

Asset – The physical infrastructure of a transportation network, such as right-of-way, pavements, structures, roadside features. Assets can also include other agency resources capable of providing added value, such as human resources, real estate, equipment and materials.

Asset management – A strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively throughout their lifecycle. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decision-making based upon quality information and well-defined objectives.

Asset management plan – A plan for managing an agency’s physical assets to deliver an agreed upon level of service. Typically, the asset management plan encompasses more than one asset, for example, a system approach.

Audit – Evaluation of a person, organization, system, process, product, or project. In the area of quality, audits are used to verify the existence of a process, assess the successful implementation of a process, assess the effectiveness of a process for achieving the defined objectives, and provide evidence of process improvement.

Benchmarking – Process for comparing cost, performance life, productivity, or quality of a specific process or method to a standard or best practice. Benchmarking is used in strategic management to evaluate various process aspects in relation to best practice. Agencies then use the benchmarking results to develop plans for process improvement or adoption of best practices, usually with the aim of increasing performance.

Condition – A measure of the physical state of an asset as affected by deterioration and past maintenance and repair.

Customers – Members of the general public who use agency services. Customers usually are not directly involved in asset management, but their expectations of transportation services and perceptions of asset performance ultimately determine public confidence in the agency.

Deficiency – A gap between an asset’s current condition and performance and a defined target or threshold value; deficiency implies a need for work.

External stakeholder – Organizations and groups outside the agency that have an important interest in transportation asset management. They may be included in the agency’s planning processes by using representatives or proxies.

Gap analysis – An evaluation of the current state of asset management practices within an agency compared with the ideal state, with a focus on identifying performance gaps and areas for improvement.

Improvement – A project or investment that enhances transportation system functionality; may include capacity additions or operations enhancements to existing facilities, or construction of new facilities.

Internal stakeholder – An individual or team within an agency with a significant interest in asset management processes. An Asset Management Steering Committee could serve as a primary internal stakeholder during TAMP development.

Inventory – A compilation of the agency infrastructure assets including relevant characteristics such as count or quantity, location, size, functional classification, traffic usage, and district responsibility. Depending on agency practice, it may include condition or performance data.

Investment analysis – A system or process that provides general guidance on predicting the performance of one or more assets within a specified budget level.

Levels of service – Measures related to the public's perception of asset condition or of agency services; used to express current and target values for maintenance and operations activities.

Life cycle – A length of time that spans the stages of asset construction, operation, maintenance, rehabilitation, and reconstruction or disposal and abandonment; when associated with analyses, refers to a length of time sufficient to span these several stages and to capture the costs, benefits, and long-term performance impacts of different investment options.

Management system – A system that is designed to support one or more assets, such as: bridge management, maintenance management, pavement management, and others. These systems generally include data related to asset inventory and condition levels. Can also consist of a software application that supports a particular set of an agency's business processes, whether in managing assets or resources (such as pavements, bridges, human resources, equipment fleets, materials stockpiles, lands and buildings), performing prescribed functions (such as planning, project development, construction management, maintenance management), recording and managing transactions (such as financial management and accounting, payroll), or processing and communicating information (such as executive information, customer comments and complaints).

Network – A system of assets to provide transportation services to customers.

Optimization – A process for determining the best available value, in terms such as cost or performance life, within a given set of constraints.

Performance measure – A quantitative indication of the service provided by agency assets to users of the transportation system.

Performance target – A goal or threshold set by the agency for a particular performance measure that is aligned with its strategic goals and policy objectives.

Program – A set of projects of similar type of work, such as pavement rehabilitation, or serving a similar objective, for example to improve mobility or safety.

Resource – An input to the construction, operation, maintenance, repair, renewal, or disposal of transportation infrastructure assets; provides value-added to these processes; may include labor knowledge and skills, financial capacity, real estate, corporate information, or equipment and materials.

Risk – In asset management, risk may include possible adverse consequences to assets because of damage or malfunction due to a variety of causes, including obsolescence or lack of capacity. Risk assessment must take into account the likelihood of the consequences, their impact on the mission of the asset, and hazards to life, property, and the environment.

Risk assessment – A process to determine risk of system failure, predict the consequences of risk, and assist in prioritizing investments for mitigating risk.

Self-assessment – A process by which an agency self-evaluates its compliance with established practices and procedures.

Stakeholder – An individual or group who affects, or whose interests are affected by, the decisions an agency makes as part of its asset management processes.

Strategic goals – Objectives set by an agency that support its mission and are reflected in its policies, based on a long-term view of transportation assets and needs.

Tradeoff analysis – Comparisons of alternative solutions, particularly involving consequences of reallocating funds between programs.

Transportation Asset Management Plan (TAMP) – A document that establishes the agency's policies for asset management in support of its strategic goals. The TAMP serves as a communication tool and business plan for making investments in transportation infrastructure.