I could summarize my conclusion to this subject very briefly by saying, "It is bad."

The automobile has revolutionized our way of living and our way of doing business because most of our central cities developed before anyone thought about automobiles. Now we must accommodate millions of automobiles in cities which grew up in the horse and buggy days. It is really surprising that we are able to get along as well as we have. One of the most important problems of cities is that of providing adequate physical facilities for handling the vehicular traffic of the present and the increasing traffic of the future.

Traffic regulation and control has become a major function and a major expense of cities. In Louisville almost $2,000,000 or over 10 per cent of the total annual city operating budget goes for traffic regulation and control. The Louisville Police Department personnel averages about 50 per cent of its time on traffic control and related problems, and the percentage jumps up to 60 to 70 per cent during peak traffic periods. I am sure this situation is common to other cities. Local streets, designed as residential streets and local parkways, have been turned into heavy traffic arteries and traffic congestion has changed shopping habits with loss of business to many old commercial areas. It would be impossible to estimate the economic loss to individuals and businesses due to congestion and the excess time required to travel from one part of a city to the other.

An increasing number of people and motor vehicles have created the problems and every study indicates that we can confidently expect still more people and more cars. In the last ten years the City of Louisville has increased in population by 9 per cent, much of which was the result of annexation, but Jefferson County outside Louisville increased 66 per cent. This growth outside the central city is the pattern for all metropolitan areas.

The population of the U. S. is increasing at the rate of between 2½ to 3 million a year and shows no sign of slowing. In the last ten years practically all of the increase has been in metropolitan areas while most rural areas have lost population. From 1950-1955, 97 per cent of the nation's population growth was in metropolitan areas and it is estimated that two-thirds of our population will live in about 200 metropolitan areas by 1975. Farms are being mechanized, the small farm is seldom economic, and less farm labor is necessary to produce the agricultural surpluses whose disposition is a national problem. We cannot look to the rural areas to absorb the increased population, it will inevitably go into metropolitan areas.

The number of automobiles follows the population trend. In Jefferson County, registration of motor vehicles increased 105,000 in the eight-year period, 1949 to 1957. Allowing 18 feet per vehicle, this means a solid line of cars, bumper to bumper, extending 358 miles. But there is no slowing in the increase in population or cars. Last year our population increase in Jefferson County was estimated to be 11,200 and this in a period of economic recession. Estimates agree that 1980 will see our county population reach 900,000 and—what is most important—relative to our traffic problem—an estimated additional 587 miles of cars and trucks bumper to bumper. Including our neighbors in Indiana, our metropolitan population will pass the million mark and a corresponding increase
in cars. We are not going to solve completely the traffic problem with our expressway system but without it we would be paralyzed.

The problem is not confined to the Louisville area but is similar in every metropolitan area—afflicting the majority of people in the U.S.—and became a national problem demanding the attention of Congress, out of which came the Federal Highway Program or the Interstate System.

Congress found a growing need for a modern system of limited-access highways to connect and serve the major population centers, a serious need for a system of highways to serve in time of a national emergency and national defense, but also, just as important as these, to prevent traffic paralysis in densely populated urban areas.

About 3,000 miles of the 41,000 mile system, and about half of the money provided in the federal program will be in metropolitan areas. By far the greatest use, and the bulk of the traffic, on the system will be within urban areas. Most traffic is going to or from cities, and to and from one part of a metropolitan area to another. Providing routes for tourists to travel from one part of the country to another was not a prime purpose. When completed, it is estimated that the Interstate System will carry 20 per cent of all traffic although it constitutes only 1.2 per cent of the total road and street mileage.

The impact of the federal highway program will accelerate urban expansion. Their routes, designs, and interchanges will have a tremendous influence upon our future growth, residually, industrially and commercially.

The Louisville expressway system will facilitate the movement of traffic, ease our present existing routes and permit us to absorb increasing future traffic. It will shorten the time required to drive to and from the downtown area and make a trip to town more attractive. It will make new residential, commercial and industrial sites more accessible. It will make trips to and from other cities safer and speedier because the routes will be limited-access and well planned, and the system will also serve in time of emergency for the movement of supplies, rescue units and for evacuation, should it ever be necessary.

Expressways will, no doubt, spread our growing population over a greater area. Some planners have predicted that our urbanized areas may require twice as much area as we have used in the past. In other words, we may find that the area required for additional metropolitan growth in the next twenty years may be as much as was required for urban use from the beginning of our nation to 1950. Those who want to live in the rural areas may have to move much farther out than they anticipated. If we are to double the area used for urban expansion, we may well ask ourselves, "Is the new better than the old?" Suburban life has its blessings with open space and neighborliness but it also has lawns to mow, screens to take off and put on, leaves to rake and the ordeal of commuting—even with expressways. Our population is growing, but the percentage of old people is growing even more rapidly and it is noticeable that more and more people in metropolitan areas desire to live in the downtown and central areas if they can find comfortable and convenient apartments and if the area is attractive.

We can expect an acceleration in changing neighborhood patterns and changing land values. New areas will open up for residential, commercial and industrial development. Traffic may be greatly reduced on some residential streets which will make some older areas more attractive and encourage their rehabilitation and revitalization.

So far I have emphasized the growth of cities (especially in area) and the impact of expressways and seemed to ignore my subject which is the "Economic Impact of Traffic Congestion" but actually, they are closely related. Cities have spread out, new shopping centers have been built, industries have moved away from the center of cities because of traffic congestion, and expressways, which will have great economic impact, are being built to remedy present traffic congestion or to relieve future congestion. Expressways are a result of traffic congestion, present or future.
Traffic congestion results in loss of business, loss in property values, and loss of tax base upon which our cities depend. All of us have seen this happen to certain areas, but unfortunately it is so complicated that accurate statistic studies are impossible. There are some studies which show the time savings which have resulted from expressways. The nine-mile Gulf Freeway in Houston is estimated to have saved 20.8 million vehicle-travel-hours in six and a half years. In Los Angeles the estimated average saving from freeway use came to 2 cents per vehicle mile. They estimate that 45.3 miles of expressways which cost $198,000,000 saves the users about $24 million per year. When time savings is added to use it is estimated that the savings of using the expressway over surface streets amounts to 4.16 cents per mile.

Congestion means an expense in time and money which competitive business cannot long endure. A retailer, wholesaler or manufacturer faced with constant traffic congestion will face the alternative of moving or going out of business. Traffic congestion is primarily the cause of our exploding cities, our shifting residential, commercial and industrial areas. Our problem today is to forecast the traffic congestion danger spots and do our best to prevent them.