

Coordinated Traffic Operations

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STATE, COUNTIES, CITIES MUST COMMUNICATE

The title could refer to the internal operation necessary in handling traffic problems such as the programming, scheduling and construction procedures. However, this paper pertains to the coordination necessary in traffic operations between various levels of government and in particular to the problems of coordination between state, counties, and cities. There are various ways that better communication, and in turn coordination, can be developed between the local governments and state governments. The key word is communication.

In traffic operations as well as any other type of government work, communication between the parties concerned and affected is vital. This communication must take place in the planning stage and not wait until the construction stage. It is very important that when any governmental agency plans to do work which will affect other agencies, the earliest discussion of these plans could avoid serious delays and pitfalls. There are many areas in traffic operation which need coordination through communication, and some of the most frequent problems showing a lack of coordination involve such things as the implementing of traffic regulations, warrants for traffic controls, railroad crossing protection, traffic routing and detours, route changes or abandonments, truck routes, and spot improvements which involve minor construction. In cities, we get involved with additional problems such as traffic signal requests, speed zones, parking, one-way streets, driveways permits, and many other daily routine operations which are compounded in difficulty many times by lack of communication between the controlling agencies.

We could perhaps follow the example given us by our enforcement agencies—the city police, county sheriffs, and state police—insofar as they maintain a very adequate communication system in their operations even to the extent of cross-monitoring the police frequencies by radio. They have found that no one group can operate independently of the others and get an adequate job accomplished. They rely on each other for help and assistance in the many problems which occur on a day-to-day basis.

In the area of traffic operations, or rather in the control of traffic, it is not any one agency's sole responsibility to perform this job. I am going to try to show that through coordination of state, county and city efforts, through cooperation and communication, we can perhaps improve our overall capabilities and certainly benefit from each other's findings. Following are some specific programs that are urgent and operating within the state. Also brief consideration is given to some operational techniques, training programs and mutual problem areas which the state has with cities and counties. However, the prime purpose of this paper is to present examples where coordination between the cities, counties and state agencies can be improved.

CITY-STATE COOPERATION—TOPICS PROGRAM

There are several new programs underway at state level and one receiving considerable publicity is the TOPICS program. The TOPICS program is primarily directed toward improvements in cities of 5,000 population or more. This is an excellent example of the type of program that requires better communication and coordination between the cities and the state and federal government. The TOPICS program attempts, through the use of modern traffic engineering techniques, to improve traffic conditions in relatively large areas of cities with minimum expenditures. There is information available on this program from both the Bureau of Public Roads and the Indiana State Highway Commission. At the present time there are two pilot projects underway in Indiana—in the cities of Kokomo and Indianapolis. We have limited our activities to these two locations at this time. This is, of course, due to funding and other limiting features. I mention the TOPICS program so that you can see the apparent trend to coordinate the problems of the cities with those of states even insofar as to develop a new type of federal-aid road. In this instance, it is called the Type Two Primary System.

BETTER COMMUNICATION FOR BETTER SAFETY PROGRAMS

In the areas of safety programs, the state is currently working with the National Highway Safety Bureau on such matters as developing standards, research planning, and funding programs. We are trying to estimate the needs of the cities and counties, but the information asked of the state was not readily available as to the status in the cities and counties. We have not adequately communicated with you, nor you with us, in our mutual problems of safety, and it is becoming quite

embarrassing to all levels of government that these mutual problems are not being approached in a unified effort.

STATUS OF MARKINGS UNKNOWN

Another national program underway is one of obtaining uniform traffic control markings on all streets and highways within the state. This not only includes state highways, but county roads and city streets as well. A problem that concerns us all is uniform markings. We have had to report to the federal agencies the status of markings, signals, etc., on county roads and city streets, as well as the state system. Once again we find ourselves in the embarrassing position of not having the necessary information to know what the status is on the city streets and county roads. By January of 1969, all roads and streets in Indiana are expected to be in conformity with the Uniform Manual. This is a requirement of the federal government placed on the state—cities and counties as well.

A UNIFORM MANUAL FOR STATE, COUNTIES AND CITIES

I might report that within the very near future the state will have available several thousand copies of the new revised *Uniform Manual on Traffic Control Devices for Streets and Highways*, and it is our intention to transmit this manual in greater numbers than ever before to those persons at city and county level who are responsible for this type of work. We cannot have uniformity on our streets and highways unless there is a uniform standard by which we all operate. This manual is the uniform standard and as required in the acts of 1939, all city, county, and state agencies must adhere to this manual on traffic operations. It is imperative that a training program be instituted to train our sign men and signal men in the proper use and application of traffic control devices. The state is planning this type of training internally and as manuals and procedures are developed which we feel would be worthwhile to local government users, we would be most happy to make them available.

COOPERATION FOR CENTRALIZING ACCIDENT REPORTS

Another special program being conducted at state level, and I am sure some of you have heard this report, perhaps here at the Purdue Road School, concerns the collecting of accident data at all levels of government and combining this data into one central reporting system.

This is being required by the Highway Safety Act of 1966 and will be put into effect in all states in the not-too-distant future. With the national emphasis placed on the reduction of accidents and the improved safety on our streets and highways, it is a certainty that the pressures for better results and better information will be required.

In the area of safety, and in particular accident reporting, we shall soon have available maps for purposes of accident reporting on all roads and streets in the entire state. The highway commission has been working with and funding a project at Indiana University to develop this system. This has been in cooperation with the Bureau of Public Roads and other state agencies. Within the next few months the initial phases of this project will be completed. The cities and counties will be approached to participate in this program of accident reporting and their enforcement officers will be asked to receive training. Many states and federal agencies are interested in our proposed accident reporting system. They are interested to see if it will work. It is only through the cooperation and coordination of the cities, counties, and state agencies that the reporting system has a chance of working.

With this cooperation, Indiana could have the best and highest type of accident reporting system in existence anywhere—but it will take cooperation. From mutual experience, the state, counties and cities will be able to relay to each other information on the best method to reduce accidents, traffic control operations, cost account information, and many other features that are of our mutual concern.

COOPERATION FOR CONTROL OF STATE AND RURAL ROAD INTERSECTIONS

Another area that needs our combined effort and coordination is the control and surveillance of high-speed rural intersections—state road intersections with county roads. One of the difficult problems at state level is to observe and control the sight-distance requirements for motorists both on the state road and the county crossroad. Right-of-way corner cuts are not always available and many times a dense growth of trees, shrubs and weeds restrict and even block the drivers' vision. Many times, the stop signs and advance warnings signs on the crossroads are completely obscured by foliage, and accidents are caused due to inadequate warning to the approaching motorists. It is in this area that good visibility to the traffic control devices by the removal of the unwanted greenery could improve our accident problems at these intersections. It is also noted that some gravel road approaches to high-speed highways have been paved several hundred feet in advance of the stop sign so that adequate and proper braking of the vehicle is possible.

It is also noted that many times a reduced speed zone on the approach to state road intersections would be advisable. Where accident or capacity problems are being experienced at this type of location, a meeting between state and local officials could provide good remedial results.

Another area where more coordination is certainly possible and needed would concern the spot channelization improvements at rural intersections. Many times we at state level are negligent in not approaching the local officials with our plans for this type of improvement, and many times the local officials can be of great help in resolving right-of-way and drainage problems which get involved in this type of construction. It is apparent that contact should always be made with other governmental agencies involved when spot improvements of this type are being contemplated.

STATE OFFERS INFORMATION ON TRAFFIC CONTROL EQUIPMENT

One of the more difficult and time-consuming problems in traffic operations is the selection of materials and equipment with which we must work. The state spends considerable time in researching and testing the various types of traffic control devices such as signals, detectors, sign materials, and lighting devices, and generally we do have a good working knowledge of the advantages and disadvantages of each type of equipment. In the area of traffic paint, the state performs yearly exhaustive laboratory and field performance tests on various types of traffic paint. We have also developed specifications and standards for traffic equipment such as sign trucks, high lifts, signal repair rigs, and mobile cranes. This is not classified information, and we would be happy to share our findings and recommendations with any city or county who would be desirous of receiving this information.

SCHOOL CROSSING MANUAL AVAILABLE

Another problem that is constantly posed to governmental agencies is the protection of school areas. I am sure that we have all received requests for better protection for the school bus routes and for the school pedestrian crossings. A manual was prepared through the cooperation and coordination of several state and civic agencies which delineates the various ways of protecting school crossings. This manual is entitled *The Indiana School Crossing Protection Procedure Manual*. It is suggested that those of you who have problems in this area of school protection, pick up a copy for your files. I understand that a hundred or so copies are still available through the Indiana Office of Traffic

Safety, and some are perhaps available at the School Traffic Safety Office of the Department of Public Instruction in the State House. Purdue University participated in the development of this manual, and was of great assistance in the researching and development of the standards. This manual is an excellent example that through coordinated effort we can meet and control one of the problems of traffic operations.

STATE TRAFFIC ENGINEERS WILL ADVISE

In conclusion I would like to make a suggestion to all in county and city government and to offer assistance. The suggestion is that in the area of traffic and its control, traffic safety, pedestrian safety, engineering studies, and all of the other facets that enter into the field of traffic engineering, it is quite apparent that the assistance or need of qualified traffic engineers is a necessity. I heartily recommend that each county and city that has traffic problems, either attempt to hire a qualified traffic engineer or find out where they can solicit a traffic engineer's help on a temporary basis. The days of trial and error method of traffic control are long gone. We have a mutual problem, and only by communicating with each other can we resolve this problem. I would like to offer the assistance of the traffic engineering personnel at the state level to county and city officials who have traffic problems. We will not be able to do your job for you, but we can perhaps direct you to the proper channels or make suggestions which will help you in your problems. I have mentioned several documents which are available or will be available in the near future on the problem of traffic control. If you will recall they are the, *Uniform Manual on Traffic Control Devices*, the *School Safety Manual, Standards and Specifications*, and research data, which may be of help to you. If you are interested in receiving any assistance or any of this information, please contact the Division of Traffic, State Office Building, Room 1017, Indianapolis, and we will be most happy to try to help you in your problems.