

Comprehensive Social Equity Study for the Baltimore Urban League



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<p>16. Abstract</p> <p>This report was commissioned by the Greater Baltimore Urban League (GBUL) to the Graduate Program in City and Regional Planning and the National Transportation Center at Morgan State University. The purpose of the report is to answer two broad research questions: (a) how does the public participation process in transportation reach, empower, and take into account low-income and minority communities and their needs, problems, and aspirations? And (b) how are equity and environmental justice data and concerns incorporated into the decision- making process? The research employed multiple methods. These included a literature review; qualitative interviews with transportation planners, practitioners and policymakers, and other stakeholders in transportation planning and policy; a focus group; and a survey. Our primary analytical framework was drawn from critical ethnography and studies of practice and discourse in public policy.</p> <p>Three different views of environmental justice emerged from this study. Most private consulting firms are engaged in environmental justice and citizen participation because it's a source of job and contracts. Most public officials are engaged in environmental justice and public participation because it's a federal regulation and requirement. However, most citizen and advocacy groups consider environmental justice and citizen participation as part of the agency's mission. The lack of uniform standards regarding environmental justice issues, coupled with scarcity of information, as well as the complexity of the issues, are all obstacles in implementing and enforcing</p>		

environmental justice principles. Access to information is an important issue for community organizations, advocacy groups, low income and minority groups. Public agencies often hold meetings at places that are not easily accessible, or at times difficult for transit dependent, low-income, and minority populations to attend.

We recommend that transportation agencies take a proactive stance in involving low-income and minority communities in the transportation policy and planning process. This should involve establishing outreach programs through nonprofit organizations, minority institutions, and advocacy groups that already play significant roles in these communities. The transportation agencies should work with these organizations to set up public meetings and hearings that are accessible. They should consider holding meetings in the communities themselves, and at times and on days which will allow the maximum possible participation. One idea that may be effective is holding informal, small-group meetings in neighborhoods, initiated by community leaders. Another way to boost participation would be to provide child-care during the meeting. Utilizing people who understand the culture of the targeted communities to initiate contact is also crucial to ensure greater participation among minority groups. In addition to the process of soliciting community involvement, making information on transportation issues readily available is critical. Such methods as radio, schools, libraries and churches could prove to be effective means of communications. There is also the need to translate documents into languages other than English to reach out to the non-English speaking minorities. The findings also suggest the need for transportation agencies, particularly the MTA, to re-evaluate bus schedules and routes to meet the demand of low-income and minority populations that depend on the system. The frequency and quality of the services should be improved, especially in the poorer segments of the city, in order to make the transit system just and equitable.

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1. Introduction

This report was commissioned by the Greater Baltimore Urban League (GBUL) to the Graduate Program in City and Regional Planning and the National Transportation Center at Morgan State University. The purpose of the report is to answer two broad research questions. These are:

1. How does the public participation process in transportation reach, empower, and take into account low-income and minority communities and their needs, problems and aspirations?
2. How are equity and environmental justice data and concerns incorporated into the decision-making process?

This study is part of a broader project to the “Ford Foundation Comprehensive Social Equity Study for the Baltimore Metropolitan Region” undertaken by GBUL. To answer the above research questions, we took into account the subset of smaller questions raised in GBUL’s proposal to the Ford Foundation. In addition, we proposed some modifications to this original subset. In answering the first broad research question, we addressed the following:

- (a) What information is being collected and disseminated on transportation needs of low-income and minority populations?
- (b) Where and when are public meetings being held and what use is being made of existing community structures and institutions to collect and disseminate information on needs, burdens, and desires of low-income and minority populations in transportation issues?
- (c) Do the transportation planning processes of Metropolitan Planning Organizations (MPOs) and other transportation authorities in the region address issues that are of particular concern to minority and low-income populations?
- (d) What are the barriers to participation of low-income and minority populations in the transportation policy-making process?
- (e) What are the avenues for reaching low-income and minority populations to increase their involvement in the decision-making process?
- (f) Are there examples of projects with successful participation of low-income and minority populations?

In answering the second broad research question, we also took into account the subset of smaller questions raised in GBUL's proposal to the Ford Foundation, as well as proposing some modifications. The subset of questions we addressed include:

- (a) What type of data are the MPOs and other transportation authorities collecting on equity and environmental justice?
- (b) What are the additional data which transportation policymakers and planners need to implement equity and environmental justice principles in transportation policy and planning?
- (c) What proactive action can be taken to ensure that a proportionate share of benefits is received in low-income and minority communities?
- (d) Are there examples of projects in which equity and/or environmental justice were proactively considered in the planning process?
- (e) Are there examples of projects initiated as a result of equity and/or environmentally related concerns?
- (f) How have the MPOs and other relevant agencies responded to comments and information from low-income and minority populations on equity and environmental justice concerns?

Although we were not able to get specific answers for all of these questions (due to a lack of data and time constraints), our study succeeded in answering most of them. We discuss the extent to which we were able to answer these questions in the section entitled, "Conclusions and Policy Recommendations."

2. Research Methodology

The research employed multiple methods. These included a literature review; qualitative interviews with transportation planners, practitioners and policymakers, and other stakeholders in transportation planning and policy; a focus group; and a survey.

Our primary analytical framework was drawn from critical ethnography and studies of practice and discourse in public policy (Van Maanen, 1988; Forester, 1999; Throgmorton, 1996). Such a methodology relies on qualitative interpretative inquiry and seeks to understand the unique and contextual, rather than make generalized propositions. This methodology explores "practice stories" and case studies in order to seek answers to the questions discussed above. For our purpose, "practice stories" (Hummel, 1991; Forester, 1999) are defined as stories of practice, narrated by transportation officials, planners and policymakers, which illustrate impediments to achieving equity in transportation.

Because we were seeking a wide range of stories and cases, the literature review was not limited to academic literature. Thus, we searched trade journals, internet resources, materials available at the Federal Highway Administration (FHWA), the United States Department of Transportation (USDOT), the American Association of State Highway and Transportation Officials (AASHTO), the Transportation Research Board (TRB), the Association of Metropolitan Officials (AMPO), and the American Public Transportation Association (APTA), as well as at universities engaged in similar research (e.g., Clark Atlanta University, University of Minnesota's Institute of Race and Poverty, etc.).

Because the study did not follow the logical positivist method of inquiry, we did not do a random sample during the interviews. Instead we selected a variety of professionals and stakeholders in terms of race, age, and sex (see Appendix I for the list of people interviewed). Although the interviews were open-ended, a formal questionnaire was developed. Additional questions arose during the interviews because of their open-ended nature. As a supplement to the interviews, one focus group session was conducted with members of the Transit Riders League of Metropolitan Baltimore.

We first present a review of the literature, followed by analyses of the interviews, the focus group, and the survey. Finally, we present conclusions and policy recommendations.

3. Literature Review

Issues of equity in transportation policy and planning have been the subject of scholarly debate since the 1960s. Examples include disruption of African-American neighborhoods during the "interstate era"¹; spatial mismatch between housing and jobs; and obstacles to improving the mobility of low-income, elderly, minority groups, and women (Kasarda, 1983, Levine, 1998; Bullard and Johnson, 1997; Denmark, 1998; Sanchez, 1999). In fact, the civil rights movement had its roots in transportation, when African-Americans in Baton Rouge, Louisiana staged a successful bus boycott in 1953 (Bullard, et. al. 2000). Two years later, Rosa Parks made herself immortal by refusing to give up her seat in the front of a bus to a white man in Montgomery, Alabama. Rejuvenated interest in equity issues has recently taken hold among transportation planners and policymakers, as they address such issues as environmental justice, integration of bicycling and walking into transportation systems, disability, and the Personal Responsibility and Work Opportunity Act of 1996 (welfare to work)². Public participation and equity is also central to accomplishing the vision of the Transportation Equity Act of the 21st Century (TEA 21) of 1998, which builds on the Intermodal Transportation Equity Act of 1991 (ISTEA).³

¹ Although highway construction activity increased with the Federal Aid Road Act of 1916, the beginning of the "interstate era" can be traced to the Federal Highway Act of 1956. Title II of the Act provided a mechanism to deliver massive funding for construction of highways. The era came to an end by the 1980s, when the interstate system was virtually completed (Levy, 1997).

² See Bullard and Johnson, 1997; Forkenbrock and Schweitzer, 1999; Sanchez, 1999; and Khisty, 2000. This act aims to enhance the mobility of low-income populations to job sites. In addition to job access, other related issues, such as fairness of transit service pricing and quality of service provision, have also been of recent concern.

³ These and other Acts, and their stipulations on equity and citizen participation, are discussed below.

Until the passage of the above-mentioned legislations, transportation decisions and actions focused mainly on the general population, overlooking the differences in the household circumstances and travel constraints of low-income and minority communities. Federal, state, and local transportation agencies have now recognized these issues and are beginning to address them.

In this context, it is to be noted that the urban transportation constraints of low-income and minority population are different from the constraints of the working population at large. Some constraints are a function of income and lack of access to employment centers or available jobs (see Levin, 1998; Talen, 1998; Cervero, 1996; France Institute, 1999; Citizens Planning and Housing Association, 2000; Center for Community Change, 1998; Metropolitan Washington Council of Government, 2000). Others are a function of household composition, family circumstances, and related factors, including race, gender, education, age, household size, and the individual's role in the household (see Bernard et. al, 1996; Sarmiento, 1996; Johnson, 1996). A third set of constraints is the lack of involvement by low-income and minority populations in transportation-related decisions and actions, particularly in the early stages of the planning process.

As stated, concern for equity and citizen participation among transportation agencies and officials is a relatively new phenomenon. Transportation planning and implementation in the United States has generally been conducted by state and local agencies (Khisty, 2000). For most of the past century, transportation planning focused on accommodating the demand for travel and the needs of automobiles through the construction of roads and other transportation facilities (Horan and Jordan, 1998). Soon after World War II, the United States embarked on construction of a 44,000-mile nationwide system of highways with the passage of the Federal Highway Act of 1956 and the implementation of the Interstate and Defense Highways program. Construction of highways became one of the biggest civil engineering feats of the century, but also tore apart the existing urban fabric of the United States.

Although the official creation of transportation planning organizations dates back to the early 1960s, and their numbers increased with the passage of the Federal-Aid Highway Act of 1970 (http://www.ampo.org/who/about_mpos.html), we find little evidence of citizen involvement during this period. This is despite the fact that the act provided the first provisions for protection of communities and the human environment. The act required urban areas with a population of 50,000 people or more to organize planning organizations in order to receive federal transportation funding. By 1965, 224 MPOs were formed, largely in response to the requirement of the Bureau of Public Roads (predecessor to the Federal Highway Administration) for urban areas to create planning organizations that were focused on the regional transportation planning process.

The Housing and Urban Development Act of 1965 encouraged MPOs to be controlled and headed by elected officials, as opposed to appointed ones, thereby opening up avenues for citizen participation. This Act also encouraged local governments to address transportation planning regionally, rather than locally. Despite these innovations, transportation planning was still

focused largely on the development and implementation of the 3C (continuing, comprehensive, and cooperative) planning process in the 1960s and 1970s. In the 1970s, changes were made to the planning process to incorporate short-range capital improvement programs, along with the long-range plans. The 1970s also saw an increase in environmental and energy concerns, but little progress was made in involving the public.

It is interesting to note that the U.S. Department of Transportation (USDOT) had a long-standing policy to ensure non-discrimination under Title VI of the Civil Rights Act of 1964. The Act states that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” However, we find little evidence of serious implementation of this act in the 1960s and 1970s. In fact, by the time the interstate construction program was in full swing in the 1960s, the “great freeway revolt” (Khisty, 2000; 126) was also underway. The freeway revolt was the opposition offered to freeway building by citizen groups and news media around that time. Despite these protests, highways were planned primarily in terms of civil reengineering specifications, with the virtual exclusion of environmental factors and citizen participation (Mason and More 1971). Critics also claimed that highways and automobiles caused air pollution, ruined aesthetic qualities of cities, and resulted in irreparable damage to communities (Dittmar, 1995; Kay, 1997).

In fact, a highway-centered emphasis and lack of citizen participation remained ingrained in transportation planning until the 1990s (Horan and Jordan, 1998). The passage of Intermodal Transportation Equity Act (ISTEA) by the Congress in 1991 fundamentally altered U.S. transportation policy. As pointed out by Horan and Jordan (1998), ISTEA created an urban transportation planning process that linked it to several policy domains - environmental, economic, and social. The goal was to improve the overall quality of life in communities. As they point out, ISTEA created a place-based planning model, in which the place itself, rather than the movement from place to place, became the central concern of public policy. ISTEA called for a planning process in which traditional transportation goals (namely moving people and goods) were balanced with non-traditional goals that addressed ways in which transportation related to other aspects of society. Compliance with air quality standards was also strictly mandated by ISTEA (Paaswell, 2001).

In order to receive federal funding, transportation planners now had to develop comprehensive plans that considered the 15 factors listed under ISTEA (Horan and Jordan, 1998). ISTEA mandated that the Federal government designate an MPO for each metropolitan area. This MPO is responsible for coordinating the transportation plans of all government entities within its jurisdiction. Thus, passage of ISTEA resulted in more power and authority being given to locally elected officials in the metropolitan planning process (http://www.ampo.org/who/about_mpos.html). This legislation gave MPOs the framework for operations, management, and investment in transportation systems that were flexible, people-centered and equity-oriented. It encouraged participation from community stakeholders, elected officials, and citizens and helped move toward a multimodal transportation system that would increase mobility and access. ISTEA aimed to increase public involvement in the transportation policy process by requiring public review and comment on key transportation decisions; mandating that the public involvement process be inclusive, involving those that were

traditionally underserved by transportation systems; and requiring the demonstration of explicit consideration and response to public input (Horan and Jordan, 1998). It gave transportation direction and guidelines from the Federal level, but invoked state and local partnerships to implement them. It provided for flexible funding of modes of surface transportation and supported substantial emphasis on early program planning and environmental considerations. It mentioned the importance of Indian tribal government involvement in planning and described women as socially and economically disadvantaged individuals. Its policy emphasis included improved mobility for the elderly, disabled and economically disadvantaged.

Public participation and equity is also central to accomplishing the vision of the Transportation Equity Act of the 21st Century (TEA-21) of 1998, which builds on ISTEA (Passwell, 2001). TEA-21, and its supporting regulations, reinforce Title VI and continue to strengthen initiatives that protect and enhance communities and the natural environment. TEA-21 also created a new program for Job Access and Reverse Commute Grants to develop transportation services designed to transport welfare recipients and low-income individuals to and from jobs. In addition, USDOT adopted strategic goals that emphasize non-discrimination in implementation of programs, policies, and activities (<http://stratplan.dot.gov/archive>). The "Human and Natural Environment Strategic Goal" outlined in USDOT's "Strategic Plan" (*ibid*) calls for the protection and enhancement of communities and natural environments affected by transportation. In general, USDOT intends to identify and address high and adverse human health and environmental effects of transportation policies and programs on minority and low-income populations.

Along with safety and mobility, achieving environmental justice is another mission of the USDOT. The origins of government's attempts to address the environmental justice issue date back to February 11, 1994, when President Clinton signed Executive Order (E.O.) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. This order directed every Federal agency to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on minority and low-income populations.

In response to Presidential directives concerning E.O. 12898, USDOT issued a proposed Environmental Justice Strategy on February 13, 1995, and then a final order on the subject, Order No. 5610.2 (*Order to Address Environmental Justice in Minority Populations and Low-Income Populations*), on April 15, 1997. The Order generally describes the process for incorporating environmental justice principles into all USDOT's existing programs, policies, and activities. The Federal Highway Administration (FHWA) issued DOT Order No. 6640.23, *FHWA Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, on December 2, 1998. The order requires the FHWA to implement the principles of the DOT Order 5610.2 and E.O. 12898 by incorporating environmental justice principles in all FHWA programs, policies, and activities. (Forkenbrock and Schweitzer 1999; <http://www.fhwa.dot.gov/environment/ej2000.htm>).

Specifically, USDOT is committed to three basic principles of environmental justice. These are:

1. Ensure full and fair participation of low-income and minority groups and communities potentially affected by the transportation decision-making process.

2. Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
3. Prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low-income populations.

Today, environmental justice is an important part of the transportation planning process and must be considered in all phases of planning. This includes all public-involvement plans and activities, the development of Regional Transportation Plans (RTPs), Transportation Improvement Programs (TIPs), Statewide Transportation Improvement Programs (STIPs), and work programs (such as the Unified Planning Work Programs - UPWPs). A truly integrated and effective planning process actively considers and promotes environmental justice within projects and groups of projects, across the total plan, and in policy decisions (www.fhwa.dot.gov/environment/ej2000.htm).

In this context, it should be noted that there are minority populations at all income levels. Moreover, low-income populations may be minority, non-minority, or a mix in a given area. Within the framework provided by Executive Order 12898, U.S. DOT Order 5610.2 addresses only minority populations and low-income populations, and does not provide for separate consideration of elderly, children, disabled, and other populations. However, impacts on all sectors of the community, including minority and low-income populations, as well as impacts on the community as a whole, should be routinely investigated, analyzed, mitigated, and considered during decision-making, similarly to impacts on minority populations and low-income populations. Disproportionately high and adverse effects, not size, are the bases for environmental justice. Some people wrongly suggest that if minority or low-income populations are small ("statistically insignificant"), this means there is no environmental justice consideration. Environmental justice determinations are made based on effects, not population size (<http://www.fhwa.dot.gov/environment/ej2000.htm>).

Executive Order 12898 and DOT Order 5610.2 refer exclusively to "populations," while the White House distribution memo refers to both "communities" and "populations." Impacts on neighborhood and community boundaries, however, should be considered in planning, programming, and project-development activities, whether there are minority or low-income populations involved or not. Environmental justice must be considered in all phases of planning. Although environmental justice concerns are frequently raised during project development, Title VI applies equally to the plans, programs, and activities of planning (<http://www.fhwa.dot.gov/environment/ej2000.htm>).

Executive Order 12898 and the DOT and FHWA Orders on Environmental Justice address persons belonging to any of the following groups:

1. **Black** - a person having origins in any of the black racial groups of Africa.
2. **Hispanic** - a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

3. **Asian** - a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
4. **American Indian and Alaskan Native** - a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.
5. **Native Hawaiian or Other Pacific Islander** - a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
6. **Low-Income** - a person whose household income (or, in the case of a community or group, whose median household income) is at or below the U.S. Department of Health and Human Services poverty guidelines.

In this context, it is to be noted that environmental justice should be considered and addressed in all National Environmental Policy (NEPA) decision-making and appropriately documented in Environmental Impact Statements, Environmental Assessments, Categorical Exclusions, or Records of Decision (<http://www.fhwa.dot.gov/environment/ej2000.htm>). Properly implemented environmental justice principles and procedures should improve all levels of transportation decision-making, result in transportation facilities that fit more harmoniously into communities, and avoid disproportionately high and adverse impacts on minority and low-income populations.

Public involvement is an integral part of environmental justice in transportation planning and project development. DOT Order 5610.2 directs the Department to provide minority and low-income populations greater access to information on, and opportunities for, public participation in matters that may impact on human health and the environment. Continuous interaction between community members and transportation professionals is critical to successfully identify and resolve potential environmental justice concerns (<http://www.fhwa.dot.gov/environment/ej2000.htm>).

DOT Order 5610.2 also asks whether a proposed action or plan causes disproportionately high and adverse effects on minority populations and low-income populations, and whether these populations are denied benefits. Community impact assessment can provide this framework. Like public involvement, community impact assessment is an integral part of planning and project development (<http://www.fhwa.dot.gov/environment/ej2000.htm>).

Federal agencies, State DOTs, MPOs and transit providers can advance Title VI and environmental justice by involving the public in transportation decisions. Effective public involvement programs enable transportation professionals to develop systems, services, and solutions that meet the needs of the public, including minority and low-income communities. State DOTs successfully integrate Title VI and environmental justice into their activities when they:

1. Ensure that State Transportation Improvement Program (STIP) findings of statewide planning compliance and NEPA activities satisfy the letter and intent of Title VI requirements and environmental justice principles.
2. Enhance their public-involvement activities to ensure the meaningful participation of minority and low-income populations.

MPOs serve as the primary forum where State DOTs, transit providers, local agencies, and the public develop local transportation plans and programs that address a metropolitan area's needs. MPOs can help local public officials understand how Title VI and environmental justice requirements improve planning and decision-making.

Although the concept of citizen participation is fairly new in transportation, the concept dates back to the 1960s in the planning community. Radical-style citizen participation, known as “advocacy planning,” was developed by Paul Davidoff (1965), and became popular among planners in the late 1960s. The proponents of advocacy planning assumed that there are a wide variety of client groups, with diverse and often opposing goals and interests, and that planning professionals should be aware of this reality. They should, in fact, help voice the interests of their clients in the same fashion that lawyers serve theirs. The essence of advocacy planning was an attempt to increase the power of deprived and underprivileged people by fighting apathy, guiding their complaints, and formulating their ideas to bureaucratic organizations.

Garcia and Replogle (2000) present a framework of public participation and equitable transportation policy, which suggests that transportation agencies should have policy goals that are equitable, environmentally sound, and economically vital. In order to achieve these goals, such agencies should gather, analyze, and publish information that is necessary to understand the impact of their decisions on communities. Agencies must also ensure full and fair participation of all communities in the decision-making process. Finally, they should avoid intentional discrimination and unjustified adverse disparate impacts in policy decisions.

An undated document, published by Hoover and Gomez (n.d) for the engineering firm Parsons Brinckerhoff, provides some concrete ideas for public participation in transportation planning. According to the authors, informal small-group techniques are often most effective. This involves small-group meetings in neighborhoods initiated through community leaders. Such meetings are often more comfortable than a public forum for minority groups. They also suggest that community and religious organizations may be invaluable in building communications between agencies and community groups, and that the use of financial incentives might increase participation. Non-mainstream media, such as radio, can prove to be effective means of communications. Innovative recruitment tactics, such as sending staff to churches, may increase participation. Special meeting provisions, such as providing childcare during meetings, can also lead to an increase in public participation by minority and low-income populations. Using minorities in reaching out to such communities and understanding the culture of the community are also crucial to ensure public participation among minority groups.

A document produced by the Ohio Department of Transportation (ODOT) discusses the proposed tasks set forth by the department to implement environmental justice in transportation (ODOT, n.d). These are useful, as they are applicable to other situations. The first task consisted of developing a demographic

profile of State/MPO areas, which would determine where low-income populations live and work. The second task would involve establishing methods for evaluating disproportionately high adverse effects and ensuring proportionate benefits. The third task consisted of developing techniques that are acceptable in minimizing adverse effects of projects or mitigating such effects. The fourth task consisted of determining adequate types of public involvement and outreach efforts. The fifth task was ensuring public involvement and outreach during implementation of environmental justice procedures. The sixth task was to examine how the State and MPOs could integrate the above actions and analysis in their planning process. The seventh task consisted of developing acceptable standards for documentation by MPOs and the State. The last task was to determine when and by whom each task was to be implemented.

In 1998, the Baltimore Metropolitan Council (BMC), on behalf of the Transportation Steering Committee (TSC), commissioned the MATRIX Group, LLC, and Bonham Research to develop a report (completed in 1999) on how equity issues may be addressed in Baltimore region's transportation system policies and plans. The TSC was the region's designated MPO responsible for developing the region's transportation policies and plans, while the BMC provided technical support to the TSC when this summary was published. The report recommended that the TSC should adopt equity in transportation investment as a goal to guide future policy and plan development in the Baltimore region. It was further recommended that, at a minimum, TSC should assess the distribution of potential impacts of proposed plans and policy alternatives for racial and ethnic minorities and low-income groups identified for attention in Federal Environmental Justice Policies, and for people with disabilities under the Federal Americans With Disabilities Act (FDA).

As to tools and techniques, Forkenbrock and Schweitzer (1999) provide a useful illustration of how quantitative methods can be employed to estimate the relationship of access to public transit to labor force participation levels. Using 1990 census data for Portland and Atlanta, the study uses Geographic Information System (GIS) to analyze location and characteristics of residents with varying level of access to public transit. GIS is used to estimate distance measures and accessibility indices for employment and residence locations. A two-stage least squares regression is used to estimate the relationship of access to public transportation to labor force participation levels. The results indicate that improved access to public transit can overcome the physical separation between the residential location of non-white workers and jobs. Petersen (n.d.) discusses a methodology developed by the Chicago Area Transportation Study to determine whether transit service was provided equitably in the Chicago area. The methodology employs statistical analysis and is a useful tool to determine equity in transit service. Sanchez's (1998) study is also a useful methodological piece, as it shows how to determine the incidence of urban transportation service benefits by income, race, and urban location, using Atlanta as a case study. The method uses multiple regressions to estimate the implicit price or demand for property attributes, such as quality of public services, environmental quality, neighborhood conditions, and property improvements. The estimated locational benefits (increases in property values) of personal transportation accessibility, holding other determinants of property value constant, are compared to social and economic household characteristics to describe the incidence of these benefits. The analysis suggests that the lowest income, non-white, central-city homeowners realize the same, if not higher, per square foot benefits as their affluent white urban and suburban counterparts.

4. Analysis of the Interviews

An analysis of the interviews conducted with transportation planners and policymakers suggest the following propositions:

- 1. For most public officials (such as those from MPOs, Maryland Department of Transportation, Maryland Transit Administration, Maryland Department of Planning, and Federal Highway Administration (FHWA), enforcing environmental justice and public participation is a federal regulation and is, hence, a requirement.**

An official from FHWA stated⁴, “In this agency we are taking very seriously the instructions from our department secretary. Environmental justice . . . is an expansion of Title VI. President Clinton gave an Executive Order . . . in '94 . . . to all of his cabinet secretaries . . . which defined what Title VI requires us to do in the execution of our program. . . . The order directed the secretaries to . . . look at your program . . . and then write guidelines . . . which will interject this concern into our processes from beginning to end. . . FHWA had pretty well developed their guidelines on how to include environmental justice concerns in all parts and all the stages of the program, . . . It was used as a model for the DOT Order. . . Environmental justice was already becoming a part of our way of doing business”. He continued, “The FHWA environmental justice orders are guidelines. They are not codified in regulation, they are instead good practices that we recommend to the state’s DOT.”

According to an MTA official, “Just the presence of that regulation or executive order has, as an agency, made us think more about those issues.”

To cite yet another example, an MPO official stated, “Since we do regional transportation planning, we fall under the purview of several federal regulatory functions, most importantly TEA-21, but the Title VI regulations also apply to us, because we receive federal funding. So, based on that, . . . we must take environmental justice issues into consideration during the development of our transportation improvement program.”

- 2. For most citizen and advocacy groups, these issues are part of agency goals and mission.**

A community organizer from a citizen’s group stated, “My job is to organize transit riders in the Baltimore region. . . It is core to our mission to create an equitable system. . . You could look at equity from the perspective of race. The rapid rail system heads north and south through the city and people that have to go east and west take an hour-and-a-half-long slow bus trip through the city. . . Express buses are largely in more predominately-white communities. . . Service is better from suburbs to the city than from the city to the suburbs, which hampers the people living in the city to commute to the high-growth suburban areas for service-sector jobs. You can also look at it from the perspective of the Baltimore region vs. the greater Washington region, where a disproportionate amount of capital funding has recently been going to the Washington region and

⁴ The responses have been edited, as indicated by the ellipses, for conciseness and to increase clarity.

into suburban projects of Montgomery County, which is very powerful in the State legislature, rather than to the Baltimore region. . . Our organization. . . challenges MTA to give better service. We also challenge the state leadership to put more money into transit than into highway widening, . . . into the Baltimore region than the DC region, and to give MTA adequate funding to serve their core ridership, which is largely bus riders.”

3. Most private consulting firms are engaged in environmental justice and citizen participation because it is a source of work due to federal regulations.

One consultant said, “Because it is a requirement that federal agencies consider environmental justice in their planning and project development, there is work to be done by consultants advising agencies to do that.”

4. For most public officials as well as advocacy groups, citizen participation is a complex issue. It is difficult to get citizens to attend public meetings, since this may not be a priority among low-income and minority populations. Food, shelter and family needs may rank higher with such groups. Lack of communication and lack of perceived relevancy of the issue is often the reason for non-involvement of citizens. One way to increase community participation is to reach out to the community. However, it takes a long time to build a relationship between a community and an official agency. There is also a need to translate documents in to languages other than English to reach out to non-English speaking minorities.

One official from a mass transit agency stated that, “Citizen participation happens on many different levels. . . When we are going for an EA or EIS, we have to do a public hearing We tend to do those things that are perfunctory and we . . . only go above and beyond once people start to yell and scream about a particular issue. . . It has been a struggle for me, I’m constantly wanting to . . . talk . . . to neighborhood groups, but there is this agency tendency to hold off . . . doing that until you are in the formal process.” The same official continued, “I think it requires an agency to understand the level of need its customers are operating on. Our bus patrons, while . . . getting to work . . . is critically important to them, for them to have food on the table and shelter over their head at night is equally important . . . It is hard for us to expect them to go spend two hours at an evening meeting trying to help us figure out where to site a bus facility, or whether this route or that route should be re-routed, or whether we should build a subway line here or there. We have to be willing to meet the community where they are at, both physically and psychologically.”

He continued, “The other thing we tend to do is segregate the riding public from the non-riding public. . . We will make a change on a bus route, because of a request of a community organization, and never consult the riders who may happen to live in that neighborhood or the riders going through that neighborhood to go to work. . . Community associations tend not to represent poor minority members of the community, especially in a majority white community. If we have to move the 11 bus route, I expect our people to be on the 11 bus route talking to riders or at the bus stop talking to riders. . . We spend a lot of staff time going to evening meetings, where there is a dozen or so people, but we never spend that same staff time getting on a bus and talking to riders .”

The need to reach out to the community was well stated by an MPO official. According to her, “It helps to make contact with one or more individuals in the community, so they invite you in and you have someone that will bring you to the meeting, so you’re not just an outsider standing there. You follow up with the community. If they ask us a social service question, . . . we say . . . we’ll pass it along. . . . We try to make materials available in the community and in the libraries.”

Another official in the same MPO stated “In terms of other languages, there are a lot of standard documents that we might hand out. . . For each agency to hire a translator, it seems inefficient and costly. . . Federal assistance would be very helpful.”

An advocacy group official clearly pointed out that a lack of communication often results in a lack of participation. He stated that “We talk technical, we talk MPO, VMT, TIP, SIP.” He continued, “We don’t say, hey, how is your bus service? How long did it take you to get to work? . . . Unfortunately, we are a bunch of technocrats engaged in this decision-making process . . . who haven’t figured out how to speak common everyday English about those issues.” He also pointed out that the relevancy of the issue was important in involving citizens. “You almost have to make some of the decision-making . . . and some of the impact more immediate. People will stay engaged in something . . . if there is some level of immediacy . . . I think people will find . . . the time if they feel there is some level of relevance.”

5. A lack of standards in including the public in policy planning is an obstacle to implement environmental justice.

An MPO official pointed out, “I think an additional challenge on the technical side is that this is still new enough that there aren’t many examples. . . There is no standard way to do public involvement, . . . it’s still a lot of trial and error.”

6. GIS and a few other models are the best tools available for gathering data on environmental justice

An official from a Mass Transit Authority stated that “we are getting more sophisticated in terms of GIS modeling and such. We are very good at identifying the potential negative impacts.”

An official from Baltimore County government reiterated the point by stating “Looking at data and trying to map that data, putting that data into geographic areas, that’s our biggest tool. . . . We use ArcView and we use a number of layer-based data, zoning, census information, permit information, housing values, land values and acreages.”

An MPO official reflected the same notion by stating, “We just completed our long range transportation plan. The main tool we used was our travel demand model that looked at race and income and we looked at accessibility.”

Another official from the MPO stated that there was “no standard of measurement.” She continued, “The experience I have had is that the GIS we use is more to identify the communities, that being the first step in the process.”

7. There is a need to go beyond census data in order to identify groups that could benefit from Environmental Justice Principles.

For example, a staff member from FHWA stated, “We suggest . . . school lunch programs, senior citizens program, social services, health services, can help you identify groups a more discreet level. . . . these groups are the ones you want to have interactions with, to determine what their transportation needs are. . . to determine if these are the same as the community at large or are different in nature.”

An MPO official reinforced this view by stating, “We need to know the low income and minority. Where are these folks? What are the income levels, where do they live? And then on the other side we need to know where the jobs are. . . that’s a lot more difficult, to get information on low wage jobs, the turnover, the shift period, because you then obviously want to know if there’s transit, a guaranteed ride home. You need to get folks to all the different shifts, and on the weekends. So we need to know where they are and what time of day. So it’s the kind of data that tells you where people live and where people work.”

Even the private consultants echoed the same data needs. According to one consultant, “We try to use the census data to narrow the field down to where we think there might be an impact upon a low-income or minority community. From that point we get into a gray area because there are no specific data needs. A lot of it is talking to people who are familiar with the area. A lot of times we start with the local planner. The county or local jurisdiction usually has someone who is in charge of the particular area we are looking at and they work with the communities on a daily basis. That is usually our first point of contact. From that point, we start to look at community associations, churches, and any sort or organizations that might have some familiarity with the area. In my opinion, the trickiest part of the entire analysis is trying to find people who know where the potential environmental justice communities might be and then trying to establish boundaries for those communities.”

8. Access to information was an important issue among community organizations and advocacy groups.

An official from an advocacy group stated that “there are tools that should be implemented, and I think the biggest tool should be access to knowledge and the whole information field, so communities can make some intelligent decisions. . . . Until every community is armed with the knowledge and ability to make those kinds of decisions, people will be disadvantaged and disenfranchised. The lower you are on the totem pole, the easier you are to be stepped on by the system.”

5. Analysis of the Focus Group

An analysis of the focus group suggests the following propositions:

- 1. Infrequent service and difficulty of connections is a major problem faced by transit-dependent citizens. The plan of the city makes it difficult for buses to get around, further compounding the problem. Services for the disabled in the city are also very inadequate. Overcrowding on some of the bus lines is an issue with transit-dependent citizens. More buses and interconnectivity of modes is needed for better service.**

One member of the Transit Riders League of Metropolitan Baltimore stated, “When you don’t have a car, it is difficult to get around, because buses are not on time, and the connections are not good.” Another member of the group articulated the problem by stating, “If you are transit-dependent and you are going at odd hours, there aren’t enough buses . . . So it doesn’t encourage people to use transit. Couple that with the fact that this is an old city with an old plan that hasn’t changed since the city was designed, and the buses are still trying to get around these streets . . . The most hopeful plan is the new rail system, but. . . I wonder if we will have the political will to get it done. The mayor calls [Baltimore] the greatest city, but you can’t be the greatest city with a second-class transit system like today. . . The services in the city for the disabled are dismal. . . Meeting the basic requirements of the ADA act is an issue.”

Another member stated, “They need better buses, more buses, better connectivity, and collaboration between the modes . . . If you look at a map of the buses, you will see so many gaps in service where the buses could connect better.”

- 2. There is discrimination in provision of transportation service and infrastructure.**

The above proposition was well articulated by a member of the group who stated that “The system now is set up as a system of haves and have-nots. If you have a car and money, you get shuttles and shelter and the like. But those in low-income areas have longer distances between their stops. They have to wait many hours for buses that do not come. . . Those who have to use public transit . . . in Baltimore typically . . . are poor, minority, specifically African-Americans. . . Because we structured this system in an unjust manner, it tends to do the opposite of what we want in terms of . . . diversity in Baltimore. . . It doesn’t have to be that way. There is enough money, good will, and planning to ensure equity. Once upscale people start to ride the bus, it gets better . . .”

- 3. Transit-dependent people do not participate in meetings because of lack of adequate transportation and because the meetings are often held at inappropriate hours that make it difficult for transit-dependent people to attend. Furthermore, public meetings are often held after the decisions have been made.**

One member stated that “there have been several public meetings and the last one they had was inaccessible to bus riders.” Another member stated that “they often have transit meetings in the most inopportune places for those who ride transit.” Inappropriate meeting times were also a

major concern. For example one member stated, “Hearings are also not scheduled around the public. They are often in the morning or lunchtime, when the public is working.” Another member stated that “I would like to see public meetings on the weekend.”

Some of the members felt that public meetings were often held after the decisions had already been made. For example, one member stated that “a lot of the time when they have the meetings, it is when decisions have already been made, so public input will not matter.”

6. Analysis of the Survey

Our purpose here was to explore how public participation in transportation planning reaches, empowers, and takes into account low-income and minority communities and their needs, problems, and aspirations. The survey also accounts for the differences in the household composition, circumstances, and travel constraints of low-income and minority populations. Specifically, the survey was designed to elicit information on the following issues and needs in the Baltimore area:

- Identify the current modes of transportation for low-income and minority populations.
- Identify the transportation needs of low-income and minority populations.
- Identify the preferred modes of transportation of low-income and minority populations.
- Identify problems with the existing transportation services and programs.
- Identify mechanisms for low-income and minority involvement in public hearings and meetings.
- Identify how helpful transportation agencies have been in the delivery of services.
- Identify transportation projects and programs and how they have impacted low-income and minority users.

Survey Instrumentation

The survey instrument used in this study consisted of 15 questions and approximately 20 variables. The instrument asked the respondent for demographic and socioeconomic information (sex, age, family income, residence, type of employment, and household size) and a series of 12 questions relating to transportation. These 12 questions are listed below.

1. What kind of transportation do you use to get around?
2. Would you use the light rail if it were available near your house?
3. Which of the following problems with transportation do you have?
4. What are your immediate transportation needs?
5. Have you ever been to a public meeting to discuss transportation problems?
6. Where would you like these meetings to be so you can attend?
7. How helpful do you think MTA (Maryland Transit Administration) is about your transportation needs?
8. How helpful do you think MDOT (Maryland Department of Transportation) is about your transportation needs?

9. How helpful do you think FHWA (Federal Highway Administration) is about your transportation needs?
10. What transportation projects have affected your well-being?
11. How has the transportation projects affected your well-being?
12. Please name any future transportation plans you are aware of that may affect your life.

Questions 7, 8, and 9 used the four-point Likert scale format (i.e., very helpful to not helpful). The questionnaires were distributed to participants in the Housing, Young Fathers Responsible Fathers, Technology, and Employment programs at GBUL. We received a total of 263 questionnaires.

Demographic and Socioeconomic Characteristics

As Table 1 below shows, 127 (48.5%) of the 263 respondents were males, and 135 (51.3%) were females. One respondent did not complete this item, and thus was declared as missing system or missing (see Table 1 below). Henceforth, missing system or missing item indicates question item not completed by survey respondents for various technical reasons.

Table 1: Distribution by Sex

		Number	Percent
Valid	Male	127	48.3
	Female	135	51.3
	Total	262	99.6
Missing System		1	00.4
Total		263	100.0

Table 2 below shows that more than half of the respondents (55.1%) were between the ages of 20 and 39. About 22.4 % of the respondents were in the 40-49 age group, while 12.2 % were between 50 and 65 years of age. Those between the ages of 15 and 20 accounted for about 8% of the respondents, while only 1.9% identified themselves as over 65 years of age.

Table 2: Distribution by Age

		Number	Percent
Valid	15-20	21	8.0
	20-39	145	55.1
	40-49	59	22.4
	50-65	32	12.2
	Over 65	5	1.9
	Refuse to Answer	1	.4
Total		263	100.0

Table 3 below reports the annual family income characteristics of the population. Of the total respondents, 20.2% individuals claimed income below \$15,000, while 19.8% claimed income over \$40,000. Overall, about 65 % of respondents claimed income of less than \$40,000. About 6.5% of the respondents refused to answer this question.

Table 3: Distribution by Annual Family Income

		No	Percent
Valid	Below \$15,000	53	20.2
	\$15,000 - \$20,000	22	8.4
	\$21,000 - \$25,000	38	14.4
	\$26,000 - \$30,000	19	7.2
	\$31,000 - \$40,000	39	14.8
	Above \$40,000	52	19.8
	Refuse to Answer	17	6.5
	Total	240	91.3
Missing System		23	8.7
Total		263	100.0

Tables 4 and 5 below report on the residence and neighborhood characteristics of the sample population. Most of the survey respondents claimed residence in either Baltimore City (65.4%) or Baltimore County (12.9%). Approximately 20.5% of the respondents did not identify their place of residence, and thus were declared missing cases (see Table 4). Most of those that claimed Baltimore City residence lived in the following neighborhoods: West (18.6%), Northwest (12.2%), East (9.9%), and Central (8%) (See Table 5).

Table 4: Distribution by City and County Residence

		No	Percent
Valid	Baltimore City	172	65.4
	Baltimore County	34	12.9
	Montgomery County	1	.4
	Anne Arundel County	1	.4
	Washington DC	1	.4
	Total	209	79.5
Missing System		54	20.5
Total		263	100.0

Table 5: Distribution by Baltimore City Neighborhood

		No	Percent
Valid	Northwest	16	6.1
	North	9	3.4
	Northeast	32	12.2
	Southwest	4	1.5
	West	49	18.6
	Central	21	8.0
	East	26	9.9
	Southeast	6	2.3
	South	8	3.0
	Other: Counties	37	14.1
	Total	208	79.1
Missing System		55	20.9
Total		263	100.0

Table 6 below describes the employment characteristics of the sample population. About 27.4% of the respondents were employed in the private sector, 24.7% worked for the government, 8% worked for nonprofit organizations, 6.5% were self-employed, and 28.5% were unemployed.

Table 6: Distribution by Employment

		No	Percent
Valid	Private Business	72	27.4
	Government	65	24.7
	Nonprofit	21	8.0
	Self Employed	17	6.5
	Unemployed	75	28.5
	Other	1	.4
	Total	251	95.4
Missing System		12	4.6
Total		263	100.0

In Table 7 below, we show the household size distribution of the respondents. The number of respondents living alone or with one other person (49.8%) was slightly higher than that of households with two or more other persons (49.5%). More specifically, about 28.1% respondents lived alone, 21.7% lived with one other person, 20.2% have three people residing in the same household, 11.8% have four people residing in the same household, and 8.4% and 8.7% respectively, have five and six people living in the same household. Only one respondent had seven or more people living in the same household.

Table 7: Distribution by Household Size

		No	Percent
Valid	One Person	74	28.1
	Two People	57	21.7
	Three People	53	20.2
	Four People	31	11.8
	Five People	22	8.4
	Six People	23	8.7
	Seven or More People	1	.4
	Total	261	99.2
Missing System		2	.8
Total		263	100.0

Statistical Analysis of Transportation-Related Responses

We relied on the use of descriptive statistics, such as frequencies and cross-tabulations, to assess the distribution of responses and analyze the needs, circumstances, and travel or transportation constraints of low-income and minority populations. We began the analysis by considering the frequency distributions of responses starting from question number one above.

Table 8 below reports the distribution of responses regarding what kind of transportation respondents use to get around. Of the 263 surveyed, 260 responded to this question. The results show that the proportion of those who use a combination of bus, light rail, subway and car to get around (52.1 %) was higher than those who use a car alone (46.8%) as their major mode of transportation. This suggests that low-income and minority communities value the availability of a combination of transportation services such as bus, light rail, and subway, while retaining the option of using one’s own car.

Table 8:
Distribution of Responses About Transportation Mode
Of Respondents (**Question 1**)

		No	Percent
Valid	Bus, Light Rail, Subway, Car	137	52.1
	Car	123	46.8
	Total	260	98.9
Missing System		3	1.1
Total		263	100.0

Table 9 reports the distribution of responses about the use of light rail, if made available near one’s house. Sixty six percent of all questionnaire respondents said they would use the light rail if it were available at convenient locations near homes, compared to 8.7% who said no and 12.2

% who don't know if they would use the light rail if made available near them. These numbers strongly suggests that low-income and minority communities will use the light rail if it is made more accessible to their residences.

Table 9:
Distribution of Responses About Light Rail Use (**Question 2**)

		No	Percent
Valid	Yes	174	66.2
	No	23	8.7
	Don't Know	32	12.2
	Total	229	87.1
Missing System		34	12.9
Total		263	100.0

Table 10 shows the distribution of responses regarding transportation problems and constraints of low-income and minority populations. More respondents reported one or more transportation constraints than not. A total of 39.5% of respondents had some problem with transportation, with 16.3% claiming that buses don't run often enough, 8% saying light rail is not close enough, 15.2% not owning a car, and 3% finding it difficult to get to and from work. Only 33.1% (87) claimed no transportation problems and constraints. These results suggest the need for transportation agencies, like MTA, to reevaluate their bus schedules and routes to meet the demand of low-income and minority populations that depend on the system. The results also indicate the need for MTA to consider expansion of the light rail system at convenient locations near low-income and minority communities.

Table 10:
Distribution of Responses About Transportation Problems (**Question 3**)

		No	Percent
Valid	Buses Don't Run Often Enough	43	16.3
	Light Rail Stop is Not Close Enough	21	8.0
	Don't Own a Car	40	15.2
	Hard to Get to and From Work	8	3.0
	No Problem	87	33.1
	Total	199	75.7
Missing System		64	24.3
Total		263	100.0

Table 11 below describes the distribution of responses about the immediate transportation needs of low-income and minority populations. About 34.4% of respondents claimed to have immediate transportation needs. Approximately 8.4% said that their immediate transportations needs were getting to school, work, or church; 5.3% need the buses to run more often and on

time; 3% need more convenient access to subway and light rail; and 13.7% need personal transportation. Only about 25.9% claimed to have no immediate transportation needs.

Table 11:
Distribution of Responses About Immediate Transportation Needs (**Question 4**)

		No	Percent
Valid	Transportation to School, Work, Church	22	8.4
	Buses Running More Often and on time	14	5.3
	More Convenient Access to Subway and Light Rail	8	3.0
	None	68	25.9
	Personal Transportation	36	13.7
	Total	148	56.3
Missing System		115	43.7
Total		263	100.0

Table 12 below describes the distribution of responses about having ever attended a public meeting to discuss transportation problems. Approximately 3% of the respondents said they have attended a public meeting or hearing to discuss transportation problems. Eighty-one percent (213) of the respondents said they have never attended a public meeting or hearing to discuss transportation problems. The infrequency of attendance may be attributed to the lack of awareness regarding the time and locations of the meetings or hearings, difficulties getting transportation, or the perception that the meeting is not that relevant to their needs.

Table 12:
Distribution of Responses About Attending A Public Meetings (**Question 5**)

		No	Percent
Valid	Yes	8	3.0
	No	213	81.0
	Total	221	84.0
Missing System		42	16.0
Total		263	100.0

Table 13 below provides distribution of responses regarding where respondents would like the public meetings to be held so that they can attend. Most of the respondents preferred school, library, or church locations. Approximately 6.8% preferred churches, 14.8% preferred schools, and 7.2 % preferred libraries. (A question about when the respondent would like the meetings held was also included along with this item. However, of the 263 respondents, about 97.3% (256) did not respond to this item for various technical reasons. The entire item was declared missing, and thus excluded from the analysis).

Table 13:
Distribution of Responses About Preferred Meeting Location (**Question 6**)

		No	Percent
Valid	Church	18	6.8
	School	39	14.8
	Library	19	7.2
	School and Library	5	1.9
	School and Church	8	3.0
	Any Convenient Location	8	3.0
	Library and Church	3	1.1
	Community Center	2	.8
	Church, School and Library	8	3.0
	Online	1	.4
	Any Location	9	3.4
	Total	120	45.6
	Missing System		143
Total		263	100.0

Tables 14, 15 and 16 below describe the distribution of responses concerning how helpful respondents think the Maryland Transit Authority (MTA), Maryland Department of transportation (MDOT) and the Federal Highway Administration (FHWA), are toward the transportation needs and constraints of low-income and minority communities. Overall, the results show that all the three agencies were helpful or somewhat helpful in meeting the transportation needs of the low-income and minority populations.

About 32.3% of those who responded to this item said that MTA was helpful, 30.8 % said that it was somewhat helpful, while 5.3% said they were not aware of MTA. A small fraction of the respondents (4.6%) thought that MTA was not at all helpful.

Table 14:
Distribution of Responses About the Helpfulness of MTA (**Question 7**)

		No	Percent
Valid	Helpful	85	32.3
	Somewhat Helpful	81	30.8
	Not at all Helpful	12	4.6
	Not Aware of this Agency	14	5.3
	Total	192	73.0
Missing System		71	27.0
Total		263	100.0

About 10.6% of those who responded to this item said that the agency was helpful, while 19% said that it was somewhat helpful. A large percentage of 18.6% those responding said they were

not aware of this agency. A small fraction of the respondents (6.5%) thought that MDOT was not at all helpful.

Table 15:
Distribution of Responses About the Helpfulness of MDOT (**Question 8**)

		No	Percent
Valid	Helpful	28	10.6
	Somewhat Helpful	50	19.0
	Not at all Helpful	17	6.5
	Not Aware of this Agency	49	18.6
	Total	144	54.8
Missing System		119	45.2
Total		263	100.0

About 10.3% of those who responded to this item said that FHWA was helpful, 13.3% said that it was somewhat helpful. A large percentage 23.6% of those answering this question said they were not aware of this agency. A small fraction of the respondents (6.5%) thought that FHWA was not at all helpful.

Table 16:
Distribution of Responses About the Helpfulness of FHWA (**Question 9**)

		No	Percent
Valid	Helpful	27	10.3
	Somewhat Helpful	35	13.3
	Not at all Helpful	17	6.5
	Not Aware of this Agency	62	23.6
	Total	141	53.6
Missing System		122	46.4
Total		263	100.0

The results shown in Tables 14 through 16 suggest that MTA, MDOT and FHWA are making good efforts to address the needs of low-income and minority populations within their own bureaucratic constraints.

Table 17 reports the distribution of responses about which transportation projects affected the well-being of low-income and minority populations. A plurality of respondents (22.8%) said that none of the transportation projects in the Baltimore area have affected their lives. Only about 11.6% of respondents claimed that subway, light rail, train, and bus affected their lives positively.

Table 17:
Distribution of Responses About What Transportation
Projects Affected Well-Being (**Question 10**)

		No	Percent
Valid	MTA	7	2.7
	Subway	4	1.5
	Light Rail	10	3.8
	Subway and Light Rail	3	1.1
	None	60	22.8
	Train	2	.8
	Bus	11	4.2
	Crowded Highways	1	.4
	Total	98	37.3
Missing System		165	62.7
Total		263	100.0

As to how transportation projects affected their well being, only 25 of the 263 surveyed responded to this question. Nine percent of all questionnaire respondents reported that public transportation improved their lives, while only 0.8% claimed a negative impact.

Table 18:
Distribution of Responses About How
Transportation Projects Affected Well-Being (**Question 11**)

		No	Percent
Valid	Improved	4	1.5
	Public Transportation Running on Time	13	4.9
	Made Transportation Easier	2	.8
	Public Transportation Not Being on Time	1	.4
	Eliminates Parking	2	.8
	Travel in Inclement Weather	2	.8
	No Access to Public Transportation	1	.4
	Total	25	9.5
Missing System		238	90.5
Total		263	100.0

Table 19 describes the distribution of responses about the awareness of any future transportation plans that may impact the low-income and minority populations. More respondents (22.8%) said that they are not aware of any future transportation plans in the Baltimore area that may impact their lives than those who claimed awareness (11.8%).

Table 19:
Distribution of Responses About Impact of Future
Transportation Plans that Will Affect Life (**Question 12**)

		No	Percent
Valid	Personal Transportation	10	3.8
	Rapid Rail Train DC and Baltimore	7	2.7
	MTA	2	.8
	None	60	22.8
	Subway	5	1.9
	Light Rail and Highways	3	1.1
	More Buses	3	1.1
	Highway Expansion	1	.4
	Total	91	34.6
Missing System		172	65.4
Total		263	100.0

Major Findings of the Survey

The major findings of this survey show that the transportation constraints of low-income and minority populations go beyond income, access to jobs, and household circumstances. A key constraint is the lack of participation in decisions and actions in the early stages of the transportation planning process. The majority of those surveyed said they have never attended public meetings or hearings to discuss transportation problems. They would prefer that public meetings or hearings be held at schools, libraries or churches. The implication of these findings is that transportation agencies can do more to facilitate the participation of low-income and minority populations in transportation decisions and actions that affect their lives. We recommend that the agencies establish low-income and minority transportation outreach programs through nonprofit organizations, minority institutions, and advocacy groups playing significant roles in low-income and minority communities.

As indicated in the results of this survey, MTA, MDOT and FHWA were somewhat helpful in addressing the transportation needs of low-income and minority populations, within their own bureaucratic constraints. However, a large percentage of those responding to the survey said they were not familiar or aware of these agencies. Most of them said that none of the transportation projects in the Baltimore area had affected their lives. They were also, for the most part, not aware of any future transportation projects in the Baltimore area that might impact their lives. They reported transportation constraints, such as buses that don't run often enough, light rail that is not accessible enough, lack of ability to own a car, and difficulty getting to and from work.

These findings suggest the need for the three transportation agencies to become more involved in educating and empowering low-income and minority communities regarding ongoing and future transportation projects that may affect their lives. The findings also suggest the need for transportation agencies, particularly MTA, to re-evaluate their bus schedules and routes to meet the demand of low-income and minority populations that depend on the system. It also indicates

the need for MTA to consider expansion of the light rail and subway systems at convenient locations near low-income and minority communities. There was overwhelming response in favor of the use of light rail, if made available at convenient locations near low-income and minority communities. These communities value the availability of a combination of transportation services, including bus, light rail, and subway, without eliminating the choice of using one's own car.

The immediate transportation needs of low-income and minority populations in Baltimore include needing transportation to get to school, work, or church; buses to run more often and on time; more convenient access to light rail and subway, and personal transportation. A large percentage of those responding to the survey were unemployed (28.5%), suggesting a need to explore and understand the non-work travel patterns of the low-income and minority populations in the Baltimore area.

7. Conclusions and Policy Recommendations

As stated at the beginning of the report, we attempted to answer two broad research questions: namely, (1) "How does the public participation process in transportation reach, empower, and take into account low-income and minority communities and their needs, problems, and aspirations?" and (2) How are equity and environmental justice data and concerns incorporated into the decision-making process? In answering these two broad questions it was necessary to pose a subset of research questions. In this section we address the extent to which we were able to answer the subset of research questions. We list the subset of research questions below and attempt to provide answers to these questions. This is followed by overall conclusions and policy recommendations.

What information is being collected and disseminated on transportation needs of low-income and minority populations?

Our analysis shows that most agencies have not made much progress in collecting information beyond census data. Yet, many of them are aware of the need for going beyond the census data. We discuss the additional data needs in a later section of the report.

Where and when are public meetings being held and what use is being made of existing community structures and institutions to collect and disseminate information on needs, burdens, and desires of low-income and minority populations in transportation issues?

Public meetings are often being held at inappropriate places and at inappropriate hours. Except for a few agencies little effort is being made of existing community structures and institutions to collect and disseminate information on needs, burdens, and desires of low-income and minority populations in transportation issue

Do the transportation planning processes of Metropolitan Planning Organizations (MPOs) and other transportation authorities in the region address issues that are of particular concern to minority and low-income populations?

All the MPOs and other transportation authorities in the region do address issues that are of particular concern to minority and low-income populations. However, many of them may be doing so as this is a Federal regulation. However, there are exceptions. Human agency plays a significant role in determining the level of concern for these issues among these agencies. If the agency has officials who come from a grassroots background, there is a greater concern for these issues. However, for most citizen and advocacy groups, these issues are part of the agency's goals and mission.

What are the barriers to participation of low-income and minority populations in the transportation policy-making process?

One of the biggest barriers in citizen participation among low-income and minority populations is the low priority assigned to transportation issue by this segment of the citizenry. Providing food, shelter, and other family needs rank far above transportation. Another key constraint is the lack of participation in the decisions and actions at the early stages of the transportation planning process. Holding meetings at places that are not easily accessible by transit-dependent people, or at times that make it difficult for them to attend, acts as a deterrent to participation. Holding meetings too far into the planning process for citizens to have a real impact is yet another deterrent to participation. Lack of communication and lack of perceived relevancy of the issues is also a reason for non-involvement of citizens.

What are the avenues for reaching low-income and minority populations to increase their involvement in the decision-making process?

The best way to involve low-income and minority populations is to reach out to the community. This can consist of establishing outreach programs through nonprofit organizations, minority institutions, and advocacy groups that already play significant roles in these communities. The transportation agencies should work through these organizations to set up public meetings and hearings that are accessible by these groups. They should consider holding meetings in the communities themselves, and at times and on days (such as on weekends) which will allow the maximum possible participation. Attendance would be more likely if the meetings were held at local school, libraries, or churches. One idea that may be effective is holding informal, small-group meetings in neighborhoods, initiated by community leaders. Such meetings might be a more comfortable forum than standard public meetings and hearings. Another way to boost participation would be to provide child-care during the meeting. Utilizing people who understand the culture of the targeted communities to initiate contact is also crucial to ensure greater participation among minority groups. Another essential concern is to seek community involvement very early in the planning process, well before crucial decisions have already been made.

Are there examples of projects with successful participation of low-income and minority populations?

Our study did not reveal any significant examples of successful participation in the region.

What type of data are the MPOs and other transportation authorities collecting on equity and environmental justice?

Most of the agencies rely on census data. However, most agencies are aware of the need to collect data that goes beyond census data. A few of the agencies are making an effort to reach non-traditional sources such as senior citizens programs, social services, health services, community associations, churches, and grassroots organizations to collect appropriate data.

What are the additional data which transportation policymakers and planners need to implement equity and environmental justice principles in transportation policy and planning?

As discussed, there is a need to go beyond census data. Contacts with school lunch programs, senior citizens programs, social services, health services, community associations, churches, and any sort of grassroots organizations are essential to identify transportation needs of the poor and disadvantaged. There is also a need to define and identify the low income and minority, their income levels, and their place of residence. Information on jobs (especially low-wage jobs) is another key element of data collection strategy. It is important to identify people and organizations who know where potential EJ communities might be and then try to establish boundaries for those communities.

What proactive action can be taken to ensure that a proportionate share of benefits is received in low-income and minority communities?

The most proactive action is to reach out to low-income and minority populations to increase their involvement in the decision-making. As discussed, this must be achieved through establishing outreach programs through nonprofit organizations, minority institutions, and advocacy groups that already play significant roles in these communities. Transportation agencies should set up public meetings and hearings that are accessible to such populations. Citizens should be involved early enough in the process to have a significant effect on the outcome.

Are there examples of projects in which equity and/or environmental justice were proactively considered in the planning process?

Our study did not reveal any specific examples in which equity and/or environmental justice were proactively considered in the planning process that are worthy of discussion and allow for significant conclusions.

Are there examples of projects initiated as a result of equity and/or environmentally related concerns?

Our study did not reveal any specific examples of projects initiated as a result of equity and/or environmentally related concerns that are worthy of discussion and allow for significant conclusions.

How have the MPOs and other relevant agencies responded to comments and information from low-income and minority populations on equity and environmental justice concerns?

Except for citizen and advocacy groups, not much effort has been undertaken by agencies to respond to comments and information from low-income and minority populations on equity and environmental justice concerns. Part of the problem lies in the relatively low-levels of citizen participation.

Summary and Recommendations

In summary, this study suggests that, for most public officials (such as those from MPOs, Maryland Department of Transportation, Maryland Transit Administration, Maryland Department of Planning, and FHWA), enforcing environmental justice and public participation is a requirement mainly because it is a federal regulation. Consequently, most private consulting firms are engaged in environmental justice and citizen participation by way of contracts with government agencies. However, for most citizen and advocacy groups, these issues are part of the agency's goals and mission. Although the opportunity for citizens to participate in policy-making and planning is mandated by federal law, it is often difficult for both government agencies and advocacy groups to get low-income and minority populations involved, because this may assign higher priority to tasks such as providing food, shelter, and other family needs.

The transportation constraints of low-income and minority populations go beyond income, access to jobs, and household circumstances. A key constraint is the lack of participation in the decisions and actions at the early stages of the transportation planning process. Most people from low-income groups have never attended public meetings or hearings to discuss transportation problems. The meetings are often held at places not easily accessible by transit-dependent people, or at times that make it difficult for them to attend. Attendance would be more likely if the meetings were held at local school, libraries, or churches. Also, meetings are often held too far into the planning process for citizens to have a real impact. Lack of communication and lack of perceived relevancy of the issues is also a reason for non-involvement of citizens.

The scarcity of information about environmental justice, as well as the complexity of the situation and the lack of standard ways of dealing with these issues are obstacles in implementing environmental justice principles. Access to information is a particularly important issue among community organizations and advocacy groups. Nonetheless, agencies are making progress, using tools such as the Geographic Information System (GIS) and other mathematical models in implementing environmental justice. The study indicated that MTA, MDOT and FHWA are somewhat helpful in addressing the transportation needs of low-income and minority populations, within their own bureaucratic constraints. However, the low-income population is not generally aware of these agencies. Most of those surveyed felt that none of the transportation projects in the Baltimore area have improved their lives. They were also generally not aware of any future transportation projects in the Baltimore area that would benefit them. They reported one or more transportation constraints, such as buses that don't run frequently enough, light rail that is not easily accessible, lack of resources to own a car, and difficulty getting to and from work.

We also found that there is discrimination in provision of transportation and infrastructure services, with low-income areas getting poor quality of services. Relatively better off, majority-white communities tend to have better access to convenient, reliable mass transit, with more express service and less connections required to arrive at their destination, as opposed to the situation with lower-income, predominantly minority populations. The plan of the city also makes it difficult for buses to navigate the city, further compounding the problem of timely service. Services for the disabled in the city are also quite inadequate. Overcrowding on some of the bus lines is also an issue with lower-income transit-dependent citizens.

We recommend that transportation agencies take a proactive stance in involving low-income and minority communities in the transportation policy and planning process. This should involve establishing outreach programs through nonprofit organizations, minority institutions, and advocacy groups that already play significant roles in these communities. The transportation agencies should work through these organizations to set up public meetings and hearings that are accessible by these groups. They should consider holding meetings in the communities themselves, and at times and on days (such as on weekends) which will allow the maximum possible participation. One idea that may be effective is holding informal, small-group meetings in neighborhoods, initiated by community leaders. Such meetings might be a more comfortable forum than standard public meetings and hearings. Another way to boost participation would be to provide child-care during the meeting. Utilizing people who understand the culture of the targeted communities to initiate contact is also crucial to ensure greater participation among minority groups. Another essential concern is to seek community involvement very early in the planning process, well before crucial decisions have already been made.

In addition to the process of soliciting community involvement, making information on transportation issues readily available is critical. Such methods as radio, schools, libraries, and churches could prove effective means of communications. There is also the need to translate documents into languages other than English to reach out to the non-English speaking minorities.

The findings suggest the need for the three transportation agencies to become more involved in educating and empowering low-income and minority communities regarding ongoing and future transportation projects that may affect their lives. The findings also suggest the need for transportation agencies, particularly the MTA, to re-evaluate bus schedules and routes to meet the demand of low-income and minority populations that depend on the system. MTA should also consider expansion of the light rail and subway systems to convenient locations near low-income and minority communities. More buses and interconnectivity of modes are also needed for better service. The frequency and quality of the services should be improved, especially in the poorer segments of the city, in order to make the transit system just and equitable. Low-income and minority communities value the availability of a combination of transportation services, including bus, light rail, and subway, while retaining the option of using one's own car.

Because low-income and minority populations are so dependent on public means of transportation, it is imperative that transportation agencies consider their immediate needs, such as transportation to and from schools, work, and churches; reliable and frequent service; and more convenient access to light rail and the subway. There is also a need to explore and

understand the non-work travel patterns of the low-income and minority populations in the Baltimore area.

The consideration of the needs of under-served communities in transportation planning is a necessity. It is clear that adequately addressing the needs of low-income and minority populations benefits not only these communities, but the entire Baltimore metropolitan area, as well.

References:

Bernard et. Al. (1996). Household Structure and Mobility Patterns of Women in O-D Surveys: Methods and Results Based on the Case Studies of Montreal and Paris. Women's Travel Issues. Baltimore MD. Second National Conference Proceedings, October.
(www.fhwa.dot.gov/ohim/womens)

Cervero, Robert. (1996). Job-Housing Balance Revisited: Trends and Impacts in the San Francisco Bay Area. Journal of the American Planning Association. 62 (4): 492-511.

Cervero, Robert, and Gorham Roger. (1995). Commuting in Transit Versus Automobile Neighborhoods. Journal of The American Planning Association. 61 (2): 210-225.

Center for Community Change. (1998). Getting to Work: An Organizer's Guide to Transportation Equity. Washington DC: Center for Community Change.

Citizens Planning and Housing Association. (2000). State of the Buses 2000. Report by the Citizens Planning and Housing Association, Baltimore MD.

Dittmar. H. (1995). A Broader Context for Transportation Planning: Not Just an End in Itself. Journal of the American Planning Association 61 (1): 7-13.

Forester, J. (1999). The Deliberate Practitioner: Encouraging Participatory Planning Processes. Cambridge, MA: MIT Press.

France Institute. (1999). Report on Access to Entry Level Jobs in the Baltimore Region. Baltimore MD: University of Baltimore.

Garcia, Robert, and Michael Replogle. (2000). No Title. Progress. X (1): 10-11. February-March.

Horan, Thomas. A., and Daniel R. Jordan. (1998). Integrating Transportation and Telecommunications Planning in Santa Monica. Journal of Urban Technology 5 (2): 1-20.

http://www.ampo.org/who/about_mpos.html.

<http://stratplan.dot.gov/archive/>

<http://www.fhwa.dot.gov/environment/ej2000.htm>.

Hummel, R. (1991). Stories Managers Tell: Why are They Valid as Science?" Public Administration Review 51 (1): 31-41.

Johnson, Ibipo (1996). Location, Race and Labor Force Participation: Implications for Women of Color. Women's Travel Issues. Baltimore MD. Second National Conference Proceedings, October. (www.fhwa.dot.gov/ohim/womens)

Julian, David A., Thomas M. Reischl, Richard V. Carrick, and Cathy Katrenich (1997). Citizen Participation – Lessons From A Local United Way Planning Process. Journal Of The American Planning Association, 63 (3): 345-355.

Kay, J. H. (1997). Asphalt Nation: How the Automobile Took Over the Nation and How We Can Take it Back. New York: Random House

Levin, Jonathan. (1998). Rethinking Accessibility and Job-Housing Balance. Journal of the American Planning Association. 64 (2): 133-149.

Metropolitan Washington Council of Government. (2000). A Regional Accessibility Analysis of the Financially Constrained Long-Range Transportation Plan and Impact on Low-Income and Minority Populations. Washington DC: Metropolitan Washington Council of Government.

Neal, Ruth. (2001). Minority Disabled and Public Transportation. Transportation equity: A Newsletter of the Environmental Justice Resource Center at Clark Atlanta university. 4 (1): 1-23.

Ohio Department of Transportation. (Undated). Addressing Title VI- Environmental Justice as it Relates to Ohio Transportation Planning Processes, Projects, and Services.

Passwell, R. E. (2001). Intelligent Transportation Systems: Creating Operational, Institutional, and Labor Force Changes in the United States. Journal of Urban Technology 8(2): 61-73.

Petersen, Eric. (?). Transit and Transportation Equity. Paper number 00-0473 presented at the 79th annual meeting of the TRB

Sanchez, Thomas W. (1999). The Connection Between Public Transit and Employment: The Cases of Portland and Atlanta. Journal of the American Planning Association 63 (3): 284-296.

Sarmiento, Sharon. (1996). Household, Gender and Travel. Women's Travel Issues. Baltimore MD. Second National Conference Proceedings, October. (www.fhwa.dot.gov/ohim/womens)

Talen Emily. (1998). Visualizing Fairness: Equity Maps For Planners. Journal of the American Planning Association. 64 (1): 22-38.

Talen, Emily. (2000). Bottom-Up GIS: A New Tool For Individual And Group Expression In Participatory Planning. Journal Of The American Planning Association. 66 (3): 279-294.

The MATRIX Group, LLC. (Undated). Executive Summary -- Considering Equity in Regional Transportation Systems: Concepts, Current Practices, and Strategic Options. The MATRIX Group, LLC. Baltimore, MD.

Throgmorton, J. (1996). Planning as Persuasive Storytelling: The Rhetorical Construction of Chicago's Electrical Future. Chicago, Ill: University of Chicago Press.

Van Maanen. J. (1988). Tales of the Field: On Writing Ethnography. Chicago, IL: University of Chicago Press.

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Appendix I
Names and Addresses of Professionals and Stakeholders Interviewed

Number	Agency	Contact and Phone
1	Baltimore Metropolitan Council. 2700 Lighthouse Point East Rm. 310 Baltimore, MD 21224-4774	Jocelyn Jones, Transportation Planner 410-732-0500 x 1049 Regina Aris, Manager 410-732-9572
2	Environmental Defense 1875 Connecticut Ave. NW Washington DC 20009	Scott Spenser, Transportation Specialist 202-387-3500 202-234-6049
3	1000 Friends of Maryland 1209 N. Calvert St. Baltimore, MD 21202	Dan Pontius, Director 410-385-2910
4	Citizen Planning and Housing Association. 218 West Saratoga Street Baltimore, MD 21201	Brent Flickinger, Transport Program Director 410-539-1369
5	Mass Transit Administration 6 St. Paul Street Baltimore, MD 21202	Jamie Kendrick 410-767-8762
6	Maryland Department of the Environment 2500 Broening Highway Baltimore, MD 21224	Andrew Sawyers 410-631-8054
7	Transit Riders League 218 West Saratoga St. Baltimore, MD 21201	Caroline Harmon 410-539-1369
8	Baltimore County Dept. of Public Works and Transportation 111 W. Chesapeake Avenue, Room 326 Towson, MD 21204	Craig Forest 410-887-3554
9	MD State Highway Administration Project Planning Division, 3 rd Floor 707 N. Calvert Street. Baltimore, MD 21202	Donald Sparklin 410-545-8564 410-899-6250 pager Ms. Gay Olsen (not avail.) 410-545-8504
10	Maryland Department of Planning 301 West Preston St. Baltimore, MD 21201-2365	Feng Liu 410-767-4577
11	Consultant: Andre Lemer The Matrix Group 4701 Keswick Road Baltimore, MD 21201	Andre Lemer 410-235-3307
12	Empower Baltimore Mgmt. Corp 3 South Frederick St. Suite 800 Baltimore, MD 21202	Bill Wiley 410-783-4410

Number	Agency	Contact and Phone
13	U.S. Department of Transportation Federal Highway Administration Eastern Resource Center City Crescent Building 10 S. Howard St. Suite 4000 Baltimore, MD. 21201	Ms. Jareene Barkdoll 410-962-0051 Brian Betlyon (Betlion) 410-962-0086 Sandra Talbert Jackson 410-962-4342 x 133 Denis Winslow 410-962-4342 x 1116
14	McCormick and Taylor Associate 3600 Clipper Mill Road Baltimore, MD 21211	Andre Smith 410-662-7400
15	Baltimore County Dept. of Planning 401 Bosley Avenue Towson, MD 21204-4420	Jef Mayhew 410-887-3521 Rose Katzenberger 410-887-3211
16	Jobs Opportunity Task Force @ Sojourner Douglass 500 North Caroline Street Baltimore, MD 21205	Jamal Mubdi-Bey (Mudu-bey) 410-276-0306 x 242
17	MDOT Project Planning Division 10 Elm Road, Baltimore, MD 21240	Cindy Johnson 410-865-1288 Marsha Kaiser, Director 410-865-1275
18	The Wilson T. Ballard Company 17 Gwynness Mill Court Owings Mills, MD 21117	Mark D. Lotz 410-363-0150
19	URS Corporation 4 N. Park Drive Suite 300 Cockeysville, MD 21030	Allen Starus 410-785-7220
20	Baltimore Regional Initiative for Developing Genuine Equity (BRIDGE) Dept. of Housing & Urban Development (HUD) 10 S. Howard Street, 5 th Floor Baltimore, MD 21201	J. C. Shay 410-962-2520 x3119 Ethel Locks x3307 Laverne Brooks Bob Herbert
21	Metropolitan Washington Council of Governments, 777 N. Capital Street NE Suite 3000 Washington D.C. 20002	Malaika Abernathy 202-962-3394
22	U.S. Environmental Protection Agency (EPA) 1200 Pennsylvania Ave, NW (2201A) Washington DC 20004 U.S. Environ. Protection Agency 1200 Penn. Ave, NW (2201A) Washington DC 20460	Robert J. Knox Associate Director EPA 1-800-962-6215 202-564-2515

Number	Agency	Contact and Phone
23	Community Law Center State Dept of Comm. Development 2500 Maryland Avenue Baltimore, MD 21218	Kristine Dunkerton 410-366-0922 x229 Mike Bainum 410-366-0922
24	Neighborhood Design Center 1401 Hollins Street Baltimore, MD 21223	Patrick McMan 410-233-9686 410-233-9687
25	Conference of Minority Transportation Officials	Helen Dale
26	Baltimore City Planning Department 417 East Fayette St. 8 th Floor Baltimore, MD 21202	Jef Drinkwater 410-396-1670 Peter Conrad 410-396-4264, 4327
27	Interfaith Action for Racial Justice 325 East 25 th Street Baltimore, MD 21218-5300	410-889-8333 410-889-5719
28	Hartford Road Partnership, Inc. 4605 Hartford Road Baltimore, MD 21214	410-426-3186
29	Office of Police and Research MD State Highway Administration 707 N. Calvert St. Baltimore, MD 21202	Jeff Smith, Chief Research Division 410-545-2196
30	Center for Fathers, Families and Workforce	Donald Malcolm 410-296-3132
31	Baltimore Regional Partnership 1209 N. Calvert Street Baltimore, MD 21202	Adam Gordon 410-385-2910
32	US EPA	Reginald Harris 215-814-2988