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# Dictionary

# MTA

# Terminology

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Jesse Haugh  
Los Angeles County Metropolitan Transportation Authority



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## FORWARD

Metro words: a dictionary of transit terminology has been prepared to provide employees, the Board of Directors and the general public with a resource which consolidates transit and transit-related terms used throughout the Metropolitan Transportation Authority. The terms included are the collective efforts of MTA Departments: Planning, Operations, Construction and Administration. Permission was granted from the National Transportation Systems Center and the Transportation Research Board to include terms from their glossaries.

Employees who have Lotus Notes installed at their workstations may access the dictionary electronically. A written request to ITS will facilitate the activation. The electronic version, which has full text searching features, will be updated frequently; however, new entries can only be inputted by library staff. Eventually, the dictionary will be made available via the MTA internet page.

**MTA LIBRARY**



One Gateway Plaza  
Los Angeles, CA 90012

# **Metro Words**

a dictionary of MTA terminology

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This manual was produced by the Los Angeles County  
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# A

## **A CAR**

The odd numbered passenger vehicle of a dependant pair that carries the air compressor and Automatic Train Protection (ATP) equipment.

## **A.M. PEAK**

SEE: Peak.

## **A-95**

SEE: Circular A-95.

## **AA/DEIS**

Alternatives Analysis/Draft Environmental Impact Statement. A detailed informational document that presents an analysis of all reasonable alternatives to resolve a transportation need, the probable environmental effects and mitigation measures for significant effects. Under federal law, the AA/DEIS was replaced with the Major Investment Study (MIS/DEIS) in 1994.

## **AADT**

Annual average daily traffic. SEE: Traffic, Annual Average Daily.

## **AAR**

SEE: Association of American Railroads.

## **AASHTO**

SEE: American Association of State Highway and Transportation Officials.

## **AAWDT**

SEE: Traffic, Annual Average Weekday.

## **ABA**

See: American Bus Association.

## **ABANDONMENT**

1. In public transportation operations, a procedure whereby a carrier ceases operations on all or part of its lines and routes on permission from the appropriate regulatory authorities. 2. In "rights-of-way," the relinquishment of the public interest in right-of-way or activity thereon with no intention to reclaim it or use it again for transportation, also known as "vacation." (TRB)

## **ABEND**

An abnormal end to a computer job.

**ABOVE GROUND STATION**

A station in which the tracks and platform are either located on an aerial structure or rest directly on grade.

**ABS**

SEE: Automatic block signal.

**ABSOLUTE BLOCK**

SEE: Block, Absolute.

**ABSOLUTE PERMISSIVE BLOCK**

SEE: Block, Absolute Permissive.

**ABSTRACT CHOICE MODEL**

A model based on the assumption that it is not necessary to identify travel choice variables by the name of their mode, destination, time of day, or other characteristic; instead, they are identified by their attributes, for example, variables describing level of service. (TRB)

**ABUTMENT**

End point of a bridge or aerial structure.

**ACCELERATION**

Increase in velocity per unit time; in transit, usually measured in feet per second squared (meters per second squared) or, in the United States, sometimes in miles per hour per second. (TRB)

**ACCELERATION RATE**

Positive time rate change of speed of a vehicle.

**ACCEPTANCE**

The formal written acceptance by the MTA.

**ACCEPTANCE TESTING**

Testing concerned with proving the effectiveness of new equipment prior to placing said equipment into operating service.

**ACCESS**

Permission, liberty, or ability to enter, approach, or make use of. (TRB)

**ACCESS CONTROL**

The process by which access to resources of a computer system is limited or controlled. A logical or physical control designed to protect against unauthorized entry or use.

**ACCESS CONTROL TABLE**

An internal computerized table of access rules regarding the level of computer access permitted, log-on IDs and computer terminals.

**ACCESS METHOD**

The technique used for selecting records in a file, one at a time, for processing, retrieval or storage. The access method is related to, but distinct from the file organization which determines how the records are stored.



**ACCESS MODE**

SEE: Mode, Access.

**ACCESS PATH**

The logical route an end user takes to access computerized information; typically includes a route through the operating system, telecommunications software, selected application software, and the access control system.

**ACCESS PRIVILEGES**

The privilege to access and make changes to folders.

**ACCESS ROAD**

SEE: Road, Access.

**ACCESS SERVICES INC. (ASI)**

This service is designed exclusively for passengers requiring specialized transportation vehicles and services mandated by the Americans with Disabilities Act. Originally managed by the LACMTA, the Department was restructured as a non-profit, independent agency under the name Access Services Inc. in 1994.

**ACCESS STREET**

SEE: Street, Local Access.

**ACCESS TIME**

SEE: Time, Access.

**ACCESS, LIMITED (CONTROLLED ACCESS)**

In transportation, to have entry and exit limited to predetermined points, as with rail rapid transit or freeways. (TRB)

**ACCESSIBILITY**

1. A measure of the ability or ease of all people to travel among various origins and destinations. 2. In transportation modeling and planning, the sum of the travel times from one zone to all other zones in a region, weighted by the relative attractiveness of the destination zones involved. 3. In traffic assignment, a measure of the relative access of an area or zone to population, employment opportunities, community services, and utilities. (TRB)

**ACCESSIBILITY POINT**

In planning, a measure of the access of a certain point to activities throughout the region.

**ACCESSIBILITY REGION**

In planning, a measure of the ability of all peoples in all zones within a certain region to travel to other zones within that same region.

**ACCESSIBILITY STATION**

A measure of the ability of all people within a defined area to get to a specific transit station.

**ACCESSIBILITY, HANDICAPPED (FULL ACCESSIBILITY)**

The extent to which facilities are free of barriers and usable by mobile handicapped people, including wheelchair users.

**ACCESSIBLE SERVICE**

Transit vehicles equipped with wheelchair lifts. Transit vehicles equipped with wheelchair lifts or ramps that meet or exceed the Federal Transit Administration rules and regulations Part 38.

**ACCESSIBLE TRANSIT SYSTEM**

SEE: Transit System, Accessible.

**ACCESSIBLE TRANSPORTATION FACILITIES**

Transportation facilities that are barrier free, allowing their use by all travelers, including the mobile physically handicapped, elderly, and transportation disadvantaged. (TRB)

**ACCIDENT**

Unforeseen event or occurrence which results in injury or property damage.

**ACCOUNTING AND REPORTING ELEMENTS**

SEE: Financial Accounting and Reporting Elements.

**ACTION DIAGRAM**

A map or diagram that shows a sequence of actions or steps needed to retrieve certain data or produce certain results from a database. (Modern Database Management- 4th Edition)

**ACTION PLAN (STATE ACTION PLAN)**

Pursuant to the Code of Federal Regulations and guidelines by the U.S. Department of Transportation, a description of the statewide organizational arrangements, assignments of responsibility, and decision-making processes to ensure that economic, social, and environmental effect are fully considered along with the technical issues in the development of multimodal state and regional transportation plans, corridor studies, and any resulting highway project, so that final decisions are in the best overall public interest. (TRB)

**ACTIVITY ALLOCATION MODEL**

A model used to predict the geographical distribution of land use activities. (TRB)

**ACTIVITY CENTER**

An area with heavy traffic activity and high population or commercial building densities which generate a large number of trips, such as in a shopping center or industrial park.

**ACTUAL COSTS**

Amounts determined on the basis of costs incurred, as distinguished from forecasted costs.

**ACV**

SEE: Vehicle, Air Cushion.

**ADA**

SEE: Americans With Disabilities Act of 1990 (ADA).

**ADB**

SEE: Bus, Advanced Design.

**ADDENDUM/ADDENDA**

Written interpretation(s) or revision(s) to Invitation for Bids or Requests for Proposals issued by the MTA before the bid opening or proposal receipt, which are incorporated into the Contract Documents.

**ADDITIONAL WORK ORDER (AWO)**

Order to add or delete work in contract law where the MTA has the unilateral right to direct the contractor to do so in accordance with a Change Order clause of the basic contract. AWOs are a type of modifications that involve only changes to schedules and/or specifications. Such changes must be within the general scope of work and are so considered if they do not constitute a cardinal change from the original scope of the work or the intended method of achievement.

**ADDRESS**

The code used to designate the location of a specific piece of data within computer storage.

**ADDRESS SPACE**

The number of Authority locations that may be referred to with the machine address. For most binary machines it is equal to  $2^n$ , where  $n$  is the number of bits in the machine address.

**ADDRESSING**

The method used to identify the location of a participant in a network. Ideally, addressing specifies where the participant is located rather than who he/she is (name) or how to get there (routing).

**ADMINISTRATIVE CONTROLS**

Controls dealing with operational efficiency and adherence to management policies.

**ADT**

SEE: Average Daily Traffic.

**ADULT CASH FARE**

SEE: Fare, Adult Cash.

**ADVANCE COST AGREEMENT**

An agreement between the MTA and a contractor concerning the treatment of special or unusual costs which are expected to be incurred.

**ADVANCED DESIGN BUS**

SEE: Bus, Advanced Design.

**ADVANCED PUBLIC TRANSPORTATION SYSTEMS (APTS)**

Intelligent Vehicle Highway Systems (IVHS) technology that is designed to improve transit services through advanced vehicle operations, communications; customer service and market development. (APTA)

**ADVISORY COMMITTEE**

SEE: Citizen Advisory Committee.

**AE**

SEE: Annual element.

**AERIAL CONFIGURATION**

An assembly of construction components elevated above the adjacent natural ground level, usually supported by columns.

**AERIAL STRUCTURE**

Any system structure or configuration, other than a culvert, which carries tracks and spans above an earth or water surface.

**AERIAL TRAMWAY**

In passenger transportation, a mode consisting of cabins suspended from a stationary cable and towed by a moving, usually closed-loop cable; used to overcome steep gradients, deep valleys, or bodies of water. (TRB)

**AFC**

SEE: Automatic Fare Collection.

**AFI**

Alternate Fuel Initiative bus- any fuel but diesel or gasoline.

**AFTER-IMAGE**

A copy of a record (or memory page) after it has been modified. (Modern Database Management- 4th Edition)

**AFZ**

SEE: Auto-Free Zone.

**AGENCY, LEAD**

SEE: Lead Agency.

**AGENCY, REGIONAL PLANNING**

SEE: Regional Planning Agency.

**AGENCY, RESPONSIBLE**

SEE: Responsible Agency.

**AGGREGATE DEMAND MODEL**

A model calibrated by combining observations of travel by individuals into geographic or demographic units that are used to estimate new flows when service attributes or unit sizes change. (TRB)

**AGT**

SEE: Automated Guideway Transit.

**AICPA**

American Institute of Certified Public Accountants.

**AIR BRAKE**

SEE: Brake, Air; and Brake Automatic Air.

**AIR CUSHION SYSTEM**

SEE: Transportation System, Air Cushion.

**AIR CUSHION VEHICLE**

SEE: Vehicle, Air Cushion.

**AIR POLLUTION**

The presence of unwanted material in the air in sufficient amount and under such circumstances as to interfere significantly with human comfort, or welfare, or with full use and enjoyment of property. (TRB)

**AIR QUALITY**

SEE: Ambient Air Quality.

**AIR QUALITY MANAGEMENT DISTRICT (AQMD)**

The South Coast AQMD has authority for control of emissions from stationary sources within the Los Angeles region. The control includes restrictions on use of paints and solvents by site. Through extension of the agency's on-site emission control. The SCAQMD sets extensive requirements on employers for ride sharing encouragement.

**AIR QUALITY MANAGEMENT PLAN (AQMP)**

Air Quality Management Plan. Plan that focuses on setting forth a comprehensive program that will lead into compliance with all federal and state air quality standards. This program requires the cooperation of all levels of government: local, regional, state, and federal. Each level is represented in the Plan by the appropriate agency or jurisdiction that has the authority over specific emissions sources. Accordingly, each agency or jurisdiction is assigned specific planning and implementation responsibilities.

**AIR RIGHTS**

The right to the use of air space over property owned by another. Often air rights are granted for buildings or other uses above or below transportation facilities. (TRB)

**AIR SPRING**

Pneumatic suspension system on each passenger rail vehicle to provide ride quality and automatic floor elevation adjustments.

**AIRPORT GROUND ACCESS**

SEE: Ground Access.

**ALARM SIGNAL**

A signal for attracting attention to some abnormal condition.

**ALGORITHM**

A prescribed set of well-defined rules of processes for the solution of a problem in a finite number of steps. See also Moore's algorithm and routing and control algorithm. (TRB)

**ALIGHTING**

Customers getting off a train or bus.

**ALIGNMENT**

The horizontal and vertical location of the guideway or roadway as described by curves and tangents defining its position with respect to the surrounding area.

**ALL-OR-NOTHING TRIP ASSIGNMENT**

SEE: Trip Assignment, All-Or-Nothing.

**ALLOWABLE COSTS**

Costs determined to be permissible based on reasonableness, allocability, and generally accepted principles and practices appropriate to the particular circumstances.

**ALLOWANCE TIME**

SEE: Time, Allowance.

**ALLOWANCE, COST-OF-LIVING**

SEE: Escalator Clause.

**ALLOWANCES**

In Labor, pay elements (beyond base pay) included in an operator's wages, for example, intervening time, layover time, overtime, pad time, report time, travel time, turn-in time. Also see Time, Allowances. (TRB)

**ALLOWED TIME**

SEE: Time, Allowances.

**ALL-STOP STATION**

In transit systems with skip-stop schedule or express service, station that is served by all scheduled transit units (vehicles or trains). (TRB)

**ALTERNATING-CURRENT MOTOR**

SEE: Motor, Alternating-current.

**ALTERNATIVE FUELS**

Low-polluting fuels which are used to propel a vehicle instead of high-sulfur diesel or gasoline. Examples include methanol, ethanol, propane or compressed natural gas, liquid natural gas, low-sulfur or "clean" diesel and electricity. (APTA)

**ALTERNATIVE, DO-NOTHING**

SEE: No-action alternative.

**ALTERNATIVE, LOW-CAPITAL**

SEE: Transportation System Management.

**ALTERNATIVE, NO-BUILD**

SEE: Transportation System Management Alternative.

**ALTERNATIVE, NULL**

SEE: No-Action Alternative.

**ALTERNATIVE, PREFERRED**

SEE: Preferred Alternative.

**ALTERNATIVES ANALYSIS**

A detailed study and assessment of the various options available for the purpose of selecting one for implementation. Ideally, all feasible alternatives will be investigated. An alternatives analysis is required if funds are sought from the Urban Mass Transportation Administration for capital-intensive major transportation projects. (TRB)

**AMALGAMATED TRANSIT UNION (ATU)**

A major labor union representing workers in the transit industry; membership is limited to operators, mechanics and other non-supervisory employees of the transit industry. (APTA)

**AMBIENT AIR QUALITY**

A physical and chemical measure of the concentration of various chemicals in the outside air, usually determined over a specific time period, for example, 5 minutes, 1 hour, or 1 day. (TRB)

**AMBULATORY HANDICAPPED**

SEE: Handicapped, Ambulatory.

### **AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS**

American Association of State Highway and Transportation Officials (AASHTO). Membership includes state and territorial highway and transportation departments and agencies and the U.S. Department of Transportation. Its goal is to develop and improve methods of administration, design, construction, operation and maintenance of a nationwide integrated transportation system. It studies transportation problems, advises Congress on legislation, and develops standards and policies. (TRB)

### **AMERICAN BUS ASSOCIATION**

(ABA) Membership is primarily privately owned bus operating firms in intercity, local, charter, and tour bus service; bus manufacturers; oil and gas refiners and distributors; travel and tourism organizations; and others concerned with the operation of bus service and promotion of motor coach tours. Its members seek to improve the service that they provide and to develop increased bus use. (TRB)

### **AMERICAN PUBLIC TRANSIT ASSOCIATION (APTA)**

American Public Transit Association (APTA). An International, nonprofit trade association representing the public transit industry. APTA members include more than 400 public transit systems, as well as state and local departments of transportation and planning agencies, manufacturers and suppliers of transit equipment, consultants, contractors and universities.

### **AMERICAN PUBLIC WORKS ASSOCIATION**

American Public Works Association (APWA). Members include those involved in the theory and practice of the design, construction, maintenance, administration, and operation of public works facilities and services. It conducts historical research on public works subject; sponsors research and educational foundations, and operates a computerized local government information network. It includes a transportation council. (TRB)

### **AMERICANS WITH DISABILITIES ACT OF 1990 (ADA)**

A civil rights law passed by Congress in 1990 which makes it illegal to discriminate against people with disabilities in employment, services provided by state and local governments, public and private transportation, public accommodations and telecommunications. (APTA)

### **AMTRAK**

Rail services operator for Metrolink under contract with the Southern California Regional Rail Authority (SCRRA).

### **ANALYSIS AREA**

(Also called Analysis Unit.) Any geographic area, such as a zone or a group of zones combined, for the purpose of making an analysis or study. (TRB)

### **ANALYSIS AREA OR UNIT**

SEE: Area, Analysis.

### **ANALYSIS, ALTERNATIVES**

SEE: Alternatives Analysis.

### **ANALYSIS, COST-BENEFIT**

SEE: Cost-benefit Analysis.

### **ANALYSIS, COST-EFFECTIVENESS (CEA)**

SEE: Cost-effectiveness Analysis.

### **ANALYSIS, DEMAND**

SEE: Demand Analysis.

**ANALYSIS, FACTOR**

SEE: Factor Analysis.

**ANALYSIS, IMPACT**

SEE: Impact Analysis.

**ANALYSIS, MARKETING COST**

SEE: Marketing Cost Analysis.

**ANALYSIS, REGRESSION**

SEE: Regression Analysis.

**ANALYSIS, SELECTED LINK**

SEE: Selected Link Analysis.

**ANALYSIS, TIME SERIES**

SEE: Time Series Analysis.

**ANALYSIS, VALUE**

SEE: Value Engineering.

**ANCHOR, RAIL**

SEE: Rail Anchor.

**ANCILLARY FACILITIES**

Support system for a rail line, such as power and electric equipment.

**ANGEL'S FLIGHT**

Angel's Flight is a funicular railway system developed in 1901 by Colonel James Ward Eddy. A funicular system is characterized by a car body that is angled to match the slope of the track while the floor of its passengers is horizontal. Angel's Flight originally was installed at the southwest corner of Hill and 3rd Streets to provide transportation to passengers at Bunker Hill in downtown Los Angeles. Described as the "shortest railway in the world", it moved people up and down an incline of 315 feet between Flower and Hill Streets. Due to urban renewal of Bunker Hill it shut down in 1969 and was dismantled. On February 24, 1996, it reopened to the public in its new location on Hill Street between 3rd and 4th Streets.

**ANGELS WALK**

A series of pedestrian improvements organized to make a cohesive and contiguous pedestrian system.

**ANNUAL AVERAGE DAILY TRAFFIC**

SEE: Traffic, Annual Average Daily.

**ANNUAL ELEMENT**

Those transportation improvement projects, contained in an area's Transportation Improvement Program (TIP), that are proposed for implementation in the current year. The annual element is submitted to the U.S. Department of Transportation (U.S. DOT) as part of the required planning process. (APTA)

**ANNUAL WAGE PLAN**

SEE: Guaranteed Annual Wage Plan.



**ANOMALIES**

Errors or inconsistencies that may result when a user attempts to update a table that contains redundant data. There are three types of anomalies: 1. Insertion, 2. Deletion, and 3. Modification. (Modern Database Management- 4th Edition)

**ANTICREEPER**

SEE: Rail Anchor.

**APPLICATION CONTROLS**

Controls that facilitate, but do not guarantee, computer processing of complete, accurate and valid data; processing that accomplishes the current tasks or identifies exceptions for followup and review.

**APPLICATION GENERATOR**

A programming language that allows a database application to be built from existing programs, screen and report definitions, and from custom-built menus. (Modern Database Management- 4th Edition)

**APPLICATION PROGRAM**

A program that processes data entry, update, or query; contrasts with systems programs, such as an operating system or network control program; also contrasts with utility programs, such as copy or sort.

**APPLICATION PROGRAMMING**

The act or function of developing and maintaining applications programs in "production".

**APPLICATION, SERVICE**

SEE: Braking, Service.

**APPORTIONMENT**

A federal budgetary term that refers to a statutorily prescribed division or assignment of funds. It is based on prescribed formulas in the law and consists of dividing authorized obligation authority for a specific program among transit systems. (APTA)

**APPRAISAL**

A written statement of the appraiser's unbiased opinion of value fully supported by pertinent factual data, of an adequately described interest in, or aspect of real property and related personally as of a specified date.

**APPRAISAL REVIEW**

A review of an appraisal performance by a real estate staff appraiser or contract appraiser to verify the quality and accuracy analysis and conclusions contained in an appraisal.

**APPROPRIATION**

A federal budgetary term that refers to an act of Congress that permits federal agencies to incur obligations and make payments out of the Treasury for specified purposes. An appropriation act is the most common means of providing budget authority, but in some cases the authorization legislation itself provides the budget authority.

**APPROVED EQUAL**

A substitute offered by a prospective Bidder which is accepted by the MTA in accordance with applicable law and procedures stipulated in the Solicitation Documents as equal to or better than a designated process or manufacturers' brand-name product.

**APTA**

See American Public Transit Association.

**APWA**

See: American Public Works Association.

**AQMD**

SEE: Air Quality Management District.

**AQMP**

SEE: Air Quality Management Plan.

**ARB**

Air Resource Board. The State of California through the ARB sets ambient air quality standards for air pollutants. California's standards generally are tighter than the Federal Environmental Protection Agency's, reflecting the conclusion on ARB's part that the federal standards are not adequate to protect public health in this region.

**ARBITRATION**

A method of settling disputes where labor and management present their case to an impartial third party, called an arbitrator, who has the responsibility of deciding the case. "Binding arbitration" results in a final and binding award, which is often enforceable in the courts. "Compulsory arbitration" is that required by law. (APTA)

**ARCADE ENTRANCE**

An entrance to a below ground station with the head of the stair or public sidewalk and the stair run within a private building structure.

**AREA**

American Railway Engineering Association; the industry's professional engineering association.

**AREA OCCUPANCY**

In station and other facility design and in pedestrian movement, the area provided per person. (TRB)

**AREA SAMPLING**

SEE: Sampling, Area.

**AREA, CONSOLIDATED METROPOLITAN STATISTICAL**

SEE: Consolidated Metropolitan Statistical Area.

**AREA, COVERAGE (AREA, SERVICE)**

The geographical area that a transit system is considered to serve, normally based on acceptable walking distances (e. g. 1/4 mile, 0.4 km) from loading points. For suburban rail transit that depends on automobile access (park and ride or kiss and ride); coverage may extend several miles. (TRB)

**AREA, MULTIPLE-USE**

A transportation right-of-way used for other purposes in addition to transportation, for example, as a park. See also Joint-Use Corridor. (TRB)

**ARMATURE**

The part, usually revolving, of an electric motor or generator that includes the main current-carrying winding and in which the electromotive force is induced. (TRB)

**A-R-T**

Art for Rapid Transit (previously Art for Rail Transit.) One half percent of local (Proposition A) rail funds are allocated to the art projects commissioned by the Los Angeles County Metropolitan Transportation Authority (MTA) and administered by the Metro Art Department.

**ARTERIAL SERVICE**

SEE: Service, Arterial.

**ARTERIAL STREET OR HIGHWAY**

A major thoroughfare, used primarily for through traffic rather than for access to abutting land, that is characterized by high-vehicular capacity and continuity of movement; type of street, either divided or undivided, that has the main function of carrying non-local traffic at medium speeds.

**ARTICULATED BUS (ARTICULATED TROLLEY BUS)**

Bus that has two sections separated by a hinged joint; compared to a single-unit bus, it holds about 35-40 percent more people.

**ARTICULATED RAIL VEHICLE (ARTICULATED CAR)**

1. An extra-long rail vehicle with two or more bodies connected by joint mechanisms that allow bending in curves yet provide a continuous interior. Typically, the vehicle is 56-100 ft (17-33 m) long. It is very common on light rail transit systems but is also found on several rail rapid transit systems. 2. Rapid transit cars with separate bodies that share a common center truck. 3. Rapid transit cars in consist with two trucks on each car and bodies joined so that passenger can walk between the cars. (TRB)

**ARTIFICIAL INTELLIGENCE**

Advanced computer systems that can simulate human capabilities such as analysis based on a predetermined set of rules.

**ARTIST**

A professional who has devoted his/her life to creative endeavors as a means to communicate; usually refers to the visual art.

**ARTIST SELECTION PANEL**

A small group of people convened for the purpose of reviewing artists' qualifications and establishing a short list, and the second to review proposals or interview and make a selection. Artists are selected through both Request for Proposal (RFP) and Request for Qualifications (RFQ) processes, depending on the nature of the project.

**ARTIST SLIDE REGISTRY**

Slide and biographical materials files kept on artists.

**ARZ**

SEE: Auto-Restricted Zone.

**ASBESTOS ABATEMENT**

The management of an asbestos hazard; this may involve removal of or various means to contain the asbestos.

**ASBURY RAPID TRANSIT SYSTEM**

Formed in 1913. Backbone of the ARTS was the Original Stage Line. The company ran many bus lines, principally in the San Fernando Valley. Asbury was purchased by Metropolitan Coach Lines in 1954, which kept ARTS as a separate corporation.

**ASCII**

American Standard Code For Information Interchange. An 8 digit 7 bit code representing 128 characters. Used in most small computers.

**ASI**

SEE: Access Services Incorporated.

**ASPECT**

Appearance or sound of a signal.

**ASSEMBLER**

A program that takes as input a program written in assembly language and translated into machine code or relocatable instructions.

**ASSEMBLY**

A number of parts or subassemblies or any combination thereof joined together to perform a specific function. (NTSC)

**ASSEMBLY LANGUAGE**

A low-level computer programming language which uses symbolic code and produces machine language instructions.

**ASSESSMENT, ENVIRONMENTAL**

SEE: Environmental Assessment.

**ASSESSMENT, NEEDS**

SEE: Needs Assessment.

**ASSIGNMENT**

The method or manner by which a right, specialty, or contract is transferred from one person to another.

**ASSIGNMENT SHEET**

SEE: Sheet, Assignment.

**ASSISTANCE, CATALOG OF FEDERAL DOMESTIC**

SEE: Catalog of Federal Domestic Assistance.

**ASSOCIATION OF AMERICAN RAILROADS**

Association of American Railroads (AAR). An industry association made up of individual railroads in the United States, Canada, and Mexico. It performs a variety of technical services for the railroads, and its purposes include the promotion of railroad interests and the standardization and coordination of operating and mechanical activities within the railroad industry. (TRB)

**ASSURANCE, QUALITY**

SEE: Quality Assurance Program.

**ASYMMETRICAL MONORAIL**

SEE: Transit System, Monorail.

**ASYNCHRONOUS MOTOR**

SEE: Motor, Asynchronous.

**ASYNCHRONOUS NETWORK CONTROL SYSTEM**

SEE: Control System, Asynchronous Network.

**AT GRADE**

At natural ground level when describing transitways or streets; the intersecting transitways and streets are at the same elevation and actually intersect. (Grade crossings that are not separated.)

**ATC**

SEE: Automatic Train Control.

**ATO**

SEE: Automatic Train Operation.

**ATP**

SEE: Automatic Train Protection.

**ATP BYPASS**

SEE: Operating Modes (Light Rail).

**ATS**

SEE: Automatic Train Supervision.

**ATTB**

Advanced Technology Transit Bus - Development project in conjunction with Northrop Grumman aimed at incorporating recent technological advancements into the design of transit buses. The objective vehicles that meet specific goals to include maximum cost, reduction in weight, reduction in operating costs, adherence to impending low emission requirements, and adherence to ADA requirements.

**ATTITUDE SURVEY**

SEE: Survey, Attitude.

**ATTITUDINAL DATA**

In transportation studies, data collected, usually by surveys, from individuals concerning their judgments, views, and perceptions of existing and proposed transportation services and other transportation issues. Also see Behavioral Data. (TRB)

**ATTRACTIONS, TRIP**

SEE: Trip Attractions.

**ATTRIBUTE**

A named property or characteristic of an entity that is of interest to the organization. (Modern Database Management- 4th Edition)

**ATTRITION ARRANGEMENT**

In Labor, the policy of relying on voluntary resignations, deaths, and retirements instead of layoffs to reduce the labor force of a company or organization. (TRB)

**ATU**

Amalgamated Transit Union. The union to which all mechanics and service attendants in the bus division belong. The ATU also represents the parallel job positions in the rail system as well as similar positions in facility maintenance and selected janitorial positions.

**AUDIT**

Formal or official examination and verification. (NTSC)

**AUDIT OBJECTIVES**

The specific goals of an audit. These often center around substantiating the existence of internal controls to minimize business risk.

**AUDIT PROGRAM**

A step-by-step set of audit procedures and instructions that should be performed to complete an audit. The audit program should also be a guide for documenting the various audit steps performed.

**AUDIT RISK**

The risk that information or financial reports may contain material errors the auditor may not detect.

**AUDIT TRAIL**

A visible trail of evidence enabling one to trace information contained in statements or reports back to the original input source.

**AUGMENTED BLOCK GUIDANCE CONTROL SYSTEM**

SEE: Control System, Augmented Block Guidance.

**AUTHENTICATION**

The act of verifying the eligibility of a user to gain access to computerized information. Typically designed to protect against fraudulent log-on activity.

**AUTHORITY HAVING JURISDICTION**

The "authority having jurisdiction" is the organization, office, or individual responsible for approving equipment, installations, or procedures. (Note: The phrase "authority having jurisdiction", and "approval" agencies vary as do their responsibilities. Where public safety is important, the "authority having jurisdiction" may be a federal, state, local or other regional department or individual such as fire chief, fire marshal, chief of fire prevention bureau, labor department, health department, building official, electrical inspector, or other having statutory authority). For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representatives may be the "authority having jurisdiction". At government installations, the commanding officer or department official may be the "authority having jurisdiction".

**AUTHORIZATION**

Basic, substantive legislation which establishes or continues the legal operation of a federal program or agency, either indefinitely or for a specific period of time, or which sanctions a particular type of obligation or expenditure within a program. An authorization may set appropriation limits. See also Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). (APTA)

**AUTHORIZATION TIME**

Time issued by proper authority whenever instruction or authorization is given for appropriate rail activities.

**AUTHORIZED FOR EXPENDITURE (AFE)**

The maximum amount of funds authorized for expenditure by the LACMTA for each contract or work order.

**AUTO-FREE ZONE (AFZ, AUTO-FREE AREA)**

An area in which normal automobile traffic is prohibited. Vehicular traffic is restricted to public transit, emergency vehicles, taxicabs, and delivery of goods (the last usually confined to certain time periods), or some combination thereof. (TRB)

**AUTOMATED GUIDEWAY (GUIDED) TRANSIT**

Automated Guideway Transit (AGT). Also see Transit System, Automated Guideway.

**AUTOMATED HIGHWAY SYSTEM**

A system designed to automatically control modified automobiles by external electrical signals emitted by sources such as overhead circuits or circuits embedded in the roadway.

**AUTOMATIC**

The term applied to a system, sub-system or device which has the inherent capability to function without direct manual participation.

**AUTOMATIC AIR BRAKE**

SEE: Brake, Automatic Air.

**AUTOMATIC BLOCK SIGNAL**

SEE: Control System, Automatic Block Signal.

**AUTOMATIC BLOCK SIGNAL CONTROL SYSTEM**

SEE: Control System, Automatic Block Signal.

**AUTOMATIC COUPLER**

SEE: Coupler, Automatic.

**AUTOMATIC FARE COLLECTION SYSTEM (AFC)**

A system of controls and equipment that automatically admits passengers on insertion of the correct fare in coins, tokens, tickets or farecards; it may include special equipment for transporting and counting revenues. (APTA)

**AUTOMATIC PROGRESSION**

1. A labor policy by which pay rate ranges or rates of pay of workers in jobs with established rate ranges are increased automatically at fixed intervals to the maximum rate for the classification. 2. Automatic movement from a trainee pay rate to the pay rate of a job classification or to the minimum level of a rate range. 3. A method by which workers move according to an agreed-on schedule from one pay scale to another automatically in a specified period of time. (TRB)

**AUTOMATIC ROUTE SELECTOR (ARS)**

Pole mounted device in the yard which allows train operators to select a route by automatically aligning track switches.

**AUTOMATIC SIGNAL**

SEE: Signal, Automatic.

**AUTOMATIC SPEED REGULATION (ASR)**

The function of Automatic Train Operation (ATO) which controls vehicle propulsion and braking effort to reach and maintain a desired speed within a desired tolerance.

**AUTOMATIC TRAIN CONTROL (ATC)**

Complete, automated train control system composed of Automatic Train Operation (ATO), Automatic Train Protection (ATP), and Automatic Train Supervision (ATS).

**AUTOMATIC TRAIN OPERATION (ATO)**

Subsystem within Automated Train Control (ATC) which automatically regulates train speed, performs programmed station stopping and is subordinate to Automatic Train Protection (ATP). The ATO mode shall be used while in Cab Signal Territory (CST) at all times, unless authorized by the Central Control Facility (CCF).

**AUTOMATIC TRAIN PROTECTION (ATP)**

A sub-system within Automatic Train Control (ATC) which monitors and maintains safe train operation through a combination of train detection, train separation and speed regulation.

**AUTOMATIC TRAIN SUPERVISION (ATS)**

A sub-system within Automatic Train Control (ATC) which monitors train operation, maintains scheduled traffic patterns and is subordinate to Automatic Train Protection (ATP). Also called Automatic Train Stop System.

**AUTOMATIC VEHICLE LOCATION SYSTEM (AVLS)**

Technology that tracks the current location of fleet vehicles to assist in dispatching, maintaining schedules, answering specific customer inquiries, etc.

**AUTOMATIC VEHICLE MONITORING SYSTEM (AVM)**

A system in which electronic equipment on a vehicle sends signals back to a central control facility, locating the vehicle and providing other information about its operations or about its mechanical condition. (TRB)

**AUTOMOBILE OR AUTO OCCUPANCY**

SEE: Vehicle Occupancy.

**AUTOMOBILE, SERVICE, PUBLIC**

SEE: Transportation System, Public Automobile Service.

**AUTO-RESTRICTED ZONE (ARZ)**

(Also called Auto-Restricted Area or Auto-Free Zone.) An area in which vehicular traffic is regulated by time of day and type of vehicle. Normal automobile traffic and, sometimes, delivery of goods are limited to certain times; public transit, emergency vehicles, and (usually) taxicabs are permitted unrestricted access. (TRB)

**AVAILABILITY, TRANSIT SYSTEM**

See: Transit System Availability.

**AVERAGE DAILY TRAFFIC**

SEE: Traffic, Average Daily.

**AVERAGE FARE**

SEE: Fare, Average.

**AVERAGE SPEED**

SEE: Velocity, Effective.

**AVERAGE VEHICLE OCCUPANCY (AVO)**

The average number of person occupying a passenger vehicle along a roadway segment intersection, or area, as typically monitored during a specified time period. For the purpose of the California Clean Air act, passenger vehicles include autos, light duty truck, passenger vans, passenger rail vehicles and motorcycles.



**AVERAGE VEHICLE RIDERSHIP (AVR)**

The number of employees who report to a worksite divided by the number of vehicles driven by those employees, typically average over as established time period. This calculation includes crediting vehicle trip reduction from telecommuting, compressed work weeks and non-motorized transportation.

**AVERAGE WEEKDAY REVENUE**

Average amount of money collected through fares on a weekday.

**AVL**

Automated Vehicle Locator and Control System used for tracking bus movements from a central control center.

**AVM**

SEE: Automatic Vehicle Monitoring System.

**AVO**

SEE: Average Vehicle Occupancy.

**AVR**

SEE: Average Vehicle Ridership.

**AWO**

Additional Work Order (also referred to as Change Order). A written directive to a contractor to perform additional work or delete work pursuant to the terms of the contract; usually this involves an item of work not originally specified in a Capital contract as part of the original bid but is later deemed necessary to render the project physically or economically functional.

**AXLE, TAG**

SEE: Tag Axle.

## **B**

**B CAR**

The even numbered passenger vehicle of a dependent pair that carries the batteries and communication equipment.

**B.O. BUS**

Bad Order Bus - One with a mechanical or other related defect.

**BACKBONE**

Network of broadband connections between switches.

**BACKUP**

Equipment, data or procedure available for use in the event of a failure or loss.

**BACKUP SYSTEM**

A redundant system that performs the principal functions of the primary system with minimum deviation from the performance of the primary system.

**BAD ORDER (BO)**

1. A notice that a transit unit or locomotive needs repair. 2. A defect in a device or a transit unit or locomotive needing repair. (TRB)

**BADGE NUMBER**

An employee number assigned for record keeping and identification purposes.

**BALANCED TRANSPORTATION**

SEE: Transportation System, Balanced.

**BALLAST**

Selected material placed on the rail roadbed for the purpose of holding the track structure in line.

**BANDWIDTH**

A measure of the communication capacity or data transmission rate of a circuit or channel.

**BAR CODE**

A printed machine-readable code that consists of parallel bars of varied width and spacing.

**BARGAINING AGENT**

A labor union designated by an appropriate government agency or recognized by the employer as the exclusive representative of all employees in the bargaining unit for purposes of collective bargaining. Also see Collective Bargaining.

**BARN**

An old-fashioned term for a large storage building for locomotives, (also known as a roundhouse), rail transit cars (also known as a carhouse), or buses (also known as a garage). (TRB)

**BARRIER FREE**

Provision for the interchange of patrons between transport modes without use of fare media or fare collection equipment. Also see Barrier - Free Fare System.

**BARRIER FREE FARE SYSTEM**

Used for all MTA rail lines. Customers are required to have proof of valid fare on their possession in the "paid area" of stations and may be issued a citation for failure to show a valid fare. This system contrasts with barrier systems used by various other rail systems in which the customer passes through a turnstile and/or is checked by a passenger agent upon entry into rail station.

**BASE FARE**

The price charged to one adult for one transit ride; excludes transfer charges, zone charges, express service charges, peak period surcharges and reduced fares. (APTA)

**BASE HEADWAY**

SEE: Headway, base.

**BASE PERIOD**

Refers to bus and rail service operated between the peak periods. The base period runs Monday - Friday from 9:00 a.m. to 3:00 p.m. Also known as "off-peak period".

**BASE RUN**

A regular run that has no unpaid breaks and is normally 8 hr in duration. (TRB)

**BASE STATION**

Fixed location two-way radio equipment used to communicate with mobile and portable radio users in the field. For strategic reasons, base stations are generally located in high elevation areas such as mountain tops and the roofs of very tall buildings.

**BASE YEAR**

1. The year to which the major portion of the data gathered in a transportation survey relates. 2. The first year of a planning or forecast period. (TRB)

**BASELINE**

The foundation document upon which all further work is based.

**BASELINE SYSTEM**

A term from the MTA Twenty Year Long Range Plan. Refers to the regional Metro Rail Systems that are either in operation, under construction or funded for construction. This includes the following lines and segments: Long Beach Blue Line; Green Line; Red line - Segment 1 Union Station to Westlake Station, Segment 2- from Westlake Station to Wilshire/Western Station and to Hollywood/Vine Station. North Hollywood Segment 3 to North Hollywood Station at Chandler/Lankershim (5.9 mi.), East Side Segment 3 - from Union Station to 1st/Lorena Station (2.3 mi.), and Pasadena Blue Line from Union Station to Sierra Madre Villa Station in Pasadena (13.5 mi.).

**BASE-PERIOD FLEET**

In transit, the number of transit units (vehicles or trains) required to maintain base-period schedules. (TRB)

**BASE-PERIOD SERVICE**

SEE: Service, Base-period.

**BASIC FARE**

The cash regular or base fare charge for local service. Express bus service requires payment of 1-5 express increments for freeway distances. Discount cash fares apply to seniors and the disabled. Monthly passes are available for all of the above fare payments and for school/college riders.

**BASIC OPERATING UNIT**

In rail rapid transit, the smallest number of rapid transit vehicles that can operate independently in revenue service, usually one to three (exceptionally more) cars. (TRB)

**BASICS OF ACCOUNTING**

Refers to that point in time when revenues, expenditures, or expenses (as appropriate), and related assets and liabilities are recognized in the accounts and reported in the financial statement.

**BATCH CONTROL**

Correctness checks built into data processing systems and applied to batches of input data, particularly in the data preparation stage. There are two main forms of batch controls; sequence control, which involves numbering the records in a batch consecutively so that the presence of each record can be confirmed, and control totals, which involves establishing record counts, or totals of the values in selected fields within each record, and checking these totals. Batch control manually groups input transactions in order to provide control totals.

**BATTERY BUS**

SEE: Bus, Electric.

**BATTERY RUNS**

Skipping scheduled stops in response to a delay--this is to prevent overloading and restore scheduled service.

**BAUD**

The number of signaling elements that can be transmitted per second on a circuit. An older term being replaced by BPS (bits per second).

**BAY, BUS**

SEE: Bus Bay.

**BBS (BULLETIN BOARD SYSTEM)**

An electronic bulletin board where user can leave messages. Many BBSs are on a membership basis.

**BD CARD**

Bus Defect Card. This card must be completed by operator in the Pre-Pull Out Inspection with defects noted/written up on a card. The card must be kept onboard the run, available for California Highway Patrol (CHP) inspection. The cards are removed from the buses at the end of the day and are the basis for operators to report defects reported.

**BDOF OPERATOR**

Provisions of the UTU Agreement under Article 25, establishes a separate class of UTU Operators termed BDOF who may operate any service provided under contract to another entity, any new service initiated by the MTA or any existing "high subsidy" service operated by the MTA under the terms of the UTU Agreement.

**BEFORE-IMAGE**

A copy of a record (or memory page) before it has been modified. (Modern Database Management- 4th Edition)

**BEHAVIORAL DATA**

In transportation studies, data based on the way individuals or coherent groups of individuals, presumably with highly similar responses, behave when faced with a set of transportation alternatives (see also Attitudinal Data). (TRB)

**BELT HIGHWAY**

SEE: Highway, Belt.

**BELT SYSTEM**

A means of transportation using continuously moving belts, for example, a pedestrian belt or a belt that carries individual small vehicles. (TRB)

**BELT, PASSENGER**

SEE: Moving Walkway.

**BELTWAY**

SEE: Highway, Belt.

**BENEFICIAL USE**

Equipment or facility that is functioning after construction or repair and has been accepted into service by the Authority.

**BENEFIT ASSESSMENT DISTRICT (BAD)**

A limited area around public transportation stations in which non-residential property owners are taxed for benefits derived from proximity to the system.

**BENEFIT-COST ANALYSIS**

SEE: Cost-Benefit Analysis.

**BENEFIT-COST RATIO**

The ratio of the dollars of discounted benefits available to the given outlay of discounted costs. (TRB)

**BERTH**

Space designated for a train of given length to occupy when it is stopped at a station platform, in a terminal or at some other designated location.

**BERTHING VERIFICATION**

A part of the Automatic Train Operation (ATO) system that verifies when a train is berthed and permits the platform side doors to be opened.

**BFLOW RATE (RATE OF FLOW)**

In transportation, the number of units (passengers or vehicles) passing a point on a transportation facility during some period of time, usually counted or recomputed in units per hour. For example, if 8 buses pass a point in the first half hour and 15 in the second, the volume for the hour is 23. However, the flow rate for the first half hour is 16 buses/hr, and for the second half hour the flow is 30 buses/hr. See also Volume.

**BICYCLE LANE**

A portion of a roadway or right-of-way that has been designated for preferential or exclusive use by bicycles. It is distinguished from the rest of the roadway by a painted stripe, curb, or other similar device. (Also see Bicycle Route). (TRB)

**BICYCLE ROUTE (BICYCLE WAY)**

Any road, street, path, or way that is specifically designated in some manner as being open to bicycle travel, regardless of whether such facilities are designated for exclusive use of bicycles or are to be shared with other vehicles or pedestrians (also see Bicycle Lane). (TRB)

**BID (OPERATIONS)**

In accord with the employee's labor contract, exercise of the right to select a work assignment or time off (usually vacation days) on the basis of seniority. Also generally applies to requested overtime work including Voluntary Call Back (VCB) assignments for operators. The principle is common to all labor contracts, however, the specific procedure depends on the labor contract.

**BID (PROCUREMENT)**

Offer of a Bidder to provide goods, services or work in response to an Invitation for Bids. For Public Works contracts, it is determined by statute (Public Contracts Code, Section 5100) as any proposal submitted to a public entity for the construction, alteration, repair or improvement of any structure, building, road or other improvement of any kind.

**BID OPENING OFFICER**

Individual to whom authority has been delegated to receive and open Bids and Proposals. The overall responsibility resides with the Executive Officer, Office of Procurement and Distribution.

**BID SAMPLES**

Sample required by the Invitation for Bids, to be furnished by a Bidder as part of its Bid to show the characteristics of a product offered in its Bid to assure procurement of an acceptable product. These samples are required only when there are certain characteristics of the product which cannot be adequately described in the Specifications.

**BID SECURITY**

A required certified or cashier's check, cash or Bid Bond accompanying the bid submitted by the Bidder, as a guarantee that the Bidder will enter into a contract with the MTA for the performance of the work and that it can and will obtain the required bonds and insurance if the contract is to be awarded to the Bidder.

**BID SOLICITATION PACKAGE**

A set of documents issued by the MTA for the intended work, which includes but is not limited to the Invitation Letter, Information for Bidders, Standard Contract Terms and Conditions and Special Terms and Conditions, and if required, Contract Drawings, Technical Specifications, Addenda (if any), the Bid Form and Forms of Bonds (if any).

**BID TABULATION (BID SUMMARY SHEET)**

The written record of prices and other relevant information pertaining to the Bids submitted in response to a Bid Solicitation Package. (The Bid Summary Sheet is filled in at the Bid Opening and serves as the Bid Tabulation unless not all relevant prices can be read at the time of bid opening in which case a more detailed Bid Tabulation, providing all unit and extended prices, is prepared after Bid Opening.)

**BIDDABLE TRIPPER**

A short bus run assignment which a bus operator can be on in addition to his or her regularly assigned run.

**BIDDER**

Any individual, firm, partnership, corporation, or combination thereof submitting a Bid for the work solicited in an Invitation for Bids, acting directly or through a duly authorized representative.

**BIDDERS FILES**

A compilation of identification of prospective Bidders, the names and addresses of which are recorded according to subject matter, obtained from requests for inclusion in the Bidders List Files, listings of bid package holders and bidders of previous procurements, minority business directories, Yellow Pages, and sources suggest by technical staff and consultants.

**BIDDERS LIST**

A compilation of names of prospective Bidders for a particular solicitation consisting of firms that requested and/or were sent a copy of the Solicitation Package.

**BIDIRECTIONAL TRANSIT UNIT (DOUBLE ENDED)**

SEE: Double-ended Transit Unit.

**BIKEWAY**

SEE: Bicycle Route.

**BILEVEL CAR**

SEE: Car, Bilevel.

**BINARY CHOICE MODEL**

A demand model used in trip generation and modal choice that is based on the assumption that travelers make one of two possible choices. (TRB)

**BINARY RELATIONSHIP**

A relationship between instances of two entity classes. This is the most common type of relationship encountered in data modeling. (Modern Database Management- 4th Edition)

**BINDING ARBITRATION**

SEE: Arbitration.

**BIOMETRIC LOCKS**

Door and entry locks that are activated by such biometric features as voice, eye retina, fingerprint or signature.

**BIS**

Budget Input System.

**BIT**

The smallest amount of information that can be transmitted. A combination of bits can indicate an alphabetic character, a numeric digit, or perform signaling, switching or other functions.

**BLANKET PURCHASE ORDER**

A pre-contractual agreement with a vendor that establishes an agreement for the purchase of supplies or services which allows the MTA to make small purchases without the issuance of a purchase order for each individual purchase. Payments are made on a monthly basis.

**BLISTER**

SEE: Bus Bay.

**BLOCK**

Length of track of defined limits, the use of which is controlled by signals, Cab Signals or Central Control Facility (CCF) authorization.

**BLOCK GRANTS**

Aid directed at broadly or functionally defined purposes. In comparison with directed grants, more reliance is placed on state initiative, local initiative, or both in this form of grant. (TRB)

**BLOCK GUIDANCE CONTROL**

SEE: Control System, Augmented Block Guidance.

**BLOCK INDICATOR**

A device, generally located near a turnout switch, that is used to indicate the presence of a train in the block or blocks leading to that switch. (TRB)

**BLOCK MILEAGE (BLOCK KILOMETERS)**

The distance traveled daily during the operating schedule of a transit unit (vehicle or train) from pull-out to pull-in, including schedule and deadhead service. (TRB)

**BLOCK SIGNAL**

A fixed signal installed at the entrance of a block to govern trains entering and using that section of track. (TRB)

**BLOCK, ABSOLUTE**

Length of track of defined limits determined by the Central Control Facility (CCF) which shall only be occupied by a single train.

**BLOCK, ABSOLUTE PERMISSIVE**

A signal system for a single track or guideway that prevents simultaneous opposing train movements between sidings but permits following movements at a safe distance. (TRB)

**BLOCK, MANUAL**

Procedure for controlling train movement into or within defined limits governed by Central Control Facility (CCF) authorization.

**BLOCK, PERMISSIVE**

Length of track of defined limits determined by the Central Control Facility (CCF) which may be occupied by another train.

**BLOCK, TEST**

Length of track specified for a specific test or tests authorized by the Central Control Facility (CCF). Test blocks shall be absolute or permissive.

**BLUE FLAG/LIGHT**

Blue flag/light displayed on both ends of a train is an indication that rail employees are on or about the vehicle.

**BLUE LIGHT STATION**

Designated location within the rail system, identified by a blue light, where traction power may be de-energized and emergency telephones are located.

**BLUE TAG**

Tag displayed on each Manual Controller indicating the vehicle shall not be operated.

**BMD**

Bus Maintenance Directives - Previously entitled "Maintenance Department Information Bulletin (MDIB)". These bulletins provide documentation for all modifications to bus equipment. Included are instructions on how to do the modifications, the parts lists and the estimated time to complete the work per bus.

**BOARD**

To go onto or into a transportation vehicle. (TRB)

**BOARD BOX**

A board box is an interoffice memo to board members that does not require board action. The board box provides an avenue for staff to track status of projects or programs, and includes information of upcoming workshops and other special events.

**BOARD OF DIRECTORS**

The governing body of the MTA consisting of a Chair and 12 members and their alternates who exercise and perform all powers, duties, functions, rights, and privileges vested in the Los Angeles County Metropolitan Transportation Authority pursuant to the MTA's governing law.

**BOARD, EXTRA**

SEE: Extra Board.

**BOARD, SPARE**

SEE: Extra Board.



**BOCC**

Bus Operations Control Center - Located on sixth floor of Gateway headquarters building, this unit performs real-time revenue operations control and police dispatching for the Metro Bus system. Also serves as MTA Operations emergency command center during natural disasters, civil disturbances, and other events affecting MTA bus services.

**BODY HOIST**

Apparatus, either electro-mechanical or hydraulic, generally used in conjunction with truck hoists, for elevating and maintaining a vehicle carbody; often called body supports.

**BODY, CAR**

SEE: Car Body.

**BODY-ON-CHASSIS**

A vehicle that has a body fastened to a chassis usually built for trucks, as is typical in school bus construction; distinguished from integral construction, in which the frame and body are built as one unit. (TRB)

**BOGIE**

SEE: Truck.

**BOND**

An interest-bearing promise to pay a specified sum of money; the principal is due on a specified date.

**BOND, IMPEDANCE**

An iron core coil of low resistance and relatively high reactance, used to provide a continuous path for the return propulsion current around insulated joints and to confine the alternating current signaling energy to its own track circuit. (NTSC)

**BONDED RAIL JOINT**

SEE: Rail Joint, Bonded.

**BONUS TIME**

SEE: Time, Allowance.

**BONUS VALUE**

The value of any rental in excess of the rent reserved in the lease, which the tenant could obtain if he or she sublet the premises on the open rental market. It is the difference between the lease rent (contract rent) and the rent being paid by other tenants for comparable space in the vicinity of the subject lease (economic or market rent).

**BONUS, OWL**

SEE: Owl Bonus.

**BOOKED DRIVERS**

Operating employees who have picked regular runs, including relief runs or trippers. (TRB)

**BOS**

1. Bus Operations Subcommittee, a subcommittee of the Technical Advisory Committee (TAC). BOS is composed of the 17 municipal bus operating agencies within Los Angeles County. Each operator has one vote on the subcommittee. 2. Bus-only street (see Street, Bus-Only).

**BOT**

"Bot" is the colloquial term for programs that listen and respond on an IRC channel to conversation.

**BOTTLENECK**

A system capacity constraint that may reduce traffic during peak load conditions.

**BOX, FARE**

SEE: Farebox.

**BOYCE-CODD NORMAL FORM (BCNF)**

A relation in which every determinant is a candidate key. (Modern Database Management- 4th Edition)

**BPS**

Bits per second. The measure of a modem's speed.

**BRAKE**

Electric or pneumatic device which slows or stops a train.

**BRAKE ASSURANCE**

The function provided by a subsystem within the automatic train operation system that will cause the emergency brakes of a vehicle to be applied when the actual braking rate of the vehicle is less than the braking rate requested by the automatic train control system. (NTSC)

**BRAKE RATE**

The negative time rate of change of speed of vehicle as produced solely by the action of its braking system, or systems in combination; average rate of its braking system, or systems in combination; average rate of deceleration caused by the braking system.

**BRAKE SHOE**

The nonrotating portion of a tread or disc brake assembly. The shoe is pressed against the tread, disc, or drum when the brake is applied. (TRB)

**BRAKE, AIR**

A brake in which the mechanism is actuated by manipulation of air pressure. The term is often used to describe brakes that employ air under pressure above atmospheric, in contrast to vacuum brakes, which employ pressure below atmospheric. (TRB)

**BRAKE, AUTOMATIC AIR**

A brake in which air is stored above atmospheric pressure so that a reduction in pressure in the brake line (intentional or by some failure) causes a valve in each rail car to use air from an auxiliary reservoir to build up pressure in the brake cylinder, thus applying the brakes. (TRB)

**BRAKE, CONTINUOUS (TRAINLINED BRAKE)**

A system of brakes interconnected among rail cars so that the brakes on all cars in the train can be operated simultaneously from the locomotive or from any car in a multiple-unit train. (TRB)

**BRAKE, DISC**

A brake used primarily on rail passenger cars that uses brake shoes clamped by calipers against flat steel discs. (TRB)

**BRAKE, DYNAMIC**

Primary braking system where the electric current derived from the motors, acting as a generator, provides controlled braking. Also see Brake, Regenerative.

**BRAKE, ELECTROMAGNETIC**

SEE: Brake, Track.

**BRAKE, ELECTROPNEUMATIC (PNEUMATIC BRAKE)**

An automatic air brake that has electrically controlled valves to expedite applying and releasing the brakes. (TRB)

**BRAKE, EMERGENCY**

Maximum braking that can be obtained with friction brake. Once activated, emergency brakes cannot be released until the train has come to a complete stop.

**BRAKE, FRICTION**

Controlled, air-blended systems applying stopping forces to a brake shoe on each wheel tread.

**BRAKE, MAGNETIC**

SEE: Brake, Track.

**BRAKE, MOTOR**

SEE: Brake, Dynamic.

**BRAKE, PNEUMATIC**

SEE: Brake, Electropneumatic.

**BRAKE, REGENERATIVE**

A form of dynamic brake in which the electrical energy generated by braking is returned to the power supply line instead of being dissipated in resistors. (TRB)

**BRAKE, SERVICE**

1. The primary train brake system.

**BRAKE, TRACK**

Electromagnetic brake device located between the wheels of each truck which operates through direct contact with the running rail. (TRB)

**BRAKE, TRAINLINED**

SEE: Brake, Continuous.

**BRAKE, VACUUM**

A brake released by air pressure that is lower than atmospheric pressure. (TRB)

**BRAKES IN EMERGENCY (BIE)**

An automatic friction brake applied to halt a train and activated by the crew, customers or the wayside (signal trip arm).

**BRAKING RATE**

The negative time rate of change of speed of vehicle as produced solely by the action of its braking system(s). (NTSC)

**BRAKING, CLOSED LOOP**

Braking under continuous direction of the train control system. (NTSC)

**BRAKING, MAXIMUM SERVICE (FULL SERVICE)**

In rail operations, a nonemergency brake application that obtains the maximum brake rate that is normally regarded as comfortable for passengers and consistent with the design of the primary brake system. (TRB)

**BRAKING, OPEN-LOOP**

Unmodulated braking without feedback control from the train control system. (TRB)

**BRAKING, PROGRAMMED**

Automatically controlled braking that causes a train to stop or reduce its speed to a predetermined level at a designated point within a specified range of deviation. (TRB)

**BRAKING, SERVICE (SERVICE APPLICATION)**

In rail operations, retardation produced by the primary train braking system at the maximum rate of retardation regarded as comfortable for repeated use in service stopping. (TRB)

**BRANCH SERVICE**

Periodic or full-extension of service from a bus route.

**BRAND NAME PRODUCT**

A commercial product described by brand name and make, model number, or other appropriate nomenclature by which the product is offered for sale to the public by a particular manufacturer, producer or distributor. The brand name is used by the MTA only for the purpose of establishing identification and a general description of the item and to establish the essential, salient characteristics of an item to be acquired.

**BREACH**

The breaking or violation of a law, right or duty, either by commission or omission.

**BROAD GAUGE**

SEE: Gauge, Broad.

**BROADBAND**

A high-capacity communications circuit/path. It usually implies a speed greater than 1.544Mbps.

**BROKERAGE, TRANSPORTATION**

SEE: Transportation Brokerage.

**B-ROLL**

Silent television footage.

**BROWSER**

Application software that gives you a graphical interface for searching, finding, viewing and managing over a network.

**BSIP**

Bus Service Improvement Plan - provides funds for additional buses on existing lines for overcrowding relief (\$7.5 million) in FY97, and additional bus routes in FY98.

**BUDGET**

A plan of financial operations for a given period including proposed expenditures, authorized staffing levels, and a proposed means of financing them.

**BUDGET AUTHORITY**

A federal budgetary term that refers to legal authority given by Congress to federal agencies to make funds available for obligation or expenditure.

**BUDGET RESOLUTION**

A federal budgetary term that refers to a concurrent resolution passed by both Houses of Congress, but not requiring the signature of the President, setting forth the congressional budget for each of five fiscal years. The budget resolution sets forth various budget totals and functional allocations; and may include reconciliation instructions to designated House or Senate committees.

**BUDGETING, PROGRAM**

SEE: Planning-Programming-Budgeting System.

**BUFFER (COMPUTER)**

Memory reserved to hold data temporarily. In programming, buffers are reserved areas of RAM that hold data while it is being processed.

**BULLETIN BOARDS**

The specific location where employees reporting for duty will examine new bulletins, special orders, notices and policies affecting the operation of the system.

**BULLETINS (TEST OPERATIONS)**

These documents will contain any permanent changes or additions to the rules issued over the signature of the MTA Manager of Rail Activation during the test operations. The bulletins will be numbered consecutively from January 1 of each year.

**BUMP**

Displacement of an assignment by one employee taking the assignment of another employee on the basis of seniority. The labor contracts specify the displacement right. For the United Transportation Union (UTU) contract, the selection by a senior operator of an assignment which causes the displacement of the junior operator in possession of that assignment.

**BUMPING POST**

Structure located on tracks to prevent car(s) from rolling off the end of track.

**BUNCHING**

With transit units, a situation that occurs when passenger demand is high and dwell times at stops are longer than scheduled, and platoons of transit units (vehicles or trains) develop, with longer intervals between platoons. The same effect (one transit unit caught by the following) can also be caused by lack of protection from general road traffic congestion and can result in delay to passengers and unused capacity. (TRB)

**BUS**

A self-propelled, rubber-tired road vehicle designed to carry a substantial number of passengers (i.e. 10 or more), commonly operated on streets and highways. A bus has enough headroom to allow passengers (unless they are exceptionally tall) to stand upright after entering, and its body can typically accommodate at least 16 adult passenger seats (various legal definitions may differ slightly as to minimum capacity.) Propulsion may be by gasoline, diesel fuel, alternative fuels, or electric motor. (TRB)

**BUS BAY**

A branch from or widening of a road that permits buses to stop, without obstructing traffic, while laying over or while passengers board and alight. It is designed to allow easy reentry of the bus into the traffic stream (also known as a Blister, Bus Duckout, Bus Turnout, or Lay-By). 2. A specially designed or designated location at a transit stop, station, terminal, or transfer center at which a bus stops to allow passengers to board or alight (also known as a Bus Dock or Bus Berth). 3. A lane for parking or storing buses in a garage facility, often for maintenance purposes. (TRB)

**BUS BERTH**

SEE: Bus Bay.

**BUS BRIDGE**

Temporary bus service established by Bus Operations Controls Centers (BOCC) to serve as a "bridge" between passenger stations in the event of Metro Rail system delays or interruptions to service.

**BUS CHANGE**

An exchange of one bus for another on the road. Bus changes are usually made in response to reported mechanical defects.

**BUS DISCRETIONARY CAPITAL**

Federal funding granted under Section 3 of the Federal Transit Act (formerly known as the Urban Mass Transportation Act). These discretionary funds are used for bus-related construction projects or to replace, rehabilitate or purchase buses. (APTA)

**BUS DOCK OR DUCKOUT**

SEE: Bus Bay.

**BUS GATE**

1. A bus priority signal control for intersection approaches. Signals located upstream from the intersection stop traffic in regular lanes while the bus lane remains open, allowing buses to proceed to any lane at the intersection signal ahead of other traffic. 2. In some areas, a crossing gate on highway ramps that only opens for buses. (TRB)

**BUS MARK-UP SHEET**

SEE: Sheet, booking.

**BUS MILE**

One bus operated for 1 mile (kilometer). (TRB)

**BUS NUMBER**

A four-digit permanent number which is placed on the front, top, rear, and side of forms of transportation.

**BUS PLATOON**

Several buses operating together as a convoy, with each bus following the operating characteristics of the one in front. (TRB)

**BUS POOL**

A group of people who share the use and cost of bus transportation between designated origins and destinations on a regular basis, for example, daily trip to work. (TRB)

**BUS PRIORITY LANE**

SEE: Lane, bus.

**BUS PRIORITY SYSTEM**

A system of traffic controls in which buses are given special treatment over other forms of transportation.

**BUS PRIORITY SYSTEM, METERED FREEWAY**

A means of giving buses preferential access to enter a freeway by restraining the entrance of other vehicles through the use of ramp metering. See also Freeway, Metered. (TRB)

**BUS RAPID TRANSIT**

SEE: Transit System, Bus Rapid.

**BUS RIDERS UNION**

An organization whose purpose is to advocate for improved bus service in Los Angeles.

**BUS RUN**

The daily assignment of a bus, numbered and listed in a master schedule. Each vehicle displays its bus run number. (TRB)

**BUS RUN NUMBER**

One or two digit destination placed on the number display box in the lower right windshield area which identifies the operation schedule of that particular bus on a particular line.

**BUS SERVICE IMPROVEMENT PLAN (BSIP)**

The BSIP seeks to relieve overcrowding on services operated by the 17 included and eligible transit operators, including the MTA Operations. The BSIP unit within Regional Transportation Planning & Development Division (RTP&D) works to improve bus transit services countywide and assumes a variety of other challenging assignments.

**BUS SHELTER**

SEE: Transit Shelter.

**BUS TOPOLOGY**

A type of LAN architecture in which each station is directly attached to a common communication channel. Signals transmitted over the channel take the form of messages. As each message passes along the channel, each station receives it in turn. Each station then determines, based on an address contained in the message, whether to accept and process the message or simply to ignore it.

**BUS TURNOUT**

SEE: Bus Bay.

**BUS, ADVANCED DESIGN**

Bus, Advanced Designed (ADB). A prototype bus, originally introduced in the 1970s, that incorporates new styling and design features specified by the Urban Mass Transportation Administration. (TRB)

**BUS, ARTICULATED**

SEE: Articulated Bus.

**BUS, CHARTER**

SEE: Service, Charter Bus.

**BUS, COMMUTER**

SEE: Service, Commuter.

**BUS, DOUBLE-DECKER**

A high-capacity bus that has two levels of seating, one over the other, connected by one or two stairways. Total bus height is usually 13-14 ft (4-4.4 m), and typical passenger seating capacity ranges from 40 to 80 people. (TRB)

**BUS, DUAL MODE**

1. A bus designed to operate both on city streets and on rails or other types of guideways; also known as a Dual-control Bus. 2. Sometimes used to refer to a trolleybus with a diesel or gasoline engine that operates away from overhead wires; also known as a Dual-powered Bus. (TRB)

**BUS, ELECTRIC (BATTERY BUS)**

A bus that is propelled by electric motors mounted on the vehicle. The power source, usually a battery or a battery pack, is located in the vehicle or on a trailer. (TRB)

**BUS, EXPRESS**

SEE: Service, Express Bus.

**BUS, INTERCITY (OVER-THE-ROAD COACH)**

A large bus with luggage space, used primarily for transportation between cities. It usually has reclining seats and restroom facilities. (TRB)

**BUS, MOTOR**

A bus that has a self-contained source of motive power, usually a diesel engine. (TRB)

**BUS, NEW LOOK**

Generally refers to a bus model manufactured in the United States and Canada between 1959 and 1978. New Look buses have much larger window areas than those of older buses, although these window areas are smaller than those of buses built in other parts of the world during the same period. (TRB)

**BUS, SCHOOL**

1. A vehicle operated by a public or private school or by a private contractor for the purpose of transporting children (through grade 12) to and from school or to and from other school-sponsored activities. The vehicle is externally identifiable as a school bus, typically by color (yellow) and lettering that identifies the school or school district served by the vehicle. This definition includes vehicles designed and built as school buses as well as other vehicles, such as vans and station wagons. Also see Service, School. 2. A vehicle designed and built as a school bus, typically with body-on-chassis construction. Such a vehicle may be used for other purposes than school bus service (e.g., military or church service). (TRB)

**BUS, SMALL**

A bus that is less than 20 ft (6 m) long. (TRB)

**BUS, STANDARD URBAN (TRANSIT COACH, URBAN TRANSIT BUS)**

A motor bus designed for maximum number of seated and standing passengers in short ride, frequent stop service. Typically it is 33 to 40 (10-12 m) long and is self-propelled by a diesel engine operated by diesel or alternative fuel, although gasoline and propane engines have been used. (TRB)

**BUS, SUBSCRIPTION**

SEE: Service, Subscription Bus.

**BUS, SUBURBAN TRANSIT (SUBURBAN COACH)**

A motor bus designed primarily for a seated passenger load and longer journey times. It usually has a single front door, more comfortable seats than a standard urban bus, individual reading lights, and special baggage or package facilities. (TRB)



**BUS, TROLLEY**

SEE: Trolleybus.

**BUS, URBAN TRANSIT**

SEE: Bus, Standard Urban.

**BUS/RAIL INTERFACE**

The integration of bus and rail services at rail stations. More generally, the integration of transit that travels in or crosses a rail corridor.

**BUSH**

In planning, a collection of all the efficient paths between some origin and all destinations. (TRB)

**BUSINESS DISTRICT**

SEE: Central Business District and Outlying Business District.

**BUSINESS ENTERPRISE**

SEE: Disadvantaged Business Enterprise, Minority Business Enterprise, and Women's Business Enterprise. (TRB)

**BUSINESS FUNCTION**

A related group of business processes that support some aspect of the mission of an enterprise. (Modern Database Management- 4th Edition)

**BUSINESS RISK**

Risk that could impact the organization's ability to perform business or provide a service. It can be financial, regulatory or control oriented.

**BUSINESS RULES**

Specifications that preserve the integrity of the logical data model. Also see Deletion Rule, Insertion Rule, Referential Integrity Constraint, and Triggering Operation. (Modern Database Management- 4th Edition)

**BUS-ONLY STREET**

SEE: Street, Bus-Only.

**BUSWAY**

Exclusive freeway lane for buses and usually for all other High Occupancy Vehicles (HOV) consisting of carpools and vanpools. Also the name for the specific Busway on the San Bernardino (1-10) Freeway. which is between El Monte and downtown Los Angeles, with passenger stations located at El Monte, California State Los Angeles University and the County/USC Medical Center; it may be constructed at, above, or below grade and may be located in separate right-of-way or within highway corridors. There is also a Transitway (which see) in the Harbor (I-110) Freeway.

**BYPASS LABEL PROCESSING (BLP)**

A technique of reading a computer file while bypassing the internal file/data set label. This process could result in bypassing of the security access control system.

**BYPASS LANE**

SEE: Queue Jumper.

**BYPASS ROAD**

SEE: Road, Bypass.

**CAPITAL INVENTORY**

The class of inventory which, by rebuild, can be returned to specified operating condition rather than consumed.

**CAPITAL PROGRAM**

An approved program for capital projects.

**CAPITAL PROJECT FUNDS**

Funds used to account for resources restricted for major capital outlays.

**CAPITALIZATION RATE**

The rate at which payments are discounted to indicate the probable capital value or present worth. The rate is usually commensurate to risk, for example a leasehold interest would require a greater rate than would an unencumbered fee interest.

**CAPSULE TRANSIT SYSTEM**

SEE: Transit System, Capsule.

**CAPTIVE TRANSIT RIDER**

SEE; Rider, Captive Transit.

**CAR**

1. A vehicle running on rails, for example, streetcar, rapid transit car, railroad car. 2. An automobile. (TRB)

**CAR BODY**

In passenger transportation, that portion of a rail car that carries people. (TRB)

**CAR CARD**

An advertising card used on the interior or exterior of transit vehicles, usually of a standard size to fit permanent holders. (TRB)

**CAR CLEANING PLATFORM (CCP)**

A platform elevated to vehicle floor height for easy access to car interiors for personnel and equipment.

**CAR MOVER**

A self powered auxiliary vehicle used to move a disabled vehicle, or move a vehicle in de-energized territory.

**CAR, BIDIRECTIONAL (DOUBLE-ENDED)**

SEE: Bidirectional Car.

**CAR, BILEVEL**

A rail car that has two levels for passenger accommodations. The upper level may extend through the entire length of the car or only over a part of it; this level is sometimes restricted to seated passenger only. Bilevel cars are used principally on commuter lines. Double-deck cars and gallery cars are types of bilevel cars. (TRB)

**CAR, CAB**

1. A rail car with a driving cab. 2. A passenger-carrying car used in push-pull service and fitted with a cab at one end, to be used to operate the train when the locomotive is pushing. See also Car, Commuter Rail. (TRB)

**CAR, CABLE**

An individually controlled rail passenger vehicle operating in mixed street traffic and propelled by gripping a continuously moving cable located in an underground slot between the rails. The cable (which can draw many cable cars simultaneously) is powered by a large stationary motor at some central location instead of aboard the vehicle. (TRB)

**CAR, COMMUTER RAIL**

A passenger rail car designed for commuter rail services. It usually has many more seats than a conventional long-distance rail passenger car. The car may be hauled by a locomotive, have a self-contained internal combustion engine, or be electrically propelled by power from a third rail or overhead wire. (TRB)

**CAR, DIESEL RAIL**

SEE: Car, Rail Diesel.

**CAR, DOUBLE-DECK**

A bilevel rail car with a second level that covers the full width of the car but may or may not extend the full length. (TRB)

**CAR, ELECTRIC RAIL (CAR, RECTIFIER ELECTRIC MOTOR)**

A car powered by current from a conduit along the track. The conduit is usually an overhead wire or third rail. (TRB)

**CAR, GALLERY**

A bilevel rail car that has seating and access aisles on a second level along each side of an open well. Ticket of passengers on the second level can be inspected or collected from the lower level. (TRB)

**CAR, MOTOR**

SEE: Car, Rail Motor.

**CAR, MULTIPLE-UNIT**

A powered rail car arranged either for independent operation or for simultaneous operation with other similar cars, when connected to form a train of such cars. It may be designed as DMU (diesel multiple-unit) or EMU (electric multiple-unit), depending on a source of power. (TRB)

**CAR, RAIL DIESEL (RDC, DIESEL RAIL CAR)**

A self-powered rail car that usually has two diesel engines and can usually operate in multiple units (diesel multiple-unit car). (TRB)

**CAR, RAIL MOTOR (MOTOR CAR, POWERED CAR, SELF-POWERED CAR)**

A rail car that is propelled by a motor or engine located on the car itself. It can often be operated in multiple units (multiple-unit car). Common types are electric (electric rail car), which receives current either from a third rail or from an overhead wire, and diesel (rail diesel car). (TRB)

**CAR, RECTIFIER ELECTRIC MOTOR (IGNITRON ELECTRIC CAR)**

A rail car that collects propulsion power from an alternating-current distribution system and converts it to direct current for application to direct current motors by means of rectifying equipment carried by the rail car. The car may be identified by type of rectifier used, for example, ignitron rectifier car. (TRB)

**CAR, TRACK**

A self-propelled rail car (e.g., burro crane, highway rail car, detector car, weed burner, tie tamper) that is used in maintenance service and that may or may not operate signals or shunt track circuits. (TRB)

**CAR, TRAILER**

1. An unpowered rail car operated in trains with powered cars (rapid transit) or towed by locomotives (regional rail). 2. In some rail rapid transit systems, a trailer may be powered; however, it does not have operator's control and thus can only be operated in consists with cars that do. (TRB)

**CARD, CAR**

SEE: Car Card.

**CARD, RUN ON TRAIN**

SEE: Paddle Board.

**CARDINALITY**

The number of instances of entity B that can (or must) be associated with each instance of entity A. (Modern Database Management- 4th Edition)

**CAR-FOLLOWING CONTROL SYSTEM**

SEE: Control System, Car-Following.

**CARMAN**

Employee who repairs or maintains railway cars.

**CARPOOL LANE**

A highway or street lane intended primarily for carpools, and other high-occupancy-vehicle (HOV), either all day or during specified periods. It may be used by other traffic under certain circumstances, such as while making a right turn.

**CARPOOLING**

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. Also see HOV Lanes and Ridesharing.

**CARRIER**

A telecommunications provider which owns network switch equipment.

**CARRIERS UNDER CONTRACT**

SEE: Purchased Transportation.

**CASE**

Computer Aided Software Engineering. The use of software packages that aid in the developing of all phases of an information system. System analysis, design, programming, and documentation are provided for; changes introduced in one CASE chart will automatically update all other related charts. CASE can be installed on a microcomputer for easy access.

**CATALOG OF FEDERAL DOMESTIC ASSISTANCE**

A catalog published annual by the U.S. Office of Management and Budget. It presents a comprehensive listing and description of federal assistance programs administered by different federal departments, agencies, commissions, and councils. (TRB)

**CATALYTIC TRAP OXIDIZER**

Pollution filtering device for diesel buses.

**CATEGORICAL EXCLUSION**

National Environmental Policy Act of 1969 categories of action that are exempt from preparing an environmental impact statement. (TRB)

**CATENARY SYSTEM**

System of overhead wires in which the contact wire is supported from one or more longitudinal messenger wires either directly by hangers (simple) or by hangers in combination with auxiliary conductors and clamps (compound). Attachment of the contact wire to the messenger is made at frequent and uniform intervals to produce a contact surface nearly parallel to the top of the track rails.

**CATV**

Community Antenna Television. A community television system, served by cable and connected to a common (set of) antenna(s). 1994 Federal legislation may allow CATV providers to compete for telephone services (on the Information Superhighway).

**CBA (OPERATIONS)**

Collective Bargaining Agreement.

**CBA (PLANNING AND FINANCE)**

SEE: Cost-benefit analysis.

**CBD**

See Cental Business District.

**CCF**

Central Control Facility (which see).

**CCIS**

Computerized Customer Information System which gives computer assisted answers to telephone inquiries on route and schedules.

**CCTV**

Closed Circuit Television -- Private video surveillance system. CCTV equipment is used in many areas to include vault houses, the cash counting room and on all the station platforms of the rail lines.

**CD&P**

Capital Development and Programming units (formerly Capital Planning) with the Regional Transportation Planning and Development unit (RTP&D) performs strategic capital planning and regional programming for all fund sources that support the MTA's mission.

**CEA**

SEE: Cost-effectiveness Analysis.

**CENSUS**

SEE: Census Block.

**CENSUS BLOCK**

As defined by the Bureau of the Census, a geographic area wholly contained within a census tract and bounded on all sides either by streets or by a combination of streets, natural features, waterways, railways, transportation lines, or property lines of public and semipublic tracts. It is the basic unit for tabulation of urban data by the Bureau of the Census. (TRB)

**CENSUS ENUMERATION DISTRICT (ED)**

As defined by the Bureau of the Census, an area used for data collection activities and as a tabulation area where census blocks are not present. EDs do not cross boundaries of legal or statistical area and therefore vary widely in population size. They do not generally exceed 1,600 population in areas where the census is taken by mail or 1,000 where the census is taken by conventional enumerator canvassing. (TRB)

**CENSUS TRACT**

As defined by the Bureau of the Census, a small statistical subdivision of a county. Generally, tracts have stable boundaries and 2,500-8,000 residents. When census tracts are established, they are designated to be relatively homogeneous areas in population characteristics, economic status, and living conditions. (TRB)

**CENTER PLATFORM**

SEE: Platform, Center.

**CENTRAL BUSINESS DISTRICT (CBD)**

As defined by the Bureau of the Census, an area of high land valuation characterized by a high concentration of retail businesses, service businesses, offices, hotels, and theaters, as well as by a high traffic flow. A CBD follows census tract boundaries; that is, it consists of one or more whole census tracts. CBDs are identified only in central cities of Metropolitan Statistical Areas (MSAs) and other cities with populations of 50,000 or more. See also Outlying Business District. (TRB)

**CENTRAL CASH COUNTING ROOM**

The location where all farebox vaults are emptied and the money counted and prepared for bank deposit.

**CENTRAL CITY**

As defined by the Bureau of the Census, the largest city, or one of the largest cities, in a metropolitan statistical area or urban area. The criteria for designating a central city vary with the type of area and the particular census. (TRB)

**CENTRAL CONTROL FACILITY (CCF)**

Location from which mainline operations are authorized, controlled and directed.

**CENTRAL MAINTENANCE FACILITY**

SEE: RRC.

**CENTRAL PROCESSING UNIT (CPU)**

Computer hardware which houses the electron circuits that control/direct all operations in the computer system.

**CENTRALIZED DATA PROCESSING**

Identified by one central processor and databases that form a distributed processing configuration.

**CENTRALIZED TRAFFIC CONTROL**

SEE: Control Systems, Centralized Traffic.

**CENTROID**

In planning, a point within a traffic zone or district that is chosen to be representative of the center of trip-making activities of the zone or district. (TRB)

**CEQA**

SEE: California Environmental Quality Act.

**CERN**

The European Laboratory for Particle Physics, site of the first World Wide Web conference and considered the birthplace of WWW technology. Work on WWW technology and setting standards has moved to the World Wide Web Organization (W3O, at w3.org). <http://www.cern.ch/>

**CERTIFICATION**

The process of identifying real estate parcel requirements, preparing required documentation and verifying that a parcel of real estate is required for the construction and/or operation of a transit project.

**CERTIFICATION CARD**

Certificate which authorizes rail employees to engage in specific activities for which they have been trained.

**CERTIFIED COST AND PRICING DATA**

Factual, verifiable Data that, as of the date of contract award, would reasonably be expected to significantly affect price negotiations. Data may include, but is not limited to, vendor quotations, non-recurring costs,, unit-cost trends, and information concerning change in production methods.

**CERTIFIED DISADVANTAGED BUSINESS ENTERPRISE**

A contractor certified as a disadvantaged business enterprise by the Office of Equal Employment Programs Department, City of Los Angeles, Caltrans or the Regional Transit Coordinating Council.

**CFP**

Call For Projects.

**CFR**

Code of Federal Regulations. An annual publication that contains all federal regulations currently in effect. (TRB)

**CGI**

The Common Gateway Interface is an interface for programmers who build script or applications which run behind-the-scenes on a web server. These scripts can generate text or other types of data on the fly, perhaps in response to input from user or from mining information from a database.

**CHANGE NOTICE**

For public works projects, a written notice issued to the Contractor Administrator specifying a change in the work within the general scope of the contract. The MTA may issue a Change Notice which is a request for Contractor's proposal that may result in a Change Order. Also see Work Authorization Change Notice.

**CHANGE ORDER**

A written document issued unilaterally to the Contractor by MTA. The unilateral Change Order is signed by the Contracting Office, but not by the contractor. The Change Order incorporates in the contract changes in the work. After receipt, the contractor is required to submit a proposal covering any changes caused by the Change Order, and negotiations between the MTA and the contractor will be held to price out the cost (or savings) of the changes. Alternatively, a contract change may be made by bilateral price modifications.

**CHANGE ORDER (CO)**

A formal modification to the contract. Considered executed and valid when signed by the appropriate parties.

**CHANNEL**

A telecommunications path (pipe) of a specific capacity (speed) between two locations in a network.

**CHARGE, FLAG DROP**

SEE: Flag Drop Charge.

**CHARTER BUS SERVICE**

SEE: Service, Charter Bus.

**CHAT**

"Chat" is a term used to describe real-time conferencing. "America On Line (AOL) chat room" is an example of "chat."

**CHECK**

In transit operations, a record of the passenger volume on all transit units that pass a specific location or time point (also known as a Passenger Riding Count or Check), the actual time the unit passes it (also known as a Schedule Check), the number of passengers who board and alight at each stop on a route or line (also known as an On-And-Off Count or Check), or any combination of these items. The checker may ride the transit unit ( an On-Board Check), follow it in another vehicle, or check the transit units from a particular location (a Point or Corner Check). (TRB)

**CHECK RIDE**

In transit operations, a ride on which an observer checks the operator's skills, abilities, and compliance with rules and standard operating procedures. (TRB)

**CHECKER**

In transit operations, a person who observes and records passenger counts, timing, speeds, vehicle counts, schedule adherence, or other data useful in transit planning and scheduling. The position may be further specified as Schedule Maker, Traffic Checker, and so on. (TRB)

**CHOCK, WHEEL**

A device placed between the top of the rail and the rail vehicle wheel to prevent vehicle movement when brakes are not applied or are defective.

**CHOICE RIDER**

SEE: Rider, Choice.

**CHOPPER**

A solid-state electronic device that controls electric current flow to traction motors by very rapidly turning the power on and off, resulting in gradual vehicle acceleration at reduced current use. (TRB)

**CHP**

California Highway Patrol. The major statewide law enforcement agency responsible for the management and regulation of traffic to achieve safe, lawful, and efficient use of the highway transportation system. CHP also assists in emergencies exceeding local capabilities and provides disaster and lifesaving assistance.

**CHP MOTOR CARRIER INSPECTION**

An annual safety inspection at each bus division of the mechanical and other bus safety conditions of the buses conducted by a team of motor carrier inspectors from the California Highway Patrol (CHP). Buses are randomly selected for inspection. A unit within MTA Operations Support, Quality Assurance, conducts simulated CHP inspections of each bus division on a biennial cycle to help ensure that the divisions are ready for the CHP annual inspections.



**CINDER DICK**

Private policeman employed by a railway company.

**CIP**

SEE: Capital Improvement Program.

**CIRCULAR A-95**

A circular from the U.S. Office of Management and Budget that furnished guidance to federal agencies for cooperation with state and local governments in the evaluation, review, and coordination of federal assistance programs and projects. This procedure has been replaced by the Intergovernmental Review Process (Executive Order 12372, issued July 14, 1982). (TRB)

**CIRCULATOR SERVICE**

Bus service confined to a specific locale, such as a downtown area suburban neighborhood with connections to major traffic corridors.

**CITIZEN ADVISORY COMMITTEE (CAC)**

Citizen Advisory Committee (CAC). An organized group of local people who supply their ideas and input to, for example, a particular transportation study or plan, a transit or paratransit operation, or a government agency. (TRB)

**CITY TRANSIT SERVICE**

SEE: Service, City Transit.

**CIVIL SPEED LIMIT**

SEE: Speed Limit.

**CLASSIFICATION YARD**

Used for sorting cars into tracks according to destination, route or train.

**CLEAN AIR ACT AMENDMENTS OF 1990 (CAAA)**

The comprehensive federal legislation which establishes criteria for attaining and maintaining the federal standards for allowable concentrations and exposure limits for various air pollutants; the act also provides emission standards for specific vehicles and fuels. Also see State Implementation Plan (SIP). (APTA)

**CLEAN FUELS**

Lower polluting replacements for conventional diesel fuel. The state has mandated that all buses purchased after January 1, 1992 be clean-fueled.

**CLEARANCE CARD**

A card, when properly completed, authorizes the train operator to operate a train with bypass switches activated, past an interlocking signal displaying a "STOP" indication or activities authorized by the rules.

**CLEARANCE, NO**

Locations within Heavy Rail where no clearance exists between fixed wayside structures and moving vehicles operating on tracks.

**CLIENT**

A software application that requests services (such as communications management) from one or more servers. Also see Client/Server Architecture. (Modern Database Management- 4th Edition)

#### **CLIENT/SERVER ARCHITECTURE**

A form of Local Area Network (LAN) in which a central database server or engine performs all database commands sent to it from client workstations, and application programs on each client concentrate on user interface functions. (Modern Database Management- 4th Edition)

#### **CLOSED-LOOP BRAKING**

SEE: Braking, Closed-Loop.

#### **CLUSTERING ATTRIBUTE**

Any nonkey attribute in a record (or row) that is used to cluster (or group together) the rows that have a common value for this attribute. (Modern Database Management- 4th Edition)

#### **CMA**

SEE: Congestion Management Agency.

#### **CMAQ**

SEE: Congestion Mitigation and Air Quality Program.

#### **CMP**

SEE: Congestion Management Program.

#### **CMP ARTERIAL**

Any route on the CMP (Congestion Management Program) Highway and Roadway System. It includes all freeways, state highways, and selected major arterials.

#### **CMS**

Congestion Management System. One of nine management systems required under the Federal Intermodal Surface Transportation Efficiency Act (ISTEA).

#### **CMSA**

SEE: Consolidated Metropolitan Statistical Area.

#### **CMSD SYSTEM**

A Caltrans database used for Transportation Improvement Programs (TIP).

#### **CNG**

Compressed Natural Gas. Fuel that is becoming an alternative to the diesel fuel commonly used in transit buses. The attraction of CNG is due to its ability to meet the low emission regulations being imposed upon the transit industry and the abundant supply of the fuel in the United States. CNG is pressurized to 3600psi and stored in carbon fiber containment vessels aboard the vehicles.

#### **COACH**

Another word for bus. Historically, old-timers in the transit industry used this word.

#### **COAST**

Train movement that occurs during Manual Train Operation (MTO), Restricted Manual Operation (RMO), or Emergency Manual Operation (EMO) when the manual controller is in the 'coast' position and neither power or brakes are being applied. Also see Freewheeling.

#### **COAST COMMAND**

Cab signal which de-energizes all propulsion on the train and allows the train to coast at speeds up to 8 mph. The aspect is termed "8NP."

**COASTING**

SEE: Freewheeling.

**COAXIAL CABLES**

An insulated wire that runs through the middle of each cable. A second wire surrounds the insulation of the wire like a sheath. The other insulation wraps the second wire. Coaxial cable has a greater transmission capacity than standard twisted pair cables.

**CODE 2**

A serious accident or incident, usually requiring ambulance and/or police response. Note: Operations Control uses a series of "codes" to define types of messages radioed to all bus operators over the bus radio network.

**CODE GENERATOR**

A module of a Database Management System (DBMS) that produces the program instructions that define a form, report, or menu. A code generator usually builds these instructions from a visual image of the object drawn by the designer of the object. Also see Application Generator. (Modern Database Management- 4th Edition)

**CODE OF FEDERAL REGULATIONS (CFR)**

An annual publication that contains all federal regulations currently in effect. (TRB)

**CODING, NETWORK**

SEE: Network Coding.

**COEFFICIENT OF DIRECTNESS**

1. The ratio of the length (measured in units of either distance or time) of a transit trip between two points and the length of the most direct highway between the two points. 2. The ratio of the length (measured in units of either distance or time) of a trip by another mode. (TRB)

**COEFFICIENT, RIDING FREQUENCY OR HABIT**

SEE: Riding Frequency Coefficient.

**COEFFICIENT, UTILIZATION**

SEE: Load Factor.

**COFC**

Container On Flat Car. Inter-modal freight service.

**COG**

SEE: Council of Governments.

**COG RAILWAY (RACK RAILWAY)**

A rail transportation mode with auxiliary or full traction provided by a geared wheel in the middle of a powered axle that is engage with a rack (toothed bar) install along the track center. This system is used to overcome steep gradients. (TRB)

**COLA**

SEE: Cost-Of-Living-Allowance.

**COLD SITE**

An ITS backup facility that has the necessary electrical and physical components of a computer facility, but does not have a greater transmission capacity than standard twisted pair cables; has a limited range of effective distance. Also see Hot Site.

**COLLECTIVE BARGAINING**

Negotiations between labor union representatives and employers to reach agreement on a contract describing such matters as wages, hours and working conditions.

**COLLECTOR ROAD OR STREET**

SEE: Street, Collector-Distributor.

**COLLECTOR SHOE**

On the Red Line, a device located on each side of each truck that rest or slides on the contact rail, collects 750 volts direct current and transfers power to the traction motors.

**COLLECTOR, CURRENT**

SEE: Current Collector.

**COLLECTOR-FEEDER-DISTRIBUTION SYSTEM**

A public transit system operating in localized Zones to connect patronage generating areas to the Rapid Transit System.

**COMMAND AND CONTROL SYSTEM (C&C)**

In rail systems, any means of adjusting and maintaining prescribed headways; effecting starting and stopping, merging, and switching; and controlling other such functions. It is usually considered to include transit unit (car or train) protection, transit unit operation, and line supervision to ensure safe movement of the transit unit within the system. See also Control System, Wayside. (TRB)

**COMMAND ZERO**

Look ahead feature of the train control system that prevents a train from leaving a station when traction power is de-energized ahead.

**COMMERCIAL PAPER**

Short-term interest-bearing promissory note secured by pledged revenues and a liquidity/credit facility. The maturity can range from 1 to 270 days.

**COMMISSION HOURS**

Daily periods when customer transit use is the highest, typically 7 a.m. to 9:30 a.m. and 4 p.m. to 6:30 p.m. Also see Rush hour, Peak period.

**COMMITMENT**

SEE; Obligation.

**COMMON CARRIER**

A carrier that holds itself out as serving the public (or a segment thereof) indifferently (i.e., without regard to the identity of the customer and without undue discrimination).

**COMMUNICATION LINK**

A system of hardware and software connecting two end users.

**COMMUNICATION SYSTEM**

A system containing an information source, an information link or user, and a communications link for moving the information, intelligence or control between the source and link.

**COMMUNICATIONS CONTROLLERS**

Connects and coordinates communication links between distributed or remote devices and the main computer, thus freeing the main computer from this overhead function.

**COMMUNITY ADVISORY COMMITTEE**

Group comprised of community representatives convened for the purpose of compiling a Community Profile. This Profile is used by Metro Art in the Artist Selection Process.

**COMMUNITY PROFILE**

A document created by Metro Art through research and input by the Community Advisory Committee which describes unique attributes of a community. This document is used by the Artist Selection Panel to aid them in selecting an artist who will be sensitive to the neighborhood surrounding the station. The selected artist also uses it to learn about the community as he/she develops a proposal.

**COMMUTATION TICKET**

In rail systems, a ticket sold at a reduced rate for a fixed on unlimited number of trips in a designated area during a specified time period. (TRB)

**COMMUTE**

Regular travel between home and a fixed location (e.g. work, school). The term is often applied only to travel in the direction of the main flow of traffic, to distinguish from reverse commute. (TRB)

**COMMUTER**

A person who travels regularly between home and a fixed location (e.g. work, school). (TRB)

**COMMUTER BUS**

SEE: Service, Commuter.

**COMMUTER RAIL**

Railroad local and regional passenger train operations between a central city, its suburbs and/or another central city. It may be either locomotive-hauled or self-propelled, and is characterized by multi-trip tickets, specific station-to-station fares, railroad employment practices and usually only one or two stations in the central business district. Also known as "suburban rail." (APTA)

**COMMUTER RAIL CAR**

SEE: Car, Commuter Rail.

**COMMUTER SERVICE**

SEE: Service, Commuter.

**COMPETITIVE NEGOTIATIONS**

The procurement process by which a Request for Proposal is issued, soliciting proposals from a number of sources. Negotiations are normally conducted with more than one of the sources submitting offers, and either a fixed-price or cost-reimbursement type of contract is awarded.

**COMPETITIVE RANGE**

Parameters which include all offers in response to a Request For Proposal (RFP) that have a reasonable chance of being selected for award based on cost or price and other factors that were stated in the solicitation.

**COMPILER**

A software program that translates a programming language into machine language which a computer understands. A compiler usually generates assembly language first. The assembly language is then converted to machine language.

**COMPLIANCE TESTING**

Tests which determine if project is operating in a manner described in the documentation and in accordance with contractual terms and conditions.

**COMPOSITE ENTITY**

SEE: Gerund. (Modern Database Management- 4th Edition)

**COMPOSITE KEY**

A primary key that contains more than one attribute. (Modern Database Management- 4th Edition)

**COMPOSITE NETWORK**

In planning, a group of interconnected lines that represents a multimodal combination of existing and proposed transportation facilities and routes. It is often used for simulating travel patterns and determining capacities or other transportation system characteristics. (TRB)

**COMPOUND CATENARY**

SEE: Catenary System.

**COMPOUND MOTOR**

SEE: Motor, Compound.

**COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR)**

Report containing financial statements and statistical data which provides full disclosure of all material financial operations of the MTA in conformity with Generally Accepted Accounting Principles. The report contains three sections; an introduction with explanatory narrative defining the entity and highlighting its economic condition and outlook; a Financial Statement section with notes; and a concluding Statistical section.

**COMPREHENSIVE AUDIT**

1. An audit designed to determine if internal controls are being applied in a manner described in the documentation, and in accordance with management's intents. 2. An audit designed to determine the accuracy of financial records, as well as evaluate the internal controls of a function or department.

**COMPRESSION/DECOMPRESSION**

A method of encoding/decoding signals that allows transmission (or storage) of more information than the media would otherwise be able to support.

**COMPROMISE RAIL JOINT**

SEE: Rail Joint, Compromise.

**COMPULSORY ARBITRATION**

SEE: Arbitration.

**COMPUTER ASSISTED AUDIT TECHNIQUE (CAAT)**

Any automated audit technique, such as generalized audit software, test data generators, computerized audit programs, and specialized audit utilities.

**CONCATENATED KEY**

SEE: Composite Key. (Modern Database Management- 4th Edition)

**CONCEPT, MARKETING**

SEE: Marketing Concept.

**CONCEPTUAL DATA MODEL**

A detailed model that captures the overall structure of organizational data, while being independent of any database management system or other implementation consideration. A conceptual data model includes the relevant entities, relationships, and attributes, as well as the business rules and constraints that define how the data are used. (Modern Database Management- 4th Edition)

**CONCILIATION**

SEE: Mediation.

**CONDEMNATION**

The process by which property is acquired for public purposes through legal proceedings under power of eminent domain. (TRB)

**CONDUCTOR**

An on-board train attendant whose function is to operate doors and otherwise assist in passenger movement and safety.

**CONFIGURATION MANAGEMENT**

A process to assure that all documentation which describes a system and its various components is current and reflects the actual functional and physical characteristics of the system throughout its life cycle. (NTSC)

**CONFORMITY**

The ongoing process that ensures the planning for highway and transit systems, as a whole and over the long term, is consistent with the state air quality plans for attaining and maintaining health-based air quality standard; conformity is determined by metropolitan planning organizations (MPOs) and the U.S. Department of Transportation (Federal DOT), and is based on whether transportation plans and programs meet the provisions of a State Implementation Plan (SIP). (APTA)

**CONGESTION MANAGEMENT AGENCY (CMA)**

The agency responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.

**CONGESTION MANAGEMENT PROGRAM (CMP)**

A legislatively required county-wide program which addresses congestion problems.

**CONGESTION MANAGEMENT SYSTEM (CMS)**

One of nine management systems required under the Federal Intermodal Surface Transportation Efficiency Act (ISTEA) to improve transportation planning.

**CONGESTION MITIGATION AND AIR QUALITY PROGRAM (CMAQ)**

Federal funds available for either transit or highway projects which contribute significantly to reducing automobile emissions which cause air pollution. Part of the Intermodal Surface Transportation Surface Efficiency Act.

**CONNECTION**

A point-to-point dedicated or switched communicating path.

**CONNECTIVITY**

The ability of a public transportation network to provide service to the maximum number of origin-and-destination trip pairs through the optimal integration of routes, schedules, fare structures, information systems, and modal transfer facilities. (TRB)

**CONSENT DECREE**

A court order in which both parties to a lawsuit agree to a set of actions to be taken without accepting liability or culpability and without admitting any alleged facts into the court record. The court retains the authority to oversee implementation of the actions agreed to in the Decree. The consent decree presently affecting the MTA establishes obligations, over a 10 year period, that the MTA must fulfill in settlement of the litigation filed in September 1994 by the American Civil Liberties Union (ACLU), the Labor Strategy Center and others.

**CONSERVATION**

Refers to both routine maintenance and repair of artwork.

**CONSIST**

The number and specified identity of rail vehicles that make up a train. (NTSC) (When pronouncing this term the first syllable [con] should be emphasized).

**CONSOLIDATED METROPOLITAN STATISTICAL AREA**

A metropolitan statistical area that has more than 1 million population and meets other specified requirements, as provided by the U.S. Office of Management and Budget. A CMSA consists of major components recognized as primary metropolitan statistical area (PMSAs). (TRB)

**CONSPICUITY**

Term used to refer to the use of headlights on buses during the daylight hours. This procedure is used as a safety feature.

**CONSTANT DOLLARS**

Current dollars, that is, the value of the dollar for the year selected as a base, adjusted by using the change in the GNP deflator index or other specified indicator between the current (base) year and the desired year. The intent of usage is to remove the distortion caused by inflation during the intervening time period. The adjusted values are termed constant measurement year dollars, for example, constant 1984 dollars. (TRB)

**CONSTRUCTION COMPLETION**

Work completion determined after a thorough inspection to ensure that the job meets all contractual specifications.

**CONSTRUCTION SAFETY**

The optimum degree of safety within the constraints of construction effectiveness, time and cost through specific application of safety management throughout all phases of the construction. (NTSC)

**CONSTRUCTION, FIRE RESISTANCE NON-COMBUSTIBLE**

Non-combustible construction which has a fire resistance rating through application of a protective fire resistive membrane such as masonry or concrete to supporting steel.

**CONSTRUCTION, NON-COMBUSTIBLE**

Construction minimizing the hazards of fire by the use of non-combustible materials for structural elements or assemblies, and by limiting the amount of combustible materials that are incorporated into the building construction.



**CONSULTANT**

A firm or individual which is awarded a contract for specialized services and advice in financial, economic, accounting, engineering, legal or administrative matters who are specially trained, experienced and competent.

**CONSULTANT CONTRACT (INCLUDING ALL MODIFICATIONS AND SUPPLEMENTS THERETO)**

A contract that the MTA awards for specialized services.

**CONSUMER PRICE INDEX (CPI)**

A measurement of the overall price change for a package of consumer goods purchased by a typical urban resident or worker, compiled by the Bureau of Economic Analysis of the Department of Commerce. The CPI does not measure the overall level of price change in the total economy. (See Also Gross National Product Deflator). (TRB)

**CONTACT RAIL**

On the Red Line, electrical conductor (adjacent to running rail) which provides 750 volts direct current to the vehicle through contact with collector shoes on the vehicle. Often referred to as "the third rail."

**CONTACT RAIL END APPROACH**

On the Red Line, the tapered end of the contact rail which provides a method for lifting the collector shoes onto the contact rail.

**CONTACT RAIL SIDE APPROACH**

On the Red Line, a mounted extension of the contact rail which provides a method for lifting the vehicle collector shoes onto the contact rail.

**CONTACT SHOE, OVERHEAD**

SEE: Overhead Contact Shoe.

**CONTACT WIRE**

Electrical conductor which carries 750 volts direct current to the rail vehicle through contact with the pantograph.

**CONTAINER (COFC)**

A standardized shipping container which can be transported by ship, railroad car, or highway chassis. By the 1990s a very large proportion of international non-bulk traffic was being moved in containers, often in entire trainloads chartered by shipping companies. Also see COFC.

**CONTEMPORARY ART**

Art made after 1945.

**CONTINGENCY**

An amount that is included in the baseline project budget estimate to cover additional project execution costs which may include: uncertainties in the design; changes in construction technology; changes in site conditions; schedule changes; changes in specifications; changes in economic conditions (construction, equipment, etc.); and changes in safety and regulatory requirements.

**CONTINUOUS BRAKE**

SEE: Brake, Continuous.

**CONTINUOUS INDUCTIVE TRAIN CONTROL SYSTEM**

SEE: Control System, Continuous Train.

**CONTINUOUS TRANSIT SYSTEM**

SEE: Transit System, Continuous.

**CONTINUOUS WELDED RAIL (CWR)**

Rail consisting of pieces welded together into long lengths, thus reducing rail joints. Provides smoother ride and less maintenance expense than rail with bolted joints. Rail strings can be as long as the distance between switches or insulated joints, often miles. Rail strings about 1500 feet long are usually fabricated in welding plants using an electric flash-butt process, then loaded onto rail rack cars for movement to the place of installation. Also called Ribbon Rail.

**CONTRACT**

A written agreement executed by the MTA and an individual or firm which thereby becomes the Contractor. The contract sets forth the rights or obligations of the parties in connection with the furnishing of goods or services (including construction).

**CONTRACT ADMINISTRATION**

A system for ensuring that Contractors conform to the terms, conditions, and specifications of the contract and for the conduct of any MTA administrative requirements during the life of the contract.

**CONTRACT AMENDMENTS**

SEE: Contract Modifications.

**CONTRACT AUTHORITY**

A federal budgetary term that refers to a form of budget authority permitting obligations to be incurred in advance of appropriations. Advance obligations, however, have been limited by the appropriations committees with obligation limitations.

**CONTRACT CLOSEOUT**

A formal process ending the life of a contract, including the resolution and closeout of any open issues relating to payment and services. The closeout indicates that required services have been rendered to the MTA and that all payments for such services have been received.

**CONTRACT DRAWINGS**

The plans, showing locations, character, dimensions of the work to be performed under the contract, pursuant to the contract specifications or amendments thereto.

**CONTRACT MAINTENANCE**

The repair, overhaul and testing of parts, modules, and assemblies under contract to other than an operator's own personnel. The work may be done on or off the operating property. The term also can apply to tasks such as facilities janitorial work, landscaping, etc. it is often used for specific items such as elevators, motors, bearings, etc. generally impacted by labor agreements.

**CONTRACT MODIFICATIONS**

Written alterations in the specifications, delivery point, rate of delivery, contract period, price, quantity, of other contract provisions of an existing contract, where accomplished by unilateral action in accordance with a contract provision or by a mutual action of the parties to the contract. It includes both bilateral actions such as Change Orders and notices of the exercise of an option. Contract Modifications may be referred to as a "Contract Amendment."

**CONTRACT RENT**

The amount of rent provided for under the terms of the lease; the actual rent that is agreed to be paid.

**CONTRACT SCOPE**

A brief narrative of the objectives of the contract which is expanded in the Scope of Work.

**CONTRACT, COST-PLUS**

SEE: Cost-Plus Contract.

**CONTRACTING OFFICER**

The Chief Executive Officer (CEO) or such person(s) as the CEO shall designate in writing to act on the CEO's behalf, having authority to authorize contract action. Whenever the term "Contracting Officer" shall appear in this document, the term shall also include authorized designee(s). (The authority of the designees varies significantly depending on the value and type of procurement action.)

**CONTRACTING OUT**

A procedure followed by many organizations to let certain parts of the operation to private contractors, instead of having their own employees perform the work. A frequent rationale for contracting is the idea that the work can be performed more efficiently and with less expense to the main organization. See also Privatization. (TRB)

**CONTRACTOR**

The person or organization identified as being the other party to a contract with the MTA.

**CONTRAFLOW**

Movement in a direction opposite the normal flow of traffic. The term usually refers to flow opposite to the heavier flow of traffic. (TRB)

**CONTRAFLOW LANE**

A highway or street lane on which public mass transit or other specifically designated vehicles operate in a direction opposite to that associated with the normal flow of traffic on that lane during the specified period of the day or at all times; reserved lane for buses on which the direction of bus traffic is opposite to the flow to traffic on other lanes.

**CONTROL DEVICE, GRADE CROSSING TRAFFIC**

SEE: Grade Crossing Traffic Control Device.

**CONTROL DEVICE, TRAFFIC**

SEE: Traffic Control Device.

**CONTROL GROUP**

Members of the operations area that are responsible for the collection, logging and submission of input for the various user groups.

**CONTROL RISK**

The risk that a misstatement which could occur in an assertion will not be prevented or detected on a timely basis by an entity's internal controls structures.

**CONTROL SECTION**

The area of the control processing unit that executes software, allocates internal memory, and transfers operation between the arithmetic-logic, internal storage and output section of the computer.

**CONTROL SYSTEM, ASYNCHRONOUS NETWORK**

A nonsynchronized electric system for controlling headways. The transit unit (car or train) is not rigidly controlled as a function of time. The longitudinal control of the transit unit is independent of line traffic when it is not in close proximity to another transit unit but usually becomes a car-following procedure when transit units are close to each other. (TRB)

**CONTROL SYSTEM, AUGMENTED BLOCK GUIDANCE**

An automated block control system for transit units (cars or trains) with short headways. (TRB)

**CONTROL SYSTEM, AUTOMATIC BLOCK SIGNAL**

Control System, Automatic Block Signal (ABS). A system of governing train separation in which the signals are controlled by the trains themselves. The presence or absence of a train in a block is determined by a track circuit. If the circuitry fails, a restrictive signal is displayed. (TRB)

**CONTROL SYSTEM, CAR-FOLLOWING**

A method of transit unit (car or train) longitudinal control whereby a following transit unit senses its position and velocity in relation to that of the transit unit preceding it and remains a specified distance behind it. Also see Control System, Asynchronous Network. (TRB)

**CONTROL SYSTEM, CENTRALIZED TRAFFIC (CTC)**

In rail operations, a traffic control system in which signals and switches are controlled from a remotely location (Centralized Traffic Control) panel. (TRB)

**CONTROL SYSTEM, COMMAND AND CONTROL**

SEE: Command and Control System.

**CONTROL SYSTEM, CONTINUOUS TRAIN**

A locomotive or self-propelled car apparatus that is constantly in contact with the track circuit and is immediately responsive to a change of conditions in the controlling section that affects train movement. (TRB)

**CONTROL SYSTEM, MULTIPLE-UNIT**

A system that controls the operation of two or more rail motor cars in a train through the simultaneous control of the train by one operator. (TRB)

**CONTROL SYSTEM, SYNCHRONOUS NETWORK (CONTROL SYSTEM, MOVING SLOT)**

A position control system in which the transit unit (car or train) synchronizes itself with the preprogrammed trajectory of one of a set of moving points or slots monitored by a central computer. A complete, conflict-free trajectory must be available for the assigned slot from origin to destination before the transit unit is permitted to depart. (TRB)

**CONTROL SYSTEM, WAYSIDE**

A command and control system in which transit units (cars or trains) are controlled by electronic or mechanical devices along the track or other guideway. (TRB)

**CONTROL, DUAL**

SEE: Transit System, Dual-Mode and Bus, Dual-Mode.

**CONTROL, QUALITY**

SEE: Quality control.

**CONTROL, YARD**

The location from which yard operations are authorized and directed.

**CONTROLLED ACCESS**

SEE: Access, Limited.

**CONTROLLER**

The designated rail employee on duty at the Central Control Facility (CCF), or other location, having absolute authority over train movements and other activities affecting train movements and mainline operations.

**CONTROLLER, CAM**

SEE: Cam Controller.

**CONTROLLER, TEST**

The designated employee on duty at the Test Control Facility having absolute authority over all train movements on or affecting the designated test operations area.

**CONTROLLER, YARD**

The designated rail employee on duty in Yard Control, or other location, having absolute authority over train movements and other activities within yard limits.

**CONTROLS, PASSENGER**

SEE: Passenger Controls.

**COP**

Certificate of Participation. A debt obligation used to finance a large lease obligation.

**CORDON COUNT**

In planning, a count of vehicles and people across a designated (cordon) line to determine the total flow (people and vehicles by mode and time period) into and out of the study area. (TRB)

**CORDON LINE**

In planning, an imaginary line circumscribing a specific geographic study area. (TRB)

**CORPORATE EMPLOYEE TRANSPORTATION COORDINATOR**

The individual assigned to implement regulation XV Trip Reduction Plan. Also known as Corporate ETC.

**CORRECTIVE CONTROLS**

These controls are designed to correct errors, omissions, and unauthorized uses and intrusions once they are detected.

**CORRECTIVE MAINTENANCE**

The action taken to restore a failed item of equipment to an operable state.

**CORRELATED SUBQUERIES**

In Structured Query Language (SQL), a subquery in which processing the inner query depends on data from the outer query. (Modern Database Management- 4th Edition)

**CORRIDOR**

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

**CORRIDOR, JOINT-USE**

SEE: Joint-Use Corridor.

**CORRUGATED RAIL**

A rough condition of alternate ridges and grooves that develops on rail tread in service. (TRB)

**COST**

The outlay or expenditure made to achieve an objective. Also see Capital Costs and Operating Costs. (TRB)

**COST ALLOCATION**

Dividing costs among the various purposes or categories involved. (TRB)

**COST ANALYSIS**

Review and evaluation of cost data submitted by an offeror in support of a contract price, or a contractor in support of a contract modification, including review and evaluation of the judgmental factors applied in projecting from the data to the estimated costs in order to form an opinion of the degree to which the proposed cost represents what performance should cost.

**COST CONTRACT**

A cost-reimbursement contract under which the contractor receives no fee.

**COST EFFICIENCY**

A quantitative measure of efficiency or how well something contributes to the attainment of goals and objectives measured against its cost. For transportation systems, cost efficiency is usually measured as the ratio of the cost of a system to the level of service. Examples of four major unit cost measures that might be used (either separately or together) to determine cost efficiency are total operating cost per vehicle hour, total operating cost per vehicle mile, total operating cost per passenger trip, and total operating cost per passenger mile. See also Efficiency. (TRB)

**COST RECOVERY RATIO**

The ratio of total revenues to total costs; the inverse of operating ratio. It is often used for evaluation of alternative plans. (TRB)

**COST, INCREMENTAL (INCREMENTAL COST)**

The net change in dollar costs that is directly attributable to a given decision or proposal when compared with some other alternative (including the existing situation or the do-nothing alternative). (TRB)

**COST-BENEFIT ANALYSIS (CBA)**

An analytical technique that compares the societal costs and benefits (measured in monetary terms) of proposed programs or policy action. Identified losses and gains experienced by society are included, and the net benefits created by an action are calculated. Alternative actions are compared to allow selection of one or more that yield the greatest net benefits or benefit-cost ratio. (TRB)

**COST-EFFECTIVENESS ANALYSIS**

An analytical technique used to 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 (but not necessarily) be measured in monetary terms. (TRB)

**COSTING, LIFE-CYCLE**

SEE: Life-Cycle Costing.

**COST-OF-LIVING ALLOWANCE (COLA)**

An increase or decrease in employees' wages or salaries made on the basis of changes in agreed-upon economic indices, usually the Consumer Price Index (CPI). (APTA)

**COST-PLUS CONTRACT**

A contract in which the purchase price is determined on the basis of actual costs plus a predetermined and mutually agreed-on fee, either a lump-sum or a fixed percentage of total costs. (TRB)

**COST-PLUS-FIXED FEE**

A cost-reimbursement type contract which provides for the payment of a fixed fee to the Contractor. The fixed fee, once negotiated, does not vary with actual cost, but it may be adjusted as a result of any subsequent changes to the work or services to be performed under the contract.

**COST-REIMBURSEMENT CONTRACT**

A contract which provides for payment of allowable costs incurred in the performance of a contract to the extent prescribed in the contract. This type of a contract establishes an estimate of total cost for the purpose of obligating funds, and establishes a ceiling which the contract may not exceed (except at its own risk) without prior approval of, or subsequent ratification by, the Contracting Officer.

**COUNCIL OF GOVERNMENTS**

Council Of Governments (COG). The COG is an association of cities or other government entities that have entered into an agreement for specific purposes to benefit its members and the communities, organizations and individuals they serve. (TRB)

**COUNCIL OF STATE GOVERNMENTS**

(CSG) A joint agency of all state governments. It works to strengthen state government, promotes intergovernmental cooperation, disseminates information needed by states, and assists states in solving specific problems. It maintains the State Government Research Institute. (TRB)

**COUNT (TRAFFIC COUNT)**

In transportation, a process that tallies a particular movement of people or vehicles past a given point during a stated time period. It may be a directional or a two-way value and is also known as a Traffic Count. A volume of people or vehicles. (TRB)

**COUNT, CORDON**

SEE: Cordon Count.

**COUNT, ON-AND-OFF**

SEE: Check.

**COUNT, PASSENGER**

SEE: Passenger Count.

**COUNTYWIDE PLANNING DEPARTMENT (CWP)**

The Countywide Planning Department is responsible for providing MTA with nationally-recognized leadership, expertise and capability in program development, policy planning and technical analysis in the implementation of transportation system improvements and in the management of travel demand. The CPD is directly responsible for the conducting of statutorily mandated programs related to the ISTEAs and the Congestion Management Program.

**COUPLE**

Connecting rail vehicles together in order to permit the resulting train to be operated from one cab.

**COUPLER**

A device located at each end of each car and locomotive which mechanically connects cars/locomotives together. It is made of cast steel and roughly resembles a right hand. In transit applications, the coupler also connects the electrical and air systems between cars.

**COUPLER, AUTOMATIC**

1. A coupler that operates automatically. It may also be capable to uncoupling automatically. 2. An automatic connector that joins electric or pneumatic train lines together between rail cars. (TRB)

**COURTESY CARD**

Card passed out to passengers to record their comments on accidents or other incidents requiring witnesses.

**COVERAGE AREA**

In transit operation, the geographical area that a transit system is considered to serve, normally based on acceptable walking distances (e.g. 1/4 mile, 0.4 km) from loading points. For suburban rail transit that depends on automobile access (park and ride or kiss and ride), coverage may extend several miles. (TRB)

**COVERBOARD**

The protective fiberglass covering over the contact rail.

**COWCATCHER**

SEE: Pilot.

**CPFF CM**

Cost Plus - fixed fee construction management contract.

**CPI**

Consumer Price Index. A measurement of inflation of goods and services used by consumers.

**CRASHWORTHINESS**

The capability of a vehicle to act as a protective container and energy absorber under impact conditions. (TRB)

**CREEP**

SEE: Rail Creep.

**CROSS ELASTICITY**

SEE: Elasticity, Cross.

**CROSSING PROTECTION**

Gates, lights and bells warning of impending train movement to motorists and pedestrians.

**CROSSING, RAILWAY**

SEE: Crossing, track.

**CROSSING, TRACK (RAILWAY CROSSING)**

An assembly of rails and frogs that allows crossing of two tracks at grade. (TRB)

**CROSSOVER**

The arrangement of tracks and switches providing a route from one track to another.

**CROSSPASSAGE**

Exits connecting mainline tracks which allow access or egress from one track to the other or to street level at designated locations.



**CROSSTIE**

SEE: Tie (Crosstie).

**CROSSTOWN SERVICE**

Non-radial bus or rail service which does not enter the Central Business District (CBD). (APTA)

**CRP**

Combined Road Plan, A Federal Aid Urban (FAU) program to assist localities in road and highway projects. FAU has been replaced by Intermodal Surface Transportation Efficiency Act (ISTEA) and the CRP program is currently under review.

**CRT**

Cathode Ray Tube. The picture tube of a computer monitor. Also a terminal attached to a multi-user computer, such as a mainframe.

**CRUISE SPEED OR VELOCITY**

SEE: Velocity, Cruise.

**CRUSH (STANDING) LOAD**

The maximum passenger capacity of a vehicle in which there is little or no space between customers, and more customers can't enter without causing discomfort to others.

**CRUSH CAPACITY**

SEE: Capacity, Crush.

**CSG**

SEE: Council of State Governments.

**CTC (OPERATIONS)**

SEE: Control System, Centralized Traffic.

**CTC (PLANNING)**

SEE: California Transportation Commission.

**CTP**

Corporate Transit Partnership. This program provides transit service marketing and information to corporations and large employment centers.

**CTSA**

Consolidated Transportation Services Agency. The Access Services Incorporated (ASI) has been designated as the CTSA for Los Angeles County, to coordinate all paratransit services to ensure compliance with the Americans with Disabilities Act (ADA). Also see Access Services Incorporated.

**CULVERT**

Any drainage or service structure under a roadway or guideway with a clear opening of 20 ft (6 m) or less measured along the center of the roadway or guideway. (TRB)

**CURATOR**

A trained arts professional who organizes exhibitions.

**CURB-TO-CURB SERVICE**

SEE: Service, Curb-To-Curb.

### **CURRENT BUDGET**

The original budget plus all budget amendments adopted by formal MTA action. Budget amendments are changes to the "scope work." The Project Manager has the authority to approve budget fund shifts from one budget category to another via the Project Budget Changes Request (PBCR) procedure as long as the "bottom line" project total is maintained.

### **CURRENT COLLECTOR**

The mechanical component on an electric rail car that makes contact with the conductor that distributes the electric current (See also: Overhead Contact Shoe, Pantograph, Third-Rail Shoe, and Trolley Pole. (TRB)

### **CUT**

1) verb- To uncouple. 2) noun- A group of cars coupled together.

### **CUT LEVER**

Rod attached to coupler which can uncouple coupled cars.

### **CUT LINE**

1. In planning, an imaginary line placed at a strategic location to intercept all the links in an identified corridor. 2. In transit operations, the transverse division of a route as by a planned service change or an emergency. (TRB)

### **CUT-AND-COVER**

A method of construction that consists of excavating the terrain from ground level, placing a structure in the excavation, and then filling over the structure. (TRB)

### **CUTAWAY**

After completing a one on one interview, photographer shoots footage of reporter and interviewee talking.

### **CUTTING**

SEE: Run Cutting.

### **CWR**

SEE: Continuous Welded Rail.

### **CYBERSPACE**

Originally used in "Neuromancer," William Gibson's novel of direct brain-computer networking, refers to the collective realms of computer-aided data.

## **D**

### **D/C RATIO**

SEE: Demand-To-Capacity (D/C) Ratio.

### **DAB**

Dial-A-Bus. SEE: Transportation System, Dial-A-Ride.

**DAMPER**

An emergency switch which stops a bus engine by cutting off its air supply. Dampers are not used on newer buses.

**DAR**

Dial-A-Ride. Curb-to-curb transit service provided to the general public and/or elderly or disabled persons.

**DASHSIGN**

A card placed in a bus windshield, in addition to or instead of a headsign denoting type of service or destination.

**DATA ADMINISTRATION**

A high-level function that is responsible for the overall management of data resources in an organization, including maintaining corporate-wide definitions and standards. Also see Database Administration, Data Steward. (Modern Database Management- 4th Edition)

**DATA CUSTODIAN**

Individuals and departments responsible for the storage and safeguarding of computerized information. This typically is the Information Technology Services (ITS) group.

**DATA DESCRIPTION LANGUAGE (DDL)**

The language component of a Database Management System (DBMS) that is used to describe the logical (and sometimes physical) structure of a database. Different DDLs may exist to describe either the whole database or particular views of part of a database. (Modern Database Management- 4th Edition)

**DATA DIALING**

Changing data for malicious intents before or during input into the system.

**DATA DICTIONARY**

A data dictionary is a database which contains the name, type, range of values, source and authorization for access for each data element in a database. It also indicates which application programs use that data so that when a data structure is contemplated, a list of the affected programs can be generated. The data dictionary may be a stand-alone information system used for management for documentation purposes, or it may control the operation of database.

**DATA FLOW DIAGRAM (DFD)**

A graphic model of the flow, use, and transformation of data through a set of processes. (Modern Database Management- 4th Edition)

**DATA INTEGRITY MANAGEMENT SUBSYSTEM**

Subsystem that provides facilities for managing the integrity of data in the database and the integrity of metadata in the repository. (Modern Database Management- 4th Edition)

**DATA ITEM**

SEE: Attribute.

**DATA LEAKAGE**

Siphoning out or leaking information by dumping computer files or stealing computer reports and tapes.

**DATA MANIPULATION LANGUAGE (DML)**

A language component of a Database Management System (DBMS) that is used by a programmer to access and modify the contents of a database. (Modern Database Management- 4th Edition)

**DATA OWNER**

Managers or directors who have responsibility for the accurate reporting and use of the computerized data.

**DATA SECURITY**

Those controls which protect information, both computerized and hardcopy, from accidental or intentional unauthorized additions, deletions, disclosure, modification, or destruction.

**DATA STEWARD**

Manages a specific logical data resource or entity for all business functions and data processing systems that originate or use data about the assigned entity. Also see Data Administration, Database Administration. (Modern Database Management- 4th Edition)

**DATABASE**

1. A collection of data from which information is derived and from which decisions can be made. 2. A nonredundant collection of data items processable by one or more computer applications. (TRB)

**DATABASE ADMINISTRATION**

A technical function that is responsible for physical database design and for dealing with technical issues such as security enforcement, database performance, and backup and recovery. Also see Data Administration. Data Steward. (Modern Database Management- 4th Edition)

**DATABASE ADMINISTRATOR**

An individual or department responsible for the security and information classification of the shared data stored on a database system. This responsibility includes the design, definition and maintenance of the database.

**DATABASE APPLICATION SYSTEM**

The data definitions, stored data, transactions, inquiries, screens, reports, and other programs needed to capture, maintain, and present data from a database. (Modern Database Management- 4th Edition)

**DATABASE MANAGEMENT SYSTEM (DBMS)**

A complex set of software programs that control the organization, storage, and retrieval of data in a database. It also controls the security and integrity of the database.

**DATABASE MANAGEMENT SYSTEM (DBMS) ENGINE**

The central component of a Database Management System (DBMS). Provides access to the repository and the database and coordinates all of the other functional elements of the Database Management System (DBMS). (Modern Database Management- 4th Edition)

**DATABASE SECURITY**

Protection of the database against accidental or intentional loss, destruction, or misuse. (Modern Database Management- 4th Edition)

**DATABASE SERVER**

The (back-end) portion of the client/server database system running on the server and providing database processing and shared access functions. See also Client/Server Architecture, Database Manager System (DBMS) Engine. (Modern Database Management- 4th Edition)

**DATABASE SPECIFICATIONS**

These are the requirements for establishing a database application. They include field definitions and reporting requirements for the individual information in the database.

**DBE**

Disadvantaged Business Enterprise (DBE). (TRB)

**DEACCESSION**

Process to formally remove a public artwork from its permanent site.

**DEAD ON THE LAW**

Train service employee who has worked to the limit of the hours of service permitted by law.

**DEAD SECTION**

A section of track, either within a track circuit or between two track circuits, the rails of which are not part of a track circuit. (NTSC)

**DEAD TIME**

SEE: Time, Allowance.

**DEADHEAD**

1. The movement of a transit vehicle without customers aboard, often to and from a terminal or from one route to another. 2. A non-fare-paying passenger, most commonly a transit system employee traveling to work using a pass.

**DEADHEADING**

Driving a bus or operating a train that is not in passenger service.

**DEADMAN (HEAVY RAIL)**

Device built into the Manual Controller which shall be held in the activated position before movement can occur ) and which is designed to bring a moving train to a full service stop if proper positioning is not maintained while the train is being operated in Manual Train Operation (MTO), Restricted Manual Operation (RMO), and Emergency Manual Operation (EMO).

**DEADMAN (LIGHT RAIL)**

Spring loaded safety device incorporated into the Master Control handle which must be in the activated position before movement can occur and which is designed to bring a moving train to a full service stop if the activated position is not maintained.

**DEADMAN (METROLINK)**

A device to actuate the train brake if the locomotive engineer becomes incapacitated.

**DEBARMENT**

A Federal process whereby the U.S. Comptroller General compiles a list of persons or firms not eligible for contract award if Federal funds are involved. Also see Suspension.

**DEBT SERVICE FUND**

Funds to account for those resources used to repay the principal and interest on long-term debt.

**DECELERATION**

Decrease in velocity per unit time; in transit practice, often measured in feet per second squared (meters per second squared) or, in the United States, miles per hour per second. (TRB)

**DECENTRALIZATION**

The process of distributing computer processing to different locations within an organization.

**DECISION SUPPORT SYSTEM (DSS)**

An interactive system that provides the user with easy access to decision models and data in order to support semi-structured decision-making tasks.

**DECK**

The floor of a rail car, bus, or boat. (TRB)

**DEDICATED FUNDING SOURCE**

A source of monies which by law is available only to support a specific purpose, and cannot be diverted to other uses. (APTA)

**DEDICATED FUNDS**

SEE: Funds, Dedicated.

**DEDICATED LINE**

A private line leased from a telecommunications carrier.

**DE-ENERGIZE**

To remove electrical power.

**DEFAULT VALUE**

A design value that is based on experience or on studied conclusions and that is used as a substitute value when an actual value is not available. (TRB)

**DEFECT**

A fault or imperfection.

**DEFLATOR, GROSS NATIONAL PRODUCT**

SEE: Gross National Product Deflator.

**DELAY TIME**

SEE: Time, Delay.

**DELETION RULE**

A row should not be deleted from the reference table if there is a matching row (or rows) in the reference table. (Modern Database Management- 4th Edition)

**DELPHI PROCESS (DELPHI METHOD, DELPHI TECHNIQUE)**

A method of allowing a group of individuals to deal with a complex problem as a single unit, with the goal of achieving a consensus. A typical Delphi process could involved distributing a questionnaire to participants so that they could rank problems in order of priority, summarizing the results, together with another questionnaire. As these steps are repeated, the distribution of individual responses narrows, and the participants move toward a consensus or to polarization. (TRB)

**DEMAND**

1. The quantity (of transportation) desired. 2. In an economic sense, a schedule of the quantities ((of travel) consumed at various levels of price or levels of service offered (by the transportation system). (TRB)

**DEMAND ANALYSIS**

A study of the factors that affect demand, performed by collecting data and using various analytical techniques to understand demand. (TRB)

**DEMAND CURVE**

The quantities of a given product or service that people are willing to purchase as a function of its given unit cost. (TRB)

**DEMAND FORECASTING**

SEE: Forecasting, Demand.

**DEMAND FORECASTING MODEL**

A model that relates the amount of travel and price of the transportation service and the socioeconomic characteristics of the potential traveler. (TRB)

**DEMAND JITNEY SERVICE**

SEE; Service, Jitney.

**DEMAND MODEL (DEMAND-FORECASTING MODEL)**

A model that relates the amount of travel to the level and price of the transportation service and the socioeconomic characteristics of the potential traveler. (TRB)

**DEMAND MODEL, AGGREGATE**

A model calibrated by combining observations of travel by individuals into geographic or demographic units that are used to estimate new flows when service attributes or unit sizes change. (TRB)

**DEMAND MODEL, DIRECT**

SEE: Direct Demand Model.

**DEMAND RESPONSIVE**

Non-fixed-route service utilizing vans or buses with passengers boarding and alighting at pre-arranged times at any location within the system's service area. Also called "Dial-A-Ride."

**DEMAND RESPONSIVE TRANSPORTATION SYSTEM**

SEE: Transportation System, Demand-Responsive.

**DEMAND-ACTUATED TRANSPORTATION SYSTEM**

SEE: Transportation System, Demand-Actuated.

**DEMAND-TO-CAPACITY (D/C) RATIO**

The relationship between the number of vehicle trips operating on a facility, versus the number of vehicle trips that can be accommodation that facility.

**DEMOGRAPHIC DATA**

Statistics related to the size, density, distribution, vital statistics, social structure, and related characteristics of human populations. (TRB)

**DENSITY, TRAIN**

SEE: Train Density.

**DEPARTMENT OF TRANSPORTATION (DOT)**

SEE: DOT (Federal).

**DEPENDENT PAIR**

On the Red Line, "A" and "B" cars semi-permanently coupled together to form a single operating unit.

**DEPENDENT VARIABLE**

SEE: Variable, Dependent.

**DEPENDENT, TRANSIT**

SEE: Transit Dependent.

**DERAIL**

1. Pronounced with emphasis on the "De" portion. A safety device which will cause an uncontrolled movement to derail before moving to a place where a collision with other equipment could occur. Often linked to signals. 2. To run off the track.

**DE-RAIL DEVICE**

Track device designed to cause rail equipment to derail. Often linked to signals.

**DERAILMENT**

Accidental occurrence where train wheels leave the rail. Can be minor, with only one wheel down on the ties, or a catastrophic wreck of many cars and locomotives.

**DES**

Data Encryption Standard. A standardized encryption technique that allows binary code to be scrambled into an undetectable stream of bits for transmission over a public network.

**DESCRIBER**

SEE: Train Describer.

**DESCRIPTION, JOB**

SEE: Job Description.

**DESCRIPTIVE LITERATURE**

Information such as catalog cuts, illustrations, drawings, and brochures which show the characteristics of construction of a project or explain its operation. The Descriptive Literature may be furnished by a Bidder or Offeror as part of its Bid to describe the products offered in its Bid or Proposal and required only when the MTA deems such literature is need to enable it to determine whether the products offered meet the specifications and to establish exactly what the Bidder proposes to furnish.

**DESIGN CAPACITY**

SEE: Capacity, Design.

**DESIGN HOURLY VOLUME (DHV)**

The amount of traffic a transportation facility is designed to carry in 1 hr. (TRB)

**DESIGNATED RECIPIENT**

A public body, designated in each urban area, that must have the legal authority to receive and dispense federal funds. (TRB)

**DESIRE LINE**

A straight line on a map that connects the origin and destination of a trip (theoretically, the ideal or most desirable route) and may indicate by its width or density the volume of trips between that origin and destination. (TRB)



**DESTINATION**

1. The point at which a trip terminates. 2. In planning, the zone in which a trip ends. (TRB)

**DESTINATION SIGN**

A sign on a transit vehicle indicating the vehicle's route number, direction or destination.

**DETERMINANT**

The attribute on the left-hand side of the keyboard in a functional dependency; A is a determinant in the following functional dependency: A->B. (Modern Database Management- 4th Edition)

**DETERMINATIONS AND FINDINGS (D&F)**

A document created for the Contract file to record all the facts that form the basis for an important decision affect a procurement or contract action.

**DETERMINISTIC MODEL**

A model that represents mathematical events and responses to these events in a manner that resembles the interaction of cause and effect in a real system. (TRB)

**DETERMINISTIC PROCESS**

A process in which all factors are known and predictable and that produces a fixed replicable output. See also Stochastic Process. (TRB)

**DETERMINISTIC TRIP ASSIGNMENT**

SEE: Trip Assignment, Deterministic.

**DETOUR**

A temporary change in a portion of a transit route or highway. See also Reroute. (TRB)

**DEVELOPMENT AND DEMONSTRATION PROGRAM, RESEARCH**

SEE: Research, Development and Demonstration Program.

**DEVELOPMENT PROGRAM, TRANSIT**

SEE: Transit Development Program.

**DHV**

Design Hourly Volume.

**DIAGNOSTIC TEST EQUIPMENT**

Pre-programmed automatic-test sets used to check car circuitry and subsystems. Usually for use in shops, but may refer to portable sets on cars or trains.

**DIAL-A-BUS OR DIAL-A-RIDE**

SEE: Transportation System, Dial-A-Ride; Demand Responsive.

**DIALBACK**

Used as a control over dialup telecommunications lines. The telecommunications link established through dialup on the computer from a remote location is interrupted so the computer can dial back to the caller. The link is permitted only if the caller is from a valid phone number or telecommunications channel.

**DIAMOND LANES**

SEE: HOV Lanes.

**DIESEL MULTIPLE-UNIT**

SEE: Car, Multiple-Unit.

**DIESEL RAIL CAR**

SEE: Car, Rail Diesel.

**DIESEL-ELECTRIC LOCOMOTIVE**

SEE: Locomotive, Diesel-Electric.

**DIESEL-HYDRAULIC LOCOMOTIVE**

SEE: Locomotive, Diesel-Hydraulic.

**DIFFERENTIAL TECHNIQUE, SEMANTIC**

SEE: Semantic Differential Technique.

**DIGITAL**

A device or method that uses discrete variations in voltage, frequency, amplitude, locations, etc. to encode, process, or carry binary (zero or one) signals for sound, video, computer data or other information.

**DIRECT DEMAND MODEL**

A model that simultaneously (in a single equation) predicts all travel choices for aggregate groups of individuals. (TRB)

**DIRECTIONAL SPLIT**

The proportional distribution between opposite flows of traffic on two-way facilities. (TRB)

**DIRECTNESS, COEFFICIENT OF**

SEE: Coefficient Of Directness.

**DISABILITY, PUBLIC TRANSPORTATION**

SEE: Handicapped.

**DISADVANTAGED BUSINESS ENTERPRISE**

A for-profit small business concern which is at least 51% owned by one or more socially and economically disadvantaged individuals or, in the case of a corporation, in which 51% of the stock is owned by one or more such individuals; and whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

**DISADVANTAGED BUSINESS ENTERPRISE (DBE)**

A business owned and operated by one or more socially and economically disadvantaged individuals. Society and economically disadvantaged individuals include African Americans, Hispanic Americans, Native Americans, Asian Pacific Americans or Asian Indian Americans and any other minorities or individuals found to be disadvantaged by the Small Business Administration (SBA) under Section 8(a) of the Small Business Act. (APTA)

**DISADVANTAGED, TRANSPORTATION**

SEE: Transportation Disadvantaged.

**DISAGGREGATE DATA**

Information on the individual as opposed to averages or similar descriptors of a group of individuals. (TRB)

**DISAGGREGATE DEMAND MODEL**

A model that is calibrated by using the observations of the travel choice behavior of individuals directly and is usually set up as a probabilistic model. (TRB)

**DISC BRAKE**

SEE: Brake, Disc.

**DISCHARGE**

To let passengers exit the vehicle. (TRB)

**DISCRETIONARY FUNDS**

Any funds that have restricted allocation toward certain uses. Decisions on the allocation of discretionary funds are usually made by an agency or person on the basis of that agency's or person's choice or judgment and in accordance with criteria set out in laws or regulations.

**DISCRETIONARY SPENDING**

A federal budgetary term that refers to any funds whose distribution is not automatic. Discretionary spending encompasses programs controlled by annual appropriations bills and is subject to the constraints imposed by the discretionary spending limits set in the balanced budget law. (APTA)

**DISINCENTIVE**

Something that discourages people from acting in a certain way. For example, high parking fees or tolls are disincentives to automobile use. (TRB)

**DISPATCH**

The act of authorizing trains onto the main line.

**DISPATCH POINT**

1. The location at which operating employees receive their assignments. 2. The location at which trips are started or restarted. (TRB)

**DISPATCHER**

Employee responsible for keeping trains or buses on schedule.

**DISPATCHING**

1. In rail operations, the process of starting a transit unit (car or train) into service from a terminal, yard, or transfer track. 2. In demand-responsive transportation systems, the process of relaying service instructions to drivers. The procedure may include vehicle scheduling, routing, and monitoring, and it can be manual or partly or fully automated. 3. The relaying of service instructions to vehicle drivers or operators. (TRB)

**DISTANCE, LINKED TRIP**

SEE: Trip Distance, linked.

**DISTANCE, TOTAL TRAVEL**

SEE: Trip Distance, Linked.

**DISTRIBUTED DATA PROCESSING NETWORK**

A system of computers connected together by a communications network. Each computer system processes its data, and the network supports the system as a whole.

**DISTRIBUTION FLOW**

SEE: Trip Assignment.

**DISTRIBUTION, TRIP LENGTH FREQUENCY**

SEE: Trip Length Frequency Distribution.

**DISTRIBUTOR STREET**

SEE: Street, Collector-Distributor.

**DISTRICT, ENUMERATION**

SEE: Census Enumeration District.

**DISTRICT, OUTLYING BUSINESS DISTRICT**

SEE: Outlying Business District.

**DIVERGENCE, POINT OF**

SEE: Point Of Divergence.

**DIVERGING ROUTE**

A route which changes a train's directional movement over a reverse switch position allowing for a crossover movement.

**DIVERSION TRIP ASSIGNMENT**

SEE: Trip Assignment, Diversion.

**DIVERTED DEMAND OR TRAFFIC**

SEE: Traffic, Diverted.

**DIVISION**

A facility where vehicles are stored, cleaned, repaired and maintained and out of which routes are operated. Include facilities for operators.

**DIVISION OF WORK**

SEE: Work sharing.

**DLIM**

Double-sided liner induction motor. SEE: Motor, Double-Sided Linear Induction.

**DMU**

Diesel multiple-unit car. SEE: Car, Multiple-Unit.

**DOCK**

SEE: Bus Bay.

**DOJ**

United States Department of Justice. MTA has a multi-year grant from the DOJ for community policing.

**DOL**

U.S. Department of Labor.

**DOMAIN**

The set of all data types and ranges of values that an attribute may assume. (Modern Database Management- 4th Edition)

**DOMAIN, EMINENT**

SEE: Eminent Domain.

**DOMAIN-KEY NORMAL FORM (DK/NF)**

A relation is in domain-key form if and only if every constraint on the relation is a logical consequence of key constraints and domain constraints. (Modern Database Management- 4th Edition)

**DO-NOTHING ALTERNATIVE**

SEE: No-Action Alternative.

**DOOR CONTROL**

Circuitry, including such safeguards and interlocks as required, which operates to open and close car doors. (NTSC)

**DOOR-TO-DOOR SERVICE**

SEE: Service, Door-To-Door.

**DOT (FEDERAL)**

U.S. Department of Transportation.

**DOT (LOS ANGELES)**

SEE: LADOT.

**DOUBLE**

SEE: Extra Section.

**DOUBLE JACK**

A large sledge hammer with two striking faces.

**DOUBLE-DECK CAR**

SEE: Car, Double-Deck.

**DOUBLE-DECKER BUS**

SEE: Bus, Double-Decker.

**DOUBLE-ENDED TRANSIT UNIT (BIDIRECTIONAL TRANSIT UNIT)**

A rail car or train with an operating cab at each end.

**DOUBLESTACK**

A train of containers, often stacked two high, on well cars. Also see Container.

**DOUBLE-TRACK MAIN LINE**

SEE: Line, Double-track.

**DOWNLOAD**

To transfer programs or data from a computer to a connected device, usually from a server to a personal computer.

**DOWNLOADING**

The act of transferring computerized information from one computer to another.

**DOWNTIME**

A period during which a vehicle is inoperative because of repairs or maintenance. (APTA)

**DOWNTOWN PEOPLE MOVER (DPM)**

A type of automated guideway transit vehicle operating on a loop or shuttle route within the Central Business District (CBD). (APTA)

**DPM**

Downtown People Mover. SEE: People Mover, Downtown.

**DRAFT GEAR**

Device which connects coupler to carbody, incorporating springs and cushioning devices to absorb impacts caused by coupling or train dynamics.

**DRAG**

A heavy or slow freight train.

**DRAG AND DROP**

A GUI (Graphic User Interface) concept that allows one screen object to be selected and passed as input to another screen object (icon).

**DRAGGING THE LINE**

Operating behind schedule deliberately.

**DRAGGING THE ROAD**

Bus operators driving slowly to avoid being too far ahead of schedule and creating a gap in service behind them.

**DSLIM**

Double-sided linear induction motor. SEE: Motor, Double-Sided Linear Induction.

**DTC**

Direct Traffic Control. A system of authorizing train movements directly from the dispatcher to the train crews by telephone or radio. In a DTC system, the railroad line is divided into blocks which are designated by wayside signs and in the timetable.

**DTS**

Data Transmission System.

**DUAL-CONTROL OR DUAL-MODE BUS**

SEE: Bus, Dual-Mode.

**DUAL-MODE TRANSIT SYSTEM**

SEE: Transit System, Dual-Mode.

**DUAL-MODE VEHICLE**

SEE: Vehicle, Dual-Mode.

**DUAL-POWERED BUS**

SEE: Bus, Dual-Mode.

**DUAL-POWERED LOCOMOTIVE**

SEE: Locomotive, Dual-Powered.

**DUAL-POWERED TURBOELECTRIC**

A commuter railroad car capable of either running on electric power from a third rail or overhead wire or self-propulsion by a generator driven by a gas turbine. (TRB)

**DUMB TERMINAL**

A display terminal without processing capability. Dumb terminals are dependent upon the main computer for processing. All entered data is accepted without further editing or validation.

**DWELL TIME**

Total time measured from the instant a train berths at a station/terminal until the instant the train resumes moving.

**DYNAMIC BRAKING**

An electric primary braking system whereby the current derived from the motors, acting as generators, is modulated to provide controlled braking; system of retarding locomotives and/or trains by using the traction motors to generate electric current. Use of dynamic braking is very advantageous in mountain territory because it reduces the wheel heating and wear caused by air brakes.

**DYNAMITE**

Slang term for emergency application of brakes.

**DYNAMITER**

Car with defective air brake which applies in emergency whenever air brakes are applied.

# E

**E&H**

SEE: Elderly and Handicapped.

**EA**

SEE: Environmental Assessment.

**EARMARK**

A federal budgetary term that refers to the specific designation by Congress that part of a more general lump-sum appropriation be used for a particular project; the earmark can be designated as a minimum and/or maximum dollar amount. (APTA)

**EASEMENT**

A right acquired by one party to use or control property belonging to another party for a designated purpose, such as public utilities, streets or highways, transit lines. (TRB)

**EBCDIC**

Extended Binary-Coded Decimal Interchange Code. An eight bit code representing 256 characters. Used in most large computer systems.

**ECHO**

Electronic Clearing House Operations Payment System - Federal.

**EDITING**

A process which ensures that input data conforms to predetermined criteria to enable early identification of potential errors.

**EFFECTIVE DEMAND**

The number of people or vehicles prepared to travel in a given situation, at a given price (fare or fee). (TRB)

**EFFICIENCY**

The ratio of output (e.g. level of service provided) to input (e.g. cost of resource usage), that is, providing the desired result with the minimum of effort, expense, waste, and so on (doing things right). (TRB)

**EGRESS TIME**

The time elapsed on a trip from the moment of alighting from a vehicle to the moment of arriving at the point of destination. (TRB)

**EIR**

SEE: Environmental Impact Report.

**EIS**

Environmental Impact Statement. Same as EIR except it is prepared under the (federal) National Environmental Policy Act.

**ELASTICITY, CROSS**

A measure of the change in demand of one good or service (e.g. ridership on transit) with a change in price of another (e.g., price of gasoline). (TRB)

**ELASTICITY, INCOME**

A measure of the change in demand of a good or service (e.g., ridership on transit) with a change in one's income. (TRB)

**ELDERLY AND HANDICAPPED (E&H)**

People who may have special needs for services such as transportation. Transportation especially provided for the benefit is called elderly and handicapped (E&H) transportation. Transit operations may include discounted fares (E&H fares) for their benefit. The minimum age for elderly people varies by the program (e.g. 55+, 60+, 65+).

**ELECTRIC BUS**

SEE: Bus, Electric.

**ELECTRIC INCLINE RAILWAY (INCLINE)**

A railway in which vehicles are carried or conveyed by an electric hoist along inclined tracks. The hoist carries a single car, with or without counterweights, or two cars in balance. The system is used to overcome steep gradients. Also see Funicular Railway. (TRB)

**ELECTRIC LOCOMOTIVE**

SEE: Locomotive, Electric.

**ELECTRIC MULTIPLE-UNIT CAR**

SEE: Car, Multiple-Unit.



**ELECTRIC RAIL CAR**

SEE: Car, Electric Rail and Car, Rectifier Electric Motor.

**ELECTRIC TRAIN LINE CIRCUIT**

A continuous electric circuit between all units of the train. The circuit is provided with control stations to permit the control of traction motors and other equipment from any operator's cab on the train (or, in special cases, from one cab only). (TRB)

**ELECTRIC TROLLEYBUS**

SEE: Trolleybus.

**ELECTRICALLY LOCKED SWITCH**

SEE: Switch, Electrically Locked.

**ELECTRIFICATION (RAILWAY ELECTRIFICATION)**

In rail systems, a term used to describe the installation of overhead wire or third-rail power distribution facilities to enable operation of electrically powered transit vehicles. (TRB)

**ELECTRIFIED TRACK**

SEE: Track, Electrified.

**ELECTRONIC FUNDS TRANSFER (EFT)**

The exchange of money via telecommunications. EFT refers to any financial transaction that originates at a terminal and transfers a sum of money from one account to another.

**ELECTROPNEUMATIC BRAKE**

SEE: Brake, Electropneumatic.

**ELEPHANT TRAIN**

A train of two or more small passenger conveyances, which may be open or enclosed, pulled slowly by a power tractor unit. The trailer units follow essentially the same path as that taken by the tractor unit. Elephant trains are typically operated at major activity center, such as expositions or boardwalks. (TRB)

**ELEVATED GUIDEWAY**

SEE: Guideway, Elevated.

**ELEVATED-ON-FILL GUIDEWAY**

SEE: Guideway, Elevated-On-Fill.

**EMERGENCY**

A condition that may result in injury or death to persons, or damage to equipment or property.

**EMERGENCY APPLICATION OR BRAKING**

SEE: Brake, Emergency.

**EMERGENCY MANAGEMENT PANEL (EMP)**

Command panel installed on a wall in public areas of each passenger station for coordination of fire/rescue and emergency response forces. Also serves as a backup to the TRACS System for ventilation control, gas monitoring and communications.

**EMERGENCY MANUAL OPERATION (EMO)**

The EMO mode shall only be used after a Clearance Card (CC) has been completed according to Standard Operating Procedures (SOP). Maximum operating speed is 25 mph.

**EMERGENCY PROCEDURES PLAN**

A plan developed by the MTA with the cooperation of all participating agencies for information, guidance and use prior to and during any emergency.

**EMERGENCY TELEPHONE (E-TEL)**

Located throughout the rail system providing direct communication to the proper authority.

**EMERGENCY TRANSFER**

A transfer issue to passengers under emergency conditions, for example, a transfer issued at the point of a break in service or to a passenger who caught the wrong bus. It does not conform to the rules for normal transfer and therefore may permit continuation of a ride by an alternate route or in a reverse direction. (TRB)

**EMERGENCY TRIP STATION (ETS)**

Push-button device at Blue Light Stations that, when activated, de-energizes traction power to each designated contact rail section within the limits of the power feed. Additionally, the ETS houses an emergency telephone and in a Red Line station platform is located a deluge system activation button.

**EMERGENCY WALKWAY**

Footpath for right-of-way access/egress.

**EMINENT DOMAIN**

The power to take private property for public use. The right of the state, through an authorized governing body, to reassert, either temporarily or permanently, its dominion over any part of the soil of the state on account of public exigency and for the public good in return for the payment of just compensation to the property owners.

**EMPLOYEE**

Any person employed by the Los Angeles County Metropolitan Transportation Authority.

**EMS**

Equipment Maintenance Supervisor - The immediate supervisor of first echelon of supervision for bus maintenance mechanics in the Division and at the Regional Rebuild Center. See also ESS. (RRC).

**EN ROUTE CANCELLATION**

Train or bus trip halted in the midst of a run.

**EN ROUTE ON-TIME PERFORMANCE**

Service reliability measured from the customer's perspective at random spots along a route.

**ENCODER**

A device that transforms the format of the supplied data into the format required for transmission.

**ENCRYPTION**

A technique used to protect computerized information by coding the data in such a manner that it is unintelligible to the reader.

**ENCUMBRANCES**

Commitments related to unperformed contracts for goods or services. A purchase order is the most common encumbrance.

**END, TRIP**

SEE: Trip End.

**END-USER COMPUTING**

An approach to data processing in which users who are not computer experts satisfy their own computing needs through the use of high-level software and languages such as electronic spreadsheets and relational database management systems. (Modern Database Management- 4th Edition)

**ENERGIZE**

To apply electrical power.

**ENERGIZED EQUIPMENT**

Electrical apparatus, wires, cable, switches and motors which are connected to an electrical power source and are always considered "energized."

**ENERGY, KINETIC**

SEE: Kinetic Energy.

**ENGINE**

Generally used interchangeably with the word locomotive. Under the rules, an engine (as opposed to a train, which must be authorized by the dispatcher) may occupy the line.

**ENGINE, EXTERNAL COMBUSTION (ECE)**

An engine in which fuel combustion takes place outside the cylinder, turbine, or the like and in which energy is turned into mechanical forces; for example, a steam engine. (TRB)

**ENGINE, GAS TURBINE**

An internal combustion engine in which the hot compressed gases of combustion drive a turbine. (TRB)

**ENGINE, INTERNAL COMBUSTION (ICE)**

An engine in which the power is developed through the expansive force of fuel that is fired or discharged within a closed chamber or cylinder. (TRB)

**ENGINE, RADIO-CONTROLLED (SLAVE UNIT)**

In passenger trains, an unmanned propulsive unit within a train that is separated by rail cars from the lead unit but controlled from it by radio signals. (TRB)

**ENGINE, STEAM**

An engine driven or worked by steam; specifically, a reciprocating engine that has a piston driven by steam in a closed cylinder. (TRB)

**ENGINE, TURBINE**

A rotary engine actuated by the reaction or impulse or both of a current of fluid or gas subjected to pressure. A turbine is usually made with a series of curved vanes on a central rotating spindle. (TRB)

**ENGINEER**

A person who operates a locomotive.

**ENGINEERING, VALUE**

SEE: Value Engineering.

**ENTERPRISE DATA MODEL**

A high-level conceptual data model for an organization. An enterprise data model shows the entities and the relationships among the entities. (Modern Database Management- 4th Edition)

**ENTERPRISE FUND**

Fund established to finance and account for the acquisition, operation, and maintenance of governmental facilities and services that are entirely or predominantly self-supporting by user charges; or where the governing body of the governmental unit has decided periodic determination of revenues earned, expenses incurred, and/or net income is appropriate.

**ENTERPRISE MODELING**

The first step in database development, in which the scope and general contents of a database are specified. (Modern Database Management- 4th Edition)

**ENTITY**

A thing (e.g., person, place, event, or concept) about which an organization chooses to record data. (Modern Database Management- 4th Edition)

**ENTITY TYPE**

A collection of entities that share common properties or characteristics. (Modern Database Management- 4th Edition)

**ENTITY-RELATIONSHIP DATA MODEL (E-R MODEL)**

A detailed, logical representation of the entities, associations, and data elements for an organization or business area. (Modern Database Management- 4th Edition)

**ENTITY-RELATIONSHIP DIAGRAM (E-R DIAGRAM)**

A graphical representation of an E-R model. (Modern Database Management- 4th Edition)

**ENUMERATION DISTRICT, CENSUS**

SEE: Census Enumeration District.

**ENVIRONMENT**

The aggregate of all conditions which externally influence the performance and life of an item. (NTSC)

**ENVIRONMENTAL ASSESSMENT (EA)**

An environmental study used under the National Environmental Policy Act of 1969 to determine whether an environmental impact statement is required. (TRB)

**ENVIRONMENTAL IMPACT REPORT (EIR)**

Environmental Impact Report. A detailed statement prepared under the California Environmental Quality Act (CEQA) describing and analyzing the significant environmental effects of a project and discussing ways to avoid or mitigate the effects; the analysis and reporting requirements for all projects under the California Environmental Quality Act.

**ENVIRONMENTAL IMPACT STATEMENT (EIS)**

A comprehensive study of likely environmental impacts resulting from major federally-assisted projects; statements are required by the National Environmental Policy Act (NEPA). See also EIR. (APTA)

**EQUAL**

A substitute for a brand name product identified in the specifications which is offered by a prospective Bidder and which is accepted by the MTA, in accordance with procedures stipulated in the Bid Solicitation Documents, as equal to or better than a manufacturer's brand-name product.

**EQUI-JOIN**

A join in which the joining condition is based on equality between values in the common columns. Common columns appear (redundantly) in the result table. (Modern Database Management- 4th Edition)

**EQUIPMENT SUB-UNIT**

An assemblage of parts, components or other hardware combinations capable of providing an identified functional output.

**EQUIPMENT, WAYSIDE**

Train control or movement apparatus which is located along the track or wayside as opposed to the control center or other remote location. (NTSC)

**EQUITY**

In transportation, a normative measure of fairness among transportation users.

**EQUITY, FEDERAL TRANSIT FUNDING**

A ratio of appropriated dollars between Section 9 and 18 (formula funds) to Section 3 (discretionary funds). (APTA)

**ERS**

Equipment Records Specialist. Staff person in the Maintenance Department; assigns buses to operators, maintains vehicle records, and schedules preventive maintenance.

**ESCALATOR CLAUSE**

A provision in a contract that stipulates that wages or prices are to be automatically increased or decreased at specific times according to a schedule that is usually related to changes in the cost of living (cost of living allowance, or COLA) as measured by a designated index or other standard (e.g. the consumer price index). The provision may also apply to any ties between employee benefits and the cost of living, as in a pension plan. (TRB)

**ESS**

Equipment Service Supervisor. The immediate supervisor or first echelon of supervision for service attendants on shifts that have an ESS. In the absence of an ESS, the EMS directly supervises the maintenance assistants. Note: The service attendant's duties include the fueling, service checking, cleaning (both interior and exterior), vaulting, and parking of the buses; also other division cleaning tasks.

**ETB**

Electric Trolley Bus. This bus project was the result of a study completed in 1991 whereby electrified buses were to be utilized for 18 heavily traveled routes in the Los Angeles area. A tree planting motif was included to contribute to the beautification of the streetscapes and to camouflage the overhead wire brackets. The project was canceled in 1995.

**ETHANOL**

A variation of methanol fuel, produced from grains rather than a derivative from methane gas. MTA experimented with switching to ethanol from methanol fuel to determine if ethanol fuel is significantly less corrosive than methanol (this is done through reprogramming the electronic fuel mixing program for each methanol engine).

**EVACUATION**

An incident that results in customers being removed from a train. In a tunnel, customers are led from the train by way of the roadbed, catwalk or benchwalk - sometimes to an emergency exit.

**EVENING SHIFT**

A shift that ends at or near midnight. See also Swing Shift. (TRB)

**EXCEPTION REPORTS**

Reports generated by a program which identifies transactions or data which appear to be incorrect. These items may be outside a predetermined range, or may not conform to specified criteria.

**EXCESS TIME**

Time delay associated with travel to or between major transit routes, for example, time spent walking, waiting or transferring. (TRB)

**EXCLUSIVE RIGHT-OF-WAY**

A highway or other facility that can only be used by buses or other transit vehicles.

**EXCLUSIVE CARPOOL LANE**

A highway or street lane reserved for carpools and vanpools. (TRB)

**EXCLUSIVE TRANSIT LANE (RESERVED TRANSIT LANE)**

A highway or street lane reserved for buses, light rail vehicles, or both. (TRB)

**EXCLUSIVE TRANSIT RIGHT-OF-WAY**

A right-of-way that is fully grade separated or access controlled and is used exclusively by transit, transit ROW category A. (TRB)

**EXECUTIVE MANAGEMENT**

Includes the CEO, deputy CEOs, chief of staff, and executive officers.

**EXECUTIVE ORDER 12372**

A presidential directive that furnishes guidance to federal agencies for cooperation with state and local governments in the evaluation, review and coordination of federal assistance programs and projects.

**EXPENDITURES**

Decrease in net financial resources. Expenditures include current operating expenses which require the current use of net current assets.

**EXPENSE RECOVERY RATIO**

Total system-generated revenue (including farebox revenue) divided by Section 15 operating costs.

**EXPERT SYSTEMS**

The most prevalent type of computer systems which arise from the research of artificial intelligence. An expert system is built in a hierarchy of rule sets which are acquired from human experts in that field. Once provided input, the system should be able to define the nature of the problem and provide recommendations to solve it.

**EXPOSURE**

Possible result or consequence of adverse action or events.

**EXPRESS BUS**

A bus which operates non-stop or point-to-point, usually on freeways.

**EXPRESS BUS SERVICE**

Bus service with limited number of stops along a designated route; vehicles do not stop at all stations; express bus service operates either from a collector area directly to a specific destination or in a particular corridor with stops en-route at major transfer points or activity centers. Express bus service usually uses freeways or busways where they are available.

**EXPRESS COLLECTOR BUS SERVICE**

Peak period bus service that originates in neighborhoods and collects riders on a convenient route and schedule (in trips of reasonable duration) prior to the express run.

**EXPRESS ZONED BUS SERVICE**

Bus service operating through corridor zones (utilizing right-of-way from other or preferential treatment in traffic) in which the bus makes convenient stops in its originating zone and runs express through other zones except for transfers at zone limits.

**EXPRESSWAY**

A highway with full or partial control of access, with some signalized grade intersections but with grade separations at major crossings; a divided arterial highway for through traffic.

**EXTERNAL CUSTOMER**

Individuals, organizations, agencies outside the MTA who use the products and services provided by the MTA.

**EXTERNAL-EXTERNAL TRIP**

A trip that has both its origin and destination outside the study area but that involves travel through the study area. (TRB)

**EXTERNAL-INTERNAL TRIP**

A trip that has either its origin or destination inside the study area. (TRB)

**EXTRA BOARD**

A pool of operators maintained to work non-biddable AM & PM tripper combinations and to fill assignments and vacancies caused by sickness, missouts, vacations, leaves, etc.; operators who have no assigned run but are used to cover runs left open.

**EXTRA SECTION (DOUBLE)**

A second bus added to accompany a regularly scheduled bus, used to handle passenger overheads. (TRB)

# F

**F END**

Front end of a heavy rail vehicle containing the train operator's cab.

**FACING MOVEMENT**

The movement of a train over the points of a switch which faces the approaching train. See also Trailing Movement.

**FACING POINT SWITCH**

A track switch the points of which face toward approaching traffic. (NTSC)

**FACTOR ANALYSIS**

An analytical technique for identifying the major interrelationships between variables, frequently used in transportation demand analysis. (TRB)

**FAIL OPERATIONAL**

A characteristic design which permits continued operation in spite of the occurrence of a discreet failure. (NTSC)

**FAIL OPERATIONAL FAIL SAFE**

A system characteristic which permits continued operation on occurrence of a failure while remaining acceptably safe. A second failure results in the system remaining safe, but non-operational. (NTSC)

**FAILED COMPONENT**

A component which has ceased to perform its intended function. (NTSC)

**FAIL-SAFE DESIGN**

A design principle in which each of the elements which make up a system is analyzed to determine the potential consequence of failure of that element, alone or in combination with any or all other elements of the system, to ensure that a failure or a combination of failures will not result in an unsafe condition. (NTSC)

**FAIL-SAFE SAFETY**

A characteristic of a system and its elements, the object of which is to ensure that any fault or malfunction will not result in an unsafe condition. (NTSC)

**FAILURE**

An inability to perform an intended function. (NTSC)

**FAILURE ANALYSIS**

The logical and systematic examination of a system to identify and analyze the probability, causes, and consequences of potential and real failure. (NTSC)

**FAILURE ASSESSMENT**

The process by which the cause, effect, responsibility, and cost of an incident (reported problem) in the transit system is determined and reported. (NTSC)

**FAILURE CRITICALITY ANALYSIS**

Study of the potential failures that might occur in any part of a system in relation to other parts of the system in order to determine the severity of effect of each failure in terms of a probable resultant safety hazard, and acceptable degradation of system performance. (NTSC)

**FAILURE EFFECT ANALYSIS**

The study of the potential failures that might occur on any part of a system in order to determine the probable effect of each on all other parts of the system. (NTSC)

**FAILURE MANAGEMENT**

Decisions, policies and planning which identify and eliminate or control potential failures and implement corrective or control procedures following real failures. (NTSC)



**FAILURE MECHANISM**

The process which results in a part or equipment failure. (NTSC)

**FAILURE MODE**

The description of the manner in which a failure occurs, and the operating condition of the equipment at the time of the failure. (NTSC)

**FAILURE MODE ANALYSIS**

The study of a system and working inter-relationships of the parts thereof under various anticipated conditions of operations (normal and abnormal) in order to determine probable location and mechanism where failures will occur. (NTSC)

**FAILURE MODE AND EFFECT ANALYSIS (FMEA)**

An inductive procedure in which potential malfunctions are identified and then analyzed as to their possible effects. (NTSC)

**FAILURE MODE, EFFECT AND CRITICALITY ANALYSIS (FMECA)**

An extension of an FMEA in which each failure effect is assigned a criticality index which reflects the probability of the occurrence of the effect in terms of loss in performance, reliability, maintainability and safety.

**FAILURE RATE**

Rate at which failures occur as a function of time. If the failure rate is constant, it is frequently expressed as the reciprocal of mean-time-between-failure (MTBF). (NTSC)

**FAILURE, CRITICAL**

A failure which could result in major injury or fatality to people or which could result in major damage to any system or loss of critical function.

**FAILURE, DEPENDENT**

A failure which occurs as the consequence of another failure.

**FAILURE, HUMAN**

Failure due to human error. (NTSC)

**FAILURE, INDEPENDENT**

A failure which occurs without being related to the failure of any associated item.

**FAILURE, SECONDARY**

A failure which occurs as the consequence of another failure. See also Failure, Dependent.

**FAILURE, SERVICE**

A failure which not only prevents the unit from performing its intended function, but also disrupts or delays scheduled service.

**FAILURE, SINGLE POINT**

A failure of a subunit which by itself will cause a failure of the system or equipment.

**FAIR LABOR STANDARDS ACT (FLSA)**

The Fair Labor Standards Act (FLSA) is the primary federal regulation that affects wage and hour practices.

**FAREBOX REVENUE**

Amount of money collected in fareboxes and station turnstiles. Excludes charter revenue.

**FAREBOX, REGISTERING (REGISTER)**

A farebox that also receives and records fare information. (TRB)

**FARECARD**

SEE: Magnetic Farecard.

**FARECARD READER**

A device that determines the value stored in a farecard when the farecard is inserted. A farecard reader may also be used for appropriately altering the value stored in a farecard. The device is usually used with a passenger turnstile or gate. (TRB)

**FARE-REGISTERING TURNSTILE (FAREGATE)**

A turnstile that unlocks to allow a passenger to enter the paid area after a pass or farecard or the correct amount of money or tokens is inserted in it. It records the fares paid. (TRB)

**FAR-SIDE STOP**

A transit stop located beyond an intersection. It requires that transit units (vehicles or trains) cross the intersection before stopping to serve passengers. (TRB)

**FAS**

Fire Alarm System.

**FAU**

Federal Aid Urban. Authorized by the enactment of the Federal Highway Act every five years. Cities and the county are eligible for FAU funds for projects such as street reconstruction and widening, and installation of lights and signals.

**FAULT FREE ANALYSIS**

A deductive analysis procedure which graphically presents undesired events to determine possible causes of those events. (NTSC)

**FB**

SEE; Foreign Bus.

**FCR**

SEE: Flexible Congestion Relief.

**FEASIBILITY STUDY**

A methodology phase of a study that researches the feasibility and adequacy of resources for the development or acquisition of a system or solution to a user need.

**FEDERAL DEPARTMENT OF TRANSPORTATION**

(DOT) The federal agency responsible for transportation.

**FEDERAL HIGHWAY DEMO PROJECTS**

These revenues include federally authorized funding for projects designated in the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). The funds may be used for project development, right-of-way, and construction for projects designated in the ISTEA.

**FEDERAL MANAGEMENT INFORMATION SYSTEM (FMIS)**

The Federal Management Information System (FMIS) provides federal fund activities.

**FEDERAL REGISTER**

The official public notice of government actions. It publishes all current Presidential proclamations and Executive Orders, as well as federal agency regulations that have general applicability and legal effect. It is published five times a week. (TRB)

**FEDERAL REGULATIONS, CODE OF**

SEE; Code of Federal Regulations.

**FEDERAL TRANSIT ACT**

SEE: Bus Discretionary Capital.

**FEDERAL TRANSIT ADMINISTRATION (FTA)**

Formerly the Urban Mass Transportation Authority (UMTA). Now a sub-unit of the United States Department of Transportation.

**FEEDBACK**

The return to the input of part of the output of a process to obtain or approach a final answer. (TRB)

**FEEDER BUS**

Any publicly operated bus which carries patrons to or from transit stations.

**FEEDER BUS SERVICE**

Local transit service that picks up and delivers customers to a rail station, express bus stop or terminal.

**FEMA**

Federal Emergency Management Assistance.

**FERRYBOAT**

A boat providing fixed-route service across a body of water. (APTA)

**FET**

Field Equipment Technician. A mechanic in a radio-equipped truck dispatched in response to reports of vehicle breakdowns.

**FEW-TO-FEW SERVICE**

A service that picks up passengers at a limited number of origins and delivers them to a limited number of destinations. (TRB)

**FEW-TO-MANY SERVICE**

A service that picks up passengers at a few preselected origins, typically activity centers or transfer points, and delivers them to many destinations. (TRB)

**FFGA**

Full Funding Grant Agreement. A grant agreement with the Federal Transit Administration (FTA) currently for Metro Rail segments.

## **INTERGOVERNMENTAL REVIEW PROCESS**

U.S. President Executive Order 12372 (July 14, 1982) requires federal agencies to use state and local processes of intergovernmental coordination for review of proposed federal financial assistance, state plans, direction development activities, and environmental documents. This procedure replaces Circular A-95 procedures. (TRB)

## **INTERLINING**

Scheduled operation in revenue service of a bus on another bus line. When there are requirements for extra trips at certain times of the day (usually corresponding to peak period traffic demands and to student travel peaks) interlining is used to avoid pulling-out additional buses.

## **INTERLOCKING**

Arrangement of signals and switches so interconnected that functions must succeed each other in a predetermined sequence, which permits train movements over routes only when non-conflicting conditions exist.

## **INTERLOCKING CONTROLS**

Systems or devices located at the Central Control Facility (CCF) or designated wayside locations capable of controlling the functions of interlockings from Local Control Panels or wayside push-buttons.

## **INTERLOCKING LIMITS**

The tracks between the extreme outer, opposing, interlocking signals of an interlocking.

## **INTERLOCKING SIGNAL**

A wayside signal which governs movements into or within interlocking limits. Also see Signal, Interlocking. (NTSC)

## **INTERMEDIATE CAB**

Cab which is not the leading or trailing cab of a train.

## **INTERMODAL**

1) Freight service whereby highway trailers or containers are carried on rail cars, and/or oceangoing ships. 2) Passenger transit service provided by a combination of modes, e.g. bus and rail; switching from one form of transportation to another.

## **INTERMODAL INTEGRATION**

Service coordination between two or more different transportation modes. This arrangement may include joint (transfer) station, coordinated scheduling, joint fares, and combined public information activities. (TRB)

## **INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)**

ISTEA was signed by the President of the United States in December 1991 providing \$155 billion in revenues. This new flexible funding is authorized for both highway and transit use which is distributed under eligible criteria for the following programs: Surface Transportation Program (STP), Minimum Allocation, Donor State Bonus, Interstate Maintenance, Bridge Replacement and Rehabilitation, National Highway System Substitute Highway, and Congestion Mitigation and Air Quality Improvement (CMAQ) Programs.

## **INTERNAL CUSTOMER**

Individuals, departments or organizational units within the MTA who use your products and services.

## **INTERNAL STORAGE**

The storage of data inside the computer, such as an internal hard disk.

**INTERNAL-INTERNAL TRIP**

A trip that has both its origin and its destination inside the study area. (TRB)

**INTERNATIONAL BROTHERHOOD OF TEAMSTERS**

Union representing Security Officers of the MTA.

**INTERNATIONAL TAXICAB ASSOCIATION**

International Taxicab Association (ITA). An organization of fleet taxicab owners. It provides representation in Washington, D.C., disseminates information to its members and others concerned with taxicab operations, and conducts research and studies relevant to the problems of the taxi service industry. (TRB)

**INTERNATIONAL UNION OF PUBLIC TRANSPORT**

(UITP) An association that pools information and experience of urban and interurban transportation undertaking for joint study and research and promotes technical and economic development. (TRB)

**INTERREGIONAL IMPROVEMENTS PROGRAM**

This is one of the state funding programs and is also known as "State Choice." It is a statewide discretionary program which utilizes 25% of the State transportation improvement funds. This source of funds may be used for three sub-programs -- intercity rail, interregional roads, and an interregional high priority State program which is available for road, rail, and urban rail. Projects funded through the Interregional Improvements Program are largely developed by Caltrans and there are no County minimums or guarantees.

**INTERSECTION CAPACITY UTILIZATION (ICU)**

A method of calculating the traffic congestion (see Level of Service) at an intersection.

**INTERURBAN TRANSIT SYSTEM**

Electric rail transit service between cities and towns that are fairly close to each other, specifically, 9-50 miles (15-80 kilometers). This mode usually operates on private rights-of-way that are longitudinally physically separated (by curbs, barriers, grade separation, etc.) from other traffic but that have grade crossings for other vehicles and pedestrians, including regular street intersections. Sections of line in cities may run along streets or median strips. (TRB)

**INTERVAL**

Scheduled starting time of a one-way trip between two terminals of a revenue-service train or bus.

**INTERVENING OPPORTUNITIES MODEL**

A mathematical model that is based on probability theory and that distributes trips from one zone to each other zone in proportion to the probability that the trip have not found a prior destination in zones ranked closed to the zone of origin. (TRB)

**INTERZONAL TRAVEL TIME**

The travel time between any two zones, including the terminal time at each end of the trip. (TRB)

**INTERZONAL TRIP**

A trip that involves travel between (inter) two zones. (TRB)

**INTRAZONAL TRIP**

A trip that has both its origin and its destination in the same zone. (TRB)

**INVENTION**

Any invention or discovery that is or may be patentable or otherwise protectable under Title 35 of the U.S. Code or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S. 2321, et seq.).

**INVITATION FOR BIDS (IFB)**

An advertised competitive solicitation for fixed price bids. Awards are made to the responsive, responsible bidder that submits the lowest price.

**IP (INTERNET PROTOCOL)**

The Internet protocol that defines the unit of information passed between systems that provides a basis packet delivery service.

**IP ADDRESS**

The Internet protocol address which is a 32-bit address assigned to a host. The IP address has a host component and a network component.

**IPF**

Information Processing Facility. The computer room and support areas.

**ISA RELATIONSHIP**

The relationship between each subtype and its supertype. (Modern Database Management- 4th Edition)

**ISAM**

Indexed Sequential Access Method. A disk access method that stores data sequentially, while also maintaining an index of key fields to all the records in the file for direct access capability. The sequence order of the file would be the one most commonly used for batch processing and printing.

**ISDN (INTERGRADED SERVICES DIGITAL NETWORK)**

Integrated Service Digital Network. 1. A public end to end digital telecommunications network with signaling, switching and transport capabilities supporting a wide range of service accessed by standardized interfaces with integrated customer control. 2. A set of standards for high-speed transmission of voice, data and video information over fewer channels than would otherwise be needed, through the use of out-of-band signaling.

**ISTEA**

SEE: Intermodal Surface Transportation Efficiency Act of 1991.

**ISTEA FEDERAL TRANSIT ACT AMENDMENTS OF 1991**

These revenues are generally administered by the Federal Transit Administration through transit formula and discretionary programs to achieve such objectives as transit and highway funding flexibility and identical matching shares, rail modernization funding by formula, increased use of the trust fund, and expanded research. Revenues from these programs are authorized over a 6 year period of the Act and consist of 58 percent from the Mass Transit Fund of the Highway Trust Fund.

**ISTEA-CMAQ**

Congestion Mitigation and Air Quality Improvement program (CMAQ) funds are apportioned to States which have ozone and/or carbon monoxide nonattainment areas (based on the nonattainment classification factor). Such projects are used to attain national ambient area air quality standards with funding of \$6 billion. Projects must contribute to the reduction of air pollutants by implementing Transportation Control Measures (TCM), such as carpool lanes, Transportation Demand Management (TDM) measures and transit (transit related project or program contained in an approved SIP). Other projects and programs may qualify if, after consultation with the Environmental Protection Agency, FHWA determines that they are likely to contribute to the attainment of a National Ambient Air Quality Standard.

**ISTEA-STP**

Surface Transportation Program is a new block grant type program that may be used by the states and localities for any roads that are not functionally classified as local or rural minor collectors. Such roads are now collectively referred to as Federal-Aid roads. Uses also include transit capital projects. Total funding for the STP is authorized over the 6 year period of the ISTEA and consists of 58 percent from the Mass Transit Fund of the Highway Trust Fund.

**ITA**

SEE: International Taxicab Association.

**ITE**

SEE: Institutes of Transportation Engineers.

**ITF**

Integrated Test Facilities. Test data processed in production systems. The data usually represents a set of fictitious entities such as departments, customers, and products. Output reports are verified to confirm the correctness of the processing.

**ITS**

Information Technology Services. Formerly known as MIS, ITS provides the computer services function at the MTA.

**J****JACK**

A power or manual device for lifting.

**JERK**

The time rate of change of acceleration. (NTSC)

**JITNEY SERVICE**

Transit service provided in passenger automobiles, vans or minibuses driven along fixed routes, sometimes with minor deviations.

**JOB DESCRIPTION**

A written statement of the elements of a particular job or occupations, such as purpose, duties, equipment used, chain of command, previous training required, physical and mental demands, working conditions. (TRB)

**JOIN**

A relational operation that causes two tables with a common domain to be combined into a single table. Also see Equi-Join, Natural Join, Outer Join, Self Join. (Modern Database Management- 4th Edition)

**JOIN DEPENDENCY**

A relation that has a join dependency cannot be divided into two (or more) relations such that the resulting tables can be recombined to form the original table. (Modern Database Management- 4th Edition)

**JOINT**

The connection between rail ends consisting of joint bars and bolts with nuts and washers. A great deal of maintenance is required on joints because a significant fraction of rail breaks occur at joints.

**JOINT DEVELOPMENT (PLANNING)**

Projects which combine public and private resources to build mixed use development to generate income and passengers around transit station areas.

**JOINT DEVELOPMENT (PROCUREMENT)**

A project that involves the disposition, by lease or by sale, of incremental transit authority-owned or controlled real property interests at or near a station area which, because of proximity to station facilities, have significant potential for commercial, residential, or related development, along or in combination with adjoining real property interests to further MTA development-related goals and objectives.

**JOINT POWERS AGREEMENT (JPA)**

(Also called JPA, Joint Powers Agency, Joint Powers Authority.) A voluntary association of government entities formed into a special purpose agency to deal with a common problem or problems, carry out a specific project, or provide a specific service, for example, the operation of a regional transit system. (TRB)

**JOINT POWERS AUTHORITY**

SEE: Joint Powers Agreement.

**JOINT WORKING GROUP (JWG)**

The Operations Planning and Scheduling unit co-chairs the JWG as prescribed by the Consent Decree in the development of new bus service to improve the public's access to jobs, education and health care.

**JOINT, RAIL - INSULATED**

A rail joint in which electrical insulation is provided between adjoining rails. Also see Insulated Rail Joint. (NTSC)

**JOINT-USE CORRIDOR**

A transportation right-of-way used for more than one mode of transportation, such as trains and automobiles. Also see Multiple-Use Area. (TRB)

**JOURNAL**

Refers to bearing of ends of axles which support the car.

**JOURNEY TIME (OPERATOR'S TRAVEL TIME)**

SEE: Time, Journey.

**JPA**

SEE: Joint Powers Agreement.

**JPEG**

Joint Photographic Experts Group. JPEG is a popular method used to compress photographic images. Many web browsers accept JPEG images as a standard file format for viewing.

**JUMPER CABLE (JUMPER)**

A flexible conductor or group of conductors arranged to connect electric circuits between adjacent vehicles or rails. (TBA)



**JUNCTION POINT**

A location at which a rail branch line track connect with a main-line track. 2. A location at which two or more railroads interchange cars over connecting track. 3. A location at which several transit lines converge or diverge. (TRB)

**JUST COMPENSATION**

That payment required by law for the loss sustained by an owner as a result of taking or damage to private property used for public purposes.

# K

**KEY**

SEE: Primary Key, Candidate Key. (Modern Database Management- 4th Edition)

**KEY PERFORMANCE INDICATORS**

Quantitative criteria for evaluating transit performance with respect to the Transit Authority's mission and objective.

**KINETIC ENERGY**

The energy of a body that results from its motion. The kinetic energy of a moving body is equal to the energy needed to bring it to rest. (TRB)

**KISS 'N' RIDE**

A stop or terminal where a commuter can be driven by spouse or relative so he or she can board public transit. Also known as Kiss and Ride. Also see Park 'N' Ride.

**KNEELING BUS**

Bus feature that causes bus to tilt down toward a curb so customers can board more easily.

**KNUCKLE**

The movable part of a coupler which resembles the fingers.

**KTU**

Key Telephone Unit, which interconnects a group of push-button telephones for local and systemwide communication.

# L

**L A CAR**

Los Angeles Car. Patterned after the highly successful Blue Line Car, the L A Car will be a generic light rail vehicle that will allow for upgrades in technology and automation.

**LABOR GROUP**

Group to which the job classification belongs (i.e., Non-Contract, UTU, ATU, TCU, TPOA, or Teamsters).

**LABOR TURNOVER**

The movement of workers into and out of employment in a company or industry through hiring, layoff, recall, resignations, and so on. The rate of labor turnover is usually expressed as the number of accessions and separations during a given period per 100 employees. (TRB)

**LABOR-HOUR CONTRACT**

A contract that is a variant of the time-and-materials type contract differing only in that materials are not supplied by the contractor.

**LACBD**

Los Angeles Central Business District. The downtown area of Los Angeles. Also see Central Business District (CBD).

**LACMTA**

SEE: Los Angeles County Metropolitan Transportation Authority.

**LACTC**

Los Angeles County Transportation Commission. Merged with SCRTD, effective April 1, 1993 to form Los Angeles County Metropolitan Transportation Authority. Created by the California Legislature in 1976 to fund and coordinate public transportation improvements in the county. Acquired additional authority with the successful transit funding election in 1980, still referred to as Proposition A Funds, also with the successful transportation funding election in 1990, still referred to as proposition C Funds.

**LADDER TRACK**

Track at the end of a yard with turnouts connecting to the classification tracks.

**LADOT**

Los Angeles Department of Transportation.

**LAN**

Local Area Network. A network of computers that serves several users within a specified geographical area. A personal computer in the network does its own processing and manages some of its data. Shared data is stored in a file server which acts as a remote disk drive to all users in the network.

**LAND BANK CORPORATION**

A subsidiary of the MTA which reserves land and financial commitment for future transportation projects.

**LAND USE**

The purpose for which land or the structure on land is being used, for example, residential, commercial, light industry. (TRB)

**LAND USE MODEL**

A model used to predict the future spatial allocation of urban activities (land use), given total regional growth, the future transportation system, and other factors. (TRB)

**LANE**

A portion of a street or highway, usually indicated by pavement markings, that is intended for one line of vehicles. (TRB)

**LANE, BICYCLE**

A portion of a roadway or right-of-way that has been designated for preferential or exclusive use by bicycles. It is distinguished from the rest of the roadway by a painted stripe, curb, or other similar device. Also see Bicycle Route. (TRB)

**LANE, BUS**

(Also called Preferential Bus Lane, Priority Bus Lane.) A highway or street lane reserved primarily for buses, either all day or during specified periods. It may be used by other traffic under certain circumstances, such as making a right or left turn, or by taxis, motorcycle, or carpools that meet specific requirements described in the traffic laws. (TRB)

**LANE, CARPOOL**

SEE: Carpool Lane.

**LANE, CONTRAFLOW**

SEE: Contraflow Lane.

**LANE, DIAMOND**

SEE: Diamond Lane.

**LANE, EXCLUSIVE CARPOOL**

SEE: Exclusive Carpool Lane.

**LANE, PREFERENTIAL BUS**

SEE: Lane, Bus.

**LANE, PRIORITY**

A highway or street lane reserved (generally during specified hours) for one more specified categories of vehicles, for example, buses, carpool, vanpools. (TRB)

**LANE, RAMP METER BYPASS**

A form of preferential treatment in which a bypass lane on metered freeway on-ramps is provided for the exclusive use of high-occupancy vehicles. (TRB)

**LANE, REVERSIBLE**

A highway or street lane on which the direction of traffic flow can be changed to use maximum roadway capacity during peak-period demands. (TRB)

**LANE, REVERSIBLE BUS**

A highway or street lane that is reserved for the exclusive use of buses and other high-occupancy vehicles and that can be operated in alternate directions during the two peak-hour periods. It may be the center lane in an arterial street that is used for left-turning traffic in off-peak hours. Usually, bus operators who use this facility are required to have special training and a permit, and the buses may be subject to access or operation controls or both. (TRB)

**LANI**

Los Angeles Neighborhood Initiative - a non-profit corporation established by the City of Los Angeles Mayor's Office to improve transportation services, revitalize public spaces, and promote small business in Los Angeles neighborhoods.

**LAP**

The position of a brake valve in which the pressure being controlled is being neither increased nor decreased. (NTSC)

**LARTS**

SEE: Los Angeles Regional Transportation Study.

**LATE CLEAR GENERAL ORDER**

A day's construction work that concludes later than scheduled.

**LATENT TRAVEL DEMAND**

A number of trips that would probably be made during a defined period of time by vehicles or passengers along a particular route or corridor under specified conditions, for example, at certain fare or service levels. (TRB)

**LATERAL MOTION**

In rail operation, motion crosswise of the path of travel that results from the flexibility that must be provided in the track structure to permit its negotiation. It is experienced by all rail car parts except the wheels and axles. Lateral motion may also occur when the wheel tread is worn to a dish profile. This type of wear causes tracks hunting at speed and hence produced lateral motion. (TRB)

**LATERAL TRANSFER BILL**

State law allowing officers to apply for transfer among Transit Police, City Police, and Housing Police; this will be in effect until every officer on the tri-agency list has one opportunity to apply for a transfer.

**LAYOFF**

The involuntary separation of a worker from employment, usually for a temporary or indefinite period, without prejudice toward the worker. (TRB)

**LAYOVER**

Time the bus or train is scheduled at the end of the line. The time is necessary for two distinct purposes: 1. For recovery, meaning time needed to allow for making up for late arrivals at the terminal. 2. The time needed to provide the operator with a rest break. The labor contract specifies minimums due to the schedule cycle or to the frequency and length of late arrivals at the line terminal.

**LAYOVER TIME**

Time built into a schedule between arrivals of buses and trains at their terminal points and their departures, used for recovery of delays and preparation for the return trip.

**LAYOVER ZONE**

A designated stopover point for a bus at or near the end of the line.

**LAYUP AREA**

Section of track away from main route, used for storing trains.

**LCTI**

SEE: Transportation System Management.

**LEAD AGENCY**

Under the National Environmental Policy Act of 1969, the public agency that has the principal responsibility for preparing environmental documents and for carrying out or approving a project that may have a significant effect on the environment. (TRB)

**LEADER**

The bus operating on the headway immediately ahead of a given bus.

**LEASE**

A contract, written or oral, by which possession of land and/or building space is given by owner (lessor) to another (tenant) for a specified period of time (lease term) and for a specified consideration (rent).

**LEASED FEE**

1) The title to real estate subject to lease. 2) A property held in fee with the right of use and occupancy conveyed under lease to another. 3) A property with the right to receive ground rentals over a period of time and an ultimate repossession.

**LESSEE/TENANT**

One who acquires the right to use of the property of another, to whom the lease is granted or the property is rented under the lease.

**LESSOR**

One who rents real property to another or conveys or leases the right of use of real estate to another; the "landlord".

**LETTER CONTRACT**

A written preliminary contractual instrument that authorizes the contractor to begin immediately manufacturing or delivering supplies or performing services. The Letter Contract will rarely contain prices of the supplies or service, and it will be converted to a definitive contract with the time period specified in the Letter Contract.

**LEVEL OF SERVICE (LOS)**

A term used to describe the relative quality of the service provided by various transit alternatives. It will usually encompass a consideration of travel times, frequency service and passenger carrying capacity.

**LEVEL PLAYING FIELD**

A balanced approach to federal funding proportions for highway projects and transit projects; may also refer to employee transportation benefits so that the monthly, tax-free value of a transit pass is equal to that of a parking space; generally, any situation in which transit and highways receive equal treatment in federal funding and other federal procedures.

**LEVERAGE**

Use of debt to match federal and state funding to expand current cash flows.

**LICENSE PLATE SURVEY**

A survey in which license plate numbers of vehicles at one point are tabulated and compared with a similar listing at another point. It may also be used to establish approximate trip origin by identifying the registration address from motor vehicle records or even to conduct a survey through questionnaires sent to the registration address. (TRB)

**LIFE CYCLE**

The acquisition and operations stages of a system's evolution. The phases of development of a system typically include the concept, design, development, and deposition efforts. (NTSC)

**LIFE CYCLE COSTING**

A method of evaluation of alternative choices (e.g., vehicles) on the basis of comparative total costs for purchase and operations over the expected useful life of the asset. (TRB)

**LIFE-CYCLE PROCUREMENT**

A form of competitive procurement where the contract is awarded based on a consideration of cost of operation as well as initial capital cost.

**LIGHT RAIL (LRT)**

Modern-day term for a streetcar-type of transit operation. Traditionally this mode of transit consisted of mostly travel at grade in mixed traffic in the middle of the street using low platforms. The MTA Blue Line light rail system is actually a hybrid with many characteristics of so-called heavy rail. These include high level platforms and sophisticated centralized control systems. The Green Line has the exclusive use of its own rail right-of-way, and as such, meets the definition for both light and heavy rail.

**LIGHT RAIL RAPID TRANSIT SYSTEM (LRRT)**

Light rail transit with exclusive, grade-separated right-of-way for the entire system. It may have low- or high-level platforms and visual or signal control. (TRB)

**LIGHT RAIL VEHICLE (LRV)**

Electrically-propelled passenger carrying rail vehicle.

**LIMITED CONTROLLED ACCESS**

In transportation, to have entry and exit limited to predetermined points, as with rail rapid transit or freeways.

**LIMITED SERVICE**

1. A transit service that operates only during a certain period of the day, or that serves only specific stops (also known as Limited Stop Service) or in a specified area, or that serves only certain segments of the population. 2. Line service with some restrictions on boarding and alighting. (TRB)

**LIMOUSINE SERVICE (LIVERY SERVICE)**

1. Demand-responsive transportation service on an exclusive basis, provided in a vehicle that is licensed to render that service for hire at rates of fare agreed on by the operating licensee, its agency, or the chauffeur and the passengers. 2. Exclusive transportation provided by a chauffeur (usually uniformed) in a large automobile. (TRB)

**LINE**

The horizontal alignment of the rails. Also a verb indicating the act of moving track or correcting irregularities in alignment.

**LINE CAPACITY**

The number of vehicles per unit time, or passenger per unit time, that flow in one direction between two points along a line.

**LINE HAUL SERVICE**

1. Transportation service along a single corridor, without branches, with stops along the way. Usually service is intensive (high capacity) and uses exclusive right-of-way. 2. May also be used to describe express service or even main-line service, as opposed to feeder service. (TRB)

**LINE MILES (LINE KILOMETERS, MILES OR KILOMETERS OF DIRECTIONAL ROADWAY)**

The sum of the actual physical strength (measured in only one direction) of all streets, highways, or rights-of-way traversed by a transportation system (including exclusive rights-of-way and specially controlled facilities), regardless of the number of routes or vehicles that pass over any of the sections. Also see Route Miles. (TRB)

**LINE SUPERVISION (AUTOMATIC TRAIN CONTROL)**

The subsystem within the automatic train control system which monitors the system status and provides the appropriate control to direct the operation of the train in order to maintain intended traffic patterns and minimize the effect of train delays on the operating schedule.

**LINE SUPERVISION (COMMUNICATIONS)**

The monitoring of a line (circuit) to determine the state of its integrity and ability to perform in its prescribed manner.

**LINE, DOUBLE-TRACK MAIN**

A rail main line that has two tracks, usually one for each direction. (TRB)

**LINE, ROUTE**

The course followed by a scheduled transit vehicle as a part of a transit system.

**LINEUP**

Scheduled connections between two or more lines. In MTA practice, refers to the hourly line up of owl service in downtown Los Angeles along 7th Street and along Broadway on blocks near this intersection. Owl service connections also are scheduled at other locations including Broadway and Brand in Glendale and at several intersections along Soto Street in East Los Angeles. Also see Timed Transfer.

**LINK EDITOR**

A utility program that combines several separately compiled modules into one, resolving internal references between them.

**LINK LOAD**

In planning, the assigned volume of traffic on a link. Also see Link Volume. (TRB)

**LINK LOADING**

In planning, the process of determining the link loads by selecting routes of travel and accumulating the trip volumes on each link that is traversed. (TRB)

**LINK VOLUME**

In planning, the total number of highway vehicles or transit passengers assigned to a network link. (TRB)

**LINKED TRIP (LINKED JOURNEY, LINKED PASSENGER TRIP)**

A trip from the point of origin to the final destination, regardless of the number of modes or vehicles used. (TRB)

**LINKED TRIP TIME (OVERALL TRAVEL TIME, TOTAL TRAVEL TIME)**

In transportation planning, the time duration of a linked trip, that is, from the point of origin to the final destination, including waiting and walking time at transfer points and trip ends. (TRB)

**LIQUIDATED DAMAGES**

An amount fixed in the contract which is assessed against a Contractor when it breaches the delivery provision of a contract (e.g., it fails to complete delivery, installation, service, or the work specified in a contract within the contract period of performance or schedule) where the extent of actual damages would be difficult or impossible to determine. Liquidated damages are a predetermined, set amount and are included in the contract in lieu of attempting to measure actual damages. Liquidated damages, as predetermined, are assessed even if there are no ascertainable damages or greater damages as a result of the contractor's failure to perform in accordance with contract requirements.

**LIR**

SEE: Local Implementation Report.

**LIST-SERV**

"List-Serv" is a free software program for automating the maintenance and delivery of e-mail mailing lists. There are mailing lists for many different topics - some lists are "open" (which means anyone on the list can send a message to the whole list, as in a conversation), and some are "closed" (only certain people can post information to them).

**LOAD FACTOR (UTILIZATION COEFFICIENT)**

The ratio of passengers actually carried versus the total passenger capacity of a vehicle.

**LOAD SHEDDING**

Reducing the amount of conventional transit service at peak hours by encouraging the use of paratransit operations to carry some of the peak-period passengers. (TRB)

**LOADING ISLAND**

1. A pedestrian refuge within the right-of-way and traffic lanes of a highway or street. It is provided at designated transit stops for the protection of passengers from traffic while they wait for a board or alight from transit vehicles (also known as a Pedestrian Island). 2. A protected spot for the loading and unloading of passengers. It may be located within a rail transit or bus station. (TRB)

**LOCAL BUS**

Bus that stops at every bus stop along a route where customers board or alight.

**LOCAL CONTROL PANEL (LCP)**

Wayside train control equipment having interlocking controls located in station train control and communications rooms.

**LOCAL IMPLEMENTATION REPORT (LIR)**

A report jurisdictions must submit to MTA to remain in conformance with Los Angeles County Congestion Management Program (CMP) requirements. This report is submitted on an annual basis, and contains a resolution of conformance, new development activity reporting, selected mitigation strategies and credit claims and future transportation improvements.

**LOCAL RETURNS**

Money (portions of Propositions A & C) that is returned to local jurisdictions for transit purposes; money that is to be spent on local projects by the local agency.

**LOCAL SERVICE**

An operation involving frequent stops and low speed to deliver and pick up transit passengers as close to their destinations or origins as possible; regular line service which operates on city streets making frequent stops at any designated stop for passengers to board or alight.

**LOCAL TRAIN**

Train that stops at every station along a route.

**LOCKING**

The electrical or mechanical establishment of a condition for a switch, interlocked route, speed limit or automatic function so that its state cannot be altered except by a prescribed and inviolate sequence of unlocking. (NTSC)

**LOCKING, APPROACH**

Electrical locking of any interlocked or electrically locked switch, movable point frog or derail in the route governed by the signal that occurs whenever a train approaches, within a specified distance of that signal displaying to proceed, (until after the expiration caused to display its most restrictive aspect), and which prevents a conflicting route.



**LOCKYER**

The common name of a statute which provides the process by which the Governor intercedes in the collective bargaining between a public agency and a union. This process provides for a "cooling off" period (preventing a strike or lock out) and the appointment of a committee to publicly report on the parties' differences. Named after California State Senator Bill Lockyer.

**LOCOMOTIVE**

A powered rail vehicle used for towing rail cars. It does not carry passengers and is usually powered by electric motors or diesel engines. (TRB)

**LOCOMOTIVE, DIESEL-ELECTRIC**

In a common railroad language, refers to the diesel electric locomotive which uses a diesel engine to power an electric generator (or alternator) and the electric current in turn is used to turn traction motors connected to the locomotive's wheels.

**LOCOMOTIVE, DIESEL-HYDRAULIC**

A locomotive in which power from one or more diesel engines is delivered through hydraulic transmission to the driving axles by means of shafts and gears. The hydraulics are for speed control. (TRB)

**LOCOMOTIVE, DUAL-POWERED**

A locomotive that is capable of both diesel and electric operation. (TRB)

**LOCOMOTIVE, ELECTRIC**

A locomotive in which the propulsion is effected by electric motor mounted on the vehicle. The electric power comes from an external source. (TRB)

**LOCOMOTIVE, GAS TURBINE**

A locomotive in which power developed by a turbine drives electric generators that supply traction power through electric motor gear drives. It usually burns oil. (TRB)

**LOCOMOTIVE, PASSENGER**

A locomotive commonly used for hauling passenger trains and generally designed to operate at higher speeds and lower tractive effort than a freight locomotive of equal power. (TRB)

**LOCOMOTIVE, SELF-PROPELLED**

A locomotive than requires no external source of electric power for its operation. (TRB)

**LOGICAL ACCESS CONTROLS**

The policies, procedures, organizational structure, and electronic access controls designed to restrict access to computer software and data files.

**LOGISTICS**

The system management function which deals with the procurement, maintenance, transportation of material, facilities and personnel.

**LOGO**

A distinctive emblem, symbol, or trademark that identifies a product or service. (TRB)

**LOGOFF**

Disconnecting from the computer.

**LOGON**

The act of connecting to the computer. Typically requires entry of a user ID and password into a computer terminal.

**LONG RANGE TRANSPORTATION PLAN (LRTP)**

The MTA's twenty-year financial look-ahead, which includes a reassessment of all revenues and costs associated with MTA programs and projects.

**LONG-RANGE ELEMENT (LRE)**

As provided in FHWA-UMTA joint regulations governing transportation programming, the LRE of a transportation plan provides for the long-range transportation needs of the urbanized area and identifies new transportation policies and facilities or major changes in existing facilities. It must be consistent with the area's comprehensive long-range land use plan, urban development objects, and overall social, economic, environmental system, performance, and energy conservation goals and objectives. (TRB)

**LOOP**

1. A transit route or guideway layout that is of a closed continuous form, such as a circle. 2. A terminal track layout or bus driveway that reversed the direction of a vehicle without the vehicle's reversing. (TRB)

**LOOP, PINCHED**

SEE: Pinched Loop.

**LOS**

Level of Service. A measurement monitor based on traffic counts. Used by the Congestion Management Plan (CMP) to assign ratings at specific corridor locations ranging from "A" (best) to "F" (worst).

**LOS ANGELES & REDONDO**

A system of interurban rail lines generally in the Southbay part of the Los Angeles Basin (the communities of Redondo Beach, Gardena, Hawthorne, and Lawndale, for instance). Merged into Pacific Electric in 1911.

**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (LACMTA OR MTA)**

Los Angeles County Metropolitan Transportation Authority. Established by the California Legislature April 1, 1993. The LACMTA (MTA) is the result of a merger of the Los Angeles County Transportation Commission (LACTC) and the Southern California Rapid Transit District (SCRTD). MTA is a public entity with a locally appointed Board of Directors consisting of thirteen members. The Agency continues the responsibilities of its two predecessor agencies, which include planning, construction, and bus and rail operations.

**LOS ANGELES METROPOLITAN TRANSIT AUTHORITY**

Formed in 1951 to study a monorail system in the Los Angeles River, the LAMTA Act was redefined in 1957 so that the Los Angeles Metropolitan Transit Authority (the first MTA) could operate existing transit while seeking to construct a rapid transit system. Purchased Los Angeles Transit Lines and Metropolitan Coach Lines March 3, 1958. Converted the remaining MCL rail services to bus by 1961 and by 1963 converted the remaining LATL rail and trolley bus lines to motor bus operation. Replaced by the Southern California Rapid Transit District (SCRTD or RTD) in 1964. Known as the first MTA.

**LOS ANGELES MOTOR COACH CO. (LAMC)**

A joint operating agency formed by Pacific Electric Railway and Los Angeles Railway in 1923 (original name was Los Angeles Motor Bus Co. but renamed Los Angeles Motor Coach Co. in 1930) to operate certain bus lines. Dissolved in 1949, and the lines split between Pacific Electric Railway and Los Angeles Transit Lines.

### **LOS ANGELES PACIFIC**

A system of interurban rail lines built by Gen. Moses Hazeltine Sherman and Eli P. Clark on Los Angeles' west side (the communities of Venice, Ocean Park, Santa Monica, Hollywood, Beverly Hills, for instance). Merged into Pacific Electric in 1911. Sherman was also a land developer and his name is seen in Sherman Oaks and Hazeltine Avenue in the San Fernando Valley.

### **LOS ANGELES RAILWAY**

The local transit system in Los Angeles. The "Yellow Car" system was an outgrowth of horse, cable, then electric railway systems and began its corporate identity in 1895. Control of LARY passed to Henry E. Huntington in 1898. Conversion of streetcar lines to bus operation began in the 1930s. The Huntington estate sold its majority interest in LARY to National City Lines in 1944, which renamed it Los Angeles Transit Lines. LATL was sold to the Los Angeles Metropolitan Transit Authority (the first MTA) in 1958 and is now part of the Los Angeles County Metropolitan Transportation Authority. Also see Huntington, Henry Edwards.

### **LOS ANGELES REGIONAL TRANSPORTATION STUDY (LARTS)**

An organization of transportation planners and data analysts who have developed and are charged with maintaining procedures for monitoring and forecasting travel in the Los Angeles area. It has primary responsibility for predicting future travel behavior within six counties (Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial) which comprises the Southern California Association of Governments (SCAG) region. It operated under the aegis of CALTRANS, District 7, and function with the support of SCAG, U.S. Department of Transportation, and transit districts, cities and counties of the SCAG region.

### **LOS ANGELES TRANSIT LINES**

National City Lines purchased controlling interest in Los Angeles Railway in 1944, and renamed the corporate entity Los Angeles Transit Lines. The owners, which operated many other urban transport systems, converted much of the remaining Los Angeles streetcar system to motor bus operation. Sold to Los Angeles Metropolitan Transit Authority (the first MTA) in 1958.

### **LOSS OF GOODWILL PAYMENTS**

Payments made to property owner or tenant to compensate for loss of business goodwill or reduction in value of a business that results from acquisitions of the real property and displacement of the business.

### **LOW PLATFORM**

A platform at or near the top of the running surface of the transit unit (vehicle or train), requiring the passenger to use steps to board and alight. (TRB)

### **LOW RAIL (INSIDE RAIL)**

The inner rail of a curve that has at-grade alignment, whereas the opposite or outer rail is elevated. (TRB)

### **LOW VOLTAGE**

In rail transportation, the voltage used for most auxiliary systems (e.g., illumination, fans, public address systems), usually 24 or 72 volts direct current or 110-240 volt alternating current. (TRB)

### **LOW-BID PROCUREMENT**

A bid that is awarded to the lowest responsive and responsible bidder.

### **LOW-CAPITAL TRANSPORTATION IMPROVEMENTS (LCT)**

A group of transportation improvements, designed to increase the usefulness of existing transportation facilities, that generally cost less and can be implemented more quickly than system development action; see also Transportation System Management (TSM). (TRB)

**LOWE, THADDEUS S. C.**

Professor Thaddeus Sobieski Constantine Lowe (1832-1913) built the Mt. Lowe railway (including the incline railway from Rubio Canyon to Echo Mountain). His fame began during the Civil War, when he organized a balloon corps for observation purposes. He moved to Pasadena, California, in 1888. His railway properties were lost to Pacific Electric in 1902; the mountain railway was abandoned in 1939 after many fires and a great flood made continuing the service unfeasible.

**LPG**

Liquefied Petroleum Gas. Propane, butane and other fuel gases which are transported under pressure in their liquid phase. Accidents involving LPG are hazardous because the gas escapes under pressure, is very flammable, and is heavier than air. Shipments of LPG receive special handling.

**LRT**

Light Rail Transit.

**L RTP**

SEE: Long Range Transportation Plan.

**LRV**

Light Rail Vehicle. An electrically-propelled passenger carrying rail vehicle. Also see Streetcar.

**LTF**

Local Transportation Fund. Created by the Transportation Development Act (TDA). A one-fourth percent state sales tax allocated by formula to eligible transit operators for operating and capital purposes.

**LUBRICATION**

The application of lubricants, generally on a scheduled basis, to equipment and machinery.

# M

**MACHINE LANGUAGE**

The logic language a computer understands.

**MAGNETIC FARECARD**

A card containing a magnetic tape strip or other electronic means of indicating the value purchased. The card is usually obtained from a vending machine and must be inserted into a farecard reader to gain access to the paid area of the transit system. In some systems, the card must also be inserted into a farecard reading to exit the paid area. (TRB)

**MAGNETIC LEVITATION (MAG-LEV)**

A rail transportation system with exclusive right-of-way which is propelled along a fixed guideway system by the attraction or repulsion of magnets on the rails and under the rail cars. (APTA)

## **MAINLINE**

Territory control on all heavy and light rail lines by the Central Control Facility (CCF) consisting of main track, interlockings, tumbback tracks and yard lead tracks to the Yard Limit sign. Mainline tracks are identified as:

- \* AR/BR/YR- Normal westbound tracks from Yard Limit.
- \* AL/BL/YL- Normal eastbound tracks to Yard Limit.
- \* Track 1- Designated northbound track from Long Beach to Los Angeles (Blue Line).
- \* Track 2- Designated southbound track from Los Angeles to Long Beach (Blue Line).
- \* Track 1- Designated westbound track from Norwalk to El Segundo (Green Line).
- \* Track 2- Designated eastbound track from El Segundo to Norwalk (Green Line).

## **MAINTAINABILITY**

The quality of the combined features of equipment design and installation that facilitates the accomplishment of inspection, test, checkout, servicing, repair, and overhaul with a minimum of time, skill and resources in the planned maintenance environments. (NTSC)

## **MAINTAINER**

Employee who maintains, repairs, constructs or otherwise improves the appearance of equipment or facilities.

## **MAINTENANCE**

All actions necessary for retaining an item in or restoring it to an operable condition. (NTSC)

## **MAINTENANCE OF WAY DEPARTMENT**

The function unit within a maintenance organization that has responsibility for the maintenance of all fixed plant and equipment other than transit vehicles.

## **MAINTENANCE, CORRECTIVE**

The action taken to restore a failed item of equipment to an operable state. (NTSC)

## **MAINTENANCE, PREVENTIVE**

The actions performed in an attempt to retain an item in specified condition by providing systematic inspection, detection and prevention of incipient failure. (NTSC)

## **MAINTENANCE, SCHEDULED**

Programmed preventive maintenance. (NTSC)

## **MAINTENANCE, UNSCHEDULED**

Corrective maintenance action initiated by the failure of equipment.

## **MAJOR ACTIVITY CENTER (MAC, ACTIVITY CENTER)**

A geographical area characterized by a large transient population and heavy traffic volumes and densities; for example, central business district, major air terminal, large university, large shopping center, industrial park, sports arena. (TRB)

## **MAJOR ACTIVITY CENTER TRANSIT SYSTEM (MAC SYSTEM)**

SEE: Transit System, Major Activity Center (MAC System).

## **MAJOR DEFECT**

A defect other than critical, that is likely to result in failure or reduce materially the usability of the unit or product for its intended purpose.

**MAJOR STREET**

An arterial highway that has intersections at grade and gives direct access to abutting property. Geometric design and traffic control measures are used to expedite the safe movement of through traffic. (TRB)

**MALFUNCTION**

Any anomaly or failure wherein the system, subsystem, or component fails to function as intended. (NTSC)

**MAN FAILURE**

Failure due to human error.

**MANAGERS OF MOBILITY**

Transit systems which expand their role to include services and approaches beyond traditional public transportation to include ridesharing, high occupancy vehicle programs, public education of transit's benefits and integration of land use, air quality and transportation decisions; the phase was developed as part of the industry's Transit 2000 policy effort undertaken in the late 1980s and early 1990s. (APTA)

**MANAGING ACTIVITY**

The organizational element that will plan, organize, direct, contract and control tasks and associated functions appropriate to the life cycle phase of the system. (NTSC)

**MANUAL CONTROLLER**

Control handle device that allows train operator to manually control movement of a train.

**MANUAL TRAIN OPERATION (MTO)**

The MTO mode shall only be used in Cab Signal Territory (CST) when authorized by Central Control Facility (CCF) or according to Standard Operating Procedures (SOP).

**MANY-TO-FEW SERVICE**

A service that picks up passengers at many different origins and delivers them to a few destinations. (TRB)

**MANY-TO-MANY SERVICE**

A service that picks up passenger at many different origins and delivers them to many different destinations within the service area. (TRB)

**MANY-TO-ONE SERVICE (GATHER SERVICE)**

A service that collects passenger from many origins and delivery them to a specific point, for example, an office building, train station or bus stop. (TRB)

**MARGINAL COST**

The cost of producing one more unit of output. (TRB)

**MARKER**

A flag, reflector, or light displayed on the rear of a train. (Technically, if no marker is displayed, a movement is not a train, it just an engine with cars.) Typically a marker is extinguished or removed when a train is clear of the main track, as in a siding. The red light of a FRED is usually the marker for a 1990s freight train. Also see FRED.

**MARKET INFORMATION SYSTEM**

A systematic approach to provide (transportation) decision makers with relevant marketing information on a continuing basis. (TRB)

**MARKET OUTLINE**

A summary of the relative position of a type of (transportation) produce or service in the total (transportation) market. (TRB)

**MARKET POTENTIAL**

A calculation of the maximum possible number of buyers or users of a (transportation) good or service in a defined territorial area during a stated time period. (TRB)

**MARKET PROFILE**

A description of the characteristic of people (age, sex, income, etc.) or of businesses or industrial activity (size, volume of sales, etc.) that constitute the market for a (transportation) product or service. (TRB)

**MARKET SEGMENT**

A portion of the population or a commercial activity consisting of individuals that have similar socioeconomic, demographic, economic, or other characteristics, so that similar marketplace behavior can be implied. The market segment may require a marketing plan tailored to its distinctive characteristics. (TRB)

**MARKET SEGMENTATION**

The process of identifying market segments. (TRB)

**MARKET SHARE**

The percentage of a (transportation) market realized or available to a particular (transportation) provider. (TRB)

**MARKETING**

1. A comprehensive process to induce greater use of (transportation) services or products by determining the needs or demands of the community and potential consumers, developing and implementing service on the basis of these needs, pricing the service, promoting the services, and evaluating the services as implemented in relation to consumer needs and marketing goals. 2. In some organizations the marketing function is defined more narrowly as market research, pricing (fare) structure, image development (e.g., logo and color scheme), information services (e.g., route maps and schedules), advertising, and promotional efforts. (TRB)

**MARKETING ANALYSIS**

A type of marketing research that involves the measurement of the extent of present (transportation) needs, the determination of their characteristics, and the project of future trends. (TRB)

**MARKETING CONCEPT**

A philosophy that marketing is a management function that links the organization with its external environment (consumers and other constituencies). It includes responding to needs and anticipating change by attention to the process by which people adopt, maintain, or discard ideas, beliefs, or behavior patterns. (TRB)

**MARKETING COST ANALYSIS**

The classification of accounting date into functional accounts (accounts organized by the purpose for which the expenditure was made or for which the revenue was received) instead of the traditional natural accounts (e.g. salaries and supplies) so that the marketer can evaluate the potential revenue and profitability of particular customer, territories, and so on. (TRB)

**MARKETING MANAGEMENT**

The planning, organizing, direction, and control of the entire marketing activity of a (transportation) supplier, including the formulation of marketing strategy, objective, policies, and programs, market research and product development; organization and staffing to carry out plans; supervision of market operation; and control of marketing performance. (TRB)

**MARKETING MIX**

The four basic elements in a marketing program that influence consumer decisions; product, pricing, distribution or delivery, and communication (promotion). (TRB)

**MARKETING PLANNING**

The process of setting up objective for marketing activity and of determining and scheduling the steps necessary to achieve such objectives. (TRB)

**MARKETING RESEARCH**

The systematic gathering, recording, and analyzing of primary (newly collected) and secondary (existing) data to provide information for marketing decision making. In transportation, this could consist of gathering information and data (including economic data, etc.) and analyzing this material to identify the service attributes that most strongly influence the decisions of different groups about travel, to assess the characteristics (needs, number, etc.) of potential users of a system, and to anticipate future trends. (TRB)

**MARRIED PAIR**

Two cars that makeup an operable transit vehicle unit, generally sharing certain equipment such as battery, power supply, etc. A car of a married pair cannot function alone and the pair is generally connected on a semi-permanent and not easily separable basis.

**MASKING**

A computer technique of blocking out or reformatting the display of information, such as substituting asterisks for characters when inputting passwords, or adding the necessary dashes to a telephone number on a computer display or report.

**MASS TRANSIT**

Transportation vehicles which provide for movement of relatively large numbers of persons in shared vehicles; another name for public transportation. Also see Public Transportation.

**MASS TRANSIT ACCOUNT**

The federal account, established by the Surface Transportation Assistance Act of 1982, into which a designated portion of the federal Highway Trust Fund revenue from motor fuel taxes is placed (1.5 cents in 1994). This account is used for federal mass transportation assistance. (APTA)

**MASS TRANSPORTATION**

SEE; Public Transportation.

**MASTER CONTROLLER**

The device which generates local and trainlined control signals to the propulsion system or brake system of a transit vehicle.

**MATERIAL COSTS**

Costs of items such as raw materials, parts, sub-assemblies, components, and manufacturing supplies, whether purchased or manufactured by the contractor, which may include such collateral items as inbound transportation and in-transit insurance.

**MATINEE**

Any regular straight run which signs on between 10:00 a.m. and early afternoon.

**MATRIX**

An array of symbols or numbers, called elements, arranged in rows and columns in two dimensions and used as a form of tabulation. (TRB)



**MATRIX, IMPEDANCE**  
SEE: Impedance Matrix.

**MATRIX, TRIP**  
SEE: Trip Matrix.

**MAXIMUM AUTHORIZED SPEED**  
The highest speed limit which is authorized for a particular section of track. (NTSC)

**MAXIMUM LOAD POINT**  
The point on a route where the total numbers of passengers carried is a maximum. Generally, the total is for 24 hour period in both directions. The maximum load point can also refer to peak-hour and a one direction flow.

**MAXIMUM THEORETICAL VELOCITY (SPEED)**  
The highest theoretical velocity that a vehicle is physically capable of achieving. (TRB)

**MBE**  
Minority-owned Business Enterprises.

**MEAN DISTANCE BETWEEN SERVICE INTERRUPTIONS (MDBSI)**  
The average number of miles a transit vehicle is operated between service interruptions caused by chargeable defects and resulting in a delay and/or inconvenience to customers.

**MEAN DOWN TIME (MDT)**  
The arithmetic mean of the time that the device remains in an inoperable state after it has failed. (NTSC)

**MEAN LIFE**  
The arithmetic mean of time to wear out of all items in the test sample or population. (NTSC)

**MEAN MAINTENANCE TIME**  
The arithmetic mean of the time required to perform a maintenance action. (NTSC)

**MEAN TIME BETWEEN FAILURES (MTBF)**  
SEE: Failure Rate.

**MEDIA**  
Information storage and distribution format (e.g. video tape, floppy disk, optical disc, print, etc.) The extensions of mankind's ability to communicate. This is the message.

**MEDIAN STRIP**  
The portion of a divided highway which separates opposing flows of traffic.

**MEDIATION**  
Efforts by an impartial third party to encourage agreement between a labor union and management by counseling each side and facilitating negotiations. Also known as "conciliation."

**MEIR**  
Master Environmental Impact Report.

**METERED FREEWAY**

SEE: Freeway, Metered.

**METHANOL**

A fuel derived from methane gas, that in the late 1980s was a leading alternative to diesel fuel. The objective was to use methanol to meet the low emission regulations. The high cost of maintaining vehicles using methanol resulted in transit agencies switching to other alternatives.

**METHODOLOGY**

A process (or related series of steps) to accomplish a design goal, together with a set of design objects that are manipulated to support the process. (Modern Database Management- 4th Edition)

**METRO ART**

Section within the Communications Division whose mission it is to assist commuters connecting with one another through the creative community's innovative involvement in the Metro System. Programs include permanent art and design collaborative projects, temporary projects, and education.

**METRO BLUE LINE**

Long Beach-Los Angeles Light Rail Transit Project. A 22-mile electrically-powered light rail line originally constructed by the LACTC/RCC now under the jurisdiction of the MTA; opened for service on July 14, 1990.

**METRO FREEWAY SERVICE PATROLS**

Funded by MTA, these contracted towing services remove stalled vehicles from peak period congested freeways. It is managed by MTA in conjunction with the California Highway Patrol and Caltrans. MTA staff maintains the two-way radio equipment installed in the trucks. Currently there are 144 tow trucks covering 400 miles of freeways during peak commuter periods, Monday through Friday.

**METRO GREEN LINE**

Norwalk-El Segundo Light Rail Transit Project. A 20-mile electric rail line constructed by the MTA mostly in the median of the I-105 freeway. It was opened for service August 12, 1995.

**METRO RED LINE-SEGMENT 1**

Segment 1 of the Metro Rail project constructed by the MTA from Union Station to Wilshire/Alvarado (now called Westlake/MacArthur Park) (4.4 miles). Operation began on January 30, 1993.

**METRO RED LINE-SEGMENT 2**

Segment 2 of the Metro Rail project will be constructed in two separate Segments. Segment 2A was completed July 13, 1996 and constructed from Wilshire/Alvarado (now called Westlake/MacArthur Park) to Wilshire/Western. Segment 2B is currently under construction from Wilshire/Vermont to Hollywood/Vine and is scheduled to be completed December 31, 1998. Both segments will add a combined total of 6.7 miles.

**METRO RED LINE-SEGMENT 3**

Segment 3 of the Metro Rail project is the continuation of the Mainline from Hollywood/Vine to Lankershim Blvd./Chandler Blvd., and is scheduled to be in operation in the future (6.3 miles). Segment 3 also includes an East Los Angeles extension from Union Station to 1st/Lorena (3.7 miles).

**METROLINK**

The regional commuter rail system connecting Los Angeles, Orange, Riverside, San Bernardino, Ventura and San Diego counties. The system started operation with the opening of the San Bernardino, Santa Clarita and Ventura County Lines on October 26, 1992. Inter-county commuter rail system established and operated under the authority of the Southern California Regional Rail Authority (SCRRA), using contracted service providers. Currently, AMTRAK is contracted to operate the system. Also see SCRRA.

### **METROPOLITAN COACH LINES**

Formed to purchase existing rail and bus passenger operations of Pacific Electric Railway, which it purchased in 1953. MCL was committed to seek to convert the remaining rail passenger operations to buses. President was Jesse L. Haugh. MCL purchased Asbury Rapid Transit System in 1954. Metropolitan Coach Lines was sold to Los Angeles Metropolitan Transit Authority (the first MTA) in 1958.

### **METROPOLITAN PLANNING ORGANIZATION**

Metropolitan Planning Organization. There are 339 MPOs designated by the federal and state governments to undertake cooperative regional transportation and conforming the plan to environmental planning requirements. The primary responsibility of an MPO is to develop consensus on a long-term transportation plan for an urban area and to develop a Transportation Improvement Program (TIP) that identifies projects to implement the plan. The Southern California Association of Governments is the MPO responsible for Southern California. Also see Conformity.

### **METROPOLITAN STATISTICAL AREA (MSA)**

As defined and designated by the U. S. Office of Management and Budget, an MSA consists of the central county or counties containing a city or an urbanized area with a population of at least 50,000 and the adjacent or outlying counties that have close economic and social relationships with the central counties, with a total metropolitan population of at least 100,000. An MSA, in contrast to the urbanized area, will therefore correspond to existing political jurisdiction boundaries (i.e., entire counties, except in the six New England states, where the boundaries are in terms of cities and towns. The term was adopted after the 1980 census and replaces standard metropolitan statistical area (SMSA). (TRB)

### **MICROWAVE LOOP**

Backbone of MTA's telecommunication network. Seven microwave repeater sites are configured in a loop with the Union Station Gateway Building as the terminal and hub. The network of microwave communications equipment is installed at the Gateway Building, most MTA divisions, and mountain-top radio sites. The microwave system carries the majority of telephone, data and radio traffic throughout Authority facilities. The "loop" represents the configuration of the main backbone radios located at the Gateway, CCF, San Pedro Hill, Division 5, Verdugo Peak, Mount Washington and Rio Hondo. Note also the following term, Telco Lines - voice or data communication lines leased from the local telephone company. MTA uses Telco Lines as backup to the microwave system and in areas where it is not practical or cost-effective to have private lines.

### **MICROWAVE TRANSMISSION**

A high capacity transmission medium for radiated signals that uses the radio frequency system; when acting in the receiver capacity, a modem decodes incoming frequencies.

### **MIDBLOCK STOP**

A transit stop located at a point away from intersections. (TRB)

### **MILE POST**

A sign along the railroad (or highway) indicating the number of miles from a reference point. On the Southern Pacific, miles are from San Francisco, on Metrolink, they are from Los Angeles. Abbreviated MP or M.P.

### **MINI SYSTEM**

A form of collector-feeder-distribution system generally utilizing small scale people-mover vehicles, moving sidewalks or other similar means for distributing or collecting passengers in the vicinity of a rapid transit station.

### **MINIBUS**

Small bus usually operated on short trip or circulation routes in a downtown area, airport or other dense population area. The name originates from the trade name "Minibus" whose buses were manufactured in Pico Rivera. In the seventies, the RTD operated minibuses, seating 20 passengers with peripheral seating, similar to the small buses now operated by LADOT using the DASH name.

**MINORITY BUSINESS ENTERPRISE (MBE)**  
SEE; Disadvantaged Business Enterprise (DBE).

**MINORITY/WOMEN BUSINESS ENTERPRISE PROGRAM (MBE/WBE)**

An MBE enterprise is at least 51 percent owned by one or more members in the following presumptive groups: Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, Asian-Indian Americans and Women regardless of race, ethnicity or origin. A WBE enterprise is at least 51 percent owned by one or more women; and its management and daily business operations are controlled by one or more women who own it.

**MISSOUT**

Failure of operators to report for work at their designated time.

**MITIGATION**

Temporary public art project used as a means of reducing the impact of construction on neighborhoods and businesses.

**MIXED MODE STREET**

A street carrying mixed traffic, that is, having no exclusive transit lanes or priority lanes for transit. (TRB)

**MIXED TRAFFIC (MIXED FLOW TRAFFIC)**

Traffic that contains different vehicle categories or different modes. (TRB)

**MIXED TRAIN**

A train which carries both freight and passengers. Once common on lightly traveled lines, now extinct.

**MMS**

Material Management System.

**MOBILITY ALLOWANCE**

Funds that are given to local and or private transit operators to provide transit services on fixed routes at an equal or better service and lower costs.

**MODAL SPLIT**

1. The percentage of inter/intra-zonal trips using some mode of mass transit as opposed to the use of private automobiles. The choice or "split" between modes can be modeled as a function of variables which describe both the transportation alternatives and the socio-economic characteristics of those who would avail themselves of the alternatives; 2. Term which describes how many people use alternative forms of transportation, frequently used to describe the percentage of people using public transit.

**MODE**

A particular form of transit or transportation, i.e., bus, light rail, heavy rail, or automated guideway.

**MODE CHOICE MODEL (MODAL CHOICE MODEL)**

A model used to forecast the proportion of total person trips on each of the available transportation modes. (TRB)

**MODE, ACCESS**

A feeder mode to the principal mode of transportation; for example, walking, kiss and ride, park and ride. (TRB)

**MODEL**

The representatives of a system having properties and operations that duplicate those of the original system in characteristics of interest. An analytical tool (often mathematical) used by transportation planners to assist in making forecasts of land use, economic activity, travel activity and their effects on the quality of resources such as land, air and water.

**MODEL, LAND USE**

A model used to predict the future spatial allocation of urban activity (land use), given total regional growth, the future transportation system, and other factors.

**MODELING SYSTEM, URBAN TRANSPORTATION**

SEE: Urban Transportation Modeling System.

**MODEM (MODULATOR-DEMODULATOR)**

End user computer interface that enables digital data to be transmitted over analog transmission facilities like phone lines.

**MODERN ART**

Art made between approximately 1900 and 1945.

**MODIFIED ACCRUAL BASIS**

The accrual basis of accounting adapted to the governmental fund type spending measurement focus. Revenues are recognized when they become both "measurable" and "available" to finance expenditures of the current period. Expenditures are recognized when the related fund liability is incurred.

**MONOBEAM**

A type of guideway that consists of a single beam, usually elevated. It generally has a rectangular cross section that is usually straddled by the associated vehicles. (TRB)

**MONORAIL**

An electric railway in which a rail car or train of cars is suspended from or straddles a guideway formed by a single beam or rail. Most monorails are either heavy rail or automated guideway systems. (APTA)

**MONTE CARLO TECHNIQUE**

A simulation technique in which a random number generator is used to assign the numerical values of some components in the system being analyzed. It is usually assumed that a large number of repetitions of the simulation will produce reliable data on the means and distributions of the outputs. (TRB)

**MONTHLY PASS**

SEE: Pass, Monthly.

**MOORE'S ALGORITHM**

A numerical procedure for determining the shortest paths from a single starting node to each other node in a network. (TRB)

**MOS**

Minimum Operating Segment. Original names for the three Metro Red line project modules. Now called Segments.

**MOTOR COACH**

SEE: Bus, Motor.

**MOTOR, ALTERNATING-CURRENT**

An electric motor (synchronous, induction, etc.) that operates on alternating current. (TRB)

**MOTOR, ASYNCHRONOUS**

An asynchronous machine that transforms electrical power from any alternating-current system into mechanical power and whose rotor does not turn at synchronous speed. (TRB)

**MOTOR, COMPOUND**

A direct current motor that has two separate field windings, one (usually the predominating field) connected in parallel with the armature circuit and the other connected in series with the armature. (TRB)

**MOTOR, DOUBLE-SIDED LINEAR INDUCTION (DLM, DSLM)**

A linear induction motor that has its active primary winding constructed so that it reacts magnetically with both sides of the guideway-mounted reaction rail (secondary winding). (TRB)

**MOTOR, INDUCTION**

An asynchronous alternating-current motor that converts alternating-current electric power, delivery to the primary winding (usually the stator) and carried as induced current by the secondary winding (usually the rotor), into mechanical power. Also see Motor, Linear Induction. (TRB)

**MOTOR, LINEAR ELECTRIC (LEM)**

An electric motor that produces mechanical force through linear, instead of rotary, motion. It is chiefly used for propelling vehicles along a track or other guideway. (TRB)

**MOTOR, LINEAR INDUCTION (LIM)**

An asynchronous alternating-current motor composed of a winding in the guideway and a winding in the vehicle, one of which is energized to produce opposing magnetic fields that propel by alternately attracting and repelling the vehicle. Also see Motor, Double-Sided Linear Induction; Motor, Single-Sided Linear Induction. (TRB)

**MOTOR, SINGLE-SIDED LINEAR INDUCTION (SLM, SSLM)**

A linear induction motor that has a single primary winding on one side of the secondary or reaction rail. (TRB)

**MOU**

Memorandum of Understanding. A formal contractual agreement between two or more public agencies.

**MOVING WALKWAY**

(Also called Moving Sidewalk, Passenger or Pedestrian Conveyor, Passenger Belt.) A fixed conveyor device (usually a flexible felt) on which pedestrians may stand or walk while being transported. Also see Ramp, Moving. (TRB)

**MOW**

Maintenance of Way.

**MPEG**

Moving Pictures Expert Group. MPEG is a standard way to compress full-motion video.

**MPO**

SEE: Metropolitan Planning Organization.

**MSA**

SEE: Metropolitan Statistical Area.

**MSDS**

Material Safety Data Sheets - A written description of the product produced by the manufacturer that includes description of any hazardous substance in accordance with Cal-OSHA regulations. These data sheets are required to be available for employee review. By MTA policy, a MSDS sheet must be approved and on file before purchase of the product.

**MTA**

Metropolitan Transportation Authority. Also known as Los Angeles County Metropolitan Transportation Authority (LACMTA).

**MTO**

SEE: Manual Train Operation.

**MULTIMEDIA**

Computer systems that integrate audio, video and data.

**MULTIMODAL**

Public transportation system which employs a combination of highway, bus, rail, High Occupancy Vehicle (HOV), bikeway, pedestrian land uses, and demand management systems.

**MULTIMODAL PLANNING DEPARTMENT (MMP)**

The Multimodal Planning Department plans, develops and implements projects that strengthen the transportation system as well as integrates innovative congestion management and land use programs.

**MULTIPLE UNIT**

The devices used to connect the controls of several locomotives so they can be controlled from one cab. Almost all road locomotives are so equipped.

**MULTIPLE-CHOICE MODEL**

A model that relaxes the assumption of only two possible choices and allows any number of possible choices within a given level of travel choice, such as mode, route, or time period, or among any of all of these trip characteristics. (TRB)

**MULTIPLE-USE AREA**

A transportation right-of-way used for other purposes in addition to transport, for example, as a park. (TRB)

**MULTIVALUED ATTRIBUTE**

An attribute that can have more than one value for each entity instance. (Modern Database Management- 4th Edition)

**MULTIVALUED DEPENDENCY**

A type of dependency that exists when there are at least three attributes (for example, A, B and C) in a relation, and for each value of A there is a well-defined set of values for B and a well-defined set of values for C, but the set of values for B is independent of set C. (Modern Database Management- 4th Edition)

## **MUNICIPAL OPERATOR**

A city or county (including any non-profit corporation or other legal entity wholly-owned or controlled by the city or county) which operates a public transportation system, or which on July 1, 1972, financially supported in whole or in part a privately-owned public transportation system and which is not included within an existing transit district.

## **MUNICIPAL OPERATORS**

From a funding perspective, consists of all bus operators who are recipients of regional transit funds through the formula share. Using this definition, MTA Operations is included as a municipal carrier. Currently there are four demand responsive carriers and thirteen fixed route carriers. In the first category are the dial-a-ride systems for the cities of Arcadia, Claremont, La Mirada and Redondo Beach. In the second category are the municipal bus systems for the following cities: Antelope Valley Transit Authority (Lancaster and Palmdale), Commerce, Culver City, Gardena, Los Angeles (LADOT), Long Beach, Montebello, Norwalk, Santa Clarita, Santa Monica and Torrance. Also in this category are MTA Operations and starting July 1, 1996, Foothill Transit Zone. All of the municipal operators are departments of their respective cities, except that Long Beach is an independent department of that city. Foothill Transit is a Joint Powers Agency and MTA Operations is directly a part of the LACMTA, a public entity with a locally appointed Board of Directors. All other transit operations operated by cities within Los Angeles County, both fixed route and demand responsive, are funded by funds under their own control, within specified guidelines, with most of the funds coming from the cities' Local Return Funds from Propositions A and C. As a historical note, six of the municipal systems, not counting the predecessors to MTA Operations, operated as bus substitutes when the Pacific Electric rail system was being abandoned incrementally. Also see Proposition A and Proposition C.

# **N**

## **NACO**

SEE: National Association of Counties.

## **NARC**

SEE: National Association of Regional Councils.

## **NARROW GAUGE**

Railroad track narrower than standard (4'-8 1/2") gauge.

## **NATIONAL ASSOCIATION OF COUNTIES**

National Association of Counties (NACO). Membership includes elected and appointed county governing officials and other county officials and their deputies at management or policy levels. This organization provides research and reference services for its members and represents them at the national level. (TRB)

## **NATIONAL ASSOCIATION OF REGIONAL COUNCILS**

National Association of Regional Councils (NACO). Membership includes the regional councils of local governments and government agencies, and libraries, organizations, and others interested in regionalism as an approach to or addressing issues that cross local government boundaries, such as transportation. The association provides legislative representation in Washington, D.C., and technical assistance through workshops and training programs. (TRB)

## **NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP)**

A program established by the American Association of State Highway Officials (now American Association of State Highway and Transportation Officials) to provide a mechanism for a national coordinated program of cooperative research employing modern scientific techniques. NCHRP is administered by the Transportation Research Board. (TRB)



**NATIONAL COOPERATIVE TRANSIT RESEARCH AND DEVELOPMENT PROGRAM (NCTRP)**

A program established under section 6(a) of the Urban Mass Transportation Act of 1964, as amended, to provide a mechanism by which the principal client groups of the Urban Mass Transportation Administration can join cooperatively in an attempt to resolve near-term public transportation problems through applied research, development, testing, an evaluation. NCTRP is administered by the Transportation Research Board. (TRB)

**NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA)**

A comprehensive federal law requiring an analysis of the environmental impacts of federal actions, such as the approval of grants, and the preparation of an environmental impact statement for every major federal action that significantly affects the quality of the human environment. (TRB)

**NATIONAL HIGHWAY SYSTEM (NHS).**

A proposed transportation system consisting of approximately 155,000 miles of highway in order to provide an interconnected system of principal arterial routes serving major populations centers, major transportation facilities, major travel destinations, interstate and interregional travel and meeting national defense requirements. The NHS, defined in the Intermodal Surface Transportation Efficiency Act (ISTEA), is one component of the National Transportation System (NTS). (APTA)

**NATIONAL LEAGUE OF CITIES**

National League of Cities (NLC). A federation of state leagues and cities that develops and pursues a national municipal policy to meet the future needs of cities and to help them solve problems that they have in common. It represents municipalities before Congress and federal agencies; offers training, technical assistance, and information; and conducts a research program. (TRB)

**NATIONAL PERSONAL TRANSPORTATION STUDY (NPTS)**

The NPTS, conducted (at this time) in 1969, 1977, and 1983 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. (TRB)

**NATIONAL TRANSPORTATION SYSTEM (NTS)**

An intermodal system consisting of all forms of transportation in a unified, interconnected manner to reduce energy consumption and air pollution while promoting economic development and supporting the Nation's preeminent position in international commerce. The NTS includes the National Highway System (NHS), public transportation and access to ports and airports. (APTA)

**NATURAL JOIN**

The same as an equi-join except that one of the duplicated columns is eliminated in the result table. (Modern Database Management- 4th Edition)

**NCSA**

The National Center for Supercomputing Applications is an educational institute. The Mosaic web browser was created here. <http://www.ncsa.uiuc.edu/>

**NEA**

The Federal government's National Endowment for the Arts agency.

**NEAR-SIDE STOP**

A transit stop located on the approach side of an intersection. The transit units (vehicles or trains) stop to serve passengers before crossing the intersection. (TRB)

**NEEDS ASSESSMENT**

In transportation planning, a technique of estimating the services and facilities needed to satisfy the potential demand for transportation service. (TRB)

**OFF-LINE**

Not in the main flow of traffic or not on the main line of traffic, for example, off-line station. (TRB)

**OFF-LINE STATION**

A station at which a transit unit (vehicle or train) stops outside of the main track or travel line so that other units can pass while passengers board or alight. (TRB)

**OFFSET**

1. In transit operations, the amount of time (system-wide) that the train control computer has added into the theoretical schedule to maintain proper train sequencing, scheduled connections, and headways. 2. In traffic operations, the time difference between traffic signals as measured from some reference point. (TRB)

**OFF-STREET TERMINAL**

A transit terminal or turnaround point for transit vehicles that is located away from other vehicular traffic. (TRB)

**ON TIME PERFORMANCE**

Performance measure for determining how well a train or bus keeps to schedule; usually refers to whether vehicles arrive at their terminals within five minutes of their scheduled arrival time and calculated as a percentage compared to the total number of runs scheduled over a specified time period.

**ONE-PIECE RUN**

An operator's daily work schedule for which the operator stays in the same transit unit (vehicle or train) without relief. It is usually about 8 hours long. (TRB)

**ON-LINE**

In the main flow of traffic. (TRB)

**ON-LINE STATION**

A station in which transit units (vehicles or trains) stop on the main track or travel lane. This is the common design, and term is used only to distinguish this station from off-line stations. (TRB)

**ON-SCENE COORDINATOR (OSC)**

First MTA rail employee to arrive at the scene of an accident/incident until relieved by a rail transit Operations Supervisor, who declares as 'in-charge' of the accident/incident for all Rail Operations response activities. The OSC is Rail Operations' liaison with all emergency response agencies and the Central Control Facility (CCF).

**OPEN CUT GUIDEWAY**

A guideway below the prevailing surface of the terrain in a trenchlike excavation (cut). (TRB)

**OPEN RUN (EXTRA RUN)**

A run that is put into effect after other runs have been assigned and that normally will be assigned from the extra board until the next picking of runs or will be put up for bid by seniority. (TRB)

**OPERATE ON SIGHT**

Operate prepared to stop within the range of vision.

**OPERATING ASSISTANCE**

Financial assistance for transit operating expenses (not capital costs); such aid may originate with federal, local or state governments.

## **OPERATING BUDGET**

Funds allocated for normal MTA operations, such as employee salaries, rentals, power and fuel.

## **OPERATING CHARACTERISTICS**

Those quantitative, measurable parameters pertinent to a specific system, subsystem, device or component that provide definition of performance.

## **OPERATING COSTS**

All annual costs, including salaries, maintenance of equipment, supplies, and administrative expenses. They include amortization of buses, but not rapid transit vehicles and fixed facilities. Also see Capital Costs.

## **OPERATING EXPENSE**

Monies paid in salaries, wages, materials, supplies and equipment in order to maintain equipment and buildings, operate vehicles, rent equipment and facilities and settle claims.

## **OPERATING MODES (HEAVY RAIL)**

The Heavy Rail Operating Modes are:

- \* Automatic Train Operation (ATO), a subsystem within Automatic Train Control (ATC), which automatically regulates train speed, performs programmed station stopping and is subordinate to Automatic Train Protection (ATP).
- \* Emergency Manual Operation (EMO), train movement completely controlled by the train operator without speed regulation, monitoring or protection. Maximum train speed is 25 mph.
- \* Manual Train Operation (MTO), train movement controlled by the train operator, including train stopping, door control and with full Automatic Train Protection (ATP).
- \* Restricted Manual Operation (RMO), train movement controlled by the train operator. Maximum speed is 10 mph.
- \* Wash/Couple (W/C), train movement controlled by the train operator. Maximum train speed is 2 mph.
- \* Reverse Jog (R/J), a train movement controlled by the train operator for uncoupling a dependent pair from another dependent pair. Maximum movement in reverse direction is limited to 9 feet.

See also Automatic Train Operation, Emergency Manual Operation, Manual Train Operation, Restricted Manual Operation, Wash/Couple and Reverse Jog.

## **OPERATING MODES (LIGHT RAIL)**

The Light Rail Operating Modes are:

- \* Cab Signal, used in Cab Signal Territory and governed by wayside equipment. Maximum operating speed is 55 MPH.
- \* Street Run, used in Street Run Territory. Maximum Operating Speed is 35 MPH.
- \* Stop and Proceed, used in the Yard for normal train movement and on the Mainline where authorized by the rules. Other Main Stop and Proceed operation must be authorized by Control within defined limits. Maximum operating speed is 10 MPH.
- \* ATP Bypass, train movement completely controlled by the Train Operator by bypassing Automatic Train Protection (ATP) systems within defined limits and under special procedures by use of a Clearance Card. Maximum operating speed is 10 MPH on diverging moves, 25 MPH in Street Run Territory and 45 MPH in Cab Signal Territory.

## **OPERATING PERSONNEL**

Those employees of a transit system having direct and supervisory responsibility for the movement of vehicles, and the operation of stations, embodying both onboard and wayside duties.

## **OPERATING RATIO**

The ratio of operating expenses to operating revenue; the inverse to cost recovery ratio. It is used as a measure of financial efficiency. Also see Fare Recovery Ratio. (TRB)

**PINK LETTER (TEMPORARY SERVICE CHANGE LETTERS)**

Bulletin issued on pink paper by the Schedule Department regarding schedule changes or extra work. Annually about 4,000 schedule changes or "pinks" are issued for changes in school hours, fluctuation in traffic and ridership patterns, construction detours and community events, such as parades and street fairs.

**PIR**

Project Information Report.

**PIT**

A depressed area below floor level mainly between running rails or guideway for undercar lubrication, inspection and maintenance and equipped with all necessary utilities.

**PKZIP**

PKZIP is a shareware compression utility for PCs. A program called PKUNZIP is used to decompress these files.

**PLAN**

A scheme or program for making, doing or arranging something; project, design, schedule, etc.

**PLANNING PROCESS**

In transportation, the process required by federal transit and highway legislation through which communities develop proposals for transportation projects designed to serve the needs of an area. Also see Urban Transportation Planning Process. (TRB)

**PLANNING SYSTEM**

A system of cost, work and manpower planning, scheduling, and control, either manual or automated and generally part of a total management information system.

**PLANNING-PROGRAMMING-BUDGETING SYSTEM (PPBS) (PROGRAM BUDGETING)**

A planning and management process in which resources of an organization are allocated to identified individual programs, in contrast to the administrative budget grouping of resources by type of disbursement. (TRB)

**PLATFORM**

That portion of the station directly adjacent to the tracks, where trains stop to load and unload passengers. The full platform is the length of the trains which ultimately operate at peak hours. There are two basic types of platforms: center platform, with a platform between inbound and outbound guideways and side platforms, with a platform on each side of an adjacent pair of tracks.

**PLATFORM EDGE**

Referring to that continuous portion of the platform adjacent to the train; distinguishable by color, texture or a combination of both of these. Also see Platform.

**PLATFORM INTRUSION DETECTION SYSTEM (PIDS)**

Safety/security system located between tracks at passenger stations detecting unauthorized right-of-way intrusions.

**PLATFORM TIME**

1. The period during which an operator is charged with the operation or care of a transit unit (vehicle or train), including operating time in revenue service and deadhead, layover, and other time that the unit may be in operation but not in passenger service. 2. The time a transit unit is in revenue service. 3. The time the operator is actually on the assigned transit unit; also known as work time. (TRB)

**PLATFORM, CENTER**

A passenger platform located between two tracks or guideways so that it can serve them both. (TRB)

**PLATFORM, SIDE**

A passenger platform located to the outside of the tracks or guideways, as distinguished from a center platform located between the tracks or guideways. (TRB)

**PLAZA ENTRANCE**

An entrance to a below ground opening directly from an off-street plaza.

**PLOP ART**

Generally refers to sculpture which has been traditionally created by an artist in the studio with the intention of displaying in a gallery or museum, and "plopped" in a plaza; artwork not created specifically for the site.

**PMOC**

Project Management Oversight Consultant. An oversight function performed by the federal government to provide an independent review and evaluation of MTA's management and construction of the Metro Rail Project. Local Project Management Oversight is also performed by consultants reporting to the MTA Board for locally funded projects including the Pasadena Blue Line and the Los Angeles Standard Light Rail Vehicle Procurement.

**PMP**

Preventive Maintenance Program. An important part of bus vehicle maintenance is the performance of inspection, servicing and repairing of various components on the basis of bus miles operated.

**PMSA**

SEE: Primary Metropolitan Statistical Area.

**PMT**

SEE: Passenger Miles Traveled.

**POINT OF CONVERGENCE**

The location at which two transit routes meet and then continue on the same alignment. (TRB)

**POINT OF DIVERGENCE**

The point at which two transit routes separate after operating over the same alignment. (TRB)

**POINT OF INTERSECTION**

The point at which one transit route crosses or abuts another route. (TRB)

**POINTER**

An address (URL) embedded in data that specifies the location of data in another record or file. A hyperlink is an example of a pointer.

**POINTS**

The movable, tapered, pointed rails in a track switch.

**POINT-TO-POINT DEVIATION**

A transit routing pattern in which the vehicle passes through prespecified points in accordance with a prearranged schedule but is not given a specific route to follow between these points. It may provide door-to-door or curb-to-curb service. Also see Service, Point Deviation. (TRB)

**PROPERTY**

A transit industry term for a public transit agency or private transit company with responsibility for bus, rail or ferry service. Also see Transit District.

**PROPERTY MANAGEMENT**

Administration of property toward the end of maintaining and enhancing its productivity and value.

**PROPORTIONAL SAMPLE**

SEE: Sampling, Stratified.

**PROPORTIONAL TRIP**

A trip assignment process that is not all or nothing. (TRB)

**PROPOSAL**

A written response to a Request for Proposals.

**PROPOSED STATE TRANSPORTATION IMPROVEMENT PROGRAM (PSTIP)**

This seven-year program is based on the adopted State Transportation Improvement Program (STIP) and the most recent Delivery. It is developed by Caltrans for the California Transportation Commission (CTC) and includes projects developed through the IRRS, Intercity Rail, Sound Wall, Toll Bridge, and Aeronautics programs.

**PROPOSER**

Any individual, firm, partnership, corporation or combination thereof submitting a proposal for the work solicited by a Request for Proposal or other similar document.

**PROPOSITION 111 STATE GAS TAX**

Many state programs are funded by the Proposition 111 state gas tax of five cents (\$.05) per gallon that was effective on August 1, 1990 and a one cent (\$.01) per gallon additional increase that was effective on January 1, for each of the next four years (1991 to 1994) for a total of nine cents (\$.09) increase. The measure enacted a fifty-five percent (55%) increase in truck weight fees for commercial trucks over 4,000 pounds, effective August 1, 1990, and another ten percent (10%) increase effective January 1, 1995. Proposition 111 also exempts from the Gann expenditure limit the revenues generated by these increases so that the new funding can be spent for congestion relief and mass transit. The term Gann is for former Assemblyman Paul Gann, who was an anti-tax crusader.

**PROPOSITION A**

A transit funding referendum for Los Angeles County passed in 1980 providing for a one-half cent sales tax for transit related projects. One quarter (25%) of the funds generated, (referred to as Local Return Funds) are earmarked for transit projects. Thirty five percent (35%) of the balance of the funds is allocated to rail projects. The remaining forty percent (40%) is discretionary between bus and rail, although currently it is all allocated to bus operating costs.

**PROPOSITION C**

A transportation funding referendum for Los Angeles County passed in 1990 providing for a second one-half cent sales tax for transportation related projects. One fifth (20%) of the funds generated, (referred to as Local Return Funds) are earmarked for transportation projects. Twenty-five percent (25%) of the balance is for street and highways (provided transit operates on the streets), ten percent (10%) is for commuter rail, five percent (5%) is for transit related security measures, and the remaining balance of forty percent (40%) is discretionary with the funds currently allocated to both bus and rail projects; effective April, 1991.

**PROPRIETARY INFORMATION**

Information, including trade secrets, data, formulae, patterns, compilations, programs, devices, methods, techniques, or processes, that has the following characteristics:

- a) It derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; or
- b) It is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

**PROPULSION**

Electrical forces produced for train acceleration.

**PROSPECTUS**

1. In transportation, 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. 2. A document presenting the qualifications and experience of a consultant. (TRB)

**PROTEST**

A written objection or complaint by an interested party to the terms, conditions or forms of a proposed procurement or actual award of a contract.

**PROTOTYPE SYSTEM**

In system development, a system that has been built to demonstrate its capability to operate in the manner intended. Also see Prototype Vehicle. (TRB)

**PROTOTYPE VEHICLE**

A vehicle that is built to test a new design and that is expected to perform in essentially the same way that the production vehicle is meant to perform. When tested and perfected, the prototype becomes the model for production of series vehicles. See also Prototype System. (TRB)

**PROVIDER-SIDE SUBSIDY (OPERATOR'S SUBSIDY)**

A subsidy paid directly to the provider for supplying certain specified transportation services. (TRB)

**PSR**

Project Study Report. A document prepared for Caltrans for a major transportation improvement affecting a portion of the California State Highway System. The PSR is an engineering document that analyzes alternatives. The Project Report (PR) provides environmental document for the preferred alternative.

**PSTIP**

SEE: Proposed State Transportation Improvement Program.

**PTSC**

SEE: Public Transportation Services Corporation.

**PUBLIC ART**

Artwork that is publicly funded; artwork sited in public places; artworks whose content is determined in great part by public input.

**PUBLIC SERVICE VEHICLE**

A vehicle used for public passenger transport. (TRB)

**PUBLIC TRANSIT SYSTEM**

An organization that provides transportation services owned, operated, or subsidized by any municipality, county, regional authority, state or other governmental agency, including those operated or managed by a private management firm under contract to the government agency owner. (APTA)

**PUBLIC TRANSPORTATION**

Any system of an operator which provides transportation services to the general public by any vehicle operating on land or water, regardless of whether operated separate from or in conjunction with other vehicles. Also known as "mass transportation", "mass transit" and "transit". (APTA)

**PUBLIC TRANSPORTATION SERVICES CORPORATION (PTSC)**

The entity that establishes the employment status of non-contract employees.

**PUBLIC UTILITIES CODE**

State laws which govern the MTA and define its authority.

**PUBLIC UTILITIES COMMISSION**

Public Utilities Commission (PUC). A state agency whose responsibilities include regulation of for-hire (public and private) carriers of passengers and goods within a state. Other jurisdictions may also have a public utilities function that regulates for-hire carriers within that jurisdiction. May also be called public series commission. (TRB)

**PUBLIC WORKS**

Any work of improvement of the MTA performed by contractors which supply material or goods and apply or install the work or improvement to constitute an improvement to real property or a fixture thereon, i.e., more than just a "plug in" of moveable goods such as furniture.

**PUBLICLY OWNED TRANSIT SYSTEM**

A transit system owned by any municipality, county, regional authority, state, or other governmental agency, including a system operated or managed by a private company under contract to the government agency owner. (TRB)

**PUC**

SEE: Public Utilities Commission.

**PULL-IN**

The trip from the end of revenue service back to the Division.

**PULL-IN ROUTE**

An out-of-service prescribed route between the end of revenue service and a Division.

**PULL-IN TIME**

The time at the end of a run that allows the operator to make the final farebox reading, organize his or her belongings and turn in transfers and tickets to the dispatcher.

**PULL-OUT**

The trip from the Division to the point where revenue service begins.

**PULL-OUT PERFORMANCE**

Percentage of buses that leave a depot on schedule.

**PULL-OUT ROUTE**

An out-of-service prescribed route between the Division and the point of beginning of revenue service.



**PULL-OUT TIME**

1. In transit operations, the scheduled time at which the transit unit leaves the yard or garage; see also Report Time. 2. In some transit operations, the deadhead time assigned to move a transit unit (vehicle or train) from the storage area to its first scheduled stop; also known as stem time. (TRB)

**PURCHASE ORDER**

A contractual document in which a promise to pay is offered to exchange for an acceptance effectuated by performance, e.g., the delivering of goods, generally used for inventory replenishment items or other acquisitions for which the MTA assumes a minimum exposure to liability, thereby negating the need for extensive non-standard terms and conditions. In some cases a Purchase Order is bilaterally executed.

**PURCHASE REQUISITION (PR)**

A form used by a user department or other authorized user to initiate procurement action for materials, supplies, and/or services.

**PURCHASED TRANSPORTATION (CARRIERS UNDER CONTRACT)**

Public or private transportation provider on the basis of a written contract. (TRB)

**PUSH-PULL TRAIN**

A locomotive and a set of cars equipped with one or more cab cars from which the locomotive can be controlled. The train is either pulled and controlled from the locomotive in the conventional manner or pushed by the locomotive and controlled from the leading car. (TRB)

**PUSH-THROUGH**

A bus-operating technique used in busy peak-hour street operations when heavy passenger loads can combine with general road traffic delays to create bunching. A push-through is an unscheduled bus that is held at a key point, to be inserted by an inspector or street supervisor into a route when a serious gap occurs. It is used to prevent worsening of service. (TRB)

**PVEA**

Petroleum Violation Escrow Account. A state Special Revenue Fund available to the MTA for transportation projects on a competitive basis.

**Q****QUALIFICATION TEST**

A one-time test performed by manufacturer to evaluate the ability of an item to operate correctly as specified.

**QUALIFIED PRODUCTS LIST (QPL)**

An established list of standardized products which assures efficiency, economy, compatibility and/or maintenance reliability of MTA purchased products.

**QUALITATIVE**

Those inductive or deductive analytical approaches which are oriented toward relative, non-measurable and subjective values. (NTSC)

**QUALITATIVE INTERVIEW**

An open-ended, detailed, or in-depth survey technique, the findings of which are not generally projectable and cannot be summed up by tabulation. See also Survey, Quantitative. (TRB)

### **RAIL OPERATIONS PROCEDURE NOTICES**

Rail Operations Procedure Notices are numbered consecutively from January 1 of each year. Rail Operations Procedure Notices contain permanent changes to Standard Operating Procedures (SOP) and are issued as needed.

### **RAIL OPERATIONS SPECIAL NOTICES**

Rail Operations Special Notices are numbered consecutively from January 1 of each year. Rail Operations Special Notices contain temporary changes to the Rule Book or Standard Operating Procedures (SOP) and are issued for a specific period of time.

### **RAIL RAPID TRANSIT SYSTEM**

An electrified fixed guideway transportation system, utilizing steel rails, usually operating on an exclusive grade-separated right-of-way for the mass movement of passengers within a city or metropolitan area and consisting of its fixed way, transit vehicles and other rolling stock, power system, maintenance facilities, and other stationary and movable apparatus and equipment, and its operating practices and personnel. (NTSC)

### **RAIL TRANSIT OPERATIONS SUPERVISOR (RTOS)**

The Rail Transit Operations Supervisor (RTOS).

### **RAIL TREAD**

The top surface of the rail that contacts the wheels of the rail vehicle. (TRB)

### **RAIL VEHICLE**

A self propelled vehicle operating on tracks which could be a passenger vehicle, Hi-Rail vehicle or other truck and track equipment.

### **RAIL, CONTINUOUS WELDED**

SEE: Continuous Welded Rail.

### **RAILFAN**

A person who studies, photographs, or observes trains as a hobby. Called train spotters in England. Called rail nuts (and worse) by some railroaders. Known to drive hundred of miles to see certain trains, and justify actions to family members by calling it a vacation.

### **RAILROAD RESEARCH INFORMATION SERVICE (RRIS)**

A computer-based information storage and retrieval system developed by the Transportation Research Board with financial support from the Federal Railroad Administration. It consists of summaries of research projects in progress and abstracts of published works. (TRB)

### **RAMP**

1. In highway systems generally, an inclined section of roadway over which traffic passes for the primary purpose of ascending or descending to make connections with other roadways. It can also be an interconnecting roadway to an interchange, or any connection between highway facilities of different elevations that vehicles may use to enter or leave a designated highway. 2. For divided highways specifically, a facility that provide access to the through lanes of freeways and expressways or connects two freeways. 3. In traffic assignment, a link that connects a freeway node and an arterial node. (TRB)

### **RAMP METERING**

1. The process of facilitating traffic flow on freeways by regulating the amount of traffic entering the freeway through use of control devices on entrance ramps. 2. The procedure of equipping a freeway approach ramp with a metering device and traffic signal that allow the vehicles to enter the freeway at a predetermined rate. (TRB)

**RAN**

Revenue Anticipation Note.

**RANDOM SAMPLING**

A form of probability sampling in which each unit of the universe has an equal chance of selection. (TRB)

**RAPID TRANSIT**

A public transit facility operating on exclusive, grade-separated fixed right-of-way. Buses operating on exclusive grade-separated roadways are included in the term "rapid transit".

**RATE, ACCELERATION**

Time rate of change of speed of a vehicle. (NTSC)

**RATE, BRAKE**

The negative time rate of change of speed of a vehicle as produced solely by the action of its braking system, or systems in combination. (NTSC)

**RCC**

Rail Construction Corporation. Formerly a subsidiary of the Los Angeles County Transportation Commission (LACTC) responsible for designing and constructing Metro rail network in Los Angeles County. Now the Construction Unit of the MTA.

**REACTION TIME**

The time used by equipment, operator, or both, that elapses between the moment an action is called for and when the desired result occurs. (NTSC)

**READ-BACK TIME**

Time issued by the Central Control Facility (CCF) or Yard Control which validates Clearance Cards, Train Orders and Work Permits. Also see Clearance Cards, Train Orders, Work Permits.

**REAL TIME**

Rapid transmission and processing of event-oriented data and transactions as they occur, in contrast to being stored and re-transmitted or processed as batches.

**RECEIVING REPORT**

Written documentation of supplies delivered or services performed as noted by the Contracting Officer or other authorized MTA personnel.

**RECISSION**

A federal budgetary term that refers to the cancellation, in whole or part, of budget authority previously granted by Congress.

**RECORD TYPE**

A named entity, instances of which describe individual occurrences of the entity. (Modern Database Management- 4th Edition)

**RECOVERY**

The act of removing a train from revenue service and returning to the yard.

**RED TAG**

A two part, red identification tag issued by the Test Controller to designated construction, testing or maintenance personnel that have been approved in the Track Allocation Meeting to work in an area where the contact rail or catenary will be de-energized and train operations will be suspended while the Red Tag is in their possession. The Test Controller will give the individuals one half of the Red Tag and keep the other half. Until all the Red Tags are returned to the Test Controller traction power will not be restored nor will reassignment of the red tags be permitted by the Test Controller.

**RED TAG AREA**

The limits of the Red Tag area may change weekly during the Track Allocation Meeting. The Track Allocation Coordinator will define, at the weekly track allocation meeting, the limits of the Red Tag Area for the following week.

**RED TAG DESK**

The desk where Red Tags are distributed and returned. The Test Controller is located at the Red Tag Desk.

**REEFER**

A refrigerator rail car. Originally cooled by ice, currently cooled by fuel powered refrigeration units.

**REFERENTIAL INTEGRITY**

An integrity constraint that specifies that the value (or existence) of an attribute in one relation depends on the value (or existence) of the same attribute in another relation. See also Referential Integrity Constraint. (Modern Database Management- 4th Edition)

**REFERENTIAL INTEGRITY CONSTRAINT**

A business rule that addresses the validity of references by one object in a database to some other object (or objects) in the database. Also see Business Rules. (Modern Database Management- 4th Edition)

**REGIONAL CHOICE**

SEE: Regional Improvement Program.

**REGIONAL GROWTH MODEL**

A model used to estimate land uses in a region. (TRB)

**REGIONAL IMPROVEMENTS PROGRAM**

One of the state funding programs, it is also known as "Regional Choice." It is a flexible funding program developed by the MTA and submitted to the California Transportation Commission for their approval. 75% of State transportation improvement funds are programmed through the Regional Improvements Program. These funds may be used for capital projects including highways, arterials, guideways, rail projects, bikeways, transportation enhancements, TSM and TDM activities.

**REGIONAL PLANNING AGENCY**

Regional Planning Agency (RPA). A nonprofit, quasi-public organization whose policy board is composed of member municipal government representatives. It makes recommendations related to land use, the environment, human resources, housing, and transportation for a specific region. (TRB)

**REGIONAL RAIL SERVICE (RGR)**

Regional rail passenger service, usually provided by railroad agencies, that consists of electric- or diesel-powered trains on grade separated railroad lines (sometimes with protected grade crossings). (TRB)

**REGIONAL REBUILD CENTER**

SEE: RRC.

**REGIONAL STATISTICAL AREA (RSA)**

An aggregation of census tracts for the purpose of subregional demographic and transportation analysis without the Southern California Association of Governments (SCAG) area.

**REGIONAL TRANSIT SERVICE**

Long bus or rail transit lines with few stations and high operating speeds. They primarily serve long trips within metropolitan regions, as distinguished from city transit service and short-haul transit service. (TRB)

**REGIONAL TRANSPORTATION AGENCIES COALITION (RTAC)**

The primary policy coordination forum for the six County Transportation Commissions in the Southern California Association of Governments (SCAG) region which oversees the administration of SB 836 ridesharing funds, a state statutory requirement. Also see RTAC/Technical Advisory Committee (RTAC/TAC)

**REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)**

A list of proposed transportation projects submitted to the CTC by the regional transportation planning agency, as a request for state funding through the FCR and Urban and Commuter Rail Programs. The individual projects are first proposed by local jurisdictions (CMAs in urbanized counties), then evaluated and prioritized by the RTPA for submission to the CTC. The RTIP has a seven year planning horizon, and is updated every two years.

**REGIONAL TRANSPORTATION PLAN (RTP)**

A comprehensive 20 year plan for the region, updated every two years by the regional transportation planning agency. The RTP includes goals, objective, and policies, and recommends specific transportation improvements.

**REGIONAL TRANSPORTATION PLANNING AGENCY (RTPA)**

Organization which plans, develops and programs multimodal transportation projects and facilities in its area. In the Los Angeles Area the Southern California Association of Governments (SCAG) is the RTPA.

**REGIONAL TRANSPORTATION PLANNING AND DEVELOPMENT DIVISION (RTP&D)**

This Division of the MTA is primarily responsible for the planning, development and programming of multimodal transportation projects and facilities in Los Angeles County. RTP&D works closely with the MTA Operations and Rail Construction Divisions, the County, the 88 cities in the County, Caltrans, and other public and private transportation providers in both the planning and implementation of transportation projects.

**REGRESSION ANALYSIS**

A statistical technique for estimating best-fit mathematical relationships between a dependent variable and one or more independent variables. (TRB)

**REGULAR RUN**

A driving assignment for bus operators, consisting of either one or two work pieces, which usually totals 7 hours or more within a prescribed period. Operators select their assignments by bid. A regular run may be either a straight run or a split run and is contrasted with work performed off the Extra Board. Also see Shake-up, Straight run, Split run.

**REGULAR TRAIN**

A train designated in the classified schedule of a timetable. It displays no classified signals.

**REVERSE CONTRACTING**

The reverse of privatization is the performing of work on a competitive bid basis for other public agencies and private companies. The extensive facilities, expertise and experience within MTA Operations provides great opportunities for performing this kind of work. Currently, the Regional Rebuild Center (RRC) has been the successful bidder on several contracts. These include the following: mid-life rebuilds for Foothill Transit buses; engine overhauls for Los Angeles Unified School District (LAUSD); and fleet maintenance for the City of Bell.

**REVERSE RUNNING**

A train movement in reverse direction on designated track.

**REVERSE/JOG MODE (R/J)**

The Reverse/Jog Mode is used during uncoupling a dependent pair from another dependent pair. Maximum operating speed is 2 mph, up to 9 feet in the reverse direction.

**RFP**

SEE: Request For Proposal.

**RIBBON RAIL**

SEE; Continuous Welded Rail.

**RIDE QUALITY**

A measure of the comfort level experienced by a passenger in a moving vehicle, including the vibration intensity and frequency, accelerations (longitudinal, transverse, and vertical), jerk pitch, yaw, and roll. (TRB)

**RIDE THE CUSHIONS**

An operator riding to his assignments on a regular service bus.

**RIDER**

1. A passenger on any revenue service vehicle; also known as a patron. 2. In government reporting, someone making an unlinked trip. (TRB)

**RIDER, CAPTIVE TRANSIT (TRANSIT DEPENDENT, TRANSPORTATION DISADVANTAGED)**

A person who does not have a private vehicle available or cannot drive (for any reason) and who must use transit to make the desired trip. (TRB)

**RIDER, CHOICE**

A person who has at least two modes of travel available and selects one to use. (TRB)

**RIDERS' GROUP**

Riders who have a common origin and destination or some demographic variable in common and travel together in the same vehicle. (TRB)

**RIDERSHIP**

The number of persons using the transit system within any given time period.

**RIDESHARING**

A fund used to account ridesharing contributions for various local governments. Resources are currently used to fund California Ride Share and Transportation Demand Management (TDM) projects. More generically, any alternative to the single occupant vehicle. (Ridesharing examples: Carpools, vanpools, transit, telecommute, walk, bicycle, compressed work week.)

**RIDING FREQUENCY COEFFICIENT (RIDING HABIT COEFFICIENT)**

The number of passenger trips during a designated time period divided by the resident population of the area served, that is, transit trips per capita per year. (TRB)

**RIGHT-OF-WAY**

Land or rights to land use or held for transit operations or for public way. For rail operations, the designated area of main line and the yard within fences or medians. Also see Exclusive right-of-way.

**RIGHT-OF-WAY MILES (RIGHT-OF-WAY KILOMETERS, FIRST-TRACK MILES-KILOMETERS)**

The length of right-of-way occupied by one or more lanes or tracks. Also see Route Miles (Route Kilometers). (TRB)

**RIM**

On a rail car wheel, that portion around the outer circumference that forms the edge of the tread. The thickness of the rim is a measure of the amount of wear remaining in the wheel, and when this dimension reaches a given limit, the wheel must be scrapped. (TRB)

**RIPRAP**

Stone or masonry placed on embankments to resist erosion or settlement.

**RISK**

An expression of possible loss over a specific period of time or number of operational cycles. It may be indicated in terms of hazard severity and probability.

**RISK MANAGEMENT**

An element of the systems safety management function that evaluates the safety effects of potential hazards and considers acceptance, control, or elimination of such hazards with respect to expenditure of resources.

**RMC**

Records Management Center. The group within the Information Services Section of the MTA which maintains critical records in accordance with the MTA's records retention policy.

**RME**

Regional Mobility Element. The Southern California Association of Government's major policy and planning statement on the regional transportation issues and goals. It is comprised of a set of long range policies, plans, and programs that outline a vision of a regional transportation system compatible with federal and state mobility objectives.

**ROAD**

1. Railroad. 2. Class of service between terminals, as opposed to yard service.

**ROAD CALL**

A mechanical failure of a bus in revenue service that necessitates removing the bus from service until repairs are made. (TRB)

**ROAD FOREMAN OF ENGINES**

Employee who supervises and trains locomotive engineers in proper train operation.

**ROAD MILES (ROAD KILOMETERS)**

Linear miles (kilometers) of highway as measured along the centerline of the right-of-way. (TRB)

**ROAD, ACCESS**

A road that gives direct access to the land and premises on one or both sides. (TRB)

**ROAD, BYPASS**

A road that take through traffic around a congested area and thereby facilitates through movement and relieves local congestion. (TRB)

**ROADBED**

1. In railroad construction, the foundation on which the ballast and track rests. 2. In highway construction, the graded portion of a highway within top and side slopes, prepared as a foundation for the pavement structure and shoulder. (TRB)

**ROADCALL**

A revenue service interruption caused by failure of some mechanical or other-than-mechanical element of the revenue vehicle.

**ROADSIDE SURVEY**

A survey in which highway vehicles are stopped, and drivers, passengers, or both are interviewed to secure information about the trip being made. (TRB)

**ROADWAY**

That portion of a highway built, designed, or ordinarily used for vehicular travel, except the berm or shoulder. If a highway includes two or more separate roadways, the term means any such roadway separately but not all such roadways collectively. (TRB)

**ROBOT**

Robots are usually mentioned in the context of the World Wide Web (WWW) as programs which traverse the web looking for information, perhaps for indexing into a search engine or to find errors in web sites or some such.

**ROCK-AND-ROLL**

Excessive side-to-side swaying of cars. Can be aggravated when harmonic frequencies of the cars match the impacts of rail joints at certain speeds, often called critical speeds.

**ROD**

Revenue Operations Data.

**ROLL BY**

To perform a safety inspection of a moving train, as by employees on other trains or engaged in work along the track. A requirement for all employees who are in a position to do so.

**ROLLER BEARING**

A wheel bearing comprised of sets of steel cylinders rolling on races, lubricated by grease and sealed from dust and moisture. Roller bearings are required for interchange freight cars in the 1990s because they are much more reliable than solid journal bearings.

**ROLLING AGENDA**

This is an internal working document generated by departments in order to provide staff with a "look ahead" of projects and/or activities within a unit. It also identifies lead project staff assigned to items as well as submittal timeline.

**ROLLING STOCK**

The vehicles used in a transit system, including buses and railcars.



**ROTARY**

A type of snow plowing equipment which has a large wheel transverse to the track, equipped with chambers designed to scoop up snow and throw it to the side of the tracks by centrifugal force. Used only for the deepest snow accumulations.

**ROTATING SHIFT**

A work schedule in which workers change their hours at periodic intervals. (TRB)

**ROUND TRIP**

The movement of a person or a vehicle from a point of origin to a destination and then back to the same point of origin. (TRB)

**ROUNDHOUSE**

A building, circular in design, used to house locomotives while they are being serviced or repaired. Also see Barn. (TRB)

**ROUTE**

The path a train or bus will travel between two designated locations. The path a train follows through crossovers or interlockings.

**ROUTE DEVIATION**

Public transportation service on an exclusive basis that operates along a public way on a fixed route (but not a fixed schedule). The vehicle may deviate from the route occasional in response to demand for service or to take a passenger to a destination, after which it returns to its route. It is a form of para-transit. Also see Jitney Service. (TRB)

**ROUTE MILES (ROUTE KILOMETERS)**

The total number of miles (kilometers) included in the fixed route transit-system network. Also see Right-of-way Miles (Kilometers).

**ROUTE SHEETS**

A set of street-by-street directions for a particular line, including: in service, pull-out, off-route and Company Equipment Assigned (CEA) routings, as well as any special operating instructions.

**ROUTE STRUCTURE**

1. A network of transit routes. 2. The pattern of transit routes, for example, grid, radial. (TRB)

**ROUTES, CONFLICTING**

Two or more routes, opposing, converging or intersecting, over which movements cannot be made simultaneously without possibility of collision. (NTSC)

**ROUTING AND CONTROL ALGORITHM**

A numerical technique for assigning trips (usually vehicle trips) to routes and controlling flows of traffic in simulation of transportation networks. (TRB)

**ROW**

Right-of-way. Land purchased for a transit system generally but not exclusively for rail.

**RPA**

SEE: Regional Planning Agency.

**RRC**

Central Maintenance Facility, renamed Regional Rebuild Center (RRC). The facility, located adjacent to the Gateway Headquarters Building, provides heavy maintenance support for bus divisions and in part for the rail divisions. In addition the facility does similar work for other public and private public transportation agencies and companies on a competitive bid basis.

**RSA**

SEE: Regional Statistical Area.

**RTAC/TECHNICAL ADVISORY COMMITTEE (RTAC/TAC)**

Composed of agency staff who meet to discuss the more technical aspects of Regional Transportation Agencies Coalition (RTAC) transportation policy issues.

**RTD**

SEE: Southern California Rapid Transit District.

**RTIP**

Regional Transportation Improvement Program. This plan is required in order for the region to qualify for federal funding, which is the basis for Los Angeles County input into the State Transportation Improvement Program (STIP).

**RTP**

A long-range Regional Transportation Plan. The Southern California Association of Governments (SCAG) is responsible for adopting a RTP for this area.

**RTP&D**

SEE: Regional Transportation Planning and Development.

**RTPA**

SEE: Regional Transportation Planning Agency.

**RTS BUS**

Rapid Transit Series, manufactured by Transportation Manufacturing Corporation (formerly General Motors).

**RULE**

In rail operations, a law or order authoritatively governing conduct or action. (TRB)

**RUN**

1. The movement of a transit unit (vehicle or train) in one direction from the beginning of a route to the end of it; also known as a trip. 2. An operator's assignment of trips for a day of operation; also known as a work run. (TRB)

**RUN CUTTING**

The process of scheduling individual assignments, or "runs", on a particular line.

**RUN CUTTING AND VEHICLE SCHEDULING (RUCUS)**

A computerized transit schedule program. (TRB)

**RUN, OWL**

SEE: Owl Run.

**RUN-A-ROUND**

Failure to work Extra Board in proper sign-on order. Also, bus or train trips that fail to depart a common terminal in a first-in, first-out order.

**RUNNING GEAR**

The vehicle parts whose function are related to the movement of the vehicle, including the wheels, axles, bearings, and suspension system. (TRB)

**RUNNING HOT OR RUNNING SHARP**

A vehicle operating ahead of schedule. It is an important principle of operations supervision that vehicles do not operate ahead of schedule since this results in passengers missing the vehicle at the scheduled time and the resultant extra passengers on the following vehicle (under and overloading of the vehicles).

**RUNNING RAIL**

A rail that supports and guides the flanged wheels of the rail vehicle. (TRB)

**RUNNING TIME**

Time provided in a bus or train schedule for a vehicle to travel between two time points. Also see Timepoint.

**RUN-TIME VERSION**

The portion of the Database Management System (DBMS) needed to run an existing database application. (Modern Database Management- 4th Edition)

**RURAL AREA**

As defined by the Bureau of the Census, the urban population includes all people living in urbanized areas or in places with 2,500 or more inhabitants located outside urbanized areas. The rural population consists of everyone else. Both urban and rural areas occur inside and outside of metropolitan statistical areas. (TRB)

**RUSH HOUR**

Morning and afternoon time periods when transit riding is heaviest . Also see Peak.

**RVSH**

Revenue Vehicle Service Hours.

# S

**SAFETY**

Freedom from danger; a reasonable degree of freedom from those conditions that can cause injury or death to personnel, damage to or loss of equipment or property. (NTSC)

**SAFETY CHECKLIST**

A list for examining the safety aspects of equipment, procedures, and personnel.

**SAFETY CRITICAL**

A designation placed on a system, subsystem, element, component, device, or function denoting that satisfactory operation of such is mandatory to assurance of patron, personnel, equipment, or facility safety. Such a designation dictates incorporation of special safety design features. (NTSC)

**SAFETY DEVICES**

Protective devices which do not alter the fundamental nature of a hazard but which do control the extent of the hazard in some manner. (NTSC)

**SAMPLE**

A part off a statistical population (universe) that is studied to gain information about the whole. (TRB)

**SAMPLING, AREA**

A method of sampling that divides a geographical region into smaller areas and uses random selection to determine specific areas or respondents to be interviewed. (TRB)

**SAMPLING, STRATIFIED (PROPORTIONAL SAMPLING)**

A method of sampling that sets a quota for certain classifications of the population being sampled on the basis of the proportion of each classification in the total population (universe) or of previous information about the relative distributions in these classifications. (TRB)

**SAS**

Silent Alarm System. Alarm system in the bus which directs the two-way radio, headsign, and outside top-corner flashers to activate and send a panic message for immediate police response.

**SBE**

SEE: Small Business Enterprise Program.

**SCAB**

SEE: South Coast Air Basin.

**SCADA**

Supervisory Control and Data Acquisition. Also see TRACS.

**SCAG**

SEE: Southern California Association of Governments.

**SCAG GOODS MOVEMENT ADVISORY COMMITTEE (GMAC)**

The Southern California Association of Government (SCAG) committee which examines regional freight issues and makes policy recommendations to SCAG's Regional Council.

**SCAG REGIONAL COUNCIL (RC)**

The Southern California Association of Government's (SCAG) Board of Directors, composed of 71 elected officials representing six counties and 184 cities.

**SCAG TRANSPORTATION & COMMUNICATIONS COMMITTEE (TCC)**

Reporting directly to the SCAG Regional Council (RC), the TCC, composed of RC members who are involved with TCC issues, contributes to transportation policy development by forming positions of transportation policies and plans.

**SCANNER**

Radio receiver designed to monitor several different two-way radio frequencies at once.

**SCAQMD**

South Coast Air Quality Management District. Also known as AQMD.

**SCHEDULE BUILDING**

Process for structuring service which includes the establishment of running time, timepoints, trips, headways and recovery time.

**SCHEDULED MAINTENANCE**

Programmed preventive maintenance. (NTSC)

**SCHEDULED MAINTENANCE SYSTEM (SMS)**

Parts and subsystem replacements done according to a schedule and based on vehicle miles age.

**SCHEDULING**

In transit operations, the process of preparing the operating plan (schedule) for a transit line or network on the basis of passenger demand, policy for level of service, and operating elements (travel times, etc.). (TRB)

**SCHEMA**

A description of the overall logical structure of a database, expressed in a special data definition language. (Modern Database Management- 4th Edition)

**SCHOOL BUS SERVICE**

Service designed to transport children to or from any regularly conducted public or private school or school-related activities, either on an exclusive or non-exclusive basis. (TRB)

**SCHOOL SERVICE**

Due in part to the Federal Transit Administration (FTA) and the California Highway Patrol (CHP) regulations, the MTA no longer operates school only trippers. However, supplemental trips, open to all riders, are operated on some lines to serve extra riding due to school travel. The benefits to the students aside, these supplemental trips are operated to protect the riders of the regular service from overloading. There are several lines which have route modifications or route deviations to serve a school but they are open to all riders and the service is shown in the public timetable.

**SCMS**

Schedule Checker Management System.

**SCOPE OF WORK**

Complete description clearly defining the supplies or services being procured, either through performance specifications setting forth the minimum acceptable performance standards expected of the end product, or through a description of tasks to be performed and products to be delivered.

**SCOPING**

In planning, the setting of parameters. (TRB)

**SCREEN LINE**

An imaginary line, usually following such physical barriers as rivers or railroad tracks, that splits a study area into parts and along which traffic counts and interviews may be conducted and compared. (TRB)

**SCRRA (METROLINK)**

SEE: Southern California Regional Rail Authority. Also see Metrolink.

**SCRTD**

SEE: Southern California Rapid Transit District.

**SEALED BIDDING**

SEE: Formal Advertising.

**SECONDARY FAILURE**

A failure which occurs as the consequence of another failure. Also see Dependent Failure.

**SECTION**

1. One of two or more trains running on the same schedule authority, all but the last section displaying green classification signals. 2). The territory assigned to a section gang for maintenance. 3. The size and type of rail, as 115-pound, measured per yard.

**SECTION 13(C) AGREEMENT (LABOR PROTECTION)**

A labor protection agreement required by the Federal Transit Act (FTA) (formerly known as the Urban Mass Transportation Act of 1964) as a condition to receive several types of federal transit funding. The law provides that a grantee enter into agreements with its unions to protect its employees from hardship resulting from a federal contract. These protections include preservation of rights under existing collective bargaining agreements, the continuation of collective bargaining rights, the protection of individual employees against a worsening of their positions, priority of reemployment, and paid training and retraining.

**SECTION 15 OPERATING COSTS**

Operating costs as defined by the Federal Transit Administration (FTA) for reporting purposes; total operating costs less leases, rentals, and interest expense.

**SECTION 16 ELDERLY & DISABLED**

The section of the Federal Transit Act (FTA) (formerly known as the Urban Mass Transportation Act of 1964), as amended, that declares the national policy to be that elderly persons and persons with disabilities have the same right as other persons to utilize mass transportation facilities and services, and that special efforts shall be made in the planning and design of mass transportation facilities and service so that effective utilization by elderly persons and persons with disabilities is assured.

**SECTION 16(B)(2) GRANTS TO ORGS. SERVING ELDERLY & DISABLED**

The subsection of the Federal Transit Act (FTA) (formerly known as the Urban Mass Transportation Act of 1964), as amended, that authorizes grants to nonprofit corporations and associates for the specific purpose of assisting them in providing transportation service meeting the special needs of elderly persons and persons with disabilities for whom mass transportation services are unavailable, insufficient or inappropriate. (APTA)

**SECTION 18 OUTSIDE URBANIZED AREAS**

The section of the Federal Transit Act (FTA) (formerly known as the Urban Mass Transportation Act of 1964), as amended, that authorizes grants to public transit systems outside urbanized areas, based on formulas set in states; the funds go initially to the Governor of each state. (APTA)

**SECTION 3 DISCRETIONARY AND FORMULA CAPITAL PROGRAM**

The Section 3 program is authorized over a 6 year period. Funds are split accordingly: 40 percent for Rail New Starts, 40 percent for Rail Modernization, and 20 percent for bus and other use.

**SECTION 504**

The section of the Rehabilitation Act of 1973 that established the policy that otherwise qualified handicapped people may not be discriminated against in any federal or federally assisted program. (TRB)

## **SECTION 9 FORMULA GRANT PROGRAM**

Revenues are appropriated by Congress from the General Fund which are restricted to Bus and Rail capital expenses. Funds are allocated on a formula basis to each urbanized area in the nation. Funds may be used for highway projects in "Transportation Management Areas" (all areas over 200,000 and any other areas which the Governor requests), if all needs related to the Americans with Disabilities Act are met, the Metropolitan Planning Organization (MPO) approves, and there is a balanced local approach to funding highways and transit.

## **SECTION INSULATOR**

Device separating contact wire at specific locations for sectionalization of traction power within a defined track section.

## **SECTIONALIZATION**

Specific de-energized section of contact rail or contact wire.

## **SECURITY**

Control mechanisms that prevent unauthorized use of resources.

## **SEGMENT**

SEE: MOS

## **SELECTED LINK ANALYSIS**

In planning, an analysis of origins and destinations of trips assigned to a specified link or links in a network. (TRB)

## **SELF-CERTIFICATION**

A procedure by which a local agency assures the federal agency that all the federal rules and regulations have been followed and adhered to. (TRB)

## **SELF-JOIN (RECURSIVE JOIN)**

A join of a table with itself. (Modern Database Management- 4th Edition)

## **SELF-SERVICE, BARRIER-FREE FARE COLLECTION SYSTEM (HONOR SYSTEM)**

A fare collection system that has no paid areas or fare-registering turnstiles. This system requires that a passenger be able to display proof of payment (e.g., validated ticket, prepaid pass, valid transfer) while on board the transit vehicle. Compliance is monitored through random checking by designated transit employees. (TRB)

## **SEMANTIC DIFFERENTIAL TECHNIQUE**

In attitudinal research, a method of rating the emotional connotations of words and concepts by the use of adjectives paired with their opposites. (TRB)

## **SEMI-ANNUAL BID**

In accord with the UTU contract, in March and September all open runs in the system are placed up for bid by seniority choice, regardless of Division.

System shake-up - Since the eighties this procedure is no longer in effect. This consisted of placing up for bid all runs in system whether open or bid-in by an operator. The elimination of this practice helped stabilize the system and Operation's management goal.

Weekly bid - Within each Division all open runs are placed for bid by seniority choice.

**SEMI-METRO TRANSIT SYSTEM**

A light rail transit system that uses exclusive right-of-way for much of its length, usually at surface grade but occasionally in tunnels or on aerial structures. (TRB)

**SEQUENTIAL MODEL**

A demand model that is based on the assumption that travel decisions are made in a sequence of steps, such as whether or how often to travel (trip generation), what destination to choose (trip distribution), which mode to choose (modal split), and which route to choose (trip assignment). (TRB)

**SEQUESTRATION**

A federal budgetary term that refers to the permanent cancellation of budget authority. (APTA)

**SERIAL LINE INTERNET PROTOCOL (SLIP)**

SEE: SLIP. Also see PPP.

**SERVER**

In a network, a host data station that provides facilities to other stations.

**SERVICE AND METHODS DEMONSTRATION PROGRAM (SMD PROGRAM)**

A program established and overseen by the Urban Mass Transportation Administration and the Transportation Systems Center in which transit innovations are developed, demonstrated, and evaluated for their potential in providing improved transit service. (TRB)

**SERVICE AREA**

1. The jurisdiction in which the transit property operates. 2. The geographic regional in which a transit system provides service or that a transit system is required to serve. (TRB) Also see Coverage Area.

**SERVICE ATTRIBUTES**

Those aspects of a transportation system that affect travel decisions about its use, such as travel time, reliability, comfort (e.g., crowding, standees), cost, ease of use, and safety. (TRB)

**SERVICE AUTHORITY FOR FREEWAY EMERGENCIES (SAFE)**

The SAFE revenue is based on a \$1 annual surcharge on each motor vehicle registration in Los Angeles County for the Metro Callbox System. Cost estimates and assumptions are based on the SAFE ten-year Financial Plan and are divided into the capital and operations/maintenance categories.

**SERVICE CALLS**

Request submitted to the division of infrastructure to have work performed on a regular basis.

**SERVICE CHANGE PROGRAM**

A report prepared by the Scheduling Department that documents schedule and route changes to be implemented, usually in conjunction with shake-ups. Also see Shake-Up.

**SERVICE DEPENDABILITY**

The combination of reliability and maintainability characteristics of a system that describes on-time system performance probability. (NTSC)

**SERVICE FAILURE**

A failure which not only prevents the unit from performing its intended function, but also disrupts or delays schedule service.



**SERVICE FREQUENCY**

The number of transit units (vehicles or trains) on a given route or line, moving in the same direction, that pass a given point within a specified interval of time, usually 1 hour. See also Headway. (TRB)

**SERVICE MILES (KILOMETERS)**

The number of miles (kilometers) of track used exclusively in nonrevenue service. (TRB)

**SERVICE PLANNING MARKET RESEARCH PROJECT (SPMRP)**

The most comprehensive multi-agency transit-marketing research study ever undertaken in Los Angeles County to support several MTA and regional studies, programs and initiatives.

**SERVICE VOLUME**

The maximum number of vehicles that can pass a given point during a specified period while a specified level of service is maintained. (TRB)

**SERVICE, ARTERIAL**

Generally major (long or heavily patronized) transit routes that operate on principal or major surface arterial streets. (TRB)

**SERVICE, BASE-PERIOD**

The level of transit operations during the base period. (TRB)

**SERVICE, CHARTER**

Transportation service offered to the public on an exclusive basis (either as individuals or as groups). It is provided with a vehicle that is licensed to render charter service and engaged at a specific price for the trip or period of time, usually on a reservation or contractual basis. (TRB)

**SERVICE, CIRCULATOR**

SEE: Circulator Service.

**SERVICE, CITY TRANSIT**

Transit serving an urban area, as distinguished from short-haul and regional transit service. (TRB)

**SERVICE, COMMUTER**

Transportation provided on a regularly schedule basis during peak travel periods for users commuting to work, school, and similar destinations. (TRB)

**SERVICE, CURB-TO-CURB**

A service that picks up and delivers passengers at the curb or roadside, as distinguished from door-to-door service. Passenger assistance is not rendered other than for actual boarding and alighting. (TRB)

**SERVICE, DOOR-TO-DOOR**

A service that picks up passengers at the door of their place of origin and delivers them to the door of their place of destination. This service may necessitate passenger assistance between the vehicle and the doors. See also, Service, Curb-To-Curb. (TRB)

**SERVICE, EXPRESS BUS**

Bus service with a limited number of stops, either from a collector area directly to a specific destination or in a particular corridor with stops en route at major transfer points or activity center. Express bus service usually uses freeways or busways where they are available. (TRB)

**SERVICE, FEW-TO-FEW**  
SEE: Few-To-Few Service.

**SERVICE, FEW-TO-MANY**  
SEE: Few-To-Many Service.

**SERVICE, FLAG STOP**  
SEE: Flag Stop Service.

**SERVICE, JITNEY (DEMAND JITNEY SERVICE)**

A route deviation service in which small or medium-sized vehicles, such as large automobile, vans, or minibuses, are used. The vehicles are usually owned by the drivers and the service is often independently operated. Also see Jitney Service. (TRB)

**SERVICE, LIMITED**  
SEE: Limited Service.

**SERVICE, LIMOUSINE**  
SEE: Limousine Service.

**SERVICE, LINE HAUL**  
SEE: Line Haul Service.

**SERVICE, MANY-TO-FEW**  
SEE: Many-To-Few Service.

**SERVICE, MANY-TO-MANY**  
SEE: Many-To-Many Service

**SERVICE, MANY-TO-ONE (GATHER SERVICE)**  
SEE: Many-To-One Service.

**SERVICE, ORIGIN-TO-DESTINATION**  
SEE: Origin-To-Destination Service.

**SERVICE, OWL**  
SEE: Owl Service.

**SERVICE, PEAK**  
SEE: Peak Service.

**SERVICE, POINT DEVIATION**

Public transportation service in which the transit vehicle is required to arrive at designated transit stops in accordance with a prearranged schedule but is not given a specific route to flow between these stops. It allows the vehicle to provide curbside service for those who request it. Also see Point-To-Point Deviation. (TRB)

**SERVICE, REGIONAL RAIL**  
SEE: Regional Rail Service.

**SERVICE, REGIONAL TRANSIT**

SEE: Regional Transit Service.

**SERVICE, SCHOOL**

SEE: School Service.

**SERVICE, SHOPPERS' SPECIAL**

SEE: Shoppers' Special Service.

**SERVICE, SHORT-HAUL TRANSIT**

SEE: Short-Haul Service.

**SERVICE, SHUTTLE**

SEE: Shuttle Service.

**SERVICE, SUBSCRIPTION BUS**

SEE: Subscription Bus Service.

**SFV**

San Fernando Valley. The San Fernando Valley is approximately 250 square miles in area and is comprised of about 1.3 million people. It is located north of the Santa Monica Mountains and includes all or a portion of the cities of Los Angeles, Burbank, San Fernando, Agoura, Hidden Hills, Westlake Village, and Calabasas.

**SGML**

Standard Generalized Markup Language is a language for describing other tag-based structural document languages. For example, HTML is defined using SGML.

**SGV**

San Gabriel Valley. The San Gabriel Valley is a geographic area consisting of 30 cities and numerous unincorporated communities bounded by the City of Los Angeles on the west, the San Gabriel mountains on the north, San Bernardino County on the east, and Orange County on the south.

**SHAKE-UP**

The time when operators pick their work assignments based upon their seniority. Also, a time when most schedule adjustments are implemented. Also see Semi-annual bid.

**SHARE MODEL**

A demand-forecasting model that divides a trip total (such as total trips from an origin) into its various components (such as trips from the origin to each of the destinations). (TRB)

**SHARED RIDE**

A trip, other than be conventional public transit, on which the passengers enter at one or more points of origin and disembark at one or more destinations and for which each passenger is charged an individual fare. Shared ride taxi service is a way of using taxicabs for paratransit. (TRB)

**SHEET, ASSIGNMENT**

(Also called Detail Sheet, Driver Mark-up Sheet, Operator Assignment Sheet, Roster.) In transit operations, a listing that includes both the vehicles needed by time of day for each division and how many operators are needed. (TRB)

**SHEET, BOOKING (BUS MARK-UP SHEET)**

A list of scheduled runs posted to inform operators of the buses assigned to them and where the buses are parked. (TRB)

**SHIFT DIFFERENTIAL (SHIFT PREMIUM)**

Additional compensation (cents per hour or percentage of the daily rate) paid to workers employed at other than regular daytime hours. (TRB)

**SHIFT SHEET (TOUR OF DUTY, STINT, TRICK, TURN)**

A part of the daily working schedule of a transit system or its employees. (TRB)

**SHINE TIME OR REPORT TIME**

Time spent by an operator waiting for an assignment or protecting service in event of the absence of another operator.

**SHOOFLY**

A temporary track to allow rail operations to bypass construction activities. (TRB)

**SHOP**

Facility where maintainers repair, rebuild, paint or clean vehicles or equipment located within a yard.

**SHOP LIMIT**

Specific location designating limits of shops.

**SHOP LIMIT SIGN**

A specific location where movement of a vehicle must stop and proceed only on a proper hand signal from maintenance personnel.

**SHOPP**

State Highway Operation and Protection Plan. Capital program used for state highway rehabilitation, operation and safety improvements by Caltrans.

**SHOPPERS' SPECIAL SERVICE**

Service provided during off-peak hours that is designed to carry passengers to or from shopping areas. (TRB)

**SHORE PROGRAM**

Support of the Homeless Re-entry Program. MTA provides \$700,000 in bus tokens to Los Angeles County shelters and missions.

**SHORT LINE**

Line segments at one or both ends of a line where the vehicles are scheduled to turn back short of the far terminal of the line. This scheduling technique is done as an efficiency measure to reduce the trips operated over line segments when ridership is substantially lower compared to the balance of the line. A short line may be operated all day or only during the peak periods.

**SHORT RANGE TRANSIT PLAN (SRTP)**

Currently a planning document with five year projections, updated annually, that describes goals and objectives of each transit operator in the county; provides estimates of ridership, services and expenses; and outlines proposed service modifications. Formerly a Federal planning requirement, but now continued by California and local policy, including Operations (as well as for every other operator) by March of each year. The county-wide SRTP is to be completed by June of each year.

**SHORT TURN**

SEE: Turn Back.

**SHORT-HAUL TRANSIT SERVICE**

Low-speed transit service for circulation within small areas that usually have high travel density, such as central business districts, campuses, airports, exhibition grounds, and other major activity centers. (TRB)

**SHUNT**

A bypass in an electrical circuit. (NTSC)

**SHUTTLE SERVICE**

A vehicle that travels back and forth over a particular route to connect two transportation systems or centers.

**SHUTTLE TRANSIT SYSTEM**

SEE: Transit System, Shuttle.

**SHUTTLE-LOOP TRANSIT SYSTEM**

SEE: Transit System, Shuttle-Loop.

**SIB**

SEE: State Infrastructure Bank Project.

**SIDE PLATFORM**

SEE: Platform, Side.

**SIDEBAR**

Newspaper or television story that is related or complementary to the primary story often containing more background and descriptive information, using many more quotes or interviews.

**SIDING (PASSING TRACK, SIDE TRACK)**

A track auxiliary to the main track used for meeting and passing trains.

**SIDING, PRIVATE**

A siding owned or leased by an individual or firm. (TRB)

**SIGNAL**

Method or device, the aspect of which conveys information affecting movement of trains.

**SIGNAL (ITS)**

An event-oriented change in state (e.g. a tone, frequency shift, binary value, alarm, message, etc.).

**SIGNAL ASPECT**

1. The appearance of a fixed signal conveying an indication, as viewed from the direction of an approaching rail unit. 2. The appearance of a cab signal conveying an indication, as viewed by an observer in the cab of a rail unit. (TRB)

**SIGNAL INDICATION**

The information conveyed by a signal. (TRB)

**SIGNAL PREEMPTION**

In highway operations, an automatic or manual device for altering the normal signal phasing or the sequence of a traffic signal to provide preferential treatment for specific types of vehicles, such as buses or trains. (TRB)

**SIGNAL, AUDIBLE**

Aspect conveyed by a sound producing device.

**SIGNAL, AUTOMATIC**

A signal that is controlled automatically by certain conditions of the track section that it protects.

**SIGNAL, BAG**

Cover placed over signals indicating signal is out of service and is to be ignored. Switches associated with that signal shall be blocked and clamped.

**SIGNAL, BLOCK**

SEE: Block Signal.

**SIGNAL, CAB**

Speed command indication on the train operator's console displaying maximum operating speed.

**SIGNAL, FIXED**

Signals at specific locations along the right-of-way, including interlocking signals, signs, switch indicators, or other devices for governing operation and movement of rail vehicles.

**SIGNAL, HAND**

Aspect conveying an indication given by the motion or position of a person's hand/arm, flag, light or object.

**SIGNAL, HOME**

Fixed signal at the entrance of a route indicating interlocking status and occupancy to the next interlocking signal.

**SIGNAL, INTERLOCKING**

Fixed signal governing movement at an interlocking.

**SIGNAL, STOP**

A signal which displays the most restrictive aspect indicating stop. (NTSC)

**SIGNAL-ACTUATING DEVICE**

SEE: Pedestrian Signal-Actuating Device and Vehicle Signal-Actuating Device.

**SIGN-UP (BIDDING RUNS, MARK-UP, OPERATOR PICK, PICK, RUN PICK, RUN PICKING)**

The procedure by which, at regular intervals or when new service or realignments of service are implemented, operators select their regular assignment for an upcoming period (typically several months). The order of selection is usually by operator seniority and is usually specified in union contracts. Also see Shake Up. (TRB)

**SIMULATION**

A process or technique in which real phenomena, such as vehicle or person movements, are presented mathematically to allow study for planning purposes. (TRB)

**SIMULATION MODEL**

A model that represents mathematical events and responses to these events in a manner that resembles the interaction of cause and effect in a real system. (TRB)

**SIMULTANEOUS MODEL**

A demand-forecasting model that is based on the assumption that travelers choose a level of trip frequency, time of day, destination, mode, and path as a single decision and that in making this decision, travelers consider the alternative for each of these choices simultaneously. (TRB)

**SINGLE POINT FAILURE**

A failure of a sub-unit which by itself will cause a failure of the system or equipment.

**SINGLE TRACK OPERATION**

Operation within defined limits governing bi-directional train movement over a single track on the Mainline.

**SINKHOLE**

A depression in the ground caused by settlement of soil in specific area; usually due to underground water erosion.

**SIP**

SEE: State Implementation Plan.

**SITE**

Address location of a server on the Internet.

**SITE SPECIFIC**

Refers to artwork created based on specifications of a given site. The extreme end of this meaning is that the artwork ceases to exist if it is moved from the site for which it was intended, i.e. Richard Serra's "Tilted Arc."

**SITE VISIT ("INSPECTION OF PROJECT SITE")**

MTA conducted tour of project site to acquaint prospective bidders of the existing conditions at the site of the proposed work.

**SKETCH PLANNING**

A transportation analysis procedure that is simpler, faster, and cheaper than using a full procedure and that typically requires less detailed input and provides less specific output. (TRB)

**SKIMMED TREE (SKIM TREE)**

In planning, a series of records, compiled by using data obtained from the tree records, that list the minimum travel time, cost, or distance between each pair of zones. (TRB)

**SKIP-STOP SERVICE**

A type of express service in which buses skip alternate stations or stops to provide faster service along routes.

**SLIDE (WHEEL)**

The condition where in the wheel tread speed is greater than the train speed. (NTSC)

**SLIP (SERIAL LINE INTERNET PROTOCOL)**

Dial-up Internet connection speaking in Transmission Control Protocol/Internal Protocol (TCP/IP) protocol.

**SLIP/SLIDE SYSTEM**

Vehicle system for detecting and preventing excessive wheel slips and slides during acceleration and braking (Heavy Rail). (For Light Rail, SEE: Spin/Slide.)

**SLOW ORDER**

A location where trains must temporarily travel more slowly than maximum authorized track speed for that location. (TRB)

**SLOW ZONE**

Area within defined limits for wayside conditions requiring reduced operating speeds.

**SMALL BUSINESS ENTERPRISE PROGRAM (SBE)**

An SBE enterprise is at least 51 percent owned by one or more socially and economically disadvantaged individual, or in the case of any publicly owned business, at least 51 percent of the stock is owned by one or more socially disadvantaged individuals; and whose management and daily operations are controlled by one or more of the socially and economically disadvantaged individuals who own it. Whose combined net worth of the individuals that own and control the firm does not exceed \$250,000 excluding the value of their personal residence(s) and the value of the applicant firm.

**SMALL PURCHASES**

Services, supplies, equipment and material procurements which do not exceed the small purchase threshold specified by the MTA. Simplified procurement procedures have been adopted for these items.

**SMART CARD**

A thin plastic card the size of a credit card with an embedded microprocessor. (Modern Database Management- 4th Edition)

**SMART SHUTTLE**

A multiple occupant passenger vehicle equipped with advanced technology for more effective vehicle and fleet planning, scheduling and operation, as well as offering passenger more information and fare payment options.

**SMART VEHICLES**

SEE: Intelligent Vehicle Highway Systems (IVHS).

**SMITH, OSCAR A.**

President for many years of Pacific Electric Railway.

**SMSA**

SEE: Standard Metropolitan Statistical Area.

**SOLE SOURCE CONTRACT**

A contract for the acquisition of goods or services from the only contract/vendor/consultant capable, authorized, or available to provide the goods or services. A type of non-competitive contract. Also see Non-Competitive Negotiation.

**SOP**

SEE: Standard Operating Procedures.

**SOUND BITE**

Concise 10-20 second interview to be used on TV or radio.



**SOUTH COAST AIR BASIN (SCAB)**

A geographic area defined by the San Jacinto Mountains to the east, the San Bernardino Mountains to the north, and the Pacific Ocean to the west and south. The entire SCAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)**

SEE: Air Quality Management District (AQMD).

**SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG)**

The regional planning agency for Los Angeles, Imperial, Orange, Riverside, San Bernardino, and Ventura Counties; designated the Metropolitan Planning Organization (MPO) by the Federal Government for management and coordination of specified federal and state funded programs. These include air quality conformity analysis.

**SOUTHERN CALIFORNIA RAIL GROUP INTERIM JOINT POWERS BOARD (JPB)**

Convened as a Joint Powers Agency in 1996 pursuant to SB 457 to investigate whether Amtrak intercity rail passenger services could be more efficiently administrated under a locally controlled agency than by Caltrans' Division of Rail.

**SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT (SCRTD)**

The Southern California Rapid Transit District (SCRTD sometimes called RTD) was established by the California Legislature in 1964 to plan, build and operate a regional rapid transit system along with operation of a regional bus system. It was created from the existing and first public agency for this purpose, the Los Angeles Metropolitan Transit Authority (LAMTA), established in 1951 and expanded in 1957. The major public transportation providers were privately owned and operated. In 1958 the two largest companies were purchased by the LAMTA (often called the first MTA), Los Angeles Transit Lines (LATL), successor to Los Angeles Railway (LARY) and Metropolitan Coach Lines (MCL), successor to Pacific Electric Railway (PERY) passenger operations. SCRTD merged with the Los Angeles County Transportation Commission (LACTC) effective April 1, 1993 to become the Los Angeles County Metropolitan Transportation Authority (LACMTA or MTA).

**SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY (METROLINK)**

A joint powers agency including Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties formed to plan, construct, and operate the regional commuter rail system known as Metrolink.

**SPACE**

In the context of transportation vehicle capacity, a space is a seat or the standing area for one passenger. (TRB)

**SPACING**

The distance between consecutive vehicles, measured front-to-front. (TRB)

**SPECIAL BENEFIT ASSESSMENTS**

Revenue generating Special Benefit Assessment Districts are authorized by state legislation to levy special benefit assessments for needed public rail transit facilities and/or services on the property which benefits from those facilities and/or services. Assessments are calculated annually based on either the square footage of the parcel or the square footage of the assessable improvements, whichever is larger. Benefit Assessment Districts have been established around the Metro Redline Segments 1 and 2 station areas. Similar districts are in the process of being created around future segments. Properties subject to assessment includes offices, commercial, retail, hotels and motels.

### **SPECIAL EVENT SERVICE**

Operated by MTA in four ways. First, extra service on regular routes to serve additional passengers due to special events. Examples include race track events and Disneyland. This supplement service on existing routes is sometimes referred to as line protection service because it protects the line from ridership overloads that the line's regular passengers would otherwise experience if the extra service was not operated. Second, separate special event routes have been operated. Examples include separate race track routes, service to Los Angeles County Fair and service to L.A. Dodger games. When service reductions are necessary, this category of service is considered an early candidate for cancellation. The third category service for a special event which receives supplemental funds through a service contract. The Hollywood Bowl Park-Ride service is the best example. The fourth category consists of requests by individual groups for service to a special event. Even if fully funded from new monies, the MTA cannot operate such service under its prohibitions on operation of a charter service. The exception to this charter prohibition applies to a major event, such as the Superbowl, where it is determined that other carriers cannot meet the demand. Lastly, the MTA is restricted to the transport of private groups on a no change basis only where it is determined that the transportation is directly in support of an MTA program. One example would be the transportation of youth involved in a joint MTA-community program to eradicate graffiti.

### **SPECIAL ORDERS**

Special orders cover temporary changes to the manual governing special conditions for a specified period of time issued by the MTA Manager of Rail Activation and are numbered consecutively from January 1 of each year.

### **SPECIAL REVENUE FUNDS**

Funds used to account for resources which are legally or administratively restricted for specific purposes.

### **SPECIAL TERMS AND CONDITIONS**

A part of the Contract Document. These clauses set forth legal, business and technical requirements that are particular to a specific contract.

### **SPECIAL TRACKWORK (TRACK SPECIAL WORK)**

All rails, track structures, and fittings, other than plain unguarded track, that is neither curved nor fabricated before laying. (TRB)

### **SPEED LIMIT**

1. The maximum speed allowed in a specified section of track as determined by physical limitations of track structure, train design, and passenger comfort. 2. A prescribed maximum road speed allowed. (NTSC)

### **SPEED PROFILE**

A plot of speed against distance traveled. (NTSC)

### **SPEED REGULATION**

The automatic action of a speed regulator.

### **SPEED-FLOW RELATIONSHIP**

The relationship between the flow (volume) of units on a transportation facility and the speed of those units. As flow increases, speed tends to decrease. (TRB)

### **SPIDERWEB NETWORK (SPIDER NETWORK, SIMPLIFIED NETWORK)**

A simulated highway system for a given area that is composed only of connections between zone centroids without respect to the physical street layout. It is usually used for corridor analysis. (TRB)

**SPIN/SLIDE**

Vehicle system for detecting and preventing excessive wheel spins and slides (Light Rail). (For Heavy Rail, SEE: Slip/Slide.)

**SPLIT RUN (SWING RUN)**

A regular driving assignment consisting of two separate parts which pay at least 8 hours a day within a prescribed period.

**SPLIT TIME**

Time between the sign-off time of the first part and the sign-on time of the second part of a split run.

**SPOTTING BUS**

Parking a bus at a particular location.

**SPREAD TIME**

The period of time from the moment an operator initially signs on until he/she signs off. In addition to driving time, spread time includes time between runs, travel time and deadheading.

**SPREADER**

A rail car used for maintenance of the right-of-way which is equipped with movable, angled blades which can be positioned to shove or plow earth or snow away from the track when a locomotive shoves or pulls a car.

**SPUR**

A track used for loading, unloading or storing cars or other uses, but not used for meeting trains.

**S RTP**

SEE: Short Range Transit Program.

**SSL**

The Secure Socket Layer is a protocol that Netscape uses to provide people with secure transactions over the network.

**STA**

SEE: State Transit Assistance Program.

**STAF**

State Transit Assistance Fund. A special revenue fund used to account for the revenue received by the MTA from sales tax on gasoline used for transit purposes. The STAF was created as an amendment to the Transportation Development Act of 1976.

**STAFF SUMMARY SHEET**

Instrument developed to forward material to the Executive Officer and the Chief Executive Officer for information, concurrence or execution.

**STANDARD CONTRACT TERMS AND CONDITIONS**

A part of the Contract Document. These clauses set forth the rights and responsibilities of the contracting parties and are standard in all contracts of a specific type, e.g., construction, purchase or repair.

**STANDARD ERROR OF ESTIMATE**

A statistical measure of the possible differences between the actual and estimated values of a variable. (TRB)

**STANDARD GAUGE**

A rail track gauge that is 4 feet, 8.5 inches (1.435 meters) wide. (TRB)

**STANDARD METROPOLITAN STATISTICAL AREA**

A large population nucleus and the nearby communities that have a high degree of economic and social integration with that nucleus. Each SMSA consisted of one or more entire counties (or county equivalents; in New England, cities and towns) that met specified standards pertaining to population, commuting ties, and metropolitan character. SMSAs were designated by the U.S. Office of Management and Budget. An SMSA included a city or an urbanized area (as defined by the Bureau of the Census) with a population of at least 50,000, and had a total population of at least 100,000 (75,000 in New England). The term SMSA was replaced by metropolitan statistical area (MSA) after the 1980 census. (TRB)

**STANDARD OPERATING PROCEDURES (SOP)**

Contains information and instructions on operation, performance and procedural responsibility for rail operations employees.

**STANDARD RAIL**

A 39-foot (11.89 meters) section of rail. (TRB)

**STATE CHOICE**

SEE: Interregional Improvements Program.

**STATE IMPLEMENTATION PLAN (SIP)**

A state plan mandated by the Clean Air Act Amendment of 1990 (CAAA) that contains procedures to monitor, control, maintain and enforce compliance with national standards for air quality. (APTA)

**STATE INFRASTRUCTURE BANK PROJECT (SIB)**

A revolving loan program that provides short term bonded indebtedness allowing liquidity of funds to municipal and regional governments.

**STATE OF GOOD REPAIR (SOGR)**

Equipment or facility functioning according to specification and able to continue along its normal life cycle.

**STATE RAIL BONDS**

Proposition 108

Proposition 108 was passed by the voters in June 1990 authorizing the State to sell \$1 billion in general obligation bonds to provide funds for rail capital outlay. Eligible projects must be located on routes and corridors specified in the measure, of future statutes enacted by the Legislature with at least 15 percent of the total bond funds to be spent for inter-city rail.

Proposition 116

Proposition 116 was passed by voters in June 1990 authorizing the state to sell \$1 billion in general obligation bonds to provide funds for mostly rail capital outlay allocating certain amounts to specified state and local entities through a grant program administered by the California Transportation Commission. Funds are used primarily for passenger and commuter rail systems, with limited funds available for public mass transit guideways, paratransit vehicles, bicycle and ferry facilities, and railroad technology museums. This program requires matching funds from local entities.

**STATE TRANSIT ASSISTANCE PROGRAM (STA)**

The STA program is a source of funding for transportation planning and mass transportation purposes as specified by the California Legislature derived from 50 percent of Transportation Planning & Development (TP&D) revenues.

## **STATE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)**

The STIP is the adopted plan of the California Transportation Commission for the allocation of funds to specific projects in future years. Programs identified in the STIP are funded through state and federal gas taxes. The STIP serves as a programming policy for revenues in the State Highway Account and from the Passenger Rail Bond Fund. The major programs include:

### **Flexible Congestion Relief (FCR)**

The FCR is a statewide capital program for highway and fixed guideway capacity improvements composed of state and federal gas tax revenues. Guidelines are developed by Caltrans and adopted by the California Transportation Commission. FCR Funds are appropriated to major gap closure, backbone arterials, carpool lanes, and some fixed guideway uses.

### **Inter-Regional Roads**

The Inter-Regional Road program was established for the purpose of improving inter-regional traffic on state highways outside urban limit lines from revenues composed of state and federal gas taxes. Projects eligible for this program are nominated by Caltrans for the State Transportation Improvement Program (STIP). These funds count toward meeting county minimums in whatever counties they are programmed. The federal share of this revenue source is assumed to increase every five years by the Consumer Price Index (CPI) through the end of the Plan. All unallocated Inter-regional Road revenues are transferred to the Flexible Congestion Relief (FCR) fund annually.

### **State Highway Operation and Protection Program (SHOPP)**

The State Highway Operation and Protection Program is established for the maintenance and operational integrity and safety of the State Highway system. It includes rehabilitation and safety projects, operational improvements, and other work necessary to maintain system integrity.

## **STATION BOX**

Underground chamber containing a subway station.

## **STATION RUN-THROUGH**

Passing a station platform without stopping.

## **STATION, PASSENGER**

A located designated for the purpose of loading and unloading passengers.

## **STEEL WHEEL**

In rail systems, the specially designed cast or forged steel, essentially cylindrical element that rolls on the rail, carries the weight, that provides guidance for rail vehicles. The wheels are semipermanently mounted in pairs on steel axles and are designed with flanges and a tapered tread to provide for operation on track of a specific gauge. The wheel also serves as a brake drum on cars with on-tread brakes. (TRB)

## **STINGER**

Hand held portable device which provides traction power to a train.

## **STIP**

The State Transportation Improvement Program (STIP) was adopted by the California Transportation Commission (CTC) and serves as the primary vehicle for programming funds for highway projects. STIP Documents is a generic term that refers to Adopted STIP, SHOPP, TSM, and TBF.

## **STOCHASTIC PROCESS**

A process that involves random variables and a nonreproducible output. Also see Deterministic Process. (TRB)

**STOCHASTIC TRIP ASSIGNMENT**

A probabilistic trip assignment technique that allocates trips with deviation from the minimum time route on the basis of differences in travel times. (TRB)

**STOCK RAIL**

The rail against which the point of a switch, derail, or movable point frog rests.

**STOP AND PROCEED**

A signal indication to stop and then proceed with certain cautions not to exceed a designated speed. Also see Operating Modes (Light Rail). (NTSC)

**STOP, FAR-SIDE**

A transit stop located beyond an intersection. It requires that transit units (vehicles or trains) cross the intersection before stopping to serve passengers. (TRB)

**STOPPED TIME**

Time on a trip spent stationary because of the stoppage of other traffic. (TRB)

**STRAIGHT RUN**

An operator's regular work consisting of one uninterrupted assignment paying 8 or more hours.

**STRATIFIED SAMPLING (PROPORTIONAL SAMPLING)**

A method of sampling that sets a quota for certain classifications of the population being sampled on the basis of the proportion of each classification in the total population (universe) or of previous information about the relative distributions in these classifications. (TRB)

**STREET RUN TERRITORY**

Mainline tracks outside of Cab Signal Territory, within medians. Also see Operating Modes (Light Rail).

**STREET, BUS-ONLY (BOS)**

A street devoted to bus traffic only. (TRB)

**STREET, COLLECTOR-DISTRIBUTOR (COLLECTOR ROAD)**

A street that gathers and disburses traffic between larger arterial highways and smaller streets. It has intersections at grade and provides access to abutting properties. (TRB)

**STREET, LOCAL ACCESS**

A street that provides access for pedestrians and vehicles to properties that front on it but is not intended for through traffic (TRB).

**STREETCAR**

An electrically powered rail car that is operated singly or in short trains in mixed traffic in city streets. In some areas it is also known as a trolley car and, primarily in Europe, as a tram. (TRB)

**STREETCAR TRANSIT SYSTEM (STREET RAILWAY, TRAMWAYS, TROLLEY SYSTEM)**

A street transit system consisting of electrically powered rail vehicles operating in one- to three-car transit units, mostly on surface streets with mixed traffic. (TRB)

**STRUCTURED QUERY LANGUAGE (SQL)**

A standard fourth-generation query language for relation database systems. (Modern Database Management- 4th Edition)

**STUB TERMINAL**

A dead-end terminal in which the entering rail (or other guided) transit unit must depart by the same guideway on which it entered. Because no loop is provided, a bidirectional transit unit (vehicle or train) is necessary. (TRB)

**SUBBALLAST**

A material, superior in composition to the roadbed materials, that is spread on the track roadbed before the ballast is spread. (TRB)

**SUBCONTRACT**

A secondary contract undertaking some or all of the obligations of a primary or previous contract. (TRB)

**SUBLEASE**

The subletting of a portion of the premises covered by the lease.

**SUBSCHEMA**

A logical description of a user's view (or program's view) of data, expressed in a special data definition language. (Modern Database Management- 4th Edition)

**SUBSCRIPTION BUS SERVICE**

1. A bus service in which routes and schedules are prearranged to meet the travel needs of riders who sign up for the service in advance. The level of service is generally higher than that of regular passenger service (fewer stops, shorter travel time, and greater comfort), and the buses are usually obtained through charter or contractual arrangements. 2. Commuter bus express service operated for a guaranteed number of patrons from a given area on a prepaid, reserved seat basis. (TRB)

**SUBSCRIPTION VAN SERVICE**

Service similar to that provided by a subscription bus, except that the van may be privately owned, leased from a public or private company, or provided by the employer. The driver is usually a member of the group. (TRB)

**SUBSIDIZED TAXI SERVICE**

A taxicab service in which the fares are lower than actual taxi fares and the taxi company is reimbursed the difference. The service may be provided to the general public or to special groups, such as elderly people. Funds for the subsidy can come from a variety of sources, including local taxes or social service agency program funds. (TRB)

**SUBSIDY**

Scripts, tokens, vouchers, Transit Checks, transit passes, or other fare media provided by MTA for use on non-MTA transportation providers.

**SUBSTATION**

A facility used to transform 34.5 Kilovolts Alternating Current (KVAC) to lower voltages for distribution to station facilities. Also see Traction Power Substation (TPSS)

**SUBTYPE**

A subset of a supertype that shares common attributes or relationships distinct from other subsets. (Modern Database Management- 4th Edition)

**SUBURBAN COACH**

SEE: Bus, Suburban Transit.

**SWITCH, MANUAL**

Track switch operated manually.

**SWITCH, NORMAL POSITION**

Switch position aligned for normal movement over a track switch.

**SWITCH, REVERSE POSITION**

Switch position aligned for diverging movement over a track switch.

**SWITCH, VARIABLE (SLAP AND STAY)**

Track switch not requiring alignment for trailing movements and once moved, switch points remain aligned in a trailed position. Variable switches shall be properly aligned manually for facing movements.

**SWITCHER OR SWITCH ENGINE**

A locomotive used for switching. Often smaller and slower than road locomotives, with good visibility and steps for employees to ride.

**SWITCHING**

1. A means of changing the route of a guided transit unit (vehicle or train) from one track or guideway to another. 2. The moving of rail cars from one place to another within a terminal or yard. (TRB)

**SWITCHMAN**

Employee assigned to yard service, where most of the activity is switching cars, roughly equivalent to a brakeman.

**SYMBOLIC RESOURCES SITES**

Those cultural or educational area that are important for their symbolic significance to the community. There could include public and private management areas, historic sites, and unique archaeological, botanical, cultural, and educational areas. (TRB)

**SYNONYM**

Two different names that are used to describe the same data item (for example, car and automobile). (Modern Database Management- 4th Edition)

**SYSTEM SAFETY**

The application of operating, technical, and management techniques and principles to the safety aspects of a system throughout its life to reduce hazards to the lowest practical level through the most effective use of available resources. (NTSC)

**SYSTEM SAFETY MANAGEMENT**

An element of management that defines the system safety requirements and ensures the planning, implementation and accomplishment of system safety tasks and activities. (NTSC)

**SYSTEM SAFETY PROGRAM**

The combined tasks and activities of system safety management and system safety engineering that enhance operational effectiveness by satisfying the system safety requirements in a timely, cost-effective manner throughout all phases of a system life-cycle. (NTSC)



# T

## **TAG AXLE**

A nonpowered vehicle axle that helps distribute the load. (TRB)

## **TALENT**

A reporter or person doing an interview.

## **TAMP**

To compact the ballast beneath the ties, usually after raising the track when there will be a void under the ties.

## **TAMPER**

A power machine to tamp track, equipped with vibrating teeth or bars which are thrust into ballast and squeeze it under each tie. Most tampers are also equipped with power jacks to raise the track and a control system to cause the raised track to assume a smooth surface.

## **TANGENT**

Straight track between curves.

## **TARGET MARKET**

A specified segment of the potential or actual (transportation) market (or both) that has been analyzed and selected by a (transportation) provider so that a marketing mix (target marketing) can be directed toward this segment. (TRB)

## **TARIFFS**

Rates of fares and rules pertaining to fares.

## **TAXICAB SERVICE (EXCLUSIVE RIDE TAXI, TAXI SERVICE)**

Demand-responsive public transportation service on an exclusive bases, in a vehicle licensed to render that service. (TRB)

## **TBF**

Toll Bridge Funded Program.

## **TCI**

SEE: Transit Capital Improvement Program.

## **TCM**

SEE: Transportation Control Measures.

## **TCP/IP**

Transmission Control Protocol/Internet Protocol is the standard network communications protocol used to connect computer systems across the Internet.

## **TCU**

Transportation Communications Union. The union representing selected MTA clerical office employees, telephone information clerks, custodial staff, and stores personnel..

**TDA**

Transportation Development Act. Created by state law in 1972, the TDA authorize the use of 1/4 of 1% of the 6% state sales tax for transportation purposes. A Special Revenue Fund is used to account for the funds programmed by the MTA. 1% of this revenue is allocated to the MTA for its transportation planning activities.

**TDM**

SEE: Transportation Demand Management.

**TEAM TRACK**

A track on which cars are placed for public loading or unloading, named from the time when horse-drawn wagons were used to transfer freight. As opposed to a spur which serves a specific customer of the railroad.

**TEAMSTERS**

Union representing security guards. Full name of union is the International Brotherhood of Teamsters.

**TECHNICAL EVALUATION MEMORANDUM**

A document prepared by the User Department supporting the analysis of the Bidders/Proposers' technical qualifications and responsiveness to the Solicitation Documents.

**TELEPHONE KEY SYSTEM**

Similar in function to PBX but uses for small and medium-sized business applications. Key systems are used at the majority of the operating divisions and the ticket offices.

**TELEPHONE SURVEY**

A survey in which data are collected by telephone. (TRB)

**TELNET**

Telnet is a network program that offers a way to log into and work from another computer. By logging into another system, users can access Internet services that they might not have on their own computers.

**TEMPORARY PUBLIC ART PROJECTS**

Those which are not intended to be permanent. Can be performance, visual art, etc.

**TERMINAL**

The starting or ending point of a line.

**TERMINAL CANCELLATION**

Bus runs that don't begin their scheduled trip.

**TERMINAL LAYOUT SHEET**

A form on which the scheduled departure times of trains from the line terminals are laid out before final adjustment. (TRB)

**TERMINAL SHEET**

The final timetable of transit unit (vehicle or train) departures from the route or line terminal that is used, in conjunction with the time points and running time, to govern the operation of the units. (TRB)

**TERMINAL STATION**

The station where scheduled trips begin and end.

**TERMINAL STOP**

A transit stop located at either end of a transit route or line. (TRB)

**TERMINAL TIME**

1. For passengers, the time required at the end of trips to unpark and park their private vehicles, including any necessary walking time. 2. For rail vehicles, the time allowed at a terminal between arrival and departure for turning vehicles, recovering delays, and preparing for the return trip. 3. The time required for a passenger to pass through a terminal when there is a change of mode. (TRB)

**TERMINAL ZONE**

Mainline location for reversing train direction for schedule purposes.

**TERNARY RELATIONSHIP**

A simultaneous relationship among instances of three entity types. (Modern Database Management- 4th Edition)

**TEST CONTROL FACILITY**

The location where all Segment 2B mainline operations are authorized, directed, and controlled.

**TEST COORDINATOR**

The Test Coordinator is the designated employee responsible for conducting tests.

**TEST OPERATIONS PROCEDURES (TOP)**

The Test Operations Procedures contain instructions explaining operation, performance and procedural responsibility for rail.

**TGV**

French acronym for Tres Grande Vitesse; the very high speed passenger trains introduced in France in 1980 and are now the backbone of French surface transportation.

**THERMITE WELD**

A welding process in which an exothermic reaction produces molten rails to be joined. When the molten steel cools and solidifies, the rails are fused together. Can be performed in the field to join strings of ribbon rail (also called continuous welded rail or CWR.)

**THIRD RAIL**

On the Red Line, a raised rail parallel to the tracks that serves as the electrical conductor which carries the 750 V.D.C. to the rail car motors through contact with protruding devices, called shoes, that ride on top of the third rail. The comparable components on the Blue and Green Lines are the catenary and the pantograph, respectively.

**THIRD-PARTY CONTRACT**

As used in Federal guidelines and grants, any contract or contract modification between the MTA and another person or firm. Use of the term is generally limited to a contract which is to be funded in whole or in part by the Federal government. The original grant agreement related to a project or to the work to be performed is entered into between the Federal government or other body and its grantee; if the grantee then contracts to have the work performed by another individual or firm, that contract is referred to as a "third party contract."

**THIRD-RAIL SHOE**

A metallic sliding contact attached to the trucks of electric rail vehicles for the purpose of collecting current from the third-rail distribution system. (TRB)

**THREE C PROCESS (3CS)**

A process for planning urban transportation facilities and services that is required by the Federal Aid Highway Act of 1962 and the Urban Mass Transportation Act of 1964, as amended, in urbanized areas. The three Cs standard for a continuing, comprehensive, and cooperative transportation planning process. (TRB)

**THROUGH ROUTING**

The practice of joining the ends of radial transit routes to travel through downtown instead of having each route turn back in the downtown and return to its origin. (TRB)

**THROUGHPUT**

1. The volume of vehicles passing or people transported past a point or series of points during a given period of time. 2. Traffic. (TRB)

**TIA**

SEE: Transit Impact Analysis.

**TIC**

True Interest Cost. The interest cost of debt to borrowers based on the interest rate, compounded semi-annually, that is necessary to discount cash payments of interest and principal to the purchase price of the bonds received. Similar to the Annualized Percentage Rate (APR) used in commercial and personal banking.

**TICKET**

1. A printed card or piece of paper that gives a person a specific right to ride on a train or transit vehicle. 2. To provide a ticket or tickets. (TRB)

**TICKET VENDING MACHINE (TVM)**

TVMs are located at the entrances to rail stations for purchase of tickets.

**TIE (CROSSTIE)**

The transverse track structure element, usually of treated wood, which supports the rails and holds them at the proper gauge. It is in turn supported by the ballast. In addition to supporting the rails, wooden ties provide some measure of vibration and shock absorption and in signaled track, insulate the rails from each other. In a mile of conventional main line track there are 3250 wooden ties, each seven by nine inches in diameter and eight to nine feet long. Larger ties are used in turnouts and on bridges. Ties can also be made of steel or concrete.

**TIME AND MATERIALS CONTRACT**

A type of contract that provides for the procurement of supplies or services on the basis of direct labor hours at specified fixed hourly rates (which include wages, overhead, general and administrative expenses, and profit) and materials at cost.

**TIME LOCKING**

Interlocking protection which prevents the position of a switch, movable point frog or derail from being changed until a predetermined time has elapsed.

**TIME OFF**

The clock time recorded when an operator's duties are completed. (TRB)

**TIME ON**

The clock time recorded when an operator actually reports, before pull-out time. (TRB)

**TIME SERIES ANALYSIS**

An analytic approach that separates the effects of trend, season, and cycle and is useful in evaluating demand. (TRB)

**TIME, ACCESS**

The time elapsed on a trip from the moment of leaving the point of origin to the moment of boarding a vehicle. (TRB)

**TIME, ALLOWANCE**

(Also known as Allowed Time, Bonus Time, Dead Time, Hold Time.) Time for which an operator is paid even though the hours have not been worked or have not been worked in operating a transit unit. Forms of allowance time are paid time, report time, turn-in time, and sometimes, travel time and intervening time. Also see Allowances. (TRB)

**TIME, DELAY**

The amount of time by which a transit unit (vehicle or train) in service is delayed from its scheduled time. (TRB)

**TIME, JOURNEY (OPERATOR'S TRAVEL TIME)**

In transit operations, a time allowance for being required to report for work at a point removed from the home terminal or to return without passengers after completing a run. See also Pay, Deadheading. (TRB)

**TIMED TRANSFER**

Two or more lines which meet at a common location and usually have waiting times built into the schedule at regular intervals so that passengers may easily make transfer connections to change vehicles.

**TIMED TRANSFER SYSTEM (TTS)**

A transit network consisting of one or more nodes (transit centers) and routes or lines radiating from them. The system is designed so that transit vehicles on all or most of the routes or lines are scheduled to arrive at a transit center simultaneously and depart a few minutes later; thus transfers among all the routes and lines involve virtually no waiting. TTS is typically used in suburban areas and for night service; in other words, for those cases in which headways are long (10-60 minutes). Transit centers (also known as time transfer focal points) are ideally located at major activity centers, such as suburban towns, campuses, and shopping centers. (TRB)

**TIMEPOINT**

The points along the route of the bus or rail line which list the time the bus or train is scheduled to pass. For the bus schedule these are street intersections or major points of interest, such as a shopping center or bus terminal. For the rail schedule these points are rail stations.

**TIMETABLE, EMPLOYEE'S**

A document containing information governing the movement of vehicles. It usually contains a listing of stations and facilities for each route of the operator and may contain classified schedules of vehicles and special instructions. It should not be confused with a public timetable, which contains information on routes, including their schedules and equipment but does not govern employees in actually moving the vehicle.

**TIP**

Transportation Improvement Program. Federally mandated procedure for setting priorities for federal capital and operating funding approval. Operations capital improvement projects are proposed through the capital call procedures internal to MTA. The priorities set in this MTA process are determined by Federal discretionary funding program decisions, rather than by funds available from the formula funding allocated to MTA.

**TOFC**

Trailer On Flat Car. Intermodal freight service. Also see Piggyback.

**TOKEN**

A coin used for paying fare.

**TOP**

Transportation Occupation Program. A jointly sponsored MTA, local businesses, and school districts program. The program prepares young people for careers in transportation.

**TORPEDO**

An explosive cap which can be attached to the rail to be exploded by the passage of the wheel. It sounds like a shotgun and conveys an indication to the crew of the train which explodes it that they must run at restricted speed for two miles. It is usually placed on the track to protect a train ahead or track workers.

**TORQUE**

The twisting force required to turn a bolt or a rotating shaft. (TRB)

**TOS**

Transit Operations Supervisor. The immediate supervisors or first echelon of supervision for bus operators. Previously there were four separate categories of TOS: TOS-Communications (Radio Dispatchers), TOS-Divisions (Division Administration), TOS-Instructor (Instructors) and TOS-Vehicle Operations (Road Supervisors). There is now only one job classification, with specific qualifications and job training for each of the four specialties.

**TOTAL OPERATING REVENUE**

The sum of regular passenger revenue, charter revenue, and other miscellaneous revenues, such as those from advertising or concessions. (TRB)

**TOTAL TRAVEL DEMAND**

The potential number of trips that would probably be made by people who do not now travel because of inconvenience, unawareness, inaccessibility, or unavailability of present modes or the inability to use them. (TRB)

**TPM**

SEE: Transit Performance Measurement Program.

**TPOA**

The union (Transit Police Officers' Association) representing Transit Police Officers and Sergeants.

**TRACE TREE**

In planning, the sequence of modes that defines the links that make up the shortest path between two zones. (TRB)

**TRACK**

Two adjacent running rails over which trains operate.

**TRACK ALLOCATION NOTICE**

Published weekly summary that indicates specific contractors, maintenance and test personnel that will be scheduled to work on the Red Line system for the following week. It indicates that limits, time, and dates of the week for these activities.

**TRACK CHART**

A document which graphically depicts the alignment, grade, track layout, track structure (weight of rail, age of ties, etc.), and other information (bridge locations, towns, crossings, etc.) about a railroad line. It is usually scaled at one-half to two inches per mile.

**TRACK CIRCUIT**

An electrical circuit of which the rails of tracks form a part.

**TRACK CONNECTOR (NRC)**

Designated track auxiliary to Mainline track used to transfer rail vehicles.

**TRACK CROSSING**

A track structure used for one line of track to cross another, consisting of two frogs and connecting rails. An element of special trackwork. Often referred to as a diamond.

**TRACK INSTRUMENT**

A device in which the vertical movement of the rail or the blow of a passing wheel operates a contact to open or close an electric switch. (TRB)

**TRACK MILES (TRACK KILOMETERS)**

The sum of the one-way linear miles (kilometers) of all trackage in a system, including all main track and trackage in yard, car barns, switches and turnouts. (TRB)

**TRACK RELAY**

A relay that receives all or part of its operating energy through conductors (of which the track rails are an essential part) and that responds to the presence of a train on the track. (TRB)

**TRACK SCHEDULE**

A document issued on a regular basis that describes the departments and personnel that are scheduled to occupy any portion of track during the following week. Use of a track schedule is usually associated with heavy track maintenance work. (TRB)

**TRACK, AUXILIARY**

Designated track auxiliary to Mainline. Used for rail vehicle storage.

**TRACK, ELECTRIFIED**

Rail track equipped for the operation of electrically propelled vehicles that receive electric power from a conduit along the track's entire length. The conduit is usually an overhead wire or third rail. (TRB)

**TRACK, POCKET**

Designated tracks auxiliary to the main line for storing rail vehicles and turnbacks.

**TRACK, TAIL**

Designated tracks auxiliary to the main line used for storage, reversing direction and other rail activities.

**TRACK, TRANSFER**

Track that connects the yard lead track to the yard track.

**TRACK, YARD**

Tracks within the Yard Limit signs used for storage of trains, repairs or other operations.

**TRACKED AIR CUSHION VEHICLE (TACV)**

A laterally guided vehicle that is suspended above the track by an air cushion system. (TRB)

**TRACKED LEVITATED VEHICLE (TLV)**

A laterally guided vehicle that is suspended above the track by magnetic levitation. (TRB)

**TRACKWORK**

The rails, switches, frogs, crossings, fastenings, pads, ties, and ballast or track-support slab over which rail cars are operated. (TRB)

**TRACS**

Transit Automatic Control and SCADA (Supervisory Control and Data Acquisition).

**TRACTION MOTOR**

The electric motor which is directly connected to the drive wheel(s) of a rail car. Usually a series wired direct current motor geared directly to a gear on the wheel and carried in the rail car truck.

**TRACTION POWER SUBSTATION (TPSS)**

A facility used to transform and rectify 34.5 Kilovolts Alternating current (KVAC) to 750 Volts Direct Current (VDC) for distribution to the contact wire or contact rail. On Light Rail lines it is identified by an exterior blue light.

**TRACTION POWER SYSTEM**

Electrical power distribution system which provides 750 Volts Direct Current (VDC) to operate passenger vehicles.

**TRADE DISCOUNT**

A price allowance or deduction, usually as a percentage allowed to different classes of customers.

**TRADE SECRET**

Information which includes, but is not limited to, formulas, plans, patterns, processes, tools, mechanisms, compounds, procedures, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value and which give its user an opportunity to obtain a business advantage over competitors.

**TRAFFIC**

Direction of movement over mainline track.

- \* Normal Traffic is movement of trains in the normal direction as defined by the rules.
- \* Reverse Traffic is movement of trains in the reverse direction as defined by the rules.

**TRAFFIC ASSIGNMENT ZONE (TRAFFIC ZONE)**

In planning, a division of a study area that is represented by a centroid and used for traffic assignment purposes. (TRB)

**TRAFFIC CALMING**

A holistic, integrated traffic planning approach that seeks to maximize mobility while reducing the undesirable effects of that mobility. (Cynthia L. Holye Traffic Calming)

**TRAFFIC CONTROL DEVICE**

A sign, signal, marking, or other device placed on a adjacent to a street or highway, by authority of a public body or official that has jurisdiction, to regulate, warn, or guide traffic. (TRB)



**TRAFFIC COUNT**

A record of the number of vehicles, people aboard vehicles, or both, that pass a given checkpoint during a given time period. It may be classified by type of vehicle. See also Count. (TRB)

**TRAFFIC DIVERTED (DIVERTED DEMAND)**

A component of traffic that has changed from its previous path of travel to another route without a change in origin, destination, or mode of travel, for example, traffic diverted from a major street to a new expressway, roughly parallel to the street, because of savings in time or distance. (TRB)

**TRAFFIC MODEL**

A mathematical equation or graphic technique used to simulate traffic movements, particularly those in urban areas or on a freeway. (TRB)

**TRAFFIC SYSTEMS MANAGEMENT PROGRAM (TSM PROGRAM)**

A former state-wide funding program intended to provide effective traffic management systems in urbanized areas. To be eligible for TSM Program funding, projects had to be designed to increase the number of person-trips which could be carried on the highway system in a peak period without significantly increasing the designed capacity of the highway system.

**TRAFFIC, ANNUAL AVERAGE DAILY (AADT)**

Daily traffic that is averaged over a calendar or fiscal year. (TRB)

**TRAFFIC, ANNUAL AVERAGE WEEKDAY (AAWDT)**

Daily traffic that is averaged over a calendar or fiscal year and that includes only weekdays (Mondays through Fridays). It may also exclude holidays. (TRB)

**TRAFFIC, AVERAGE DAILY (ADT)**

The average number of vehicles that pass a specified point during a 24-hr. period. (TRB)

**TRAFFIC, INDUCED (INDUCED DEMAND)**

The added component of traffic volume that did not previously exist in any form but that results when new or improved transportation facility are provided, for example, trips to a shopping center by the transit dependent when transit service to the shopping center is started. (TRB)

**TRAILING MOVEMENT**

The movement of a train over the points of a switch which faces away from an approaching train. Also see Facing Movement.

**TRAILING POINT SWITCH**

A track switch the points of which face away from approaching traffic.

**TRAIN**

(Metrolink) One or more rail vehicles combined into an operating unit, with headlights displayed to the front and taillights/marker lights to the rear; a train is a locomotive, with or without cars, displaying markers. (Rail Operations) One or more designated rail vehicles operating as a single unit.

**TRAIN BERTH**

In rail operations, the space designated for a train of given length to occupy when it is stopped at a station platform, in a terminal, on a transfer track, or at some other designated place. (TRB)

**TRAIN CONTROL TERRITORY**

The portion of a railroad division or district that is equipped with an automatic train control system. (TRB)

**TRAIN DENSITY**

1. The number of trains that can be operated safely over a segment of railroad in each direction during a 24-hr period. 2. The average number of trains that pass over a specified section of railroad in a specified period. (TRB)

**TRAIN DESCRIBER**

A document or display device that gives information about the origin, destination, class, or character of trains, locomotives, or rail cars that are moving or to be moved between given points. (TRB)

**TRAIN DETECTION**

A method by which the presence of a train in a block is shown. (NTSC)

**TRAIN IDENTIFICATION CONTROL UNIT (TICU)**

A unit located in each heavy rail vehicle operating cab performing train to wayside communications with the Automatic Train Supervision (ATS) sub-system such as verification of badge number, train run number, destination code and train length.

**TRAIN LENGTH**

The number of rail cars in a train, specifically its overall length both in terms of operating vehicle units and feet (meters).

**TRAIN NUMBER**

Numerical designation of a train. (NTSC)

**TRAIN OPERATOR**

Rail employee responsible for direct control and responsibility for the safe movement of a train.

**TRAIN ORDER**

(Metrolink) A written set of instructions in proper format which indicated instructions given by the Test Controller affecting train and/or maintenance equipment movement. A Train Order can only be annulled or fulfilled. (Rail Operations) A written set of instructions from the Central Control Facility (CCF) which authorizes train movement.

**TRAIN ORDER SIGNAL**

A signal at train order offices which conveys information to approaching trains regarding whether train orders are to be picked up or whether the orders restrict the train.

**TRAIN ROOM**

The area provided at each division for use by operators (also known as the ready room, dog house or operators' shack).

**TRAIN STOP**

An electrically operated mechanical device located adjacent to a running rail which stops a train by activated emergency brakes. Also see Trip Stop.

**TRAIN SYSTEM, ACCESSIBLE**

A transit system that can transport any mobile person, including those who are physically disabled, and in which the vehicles and stops or stations are designed to accommodate patrons who are confined to wheelchairs. (TRB)

**TRAINLINE**

Electrical and pneumatic coupling between rail vehicles allowing signal transmission to all vehicles in a consist.

**TRANSDUCER**

An electrical or mechanical device that converts physical motion into electrical impulses that can be easily counted and processed by a computer. Examples of transducers include fuel flow meters, vehicle odometers, and passenger-counting infrared beams. (TRB)

**TRANSFER**

1. A passenger's change from one transit unit (vehicle or train) or mode to another transit unit or mode.
2. A slip of paper, card, or other instrument issued to passengers (either free or with a transfer fee) that gives the right to change from one transit unit or mode to another according to certain rules that may limit the direction of travel or the time in which the change may be made. (TRB)

**TRANSFER CENTER**

A fixed location where passengers interchange from one route or vehicle to another.

**TRANSFER ENCODING DISPENSER**

The module in the Automatic Fare Collection (AFC) farebox that dispenses magnetically encoded transfers to customers.

**TRANSFER PASSENGER**

A passenger who changes from one route or line to another route or line.

**TRANSFER TRACKS**

The tracks within the Yard Limit that connect the transfer point tracks to the yard tracks.

**TRANSIT**

SEE; Public Transportation.

**TRANSIT 2000**

SEE: Managers of Mobility.

**TRANSIT CAPITAL IMPROVEMENT (TCI) PROGRAM**

TCI is an annual state program funded by the California Transportation Commission with Transportation & Development and Article XIX (state gas tax) funds. Eligible uses include: abandoned railroad rights-of-way acquisition; bus rehabilitation; fixed guideway/rolling stock for commuter rail; urban rail and intercity rail; grade separation; intermodal transfer stations serving various transportation modes; ferry projects; vessels & terminals; and short-line railroad rehabilitation.

**TRANSIT CENTER**

A transit stop or station at the meeting point of several routes or lines or of different modes of transportation. It is located on or off the street and is designed to handle the movement of transit units (vehicles or trains) and the boarding, alighting, and transferring of passengers between routes or lines (in which case it is also known as a transfer center) or different modes (also known as a modal interchange center or an intermodal transfer facility). (TRB)

**TRANSIT CHECK**

A voucher that is recognized by all public transportation operators in Southern California as tender to pay fares.

**TRANSIT COACH**

SEE: Bus, Standard Urban.

**TRANSIT DEPENDENT (RIDER, CAPTIVE; RIDER, CAPTIVE TRANSIT)**

Having to rely on transit services instead of the private automobile to meet one's travel needs. Also see Transportation Disadvantaged. (TRB)

**TRANSIT DEVELOPMENT PROGRAM (TDP)**

A short-term (5-year) program that outlines the intended development of transit in any given year of that period. It includes a detailed program of capital equipment acquisition, system management, and operations. (TRB)

**TRANSIT DISTRICT**

A geographical or political division created specifically for the single purpose of providing transportation services. It is a separate legal entity and usually possesses the authority to impose a property tax. Such political divisions may also be known as a transit agency or transit authority. Also see Property. (TRB)

**TRANSIT MALL**

The major transit terminal located adjacent to the south side of Gateway Headquarters Building which is also called the Patsaouras Transit Plaza. Many bus lines from MTA Operations and other carriers terminate here. It is also adjacent to the East Entrance to three rail terminals: the Metro Red Line, Metrolink trains and Union Station (AMTRAK) trains. The term also applies to the Transit Mall Station on the Metro Blue Line in downtown Long Beach in which no automobile travel is allowed. Lastly, the term is used generically to refer to any off-street terminal for buses.

**TRANSIT PASS**

A tax-free employee commute benefit in which an employer subsidizes up to \$60 per month for an employee's transit fares or vanpool charges. The benefit also applies to military and government employees. (APTA)

**TRANSIT PERFORMANCE MEASUREMENT PROGRAM (TPM)**

Transportation Performance Measurement. A program adopted by the LACTC in 1981, in accordance with state law, to monitor systems or transit operators who receive federal and state formula-driven funds such as State Transit Assistance (STA), Transit Development Act (TDA), and Section 9.

**TRANSIT ROW CATEGORY A**

SEE: Exclusive Transit Right-of-way.

**TRANSIT SHELTER**

A building or other structure constructed at a transit stop. It may be designated by the mode offering service, for example, bus shelter. A transit shelter provides protection from the weather and may provide seating or schedule information or both for the convenience of waiting passengers. (TRB)

**TRANSIT STOP**

An area where passengers wait for, board, alight, and transfer between transit units (vehicles or trains). It is usually indicated by distinctive signs and by curb or pavement markings and may provide service information, shelter, seating, or any combination of these. Stops are often designated by the mode offering service, for example, bus stop, car stop. (TRB)

**TRANSIT STREET**

A street reserved for transit vehicles only. (TRB)

**TRANSIT SUBSIDY PROGRAM**

A program whereby eligible MTA employees are provided vouchers up to \$102.00 per month for purchase of transit passes from operators that do not recognize the MTA employee pass. The program is available to full-time, regular, non-contract employees and members of ATU, TCU and IBT.

**TRANSIT SYSTEM**

An organization (public or private) providing local or regional multi-occupancy-vehicle passenger service. Organizations that provide service under contract to another agency are generally not counted as separate systems. (APTA)

**TRANSIT SYSTEM AVAILABILITY**

A measure of the capability of a transit system to be used by potential passengers, including such factors as the hours the system is in operation, route space, and accessibility to the physically handicapped. (TRB)

**TRANSIT SYSTEM, ACCESSIBLE**

A transit system that can transport any mobile person, including those who are physically disabled, and in which the vehicles and stops or stations are designed to accommodate patrons who are confined to wheelchairs. (TRB)

**TRANSIT SYSTEM, AUTOMATED GUIDEWAY (AGT)**

Any guided transit mode with fully automated operation (i.e. no crew on the transit units). The term usually refers, however, only to guided modes with small and medium-sized vehicles that operated on guideways with exclusive right-of-way. The term includes the personal rapid transit concept and group rapid transit or people mover systems. (TRB)

**TRANSIT SYSTEM, BALANCED**

A system in which the facilities and services of different transportation modes are treated as parts of a single system and each mode is planned in a manner that most effectively uses its special elements in combination with other elements to provide mobility for people in the most effective manner. (TRB)

**TRANSIT SYSTEM, BUS RAPID**

An inexact term describing a bus operation that is generally characterized by operation on an exclusive or reserved right-of-way that permits high speeds. It may include reverse lane operations on limited access roads. Strictly speaking, rapid transit designates operations entirely on exclusive right-of-way; thus bus rapid transit might be appropriately called semi-rapid. (TRB)

**TRANSIT SYSTEM, CAPSULE**

A system of small transit units or individual capsules propelled by belts, rollers, or cables. (TRB)

**TRANSIT SYSTEM, COMMUTER RAIL**

A passenger railroad service that operates within metropolitan areas on trackage that usually is part of the general railroad system. The operations, primarily for commuters, are generally run as part of a regional system that is publicly owned or by a railroad company as part of its overall service. In some areas it is called regional rail. (TRB)

**TRANSIT SYSTEM, CONTINUOUS**

A system that provides continuous movement, for example, a moving belt or escalator. The whole system or portions of it may operate at variable speeds. (TRB)

**TRANSIT SYSTEM, DUAL-MODE**

A broad category of systems wherein vehicles may be operated in both of two different types of operation or propulsion, for example, manually steered and guided, on highways and on guideways, or with diesel and electric traction. (TRB)

**TRANSIT SYSTEM, MAJOR ACTIVITY CENTER (MAC SYSTEM)**

A transit system that provides service for short trips within small, densely populated major activity centers, such as shopping centers and downtown areas. (TRB)

**TRANSIT SYSTEM, MONORAIL**

A transit system consisting of vehicles supported and guided by a single guideway (rail or beam), usually elevated. The basic types are as follows: supported, in which vehicles straddle the guideway or are laterally supported by it; and suspended, in which vehicles hang directly below the guideway (symmetrical monorail) or to one side of it (asymmetrical monorail). Supported monorails are stabilized by gyro, overhead rails, or lateral guidewheels on both sides of the beam (saddle monorail). (TRB)

**TRANSIT SYSTEM, SHUTTLE**

A transit system that is characterized by a back-and-forth operation, usually over a short distance. (TRB)

**TRANSIT SYSTEM, SHUTTLE-LOOP (SLT)**

An automated guideway transit system in which transit units (vehicles or trains) operate along shuttle or loop guideways with few or no switches. It usually has on-line stations. (TRB)

**TRANSIT UNION**

One of the many unions representing various segments of the transit industry's work force. LACMTA employees are represented by the United Transportation Union, the Amalgamated Transit Union, and the Teamsters.

**TRANSIT UNIT**

One or more transit vehicles coupled and operated together. The term includes single vehicles (bus, rail or other guideway) and multicar trains (rail or other guideway). (TRB)

**TRANSITIVE DEPENDENCY**

A functional dependency between two (or more) nonkey attributes in a relation. (Modern Database Management- 4th Edition)

**TRANSITWAY**

Exclusive freeway lane for buses (also for carpools and vanpools). The Harbor Freeway Transitway under construction is an example. Also see Busway.

**TRANSPORT WORKERS UNION (TWU)**

One of the major labor unions in the transit industry; membership is limited to operators, mechanics and other non-supervisory employees of the transit industry.

**TRANSPORTATION BROKERAGE**

1. Coordination of transportation services in a defined area. The transportation broker may centralize vehicle dispatch, record keeping, vehicle maintenance, and other functions under contractual arrangements with agencies, municipalities, and other organizations. 2. A method of matching travelers with a variety of transportation provided through use of central dispatching and administrative facilities. (TRB)

**TRANSPORTATION CONTROL MEASURES (TCM)**

Transportation Control Measures. Required actions under the Federal Clean Air Act to reduce pollutant emissions from motor vehicles. Examples include programs to encourage transit use, ridesharing, signal synchronization, and rail projects.

**TRANSPORTATION DEMAND MANAGEMENT (TDM)**

Demand based techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of peak hours.

#### **TRANSPORTATION DEVELOPMENT ACT (TDA)-ARTICLE 4**

Transportation Development Act (TDA) establishes two major funding sources for public transportation: Local Transportation Fund and State Transit Assistance Fund. A Local Transportation Fund (LTF) is created in each county for transportation purposes specified in the Act which are derived from 1/4th of a percent (.0025) of the 6 percent retail sales tax collected statewide. Allocations under Article 4 are available to operators throughout the State for the support of "public transportation systems." Other transit services, including services provided exclusively for elderly and handicapped persons, may be funded under Article 4.5 (not subject to apportionment).

#### **TRANSPORTATION DISADVANTAGED (LOW MOBILITY GROUP)**

(Also called Transit Dependent, Rider, Captive, and Ride, Captive Transit.) People whose range of transportation alternatives is limited, especially in the availability of relatively easy-to-use and inexpensive alternatives for trip making. Example include the young, the elderly, the poor, the handicapped, and those who do not have automobiles. (TRB)

#### **TRANSPORTATION IMPACT ANALYSIS (TIA)**

An analysis procedure to assist local jurisdictions in assessing the impact of land use decisions on the Congestion Management Program (CMP) system for Los Angeles County.

#### **TRANSPORTATION IMPROVEMENT PROGRAM (TIP)**

As stated in FHWA-UMTA (Federal Highway Administration, Urban Mass Transportation Administration) joint regulations that govern transportation programming, a prioritized program of transportation projects to be implemented in appropriate stages over several years (i.e., 3-5 years). The projects are recommended from those in the transportation systems management element and the long-range element of the planning process. This program is required as a condition for a locality to receive federal transit and highway grants. (TRB)

#### **TRANSPORTATION INTERFACE**

The point or facility at which two or more modes of transportation meet or at which two or more transit system routes or lines meet. (TRB)

#### **TRANSPORTATION MANAGEMENT ASSOCIATION (TMA)/ORGANIZATION (TMO)**

A private/non-profit association that has a financial dues structure joined together in a legal agreement for the purpose of achieving mobility and air quality goals and objectives within a designated area. There are fourteen operating TMA/TMOs in Los Angeles County.

#### **TRANSPORTATION PARTNERSHIP PROGRAM**

Provides state funds to local agencies for construction of locally funded highway and mass transit guideway construction projects. Local entities are reimbursed for a portion of the construction costs for eligible projects. Actual reimbursement amounts depend upon the number of eligible projects that have applied for SLTPP funding statewide during each annual funding cycle. Past award amounts have varied from 9 to 22 percent of project construction costs.

### **TRANSPORTATION PLANNING & DEVELOPMENT (TP&D)**

TP&D revenues are generated from sales tax on diesel fuel, sales tax due to state tax on gasoline above nine cents per gallon, and "over spill" sales tax (4.75% tax on taxable goods, including gasoline, in excess of revenue generated from 5% state sales tax on all taxable goods, except gasoline):

#### **State Transit Assistance (STA) Program**

The STA program is a source of funding for transportation planning and mass transportation purposes as specified by the California Legislature derived from 50 percent of TP&D revenues.

#### **Transit Capital Improvement (TCI) Program**

TCI is an annual state program funded by the California Transportation Commission with Transportation Planning & Development and Article XIX (state gas tax) funds. Eligible uses include: abandoned railroad rights-of-way acquisition; bus rehabilitation; fixed guideway/rolling stock for commuter rail, urban rail and intercity rail; grade separation; intermodal transfer stations serving various transportation modes ferry projects, vessels & terminals, and short-line railroad rehabilitation.

### **TRANSPORTATION PLANNING SUPPORT INFORMATION SYSTEM (TPSIS)**

A centralized system for gathering transportation data. (TRB)

### **TRANSPORTATION RESEARCH BOARD**

Transportation Research Board (TRB). A unit of the National Research Council, operating under the corporate authority of the private and nonprofit National Academy of Sciences. The purpose of TRB is to advance knowledge concerning the nature and performance of transportation systems by stimulating research and disseminating the information derived therefrom. Its affiliates and participants include transportation professionals in government, academia, and industry. (TRB)

### **TRANSPORTATION RESEARCH INFORMATION SERVICES (TRIS)**

A national network of transportation research information services developed by the Transportation Research Board, TRIS consists of the Air Transport Information Service, Highway Research Information Service, Maritime Research Information Service, Railroad Research Information Service, and Urban Mass Transportation Research Information Service. The TRIS database is vended by Dialog Information Services. (TRB)

### **TRANSPORTATION SYSTEM**

1. A system that provides for the movement of people, goods, or both. 2. A coordinated system made up of one or several modes serving a common purpose, the movement of people, goods, of both. (TRB)

### **TRANSPORTATION SYSTEM MANAGEMENT (TSM)**

That part of the urban transportation planning process undertaken to improve the efficiency of the existing transportation system. The intent is to make better use of the existing transportation system by using short-term, low-capital transportation improvements (LCTI) that generally cost less and can be implemented more quickly than system development actions. (TRB) TSM is a funding program for projects designed to make better use of existing transportation rights-of-way. Revenues in this program are generated from the Proposition 111 state gas tax authorizing \$1 billion for a 10-year period which is targeted for ready-to-go TSM projects on an annual basis.

### **TRANSPORTATION SYSTEM MANAGEMENT ALTERNATIVE**

(Also known as Low-capital Alternative, No-Build Alternative, TSM Alternative.) The planning option of not building a new transportation facility, such as a new highway or rail system, but instead improving the already existing transportation system, for example, by making streets one-way or increasing public transportation services. Also see No-Action Alternative and Transportation System Management. (TRB)

### **TRANSPORTATION SYSTEM, AIR CUSHION**

A surface transportation system that uses vehicles that are supported by a thin layer (cushion) of air. (TRB)



**TRANSPORTATION SYSTEM, BALANCED**

A system in which the facilities and services of different transportation modes are treated as parts of a single system and each mode is planned in a manner that most effectively uses its special elements in combination with other elements to provide mobility for people in the most effective manner. (TRB)

**TRANSPORTATION SYSTEM, DEMAND RESPONSIVE (DEMAND-ACTUATED)**

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. It operates on the street and highway system (e.g. taxicab) or, in concept, on a guideway network. (TRB)

**TRANSPORTATION SYSTEM, DIAL-A-RIDE (DAR)**

A demand-responsive system in which curb-to-curb transportation is provided to patrons who request service by telephone, either on an ad-hoc or subscription basis. It is also known as dial-a-bus (DAB) when buses are the vehicles used. (TRB)

**TRANSPORTATION SYSTEM, JITNEY**

Public transportation rendered in small or medium-sized vehicles that are licensed to render that service at a fixed rate or fare for each passenger. The vehicles operate on fixed routes along public ways, from which they may deviate from time to time in response to a demand for service or to take passengers to their destinations, thereafter returning to the fixed route. The scheduling and organization of this type of system varies among jurisdictions. It is used extensively in cities of developing countries that have inadequate transit service. See also, Service, Jitney. (TRB)

**TRANSPORTATION SYSTEM, PUBLIC AUTOMOBILE SERVICE (PAS)**

A system designed to facilitate short-distance urban trips at modest speed through the use of a fleet of small electric automobiles, available at self-service stand locations every few blocks, for rental by the trip to accredited drivers.

**TRAVEL SURVEY**

The collection of data that describe the social, economic, and travel characteristics of people who make trips by various modes of transportation. (TRB)

**TRAVEL TIME FACTOR**

An empirically determined set of factors in which each factor expresses the effect of one particularly travel time increment of trip interchanges between zones. (TRB)

**TRAVEL TIME RATIO**

The ratio that compares travel times between a pair of points via two different modes or facility types. (TRB)

**TRB**

SEE: Transportation Research Board.

**TREE**

In planning, a graph or network in which one node is joined to every other node by a unique path. A shortest path tree is a record that shows the shortest routes and travel times from a given zone to each node in the travel network. The tracing of routes has a strong resemblance to the trunk and branches of a tree. (TRB)

**TRIGGERING OPERATION (TRIGGER)**

An assertion or rule that governs the validity of data manipulation operations such as insert, update, and delete. See also Business Rules. (Modern Database Management- 4th Edition)

**TRIP**

1. A one-way movement of a person or vehicle between two points for a specific purpose; sometimes called a one-way trip to distinguish it from a round trip. 2. An rail operations, a mechanical lever or block signal that, when in the upright position, activates a train's emergency braking system. (TRB)

**TRIP (RUN)**

SEE: Run.

**TRIP ASSIGNMENT (FLOW DISTRIBUTION, TRAFFIC ASSIGNMENT)**

A process by which trips, described by mode, purpose, origin, destination, and time of day, are allocated among the paths or routes in a network by one of a number of models. See also Urban Transportation Modeling System. (TRB)

**TRIP ASSIGNMENT, ALL-OR-NOTHING**

A trip assignment technique that allocates the total number of trips between two zones to only one path between them, usually chosen on the basis of minimum travel time. (TRB)

**TRIP ASSIGNMENT, CAPACITY RESTRAINT**

An iterative process by which the volume allocated to a route is compared with the capacity of that route and the speed of the route is adjusted accordingly to reflect its characteristics of speed, volume, and density. New minimum time paths are calculated at the beginning of each iteration. (TRB)

**TRIP ASSIGNMENT, DETERMINISTIC**

A trip assignment process without probabilistic elements, that is, one that will always produce the same outputs when given the same inputs. (TRB)

**TRIP ASSIGNMENT, DIVERSION**

A trip assignment technique that allocates trips to alternate routes on the basis of the relative times or distances (or both) involved. (TRB)

**TRIP ATTRACTIONS**

In planning, the number of trips, daily or for a specified time interval, to or from a zone generated by present or future land uses in that zone. The term normally refers to the non-home end of a trip. Trip attractions can also be defined as the non-home ends of home-based trips or the destinations of non-home-based trips. See also Trip Productions. (TRB)

**TRIP DISTANCE, LINKED (TOTAL TRAVEL DISTANCE)**

The distance traveled on a linked trip, that is, the distance from the point of origin to the final destination, including the walking distance at trip ends at transfer points. (TRB)

**TRIP DISTRIBUTION**

In planning, the process of estimating movement of trips between zones by using surveys or models. See also Urban Transportation Modeling System and Sequential Model. (TRB)

**TRIP END**

A trip origin or a trip destination. (TRB)

**TRIP GENERATION**

In planning, the determination or prediction of the number of trips produced by and attracted to each zone. See also Urban Transportation Modeling System and Sequential Model. (TRB)

**TRIP GENERATOR**

A land use from which trips are produced, such as a dwelling unit, a store, a factory, or an office. (TRB)

**TRIP LENGTH FREQUENCY DISTRIBUTION**

A list or diagram of the number or the percentage of trips made at various intervals of trip time or distance. (TRB)

**TRIP MATRIX**

In planning, an array of the number of trips made between each zone pair. See also Trip Table .(TRB)

**TRIP PRODUCTIONS**

In planning, the number of trips, daily or for a specified time interval, that are produced from and return to a given zone, generally the zone of residence. Trip productions can also be defined as the home end of home-based trips or the origin of non-home-based trips. See also Trip Attractions. (TRB)

**TRIP PURPOSE**

The primary reason for making a trip, for example, work, shopping, medical appointment, recreation. (TRB)

**TRIP SHEET**

1. A sheet on which operating employees record their day's work and may also record the receipt for a run. 2. A record kept of the information required by ordinance or by rule for a shift worked by the driver of a public passenger vehicle in demand-responsive service. It may also be used in line haul or charter service. (TRB)

**TRIP STOP (TRACK TRIP)**

A mechanical device placed on a running rail which stops a train by activating braking systems. Also see Train Stop.

**TRIP TABLE**

A table that present the number of trips between zones, classified by mode, purpose, time period, type of vehicle, or other category. Also see Trip Matrix. (TRB)

**TRIP, LINKED (LINKED JOURNEY, LINKED PASSENGER TRIP)**

A trip from the point of origin to the final destination, regardless of the number of models or vehicles used. (TRB)

**TRIP, PASSENGER**

SEE: Passenger Trip.

**TRIPPER**

An assignment of work for an operator that is not long enough to qualify as a run or a full day's work.

**TRIS**

The Transportation Research Information Services (TRIS) is a composite file of abstracts of published articles and reports or summaries of ongoing or recently completed research projects relevant to the planning, development, operations and performance of transportation systems and their components.

**TROLLEY**

1. An apparatus, such as a grooved wheel or shoe, at the end of a pole, used for collecting electric current from an overhead wire and transmitting it to a motor of a streetcar, trolleybus, or similar vehicle, when it is used for traction and other purposes. 2. Sometimes used locally as another term for a streetcar. (TRB)

**TROLLEY COACH**

SEE: Trolleybus.

**TROLLEYBUS (ELECTRIC TROLLEYBUS-ETB, TROLLEY COACH)**

An electrically propelled bus that obtains power via two trolley poles from a dual (positive and negative) overhead wire system along routes. It may be able to travel a limited distance on battery power or an auxiliary internal combustion engine. The power-collecting apparatus is designed to allow the bus to maneuver in mixed traffic over several lanes. (TRB)

**TROMPE L'OEIL**

A French phrase meaning 'trick of the eye.' In art, when a two-dimensional surface is painted to look 3-dimensional, and thus 'tricks' your eye.

**TRS**

Transit Radio System. The Bus Operations Control Center's (BOCC) computerized bus communications and real-time revenue operations fleet system. This new system, successor to the existing 20 year old radio system, began to be installed into MTA buses in late 1995. The TRS has the capability of generating a multitude of fleet management and schedule data reports.

**TRUCK**

An assembly of wheels, axles, frames, springs and bolsters at each end of cars and locomotives which pivots to follow curves. Most car and locomotive trucks have two axles, however some heavy duty locomotives and cars have three axle trucks. On Blue, Green and Red Line cars primary components also include traction motors and, on Red Line cars, current collector assemblies.

**TRUCK HUNTING**

In rail operations, lateral instability of a truck, generally occurring at high speed and characterized by the shifting of one or both wheel sets from side to side so that the flanges strike the rail. The resulting motion of the rail car causes potentially unsafe operating conditions. (TRB)

**TRUST FUNDS**

Funds collected and used by the federal government for carrying out specific purposes and programs according to the terms of a trust agreement or statute, such as the Social Security and highway trust funds. Trust funds are administered by the government in a fiduciary capacity and are not available for the general purposes of government. Also see Dedicated Funding Source. (APTA)

**TSM**

SEE: Transportation System Management Program.

**TSM PROGRAM**

SEE: Traffic Systems Management Program.

**TUNNEL**

1. An enclosed passageway, as for trains, automobiles, and so on, through or under an obstruction, such as a city, mountain, river, or harbor. 2. An underground passage. (TRB)

**TURN AROUND LOOP**

The bus route segment at the far terminal or short line terminal to reverse direction of the bus for the return trip over the route of the line. Sometimes passengers are allowed to ride or board but on most lines no passengers are carried through the loop.

**TURN BACK**

1. In transit operations, to cut short a transit trip (to turn back before reaching the end of the route or line), usually to get back on schedule or to meet peak passenger demands; also known as a short turn. 2. In rail operations, a point along a track at which a train may reverse direction. (TRB)

**TURN-IN TIME**

The time at the end of a run that allows the operators to clear their responsibilities (e.g., read farebox, turn in tickets) and prepare their vehicles for storage. The time may be paid or unpaid and may or may not be included in platform time. It is also frequently known as clear time, pull-in time, or storage time. (TRB)

**TURNOUT**

A track structure for diverting rolling stock from one track to another consisting of the switch, a frog and connecting rails. Often "switch" is used to refer to the complete turnout. An element of special trackwork.

**TVM**

SEE: Ticket Vending Machine

**TWO-STEP SEALED BIDDING**

A method of contracting designed to obtain the benefits of competitive sealed bidding when adequate specifications are not available.

# U

**U.S. DEPARTMENT OF TRANSPORTATION- FEDERAL TRANSIT ADMINISTRATION**

Federal grantor agency referred to in the Contract documents as "FTA," under whose grants of financial assistance and grant contracts work or services are performed or materials are provided by third parties.

**UA**

SEE: Urbanized Area.

**UBOA**

SEE: United Bus Owners of America.

**UITP**

SEE: International Union of Public Transport.

**UMTA**

The former Urban Mass Transportation Administration of the United States Department of Transportation. Now known as the Federal Transit Administration.

**UNALLOWABLE COST**

Any cost which, under the provisions of any pertinent law, regulation, or contract, cannot be included in prices, cost-reimbursement, or settlement under an MTA contract to which it is allocable.

**UNARY RELATIONSHIP (RECURSIVE RELATIONSHIP)**

A relationship between the instances of one entity type. (Modern Database Management- 4th Edition)

**UNDER-SERVED**

Customer demand for service exceeds the current service level.

**UNIFIED PLANNING WORK PROGRAM (UPWP)**

A document produced every year to describe all transportation-related planning activities that will be carried out during the next year. It includes planning to be done by all agencies in the region and details which agencies will be involved in each portion of the work program. (TRB)

**UNIFORM FINANCIAL ACCOUNTING AND REPORTING ELEMENTS**

SEE: Financial Accounting and Reporting Elements (FARE).

**UNION (LABOR UNION, TRADE UNION)**

An organization of wage earners or salaried employees for mutual aid and protection and for dealing collectively with employers in advancing the members' economic interests and general working conditions. (TRB)

**UNIT**

An MTA-owned automobile.

**UNIT ITEM OVERRUN**

A unit item is a line item bid based upon unit cost times a specified number or measurement. A unit item overrun occurs when the item quantity exceeds the quantity specified in the line item contained in the contract document. Unit item overruns may or may not require a contract modification.

**UNIT TRAIN**

A train carrying one commodity between one origination and one destination. Unit trains avoid the delay and expense of switching individual cars in terminals and can furnish freight transportation at much lower cost than conventional freight trains. Often they are as long and heavy as can be operated over the road. (14,000 gross tons are typical for a 110-car unit train.)

**UNITED BUS OWNERS OF AMERICA**

United Bus Owners of America (UBOA). An organization of bus companies. It provides representation in Washington, D.C. for its members, disseminates information, provides insurance programs to members, and is especially concerned with safety and regulatory issues. (TRB)

**UNITED STATES CONFERENCE OF MAYORS**

United States Conference of Mayors (USCM). Membership includes cities of more than 30,000 population, represented by their mayors. Its purpose is to promote improved municipal government by cooperation between cities and the federal government. It provides educational information, technical assistance, and legislative services to cities and conducts a reach program. (TRB)

**UNITED TRANSPORTATION UNION (UTU)**

SEE: UTU

**UNIVERSE**

SEE: Population.

**UNLINKED TIME**

In planning, the time duration of an unlinked trip, that is, one made on a single vehicle. (TRB)

**UNLINKED TRIP**

1. A trip made in a single vehicle. 2. The boarding of one transit vehicle in revenue service; also known as an unlinked passenger trip. 3. Any segment of a linked trip. (TRB)

**UNLINKED TRIP DISTANCE**

The distance traveled on an unlinked trip, for example, a trip on a single vehicle. (TRB)

**UNPAIRABLE TRIPPER**

A tripper that cannot be paired with another piece of work to form a day's work because of timing and applicable work rules, for example, the maximum spread rule. (TRB)

**UNSAFE CONDITION OR ACT**

Any condition or act which does endanger human life or property. (NTSC)

**UNSCHEDULED MAINTENANCE**

Maintenance action initiated by the malfunction of equipment. (NTSC)

**UNZIP**

To unzip a file means to decompress, or expand a file that has been made smaller using a compression utility.

**URBAN FRINGE**

That part of an urbanized area outside the central city or cities. (TRB)

**URBAN MASS TRANSPORTATION ACT**

SEE: Bus Discretionary Capital.

**URBAN PUBLIC TRANSPORTATION**

Transportation system for intraurban or intraregional travel, available for use by any person who pays the established fare. It consists of transit and paratransit. (TRB)

**URBAN TRANSPORTATION MODELING SYSTEM (UTMS)**

A system of models used in transportation planning as an approach to urban travel demand modeling. It consists of four major stages: Trip generation, trip distribution, modal split, and trip assignment. UTMS predicts the number of trips by type, time of day, zonal origin and destination, model, and routes. (TRB)

**URBAN TRANSPORTATION PLANNING PROCESS**

The federally required planning process for urbanized areas that is aimed at developing programs to meet a region's transportation needs by analyzing the existing system and preparing plans and studies in a comprehensive, continuing, and cooperative manner. It results in several documents: a transportation systems management element (TSME), a transportation improvement program (TIP), a prospectus, a unified planning work program (UPWP), and a long-range element (LRE). (TRB)

**URBAN TRANSPORTATION PLANNING SYSTEM (UTPS)**

A tool for multimodal transportation planning developed by the Urban Mass Transportation Administration and the Federal Highway Administration. It is used for both long- and short-range planning, particularly system analysis, and covers both computerized and manual planning methods. UTPS consists of computer programs, attendant documentation, user guides, and manuals that cover one or more of five analytical categories: highway network analysis, transit network analysis, demand estimation, data capture and manipulation, and sketch planning. (TRB)

**URBAN TRANSPORTATION SYSTEM**

The system of transportation elements (both private and public) that provides for the movement of people and goods in an urban area. The components include transit system, paratransit services, and highway or road systems, including private vehicles and pedestrians. (TRB)

**URBANIZED AREA (UA)**

As defined by the Bureau of the Census, a population concentration of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled, contiguous territory (suburbs). The boundary is based primarily on a population density of 1,000 people/mile squared but also includes some less densely settled areas, as well as such areas as industrial parks and railroad yards, if they are within areas of dense urban development. The boundaries of UAs, the specific criteria used to determine UAs, or both may change in subsequent censuses. It should be noted that some publications abbreviate urbanized area UZA. (TRB)

**URL (UNIFORM RESOURCE LOCATOR)**

The form of the site address that reveals the name of the server where the site's files are stored, the file's directory path, and its file name.

**USCM**

SEE: United States Conference of Mayors

**USER DEPARTMENT (USER)**

The term used for any organizational entity within the MTA that initiates a request for procurement action and that will ultimately benefit from the goods or services required.

**USER INFORMATION (SERVICE INFORMATION)**

Information on fares, stopping places, schedules, and other aspects of service essential to the efficient use of public transit. The term also refers to devices employed to convey such information, including bus stop signs, timetable brochures or books, telephone inquiries, and computerized user-interactive systems. (TRB)

**USER-SIDE SUBSIDY (USER SUBSIDY)**

A subsidy in the form of a sum or a discount paid or applied directly to riders of a transportation service, usually through some type of voucher system. (TRB)

**USNET (USER NETWORK)**

Internet newsgroups. One of the earliest forms of "group electronic mail," currently at a level of about 10,000 different newsgroups.

**UTPS**

SEE: Urban Transportation Planning System.

**UTU**

United Transportation Union. The labor union representing bus drivers and train operators, schedule makers and schedule checkers. Formerly the Brotherhood of Railway Trainmen.

# V

**VALIDATION**

The marking of a ticket, pass, or transfer for the purpose of verifying its legitimate use for paid travel, usually giving time and place of marking. (TRB)

**VALUE ENGINEERING (VALUE ANALYSIS)**

An analysis of materials, processes, and products in which functions are related to cost and from which a selection may be made for the purpose of achieving the required function at the lowest overall cost consistent with the requirements for performances and maintainability. (TRB)



**VANPOOLING**

SEE; Ridesharing.

**VARIABLE**

A quantity that may have different values; a data measure used for analysis. (TRB)

**VARIABLE COST**

A cost that varies in some relation to the level of output or operational activity; for example, the cost of fuel. (TRB)

**VARIABLE, DEPENDENT**

A variable whose value is determined for a given value of another variable. (TRB)

**VAULT**

The part of a farebox or turnstile that holds the money or tokens.

**VAULT HOUSE**

The house at the divisions, usually located at the bus entrance, which contains the receiver or portable safe where the money from the farebox vaults are "dumped" by the vaulter each time the bus enters the division.

**VEHICLE**

Any device of contrivance for carrying or conveying people or objects, including land conveyance, vessels, aircraft and spacecraft. The term is sometimes specifically restricted to hand conveyances on wheels, runners, treads, and so on. (TRB)

**VEHICLE CAPACITY**

The passenger capacity pertinent to specified loading conditions.

**VEHICLE HOUR**

The operation of a vehicle for a period of 1 hour. (TRB)

**VEHICLE MILE (KILOMETER)**

A vehicle operated one mile (kilometer).

**VEHICLE MILES OF TRAVEL (VMT; VEHICLE KILOMETERS OF TRAVEL, VKT)**

1. On highways, a measurement of the total miles (kilometers) traveled by all vehicles in the area for a specified time period. It is calculated by the number of vehicles times the miles (kilometers) traveled in a given area or on a given highway during the time period. 2. In transit, the number of vehicle miles (kilometers) operated on a given route or line or network during a specified time period. (TRB)

**VEHICLE OCCUPANCY**

The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only. (TRB)

**VEHICLE SERVICE MILES/KILOMETERS (VSM/K)**

The total miles/kilometers traveled by transit vehicles while in revenue service.

**VEHICLE SIGNAL-ACTUATING DEVICE**

A device to control traffic signals that is activated by vehicles. (TRB)

**VEHICLE TRIP**

The one-way movement of a vehicle between two points.

**VEHICLE, AIR CUSHION**

Also called ACV and ground effect machine. Any vehicle supported by a cushion of air.

**VEHICLE, DUAL-MODE**

A vehicle that operates both manually on public streets and automatically on an automated guideway. (TRB)

**VELOCITY, CRUISE (CRUISE SPEED)**

The forward velocity that a vehicle maintains where it is neither accelerating nor decelerating. It is usually less than maximum design speed but can be equal to it. (TRB)

**VELOCITY, EFFECTIVE**

(Also called Average Speed.) The average velocity at which a vehicle travels. For transit vehicles, it includes dwell time at stops or station, acceleration, and deceleration. (TRB)

**VESTIBULE**

In rail systems, an enclosed space at each end of a passenger car. (TRB)

**VIEW**

A virtual table in the relational data model in which data from real (base) tables are combined so that programmers can work with just one (virtual) table instead of the several or more complete base tables. (Modern Database Management- 4th Edition)

**VINE**

In planning, a record that shows the shortest routes from a given zone to all nodes; a node may be traversed more than once. (TRB)

**VISUAL ART(S)**

Refers to all fine art experienced in the visual realm, including painting, sculpture, drawing, photography, and printmaking.

**VMS**

Vehicle Maintenance System. A key database for carrying out Preventive Maintenance Program (PMP) and for the monitoring of the performance of bus maintenance tasks by the bus mechanics.

**VMT/VKT**

SEE: Vehicle Miles/Kilometers of Travel.

**VOLUME**

SEE: Flow Rate.

**VRML(VIRTUAL REALITY MODELING LANGUAGE)**

A "tag" language in which web pages are formatted that can support 3D graphics and interactive spatial navigation.

**VSM/K**

SEE: Vehicle Service Miles/Kilometers.

**VTT**

Verification of Transit Training. The VTT card is a certificate issued by the California Department of Motor Vehicles (DMV) which verifies that a bus operator has received the required eight hours of annual training. The state specifies the general topics which include safety and passenger handling and requires the instructors to be either state or federally certified. MTA Transit Operations Supervisor (TOS) instructors, who are all federally certified, provide the training. The operator must carry the VTT card along with his or her commercial driving license and medical certificate.

# W

**WAIS (WIDE AREA INFORMATION SERVER)**

A powerful system for searching large amounts of information very quickly over the Internet.

**WAIT TIME**

The time spent waiting for a transit vehicle. (TRB)

**WALKER, JAMES W., JR. (JIM)**

Local transit historian. B. 1935 in South Gate, California. Author of "The Yellow Cars of Los Angeles."

**WASH/COUPLE MODE (W/C)**

The Wash/Couple Mode shall be used to wash cars during car wash operations. Maximum operating speed is 2 mph.

**WASHOUT**

1) Planning - The erosion of an embankment supporting a road or a railroad. 2) Operations - A violent stop signal given by hand (or lantern at night).

**WAV**

Wav (pronounced "wave") is the file extension used on some types of audio files.

**WAYSIDE EQUIPMENT**

Train control or movement apparatus which is located along the track or wayside as opposed to the control center or other remote location. Also see Trip Stop. (NTSC)

**WAYSIDE INTRUSION DETECTION SYSTEM (WIDS)**

Safety/security system on the Green Line detecting unauthorized intrusion into the right-of-way.

**WAYSIDE PUSH-BUTTON**

A device for selecting rail vehicle routes.

**WAYSIDE RESTRICTION**

Operating instructions issued by the Central Control Facility (CCF) to rail personnel advising of conditions affecting normal rail operations.

**WAYSIDE SIGNAL**

In rail operations, a fixed signal that is located along the track right-of-way. (TRB)

**WAYSIDE TRAIN STOP**

A mechanical arm located on the wayside which, when in the up (trip) position, initiates an emergency brake application on a train which passes it. (NTSC)

**WEBMASTER/WEBMISTRESS**

System operator for a web site server.

**WEIGHTED TIME**

A measure of travel time where certain components (e.g., wait time) are factored upward. (TRB)

**WELDED RAIL**

Two or more rails welded together at their ends to form a length less than 400 feet (122 meters). Also see Continuous Welded Rail. (TRB)

**WELL CARS**

Railroad freight cars designed to hold single or double stacked containers.

**WHEEL FLANGE**

In rail systems, a projecting edge or rim on the circumference of a steel wheel that is designed to keep the wheel on a rail. (TRB)

**WHEEL TREAD**

In rail systems, the exterior cylindrical or conical surface of a steel wheel that comes in contact with the rail. (TRB)

**WHEELCHAIR LIFT**

A device used to raise and lower a platform in a transit vehicle for accessibility by people with disabilities.

**WIDE GAUGE**

SEE: Gauge, Broad.

**WIDEBAND**

A medium-capacity communications circuit/path. It usually implies a speed from 64Kbps to 1.544Mbps.

**WIDS**

SEE: Wayside Intrusion Detection System.

**WINZIP**

Winzip is a compression utility that lets Windows 95, 3.1, and NT users make their files smaller for faster transfer over the Internet. This utility also decompresses files that were originally compressed using PKZIP or TAR formats. <http://www.winzip.com/winzip/>

**WOMEN'S BUSINESS ENTERPRISE (WBE)**

A business owned and operated by one or more women. Also see Minority/Women Enterprise Program. (APTA)

**WORK**

The completed performance required by the contract documents, and includes all necessary labor and materials and equipment incorporated or to be incorporated in such performance.

**WORK AUTHORIZATION CHANGE NOTICE**

Differs from Change Notice in that it authorizes immediate work required to remain on schedule or to mitigate safety or environmental issues or to comply with a regulatory requirement or to avoid unnecessary expenditures. Also see Change Notice.

**WORK CONTINUATION AGREEMENT**

This is an agreement between the Building Trades Council and various construction trade unions whereby the unions agree not to strike and picket any of the contractors on the Red Line and Blue Line rail projects. When the work continuation agreement is attached to a construction contract, the contractor's employees are also subject to its requirements.

**WORK DIRECTIVES/TASK ORDERS (WD/TO)**

Scheduled or un-scheduled orders to perform specific services, or provide goods, etc. over a specific contract period, for filling the MTA's requirements and used where the MTA anticipates recurring requirements but cannot predetermine precise quantities or services to be provided and it is inadvisable for the MTA to commit itself to a minimum quantity or compensation. Funds are obligated by each order (WD or TO), and not by the contract itself. Such orders must be within the general Scope of Work.

**WORK GROUP**

The group of individuals, department, or unit with whom you work on a regular basis.

**WORK PERMIT**

A written order issued by Central Control Facility (CCF) or Yard Control authorizing work within specified time and limits.

**WORK RUN**

The daily assignment of an operator. It may include operation over more than one route or line. Also see Run. (TRB)

**WORK SHARING (DIVISION OF WORK, SHARE THE WORK, SPREAD THE WORK)**

An arrangement designed to avoid layoffs, whereby available work during slack periods is spread as evenly or as equitably as possible among the regular employees by reducing each worker's daily or weekly hours or by establishing a week-on, week-off work schedule. (TRB)

**WORK TRAIN**

Non-revenue service train used to assist in on-track maintenance or for other purposes.

**WWW (WORLD WIDE WEB)**

Internet system for world-side hypertext linking of multimedia documents, making the relationship of information that is common between documents easily accessible and completely independent of physical location.

**WYE**

An arrangement of tracks splayed like the letter "Y" but with a connection across the top, used to connect a track to both directions of another line or to turn rolling stock around.

**WYSIWYG**

What you see is what you get.

**Y****YARD**

A facility where trains or buses are stored, assembled for service, repaired, maintained and cleaned.

**YARD CONTROL**

Location from which yard operations are authorized and directed.

**YARD LIMIT**

Specific location designating limits between yard, shop and mainline tracks. Unless governed by signal indications, trains must run at restricted speed in yard limit.

**YARD LIMIT SIGN**

A sign placed at a specific location between the tracks to denote the separation between the yard and the mainline tracks.

**Z****ZERO TOLERANCE PROGRAM**

A program that encompasses keeping buses free of painted graffiti and enhance cleaning of the interior of the buses.

**ZIP**

When one "compresses" (i.e., makes a smaller but equal copy) a file using "pkzip", the resulting file is called a "zip". It usually ends with the file extension "zip".

**ZONE CENTROID**

SEE; Centroid.

**ZONE CHECKS**

Tickets issued by an operator as proof of extra fare paid. Zone checks are issued only when one line provides both local and express service.

**ZONE FARES**

A system of fares in which a service area is divided into zones within which specified rates or fares apply.

**ZONING**

It is well settled that a municipality may divide land into districts and prescribe regulations governing the uses permitted therein, and that zoning ordinances when reasonable in object and not arbitrary in operation constitute a justifiable exercise of police power, and as intendment in favor of the validity of such ordinances the court will not substitute its judgment for that of the zoning action. (Page C1-27 of Los Angeles Municipal Code, Fifth Edition)