IT IS my belief that history will judge the success or failure of any urban highway project by the way it meets or fails to meet four conditions: (a) Was the route in the right place as a transportation facility? (b) Were those displaced handled justly? (c) Were the neighborhoods through which it passed better off or worse off than before? (This relates to the idea of compensatory joint development as opposed to optional joint development opportunities.) (d) Was the city and region as a whole improved economically, socially, and environmentally?

During the first year of the two-year Baltimore Urban Design Concept Team project I have heard joint development both oversold and undersold. One myth is that it is a kind of candy that automatically comes along with an urban highway. However, I am not as pessimistic as Ed Logue, former Director of the Boston Redevelopment Authority, now head of New York State's Urban Development Corporation, who said at the recent NAHRO conference, "What the national government is presently doing and contemplates doing is not only not going to make any difference, it is going to make it worse, because it is arousing expectations with no possibility of fulfillment and no appropriations seriously sought."

In the Baltimore Project, with 60 percent of the time now elapsed, there is measurable progress in joint development planning but it is still too early to tell whether delivery will be achieved.

I would like to first bring out a few background facts on the Baltimore Project and then describe in chronological order the highlights of the Team's joint development operation and then to discuss administrative aspects of local, state and Federal Government.
Background

This experimental program, primarily funded by the Department of Transportation through the State Roads Commission of Maryland, has as its objective: “To assure that the Interstate system within the city will provide for the social, economic, and aesthetic needs of the city’s environment, as well as provide an efficient transportation facility.”

This is a tall order. When it comes to the hard cash realities this means that the Team must design, engineer, and promote programs to assure that the social, economic and aesthetic requirements are met in sufficient quantity and in sufficient time to match the already available road funds. The participants in the Baltimore Team are a Joint Venture consisting of Skidmore, Owings & Merrill; Wilbur Smith and Associates; Parsons, Brinkerhoff, Quade and Douglas; and the J. E. Greiner Company. Consultants are in housing, Charles Abrams; in economics, Real Estate Research Corporation; in sociology, George Grier; in acoustics, Bolt, Beranek and Newman; and in design techniques, Kevin Lynch; as well as others.

The actual condemnation line of the Baltimore Project was given to us before the project began. It goes through Leakin Park, then enters from the west, the ghetto area of Baltimore, Rosemont, Franklin-Mulberry Corridor, and Fremont. Then it goes down in the Inner Harbor adjacent to an urban renewal project and runs along the waterfront near Fells Point. The southwest leg comes toward Washington and runs generally through the middle branch and through a lot of open space.

The process network is fairly straightforward to draw on a piece of paper but extremely difficult to do. The end products that we visualize are three: the road alone, the road in conjunction with the joint development physically that is necessary to have it fit in the city, and the environmental programs, such as compensation, that are not built but are fundamental to locating a highway in a city.

Joint Development Studies

In the Fall of 1967, when we began, the Concept Team did a preliminary survey of the 24 miles of route that passed through park, ghetto area, waterfront, and historical and industrial areas, as well as open space. We began by developing exploratory initial concepts. In one area, the Franklin-Mulberry Corridor, this concept displayed all the things that this hardpressed, already half-demolished ghetto area appeared to need at first glance: job facilities, recreation, housing, schools, and commercial facilities.

Last winter, programming took a harder look and together with the City Planning Department and School Board evolved a proposal for a three-block school and multi-service center for the neighborhood. The
School and multi-service center using the air rights over the Interstate highway and rapid transit routes through Baltimore, Maryland. (Source: Urban Design Concept Associates, Baltimore, Md.)

Concept Team developed preliminary design and cost analyses for the facility and submitted them to the Federal Highway Administration.

Three schools were programmed in the area and to build them on other blocks would have meant even more relocation, even though land values from a purely economic sense are about $2.00 a square foot in the area. This scheme was costed out to be somewhere between $15 to $30 a square foot, essentially for the platform — at one point it ranged about $4 or $5 million of premium over building the same facilities on "dry" land. Still there was a great deal of support for the concept in the Bureau of Public Roads.

According to a later plan drawn up about four months ago, the Franklin-Mulberry Corridor would retain perhaps half of the land for recreation, housing, and other development instead of using the whole corridor for transportation.
The subject of acoustics and noise is something we are considering very seriously. One idea to decrease the noise in terms of decibel rating is to simply depress the road. However, this still causes problems. You find high levels of noise in the adjoining houses with noise on the upper floors 50 and 60 decibels, because there would be not only the depressed highway but existing traffic on Franklin and Mulberry Streets. One solution would be to put walls and joint uses that will contain or dampen the noise level adjacent to it. We are tracking carefully the noise output from various configurations of design. Another idea is to bury the road under decking or in a tunnel and thereby eliminate a good deal of the noise problem. Ventilation stacks could be clustered together and run through the center of tall buildings in the adjacent area.

Another possibility in the Franklin-Mulberry Corridor is elevating the road in some places. This is still met with horror whenever we mention it but you will see later that there are some possibilities in reducing the ground noise level. If you take the trucks off the existing streets and put them on an elevated expressway there would still be a bad situation in the houses but not quite as bad as it is now. If you elevate it but try to contain the noise by putting in certain uses that might be needed in the neighborhood, this explores possible structural or office uses. Another possibility is an elevated highway and rapid transit in the air down the center, containing the sound by building needed facilities along the sides.

Still another idea would be to stack the transportation facilities with two levels of road plus rapid transit with one above the ground level. A variation of this would be to stack it all on one side, putting the highway below and the rapid transit above, and using the condemned corridors for recreation purposes in some places.

At about the same time last winter the Concept Team also submitted a proposed 500-foot covering of the highway in an important area of Leakin Park as well as a third project called the Quad Street Industrial Park which would put the highway on structure instead of on fill, thereby generating space for industrial development below it. While these three proposals were cooking, the consultants in economics and in sociology were investigating the need for additional joint development projects along the whole 24 miles of the route.

Administrative Actions

The Federal Highway Administrator, Mr. Bridwell, insisted that the Team and the city get together and come up with a whole set of joint development packages with priorities and costs so that the full magnitude could be known before decisions were made on a piecemeal, fragmented basis.

This spurred the city and the Team into a more concentrated and coordinated planning effort. The mayor set up a Coordinating Com-
mittee consisting of the heads of all city departments to meet weekly with the Concept Team and to assign people from the City Planning Department and the Housing and Community Development Agency to work together with the Team in programming and in setting priorities for the joint development projects.

A report was produced in September 1968, outlining some 16 specific projects. Each one was outlined in terms of objectives of development, summary of proposal, programming details and potential implementation resources and funding.

It was agreed by everybody that the first priority joint development project should be the school multi-service center in the Franklin-Mulberry Corridor. The Baltimore School Board, City Planning Department, the Mayor's office, the Housing and Community Development Agency, the State Roads Commission, the Bureau of Public Roads, the U.S. Department of Health, Education and Welfare — all are on record as supporting this proposal. A revised submittal has been made to the Department of Transportation and some decision is expected very soon.

In joint development, the Concept Team also acts as a kind of marriage broker in bringing together consultants with expertise in urban affairs throughout the country with the local agencies. A proposal to set up an urban development corporation in Baltimore to manage joint development projects within portions of the transportation corridor is under serious discussion now. Among its purposes are the following:

1. To provide professional staff capable of identifying, planning, and implementing the development of required housing, commercial, and community facilities;
2. To develop methods of maximizing private and non-city public financing of required facilities;
3. To coordinate participation of the several local, state, Federal, public and private agencies and necessary individual and joint developments; and
4. To prepare or assist in the preparation of applications to appropriate public and private agencies to provide requisite financing.

It is visualized as a nonprofit action agency organized for the single purpose of analyzing and developing solutions to minimize the impact of highway construction on the Baltimore community.

Its organization could consist — and this is still in the speculative stage — of a Board of Directors including the Mayor's Development Coordinator, the Director of the Housing and Community Development Agency, the Director of City Planning, and the Chief of the Interstate Division of the State Roads Commission. The funding for this facility might include either direct appropriations by the Housing and Community Development Agency, grants from national foundations and local civic agencies, contracts with Federal or state agencies including
funds from DOT, HUD, and OEO. The next steps are the securing of informal concurrence of the city officials and formal discussion with foundations and other public and private fund sources.

Conclusion
These are simply a few of the studies that are now in progress, and we have not arrived at conclusions. In order to accomplish joint development in urban areas on the scale appropriate to a 24-mile urban freeway a new industry is needed, as efficient and at least as well-funded as the highway building industry. In Baltimore the work has begun, substantial progress is being made, but the machinery and the funding are not quite in hand at this date. In this we—the Team, the city, the state, and the nation as a whole—are taking significant baby steps when we should be taking giant steps.

Panel Discussion

MR. PIGNATARO: There has been considerable talk about compatible land use as being encouraged and required for joint development. This means that very often housing, recreation, shopping, etc., can be in very close proximity of the highway right-of-way, and yet there are many undesirable aspects of the subsystem regarding pollution, including air, noise and dirt.

It has been claimed by some that about 80 percent or more of the noise is due to traffic. I wonder how we can talk about compatible land use, and housing particularly, when you are so close to all of these undesirable effects? What has been done and what is being planned to minimize these undesirable effects?

MR. KLEIN: The firm of Bolt, Beranek and Newman has been working with us on the Baltimore project in the submittal to the Bureau of Public Roads for the three-block school project. There has been a complete analysis of the acoustics problem and this can be handled as well as the ventilation problem.

The question has been raised, I think, largely because of that George Washington Bridge project. From the engineering advice we get, there does not seem to be any technical difficulty that is not solvable.

As I understand it, the problem in the George Washington Bridge complex is that there was insufficient mechanical ventilation. There were 500-foot platforms on which the houses were built so the lower stories of the building, particularly when the cars were stopped and the exhaust came out in vast quantities, created quite a problem.