FTA Transit Safety ANPRM Analysis

October 11, 2013

The FTA's Safety Advanced Notice of Proposed Rulemaking (ANPRM) was issued October 3, 2013, with comments due back to FTA by January 2, 2014. What follows is a quick analysis of the document, highlighting key passages and intended to provide a synopsis. The full ANPRM is available here: http://www.fta.dot.gov/documents/Final_Safety_TAM_ANPRM.pdf

Summary

FTA "intends to focus its initial oversight and enforcement efforts on rail systems' implementation of and compliance with these requirements."

FTA will be seeking public comment on its initial interpretations, proposals it is considering and in the form of questions the agency poses throughout the ANPRM document. Overall, FTA has organized the document into sections covering: (1) the requirements of the National Safety Program relating to the National Public Transportation Safety Plan, the Public Transportation Agency Safety Plan, and the Public Transportation Safety Certification Training Program; (2) the requirements of the National Transit Asset Management (TAM) System, including four proposed options under consideration for defining and measuring state of good repair; and (3) the relationship between safety, transit asset management and state of good repair.

The Safety Management System (SMS) Approach

There are four essential pillars of an SMS approach — (1) safety policy; (2) safety risk management; (3) safety assurance; and (4) safety promotion.

Within the context of the Transit Agency Safety Plan, an organization's safety objectives will be articulated, at a minimum, through the setting of performance targets based on the safety performance criteria established in the National Safety Plan and state of good repair based on the definition of that term established under the National TAM System.

The Transit Agency Safety Plan must also include methods for identifying and evaluating safety risks throughout all elements of the public transportation system and strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions.

Safety assurance requires an organization to monitor the effectiveness of safety risk controls established under safety risk management. Safety assurance is also

designed to ensure that the organization meets or exceeds its safety objectives through the collection, analysis and assessment of data.

Safety promotion involves training, awareness and communication that support safety.

The National Public Transportation Safety Program

The National Safety Program is comprised of four subsections: (1) the National Public Transportation Safety Plan; (2) the Public Transportation Agency Plan; (3) the Public Transportation Safety Certification Training Program; and (4) the State Safety Oversight Program.

The National Safety Plan

The National Safety Plan will, at a minimum , include safety performance criteria for all modes of public transportation; the definition of state of good repair developed through the implementation of the National TAM System; a public transportation safety certification training program; and minimum safety performance standards for transit vehicles used in revenue service.

Within 1 year after FTA issues a final rule, each recipient of 5307 and 5311 (including states) must develop, implement and certify a Public Transit Agency Safety Plan. Small transit providers that are recipients under 5307 or 5311 may have their plans drafted by the state. Each plan must include:

• A requirement that the board of directors or equivalent entity approve the plan and any updates;

• Methods for identifying and evaluating safety risks throughout all elements of the recipient's public transportation system;

• Strategies to minimize the exposure of the public, personnel and property to hazards and unsafe conditions;

• A process and timeline for conducting an annual review and update of the plan;

• Assignment of an adequately trained safety officer who reports directly to the general manager, president or equivalent officer of the recipient; and

• A comprehensive staff training program for operations personnel and personnel directly responsible for safety.

The Public Transportation Safety Certification Training Program

FTA envisions that the Public Transportation Safety Certification Training Program will establish minimum expertise requirements for Federal, State, transit agency and other designated personnel who are directly responsible for safety oversight.

FTA is developing proposed interim provisions for safety certification and training, which will "soon" be published in the *Federal Register*. These interim provisions will remain in effect until FTA issues a final rule for the Safety Certification Training Program. FTA is organizing its training approach around a series of competencies and basic skills that Federal, State and transit employees and contractors charged with overseeing transit safety need in order to perform their oversight duties. Recipients of 5307 and 5311 funds may use up to 0.5 percent of apportioned formula funds to pay for up to 80 percent of the costs of an applicable transit agency employee's participation in the Safety Certification Training Program.

Safety Performance Criteria

FTA is required to set safety performance criteria for all modes of public transportation, which it envisions will consist of desired outcomes, established controls to mitigate risks and indicators for identifying and tracking safety related issues. Eventually, FTA envisions that transit agencies will be able to use safety information to progress from reactive safety risk management response to a proactive or predictive response. FTA in considering proposing data collection processes and analyses that will allow FTA to collect and roll up results to the national level. Transit agencies would then set targets based on these measures.

State of Good Repair

The definition of state of good repair will be established through the rulemaking to establish the National TAM System. The definition must include objective standards measuring the condition of capital assets of recipients, including equipment, rolling stock, infrastructure and facilities. FTA has established four potential approaches that could be used to define and measure state of good repair, which are as follows:

• Asset Age: The approach relies on the assumption that most assets provide reliable service for a predictable period of time after which they should be replaced. It establishes a maximum useful life for many assets, beyond which an asset is considered to be part of the state of good repair backlog. This is not to be confused with the minimum useful life with which many FTA recipients are familiar.

• Asset Condition: This approach is based on periodic conditions assessment of all assets using a set of standardized procedures and criteria and would require FTA to develop significant guidance on how and when to assess the conditions of different classes of assets, including parameters for sampling, if necessary.

• Asset Performance: The approach is based on a regular, comprehensive assess of a system's performance and relies upon the assumption that as assets age, they will become less durable and reliable, resulting in decreased operational performance. A performance-based approach would require far tighter integration of operations and capital maintenance than currently exist at most transit systems.

• Comprehensive Assessment of Assets: This approach combines the previous approaches to look at the age, condition and performance of a system's assets, as

well as to incorporate information on maintenance history for each asset. Its primary benefit is it takes into account all the factors that contribute to state of good repair, but it is clearly the most complex and most labor-intensive approach.

Minimum Safety Performance Standards for Vehicles

FTA is required to issue minimum safety performance standards for public transportation vehicles used in revenue operation. Those standards, to the extent practicable, must take into consideration: (1) relevant recommendations of the National Transportation Safety Board; and (2) recommendations of, and best practices developed by the public transportation industry. Presently, FTA's priority with respect to vehicles is issuing a proposed rule to establish a bus testing pass/fail standard.

The Public Transportation Agency Safety Plan

Each recipient of Section 5307 and Section 5311 must certify that it has established a comprehensive Transit Agency Safety Plan. States may also draft and certify planas for rural areas or small public transportation providers in urban areas. The Transit Agency Safety Plan is where FTA envisions each transit agency to illustrate its practice of SMS, particularly as it relates to the following four questions:

• What will likely be the cause of the transit agency's next accident?

• How does the transit agency know the likely cause of the next accident?

• What is the transit agency doing to mitigate the risk?

• Is the strategy or action working?

Public Transportation Agency Safety Plan requirements include:

• A requirement that the board of directors or equivalent entity approve the plan;

• Methods for identifying and evaluating safety risks throughout all elements of the system;

• Strategies to minimize the exposure of the public, personnel and property;

• A process and timeline for conducting an annual review and update of the plan;

• Performance targets based on the safety performance criteria and state of good repair standards;

• Assignment of an adequate trained safety officer who reports directly to system leadership; and

• A comprehensive staff training program for the operations personnel and personnel directly responsible for safety.

Transit Asset Management

FTA must establish a National TAM System that includes the following five elements: (1) FTA is define the term, state of good repair, including objective standards for measuring asset conditions; (2) FTA must establish performance measures based on these state of good repair standards, and each FTA grant recipient must annually set targets based on these measures; (3) each FTA recipient and subrecipient must develop an asset management plan that includes asset inventory and investment prioritization; (4) asset inventories, condition assessments and performance targets must be reported to FTA; and (5) FTA must provide technical assistance to recipients.

FTA notes about the relationship between Safety, the Safety Management System Approach, Transit Asset Management and State of Good Repair the following:

"Even when assets are not in a state of good repair, they can be operated safely."

"FTA believes that there is a nexus between achieving a state of good repair and the safety of a transit system."

All recipients and subrecipients of FTA grants must develop a TAM plan. Each recipient is further required to set state of good repair performance targets. Finally, recipients of the Section 5307 or 5311 formula programs must also report asset condition data to the NTD. FTA interprets the language of the statute to specifically exclude a statewide TAM plan. Subrecipients will not be required to set state of good repair performance targets directly, the recipient will set a performance target on their behalf. FTA intends to define state of good repair and to set the state of good repair performance measures in a way that will allow for and provide a simple approach for small recipients and for grant recipients setting state of good repair targets on behalf of small subrecipients. FTA intends for the TAM Plan required of small operators to be relatively simple and based on the life-cycle of the revenue vehicles and facilities in the operator's asset inventory. FTA recognizes that meeting the new requirements for transit asset management will not be easy and may require additional resources and expertise. In many cases, funds from FTA's core formula grant programs may be used to cover costs related to implementing the TAM requirements.

The TAM Plan must include, at a minimum, capital asset inventories and condition assessments, decision support tools, and investment prioritization. The foundation of any effective TAM Plan is a good capital asset inventory. FTA is preparing a separate *Federal Register* notice on collecting asset inventory information through the NTD.

Each TAM Plan must include investment prioritization. All projects identified in the TAM Plan should reflect priorities for funding from all available sources, including FTA program funds, State and local funds, and funds transferred from FHWA.

Three months after a final rule is issued to establish state of good repair performance measures, each FTA grant recipient is required to establish annual state of good repair performance targets in relation to those measures. Further, each year, FTA grant recipients are required to report to FTA on progress toward meeting those state of good repair targets, and to report the targets established for the subsequent fiscal year. Note: only recipients and not subrecipients will be required to set state of good repair performance targets. FTA envisions adopting performance measures that provide a direct measure of each transit agency's state of good repair backlog. FTA believes that the state of good repair performance measures should be transparent, readily understood by the public, and sustainable over the long-term as possible. They should be quantitative, and the not be constructed in reference to an arbitrary baseline.

FTA grant recipients will be required to establish state of good repair performance targets in relation to state of good repair performance measures within three months after FTA establishes the performance measures. Recipients of FTA funding will be required to submit an annual report describing the progress of the recipient toward meeting the recipient's state of good repair performance targets for the subsequent year.

Certification of Transit Agency Safety Plans and Transit Asset Management Plans

Both the Transit Agency Safety Plan and the TAM Plan have a self-certification requirement. First, certification provides assurance to FTA that recipients have conscientiously sought to meet the requirements for the Transit Agency Safety Plan and the TAM Plan and that the resulting plans are supporting the goals for safety and transit asset management. Second, a recipient that engages in a rigorous review of the Transit Agency Safety Plan and TAM Plan before certifying it to FTA will have confidence that their plans meet the standards established by FTA.