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North Carolina Department of Transportation's Implementation of the FHWA Final Rule on Safety & Mobility 23 CFR 630 Subparts J & K

Work Zone Qualification and Training Component

This Final Rule had an effective implementation date of October 12, 2007. Subpart J of the Final Rule on highway work zone regulations includes various sections such as Temporary Traffic Control Plan development, Transportation Management Plan development, Public Information Plan development, development of an Agency Work Zone Policy, implementation of a Work Zone Audit and data tracking program, and a comprehensive training component. Subpart K of the Final Rule on Highway Work Zone regulations includes uses of Temporary Traffic Control Devices to protect workers and motorists in Temporary Traffic Control Work Zones. The NCDOT has created a basic policy as required by the Final Rule that covers the design and implementation of Traffic Management Plans and Temporary Traffic Control Plans. This document does not currently include the Knowledge and Training Component. The current Work Zone Safety & Mobility Policy can be found at the Work Zone Traffic Control website:

<https://connect.ncdot.gov/projects/wztc/Pages/default.aspx> .

The Final rule “specifies that agencies require appropriate training for personnel involved in the development, design, implementation, operation, inspection, and enforcement of work zone related transportation management and traffic control”. It also requires “periodic training updates”. The people who need this training include “transportation planners, design engineers, traffic and safety engineers, temporary traffic control designers and program managers, regional construction managers, construction project staff, maintenance staff, and contractor and utility staff”. “Training needs to be appropriate to an individual’s job responsibilities and to the job decisions each individual needs to make”.

The NCDOT will require workers to have work zone safety knowledge and any training needed to gain that knowledge for all work performed by any agency, contractor, company, or individual while inside Highway Rights of Way. Subpart J and K of the Final Rule will be included in this information. The work zone safety knowledge levels and implementation dates are described below. It is expected that work zone safety knowledge levels will increase as an individual’s job responsibilities increase.

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The NCDOT has developed these knowledge levels in accordance with the following: OSHA Standards 1910 & 1926, ANSI Standards for Safety Apparel and for Work Zone Safety for Highway Construction, FHWA Final Rule on Safety and Mobility for minimum levels of training for individuals working inside highway rights of way, Manual on Uniform Traffic Control Devices (MUTCD, 2009 Edition) for Temporary Traffic Control (TTC), AASHTO Roadside Design Guide, ITE Traffic Control Handbook, NCDOT Standards, Specifications, and Industry Best Practices.

A list of sources for training of the various knowledge levels can be found at the Work Zone Traffic Control Section website:

<https://connect.ncdot.gov/projects/WZTC/Pages/Training.aspx>

While no specific training session is recommended for the Maintenance / Utility Traffic Control Guidelines, several sources are listed. Flagger certification can be obtained thru the listed training sources. Some of those training sources can provide Flagger Instructor courses that allow agencies and firms to train their own personnel as flaggers using that training sources material with permission. Agencies and firms may decide to create their own course. Contact the Work Traffic Control Section through Steve Kite at 919-814-4937 for details on this process. Work Zone Supervisor and Installer Qualification is obtained by passing a NCDOT approved training course together with a review of each applicant's work experience.

NCDOT expects this training to create a pyramid of Work Zone Traffic Safety decision making such that each agency and company will have trained personnel to answer questions and make decisions appropriate to the level of complexity of the work zone. This pyramid will include the NCDOT Work Zone Traffic Control Section. It is expected that each agency, contractor, and company in charge of overseeing work zone Temporary Traffic Control operations and installations inside the Highway Right of Way have at least one Qualified Work Zone Supervisor available to make decisions for their firm. The size of the firm and the complexity of their work zones will guide the number of Work Zone Supervisors needed.

All employers will maintain records of training provided under this program with the names of those trained, the date and location of the training, name of the trainer, any certifications provided, and employee test scores and work experience if required.

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Work Zone Safety Knowledge levels

- **NCDOT Maintenance / Utility Traffic Control Guidelines**

All personnel performing any activity inside the highway right of way will be familiar with the NCDOT Maintenance / Utility Traffic Control Guidelines. Training for this document may be provided through agency/company developed training, or safety meetings or tailgate meetings. Personnel may also attend a Joint NCDOT/Industry sponsored Technical Training event or other enhanced work zone safety training. This Maintenance / Utility Traffic Control Guideline should be placed in each work vehicle.

This document covers work zone safety knowledge for a wide range of job responsibilities. Employees working in any given job may not need to know all the information contained in this document. The employer will determine what elements of the Maintenance / Utility Traffic Control Guidelines apply to each employee based on their job responsibilities. It is expected that as job responsibilities increase work zone safety knowledge levels will increase. No specific training course or test is required for qualification in the Maintenance / Utility Traffic Control Guidelines.

Implementation date: November 30, 2010

- **Qualified Work Zone Flagger**

All personnel performing flagging, spotting, or operating Automated Flagger Assist Devices (AFAD) inside the highway right of way will be trained in an NCDOT approved Flagger Course. A written test is required with a passing grade of 70 or better. Flaggers will carry a card issued by the certifying firm that shows the dates of certification with recertification at regular intervals. NCDOT Flagger Instructor Courses are also available.

Implementation date: July 1, 2010

- **Qualified Work Zone Installer**

All personnel responsible for the setup and installation of Work Zone Traffic Control devices inside the highway right of way will be trained in an NCDOT approved Qualified Work Zone Installer Course. A written test is required with a passing grade of 70 or better. Installers will carry a card issued by the certifying firm that shows the dates of certification with recertification at regular intervals.

Implementation date: June 1, 2020

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- **Qualified Work Zone Supervisor**
All personnel in charge of overseeing work zone Temporary Traffic Control operations and installations inside the highway right of way will be trained in an NCDOT approved Qualified Work Zone Supervisor Course. Passing a written test on the course materials together with a minimum of two years of Temporary Work Zone Traffic Control "On the Job Training" will be required. A Qualified Work Zone Supervisor will carry a card issued by the certifying firm that shows the dates of certification with recertification at regular intervals. A Work Zone Supervisor Instructor Course or method is currently available.
- **Qualified Work Zone Supervisor (Cont'd)**

Requirements for North Carolina Local Governments.

Since local governments have many different issues regarding work zone safety, short duration, low number of employees, limited speed limits, and various other differences, the following rule shall apply:

Cities, Towns, and Villages with less than 50,000 population and state roads with a speed limit less than 55 miles per hour shall have at least one employee trained to a level equivalent to the basic level of the Institute of Transportation Research and Education's (ITRE) program. It is strongly recommended that there be two employees trained to cover absences.

The North Carolina Department of Transportation will recognize a card of certification issued by the North Carolina League of Municipalities to city and town employees with populations under 50,000 only. This card will not be recognized if the holder's employment changes to a town outside of this limitation or to a private company. The League will work with the NCDOT to ensure that the training and course content meet the objectives of the NCDOT Work Zone Qualification and training program.

The certification will be in effect for 4 years and then the employee must renew their card.

Cities with populations of more than 50,000 are required to have at least one employee trained through one of the NCDOT approved training resources.

Again, it is recommended that more than one employee qualify and in larger cities, one from each department.

Implementation date: July 1, 2011

- **Qualified Work Zone Designer (New - Proposed)**
All personnel in charge of Temporary Traffic Control Plan development, Transportation Management Plan development, and/or Public

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Information Plan development inside the highway right of way will be trained in an NCDOT approved Work Zone Designer Course. A written test is required with a passing grade of 80 or better. A minimum of 2 years of experience in Work Zone Traffic Control Design will be needed to qualify. A Work Zone Designer will carry a card issued by the certifying firm that shows the dates of certification with recertification at regular intervals. Work Zone Designer Instructor Courses are **NOT** available. **Proposed implementation date: 20??**