Remarks by F. C. Turner, Director, Bureau of Public Roads, U. S. Department of Transportation, at the AGC National Safety Conference, February 1, 1968, Hotel Washington Hilton, Washington, D. C. - 9:00 a.m.

Highway Safety is the responsibility of everyone who plans, designs, constructs, maintains or travels the streets and highways of our country. We are concerned in this discussion with safety at the highway work site, which is a key element in the total effort to reduce traffic accidents. It is obvious that worksites pose additional and unexpected hazards to traffic because of the interruption of normal flow and, therefore, create heavy responsibilities which we must meet to realize our goal of significant accident reduction. Obviously, the construction industry must assume a major share of these responsibilities.

With an estimated 10,000 construction projects in active status on the Federal-aid systems at any given time, plus State and local road construction, plus maintenance and traffic engineering operations, plus utility work, the potential danger traps in the path of the Nation's motorists are numerous and sometimes lethel. Because of the responsibility this places on all of us, especially the contractor and the State highway departments, to prevent many needless accidents, we should all have a strong and continuing interest in improving construction site safety, Just as we have in reducing other highway-related dangers. Furthermore, as other hazards are eliminated on the Federal-aid roads -- and our goal is to correct all high-accident locations by 1969 -- the temporary hazards presented by worksites gain in prominence as matters of concern in the traffic safety effort.

It is apparent to anyone traveling the highways that improvement in traffic safety at construction sites is both necessary and possible. Most contractors do a good job in this respect. However, a few contractors have developed the habit over the years of scrimping on job safety. The result has been that the public has suffered undue inconvenience and exposure to hazards while traveling through construction areas. This laxity is not fair to the motorists - who, it must be remembered - are paying the bill for the work being done.

Highway travelers are ever alert to conditions at construction sites, and where hazards and inconvenience exist they let their reactions become known. Their significant complaints concern such things as inadequate lighting, improper use of signs and barricades, discourteous flagmen, and rough, unmarked detours with inadequate capacity. Needless to say, these complaints are so loud that they are heard quite distinctly in Washington. In cases where the traveling public is unavoidably inconvenienced, good public relations on the part of all parties concerned will reduce these complaints.

This is not to exomerate the motoring public from responsibility. We will always have the inattentive driver or, worse yet, the occasional lunatic who wants to maintain his cruising speed through any situation that arises; and in so doing, will virtually ignore signs, flagmen, lights, blinkers, construction machinery and everything else that should signal extreme caution to a motor vehicle operator. I recognize that self-discipline is the real, and only truly effective answer, to worksite traffic accidents, as it is to most all other problems in the world today; but we must nevertheless protect unthinking or undisciplined drivers from themselves as well as protecting others from their actions.

~ 2 -

The Bureau of Public Roads has taken a number of steps to assure greater safety for the traveling public in highway work areas. We have turned our attention to the development of traffic control plans and to their effective operation. We are also very much interested in increasing job safety for engineering and contractor personnel. In this regard, the Bureau includes the Manual on Construction Safety Requirements as part of our Direct Federal construction. This manual establishes uniform accident prevention standards, criteria, procedures, and work practices for the protection of Federal and contractor personnel, the public, and property during all construction activities.

As to effective traffic operations, we have directed our field offices to conduct Statewide inspections-in-depth of worksite signing and traffic control devices on all Federal-aid highway projects. In this connection, we have drawn up guidelines for our field personnel. These are founded on the premise that the basic objective, which is to expedite traffic flow safely with controlled speed while providing room for the contractor to work efficiently, can be accomplished through properly engineered traffic control plans.

The guidelines call for recognition of the fact that it costs money to maintain traffic during construction and that the particular contract should contain necessary pay items for traffic control or maintenance of traffic. Maintenance of traffic should not be written into the special provisions as being incidental to the work. The material, equipment and man-hours required to do a proper job of traffic control are not insignificant. They are an integral part of the job and normally a specific bid item should be provided. I strongly urge you to take the lead in working toward recognition that

- 3 -

traffic control and maintenance of traffic be accepted as an important item of work, where applicable. This would seem to be an appropriate item for the AASHO-AGC Joint Committee.

We believe another important step toward achieving our safety goals is the holding of a preconstruction conference for representatives of the highway departments, the contractor, the law enforcement agency, Public Roads, and -- wherever appropriate -- the utility companies which may be involved. At such a conference the traffic control plan should be discussed and agreed upon, and one person should be designated from each of the parties to be responsible for traffic control matters.

Where traffic is to be maintained through a construction site, the Manual on Uniform Traffic Control Devices should be consulted for guidance in developing traffic control plans. Part V of the Manual, "Traffic Controls for Highway Construction and Maintenance Operations," contains good working principles. It cannot be emphasized too strongly that the principles must be applied and a plan developed for the particular work to be performed. There is no standard application in the Manual for every kind of construction job, nor can there be a single set of instructions that will cover all situations.

In this brief opening statement I have been talking mainly in general terms, but I want to get down to a couple of important specifics before closing. I would preface these by emphasizing that signs, signals, pavement markings and other devices are the principal media of communications with the motorist at the job site. The value of these depends on the efficiency and accuracy with which they convey messages to the highway user. They must be posted

- 4 -

well enough in advance of the construction and be easily readable so that the driver has time to adjust to changed conditions ahead.

Most of all, they must accurately reflect the conditions as they exist at any particular time. Since construction status changes by the hour, the warning signs must keep pace with the changes so that the motorist will be aware of the true condition at the very moment he is passing through the project. If the line of communications to the driver is inaccurate or out of date, it is of no more value to him than last week's newspaper, and it can be much more hazardous. This is true because the average motorist, having found nothing to be cautious about in many instances, tends to become sceptical about all caution and warning signs.

Night precautions at work sites are particularly important. Equipment must be moved completely off the roadway and shoulders to minimize accident potential. Signing at night when construction operations are suspended should be especially watched as the last item of work for the day. Blinkers and lanterns must be clean and properly placed, and their actual operating condition should be checked constantly.

To sum it up, then, there seems little doubt that intensive application of more effective measures can further reduce traffic accidents at highway worksites, and that this is an important area for concentration in the overall national traffic safety effort. To accomplish this, traffic control plans--keeping the driver uppermost in mind--should be tailored to the individual project, and should be treated as an integral part of the project plans. Traffic control and safety measures should be regarded as legitimate work items in the contract. Furthermore, all parties concerned should be brought together in a preconstruction conference to secure their

- 5 -

cooperation in making the traffic control plan effective. And finally, the value of the traffic control plan and the means of implementing it will depend largely on the accuracy of signing and communications to the driver at the construction site.