Federal Highway Administration, DOT

§ 511.301 Purpose.

The purpose of this part is to establish the provisions and parameters for the Real-Time System Management Information Program. These provisions implement Subsections 1201(a)(1), (a)(2), and (c)(1) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (Pub. L. 109–59; 119 Stat. 1144), pertaining to Congestion Relief.

§ 511.303 Definitions.

Unless otherwise specified in this part, the definitions in 23 U.S.C. 101(a) are applicable to this subpart. As used in this part:

Accuracy means the measure or degree of agreement between a data value or set of values and a source assumed to be correct.

Availability means the degree to which data values are present in the attributes (e.g., speed and travel time attributes of traffic) that require them. Availability is typically described in terms of percentages or number of data values.

Congestion means the level at which transportation system performance is unacceptable due to excessive travel times and delays.

Data quality means the fitness of data for all purposes that require such data.

Full construction activities mean roadway construction or maintenance activities that affect travel conditions by closing and reopening roadways or lanes.

Metropolitan areas means the geographic areas designated as Metropolitan Statistical Areas by the Office of Management and Budget in the Executive Office of the President with a population exceeding 1,000,000 inhabitants.

Real-time information program means the program by which States gather and make available the data for traffic and travel conditions. Such means may involve State-only activity (including cooperative activities engaging multiple State agencies), State partnership with commercial providers of value-added information products, or other effective means that enable the State to satisfy the provisions for traffic and travel time conditions reporting stated in this section.

Routes of significance are non- Interstate roadways in metropolitan areas that are designated by States as meriting the collection and provision of information related to traffic and travel conditions. Factors to be considered in designating routes of significance include roadway safety (e.g., crash rate, routes affected by environmental events), public safety (e.g., routes used for evacuations), economic productivity, severity and frequency of congestion, and utility of the highway to serve as a diversion route for congestion locations. All public roadways including arterial highways, toll facilities and other facilities that apply end user pricing mechanisms shall be considered when designating routes of significance. In identifying these routes, States shall apply the collaborative practices and procedures that are used for compliance with 23 CFR part 940 and 23 CFR part 420.
§ 511.305 Policy.

This part establishes the provisions and parameters for the Real-Time System Management Information Program for State DOTs, other responsible agencies, and partnerships with other commercial entities in establishing real-time information programs that provide accessibility to traffic and travel conditions information by other public agencies, the traveling public, and by other parties who may deliver value-added information products.

§ 511.307 Eligibility for Federal funding.

(a) Subject to project approval by the Secretary, a State may obligate funds apportioned to the State under Title 23 U.S.C. sections 104(b)(1), also known as National Highway System funds, 104(b)(2), also known as CMAQ Improvement funds, and 104(b)(3), also known as STP funds, for activities relating to the planning, deployment and operation, including preventative maintenance, of real-time monitoring elements that advance the goals and purposes of the Real-Time System Management Information Program. The SPC funds, apportioned according to 23 U.S.C. 505(a), may be applied to the development and implementation of a real-time information program.

(b) Those project applications to establish a real-time information program solely for Interstate System highways are entitled to a Federal share of 90 percent of the total project cost, pursuant to 23 U.S.C. 120(a). Those project applications to establish a real-time information program for non-Interstate highways are entitled to a Federal share of 80 percent of the total project cost, as per 23 U.S.C. 120(b).

§ 511.309 Provisions for traffic and travel conditions reporting.

(a) Minimum requirements for traffic and travel conditions made available by real-time information programs are:

1. Construction activities. The timeliness for the availability of information about full construction activities that close or reopen roadways or lanes will be 20 minutes or less from the time of the closure for highways outside of Metropolitan Areas. For roadways within Metropolitan Areas, the timeliness for the availability of information about full construction activities that close or reopen roadways or lanes will be 10 minutes or less from the time of the closure or reopening. Short-term or intermittent lane closures of limited duration that are less than the required reporting times are not included as a minimum requirement under this section.

2. Roadway or lane blocking incidents. The timeliness for the availability of information related to roadway or lane blocking traffic incidents will be 20...
minutes or less from the time that the incident is verified for highways outside of Metropolitan Areas. For roadways within Metropolitan Areas, the timeliness for the availability of information related to roadway or lane blocking traffic incidents will be 10 minutes or less from the time that the incident is verified.

(3) **Roadway weather observations.** The timeliness for the availability of information about hazardous driving conditions and roadway or lane closures or blockages because of adverse weather conditions will be 20 minutes or less from the time the hazardous conditions, blockage, or closure is observed.

(4) **Travel time information.** The timeliness for the availability of travel time information along limited access roadway segments within Metropolitan Areas, as defined under this subpart, will be 10 minutes or less from the time that the travel time calculation is completed.

(5) **Information accuracy.** The designed accuracy for a real-time information program shall be 85 percent accurate at a minimum, or have a maximum error rate of 15 percent.

(6) **Information availability.** The designed availability for a real-time information program shall be 90 percent available at a minimum.

(b) Real-time information programs may be established using legacy monitoring mechanisms applied to the highways, using a statewide incident reporting system, using new monitoring mechanisms applied to the highways, using value-added information products, or using a combination of monitoring mechanisms and value-added information products.

§ 511.311 Real-time information program establishment.

(a) **Requirement.** States shall establish real-time information programs that are consistent with the parameters defined under §511.309. The real-time information program shall be established to take advantage of the existing traffic and travel condition monitoring capabilities, and build upon them where applicable. The real-time information program shall include traffic and travel condition information for, as a minimum, all the Interstate highways operated by the State. In addition, the real-time information program shall complement current transportation performance reporting systems by making it easier to gather or enhance required information.

(b) **Data quality.** States shall develop the methods by which data quality can be ensured to the data consumers. The criteria for defining the validity of traffic and travel conditions made available from real-time information programs shall be established by the States in collaboration with their partners for establishing the programs. States shall receive FHWA’s concurrence that the selected methods provide reasonable checks of the quality of the information made available by the real-time information program. In requesting FHWA’s concurrence, the State shall demonstrate to FHWA how the selected methods gauge the accuracy and availability of the real-time information and the remedial actions if the information quality falls below the levels described in §511.309(a)(5) and §511.309(a)(6).

(c) **Participation.** The establishment, or the enhancement, of a real-time information program should include participation from the following agencies: Highway agencies; public safety agencies (e.g., police, fire, emergency/medical); transit operators; and other operating agencies necessary to sustain mobility through the region and/or the Metropolitan area. Nothing in this subpart is intended to alter the existing relationships among State, regional, and local agencies.

(d) **Update of Regional ITS Architecture.** All States and regions that have created a Regional ITS Architecture in accordance with Section 940 in Title 23 CFR shall evaluate their Regional ITS Architectures to determine whether the Regional ITS Architectures explicitly address real-time highway and transit information needs and the methods needed to meet such needs. Traffic and travel conditions monitoring needs for all Interstate system highways shall be considered. If necessary, the Regional ITS Architectures shall be updated to address coverage, monitoring systems, data fusion and archiving, and accessibility to highway and transit information for other...
§ 511.313 Metropolitan Area real-time information program supplement.

(a) Applicability. Metropolitan Areas as defined under this subpart.

(b) Requirement. Metropolitan Areas shall establish a real-time information program for traffic and travel conditions reporting with the same provisions described in §511.311.

(c) Routes of significance. States shall designate metropolitan areas, non-Interstate highways that are routes of significance as defined under this subpart. In identifying the metropolitan routes of significance, States shall collaborate with local or regional agencies using existing coordination methods. Nothing in this subpart is intended to alter the existing relationships among State, regional, and local agencies.

(d) Effective date. Establishment of the real-time information program for traffic and travel conditions reporting along the Metropolitan Area Interstate system highways shall be completed no later than November 8, 2014. Establishment of the real-time information program for traffic and travel conditions reporting along the State-designated metropolitan area routes of significance shall be completed no later than November 8, 2016.

§ 511.315 Program administration.

Compliance with this subpart will be monitored under Federal-aid oversight procedures as provided under 23 U.S.C. 106 and 133, 23 CFR 1.36, and 23 CFR 940.13.