconstruction

Pavement reconstruction is construction of the equivalent of a new pavement structure which usually involves complete removal and replacement of an existing pavement structure including new and/or recycled materials.

Pavement Design Manual

pavement rehabilitation
Pavement rehabilitation is work undertaken to extend the service life of an existing facility. This includes resurfacing, restoration, and rehabilitation (3R) work undertaken to restore serviceability such as placement of additional surfacing material and/or other work necessary to return an existing roadway, including shoulders, to a condition of structural or functional adequacy. This could include the complete removal and replacement of the pavement structure. This may include partial recycling of the existing pavement.

*Pavement Design Manual*

**pavement structure**

Pavement structure is the combination of sub-base, base course, and surface course placed on a subgrade to support the traffic load and to distribute it to the roadbed.

**payee**

A payee is an individual or entity that receives a payment from the State of Texas.

*Voucher Manual*

**Payee Identification Number System**

**PINS**

The Payee Identification Number System (PINS) is TxDOT’s procedure to set up vendors in the comptroller’s payment system.

*Public Transportation Collection*

**payload**

Payload is the combined maximum allowable weight of cargo and passengers that a truck is designed to carry. Payload is the same as tare weight and net carrying capacity.

*Equipment Manual*

**payment**

A payment is a transfer of funds from the appropriate TxDOT financial account to pay for any costs of the miscellaneous contracts.

*Contract Management Manual*

**payment bond**

The security furnished by the contractor solely for the protection of claimants, as defined by law, supplying labor and materials for the prosecution of the work in accordance with the terms of the contract.

*Maintenance Contract Manual*

**payment rate**

Payment rate is the proportional share of sampling cost to be paid to MAT when a supplier/producer chooses to have less that the MQR of a material sampled and tested.
payroll

Payroll is a list of employees entitled to the payment of wages.  
*Voucher Manual*

peak hour factor

PHF

The peak hour factor (PHF) is a ratio of the total hourly traffic volume to the maximum 15-minute traffic volume within the hour. PHF represents the flow variation within an hour.

peak hour traffic

PHT

Peak hour traffic (PHT) is the percentage of Average Daily Traffic (ADT) that occurs during the hour with the highest traffic volume.

peat

Peat is a soil composed of vegetable tissue in various stages of decomposition usually with a dark brown to black color, a spongy consistency and a texture ranging from fibrous to amorphous.  
*Manual of Testing Procedures*

pedestrian or bystander injury

Pedestrian or bystander injuries are occurrences which result in death or injury to pedestrians or bystanders caused by contact with a moving vehicle or road machine, or an object carried on or in such equipment and are classified as accidents.  
*Occupational Safety Manual*

pedestrian overpass

A pedestrian overpass is a grade separation designed to carry pedestrian traffic over the subject highway.

pedestrian underpass

A pedestrian underpass is a grade separation designed to carry pedestrian traffic under the subject highway.

penetration

Penetration is the distance a needle penetrates asphalt, under a specified weight, in a specified time, and at a specified temperature. This is a controlled laboratory test.

percent combo unit trucks in ADT
Percent combo unit trucks in ADT represents all combo unit truck activity over all days of the week and seasons of the year as a percentage of total annual traffic. Combo unit trucks include vehicle classes 8 through 13.  
_Texas Reference Marker (TRM) System User's Manual_

**percent combo unit trucks in DHV**

Percent combo unit trucks in DHV represents all combo unit truck activity for peak periods of the year as a percentage. Combo unit trucks include vehicle classes 8 through 13.  
_Texas Reference Marker (TRM) System User's Manual_

**percent density or percent compaction**

The percent density or percent compaction is the ratio of the actual bulk specific gravity (Ga) of the compacted bituminous mixture specimen to the theoretical maximum specific gravity (Gr) of the bituminous mixture expressed as a percentage.  
_Manual of Testing Procedures_

**percent of grade**

Percent of grade is the grade of centerline or profile grade road between vertical points of intersection +0.10% = Increase in elevation by 0.10 feet for each 100 feet station.

**percent single unit trucks in ADT**

Percent single unit trucks in ADT represents all single-unit truck activity over all days of the week and seasons of the year as a percentage of total annual traffic. Single unit trucks include vehicle classes 4 through 7.  
_Texas Reference Marker (TRM) System User's Manual_

**percent single unit trucks in DHV**

Percent single unit trucks in DHV represents all single unit truck activity for peak periods of the year as a percentage. Single unit trucks include vehicle classes 4 through 7.  
_Texas Reference Marker (TRM) System User's Manual_

**percent soil binder**

The percent soil binder is equal to 100 times the ratio of the oven-dry mass of the soil binder to the oven-dry mass of the total.  
_Manual of Testing Procedures_

**percent slope (% slope)**

Percent slope (% slope) is the change in elevation divided by the horizontal distance over which the change occurs for a vertical line.
perched water table

A perched water table, in hydrology, is the upper surface of a body of free ground water in a zone of saturation, separated by unsaturated material from an underlying body of ground water in a different zone of saturation.

performance awards

Performance awards are awards that may be given to individual employees or work teams for outstanding contributions to the department. Awards may include cash, certificates of recognition, plaques, and gifts within state and department guidelines.

*Human Resources Manual*

performance bond

Performance bond is the security furnished by the contractor to guarantee the completion of the work in accordance with the terms of the contract.

*Maintenance Contract Manual*

performance period

Performance period is the period of time that an initially constructed or rehabilitated pavement structure will last (perform) before reaching its terminal serviceability. This is also referred to as the design period.

*Pavement Design Manual*

performing agency

The performing agency is the state agency providing the service or resources.

*Contract Management Manual*

performing district, division or office

The performing district, division, or office is the office responsible for providing the service or resource to the receiving agency.

*Contract Management Manual*

performing entity

Performing entity a party to a department contract, not a department employee, who accepts a department offer to participate in a contracting activity; the contract can define the performing entity as appropriate to the contract: engineer, surveyor, technical expert, private consultant, the city, the recipient, etc.

*Contract Management Manual*

peripherals (or peripheral devices)

Peripherals are computer-oriented hardware components such as printers, modems, etc.

*Information Security Manual*
period ending

A period ending is a date that indicates the last day of the accounting period being reported.

permanently assigned vehicle

A permanently assigned vehicle is a vehicle permanently assigned to a division or office for its exclusive use and may be used for local or out-of-town travel.

Equipment Manual

permanent sign

A permanent sign is any sign permanently affixed or attached to the ground or a structure or which cannot be removed without special handling.

Maintenance Collection

permanent structure number

PSN

A permanent structure number (PSN) is a unique three-digit number assigned to any structure meeting the definition of a bridge. It is part of the 12-digit Bridge Identification. PSNs are assigned by control in ascending order as the bridges are built and are not necessarily in sequence along the control or section.

Bridge Inspection Manual

permeability

Permeability means penetrability.

permit system

A permit system is the employer’s written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

Occupational Safety Manual

permit-required confined space (permit space)

A permit-required confined space is a confined space that has one or more of the following characteristics: contains or has a potential to contain a hazardous atmosphere; contains a material that has the potential for engulfing an entrant; has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or, contains any other recognized serious safety or health hazard.

Occupational Safety Manual

person

1. A person is any individual, family, partnership, corporation or association.

Right of Way Manual
2. A person is an individual, corporation, organization, business trust, estate, trust, partnership, association, or any other legal entity.

Maintenance Manual

Personal Care Attendant
PCA
A personal care attendant (PCA) is an individual who provides personal care to a person with a very severe disability by providing assistance with activities of daily living that the individual would typically perform if the individual did not have a disability.

Public Transportation Collection

Personal Computer
PC
A personal computer (PC) is a microcomputer that is not a server.

Information Security Manual

Personal Digital Assistant
PDA
A Personal Digital Assistant (PDA) is a general category for two way digital networks with integrated voice, data, and messaging capabilities. A small computing device based on the Microsoft Pocket PC standard or Palm OS.

Personalty
A personalty is any property owned by a person other than real property.

Right of Way Manual

Persons Providing Services on the Project (“Subcontractor” in §406.096 of the Texas Labor Code)

Persons providing services on the project include all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes but is not limited to independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity or employee of any entity furnishing persons to perform services on the project. “Services” includes but is not limited to providing, hauling, or delivering equipment or materials, or providing labor, transportation or other service related to a project. “Services” does not include activities unrelated to the project, such as food and beverage vendors, office supply deliveries, and delivery of portable toilets.

Occupational Safety Manual

Person Trips
Person trips are those trips made by persons five years of age or older by any mode of transportation. These are usually summed for all members of a household and reported as person trips per household and referred to as the person trip rate. Person trips are also summed by household and divided by the number of persons in the household to compute the person trips per person.

**Traffic Data and Analysis Manual**

**petroleum storage tank system**

**PSTS**

A petroleum storage tank system (PSTS) is any storage system designed to contain petroleum products or byproducts underground, and to be accessed from the ground's surface; also any container of hazardous material or waste buried beneath the surface of the earth.

Right of Way Collection

**petty cash**

Petty cash is a sum of money set aside to pay items for which the issuance of a formal voucher and warrant would not be cost- or time-efficient.

**Voucher Manual**

**Pharr District**

**PHR**

The Pharr District (PHR) is a TxDOT district office including the following counties: Brooks, Cameron, Hidalgo, Jim Hogg, Kenedy, Starr, Willacy and Zapata. Area offices are located in Hebronville, Pharr, Raymondville and San Benito. Other TxDOT offices in this district are the Valley Travel Information Center and a Vehicle Titles and Registration Regional Office.

**Inside TxDOT**

**photometric curves**

Photometric curves, also called photometric data, are derived from metered measurements of horizontal or vertical lux (or footcandles). These metered measurements are obtained by the use of a light meter usually calibrated in lux (or footcandles).

**Highway Illumination Manual**

**photo mosaics**

A series of overlapping aerial photos that form a composite image of a larger area.

**Survey Manual**

**picnic area**

A picnic area is a TxDOT-operated facility that offers parking and picnic arbors for the traveling public. Picnic areas are open 24 hours a day, 365 days a year.
pile, bearing

A pile, bearing, is a member driven or jetted into the ground and deriving its support from the underlying strata and/or by the friction of the ground on its surface.

pilferable items

Pilferable items are those items, of any value, which are desirable and/or quickly adjusted for personal use.

*Materials and Supplies Management System Manual*

piling

A piling is a long slender column of timber, steel, or reinforced concrete that is driven into the ground to carry vertical loads from the structure to the earth to act as a foundation for the structure.

pixel

A pixel is the smallest definable unit in a raster image. The actual size of the pixel depends on the resolution of the individual image.

*Communications Manual*

place of employment

Place of employment means the place where an employee routinely conducts official state business.

*Travel Manual*

plain elastomeric bridge bearings

Plain elastomeric bridge bearings consist of elastomer only.

*Manual of Testing Procedures*

plain old telephone service

POTS

Plain old telephone service (POTS) is short for plain old telephone service, which refers to the standard telephone service that most homes use.

*Information Security Manual*

plan quantity item

A plan quantity item is an item whose quantity can be accurately determined through calculation such as pounds of reinforcing steel or cubic yards of concrete for structure work.

planning emphasis areas
PEAs

Planning emphasis areas (PEAs) are FTA and FHWA priority themes for consideration in developing the state and in metropolitan planning organization unified planning work programs. PEAs were published annually in the Federal Register until 2007 when they were discontinued to allow MPOs and states to concentrate on implementation of SAFETEA-LU practices.

Planning Justification System

PJS

The Planning Justification System (PJS) contains a list of all TxDOT “approved for purchase” hardware and software.

Technology Services Division

planimetric (photogrammetric) map

Planimetric maps ("planimetrics" or "mapping") contain two-dimensional data (X and Y coordinates). Planimetrics are digitized maps that show outlines and labels of topographic features. Contour lines (adding the vertical "Z" element) can be computed from a digital terrain model (DTM) and superimposed on the map.

plans

Plans are drawings which show the location, dimensions, and nature of the prescribed work, including layouts, profiles, typical sections, and other details as is necessary to describe the work fully. These drawings are part of the contract for a project.

Plans, Specifications and Estimates

PS&E

Plans, Specifications and Estimates (PS&E) are the detailed plans and accompanying specifications and construction cost estimates which serve as documents for construction contract lettings purposes. Plans are the contract drawings which show the location, character, and dimensions of the prescribed work, including layouts, profiles, cross section, other miscellaneous details, and quantity summaries. Specifications are the compilation of provisions and requirements for the performance of prescribed work. The estimate is a list of all bid items and quantities estimated bid prices, total cost for each bid item, and the total estimated cost for the proposed project.

plastic limit

Plastic limit is the constant defined as the lowest moisture content and expressed as a percentage of the weight of the oven dried soil at which the soil can be rolled into threads one-eighth inch in diameter without the soil breaking into pieces, also the moisture content of a solid at which a soil changes from a plastic state to a semisolid state.
**plastic state**

Plastic state is when the material will deform and remain in that deformed state when a deforming pressure is applied and then released.

**plasticity**

Plasticity is the property of a fine-grained portion of a soil which permits it, under certain moisture conditions to be remolded without crumbling or fracture in; the degree of plasticity a soil possesses can be used as a relative index of its clay content.

**plasticity chart**

A plasticity chart is used to differentiate the plasticity and organic characteristics of the fine-grained soils based on liquid limit (LL) and plasticity index (PI) of the soils.

*Manual of Testing Procedures*

**plasticity index**

P.I.

1. The plasticity index (P.I.) is a range of moisture in which a soil remains in a plastic state while passing from a semisolid state to liquid state. Numerical difference between Liquid Limit and Plastic Limit of a soil (PI = LL - PL) using Test Method TEX-106-E.

2. Plasticity index (P.I.) is a test conducted on soil samples as set out in Test Method Tex-106-E. The plasticity index is a range of moisture in which a soil remains in a plastic state while passing from a semisolid state to liquid state. Numerical difference between Liquid Limit and Plastic Limit of a soil (PI = LL - PL) using Test Method “Tex-106-E, Calculating the Plasticity Index of Soils.”

*Manual of Testing Procedures*

**plate**

A plate is a flat-rolled iron or steel product (See structural plate).

**platform**

A platform is the foundation technology of a computer system. It is the hardware and systems software that together provide support for an application program.

*Information Security Manual*

**plottage value**

Plottage value is an increment of value resulting from the combination of two or more sites that develops one site as having greater utility than the sum of each when separately considered.

*Right of Way Collection*

**plotters and printers**

Plotters and printers are devices that allow users to provide hard copies of drawings/text.
point of compound curve

A point of compound curve is the common point between two curves with different degrees of curvature.

point of beginning

POB

Point of beginning (POB) is the first point mentioned in the legal description of the boundary on the property being described.

Survey Manual

point of curvature

P.C.

The point of curvature (P.C.) is the point at which a curve begins.

Survey Manual

point of intersection

P.I.

The point of intersection (P.I.) is the point at which two straight line tangents intersect.

point of tangency

P.T.

The point of tangency (P.T.) is the point at which a curve ends.

Survey Manual

point source

A point source is any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. Agricultural stormwater runoff and return flows from irrigated agriculture are excluded.

point-to-point protocol

PPP

Point-to-point protocol (PPP) is a protocol that allows a computer to directly access the Internet using a standard telephone line and a high-speed modem. PPP offers users data compression and compensates for noisy telephone lines.

Information Security Manual

pole
A galvanized steel or aluminum shaft to support the lighting unit (also called the lighting standard).

*Highway Illumination Manual*

**police power**

Police power is the right of government to limit the exercise of property rights in real estate, without compensation, provided the limitation is not specific to one parcel. The limitation is to serve the interest of public health, public safety, public morals and the general welfare.

*Right of Way Collection*

**policy**

A policy is parameters designed to ensure compliance with state and federal laws and achievement of TxDOT's mission.

**polish value**

PV

A polish value (PV) is the average of a set of readings on the test specimen of aggregate after nine hours of polishing in the accelerated polishing machine. It is more commonly known as the ability of an aggregate to withstand the polishing effects of traffic wear.

**political sign**

A political sign is a temporary sign associated with a campaign for an elective office or issue that will be put to public vote.

*Maintenance Collection*

**political subdivision**

A political subdivision is a municipality or county within the State of Texas.

*Safe Routes to School Program Guidelines*

**pollution**

Pollution is contamination of any component of the total environment by harmful sounds, smells, or sights degrading or injurious to humans and other living organisms.

**polyvinyl chloride**

PVC

Polyvinyl chloride (PVC) is the material of which a kind of tubing used for conduit is made.

*Highway Illumination Manual*

**ponding**

Ponding is jetting or the use of water to hasten the settlement of an embankment and requires the judgment of a soils engineer. In Hydraulics, ponding refers to water backed up in a channel or ditch as the result of a culvert of inadequate capacity or design to permit the water to flow unrestricted.
pool vehicle

A pool vehicle is a vehicle (such as a car, pick-up, or van) assigned to the equipment motor pool at department offices/complexes throughout the Austin area. These vehicles are available to be checked out upon request.

*Equipment Manual*

population density

Population density (Bureau of the Census definition) is determined by: 1) outside of a place, one or more contiguous census blocks with a population density of at least 1,000 persons per square mile. Or 2) inclusion of a place containing census blocks that have at least 50 percent of the population of the place and a density of at least 1,000 persons per square mile.

*Transportation Planning and Programming Collection*

portable computing device

A portable computing device is any easily portable device capable of receiving and/or transmitting data to and from an information resource. These sources include, but are not limited to, notebook computers, handheld computers, PDAs, pagers, memory sticks, memory pens, digital cameras, digital toys and cell phones.

*Information Security Manual*

port number

A port number is a standardized transmission control protocol/internet protocol (TCP/IP) port number that enables remote computers to know which port to connect to for a specific network service.

*Information Security Manual*

Portland cement

Portland cement is a finely powdered substance, usually gray or brownish gray, composed largely of artificial crystalline minerals, the most important of which are calcium and aluminum silicates. The calcium silicate compounds, upon reaction with water, produce the new compounds capable of imparting the stonelike quality to the mixture.

Portland cement concrete pavement

Portland cement concrete pavement is a hardened mixture of Portland cement, aggregate, and water used to pave streets or highways. This mixture may or may not contain steel reinforcing.

posting amount

Posting amount is the amount of the transaction.

*Finance Division*

potential vertical rise

PVR
Potential vertical rise (PVR) is expressed in millimeters (inches), is the latent or potential ability of a soil material to swell, at a given density, moisture and loading condition, when exposed to capillary or surface water, and thereby increase the elevation of its upper surface, along with anything resting on it.

_Manual of Testing Procedures_

**pound force**

Pound force is that force, which if applied to a one pound mass, will cause it to accelerate at a rate of 9.807 meters per second per second. (the gravitational acceleration factor is 9.807 meters per second per second). A 100-pound weight placed on an object exerts a force of 100 pounds to that object.

_Manual of Testing Procedures_

**power**

\[ P \]

Power (P) is measured in watts. Formulae as follows:

- for DC circuits: \( P = EI \) or \( P = VI \)
- for AC circuits: \( P = EI(pf) \) or \( P = VI(pf) \).

For power loss due to resistance in lighting circuits, the power factor can be considered equal to one. This power can also be calculated: \( P = I^2R \).

_Highway Illumination Manual_

**power of attorney**

POA

A power of attorney (POA) is a legal instrument authorizing a person to act as the agent of the grantor.

_Letting Manual_

**power factor**

\( pf \)

Power factor (pf) is the time relationship between current wave and voltage wave in an A.C. system.

_Highway Illumination Manual_

**pre-bid conference**

A pre-bid conference is used to present a general review of the completed plans and specifications plus a detailed review of the project’s special requirements.

**pre-cast**
Pre-cast is concrete that is formed, placed, and cured before being placed in its final position. An example is a pre-case concrete beam for a bridge.

**precision weights**

Precision weights are weights meeting the requirements of any of the four classes in the “Acceptance Tolerances for Analytical Weights” of Test Method “Tex-901-K. Verifying Calibration of Weighing Devices used for Laboratory Testing.” Class 1 and Class 2 weights are used as standards for calibration of analytical balances, in the calibration of lesser class weights, and as counterweights with analytical balances. Class 3 and Class 4 weights are used as working weights and for calibration of general-purpose balances.

*Manual of Testing Procedures*

**prefabricated pavement markings**

Prefabricated pavement markings are all film type materials to be used for symbol, legend, or linear pavement markings which are supplied in a preshaped or semi-preshaped form.

*Manual of Testing Procedures*

**prehistoric**

Prehistoric means archeological sites of Native American peoples without a written record dating before A.D. 1492.

*Environmental Manual*

**preliminary engineering**

Preliminary engineering is that portion of the development of a project during which the basic planning objectives are translated into specific, well-defined criteria that can permit the final design process to begin.

**preliminary survey**

A preliminary survey consists of fieldwork and gathering data from a variety of sources to identify all issues in the project development process early enough to allow time to address and, if need be, mitigate for environmental issues.

*Environmental Manual*

**pre-negotiated audit**

An examination of the contractor’s records before the negotiated contract is executed. This is performed to assure the contract manager that the contractor has an acceptable accounting system, adequate and proper justification for the various rates charged to perform work and is aware of the cost eligibility and documentation requirements.

*Contract Management Manual*

**prepared roadbed**
Prepared roadbed refers to in-place roadbed soils compacted or stabilized according to provisions of applicable specifications. *Pavement Design Manual*

**prescriptive right**

Prescriptive right is the open and continuous use of land by an entity where no previous written document exists. *Right of Way Collection*

**pre-sentence investigation**

PSI

A pre-sentence investigation (PSI) typically applies to a convicted driving while intoxicated offender. *Traffic Safety*

**present owner**

A present owner is the person currently holding clear title to a certain property. *Right of Way Manual*

**present serviceability index**

PSI

Present serviceability index (PSI) is a number derived by formula for estimating the serviceability rating from measurements of certain physical features of the pavement. *Pavement Design Manual*

**prestressed concrete**

Prestressed concrete is precast concrete subject to pretensioning, post-tensioning, or a combination of both. *Manual of Testing Procedures*

**preventive maintenance**

1. Preventive maintenance is pavement repair to preserve existing pavement so that it may achieve its designed loading. *Pavement Design Manual*

2. Preventive maintenance for pavements is a relatively light-duty treatment applied before the pavement shows obvious signs of deterioration. These treatments preserve condition and prolong pavement life either by repairing the surface or by preventing intrusion of water into the underlying layers. Some typical preventive maintenance treatments for pavements are: seal coat, thin overlay, crack seal and joint treatment. 
   *Pavement Management Information System User's Manual*
preventive maintenance project

Work proposed to preserve, rather than improve, the structural integrity of the pavement and/or structure. Examples of preventive maintenance activities include ACP overlays, seal coats, sealing joints and cracks, patching concrete pavement, shoulder repair, scour countermeasures, painting steel members, restoration of drainage systems and cleaning and sealing bridge joints.

Primary Highway System

Primary Highway System, or Federal-Aid Primary System, means that portion of connected main highways that is officially designated by the Commission as the federal-aid primary system in existence on June 1, 1991, and any highway that is not on the system but is on the National Highway System.

Right of Way Manual

Primary Metropolitan Statistical Area

PMSA

A Primary Metropolitan Statistical Area (PMSA), according to the Bureau of the Census, if an area that qualifies as an MA and has more than one million persons, Primary Metropolitan Statistical Areas (PMSA) may be defined within it. A PMSA consists of a large urbanized county or cluster of counties that demonstrates very strong internal economic and social links, in addition to close ties with other portions of the larger area. When PMSAs are established, the larger area of which they are component parts is designated a CMSA.

Transportation Planning and Programming Collection

primary monumentation and control

Primary monumentation and control is the base monuments used to control surveying, design, and construction of a transportation project; also, the relative course and distance between monuments.

Right of Way Manual

prime coat

PC

The prime coat (PC) is the initial application of a low viscosity liquid asphaltic material on a completed base course or other approved area for the purpose of promoting adhesion between the base course or area and the application of a subsequent layer of asphaltic material.

prime contractor

Prime contractor is the contractor of record who remains responsible for contract compliance, even if employing sub-contractors. See contractor.

Contract Administration Manual

prime provider
The prime provider is the provider awarded a TxDOT provider contract.  
*Engineering Architectural and Surveying Services Manual*

**principle of least privilege**

The principle of least privilege requires that a user be given no more privilege than necessary to perform a job. Ensuring least privilege requires identifying what the user's job is, determining the minimum set of privileges required to perform that job, and restricting the user to a domain with those privileges and nothing more.  
*Information Security Manual*

**printout**

A printout is an analog representation of a digital file, usually on paper.  
*Communications Manual*

**prior approval**

Prior approval is the documentation evidencing consent prior to incurring specific cost or undertaking a new task.  
*Contract Management Manual*

**prior authorization**

Prior authorization is the documentation evidencing department consent for the performing entity to proceed on a course of action.  
*Contract Management Manual*

**priority program area**

A priority program area is a program area designated by the federal government for national emphasis in highway safety.  
*TxDOT Safety*

**private key**

A private key is one piece of an encrypted system, required to prove authenticity of the sender.  
*Information Security Manual*

**privately owned utility**

Privately owned utility is any utility facility or line, its accessories and appurtenances, devoted exclusively to private use and not serving the public either directly or indirectly. These facilities will be considered as improvements and not as public utilities. The function of an individual facility or line should be the determining factor and not ownership considerations.  
*ROW Utility Manual*

**privatization**
Privatization is the contracting of public services or selling of public assets to private industry.

**probable sales (price)**

Probable sales (price) is the amount which would normally be received for a residential dwelling through its sale to another person.

*Right of Way Manual*

**probational status**

Probational status is a status assigned to an aggregate product on the AQMP, Aggregate Quality Monitoring Program, when its rated source statistical value (with the exception of polish value) is within 10 percent of TxDOT’s standard specification unit.

*Manual of Testing Procedures*

**problem inventory**

A problem inventory occurs when a specific stock item is inventoried because of a discrepancy.

*Materials And Supplies Management System Manual*

**procedure**

A procedure translates policies, plans, programs into action. Procedures establish sequence, timing and coordination, and specify how the work is accomplished. They set out the steps to carry out policy.

**process**

A process is a set of sub-processes that take input and create one or more outputs that are of value to the customer.

**procurement**

Procurement is the process of acquiring goods and services.

*Contract Management Manual*

**procurement card**

Procurement card is a credit card provided under the state procurement card program and issued to state employees for the payment of selected goods and services for official business only.

*Purchasing Manual*

**procurement contract**

A procurement contract is a legal instrument between an awarding agency and recipient where the principal purpose is to acquire (by purchase, lease, or barter) property or services for the direct benefit or use of the awarding agency.

*Transportation Planning and Programming Collection*
producer

A producer is any business or individual who manufactures a product and seeks to supply that product to TxDOT or contractors of TxDOT.

product

A product is a material that meets a TxDOT specification produced from a single source.

productions

Productions are the trips that are produced by members of a household. Productions are computed by trip purpose as well as mode of travel. Production rates refer to the total trips produced divided by the number of households.

Traffic Data and Analysis Manual

production system

The production system is the hardware, software, physical, procedural, and organizational issues that need to be considered when addressing the security of an application, group of applications, organizations or group of organizations.

Information Security Manual

professional providers

Professional providers are professionals identified under Government Code chapter 2254, Subchapter A that may perform professional services for the department.

Contract Management Manual

professional services

Professional services means services covered by the Professional Services Act (Texas Government Code Title 10, Subtitle D, Section 2254), including accounting, architecture, landscape architecture, land surveying, medicine, optometry, professional engineering, real estate appraising, and professional nursing, and services provided in connection with the professional employment or practice of a person who is licensed or registered as a state certified or state licensed real estate appraiser.

Purchasing Manual

professional services provider

Professional services provider (provider) is an individual or entity that provides engineering, architectural, or surveying services.

Engineering Architectural and Surveying Services Manual

proficiency samples
Proficiency samples are defined as homogenous samples that are distributed and tested by two or more laboratories and/or personnel. The test results are compared to assure that the laboratories and/or personnel are obtaining the same results.

*Quality Assurance Program Manual*

**profile**

1. A profile is an accessor ID (ACID) and the resources that the ACID is authorized to access.
   *Information Security Manual*

2. Profile is a line indicating ground elevations of a vertical section along a survey line.
   *Right of Way Collection*

3. The profile is the line showing ground elevations or a vertical section along a horizontal survey line. Side view of roadway or ditch grade.

**profile grade line**

The profile grade line, usually the centerline, and elevation to which the roadway is to be built.

**profilograph (California-type)**

A profilograph is an apparatus constructed with a metal frame with about 7.62 m (25 ft.) between the front and rear wheel assembly supports, and allowing field calibration using vertical deflection standards. Each wheel assembly consists of six averaging rubber-tired wheels arranged so the center of the frame represents the mean evaluation of the road surface between the wheel assemblies. For consistent graph recording, air pressure in the profile wheel must be maintained to manufacturer’s specification. Motive power may be manual or a small propulsion unit attached to the center assembly.

**profilometer, surface dynamics**

A profilometer, surface dynamics, is a device designed to produce a trace resembling the surface profile over which it is passed.

**pro forma**

Pro forma is a document provided in advance to prescribe form and basic content, as “pro forma” grant agreements for Selected Traffic Enforcement Programs.

**program**

A program is a grouping of activities of a related nature.

**programmed**

Programmed is the amount of transportation planning funds the MPO expects to expend on tasks detailed in the UPWP. The programmed amount includes FHWA transportation planning funds, also known as PL funds, FTA Section 5303 funds, and state match. The FHWA PL funds may include the new allocation, carryover from the previous year, and any unobligated balance. The
programmed amount cannot be more than the sum of the new allocation, carryover, and unobligated balance or two years of allocation, whichever is less.

*Transportation Planning and Programming Collection*

**program coordinator**

PC

A program coordinator (PC) is a Research Management Committee member assigned by the RMC over a program of research defined in the long range research plan (a topic, goal, objective or an individual project).

*Research and Implementation Manual*

**program cost account**

PCA

Program cost account (PCA) is an assigned number that relates to appropriation authority (Reference FIMS Code Chart 81).

*Finance Division*

**program manager**

1. The program manager is the department staff person responsible for making administrative decisions to implement a contracting activity.

*Contract Management Manual*

2. A program manager is the manager assigned IR ownership; responsible for the information used in carrying out program(s) under their direction and provides appropriate direction to implement defined security controls and procedures.

*Information Security Manual*

**program of projects**

POP

The program of projects (POP) is a statewide list of projects for FTA funding.

*Public Transportation Collection*

**Program Selection Committee**

The Program Selection Committee is a committee approved by the Executive Director to select employees who may participate in the department-sponsored master’s program.

*Human Resources Manual*

**programmatic agreement**

Programmatic agreement is an agreement that governs how certain activities will occur, usually on a specific environmental issue. TxDOT has a PA with FHWA and with THC on cultural resources.

*Environmental Manual*

**programmatic categorical exclusion**
PCE
A programmatic categorical exclusion (PCE) is a CE project for which an environmental analysis is prepared. The types of projects are the result of an agreement between TxDOT and FHWA. ENV approves PCEs for FHWA.
*Environmental Manual*

**prohibited condition**
A prohibited condition is any condition in a permit space that is not allowed by the permit during the period when entry is authorized.
*Occupational Safety Manual*

**project advisor**
PA
A project advisor (PA) is an individual who provides additional expertise for research project oversight. A project advisor may be a TxDOT employee or a person from outside of TxDOT. A project advisor serves under the project director on the Project Monitoring Committee.
*Research and Implementation Manual*

**project classification**
Project classification is an official classification of the type of project provided for in construction plans.

**Project Development Plan**
PDP
The Project Development Plan (PDP) is produced by the Design and Construction Information System for 10 year planning and development. In 1996, the name changed to the Unified Transportation Plan (UTP).

**project director**
PD
A project director (PD) is the TxDOT person in charge of project oversight during the conduct of the project. The project director answers to the Research Management Committee (RMC) through the program coordinator, ensuring that the project stays on the course determined by the RMC and as outlined in the project work plan.
*Research and Implementation Manual*

**Project Grant Agreement**
PGA
A project grant agreement specifies the scope, the time period of the grant and maximum reimbursable award for a public transportation grant. Along with the master grant agreement (MGA), it is the legally binding instrument between TxDOT and the grant subrecipient.

Public Transportation Collection

projected traffic

Projected traffic is estimated future traffic volumes of a roadway.

project-level

In pavement management, project-level refers to activities which directly support decision-making and design of an individual pavement project. Project-level activities require more detailed data collection and analysis than that required for network-level.

Pavement Management Information System (PMIS) Users Manual

project maintenance

Project maintenance is a project intended to maintain rather than improve the original condition of a highway facility. Special maintenance and some day labor work is handled under Project Maintenance.

project manager

1. The project manager is the TxDOT supervising employee that is responsible for initiating and orchestrating projects to be outsourced and managed by the department; verifies that the performing entity is in compliance with the terms and conditions of the contract and accepts a good or service on behalf of TxDOT.

Contract Management Manual

2. The project manager coordinates the work of others and acts as “go-between” with other sections, agencies, etc. Typically, the project manager develops and oversees project work schedules and supervises work performed by others. A project may have more than one project manager if the project involves work performed by more than one organization.

Traffic Safety

3. The department project manager is the department employee designated in the contract as the official contact for all correspondence between the department and the provider.

Engineering Architectural and Surveying Services Manual

project monitoring committee

PMC

A project monitoring committee (PMC) is composed of the project director, who chairs the committee, the program coordinator associated with the project, project advisors, and the RTI research engineer assigned to the Research Management Committee under which the project is funded.

Research and Implementation Manual

project number
Project number is the unique number for the overall designation of a work effort containing one or more details for city/county/agency.
Finance Division

**project release letter**

A project release letter is a memorandum issued by the Right of Way Division to a District authorizing funding on the ROW CSJ for right of way activities for a specific project.

**promotion**

A promotion is a change in duty assignment to a position in a higher salary group. Generally, such positions carry more responsibility and require that those who fill them possess higher levels of education and experience.
*Human Resources Manual*

**property description**

Property description is a description recognized by law which is sufficient to locate and identify property without oral testimony. The property description includes metes and bounds of the property and a survey (parcel) plat.
*Right of Way Collection*

**property fence**

A property fence is placed on or near the boundary line between two adjacent properties.
*Survey Manual*

**property interest**

Property interest is a right or interest that an individual has in land and chattels to the exclusion of all others.
*Right of Way Manual*

**property line**

P/L

1. The property line (P/L) is the line that identifies the outside perimeter of a tract of land as described by the metes and bounds in the field notes.
2. A property line (P/L) is a legally established line which indicates the registered boundary between adjacent property owners holdings.
*Survey Manual*

**proposal**

A proposal is a prospective entity’s submission of its qualifications and/or fees for completing a project being outsourced; the proposal is scored by the department to determine which entity will be awarded the contract.
proprietary accounts

Proprietary accounts are those accounts which show financial position and operations, such as assets, liabilities, reserves, fund balances, revenues and expenditures, as distinguished from budgetary accounts.

proprietary purchase

A proprietary purchase is a purchase in which the specifications or requirements describe a product or service that is only available from one manufacturer or vendor, and which does not permit an equivalent product to be supplied. Formerly called a 3.09 or 309 purchase.

proprietary software

Proprietary software is software that the department obtains from vendors or other commercially available sources, the use of which is governed by licensing agreements.

prospective employee

Prospective employee is a person who is being considered for employment with TxDOT. This term also includes an employee of another agency who is being considered for employment by TxDOT.

prospectus

A prospectus, in transportation, is a document that describes proposed activities in transportation planning over a specified period of time, predicts future conditions in the region, assigns responsibility for planning and implementing transportation services, and discusses transportation alternatives for the future.

protocol

A protocol is a pre-established standard that is used to communicate between two entities where each entity is able to understand and communicate with the other.

protocol stack

Communications functions are generally divided into separate “layers” of protocol, each of which builds on the functions provided by a more basic layer. The combination of these layered protocols is termed a protocol stack.

provider
A provider is any firm or company performing ROW services under a professional services contract. 
*Right of Way Manual*

**proximity damage**

Proximity damage is a reduction in value to improvements caused by their location too close to an activity that is not compatible to their use.
*Right of Way Collection*

**proxy**

A proxy is a firewall mechanism that replaces the IP address of a host on the internal (protected) network with its own IP address for all traffic passing through it. A software agent that acts on behalf of a user, typical proxies accept a connection from a user, make a decision as to whether or not the user or client IP address is permitted to use the proxy, and perhaps does additional authentication. It then completes a connection on behalf of the user to a remote destination.

**proxy server**

A proxy server is a device which allows (or restricts) passage from internal network facilities to external network facilities (for example, the Internet) and maintains individual records of the date, time, and duration of such passages, as well as the sites visited.
*Information Security Manual*

**public hearing**

A public hearing is a hearing held after public notice to solicit public input in determining a preferred alternative for or with respect to, any changes to a project. All testimony given at a public hearing will be made a part of the hearing record.
*Environmental Manual*

**Public Information and Education**

PI&E

Public Information and Education (PI&E) is an activity intended to create awareness, build knowledge, enhance sensitivity toward traffic safety issues, and change behavior of the driving public.

**Public Information Office**

PIO

The Public Information Office (PIO) provides information to the public and develops public education campaigns about department functions and activities. In March of 1998, PIO assumed responsibility for the department's ombudsman.
*Inside TxDOT*
**public involvement**

Public involvement is an ongoing phase of the project planning process that encourages and solicits public input and provides the public the opportunity to become fully informed regarding project development.

*Environmental Manual*

**public key**

A public key is one piece of an encrypted system. It is held by a trusted, third party, certificate authority.

*Information Security Manual*

**public key encryption**

Public key encryption involves encrypting messages with one key (public key) that can only be decrypted with a second key (private key) and vice versa. Each key unlocks the encryption that the other key creates. For security purposes, the private key is never revealed to unauthorized users. Only the public key is widely known.

Source: *Information Security Manual*

**public key infrastructure**

PKI

The public key infrastructure (PKI) consists of the programs, data formats, communications protocols, institutional policies and procedures required for enterprise use of public-key cryptography.

*Information Security Manual*

**publicly owned utility**

A publicly owned utility is any utility facility or line, its accessories and appurtenances, devoted to serving the public either directly or indirectly. Common carrier type utility facilities will be considered public utilities. The function of an individual facility or line should be the determining factor and not ownership considerations. Highway design features such as storm drainage, illumination, traffic metering, intelligent traffic systems (ITS), or intelligent vehicle highway systems (IVHS) will not be considered public utilities.

*ROW Utility Manual*

**public meetings**

Public meetings are informal discussions which may assist in the preparation of environmental documents may be held with local public officials, interested citizens or the general public and local, neighborhood or special interest groups for the purpose of exchanging ideas and collecting input on the need for and possible alternatives to a project.

*Environmental Manual*

**public park**
A public park, forest, playground, nature preserve, or scenic area designated and maintained by a political subdivision or governmental agency.

*Right of Way Manual*

**public property**

Public property is property owned by a state, city, or county.

*Safe Routes to School Program Guidelines*

**public transit**

Public transit, sometimes called mass transit, is where passenger transportation service, usually local in scope, that is available to any person who pays a prescribed fare. It operates on established schedules along designated routes or lines with specific stops and is designed to move relatively large numbers of people at one time. Buses, light rail, and rapid transit.

**public transportation**

Public transportation is the transportation of passengers and their hand-carried packages or baggage on a regular or continuing basis by means of surface or water conveyance. This definition includes fixed guideway transportation and underground transportation, but excludes services provided by aircraft, taxicabs, ambulances, or emergency vehicles.

*Public Transportation Collection*

**Public Transportation Advisory Committee**

PTAC

The Public Transportation Advisory Committee (PTAC) is a group appointed by the Transportation Commission to provide advice and recommendations to the commission on the needs and problems of the state’s public transportation providers.

*Public Transportation Collection*

**public transportation coordinator**

PTC

A public transportation coordinator (PTC) is a TxDOT Public Transportation Division employee charged with carrying out public transportation grant management activities and providing technical assistance to transit agencies at the district level.

*Public Transportation Collection*

**Public Transportation Division**

PTN

The Public Transportation Division (PTN) provides financial and technical assistance to a variety of public transportation entities. These include urban, rural, and persons with disabilities transit providers, as well as metropolitan planning organizations, intercity carriers, and other public trans-
portation industry related organizations. In addition, the division also administers and oversees various programs which are financed with funds and monies appropriated and made available from both the Texas Legislature and the Federal Transit Administration. In supporting public transportation in Texas, the division represents transit in the planning and programming process including the preparation of a statewide comprehensive master plan and in rail safety oversight. It also represents the state in public transportation matters with federal officials, other state agencies, transit organizations and local communities; monitors and sponsors research and development activities; and assists in the development of policies by the commission, the governor, and the legislature.

Public Transportation Management System

PTMS

The Public Transportation Management System (PTMS) is an information database for transit agency contact data, procurement status, security and safety information, and fleet and facility inventories.

Public Transportation Collection

pump station

A pump station is the facility required for mechanically lifting the storm water a required vertical distance from a gravity inflow to a gravity outflow. The station includes a wet well sump, pumps, controls, pump house, and motors.

pumping

Pumping is the ejection of mixtures of water, clay or silt along or through transverse or longitudinal joints, cracks, or pavement edges resulting from repeated wheel load applications.

punchout

A punchout is an asphaltic concrete pavement (ACP) distress type. A punchout is a full-depth block of pavement formed when one longitudinal crack crosses two transverse cracks. PMIS ratings for punchouts range from 0 to 999.

Pavement Management Information System Users (PMIS) Manual

purchase

Purchase, as used in connection with claiming supplementary relocation benefits, means:

◆ the date of delivery to such claimant of the deed to the replacement property; or
◆ the date of delivery of a completely executed installment contract for purchase of the replacement property.

Right of Way Manual

purchase, 3.09
3.09 is an obsolete purchasing term taken from Vernon’s Texas Civil Statutes, referring to a sole source or proprietary purchase. This has been replaced by Texas Government Code, Title 10, Subtitle D, Section 2155.067.

*Purchasing Manual*

**purchase additive**

A purchase additive is the amount of money the displacee must pay for replacement housing over and above the acquisition amount he/she receives from the department.

*Right of Way Manual*

**Purchase Category Codes**

**PCC**

Purchase Category Codes (PCC) are codes used in the Uniform Statewide Accounting System (USAS) to document the purchase method, commodity type, and dollar category of purchases. This code also determines the audit process for all types of delegated and non-delegated payments. Audits are either pre- or post-payment.

*Purchasing Manual*

**purchase of services**

1. Purchase of services is the procurement of skilled or unskilled labor or professional work, but does not include:
   - professional and consulting services covered by the Professional Services Act, as defined in TGC, Title 10, Subtitle D, Section 2254
   - services of an employee of a state agency (interagency agreement)
   - services of public utilities.

*Purchasing Manual*

2. Purchase of services means the method of providing right of way services to TxDOT based on established ratios of qualifications and bid price.

*Right of Way Manual*

3. Purchase of services is the purchasing method an entity buys transit service from a public transit agency or other transportation source.

*Public Transportation Collection*

**purchase order**

**PO**

1. Purchase order (PO) is a written document to a vendor formalizing all terms and conditions of a proposed transaction made under the State Purchasing Act, for goods or non-professional services.

*Purchasing Manual*

2. Purchase order (PO) is a purchase agreement issued by a state agency authorized to do so under the provisions of Title 10, Subtitle D, Government Code.

*Contract Management Manual*
3. Purchase order (PO) is a number sequentially assigned to purchases handled through the Automated Purchasing System (APS).

Finance Division

**purchase order change notice**

Purchase order change notice is a document used to notify a vendor of specific changes in a purchase order and to document the purchasing file.

*Purchasing Manual*

**purchaser**

Purchaser is an employee authorized in writing to act as a purchasing agent for TxDOT who may obligate state funds by issuing and signing purchase orders. Texas Government Code, Title 10, Subtitle D, the State Purchasing Act.

*Purchasing Manual*

**purchasing**

Purchasing is the acquisition of goods and services for TxDOT made under the Purchasing Act. Texas Government Code, Title 10, Subtitle D, the State Purchasing Act.

*Purchasing Manual*

**Purchasing Act**

The Purchasing Act, also known as the State Purchasing Act (Texas Government Code, Title 10, Subtitle D) is the enabling legislation that governs the purchase of goods and services by state agencies.

*Purchasing Manual*

**purchasing and materials administrator**

PMA

The purchasing and materials administrator (PMA) is the same role as the former purchasing materials manager (PMM)

*Purchasing Manual*

**pycnometer**

A pycnometer is a standard vessel often provided with a thermometer for measuring and comparing the densities of liquids and solids.

*Manual of Testing Procedures*
qualified information systems vendor

QISV

A qualified information systems vendor is a vendor whose catalogue of automated information systems products and services has been approved by the General Services Commission. A listing of approved catalogue vendors is available on the GSC web site.

*Purchasing Manual*

qualified laboratories

Qualified laboratories are laboratories that are capable as defined by appropriate programs established by the SHA. As a minimum, the qualification program shall include provisions for checking testing equipment and the laboratory shall keep records of calibration checks.

*Quality Assurance Program Manual*

qualified sampling and testing personnel

Qualified sampling and testing personnel are personnel who are capable as defined by appropriate programs established by the SHA.

*Quality Assurance Program Manual*

qualified staff appraisers

Qualified staff appraisers are staff appraisers who, by virtue of their experience, training, and knowledge, are qualified to determine parcel values of $2,500 or less and to review fee appraiser reports and determine them to be sufficiently comprehensive to substantiate the recommended values with adequate explanations.

*Right of Way Collection*

quality assurance

QA

1. Quality assurance is TxDOT’s management method of evaluating the consistency of aggregate products’ quality including the use of AQMP, Aggregate Quality Monitoring Program samples and test results and source inspection to monitor the quality, uniformity and acceptability of aggregates.

*Manual of Testing Procedures*

2. Quality assurance is defined as all those planned and systematic actions necessary to provide confidence that a product or service will satisfy given requirements for quality.

*Quality Assurance Program Manual*

quality control

QC
Quality control is the producers’ management method of controlling and making adjustments to processing techniques of parent materials including the use of QC samples and tests and other available information to establish and maintain the specified quality of a product.
Quality control is defined as all contractor/vendor operational techniques and activities that are performed or conducted to fulfill the contract requirements. *Quality Assurance Program Manual*

**quality control plan**
QCP

A quality control plan is an over-all system developed and used by a producer or supplier that ensures that a product will meet the specified quality standards. *Manual of Testing Procedures*

**quantity sampled**
QS

Quantity sampled is the quantity of a specific material represented by a sample or samples obtained during a single sampling proceeding.

**quarry**

A quarry is an open surface excavation of minerals or construction materials. NOTE: This definition was approved by the Specification Committee. *Manual of Testing Procedures*
Radian
A radian is an arc of a circle equal in length to the radius. A radian is the angle at the center measured by the arc.
*Survey Manual*

Radius
R
A radius is a line segment extending from the center of a circle to the curve.
*Survey Manual*

Radius of Gyration
A radius of gyration is the distance from the reference at which all of the area can be considered concentrated that still produces the same moment of inertia. Numerically, it is equal to the square root of the moment of inertia, divided by the area.

Railroad Crossing
RRX
A railroad crossing is a crossing of a highway and a railroad.

Rainfall Intensity
Rainfall intensity is a value expressing rainfall in terms of inches per hour used in hydraulic calculations. The term “one inch per hour of rainfall” equals approximately one cubic foot per second per acre.

Ramp
A ramp is an interconnecting roadway or a traffic interchange on which vehicles may enter or leave a designated highway.

Ramp, Entrance
A ramp, entrance, is an interconnecting roadway for the transfer of traffic from a low-speed, local service facility to a higher-speed, through facility.

Ramp, Exit
A ramp, exit, is an interconnecting roadway for the transfer of traffic from a high-speed, through facility to a low-speed, local facility.

Ramp, Terminals
A ramp, terminals, is the nose of a ramp at its point of mergence or divergence with either a local street, frontage road, or traffic lane of the through highway.

**ranch road**

RR

Ranch road is only Ranch Road 1; considered part of the farm to market road system, so designated by the Texas Transportation Commission. Ranch road spur is also a roadway so designated by the Texas Transportation Commission, which is designated within the description of the ranch road. *Texas Reference Marker (TRM) System User's Manual*

**ranch to market road**

RM

A ranch to market road is a roadway so designated by the Texas Transportation Commission. Ranch to market road spur is also a roadway so designated by the Texas Transportation Commission, which is designated within the description of the ranch to market road. *Texas Reference Marker (TRM) System User's Manual*

** raster**

Raster is the system for digitally defining an image by dividing the image into a specified number of square areas and assigning one of 256 density values to each of these areas. Photoshop is a raster-based image-editing program. *Communications Manual*

**rated source**

A rated source is a source with one or more aggregate products(s) meeting the AQMP, Aggregate Quality Monitoring Program, eligibility and acceptance criteria and rated statistically for quality by MAT. *Manual of Testing Procedures*

**rated source quality catalog**

The rated source quality catalog is a catalog published biannually by MAT to update the rated source statistical values for the quality tests covered by the AQMP, Aggregate Quality Monitoring Program. *Manual of Testing Procedures, Inspection Guide*

**rational method of design drainage structure**

A rational method of design drainage structure is a design method based on the principle that the maximum rate of run off from a given watershed for an assumed intensity of rainfall occurs when all parts of the area are contributing to the flow of discharge. Expressed as a formula this method becomes: \[ Q = CIA. \]
raveling
1. Raveling is an Asphaltic Concrete Pavement (ACP) distress type. It is the progressive disintegration of the surface due to dislodgement of aggregate particles. Pavement Management Information System (PMIS) ratings for raveling range from 0 (none) to 3 (most).

2. Raveling is the progressive failure of the binder and loss of aggregate from the surface by weathering and/or traffic abrasion.

readability
Readability is the smallest division or fraction of a division to which a visual output can be accurately read or estimated. For digital load indicators, this is the smallest incremental change for each range. NOTE: Some digital load indicators change readability without warning.

Some change from 0.01 to 0.02 and 0.05 g, others from 0.1 to 0.5 as the weight increases.

read-only memory
ROM
Some computers and most microprocessors have some form of memory that represent either by the manufacturer or in some one-time process so that ROM only has one set of information and does not have the hardware to rewrite (and thus to erase) its contents.

real property
Real property is land, including improvements, structures, and appurtenances, but excluding movable machinery and equipment.

reappraisal
Reappraisal is a second or subsequent appraisal of property after the initial appraisal, updating the values for negotiation or eminent domain purposes, or due to a market change.

Reasonable Accommodation Review Committee
RARC
The Reasonable Accommodation Review Committee is a committee to review accommodation requests that will cost more than $2,000. The RARC consists of representatives of the:
- Director of Human Resources Division
- Director of the Office of Civil Rights
- Director of the Finance Division
- Director of the Occupational Safety Division, and
- Office of General Counsel.
human resources manual

rebuilt (re-life) equipment
Rebuilt (re-life) equipment is the complete refurbishment of a piece of equipment or the extensive refurbishment at an established interval to a major component, such as an aerial device.

equipment manual

receipts
Receipts are all cash deposits.

finance division

receiving agency
The receiving agency is the agency compensating the performing agency for services or resources.

contract management manual

receiving district, division or office
The receiving district, division or office is the office responsible for preparing and managing the contract, including processing payments.

contract management manual

receiving hopper
The receiving hopper is the front part of a paver, where hot mix is received from the haul truck.

receiving waters
Receiving waters are the waters into which runoff flows.

reciprocity
Reciprocity is a preference applied against a bidder whose home jurisdiction has preferences. Used for bid evaluation purposes only.

purchasing manual

reclassification
Reclassification is the process of reviewing the actual duties performed in a position and assigning the position to a state and business category consistent with the duties and job description. Reclassification is not to be interpreted as a change in duty assignment.

human resources manual

recommended value
Recommended value is the value for a parcel recommended as just compensation by the reviewing appraiser after his/her review of the appraisal report.

right of way collection
reconstruction (4R) project

Work proposed on the approximate alignment of an existing route that meets the geometric criteria for a new facility. Reconstruction includes new location projects or projects that provide substantial changes in the general geometric character of a highway, such as widening to provide additional through travel lanes, horizontal or vertical re-alignment, etc. Reconstruction work includes bridge replacement work.

record copy

The record copy of a document or collection of documents in a file is the “official” copy of a record subject to records retention requirements.  
*Records Management Manual*

Record Of Decision  
ROD

The final approval of an Environmental Impact Statement issued by the Federal Highway Administration.

record owner

A record owner is the owner of record in a particular political subdivision of the State.  
*Right of Way Manual*

record series

A record series is a single specific type of record or file or a group of files that are similar in function and have similar retention requirements.  
*Records Management Manual*

records retention schedule

A records retention schedule is a document describing records produced and maintained by TxDOT, including information on the minimum required retention, the medium of the record, its status as a confidential or vital record, and whether the record is subject to review by the State Archives before it may be destroyed.  
13 TAC §6.1(12); *Records Management Manual*

recreational road

RE

A recreational road is a roadway so designated by the Texas Transportation Commission. Recreational Road Spur is also a roadway so designated by the Texas Transportation Commission.  
*Texas Reference Marker (TRM) System User's Manual*

recycled asphalt pavement

RAP
Recycled asphalt pavement is hot mix asphalt and any accompanying tack coat, seal coat or chip seal removed as millings or broken pavement pieces from a road during construction, reconstruction or repavement.

Materials and Supplies Management System Manual

reduction in force

RIF

Reduction in force is the involuntary separation from employment of employees whose positions have been eliminated for reasons not related to substandard performance or rule violations.

Human Resources Manual

redundant array of inexpensive disks

RAID

Redundant array of inexpensive disks is a type of data storage mechanism in which large numbers of small and inexpensive hard disks are utilized in combination to provide for data protection, redundancy and recoverability.

reference items

Reference items are standard or special specifications used to supplement other specifications. They are noted, mentioned, or referenced in the specification itself or in a plan or general note or by provision.

PS and E Preparation Manual

reference marker

A reference marker is the building block of the TRM Highway Data File and the link between the automated files and what is actually on the ground. Reference markers replace control-section-milepoint, milepost, link-node, or others as the sole source of location identification for highway-related on-system data.


reference marker displacement

Reference marker displacement is the distance in miles from a posted reference marker on the signed highway route to a data attribute or feature.


reference marker group


reference marker number
The reference marker number is the official number posted on the signed highway route. Markers are numbered from state line to state line and from westernmost or northernmost point of the Highway origin (south to north for interstate highway post numbering).

*Texas Reference Marker (TRM) System User's Manual*

**reference marker sign**

A reference marker sign is a symbol indicating the ascending (+) or descending (−) direction to a data attribute or feature from a posted reference marker.

*Texas Reference Marker (TRM) System User's Manual*

**reference marker suffix**

A reference marker suffix is the posted suffix character, if any, appended to the reference marker number on the signed highway route.

*Texas Reference Marker (TRM) System User's Manual*

**reference temperature profile**

Reference temperature profile is a graph generated by the match cure system representing time versus temperature (heat of hydration) of the in-situ concrete.

*Manual of Testing Procedures*

**reference test report**

Reference test reports are issued to any current project using item specific material on a QM program within the program guidelines.

*Manual of Testing Procedures*

**reflector**

A reflector is a polished aluminum device used to reflect light.

*Highway Illumination Manual*

**reflector units**

There are two types of reflector units. Type A reflector units have reflective sheeting applied to the substrate. Type B reflector units have center mounted acrylic plastic reflectors.

*Manual of Testing Procedures*

**refractor**

A refractor is a prismatic glass element used to refract light.

*Highway Illumination Manual*
refueling emissions

Refueling emissions are gasoline vapor emissions generated by the refueling of vehicles where the vapor in the vehicle fuel tank is displaced by the incoming liquid fuel and released into the atmosphere.

Traffic Data and Analysis Manual

regional automation center

RAC

A regional automation center is one of the TxDOT computer facilities at Austin (not the central system), Houston, Dallas, Ft. Worth, Odessa, and San Antonio in which large computers are in use by the department. These computers have extensive linkage between each other and the central system.

regional computing center

RCC

A regional computing center (RCC) provides district-to-center and center-to-Austin communications. Automated facilities are located at 6 host district offices (Houston, Dallas, Ft. Worth, Odessa, San Antonio, and Austin) that consist of IBM 4341 and VAX.

Regional Liaison Officer

RLO

A Regional Liaison Officer (RLO) is a member of the Governor’s Division of Emergency Management staff. The RLOs are stationed throughout the state. These field response personnel assist local officials in planning and carrying out emergency preparedness programs, teach a variety of emergency management courses, identify needs and advise local officials during incidents and disasters, and help coordinate state emergency resource support.

Maintenance Division

regional pooled-fund study

A regional pooled-fund study is a planning or RD&T study expected to solve problems of regional significance. The study is usually administered by an FHWA region office in cooperation with a lead state and/or MPO, that is funded by state and/or MPO contributions of FHWA planning and research funds, with or without matching funds.

Transportation Planning and Programming Collection

regionally significant project

A regionally significant project is a project (other than projects excluded by the cooperating parties from individual identification and grouped in the STIP/TIP) that is on a facility which serves regional transportation needs. 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, etc., or transportation terminals as well as most terminals themselves) and would nor-
nally be included in the modeling of a metropolitan area’s transportation network, e.g., all principal arterial highways and all fixed guideway transit facilities.

Transportation Planning and Programming Collection

registered professional land survey

RPLS

A registered professional land surveyor is a board certified professional qualified to provide value to the Texas Department of Transportation

Survey Manual

registration authority

RA

The registration authority keeps, monitors, and distributes certificates for the PKI process.

Information Security Manual

regular standby time

Regular standby time is standby time that is routinely scheduled for employees on a rotating basis.

Human Resources Manual

regular overtime

Regular overtime is time worked over eight hours in one day, on a paid holiday, or on weekends. All regular overtime worked is compensated with regular compensatory time at the rate of one hour earned for every hour worked. Regular compensatory time may be earned by non-exempt and exempt employees.

Human Resources Manual

regulated output ballast

A regulated output ballast is a form of electrical transformer that maintains the wattage of the lamp at a nearly constant value, though the line voltage may fluctuate as much as ±10 percent. Such ballasts or transformers may be integrally mounted within the luminaire or separately mounted in a ballast enclosure.

Highway Illumination Manual

regulated highway

A regulated highway is a highway on the interstate highway system or the primary highway system.

Right of Way Manual

regulatory signs

Regulatory signs are signs used to regulate the traffic movement or use of public highways and is law. A regulated sign is a sign permitted under the Transportation Code, Chapters 391 and 394 (outdoor advertising statutes).
**rehabilitation (3R) project**

Rehabilitation is work proposed to improve serviceability and extend the service life of existing highways and streets and to enhance safety. Work is usually accomplished within the existing right of way and does not include the addition of through travel lanes. Work may include the upgrading of geometric features such as roadway widening, minor horizontal re-alignment, and improving bridges to meet current standards for structural loading and to accommodate the approach roadway width.

**reinforced concrete pavement**

Reinforced concrete pavement is Portland concrete pavement in which steel is used to control the width of shrinkage and thermal cracking of the concrete. The steel adds strength to the concrete in tension.

**reinforcement**

Reinforcement is steel embedded in a rigid slab to resist tensile stresses and detrimental opening of cracks.

*Pavement Design Manual*

**reinforcing steel**

Reinforcing steel is steel bar, steel fabric, steel wire and seven-wire strand steel.

*Manual of Testing Procedures*

**reinforcing steel producing mill**

A reinforcing steel producing mill is a mill which performs the hot rolling of bar, cold drawing of wire, welding of welded wire fabric, or the stranding and heat-treatment of seven-wire strand.

*Manual of Testing Procedures*

**relative importance factor**

RIF

Relative importance factor is the numerical weight of each evaluation criterion as it relates to a particular contract.

*Engineering Architectural and Surveying Services Manual*

**release of tension cylinders**

Release of Tension Cylinders are cylinders used to determine when the concrete strength is adequate to apply the pretensioning force.

*700-I, Structural Test Procedures Manual*
reliability

Reliability of a pavement design/performance process is the probability that a pavement section designed using the process will perform satisfactorily during the design period under the given traffic and environmental conditions.

*Pavement Design Manual*

relocation assistance

Reloc Asst

Relocation assistance is an advisory and/or financial aid to persons, businesses, farms and non-profit organizations displaced by a highway project to assist them in becoming re-established, at rents or prices within their financial means, in dwellings that are decent, safe and sanitary.

*Right of Way Manual*

relocation specialist

A relocation specialist is a person employed by the State to assist displaced persons with advisory or financial aid during their relocation.

*Right of Way Manual*

remainder

A remainder is that area of a parcel of land which remains in the possession of the property owner after the part to be acquired has been taken, either by purchase or condemnation by the State.

*Right of Way Manual*

remedies

Remedies are instructions provided (in accordance with the contract) to the performing entity for corrective action.

*Contract Management Manual*

remote access

Remote access is the use of a modem and communications software to connect to a computer network from a distant location via a telephone line or wireless connection.

*Information Security Manual*

remote job entry

RJE

Remote job entry is used from the remote terminals in the computer systems in the department for users to input their data directly over data communication lines to computers. This avoids mailing the data or using telephones to get the data to the computer site. Output from the computer systems is also by remote job output.
remote job entry job control language

RJEJCL

Remote job entry job control language is a prompted, menu-driven programming function in regional remote operating system conversational online environment (ROSCOE) that assists the user in building job control language (JCL) and submitting jobs.

*Design and Construction Information System Manual*

remote location

Remote location is a specific location twenty or more miles from a MAT office.

Remote Operating System Conversational Online Environment

ROSCOE

Remote operating system conversational operating environment (ROSCOE) is an online text-editing and remote job entry system. It is actually designed as a text editor with a library to save and retrieve text. ROSCOE is not designed to be a word processor. ROSCOE interfaces with the computer operating system. This interface allows the user to submit batch jobs, to examine the output from those jobs, and to determine disposition (print, delete, very temporary retention, or resubmission after error correction).

*Design and Construction Information System Manual*

remote terminal access

Remote terminal access is access to a system by any terminal device which is not directly attached to it via a dedicated connection.

remote user

A remote user is one that is not located at the same place as is the computer system to which communications have been established. Remote communications for this type of user is usually established through dial-up telephone lines.

removable media

Removable media are materials that hold data in any form or that allow data to pass through them, including paper, transparencies, multipart forms, hard, floppy and optical disks, magnetic tape, wire, cable and fiber.

*Information Security Manual*

rented or public conveyance

Rented or public conveyance means a motor vehicle, train, or aircraft that an employee rents or pays for to use on a short-term basis while traveling on official state business.

*Travel Manual*
re-order point
ROP
A re-order point is when the inventory level is low enough to order stock.
*Materials And Supplies Management System Manual*

re-order quantity
ROQ
Re-order quantity is the quantity to order when the re-order point is reached.
*Materials And Supplies Management System Manual*

repeater
A repeater is a device that receives a digital signal on an electromagnetic or optical transmission medium and regenerates the signal along the next leg of the medium.
*Information Security Manual*

replacement credit
Replacement credit is an inventory notation in the public transportation management system (PTMS) that indicates TxDOT has awarded funds to replace a transit vehicle, regardless of whether a transit agency physically disposes of the vehicle.
*Public Transportation Collection*

request
A request is an order from a stock account or customer to another stock account.
*Materials And Supplies Management System Manual*

request for discussion
RFD
A request for discussion is a posting that proposes the creation of a new Usenet news group.
*Information Technology and Services Manual*

request for information
RFI
Request for information is a formal method of obtaining information to be used in a procurement.
*Purchasing Manual*

request for offer
RFO
Request for offer is a solicitation used with the catalog purchase procedure.
*Purchasing Manual*
request for proposal

1. Request for proposal is the package a prospective entity (provider) receives from the department to help formulate a proposal to perform a service for the department. Upon submission of the proposal, it is scored and evaluated by the department using the criteria communicate to the prospective entity in the RFP it received.

*Contract Management Manual*

2. Request for proposal is a method of solicitation used for selected, technically complex procurements when deliverables cannot be easily defined.

*Purchasing Manual*

3. Request for proposal is a request for submittal of a technical proposal from a provider that demonstrates competence and qualifications to perform the requested services, and shows an understanding of the specific contract.

*Engineering Architectural and Surveying Services Manual*

4. Request for proposal is a procurement process used when the property, equipment or services to be acquired are described in a performance or functional specification; the number of bidders is uncertain despite public solicitation; price alone is not a determinant; and discussions are expected with the bidder.

*Public Transportation Collection*

request for (price) quote

1. Request for quote is a method of solicitation used for informal competitive bidding.

*Purchasing Manual*

requisition

A requisition is a request from a stock account to purchase an item.

*Materials And Supplies Management System Manual*

rescue service

Rescue service are the personnel designated to rescue employees from permit spaces.

*Occupational Safety Manual*

research

Research is a systematic, controlled inquiry, often involving analytical or experimental activities, which seeks to gain new knowledge and which may involve development of new or revised products. Research includes basic research, applied research, state-of-the-art or practice surveys and studies, development, and research field testing. Software program development which solely automates the use of existing technology, formulae, knowledge and methods is specifically excluded from the definition of research.

*Research and Implementation Manual*
Research and Technology Implementation Office
RTI

The TxDOT Research and Technology Implementation Office is charged with research and implementation program management.
Research and Implementation Manual

research management committee
RMC

A research management committee is one of five committees responsible for development of the research program.
Research and Implementation Manual

research oversight committee
ROC

The research oversight committee is comprised of the chairs of the RMCs, selected division and office directors, FHWA, plus a chair and vice-chair representing the TxDOT administration.
Research and Implementation Manual

resident bidder

A resident bidder is a business entity whose principal place of business is in Texas, including an entity whose ultimate parent company or majority owner has its principal place of business in Texas.
Letting Manual

resilient modulus

Resilient modulus is a measure of the modulus of elasticity of roadbed soil or other pavement material.
Pavement Design Manual

resistance temperature detector
RTD

A resistance temperature detector is a sensor used to measure temperature. The sensor is usually made of a metal such as nickel or platinum and whose resistance varies with the temperature. This resistance change is predictable and is stable with time and use.
Manual of Testing Procedures

resistivity

Resistivity decreases with an increase in moisture content of a material until the minimum resistivity is obtained. This minimum resistivity value is defined as the resistivity of the material.
Manual of Testing Procedures
resolution

Resolution is the relative number of pieces of information which defines an image. The number of areas into which a square inch can be divided upon output by an imagesetter. An image scanned at 100 DPI would be defined by pixels 1/100 inch by 1/100 inch in size, or 10,000 per square inch. A 300 DPI laser printer prints an image at 300 DPI, even if the image itself exists digitally at substantially higher resolution.

Communications Manual

resources

Resources include materials, equipment and supplies.

Contract Management Manual

respondent

A respondent is the administration or D/D/O/R responsible for responding to a grievance or an appeal.

responsible district

Responsible district is a Pavement Management Information System (PMIS) term which identifies the district responsible for maintaining a segment of highway. This term is used instead of just “district” because some isolated segments of highway are located in one district but are actually maintained by another (responsible) district.

Pavement Management Information System (PMIS) Users Manual

responsive bidders

Responsive bidders are those who have successfully completed and provided all required forms and documents, made proper acknowledgments, attended any mandatory pre-bid conference, and secured technical prequalification (if applicable). Their bids should be read at the public bid opening.

Letting Manual

rest area

A rest area or safety rest area (SRA) is a TxDOT-operated facility that offers parking, rest room facilities, water, picnic arbors, wireless internet services, etc., for the traveling public. Rest areas are open 24 hours a day, 365 days a year.

Maintenance Division

resting loss emissions

Resting loss emissions are small, continuous seepage and minor leakage of gasoline vapor through faulty connections, permeable hoses and other materials in the fuel system.

Traffic Data and Analysis Manual
restoration (2R) project
Work proposed to restore the pavement structure, riding quality, or other necessary components to their existing cross section configuration. Upgrading roadway components as needed to maintain the roadway in an acceptable condition may be included in the restoration work. The addition of through travel lanes is not permitted under a restoration project.

resurfacing
Resurfacing is the application of an additional surface to an existing base pavement or wearing surface to improve the ride, strength, or safety of the pavement.

retail employment
Retail employment is employment that occurs in businesses classified as retail under the standard industrial classification system. 
Traffic Data and Analysis Manual

retainage
Retainage is the percent of each contractor payment retained until contract completion. 
Contract Management Manual

retained right
Retained right is the right of a property owner, retained through agreement with the State, to cross a proposed highway or roadway. 
Right of Way Collection

retaining walls
Retaining walls are vertical wall used to retain earth. A wall for sustaining the pressure of earth or filling deposited behind it. 
Geotechnical Manual

retaliation
Retaliation is the action, harm or injury intentionally inflicted or imposed upon another as an act of revenge. The alleged retaliation may consist of discipline, harassment, difference in treatment, etc. A grievance alleging retaliation may be filed by an employee who believes she or he was retaliated against for involvement in a specified act or participation in a protected activity such as an investigation, opposing discrimination, filing a grievance or whistleblower complaint, or reporting a violation of policy. 
Human Resources Manual

retention items
Retention items are items required to be on-hand for emergency use. 
Materials And Supplies Management System Manual
**retention value**

The amount to be deducted from the amount to be paid the owner when he chooses to retain any or all of his improvements. Usually the salvageable value to the acquiring agency.

*Real Estate Acquisition Guide for Local Public Agencies*

**retrieval system**

A retrieval system is the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

*Occupational Safety Manual*

**revenue service vehicle**

A revenue service vehicle is the rolling stock (e.g. buses, vans, or railcars) used in providing transit service for passengers. This definition does not include a vehicle used in connection with keeping revenue vehicles in operation, such as a tow truck or a staff car.

*Public Transportation Collection*

**reverse commute program**

A reverse commute program includes projects providing transportation services to suburban employment centers from urban, rural and other suburban locations.

*Public Transportation Collection*

**reverse frontage road**

See [local access road](#).

**revetment**

revert

A revetment is a wall or a facing of wood, willow mattresses, steel units, stone, or concrete placed on stream banks to prevent erosion.

**revised value**

Revised value is a value that has been produced by the change, revision, or modification in the appraisal process to reflect changes in the property or conclusions of the appraiser.

*Right of Way Collection*

**Reynolds number, aeronautic**

Reynolds number is a non-dimensional coefficient used as a measure of the dynamic scale of a flow.

**rice gravity**
Rice gravity is the ratio of the weight of a unit volume of an uncompacted bituminous paving mixture to the weight of an equal volume of gas-free distilled water. Rice gravity is also known as theoretical maximum specific gravity. 

*Manual of Testing Procedures*

ride score

Ride score is a Pavement Management Information System (PMIS) term which describes the ride quality (roughness) of a pavement surface. Ride score ranges from 0.1 (roughest) to 5.0 (smoothest). 

*Pavement Management Information System (PMIS) Users Manual*

right bank

Right bank is that bank of a stream which is on the right when one looks downstream.

right of entry

ROE

An agreement from the owner of a tract or parcel of land specifically authorizing the State (usually including in addition to the State, its contractors, assigns, and the owners of any utility involved with the highway project), the right to enter upon the described tract of land for specific purposes as stated in the agreement. Where such an agreement is without consideration (unpaid), such constitutes just a license to go upon the property for the purposes stated in the agreement, and it may be revocable at the will of the person granting the right. Where a more formal agreement is utilized and payment of more than just nominal consideration is made, such an agreement may be (by its terms) made irrevocable and would constitute more than a license, and would likely be legally considered a construction easement.

right of way

ROW

1. Right of way is a general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to transportation purposes. 

*Real Estate Acquisition Guide for Local Public Agencies*

2. Right of way is a general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to a highway for the construction of the roadway. Right of way is the entire width of land between the public boundaries or property lines of a highway. This may include purchase for drainage. 

*Maintenance Collection*

right of way agreement

An agreement stating the responsibility of each party with regard to the acquisition of ROW, relocation assistance, and adjustment of utility facilities.

Right of Way Division
ROW
The Right of Way Division acquires land to build highways and regulates outdoor advertising and junkyards.

*Inside TxDOT*

**right of way line**
Right of way line is a legally established line that indicates the boundary between the highway facility and adjacent property owners' holdings.

*Right of Way Collection*

**right of way map**
Right of way map is a drawing of a proposed or existing improvement showing its relation to adjacent property, the parcels or portions thereof to be acquired, ownerships, and other pertinent information.

**rigid pavement**
A pavement structure which distributes loads to the subgrade, having as one course a portland cement concrete slab of relatively high-bending resistance. Refer to *flexible pavement*.

**riprap**
1. Riprap is a sloped wall of stone or concrete used to prevent erosion.
2. Riprap is broken rock, cobbles, or boulders placed on earth surfaces for protection against the action of water.
3. Riprap is quarried stone especially selected, graded and placed to prevent erosion and thereby preserve the shape of a surface, slope, or underlying structure. NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**risk assessment**
1. Risk assessment is a study of vulnerabilities, threats, likelihood, loss, or impact, and theoretical effectiveness of security measures. The process of evaluating threats and vulnerabilities is known and is postulated to determine expected loss and establish the degree of acceptability to system operations.

*Internal Audit Manual*

2. Risk assessment is the identification and analysis of risks relevant to the achievement of internal control objectives, which forms the basis for determining how risks should be managed.

*Internal Audit Manual*

**roadbed**
A roadbed is the graded portion of a highway between top and side slopes, prepared as a foundation for the pavement structure and shoulder.

*Pavement Design Manual*
roadbed material

Roadbed material is the material below the subgrade in cuts and embankments and in embankment foundations, extending to such depth as affects the support of the pavement structure.

Pavement Design Manual

roadbed-mile

A roadbed-mile is a measure of the total length of constructed highway materials in-place or proposed. A roadbed-mile is the same as a centerline-mile except on a divided highway, where the length is doubled to account for the presence of two-way traffic.

Pavement Management Information System (PMIS) Users Manual

roadbed, prepared

See prepared roadbed.

roadeo

Roadeo is TxDOT’s truck driving competition for employees.

Occupational Safety Manual

roadway

Rdwy
1. Roadway is the portion of the highway within the limits of construction.
   Pavement Design Manual
2. Roadway is that portion of a highway improved, designed, or ordinarily used for vehicular travel, exclusive of the berm or shoulder. In the event a highway includes two or more separate roadways, the term “roadway” as used in the Equipment Manual shall refer to such roadway separately, but not to all such roadway collectively.
   Equipment Manual

Roadway Design System

RDS

Roadway Design System is a software package to design roads or highways. It can include preliminary route location, design, and final design phases. Functions include control survey calculations; compute and plot horizontal and vertical roadway alignments, geometric calculations, compute areas, provide data for preparation of deeds, drawing interchange layouts and right-of-way plans; draw original, design and final cross-sections; design medians, special ditches, and benched slopes; compute earthwork quantities for up to six roadways at one time, draw mass diagram and compute overhaul; perform bridge geometry calculations and preliminary bridge design, store design criteria and design calculations or project tape for future use; can update, revise, or add new design data, and create perspective views.

roadway excavation
Roadway excavation means the required excavation within the limits of the roadway.

**roadway gap**

A roadway gap is a non-driveable space between two roadway segments created by route deletion, redesignation, removal of a link, or addition of a non-contiguous segment. The reference marker location of the beginning and ending of the gap is exactly the same.  
*Texas Reference Marker (TRM) System User's Manual*

**roadway illumination assembly**

A roadway illumination assembly is the luminaire and supporting members (pole, mast arm, etc.) with other related lighting equipment attached.  
*Highway Illumination Manual*

**roadway illumination details**

RID  
Roadway illumination details are the TxDOT standard sheets showing specifications for roadway illumination to be used with TxDOT standard specification Items 610, 611, 612, and 656. The details are contained in the Traffic Operations Standard Plans.  
*Highway Illumination Manual*

**roadway improvement**

A roadway improvement is construction or reconstruction made to the roadway cross-section.  
*Safe Routes to School Program Guidelines*

**rock**

Rock is a mass of solid, naturally occurring material from an in-situ deposit, excluding conglomerates. The formation may or may not be laminated.

**rolling**

Rolling is the process of applying pressure to a lift of material to attain desired compaction.

**ROSCOE PDSE Library Facility**

The ROSCOE PDSE Library Facility (RPDS/PDSE) consists of the ROSCOE Programming Facility (RPS) program, RPSD and mainframe partitioned data sets (PDSEs) that are used to provide "libraries" for storing data that would otherwise be stored in ROSCOE libraries.  
*Source: Information Security Manual*

**ROSCOE (Remote Operating System Conversational Operating Environment) Programming Facility**

RPF
Within the ROSCOE terminal package a facility known as ROSCOE Programming Facility exists for performing repetitive functions. This allows the user to write a series of instructions (which are actual ROSCOE commands) and call forth their execution.

**ROT-13**

ROT 13 is a form of encryption that can be used to make all or part of a Usenet posting unreadable. Others who have the encryption key can decipher the message. 
*Information Technology and Services Manual*

**roughness coefficient**

\[ n \]

A roughness coefficient is a factor in the Kutter, Manning, and other flow formulas representing the effect of channel (or conduit) roughness upon energy losses in the flowing water.

**route over or under**

A bridge at intersecting highways is defined as an underpass or overpass based on the inventory hierarchy of the two routes. This description is used where required on all forms, plans, etc. The hierarchy of Texas highways is: Interstate, US, SH, State Loops or Spurs, FM/RM, County Roads (CR), and Business Routes (BR). The lower route number takes precedence if the highways are of equal hierarchy. Examples are:

- IH 30 over IH 35 - IH 30 Overpass at IH 35
- IH 35 over IH 30 - IH 30 Underpass at IH 35
- FM 1234 over US 290 - US 290 Underpass at FM 1234
- CR 18 under US 183 - US 183 Overpass at County Road 18
- IH 20 Business under RM 456 - RM 456 Overpass at IH 20 Business

*Bridge Inspection Manual*

**router**

A router is a computer that transfers data between two networks using the same set of protocols. Source: *Information Security Manual*

**route realignment**

Route realignment is roadway reconstruction that causes the alignment and length of the route to change; deleting the realigned route segment from the route creates a gap in the roadway in TRM. *Texas Reference Marker (TRM) System User's Manual*

**route study**

A route study compares and analyzes alternative route alignments within a transportation corridor with the primary purpose of determining a preferred route alignment. The study may be done after or as part of a feasibility study.
rule

A rule is any agency statement of general applicability that implements, interprets or prescribes law or policy, or describes the procedure or practice requirements of an agency. A rule can be either a policy or procedure.

rule procedures

Rule procedures are statements that describe the action or practice required by an agency. These procedures are effective for external parties only when published according to the Administrative Procedure and Texas Register Act (APTRA).

running loss emissions

Running loss emissions are evaporated gasoline emissions occurring while a vehicle is driven due to the heating of the fuel and fuel lines.
Traffic Data and Analysis Manual

runoff

Runoff is that portion of precipitation that makes its way toward waterways, lakes, or oceans as surface or subsurface flow.

runoff coefficient

Runoff coefficient the fraction of total rainfall that will appear as runoff.

rural minor collector

A rural minor collector is a road that collects traffic from local roads, bring all developed areas within a reasonable distance of a collector road, provide service to the remaining smaller communities, and link the locally important traffic generators with their rural hinterland.
Transportation Planning and Programming Collection

rural road

A rural road is a road, street, way, highway, thoroughfare, or bridge that is located in an unincorporated area and that is not privately owned or controlled, any part of which is open to the public for vehicular traffic, and over which the state or any of its political subdivisions have jurisdiction.
Right of Way Manual

Rural Transit Assistance Program

RTAP

The Rural Transit Assistance Program is a program of research, training, technical assistance and other support services to meet the needs of transit agencies serving nonurbanized areas.
Public Transportation Collection

Rural Transit District
RTD

A Rural Transit District is a political subdivision of the state that provides and coordinates rural public transportation within its boundaries in accordance with the provisions of Transportation Code, Chapter 458.

Public Transportation Collection

Rural Transportation Improvement Program

The Rural Transportation Improvement Program is a staged, multiyear, intermodal program of transportation projects that is developed by the department, in consultation with local officials, for areas of the state outside of the metropolitan planning area boundaries. The rural TIP includes a financially constrained plan that demonstrates how the program can be implemented.

Transportation Planning and Programming Collection

rut

1. A rut is a surface depression in a wheelpath.
   Pavement Management Information System (PMIS) Users Manual

2. Rutting occurs when wheel track depressions have the undesirable effect of trapping water and may make vehicle control difficult. Corrections to the depressions should be made as soon as possible wherever ruts are determined to be a safety problem.
   Maintenance Collection
Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SAFETEA-LU

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users is the transportation act signed into law on August 10, 2005 that establishes policy for highways, safety, transit, and other surface transportation programs and provides funding authorization through FY 2009. SAFETEA-LU builds on the initiatives established in TEA-21.

Public Transportation Collection

Safety end treatments

SET

Safety end treatments are attachments placed or constructed at the ends of culvert pipes or boxes that allow vehicles that stray from the roadway to pass over them with little or no damage to the vehicle or passengers.

Bridge Design Manual

Safety lighting

Safety lighting is roadway lighting installed at interchanges, highway intersections, and other points of nighttime hazard to the extent necessary to provide for the safe and orderly movement of traffic.

Highway Illumination Manual

Safety pipe runner

A safety pipe runner is a pipe or series of pipes placed across a safety end treatment to prevent a vehicle or vehicle wheel from falling into the safety end treatment opening.

Safety Rest Area

SRA

See rest area.

Salary and Labor Distribution System

SLD

Salary and Labor Distribution System is an information system managed by the Finance Division.

Finance Division

Salvage

1. Salvage is utility property removed from any existing facility and retained for reuse by the utility company.

ROW Utility Manual
2. Salvage refers to improvements, or portions of an improvement, not retained by the landowner, that are removed from a parcel and may be resold for use in another location. Examples include water well equipment, plumbing fixtures, windows, doors, etc.

Right of Way Collection

**salvage value**

A salvage value is the probable sale price of an item, if offered for sale to a knowledgeable buyer on the condition that it will be removed from the property at the buyer’s expense (not eligible under relocation assistance). This includes items for reuse as well as items with components that can be reused or recycled when there is no reasonable prospect for sales except on this basis.

*Right of Way Manual*

**sample angle**

Sample angle is the orientation of the sample with respect to the blast nozzle centerline. A sample angle of 0º is such that the sample is oriented perpendicular to the blast nozzle centerline.

**sample distance**

Sample distance is the distance between the face of the blast nozzle and the sample, measured along the blast nozzle centerline.

**San Angelo District**

SJT

The San Angelo District is a TxDOT district office including the following counties: Coke, Concho, Crockett, Edwards, Glasscock, Irion, Kimble, Menard, Reagan, Real, Runnels, Schleicher, Sterling, Sutton, and Tom Green. Area offices are located in Junction, San Angelo, and Sonora. Maintenance offices are located in Eden, Junction, Leakey, Rocksprings, Balingter, Robert Lee, San Angelo, Sterling City, Big Lake, Ozona, and Sonora.

*Inside TxDOT*

**San Antonio District**

SAT

The San Antonio District is a TxDOT district office including the following counties: Atascosa, Bandera, Bexar, Comal, Frio, Guadalupe, Kendall, Kerr, La Salle, McMullen, Medina, Uvalde, and Wilson. Area offices are located in Floresville, Hondo, Kerrville, New Braunfels, Pearsall, Pleasanton, San Antonio 410, San Antonio Central, Seguin, and Uvalde. Maintenance offices are located in Floresville, Devine, Hondo, Bandera, Boerne, Kerrville, New Braunfels, Pearsall, Pleasanton, Tilden, San Antonio NW, San Antonio SW, San Antonio Central, San Antonio SE, San Antonio NE, Seguin, and Uvalde.

*Inside TxDOT*

**sanction**
Sanction is debarment, suspension, or reduction in bidding capacity.
*Texas Administrative Code*

**sand**

Sand consists of fine aggregate particles that are retained on the 75mm (No. 200) sieve, either as natural sand resulting from natural disintegration and abrasion of rock, or as manufactured sand which is produced by the crushing of rock, gravel, slag, etc.

NOTE: This definition has been approved by the Specification Committee.
*Manual of Testing Procedures*

**sandstone**

Sandstone is sedimentary rock consisting predominantly of weathered sand-sized particles naturally cemented together. NOTE: This definition has been approved by the Specification Committee.
*Manual of Testing Procedures*

**sanitize**

Sanitize is to remove sensitive data from an information system, a database or an extract from a database.
*Information Security Manual*

**sanitized information**

Sanitized information is information that has had confidential/sensitive information replaced with non-information, such as replacing a Social Security number with x’s.
*Information Security Manual*

**saturated surface-dry**

SSD

Saturated surface-dry is the condition of the aggregate when all permeable pores of each particle are completely saturated with water and its surface has no free moisture.
*Manual of Testing Procedures*

**saturated surface-dry specific gravity**

SSD Specific Gravity

Saturated surface-dry specific gravity is the ratio of the mass of SSD aggregate to the mass of an equal volume of water.
*Manual of Testing Procedures*

**saturation count**

One of a series of counts collected by TxDOT in urban areas on a recurring basis; typically every five years with each of the 25 Texas urban areas scheduled in staggered years. The term, saturation count, is derived from the fact that these traffic counts are the maximum number of traffic counts
collected by TxDOT within an urban area (i.e. the urban area is saturated with count locations). Within an urban area, during several sequential months, TxDOT may collect counts for nearly every roadway functionally classified as a validating travel demand models.

Save City/Save County ranking

SC/SC

The Save City/Save County ranking ranking procedure is a set of formulae developed by the Texas Transportation Institute (TTI) for TxDOT. It is based on crash rate and severity and is designed to provide a ranking of problem severity for each city and county in Texas. These rankings are used to assist in problem identification to ensure that funds are used as effectively as possible, aid in countermeasure development, enhance the ability to evaluate program efforts, and support program decisions.

scaleable architecture

Scaleable architecture is a technological infrastructure in which the computing capacity can be increased or decreased (scaled) in both a horizontal and/or vertical direction. Horizontal scalability occurs when the number of configured machines is increased or decreased within an established architecture. Vertical scalability occurs when a machine or number of machines within an established architecture is reconfigured or replaced with machines that have more or less computing horsepower. In this case the number of machines will remain constant.

scallop

Scallop is a vertical projection above or below the blanking band.

scarifying

Scarifying is loosening of natural ground to a required depth.

school

School means a public or private elementary, intermediate, middle, junior high, or high school.  

Safe Routes to School Program Guidelines

scope of work

Scope of work is the work that the performing entity is authorized to complete as specified in its contract with the department.  

Contract Management Manual

scoping

Scoping is the process that occurs prior to the preparation of an EIS. Scoping may include a meeting or series of meetings, an environmental analysis, and interagency coordination. Any information that is gathered will be used and provides the basis for the preparation of the EIS.  

Environmental Manual
scour
A scour is the result of abrasion. It is the wearing away of soils due to the action of streamflow.
Hydraulics Manual

scrap tire
A scrap tire is a whole tire that can no longer be used for its original purpose.
Equipment Manual

scrap tire transporter
A scrap tire transporter is a registered entity that collects and transports used or scrap tires or tire pieces for storage, processing, recycling or energy recovery. Governmental agencies are exempt from scrap tire transporter registration.
Equipment Manual

scrap value
Scrap value is the value of utility property removed from any existing facility that will not be reused by the utility company and will be sold as scrap.
ROW Utility Manual

screed
Screed is a component of a paver that strikes off the paving mixture and compacts it by the weight of the screed containing a vibrator unit.

screening document
A screening document is a measuring tool to determine which applicants to select for interviews.
Human Resources Manual

screening panel
A screening panel is two or more employees who collectively screen applications.
Human Resources Manual

seal coat
Seal coat is an asphaltic coating, with aggregate, applied to the surface of a pavement structure for the purpose of waterproofing and preserving the surface, reconditioning a previous asphaltic surface treatment, improving the surface texture of the wearing surface, changing the surface color or providing resistance to traffic abrasion.

secondary screening
Secondary screening is evaluation of an applicant’s competencies (knowledge, skills, abilities and other attributes).
**Human Resources Manual**

**Secretaría de Comunicaciones y Transportes**

SCT

The Secretaría de Comunicaciones y Transportes is the Mexican Department of Communications and Transportation.

**section modulus**

A section modulus is the moment of inertia of the area of a section of a member divided by the distance from the center of gravity to the outermost fiber.

**Section 4(f) property**

A significant publicly owned park, recreation area, wildlife and waterfowl refuge, or historic property (including archeological sites) protected by Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC 303).

**Section 6(f) property**

Property acquired or improved with funds authorized under the Land and Water Conservation Fund Act of 1965 (LWCF Act). Section 6(f) of the LWCF Act established restrictions on the use of these properties. Refer to 36 CFR §§59.1 - 59.4 for more information.

**Section 106**

Section 106 of the National Historic Preservation Act sets forth the requirement that federally funded or permitted projects must consider the effects of the project on historic properties and afford the Advisory Council on Historic Preservation an opportunity to comment. The regulations to complete this process are set forth in 36 CFR 800.

**Environmental Manual**

**sectional properties**

Sectional properties are the end area per unit of width, moment of inertia, section modulus, and radius of gyration.

**sector**

A sector is an aggregation of districts used for analysis and reporting in travel demand modeling.

**Traffic Data and Analysis Manual**

**secure shell**

A secure shell is a completely encrypted shell connection between two machines protected by a super long pass-phrase.

**Information Security Manual**
secure sockets layer

SSL

Secure sockets layer is a program layer created for managing the security of message transmissions in a network. The programming for keeping messages confidential is contained in a program layer between an application (such as a user’s web browser or HTTP) and the Internet’s TCP/IP layers. The “sockets” part of the term refers to the sockets method of passing data back and forth between a client and a server program in a network or between program layers in the same computer.

Information Security Manual

security

Security is a condition that results from the establishment and maintenance of protective measures that ensure a state of inviolability from hostile acts or influences.

Information Security Manual

security administrator

SA

A local security administrator is a TxDOT employee responsible for providing security and risk management services in a district, division, or office.

Information Security Manual

security incident

A security incident is an event that results in unauthorized access, loss, disclosure, modification, disruption, or destruction of information resources whether accidental or deliberate.

Information Security Manual

security requirements

Security requirements are types and levels of protection necessary for equipment, data, information, applications, and facilities.

Information Security Manual

security risk

Security risks are risks involving platform-specific vulnerabilities.

Information Security Manual

security risk analysis

A security risk analysis is the process of identifying and documenting vulnerabilities and applicable threats to information resources.

Information Security Manual

security risk assessment
A security risk assessment is the process of evaluating the results of the risk analysis by projecting losses, assigning levels of risk, and recommending appropriate measures to protect information resources.
*Information Security Manual*

**security risk management**

Security risk management is the process of making decisions to accept exposures or to reduce vulnerabilities by either mitigating risks or applying cost-effective controls.
*Information Security Manual*

**security token**

A security token, sometimes called a "smart card" is a small hardware device that the owner carries to authorize access to a network service. The device may be in the form of a smart card or may be embedded in a commonly used object such as a key fob. Security tokens provide an extra level of assurance through a method known as two-factor authentication: the user has a personal identification number (PIN), which authorizes them as the owner of that particular device; the device then displays a number, which uniquely identifies the user to the service, allowing them to log in. The identification number for each user is changed frequently, usually every five minutes or so.
*Information Security Manual*

**sediment**

Sediment is solid soil material, both mineral and organic, that is being moved or has been moved from its original site by wind, gravity, flowing water or ice.

**sediment basin**

A sediment basin is a depression formed by excavation or the construction of a barrier or dam built at suitable locations to retain rock, sand gravel, silt or other material.

**sedimentation**

Sedimentation refers to the action or process of depositing particles of waterborne or wind-borne soil, rock, or other materials.

**seepage**

Seepage is when water is escaping through or emerging from the ground along some rather extensive line or surface, as contrasted with a spring, the water of which emerges from a single spot.

**selected material**

Selected material is a suitable native material obtained from a specified source, such as a particular roadway cut or borrow area, or a suitable material having specified characteristics to be used for a specific purpose.
*Pavement Design Manual*
**selective quarrying**

Selective quarrying is the practice of processing certain strata or layers of material for a designated aggregate product.

*Manual of Testing Procedures*

**semi-solid state**

Semi-solid state refers to when material will crumble under a deforming pressure or load.

**SendMail**

SendMail is a program that controls incoming and outgoing email.

*Information Security Manual*

**sensitive information**

Sensitive information is information maintained by TxDOT that requires special precautions, determined by agency standards and risk management decisions, to ensure its accuracy, integrity, and protection from unauthorized disclosure, modification, or deletion.

*Information Security Manual*

**sensitivity**

Sensitivity is the smallest change that is discernible in the output indicator of any test equipment.

*Manual of Testing Procedures*

**sensors**

Sensors are the elements of a device that sense or determine the characteristic being measured.

*Manual of Testing Procedures*

**separation date**

The separation date is the last day that an employee is on the payroll. When an employee’s last day is the last working day of the month, the separation date will be the last calendar day of the month.

*Human Resources Manual*

**separation from employment**

Separation from employment occurs when an employee ends employment with the department, including extended military leave, retirement and death.

*Human Resources Manual*

**service mark**

A service mark is a mark, which identifies and distinguishes the source of services of one party from another. An example is the TxDOT logo.

*Source: Information Security Manual*
serviceability

Serviceability is the ability at time of observation of a pavement to serve traffic (autos and trucks) that use the facility.

*Pavement Design Manual*

settlement

Settlement is the act of becoming compact by sinking.

serial line internet protocol

SLIP

Serial line internet protocol is an asynchronous internet communications architecture in mainframe environments.

server

A large microcomputer that provides services for users of a local area network (LAN). The LAN operating system, shared applications, and shared data reside on a server. In a client-server architecture, the server is a component responsible for satisfying a client component’s request.

*Information Security Manual*

service employment

Service employment is employment that occurs in businesses classified as financial, insurance, real estate, government, education, and service under the standard industrial classification system.

*Traffic Data and Analysis Manual*

service mark

A service mark identifies and distinguishes the source of services of one party from another. An example would be the logo of a consultant.

*Legal Manual*

service road

See *frontage road*.

services

Services include professional, scientific, private consulting services, and services of employees.

*Contract Management Manual*

servicing and/or maintenance

Servicing and/or maintenance refers to workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying and maintaining and/or servicing machines or equipment.
These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

*Occupational Safety Manual*

**seven by twenty four (7x24) operations**

The term 7x24 operations is used to describe an entity (usually a computer system or computing facility) that is operable twenty-four hours a day, seven days a week, 365 days a year.

**sexual harassment**

Sexual harassment is unwelcome sexual or gender-based conduct that has the purpose or effect of creating an intimidating, hostile or offensive work environment; unreasonably interferes with work performance; or is made a term or condition of employment; or used as the basis for an employment decision.

*Human Resources Manual*

**shaft**

A shaft is a pit or well sunk from the ground surface into a tunnel for the purpose of furnishing ventilation or access to the tunnel.

**shall or will**

Shall or will indicates that the provision that follows is a mandatory requirement that must be met.

*Occupational Safety Manual*

**shallow rutting**

Shallow rutting is an asphaltic concrete pavement (ACP) distress type in which a surface depression in the wheelpath (a rut) is ½ to 1 inch deep. Shallow rutting ranges from 0 to 100 percent of the wheelpath length.

*Pavement Management Information System (PMIS) Rater's Manual*

**shared access**

Shared access is a single connection serving two or more adjoining lots or parcels.

*Access Management Manual*

**shattered slabs**

A shattered slab is a joint concrete pavement (JCP) distress type in which a slab is so badly cracked that it warrants complete replacement. Shattered slabs range from 0 to 999.

*Pavement Management Information System (PMIS) Rater's Manual*

**sheet flow**
Sheet flow is water, usually storm runoff, flowing in a thin layer over the ground surface. A synonym is overland flow.

**sheeting**

Sheeting is a wall of metal plates or wood planking to keep out water, or soft or runny materials.

**shelf life**

Shelf life refers to items that deteriorate during storage and/or their usefulness expires after an established date.

_Materials And Supplies Management System Manual_

**shifting cargo**

Shifting cargo results when abnormal driving (fast starts, stops or excessive speed in turns or over rough roads, detours, etc.) causes cargo to shift resulting in death, injury, or property damage and the occurrence is classified as an accident.

_Occupational Safety Manual_

**shipment**

A shipment is the quantity of finished material shipped to a project at one time. May include one or more lots.

_Manual of Testing Procedures_

**short bolts**

Short bolts are bolts that are too short to be assembled in a direct tension indicator. These bolts may be tested in a steel plate, web or flange, which contains a hole of the required diameter.

**short list**

Short list is the list of providers from the long list, selected by the Consultant Selection Team, that best meet the requirements indicated by the letter of interest.

_Engineering Architectural and Surveying Services Manual_

**short list meeting**

Short list meeting is a meeting held with the providers on the short list to answer questions regarding the contract and distribute the RFP or ICG prior to submittal of proposals or interviews.

_Engineering Architectural and Surveying Services Manual_

**short term residential occupant**

A short term, or 90-day, residential occupant is a person who had lawful possession and occupied a dwelling from which he/she is being displaced for at least 90 consecutive days immediately prior to the initiation of negotiations.

_Right of Way Manual_
should

When should is used, the provision that follows is recommended but not mandatory. 
*Occupational Safety Manual*

shoulder

Shlds

Shoulders are the portion of the roadway adjacent to the traveled way (on either side) for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface.

shoulder drains

Shoulder Drains refer to erosion control riprap concrete drains usually used to drain runoff from bridge embankment areas. 
*Hydraulics Manual*

sieve

A sieve is a series of metal pans with wire mesh screens replacing the solid bottom. The openings in the screens are specified sizes, to allow particles smaller than the opening to fall through. The screens are placed, one on top of the other, with the coarsest mesh screens at the top, and decrease in mesh size down to the bottom. These are used to analyze the size of aggregate particles (sieve analysis or screen analysis).

sight distance

Sight distance is the distance visible to the driver of a passenger vehicle measured along the normal travel path of a roadway from a designated location and to a specified height above the roadway when the view is unobstructed by traffic. 
*Access Management Manual*

sign

A sign is any outdoor sign or awning, display, light, device, figure, painting, drawing, message, plaque, poster, or other thing that is designed, intended, or used to advertise or inform. 
*Maintenance Collection*

signal

Signal is a traffic control signal. 
*Access Management Manual*

sign and issue

Sign and issue is the establishment of a written contractual and fiduciary obligation between the state and the vendor. Only authorized individuals may sign such documents and, therefore, commit funds.
signature authority

Signature authority is the designated official having the authority to execute (activate) a contract for a particular type of service.

*Contract Management Manual*

sign face

A sign face is the part of the sign that contains the message or informative contents and is distinguished from other parts of the sign and other sign faces by separation borders or decorative trim. It does not include lighting fixtures, aprons, and catwalks unless they display part of the message or informative contents of the sign.

*Right of Way Manual*

significantly

TxDOT uses the definition found in §1508.27 of the CEQ Regulations. In brief, the context and intensity of impacts determine significance. Impacts to endangered or threatened species and to sites on or eligible for inclusion in the National Register of Historic Places are specifically included in the definition.

*Environmental Manual*

signing and sealing

Signing and sealing refers to requirements that the engineer must affix a seal containing the engineer’s license number, sign, and date many of the documents prepared for a bridge inspection. The signing and sealing requirements are in conformance with the Texas Engineering Practice Act and TxDOT policy.

*Bridge Inspection Manual*

sign removed

Sign removed means the dismantling and removal of a substantial portion of the parts and materials of a sign or sign structure from the view of the motoring public. The term shall not include the temporary removal of a sign face for operational reasons.

*Right of Way Manual*

sign structure

A sign structure is all of the interrelated parts and materials, such as beams, poles, braces, apron, catwalk, and stringers, that are used, designed to be used, or are intended to be used to support or display a sign face.

*Right of Way Manual*

silt
Silt is soil passing the 75 mm (No. 200) sieve that is non-plastic or very slightly plastic and that exhibits little or no strength when air dry. NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**silt size**

Silt size is any material passing the 75 mm (No. 200) sieve which is coarser than 0.002 mm (2 mm), though not necessarily exhibiting silt characteristics. NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**simple mail transport protocol**

SMTP

Simple Mail Transport Protocol is a protocol that exchanges electronic mail on the Internet or other networks.

*Information Security Manual*

**simple network management protocol**

SNMP

Simple network management protocol is a network management protocol standard developed to complement the TCP/IP protocol suite.

*Information Security Manual*

**single axle load**

Single axle load is the total load transmitted by all wheels of a single axle extending the full width of the vehicle.

*Pavement Design Manual*

**single entry screen system**

SES

Single entry screen system is a mainframe computer system that allows office managers to enter all of the information related to maintenance activity through one system. SES then sends the appropriate data to each of the other four systems – MMIS, SLD, EOS, and MSMS. This is the single entry concept – one system is used to enter data into all four constituent systems.

**single occupancy vehicle**

SOV

A vehicle having only one occupant

**siphon (hydraulics)**
A siphon (in hydraulics) is a closed conduit, a part of which rises above the hydraulic grade line. It utilizes atmospheric pressure to effect or increase the flow of water through it. (inverted). A conduit or culvert with a U of V shaped grade line to permit it to pass under an intersecting roadway, stream or other obstruction.

skew (structures)
A skew (in structures) is the angle formed by a line perpendicular to the roadway centerline and the line drawn parallel to the vents of a bridge or walls of a culvert.

Bridge Design Manual

skew angle
A skew angle is the complement of the acute angle between two centerlines which cross.

skid resistance
Skid resistance is a characteristic of an asphalt pavement that concerns the slippage or skidding of automobile tires on the pavement surface. The surface texture and shape of aggregate particles is important in resisting skidding or slippage, as is asphalt content. Smooth aggregate particles with high asphalt content offers little skid resistance. Rough aggregate surfaces and low asphalt content offers greater skid resistance.

skid score
Skid score is a Pavement Management Information System (PMIS) term which describes the overall surface friction. Skid score ranges from 1 (least friction) to 100 (most friction), although values above 70 are rare.

Pavement Management Information System (PMIS) Users Manual

slabs with longitudinal cracks
A slab with longitudinal cracks is a joint concrete pavement (JCP) distress type in which a slab has a crack which roughly parallels the roadbed centerline. Slabs with longitudinal cracks range from 0 to 999.


slag
Slag is a non-metallic by-product of the smelting or refining of metals, and consists of calcium and alumina-silicates.

NOTE: This definition has been approved by the Specification Committee.

Manual of Testing Procedures

slide
A slide is the movement of a part of the earth under force of gravity.
sliding elastomeric bridge bearings

Sliding elastomeric bridge bearings consist of steel plates faced with stainless steel and a preformed fabric pad faced with polytetrafluoroethylene (PTFE). These bearings are specifically designed to permit sliding action of bridge girders.

*Manual of Testing Procedures*

slippery pavement

Slippery pavement is the surface texture of bituminous pavement that is subject to adverse change as a result of aging, excessive asphalt, wearing, etc.

*Maintenance Collection*

slope

A slope is a method of defining the steepness of a sloping surface. For road and bridge surfaces this is normally expressed as a vertical distance divided by a horizontal distance of one foot. 1/4":1 or 0.0208:1 is the degree of slant or slope.

*Survey Manual*

slope ratio

The slope ratio is the inverse of slope as shown above. Normally this method is used for defining cut and fill slopes and is expressed as a horizontal distance divided by a vertical distance of one foot. 6:1.

*Survey Manual*

small business

A small business is a legal entity, including a corporation, partnership or sole proprietorship that:

◆ is formed for the sole purpose of making a profit;
◆ is independently owned and operated;
◆ is not a publicly held corporation; and
◆ has fewer than 100 employees or less than $1 million in annual gross receipts in a fiscal year.

*Right of Way Manual*

small purchase

Small purchase is the purchase of goods, materials, supplies, fuel, equipment, and publications made under statutory authority or under authority delegated by the General Services Commission by rule.

smart card

A smart card is a plastic card about the size of a credit card, with an embedded microchip that can be loaded with data, used for telephone calling, electronic cash payments, and other applications, and then periodically refreshed for additional use.

*Information Security Manual*
socket

A socket is a communication path between two computer processes on the same machine or different machines. On a network, sockets serve as endpoints for exchanging data between computers. Each socket has a socket address, which is a port number plus a network address. Network connections are established by a socket device driver.

Information Security Manual

sod

Sod is a portable mass of established grass, turf, or ground-cover plants.

soft conversion

Soft conversion is a direct mathematical conversion from English to standard international (metric units) with rounding to significant digits.

software

Software are computer programs.

soil

Soil is a superficial, unconsolidated deposit of disintegrated and decomposed rock material produced by surface weathering. NOTE: This definition has been approved by the Specification Committee.

Manual of Testing Procedures

soil binder

Soil binder is any material passing the 425 mm (No. 40) sieve.

Manual of Testing Procedures

Soil Conservation Service

SCS

Soil Conservation Service is the branch of the U.S. Department of Agriculture charged with the responsibility for all soil and water conservation activities on private land. This responsibility includes implementing the Farmland Protection Policy Act (FPPA) whenever a federal highway project results in the conversion of prime and unique farmland to non-agricultural uses.

soil retention blanket

SRB

A soil retention blanket is a covering usually of geotextile material to hold a soil in place and allow vegetation to grow.
Soils are heterogeneous accumulation of uncemented or loosely cemented mineral grains enclosing voids of various sizes.

**sole source purchase**

A sole source purchase is the same as a proprietary purchase.

*Purchasing Manual*

**sound**

Sound is the sensations produced in the hearing organs by certain air pressure variations.

**source**

1. A source is a geographical location of naturally occurring material that can be mined or quarried from the original in-situ deposit. In the case of manufactured or by-product material, it is the location of the plant at which the material is produced. NOTE: This definition has been approved by the Specification Committee.

2. A source is any radioactive material that emits any of gamma rays, alpha particles, beta particles, or neutrons.

*Manual of Testing Procedures*

**source cost center**

Source cost center is the cost center that incurred the expense.

Finance Division

**source/pit**

A source or pit is a geographical location of naturally occurring material which can be mined or quarried from the original in-situ deposit.

*Manual of Testing Procedures*

**Southern Association of State Highway and Transportation Officials**

SASHTO

This is Region 2 of AASHTO and does not include Texas.

**spacing**

The distance between successive lighting units measured along the center line of the roadway.

*Highway Illumination Manual*

**spalled cracks**

A spalled crack is a continuously reinforced concrete pavement (CRCP) distress type in which a crack has widened, showing signs of chipping on either side, along some or all of its length. Spalled cracks range from 0 to 999.

*Pavement Management Information System (PMIS) Rater's Manual*
spamming

Spamming means cross-posting a message to unrelated news groups. Spamming also refers to actions taken when “netiquette” rules are not followed: Internet users will flood an offending mail system with email messages. The results of this activity can cripple a network.

*Information Security Manual*

**span**

A span is the horizontal distance between supports, or maximum inside distance between the side-walls of culverts.

**special event**

A special event is an event serving a public purpose and sponsored by a civic or non-profit organization, including, but not limited to fairs, festivals, bicycle events, marathons, rodeos, and charitable fund-raising events, but not including political events or events that could be construed to advocate or oppose a candidate for election or influence the passage or defeat of a measure on an election ballot.

*Maintenance Collection*

**special generators**

SG

Special generators are land use activities that are considered to be unique and are handled individually in the modeling process. Special generators typically include colleges and universities, military bases, hospitals, amusement parks, major regional airports, and major regional shopping malls.

*Traffic Data and Analysis Manual*

**Special Highway Safety Program**

The Special Highway Safety Program is a 403 Grant Program. Funds appropriated to National Highway Traffic Safety Administration to be used by grant programs for highway safety research and demonstration projects and providing training and other technical assistance.

*Traffic Safety*

**special item code**

The special item code is a two-digit code for grouping like items for reports. PG = propane

*Materials And Supplies Management System Manual*

**special provision**

A special provision is a modification or voiding of certain portions of a standard specification.

**special specification**
A special specification is one that is written to cover items of work that are not included in the Standard Specifications.

**specific deliverable contract**

A specific deliverable contract is a contract containing a specific scope of services that identifies deliverables, locations, and timing in sufficient detail to define the provider’s responsibilities under the contract, although additional particulars may later be enumerated in work authorizations.  
*Engineering Architectural and Surveying Services Manual*

**specific gravity**

1. Specific gravity refers to the ratio of density of soil to density of water.
2. Specific gravity refers to the number of times soil particles are heavier than an equal volume of water at 40º C using Test Method TEX-108-E.
3. Specific gravity is the ratio of the mass of a given volume of solid or liquid to the mass of an equal volume of water at a specified temperature, commonly 4º C (39º F).  
*Manual of Testing Procedures*

**specific intensity**

SI

Specific Intensity is the candelas of the returned light at the specified observation and entrance angles for each lux of incident light per reflective face. "Tex-842-B, Measuring Retroreflectivity" will be used to determine SI.  
*Departmental Material Specifications*

**specification**

SPEC

1. The specifications are the directions, provisions, and requirements that outline the description of work, method and manner to be performed, and the qualities and quantities to be furnished for a particular item of work.
2. A specification is a description of the physical and/or functional characteristics and the requirements to be satisfied by a product or service and the procedure to determine whether the requirements are satisfied.  
*Purchasing Manual*

**specification (special)**

A special specification is one that is written to cover items of work that are not included in the Standard Specifications for Construction of Highways, Streets, and Bridges.  
*Purchasing Manual*

**specification (TxDOT)**

A TxDOT specification is a standard specification produced by the General Services Division.  
*Purchasing Manual*
A specification list is a list of governing specifications and special provisions that are to become a part of the contract and by which the project will be built and the contract will be executed.

Spelter is zinc or a galvanized coating on steel products.

A spike is a scallop with a width of less than 2.03 mm (0.08 in.) (less than 0.61 m [2 ft.] on the roadway).

A spillway is a low-level passage serving a dam or reservoir through which surplus water may be discharged; usually an open ditch around the end of a dam, or gateway or a pipe in a dam.

Split tunneling is the ability to transport multiple protocols over a common network, as well as provide the vehicle for encrypted virtual private networks (VPNs).

A sponsor is a TxDOT employee who is conducting business with a guest and requesting access for the guest.

A springing line is the line of intersection between the intrados and the supports of an arch. Also the maximum horizontal dimension of a culvert or conduit.

Sprinkling is the addition of water to soil to produce desired compaction of lifts when rolling.

Spun lining is a bituminous lining in a pipe, made smooth or uniform by spinning the pipe around its centerline or axis.

The square foot is an Imperial unit (U.S. customary unit) of area with sides equal one foot.
square yard
SY
The square yard is a unit of area equal to one yard by one yard square.
Survey Manual

squatter
A squatter is a person who occupies real property without a claim of right or title.
Right of Way Manual

stability
Stability is the ability of asphalt pavement to resist deformation under imposed loads. Stability depends upon both internal friction and cohesion. Stability is tested in the laboratory to predict the stability of the pavement under traffic.

stabilization
Stabilization is the covering of soils by use of vegetation, mulches, geotextiles, rip rap, or gabions.

stakeholders
Stakeholders include the public, abutting property owners, local officials, and representatives of local agencies. In the MIS process, the public is considered separate from stakeholders.
standby time

Standby time is time during which the employee is not actually working but is expected to be available and ready for work. Only non-exempt employees are eligible for standby time; however, exceptions may be made at the discretion of the DE/DD/OD/RD for exempt employees.

*Human Resources Manual*

standard

A standard is a definite rule, principle, or measure established by authority; may be used to measure quality based on specified quantities or values. Programming standards, technology configuration standards, data naming conventions.

*Standard Generalized Markup Language*

SGML

Standard Generalized Markup Language (SGML) is a markup language that allows page descriptions to be transferred between different computing platforms.

*Information Technology and Services Manual*

standard industrial classification

SIC

A standard industrial classification code is the classification code representing the specific types of industrial sectors used in economic and employment forecasts.

*Traffic Data and Analysis Manual*

standard sheets

Standard sheets are design layouts that are common to projects throughout the state. Examples: culverts, bridge designs, retaining walls, inlets, etc.

standard specifications

Standard specifications spell out the requirements of materials, methods of construction, methods of measurement, and methods of payments for constructing highways, streets, and structures and are published in the *Standard Specifications for Construction of Highways, Streets and Bridges*.

standard thermometer

A standard thermometer is a thermometer whose errors and deviation from the true temperature are known, documented and traceable to the standards of the National Institute of Standards and Technology (NIST).

*Manual of Testing Procedures*
Standing Committee on Rail Transportation
SCORT
An AASHTO committee.

standing in traffic
Standing in traffic means that a vehicle or road machine is in a line of traffic in response to an officer, signal, stop sign or traffic condition and is not properly parked. For this reason, if the unit is involved in an accident, the occurrence is classified as an accident.

Occupational Safety Manual

starter
A device producing a high voltage pulse to begin arcing in a lamp. Also called a starting aid or an igniter.

Highway Illumination Manual

State and Community Highway Safety Grant Programs 402 Grant Program.
This grant program is a partnership program created by the Highway Safety Act of 1966 and administered by National Highway Traffic Safety Administration and the Federal Highway Administration that provides federal funds to states to manage a wide range of highway safety programs.

state CE
SCE
State CE is any categorical exclusion analysis prepared for a non-federal aid project. ENV approves SCEs.

Environmental Manual

state classification plan
State classification plan is a plan that contains job descriptions and job titles for most classified positions in Texas state government. State job titles are broadly written to cover a wide variety of jobs in different agencies. Each title is assigned to a salary group and state employees are paid according to their titles.

Human Resources Manual

State Department of Highways and Public Transportation
SDHPT
The former name of the Texas Department of Transportation.

State Emergency Response Team
SERT
The State Emergency Response Team consists of representatives from state agencies and other appropriate organizations that are equipped and prepared to deploy and operate in an area affected
by a major disaster. Most members of the SERT will be from areas of the state that were not affected by the event. TxDOT will deploy Maintenance Division personnel to supplement the affected district performing damage assessment.

Maintenance Collection

**State Employee Charitable Campaign Form**

SECC

The State Employee Charitable Campaign Form is a form employees fill out to have their charitable donation taken through a payroll deduction.

**state force item**

SFI

State force item relates to the number on project agreements and identifies multiple work efforts for state force account work. Segment 76, Function 260, SFI 0160

*Materials And Supplies Management System Manual*

**state highway**

SH

A state highway is a roadway so designated by the Texas Transportation Commission. [includes NASA Road 1 and Old San Antonio Road (OSR)].

*Texas Reference Marker (TRM) System User's Manual*

**state highway business route (includes SH alternate)**

See [business state highway].

**state highway loop**

SL

A state highway loop is a roadway so designated by the Texas Transportation Commission (includes beltway).

*Texas Reference Marker (TRM) System User's Manual*

**state highway spur**

SS

A state highway spur is a roadway so designated by the Texas Transportation Commission.

*Texas Reference Marker (TRM) System User's Manual*

**state highway system**

1. The state highway system is the system of highways in the state included in a comprehensive plan prepared by the executive director with the approval of the Commission, in accordance with Transportation Code, §201.103.

*Safe Routes to School Program Guidelines*
2. The state highway system is the system of highways in the state included in a comprehensive plan prepared by the department’s executive director under the direction and with the approval of the commission.

Maintenance Collection

state historic preservation officer
SHPO
Under the National Historic Preservation Act (NHPA) activities are supervised in each state by a governor-appointed state historic preservation officer. In Texas this official is the executive director of the Texas Historical Commission (THC). The THC through the office of the SHPO regulates the disposition and management of historic properties which are affected by federal undertakings as described in the NHPA, Section 106, and in 36 Code of Federal Regulations 800.

State Implementation Plan
SIP
State Implementation Plan (SIP) is the 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 USC §7409, §7601, and §7505a).

Transportation Planning and Programming Collection

State Infrastructure Bank program
SIB
The State Infrastructure Bank program is a TxDOT program which is a revolving loan account for cities, counties, or political subdivisions to construct, maintain, or finance an eligible transportation project.

Finance Division

state management review
SMR
A state management review is an FTA review of a DOT’s management, administration, and oversight of subrecipients’ direct operation or contract for service. It includes both a desk review of documents and site visits to the DOT and to transit agency offices.

Grants Management Manual

State Planning and Research Program
SPRP
The State Planning and Research Program is a multimodal transportation improvement programs. These programs may include planning, research, development and training activities.

Public Transportation Collection

State Purchasing and General Services Act
The State Purchasing and General Services Act is chapters 2151-2177 of the Texas Government Code.

**state record**

A state record is a document, book, paper, photograph, computer-generated or stored data, sound recording or other material, regardless of physical qualities, that is made or received by a state department or institution according to law or in connection with official state business.

13 TAC §6.1(17)

**State Transportation Agency**

STA

The State Transportation Agency is the state highway department, transportation department, or other state transportation agency to which federal-aid highway funds are apportioned.

*Transportation Planning and Programming Collection*

**State Travel Information Center Directors Alliance**

STICDA

The State Travel Information Center Directors Alliance is when travel information center directors from across the United States meet annually to discuss state programs and concerns and to attend educational seminars.

**State Use Contract**

A state use contract is a contract entered into as authorized under the Human Resources Code (Title 8, Chapter 122, Texas Council on Purchasing from People With Disabilities) and codified within the Texas Administrative Code, (Title 40, Part 7, Chapter 189, Purchases of Products and Services from People With Disabilities) to provide a needed work activity while "furthering the state's policy of encouraging and assisting persons with disabilities to achieve maximum personal independence by engaging in useful and productive employment activities and, in addition, to provide state agencies, departments, and institutions and political subdivisions of the state with a method for achieving conformity with requirements of nondiscrimination and affirmative action in employment matters related to persons with disabilities" as stated in Chapter 122.001.Purpose, of the Human Resources Code.

*Information System (MMIS) Users Manual*

**statewide project**

A statewide project is a project whose activity occurs in more than one TxDOT district and may affect the entire state.

Traffic Safety

**Statewide Transportation Improvement Program**

STIP
The statewide transportation improvement program is a multi-year, statewide, intermodal program of transportation projects which is consistent with the Texas Transportation Plan and planning processes and metropolitan plans, TIPs and processes. The STIP is to be implemented within each 3-year period after adoption of the program, and it includes a financial plan that demonstrates how the program can be implemented.

Transportation Planning and Programming Collection

**Statewide Transportation Plan**

STP

The statewide transportation plan is the official statewide, intermodal transportation plan that is developed through the statewide transportation planning process.

Transportation Planning and Programming Collection

**station**

sta

A station, in the English measurement, is a unit of measurement consisting of 100 feet in horizontal distance. A station, in the standard international metric measurement is a unit of measurement consisting of 1 kilometer in horizontal distance.

**Statistical Analysis System**

SAS

A statistical analysis system is a commercially available software system which uses statistical methods. It is very oriented toward data presentation as well as statistical methods in mathematics. SAS automatically generates formatted listings, summary statistics, frequencies, and cross-tabulations. Users design their own reports.

**statute**

Statute is a law enacted by the legislative branch of a government.

*Contract Management Manual*

**stem**

A stem is that part of a liquid-in-glass thermometer containing the capillary tube, various expansion chambers, and markings.

*Manual of Testing Procedures*

**stilling basin**

A stilling basin is a structure or excavation at the foot of a chute, drop, or spillway to reduce open the energy of the descending runoff or stream.

**stock account**

A stock account is a warehouse in a district.
Materials And Supplies Management System Manual

stock record

A stock record is an inventory record unique to a stock account.

Materials And Supplies Management System Manual

stone

Stone consists of crushed, angular particles of rock. NOTE: This definition has been approved by the Specification Committee.

Manual of Testing Procedures

stopgap treatment

Stopgap treatment is a Pavement Management Information System (PMIS) term which refers to the cost of frequent repair maintenance that a road must get when there is not enough money to give it the treatment it needs. Stopgap treatments are used in the PMIS Optimization and Impact Analysis reports.

Pavement Management Information System (PMIS) Users Manual

stopping sight distance

SSD

Stopping sight distance is the distance required by a driver of a vehicle, traveling at a given speed, to bring the vehicle to a stop after an object on the roadway becomes visible. It includes the distance traveled during driver perception-reaction time and the vehicle braking distance.

Access Management Manual

storage lane length

Storage lane length is the portion of an auxiliary lane required to store the number of vehicles expected to accumulate in the lane during an average peak period.

Access Management Manual

storage media

Storage media is the material on which data are recorded; e.g., paper tape, punched cards, magnetic tape, hard disks, optical disks, etc.


Information Security Manual

store

Store is to hold in a location for any period.

Equipment Manual
storm sewer

A storm sewer is an underground network for the collection and drainage of surface water.

strain

Strain is the vertical deformation of the specimen divided by the original height, often expressed as a percentage.

*Manual of Testing Procedures*

stringline

A stringline is a line of string stretched tight between two fixed points. In asphalt paving, stringlines are used as a guide for the paver and for measuring grade and slope. A stringline is also used as a reference for the automatic screed controls.

striping

Striping is pavement markings used to guide traffic on the road.

stripping

Stripping, when working with asphaltic concrete, refers to the separation of the asphalt from the aggregate in asphaltic concrete due to moisture intervention.

structural number

SN

Structural number is an index number derived from an analysis of traffic, roadbed soil conditions, and environment which may be converted to thickness of flexible pavement layers through the use of suitable layer coefficients related to the type of material being used in each layer of the pavement structure.

*Pavement Design Manual*

structural plate

A structural plate is deeply corrugated steel plates or sheets, bolted together to form large pipe, pipe-arches, arches, and other structures.

structural strength index score

SSI

Structural strength index score is a Pavement Management Information System (PMIS) term which describes the overall structural condition of the pavement. SSI scores range from 1 (weakest) to 100 (strongest).

*Pavement Management Information System (PMIS) Users Manual*

subarea
A subarea is an area with no predefined size or scale that focuses on a non-linear part of a metropolitan area, such as an activity center or other geographic portion of a region.

*Transportation Planning and Programming Collection*

**subbase**

Subbase is the layer or layers of specified or selected material of designed thickness placed on a subgrade to support a base course (or in the case of rigid pavements, the Portland cement concrete slab).

*Pavement Design Manual*

**subcontract**

1. A subcontract is a contract executed between the department's performing entity and a third party in which the third party agrees to perform part of the work or services that the performing entity has agreed to perform. A subcontract is sometimes referred to as a lower-tier contract.

   *Contract Management Manual*

2. A subcontract is an agreement to engage a third party to perform all or part of the work or activity included in an original contract or agreement.

   *Traffic Safety*

3. A subcontract is any contract, service purchase or procurement of engineering or other professional services arranged between the university contracting with TxDOT and any entity not a part of that university.

   *Research and Implementation Manual*

**subcontractor**

Subcontractor is the party executing a contract with the contractor and agreeing to perform parts of the work or provides part of the services for the contractor.

*Contract Management Manual*

**sub-drain**

A sub-drain is a pervious backfilled trench containing a pipe with perforations or open joints for the purpose of intercepting ground water or seepage.

**subgrade**

Subgr

1. Subgrade is the top surface of a roadbed upon which the pavement structure and shoulders are constructed.

   *Pavement Design Manual*

2. Subgrade is the upper portion of material which acts as a foundation for base course or pavement.

3. Subgrade is the line which establishes the final elevation for cut and fill operations.

4. Subgrade is the portion of roadway between crown lines.
subgrantee

A subgrantee is the recipient of a grant award made by a grantee. In the case of the traffic safety programs, subgrantees may be local governments, state agencies, or non-government organizations (TxDOT in the grantee).

Traffic Safety

sub-location stock record

Every sub-location will contain its own stock record; however, the original stock record can contain a summary from all of the sub-location records.

Materials And Supplies Management System Manual

sub-process

Sub-processes are a set of activities that are performed continuously and which take input and create one or more outputs that are of value to the customer.

subprovider

1. Subprovider is the party executing a contract with the performing entity (prime provider) and agreeing to perform parts of the work or to provide part of the services for the performing entity.

   Contract Management Manual

2. Subprovider is a provider proposing to perform work through a contractual agreement with the prime provider.

   Engineering Architectural and Surveying Services Manual

subscription service

A subscription service is any public transportation service operated for a guaranteed number of patrons on a prepaid, reserved basis.

Public Transportation Collection

subsidiary items

Subsidiary items are work items that the contractor is not paid for directly but such costs are included under the various bid items of the project. They are generally considered minor items and, as such, would have little bearing on the final cost were they to be included.

substitute personalty

Substitute personalty are items of non-residential personal property purchased by a small business, nonprofit or farm operation to replace personal property not moved from the displacement location.

Right of Way Manual

substructure
Substructure is that part of a bridge structure covered on bent details, or below the bridge seats including backwalls and wingwalls at abutments.

*Bridge Design Manual*

**subsurface exploration**

Subsurface exploration is the use of specific techniques to determine the nature and engineering characteristics of materials below the ground’s surface. Techniques may be invasive or non-invasive, destructive or non-destructive; and they include an array of procedures common to highway work such as soil sampling and testing, coring, ground penetrating radar, seismic testing, penetrometer testing, vane shear testing, etc.

*Subsurface Utility Engineering (SUE) Provider*

Subsurface Utility Engineering (SUE) Provider is a Professional Engineering Consultant retained by either a utility or TxDOT to provide accurate and comprehensive information to designate, locate and manage data associated with existing utility facilities alignments.

*ROW Utility Manual*

**sufficiency rating**

**SR**

The sufficiency rating of a bridge is a single numerical representation of the sufficiency of the bridge that ranges from 0 to 100. In calculating the rating, consideration is given to the structural adequacy and safety, serviceability and functional obsolescence, and essentiality of traffic service. The higher the number the more sufficient the bridge.

*Historic Bridge Manual*

**superelevation**

Superelevation refers to the method of banking the roadway by attaining a vertical difference between the inner and outer edges of pavement.

**superelevation rate**

A superelevation rate is the rate of rise in cross section of the finished surface or a roadway on a curve, measured from the lowest edge to the highest edge.

**superstructure**

A superstructure is that part of a bridge structure covered on the span details, or above the bridge seats.

*Bridge Design Manual*

**supplemental agreement**

Supplemental agreement is an amendment to a contract, usually used to extend the contract’s time, scope of work, money, or terms and conditions.
**supplemental work authorization**

Supplemental work authorization is an amendment to a work authorization, usually used to extend a work authorization’s time, scope of work, or money.

**supplier**

A supplier is one who offers a material or finished product to TxDOT or contractors of TxDOT. A supplier may be a prime contractor, sub-contractor, fabricator, manufacturer, approved warehouse, etc.

**supporting documentation**

Supporting documentation are the calculations, correspondence, and file data used to develop PS&E or administer contracts.

**surety**

Surety is the corporate body or bodies authorized to do business in Texas bound with and for the contractor for the faithful performance of the work covered by a contract and for the payment for all labor and material supplied in the prosecution of the work.

**Surface course**

Surface course is one or more layers of a pavement structure designed to accommodate the traffic load, the top layer of which resists skidding, traffic abrasion, and the disintegrating effects of climate. The top layer of flexible pavements is sometimes called “wearing course.”

**Surface Transportation Board**

SURF or STB

The Surface Transportation Board is the Federal agency having jurisdiction over railroad operations in interstate commerce. Formerly known as the Interstate Commerce Commission.

**Surface Transportation Program**

STP

1. The Surface Transportation Program is the block grant type program established by 23 USC to supplement the National Highway System. The STP may be used by states and localities for any roads, including NHS, that are not functionally classified as local or rural minor collectors.
These roads are now collectively referred to as federal-aid roads and replace the previously designated federal-aid primary, secondary, and urban systems.

*Transportation Planning and Programming Collection*

2. Surface Transportation Program is a category of FHWA funding that can be transferred (flexed) to the Federal Transit Administration for capital projects eligible for assistance under 49 USC Chapter 53.

*Public Transportation Collection*

**surface treatment**

Surface treatment is one or more applications of asphaltic material covered with aggregate and constructed on the prepared base or existing surface.

**surfing**

Surfing is a slang term used to describe how a person browses Internet sites. Net surfing usually implies that the net surfer spends a lot of time browsing sites and skips frequently from one site to another.

*Information Security Manual*

**surveyed panels**

Surveyed panels are temporary, large targets placed on the ground at intervals along a flight path for controlled aerial photography. The targets can be made of cardboard or plywood or can be painted on paved surfaces. The center of the panel is the “panel point” which is surveyed for its coordinates.

*Survey Manual*

**swale**

Swale is a natural or man-made depression or channel which allows water to be carried away.

**switch**

A switch is a device that channels incoming data from any of multiple input ports to the specific output port that will take the data toward its intended destination.

*Information Security Manual*

**symbol material**

Symbol material, for use as prefabricated pavement marking, is various geometry arrows or other symbols.

*Manual of Testing Procedures*

**system architecture**

System architecture is the combination of hardware, software, services, policies and procedures that when taken together function to define a computer system organization and capabilities.
System Safety Program Plan
SSPP
A System Safety Program Plan is a document adopted by a (rail) transit agency detailing its safety policies, objectives, responsibilities and procedures.
Public Transportation Collection

systems network architecture
SNA
Systems network architecture is a term used by IBM in describing the design of their larger systems. SNA deals with large computers and the communications links used by them.
Table Accounting Code System
TACS

The Table Accounting Code System is tables that are used during the update transaction validation phase in the FIMS front-end processing. During this phase, FIMS database records(s) that match the update transaction segment detail are accessed to do more extensive validation. Information contained in a TACS table serves to limit the kinds of data that can be accepted by FIMS for certain fields.
Finance Division

tack coat

A tack coat is the initial application of asphaltic material to an existing surface to ensure bonding between the superimposed construction and the old surface.

tag-a-long trailer

A tag-a-long trailer is a utility or equipment trailer with a pintle or captive-ball hitch.
*Equipment Manual*

tagout

Tagout is the placement of a tagout device on an energy-isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.
*Occupational Safety Manual*

tagout device

A tagout device is a prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device in accordance with an established procedure, to indicate that the energy-isolating device and the equipment being controlled may not be operated until the tagout device is removed. *Occupational Safety Manual*

tailwater

Tailwater is the depth of flow in the stream directly downstream of a drainage facility.

take area

A take area in eminent domain proceedings is the physical linear or metric area of the property of which the condemnor will permanently or temporarily deprive the owners use.
*Right of Way Manual*

taking
Taking is the process of obtaining right of way by negotiation or eminent domain proceedings. Also that portion of real property taken for transportation purposes.

*Right of Way Manual*

**tandem axle load**

Tandem axle load is the total load transmitted to the road by two consecutive axles extending across the full width of the vehicle. *(Note: The spacing of the tandem axles used at the AASHTO road test was 48 inches.)*

*Pavement Design Manual*

**tangent length**

The tangent length is the measurement from point of curvature to point of intersection and from point of intersection to point of tangent of a curve.

*Survey Manual*

**tangents**

T

Tangents are the straight section of a road.

*Survey Manual*

**tare**

Tare is a balance adjustment that excludes weights of containers or other apparatus present on scale in conjunct with material being weighed.

*Manual of Testing Procedures*

**team**

The team consists of the provider and all proposed subproviders who will be working on a particular contract.

*Engineering Architectural and Surveying Services Manual*

**Technical Advisory Committee**

TAC

A Technical Advisory Committee is part of a Municipal Planning Organization.

**technical assistance panel**

TAP

A technical assistance panel is affiliated with each Research Management Committee to provide input to the long range research plan and technical expertise to assist in program development. The TAP members will be from within TxDOT, FHWA, and universities and may include representatives from other entities.

*Research and Implementation Manual*
technical expert

Technical expert is one who is qualified as an expert in the valuation of a certain product other than real estate, such as machinery, minerals, cost of special improvements, etc.

Right of Way Collection

technical manager

A technical manager is an assigned custodian of information resources who provides technical facilities and support services to owners and users of information. A technical manager assists program management in the selection of cost effective controls to be used to protect information resources. The technical manager is charged with executing the monitoring techniques and procedures for detecting, reporting, and investigating breaches in information asset security.

Information Security Manual

Technology Services Division

TSD

The Technology Services Division (formerly ISD) provides information technology hardware, software, services and staffing to support and enhance the business operations of the department, including the oversight and management of the statewide data center services contract, develops and implements new systems and technologies, provides photogrammetry services and supports statewide land surveying and develops, maintains, manages and enforces TxDOT and State of Texas IT policies, standards and procedures. The Director of TSD serves as the department's Chief Information Officer, Information Resource Manager, and Information Security Officer.

Technical precertification

Technical precertification is a review process conducted by the department to determine if a prime provider or subprovider meets the technical requirements to perform work identified in a work category.

Engineering Architectural and Surveying Services Manual

technology transfer

Technology transfer means those activities that lead to the adoption of a new technique or product by users, and involves dissemination, demonstration, training and other activities that lead to eventual innovation.

Research and Implementation Manual

temporarily assigned vehicle

A temporarily assigned vehicle is a vehicle temporarily assigned to a division or office for its exclusive use and may be used for local or out-of-town travel for periods greater than five days and up to 90 days, with exceptions to be approved on a case-by-case basis.

Equipment Manual
**temporary access**

Temporary access is the time-limited provision of direct access to a roadway. Such access must be closed when permit conditions for access removal are satisfied. Typically, such conditions relate to such time when adjacent properties develop in accordance with a joint access agreement or frontage road plan.

*Access Management Manual*

**temporary assistance for needy families**

TANF

Temporary assistance for needy families is state-operated, federally funded programs to provide assistance and work opportunities to needy families.

*Public Transportation Collection*

**temporary construction easement**

A temporary right acquired by one party (from the owner of real property) to use or control real property belonging to another party for the purpose of construction. See also conveyance document and right of entry.

**temporary easement**

The right to use and possession of a given tract of land for the purpose and period of time stated in the instrument of conveyance.

*Right of Way Collection*

**temporary modified duty**

Temporary modified duty is a short-term modification or adjustment to a job or the work environment to allow an employee to return to work who is temporarily disabled, has lost their driver license, or has violated substance abuse policy.

*Human Resources Manual*

**Temporary Fuel Location**

TFL

A temporary fuel location (TFL) is established by the Texas Military Forces to provide diesel to buses carrying special needs passengers during an evacuation. These locations also include portable rest room facilities and oxygen bottles for these special needs passengers and are not open to the general evacuation population.

*Maintenance Division*

**temporary sediment control fence fabric**

Temporary sediment control fence fabric is a woven geotextile fabric conforming to the requirements of TxDOT Material Specification “6230, Temporary Sediment Control Fence Fabric.” The primary use is for control of sediment in surface runoff water.
Material Specifications

temporary sign

A temporary sign is any sign not permanently affixed or attached to the ground or a structure, which can be removed without special handling.

Maintenance Collection

tenant

A tenant a person who has the temporary use and occupancy of real property owned by another.

Right of Way Manual

tensioning cylinders

Tensioning cylinders are cylinders used to determine when the concrete strength is adequate to apply the final prestressing force by the post-tensioning.

700-1, Structural Test Procedures Manual

terminal anchorage

1. Terminal anchorage for a guard fence or concrete median barrier is an end treatment to anchor and prevent a spearing effect or excessive vaulting, and to help the deceleration of impacting vehicles.
2. Terminal anchorage for pavement is the concrete anchorage system used as a bridge approaches or terminal points of continuously reinforced concrete pavement.

termination

Termination is the cancellation of the contract before the completion date.

Contract Management Manual

termination date

Termination date is the date or event when a contract expires.

Contract Management Manual

Terrain Evaluation and Retrieval for Road Alignment

TERRA

Terrain Evaluation and Retrieval for Road Alignment uses data prepared by Contour Analysis by Random Triangulation Algorithm and calculates cross-section and profile data along a roadway alignment.

testing

Testing is the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.
**testing machine**

A testing machine is a device designed to hold specimens and to apply a force to the specimens. Testing machines incorporate equipment to control the force and instruments to measure it.

*Manual of Testing Procedures*

**Texas Administrative Code**

TAC

The Texas Administrative Code (TAC) is a compilation of all state agency rules in Texas. Each title represents a category, and relating agencies are assigned to the appropriate title.

Office of the Secretary of State

**Texas Agricultural Extension Service**

TAEXA

The Texas Agricultural Extension Service is a sub-division of the Texas A&M University System.

Traffic Safety

**Texas Air Control Board**

TACB

Texas Air Control Board became a part of Texas Natural Resource Conservation Commission in 1990.

**Texas Association of Campground Owners**

TACO

Texas Association of Campground Owners is an organization of owners of campground and recreational-vehicle parks and related businesses.

**Texas Association of Convention and Visitor Bureaus**

TACVB

Texas Association of Convention and Visitor Bureaus is a state association comprised of Texas cities that promote conventions and tourism to their areas.

**Texas Building and Procurement Commission**

TBPC

The Texas Building and Procurement Commission is a state agency that provides support services to the other agencies and institutions of Texas state government. Formerly the General Services Commission. The agency name changed effective September 1, 2001, as mandated by Senate Bill 311, 77th
Texas Commission on Environmental Quality
TCEQ
The Texas Commission on Environmental Quality is the state agency charged with protecting water and air resources of the state. TCEQ also regulates hazardous material sites and is responsible for the development of the State Implementation Plan. TCEQ is the lead agency in hazardous material spill response. Emergencies involving spillage, release, and/or abandonment of known or suspected toxic/hazardous materials are the prime responsibility of TCEQ. Formerly known as Texas Natural Resource Conservation Commission.

Texas Department of Health
TDH
Texas Department of Health’s Epidemiology Division of the Bureau of Disease Control and Epidemiology provides oversight of child passenger safety and older driver programs. Statewide emergency medical services control and supervision comes under the Emergency Management Division of TDH.

Texas Department of Insurance list
TDI-list
The Texas Department of Insurance list lists all companies authorized to conduct fidelity and surety business in Texas.

Texas Department of Transportation
TxDOT
A State agency responsible for planning, designing, constructing, maintaining, and operating state transportation facilities including roads, bridges, waterways, and airports.

Texas Eligible Bridge Selection System
TEBSS
The Texas Eligible Bridge Selection System is the system used as the basis for selection of Priority 1 bridge projects on the federal-aid Highway Bridge Replacement and Rehabilitation Program. A TEBSS score between 0 and 100 is calculated for each existing eligible bridge with 100 indicating the highest priority and 0 representing the lowest.

Texas Highway Designation File
THDF
A Texas Highway Designation File is a file containing highway designation history back to September 1939, when the Transportation Commission of that time approved the “General Redesignation of the State Highway System.”


**Texas Hotel/Motel Association**

THMA

Texas Hotel/Motel Association is an organization of businesses involved in providing overnight accommodations. THMA works with TxDOT's Travel Division to publish the *Texas Accommodations Guide*.

**Texas HYdraulic SYStem**

THYSYS

1. The Texas HYdraulic SYStem is a system of computer routines and programs specifically aimed at highway drainage/analysis by department personnel. THYSYS comprises subsystems covering hydrology, open channels, culvert and bridge hydraulics, storm drains, and pump stations.

2. The Texas HYdraulic SYStem is a package of engineering programs providing analysis of streams, water runoff and flow across the entire state of Texas. This information is needed before bridge design can begin for any sizable bridge.

**Texas Identification Number**

TIN

The Texas Identification Number is a 14-digit number issued from the Comptroller of Public Accounts to vendors and contractors for the purpose of receiving payment from the State of Texas. Each number consists of 11 digits plus a 3 digit mail code, making a complete number of 14 digits.

*Contract Management Manual*

**Texas Industries for the Blind and Handicapped**

TIBH

TIBH serves as the Central Nonprofit Agency for coordinating and managing the State Use Program.

*Contract Management Manual*

**Texas Mobile Load Simulator**

TxMLS

A Texas mobile simulator is a mobile testing device capable of accelerated simulation of real traffic loading on any selected pavement section.

*Pavement Management Information System Users Manual*

**Texas Parks and Wildlife Department**

TPWD
The Texas Parks and Wildlife Department is the state agency with primary responsibility for protecting the state’s parks, fish, and wildlife resources.

**Texas reference marker**

TRM

See [Texas Reference Marker System](#).

**Texas Reference Marker System**

TRM

The Texas Reference Marker (TRM) System is an automated system that documents the past, present and future state-maintained highway network within a database. The database contains:

- mileage for every segment of the highway network
- all secondary designations of any roadway segment
- administrative responsibilities of any roadway segment
- any classifications assigned by federal or state authorities
- configuration of all roadbeds for each route.
- Physical properties of each highway and roadbed, including dimensions and materials.

*Texas Reference Marker (TRM) System User's Manual*

**Texas Review and Comment System**

TRACS

The Texas Review and Comment System is the state's intergovernmental review system established to provide an opportunity for state agencies, councils of governments and local governments to find out about and comment, if they wish, on grant applications, state and federal projects, and environmental assessments and impact statements before they are funded or approved. TRACS serves as an information exchange system, as a mechanism for improving grant applications, as a method for determining consistency with regional plans and to avoid duplication of efforts.

*Public Transportation Collection*

**Texas Transportation Code**

The Texas Transportation Commission is a record of laws passed by the Texas legislature specific to transportation.

*Contract Management Manual*

**Texas Transportation Commission**

TTC

The Texas Transportation Commission is the five-member board that governs the Texas Department of Transportation, which is headed by an executive director selected by the commission. The governor, with the advice and consent of the Texas Senate, appoints commission members, who serve overlapping six-year terms.

**Texas Transportation Plan**
The Texas Transportation Plan is a policy document adopted by the Texas Transportation Commission as the official statewide, intermodal transportation plan. Also known as the Statewide Transportation Plan.

**Texas Travel Industry Association**

**TTIA**

Texas Travel Industry Association is a nonprofit organization representing attractions, airlines, hotels, restaurants, convention and visitor bureaus, chambers of commerce, and other groups interested in the development of travel and tourism as a major economic force in Texas.

**Texas Unified Certification Program**

**TUCP**

The Texas Unified Certification Program is the “one stop” certification process for the federal disadvantaged business enterprise (DBE) programs in Texas. The TUCP consolidates all DBE firms certified by six different agencies for U.S. DOT funded contracts into one centralized DBE directory.

Public Transportation Collection

**THD cone penetrometer test**

A THD cone penetrometer test is a standard test to determine the relative density or consistency and load carrying capacity of the foundation materials encountered in bridge foundation exploration work.

**thermistor**

A thermistor is a sensor used to measure temperature. The electrical resistance of the thermistor varies with its temperature. The thermistor is usually a composite material containing metallic oxides. The resistance change is not generally as stable with time as the resistance temperature detector (RTD) sensors.

*Manual of Testing Procedures*

**thermocouple**

A thermocouple is a sensor used to measure temperature. Thermocouples are made by twisting or welding two wires of different metals together. When used correctly, a voltage is generated that varies with the temperature at the junction of the two wires. The voltage change is not quite linear with temperature but is predictable and stable. Many different types of thermocouples are in common use.

*Manual of Testing Procedures*

**thermometer**

A thermometer is a device for measuring temperature.
thermoplastic

Thermoplastic is a substance whose viscosity is changed as a result of changing the temperature of the substance. Asphalt is a thermoplastic because it becomes less viscous when heated and its viscosity increases as the asphalt cools.

thickness design

A thickness design is a design procedure which will produce pavements of such thickness as to adequately support the design loads in an economical means.

thin hot-mix overlay

Thin hot-mix overlay is similar to conventional overlays except the thickness is 1.5 inch or less.

third party accidents

For worker's compensation purposes, a third party accident is one that involves one or more TxDOT employee and someone who is not a department employee, and may or may not damage department property.

Occupational Safety Manual

threading

Threading is the process of installing a slightly smaller pipe or arch within a failing drainage structure.

threat analysis

Threat analysis is the examination of all actions and events that might adversely affect a system or operation.


threatened species

A threatened species is any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Environmental Manual

three-tiered architecture

Three-tiered architecture is a technological hardware and software configuration in which the presentation, application and database components of the architecture are resident on separate and distinct systems within the configuration.

tie bar
Tie b is a deformed steel bar or connector embedded across a joint in a rigid slab to prevent separation of abutting slabs.  
*Pavement Design Manual*

**Tier Level**

Tier Level is an assignment for each TxDOT district to either Tier 1 or Tier 2 status on the basis of their percentage of the total Statewide construction volume. Tier 1 is comprised of those Districts whose three year projected construction spending is equal to or greater than 5% of the Statewide total. A reduction in a District’s portion of the statewide construction program below the 5% level will not necessarily result in a decrease in the District approval ceiling.

Conversely, an increase in a District’s portion above 5% could result in an increase in the approval ceiling. The monetary approval ceiling for Tier 1 Districts is $100,000 and for Tier 2 Districts is $35,000. These approval levels allow for approximately 50% of all adjustments in each tier to be candidates for District approval.

**time charges**

Time charges are the number of days elapsed from the effective date of the contract and charged against the completion of contract work.  
*Contract Management Manual*

**time of concentration**

The time of concentration is the time required for water to flow from the most distant point of drainage area to the point under consideration.

**time worked**

Time worked is any period equal to or greater than 15 minutes duration in which work has been performed by an employee with or without the employer's instruction, knowledge, or consent, and which is intended to benefit the employer. Time worked generally includes any time spent on behalf of the employer that precludes the employee from acting in the employee’s own behalf. It may include, but is not limited to, such activities as: attendance at lectures, meetings, and training programs; traveling to and from a designated headquarters to a training or work location; representing the employer at any function; performing any work for the benefit of the employer regardless of when or where this work is performed including, but not limited to working late or working during lunch.  
*Human Resources Manual*

**“Timentry” subsystem**

The “timentry” system is TxDOT’s method of recording hours to be paid an employee for a particular pay period.
tire piece
Tire piece is a particle of a scrap tire or scrap tire piece that has split, quartered, or shredded to a usable size such as two-inch minus, or other size required by an industry user or recycler.

*Equipment Manual*

T-List
See federal Treasury list.

toe drain
A toe drain is a sub-drain installed near the downstream toe of a dam or levee to intercept seepage.

toe of slope
The toe of slope is the lowest part of an embankment slope. It is the point at which the front of a slope intersects with natural ground line.

*Survey Manual*

token ring
A token ring is a combination of the ring topology and the token passing protocol. A token ring moves data packets in a specific, predefined order on a LAN.
Source: *Information Security Manual*

toll lane
A toll lane is a lane for use of which a toll, or fare, is collected from users. The toll may be collected 24 hours each day or during peak traffic periods only. A toll lane may also be used in conjunction with an HOV lane to allow motorists not meeting the HOV passenger requirements to pay a toll to use the dedicated lane. This is typically referred to as a HOT lane.

toll road
A toll road is a highway open to traffic only upon payment of a direct fee.

top of back slope
The top of back slope is the point where back slope intersects with natural ground line.

top of cap
The top of cap is the top of the abutment/bent on which the longitudinal span beams are placed.

topography
Topo
Topography is the details of a surface, including natural and man-made structures, on a map or chart.
Survey Manual

tort claims

Tort claims (as referred to within the department) are claims from actual or alleged property damages and injuries or death to persons outside the department resulting from use of state real property or actions of department employees which do not directly involve motorized equipment.

Occupational Safety Manual

total immersion thermometer

A total immersion thermometer is a liquid-in-glass thermometer that indicates correctly when the bulb and all but 6 to 12 mm (0.24 to 0.48 in.) of the liquid column in the stem is immersed in the material being tested.

Manual of Testing Procedures

total quality management

TQM

TxDOT’s total quality management initiative is known as Continuous Improvement Program, CIP.

total users

Total users are the group of users within a business processing environment that are expected to request processing services from the environment, but not all at the same point in time. The size of this group is generally greater than that of the concurrent users group but theoretically can be equal to this group.

Tour Texas 2000

TOURTEX 2000

Tour Texas 2000 is the Travel Division’s electronic travel information system. TOURTEX 2000 is a cooperative effort between the department and the travel industry. It contains travel information from convention and visitor bureaus, chambers of commerce, statewide associations and other members of the travel industry, TOURTEX 2000 can be accessed via computer and modem internationally.

tracings

Tracings is the term given the original set of plans developed by the designer for a given project. All reproductions are made from the original tracings.

trademark

A trademark is a word, phrase, symbol, or design that identifies and distinguishes the source of goods of one party from another. An example is the TxDOT logo.

Legal Manual
traffic-actuated signal

A traffic-actuated signal is a type of signal control in which the intervals vary according to the demands of traffic as registered by detectors or push buttons.

traffic assignment

Traffic assignment is the procedure by which the volume of travel on each individual component of the transportation system is estimated.

Traffic Data and Analysis Manual

traffic control device

A traffic control device is any sign, signal, marking, or installation placed or erected under public authority, for the purpose of regulating, warning, or guiding traffic.

traffic control plan

TCP

The traffic control plan is all documents pertinent to the proposed efficient, effective, and safe travel of the public through work zones. Such documents include plan sheets, general notes, specifications, special specifications, special provisions, and quantities.

traffic death rate

The traffic death rate is the number of motor vehicle deaths per hundred million vehicle miles traveled (VMT).

Traffic Safety

traffic equivalence factor

Traffic equivalence factor (e) is a numerical factor that expresses the relationship of a given axle load to another axle load in terms of its effect on the serviceability of a pavement structure.

Pavement Design Manual

traffic island

A traffic island is the area between traffic lanes for control of vehicle movements. A median or an outer separation within an intersection is considered an island.

traffic lane

Traffic lane is the strip of roadway intended to accommodate the forward movement of a single line of vehicles.

Pavement Design Manual

traffic marking
A traffic marking is the traffic control device consisting of lines, words, symbols, patterns, or colors on pavement, curbs, or other objects within or adjacent to the roadway.

**Traffic Operations Division**

TRF

The Traffic Operations Division oversees programs in traffic engineering, traffic safety, railroad crossing and signals, and traffic management.  
*Inside TxDOT*

**traffic serial zones**

TSZ

Traffic serial zones are small geographic units of area that are developed as the basis for estimation of travel. Zones may vary in size and are determined by the roadway network and homogeneity of development.  
*Traffic Data and Analysis Manual*

**traffic signal**

A traffic signal is a power-operated traffic control device by which traffic is regulated, warned or alternately directed to take specific actions.

**traffic signal controller**

A traffic signal controller is a controller unit only.  
*Manual of Testing Procedures*

**traffic signal controller assembly**

A traffic signal controller assembly is made up of a controller cabinet, controller, conflict monitor, and all auxiliary equipment which constitutes a complete operating assembly.  
*Manual of Testing Procedures*

**Training, Quality and Development Division (former)**

TQD

The Training, Quality and Development Division includes the Training and Development Section from the Human Resources Division, the Professional Development Office and the Continuous Improvement Office. In March of 1998, TQD became a section of the Human Resources Division.

**training resources**

A generic term that includes instructor-led classes, and training aids such as videos, instructional materials, technical publications and audio/visual equipment.  
*Public Transportation Collection*

**transaction**
A transaction is an accounting action that reflects the occurrence of an economic event.

Finance Division

**transaction volume**

Transaction volume is a measure of the number of processing requests that a computer system will receive and respond to within a specified period of time.

**transferred RAP**

Transferred recycled asphalt pavement is department-owned recycled asphalt pavement transferred to another governmental entity.  
*Materials And Supplies Management System Manual*

**transformer**

A transformer is an electrical device that changes one AC voltage to another. Utility companies generate and distribute power at voltages usually greater than 12,500 VAC. Transformers reduce the voltage to a safe and easily applied level, 120 VAC for typical receptacles.  
*Highway Illumination Manual*

**transformer base**

A transformer base is a hollow cast aluminum base, the bottom of which is bolted to a concrete foundation and to the top of which the bottom flange of the pole is bolted.  
*Highway Illumination Manual*

**TransGuide**

TransGuide is San Antonio’s intelligent transportation system.

**transit agency**

A transit agency is a recipient/subrecipient of Federal Transit Administration or TxDOT funding to provide general public transportation services or services to the elderly or persons with disabilities. The term includes metropolitan transit authorities.  
*Grants Management Manual*

**transit authority**

See metropolitan transit authority.  
*Public Transportation Collection*

**transit cooperative research program**

TCRP

The transit cooperative research program is a national program of transit-related research administered by the Transportation Research Board.  
*Research and Implementation Manual*
Transit Development Plan

TDP

A Transit Development Plan is a three-year plan to ensure continuous transit service within a district. It includes an inventory of current resources, a process for identifying gaps or duplicative service, and a plan of action for the Section 5310 and JARC project selection processes. The TDP lists specific projects to implement the plan.

Grants Management Manual

TransLink

TransLink is Texas Transportation Institute’s multimodal public\private research library.

transmission control protocol/Internet protocol

TCP/IP

Transmission control protocol/Internet protocol are the protocols developed by the U.S. Department of Defense’s Defense Advanced Research Projects Agency (DARPA) to enable communications between different types of computers and computer networks. The Internet protocol is a connectionless protocol which provides packet routing. Transmission control protocol is connection-oriented and provides reliable communication.

Information Security Manual

transportation brokerage

A transportation brokerage is a form of transportation coordination in which the overall management of the system is consolidated, but not necessarily the vehicle fleets.

Public Transportation Collection

transportation control measure

TCM

1. A TCM is a means to control and improve traffic flow. TCMs are typically used to reduce mobile emissions of air pollution. Examples of TCMs include: congestion pricing, high occupancy vehicle (HOV) lanes; high occupancy/toll (HOT) lanes; park-and-ride facilities; bicycle facilities; signal synchronization; and, Intelligent Transportation Systems (ITS).
2. A transportation control measure is a measure used for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Vehicle technology-based, fuel-based, and maintenance-based measures that control emissions from vehicles under fixed traffic conditions are not considered TCMs.

Transportation Planning and Programming Collection

transportation coordinator

A transportation coordinator’s primary concern is to meet customer trip needs and manage the logistics of travel, rather than operating a particular service or set of services. The term includes
both the people and automated equipment to accomplish this task. The term is synonymous with mobility manager.

Public Transportation Collection

transportation demand management
TDM
Actions or programs which encourage people to travel at alternative times, or with fewer vehicles to reduce congestion. TDM reduces traffic volumes through methods including: ridesharing, park-and-ride operations, staggered work hours, and transit improvements.

transportation enhancement
TE
A transportation enhancement is a program provided for under the Transportation Equity Act for the 21st Century (TEA-21) to address projects that contribute to the livelihood of communities, the quality of our environment and the aesthetics of our roadways. These projects are funded through the Surface Transportation Program (STP), administered by TxDOT for the FHWA. Projects undertaken with enhancement funds are eligible for reimbursement of up to 80% of allowable costs, which may include P.S.&E., environmental mitigation, acquisition of property, construction and interpretation, or other activities to enhance the appreciation of natural or cultural resources.

Historic Bridge Manual

Transportation Equity Act for the 21st Century
TEA-21
The Transportation Equity Act for the 21st Century is the transportation act passed by congress in 1998 that provides another six-year authorization (1998-2003) and policy for highways, safety, transit, and other surface transportation programs. TEA-21 builds on the initiatives established in ISTEA.

Transportation Planning and Programming Collection

Transportation Electronic Award Management
TEAM
The Transportation Electronic Award Management is the Federal Transit Administration’s electronic project and financial management system.

Public Transportation Collection

Transportation Improvement Plan
TIP
1. The TIP is a current plus three-year prioritized program of transportation projects covering a metropolitan planning area which is consistent with the metropolitan transportation plan. This
2. The Transportation Improvement Program is a staged, multi-year, intermodal program of transportation projects covering a metropolitan planning area that is consistent with the metropolitan transportation plan.

*Transportation Planning and Programming Collection*

**transportation management area**

TMA
1. A TMA is a metropolitan area with a population 200,000 or greater. Within Texas nine of the 25 MPOs are currently TMAs; these include: Austin, Corpus Christi, Dallas-Ft. Worth, El Paso, Hidalgo County, Houston-Galveston, Jefferson-Orange-Hardin Counties, Lubbock, and San Antonio.

*Public Transportation Collection*
2. A transportation management area is an urbanized area of over 200,000 population, as determined by the latest decennial census. The TMA designation applies to the entire metropolitan planning area served by a MPO(s) within which the TMA is located.

*Transportation Planning and Programming Collection*

**Transportation Planning and Development (former SMT)**

TPD
1. Transportation Planning and Development is one of TxDOT’s seven functional areas. It’s fundamental function is to form the vision, map the direction, and design the methodology for selecting and developing projects that fulfill the public demand for transportation. It has oversight of the following divisions: Transportation Planning and Programming, Environmental Affairs, Right of Way, and Design. TPD also has oversight of the International Relations Office.
2. Transportation Planning and Development is the section of a district office responsible for overseeing project planning and development functions, including metropolitan planning organization (MPO) planning activities.

*Grants Management Manual*

**Transportation Planning and Programming Division**

TPP

The Transportation Planning and Programming Division administers planning funds, collects data on the highway system and programs projects. In March of 1998, International Relations became of a section of TPP.

*Inside TxDOT*

**transportation supply management**

TSM
TSM consists of all the actions that may improve transportation performance or LOS by changing the physical or operating characteristics of the traveled route and associated facilities in order to handle transportation demand. These actions include traffic control (e.g., signalization, ramp metering, channelization), providing/improving intermodal transfer facilities (e.g., terminals), automated toll collections, and joint use of right of way.

**Transportation System Management**

**TSM**

Transportation System Management is a program to reduce congestion and improve traffic flow through traffic signal synchronization, freeway operations improvements (e.g., changeable message signs and ramp metering), incident management (clearing accidents and breakdowns quickly), and other methods.

**transporter**

Transporter is a person who transports used oil filters to a location for storage, processing, recycling, or disposal.

*Equipment Manual*

**TransStar**

TransStar is Houston’s intelligent transportation system.

**transverse cracking**

Transverse cracking is an asphaltic concrete pavement (ACP) distress type in which cracks or breaks run approximately perpendicular to the pavement centerline. Transverse cracking ranges from 0 to 99 per station.

*Pavement Management Information System (PMIS) Rater's Manual*

**transverse joint**

A transverse joint is a joint formed at right angles to the direction of traffic.

**traprock**

Traprock consists of various fine-grained, dense, dark colored igneous rocks, typically basalt or diabase; also called “trap.” NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**Traser**

Traser is a computer program used by local engineering and law enforcement agencies to isolate problem areas in a jurisdiction. Traser is used as the name of a software program developed by the Texas Transportation Institute for microcomputer traffic crash and citation data.
Travel and Tourism Research Association

TTRA

The Travel and Tourism Research Association is an international organization of travel research and marketing professionals devoted to improving the quality and scope of travel and tourism research and marketing information.

travel coordinator

A travel coordinator is an employee assigned the responsibility of assisting travelers with all aspects of travel. The travel coordinator acts as liaison to the Travel Aid and Payment Unit of Budget and Finance Division.

*Travel Manual*

Travel Division

TRV

The Travel Division (formerly the Travel and Information Division) supports tourism by running travel information centers and publishing travel literature.

*Inside TxDOT*

traveled way

Traveled way is the portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

*Right of Way Collection*

travel expense

Travel expense means a transportation, meal, lodging, or incidental expense.

*Travel Manual*

travel expense account

Travel expense account is the form or the completed form that TxDOT employees use to submit travel expenses for reimbursement.

*Travel Manual*

Travel Industry Association of America

TIA

The Travel Industry Association of America is a national nonprofit organization uniting all components of the diverse U.S. travel industry.

Travel Information Center

TIC

TxDOT’s Travel Division operates and maintains 12 Travel Information Centers staffed by uniformed, professional travel counselors who provide information and materials to visitors.
Travel Information Data Exchange

TIDE

Travel Information Data Exchange is part of Travel Division’s travel literature fulfillment program. TIDE is an electronic bulletin board for the automated transfer of names and addresses of persons requesting travel/tourism information from a magazine reader service card.

Travel Requester’s Address Exchange

TRAX

Travel Requester’s Address Exchange is an electronic bulletin board providing access to names and addresses of persons who have requested Texas travel/tourism information. TRAX data is available to the Texas travel industry as a free public service of TxDOT.

travel voucher

Travel voucher is the accounting document used to seek reimbursement for travel expenses. This document is used for coordinating with the comptroller.

Travel Manual

traversable median

See median, traversible.

traverse sheet

 Traverse sheet is a form generally used in calculating unknown sides, determining areas and verifying accuracy of a survey.

Right of Way Collection

treated RAP

Treated recycled asphalt pavement is cold-mixed with asphalt, oil, emulsion, rejuvenator, etc., stockpiled and ready for use.

Materials And Supplies Management System Manual

trial de novo

A trial de novo is a trial in a higher court in which all the issues of fact or law tried in a lower court are reconsidered as if no previous trial had taken place.

Right of Way Manual

triangulation station

A triangulation station is a permanent horizontal control monument. It is a point on the Earth where the position is determined by triangulation.

GPS User’s Manual

triaxial classification system
A triaxial classification system is a soil strength classification system based upon shear strength of soils triaxially loaded.

**triaxial compression test**

The triaxial compression test is a test in which a cylindrical specimen of soil or rock encased in an impervious membrane is subjected to a confining pressure and then loaded axially to failure in compression.

*Manual of Testing Procedures*

**triaxial test**

1. A triaxial test method of determining the stress-strain characteristics of cohesive soils or materials in which the sample is subjected to a constant lateral pressure while the vertical pressure is increased.
2. The triaxial test is one in which stresses are measured in three mutually perpendicular directions.

*Manual of Testing Procedures*

**tridem axle load**

See *triple axle load*.

*Pavement Design Manual*

**triennial review**

A triennial review is an examination every three years of a Section 5307 transit agency’s records, policies, and procedures by the Federal Transit Administration.

*Public Transportation Collection*

**trip balancing**

Trip balancing is the procedure used to balance the number of trip productions in an area to the number of trip attractions or vice versa. Each trip that is produced within an area must have an attraction.

*Traffic Data and Analysis Manual*

**trip distribution**

Trip distribution is the process by which the trip interchange volumes between zones are estimated.

*Traffic Data and Analysis Manual*

**trip generation**

Trip generation is the procedure by which estimates of the number of trips produced and attracted by the zone within an urban area are developed.

*Traffic Data and Analysis Manual*

**triple (tridem) axle load**
triple (tridem) axle load is the total load transmitted to the road by three consecutive axles extending across the full width of the vehicle. (Note: There were no tridem axles at the AASHTO Road Test; however, the spacing that may be inferred for consecutive triple axles based on the tandem axle spacings is 48 inches.)

Pavement Design Manual

trip length

Trip length is the length of a trip measured in distance or in time.

Traffic Data and Analysis Manual

Trip length frequency distribution

Trip length frequency distribution is XXXX

Traffic Data and Analysis Manual

trip purpose

Trip Purpose is the purpose of a trip. Generally, four trip purposes are used: home based work (HBW), home based non-work (HBNW), non-home based (NHB), and truck/taxi. Home based work trips are trips that begin at home and end at work or begin at work and end at home. Home based non-work trips are those trips that begin or end at home and the purpose of the trip is to go to a place other than work such as school, shopping center, or doctor’s office. Non-home based trips are those trips that do not begin or end at home. Truck and taxi trips are those made by either a commercial vehicle or a commercial passenger carrier other than general public transportation providers.

Traffic Data and Analysis Manual

Trivial File Transport Protocol

TFTP

A trivial file transport protocol is one that is used to transfer files.

Information Technology and Services Manual

Trojan horse

A Trojan horse is a destructive program. These programs are usually viruses or worms that are hidden in an attractive or innocent-looking piece of software, such as a game or graphics program. Victims may receive a Trojan horse program by e-mail or on a diskette, often from another unknowing victim, or may be urged to download a file from a Web site or bulletin board.

Information Security Manual

tunneling

Tunneling is a method for circumventing a firewall by hiding a message that would be rejected by the firewall inside a second, acceptable message.

**turnaround**

A turnaround is roadway that connects from one frontage road to another under a grade separation structure.

**turning lane**

A turning lane is a lane reserved for turning vehicles.

**turning movement**

Turning movement is the traffic making a designated turn at an intersection.

**turning roadway**

A turning roadway is connecting roadway for traffic turning between two intersection legs.

**two-step negotiation process**

Two-step negotiation process is a procurement method in which selection of a contractor is made on a basis other than cost (step one), and after selection is made, the cost is determined (step two).

*Contract Management Manual*

**two-tiered architecture**

Two-tiered architecture is a technological hardware and software configuration in which the presentation and application components of the architecture are resident on one system in a two-system configuration and the database component is resident on the other system in the configuration.

**Tyler District**

TYL

The Tyler District is a TxDOT district office including the following counties: Anderson, Cherokee, Gregg, Henderson, Rusk, Smith, Van Zandt, Wood. Area offices are located in Athens, Jacksonville, Longview, Mineola, Palestine and Tyler. Maintenance offices are in Athens, Canton, Jacksonville, Rusk, Henderson, Longview, Mineola, Quitman, and North and South Tyler.

*Inside TxDOT*

**typical homesite determination**

Typical homesite determination is that amount of land which is considered "normally typical" for residential use in a specific area.

**typical section(s)**

Typical section(s) show usual roadway (or bridge) cross sectional features including lane and shoulder widths; limits of surfacing; pavement structure data including subgrade treatment type and depth, base course(s) thickness(es) and type of surfacing material; travel lane and shoulder cross
slopes; side slope rates for cut and fill sections; ditch or storm sewer location and depth; typical right-of-way limits; profile grade line location; typical traffic barrier location median width and slopes; and curb location and geometry.
unaffected adverse possessor

Unaffected adverse possessor is an actual possessor of another's real property that is open, hostile, exclusive, continuous, adverse to the claim of the owner and who is unaffected by the condemnation of the real property.

*Right of Way Manual*

unbalancing

Unbalancing is the inflation of certain bid items to be billed at the very beginning of a project, allowing the bidder to collect and accumulate more funds earlier in the project than those to which he/she is entitled.

*Letting Manual*

unclaimed wages account

The unclaimed wages account is an account set up for deposit of funds that were undeliverable to an employee.

unclear title

An unclear title is any title to property which is clouded by liens, judgments, or proceedings, and which a reasonably prudent person, with full knowledge, would not accept. Also, a title dependent upon extraneous evidence, single-party affidavits or written guarantees against the results of litigation.

*Right of Way Manual*

unconsolidated, undrained compressive strength

Unconsolidated, undrained compressive strength is the value of the maximum deviator stress (principal stress difference) during the test.

*Manual of Testing Procedures*

undercutting

Undercutting is the removing unstable or unsuitable material and replacing it with suitable material.

underdrain

The underdrain is a subsurface drainage system which intercepts subsurface water flow.

undertaking

Under the National Historic Preservation Act, an undertaking is any federal activity that is subject to Section 106 requirements. An undertaking includes a broad range of federal activities, such as construction, rehabilitation and repair projects, demolition, licenses, permits, property transfers and many other federal actions.
Environmental Manual

undue hardship

Undue hardship is any action that causes excessive difficulty or expense for an employer, or that fundamentally alters operations of a business or agency.

Human Resources Manual

uneconomic remainder

1. A parcel of real property in which the owner is left with an interest after the partial acquisition of the owner’s property and which the Commission, based on recommendation of the district engineer, has determined:
   - has little or no value or utility to the owner or
   - that the entire tract could be acquired for substantially the same compensation as the partial tract.
   The department may acquire uneconomic remainders although the remainder property is not needed for a particular project.

2. A remainder of a parcel of land being acquired that is of such low value that acquisition of the entire parcel should be considered (provided that the appraisal values meet the requirements of Section 203.0521 of the Texas Transportation Code). Also called an “uneconomic remnant.”

Real Estate Acquisition Guide for Local Public Agencies

Unified Planning Work Program

UPWP

The Unified Planning Work Program is the governing planning document, prepared by an MPO on an annual basis, which identifies the transportation planning work to be undertaken within the metropolitan planning area.

Transportation Planning and Programming Collection

Unified Transportation Program

UTP

The Unified Transportation Program (UTP) is the ten-year planning document that guides and controls project development for the Texas Department of Transportation in a feasible and economical manner. It was previously called the Project Development Plan.

Transportation Planning and Programming Collection

Uniform Act

The Uniform Act is the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (84Stat. 1894; 42USC 4601 et seq; Pub. L. 91 646), and amendments thereto; officially known as Public Law 91-646.

Right of Way Manual

Uniform Grant & Contract Management Standards
The Uniform Grant & Contract Management Standards is Chapter 783 of the Texas Government Code
Traffic Safety

**Uniform Grant Management Standards (UGMS)**

Uniform Grant Management Standards are the standards included in Texas Administrative Code, Title 1 Administration, Chapter 5, Budget and Planning Office, Subchapter A Federal and Intergovernmental Coordination, concerning uniform grant management standards for state agencies.  
*Contract Management Manual*

**uniformity**

Uniformity is the ratio of the average level of illumination to the minimum level of illumination on the roadway.  
*Highway Illumination Manual*

**uniform resource locator**

URL

Uniform Resource Locator (URL), formerly known as Universal Resource Locator, is an Internet address that tells a browser where to find an Internet resource.  
*Information Security Manual*

**unit bid price**

The unit bid price is the price to be paid for each unit of work as outlined in the specifications under measurement and payment.

**United States Army Corps of Engineers/United States Corp of Engineers**

USACE/USCOE, respectively

United States Army Corps of Engineers/United States Corps of Engineers are the federal agencies responsible for implementing civil projects for flood control and navigation improvements, and for regulating the transport of material using and the discharge of dredged and fill material into waters of the United States which includes wetlands.

**United States Fish and Wildlife Service**

USFWS

United States Fish and Wildlife Service is the federal agency responsible for determining which wildlife species face extinction as a result of alteration of their habitat, protecting them from further decline and providing for their survival. The USFWS administers the Endangered Species Act.

**United States highway**

US
A United States highway is a roadway so designated by the Texas Transportation Commission and approved by the American Association of State Highway and Transportation Officials.

*Texas Reference Marker (TRM) System User's Manual*

**United States highway alternate highway**

UA

A United States highway alternate highway is a highway so designated by the Texas Transportation Commission and the American Association of State Highway and Transportation Officials.

*Texas Reference Marker (TRM) System User's Manual*

**United States highway business route (includes US alternate)**

See [business US highway](#).

**United States highway spur**

UP

United States highway spur A roadway so designated by the Texas Transportation Commission and the American Association of State Highway and Transportation Officials.

*Texas Reference Marker (TRM) System User's Manual*

**unit weight**

Unit weight is the eight per unit of volume usually expressed in pounds per cubic feet: May be - Wet Unit Weight (Ww) or Dry Unit Weight (Wd).

**universal precaution**

Universal precaution is the approach to infection control that all human blood and certain human body fluids are treated as if know to be infectious for HIV, HBV and other bloodborne pathogens.

*Occupational Safety Manual*

**universal resource locator**

URL

A universal resource locator is an address for locating a World Wide Web site.

*Information Technology and Services Manual*

**universal vendor file**

The universal vendor file contains the payee information records of vendors and contractors who perform work for TxDOT. Any vendor expecting to receive payment must have a vendor identification (VID) number set up in this file.

*Contract Management Manual*

**UNIX**
UNIX is a multi-user, multitasking operating system. There are many versions of UNIX which can be used on many different platforms. It is the most commonly used operating system for Internet nodes.

*Information Security Manual*

**UNIX-to-UNIX Copy Program**

**UCCP**

UNIX-to-UNIX Copy Program is a dial-up method for copying files, mail and Usenet news between UNIX systems.

*Information Technology and Services Manual*

**unlawful occupancy**

A person who occupies without property right, title or payment of rent or a person legally evicted, with no legal rights to occupy a property under State law. An Agency, at its discretion, may consider such person to be in lawful occupancy.

*Right of Way Manual*

**unobligated balance**

An unobligated balance is the amount of carryover funds that have been finalized by the FHWA.

*Planning, Programming and Environmental Collection*

**unobligated funds**

Unobligated funds are the amount of funds that were available to the MPO but that were not programmed in the UPWP by the MPO to be spent. That is the allocation minus the programmed amount.

*Transportation Planning and Programming Collection*

**unrestricted federal funds**

Unrestricted federal funds are federal funds that are appropriated for programs and that are permitted to be treated as local funds for the purposes of matching shares for other federal programs.

*Grants Management Manual*

**unwelcome conduct**

Unwelcome conduct is conduct that an employee does not solicit or initiate and that the employee regards as undesirable and offensive.

*Human Resources Manual*

**unzoned industrial area**

An unzoned industrial area shall mean an area within 1,000 feet of the nearest edge of a controlled highway right of way in which the land use is not designated or zoned under authority of law but which is within a distance of 1,000 feet, measured parallel to the highway, of one or more recog-
nized industrial activities. The area shall be located on the same side of the highway as the principal part of said activity and shall not be predominantly used for residential or commercial purposes.

*Right of Way Manual*

**update**

1. To update is to change a master file by adding, modifying, or deleting information.
2. An update is the transaction that changes a master file.

**updated appraisal report**

A reinvestigation and re-analysis of all available market data, which results in a conclusion of current market value or value made at some specified date.

*Real Estate Acquisition Guide for Local Public Agencies*

**urban**

Urban, Bureau of the Census definition for the 1990 census, is that area comprising all territory, population, and housing units in urbanized areas and places of 2,500 or more persons outside urbanized areas. More specifically, “urban” consists of territory, persons, and housing units in:

a) places of 2,500 or more persons incorporated as cities, villages, boroughs (except in Alaska and New York) and towns (except in the six New England states, New York, and Wisconsin), but excluding the rural portions of “extended cities,” b)census designated places of 2,500 or more persons, or c)other territory, incorporated or unincorporated, included in urbanized area. d) Territory, population, and housing units not classified as urban constitute “rural.”

*Transportation Planning and Programming Collection*

**urban area**

Urban Area is an area defined by the Commission in cooperation with local officials, subject to approval by the Secretary of the United States Department of Transportation, that at a minimum includes an urban place as designated by the United States Bureau of the Census as having a population of 5,000 or more.

*Right of Way Manual*

**urban fringe**

Urban fringe generally consists of contiguous territory having a density of 1,000 persons per square mile. The urban fringe also includes outlying territory of such density if it is connected to the core of the contiguous area by road and is within 1½ road miles of that core, or within 5 road miles of the core but separated by water or other undevelopable territory. Other territory with a population density of fewer than 1,000 persons per square mile is included in the urban fringe if it eliminates an enclave or closes an indentation in the boundary of the urbanized area.

*Transportation Planning and Programming Collection*

**Urban Mass Transportation Administration**

UMTA
The Urban Mass Transportation Administration is the predecessor agency to the Federal Transit Administration (FTA).

**urban transit district**

**UTD**

An urban transit district is a local governmental body or political subdivision of the state that provides and coordinates urban public transportation within its boundaries in accordance with the provisions of Transportation Code, Chapter 458.

**urbanized area**

**UZA or UA**

An urbanized area (UA or sometimes known as a UZA) comprises one or more places (“central place”) and the adjacent densely settled surrounding territory (“urban fringe”) that together have a minimum population of 50,000. (Bureau of the Census definition for the 1990 census)

**urbanized area central (or center) place**

An urbanized area central place is one or more central places that function as the dominant center of each UA. The identification of the UA central place permits the comparison of this dominant center with the remaining territory in the UA. There is no limit on the number of central places, and not all central places are necessarily included in the UA title. UA central places include: a) each place entirely (or partially, if the place is an extended city) within the UA that is a central city of an MA and b) if the UA does not contain an MA central city or is located outside of an MA, the central place(s) is determined by population size. (Bureau of the Census definition for the 1990 census)

**usenet**

Usenet is a giant public bulletin board system on the Internet for news and electronic mail.

**user of an information resource**

A user of an information resource is a user of an individual or automated application authorized to access an information resource in accordance with the owner-defined controls and access rules.

**user ID**

User ID is a unique character string used by an automated data processing system to individually identify a user.
**user request**

UR

User request is a request for materials, supplies, equipment or services made through the Automated Purchasing System.

*Purchasing Manual*

**utility**

1. A utility is a service to the public such as power, telephone, telegraph, water, gas, oil, sewage, drainage, or irrigation.

2. Utility applies to all private lines as well as public, including electric power transmission, electrical power service, telephone, television coaxial cable, water, gas, petroleum products, chemicals, steam, waste water, and similar lines. Such utilities may involve underground, surface appurtenances or overhead facilities either singularly or in combination.

*Maintenance Collection*

**utility accommodation policy**

UAP

The utility accommodation policy is the department’s policy relative to the accommodation of utility facilities on highway right of way.

*Right of Way Manual*

**utility costs**

Utility costs are expenses for electricity, gas, other heating and cooking fuels, water and sewer.

*Right of Way Manual*

**utility force account**

Utility force account are employees of the utility performing work for the utility.

*ROW Utility Manual*

**utility strip**

Utility strip is the area of land established within a control of access highway, located within the border width and longitudinal to the highway, where utility assignments may be designated. As a rule, utility strips will not be allowed within the median area of a freeway.

*ROW Utility Manual*
validation
Validation is the process of using a previously calibrated model to predict traffic volumes and comparing predicted volumes with observed volumes for a year other than the calibration year.
*Traffic Data and Analysis Manual*

Value engineering
VE
Value Engineering is the systematic application of recognized techniques which identify the function of a product or service, establish a value for that function, and provide the necessary function reliability at the least overall cost.
*Project Development Process Manual*

vanpool
A vanpool is an organized ridesharing arrangement in which a number of people travel together on a regular basis in a van which may be company owned, individually owned, leased, or owned by a third party. Expenses are shared, and there is usually a regular volunteer driver.
Public Transportation Collection

vane shear
A vane shear is a test used to determine the in-place shearing strength of fine grained soils which do not lend themselves to undisturbed sampling and triaxial testing.
*Geotechnical Manual*

vector
Vector is the system for digitally defining an image by mathematically calculating area boundaries and assigning a density value to the entire area. Illustrator and Freehand are vector-based drawing programs.
*Communications Manual*

vegetation management
Vegetation management is the maintenance of highway right-of-way vegetation in an environmentally sensitive and uniform manner consistent with the special conditions presented by local climate, topography vegetation, and level of urbanization.
Maintenance Manual

vegetative protection
Vegetative protection is stabilization of erosive or sediment producing areas by covering the soil with a non-structural cover such as vegetation.
vehicle

Vehicle is a device in or by which a person or property is or may be transported or drawn on a public highway, other than a device used exclusively on stationary rails or tracks. Transportation Code §502.001

vehicle availability

Vehicle availability is the number of vehicles available to members of a household for travel purposes. Traffic Data and Analysis Manual

vehicle mile of travel

VMT
1. Vehicle mile of travel is a unit to measure vehicle travel made by a private vehicle, such as an automobile, van, pickup truck, or motorcycle. Each mile traveled is counted as one vehicle mile regardless of the number of persons in the vehicle.
2. Vehicle mile of travel is a measure of travel developed by multiplying a roadway section length (in miles) by the AADT. Traffic Data and Analysis Manual

vehicle occupancy

Vehicle occupancy is the number of occupants in a vehicle during a vehicle trip including the driver. Traffic Data and Analysis Manual

vehicle onboard radar

VORAD
Vehicle onboard radar is radar for collision avoidance. Traffic Operations

Vehicle Titles and Registration Division

VTR
The Vehicle Titles and Registration Division administers a statewide system of collecting fees for motor vehicle registration and certificates of title. In March of 1998, the Automobile Theft Prevention Authority Office (ATPA) became a section of VTR. Inside TxDOT

vehicles and motorized equipment

Vehicles and motorized equipment include over-the-road vehicles (trucks, sedans, vans) and road-building equipment (tractors, rollers, graders, drag lines, etc). Occupational Safety Manual
vehicles per day
VPD

This is a measure of traffic volume and is used as the unit for Average Annual Daily Traffic.

vehicle trips

Vehicle trips are those trips made by individuals in a household driving a vehicle. These are generally reported as vehicle trips per household and/or vehicle trips per person. Vehicle trips per person are computed by summing all of the vehicle trips and dividing by the number of persons within a household. Vehicle trips per household is also referred to as the vehicle trip rate.

Traffic Data and Analysis Manual

velocity head
symbol Hv

Velocity head defines water moving at a given velocity, the equivalent head through which it would have to fall by gravity to acquire the same velocity.

Hydraulics Manual

vendor

1. Vendor is an individual, partnership, corporation, or other business entity that is a party to a written contract for a purchase with the department.

Purchasing Manual

2. Vendor is defined as a supplier of project-produced material that is not the contractor.

Quality Assurance Program Manual

vendor identification number
VID

Replaced by Texas Identification Number
Finance Division

vendor name

Vendor name is the name of entity or person issued a vendor identification number or Texas Identification Number by the state comptroller.

Finance Division

Vendor Payment System
VPS

Vendor Payment System is an information system managed by the Finance Division.

Finance Division

verification
1. Verification is to confirm, by either testing or comparison with a recognized standard, that specific requirements are being met.

2. Verification is the comparison of the output of an instrument to standards in order to determine if its operation and/or accuracy meet the specifications.

*Manual of Testing Procedures*

**verification sampling and testing**

Verification sampling and testing is defined as sampling and testing performed to validate the quality of the product.

*Quality Assurance Program Manual*

**vertical alignment**

Vertical alignment is a series of straight lines called grade lines connected by parabolic curves. This is the positioning of the roadway in the profile view.

**vertical curve**

Vertical curve is a parabolic curve drawn tangent to two intersecting grade lines to provide a smooth transition from one grade to another.

**vicinity map**

Vicinity map is a key inset of an overall view of a generalized area on the ROW map.

*ROW Utility Manual*

**violation**

A violation is any event that results in theft, loss, unauthorized use, unauthorized disclosure, unauthorized modification, unauthorized destruction, or degraded or denied services of information resources. A violation constitutes a breach of security and confidentiality.

*Information Security Manual*

**virgin material**

Virgin material is material not previously used in construction. NOTE: This definition has been approved by the Specification Committee.

*Manual of Testing Procedures*

**virtual private network**

VPN

A virtual private network (VPN) typically uses the Internet as the transport backbone to establish secure encrypted links with business partners and extend communications to regional and isolated offices. It significantly decreases the cost of communications for an increasingly mobile workforce because Internet access is generally local and much less expensive than dedicated remote access server connections. A VPN is a trusted network constructed so that remote users can communicate
freely and safely between the remote networks through the untrusted, public network (Internet) by various means of encryption.

*Information Security Manual*

**virus**

A virus is a program that attaches itself to an executable file or vulnerable application and delivers a payload that ranges from annoying to extremely destructive. A file virus executes when an infected file is accessed. A macro virus infects the executable code embedded in Microsoft Office programs that allow users to generate macros.

*Information Security Manual*

**viscosity**

1. Viscosity is the resistance of a material to flowing. A fluid which is “thick” and highly resistant to flowing has high viscosity. Material with the consistency of water is low viscosity, since it flows easily. Asphalt is graded by viscosity at 140º F.
2. Viscosity is the degree to which a fluid resists flow under an applied force. The technical definition of viscosity is the shear divided by the shear rate. High viscosity fluids require a large force to induce flow (ex: asphalt). Low viscosity fluids require a small force to induce flow (ex: water). Viscosity may be used as a measure to determine the suitability of a material for an intended purpose.

*Manual of Testing Procedures*

**visible**

Visible means capable of being seen, whether legible or not, without visual aid by a person with normal visual acuity.

*Right of Way Manual*

**vital records**

Vital records are records that are necessary for TxDOT to do any of the following after a disaster: resume or continue operations; reaffirm authority and activity, including legal and financial positions; or protect the rights and interests of the department and its customers. Sometimes called; essential records.

*Information Security Manual*

Vital records are records that are necessary for TxDOT resume or continue operations, reaffirm authority and activity, including legal and financial positions, and/or protect the rights and interests of the department and its customers following a disaster.

*Source:* 13 TAC §6.1(20); *Records Management Manual*

**voids, air pockets, in the mineral aggregate**

VMA
1. Voids in the mineral aggregate refers to all the space in the paving mixture not occupied by mineral aggregate particles. This includes both air and asphalt cement, but does not include any asphalt cement that has been absorbed into the aggregate particles themselves.

2. Voids in the mineral aggregate refers to the volume of the intergranular void spaces between the aggregate particles of a compacted mixture that includes the air voids and volume of the asphalt not absorbed into the aggregates

Manual of Testing Procedures
National Center for Asphalt Technology

volt

\( V \) or \( E \)

Volt is the unit of electromotive force, electrical pressure, or difference of potential. Analogous to water pressure. One volt will cause one ampere of current to flow through a resistance of one ohm.

Highway Illumination Manual

voltage drop

A result of current flowing through a resistance.

\[ V = I \times R \]

A current of 30 amperes flowing through 300 feet of No.8 conductor whose resistance loop is 0.3924 ohms will result in a voltage drop of 11.77 volts.

volume to capacity ratio

\( V/C \)

The ratio of flow rate to capacity. The \( V/C \) may be the actual or projected rate of flow on a designated lane group during a peak 15-minute interval divided by the capacity of the lane group. The \( V/C \) ratio is a measure of capacity sufficiency, that is, whether or not the physical geometry provides sufficient capacity for the subject movement.

volumeter

A volumeter is test equipment used for determining in-place density of soils and base materials using Test Method TEX-114-E, Part I.

voucher

A voucher is the accounting document used to make payment to an individual or entity.

Finance Division

voucher requirements

Voucher requirements are the documents or documentation required to obtain reimbursement for travel expenses.

Travel Manual
vulnerability

In IT, a vulnerability causes systems prone to attach, more likely to have an impact on that system.

Information Security Manual

vulnerability report

A vulnerability report is a computer related report containing information described in §2054.077(b), Government Code, as that section may be amended from time to time.

Information Security Manual
Waco District
WAC

The Waco District is a TxDOT district office including the following counties: Bell, Bosque, Coryell, Falls, Hamilton, Hill, Limestone, and McLennan. Area offices are located in Belton, Gatesville, Hillsboro, Marlin, and Waco. Maintenance offices are located in Belton, Killeen, Gatesville, Hamilton, Hillsboro, Meridian, Marlin, Mexia, and Waco.

Inside TxDOT

waived project

A waived project is a Construction or Maintenance project which does not require the submission of audited financial statements.

Bidder’s Questionnaire

cable

A cable is a guide or brace of steel or timber, used in trenches and other construction.

Geotechnical Manual

wall-to-wall inventory

A wall-to-wall inventory occurs when all stock items are inventoried within a few days.

Materials And Supplies Management System Manual

water absorption

Water absorption is the percent of water necessary to be added to the aggregate to obtain saturated surface dry (SSD) condition.

Manual of Testing Procedures

water content of a material

Water content of a material is equal to the ratio of the mass of “pore” or “free” water in a given mass of material to the mass of the solid particles in the same mass of material, expressed as a percentage.

Manual of Testing Procedures

waters of the United States

Waters of the United States is all waters which are currently used, were used, or may be used, for interstate or foreign commerce, including waters subject to tidal effect and wetlands. Waters of the United States means all interstate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, tributaries which would or could affect interstate or foreign commerce.

Hydraulics Manual
**watershed area**

A watershed area is all land and water within the confines of a drainage divide or a water problem area consisting in whole or in part of land needing drainage or irrigation.

*Hydraulics Manual*

**waves/sags/humps**

Waves/sags/humps are surface defects which often result in poor ride quality, excessive impact loading of bridges and slabs, and may make vehicle control difficult. Typical causes are fill settlement, unstable cuts, expansive soils, and embankment shear failures.

*Maintenance Collection*

**welded wire fabric**

**WWF**

Welded wire fabric is a two-way reinforcement system for rigid slabs, fabricated from cold-drawn steel wire, having parallel longitudinal wires welded at regular intervals to parallel transverse wires. The wires may be either smooth or deformed. Deformed wire (used in deformed wire fabric, DWF) is that which has uniformly spaced deformations which inhibit longitudinal movement of the wire and which conform to “Specifications for Welded Deformed Steel Wire Fabric for Concrete Reinforcement,” AASHTO Designation M221.

*Pavement Design Manual*

**Welfare-to-Work**

**W-t-W**

Welfare-to-Work is a U.S. Department of Labor program providing assistance to long-term welfare recipients to overcome barriers to employment.

*Public Transportation Collection*

**wet aggregate**

Wet aggregate refers to aggregate in the stockpile condition.

*Manual of Testing Procedures*

**wetland**

Wetlands means land that has a predominance of hydric soils. Wetlands means land that is inundated or saturated by surface or groundwater at a frequency and duration to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions. Wetlands means land that under normal circumstances does support a prevalence of hydrophytic vegetation. Examples include swamps, marshes, bogs, and similar areas.

*Texas Civil Statutes, Article 5421u*
whistleblower

A whistleblower is an employee who in good faith reports a suspected violation of law to the appropriate law enforcement agency.

*Human Resources Manual*

whistleblower grievance

A whistleblower grievance is a grievance alleging retaliation for reporting a suspected violation of law to an appropriate law enforcement authority.

*Human Resources Manual*

**Wichita Falls District**

WFS

The Wichita Falls District is a TxDOT district office including the following counties: Archer, Baylor, Clay, Cooke, Montague, Throckmorton, Wichita, Wilbarger, and Young. Area offices are located in Bowie, Gainesville, Graham, Vernon, and Wichita Falls. Maintenance offices are located in Bowie, Nocona, Gainesville, Graham, Olney, Throckmorton, Electra, Seymour, Vernon, Archer City, Henrietta, and Wichita Falls.

*Inside TxDOT*

**Wide Area Information Server**

WAIS

Wide Area Information Server is a text search and retrieval tool designed to extract information from text-based databases.

*Information Technology and Services Manual*

**Wide Area Network**

WAN

A wide area network (WAN) connects many local networks (LANs) or metropolitan area networks (MANs) together to provide limited resource sharing among the connected networks. A WAN consists of low-speed lines (that is, modems) to high-speed links. WANs are usually used to provide access to information (such as file sharing), rather than resource sharing of devices such as printers and disks.

*Information Security Manual*

**WinCore**

WinCore is a specialized computer program which enables the engineer to input field and laboratory data, request a foundation study of various types and sizes, and obtain an output of input and calculated data with a summary of comparative foundation designs.
wireless

Wireless communication is simply data communication without the use of landlines. This may involve cellular telephone, two-way radio, fixed wireless (broadband wireless), laser, or satellite communications.
*Information Security Manual*

wireless access point

A wireless access point is a base station that plugs into an Ethernet hub or server. Users can roam between access points.
*Information Security Manual*

work authorization

1. Work authorization is a written authorization to begin work issued according to the entity and prime contract in place with the department. The work authorization includes a detailed scope of work as well as a contract period and maximum amount payable that does not exceed the time or money restrictions specified in the prime contract.
   *Contract Management Manual*

2. Work authorization is the authorization issued by TxDOT to a consultant (engineer) to perform inspections of bridge structures in various counties and districts in Texas. The Work Authorization is normally issued for a specific period of time with a commencement and ending date specified.
   *Bridge Inspection Manual*

work order

A work order is the document that details the authorization amount and permits the MPO to begin work under the approved UPWP.
*Transportation Planning and Programming Collection*

workplace

A workplace is any location where a TxDOT employee works, whether or not on state-owned property. An employee is in the workplace when operating or riding in a state vehicle.
*Human Resources Manual*

work program

A work program is a periodic statement of proposed work and estimated costs that document the eligible activities to be undertaken with FHWA planning and research funds during the next 1- or 2-year period by STAs and/or their subrecipients.
*Transportation Planning and Programming Collection*
workstation

Workstation is a generic term used to describe all microcomputers implemented to support TxDOT business functions.
*Information Security Manual*

work unit

A work unit is the smallest work group within a D/D/O/R, or Administration. Examples include, but are not limited to: A crew in a maintenance section, branch segments of a section, a specialized unit of business as defined on the D/D/O/R organizational chart.
*Human Resources Manual*

work week

A work week is the number of hours per week an employee normally works or a weekly average of the hours worked during the 12 weeks before the leave, excluding holidays. Forty hours worked within the 168 consecutive hours beginning at midnight on Friday and ending at midnight the following Friday. The State of Texas has defined its official work week as eight hours per day, Monday through Friday.
*Human Resources Manual*

workability

Workability is the ease with which paving mixtures may be placed and compacted. Workability of a mix depends upon a combination of factors, including temperature, asphalt content and aggregate gradation.
*Departmental Material Specifications*

workers’ compensation claims

Workers’ compensation claims are claims made by employees or their beneficiaries resulting from injuries or death to department employees in the course and scope of their employment.
*Occupational Safety Manual*

workday

A workday is any regularly scheduled hours of work, not including uninterrupted break time, that falls within a 24-hour period beginning at midnight and ending the following midnight.
*Human Resources Manual*

working day

A calendar day (not including Saturdays, Sundays, or legal holidays) in which weather or other conditions, not under the control of the contractor, will permit the performance of the principal unit of work underway for a continuous period of not less than 7 hours between 7 a.m. and 6 p.m. (Refer to Item 1, TxDOT Standard Specifications). The contractor may choose to work on Saturday or legal holidays other than the six listed and be charged one day.
**World Wide Web**

**WWW**

The World Wide Web is all the network-accessible resources and users on the Internet that are using the Hypertext Transfer Protocol (HTTP).

*Information Security Manual*

**Worm**

Worm is a program that makes copies of itself elsewhere in a computing system. These copies may be created on the same computer or may be sent over networks to other computers. The first use of the term described a program that copied itself benignly around a network, using otherwise-unused resources on networked machines to perform distributed computation. Some worms are security threats, using networks to spread themselves the wishes of the system owners and disrupting networks by overloading them. It is similar to a virus, in that it makes copies of itself, but different in that it need not attach to particular files or sectors at all.

*Source: Information Security Manual*
X

X-Parcel
X-Parcel is a new parcel created on a project to reflect and represent an overlooked improvement that must be appraised for compensation or relocation after the original parcel containing the overlooked improvement has been acquired.

Right of Way Collection

X-Windows
X-Windows is a graphical user interface that is supported within most versions of the UNIX operating system.
Yoakum District

YKM

The Yoakum District is a TxDOT district office including the following counties: Austin, Calhoun, Colorado, DeWitt, Fayette, Gonzales, Jackson, Lavaca, Matagorda, Victoria, and Wharton. Area offices are located in La Grange, Victoria, Wharton, and Yoakum. Maintenance offices are located in Bellville, Columbus, La Grange, Edna, Port Lavaca, Victoria, Bay City, Wharton, Cuero, Gonzales, and Halletsville.

Inside TxDOT
zoned industrial area

A zoned industrial area for the purpose of control of junkyards, a zoned industrial area is an area within 1,000 feet of the nearest edge of a controlled highway right of way, provided such area is zoned industrial by a legal zoning authority of the State.

Right of Way Manual