## LOCAL POLICY ON URBAN HIGHWAY PLANNING

## ROBERT D. BUGHER

Executive Director, American Public Works Association Chicago, Illinois

The steps we take to improve street traffic conditions should fit into a comprehensive plan for the future of the community and be designed to help guide the most desirable type of growth for the entire area. This requires land-use studies and an economic analysis of the area, plus origin and destination surveys to determine travel desires. I think it also requires a great deal more planning on the part of the private enterprise. Municipal plans should be flexible, but should not be subject to whimsical change. They must offer the business man as well as the individual some degree of confidence in the stability of the area so that property owners, business men and their employees can likewise plan for their future with a minimum of risk and uncertainty.

We all know that change is inevitable-communities change, budgets change, people change; there must be changes in land use and planning standards, as there has been changes in standards of living, work hours, travel methods, level of education, and so on.

The function of the planner is to outline the advantages of change and put it to work for the people instead of letting it work against them. Where city plans exist, they will largely dictate the highway plans, but where none exists, the highway plans are likely to dictate the city plans. It has been said that the Federal Government contributes most of the money; the state does most of the work and makes most of the decisions, but municipalities have most to lose, or gain.

Municipalities and counties have primary responsibility for managing the urban street system, about 90% of which is generally outside the state sphere of action and ineligible to participate in Federal-aid highway funds. Since local units must implement much of the overall community plan by providing feeder roads, water, drainage systems, etc., they feel that they have a responsibility to see that the plans and policies are in accord with their responsibilities to their people. They should therefore participate in the planning process.

There are great possibilities in reducing peak traffic volume, the great inrush and outrush of workers by some rearrangement of land uses. Highway Engineers should help create an environment in which the highway system will work. Highway planners must appreciate the economic and social needs of our communities.

One of the characteristics of the administration of urban transportation is that a number of incompatibilities, or conflicts of interest exist which must be compromised or resolved before rational policies can be adopted. A report on a study of urban transportation administration conducted at Yale University several years ago emphasized this particular point. It said, "These conflicts are apparent in the problem of assigning priority as between traffic, parking, or access uses of streets; of deciding whether high-type route facilities should primarily serve long distance traffic or local traffic; and of choosing between interests of commercial and residential owners sharing street facilities. A new high-type facility will deliver the benefits of more safety, more speed, less congestion, and greater accessibility for downtown. At the same time it may require the building of more parking facilities, result in loss of area for use by business, reduce rider volume on buses, create new traffic problems at connections with local streets, and destroy park and recreation lands. The complexity of the conflicts is staggering. "Nearly every major decision made in administering an urban transportation program calls for a choice between competitive alternatives. Yet it is difficult for any decision-making authority to consider every alternative because no single administrative authority is in control of the whole transportation program. Decisions are made by officials in terms of that portion of the problem within their jurisdiction, to the likely detriment of the whole."

Several factors suggest the desirability of joint participation in planning: (1) sentiments favor local autonomy and option; (2) federal and state governments have responsibilities for spending money and constructing; (3) legal ability to control development is shared by each level of government; (4) resources of skill, knowledge, personnel and finances for planning may be at state or local level; (5) legal authority to plan is normally vested in local officials.

The American Municipal Association has adopted a policy statement containing the following provision:

"Local governments in the United States should be autonomous so far as practical and consistent with public welfare. While the federal government and governments of the several states may invoke their broad powers and greater financial resources to make possible some governmental services, still these powers and finances should be delegated for the purpose of administration to the municipal authorities in a manner consistent with responsible local self-government."

Other AMA policy pronouncements concerning this subject are quoted as follows:

"The state highway system including the urban links should constitute a well integrated long range plan for the entire state. The state highway departments should be urged to prepare and publish a continuous five-year construction program for the state highway system including urban and rural highways. In developing such a plan and program, consideration should be given to economic and industrial activity, existing and potential traffic needs and land use projections."

"The first duty of each municipality is to prepare a master street and highway plan as part of its comprehensive general plan, relate it to the state highway system, and develop at the earliest opportunity a realistic and practical appraisal of its highway needs."

"Coordinated and unified action of all local governments is necessary to work out the urban highway problems within a state. The initiative should come from the municipalities, which should unite in planning and in obtaining necessary legislation. Cooperation and teamwork among all state and local highway agencies is the key to securing a sound legislative and financing program for highways and streets."

"Municipalities are fully justified in requesting the state governments to construct and maintain the state and federal highways within municipal limits on the same basis as outside municipalities. There is no justifiable distinction between parts of state highway within and without incorporated places."

"Within each state there should be an overall highway plan for the state including the federally aided highways, the primary state highway system, secondary state highway system, the state and count roads within cities, and the purely local roads in all jurisdictions. In any given governmental unit such as a city or county there ought to be a cooperative planning study of the highway needs of that area. In any jurisdiction, incorporated place, county or state, all streets or highways should be considered as part of a single integrated highway plan. This implies the need for joint planning at different levels of government, such as joint planning of federally aided highways in cities by federal, state and local officials; of state highways within cities by state, city and perhaps county highway officials. Such steps are necessary for integration of the street and highway system of the country."

I do not think we are ready to abandon the use of private automobiles in the downtown areas as they exist today. Most people, I believe, would be willing to forego some degree of "efficiency"-in terms of swiftly moving persons and goods

-in order to retain some of the personal privileges they would have to relinquish in order to obtain a more efficient system of transportation. I do not mean to imply that this will always be true. In fact, I thould think that the situation would gradually change as business districts are made more and more convenient and attractive so the sacrifice will really be worthwhile. In other words, people won't give up their personal privileges unless the price is right.

There are, of course, many reasons why various types of businesses have located where they are. Each was undoubtedly located as advantageously as possible with respect to all other then existing activities in the area. Major changes in the make-up of these districts is generally a slow process because of the varying economic status of business establishments and the huge cost of modernization programs. Therefore, it seems to me, we must develop a transportation system which meets present travel demands and which can also be adapted to changing conditions. This means that we must provide for the expeditious movement of large numbers of vehicles into and out of our central business districts recognizing that some degree of interference is necessary if such districts are to prosper and serve their intended purpose.

The overlapping of authority at the state and local level constitutes a serious problem. Virtually all states designate urban links in cities. A reliable and consistent plan is needed in exercising this responsibility and it, obviously, should not be handled in a political manner. Planning commissions are often authorized to review all plans for public works including highways and city approval is usually required before any highway construction takes place inside their corporate limits.

Instances have been reported where highways have been built irrespective of local plans and wishes of the community. I also know of a case where a city annexed an area just to be able to pass on the routing of a state highway and another where a city was incorporated for such a purpose. These actions only tend to harass state officials who are trying to do their job.

Another major problem is that old governmental structures are often ineffective. Municipal government is becoming more and more complex. Many cities in Kentucky and elsewhere should organize centralized departments of public works and put a top-notch man in charge who would have supervision over all street and traffic activities as well as other functions which also need similar attention. The 1955 Kentucky Highway Study recommended that every city over 5,000 population have a full-time professional engineer. I certainly concur with the recommendation. We must upgrade public service jobs and do a better job of recruitment and training. We should offer more of an incentive for people to train for these jobs. Work that is done is often done by untrained people and full value is not always realized from funds spent. We must also put what we known into effect and strengthen our decision-making processes. Better records and accounting practices are likewise needed and immediate attention should be given to cities financial problems. I also feel that cities should share in the state collected gas and weight tax moneys.

If cities don't meet their responsibilities, other ways will be found—probably at a higher level of government. Technical planning assistance, for example, is now being provided to 57 Kentucky communities by the State's Economic Development Department. Industrial resources surveys have also been made by this agency for 50 communities. I don't mean to say this type of service should not be provided by the State. However, I do believe that we should be cautious in doing things for cities that they should be doing for themselves. As the gulf between government and the people widens, democratic government generally becomes a less of a reality.

We must remember that highway planning involves maintenance and operation of the system as well as layout and construction. Many things can be done to improve the flow of traffic when we have strong public works departments in our cities and towns.

Rural land is being converted to urban land at the rate of about one million

acres per year. Weak county organizations are also common. Fringe areas are growing rapidly and there is no agency to properly deal with these problems until it's too late. Ineffective cities are often incorporated and have an independent attitude. Various measures have been taken to cope with these situations. For example, Minnesota and Wisconsin have recently revised their incorporation laws to make it necessary for a community to have an adequate financial base before it can incorporate. As an incentive to encourage sound planning and management practices, California requires \$20,000 of each county's state-aid money each year to be earmarked for planning, engineering and administration; several states require them to employ a professional engineer in order to qualify for state aid and others require master street plans in order to qualify.

We need county planning and metropolitan planning in many areas. The general plan should include a statement of policy on community development which will guide and limit the range of future development decisions of a more detailed nature. Then comes sub-plans, and the capital improvement program. Physical and financial planning should be blended thru capital improvement programs. Top priority should be given to those segments which can be put into use as soon as they are completed irrespective of what other work is done.

A mathematical approach to the transportation planning problem has been suggested by Robert Mitchell, who is chairman of the Planning Department of the University of Pennsylvania. "In an overall plan of highways", he says, "it is possible to simulate projected traffic on the entire system at various stages in ist construction. This helps to determine the proper order of priority for individual projects so as to serve the most important needs first, and also to reduce as much as possible the creation of bottlenecks through the improper ordering of projects."

A continuing part of the plan would be the making of inventories (1) of present facilities and services; (2) of the movements of persons, goods and vehicles, (3) of population, employment and land use; (4) of transportation and developmental economics, and finance, and (5) of the powers and responsibilities of government at various levels for urban development. Also necessary are the best possible projections of population, employment, income and economic growth for the entire area.

The new technique that is being developed involves the construction of traffic and growth models and the use of computers. By using these mathematical models and holding component factors constant, tests are made of the effect of other controllable variables in relation to expressed land use objectives. Alternative transportation plans are tested which produce several sets of internally consistent land use and transportation plans for comparison. A cost benefit analysis is made and a new "land use-transportation" plan is then developed on the basis of the findings from these studies.

Once a location is determined, private building construction should be restricted; otherwise the city will, at some future date, have to buy the land and building, too, and the taxpayers will foot the bill. Subdivision controls protect more future streets than any other type of government action. Major street plans are, of course, needed before exercising subdivision control powers. State laws normally authorize cities to require the arrangement of streets in relation to other existing or planned streets. A typical subdivision ordinance contains the following type of provision: "Whenever a subdivision embraces a major street the street shall be platted in the location and of the width indicated on the major street plan." As long as it is shown on the plan, it can be precisely located at the time the subdivision plats are submitted for approval. Actual dedication of land needed for streets to serve the subdivision is almost always required. A requirement that buildings be "set back" normally, but not always, for yards is also effective in protecting against encroachments so that streets can eventually be widened.

Land can be reserved by "eminent domain" statutes and by "police power" statutes. Under either type the land owner is compensated for the property when it is taken for public use unless dedication may be required as a condition of approval of a subdivision. However, under the eminent domain statutes, the limitations placed on building prior to the taking of land are considered a taking of a property right for which additional compensation must be paid. Under the "police power" statutes on the other hand, restrictions on the issuance of building permits prior to the taking of land are considered mere regulations which the government may impose without compensation. Building is permitted in street reservations, but no compensation is paid for structures erected within a reasonable period specified in the ordinance. Similar powers are gradually being extended to counties and some states. Restricting the use of such private property for a reasonable period of time is wise and beneficial even to private interests since it helps to guard against early functional obsolescense of private facilities.

Pre-paving regulations are often included in franchises or street-use ordinances requiring utilities to install or extend services after notice that the street is to be improved. Utilities, of course, should be given reasonable time to comply with such requirements. Oakland, California requires utilities to maintain detailed records and maps of all underground utilities and submit any records needed on 24 hours notice. Los Angeles requires the applicant for a street opening permit to show under what legal authority he is authorized to use city streets.

Substantial savings can also be effected thru cooperative planning of urban renewal and highway projects thru joint condemnation of land. For example, one can avoid the unnecessary cost of inflation of land value due to one project being done before another.

When new highway facilities are to be constructed in an urban region, there are three important items upon which it is essential that the state agency and the cities reach agreement. These are the location of routes, and the location of interchanges and connectors, and priority of construction.

"Route location is of vital concern to the city, and the city's contribution is badly needed in its determination. If the facility is to be of maximum benefit to the most people, it must be integrated into the local street system as efficiently as possible, satisfy traffic desire lines, influence future land use in desirable ways, and cause the least possible damage to the city's economy, tax structure, and commercial and industrial potential. It is impossible for the state highway departments to take these and other important considerations into account without the city's help.

"The same may be said of the location of interchanges, exist, and connectors. Interchanges outside the city itself, but within commuting range, are nearly as important as those within the city limits. They mark centers of future urbanization. Within the city, exit and connection points indicate potential traffic congestion areas, and call for advance measures by the city to avoid serious problems.

"Agreement on construction priority for some years into the future is necessary, because the city's comprehensive plan must be adjusted to fit the schedule of improvement. It is also important that the priority be worked out to afford the most convenience to the most communities, and that all are agreeable to the common program.

"There are also other points upon which state-local agreement is needed in relation to new highway facilities. They include drainage problems, utility relocation, decisions on dead-ending or overpassing local streets, right-of-way acquisition procedures, and arrangements for operating, maintaining and enforcing regulations on the highways."

Controlling land-use at interchanges is an especially difficult problem. Competition for choice land is great and land values at interchanges have reportedly increased from \$500 to \$10,000 per acre in the space of three or four years. Interchanges, well-planned and controlled can be a great asset; uncontrolled they will discourage sound investment and foster the development of roadside slums. Several methods have been used to deal with this particular problem. Special purpose "highway district" zones have been adopted as part of the zoning map at proposed interchange locations. Wisconsin enacted a law providing for the state highway department to review all subdivision plans when they adjoin state highways; the state could thus withhold its approval unless the plans provide for adequate land-use control at interchanges.

The out-right purchase of land surrounding the interchange would, of course, be an ideal practice to follow, but the difficulty of obtaining funds for this represents a real problem. Proposals have also been made to grant states zoning powers to control this problem. Lack of coordination can lead to costly lag between construction of the interchange and the start of regulatory controlmeasures, but efforts are being made to close this gap.

We are living in a rapidly changing world and have made tremendous progress in adapting our street systems, which were layed out for horse and buggy travel, to use in the automotive age. This is especially true when you stop to think of the restrictions under which we must operate. People desire independence and flexibility of movement. Human desires are changing at a more rapid rate than ever before. There are thousands of different attitudes and travel desires that we must deal with. Problems affect people in different degrees. Everyone places a different value on time and convenience and these values change from day to day. People are confronted with different stages of traffic congestion and are willing to accept different financial burdens and different degrees of control. Democracy offers the best means of making progress while still retaining individual freedom; but we must also realize that it is slow to respond to the needs of the minority even though they are destined to become the concern of the majority in a relatively short span of time. If we know what we are doing we can look upon some relocation activity that now disturbs us as actually contributing to the solution of the traffic problem and assisting in the development of a better community in which to live.