

Planning and Transportation

Remarks of F. C. Turner, Chief Engineer, Bureau of Public Roads



The problems of urban America in 1966 are many, but certainly transportation and housing are close to the top of the list in terms of magnitude and cost. It is for that reason that I will speak to you about a concept that joins these two problems with what we in the Bureau of Public Roads feel is a common solution.

One solution often being advanced for the urban transportation problem is an oversimplified one; it involves the process of closing one's eyes to the problem and thus making it disappear from sight—by such devices as telling people they should stay at home and not move about, and thus there won't be a transportation problem. Or, as another solution, if people choose not to heed the advice and won't stay at home, just don't do anything to ease the traffic problem and rely on the sheer frustration of traffic immobility to discourage the urban dweller into staying at home, if he can get there, and so lick the problem without any expenditure of funds or effort.

But in such a process there will be produced as side effects a large number of negative benefits along with the creation of new problems of a different kind, the net result of which would be a situation that urban America would not accept—at least not for very long. For cities are for people—in fact, they *are* people—rather than just inanimate structures of stone and steel and concrete and brick. And people must move about within the city to create its life. Even if the individual himself doesn't move, somebody else has to move about within the city to bring to him the goods and services which are, in most cases, the very reason why he lives in the city.

There are those who would attempt to solve the city's transportation problem by doing away with all of its automobiles on the mistaken premise that the two are incompatible and cannot be reconciled in any manner. To these, the pedestrian mode of transportation becomes the ultimate solution. That is, it is the mode which everyone *else* should use, thus leaving the automobile and street clear for the proposer to use by himself. But the space that would be required for walkways, or bicycles paths, or carriageways in such a solution would at least equal and probably would exceed that required for streets in the present automobile-oriented society. It is interesting to observe that the street system of most of our cities had been laid out even before the automobile had been invented, and thus the percentage of area devoted to streets is not a function derived from the automobile but from a planning decision based on the space requirements of some predecessor form of transport.

Another suggested solution often proposed is to build a subway or other form of fixed rail transit facility—such a proposal being generally linked with the promise of no displacement of people, no disruption of the community in its normal living patterns, low cost, 80-mile per hour speeds, no further need for automobiles or for streets to be widened, and the rather patent misrepresentation that a single rail line is the equivalent of 20 freeway lanes. It is interesting to observe right here in Chicago where a double track rail line and the eight-lane Eisenhower Freeway run side by side that during every day and every week the freeway regularly moves several times the

number of passengers that are being moved by the rail transit facility. And that in addition it is also moving large amounts of freight, as well as public service vehicles such as police, fire, ambulance, and public utility forces that could not be moved over the rail lines. Even the peak hour movement of people now using the rails could be transferred onto busses and added to the freeway load without difficulty, and with an added degree of flexibility in route service not now possible with a fixed rail line.

Any of these single solutions to the total urban transportation problem is premised on the unrealistic assumption that people will willingly separate themselves from the personalized convenience of their own automobiles with which to meet their day-to-day needs to move about the city for a large variety of trip purposes. For most of such trips a fixed rail line to the central city or a fixed route bus line will not suffice, and independent transportation under their own individual control is required. Millions of studies show conclusively that trips via fixed routings to and from the central city comprise only a minor fraction of the total person-miles of internal urban area travel each day. All of the travel that will be served, for example, by the new San Francisco Bay Area transit facility will just about equal the annual five per cent growth in traffic movement within the area.

It seems clear from mountains of research studies that to meet the demand for inner city travel we will continue to rely on the rubber-tired vehicle as the principal mode, and thus be forced to make our plans with this situation in mind. Legislation governing use of the Federal-aid highway funds requires that projects financed from Federal-aid apportionments must be based on a continuously updated, comprehensive planning process, reflecting the decisions on land use determined by the cooperative efforts of the several political jurisdictions making up most of our urban clusters. These planning efforts are under way in every one of the cities of more than 50,000 population, which cities collectively contain about 85 per cent of all of our urban population.

Where these plans indicate the need for moving large daily volumes of persons, goods, and vehicles, we frequently find that a freeway type of facility with its controlled access and no interrupting cross-traffic movement is the most efficient way to satisfy the need. We know that a freeway is an efficient user of scarce land area, because it will require only about one-third as much acreage to move a volume of traffic as would be required to move that same volume of traffic using the conventional street system. But the charge is often made that freeways are not made to fit in with the community environment, and that they displace large numbers of people and businesses who are driven to the suburbs with a resulting large loss of the tax ratable base on which the city must depend for revenues to finance other needed urban services. In response to this the Bureau has developed a concept of joint development of housing and freeway projects to make the freeway compatible with the total environment of the urban area, and to restore the housing and business places removed to make room for the freeway.

The object is to stimulate local programs through which cities can meet their needs for housing, parks, playgrounds, open spaces, and other community facilities, and for business and commercial development, by combining their development with planned freeway construction. It would permit multiple usage of the limited area available in our cities, and double the usage of our scarce dollars. The key to this concept lies in the economic facts of land acquisition for a freeway. Normally our urban freeways have been planned and designed to use a bare minimum of right-of-way, in order to minimize the displacement of people and businesses, and any other departments often pay considerable amounts to affected property owners for

severance damages; that is, payments for the decreased value to remaining property because of the sale of part of the property for the freeway.

Our studies have shown that in many urban situations the cost of acquiring whole blocks of property would be about the same as, or only slightly higher than, the cost of acquiring a narrow freeway right-of-way including the severance damage payments. Thus, a city could acquire an entire block-wide strip on the route of a planned freeway, sell to the highway department the space needed for the freeway, and still have available for other development a remainder of valuable land for a fraction of the cost of having to acquire it alone. The acquisition could be handled through a public corporation, authority, or agency. A number of Federal, state, and local programs are available that might be used to help with developments other than the highway itself. The development could be done either with private or public financing in such a manner as to continue taxpaying usages. Thus, the planned freeway, when combined in a joint development with other programs, can serve as the principal financing source with which to acquire not only a needed transportation facility but also other desired community facilities at the same time.

Out of whole blocks acquired for such joint development the highway would need only a permanent three-dimensional easement—an air tunnel so to speak—which it would buy for an amount equal to its appropriate share of the right-of-way costs, thus supporting the joint venture without any increase in its planned highway expenditure. The remaining space alongside, over, and under the freeway, which might be elevated, depressed, or at ground level, could then be developed to meet any appropriate mixture of the city's most pressing needs for rehousing, open space, parks, etc.

In many cases it would be possible to reestablish housing in high-rise units occupying land space only one-third that previously used for row house construction, leaving two-thirds, or two out of each three blocks acquired, available for development of these community-desired open space facilities. If an elevated freeway is chosen the space underneath could be developed into taxpaying commercial usages such as stores, parking, or even housing.

In operation the highway program would in effect provide the needed capital funds with which to acquire, clear, and construct replacement housing. The open space, park, or other community development projects would be financed from other programs which already exist on the statute books along with financing therefor. But the major cost—that for new housing units—would be provided by using the highway right-of-way payment as capital with which to finance the replacement housing-in-kind, and to acquire and clear large amounts of land needed for developing the other amenities mentioned.

There are many opportunities to put this concept of joint urban development to work in the immediate future since there are 2500 miles of urban freeways yet to be built under the Interstate program, involving about ten billions of dollars in costs. The Bureau of Public Roads is ready to work on this concept with the Nation's cities, through their State highway departments and other Federal agencies, in a bold and new effort to obtain the maximum use of that part of our scarce urban land which must be devoted to highway transportation.