It is a very real privilege for me to speak at this annual meeting of the Highway Research Board Committee on Land Acquisition and Control of Adjacent Areas, first because I am not a highway expert, and second, because I consider, as a city planner, that it is an important opportunity to be able to talk to men who are trying to solve the problems of our highways through fundamental research.

Before I go too far in what I have to say, I want to make my position clear to you. Mine is the fundamental assumption that cities are for people, not automobiles. What I am going on to say is based on this assumption. Also, I hope to persuade you that in planning for the rebuilding of our obsolete communities or building of new cities, one objective could be designing the city so well that people would not have to use automobiles in going to work or play, and the city would be so attractive that no one would want to leave it, even on Sunday. Or, I suppose we could reverse the objective and, instead of designing utopia, we could design autopia - the automotive city in which total mobility is the objective, all people live in trailers and we abandon the quiet residential street for the highspeed domestic highway.

Either way, or by some compromise between the two, we still should have people as the basic consideration, with those bright shiny gadgets running on macadam and concrete sluice ways as servants, not masters. Today, I am afraid that the question as to who is master is still an open one. Research into fundamental objectives is essential if we are to resolve the point.

In extending Federal financial assistance to any slum clearance or redevelopment project under Title I of the Housing Act of 1949, there are two major provisions of the Act in which streets and highways have an important role and which the Administrator must take into account in arriving at his decisions.

The first of these is the requirement that any plan for slum clearance and urban redevelopment must conform to a general plan for the development of the locality as a whole. The second requires that a redevelopment plan "shall be sufficiently complete (1) to indicate its relationship to definite local objectives as to appropriate land uses and improved traffic, public transportation, etc.," and provides further, "that the Administrator take such steps as he deems necessary to assure consistency between the redevelopment plan and any highways or other public improvements in the locality receiving financial assistance from the Federal Works Agency" (now the Department of Commerce).

The Administrator is also directed by the Act to "encourage the operations of such local public agencies as are established on a State or regional (within a State), or unified metropolitan basis or as are established on such other basis as permits such agencies to contribute effectively toward the solution of community development or redevelopment problems on a State, or regional (within a State) or unified metropolitan basis."

One of the basic considerations in planning for the development or redevelopment of any area eligible for financial assistance under Title I is the relationship of the area to the street and highway work which serves the city and the locality. The location and character of existing or planned major streets or highways in the vicinity of a proposed redevelopment project will not only influence but may be the principal factor in the determination of the
new uses in the project area. It is important in any case that the street system of any redevelopment project be integrated with the major streets and highways of the community and the locality, and that redevelopment plans be prepared with full knowledge of any proposed changes or improvements in the major street or highway systems. Problems of traffic and parking and public safety and convenience must be carefully considered and provisions included in redevelopment project plans which will best serve the new uses in the area as well as the community as a whole, and which will be consistent with the long range plans for street and highway improvement in the locality.

Applications received to date by this Agency from many cities throughout the country have focused attention on the importance of urban highway programs in the general planning being done for the development of these communities as a whole.

Solution of problems of traffic, parking, provision of terminal facilities, ease and convenience of intercity and interregional access to areas now devoted to or proposed for industrial or commercial uses, together with other problems attending the continued decentralization of commerce and industry and shifts in population to the suburban and rural areas, are basic to the development of sound plans for land use and for the provision of community facilities and services. The conclusion has been inescapable, that lacking up-to-date scientific information such as results from modern urban traffic and parking studies and a clear understanding of those factors which influence and establish the basis for design of the major street and highway system, planning for the future development of our cities or for redevelopment of worn out areas within them cannot proceed with any assurance that our planning will help us to avoid the recurrence of the very situations we seek to correct.

We are convinced, therefore, that there is need for close liaison and a free interchange of information between the local redevelopment agencies and the local, State and Federal agencies responsible for urban highway planning and development if redevelopment planning is to proceed in a manner which will accomplish the objectives of all agencies concerned.

We have said that the results of urban highway planning and research are indispensable to sound planning for development and redevelopment. On the other hand, we believe that the proper replanning of worn out or arrested areas of our cities can be an important factor in justifying and supporting the need for realization of the street and highway plans.

PSYCHOLOGICAL RESEARCH

It seems to me that we must continually search for an understanding of some of the following questions behind human behavior as it relates to the automobile. Let me suggest here a partial list of both psychological and social-psychological problems we as planners and you as researchers should consider. Traffic volume and roadway construction research and analysis will have greater value to all of us if we keep alive studies of this suggested type.

QUESTION NO. 1. Why do people want to own automobiles?

This question has several possible answers, any or all of which may be pertinent to our studies. We know that convenience is not the only reason for auto ownership. By this I mean convenience of travel from place of residence to place of work or between places of work. We know that many people make trips by car who could do so better by public conveyance at less cost and, in many instances, within the same time limits. We know that the housewife often uses the car for shopping when again she could do it as conveniently by public conveyance or by walking. We know that there are a great many unnecessary trips made and experience in the last war during the restrictions on gasoline and tires indicated that many automobile activities could be curtailed, although we recognize that commensurate gearing up of public conveyances did not take place.

We do know that people very often
acquire cars simply to own them or because they want a bright shiny gadget which they can show off. Part of the custom of the country is that every family shall own a car - at least one. We have to accept this as part of the personal pride of each family and recognize that any shift of population planned for in urban redevelopment or development will, in all likelihood, include a shift in automobile location in number approximate to the shift in the number of families.

QUESTION NO. 2. Why is the automobile used as an instrument of recreation?

The automotive week-end, which is one of the phenomena of American living, requires much research and analysis. In other countries the week-end is a day of rest or is devoted to work in the garden or around the home. "Let's go for a drive", is the standard statement of the American family on Sunday and the hegira from the city to the country and return or tours within the cities, cause one of the major problems which we face in handling week-end traffic. In many parts of the country, one of the curiosities of the week-end is the driving by those less fortunate in their residential accommodations through the better or "snooty" residential districts - a kind of Cook's tour of the mansions. It has been the thought of several city planners that were the American public to be housed in less congested conditions providing for more garden space and recreation area that the desire and need for getting away from the slum or the high density areas would be lessened and that week-end driving might be curtailed, thereby reducing both the accident rate and congestion of highways. It is recognized, however, that there is a certain psychological satisfaction in movement within a vehicle, which raises the third question:

QUESTION NO. 3. Why do people like to drive automobiles?

There is undoubtedly a physiological satisfaction for more people in the sense of motion and speed. One of our most serious problems in residential neighborhoods is the high school kid with the jalopy who spends whatever time he can in indulging in the satisfaction of high speeds and the dangerous maneuvers of his not too well controlled vehicle. Until we know more about the fundamental satisfactions obtained in getting behind a wheel and putting the foot on the accelerator, we will not have a full understanding of how to control traffic and design our cities accordingly.

QUESTION NO. 4. How does one design a street pattern for psychological and physiological safety?

This is perhaps the most difficult of all the research problems in this area on which we need immediate help. Until such time as automobiles are equipped with radar and automatically slow down or stop when they approach each other or a telephone pole or a slippery curve or a pedestrian and the question of safety is taken out of the pilot's hands, the design of new streets and the redesign of old ones becomes the most complicated problem we are facing in our orientation of the redesign of cities. In urban redevelopment this is particularly important since we are anxious not to perpetuate the engineering mistakes of the past. We recognize, however, that a compromise is constantly necessary with existing land use and ownership patterns. We do not know, however, what those things are which we should avoid. There has been a good deal of discussion as you know about the effect of billboards as distracting influences on the eye of the driver. In some states the billboard at curves or on dangerous roads has been legislated against as a matter of safety. There are undoubtedly other distractions which we are continually creating and about which we know very little. Road side markets and uncontrolled ribbon development of a commercial nature with its attendant curb cuts and the distractions of neon signs and heterogeneous architecture are to be considered in the same
category. Mr. Kipp's report on this subject deserves most careful consideration. We also know, of course, that each individual will react to the same stimulus in different ways - just as we know that there is infinite variation in the physiological reactions to danger and sudden fright, as well as an infinite variation in the competence of people to concentrate.

QUESTION NO. 5. What is the best method to encourage travel by public conveyance instead of by private car?

We all recognize the fact that the continued increase in the number of private cars used in journeys to work movements per day adds to congestion and the cost of municipal management. It is also a recognized fact that public conveyance can be a much more efficient and, in many instances, a safer method of transporting human beings from residence to place of occupation. However, despite logic and facts, many public transportation systems are failing and there is an increased difficulty in getting people to travel by bus, street car, or rapid transit vehicles. It is mandatory, if further decentralization takes place, or because of civil defense purposes dispersal activities shift work centers, that a solution be found to encourage people to travel again by public conveyance. At present there is undoubtedly a shift away from mass transportation. Research is needed into how to make a mass transportation system attractive and satisfactory and a complete analysis is essential of the journey to work.

Research is needed into the degree to which these physiological and psychological problems mentioned above should influence our city planning. I am certain that these fundamental questions require continued study.

Since urban redevelopment has the purpose of rebuilding cities along more modern lines and cleaning up blight and slums in the process, it is our hope that all technicians working in every phase of this activity will realize the mutual interests which are involved. Such mutual interests raise a whole series of new questions themselves requiring investigation, some of which I will try to touch on here illustrating with specific examples.

QUESTION NO. 6. The relationship between urban highway development and urban redevelopment.

It should be quite obvious that the replanning and rebuilding of slum and blighted areas would include where appropriate the replanning and rebuilding of the urban road pattern. However, the replanning of the urban road pattern of a locality would be, in our concept of local government, the function of the local planning agency responsible for the preparation of the general plan of the locality as a whole. In only very rare instances will the local planning agency also serve as the local redevelopment agency and therefore, for the purpose of our present activity, we distinguish between the two responsibilities. Urban highway planning is a land use function of the general plan which is the responsibility of the local planning agency working with other local governmental units. All urban redevelopment projects, by Federal law, must relate to a general plan of the locality as a whole. Where the general plan provides for highway improvement, including street and parking improvement, and such improvements affect or are affected by the local urban redevelopment program, then a relationship between redevelopment and highway planning may be developed.

While such a relationship on the surface may appear indirect, quite the contrary is the case. A number of cities participating in the Title I program of the 1949 Housing Act are using urban redevelopment as a basis for a major alteration in the street pattern and we are assisting in the financing of advance planning for these projects and the ultimate land acquisition. A noteworthy example is that of Nashville, Tennessee, where plans and estimates are well along in a program for the construction of a limited access highway in an area now a slum imme-
diately adjacent to and around the capitol. In this case the acquisition of land includes not only the right-of-way for the highway but other properties as well which are to provide for public buildings and park area. In Nashville, then, the first project in the urban re-development program involves an important addition to a local highway system as part of a planned multi-purpose improvement.

In Norfolk, Virginia, there is another important development, this time tied in with a large public housing program for the rebuilding of Negro slums. The bridge now under construction connecting Norfolk with Portsmouth is a single purpose structure. I am not questioning its design or structure or its importance as a connecting link to eliminate an outmoded ferry system but until the Norfolk Housing and Redevelopment Authority came along, the traffic generated by the bridge was to be dumped without choice into the already overcrowded and narrow streets of a century old slum. From here this traffic was supposed to percolate through a maze of smaller connecting links and over railway tracks either to the business district or to the several radials into Norfolk which, stopping at the edge of the built up area, have never quite formed a system. Working closely with the Planning Commission, the Authority and its redevelopment consultants made a careful study of the possible effect of this pending traffic jam on the city. They realized how mixed a blessing the new bridge could turn out to be having found that unless the bridge traffic could be controlled and diverted to specific channels, no redevelopment plan could be satisfactory. As you know, contemporary planning thought diverts through traffic around residential areas and planned neighborhoods. With this in mind, then, the Norfolk Authority came to the Slum Clearance and Urban Redevelopment Division with a project of approximately 110 acres of housing reuse and approximately 70 acres for industrial reuse tied together by a new belt highway leading as a major thoroughfare, partially limited access in type, cutting a swath through the slums and connecting the new bridge directly with the radials mentioned above. The right-of-way for this road and interchanges and connecting arteries is part of the urban redevelopment project. Land acquisition for this major road and some of its connections is financed in the same general way as is other land acquisition in the urban redevelopment program, through loans and grants-in-aid. The grant-in-aid is made available when it is determined that the reuse value is less than the cost of acquisition. In this case, while the State Highway Division has approved the project, some state or other Federal funds may be in the offing for it. Construction of the roadways themselves - pavement, utilities, etc., - can count towards the one-third local grant-in-aid required by the Housing Act, provided no other Federal aid is used for this purpose. Ownership of land and improvement for the new system will be vested in the city of Norfolk, though the housing project will remain property of the Federal Government and the industrial areas will be sold to private enterprise. Here again, you can see a multi-purpose redevelopment program with a highway improvement as a major element in it.

There are many other cities in the urban redevelopment program in which land acquisition for urban roads plays an important part or in which an urban road program directly affects our work. We can assist in the supplementing of local municipal or county programs in which a project requires highway improvements and such improvements relate both to a general plan and the project plan. By careful coordination of the two Federal aid programs it should be possible, in many instances, to make the grant-in-aid dollar go much farther. The fact that the Housing Act of 1949 specifically states that a redevelopment plan for a project shall be sufficiently complete to indicate its relationships to local objectives as to improved traffic and public transportation, among other public improvements, gives weight to our purpose here.

I could go on citing a number of other instances of cities. Perhaps I should add that in Cincinnati which has selected eight areas in the Lower Mill Creek
Valley. The Mill Creek Expressway now under construction which will serve part of the interregional highway plan as US Route 25 involves slum clearance and redevelopment. In Honolulu, Area No. 1, at the fringe of the central business district, involves an arterial six lane divided highway at grade. This highway will serve as a principal distribution artery for traffic from the central business district and is part of the Federal aid program of the Bureau of Public Roads.

QUESTION NO. 7. Can urban redevelopment funds be used for the clearing of land and its acquisition for parking purposes?

The answer is "Yes". A redevelopment project may be in whole or in part for parking purposes. It could be part of a municipal financed parking program in which case the municipality may become the redeveloper. It could be a private parking garage in a private enterprise commercial redevelopment project. There are several possible variables. Compliance with the general planning requirements of the Act and the residential land use provisions of the Act form certain restrictions which do not present a wide latitude in choices. Several cities are already including parking and garages in their redevelopment schemes - Chicago's Project No. 1 includes a large garage, and two large private residential parking lots and one large shopping center parking lot in a slum clearance scheme for which demolition is already under way. Paterson, New Jersey, in its Area No. 1, is proposing a street extension and a new bridge over the Passaic River, as well as a circumferential route around the business district. Part of this program includes a four or five story municipal parking lot. It is important to recognize that we are not interested in providing assistance for isolated parking lots. At all times they must be related to a project, or if the redevelopment program itself is a parking plan, it must be directly related to a general plan of the locality as a whole. We have rejected several applications where a single parking lot has been the only proposal. We certainly hope that the time will come when the entire circulation plan for a city will include the necessary storage facilities that will be required as new business ventures are developed and as improved highway conditions are made between the central business district and outlying parts of a city. Slum clearance and urban redevelopment can play a very important role in providing planned storage space where it is a logical part of the community development. This leads into a series of research projects in which we will need your help and on which I will enlarge below.

The first five questions I did not attempt to answer. The next two I did. The next three I pose for further consideration. They are questions on which I hope we can work mutually, since they are part of our joint efforts.

QUESTION NO. 8. How do we prevent highways from contributing to ribbon development?

It has been discovered that ribbon developments along roads and highways tend to create blight and slum. Much ribbon development is commercial in nature and sporadic in character. Our primary problem in ribbon development occurs along main arterial routes within cities with commercial development cutting the efficiency of the roads and adversely affecting adjoining properties to the rear of land abutting on the roads. Zoning to date has not proved effective in adequately limiting such development or correcting standing conditions. Some of our worst slum and blighted conditions occur in the vicinity of such development and are either created by it or contribute to the ribbon development problem. In many instances the assessed valuations of land along routes makes the clearance of ribbon blighted conditions almost impossible, and a number of projects have come in to us for clearance behind a wall of commercial slum. This is a phenomenon so common to urban development that it requires special study before any solution can be found. Certainly, from the
standpoint of urban routes and efficient land use, a concerted effort should be made to find a means of eradicating this traditional pattern.

QUESTION NO. 9. Does Midway development improve land values and if so, how much?

Apparently highway development of certain types is beneficial to land values in industrial areas. In urban redevelopment industrial reuse of slum residential land is possible and the appropriate redesign of an industrial and commercial street system is needed. If we maintain the usual existing grid pattern as a basis for industrial reuse, we will undoubtedly handicap such reuse. Much further information is needed on the kind of urban roads needed for industrial areas to handle trucking and docking facilities for a new industrial development.

Conversely to the industrial highway development, it is apparent that excessive traffic for highway development tends to lower residential land values. While we recognize that it is important to provide easy access from residential to work areas, planning programs are attempting more and more to insulate residential areas from high speed traffic concentrations. There are a number of instances, however, in which new developments adjoin freeways or limited access highways, but we do not know what the effect of proximity is on residential reuse value. Careful appraisal of existing situations is needed to indicate the character of the protection which needs to be afforded the residential areas and what use to make of border strips of land where high speed traffic may constitute a nuisance which cannot be avoided.

QUESTION NO. 10. Is it possible to develop a nationally acceptable system of street and highway types?

One of the problems facing planners today is the development of an acceptable pattern of street types, grading from the limited access highway as the primary or maximum to the pedestrian street as the possible minimum in intensity of use. Apparently throughout the country there is no accepted terminology on road classification in terms of widths of right-of-way, pavement widths and types for all kinds of roadway plans. Maybe such a uniform classification would be undesirable, but as we attempt to differentiate more and more between kinds of traffic and kinds of land use in a planned community, the need for standards of roadway design which can be universally applicable becomes more apparent. As part of this, we also need the development of standards of the location of underground utilities and services and a better application of principles which can be uniformly accepted to both new subdivision development and the redesign of old street patterns. For the city planner there can be no dividing line between one type of roadway and another. Each has its function and each may be able to become part of an over-all communication system within a community. The old pattern of city streets has been one in which a street has limitless purposes. This has proved most unsatisfactory in practice, and to the greatest extent possible, we must modify the existing patterns and create in new developments new patterns to meet the needs of the people who will be using the streets. We must provide for the minimum of friction between the people for whom the city is being planned and the vehicles which they use in the performance of their daily activities.

SUMMARY

To summarize the highway problems as we see them today would be a most difficult thing to do in this short paper. I can only highlight a few of the questions which our new urban redevelopment program is raising. I can assure you that it is our hope that, by collaborative effort between the Federal agencies concerned with the physical development of communities, there can be created a sound advisory system whereby communities throughout the country can work to a common objective, - the
improvement of environment for living and for work and for the elimination, within our lifetime, of the hazards which we are all facing in making correct use of this presently lethal weapon, the automobile.

RESTRICTED DEDICATION OF RIGHTS-OF-WAY FOR NEW EXPRESSWAYS OR OTHER LIMITED ACCESS FACILITIES

J. B. Hutton, Jr., Attorney
Legal Division, Bureau of Public Roads

RÉSUMÉ OF ARGUMENT

There is no uncertainty as to whether a highway may be established in which an easement of access in favor of abutting landowners does not exist: the laws of 31 of the United States and of England permit establishment of highways to which abutters may have no access.

The point in issue in this argument is whether payment is required for not giving access rights to abutters at the time a limited access facility is dedicated, whether abutters' access rights necessarily exist or must be granted when a highway of limited access type is established on new location, and so must be extinguished, and paid for, as property rights in the new highway facility appurtenant to the adjoining land.

To clear the point in issue, authorities are presented which prove:

I

By definition, an easement is a right in the land of another: it is not a natural property right inhering in ownership of land per se.

Easements are created by grant, since they are not inherent property rights.

Easements of new kinds may be created if not against public policy.

II

Abutters' rights of access to highways are easements, are derived from grant, express or implied, and hence by the conditions of grants new modes of access or no modes of access may be created, which vary from the usual types, as by denying all direct access from abutting land and permitting access only at established junctions via such local, service roads as exist or may be created for the purpose.

Payment of damages to abutting landowners is not required for not creating or giving access rights to highways in the grant or dedication which establishes such highways, because