# HOW WE GOT HERE: THE STATE OF THE URBAN TRANSPORTATION PLANNING ART

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The purpose of this paper is to trace the development of urban transportation planning, focusing particularly on three previous conferences—Sagamore, Hershey, and Williamsburg.

In taking a backsight over the course we have traversed, the three conferences stand out as significant bench marks. Yet their significance in perspective seems not so much as three separate contributions to the art but rather as high points on a long trail laboriously hacked out and improved by steady effort of many people and agencies over many years. I have staked out the beginning of the trail as the passage of the Federal-Aid Highway Act of 1934, for it was that act that authorized the "1½ percent funds" for highway planning.

#### Early Concern With Urban Transportation Planning

The product of the highway planning surveys was put to its first major use in the study leading to the 1939 report, "Toll Roads and Free Roads." This study, conducted by the Bureau of Public Roads, concluded that a national system could not be financed through tolls alone, even though certain sections could be. But it recommended that such a system be constructed to comprise "direct interregional highways, with all necessary connections through and around cities." And it recommended "the creation of a Federal Land Authority empowered to acquire, hold, sell, and lease lands needed for the public purposes and to acquire and sell excess lands for purposes of recoupment."

It is of interest that this report emphasized the problem of transportation within the major cities and used as an example the City of Baltimore.

Then in April 1941 President Roosevelt appointed the "National Interregional Highway Committee" to investigate the need for a limited system of national highways to improve the facilities now available for interregional transportation.

The system finally selected by the committee as best meeting the requirements laid down by the President was reported to the Congress on January 12, 1944, and published in the form of the report, "Interregional Highways." The designation of the system, identified as the National System of Interstate and Defense Highways, was authorized in the Federal-Aid Highway Act of that year. But it was not until the passage of the Federal-Aid Highway Act of 1956 that work on the system began in earnest.

Without doubt ''Interregional Highways'' was and remains the most significant document in the history of highways in the United States. Within it are several points that make it particularly significant to the subject of this conference.

First, it was the product of highway officials and planners with broad interests working together.

Second, the system was not selected simply on the basis of its traffic use. It was recognized from the beginning that the purpose of the system was to provide for highway transportation to serve the economic and social needs of the nation.

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Third, the importance of the system within the cities was given much attention.

Fourth, the need for coordination with other modes was emphasized.

Fifth, the committee recognized clearly the limitations of the system, saying, "... it is important, both locally and nationally, to recognize this recommended system... as that system and those routes which best and most directly join region with region and major city with major city." The clearly stated purpose of the Interregional System is indeed badly distorted when assertions are made that the Interstate System must also serve the demands of urban commuters in the major cities.

Sixth, the committee recognized the need for full cooperation at all levels of government.

Finally, the committee reiterated the recommendation of "Toll Roads and Free Roads" for the creation of a Federal Land Authority, with powers of excess condemnation and creation of similar authorities in the states.

#### The Beginnings of Urban Transportation Planning

Even while efforts to establish the Interstate System were going on, practical steps were being taken to estimate urban highway needs and to develop methods of planning to meet them. At this juncture the home interview technique of determining travel habits began. From the beginning, travel by all modes, not just by highway, was recorded, because the importance of transit and of a data base from which to plan for it was fully accepted.

It is important to recall now what was recognized then—that the process was a survey. It did not produce a plan. It became apparent early in the game that the relationship between the use of the land and the travel it produced or attracted could be measured.

It remained for the development of the computer to permit full exploitation of the land use-transportation relationship, which was given its first major test in Detroit. But the application of the new technology could not have been implemented without conversion of the land use inventories and projections from a qualitative to a quantitative basis and bringing into the planning process (until then carried on largely by engineers) professionals from other disciplines, better equipped by training to deal with the factors of land use and urban growth.

#### The National Committee on Urban Transportation

While highway departments were placing major emphasis on planning arterial routes in urban areas, city street congestion was steadily worsening. It was in this atmosphere that the National Committee on Urban Transportation was created in 1954, initiated and sponsored by the Automotive Safety Foundation. Its purpose was "to help cities to do a better job of transportation planning through systematic collection of basic facts...to afford the public the best possible transportation at the least possible cost and aid in accomplishing desirable goals of urban renewal and sound urban growth."

The committee enlisted the aid of a great many experts in various areas of urban transportation, 142 by actual count, to prepare a series of technical manuals covering all phases of data collection and processing, as well as recommendations for developing the plan, carrying out the plan, and improving transportation administration. It was an unparalleled volunteer effort, resulting in the publication of the book "Better Transportation for Your City" by the Public Administration Service in 1958.

#### The 1956 Federal-Aid Highway Act

During this period of advancing the technology and administration of urban transportation planning came the 1956 Federal-Aid Highway Act, providing for the financing of the completion of the Interstate System. The 1956 Act was in reality the end product of a committee, the President's Advisory Committee on the National Highway Program, generally known as the Clay Committee for its chairman, General Lucius D. Clay.

The committee's principal concern was with the financing of the needed improvements, and the report of the committee to the Congress in 1955 made specific recommendations, which, for one reason or another, the Congress failed to accept. The next year, however, in a renewed effort spearheaded by Commissioner du Pont, the Interstate program was enacted.

#### The AMA-AASHO Committee on Highways

The sudden availability of funds in large amount all brought immediate reactions. One was the creation of a Joint Committee on Highways by the American Association of State Highway Officials and the American Municipal Association. Each association named seven key administrative and professional officials within its group to produce a committee of the highest caliber.

#### The Hartford Conference

Another result of the passage of the 1956 Act was the convening of the Hartford Conference in 1957, the first of a series of national conferences devoted to urban highway transportation. This conference was sponsored by the Connecticut General Life Insurance Company as a public service incident to the dedication of its new headquarters office some miles outside Hartford.

But what happened? The people with the funds and the responsibility for the urban highway program were notably absent, and there was little representation of local officials. But there did come a great number of "antihighway" people, some quite rabid in their beliefs, no doubt sincerely held.

It was an unfortunate result of a sincere attempt to perform a public service, and in addition incongruous in the strength of the anti-highway sentiment exposed in a new headquarters complex to which the only access was by highway. Highway officials were left in the appearance of lack of interest and concern with the city, and the program was left in a position of dubious value to the metropolitan area.

#### The Sagamore Conference

Hartford had impact, however. It was largely responsible for the decision to organize the Sagamore Conference. Pyke Johnson, then President of the Automotive Safety Foundation, was a Hartford Conference participant and came away greatly disturbed by the turn it took. At that time the Automotive Safety Foundation was supporting the staff activity of the Highway Research Board Committee on Urban Research. This committee had been debating the desirability of holding a national conference on urban transportation but had deferred action because of the announcement of the Hartford Conference. Now, however, the committee felt that another conference should be organized, hopefully to produce a positive result. It sought and received the cooperation of the newly formed AMA-AASHO Committee on Highways to cosponsor the meeting. The executive director of AASHO, Alfred E. Johnson, agreed to serve as general chairman. The Automotive Safety Foundation provided financial support as well as assistance by its technical staff.

So, in October 1958 was held the first National Conference on Highways and Urban Development at Sagamore, a conference center operated by Syracuse University.

In Alfred Johnson's opening remarks he stated the challenge to highway officials in these words:

"In order to properly locate new highways in existing urban areas, we need to know more about the highway's effect on the area and the area's effects on the highway.... We should give thought to the other benefits possible from such highway development, which may well outweigh the direct benefits to the highway user."

In picking up from there, Ben West, Mayor of Nashville and co-chairman of the AMA-AASHO Committee, challenged the city officials in these words:

"Municipal land use as it now exists all too often bears a startling resemblance to crazy quilts. It is a jungle of diversification, partly inherited, mostly created. Lack of comprehensive community and area-wide planning is one of our greatest deficiencies. Now we have an opportunity to determine the most desirable land use for the future growth of cities, and through cooperation, locate highways to advance overall community objectives."

After all views were fully aired, "The conference agreed that the final choice among possible alternatives in highway location and design should be guided by a 'grand accounting' of costs and benefits. Advantages and disadvantages of each alternative—in terms respectively of the highway user and the community—should be added up and evaluated, in comparison with the total cost entailed."

Thus, even as of 13 years ago, thoughtful highway and city officials found themselves together on the need for a "grand accounting" and on the need for considering "community values." Probably no one present, however, had any notion of the difficulty of measuring the community costs and benefits.

The conference concluded on an optimistic note. The conferees, perhaps for the first time, had obtained a good knowledge of the total problem and were resolved to do their agreed-upon parts to solve it. The question, of course, remained as to how to impart to other officials and professionals and civic leaders the understandings reached, the principles accepted, and the responsibilities that must be assumed.

#### The AMA-AASHO-NACO Action Program

While efforts to convey the word of Sagamore through customary channels did that, it is doubtful that it did much more. Major efforts in ongoing studies in Detroit, Chicago, and Philadelphia, for example, were breaking new ground in techniques for relating transportation demand to land use and were developing models for predicting future land use to serve as a basis for plans for future transportation facilities. But the great bulk of the cities in the medium population group were not active in preparing for their future transportation needs.

It was in this atmosphere that the AMA-AASHO Committee continued to work through their parent organizations to stimulate greater effort and a higher degree of coordination between state and local officials.

The "Action Program," as developed by the committee in 1962, called for a series of regional meetings to which all state highway departments and all cities would be invited to send representatives. At these meetings the cooperative planning process would be described, the sources of funds to undertake the studies outlined, and the availability of technical assistance noted.

The program as developed by the AMA-AASHO Committee was quickly endorsed by their respective parent organizations and by the National Associa-

tion of County Officials, which was invited to join with the AMA and AASHO as a sponsor. The program, known thereafter as the AMA-AASHO-NACO Action Program, was launched in May 1962 with the first regional meeting in Chicago.

#### The 1962 Federal-Aid Highway Act

The series extended into June 1963 before the entire country was covered. During this period over 1,500 state and local officials were brought face-to-face with planning, many for the first time. But during the series came the 1962 Federal-Aid Highway Act, approved on October 23 of that year, which changed somewhat the emphasis of the series of meetings. Instead of encouraging a voluntary effort, the purpose became one of explaining the requirements of Section 9 of the Act, now known as Section 134 of Title 23.

Those of us engaged in promoting planning through the Action Program liked to regard the 1962 Act not as a new congressionally conceived requirement but rather as an endorsement of a process already being proved effective in many areas. The language of the Act bears this out in the first and last of the three sentences that Section 9 comprises. It is worth recalling this language. The first sentence reads as follows:

"It is declared to be in the national interest to encourage and promote the development of transportation systems, embracing various modes of transport, in a manner that will serve the states and local communities effectively and efficiently."

That is exactly why the Action Program had been undertaken. It is exactly what was recommended at Sagamore 4 years earlier.

Then the third sentence reads:

"After July 1, 1965, the Secretary shall not approve... any program of projects in any urban area of more than 50,000 population unless he finds that such projects are based on a continuing comprehensive transportation planning process carried on cooperatively by the states and local communities...."

And how to meet that requirement is exactly what was being described in the regional meetings. At the meetings subsequent to the passage of the 1962 Act it was pointed out that no federal planning is involved, but that thereafter states could program projects only on the basis of planning adequately performed by the states and the local communities themselves.

#### The Hershey Conference

The year 1962 saw also the setting of another bench mark, the Hershey Conference on Freeways in the Urban Setting. Sponsoring this conference were the Bureau of Public Roads, the Housing and Home Finance Agency, and the Automotive Safety Foundation, which again provided financial support and staff help in organizing and reporting on the conference.

The background statement noted that "The location and design of... projects involve the participation of numerous agencies and professional groups. It has become apparent since the Sagamore Conference that among these groups were important differences in points of view and approach, and that these differences constitute a handicap to orderly progress in urban areas. Conflicts appeared to be especially serious with respect to the location and design of freeways serving metropolitan areas."

With heavy representation of professional groups, the Hershey effort in the freeway design field closely paralleled the earlier successful approach of the National Committee on Urban Transportation in the more general area of overall urban transportation.

The early discussions reveal strong biases held by some of the participants. Some architects protested that the highway engineers invited them into the act

only to provide a "cosmetic" treatment to structures beyond salvation as to appearance. On their part, highway engineers protested that architects commissioned to design structures too often produced costly designs difficult to construct. And in the opinion of the writer, as an editorial comment, some architects seemed to view their area of responsibility as extending pretty far into what he has always regarded as planning.

Nevertheless, the conferees by the conclusion of the meeting came together on a series of findings and recommendations. Among the findings perhaps the

most important was that

Freeways cannot be planned independently of the areas through which they pass. The planning concept should extend to the entire sector of the city within the environs of the freeway. The impact of the freeways must be considered in terms not merely of limiting adverse effects but also of achieving positive opportunities for appreciation of value, for development of new land uses, and for changing land use through urban renewal and redevelopment.

Perhaps the basic reason for lack of progress is seen in another recommendation, the import of which is well expressed in its first sentence: "The necessity for compromise among conflicting philosophies and design objectives must be recognized in urban and freeway design."

Are we, all of us, really ready to compromise?

There was little follow-up of the Hershey Conference. The findings and recommendations were sound and far-reaching; the report was well prepared and widely distributed. But there was no group with muscle to get behind the promotion of the results of Hershey as did the AMA-AASHO Committee in the case of Sagamore. The recommendations of Hershey are still sound and still are in need of promotion.

#### Organizing to Carry Out the 1962 Act

Transition into the "post-1962" period was not difficult. Passage of the Act, of course, brought immediate acceleration of planning effort by the states, for the effective date of the application of the requirements of the Act was less than 3 years away.

As to the technical requirements for a planning process adequate to meet the intent of the Act, the Bureau of Public Roads turned to the AMA-AASHO Committee, as representatives of the state and local communities, for advice and assistance. After much deliberation and testing among knowledgeable people in both associations, a BPR Instructional Memo (50-2-63) was distributed in March 1963—the instructions that still stand, with only minor modifications, as the basic urban transportation planning document.

Under these circumstances came about what is probably the most remarkable achievement in planning ever seen in this country. Along with the developing of the machinery to administer the process came striking advances in technology and in data processing equipment that have produced a degree of sophistication in planning techniques that has perhaps outrun our ability to administer it. By 1965 all but a handful of the then 224 urbanized areas had qualified to meet the terms of the Act. It was against this backdrop that the Williamsburg Conference was held in December 1965.

#### The Williamsburg Conference

The Williamsburg Conference was the direct result of the concern within the AMA-AASHO Committee that plans then in the formulation stage be converted into programs and the recognition that the issue of evaluating social and community values and relating transportation plans and programs to them had not been met. At its meeting in November 1964, the committee agreed to hold a conference to review the state of the art and recommend courses of action for the future and to invite the National Association of County Officials to join the other two groups as an official sponsor. The Federal Highway Administrator expressed strong support and the Bureau of Public Roads joined with the Automotive Safety Foundation in providing financial support.

Of the 74 participants in the Williamsburg Conference, nearly half were there as official designees of the sponsoring associations. Among the highway officials were six who served at one time or another as presidents of AASHO and three others who were heads of their departments. Similar high-level participation came from the other sponsors. The Federal Highway Administrator and the Urban Renewal Administrator filled places on the program.

In his opening statement, the Conference Chairman projected a new era in highway transportation planning:

It will be an era in which today's standards are not enough. It may well be an era in which transportation planning becomes an arm of policy—national, state, and local—to help shape communities along desired lines.

It will be an era in which each form of transport will be planned in relation to other modes of transport, and transportation facilities will be planned and operated in relation to their environment as well as for their users. User costs and benefits will be increasingly weighed against community consequences.

We now seem to be well into the era the chairman then foresaw and which the conferees likewise seemed to accept as to what lay ahead. Certainly we already have a "new generation of citizens who are demanding more in beauty and quality of environment," but too often, unfortunately, at the expense of and not "as well as" efficiency in transport.

The one area in which little progress had been made, it would seem, was in land use controls. While universally recognized that no transportation system geared to a land use plan could effectively serve land uses unless they developed in adherence to the plan, the assurance of implementation of a land use plan seemed no nearer than at Sagamore.

Control of land use has to be the key to "effective and efficient transportation systems" (to refer to the words of the 1962 Act). But have we made any gains at all in these 13 years?

It was clearly brought out in Williamsburg that urban transportation systems must be planned at regional scale and that local governments must develop administrative machinery to plan and implement programs.

In the deliberations and conclusions of the conference, no doubt was left that transportation plans must take into account social and community values, recognizing that as of that time there was no accepted basis for integrating them into the economic analyses customarily made of various alternatives. Again, research was shown to be needed. But one important point emerged without question: Transportation itself is a community value.

#### What Is Highway Transportation, Anyway?

With this conference as another turning point, let us look now at where we are and what lies ahead.

In 1970, highway transportation was 1 trillion, 120 billion miles of travel by automobiles, trucks, and buses. That figure was 4.7 percent more than the figure for 1969, and 1971 will show close to the same rate of increase.

Half that travel is in urban areas, where, even in those of over 50,000 population, 93 percent of all trips are by automobile, 5 percent by bus, and the remaining 2 percent by rail, subway, or commuter train. In the smaller urban areas, travel by highway, of course, approaches or reaches 100 percent. In goods movement, virtually all intracity movement is by truck, a feature of urban transportation that is too often overlooked.

In most of the largest metropolitan areas no more than 5 percent of the travel is to or from the downtown area, and 40 or more percent of that is in the morning and evening peak. And this is by all modes, not just by highway. This is not to gainsay that the downtown area is utterly dependent on this peak-hour travel. It must have access to survive, and transit can provide that access. But providing access to downtown is not the urban transportation problem. It is but one aspect of it.

Downtown access is essential to the survival of the city as we now know it. And in the largest cities rapid rail transit may be the salvation. But experience in Montreal and Toronto shows that the new subways provided only a temporary relief from traffic congestion, even on the streets under which the subways run. Most of the passengers shifted from surface lines, and many others drove to subway stations, thus simply shifting the points of congestion. The newly opened extension of a subway line in the Boston area shows the same experience.

More than two-thirds of the \$10 billion authorized for improvement in urban mass transportation will be sunk (literally) into subways. It will have but a minuscule impact on the total transportation problem of the nation or even on the urban transportation problem except in perhaps 10 or 12 cities. It will offer virtually no relief to the highway transportation problem nationally or even in urban areas generally.

This is the backdrop against which urban transportation must be planned and programs developed. Simply stopping or slowing the highway program or diverting funds to improvements in other modes can only lead to worsening conditions.

#### What Lies Ahead?

The way we must move from here is not too obscure. There is little that needs to be done that was not recommended, sometimes over and over, in the reports of the four conferences and in other documents.

Relating highways to the environment was accepted as an important factor in highway location in "Toll Roads and Free Roads" in 1939. It has been accepted, in a variety of wordings, in each of the conferences and various official documents since that time.

The necessity for relating transportation to land use has likewise been acknowledged at every turn. What is now the Interstate System was laid out on that basis in the early 1940's.

The need for coordinating programs for the different modes of transportation was spelled out in "Toll Roads and Free Roads" and in "Interregional Highways," recognized at every conference, and likewise made a requirement in planning in the 1962 Act.

The need for keeping the public informed was recognized at Sagamore, and at Williamsburg the conferees urged greater citizen participation in developing plans and programs.

Why, then, are we now confronted with demands that we do these very things? Here, perhaps, are some of the reasons.

#### Planning Has Faltered Badly

All urban areas, as a requirement of the 1962 Act, had to have an adequate planning process by July 1, 1965, in order to qualify for federal aid in programs. But talent to carry out the process was lacking in many states and most urban areas. In these circumstances, state highway departments turned to consultants for many of the planning studies, and by and large the consultants did good work. By whatever means, virtually all states had met the requirements of the Act by July 1, 1965. Planning was indeed at full tide, or so we thought.

It was in the light of this record of accomplishment that the conferees met at Williamsburg in December 1965. The assumptions that state and local staffs would organize to keep data current and use the tools that had been forged in planning were sincere.

But that was not to be. The groups set up to carry out the initial processes flagged considerably when the more routine job of keeping data current became their major concern. On completing their jobs, the consultants left behind reels of computer tape as the basis for the continuing work. Unfortunately, today these reels of tape too often are just where the consultants left them.

With inadequate staffs at both state and local levels, and with increasing demands on  $1\frac{1}{2}$  percent funds for new programs as well as for new requirements for old ones, resources at the state level are generally far from adequate to meet the needs of planning.

At the same time, the changed emphasis in the 701 Planning Assistance program of the Department of Housing and Urban Development, to give more attention to short-range planning in the social area in preference to long-range physical planning, has hurt the local jurisdictions in their ability to meet their share of the responsibilities in the cooperative process.

#### The Planning Process as It Has Developed Is on Regional Scale

The planning process is highly sophisticated. But it is applicable primarily at the regional level, and most of the programs and most of the trouble are of local origins. The process is fully adequate for planning facilities of regional scale, and that is what it was designed to do.

The total planning effort must embrace a highly sophisticated process for the major metropolitan areas, a broad but less complicated one for the smaller metropolitan areas, and a micro-scale procedure for projects such as those included in the TOPICS program, for example. All too often it has been assumed that one approach can cover all planning needs—from a regional freeway system to an improvement in a simple traffic control network.

#### Planning Has Not Been Intermodal

Neither in the use of data nor in their administration has transportation planning been truly intermodal. The basic approach to the planning process is to develop models that relate transportation demand to future land use and that permit estimating the "modal split" in that demand. The data and models have equal application in the highway and transit fields, and they are in existence, yet transit interests generally have not been active participants in the process.

Partly this may be due to the fact that federal-aid funds have not been available until recently for transit system planning.

The entry of DOT into the urban mass transportation field brought with it strong pressures to centralize all transportation planning in a secretarial

office, transferring transit, airport, and highway planning authorizations to that office to administer.

#### Planning Administration Has Collapsed

Perhaps "collapsed" is too strong a word to apply generally, but it is widely applicable, at least. The exigencies of the 1962 Act resulted in the establishment very generally of ad hoc groups representative of the states and local jurisdictions. These ad hoc arrangements generally worked well in the data collection and processing stages but too often fell into lethargy when the individual agencies became more concerned with programs. Then, too, elected officials changed, and their interests varied accordingly. On a continuing basis these ad hoc arrangements can succeed only in the most unusual circumstances. The process must be institutionalized, as called for in Resolve No. 1 at Williamsburg.

## Planning Must Give More Attention to Environmental Factors and to Social and Community Values

There is no question but that the highway program, and now the transit program too, should have given greater consideration to environmental and social factors. In general, highway officials in recent years have been giving what they believed to be adequate attention to environmental factors and community and social values. Their failure was in not attaching the same meaning to the words "feasible and prudent alternative" and "all possible planning" in the 1968 Federal-Aid Highway Act that has been placed on them by the environmentalists. And they, like many others, failed to foresee the emotional impact these factors would arouse. But a principal reason was in the lack of quantitative measures of environmental or social or community values to relate to the economic values associated with programs, be they transportation, energy production, or many others.

In the earliest days of highway planning Fairbank sought the help of the economic discipline to aid in developing a highway system to meet the economic needs of the country. But it was not for another 20 years that the discipline began to supply the type of economic talent needed for highway system planning. Does history repeat? Can the environmental disciplines now provide the talent needed in the transportation field to enable programs to go forward on a "prudent" basis and yet serve to enhance the environment? It was at Hershey in 1956 that the need was expressed to accept "compromise in philosophies." Have our positions and those of the environmentalists and social scientists hardened to the point where there is no room for compromise? Perhaps currently this should be our most serious area of concern.

## There Must Be Greater Citizen Participation in Planning and Programming

In case after case, highway programs have been stopped in their tracks by citizen opposition, an opposition that is almost becoming a discipline in itself. The highway program is peculiarly susceptible to damage by this phenomenon, as so well expressed by Mel Webber at the HRB Annual Meeting in January 1971, because it produces linear facilities planned on a regional basis that cut through many local jurisdictions, in any one of which some citizens have reason not to like it and now seem to have the power to stop it. Stop things they can; do things they cannot. Only their elected officials can commit their jurisdictions to programs.

Many examples of effective liaison between officials and citizens have been described. Nearly all have been the result of individual and very subjective approaches, yet we are being forced into trying to institutionalize what is basically a subjective process. We can learn, and we must educate, for mobility is the lifeblood of any community, and many social scientists apparently have not yet learned this.

#### Land Use Must Be Controlled

The relationship between transportation and land use is fully accepted, as has been documented for at least 30 years by recorded words, despite some of those newly appearing on the scene believing they brought the concept with them. The relationship has been quantified in tested simulation models, and the travel demands, by modes, can be computer-produced at will. But have the transportation people carried the development of the concept to the point of preparing guidelines or standards by which developers, public or private, can include in their planning sufficient allowance for the transportation that will be needed? One must doubt it.

But the nation grows. Industry comes. People have to live somewhere. Something has to give, and it usually is zoning.

In the considerations of advance acquisition of land, control of development, and related questions, highway officials generally looked not beyond the right-of-way and its very immediate environs. But it is not just within the sight of the highway that the problem arises. It arises from the development in the entire traffic-shed of the highway, and the better the highway, the wider its traffic-shed. Effective development of cities demands effective control over land use. Highway officials led the way in developing highway systems for the economic benefit of the country and brought economists into the field of highway planning. They led the way in urban transportation planning and brought professionals of many disciplines together to form a new breed of planner. In their own interest, if not for that of the nation, perhaps it is time that they took the lead in finding a way to control land use to the maximum benefit of the whole public—not to exercise that control, but to insist that appropriate agencies be created to do it, and do it.

### CONCERN FOR HUMAN FACTORS SEEN IN MOST AREAS OF HRB'S MEETING

Henry M. Parsons\*

When the Highway Research Board met for the 52nd time in Washington, D. C., in January, interest in human factors extended well beyond the Sixth Annual Human Factors Workshop in Highway Transportation. Of the Board's 64 paper and symposium sessions, 10 were human factors-related: driver licensing, multidisciplinary accident investigation, freeway operations, communications and motorist services, traffic signals, pedestrians, driver characteristics, travel behavior, visibility, and transportation for the disadvantaged.

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