

commitment from the Office of Management and Budget with respect to federal coordination.

The state government has at least 5 different agencies involved. There are some 200 truck lines, 14 railroads, 36 barge lines, 6 pipeline companies, and 12 air carriers that are going to make inputs one way or the other into the development of this inter-modal facility. It seem to me that this type of intermodal cooperation among industry and government agencies is absolutely essential if new transportation technology is to be developed and effectively used.

THE U.S. DEPARTMENT OF TRANSPORTATION

Michael Cafferty (presented by Gene Tyndall)

Goods-movement problems within urban communities are illustrative of the operational difficulties that the urban transportation planning process has experienced. I would, therefore, like to motivate thinking first within an overall metropolitan focus and to make clear the interest of the U.S. Department of Transportation in the urban transportation planning process so that urban goods movement may then be analyzed from the broader systems point of view. The practical problems and the institutional constraints that planners and decision-makers face at the local level can then be better defined and understood.

There are 3 important new considerations or new concepts that affect the programs of the Department of Transportation; they are all institutional by nature.

1. The new focus is on the environment and on the national desire to preserve and enhance the quality of the environment with whatever tools we may adapt to serve that goal. This effort is supported by the Environmental Policy Act of 1969, signed by the President on January 1, 1970. It is also supported by Secretary Volpe's own concern about environmental quality and by steps that he has taken to establish within the Department of Transportation new mechanisms for coping with the need to assign a high priority to environmental factors in transportation planning, policy, and programs.

2. The Bureau of the Budget came to the department last year with a request that we evaluate the urban transportation planning process to see where and how it might be improved. Here again, many of the improvements will probably be institutional, and technological solutions alone cannot serve the need completely.

3. Another problem area is the need for urban systems, and solutions here are institutional rather than solely technological. The Department of Transportation itself was created in an effort to bring together and to rationalize into a system a collection of transportation modes, techniques, and methods of funding. Nowhere was the need greater than in the nation's urban areas that were reacting to the impact of a variety of factors including urban freeways and urban freeway revolts, interstate highways funded 90 percent by the trust fund, faltering and failing municipal and private transit systems, increasing reliance on airports and increasing concern about aircraft noise, and an automobile-population explosion that matched the people-population explosion.

These new considerations, these institutional innovations, have already been reflected in transportation philosophy at the federal level. Secretary Volpe created the new Office of Assistant Secretary for Environment and Urban Systems. The head of this office was the highest subcabinet presidential appointee in government whose responsibilities, by title, include environmental concerns.

Too often in the past transportation planners have given more thought to transportation efficiency in the narrow sense than they have given to transportation as an environmental consideration that might profoundly affect the quality of life. Undoubtedly this

kind of focus has progressed partly because of inefficient institutional mechanisms. To investigate this deficiency, my office has been directing an evaluation of the comprehensive urban transportation planning process. There seems to be almost common agreement about the need for something better than that which exists today.

The department's evaluation is based on the process as outlined in Section 134 of the 1962 Federal-Aid Highway Act that called for "a continuous coordinated comprehensive transportation planning process" for those metropolitan areas with more than 50,000 population. This evaluation is aimed at rationalizing all departmental planning assistance programs in urban areas. It is the first such effort to rationalize federal planning assistance programs for transportation. Once such urban transportation planning is rationalized, the Department of Transportation will have made a significant step toward allowing local government to establish intermodal urban systems.

We have already reached preliminary conclusions in this evaluation. The major strengths in the urban transportation planning process that have resulted from Section 134 include its serving as the first major federal stimulation of functional planning for highway, transportation, and land use planning in most urban areas. It has enabled planners to gather economic data to use in highway forecasting. Further, it has provided a formal structure by which state highway departments and local governments can relate to each other and cooperate on highway planning projects. In general, in spite of its shortcomings, it has provided the best highway transportation planning process that has been developed up until this time.

Preliminary findings as to weaknesses in the process have indicated that in most urban areas intermodal transportation planning as a part of area-wide planning is largely a fiction because planning is dominated by the availability of funds for highway programs. Citizens groups and committees seem to have had little impact on coordinating and guiding transportation planning in most urban areas especially in those early stages when many of the major decisions are reached.

Existing planning procedures give too little consideration to new technology and to experimentation with new transportation techniques. Further, most urban transportation study groups do no comprehensive transportation planning and give too little attention to problems relating to public transportation, airport development, water transportation and parking and pedestrian problems. Most have given too little or no attention to the problems of urban goods movement. I know of only a few isolated instances, most of them very recent, where urban goods movement has been studied well and planned within the planning process.

Moreover, at this time environmental factors play little part in the transportation planning process. Most urban transportation planning groups lack the capability to evaluate their own programs because they have neither standards nor goals for their planning activities. Many urban transportation study groups are confused about the roles of the Department of Transportation and the Department of Housing and Urban Development in financing planning and planning for transportation.

It seems to us that a new concept of urban transportation planning, emphasizing the transportation system as an urban development and environmental tool, is badly needed. Urban transportation planning should be a process promoting new systems by which urban areas use transportation to meet other goals for land use, growth, and life style.

The various elements of the department are now examining alternatives and aiming at a single departmental policy statement and guidelines for all federal-aid urban transportation planning. It is also possible that the central target of urban transportation planning assistance should be the development of metropolitan institutions capable of dealing effectively with increasing federal-aid for airports, airport access, highways, and public transportation. Criteria for receipt of federal-aid urban transportation planning funds may well include the following:

1. Capability within one metropolitan area to tie transportation planning to general land use planning, social planning, and metropolitan and environmental goals and objectives (if there is inadequate articulation of metropolitan and environmental goals and objectives, perhaps consideration should be given to withholding approval of federal transportation aid);

2. Capability within one metropolitan institution to reflect accurately the political majorities of each participating local jurisdiction in a uniform and reasonable way and to maintain a viable metropolitan forum for bargaining and decision-making to occur; and

3. Capability of staff to deal with intermodal urban transportation planning and systems planning and to reflect balanced staff capability to deal with performance and external characteristics of various modes and systems.

Those knowledgeable in urban transportation planning will quickly point out that few such metropolitan institutional mechanisms exist at this time. However, alternative strategies to identify and promote viable metropolitan institutions that may have the capability to meet such needs are now being developed. Federal planning aid can help to bring about this institutional response.

Current transportation planning funds appropriated to the Transportation Secretary for use by the various modal administrations represent the source of the department's new urban transportation planning program. Based on the premise that balanced, intermodal planning should occur as a regular process at the urban level, and that federal aid should not contribute to modal distortion in local decisions on transportation, it may develop that any planning fund should avoid modal identification or association.

A new impetus for urban growth through transportation and land use planning and control could be provided by this new program. Because urban form is shaped by transportation systems, each mode having its peculiar effect on land use, then metropolitan areas should have the opportunity to plan and achieve more diversity and opportunity for their people. A larger more flexible transportation planning fund, accompanied by carefully conceived federal criteria and data on the potential growth and environmental effects of various modes in each unique situation, would give new life to the urban planning process.

As I mentioned earlier, I hope to create an overall frame of reference within which there can be discussion of problems of urban goods movement at the local level and of solutions based on an institutional response. Now, let us turn to some indicators of urban goods movement within this perspective.

First, what is the magnitude of goods movement within a typical urban area? A recent report stated that an urban area required an average of 54 tons of inbound and outbound freight per citizen in 1962 (1). The demands of urban areas for basic domestic needs and desires as well as support for commercial and industrial activity seems to increase exponentially as economic growth occurs.

It helps us little to argue that only 10 to 20 percent of daily vehicular count is associated with goods movement. Superficially, this is not surprising; but what does it mean as we observe and participate in the terrific congestion that takes place in urban areas? When we experience more and more 6-hour rush hours, is it not indicative of the problems with the overall system? Is it not the interaction of people and goods movement contributing to the difficulty?

These problems seem to proliferate at terminals, freight transfers, and transshipment points. Studies point out that the average urban delivery is 110 lb. It seems particularly inefficient for so many large vehicles to travel significant distances to deliver small loads, then take an average of 23 minutes for unloading and consignment (2). These are real physical problems that promise only to become more prevalent in the future as the demand for goods and services increases. Yet ours is a dilemma: Can physical investments really solve these problems?

I submit to you that fragmented physical and technological approaches to these problems will only serve to prolong the difficulties and continue to choke cities. Although goods movement may be more susceptible to economic analysis than people movement, is not society's entire logistics system actually based on people? Thus, should we not foster the consideration of changing social values in urban planning?

The department's recently completed Center City Transportation Project uncovered many real issues with respect to the interrelationships of people, transportation, and the city. One of the major findings is that institutional and administrative changes are needed to improve transportation within urban areas and to permit the development of

improved distribution and circulation systems. Elements of the city must be made accessible to all other elements; and this requires increased mobility for people and for goods.

Planning for urban goods movement should be incorporated into broader systems planning activity for each metropolitan area. Each community should decide for itself what kinds of problems it has, set priorities for their solutions, and allocate resources for planning and implementation. The federal government should provide the institutional response to minimize the institutional constraints that inhibit this kind of metropolitan development planning process.

Serious consideration has to be given now to the impact on society and on the quality of life that technological innovations may have. We must do a much better job of technology assessment than we have done before. The quality of our urban environment demands it.

REFERENCES

1. Wood, R. T. The Care and Feeding of an Urban Area. Tri-State Transportation Commission, New York, March 1968.
2. Goods Movement in Lower Manhattan: A Preliminary Report. International Research and Technology Corp., Oct. 1970.