

Social Impact Analysis of an Urban Freeway System

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This paper reports on the findings and recommendations of the social impact analysis of the Interstate Highway System in Baltimore. The probable social impact of the freeway under the proposed routing was examined at both the city and neighborhood levels. The analysis disclosed that the freeway, as the largest single construction program ever to be undertaken in Baltimore, would impact heavily on existing negative trends in size of population, racial composition, age distribution, skill levels, and income levels. By selective displacement of black families, mainly of low income, the freeway would create pressures ultimately leading to the acceleration of these downward trends. Only a massive relocation program, planned and carried out with consummate skill and incorporating provision of large numbers of new subsidized housing units, could conceivably avert this result, and prospects for timely implementation of such a program seemed slim. For this reason, the social impact analysis recommended rerouting of the freeway to avoid existing neighborhoods insofar as possible. Partly as a result of this and other analyses, the proposed rerouting was accepted by the Mayor of Baltimore in December 1968. In addition, the social analysis produced recommendations for 4 strategies for social development in which the freeway is intended to be used as a tool to help alleviate existing social problems in Baltimore and to provide improved facilities to meet human needs. Both these recommendations, as well as the factual analysis and rationale supporting them, are discussed.

●IN MAJOR CITIES across the nation, citizen opposition to planned urban freeways threatens to impede completion of the Interstate Highway System as originally planned. Unless expressways in urban neighborhoods can be planned and managed on terms acceptable to residents, freeways within cities may prove politically unfeasible for the indefinite future. Or they may be built only at such cost in civic unrest that their negative residuals far outweigh any positive benefits.

It is increasingly apparent that the opposition to urban freeways is based on real and pressing considerations, albeit very different ones from those that have traditionally concerned highway designers. Thus, for the first time, the social impact of urban freeways has begun to receive serious attention. New means are being sought to evaluate this impact and to devise constructive means for coping with it.

Why do urban freeways invoke such widespread and intense citizen protest? Many factors doubtless play a role, but two appear paramount in many cities: (a) the emergence of the black ghettos as a prime political force on the urban scene and (b) the rising demand for a citizen voice in public decisions, particularly those affecting basic issues such as where people will be allowed to live and how their children will be educated. This demand is strongest from the black community because black people are the group longest denied an equitable voice in this society and are the group increasingly inheriting the central cities.

These pressures converge on urban freeways because freeways remove large amounts of scarce urban land—land needed for homes, businesses, schools, churches,

and community facilities. In addition, freeway routes often go through the heart of the black ghettos, whose physical plants are severely deficient and whose residents are desperately aware that racial and economic barriers exclude them from more desirable areas. Anything that threatens further to degrade their surroundings or to force them from their homes without providing a reasonable alternative will be resisted.

THE BALTIMORE SOCIAL ANALYSIS

This paper reports on an early effort to analyze the social impact of a proposed urban freeway network and to recommend measures that might alleviate negative impact or, if possible, achieve positive benefits. The author was principal social advisor to the Baltimore Urban Design Associates, a design concept team composed of the following architectural and engineering firms: Skidmore, Owings and Merrill; J. E. Greiner Company; Parsons, Brinckerhoff, Quade and Douglas; and Wilbur Smith and Associates. The work was performed under contract to the State Roads Commission of Maryland and was aided by federal funds channeled through the Commission. The concept team was charged with restudying the freeway plan already adopted for Baltimore City and developing recommendations for making it less damaging, hence more acceptable, to the neighborhoods through which it passed.

The social analysis played a role, along with economic and engineering analyses, in the recommendation ultimately adopted by the concept team that the freeway should be rerouted to bypass most black residential areas as well as certain valuable historic and scenic locations. This recommendation, with minor modifications, was accepted by the Mayor of Baltimore in December 1968 over the opposition of the State Roads Commission of Maryland.

On the basis of the findings on social impact, to be discussed later, rerouting was clearly the best solution available. However, it invalidated recommendations on joint development programs and social services intended to provide compensatory benefits to the community in the event that the original route could not be altered. Some of these second-best solutions will also be discussed, with the caution that they were definitely less desirable than the decision actually adopted.

No apologies will be made for the rather primitive state of the art under which the analysis was conducted, which required superimposing a strong element of judgment on the data, or for limitations of funds and time that restricted the method almost exclusively to reanalysis of data from secondary sources. The effort is presented for what it was: a beginning attempt in a field where much improvement is both needed and increasingly possible with advances in the technology of social research.

An additional limitation to the methodology should be acknowledged. The work plan for social analysis had originally specified that the subjective viewpoints of neighborhood residents, obtained through a structured communication process, were to be given equal status with objective data in formulating the recommendations. Chiefly because of strictures placed on the concept team by the State Roads Commission, which initially refused to allow study of alternate routes and forbade direct contact with the citizenry, these recommended procedures were not implemented until the deadline for submission of the final report on the social analysis was well past. It remains the author's firm belief that responsiveness to citizens' needs and desires is essential to the sound formulation of public programs, especially those impacting directly on citizens at the neighborhood level. This, then, is one area in which the method used here is subject to immediate and substantial improvement.

DESCRIPTION OF THE FREEWAY NETWORK

The proposed routing of the Interstate Highway System through Baltimore encompassed 3 legs passing across the city from points on its western, southern, and eastern boundaries and intersecting at a point near its center. These legs were to be joined with a limited-access expressway already built from the northern border to the periphery of the central business district. The complete network formed 4 spokes of a wheel, the rim of which was the Baltimore Beltway. The total length of the new routes approximated 13 miles. This mileage is very small compared to the Interstate Highway System

nationally. From the standpoint of the City of Baltimore, however, it would be the largest single construction program ever undertaken.

The physical impact would be huge. Total land area with the condemnation lines approximated 1,000 acres. This figure can be compared with only 4,748 acres of undeveloped land that had remained within city limits in 1962 (the most recent available figure, and no doubt substantially diminished since that date). It can also be compared with a total of 5,148 acres of park and recreation space within city limits in 1967. It approximated the total amount of additional acreage required for recreational and open space improvements under the city's master parks and recreation plan. But the land to be taken directly for freeway construction was only a small part of the total affected. Whether freeway traffic is seen and heard over substantial distances depends on the design employed.

In fiscal terms the project would also be gigantic. The total estimated cost of construction was estimated at an early point in the concept team's analysis at well over \$300 million. (More recent estimates are closer to \$500 million.) This cost approximated the \$350 million estimated capital investment to renew and expand the city's public education system under the school facilities master plan. It was roughly comparable to the massive commercial and residential renewal program currently under way in Baltimore's central business district.

The freeway would also have major impact on the city's housing stock. The 3,653 housing units ultimately to be removed represented almost one-fifth of the total anticipated displacement by all public programs for the 10-year period from 1965 to 1974. Much more important, this impact would be highly selective. The freeway would destroy many of the worst units but would remove relatively few good ones. Against this benefit, it would create a massive relocation problem. Of the families to be displaced, over 80 percent were estimated to be black and most were poor. The existing housing supply contained virtually no vacancies at prices these families could afford; little new housing being built locally was then available because of racial barriers, and even that little was seldom within economic reach of those families displaced.

The rehousing problem for those displaced by the freeway was relatively easy to define and analyze, though much less easy to solve. The major conceptual problems to be dealt with were concrete and quantitative: number and size of units needed, site requirements and availability, and cost and financing considerations. Thus they were largely handled by the concept team's economic consultants, Real Estate Research Corporation, with some input from the author.

The major obstacle to a workable solution lay in the need for a very large input of public funds, either in the form of subsidy for new housing construction or of direct payments to the families displaced. One major recommendation arising out of the relocation analysis—that compensation for residential properties acquired be substantially increased over traditional fair-market-value levels—ultimately had influence on both state and national legislation. But it was of help only to homeowners. Most renters, who comprised the bulk of black displacees, would require subsidized rehousing resources at tremendous cost. The needed housing was not even on the drawing boards and would require many months to plan and build even if funds would be obtained. As the project proceeded, it became increasingly evident that an adequate relocation plan would not be forthcoming on a timely basis.

The social analysis, therefore, devoted major attention to the probable impact of the freeway on both the city as a whole and immediately adjoining neighborhoods under the assumption that an adequate relocation program was not likely.

CITYWIDE SOCIAL IMPACT ANALYSIS

In view of the magnitude of the freeway plan as described earlier, we decided to focus the social impact analysis initially at the citywide level in terms of assessing overall trends and the potential impact of the freeway network as a whole on these trends. Separate impact analyses were also conducted at the neighborhood level for individual segments of the route. These neighborhood analyses supported the findings of the citywide analysis and sharpened its conclusions.

Some of the citywide findings were deeply disturbing because of the picture that they revealed of Baltimore's current social health and the prognosis for future trends. It quickly became evident that the freeway—or rather the processes of displacement, condemnation, demolition, and construction that attended its development—would be impinging not on a stable social environment but rather on a rapidly decaying one. Following are some of the key findings.

General Population Trends

According to the best available evidence Baltimore City has been losing population at a rapidly accelerating rate since the 1950's (Fig. 1). The decrease between the 1950 and 1960 Censuses was slightly under 11,000 persons or about 1 percent of the total. Although not large, this loss represented a dramatic reversal of a prior trend of uninterrupted growth exceeding 6 percent per decade throughout most of the city's history. The Baltimore City Health Department estimates that this rate of loss accelerated to 4 times the 1950-1960 average in the first half of the current decade. This estimate is based on vital statistics, which have proved to be highly reliable indexes of overall population trends at the national and local levels. Extrapolation of the trend indicates that the city's total population has now dropped below 900,000—over 50,000 persons, or 6 percent, under the 1950 peak. The prognosis is for continuing decline, perhaps at a somewhat slower rate, unless strong countervailing factors not now in evidence are brought into play.

Census statistics are known to undercount population in black ghetto areas; this fact would affect the statistical base of the trend analysis. Therefore, a correction

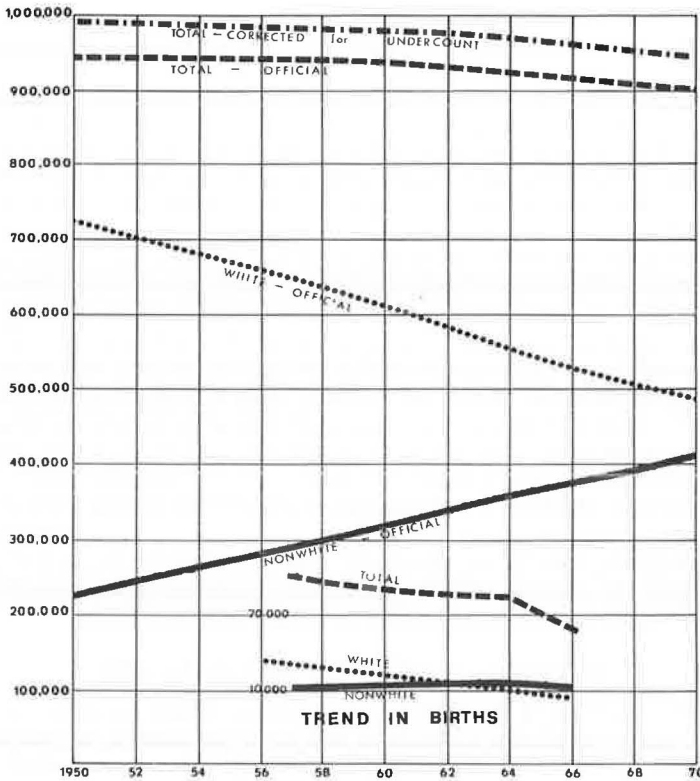


Figure 1. Population trends in Baltimore City from 1950 to 1960 and estimated for 1960 to 1970.

was made for estimated undercounting, based on a procedure developed by U. S. Bureau of Census sources. The revised estimates produced larger figures for all years since 1950; but the downward trend remained unaffected. This trend, it should be understood, is for the City of Baltimore alone. The Baltimore metropolitan area has continued to grow, and thus the loss represents a draining off of the city's population into its suburbs.

Color Shift

The centrifugal movement of Baltimore's population has been accompanied by a marked color shift. Between 1950 and 1960, nonwhites in Baltimore City increased from 24 to 35 percent of the total by official census count. By 1969, the estimated proportion had risen to 45 percent. Corrected for census undercounting, the 1969 non-white population stands at 48 percent. (The nonwhite figure includes Orientals, American Indians, and other nonwhite races in addition to Negroes. However, the number of these other groups is virtually negligible.)

It is clear that Baltimore will pass the 50 percent nonwhite mark this year or the next. At the same time, the proportion of nonwhites in the population of Baltimore's suburbs has been declining, because the suburban exodus from the central city has been almost exclusively white. White expansion has overwhelmed small black suburban enclaves, sometimes forcing their residents to relocate in central ghetto areas. Thus, the growing racial ghettoization of the central city results in part from racial exclusion in the suburbs.

Within the Baltimore City, rigid racial segregation also exists on a neighborhood basis. Baltimore neighborhoods, virtually without exception, are either all white, all black, or in process of racial change. Change once begun is usually rapid and complete. Today, nearly 90 percent of all census tracts in the city are estimated to be either less than one-fourth black or more than three-fourths black. And the process of racial transition continues at a rapid pace. About one-fourth of all census tracts in Baltimore are currently estimated to be undergoing racial change.

Baltimore's black population inherits the accumulated inequities of more than 2 centuries of systematic exclusion from good schooling, good neighborhoods, and equal access to jobs. It is at a disadvantage relative to the departing whites in job skills, employment rates, income levels, and dependency rates. Therefore, as the proportion of black residents increases, the city's potential for coping with its own problems declines, and the incidence of those problems grows.

Age Shift

A pronounced shift has also occurred in the city's age structure. Most important has been a significant decline in the age brackets from 25 through 64 years that contribute most to the city's leadership and economic potential. In this group the loss was nearly 43,000 persons from 1960 through 1966. In the same period, the number of children of school age increased by approximately 15,000, and the number of people past 65, by somewhat over 5,000. Thus, the number of school children and dependent elderly persons requiring city services increased while the taxpaying population who could pay for those services declined.

When race is superimposed on the age statistics, the changes become even more striking. Baltimore's white population declined in all age brackets except the very oldest. Today, white adults in Baltimore include at least as many persons past 50 as 49 or younger. The number of white children is declining; the ability of the white population to reproduce its numbers is diminishing to the point of no return. Recently, for the first time, deaths began to outnumber births among white residents.

The nonwhite age structure, by contrast, remains much more "normal" and much more like that of the U. S. population, regardless of race. Most age groups among blacks are increasing in numbers—with the greatest proportional rise being among teens and young adults, who increased 35 percent in the period from 1960 to 1966 alone. These young people, therefore, represent the greatest hope for the city's future. They also pose the greatest hazard to its continued social well-being, if their needs for adequate education, jobs, and recreation are not served.

Analysis of Overall Population Changes

Taken together, these changes hold profound implications for Baltimore's future. A continuing decline in numbers is clearly in prospect for some years to come, unless reversed by a substantial increase in in-migration or in births, or both. Increased in-migration is not likely. Younger whites are overwhelmingly likely to continue moving to the suburbs, and older whites to die off without replacement. Black in-migration to the city, meanwhile, has slowed to a trickle. Only a dramatic improvement in job opportunities would be likely to draw black people to Baltimore from elsewhere. (In 1960, 10 percent of the black civilian labor force was unemployed; scattered data indicate that the situation has grown worse since.)

Neither is the prognosis as to natural increase encouraging. White births will almost surely continue to decline. It is possible that births among black residents may rise sufficiently to reverse the decrease in total birthrate, but such a change would mean even more rapid racial transition. Reversal of the present trend toward increased black dominance can only occur through measures that greatly enhance the city's attractiveness to whites who have many other alternatives available. That means massive public expenditures. The age shift makes it increasingly difficult for Baltimore to mount such a public improvement program. The effect on the tax base of replacement of middle-class whites by poor blacks is compounded by the fact that the whites who remain are increasingly in the retirement years.

Probable Freeway Impact

The probable impact of the planned development was analyzed both for the city as a whole and for neighborhoods in its path. This analysis, as noted earlier, involved the application of judgment, together with logic and accumulated knowledge in relevant situations, to the interpretation of the social data.

In the first place, the author concluded that the 3,600 families to be displaced could tip an already unstable system into total imbalance. Approximately 80 percent of these persons, as indicated earlier, are black, and the great majority of these are poor. These facts result naturally from the planned route of the freeway through many of the city's worst neighborhoods.

Numerous studies of relocation, in Baltimore and elsewhere, have indicated that the majority of displaces are rehoused near their former places of residence. Commonly, at least half relocate within a radius of 1 mile. Unless a massive relocation program, skillfully planned, averts this result, the major impact would fall on immediately surrounding neighborhoods—most of which are already heavily black and deteriorating. Despite the decline in total population, there are very few decent vacant housing units available in these neighborhoods. Units left vacant are generally substandard; even if not, they are immediately and extensively vandalized. The immediate result would, therefore, be further overcrowding and deterioration.

A secondary consequence would be that black residents of such directly impacted neighborhoods who could afford to do so would seek housing elsewhere—probably in neighborhoods in racial transition. In turn, this secondary impact would produce a tertiary result: the accelerated exodus of white families from these transitional neighborhoods and, in all likelihood, from the city itself.

The probable end result of massive displacement from the immediate freeway corridor would thus be further decline in the city's population and acceleration of racial change. By the same token, the age structure would be negatively affected because the white families most likely to leave would be families in their peak earning years with children. This selectivity, in turn, would further damage the tax base.

NEIGHBORHOOD IMPACT ANALYSES

These findings were reinforced when the freeway impact was examined at the neighborhood level. For slum neighborhoods, the probable impact would be generally as that just outlined. Of even greater significance was the probable social impact on 2 neighborhoods that were not slums—one predominantly black and the other largely white.

One heavily black area to be impacted by the freeway corridor is Rosemont, located in West Baltimore. Unlike most of the others, it is not poor but a highly stable middle-class, homeowner area. Rosemont was given special attention by the concept team because it was the prime locus of organized citizen opposition to the freeway. The findings to be discussed are derived from a special survey designed and conducted cooperatively for the concept team by Morton Hoffman and Associates, Real Estate Research Corporation, and the author. It was the only original research for which resources were made available in this project.

Rosemont became heavily black in the mid-1950's, and the great majority of the present owners have resided in their homes since that time. Many are retired or approaching retirement, with 60 percent of household heads being 50 and over and one-fifth past 65. Many of these families hold substantial equities in their homes, but would face hardship in obtaining new mortgages because of age. If they could do so, however, they would be likely to relocate in transitional neighborhoods, displacing white families.

In Rosemont, over 800 households would be directly displaced by the freeway under the proposed routing. However, this direct displacement impact would account for only a fraction of the total impact. The freeway route, which followed the major commercial artery, would wipe out the majority of the area's shopping facilities and would separate the bulk of the neighborhood from 3 supermarkets on its periphery that supply the food requirements of two-fifths of its households. Shopping would become especially difficult for the 40 percent of Rosemont households that do not own automobiles, many of whom are elderly.

The freeway would also destroy many of the social facilities that helped make the neighborhood an attractive place for many of its residents. At least half a dozen churches, including both "storefronts" and major denominations, would be displaced. Also removed would be many commercial ventures important to social life such as barber and beauty shops, bars, restaurants, and laundromats. The playground of a major elementary school would be largely destroyed. Rosemont would become an area of homes gutted of most of the facilities and services on which the occupants of those homes depend for both the tangibles and intangibles of life.

Under these conditions, many Rosemont families with the wherewithall to do so would seek homes in more suitable neighborhoods, even though the freeway had left their dwellings physically intact. They too would tend to displace white residents from areas already in racial transition; and some might help to initiate transition in still other neighborhoods not yet affected.

Rosemont itself would tend to draw replacements chiefly from among black families from the central ghetto, who possessed less financial capability and thus had no choice but to accept a neighborhood virtually devoid of essential services. Unless such services were provided, these families with lower economic status and higher incidence of social problems would tend to reduce Rosemont to the condition of the slums from which they came. The beginning phases of this process of socioeconomic deterioration were already evident in the freeway corridor itself, where long-standing anticipation of freeway condemnation had encouraged a number of homeowner families to leave. Their single-family dwellings had promptly been converted to multifamily rental use.

East Baltimore is another stable homeowner area, in some ways similar to and in others very different from Rosemont. The prognosis here must be somewhat less definite than that in Rosemont, chiefly because no original surveys could be made. However, a negative outcome is likely here also. East Baltimore is a collection of white working-class neighborhoods, for the most part having a high degree of cohesiveness and stability. However, these qualities are distinctly precarious. Racial and socioeconomic transition has already begun to occur on its western and northwestern boundaries. Almost any factor that tends to disturb the area may accelerate it.

The uneasy stability of East Baltimore is based largely on its long-time occupancy by cohesive white ethnic groups, chiefly Polish, German, Italian, and Ukrainian. Social interaction occurs mainly through churches and ethnic associations. Pride in ownership of the modest row houses that predominate is evidenced by scrupulous maintenance, including frequent repainting and scrubbing of the white marble steps. Unemployment

rates are substantial, and incomes generally low to moderate; yet pride in self-sufficiency holds welfare rates well below citywide norms.

Many of the white residents of East Baltimore are extremely fearful of blacks, whom they regard as threatening to individual safety and to continued neighborhood stability. The expansion of the black ghetto on the western edge of the area has progressed noticeably in the past several years despite determined resistance. It is a source of great concern. In informal probings, the author found that residents raised the racial issue spontaneously as the key problem affecting their neighborhood. An outside observer would expect them to feel more concern about the obvious shortcomings of public facilities, the encroachment of noxious industry, and the hazards to safety presented by high-speed truck traffic on the residential streets; yet those were barely mentioned.

These facts indicate that the freeway might impact negatively on the social stability of East Baltimore in one or both of the following ways: First, it would contribute additional pressure to the nonwhite housing demand that has already initiated racial transition on its western edge. Second, its disruption of the precarious peace of the neighborhood might encourage white residents to move elsewhere, creating a vacuum into which black home-seekers would move.

The second possibility is less sure than the first, because unattractive industrial uses prevalent in this area cause residents no apparent concern. It is difficult to predict the impact of one more unsightly and noisy facility on their satisfaction with East Baltimore as a place to live. By removing some of the trucks which now travel at high speeds along residential streets, endangering small children, the freeway might even have long-run positive effects. But short-term disruption may well outweigh this prospect, especially if vandalism of condemned buildings is common. Because it would pass along the periphery of East Baltimore (rather than through its heart as in Rosemont), the freeway would have relatively little direct impact on homes and commercial and social facilities.

More important, the massive displacement of black families resulting from freeway relocation would increase the pressures on East Baltimore as well as the city's other remaining all-white neighborhoods. Because transition is already occurring, the dam has been breached and acceleration would be relatively easy. Incoming black families would not be likely to find East Baltimore as satisfactory a place to live as do the whites who now reside there, partly because many of the area's social and recreational needs have long been satisfied by its churches and ethnic associations. These would flee the area along with its white residents. East Baltimore is seriously undersupplied with public facilities as a result; a large investment would be required to suit it to the needs of a less self-sufficient group. Prognosis for physical and social blight as an accompaniment to racial transition is strong.

In this situation, the author's recommendations took 2 forms: First, both orally and in written memoranda and reports, he repeatedly stressed the potential negative impact of the freeway as originally planned. He offered no assurance that any proposals for counteracting this impact would have the desired effect. Second, in response to his contractual assignment, he proposed the joint development of the freeway and a number of facilities that were intended to help alleviate existing social problems and to help counteract the anticipated negative effects of the freeway development. Four general strategies were recommended for using the freeway and associated joint development projects as a tool to help focus all available resources on Baltimore's problems. These strategies are discussed in the following.

Strategy 1

Use joint development to provide a physical framework for institutional change.

In portions of the social impact analysis not earlier discussed, we examined the inadequacy of many of Baltimore's existing social service institutions to cope with pressures resulting from racial and economic change. This first strategy would use the development potential provided by the freeway as a lever to help reconstitute existing institutions, chiefly by providing them with an optimum physical environment for delivery of services. Under this strategy were proposed the following:

1. Multiservice neighborhood centers to bring together the entire range of human services, both public and private, in coordinated fashion and in locations convenient to concentrations of need.

2. Reoriented recreation facilities, designed with the help of potential users, to help meet the recreational needs of Baltimore's rapidly growing black teenage population.

3. School-job centers, merging paid on-the-job training with school completion in a single "package," to help bridge the serious gap between schooling and employment that particularly handicaps black youth. Low-income youth would be paid for participation in order to reduce the economic pressures that often contribute to their dropping out.

4. Educational parks to help provide the most modern, flexible environment to assist Baltimore's public education system in adapting to changed demands.

Strategy 2

Use the freeway as a vehicle to break down barriers to social, economic, and political integration of the metropolitan area.

This strategy would use the freeway as a tool to reduce the growing disparity in resources between the central city and the surrounding suburbs both by encouraging redistribution of population and facilities on a more equal basis through the metropolitan area and by improving the accessibility of suburban resources, such as jobs, to city residents. Among programs specifically recommended were the following:

1. Relocation and redesign of access ramps to maximize freedom of access for inner-city workers traveling to suburban jobs and for city industries needing better access to metropolitan markets.

2. Transportation-employment centers to provide terminals for high-speed bus routes to connect concentrations of underemployed workers with suburban job opportunities and to provide a combination job-finding, referral, and retraining service. The freeway itself would become a fast route to better jobs for these workers.

3. A nonprofit metropolitan development corporation, dubbed "Baltometro," empowered to develop low- and moderate-income housing, multiservice centers, and other required facilities throughout the metropolitan area in accord with needs. By providing sites at reasonable cost, the freeway could make an important contribution to its success.

4. Relocation housing, located in suburban areas to the maximum degree possible, to reduce economic and social disparities between the city and the suburbs and to reduce the pressure of black population growth on Baltimore's remaining all-white and transition neighborhoods.

Strategy 3

Use joint development to improve accessibility of human services to inner-city residents.

This strategy is directed specifically toward the increasing concentration of human needs within the City of Baltimore and particularly in its ghetto areas. It utilizes the freeway's route through these areas for joint development of the following strategically located facilities and services:

1. Multiservice neighborhood centers (see strategy 1).

2. Day-care centers to provide low-income mothers with safe, reliable, and convenient care of their children while they work to support them, and to furnish these children with preschool enrichment to overcome educational handicaps.

3. Social services developed in conjunction with freeway-related commercial facilities, day-care centers, and the like. Both cost economies and improved utilization could be achieved by the joint use of space and by a combination of the satisfaction of basic needs such as food and laundry with social services.

4. Tot lots and small ball fields on otherwise unusable fragments of land left vacant in the course of freeway demolition. These pocket recreational facilities would help overcome the severe shortage of safe play space in Baltimore's densely populated row-house neighborhoods.

Strategy 4

Use the freeway and joint development to help conserve the city's human, physical, and economic resources.

This strategy was oriented toward conserving Baltimore's remaining strengths, which are still impressive despite recent declines. Among these strengths are skilled workers, stable families, well-maintained neighborhoods with strong community feeling, and viable commerce and industry. This strategy included the following programs:

1. Rerouting of the freeway to avoid disrupting existing neighborhoods (the author lost no opportunity to drive home this point).
2. Provision of adequate relocation housing in advance of freeway acquisition. The intent of this recommendation was to reinforce the urging of the concept team's economic consultants toward the same end.
3. Provision of tuition-free community college and 2-year technical institute. In addition to its obvious educational advantages, such an institution could help retain families with children approaching college age by offering the economic incentive of free tuition to city residents.

The four strategies were offered not as mutually exclusive alternatives but rather as mutually reinforcing means toward the same basic goal. Thus, all were equally recommended. In recognition that limited resources would necessitate a choice, however, 4 criteria were developed for priorities:

1. Maximum economic impact. Priorities should be granted programs offering greatest potential for improving the economic status of disadvantaged families in freeway impact areas.
2. Maximum impact on youth. Priority should go to programs promising maximum improvement in the potential of youth to function effectively as wage earners, parents, and citizens.
3. Maximum equalization potential. Priority should be given programs with maximum potential for equalizing disparities in resources between city and suburbs.
4. Maximum early impact. Priority should go to programs with greatest potential for early impact because they could be implemented relatively quickly or could achieve measurable results soon after implementation.

When the various program recommendations were sorted out according to these criteria, none was found to fall in all 4 categories. Two fell into 3 categories: the transportation-employment centers and the school-job centers. One recommendation, multiservice centers, fell into 2 categories. Six more scored in 1 category: day-care centers, youth centers, relocation housing (in suburbs), the metropolitan development corporation, the community college and technical institute, and educational parks.

In accord with these recommendations, the resources available for implementing them were briefly examined. The conclusion was that Baltimore's municipal finances were far too strained to carry the burden and also that applicable federal grant programs, such as the Neighborhood Facilities Program of the U. S. Department of Housing and Urban Development, were clearly inadequate to the need.

The recommendation, therefore, was that the road itself be required to carry the major burden through an increment to federal and state construction funds calculated to help compensate the city for the effects of its passage—a "tax on the road." The author did not feel competent to recommend the appropriate level of increment, because this was basically an economic problem. However, he recommended that the economic consultants be assigned the task of calculating it in collaboration with him, and that explorations be undertaken with both federal and state officials to determine how it might be furnished. At present writing, this recommendation has not yet been implemented.

NEIGHBORHOOD-LEVEL RECOMMENDATIONS

Recommendations at the neighborhood level represented a selective application of these strategies and programs to the varying conditions found along the freeway route.

In Rosemont, facilities were recommended to reestablish displaced commercial activities where they could continue serving the same clientele. Because many of these businesses were economically marginal, liberal financial assistance in relocation was advised. Replacement of churches was recommended, together with play space to compensate for destruction of the school playground.

Recommendations included a new multiple-use neighborhood shopping center, to compensate for damage done the food distribution system by disturbance of access routes to supermarkets, plus a major recreation center. Because Rosemont is not a low-income neighborhood, the recommendations did not include social services directed toward alleviation of social pathologies. Major emphasis was placed on restructuring to restore facilities destroyed by the freeway and to remove existing inadequacies. In light of changes already observable in the freeway corridor, no assurance could be given that such restructuring would prevent Rosemont from deterioration.

In slum neighborhoods, the social recommendations took the form of facilities intended to bolster the capabilities and serve the urgent needs of residents—including multiservice centers, school-job centers, transportation-employment centers, and day-care centers for working mothers. If fully implemented, these recommendations should help materially to alleviate social problems in areas immediately surrounding the freeway. The present state of knowledge does not permit us to determine the degree of improvement that would result, but in all likelihood these areas could be made substantially better than they were before the freeway's passage.

However, such joint development programs would do nothing to reduce the negative impact on displaced families, nor the deteriorating pressures these people would exert on areas to which they moved, and ultimately on the city as a whole. Only a massive and skillfully planned relocation program incorporating construction of enough new units to replace those destroyed by the freeway, and implemented in advance of demolition, could achieve this end.

East Baltimore presented a very different constellation of problems. Neighborhoods, like their inhabitants, are creatures of constant change. No neighborhood, including those which comprise East Baltimore, can or should be stabilized in its present state indefinitely—however satisfied the present residents may appear. To attempt to impose an artificial stability would not only be futile but very possibly destructive.

But how a neighborhood changes, and how rapidly, can be critically important. However desirable as an ideal, racial integration is not a realistic prospect for East Baltimore today. Racial change, once under way in earnest, will eventuate in complete racial transition as rapidly as the white population can move out. It may be accompanied by racial violence, even by bloodshed. Moreover, precipitate racial transition will probably mean socioeconomic deterioration, especially because East Baltimore's self-sufficient but curiously ingrown neighborhoods are virtually devoid of vital public facilities and social services.

The social recommendations for East Baltimore therefore focused on facilities and programs to expose it gently to culturally broadening influences, and to improve its most obvious physical deficiencies without seriously disrupting it in the process. They included items such as a community college or technical institute or both; stimulated development of a nearby emergent cultural-commercial-recreational center, Fells Point, which shows some promise of becoming to Baltimore what Georgetown is to Washington, D. C.; and neighborhood-oriented recreation facilities, particularly small playgrounds for younger children, to remedy one of the area's most serious present deficits and place it in an improved position to accommodate future population change. Again, no assurance could be given that these proposals would prevent negative impact, especially because they would have no effect on the population displacement from slum ghetto areas, which appeared likely to create more severe human pressure on East Baltimore than any physical detriment the freeway might produce.

Areas like Rosemont and East Baltimore epitomize the dilemmas posed by the need to renew and restructure major cities without at the same time destroying their basic strengths, their human inhabitants and cohesive neighborhoods. The physical structures of cities can be torn apart and rebuilt at will, albeit at great cost. Their social structures are much more fragile. Once rent apart, it may not be possible to reconstitute them.

Rosemont and East Baltimore exemplify still another problem of our modern urban social structure, one that we created largely by intent. This is the rigid compartmentalization of metropolitan areas by race and ethnic group, with the form of these neighborhood compartments often coming to reflect their function so thoroughly that they are not readily adaptable to a different user group.

The freeway does not create these problems, but it impacts on them so heavily that a special responsibility is imposed on those who design it. At the very least, such a major public improvement program should not be guilty of making the problems even worse. The overwhelming problems of our cities today strongly urge that all physical development programs be designed and coordinated in such a manner as to help ensure that they strengthen the social and economic bases of the cities, or at least leave them as strong as they were. This requires that the planning processes have a sensitivity and comprehensiveness that up to now have been missing.

Seen in this light, the recommendations of the Baltimore social impact analysis were basically conservative. They were aimed primarily at minimizing the freeway's negative impact on the city. Secondly, they were directed toward employing the freeway as a tool for gradual and positive improvement in the human structure of the city and in the physical facilities serving human needs. The major political difficulty that they presented was their cost, which would be great regardless of whether rerouting, joint development, or a combination of the two were adopted. The author contended that this cost should be borne by the federal government, because the freeway was financed chiefly through federal funds and was intended to serve transportation needs of a multiple-jurisdictional metropolitan area and ultimately of the entire nation.

Much further knowledge is needed about the social impact of public improvement programs of all kinds and of the most effective means for ensuring that their ultimate net effects on the social structure are positive. But the more important obstacles lie in our capability for implementation. Our institutional structures must be enabled to adapt constructively to changing needs. More important still, the public and its institutions must recognize that the magnitude and severity of problems now afflicting urban areas cannot be dealt with except at great cost. This cost cannot be ignored, deferred, or magically shifted. It must be faced and met today by the ultimate source of all funds for public purposes, the American citizen and taxpayer. The current ferment over freeways makes it clear that in one way or another, he will pay.

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