occupant protection in particular." Accordingly, no change in the guideline is necessary.

Guideline #21: Roadway Safety When the original 18 standards were established, there was not an individual roadway safety program standard. Instead, four standards were published, each of which pertained to some aspect of safety in the roadway environment: Standard 9 on Identification and Surveillance of Accident Locations; Standard 12 on Highway Design, Construction and Maintenance; Standard 13 on Traffic Engineering Services; and Standard 14 on Pedestrian Safety. In 1982, the agencies issued a final rule which identified six National Priority Program Areas that were considered the most effective in reducing highway deaths and injuries. "Safety Construction and Operational Improvements" was designated as one of the six most effective programs. In 1987, the agencies changed the "Safety **Construction and Operational** Improvements'' priority program to "Roadway Safety" to encompass a wider breadth of safety activities related to the roadway environment. However, the agencies have never issued an individual highway safety program standard or guideline to encompass the entire area of either "Safety **Construction and Operational** Improvements" or "Roadway Safety."

In the notice published on January 14. 1994, the agencies proposed to more effectively organize and consolidate the roadway safety components from each of the four guidelines that pertain to safety in the roadway environment by creating a new guideline entitled "Roadway Safety." At that time, the agencies contemplated that the four related guidelines would remain unchanged. The agencies received 14 comments regarding the proposed Roadway Safety guideline, supporting the creation of a separate new guideline. Two of the comments recommended that, with the creation of this new guideline, the agencies could eliminate guidelines 9, 12, and 13. The agencies agree with these comments and have decided in this notice to remove these three guidelines. The new Roadway Safety guideline will be numbered Guideline No. 21, and contain additional section headings for ease of reference and conformance with the format of the other guidelines. Guideline Nos. 9, 12 and 13 will be reserved.

The West Virginia Department of Transportation was the only commenter that questioned the issuance of the Roadway Safety guideline, stating that it was almost a verbatim restatement of

the requirements imposed on States under the Federal Aid Policy guide (23 CFR 924). The agencies disagree with this comment. The guide to which West Virginia referred deals specifically with the Highway Safety Improvement Program (HSIP). Under this program, specific funding is set aside from the Surface Transportation Program for carrying out the Rail-Highway Crossings and Hazard Elimination programs. While HSIP funds are available for roadway safety construction and hardware improvements, Section 402 funds are not. The Roadway Safety guideline refers specifically to nonconstruction items which are authorized under Section 402. In addition, the guideline is broader in scope, articulating recommended policies, practices, and procedures.

3M Corporation supported the use of conspicuity treatment on vehicles and clothing for motorcyclists and pedestrians, and recommended data collection and education efforts on the effectiveness of conspicuous materials. The NYPD recommended educating all grades of high school students, through community policing, on safety issues such as the hazards attendant to changing flat tires in traffic lanes. The agencies agree with 3M that use of conspicuous materials has a safety benefit. However, 3M's recommendations are not directly related to this guideline, which concerns safety aspects of roadways. Moreover, the agencies note that conspicuity requirements are already in place for highway construction and maintenance workers, and that the safety benefits associated with enhanced visibility are well-established, obviating the need for data collection and educational efforts in this area. As discussed below, however, we have identified retroreflective materials as important treatments for the improvement of nighttime visibility. The agencies strongly support highway safety education efforts, but note that NYPD's recommendation for education concerning safety hazards to those changing tires is more appropriate for consideration in the context of programs concerning pedestrians or driver education.

The Michigan Department of State Police suggested that new technology, such as high intensity sheeting on signs, might render roadway lighting less cost effective than it has been in the past. Michigan also thought that evaluating the impact of specific traffic control measures on all traffic crashes might be problematic, and that it might be more reasonable for States to evaluate spot improvements. The agencies agree that new technology, such as retroreflective materials, can provide valuable safety benefits at night, and should be considered in addition to traditional lighting applications. Accordingly, we have added a reference to retroreflective materials in the guideline. The agencies also agree that spot evaluations are an effective means of measuring the impacts of specific traffic control measures on traffic crashes. Spot evaluations are currently routine practice, and no change in the guideline is needed to accommodate them.

The ITE recommended that specific minimum education standards and certain registration requirements be established for personnel responsible for traffic engineering and highway safety. ITE believes that the guideline should direct each State to implement such requirements. The agencies share ITE's concerns that personnel involved in traffic engineering and highway safety be properly trained and qualified. However, the agencies believe it is appropriate for the States to set standards in consultation with professionals within their borders and based on particular State circumstances. We would point out, however, that FHWA is developing a series of training courses on the Safety Management System and other roadway safety topics. These courses are specifically designed for those who are involved in safety and traffic engineering, and are offered through the National Highway Institute at locations across the country.

The Washington State Department of Health suggested that the guideline include language recommending the development of an "open process for frequent roadway users, e.g., EMS/ trauma providers, law enforcement, CMV drivers, and commuters to report dangerous roadway sections and/or specific hazards that they encounter.<sup>3</sup> Many such processes already exist. For example, the emergency telephone number "911" has been in use for many years, and is widely accepted as a means of communicating roadway safety hazards. The Federal **Communications Commission recently** issued a Notice of Proposed Rulemaking proposing that commercial wireless operations be required to make Enhanced 911 available to customers, and is soliciting comments on how this may be accomplished. In addition to the universal 911 emergency number, some States have provided emergency numbers for motorists to report road hazards. Most law enforcement agencies also monitor channel 9 on citizen's band radio. In Highway Safety Program Guideline 11 (Emergency Medical Services), NHTSA supports these