that supplies analyses and summaries of data, uses mathematical models to make forecasts and recommendations, and provides the means by which alternative policies and programs may be efficiently considered. An effective BMS should include, as a minimum, formal procedures for:
(a) Collecting, processing, and updating data;
(b) Predicting deterioration;
(c) Identifying alternative actions;
(d) Predicting costs;
(e) Determining optimal policies;
(f) Performing short- and long-term budget forecasting; and
(g) Recommending programs and schedules for implementation within policy and budget constraints.

§ 500.108 SMS.

An SMS is a systematic process with the goal of reducing the number and severity of traffic crashes by ensuring that all opportunities to improve highway safety are identified, considered, implemented as appropriate, and evaluated in all phases of highway planning, design, construction, maintenance, and operation and by providing information for selecting and implementing effective highway safety strategies and projects. The development of the SMS may be based on the guidance in “Safety Management Systems: Good Practices for Development and Implementation.’’ An effective SMS should include, at a minimum:
(a) Communication, coordination, and cooperation among the organizations responsible for the roadway, human, and vehicle safety elements;
(b) A focal point for coordination of the development, establishment, and implementation of the SMS among the agencies responsible for these major safety elements;
(c) Establishment of short- and long-term highway safety goals to address identified safety problems;
(d) Collection, analysis, and linkage of highway safety data;
(e) Identification of the safety responsibilities of units and positions;
(f) Public information and education activities; and
(g) Identification of skills, resources, and training needs to implement highway safety programs.

§ 500.109 CMS.

(a) For purposes of this part, congestion means the level at which transportation system performance is unacceptable due to excessive travel times and delays. Congestion management means the application of strategies to improve system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods in a region. A congestion management system or process is a systematic and regionally accepted approach for managing congestion that provides accurate, up-to-date information on transportation system operations and performance and assesses alternative strategies for congestion management that meet State and local needs.

(b) The development of a congestion management system or process should result in performance measures and strategies that can be integrated into transportation plans and programs. The level of system performance deemed acceptable by State and local officials may vary by type of transportation facility, geographic location (metropolitan area or subarea and/or non-metropolitan area), and/or time of day. In both metropolitan and nonmetropolitan areas, consideration needs to be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity of those lanes.