"CURRENT URBAN DESIGN STANDARDS"

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It is needless for me to tell you that I am happy to be here. The planning, design and construction of highways is my business in the administering of funds made available for highway construction by Congress. I enjoyed being present at this meeting last year, and to take part in the discussions pertaining to urban problems, and I am sure this meeting will be just as beneficial to all of us. You will find some others that have had a problem or condition similar to yours and by meetings such as these you will find out how it was solved.

My subject to discuss with you as listed in the program is "Current Urban Design Standards," and there has been a lot of time devoted to this subject. In fact, I could refer you to a book entitled, "A Policy on Arterial Highways in Urban Areas," by the American Association of State Highway Officials which is the design policy which is used by the Bureau of Public Roads, State Highway Departments and cities. Now, I could not cover this subject quickly as time would not permit, even if I was fully capable, so I am going to talk to you about the use of Federal-aid Urban funds made available beginning with the 1944 Federal-Aid Highway Act. Each Federal-Aid Highway Act since 1944 has provided funds for projects on extensions of the Federal-Aid Primary System in urban areas, and beginning with the Federal-Aid Highway Act of 1954 made these funds applicable for use on the extensions of the Secondary System in urban areas.

Several inquiries have been made in regard to the use of Federal-aid Urban Funds. It was the intent of Congress that these funds provide for the relief of congestion in urban areas. It was intended that they would provide an important means of assisting the cities in solving some of their traffic problems, particularly in the building of improvements that are substantial in character and which would reduce congestion and eliminate the principal traffic bottlenecks. The amount of the apportionment to Kentucky is $2,338,487.00 for fiscal year 1960, which is not adequate to provide for distribution within a State on any formula basis because such distribution inevitably will be inadequate for a proper solution of the urban traffic problems. It is therefore considered to be wiser policy to concentrate urban funds in those cities where the traffic problem is most acute, anticipating that the program will be a continuing one and other cities will be taken care of at a later date.

The application of this above stated policy is first to inspect the projects which the State Highway Department desires to program to determine if there is traffic congestion and if the proposed projects provide adequate traffic capacity to correct the existing conditions. The Bureau of Public Roads has operated under a general policy of limiting the use of Federal-aid Urban Funds to projects which would accomplish this desired objective by providing additional traffic capacity. This policy has been confirmed by our Administrator.

Under this policy resurfacing or minor construction or reconstruction such as the addition of curb and gutter which, in effect, is only incidental widening would not be approved.

I wish to give you a few examples of projects that would be considered for approval:

1. An existing two-lane 30-foot curb to curb street without parking lanes, and on field inspection it is found to be congested due to parked vehicles taking up a portion of one traffic lane, with an average daily traffic of 2,500
vehicles. A 40-foot street would correct this condition by providing two 8-foot parking lanes and two 12-foot traffic lanes. This is about the minimum width that would be considered, and if the right-of-way cost and property damage was not considered excessive a 44-foot width street would be the desirable design because if the traffic should increase beyond the capacity for two lanes the City could remove parking during peak hours and operate it as a 4-lane facility.

2. Now, let’s take another example. An existing 40-foot street with parking with an ADT of 5,000 and design traffic 10,000 ADT, or a peak hour of 1,200. A substantial improvement would require four 12-foot lanes with a median of at least four feet. If parking cannot be removed by the City, it would be necessary to make provisions for parking lanes where necessary.

These examples show you the application of the policy. The number of traffic lanes is determined by the design hour volume of traffic 20 years hence. This data with the percentage of trucks is made available for our review and submitted by the State with the urban program. The following is our design policy guide for reviewing adequacy of two-way urban streets:

1. Projects where the DHV-20 is less than 500 vehicles, the minimum width shall be 40 feet curb to curb and the traffic lanes 12-foot wide and the parking lanes 8 feet in width.

2. Projects where the DHV-20 is more than 500 vehicles, but less than 900 vehicles, the width shall be 48 feet face to face of curbs. The may be conditions that may require our acceptance of a 44-foot width. This would be due to excessive cost of right-of-way to obtain the additional four feet of width.

3. Projects where the DHV-20 is more than 900 vehicles per hour, the improvement shall be constructed to provide four traffic lanes with a 4-foot minimum median. Traffic lanes shall be 12 feet in width except where such width will involve heavy cost of rights-of-way in a business district or a developed subdivision. If this condition exists, 11-foot lanes will be considered provided the State supports this request with a full explanation of the necessity for proposing 11-foot traffic lanes.

4. Major street intersections shall be designed to meet the capacity requirements.

5. Where the existing streets are narrow and widening requiring additional right-of-way is very costly, it is frequently necessary to use a pair of one-way streets in lieu of a 4-lane divided facility. It is necessary, in this case, to provide additional capacity on each street and to accomplish this capacity requires a 44-foot curb to curb improvement.

6. If the traffic congestion can be eliminated by rerouting traffic or changing the existing street system to one-way traffic, then the need for the project will be eliminated and we would not approve a project at that location.

In closing, I wish to state that urban funds are small in amount and that Federal-Aid Primary funds are available for use on the extensions of the Federal-Aid Primary System in urban areas. Federal-Aid Secondary funds cannot be used to finance improvements on the extensions of this system into urban areas. Urban funds are available on worthy projects.

I have brought along some minimum sections for urban projects which I will show at this time.