

a definition of this person provided in § 650.305. The proposed definition was developed to clarify that this individual provides overall supervision and is available to inspection team leaders to provide guidance. A State or Federal organization can have multiple program managers, depending on the organizational structure and delegation of duties.

2. The phrase “responsible capacity” would be clarified as “bridge inspection experience.” A definition for “bridge inspection experience” is provided in § 650.305. Emphasis has been placed on active participation in bridge inspection activities. The intent is to ensure that the predominant amount of experience is acquired through direct involvement in bridge inspection activities. States and Federal organizations may choose to develop additional experience criteria that consider aspects, such as, number and types of structures inspected.

3. The criteria to be qualified for registration as a professional engineer (PE) in current § 650.307(a)(1) would be removed. The term “qualified for registration” has been interpreted to mean that an individual satisfies the education and experience requirements for professional registration, but has not obtained the license. Another interpretation has been that an individual has successfully passed the professional engineer’s exam and is awaiting issuance of his/her official license. The FHWA proposes in § 650.309(a)(1) that registration as a PE is the necessary requirement for someone with the responsibilities of a “program manager,” as an equivalent alternate to ten years of bridge inspection experience.

The majority of commenters were in favor of establishing bridge inspection training and experience requirements for the individual in charge of the bridge inspection and inventory program. Sixteen commenters noted that having a civil or structural related engineering degree, an Engineer-In-Training (EIT) certificate, or a Professional Engineer’s (PE) license should count towards an experience requirement. The majority of those in favor of establishing a training requirement recommended that the person in charge be required to complete the same training as regular bridge inspectors. The majority of commenters were in favor of requiring a specific discipline for the PE of the person in charge. Civil/structural were the most commonly recommended disciplines. Many commenters thought that the laws governing professional engineering licensing within each State ensure that PE’s only practice engineering in the fields in which they

are qualified and experienced. A private citizen, Marc S. Grunnert, noted that years of experience might not be as important as exposure to different types of structures or the number of structures inspected over a given period of time. The ARTBA and the Florida DOT noted that States should be allowed a great deal of latitude in making personnel decisions and judgment calls with respect to qualifications.

The FHWA recognizes the majority of commenters recommended that the NBIS specify the engineering license discipline for the program manager who is a PE, preferably in civil or structural engineering. However, the FHWA concurs with the minority of commenters who indicated that the laws governing licensing within each State or Federal organization ensure that PE’s only practice engineering in the fields in which they are qualified and experienced. Furthermore, the FHWA believes that it is the State or Federal organization’s responsibility to ensure that those individuals involved in the bridge inspection program meet the minimum qualifications defined in the NBIS. The proposed regulations would not specify the engineering discipline; however, individual States and Federal organizations can adopt requirements that are more specific than the minimum requirements established by the NBIS.

References to the “Bridge Inspector’s Training Manual” would be removed in the proposed regulation. A definition of “comprehensive bridge inspection training” which mentions the “Bridge Inspector’s Reference Manual (BIRM)”³ would be added in the proposed § 650.305.

Commenters were almost evenly divided on the need to require certification training in proportion to the complexity of the structure being inspected. Seven of the commenters who were opposed to adding this requirement, supported the idea that both level of training and experience should be considered, particularly for the inspection of complex structures. Several commenters stated that this should be a responsibility of the bridge inspection program manager and does not need to be codified in regulation. The New Jersey, New York, North Carolina and Florida DOT’s along with a private citizen, Omaha Greene, noted that it would be very difficult to administer a program where the training

and experience requirements varied with the complexity of structures.

The FHWA agrees that program managers must have the same basic level of training as all other bridge inspectors. A requirement is proposed in § 650.309(a)(2) for the program manager to have successfully completed a comprehensive bridge inspection training course. The FHWA proposes to define comprehensive bridge inspection training in § 650.305. This requirement would apply regardless of whether the program manager is a PE or has ten years of bridge inspection experience. The FHWA proposes to allow 12 months for new or current program managers who have not participated in the training to complete the required comprehensive training. In proposed § 650.309(a)(2), States and Federal organizations would be permitted to develop their own comprehensive inspection training programs subject to approval by the FHWA. The FHWA will use the proposed comprehensive bridge inspection training definition and the BIRM as criteria to apply when reviewing these programs.

The “individual in charge” of a bridge inspection team in current § 650.307(b) would be identified as a “team leader” in § 650.309(b) and a definition of this person provided in § 650.305. The California DOT, and two private citizens, Omaha Greene and Rick Jager, recommended that an additional, alternate team leader qualification be added for those who possess an EIT certificate, have two years bridge inspection experience, and have completed an 80-hour training course based on the bridge inspector’s training manual (BITM). The FHWA agrees with the comments regarding the consideration of engineering degrees and PE licensing status in evaluating an individual’s experience level.

Accordingly, the FHWA proposes the addition of an alternate qualification in § 650.309(b) that a “team leader” have a bachelors degree in engineering and have successfully completed the National Council of Examiners for Engineering and Surveying (NCEES) Fundamentals of Engineering examination, and have two years of bridge inspection experience. Additionally, team leaders would also have to complete a comprehensive bridge inspection training course.

There are approximately 84,500 bridges or 14 percent of the NBI that are posted in virtually every State, the District of Columbia and Puerto Rico. Bridge load rating calculations provide the basis for determining the safe load capacity of a bridge and critical load posting and permitting decisions are

³ The Bridge Inspector’s Reference Manual (BIRM), 2003, FHWA-NHI-03-001, may be purchased from the U.S. Government Printing Office bookstore, Room 118, Federal Building, 1000 Liberty Avenue, Pittsburgh, PA 15222.