Fort Wayne to Have Expressway

JAMES T. WHITE
Traffic Engineer, Fort Wayne

The need for traffic improvements in Fort Wayne can easily be established! Every year the city experiences the equivalent of a major catastrophe. During 1946 twelve persons were killed, 962 persons injured, and 5,734 vehicles damaged in 3,099 accidents, which represents an economic loss of $755,425. If these deaths, injuries, and property destruction should happen in a single hotel fire, they would be much more shocking. If the expressway system would only reduce this frightful human loss, then it would be justified for this reason only. The simple fact is that it will reduce this loss. But humanitarian losses are by no means the only losses now suffered by Fort Wayne caused by traffic. Every day thousands of dollars are lost by Fort Wayne drivers because of congestion which has reached a point where, on many downtown streets, the rate of movement has been reduced to five miles per hour or less. This is only a slight improvement over transportation by horse and buggy.

The very life and existence of the city—a place in which to live, and a place in which to do business—is threatened by the losses due to the traffic problem. The growth of the central business district is being stifled because it is so inconvenient, hazardous, and annoying to do business therein. It takes too long to get there; it takes too much time to move around; it takes too long to find a place to park; and the threat of an accident is ever present. If these conditions are permitted to exist and to grow worse, there will be blighted areas in the downtown section because businesses will be forced to move out to locations more convenient to the customers. This would ruin the tax structure of the city, and ultimately require more travel to produce the same amount of business. America is full of examples of the effect of this traffic disease.

The really tragic part of the situation is that for the past ten years the city of Fort Wayne has been paying for the expressway system without having any of the benefits of it. In other words, the cost of accidents and delay for the last ten years have cost the people as much as the expressway system would cost. It would indeed be poor management for the people to continue to suffer increasing losses when a lesser
cash expenditure would reduce these losses and save money. Thus the purchase of the expressway system has been considered as a method of saving money—as an essential investment in the lives of Fort Wayne people, in their businesses, and in the future of the city itself.

During 1944, through the close cooperation of the Bureau of Public Roads, the Indiana State Highway Commission, and the City Administration, a program was inaugurated in an effort to bring about a schedule of highway construction projects which would relieve the highway systems of metropolitan areas such as Fort Wayne, and comparable communities throughout Indiana.

The survey in its original form was known as the Metropolitan Traffic Survey of Fort Wayne. The information was collected under wartime conditions, and expanded by a group of experts from the Bureau of Public Roads and the State Highway Commission so that traffic estimates would be comparable to those in peacetime, or post-war conditions. The program was developed to relieve our present traffic ailments, and to prepare highway facilities for the day when this nation will have as many as 60,000,000 motor vehicles registered throughout our 48 states.

It must be said at this time that the expressway which has been designed for Fort Wayne is not an idle dream. Rather, it is a development of a highway actually in advance of the design of automotive predictions. The design of an expressway, whether it be in Fort Wayne, or any other metropolitan center, if it is to be of service to that community and its surrounding area, must recognize the needs of the persons who will travel such a highway system.

**Definition of Limited Access Highway**

To fully appreciate what is meant by an expressway is to define it as expressed in the Interregional Highway Report, which was submitted to the Congress of the United States on April 14, 1941:

A Limited Access Expressway is a thoroughfare designed for all types of motor vehicles. It consists of two or more traffic lanes in each direction with opposing traffic separated by a continuous median strip. It has no intersections at grade and therefore no cross traffic. Access and departure are limited to specific locations and only in the direction of expressway travel at those locations. It follows that an expressway system consists of two or more expressways, separated as to grade at their intersection, and with suitable interchange to permit freedom of movement between any two legs of the system without any crossing of traffic at grade.
If the expressway is to be of service to a community, the travel habits of the motorist must be considered. To accomplish this end, we must learn where particular motorists have their point of origin, what is their destination, and what is the nature of their travel—to and from work, business, pleasure, or shopping. To design an expressway by merely expanding our present right-of-way, and to permit traffic to intervene with that of an express nature at every intersection which we now recognize, would only develop a highway that would be out of date when the last concrete is poured. Consequently, it is necessary that best points of ingress and egress be carefully studied, and located at convenient points along an expressway so as to serve the most people for the greatest good of their travel needs.

To fully appreciate the full benefit of an expressway is to realize that it will not eradicate the present traffic problem we have within our community. It will serve as a major relief measure, and in certain aspects will require the development of a far better street system than our community now has. Our parking facilities will need an expansion program. Also our city is confronted with the problem of keeping the present off-street parking facilities which have been developed through private initiative. These could be lost overnight should a major revision of our central business district take place through the construction of modern shopping centers. We must prepare to better regulate the parking lots and garages that we now have, and create additional storage facilities for the motorists whose destination may be the central business district.

We must further recognize that motorists within a limited area adjacent to the proposed expressway will use such facilities, and that it is not designed with the idea that all of our traffic will be rerouted to this particular highway, and thus reduce our present street system to an all-time traffic low. The basic purpose of the expressway is to service our metropolitan area, relieve our highway system within the community of the present traffic which conducts business within our city, provide adequate facilities for the through traffic that may have no business to negotiate with our community.

**Origin and Destination**

Principally, the expressway is designed for the purpose of reducing the element of time between two points known as “Origin” and “Destination”. Suppose we consider a motorist who, at the present time, is required to spend as much as 20 to 25 minutes and, during peak traffic periods, a total of 35 to 45 minutes to traverse our community.
If this element of time can be reduced to the point that the motorist may have access to the many facilities of Fort Wayne, and at speeds comparable to those of rural highway development, then we have gone a long way in accommodating our neighbors and our own citizens. The Interregional Highway Report defines “Origin” and “Destination” studies as follows:

It is a survey that records the starting point (the origin) of a vehicular trip, the ending point (the destination) and the location of intermediate stops. It is not concerned with routes or streets traversed, but assumes that the operator would have followed a straight line to his destination had such a thoroughfare existed.

Fort Wayne has never approached a program so futuristic as the present program of developing the expressway system. It has been considered logical, advisable, and practical by the city administration, state highway officials, and the Bureau of Public Roads. This particular project offers Fort Wayne a golden opportunity to secure a highway system of the latest design known in the engineering field, and at the lowest possible cost under present economic conditions, that will permit free flow of traffic with a minimum amount of congestion and intersection delay. Such a highway will be free of traffic signals which, at their best, require a certain amount of stopping and starting by motorists approaching such an intersection, and increase the operating cost of motor vehicles.

**Accidents**

It is obvious that most persons will be concerned as to how an expressway system will reduce accidents. In such a system head-on collisions are eliminated by the physical separation of opposing traffic. Intersection or crossing accidents are eliminated by the absence of all crossings at grade. Rear-end collisions are minimized by the elimination of traffic signals, intersections, and all other causes of sudden stops. Pedestrian accidents are eliminated by excluding pedestrians from the expressway. And finally, the surface streets, apart from the expressway, are made safer for the vehicles using them by the removal of the faster through traffic to the expressway.

It is obvious that in addition to the benefits derived from the reduction of accidents, other benefits will follow in this sequence:

1. To the private driver—faster, smoother, uninterrupted operation without the annoyance and expense of stops, waits, short turns, and congestion.

2. To the commercial vehicle owner—less operating expense, less wear and tear on the vehicle, and less time consumed.
(3) To the inter-city bus—rapid access to and from the heart of the city.

Survey Data

Let us consider some of the data which have been secured in the survey which was conducted for the purpose of designing the expressway for Fort Wayne.

(1) On an average week day there are 133,000 trips by motor vehicles over the streets of Fort Wayne. Eighty-two percent of these trips are made by passenger cars, fourteen percent by trucks, and four percent by taxis.

(2) Seventy-four percent of all this traffic begins and ends within the urban area; twenty-four percent begins outside and ends within the city or vice versa; and only two percent both begins and ends outside the city.

(3) Of all the automobile traffic approaching the city, 94.2 percent enters into and stops within the city and only 5.8 percent wishes to avoid the city and would use a circumferential urban highway if such were available.

(4) Many of the existing arterial thoroughfares have reached the saturation point in their ability to handle peak-hour traffic, leaving no reserve capacity for the increasing traffic of future years.

(5) Contributory factors to this saturation or bottleneck condition are railroad crossings, bridges too narrow or not strategically located for present-day traffic movements, curb parking, double parking, on-street truck docking, center-of-street car lines, inadequate curb-to-curb widths, and lack of thoroughfares skirting the central business section.

The following facts should be considered in connection with the proposed expressway for the city of Fort Wayne:

(1) An expressway will not solve our downtown congestion problem. It will make the present problem worse, because such a system will encourage more people to shop in this particular area of the city. While on the surface this does not appear to be encouraging; nevertheless such conditions will be good for business, provided that the downtown conditions are improved to more efficiently move and park more vehicles. Thus it must be recognized that the construction of an expressway, which is badly needed, will increase the importance of relieving the congestion and parking problem in the central business district.

(2) While Fort Wayne will expend several million dollars for the construction of the proposed expressway, it is equally important
that a greater expenditure of money for improvements to relieve congestion and parking in the central business district is justified.

(3) An expressway system will by-pass the so-called through traffic which does not want to stop in the city. This figure may be as low as 5 percent, and is dependent upon where the point of origin and destination of such a traveler is taken. Expressways afford an opportunity to by-pass metropolitan traffic which is commuting from one side of the city to the other. It is easier for metropolitan shoppers to get downtown by using the expressway until they are opposite the place they want to reach. This in turn, reduces the amount of travel on congested city streets. Expressways reduce the running time and traffic irritation which is created under present street systems. But the amount of traffic which such a system would take away from the downtown area would be less than the amount of additional traffic it encourages to enter such an area.

(4) The development of an expressway will require a greater development and improvement for the downtown area.

Attracting more traffic to the central business district by an expressway without providing more parking spaces (on-street or off-street) would not result in a net gain because the value of the expressway would not be realized. The amount of money spent for expressways must be in proper proportion to the money spent for improvements in the downtown area. These in their order would include: limited ways at grade, parking lots, and a modern signal system. If we are to encourage more traffic into the central business district of the city, it is logical to consider the provision of more adequate terminal facilities through the creation of additional parking lots. Our present traffic signal system is desperately in need of complete modernization.

(5) Access points of the expressway must be carefully distributed over the downtown street system. We must conveniently locate points where people will want to get on or off the expressway system in order to do business with downtown merchants or business houses. Serious consideration will have to be given to the distribution of controlling traffic at access points through installation of traffic signals. Failure to control this type of traffic from an expressway may seriously hamper the flow of the traffic upon the expressway system itself. When additional traffic such as that leaving the expressway comes in conflict with the congested street system, it must be distributed over a larger area, or it will back up on the expressway. To accomplish this will require signals, parallel streets, additional storage capacity, proper arrangements for turns, street lights, and an excellent job of signing.