

This handbook is a brief overview of the safety regulations with which you must become familiar. Please also read the **Manual on Uniform Traffic Control Devices** (Part VI), Roadway and Traffic Design Standards (Index Series 600) and other Safety Standards which may be adopted by the Department. This Chapter of the Survey Safety Handbook was taken largely from Part VI, Standards for Work Zone Traffic Control of the **Manual on Uniform Traffic Control Devices** (MUTCD) Federal Standards.

Work duration is a major factor in selecting the proper Typical Application of Traffic Control Through Work Zones (Index Series 600). Work duration, work location and highway type are major factors in determining the number and types of devices used in temporary traffic control zones.

## **WEARING OF PERSONAL PROTECTIVE EQUIPMENT**

The rule, as stated in the Safe Work Practices and Compliance Standards Handbook, requires all personnel to wear the appropriate personal protective equipment during all operations where exposure to hazardous conditions exists.

Frequently, surveyors operate tools which, if not used correctly, could cause harm. Where there is a possibility that an eye injury could occur during the performance of assigned duties, the Department is required to supply its employees suitable face shields or goggles. However the Department is not required to provide individuals with prescription safety glasses.

Steel-toe safety boots are not required and are not furnished by the Department. High-top leather work boots provide the most protection and should be worn.

All personnel working or visiting locations designated by the resident engineer as "Hard Hat Areas" shall wear approved protective helmets. Helmets shall meet or exceed specifications contained in the Safe Work Practices and Compliance Standards Handbook. These helmets will be inspected on a regular basis and shall be replaced immediately if found to be defective. Helmets shall be worn while working underneath overpasses and at any other time the party chief deems it necessary.

Personnel are required to wear high-visibility safety vests of approved color, or DOT yellow and orange rain coats, whenever working within the right-of-way, at any time when exposed to traffic such as driveways, parking lots, construction sites, etc., and at any other time deemed necessary by the supervisor on-site. In addition, during night operations the safety vests must be reflectorized. If raingear or other outer garment is being worn the reflectorized vest must be worn as the outer layer.

## **USE OF TRAFFIC CONTROL DEVICES**

Basically, there are two categories: warning signs and channelizing devices.

### **WARNING SIGNS**

Warning signs shall be installed prior to the start of all survey work that is on pavement and within 15 feet of the edge of the traveled way. They shall be used all the time you are working in traffic. Since surveyors

are constantly moving on the highway, it is important that warning signs be moved as the work progresses. When you are through for the day, or at any time work ceases, these devices shall be turned, removed or covered. This simple procedure will prevent a host of potential problems for surveyors as well as motorists. Whenever the activities are changed such that a particular sign or other warning device is no longer appropriate, the sign or device shall be turned, removed or covered, and replaced if necessary with the appropriate device.

There are four signs used most frequently; WORKERS AHEAD, SURVEY CREW, FLAGGERS AHEAD, and STAY IN YOUR LANE. Signs warning of lane closings ahead may be used also.

As far as sizes of various signs and placement height, The FDOT Maintenance of Traffic Committee prefers us to refer to the Roadway and Traffic Design Standards, Series 600. This precludes having to revise the Safety Handbook when the standards change.

The SURVEY CREW AHEAD symbol or legend shall be the principle advance warning sign used for traffic control through survey work zones and may replace the ROADWORK AHEAD sign when lane closures occur, at the discretion of the party chief. Type B light or dual orange flags shall be used at all times to enhance the SURVEY CREW AHEAD sign, even with mesh signs.

When survey crew members are working between active traffic lanes, a STAY IN YOUR LANE sign shall be added as the second immediate sign from the work area.

Advance Warning Signs shall be used at extended distance of one-half mile or more when limited sight distance or the nature of the obstruction may require a motorist to bring the vehicle to a stop. Extended distance Advance Warning Signs may be required on any type roadway, but particularly on multi-lane divided highways where vehicle speed is generally in the higher range (45 M.P.H. or more). Signs shall have a black legend and border with a high visibility orange background (reflectorized for night operations). Color, sizes, wording and placement of signs shall conform with approved standards as specified in the Roadway and Traffic Design Standards (Index Series 600), and other Safety Standards which may be adopted by the Department.

The placement of warning signs is critical to the effectiveness of their individual messages and shall therefore be customized to meet roadway design and alignment. All signs should be mounted at right angles to the direction of and facing the traffic they are to serve. Proper positioning will give the driver adequate time to adjust to rapidly changing traffic conditions.

Where open roadway conditions exist on the approach to the work site, advance warning signs shall be placed approximately 1500 feet in advance of the condition to which they are calling attention.

Under certain conditions, it may be necessary to use a series of advance warning signs. In these instances, the warning sign nearest the work site should be placed approximately 500 feet from the point of restriction with additional signs placed at 500 to 1000 foot intervals. On high-speed highways, the advance warning distance should be increased to one mile or more. On city streets where more restrictive conditions