Truck Parking Information Management System (TPIMS) Glossary

AASHTO

American Association of State Highway and Transportation Officials is the organization that provides recommendations for a variety of transportation related subjects. It represents all five transportation modes: air, highways, public transportation, rail, and water. Its primary goal is to foster the development, operation, and maintenance of an integrated national transportation system.

ADT

Average Daily Traffic is the total volume during a given time period, in whole days, greater than one day and less than one year, divided by the number of days in the time period.

AHS

Automated Highway System is a proposed ITS technology designed to provide for driverless cars on specific rights-of-way.

ATIS

Advanced Traveler Information System provides real time information systems for travelers. It is one of the original core intelligent transportation systems technologies.

ATMS

Advanced Traffic Management System is highway traffic control in real time. ATMS is an array of ITS (intelligent transportation systems) technologies designed to monitor, control and manage traffic on streets and highways. ATMS technologies apply surveillance and control strategies to improve traffic flow on highways and streets.

AVL

Automated Vehicle Location is a means for automatically determining and transmitting the geographic location of a vehicle. This data, from one or more vehicles, may then be collected by a vehicle tracking system for a picture of vehicle travel.

CCTV

Closed-Circuit Television is a television system in which the video signals are transmitted from one or more cameras by cable to a restricted set of monitors.

CMS

Changeable Message Signs are an electronic traffic sign often used on roadways to give travelers information about special events or alerts.

Configuration Management Plan

This is a systems engineering process for establishing and maintaining consistency of a product's performance, functional, and physical attributes with its requirements, design, and operational information throughout its life.

ConOps

Concept of Operations is a document that defines the way the system is envisioned to work from multiple stakeholder viewpoints [Users including operators, maintenance, management].

DBMS

Database Management System is an integrated set of computer programs that provide the capabilities needed to establish, modify, make available and maintain the integrity of a database.

DCM

Data Collection Monitoring is a practice that is done to ensure that the data being collected is free of unforeseen errors.

Development Strategy

A development strategy is the way the development and deployment of the overall system will be carried out. For example, an evolutionary development strategy means that the system will be developed and deployed in multiple segments over time. These pieces are complete functional units that will perform independently from other functional pieces. Incremental development is the development of pieces that are done concurrently or nearly concurrently by the same or different development teams.

DOT

A Department of Transportation is a state's governing body for transportation policy.

DMS

Dynamic Message Signs are signs that are capable of displaying more than one message and changeable manually, by remote control, or by automatic control.

DSRC

Dedicated Short Range Communications are one-way or two-way short-range to medium-range wireless communication channels specifically designed for automotive use and a corresponding set of protocols and standards.

Feasibility Assessment

Pre-development activities that evaluates, selects and verifies that it is feasible within all of the project and system constraints.

FHWA

The Federal Highway Administration is the governing body for all interstate highways. They provide stewardship over the construction, maintenance and preservation of the Nation's highways, bridges and tunnels.

Gap Analysis

Gap analysis is a technique used to assess how far current capabilities are from meeting the identified needs of development activities.

ICM

Integrated Corridor Management enables departments of transportation (DOTs) to optimize use of available infrastructure by directing travelers to underutilized capacity in a transportation corridor.

Interface

The functional and physical characteristics required to exist at a common boundary.

ISP

The Information Service Provider Subsystem (ISPS) collects, processes, stores, and disseminates transportation information to system operators and the traveling public.

IT

Information Technology is the application of computers to store, retrieve, transmit and manipulate data.

ITS

Intelligent Transportation System is a broad range of diverse technologies which, when applied to our current transportation system, can help improve safety, reduce congestion, enhance mobility, minimize environmental impacts, save energy, and promote economic productivity. ITS technologies are varied and include information processing, communications, control, and electronics.

Life Cycle

Life Cycle refers to the end-to-end process from conception of a system to its retirement or disposal.

LOS

Level of Service is a qualitative measure used to relate the quality of traffic service. LOS is used to analyze highways by categorizing traffic flow and assigning quality levels of traffic based on performance measure like speed, density, etc.

MC

Maintenance and Construction is commonly associated with the cost it would take to build and maintain a particular system.

MOE

Measure of Effectiveness is a term designed to correspond to accomplishment of mission objectives and achievement of desired results. They quantify the results to be obtained by a system and may be expressed as probabilities that the system will perform as required.

MVDS

Microwave Vehicle Detection System is a technology that can determine if a vehicle passes a specific point. The system can be connected to ITS technology.

Needs Assessment

An activity accomplished early in system development to ensure that the system will meet the most important needs of the project's stakeholders, specifically that the needs are well understood, don't conflict, and are prioritized.

NTCIP

National Transportation Communications for ITS Protocol is a family of standards that provides both the rules for communicating (called protocols) and the vocabulary (called objects) necessary to allow electronic traffic control equipment from different manufacturers to operate with each other as a system.

O&M

Operations & Maintenance are commonly associated with the cost to operate and maintain a system.

PDR

Preliminary Design Review demonstrates that the preliminary design meets all system requirements with acceptable risk and within the cost and schedule constraints and establishes the basis for proceeding with detailed design.

PM

Program Managers are the people tasked with making sure the program is carried forward according to the project scope.

PS&E

Plans, Specifications, and Estimate is the set of information used to design and build a system with a complete understanding of its total cost.

Regional ITS Architecture

This is a specific regional framework for ensuring institutional agreement and technical integration for the implementation of ITS projects in a particular region.

RFP

A Request for Proposal is a solicitation, often made through a bidding process, by an agency or company interested in procurement of a commodity, service or valuable asset, to potential suppliers to submit business proposals.

RFQ

A Request for Quotation is a standard business process whose purpose is to invite suppliers into a bidding process to bid on specific products or services.

ROW

Right Of Way is a type of easement granted or reserved over the land for transportation purposes.

RTMS

Real-Time Monitoring Systems are used to relay information to users instantaneously upon any change that occurs on a network.

SE

Systems Engineering is an inter-disciplinary approach and a means to enable the realization of successful systems. Systems engineering requires a broad knowledge, a mindset that keeps the big picture in mind, a facilitator, and a skilled conductor of a team.

SECM

Systems Engineering Capability Model are the essential elements of an organization's systems engineering process that must exist to ensure good systems engineering.

SEMP

Systems Engineering Management Plan is a document that addresses a contractors overall systems engineering management approach. It provides unique insight into the application of a contractor's standards, capability models, configuration management, and toolsets to their organization.

Specification

Specifications are document that describes the essential technical requirements for items, materials or services including the procedures for determining whether or not the requirements have been met.

Statement of Work

This is a document primarily for use in procurement, which specifies the work requirements for a project or program. It is used in conjunction with specifications and standards as a basis for a contract. The SOW will be used to determine whether the contractor meets stated performance requirements.

STOC

Statewide Transportation Operations Center is a place that monitors a state's transportation network.

System Specification

This is a top level set of requirements for a system. A system specification may be a system/sub-system specification, Prime Item Development Specification, or a Critical Item Development Specification.

TCP/IP

Transport Control Protocol/Internet Protocol is a protocol for communication between computers, used as a standard for transmitting data over networks and as the basis for standard Internet protocols.

TMC

A Transportation Management Center collects information about the transportation network and combines it with other operational and control data to manage the transportation network and to provide traveler information.

TTS

A Travel Time Sign provides information on approximately how long it will take to travel to a specific location given the current conditions of the roadway.