Asset Management Information Systems (AMIS)

An asset management system is a set of interrelated and interacting elements of an organization, whose function is to establish the asset management policy and asset management objectives, and the processes, needed to achieve those objectives. AMIS is the combination of people, processes, applications, and technology applied to provide the essential outputs for effective asset management such as reduced risk, enhanced network performance, enhanced regulatory compliance, effective asset knowledge management, effective resource utilization and optimum infrastructure investment. Significant quantities of asset data are collected, stored, and used for a variety of asset management functions and analyses. Computerized tools and integrated information systems can interconnect various databases containing this high volume of detailed asset information. These tools and systems can enable a DOT to implement a comprehensive and cost-effective approach to asset identification analysis and management.

In general, Transportation Asset Management (TAM) is 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. TAM links user expectations for infrastructure system condition, performance, and availability with system management and investment strategies. The underlying goal of asset management is to take a broad approach to resource allocation and programming decisions that will provide greater value to the system and overall satisfaction for end users through improvements in program effectiveness and system performance.

TAM has three primary goals:
- Keeping the infrastructure in as good or better condition than it is now.
- Developing and implementing a logical capital improvement plan.
- Containing the costs of planning, building, operating, and maintaining the facilities.
  When to Use: PIP
  Whom: Core Constructability Team
  References:
  Asset Management Information System Asset Management Plan, Record Number R308648, October 2017
  https://www.aer.gov.au/system/files/TasNetworks%20-%20Asset%20Management%20Information%20Systems%20Asset%20Management%20Plan%20-%2029%20November%202018.pdf
  https://www.nap.edu/catalog/26126/guidebook-for-data-and-information-systems-for-transportation-asset-management
  https://www.capgemini.com/gb-en/wp-content/uploads/sites/3/2017/07/29909-14-asset_management_information_systems_web_14_oct.pdf