HIGHWAYS AND THEIR EFFECTS ON THE EMERGING SHAPE OF CITIES IN THE UNITED STATES OF AMERICA

Saima Qureshy, AICP
Regional Planner, County of Los Angeles,
Department of Regional Planning,USA.

ABSTRACT

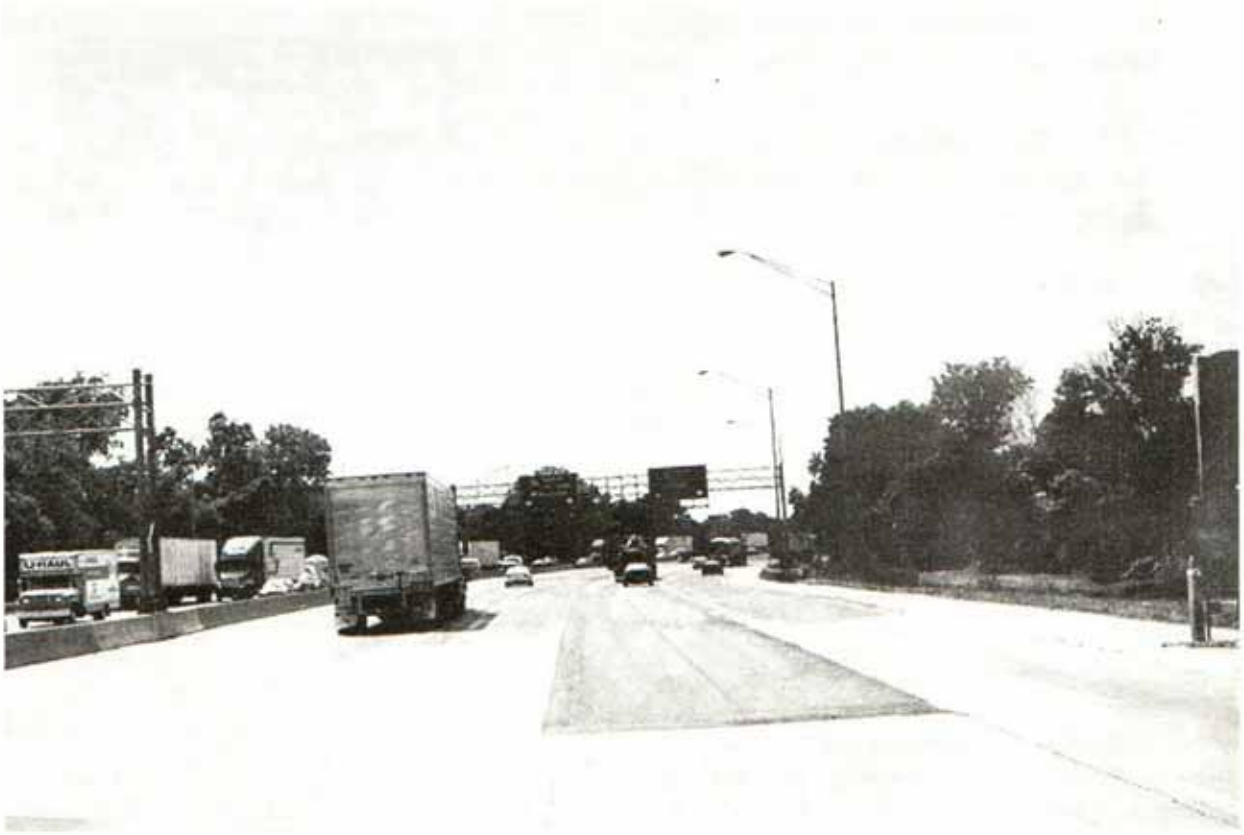
Federal and State highway departments control the production of highway facilities from planning phase to construction and operation. They wield a disproportionately large influence on the comprehensive planning process and on the pattern of decentralisation in the metropolitan areas. Because of this influence, highway departments have been able to purse the narrow objective of accommodating traffic despite attempts by the Congress to redirect transportation goals towards meeting the land-use needs of declining central cities and avoiding the adverse social, economic and environmental impacts of highways. Some of these adverse effects include isolation of central city's transit-dependent minorities from suburban employment and the creation of a massive dependence on gasoline.

The inertia of this limited purpose highway program has been sustained by massive federal funding, a bureaucratically embedded and technologically intimidating planning methodology, and a system of federal planning and impact reviews whose major effect has been to expedite the approval and construction of highway projects. These token reviews and deficient impact analysis reviews have deprived the public and elected officials of vital information about foreseeable adverse effects, and have unreasonably restricted their ability to judge highway proposals or to make decisions concerning the decentralisation of cities.

1. INTRODUCTION

As metropolitan areas grew after the Second World War, the nation's rising level of personal income permitted a massive transition by metropolitan area dwellers from bus and rail transportation to more comfortable but more expensive and space consuming automobiles. To move a given number of people, even on roads of higher quality, automobiles had to use at least four times the space required by buses and upto twenty times that required by the rail transit.

The preference of automobiles was encouraged by the changes in physical layout and spatial relation of urban areas, following Second World War. The movement, known familiarly as 'urban sprawl' greatly reduced the number of people living near the city centre and major transportation routes, while greatly increasing the number and distance between their desired destinations. The transit companies were forced to reduce the frequency of services, eliminate some routes altogether, raise prices and neglect maintenance due to declining number of people patronizing public transit.



In cities throughout the United States, increased traffic volume was channellized into street systems that were laid out before the invasion of automobiles.

Crowded traffic arteries were caused by the concentrated economic, social or other facilities on a particular street or at a particular corner.

One solution to this problem was to widen the existing streets by tearing down the buildings around them. But that would have resulted in destroying the generators of economic activities, to provide room for street widening.

2. FEDERAL FINANCE FOR HIGHWAYS

The concept of a federally financed super highway network first arose in response to the perceived needs of military security in First World War. The Roosevelt administration reviewed it as a potential public world project in 1939. The Bureau of Public Roads recommended a 26,700 miles system.

The bureau offered two major reasons;

1. Provide a system of rapid movement of man and equipment in the time of war and
2. Provide jobs during the expected post war depression

It was not until 1956 that the inter-state programme began to accelerate to its present prominence. The Highway Trust Fund was established by the Highway Revenue Act of 1956 as a mechanism to finance the highway *programme. The fund was to provide cash to* reimburse the states for expenditures on Federal Aid Highways.

In order to finance the increased authorisation, the Revenue Act increased some taxes on motor fuels, motor vehicles and associated products and also established some new taxes. Most of the cities with populations larger than 50,000 were connected by these roads.

3. MAJOR IMPACTS

After nearly 65 years and the expenditure of $80 billion from the federal funds alone, the effects of this massive public works programme are impressive. The dream of Frank Lloyd Wright's broad acre city has been materialised to some extent. Tens of millions of Americans have realised the dream of a home of their own and new employment in the suburbs. The national economy has grown enormously and nearly a fifth of its production is related to motor vehicles and highway travels.

Unfortunately, the end result of the 'highways' concept has not been achieved, as it still caused time-loss. A viscous cycle has been created between increase in the trend to use cars, and a decrease in public transit usage, resulting in the perpetual demand for more and more highways.

Some of the less benign effects are:-

Tens of millions of acres of farmland have been converted to urban uses, and hence the distance over which farm produce must be transported has increased. Sprawling development patterns has increased the cost of providing urban infrastructure and services. The effectiveness and the viability of the transit systems have been undermined.

Automobiles have become a necessity for travel to and from the employment and other necessities. The internal combustion system has become the major source of urban air pollution and the major consumer of depleting oil supplies.

4. COMPREHSNSIVE PLANNING AND HIGHWAY PLANNING METHODOLOGY

By 1962 land use planning was a well established process in local government and most cities had completed one or more long-range plans. Most state highway departments had also prepared long range plans for metropolitan areas. In many of these areas some highway elements had already been built and others were under construction. These plans reflected upon the optimistic but mistaken view in the late forties and early fifties, that improved highway access would bring about the economic revival of the inner cities.

The new regional planning agencies were only advisory and had no authority to reject or even modify the proposals of state highway departments. Because of this lack of jurisdiction and in order to expedite the approval of local projects, the regional plans produced by the planning agencies seldom went beyond the compilation of local plans.

Since there was widespread awareness that highway proposals adopted by state highway departments were almost certain to be built; the

proposed highways within the jurisdiction of local governments were usually incorporated in the regional plans as given. Planned future land uses reflected the access that would be provided by the new highways. In this way the state highway departments' plans were the basis of the regional plans from the outset.

The reports and studies that accompanied these plans invariably attributed to the decline of economic activity in central business districts (CBDs) to overly congested local streets and the absence of adequate parking. These findings led to the conclusion that the new highways in combination with a vast number of provided parking spaces would reverse the decline of the CBD.

Based on these conclusions the economic and social revival of CBD was foreseen with the construction of new highways. The need for more highways was also reinforced by the forecast of future traffic, dependent on projected population growth and the prediction of increased auto dependency.

Because of enormous volume of data involved and the extreme technical complexity of models, an aura of authority and reliability was attributed by the public to elected officials and professionals who employed those models, and to the out come of the process. Confronted with this intimidating mystique created by the interaction of voluminous data, high technology and expertise, local policy makers and local citizens understandably were reluctant to question the findings upon which the highway proposals were based and the single purpose goal of accommodating the forecasted traffic.

It is not surprising then that the continued comprehensive transportation planning process carried-on cooperatively by states and local communities, and mandated by the Congress in metropolitan areas, serves mainly to confirm the need for proposed highways and to find them to be in conformity with regional plans.

The basic relationship among the participants in the metropolitan planning process has remained the same and until quite recently the pace of sub-urbanisation has continued unchecked.

Although Congress has made substantial amount of money available for public transit since 1970, the capital improvement and operating subsidies for which those funds have been used did not

significantly affect the continuing approval and construction of metropolitan area highways or provide improved access for inner city residents to suburban employment.

After years of massive investment in the interstate highway system, the President's 1978 National Urban Policy report belatedly concluded that the construction of these highways was "the most powerful direct federal action that has contributed to metropolitan decentralisation and central city decline".

CONCLUSION

The construction of new metropolitan highways has been accompanied by the steady departure of retail, wholesale and manufacturing establishments from the central cities to the new locations on the regional highways network and by the exodus of mainly white middle income families to sub-urban subdivisions. These have left behind increasing concentration of low-income minority populations, depleted municipal resources and deficient transit systems.

In addition, right-of-way acquisitions for highways has frequently resulted in large-scale reductions in the housing supply available to low income households and has severely disrupted low-income minority communities.

All these are significant adverse social and economic impacts on the 'central city' and its inhabitants within the meaning of National Environmental Policy Act, the Civil Rights Act and the Public Hearing Requirements. Nevertheless these impacts were not considered during the planning of most metropolitan highways because those plans were developed before the requirements to consider such impacts were imposed.

REFERENCES

U S Department of Transportation, Federal Highway Administration; *America on Move – The story of Federal Aid Highway Programme and Federal State Relationships.*

Milo M. Quaifc *:Chicago's Highways – Old and New.*

Andre J. Pack and Edgar M. Horwood; *Benefit Tax Financing for Urban Transportation: A Review of the Highway Experience and Lessons for Mass Transportation.*

Alan A. Altshuler*; The Inter City Freeway.*

U S Department of Transportation, Federal Highway Administration; *America's Highways 1776-1976.*

Yale Rabin; *Federal Urban Transportation Policy and the Highway Planning Process in Metropolitan Areas.*