

**Expert Report of Prof. Thomas W. Sanchez**  
*Darensburg v. Metropolitan Transportation Commission*  
January 11, 2008

I have been retained by Plaintiffs' counsel in *Darensburg et al. v. Metropolitan Transportation Commission* to discuss transportation planning principles, including the principles governing public participation in transportation planning and funding decisions, the adoption of environmental justice principles by metropolitan planning organizations, and the analysis by agencies like the Metropolitan Transportation Commission ("MTC") of planning and funding decisions for environmental justice and equity purposes. The information and opinions stated in this report are based on: the litigation documents and depositions from *Darensburg v. MTC* that I have reviewed, a complete list of which is attached as Exhibit B to this report; the publications I have cited in this report, a complete list of which is attached as Exhibit C to this report; and my general expertise in the field of transportation planning training, education, and experience in the fields of urban planning, transportation planning and social equity. These opinions are based upon information of a kind that I and other professionals in these fields consider to be reliable.

In Section I of this report, I discuss my experience and qualifications in the field of transportation planning. In Section II, I summarize my conclusions and findings. In Section III, I discuss the general principles and expectations that govern public agencies known in federal statute as "metropolitan planning organizations" or "MPOs" (of which MTC is one) in the areas of public participation in transportation planning, as well as the environmental justice and equity doctrines that are required to guide MPO transportation planning decisions. In Section IV, I provide a factual overview, based on the documents that I have reviewed, of the history over the last ten years of public participation in MTC's planning and funding decisions, emphasizing the efforts of low-income and minority communities to participate; of MTC's responses to that public participation; of the Equity Analyses conducted by MTC of its 1998, 2001, and 2005

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Regional Transportation Plans (“RTPs”); and of MTC’s decision in 2007 not to adopt Environmental Justice (“EJ”) Principles proposed in 2004 by its Minority Citizens Advisory Committee (“MCAC”). In Section V, I discuss some of the ways in which MTC’s conduct in relation to Environmental Justice and social equity is inconsistent with principles, expectations and requirements in the transportation planning field governing the conduct of MPOs in the areas of public participation, environmental justice and social equity.

**I. EXPERIENCE AND QUALIFICATIONS**

My curriculum vitae is attached as Exhibit A to this report.

I currently serve as the Director of the Urban Planning Program at the University of Utah, where I am an Associate Professor. I have also been a Nonresident Senior Fellow with The Brookings Institution since 2006.

I have over twenty-three years of experience in the field of urban planning and transportation planning, including, among other things:

Over sixteen years as a Professor, Assistant Professor, and Instructor in the field of City Planning, Urban Planning, Urban Affairs, and Urban Studies. Prior to my current position at the University of Utah, I held academic positions at the Virginia Polytechnic Institute and State University, Portland State University, and Iowa State University.

I have published extensively in the field of urban planning with a focus on transportation and social issues, and I regularly present at conferences and professional meetings. A complete listing of my publications appears on my curriculum vitae, which is attached.

I have co-authored two books, *The Right to Transportation: Moving to Equity* (2007) and *The Social Impacts of Urban Containment* (2007).

I have authored or co-authored numerous chapters in books and over twenty-five articles

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on topics including Environmental Justice and transportation equity, connecting mass transit and employment opportunities, the inequitable effects of transportation planning on minorities, and the connection between public transit and employment. Among other publications are the following: *An Inherent Bias? Geographic and Racial-Ethnic Patterns of Metropolitan Planning Organization Boards* published by The Brookings Institution; *Moving to Equity: Addressing Inequitable Effects of Transportation Policies on Minorities* published by The Civil Rights Project at Harvard University; *No Place to Hide: Urban Containment and Racial Segregation*, published by The Brookings Institution; “The Connection between Public Transportation and Employment” published in the *Journal of the American Planning Association*, “Race, Space, and Unemployment Duration,” published in the *Journal of Urban Economics*; “Transit Mobility, Job Access, and Low-Income Labor Participation in U.S. Metropolitan Areas” published in *Urban Studies*; and “Land Use and Growth Impacts from Highway Capacity Increases” published in the *Journal of Urban Planning and Development*.

I have presented or served as a co-presenter at over sixty conferences and panels, including meetings sponsored by The Brookings Institution, the Civil Rights Project at Harvard University, the Congressional Black Caucus, the Congressional Hispanic Caucus, the American Planning Association, the Association for Collegiate Schools of Planning, the Urban Affairs Association, the American Society for Public Administration, the Transportation Research Board (a subsidiary of the National Academy of Science), the Conference of Minority Transportation Officials, and the National Association for Welfare Research and Statistics.

I have conducted research in my field as a Principle Investigator, Co-Investigator, or Researcher on thirty projects or grants. I am currently Principal Investigator on a grant from the Federal Transit Administration, on a project entitled, “Enhancing Public Participation in

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Regional Public Transportation Planning: Innovative Practices Survey, Knowledge Networks, and Incentives Model.” My other research includes “Effects of MPO Representation on Transportation Spending and Project Selection” for The Brookings Institution, “Environmental Justice Toolkit” for the Federal Transit Administration, “Transit Mobility, Jobs Access, and Low-Income Labor Participation in U.S. Metropolitan Areas” for the National Science Foundation, “Estimating Induced Travel Demand in the 1995 NPTS” for the U.S. Environmental Protection Agency, “Equity Implications and Impacts of Personal Transportation Benefits on Urban Form” for the U.S. Department of Housing and Urban Development, and “The Effect of Urban Containment on Neighborhood and Housing Quality” for the Fannie Mae Foundation.

I hold a B.A. in Environmental Studies from the University of California, Santa Barbara (1984), an M.C.R.P. in City and Regional Planning from California Polytechnic State University, San Luis Obispo (1986), and a Ph.D. in City Planning from the Georgia Institute of Technology (1996). I am a member of the American Planning Association, the Urban Affairs Association, and the Association of Collegiate Schools of Planning, and an affiliate of the Transportation Research Board.

I currently serve on two committees of the Transportation Research Board, the primary research organization for the transportation industry. These committees are the Committee on Environmental Justice in Transportation and the Committee on Social and Economic Factors of Transportation. I also participate on the Community Impact Assessment and Public Involvement Committees as a non-member.

I have received various honors, grants, and fellowships, which are listed on my curriculum vitae.

I previously served as an expert witness in 2001 for a lawsuit entitled *Perrin v. Kitzhaber*

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(2001), Multnomah County Circuit Court (Oregon), where a state congressional redistricting plan was challenged. I provided expert testimony in court in that case in regard to different analytical methods for detecting bias in district boundary changes.

My fee for my work on this case is \$150.00 per hour.

**I. SUMMARY OF CONCLUSIONS**

Among my major conclusions are the following:

- a.** MTC, as a metropolitan planning organization (MPO), is governed by formal expectations that its public involvement processes must be “proactive and provide complete information, timely public notice, full public access to key decisions, and opportunities for early and continuing involvement.” (23 CFR 450.212 [2005].) These expectations are widely-accepted and well-established.
- b.** These public participation expectations serve the purpose of enabling low-income and minority communities to participate meaningfully in voicing their concerns, needs and requests in the decision-making process. These expectations entail, among other things, four components, which may be described as:
  - providing participants with the information and analysis they need to meaningfully participate in the decision-making process;
  - continuity of participation;
  - transparency; and
  - academic integrity.
- c.** In addition to these general expectations for public involvement, MTC, like all MPOs, is also formally charged with taking affirmative steps to “seek[] out and consider[] the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households which may face challenges accessing employment and other amenities.” (23 CFR 450.212 [2005].)
- d.** MTC, like all MPOs, is governed by the requirement to treat minority populations and communities equally (Title VI), and to ensure that minority and low-income populations receive equal benefits, on an equally timely basis, as other populations.

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(Executive Order 12898 on Environmental Justice.)

- e. Since bus riders, both in U.S. cities generally and in MTC's region in particular, are more likely to be minorities than are rail riders, disparities affecting bus riders as a group relative to rail riders are an important component of Title VI compliance and Environmental Justice. This is particularly true in the case of MTC, because EJ communities and their representatives in the Bay Area have explicitly asked MTC for many years to measure current and historic inequities in funding and service levels affecting bus riders relative to rail riders.
- f. MTC repeatedly failed to honor these explicit requests for information and analysis from EJ communities, beginning even before it prepared its first Regional Transportation Plan (RTP) Equity Analysis in 1998.
- g. In preparing the Equity Analyses of its RTPs in 1998, 2001 and 2005, MTC utilized a methodology which predicts future changes in "accessibility" as a means of assessing equity. Each of these Analyses failed to identify any inequity in the RTP.
- h. MTC's RTP Equity Analyses in 1998, 2001 and 2005 all utilized a methodology that:
  - By its very design, is incapable of showing inequities as they affect bus riders compared to rail riders.
  - Is designed in such a way that it is likely to conclude that "accessibility" for minority and low-income communities improves based on expanded rail service, even if bus service does not expand, or is cut.
  - Is conceptually incapable of answering questions about the presence of inequities as between minority populations and other populations.
- i. EJ communities and their representatives in the Bay Area have a long history of raising valid criticisms of MTC's reliance on a Travel Demand Model that does not distinguish between bus and rail service as a tool for predicting equity in the distant future. Despite these repeated criticisms, and their validity, MTC has persisted in conducting essentially the same analysis for each successive RTP.
- j. Despite MTC's assertions that it takes seriously the views of its Minority Citizens Advisory Committee, there are troubling

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indications that MTC seeks to obtain and use MCAC's seal of approval, often by failing to provide transparent information. At the same time, MTC obstructs or dismisses MCAC's advice and initiatives when they are not consistent with MTC's priorities. For instance:

- In connection with MCAC's recommendation of four Environmental Justice Principles, MTC took steps to influence the views of MCAC rather than taking its advice; altered MCAC's recommendations in a significant way; and deviated from usual procedures with regard to its advisory committees.
  - In late 2006, when MCAC concluded, by adopting a unanimous motion, that MTC's analysis of funding by operator and mode revealed inequities that should be corrected, MTC concealed the relevant analysis from the public and then concluded that the existence of inequities was not "convincingly demonstrate[d]" by the analysis it did present.
- k.** In its dealings with minority and low-income communities (also known as "Environmental Justice Communities"), MTC has a history of repeated and severe failures to meet the expectations of providing information and analysis in a continuous and transparent manner, and with the integrity required to ensure meaningful participation of EJ Communities in the planning and decision-making process.
- l.** Urban Habitat proposed an appropriate methodology for assessing the distributional equity of regional transportation investment policies. Its methodology represents a meaningful multi-dimensional approach to distributional equity, reflects an effort to respond to requests for information and analysis that Bay Area EJ Communities had been making to MTC for many years, and is a feasible approach based on information that should have been readily available to MTC.
- m.** MTC's failure to meet its participation obligations, as summarized above and detailed more fully below, not only disenfranchised EJ communities, but may very well have affected the results of MTC decision-making to the detriment of EJ communities.

**II. PUBLIC PARTICIPATION AND ENVIRONMENTAL JUSTICE PRINCIPLES IN TRANSPORTATION PLANNING**

**A. Planning principles and expectations for public participation in transportation planning decisions made by Metropolitan Planning Organizations (“MPOs”)**

Urban planners have long recognized that plan-making and decisions about community and regional development are most successful within a democratic framework. Involving the public in planning processes “not only improves communications but also redistributes authority and responsibility” (Hoch, Dalton, and So 2000). In addition, planners expect that effective outcomes are achieved when those participating have “a full awareness of their interests and have sufficient power to assure representativeness and equity in outcomes” (Kaiser, Godschalk, and Chapin 1995). As consumers of planning decisions, the public is best served when their desires and preferences are known and incorporated into plans. To express those desires and preferences in a meaningful way, however, the public must be provided with the capacity to participate. As a result, a crucial component of a democratized planning process that gathers input from non-professionals is “demystifying” the decision-making process, and making the consequences and alternatives of proposed policies as transparent as possible.

By federal statute, a metropolitan planning organization, or MPO, is designated for each urbanized area with a population of more than 50,000 individuals to carry out the transportation planning process required by federal law. MTC is the MPO for the nine-county San Francisco Bay Area region.

A variety of general requirements and expectations govern public participation in the transportation planning and decision-making of MPOs. Those expectations are expressed in



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federal and state transportation planning statutes (such as ISTEA, TEA-21, and SAFETEA-LU,<sup>1</sup> as well as the National Environmental Policy Act), regulations (such as Code of Federal Regulations Title 23, Part 450); and guidance (such as 23 CFR 450.316). These expectations and requirements are frequently discussed in industry publications from groups like the American Public Transportation Association, the leading professional organization for the public transportation industry. They are also frequently discussed in a range of studies, including academic studies, “think tank” studies (like those published by Brookings and the Harvard Civil Rights Project) and studies published by the Transportation Research Board, which is the leading figure in U.S. transportation research. From the perspective of EJ communities and their needs, various organizations also publish studies and recommendations that MPOs take seriously; these include the Transportation Equity Network of the Center for Community Change, the Funders’ Network for Smart Growth and Livable Communities (a national organization supporting philanthropic organizations working to advance social equity, create better economies, build livable communities, and protect and preserve natural resources), and local and regional civil rights and EJ organizations.

While a set of general principles and expectations is broadly applicable to all levels of public participation in MPO decision-making, it has special force in regard to members of Environmental Justice (EJ) communities, defined as “those persons traditionally underserved by existing transportation systems, such as low-income or minority households” (Transportation Planning Capacity Building Program, FHWA/FTA at:

<http://www.planning.dot.gov/documents/BriefingBook/BBook.htm#11BB>). Regulations

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<sup>1</sup> ISTEA is the federal “Intermodal Surface Transportation Efficiency Act” of 1991. It was superseded in 1998 by TEA-21, the “Transportation Equity Act for the 21st Century.” In 2005, SAFETEA-LU, the “Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users,” was passed as the successor to TEA-21.

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implementing TEA-21's public involvement provision require the public participation processes of MPOs to provide for "seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households which may face challenges accessing employment and other amenities." 23 CFR 450.212 (a) (6).

At the same time, as I describe below, legal mandates related to environmental justice and social equity in MPOs' activities are included in Title VI of the Civil Rights Act of 1964 and the 1994 Executive Order 12898. Executive Order 12898 states, in part, that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Through implementing orders adopted by the US Department of Transportation in 1997, and by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) in 1998, Executive Order 12898 is applied to MPOs and other participants in federal programs.

EJ communities are thus protected doubly, both by the usual norms and requirements of MPO public participation, and by the requirements of Title VI of the Civil Rights Act of 1964 and EO 12898 (as well as the regulations, guidance, orders and principles adopted under them.) As a result, MPOs must not only treat EJ communities equally in terms of the opportunities afforded them for meaningful public participation – they should have opportunities equal to those of the most "important" stakeholders. For that to occur, federal regulations recognize that MPOs must give EJ communities the extra assistance they need to take full advantage of opportunities for meaningful participation.

Key components of conducted expected of MPOs in the public participation process

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relate to information and analysis, continuity, transparency and integrity. I discuss each in turn, both as it relates to the general requirements of public involvement and as it specifically relates to MPOs' heightened obligations to EJ communities.

**1. Information and Analysis**

One of the fundamental elements of public participation is the exchange of the information and analysis upon which decisions are made.<sup>2</sup> While this is a two-way exchange, the communication by members of the public of their desires and input depends on the communication by the MPO of the information and analysis that public participants need. Efficient and effective decision-making in the public realm relies on an understanding of resident needs, preferences, and desires as captured by planning information systems. Members of the public cannot be expected to participate in a meaningful way if they do not understand the MPO's organizational objectives, practices, and responsibilities, or if they do not understand the consequences of, and alternatives to, proposed decisions. That is why the MPO is expected to

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<sup>2</sup> Prior to its 2007 amendment, the federal regulation governingis provision public participation read in part as follows:

Public involvement processes shall be proactive and provide complete information, timely public notice, full public access to key decisions, and opportunities for early and continuing involvement. The processes shall provide for:

(1) Early and continuing public involvement opportunities throughout the transportation planning and programming process ...

(6) A process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households which may face challenges accessing employment and other amenities ...

23 CFR 450.212 (rev. as of April 1, 2005). Following the adoption of the most recent federal authorizing statute, known as SAFETEA-LU, in 2005 DOT's public participation regulations were revised, and may now be found in section 210. However, since the focus of my opinions here is on MTC's conduct under the prior authorizing statutes and their regulations, I will refer to the prior law.

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provide community participants – and EJ communities, in particular – with the information and analysis that they reasonably require in order to articulate the actions that best respond to their needs, preferences and desires.

Since ISTEA was adopted in 1991, the role of public participation has been emphasized by FHWA and FTA and indeed these agencies (sometimes referred to jointly as “the federal agencies”) are required to periodically jointly review and certify that each MPO’s transportation planning process complies with federal standards. (23 USC § 134 and 49 USC § 5303). While the federal agencies are inadequately staffed and resourced to conduct these certification reviews in a comprehensive manner for each MPO, the existence of this certification requirement serves to emphasize that public participation in regional transportation planning is an important national policy.

The specific nature of the information and analysis that is needed to facilitate meaningful participation will necessarily vary from one region to another, depending on what the public needs to understand the local issues and alternatives. This information takes a variety of forms, ranging from public meeting minutes to detailed technical analyses. While MPOs are not required to provide each individual participant with a tailor-made package of information and analysis, they are required to pay special attention to the requests for information and analysis that EJ communities make. A 1994 Transportation Research Board (TRB) publication on MPO planning expectations states that:

...planning staff will assist the public to participate throughout the technical planning process. Broad public involvement is crucial to building the political consensus necessary to support controversial transportation decisions, including those required for severe non-attainment areas to meet air quality goals. The ISTEA Rule requires "a proactive public involvement process", including access to complete technical and policy information, timely notices, full access to key decisions, and support for early and continuing involvement in plan and TIP development (Lyons 1994, p.22).

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This includes paying special attention to the needs expressed by advisory committees and working groups that the MPO convenes to advise it on the needs of EJ communities. For purposes of providing the information and analyses that EJ community representatives request, EJ community advisory groups constitute the MPO's client.

**2. Continuity**

ISTEA and TEA-21 required MPOs to increase the role of public participation in their transportation planning and decision-making processes, expressly requiring “early and continuing” public involvement (23 CFR 450.212 (a), Emphasis added). Continuous, rather than intermittent, engagement is required because it is expected to yield more effective participation in the decision-making process. Temporal lapses in communication and engagement between planning organizations and stakeholders inevitably lead to substantive gaps in knowledge. Continuity is particularly important when the decisions at stake are long-term decisions that span years (for instance, three years for the Transportation Improvement Plan (“TIP”) and 20 to 25 years for the long-range plan (or RTP)).

Discontinuities run the risk of disrupting the participation of EJ communities in these long-term decision-making processes. When this happens, community participants lose track of the information they have been provided by the MPO, and the MPO loses track of the input and requests for information made by the community. The predictable effect is to discourage the public's ongoing engagement in the process, and to cause the MPO to lose sight of issues and concerns that have been raised in the past. For these reasons, it is broadly recognized in the transportation planning industry that the failure to maintain public awareness and involvement over time can lead to a lack of effective and meaningful participation. Having to initiate or revive participation is not only difficult and time-consuming, but can deprive community

participants of the institutional knowledge that had previously been built up in the community. In addition, valuable resources are used to build relationships that can otherwise be lost if not nurtured. The requirement for “continuing” public participation expressed in federal legislation is tailored to address these realities.

### **3. Transparency**

If the information and analysis that MPOs provide to the public, and to EJ communities in particular, is to serve its purpose of enabling them to participate meaningfully in the decision-making process, transparency is an essential attribute of the information and analysis. For MPOs, transparency refers to an open, understandable, and timely public participation process (Wolf, Sanchez and Farquhar 2007). A continuous and accessible flow of information from public planning organizations to the public is the basis of transparency. Well-documented practices that include a wide range of internal and external communications are vital for stakeholders to understand processes leading to decision-making. Again, trust is built when organizational activities are open to checks on accountability. Transparency occurs only with conscientious effort on the part of an organization because additional energy is required to document and convey management and staff activities that produce planning outcomes. Transparency is diminished in the absence of accurate and continuous information, and where the information that is provided does not include the information that has been requested.

On the other hand, transparency can also be lost in the sheer quantity of information, as a needle can be lost in a haystack. This is a particular danger in the context of MPOs that produce reams of paper every month. Transparency, therefore, requires that information is presented in a manner that is at the same time both concise and complete. As I discuss below, an incomplete presentation that fails to honestly surface important facts, assumptions, concerns or alternatives,

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is lacking in the integrity that the public needs in order to have its voice heard in a meaningful participation process.

Transparency is especially important with regard to EJ communities, for several reasons. These include the highly technical nature of many MPO transportation planning analyses and the lack of technical expertise or support in EJ communities. Transparency also implies effective communication, which is needed to build trust between governmental agencies and EJ communities. The consequences of a lack of transparency can be severe, and include confusion from lack of information and divisiveness (cited by MTC Senior Planner James Corless in connection with the EJ Principles, which I discuss below), eventually leading to distrust, which can completely undermine the public participation process.

**4. Integrity**

As I have already mentioned, the ability of the public to participate meaningfully in the decision-making process depends on the integrity of the information and analysis that MPOs make available to the public, and to EJ communities in particular. Integrity in this context means, among other things, that MPOs not suppress relevant and material facts, assumptions, concerns or alternatives; that MPOs undertake analyses in a manner calculated to reveal new conclusions, rather than to justify pre-determined conclusions; that MPOs not offer rationalizations and explanations in one context that they contradict or ignore in another; and that MPOs genuinely listen to the recommendations of advisory committees they convene to advise them on particular matters.

While it can be challenging for the public, as stakeholders in the planning process, to assess whether they are receiving accurate information on a continuous basis (the by-product being transparency), it may be even more difficult to determine the degree of integrity and rigor

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of the decision-making process. The success of the public participation process hinges on the public's ability to trust that the MPO and its experts are providing the most current data and technically sound methods in a genuine effort to facilitate the involvement of the public in general, and EJ communities in particular, to participate meaningfully in decision-making processes, and are not suppressing facts, assumptions or analysis that have a bearing on the positions that the public might wish to express on important issues. Technical analyses often rely on assumptions based on "professional judgment" or otherwise subjective inputs. Whenever this is the case, planning organizations should be frank in disclosing the subjective basis of those assumptions.

When an MPO provides information or analysis that an EJ community has requested in the course of making an effort to participate in an MPO's decision-making process, that the MPO should not only provide the information or analysis requested, but should ensure that the highest standards of integrity are brought to bear in the collection of data and the preparation of any analysis. This is necessary to ensure not only that the product is accurate and complete, but that it fully and honestly answers the questions that have been raised by the public. In the event that the public has asked for data or analysis that, for technical reasons, cannot feasibly be provided in the manner requested, the MPO should explain in a transparent manner why the data or analysis cannot be provided, take the necessary steps to ensure it can be provided at the earliest time possible in the future, and provide in its place the most complete possible substitute that will shed light on the questions being raised by the public. It goes without saying that an MPO's failure to inform the public about important facts, analysis, assumptions or alternatives can result in denying the public any meaningful voice in the decision-making process.

In order to meet their public participation obligations, particularly with regard to EJ



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communities, it is common for MPOs to convene advisory committees. When MPOs have made decisions affecting EJ communities without the input of such an advisory group, the federal agencies have been known to issue “corrective actions,” as occurred with MTC in 2000, and resulted in MTC’s convening an EJ Advisory Group (EJAG) to advise it in connection with the methodology of its 2001 RTP Equity Analysis. It is also common for MPOs to convene advisory groups representative of low-income and minority communities, like MTC’s Minority Citizens’ Advisory Committee (MCAC).

When an MPO convenes an advisory group like MCAC or EJAG, the obligation of integrity requires that the MPO listen to the advice it provides, and consider it seriously. Efforts by an MPO to influence the advice that an advisory group gives it would evidence a lack of integrity, undermining both the advisory committee process and the overall process of public participation.

**B. Environmental Justice**

**1. Federal and State Requirements**

MPOs are bound not only by process requirements in regards to EJ communities, but by substantive ones. These are embodied in Title VI of the Civil Rights Act (and in analogous state statutes, such as California Government Code section 11135), and in the Environmental Justice Executive Order and implementing orders by federal agencies.

MPOs are expected to pay special attention to the mandate of these statutes and orders with regard to the equal treatment of minority and low income people. Title VI and California Government Code section 11135 prohibit agencies that receive federal and state funding, respectively, from discriminating against minorities and other protected groups.

President Clinton signed his Executive Order 12898 on Environmental Justice in 1994.

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Implementing EJ Orders followed in 1997 by the US Department of Transportation (DOT Order 5610.2, 62 Fed. Reg. 18,377) and in 1998 by FHWA and FTA (FHWA Order 6640.23). The EJ Orders protect not only minorities, but also low-income populations, and include requirements about their receipt of an equal share of the benefits as well as their protection from a disproportionate share of the burdens of transportation investments and decisions. Thus, the FHWA Order protects these populations against adverse impacts, including “the denial of, reduction in, or significant delay in the receipt of, benefits of FHWA programs, policies, or activities.” (Par. 2(f).)

MPOs (which participate in FHWA and FTA funding and other programs) are expected to monitor their activities “to actively ensure nondiscrimination in Federally funded activities,” and “to ensure that social impacts to communities and people are recognized early and continually throughout the transportation decisionmaking process--from early planning through implementation.” (Par. 3(a).)

An important expectation is that MPOs comply with federal requirements to “incorporat[e] Environmental Justice principles in all FHWA programs, policies, and activities within the framework of existing laws, regulations, and guidance.” This requires MPOs not only to monitor their activities to ensure non-discrimination, but actually to integrate EJ principles into every aspect of their work. MPOs may not segregate their focus on EJ into separate processes that are divorced from their overall planning and decision-making, but rather must ensure that their overall planning and decision-making accommodate Environmental Justice needs and concerns.

Finally, MPOs are expected to take action to eliminate discriminatory effects, both actual and potential. FHWA Order, Par. 3(a) (“Should the potential for discrimination be discovered,

action to eliminate the potential shall be taken.”)

## **2. Environmental Justice Principles**

Since the adoption of the Environmental Justice in 1994, numerous MPOs and other public agencies have adopted EJ Principles, EJ policies or mission statements, or EJ “philosophies” to serve to guide their planning and decision-making. For example, the Atlanta Regional Commission (“ARC”), the MPO that governs the Atlanta metropolitan region, includes in their EJ Plan a statement of their EJ “philosophy” as “The fair and equitable distribution of benefits and burdens combined with equal opportunity for citizens to help shape the substance of regional plans and policies.”<sup>3</sup> They add

“The public policy goal of Environmental Justice is to ensure that harmful health or environmental effects of government activities does not fall disproportionately upon low-income and minority populations living and working in the community. Unprecedented efforts were undertaken to engage the participation and input from low-income and minority citizens in the planning process for Mobility 2030, the region’s long-range transportation plan.”

On their EJ web site the Delaware Valley Regional Planning Commission (DVRPC) states their perspective on EJ as:

As a condition of the receipt of federal funding, DVRPC is subject to and responsible for enforcing pertinent EJ policies and regulations. EJ evaluations are often initiated in response to complaints or lawsuits alleging that a given action violates EJ concerns.

- DVRPC believes that an effective EJ policy and implementation strategy should not be based solely on a defensive, anti-litigation approach. Although the legal context for EJ must not be overlooked, DVRPC believes it should not be allowed to dominate the discussion of EJ issues.
- Instead, DVRPC believes it is more positive and effective to develop an affirmative and proactive EJ policy and accompanying implementation strategies with the overall goal of involving more people in the regional planning process. The policies and strategies should strive to achieve greater public understanding and participation, while simultaneously yielding a sound legal foundation should a potential EJ challenge be raised.

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<sup>3</sup> [http://www.atlantaregional.com/cps/rde/xchg/arc/hs.xsl/350\\_ENU\\_HTML.htm](http://www.atlantaregional.com/cps/rde/xchg/arc/hs.xsl/350_ENU_HTML.htm)

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<http://www.dvrpc.org/planning/regional/ej/chap1.htm>

Along with their stated “perspective” DVRPC also has six guiding principles for their EJ activities:

DVRPC has derived the following principles to guide development of the EJ policy statement, implementation strategies and monitoring process:

- A methodology to accomplish an MPO's EJ evaluation cannot rely solely on quantitative, technical factors.
- It is also essential to address qualitative issues, developed through the regional planning process, especially in relation to the policies and goals in the long-range plan and the recommendations included in various policy reports and technical studies.
- In addition, DVRPC believes a more proactive (rather than reactive) EJ implementation posture can be achieved through an agency-wide commitment to action, including a comprehensive perspective on EJ issues and public involvement opportunities.
- Rather than "reinventing the wheel" or creating a separate EJ approach, the focus of EJ implementation efforts should be through on-going enhancement of DVRPC's existing public information and involvement programs.
- DVRPC stands ready to assist our project implementation partners (the state departments of transportation (DOT's) and the operating agencies) to accomplish project-level environmental justice analyses, either through or outside of the NEPA process. This task can be accomplished through the provision of data, maps and related information. DVRPC can also assist the respective state DOT's to fulfill their required assessment of their respective Statewide Transportation Improvement Program (STIP).
- DVRPC's intentions in initiating the EJ assessment and public involvement enhancement processes are not predicated on merely fulfilling another MPO federal certification requirement. Instead, it is the firm commitment of DVRPC's Board and staff that an expanded EJ implementation program is needed because it is the right thing to do.

(Id., Emphasis added.)

These kinds of statements are meant to guide actions and provide direction in decision-making. As in the case of ARC, EJ principles typically include a statement about the important role of excluded communities in participating in decisions concerning regional priorities and expenditures.

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EJ Principles can function as a pledge by the MPO to promote equity and fairness in its policies. The purpose of adopting EJ principles can be to codify agreement between the public, and in particular members of EJ communities (that is, low-income and minority communities) and the MPO about intentions, expectations, and shared ideals. On the other hand, adopting EJ principles can be an MPO's attempt to present an image of being concerned about justice while complying with federal statutes.

MPOs that adopt EJ Principles generally are motivated in one of two ways. Some adopt principles as a proactive way of showing their compliance with, and commitment to, federal EJ and Title VI requirements. These MPOs generally view such principles as a defense against potential claims that they are acting in a discriminatory manner. Other MPOs adopt principles in the course of discussions – whether amicable or contentious – with local EJ communities. The meaningfulness of a specific MPO's action in adopting EJ principles depends on the actual history of how they arrived at them. It would be important to know who drafted the principles, who was involved with amending them, and who approved them. For instance, principles drafted by EJ community members and adopted by the MPO would be a sign of active participation as well as cooperation between the EJ community and the MPO. On the other hand, EJ principles drafted by the MPO without input from EJ communities, or contrary to their recommendations, could be an indicator of a closed process not representing the views and preferences of the EJ community.

It is extremely rare for an MPO to refuse to adopt EJ principles on the ground that doing so would open it up to the threat of litigation. By their nature, EJ Principles are statements of principle, and are not legally enforceable. (In fact, the federal Executive Order and the DOT, FTA and FHWA orders all expressly provide that private parties may not invoke them as the

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basis for a lawsuit.) To the contrary, as I have already noted, many MPOs view EJ Principles as a kind of “insurance” against being sued. See, for instance, DVRPC’s EJ statement, above (“The policies and strategies should strive to achieve greater public understanding and participation, while simultaneously yielding a sound legal foundation should a potential EJ challenge be raised.”) It would not make sense for MPO to refuse to adopt EJ Principles on the ground that it might be challenged legally.

### **III. FACTUAL OVERVIEW**

I have reviewed documents and deposition testimony in an effort to determine the nature of the interactions between MTC and Bay Area EJ communities over the past ten years, and to understand the methodology MTC has used in its RTP Equity Analyses. I provide in this section an overview of the facts I gleaned from those documents, and from other material on which experts in my field customarily rely.

#### **A. Bay Area Response to the Los Angeles Title VI Case**

In 1994, Los Angeles bus riders of color filed a class action Title VI lawsuit against the Los Angeles Metropolitan Transportation Authority (MTA), alleging that the agency discriminated by underfunding its bus system, which carried a disproportionately minority ridership, relative to its rail system. The case, which was settled by way of a Consent Decree in 1996, was closely watched by transportation agencies and equity advocates across the country.

On April 17, 1998, Carl Anthony, founder and Executive Director of Urban Habit, a nationally-prominent Bay Area environmental justice organization, sent a letter to MTC Executive Director Lawrence Dahms, co-signed by 26 leading civil rights, social equity and EJ organizations. Anthony stated:

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“We can learn a lesson from Los Angeles. There the highly-publicized Bus Riders Union prevailed against the transit authority for failure to provide equal service for bus riders as opposed to suburban commuters using a civil rights lawsuit. Their complaint proved to be only the tip of the iceberg. The Southern California Association of Government’s original analyses of their Regional Transportation Plan showed that the 13% of those below the federal poverty line would not receive their fair share of the benefits from the transportation investments in the plan. Funding priorities were changed so that this group would receive more benefits from the plan.

“The Bay Area’s transportation planning reveals similar inequalities.”

The letter urged MTC to take three actions, of which the first was:

“MTC is currently writing its new Regional Transportation Plan (RTP). It’s crucial that MTC analyze which income levels and neighborhoods will benefit from the projected \$88 billion of planned investments. If the numbers are similar to those in Southern California, reevaluation of the RTP and reprioritization of the moneys are in order. Such new analysis is crucial to ensure the validity and usefulness of the plan.”

The letter also asked MTC to perform a new Title VI report, noting that “the lack of detail in the current report fails to ‘ensure that the level and quality of [federally] assisted transit services are sufficient to provide equal access and mobility for any person without regard to race, color or national origin’ as required by Federal Transportation Administration Title VI Guidelines.” The letter also asked MTC to improve accessibility to transit for the most vulnerable communities in order to meet the new welfare-to-work mandate. (MTCP 012280-82)

MTC Executive Director Dahms responded on May 7, 1998, asserting that the “analogy between recent litigation in Los Angeles regarding [bus] service provided by the Los Angeles County Metropolitan Transportation Authority (MTA) and MTC’s allocation of transit funding in the Bay Area” is “not apt for at least two reasons”: first, “MTA operates transit service and MTC does not.” And second, “MTA has considerable local sales tax revenue at its disposal that can be directed either to rail expansion or existing bus service. MTC does not have such a large, flexible revenue source at its disposal.” (MTCP 012274-75.)

In response to Anthony’s recommended analysis of “which income levels and

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neighborhoods will benefit from the projected \$88 billion of planned investments' in the 1998 RTP," MTC stated that, "[i]n addition to the required CEQA [California Environmental Quality Act] analysis of various RTP project alternatives, we intend to perform a separate analysis comparing the effect of the RTP alternatives on access to employment for selected low income areas versus the region as a whole." MTC declined to prepare a new Title VI report, and referred to a number of initiatives, including welfare to work planning activities. (MTCP 012275-76.)

MTC's responses to the Anthony letter is summarized by Professors Judith Innes, Department of City and Regional Planning, and Judith Gruber, Department of Political Science, of the University of California at Berkeley in their comprehensive study of MTC's conflicting planning styles, entitled "Bay Area Transportation Decisionmaking in the Wake of ISTEPA," According to Professors Innes and Gruber, the matter came before MTC's Advisory Council, which viewed MTC's response as inadequate:

"Staff repeated a number of Dahms's points in the meeting [of the Advisory Council], then indicated it would be hard to define equity. One staff member said MTC wanted to look at several issues, including inner city, low income, and the effect of construction on minority and low income communities. He said they were planning to model whether investments do in fact improve the access of disadvantaged communities and to bring this to the Minority Citizens Advisory Council. He presented this as something MTC would do, not as something they were planning to discuss with the letter signers. The staff members seemed to want to placate or reassure the Council that MTC was going to take equity into account and to defuse the conflict.

"At this point Councilmember Sayer of the Greenbelt Alliance interrupted him to ask when the MCAC meeting would be and to find out exactly what would be brought to that meeting. Another Council member asked about the comparison of neighborhoods, as she could see that a major difference between what staff and Anthony proposed was that Anthony's approach would look systematically across the region to compare benefits, whereas MTC's approach would only check if the investments they do make in some low income areas are beneficial or harmful. Staff said the numbers [in MTC's approach] would be only averages, and they would conceal neighborhood differences. Sayer asserted that MTC could provide leadership on these issues even though it did not directly control a lot of the funding. He then asked whether the proposed analysis would deal with all the regional funding and whether it would be comparable to the Southern California analysis in looking at the whole region rather than just in a few parts. A



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detailed discussion ensued over exactly what would be contained in the analysis as Council members tried to grapple with the technical issues so they could form their opinions. Dahms said they should not expect too much of a modeling exercise. His tone was of someone with more experience explaining to others the realities of analysis. His comments brought this lively discussion of the concepts to an end.”

(Innes and Gruber, “Bay Area Transportation Decisionmaking in the Wake of ISTEA,” at pp. 312-13, Emphasis added.)

**B. MTC Plans its First RTP Equity Analysis**

In April 1997, DOT adopted its order implementing the Environmental Justice Executive Order, which I discussed earlier.

About six months later, an internal memo entitled, “Outline of RTP Equity Analysis,” and dated January 14, 1998, was apparently prepared by staff in MTC’s Planning Department.<sup>4</sup> (Purvis Exh. 5, MTCP 012320-25)<sup>5</sup> This memo, which preceded the exchange of correspondence between Mr. Anthony and Mr. Dahms (described in the previous section) by about five months, gives a foretaste of some of the assertions in Mr. Dahms’ response to Mr. Anthony.

The draft began by stating that “[t]he purpose of the proposed analysis is to explain how MTC is addressing the RTP Equity Goal, ‘Promote equity for system users.’” Without discussion, the memo states that “[w]e can define equity to mean: meeting the mobility needs of all people.” It goes on to “recommend that the analysis consider equity in two ways:

- 1) make a prima facie case presenting MTC’s efforts, within an existing factual and financial framework, to promote financial investment in transit operations and infrastructure maintenance in the urban core, where a large portion of the region’s

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<sup>4</sup> The memo is anonymous, although the footer appears to indicate that it originated in the Planning Department. While the date given beneath the title indicates “(DRAFT, 1/14/97),” the date in the footer, presumably computer-generated, is “01/14/98.” The first page also references the October 1997 submittal of their Title VI report to FTA.

<sup>5</sup> Chuck Purvis is a Principal Planner at MTC; he designed MTC’s travel demand model and either conducted or supervised the analysis for the Equity Analyses in 1998, 2001, and 2005.

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low-income and racial/ethnic minority households are located. MTCs outreach to minority and transportation disadvantaged communities will also be highlighted. This analysis would show that, far from intentionally discriminating against low-income and minority groups, MTC has made substantial efforts to see that their transportation needs are addressed.

- “2) Investigate the level of access to jobs, schools, and other services for low-income and racial/ethnic minority groups relative to others within the region. This part of the analysis would analyze RTP alternatives relative to the 2020 No-Build, and could be undertaken in the context of the RTP EIR.”

(Id. at MTCP012320, Emphasis added.)

In two sections that tracked these two headings, the memo fleshed out its ideas. The first section was entitled, “Prima facie case: Building the case for how the RTP addresses equity within the limits of the law.” This section spelled out the “legal framework for the RTP with respect to meeting the RTP equity goal,” noting first that MTC was subject to “legal restrictions related to the allocation of funds” (including restrictions relating to “transit capital versus operating funds,” given that “new operating funds are not available in the RTP”), and second, that “MTC’s Title VI requirements are distinct from those of the transit operators.” (Id. at MTCP012321.) For MTC, the memo stated, Title VI requires it to “show its planning efforts are not discriminatory, and upon request review[ ] the efforts of local transit agencies to comply with Title VI,” and “requires outreach to minority communities and equal opportunity for their participation in the planning process.” (Id.)

This section of the memo then explained how MTC “address[es] equity within the context of these limits.” (Id.) Having previously noted that “a large portion of the region’s low-income and racial/ethnic minority households are located” in the urban core, the memo stated that “the majority of public funds identified in the RTP goes to support the operations and maintenance of the existing transportation system for which the greatest needs lie in the region’s urban core.” (Id. at MTCP012322, Emphasis added.) In this section, the memo spells out

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various financial investments in the urban core, lists additional actions by MTC affirming its commitment to transit services in the urban core, and addresses new initiatives and other steps that MTC can take. For instance, it states that “under Title VI requirements, MTC currently reviews transit operators SRTP’s. MTC can scrutinize transit service cuts and expansions proposed by operators for equity impacts.” (Id.)

The second section, entitled “Analyzing access in the RTP alternatives,” sets forth four points for an RTP equity analysis:

- (1) The analysis of RTP alternatives would be set against a profile of demographics and travel behavior of disadvantaged groups based on 1990 Census data.
- (2) Four RTP alternatives would be analyzed and compared to the No-Build in the RTP EIR.
- (3) “The equity analysis would examine output from MTC’s travel demand models to assess how access to jobs, schools, and other activities changes between the No-Build and the RTP alternatives. The focus of the analysis would be on changes for low income and racial/ethnic minorities compared to surrounding populations.”
- (4) MTC would also focus attentions on the poorest zones, “perhaps profiling them in a more detailed fashion,” in order to “further highlight some of the initiatives in West Oakland” and other neighborhoods.

(Id.)

The memo also noted that “the proposed analysis takes into consideration criticisms by the Environmental Defense Fund and the NAACP Legal and Educational Defense Fund (LDF) of SCAG’s equity analysis of their Draft RTP,” and included a section entitled “Summary of EDF and NAACP LDF’s Critique of SCAG’s Equity Analysis.” For instance, the memo suggested that “MTC will avoid showing disproportionate distribution of benefits of the magnitude shown by the SCAG RTP” by omitting a particular metric, (Id. at MTCP012324.)

In 1999, Urban Habitat released a report entitled, “Crash Course in Bay Area Transportation Investment,” calling for a more equitable use of transportation funding in the region. The report found that “[t]ransportation funding heavily supports the commuter,

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especially those from suburban areas” rather than “improving access for those most vulnerable: the poor, children, the car-less, the elderly, and the disabled.” (Urban Habitat Program, “Crash Course in Bay Area Transportation Investment,” 1999, PL019031-78, PL019039.) To address this inequality, the report called for MTC to “begin to accurately measure who really benefits and is burdened from transportation investments over time through their plans such as the Regional Transportation Plan (RTP). Only then can we make fair and effective decisions that improve the health and social fabric of the region.” (Id. at PL019067.) Finally, the report stated: “We believe that existing funds should be reprioritized for transit needs, if we don’t shift our funding pattern, public transit will remain an endangered species.” (Id. at PL019072.)

**C. The 1998 RTP Equity Analysis**

MTC adopted its 1998 RTP on October 28, 1998. A memo to file from Chuck Purvis, dated June 24, 1998, constituted MTC’s “1998 Regional Transportation Plan: Equity & Accessibility Analysis.” (Kimsey Exh. 8, MTCP 012724-37; see Kimsey deposition at p. 409.)<sup>6</sup> This was the first such analysis that MTC had conducted. (Kimsey deposition at p. 509; Purvis deposition at p. 75.)

In a subsequent memo, MTC’s current Executive, Director Steve Heminger, described the 1998 RTP Equity Analysis as follows:

“In 1998, the MTC prepared the first analysis of the RTP with respect to social equity... often referred to as the RTP Equity Analysis. A comparison was made between ‘Disadvantaged’ and ‘Not Disadvantaged’ communities, which were distinguished by income level. The RTP performance was evaluated by trip time and access to jobs for residents by transit, drive alone, and carpooling. This analysis focused on income equity, although ‘Disadvantaged’ communities were highly correlated with minority populations as well.” (Letter from S. Heminger to Interested Organizations, Dec. 18, 2000.)

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<sup>6</sup> Doug Kimsey is MTC’s Planning Director and supervised the staff who prepared the 2005 Equity Analysis.

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Contrary to indications in the internal staff memo of January 1998 discussed above, the 1998 equity analysis only considered access to jobs (not “jobs, schools and other activities”), and only focused on low income communities, not minority communities.

The 1998 Equity Analysis did not find any evidence of inequity. (Kimsey deposition at pp. 509-10.) It concluded that “accessibility, that is proximity or access to job opportunities, is increased in the RTP project alternative compared to the no project alternative.” (Id. at 514 & Kimsey Exh. 8 at p. 4.) Doug Kimsey, MTC’s Planning Director, testified that the 1998 Equity Analysis basically compared the improved access to transit resulting from making RTP investments versus not making those investments. The conclusion of the 1998 Equity Analysis was that at the end of the year 2020, if the contemplated RTP investments were made, the aggregate number of jobs that can be reached by transit will have increased by a certain amount. (Kimsey deposition at p. 514.) Mr. Kimsey explained that MTC was improving transit with the RTP project, so one would expect that access would increase more if RTP expenditures were made, than if they were not made. (Id.)

Mr. Kimsey also testified that MTC prepared the 1998 Equity Analysis because “the federal agencies [FHWA and FTA] were telling us that as part of Title VI that they wanted us to begin to take a look at this because they knew that the Executive Order was coming.”<sup>7</sup> (Id. at 509.) According to Mr. Kimsey, MTC did not conduct the Equity Analysis to learn information that MTC was not already aware of. (Id. at 509-10.)

The results of the 1998 Equity Analysis were reported to MCAC and MTC’s Advisory Council, but neither entity was consulted on the methodology prior to MTC’s preparation of the analysis. The 1998 analysis used the travel demand model I have described in the previous

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<sup>7</sup> As already noted, the Executive Order had been issued four years earlier, in 1994. Mr. Kimsey may have meant to refer to the FHWA EJ Order, which appeared in 1998.

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section -- basically the same process that MTC used in its 2001 and 2005 RTP Equity Analyses, with different socioeconomic data assumptions. (Id. at pp. 511-12.)

MTC did not include any racial component to its 1998 Equity Analysis, focusing instead on low-income populations. The 1998 analysis states, “equity is measured in terms of accessibility, changes to disadvantaged relative to not disadvantaged neighborhoods.” That definition of equity differs from the one used in the 2001 Equity Analysis only to the extent that the 2001 Analysis looked at minority and low-income populations. (Kimsey deposition at p. 510; Kimsey Exh. 9 at 1-2, MTCP012724-25.)<sup>8</sup>

**D. FHWA/FTA’s 2000 Planning Certification Review.**

“Subsequent to [the 1998 equity] analysis, several advocacy organizations expressed concerns about not being involved in the process.” (Lethco deposition at pp. 88-90; 2001 Equity Analysis Appendix B, memo from Lethco to EJAG dated March 20, 2001, re 2001 RTP suggested Equity Analysis approach, MTCP 000403.) (See also Innes and Gruber, *op. cit.*, at 312.)

The Federal Highway Administration and the Federal Transit Administration are periodically required to jointly review and certify that each MPO’s transportation planning process complies with federal standards. (23 USC § 134 and 49 USC § 5303). In their Planning Certification Review of MTC in 2000, FHWA and FTA found MTC’s process not to satisfy federal requirements and imposed the following two corrective actions to address the deficiency: “expedited evaluation of the public involvement process and inclusion of low-income groups in

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<sup>8</sup> Mr. Kimsey testified that MTC “didn’t have any clear direction [by executive order] which spelled out the types of races that need to be considered.” Thus, MTC treated “low income as a proxy.” (Kimsey deposition at p. 510-11.) In a 2000 memo, on the other hand, Mr. Heminger stated that “Disadvantaged”, in other words low-income, “communities were highly correlated with minority populations.” (Letter from S. Heminger to Interested Organizations, 12/18/00.)

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the Title VI equity analyses.” (2001 Equity Analysis Appendix B, US DOT Letter re Final Planning Certification Report, MTCP000298.)

With regard to the first of those two corrective requirements, the MTC was asked to conduct a review of public involvement practices and identify potential improvements: “Pursuant to 23 CFR 450.316(b)(1)(ix), MTC must review and evaluate their public involvement process for effectiveness in assuring that the public involvement process provides full and open access to all. MTC will complete this evaluation within eight (8) months of the issuance of this report.” (2001 Equity Analysis Appendix B, Transportation Planning Certification Review, MTCP000331.) The federal agencies specifically requested that, as part of its evaluation, MTC examine the participation of certain groups, including “low-income, minority and other persons and groups traditionally underserved by the existing transportation system.” (MTCP000332.)

As a second corrective action, MTC was to attempt to increase the involvement of underserved community members in its planning process: “Pursuant to 23 CFR 450.316(b)(1)(vi), MTC must make a concerted effort to involve the public, especially those traditionally underserved by existing transportation, in its process of social equity analysis including the development of the performance criteria and subsequent evaluation. MTC will complete this task within eight (8) months of the issuance of this report.” (MTCP000332.) FTA and FHWA required MTC to seek input from low-income communities when designing metrics used to measure transit equity. (See, for instance, FHWA/FTA’s corrective actions to MTC in 2000.) But while MTC’s Minority Citizens Advisory Committee “participated in the identification of the 38 neighborhood areas within the region that formed the basis for the 1998 RTP investment equity analysis,” “representatives of low-income groups did not have input in the social equity analysis.” (MTCP000330.)

**E. MTC Convenes EJAG for the 2001 RTP Equity Analysis**

In response to the corrective actions prescribed by FHWA/FTA, MTC convened an Environmental Justice Advisory Group, or “EJAG,” to “review and assist MTC in crafting the analysis for the new 2001 RTP.” (Kimsey Exh. 3, 2001 RTP Equity Analysis, at page 1-1.) EJAG’s purpose was to “help the MTC in the process of developing and evaluating the Regional Transportation Plan -- with a focus on social equity,” and “help inform the development of equity evaluation measures for the RTP and the public outreach associated with the RTP.” (Letter from S. Heminger to Interested Organizations, Dec. 18, 2000.) MTC invited representatives of environmental justice organizations, such as Urban Habitat, and transit advocates such as the Transportation Choices Forum and TRANSDEF, among others. (Kimsey Exh. 17, MTCP 000374.)

EJAG was staffed by then-MTC Senior Planner Trent Lethco,<sup>9</sup> who described his role as developing a methodology that reflected the thoughts and ideas of those different groups and coming up with a plan that responded to what was being asked for by the different communities. His job, he testified, ultimately was to reflect the various concerns and viewpoints with respect to the Equity Analysis MTC had conducted in 1998. (Lethco deposition, at pp. 14-15.)

According to Lethco, the purpose of the EJAG and any subsequent Equity Analysis was to influence the outcome of the RTP by having a dialogue with all the communities in the Bay Area, of which an important component is EJ communities. Lethco testified that the development of the information and materials in the RTP was part of a very open and public discussion about what the priorities should be. (Id. at 39-40.) Lethco, however, stated that it would be difficult to say whether, if the distribution of proposed investments MTC initially included in the RTP were

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<sup>9</sup> Mr. Lethco was the Project Manager of the 2001 Equity Analysis.



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found to be inequitable, MTC would have changed the investments it ultimately adopted in the RTP. (Id. at 42-3.)

In a February 22, 2001 e-mail from EJAG member Jeff Hobson to Trent Lethco on behalf of the Transportation Justice Working Group, Hobson stated:

In the February 6 EJAG meeting, several members of the Transportation Justice Working Group (TJWG) expressed concerns about the assumed scope of the equity analysis. With the benefit of some discussions to better understand these concerns ourselves, I am writing this e-mail on behalf of the TJWG to clarify those concerns and help you shape the agenda for the February 27 meeting.

As I said at the beginning of the February 6 EJAG meeting, our biggest concern is that the results of the equity analysis must be used to influence the contents of the RTP. Therese MacMillan [sic] committed that MTC staff will use the equity analysis to outline where there are equity issues in the RTP, and that staff will use that understanding to articulate the policy decisions the Commission could make to advance environmental justice goals. We agree with that as the appropriate role for the equity analysis. The comments here are meant to make sure that the equity analysis methodology will make that role possible.

These comments are structured using the three assumptions stated in the second slide of your presentation. Our comments can be boiled down to four basic suggestions:

1. The subject of analysis should be disaggregated to corridor-level or project-level, not just the level of the RTP as a whole.
2. The analysis should measure differences in impacts and investments, not just access to opportunities.
3. The analytical methods must be able to disaggregate results by at least income and race, not just geographic areas; this may require tools besides MTC's existing travel demand model.
4. Addressing environmental justice will require an ongoing commitment to equity analyses beyond this one analysis of the RTP.

(Kimsey Exhibit 18, MTCP 024585, Emphasis added.)

Members of the TJWG serving on EJAG prepared a letter to MTC's Planning and Operations Committee, a draft of which was discussed at the EJAG meeting in about May 2001. (MTCP 044358-66; Lethco deposition at pp. 64-5.) The members wrote "to express our concerns with the planned methodology for the 2001 RTP Equity Analysis." The letter cited

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“significant concerns with both the contents of the methodology and the process we have participated in over the past several months,” including (1) a timeline that was “too short for substantive public involvement and careful investigation of alternative methodologies,” (2) “an inadequate financial analysis,” (3) the use of a travel demand model “best suited to analyzing long-distance trips,” and (4) staff’s failure to outline what steps it will take to improve the available tools for future analyses,” despite “repeated[ ]” requests. (MTCP044359-62.)

In regard to the inadequacy of the proposed financial analysis, the letter stated that the proposed methodology includes a very cursory financial analysis, amounting to a tabulation of the distribution of funds across a few variables: by program level, by county, by mode, by operator, and by funding source. While providing a little additional data, it is far short of the more comprehensive analysis we would like to see. . . . [W]e believe that there are possibilities for creative analyses that fall short of such a comprehensive analysis, but nonetheless provide more information. For example, we believe that it would be worthwhile to pair the financial tabulations with data on the racial makeup and income levels of people served in each category, (perhaps most sensibly applied to the financial totals by mode and by operator). For transit modes, we also believe that it would be worthwhile to compare these data with data on the subsidy per passenger.

(MTCP044360.)

The letter concluded that

The proposed methodology is a small step forward from the 1998 equity analysis. However, its main quantitative results will be essentially similar: an access-to-jobs analysis, only with different demographic profile than in 1998. The analysis will not be able to meet the goal MTC staff laid out at the beginning of this process: to outline where there are equity issues in the RTP and assist in articulating the policy decisions the commission could make to advance environmental justice goals.

(MTCP044361-62.)

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Trent Lethco replied in an e-mail to EJAG members, dated May 29, 2001. In response to the assertion that the financial analysis was inadequate, and the “desire to have a financial analysis that provides a comparison of the total investments benefiting different racial groups and economic classes,” Lethco stated:

We have investigated the availability of data on the racial makeup and income of transit riders and find that this data is very sparse. Our review of Title VI reports prepared by the transit operators shows that the operators apply different approaches. Some rely on the demographic characteristics of their service area population and do not include information on actual system users, while others conduct onboard surveys to develop demographic profiles. Our concern is that the general demographic makeup of a transit operator’s service area would not necessarily mirror the demographic makeup of the system users, and is therefore not useful.

Regarding the showing of subsidy per rider, the current subsidy per rider is readily obtained from MTC’s Statistical Summary of Bay Area Transit Operators, the most recent version of which was published in September 2000.

(MTCP044363.)

Lethco’s response to the group’s third concern was that “[w]e stated at the meeting that we agreed with the comment, and that was the purpose of developing the mapping basis for defining a Lifeline Transit Network. The draft letter goes on to say that MTC should modify its travel demand model to better account for short trips with destinations to grocery stores, child-care, school, social service centers, etc. This would be somewhat like the old analogy of using a sledgehammer to try to fix a watch. The model is appropriately designed for addressing regional issues, and there are better and more direct ways to address local issues outside of the modeling process.” (MTCP044365.)

In regard to the group’s fourth comment, Lethco stated “we do agree that there should be a basic database of information that can be drawn on for future equity analyses which does not currently exist. One essential piece of information referred to above is the need for transit operator specific data on race and income for transit riders. We have been in contact with FTA

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about this issue and will continue to explore how this information could be provided in the future with both FTA staff and the transit operators.” Lethco concluded that MTC “will continue to collaborate on areas where the group feels that there is still more work to be done.” (Id.)

In June 2004, members of EJAG sent a final version of the May letter to MTC’s Planning & Operations Committee. The final version was substantially the same as the letter drafted in May. (Kimsey Exh. 13, MTCP148509-11.) Among other concerns, the EJAG letter quoted an agreement from a staff memo to the effect that “many of the issues of concern to the EJAG and to members of low-income and minority communities cannot be captured in an analysis using [MTC’s] long-range forecasting model.” (Kimsey Exh. 13, MTCP148510; see Lethco deposition at pp. 91-2.) Lethco himself acknowledged that “a regional travel demand model is a very crude and blunt instrument to ask and answer questions about equity. It’s like fitting a square peg into a round hole.” (Lethco deposition at p. 98.)

Also in 2001, MTC received significant input from Rev. Andre Shumake, on behalf of a group of pastors and ministers of churches in the heavily low-income and African-American Bay Area city of Richmond. The ministers wrote on January 25, 2001, asking MTC to “fund AC Transit fairly so that bus service can be improved in our area. Our members who rider the bus system . . . depend on those buses for basic transportation such as going to work, school or to church. They deserve the same level of funding that you will be providing to build your new rail extension program.” (Letter of Rev. Shumake to Chairman Beall, Jan. 25, 2001, PL005380-84.) Further correspondence ensued in which the ministers referred to planned BART expansions. On May 9, 2001, Chair Brown responded in a second letter, stating that MTC had recently adopted criteria for its new Regional Transit Expansion Program. She asserted that “the criteria have been revised on several occasions to address issues raised by the environmental justice

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community. We intend to ensure that rail expansion does not come at the expense of critical bus service to minority and low-income communities.” (Letter from Chair Brown to Rev. Shumake, May 9, 2001, MTCP153451-52.)

Chair Brown was apparently referring to the criteria MTC adopted in Res. 3357, its Regional Transit Expansion Policy, on April 25. MTC staff, however, later testified that the criterion at issue here only applied to those Bay Area transit operators that operated both rail and bus in the same system, and that the only two examples of such operators were San Francisco MUNI and Santa Clara VTA. BART and AC Transit were not covered by this policy criterion. (McMillan deposition, Nov. 15, 2007, at pp. 736, 744-45.)

**F. The 2001 RTP Equity Analysis**

MTC issued the Equity Analysis of its 2001 RTP in September 2001. (Kimsey Exhibit 3 [MTCP 043489-569].) The document asserted that, “answers to the question of what constitutes equity in the transportation planning and funding process are by no means obvious or easy to define.” (Kimsey Exh. 3 at p. 1-1 [MTCP 043494].) It explained that:

“A number [of] the participants in the equity discussions expressed a strong interest in immediate and tangible results for their communities, whereas the RTP is intended, by its nature, to serve as a policy and investment guide covering a 20+ year timeframe. In the end, the equity analysis took on two aspects:

“1) an analytical approach applying performance measures to evaluate how transportation investment decisions would affect the mobility of targeted low income and minority communities; this analysis also was designed to make the funding decisions in the RTP more transparent from an equity perspective, particularly with respect to funding for transit; and

“2) a separate set of equity initiatives that were geared to specific issues raised during the process, which could have more immediate social benefits. These initiatives are described in Chapter 6 of this report.”

Like the 1998 Equity Analysis, the 2001 Equity Analysis measured relative accessibility to jobs within a certain travel time for communities of concern versus non-communities of concern. To conduct the analysis, MTC employed its travel demand model. (Kimsey Exh. 3 at

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pp. 4-1 to 4-3 [MTCP 043511-13].) The report's findings included the following:

- "Accessibility by transit increases with the RTP, and transit accessibility is higher from low-income and minority communities." (Kimsey Exh. 3 at p. 1-4 [MTCP 043497])
- "Transit travel times decrease in the RTP due to the number of new rail extensions and other transit service improvements." (*Id.*)
- "Traditional job centers have small improvements in transit travel time as they are already well served by rapid rail and bus." (*Id.*)

The report acknowledged "dissatisfaction" by "several participants in the EJAG process" with the travel demand model and stated that "any comprehensive equity analysis must avail itself of a number of different approaches since there is no 'one size fits all' evaluation strategy." (Kimsey Exh. 3, 2001 Equity Analysis, at 7-2 [MTCP043549])

MTC's 2001 Equity Analysis included a chapter on "RTP Financial Assumptions" (Kimsey Exh. 3 [MTCP 043529-43]), provided the distribution of RTP funding by transit operator, county, and fund source. MTC included the financial assumptions because "EJAG participants were interested in *how MTC funding decisions affect transportation equity*, particularly relating to future transit services that are the heart of the mobility issues for those without a car." (Kimsey Exh. 3, 2001 Equity Analysis at 5-1 [MTCP 043529]; Kimsey deposition at 549) (emphasis added). MTC concluded that "the transit funding levels in the RTP show a commitment that far exceeds transit's share of the Bay Area travel market . . . ." (Kimsey Exh. 3, at 5-3 [MTCP 043531].) In the overview of findings, MTC reported that 73% of RTP "committed funds" were "dedicated to transit" and that 80% of the \$81.6 billion in RTP transportation funds are dedicated to transit. Mr. Kimsey testified that these findings do not "say anything about funds that are going to low-income individuals" or "minorities." (Kimsey deposition at 179.)

The requested analysis comparing financial tabulations with data on the racial makeup

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and income levels of people served in each category was not included in the equity report. (See Kimsey Exh. 3.) Nor were race and income demographic data compared with data on the subsidy per passenger. (Id.) The 2001 Equity Analysis identified the need to improve data and tools for further analysis. In particular, the report states that “[t]he discussion with EJAG . . . uncovered the fact that there is some key missing data that is crucial to any equity discussion around transit, such as the number of minority and low income riders on each transit system.” (Kimsey Exh. 3, 2001 Equity Analysis, at p. 7-2 [MTCP043549.]

**G. The 2005 RTP Equity Analysis**

MTC created the Minority Citizens Advisory Committee (“MCAC”) in 1975, in resolution of a challenge by the Mexican American Legal Defense and Education Fund asserting inadequate participation of minority communities in the transportation planning process. The purpose of MCAC is to ensure that “the views and needs of minority communities are adequately reflected in the policies of” MTC. (MTC Fact Sheet about MCAC, p.1.)<sup>10</sup> MCAC was designed “to assist and consult with respect to effective methods and procedures for obtaining the maximum input from minority citizens to the regional transportation planning process.” (Memo of Understanding between MTC and MALDEF, p.3.) MTC has stated that MCAC “[a]dvises MTC to ensure that the views and needs of minority communities are adequately reflected in MTC policies.” (Environmental Justice Report for the 2001 RTP, App. B-3, p.28.)

MTC claimed in deposition testimony to have taken MCAC’s advice seriously in the past and to continue to take MCAC’s views into account today. (Kimsey deposition at p. 473.) Mr. Kimsey testified that MTC decided to use MCAC to represent minority interests in 2004 when conducting the equity analysis of its 2005 RTP, rather than reconvening EJAG, because MCAC

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<sup>10</sup> Available at [http://mtc.ca.gov/get\\_involved/advisory/MCAC.pdf](http://mtc.ca.gov/get_involved/advisory/MCAC.pdf).

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traditionally looked out for the interests of minorities and low-income residents on transportation issues. (Kimsey deposition at pp. 541-43; see Corless deposition at pp. 34-5.)

Staff first presented the proposed approach for the environmental justice component of the 2005 RTP (formally entitled the Transportation 2030 Plan) to MCAC at a meeting on February 10, 2004. (Kimsey Exh. 12.) Mr. Kimsey testified that “MCAC was [MTC’s] client, so we were providing them with the information that they were asking for. By that time, there was sentiment that the information that we were providing in the previous analyses was incomplete or not enough. So they asked MTC to provide more information, which MTC did.” (Kimsey deposition at p. 549.) At that first meeting, concerns were raised that the analysis wasn’t “capable of showing inequity,” “assume[d] everyone can use BART,” “need[ed] to distinguish between bus and BART,” and “should look at how dividing the money this way or that is going to help.” (Kimsey Exh. 12, MCAC Minutes of Feb. 10, 2004, at pp. 4-5.)

In March 2004, MTC established an MCAC subcommittee on environmental justice to advise MTC on the equity analysis of the 2005 RTP. At the request of MCAC, Urban Habitat, Communities for a Better Environment and FHWA presented participants with an introduction to environmental justice. (Minutes March 9, 2004: MCAC meeting)

MTC released the Equity Analysis for the 2005 RTP in November 2004 (Kimsey Exh. 9, 2005 Equity Analysis), and presented the report to MCAC at a meeting on December 7, 2004. (See MCAC Meeting Minutes, Kimsey Exh. 32, MTCP249206-13.)

Again, MTC found that communities of concern have access to a greater number of jobs by transit than the remainder of the Bay Area. It reported this finding separately for urban communities of concern versus suburban communities of concern. (Kimsey Exh. 9, 2005 Equity Analysis, at ES-2 [MTCP002586]). The 2005 Equity Analysis also measured comparative



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access to “essential destinations,” user benefits, and emissions between communities of concern and non-communities of concern. (Kimsey Exh. 9 at ES-1 [MTCP002585]).

In formal comment to MTC’s Planning & Operations Committee, MCAC critiqued the significance of this finding with the following statement: “While communities of concern have greater access to transportation and, apparently, jobs, the question arises, ‘Are the residents of communities of concern able to access transportation that will get them where they want to go, when they need to get there? Are they locked in the maze?’” (Kimsey Exh. 33, MCAC comments [MTCP003975])

MCAC also critiqued MTC’s travel demand model:

“On its face, the Equity Analysis shows that services and travel time seem to be equitable, but critical variables may have been left out of the analysis that would lead to different conclusions. Geographic proximity to a transportation mode should not be the sole criteria for determination of access. For example, affordability plays an important role that has not been factored into the equity analysis.”

(Kimsey Exh. 33, MTCP003975)

In response, MTC acknowledged that the report “does not assess all factors that may affect the residents of communities of concern,” (Kimsey Exh. 33, MTCP003962), and specifically refers to the report’s caveat that “[w]hile several new measures are included in the analysis as noted, the analysis does not assess whether transit is serving residents *when they need to travel* and *exactly where they need to go*, nor does it assess any cost barriers to using any mode of transportation.” (Kimsey Exh. 9, 2005 Equity Analysis, at ES-1 to ES-2 [MTCP002585-86] emphasis in original.) MTC indicated that “community-based transportation planning” was in its pilot phase to address these issues at the local level. (Kimsey Exh. 33, MTCP003962-63.) It also referred to a “recent collaboration with the Public Policy Institute of California to assess transportation spending by low-income California households” as “a first

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step at understanding this complex barrier.” (Kimsey Exh. 33, MTCP003963.)

The 2005 RTP Equity Analysis did not include a chapter on financial assumptions. According to Mr. Kimsey, comparing financial benefits to communities of concern with financial benefits to other communities was not material to determining equity. (Kimsey deposition at p. 492.) In formal comment, MCAC “request[ed] that the analysis of investments in the regional transportation plan be improved so that we can compare the amount of investments in communities of concern with the remainder of the Bay Area.” (Kimsey Exh. 33, MCAC comments [MTCP003975])

In response to this comment, MTC noted that “there is no standardized methodology for conducting an equity analysis,” and “other tools may be available to evaluate equity from a regional perspective. However, in order to proceed with a new methodology, data must be available to support it.” (Kimsey Exh. 33, MTCP003963.) Similarly to its 2001 Equity Analysis, MTC stated that “improving data collection on a region-wide basis is also a critical objective to achieve if additional types of analyses are to be pursued” and noted in particular the need to “require transit operators to collect relevant demographic data regarding users of their systems.” (Kimsey Exh. 33, MTCP003963.)

Despite having identified as crucial in 2001 the need for similar demographic data on the number of minority and low-income riders on different transit systems, or operators, MTC had not obtained the data by 2004, when it prepared the Equity Analysis for the 2005 RTP. (Kimsey deposition at p. 558.)

**H. MTC’s Use of its Transportation Demand Model in its RTP Equity Analyses**

For purposes of Title VI and the federal Environmental Justice Executive Order, MTC prepared an Environmental Justice or Equity Analysis as a part of its Regional Transportation

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Plans in 1998, 2001 and 2005. These RTP Equity Analyses are as follows: Kimsey Exh. 8 (1998 RTP Equity Analysis); Kimsey Exh. 3 (2001 RTP Equity Analysis) and Kimsey Exh. 9 (2005 RTP Equity Analysis).

In each of its RTP Equity Analyses, the primary analytical tool MTC has used to assess the equity of its RTP investments has been a “Travel Demand Model.”<sup>11</sup> (Kimsey deposition at pp. 115-19.) A travel demand model “refer[s] to a series of mathematical equations that represent how choices are made when people travel.”<sup>12</sup> Since these models “require a series of assumptions in order to work and are limited by the data available to make forecasts,”<sup>13</sup> “no [travel demand] model can take into account all of the factors that affect travel behavior and thus no model can perfectly replicate or predict reality.”<sup>14</sup> “In particular, today’s models can be insensitive to policies that encourage non-automobile modes of travel,” including transit.<sup>15</sup> In this section, I describe (a) how modeling forecasts provide the basis for MTC’s transportation equity analyses, and (b) some of the major limitations of a transportation demand model for analyzing equity.

The travel demand model was developed in the late 1950s to conduct highway

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<sup>11</sup> [The term “transportation demand model” is more commonly used; for purposes of this report, I use both terms interchangeably.]

<sup>12</sup> Edward Beimborn & Robert Kennedy, “Inside the Black Box: Making Transportation Models Work for Livable Communities,” at 1, available at [http://www.scag.ca.gov/modeling/pdf/1859\\_InsideBlackBox.pdf](http://www.scag.ca.gov/modeling/pdf/1859_InsideBlackBox.pdf), Susan Hanson and Genevieve Giuliano (eds). 2004. *The Geography of Urban Transportation*, 3rd Edition. New York: Guilford Press, Meyer, M.D. and Miller, E.J., *Urban Transportation Planning: A Decision-Oriented Approach*, McGraw-Hill, New York, 1984 (new edition, 2000).

<sup>13</sup> Id., p. 1.

<sup>14</sup> Id., p. 3.

<sup>15</sup> Id., p. 3.

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planning.<sup>16</sup> Initially a tool for predicting road traffic congestion (Meyer, M.D. and Miller, E.J., *Urban Transportation Planning: A Decision-Oriented Approach*, McGraw-Hill, New York, 2000), the travel demand model has been used over time by MPOs to address issues such as transit, land use, and air quality impacts.<sup>17</sup> MTC and some other MPOs have extended the use of travel demand models to the quite different context of predicting “accessibility,” defined by MTC as the ability to reach desired destinations (jobs in the equity analyses for the 1998, 2001, and 2005 RTPs, as well as “essential destinations” in the 2005 RTP) within a particular amount of time by residents of a group of communities by auto and by transit. (Kimsey Exh. 3, at 4-1 (MTCP043511); Kimsey Exh. 8, at 1 (MTCP012724); Kimsey deposition at p. 128.) MTC has used accessibility as a “performance measure” in the travel demand model equity analysis of its 1998, 2001, and 2005 RTPs. (Kimsey deposition at pp. 121-25.) In other words, MTC has used “accessibility” as a proxy for predicting equity.<sup>18</sup>

In the three RTP Equity Analyses it has prepared since 1998, MTC measured “accessibility” changes for low-income and minority communities compared to other communities. In other words, using its travel demand model, MTC predicted whether certain communities (defined as “disadvantaged” in 1998, and as “communities of concern” in 2001 and 2005)<sup>19</sup> would have access, in the aggregate, to at least as many jobs within a given travel time by auto and by transit as other Bay Area communities, in the final year of the RTP. (Kimsey

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<sup>16</sup> Id., p. 2.

<sup>17</sup> Id., p. 2.

<sup>18</sup> More generally, “accessibility” refers to the ease of reaching particular destinations. In the Transportation Demand Model, that ease is the basis for predicting travel behavior.

<sup>19</sup> In the 1998 Equity Analysis, “disadvantaged neighborhoods” were defined as those with “80 percent or less than each county’s median household income.” 1998 Equity Analysis, at 1-2 (MTCP012724-25). For the 2001 and 2004 Equity Analyses, community of concern was defined as a travel analysis zone where the population was at least 70% minority or 30% low-income (at or below twice the poverty level). 2001 Equity Analysis, at 3-4 to 3-5 (MTCP043505-06); 2004 Equity Analysis, at 3-3 to 3-4 (MTCP002600-01).

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Exh. 8, 1998 Equity Analysis, at 1 [MTCP012724]; Kimsey Exh. 3, 2001 Equity Analysis, at 4-3 [MTCP043513]; Kimsey Exh. 9, 2005 Equity Analysis, at ES-1 [MTCP002585].) In performing these analyses, MTC predicted the number of jobs that residents of “disadvantaged communities” or “communities of concern” would be able to access, by auto and by transit, in the 25th year of the RTP, assuming a “no project” (status quo) alternative and an “RTP alternative” in which the investments reflected in the RTP were made.<sup>20</sup> (See for example 1998 Equity Analysis, at 2-3 [MTCP012725-26]; 2001 Equity Analysis 4-2 [MTCP008643], and 4-5 to 4-8 [MTCP043515-18].) In the Equity Analysis of the 2005 RTP, MTC separately subtotaled jobs accessible from urban and suburban communities. (2005 Equity Analysis at 5-1 to 5-4, Kimsey Exh. 9 [MTCP002614-17])

MTC’s RTP Equity Analyses have been essentially identical (a) in measuring equity by predicting future access to jobs, (b) in the methodology employed, and (c) in the kinds of assumptions employed:

(a) All three versions of MTC’s RTP Equity Analysis measured equity in the same way, as access to jobs. (Lethco deposition at pp. 93-5; Kimsey deposition at pp. 124-25 [equity was measured in the same way in 2001 as in 2004, except that in 2004, access to essential destinations was added.]; Purvis deposition at p. 80 [1998 equity analysis measures access to jobs by total employment]; Kimsey Exh. 8 at p. 1 [in 1998, “Equity is measured in terms of accessibility changes to disadvantaged relative to not disadvantaged neighborhoods”].) As Mr.

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<sup>20</sup> MTC’s RTP equity analysis uses a baseline of “no project,” meaning no improvements in the horizon year (in the case of the 2005 RTP, the year 2030); this baseline looks at only those projects that are fully funded in the TIP, compared to what the RTP improvements do in relation to the “no project” baseline. MTC does not look at the baseline of *current* levels of access or transportation services. It looks at a horizon year, and then shows that with RTP improvements conditions are better in communities of concern. (Kimsey deposition at pp. 610-11.)

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Kimsey testified, “we are addressing equity issues in the context of long-range plans. So what it is measuring is the specific performance measure . . . what it defines as equity is whether or not the low income or non-low income have relative accessibility to transit or to jobs, either transit or autos, so it is -- you know, it is one thing to say is it -- does it -- is it equity, but what we are doing is we are defining how equity is measured.” (Kimsey deposition at p. 157.)

(b) In these Equity Analyses, MTC is comparing the improved access to transit by making investments versus not making investments. (Id. at 514.) “[T]his finding [in the 1998 RTP Equity Analysis] basically say[s], then, at the end of the year 2020, if the contemplated RTP investments are made than the aggregate number of jobs that can be reached by transit will have increased by a certain amount.” (Id.) As the 2005 analysis noted, the RTP equity analyses do not “capture whether transit is serving residents *when they need to travel or where they specifically need to go*, nor does it assess any cost barriers to using any particular mode of transportation.” (2005 Equity Analysis at ES-5, Kimsey Exh. 9 [MTCP002589], emphasis in original.)

(c) All three equity analyses used the same methodology. (Purvis deposition at p. 23 [the Travel Demand Model system has remained the same “in terms of the construction of the model components and the coefficients” since 1998]; id. at 24-25 [MTC still uses the same travel demand model that is described in an MTC document dated June 1997, which “is the detailed model coefficients and demand model components that are used in the existing or the current models”]; id. at 105 [“The Travel Demand Models were the same in the 2001 and the 2004 RTPs”]). (Kimsey deposition at pp. 463-65 [In methodology, the 2004 Equity Analysis replicated the 2001 Equity Analysis except for three changes,: the addition of “essential destinations” such as schools, food stores, and health and social services to “job destinations”];

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predicting out-of-pocket savings; and predicting vehicle miles traveled]; see Kimsey deposition at pp. 119-21.)

(d) All three travel demand model-based analyses used the same kinds of assumptions. (Id. at 135.) Among the key assumptions were the following:

- MTC assumed that bus service will not be cut, without regard to (i) whether MTC's RTP indicated that a given operator would have shortfalls in operating revenues to meet the cost of maintaining its existing service, or (ii) whether an operator had a history of service cuts. (Id. at 437; 441-42; 443). Mr. Kimsey testified that "[i]f we would have assumed service cuts in the 2005 Equity Analysis it likely would have had an impact on transit access." (Id. at p. 440)
  - In fact, for instance, AC Transit cut its service by 4% in June 2003 and an additional 14% in December 2003. (Bockelman deposition at pp. 423-27 & 2005 RTP Project Notebook at 2.1-5.) However, for the 2005 Equity Analysis, the base year was 2000. So the 2005 RTP Equity Analysis would not reflect any service cuts after 2000 by AC Transit. (Kimsey deposition at p. 443)
- MTC assumed that minority communities would be located in the same neighborhoods in 25 years as they are today. (Id. at 411).
- MTC used demographic assumptions provided by the Association of Bay Area Governments ("ABAG"), which show that both population and jobs increase over the 25-year period. (Id. at 515.) As population and jobs increase over time within a given geographic area, access will predictably increase because, on average, people and jobs will be closer to each other. From a transportation perspective, accessibility should also increase unless increases in congestion are large enough to cancel out the impact of reduced distances on reduced travel times.
- MTC determined zone-to-zone transit paths by finding the "one best path" in terms of minimum transit travel time or "best weighted travel time". (Purvis deposition at pp. 59-60, 63-64, 68-70 ["It [the model] will take the faster in-vehicle travel time, if all else is equal in terms of walk distances to and from either end of the trip."])
- MTC assumed that the coefficients in its travel demand model that are used for predicting travel behavior will remain the same over the 25 years of the RTP. (Purvis deposition at pp. 42.) This assumption has significant consequences for the outcomes of the model.<sup>21</sup>

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<sup>21</sup> The coefficients act the same as elasticities. An example is how people change decisions to travel as prices go up. For example, a 10% increase in price might correspond with a 5%

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- MTC’s travel demand model assumes that trips begin and end at the “centroid” or weighted center of a Travel Analysis Zone based on population distribution. Estimated door-to-door travel times rely on that assumption, thus it does not capture experience of a household that is not located at the centroid. (Kimsey deposition at pp. 185-86; Purvis deposition at pp. 47, 60-62.)
- MTC’s travel demand model assumes that proximity is the primary factor to determine what transit service a person will use (Kimsey deposition at p. 414) and that a person is more likely to ride the transit option closest to her regardless of its affordability.<sup>22</sup>

All three model-based equity analyses reached the following main conclusions:

(e) “‘Accessibility,’ that is, proximity or access-to-job opportunities, is increased in the RTP project alternative compared to the no project alternative” (1998 RTP Equity Analysis, Kimsey Exh. 8, at 4, MTCP012727); compare [“Accessibility by transit increases with the RTP”] (2001 Equity Analysis, Kimsey Exh. 3, at 1-4, MTCP043497); [“Both the Project and TRANSDEF alternatives offer access to a greater number of jobs overall than the No Project or Financially Constrained alternatives, which is likely due to the significant transit expansion in these two alternatives.”] (2005 Equity Analysis, Kimsey Exh. 9, at ES-2, MTCP002586 (2005 Equity Analysis).

(f) “Transit accessibility to jobs is significantly higher in disadvantaged neighborhoods compared to not-disadvantaged neighborhoods.” (Id.) Compare [“transit accessibility is higher from low-income and minority communities”]; (2001 Equity Analysis, Kimsey Exh. 3, at 1-4, MTCP043497); [“For the most part, urban and suburban communities of

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decrease in travel. These elasticities change over time because other conditions change over time. My willingness to make trade-offs over time will likely change as I have more or less alternatives. This is a fundamental problem with modeling because we also have to make assumptions/predictions about how responses to price changes will occur.

<sup>22</sup> Additional sound criticisms were set forth in the letter from Hussain to Corless, dated July 21, 2006. (Letter from Hussain to Corless, 7/21/06.)



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concern have access to more jobs and essential destinations *by transit* than the remainder of the Bay Area.”] (2005 Equity Analysis, Kimsey Exh. 9, at 6-1, MTCP002649). (Note that in the 2005 Equity Analysis, MTC separately analyzed urban and suburban communities.)

These were major findings of the 1998 report, and have been findings of all three reports. (Kimsey deposition at pp. 513-14; Kimsey Exh. 3 [2001 Equity Analysis], at 1-4, MTCP043497; Kimsey Exh. 9 [2005 Equity Analysis], at ES-5, MTCP002589.) In other words, MTC’s RTP Equity Analyses have consistently found no inequity, as defined by MTC’s performance measure. (Kimsey Deposition at pp. 446; 509-10.) As Mr. Kimsey testified, “what our RTP [equity] analysis always shows time and time again is that it improves conditions in both communities of concern and non communities of concern equally. And that is the core of the equity analysis . . . as we think it has been defined by the federal agencies on how equity analysis should be conducted.” (Id. at 609.)

**I. MCAC Proposes EJ Principles**

In early 2004, in connection with MCAC’s review of MTC’s proposed Equity Analysis methodology for the 2005 RTP, MCAC requested technical assistance from Urban Habitat on EJ issues. On April 12, 2004, Urban Habitat suggested that MCAC consider a set of eight EJ principles. (Urban Habitat, MCAC Guiding Principles, April 12, 2004, MTCP 257537.) When MCAC showed interest, and began debating the draft language, MTC staff re-wrote the proposal. (Memo to MCAC from Catalina Alvarado. “Discussion on Environmental Justice Principles.” June 8, 2004.)

Urban Habitat’s proposed language would have required that MTC “identify the presence of inequities in transportation based on race and income” (Principle #2), “measure the extent of these inequities” (Principle #3), and “change its investment decisions” in order to address the

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identified inequities (Principle #4). (Urban Habitat, MCAC Guiding Principles, April 12, 2004.)

Staff proposed that MCAC consider a substitute set of principles that omitted use of the term “inequities.” (Memo to MCAC from Catalina Alvarado. “Discussion on Environmental Justice Principles,” June 8, 2004, MTCP 257539.) MTC also proposed the following as a definition of “equity”: “an allocation of benefits and burdens that are “judged as ‘fair,’ though not necessarily equal.” Id.

After seven months of debate, MCAC adopted a set of four EJ Principles in November of 2004 (Memo to the Legislation Committee by the Executive Director, “MTC and Environmental Justice,” January 7, 2005, MTCP 257574), and sought to bring its EJ Principles before the Commission for its approval. As adopted by MCAC, the EJ Principles read as follows:

Opening Statement: To ensure that Environmental Justice is effectively incorporated into all of the Metropolitan Transportation Commission’s planning, decision-making, funding and operations, the Minority Citizens Advisory Committee urges the Metropolitan Transportation Commission to adopt and implement the following principles.

Principle #1 – Create an open and transparent public participation process that empowers low-income communities and communities of color to participate in decision making that affects them.

Principle #2 – Collect accurate and current data essential to understanding the presence and extent of inequities in transportation funding based on race and income.

Principle #3 – MTC should change its investment decisions as necessary to mitigate identified inequities. These changes would apply both to the financing of already existing projects as well as to the financing of proposed or future projects.

Principle #4 – Ensure that disproportionate project impacts on low-income and/or minority communities are addressed and mitigated prior to MTC project or funding approval.

(Id.)

The Principles were brought before the Commission’s Legislation Committee in January

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of 2005. (Memo to Legislation Committee by the Executive Director, “Environmental Principles – Staff Response to Minority Citizens Advisory Committee,” February 25, 2005, MTCP 257575.) Contrary to normal procedure, staff provided the Legislation Committee with no staff report on this agenda item. (Memo to the Legislative Committee by the Executive Director, “MTC and Environmental Justice,” January 7, 2005, MTCP 257574.) Instead, the Executive Director told the Legislation Committee that staff would prepare a report “after the MCAC has had an opportunity to discuss the principles with the Legislation Committee first.” *Id.*<sup>23</sup>

For the March 2005 Legislation Committee meeting, instead of providing a staff report on the EJ Principles that MCAC had formally adopted, staff provided a memo on a *substitute* version. (Memo to the Legislative Committee by the Executive Director. “Environmental Principals – Staff Response to Minority Citizens Advisory Committee,” February 25, 2005, MTCP 257575.) Among other things, staff’s substitute principles diminished the mandate of MCAC’s Principal #3 from a requirement that “MTC should change its investment decisions as necessary to mitigate identified inequities” to one that required only that MTC “[r]eview funding decisions for fairness.” *Id.* The Executive Director’s February 2005 memo also replaced MCAC’s Principle #2, which would have required that MTC “[c]ollect accurate and current data

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<sup>23</sup> According to the minutes of the January 14, 2005, meeting of the Legislation Committee:

“Minority Citizens Advisory Council (MCAC) Chair Frank Gallo presented a set of principles that MCAC believes will ensure that environmental justice is effectively incorporated into MTC’s planning, decision-making, funding and operations. He regarded the principles as reasonable and in accordance with federal guidelines. Commissioner Azumbrado said that wording of the principle relating to transportation investment decisions ought not imply that the Commission’s investment decisions in transportation are inequitable. Steve Heminger agreed that the investment principle needed further evaluation and that a staff analysis could provide a fuller picture. Commissioners Dodd, Lempert and Spering all agreed that the principles needed review. The committee unanimously agreed to ask staff to prepare an analysis, and revisit the principles prior to considering specific action.”  
([http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee\\_id=18&agenda\\_id=433](http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee_id=18&agenda_id=433))

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essential to understand the presence and extent of inequalities in transportation funding based on race and income” with vaguer language providing that MTC should “better understand the impact of transportation funding decisions on minority and low-income communities.” *Id.*

The Legislation Committee took no action, and MCAC’s Principles were returned to MCAC for further discussion.<sup>24</sup> *Id.* In its memo to MCAC for its March 2005 meeting, staff noted that MCAC’s adopted Principles improperly presumed “that the Commission’s existing and future investment decisions have resulted in the past or will result in the future in inequities for low income and minority communities” and that “responsibility for mitigating any inequities,

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<sup>24</sup> According to the minutes of the March 4, 2005, meeting of the Legislation Committee:

“Therese McMillan, noting the item as informational (not “action” as shown on the agenda), reviewed the staff response to environmental justice principles presented by the Minority Citizens Advisory Committee (MCAC) in January. She distributed copies of correspondence on the matter to MTC from Public Advocates, Inc., Communities for a Better Environment, and members of the Transportation Justice Working Group (TJWG).

“In summary, she said principles should be modified to (1) provide for objective evaluation supported by key data on impacts of transportation investments and policies on low-income and minority populations without predetermining burdens and benefits, and (2) clearly address where mitigation responsibility should reside if inequities are identified. In closing, Ms. McMillan said further discussion between the Commission and MCAC members would be facilitated.

“Comments from the public:

- Frank Gallo, MCAC Chair, noted a letter from Commissioner Kinsey on Feb. 11, 2005 thanking MCAC for their comments on the *Transportation 2030* equity analyses. Mr. Gallo said that TJWG’s letter to MTC on Mar. 2, 2005 warranted thoughtful review and consideration, and that he looked forward to further discussion on the matter.
- Sylvia Darensburg, Lifeline, speaking for “the ones who are totally transit-dependent,” requested further analysis of the EJ principles.
- AJ Napolis, CBE, welcomed analyses and dialogue, supported MCAC efforts to craft language suitable to all interested parties.
- Lili Farhang, San Francisco Department of Public Health, said public agencies need EJ principles to be responsive, and that MTC staff analysis needs to be on the original principles submitted by MCAC.”

([http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee\\_id=18&agenda\\_id=461.](http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee_id=18&agenda_id=461.))

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should they exist, would rest solely with the Commission.” (Memo to MCAC from Catalina Alvarado, “Discussion of Environmental Justice Principles at Legislation Committee,” March 8, 2005, MTCP 257588).

MTC’s Executive Director met personally with MCAC three times from July through September of 2005, negotiating changes to MCAC’s adopted EJ Principles. (Memo to MCAC by Catalina Alvarado, “Discussion on Environmental Justice Principles,” October 4, 2005, MTCP 257607.) At the conclusion of those negotiations, in September of 2005, MCAC voted to amend its EJ Principles in two respects. First, it added the words “if any” after referring to inequities in the transportation system in Principle #2; and second, it limited Principle #3 to apply only to “discretionary” investments by MTC. *Id.*<sup>25</sup>

After reaching agreement with MCAC on an amended set of EJ Principles, the amended Principles were not immediately brought back to the Legislation Committee. Instead, on December 5, 2005, MTC staff presented MCAC’s amended proposed EJ Principles to the Bay Area Partnership Board<sup>26</sup> “as an informational item.” (Memo to MCAC from Catalina Alvarado,

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<sup>25</sup> As amended, Principles 2 and 3 read:

Principle #2: Collect accurate and current data essential to defining and understanding the presence and extent of inequalities, if any, in transportation funding based on race and income.

Principle #3: MTC should change its discretionary investment decisions and actions to mitigate identified inequalities.

(Memo to MCAC by Catalina Alvarado. “Discussion on Environmental Justice Principles,” October 4, 2005, MTCP 257607.)

<sup>26</sup> The Partnership Board is “a confederation of the top staff of various transportation agencies in the region (MTC, public transit operators, county congestion management agencies, city and county public works departments, ports, Caltrans, U.S. Department of Transportation) as well as environmental protection agencies. The Partnership works by consensus to improve the overall efficiency and operation of the Bay Area’s transportation network, including developing

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“Update on Proposed Environmental Justice Principles,” December 6, 2005, MTCP 257609.)

On January 13, 2006, MCAC’s EJ Principles came before the Legislation Committee for a third time. The Legislation Committee asked MCAC and the Partnership Board to meet jointly and pursue mutually acceptable language. (Corless Exh. 2, January 4, 2006 memo; Memo to MCAC by Catalina Alvarado. “Update on Proposed Environmental Justice Principles,” February 7, 2006, MTCP 257618.)

In response, MTC staff called a joint meeting of MCAC and the Partnership Board, with the goal that the two groups agree on “mutually acceptable language” for the environmental justice principles. (Memo to MCAC by Catalina Alvarado. “Update on Proposed Environmental Justice Principles,” February 7, 2006, MTCP 257618.) The Partnership recommended further modifications to amended Principle #3; rather than stating that “MTC should change its discretionary investment decisions and actions to mitigate identified inequalities,” it asked for a milder requirement that MTC “include environmental justice inequities ... in its discretionary investment decisions.” *Id.* The Partnership also proposed three different and weaker versions of MCAC Proposition #4. *Id.*

Concluding that MCAC should stand by its principles and avoid further delay, MCAC rejected the Partnership’s suggestions, voting on February 14, 2006 to retain the language of its four principles, as previously amended, and requesting that the Legislation Committee now approve those Principles in the form that had been approved by the Executive Director. (Memo to the Legislation Committee by Steve Heminger, “Proposed Environmental Justice Principles,” February 24, 2006, MTCP 257489.)

At the March 3, 2006, meeting of the Legislation Committee, a motion to adopt MCAC’s

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strategies for financing transportation improvements.” (MTC, “The Bay Area Partnership,” see [http://www.mtc.ca.gov/about\\_mtc/partner.htm](http://www.mtc.ca.gov/about_mtc/partner.htm).)

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Principles failed on a vote of 3-2. Staff and General Counsel did not put forward a consensus position, with General Counsel opposing and Executive Director in favor of the MCAC submittal. General Counsel proposed alternative language,<sup>27</sup> and the Executive Director advised that both sets of principles be brought before the full Commission. A motion to do so passed unanimously. (Minutes of March 3, 2006 Legislation Committee meeting, MTCP 257410; Memo to the Legislation Committee by Steve Heminger, “Proposed Environmental Justice Principles,” February 24, 2006, MTCP 257489; Memo to the Legislation Committee by the General Counsel, “Proposed Environmental Justice Principles,” February 24, 2006, MTCP 257500.)

On March 22, 2006, just under two years after MCAC began deliberating on the subject of Environmental Justice, MCAC’s EJ Principles came before the full Commission for the first time. A motion to adopt all four EJ Principles failed, and a substitute motion to adopt Principles 1 and 2 passed. (Corless Exh. 11 [Memo from Catalina Alvarado to MCAC, Apr. 4, 2006, MTCP 257442] at 1.) The Commission directed staff to implement Principle 2, and “report back in four months on whether the data collected in Principle #2 yields insights into defining inequities and determining whether they exist based on that definition.” (Id.) Chair Rubin stated: “The hope is that in four months staff will come back to us and tell us what the data is relative to Principles 3 and 4 and the issues that they raise. And based on that data and any other considerations, and hopefully, with more enlightenment from Counsel, and perhaps in a

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<sup>27</sup> The General Counsel recommended editing proposed Principle #3 to state that MTC should “as a routine practice, take into consideration environmental inequities... so that positive corrective action can be taken if necessary,” rather than MCAC’s stronger language requiring that MTC “mitigate identified inequities.” (Memo to the Legislation Committee by the General Counsel, “Proposed Environmental Justice Principles,” February 24, 2006, MTCP 257500.) The General Counsel further weakened MCAC’s proposed Principle #4 to state that MTC should mitigate disproportionate impacts “to the extent feasible.” Id.

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subsequent closed session, we will know more and perhaps be more comfortable in setting forth other principles.” (Transcription of Commission comments, March 22, 2006, MTCP 257410.)

**J. The Funding Equity Analysis**

At the next MCAC meeting, in April 2006, James Corless of MTC staff presented a recommendation for “Implementing Environmental Justice Principle #2.” (Corless deposition at p. 124; Corless Exh. 11 [Memo from Catalina Alvarado to MCAC, Apr. 4, 2006, MTCP 257428] at 2.) Corless recommended “that an analysis be performed to compare transportation funds that are spent in identified communities of concern versus those spent outside communities of concern.” *Id.* He proposed doing so on a purely geographic basis, while at the same time noting that “[o]ne of the more challenging aspects to any analysis of transportation funding is the assignment of benefits from specific projects” to particular communities. *Id.* He offered the possibility, “[d]epending on the availability of the data,” of “looking at (a) historical funding patterns over the past 5-10 years ... and/or (b) the long term 25-year investment package in the Regional Transportation Plan (RTP).” (*Id.*) He went on to state that “[a]nother critical question is how we will define equity in terms of transportation dollars spent. Is one definition of equity that MTC should spend at least as much per capita on transportation projects that benefit communities of concern versus all other communities?... [W]e should work towards some sort of agreed upon definition if we can.” (*Id.*) Finally, he acknowledged that “one obvious data gap is the lack of consistent data being collected for the race/ethnicity and income profiles for all transit users in the Bay Area.” (*Id.*)

Urban Habitat found fault with this purely geographic-based approach. In a “Recommended Four-Month Plan for Implementing Principle #2,” Urban Habitat explained:

This staff proposal, however, would overlook several important ways to define “communities of concern” as well as several important dimensions of equity. In order to



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provide a more meaningful analysis, while avoiding unduly subjective assumptions, [Urban Habitat's] proposal recommends four simplified equity analyses that can be easily completed within the time allotted by the Commission.

This proposal begins by identifying three different kinds of communities of concern. In addition to minority and low-income communities defined in terms of geographic neighborhoods, as in the staff proposal, this proposal identifies two other communities of concern: (a) the population of all persons without access to a car (in other words, all transit-dependent people), and (b) the riders of transit systems with high rates of minority or low-income riders.

This proposal also articulates three separate dimensions of equity: equity with respect to funding; equity with respect to the level of service provided with that funding; and equity with respect to the ability to get to important destinations (mobility). (Funding is referred to as a transportation "input," while the level and quality of transportation services provided is an "output" and the level of mobility is an "outcome" of transportation funding.)

(Corless Exh. 10, MTCP 257379, emphasis in original.)

Staff presented an initial set of funding analyses to the subcommittee for its feedback on June 26, 2006.<sup>28</sup> This staff analysis included three components, one identifying communities of concern geographically, as in MTC's RTP equity analyses; one identifying communities of concern as transit dependent populations; and one identifying communities of concern as transit operators whose riderships meet MTC's criteria for communities of concern. For each, staff included two analyses: one based on the travel demand model and looking at RTP investments in 25 years, and one looking at funding levels for the past three fiscal years.

MCAC agreed to participate in a joint subcommittee with the Partnership Board,<sup>29</sup> comprised of 14 members – eight from MCAC and six from the Partnership Board (Corless Exh. 5 at p. 10), which began meeting the next month. At the June meeting, Urban Habitat presented

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<sup>28</sup> See [http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee\\_id=47&agenda\\_id=683](http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee_id=47&agenda_id=683).

<sup>29</sup> It is not clear whether this was MCAC's idea. An internal memo from Mr. Corless to Steve Heminger and Therese McMillan, entitled "Next Steps on EJ Principles," dated April 3, 2006 (Corless Exh. 12, MTCP 257438-9), refers to agreements reached at a March 28 meeting of staff, just a few days after the Commission hearing; among those agreements was that staff would "Develop a process for undertaking any analysis that includes participation from other stakeholders, particularly the Bay Area Partnership."

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its recommendation for the analysis requested by the MTC Commission.<sup>30</sup> Urban Habitat also made a presentation on its funding equity methodology at the full MCAC meeting in July.<sup>31</sup>

In a July 21, 2006 letter to staff, the Transportation Justice Working Group expressed “deep concern” over the direction of staff’s initial draft analysis. (Letter from Hussain to Corless, 7/21/06.) With regard to the use of the travel demand model, the letter stated that “this computer modeling is not designed to answer -- or capable of answering -- the fundamental equity question: have low-income residents or residents of color received less transportation funding, or fewer transportation benefits, than other residents?”, and that the travel demand model analysis “is not useful as an equity analysis.” The letter also criticized a number of assumptions made in the model, including the assumption that existing levels of transit service will be maintained for the next 25 years, that each transit trip is funded equally regardless of mode, and that those who live near a transit stop are more likely to ride that form of transit, regardless of their ability to afford the ride.

With regard to the historic funding analysis by transit operator, the letter criticized staff’s division of transit funding into “discretionary” and “non-discretionary” funding sources, stating that

the question of which funding sources are within MTCs discretion... is not relevant to the question posed by Principle #2, which is aimed at determining whether there is inequity, not why.”

(Emphasis in original.) The letter further criticized the analysis for failing to identify which riderships meet MTC’s criteria for communities of concern: instead of asking what percentage of each transit operator’s ridership consisted of minorities, staff’s analysis asked what proportion of the region’s minority transit riders were carried by that operator. The group called this approach

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<sup>30</sup> See agenda at [http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee\\_id=47&agenda\\_id=660](http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee_id=47&agenda_id=660).

<sup>31</sup> See [http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee\\_id=20&agenda\\_id=690](http://apps.mtc.ca.gov/agenda/view/agenda.jsp?committee_id=20&agenda_id=690).

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“both meaningless and inconsistent with MTC’s treatment of geographic communities of concern.”

In addition, the letter also criticized the failure to include funding for more than three years. It requested a 20 year funding analysis, stating that historic funding data is readily available from the National Transit Database. (Letter from Lila Hussain to James Corless, dated July 21, 2006.)

Staff followed up with two further “Draft Reports,” one dated September 6, 2006 (Corless Exh. 6, MTCP 257035-60), and one dated October 26, 2006 (Corless Exh. 7, MTCP 256746-60). Both were prominently marked “DRAFT” and “DO NOT QUOTE OR CITE.” The conclusions reached were as follows:

- Cell 1a (2005 RTP funding by geographic community of concern): funding per capita was higher for communities of concern, both in terms of MTC discretionary funds and nondiscretionary funds.
- Cell 1b (transportation programming and allocations by community of concern FY 03 – FY 05): funding per capita was higher for communities of concern, both in terms of MTC discretionary funds and nondiscretionary funds.<sup>32</sup>
- Cell 4a (2005 RTP funding for transit dependent household): funding per capita was higher for transit dependent households.
- Cell 4b (FY 98 – FY 05 transportation programming and allocations for transit dependent household): funding per capita was higher for transit dependent households.<sup>33</sup>
- Cell 7a (proportional share of 2005 RTP transit funding versus ridership): this analysis compared 5 transit operators (AC Transit, Bart, Caltrain, MUNI and VTA) with five bar graphs each, showing:
  - Percent share of all riders on five operators.
  - Percent share of minority riders on five operators.
  - Percent of MTC discretionary funds for five operators.
  - Percent of MTC non-discretionary funds for five operators.
  - Percent of MTC total funds for five operators.

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<sup>32</sup> This analysis was revised in the October 26, 2006 draft.

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Among other things, this analysis showed that AC Transit's percentage of total funding was smaller than its percentage of total riders, while BART and Caltrain had a higher percentage of total funding than their respective percentages of total riders.

- Cell 7b (FY 98 – FY 05 transit programming & allocations versus ridership): this analysis compared 5 transit operators (AC Transit, Bart, Caltrain, MUNI and VTA) with five bar graphs each, showing:
  - Percent share of all riders on five operators.
  - Percent share of minority riders on five operators.
  - Percent of MTC discretionary funds for five operators.
  - Percent of MTC non-discretionary funds for five operators.
  - Percent of MTC total funds for five operators.

Among other things, this analysis showed that AC Transit's percentage of total funding (11%) was smaller than its percent of total riders (15%), while BART and Caltrain had a higher percentage of total funding than their respective percentages of total riders (for BART, 33% of total funding vs. 21% total riders; for Caltrain, 6% total funding, 2% total riders).<sup>34</sup>

With regard to the results in Cell 7b, “[t]he EJ Subcommittee voted 5-3 to suggest that this analysis of transit operator funding distributions represents an inequity that would require mitigation under MCAC’s proposed EJ Principle #3.” (Corless Exh. 5, Memo from Executive Director to Legislation Committee, January 5, 2007, at 4; Corless deposition at p. 88).

MTC did not present the findings in Cell 7b in terms of subsidy per rider, nor did it group the operators according to whether their riderships met MTC’s definition of “communities of concern.” When Urban Habitat so presented MTC’s findings in a bar graph, it showed that all three operators that met the definition of communities of concern were bus operators (AC Transit, MUNI bus and VTA bus), and that subsidies per rider were far lower for bus compared to rail for AC Transit as compared to BART and Caltrain, for MUNI bus as compared to MUNI rail, and for VTA bus as compared to VTA rail. (Corless Exh. 8.)

Urban Habitat and the TJWG wrote to MTC on October 19, 2006 to assert that “funding

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<sup>34</sup> This analysis was revised in the October 26, 2006 draft.

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inequities are clearly demonstrated in the report's transit ridership analysis." Its letter stated that the September draft "plainly shows severe funding inequities in its comparison of the low-income bus riderships of AC Transit, MUNI, and VTA with the much more affluent rail riderships of MUNI, BART, Caltrain and VTA." (Corless Exh. 8, letter from Heminger to Hussain, dated October 30, 2006, at 3-4.)

Urban Habitat's circulation of its chart drew a sharp response from Executive Director Heminger, who insisted that

it is false to state that any of these figures are "calculated by the Metropolitan Transportation Commission." MTC staff at the request of Urban Habitat produced the underlying data for this chart. However, we did not calculate or publish any subsidy per rider numbers precisely because... we believe that there are major limitations of doing so without taking into consideration other factors, including total ridership, population of the service area, and capital versus operating funding.

(Corless Exh. 8, letter from Heminger to Hussain, dated October 30, 2006.)

Heminger also asserted that Urban Habitat "continues to 'cherry pick' from the draft analysis by relying uncritically on those research findings that appear to support your advocacy position while refusing to acknowledge those findings that might contradict it. Witness your use of the cell 7 data on transit agency funding distributions referenced above, versus your lengthy disparagement of the findings in cell 4 on transit dependent populations." (Id. at 2.)

Finally, Heminger accused Urban Habitat of a "breach of basic research protocol," based on presenting MTC's "draft" data in Urban Habitat's chart. (Id. at 1.) Despite Heminger's protest, MTC did not issue its September and October draft analyses in final, detailed form, nor did it post them on its website. (Corless deposition at pp. 114; see id. at 103-04.) The "final" version of the funding analysis is a simplified nine page memo from the Executive Director to the Legislation Committee, dated January 5, 2007 (Corless Exh. 5; Corless deposition at pp. 103-04), which was provided to the Committee when MCAC's EJ Principles came before it for the

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final time. (Corless deposition at pp. 104, 114.) That memo reduced the chart for Cell 7b to just two bars for each transit operator: one for share of MTC discretionary funding, and a second for share of minority riders. (Corless Exh. 5 at 5.)

MCAC met on December 12, 2006, and

adopted a motion stating the committee's strong opinion that inequities exist, whether intentional or not, in the distribution of transportation funding based on race and income, and recommending that the commission adopt proposed EJ Principles #3 and #4. The motion comes after careful review of the analysis called for in EJ Principle #2...

(Corless Exh. 9, Memo from MCAC to Legislation Committee, Jan. 5, 2007.) MCAC members also noted that "they would have preferred an analysis with 20 years of data instead of eight years of data. Even though the data before us shows inequities, a clearer demonstration of the inequities could be seen if there were a longer timeframe of data for expenditures, including rail and freeway projects." (Id.) MCAC concluded by stating that "the EJ Principles should serve as guidelines to prevent inequities from occurring in the future, regardless of the outcome of the analysis." (Id.)

MTC staff, as well as the Partnership Board, had a different view. "The Partnership concluded that the EJ analysis in general, and the analysis of funding distributions among transit operators in particular, was proving to be particularly divisive for the region and did not recommend any further specific action regarding EJ principles 3 and 4. Instead, the Partnership recommended that the Commission focus explicitly on developing new sources of transit operating revenues for the region as a means of providing more service in communities of concern and addressing the intent of the EJ principles." (Corless Exh. 5, at 5.) And staff told the Committee that "the extensive analysis conducted under the guidance of the EJ Subcommittee does not convincingly demonstrate that there are inequities in transportation funding based on race and income. While the EJ subcommittee voted that one of the analyses (see Chart E) did

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demonstrate an inequity, they could not agree on how to define inequity in the distribution of funding among transit operators.” (Id. at 6, emphasis in original.) Accordingly, staff recommended that the Commission “not adopt the remaining two EJ principles.” (Id. at 8.)

The matter came back before the Legislation Committee for the fifth and last time in nearly two years on January 12, 2007. The Committee did not recommend adoption of the EJ Principles. Instead, it passed a motion “directing the staff recommendation to the Programming and Allocations Committee” and instructing staff “to develop further data details to recommend to the Programming and Allocations Committee at its March meeting how Lifeline can be made a priority for the infrastructure bond [Proposition 1B].”<sup>35</sup>

Mr. Corless, who supervises MTC's EJ efforts, was unable to provide MTC's definition of equity. He testified that MTC was unable to reach a consensus on how to define equity for environmental justice purposes, either as part of the funding equity analysis in 2006, or at any prior time. (Corless deposition at p. 67.) He stated that, in MTC's view, it was necessary to have either a consensus or a "strong majority opinion" in order to define equity, since that term was used in MCAC's EJ Principle #3, and MTC "didn't want to spend years arguing about what does inequity mean in EJ Principle No. 3." (Id. at 68-9.) Asked whether, in light of MTC's inability to reach consensus on a definition, MTC had a working definition of equity, he said that he would go back to the 2001 and 2005 RTP Equity Analyses, which recite the definition from the EJ Executive Order. (Id. at 72.) Asked what an "equitable" share of benefits in that definition meant, however, Mr. Corless was not "comfortable saying" anything more than that the closest MTC had ever come to "generating something that most people agree on" was in the RTP Equity Analyses. (Id. at 73.)

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<sup>35</sup> See <http://apps.mtc.ca.gov/events/agendaView.akt?p=800>, agenda item 2.

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Since January 2007, MTC has made no additional efforts to define equity for EJ purposes. (Corless deposition at pp. 66-7.) MTC's point person for its EJ efforts (Corless deposition at p. 75) has no knowledge whether, over the year since that meeting, MTC has taken any steps on the recommendation that it made in lieu of adopting the EJ Principles – namely, that “MTC should re-examine its current transit capital programming and allocation priorities to assess whether changes would increase benefits to low-income riders.” (Corless deposition at pp. 119-20; Corless Exh. 5 at 8.)<sup>36</sup>

#### **IV. ANALYSIS OF MTC'S RESPONSE TO EJ COMMUNITIES**

In this section, I explain my conclusions, based on the expectations set forth in Section III and the history recounted in Section IV, that (a) MTC repeatedly failed to give EJ Communities the information and analysis that they explicitly requested, breaching its duties as described earlier; (b) instead, MTC consistently gave EJ communities a modeling analysis that was designed in such a manner as to be incapable of revealing the inequities that EJ communities explicitly asked MTC to analyze, and continued to do so despite strong and valid criticism by EJ Communities of that approach; (c) failed to adopt well-crafted and reasonable EJ Principles for no good reason; and (d) by applying a double-standard to MCAC's views on inequity and concealing key data from the public, refused to make any sort of commitment to redress clear inequities that resulted from the funding equity analysis that MTC finally conducted in 2006.

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<sup>36</sup> In connection with the statement that "the needs of low-income/transit-dependent riders should be among the Commission's chief priorities" in the January 5, 2007, staff report, Mr. Corless testified that "[t]hat was our recommendation. ... in the case of Proposition 1B, which follows on the heels of this -- this memo, the Lifeline Transportation Program was among the top priorities of that funding package under Prop 1B." (Corless deposition at p. 120.) Prop 1B funds also went to expansion projects in Res. 3434.



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**A. MTC's Resistance To EJ Communities' Requests Is Inconsistent With Public Participation Principles of Transparency, Consistency, and Integrity**

It is my opinion that MTC departed strikingly from its obligations to provide information and analysis responsive to the needs of EJ communities, and in doing so also departed from its duties of transparency, consistency and integrity.

A clear theme in the comments and requests MTC has received from EJ communities over the years emerges from the documents and depositions I have reviewed. Since 1998, Bay Area EJ communities have repeatedly and consistently asked MTC whether low-income and minority bus riders were receiving treatment at MTC's hands equal to the treatment accorded rail riders. As early as 1998, EJ and civil rights organizations joined a letter by Carl Anthony noting their belief that the same inequalities between bus and rail riders that had been uncovered in Los Angeles were also present in the Bay Area, and asked MTC to prepare a new Title VI report that would "analyze which income levels and neighborhoods will benefit" from RTP investments. (MTCP 012280-82.) MTC declined to do so.

In 1999, an Urban Habitat publication called on MTC to "begin to accurately measure who really benefits and is burdened from transportation investments over time through their plans such as the Regional Transportation Plan (RTP)." (Urban Habitat Program, "Course in Bay Area Transportation Investment," 1999, PL019067.) Urban Habitat highlighted how MTC's funding patterns favored suburban commuters and peak-time travelers. (Id. at PL019039.) It emphasized the funding disparity between bus and rail, and suggested reallocation of funding based on ridership to enable the restoration of important nighttime and weekend service for MUNI and AC Transit riders. (Id. at PL019072.) In 2001, EJAG asked MTC to compare data on the racial makeup and income levels of transit riders with "the financial totals by mode and by operator." (MTCP 044358-66.) MTC failed to do so.

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Early in 2004, MCAC raised concerns that the proposed equity analysis for the 2005 RTP wasn't "capable of showing inequity," "assume[d] everyone can use BART," "need[ed] to distinguish between bus and BART," and "should look at how dividing the money this way or that is going to help." (Kimsey Exh. 12, MCAC Minutes of Feb. 10, 2004, at pp. 4-5.) MTC did not heed these requests. Later in 2004, MCAC adopted EJ Principles asking MTC to "[c]ollect accurate and current data essential to understanding the presence and extent of inequities in transportation funding based on race and income," and to "change its investment decisions as necessary to mitigate identified inequities." (MTCP 257574.) Finally, MTC presented some of the data requested; however, after MCAC and others expressed their view that the data showed inequities that should be remedied, MTC censored the findings, refused to adopt the Principles, and appears to have taken no steps either to adopt a set of EJ Principles more to its liking or to reform its investment decisions.

When EJ communities and their representatives – particularly those whom an MPO formally asks to advise it on EJ matters, like EJAG and MCAC – request information and analysis of this kind, MPOs are expected to provide it. EJ communities are in the best position to know what issues affect them most urgently, and what information they need to participate meaningfully in the decision-making process. Every metropolitan area has different circumstances and needs among its EJ communities. These differences can be spatial as well as demographic, and also vary depending on the state of the existing transportation system, with direct implications for transportation planning and investment decisions. Accordingly, MPOs need to tailor the analysis to what the local communities need. Despite repeated and explicit requests over a period of at least eight years, MTC did not provide the requested data on the relative funding of bus and rail systems until 2006. (Kimsey deposition at pp. 486-89.)

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This is a clear departure from prevailing principles governing MPOs and the public participation process. As discussed earlier, relevant and continuing communications between the MPO and the public are necessary so that the service needs of the consumers are taken into account for system maintenance and design purposes. This kind of input cannot be replaced by uses of secondary data such as that from the Census or even a survey sample. The absence of reliable, shared information handicaps the public in their understanding of planning factors and other considerations. By failing to provide the specific kind of information that EJ communities requested, MTC not only failed to assist them in participating on an equal footing in the transportation planning process, but actually may have placed them at a disadvantage relative to other groups (for instance, those favoring rail expansion) in the process. This is clearly inconsistent with the EJ principles set forth in the Executive Order and the DOT and FHWA orders.

During this period from 1998 through 2006, while EJ communities were repeatedly requesting data on current inequities in the funding of bus versus rail systems, MTC gave them something very different: an RTP Equity Analysis that did not address the existence of current inequities, and that does not address funding (an input), but only accessibility (an outcome). And, as described more fully below, it is of particular significance that the methodology MTC designed for these RTP Equity Analyses was absolutely incapable of detecting inequity as between bus and rail transit users – though the model it used could, in fact, have incorporated that distinction.

EJ communities did not simply request specific information on the current funding equity as between bus and rail systems, they also expressly told MTC that its Travel Demand Modeling was unhelpful and inappropriate to their needs. EJAG told MTC early on that “[t]he [equity]

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analysis should measure differences in impacts and investments, not just access to opportunities.” (Kimsey Exh. 18.) Later, EJAG quoted approvingly from a staff memo to the effect that ““many of the issues of concern to the EJAG and to members of low-income and minority communities cannot be captured in an analysis using [MTC’s] long-range forecasting model.”” (Kimsey Exh. 13; see Lethco deposition at pp. 91-2.) Mr. Lethco himself, who staffed EJAG in 2001, acknowledged that “a regional travel demand model is a very crude and blunt instrument to ask and answer questions about equity. It’s like fitting a square peg into a round hole.” (Lethco deposition at p. 98.)

MTC’s failure to provide what EJ communities asked for, and to instead provide an analysis that they explicitly stated was not helpful to them was inconsistent with MPO public participation standards for responsiveness, transparency and integrity. Its failure to respond to the information needs of the EJ communities left them inadequately informed, and thus unable to voice their policy suggestions in a meaningful way. In addition, this represents the worst case of a lack of transparency because not only does MTC fail to provide clear and detailed information that was requested – it provided none at all, while providing no adequate explanation. The analysis it performed is lacking in integrity because it clearly did not address the concerns of the public from a methodological basis. Not addressing the EJ community’s concerns means that particular data were not included affecting the applications and outcomes of the analytical methods applied.

Despite the criticism in 2001 by EJ communities that MTC was not providing them with the information they needed, MTC ran the very same RTP Equity Analysis three years later, with only minor revisions. (See Kimsey deposition at pp. 463-65.) Mr. Kimsey himself, who oversaw the 2005 RTP Equity Analysis, knew that EJAG had expressed dissatisfaction with

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MTC's Travel Demand Model as an equity tool (id. at 582-83), yet MTC persisted in using it for the 2005 RTP. In addition to a lack of responsiveness due to MTC's failure to provide answers to the questions that EJ communities were expressing in very clear language, MTC's response falls short on transparency grounds, as well. As I noted earlier, transparency can be lost even if useful information is provided, if it is buried in a thick stack of paper. Here, it was even worse: MTC not only failed to provide useful information, but provided a large quantity of inappropriate data and analysis that plainly did not meet the needs of EJ communities. It is MTC's obligation to assist those communities to participate by giving them the information and analysis they need to propose solutions themselves.

Only in 2006, after more than two years of effort by MCAC to win the Commission's adoption of two of its four EJ Principles, did MTC finally provide an alternative analysis approaching the kind that EJ communities had been requesting to no avail for years. (Corless Exhs. 6 (MTC Funding Analysis to Input EJ Principle #2, DRAFT, 9/6/06) and 7 (MTC Funding Analysis to Input EJ Principle #2, DRAFT, 10/26/06).) That analysis showed significant disparities in MTC's historic "inputs" of funding to bus and rail operators over the period since 1998. Not only MTC's minority advisory committee, but a joint subcommittee of MCAC and the Partnership Board, by majority vote, "suggest[ed] that this analysis of transit operator funding distributions represents an inequity that would require mitigation under MCAC's proposed E.J Principle #3." (Corless Exh. 5; Corless deposition at p. 88). At this point, MTC provided as the "final" draft of the funding equity analysis a much shorter document that simply deleted the chart and information that MCAC and others were concerned about. Then, MTC concluded that the evidence of inequity was not "conclusively demonstrated." Under these circumstances, from this unprofessional and unethical behavior, I can form no other opinion than

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that MTC apparently acted with an intent to deceive EJ communities.

A troubling double-standard appears in MTC's unwillingness to listen to MCAC in regard to setting criteria for equity. Mr. Corless, who supervises MTC's EJ efforts, testified that, in MTC's view, it was necessary to have either a consensus or a "strong majority opinion" in order to define equity, since (Corless deposition at pp. 68-9), implying that a 5-3 vote of the joint MCAC/Partnership Subcommittee and a unanimous motion by MCAC (Corless Exh. 9) was not "strong" enough. Incredibly, he testified that the working definition of equity in the 2005 RTP Equity Analysis -- presumably referring to the "accessibility" performance measure -- was the closest MTC had ever come to "generating something that most people agree on" was in the RTP Equity Analyses (Corless deposition at p. 73), despite the fact that MCAC expressly criticized that measure (see Kimsey Exh. 33, MCAC comments [MTCP003975]), as had EJAG before it. (see Kimsey Exh. 13, MTCP148509-11.)

**B. Analytical Weaknesses in MTC's Equity Analysis**

Although MTC has conducted three equity analyses, none of them provides a meaningful analysis of equity, much less the information and analysis that EJ communities were asking MTC for. The purpose of an equity analysis should be -- consistent with standards of academic integrity -- to determine whether inequity exists, and if so, to identify it. MTC analyses are, by their very design, not capable of capturing transportation inequity, and mask critical inequities that may exist. The analytical model on which MTC relies, although useful in other aspects of transportation planning, is not an appropriate methodology for assessing distributional inequities in transportation investments.

**1. MTC's comparison of RTP project alternative to no project alternative**

**(a)** One of the main findings of each of MTC's three Equity Analyses was

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that “Accessibility,” that is proximity or access to job opportunities is “increased in the RTP project alternative compared to the no project alternative” (1998 RTP Equity Analysis, Kimsey Exh. 8, at 4); compare 2001 Equity Analysis, Kimsey Exh. 3, at 1-4, MTCP043497; 2005 Equity Analysis, Kimsey Exh. 9, at ES-2, MTCP002586 (2005 Equity Analysis).

The findings that transportation accessibility has “increased in the RTP project alternative compared to the no project alternative” says little if anything about whether inequities exists. First, it should go without saying that any additional investment in a transportation system should increase overall access compared to not doing anything. Second, a valid analysis of this type should include a range of alternatives. And third, transportation accessibility on its own is a very narrow way to define and analyze equity. The transportation literature and analyses completed by several other MPOs attest to this fact.

While MTC’s 2001 and 2005 Equity Analyses provides some analysis of additional alternatives that are not “financially constrained”, which also show greater accessibility based on greater investment overall, they are in essence a wish list and do not provide true alternatives to the one financially constrained proposal. A true alternative would consider a reordering and reprioritizing of investments that might provide greater benefit to communities of concern. If MTC had undertaken a meaningful comparison of alternatives and identification of inequities, its planned investments could have been very different.

**2. MTC’s finding that accessibility increased for disadvantaged neighborhoods**

(a) Another of the principal findings of each of MTC’s three Equity Analyses was that “Transit accessibility to jobs is significantly higher for disadvantaged neighborhoods compared to not-disadvantaged neighborhoods.” (Kimsey Exh. 8 [1998 Equity Analysis], at 4, MTCP012727). Compare 2001 Equity Analysis, Kimsey Exh. 3, at 1-4, MTCP043497); 2005

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Equity Analysis, Kimsey Exh. 9, at 6-1, MTCP002649).

This finding rests on an analysis that fails to capture important types of inequities that may exist.

*First*, MTC defines “equity” solely as “accessibility.” Much research on transportation equity points to the multi-dimensional nature of the issue. There are three significant dimensions of equity (outcomes, inputs, and outputs). Accessibility is just one measure of one dimension (“outcomes). “Inputs” refers to investments or funding levels, “outputs” refers to service location and frequency, and “outcomes” refers to employment accessibility or wage levels. In particular, a transportation service or practice can be inequitable on one dimension even if it appears to be equitable on another. Transportation research and the analyses of many MPOs use multi-faceted definitions of equity in their analyses which include social, economic, and environmental impacts (see for example Litman 2007).

*Second*, even if it were appropriate to define equity solely in accessibility terms, the model used by MTC to measure relative increases in accessibility is unable to capture inequities. In particular, MTC’s model does not adequately distinguish the marginal contributions of rail and bus transit separately despite the fact that ridership profiles are markedly different for each. Rail ridership tends to be higher income persons while bus ridership tends to be lower income persons. Evidence of these differences has been reported using national survey data (see Pucher and Renne 2005), and MTC’s own data confirms this national trend. Other MPOs and transportation planning organizations have reported the role of rail and bus separately for this reason.

In addition to the demographic differences between rail and bus ridership, another issue with treating urban rail and bus as a combined *transit* mode is that they function quite differently



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in terms of the type of service they provide. Rail service tends to provide express, point-to-point service and is more capital intensive compared to bus. Rail system routing is inflexible and cannot easily adapt to changing service demand by location other than through service extensions. On the other hand, bus service can be slower in terms of average travel times, but it can operate nearly anywhere on a road network. This means that stops and routing can change over time to adapt to land use changes and other changes effecting service demand. Bus system routing is nearly always more dispersed than rail service and therefore is accessible to more people and provides access to more destinations (albeit more slowly than rail). Urban rail and bus play significantly different roles in a regional transportation system for these and other reasons.

For modeling purposes, while MTC does not explicitly distinguish rail and bus as separate transit modes, it does compare transit as accessed by car with transit accessed by foot. It is not entirely clear why they choose this approach rather than classifying rail and bus riders as such. Rail stops can be accessed by car or foot and the same is true for bus, however, bus riders more frequently access the system by foot. This element of the mode choice phase of the modeling process blurs the rail and bus service distinction and consequently masks any potential service inequities between the two modes. It is curious to me why MTC would pursue this approach especially given that they were asked by citizen groups to perform and rail and bus comparison in their RTP equity analysis.

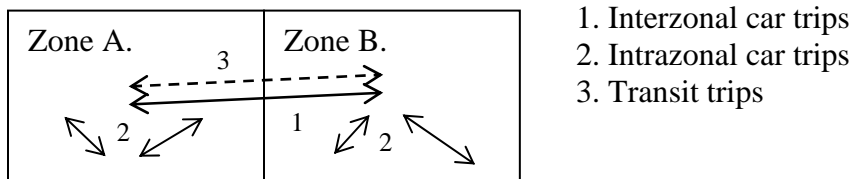
**3. MTC's Transportation Demand Model**

**a. How the Model Works**

The simplest example of a Transportation Demand Model would be a two-zone planning area where certain proportions of travel occurs *within* each zone (short distance trips with origins

and destinations within a zone's boundaries) and the remaining proportions *between* zones (interzonal trips) and there are no external trips (see Figure 1). A travel analysis zone or TAZ (also referred to as a Traffic Analysis Zone) is a small geographic area that serves as the primary unit of analysis in a Transportation Demand Model. If a single road connects the two zones, then all trips only occur along that road. If there is also bus service on the road and a rail line along that road, then trips between zones will be divided among car travel, bus travel and rail travel. The model assumes that travelers will select the fastest means or route while minimizing their personal expense. So while cars may be the fastest means, some travelers will take a less expensive means like public transit, and therefore the trips will be divided based on the socio-economic characteristics of the travelers and the purposes of their trips.

**Figure 1. Simple two-zone example**



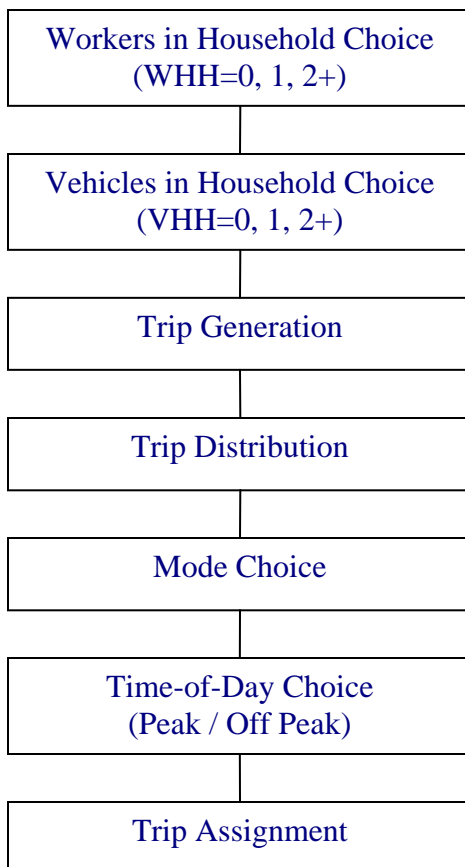
Travel demand modeling applies this process with a projected volume of future travel activity in order to predict patterns of movement. This helps to determine the conditions and impacts on the transportation system given changes in the extent and location of both supply and demand.

While travel demand modeling can be quite complicated, the underlying process is relatively straight-forward. The model simulates travel activity (i.e., individual trips) throughout a geographic area by means of an iterative four-step procedure: *trip generation* (how many trips will there be?), *trip distribution* (getting from point A to point B), *mode choice* (how will people

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travel?), and *trip assignment* (what routes will be used?). In the case of MTC’s Transportation Demand Model, three additional steps are added to the usual four: “Workers in Household Choice”, “Vehicles in Household Choice,” and “Time-of-Day Choice.” (See Figure 2 below.) The end result estimates how travel will “flow” across a region based on a zonal framework. All travel occurs along linear segments that in the aggregate comprise a larger, inter-connected regional network within the model. Vehicular travel between two locations is constrained to streets, highways, and transit routes.

**Figure 2.**  
**Bay Area Travel Demand Model Forecasting System**  
**BAYCAST**



Source: Purvis Exhibit 1. at p. 5.

MTC’s travel demand model proceeds through these steps in the following fashion:

- (1) Through MTC’s Workers In Household Choice and Vehicles in Household Choice

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models, MTC generates the “zone level estimates of households” by income level and the number of workers and vehicles in households. (Purvis deposition at p. 26.) MTC relies on socioeconomic assumptions from the Association of Bay Area Governments to make these projections (Purvis, deposition at p. 28; Kimsey deposition at p. 131; Purvis Exh. 1 [Travel Demand Models for the San Francisco Bay Area] at 5, Fig. 1].) The output of this step is a prediction of auto ownership rates that will be used to determine what mode choices are available to certain households at later steps in the model. (Purvis deposition at p. 55.)

(2) Next, MTC uses the information obtained through the Workers- and Vehicles In Household choice models in Step 1 in the *trip generation* model “to create . . . trips that are produced by households within a travel analysis zone.” (Purvis deposition at p. 27.) The outputs of the *trip generation* phase are the numbers of trips that will be made to and from each zone. (Purvis deposition at p. 28). The output from this process is essentially a matrix of travel times from each zone to all other zones. The zone with the smallest sum of travel times is considered to be, on average, the most accessible. In the example below (Figure 3) the travel time from Zone 1 to Zone 2 is 5 minutes, from Zone 1 to Zone 3 is 7 minutes, and Zone 2 to Zone 3 is 10 minutes. Therefore, Zone 1 is the most accessible.

**Figure 3. Zonal travel time matrix**

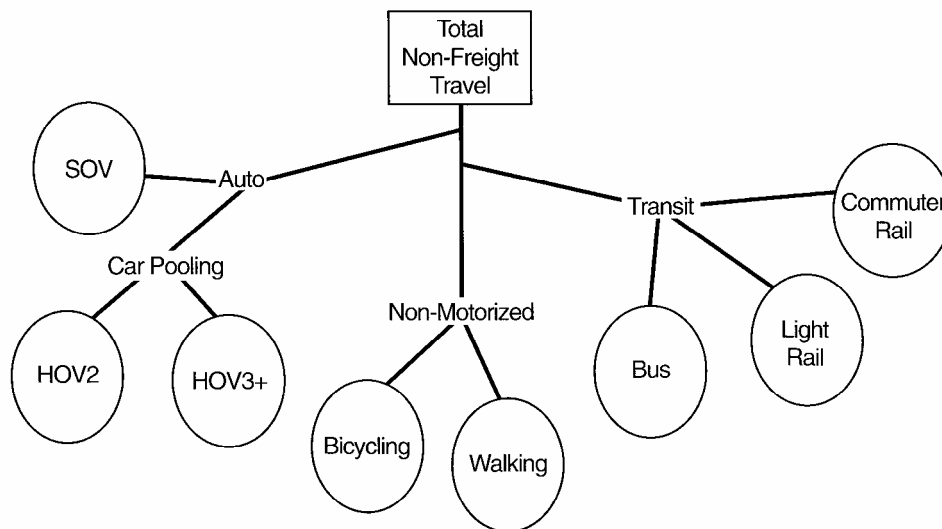
		<b>To</b>		
		<b>Zones</b>	<b>1</b>	<b>2</b>
<b>From</b>	1	--	5	7
	2	5	--	10
	3	7	10	--
<b>Sum</b>		12	15	17

(3) In the *trip distribution* phase, the origins and destinations produced in the previous step are allocated between one another to forecast “zone-to-zone trips” or “the flows of travel

between areas.” (Purvis deposition at pp. 28-29.) The output of the *trip distribution* stage is the estimated travel times and costs associated with these zone-to-zone trips. (Purvis deposition at p. 29.)

(4) The next step, *mode choice*, allocates travelers to various travel modes in the transportation network. For instance, roads carry autos with single and multiple persons. Within travel demand models generally, and MTC’s in particular, single occupancy vehicle (“SOV”) or “drive alone” is considered a distinct travel “mode” from high occupancy vehicle (“HOV”) or shared ride vehicle. Just as auto travel is separated into multiple modes, it is also possible to distinguish among transit *modes* (e.g. bus, light rail, commuter rail) (see, for example, Figure 4). But unlike auto travel, rail transit and bus transit operate on different infrastructure and have separate network links, although interconnected, typically at rail stations which also serve as bus stops. A network link is the same as a segment or linear feature such as a road between two intersecting lines (or nodes).

**Figure 4. Transportation modes in a travel demand model**



Source: Beimborn and Kennedy, 1996, at p. 24.

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In reality, a significant proportion of urban travel is made by *multiple modes*. Examples include trips that have transfers from one mode to another such as bus to rail, car to rail, car to bus, etc. Traditionally in the modeling process the access to the initial mode is very important and tends to dictate the overall means of travel despite the use of other connected modes and trip segments. For instance, a traveler with a car can drive to a rail station that may be too far away to walk to, while a transit-dependent traveler, who lacks auto access, is limited to those forms of transit that can be accessed within walking distance. The simplest way to allocate travelers to each mode is based on physical proximity. (Kimsey at p. 417).

In MTC's *mode choice model*, zone-to-zone trips from the prior steps are split among different travel modes. (Purvis at pp. 32-33 [“[W]e take the zone-to-zone total trips, and for each of our trip purposes, we further split those trips by different travel modes. In the case of work trips, we're splitting trips into driving alone, carpool modes, transit, bicycling and walking.”].) In other words, trips by auto are separated into drive alone, “shared ride 2-person vehicle”, and “shared ride 3-person plus vehicle.” Work trips by transit are separated based on how the transit service is accessed: by auto or by walking (MTC's model, however, does not distinguish among access options to transit for non-work trips). (See Purvis deposition at pp. 35, 56, 58, and Purvis Exh. 1 at 25.) MTC's model does not distinguish among transit modes such as bus and rail, although it would be possible to do so (Purvis deposition at pp. 57 [it is possible to break out the bus system from the rail network]), and other MPOs use models that make this separation by transit mode. The Southern California Association of Governments (SCAG) is one example. SCAG “...used Census data to profile mode choice by income category, clarifying who most benefited from farebox subsidies for bus, urban rail, and Metrolink, a commuter rail operation.” (Source: <http://www.fhwa.dot.gov/environment/ejustice/case/case4.htm> ) SCAG was able to

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make this comparison because they analyzed rail and bus separately in their equity analyses.

In determining mode choice, MTC's demand model considers income level to determine whether low-income workers within a TAZ, based on "the zone-to-zone transit fares, the zone-to-zone driving costs, [and] the zone-to-zone driving alone travel times," would choose "driving alone or carpooling or transit" to get to and from work. (Purvis deposition at p. 68.) The mode choice model uses the information from the worker- and vehicle-in-household choice models (Step 1) to determine how travelers will access transit. (Id. at p. 36.) For example, zero-auto households will only have "walk access" to transit. The trips are split among modes using mathematical equations that take into account the "utilities" and "disutilities" of different modes based on travel time and other characteristics. (Id. at p. 33.) In the case of MTC, the speed (or travel time cost) of a transit mode is a primary influence on mode selection. (Id. at pp. 59-60, 63-64, 68-70). This inevitably biases mode choice toward rail because it assumes that there are no other considerations in the choice-making process, such as whether a mode of transit is affordable.

(5) For auto trips, MTC then runs the *time of day choice model* to split drive alone and carpool trips between those that leave for work during peak and off-peak hours to account for traffic congestion on the roadways. (Purvis deposition at pp. 49-50.)

(6) Finally, at the *trip assignment* phase, the zone-to-zone trips by auto and transit are assigned by the model to different transit routes and highways based on available capacity. (Id. at pp. 52.) "Once trips have been split into highway and transit trips, the specific path that they use to travel from their origin to their destination must be found." (Beimborn & Kennedy, at p. 29, 1996.) At the mode choice stage, for instance, the model decides whether to put a transit rider on a bus or a train.

**b. How the Model Masks Differences in Bus and Rail**

In the transit modeling process, MTC outcomes lump all transit-based travel, regardless of specific mode (rail, bus, etc.). The outcomes are reported as *transit* trips instead of *rail* trips or *bus* trips between zones. (Purvis deposition at p. 58 [“We have typically included all transit as a mode . . .”].) Because the MTC Transportation Demand Model reports rail and bus combined, there is no way to tell the individual contributions of rail transit or bus transit to regional accessibility. In fact, accessibility calculations in MTC’s model for transit essentially show only a net change in accessibility across all modes of transit, and cannot attribute gains or losses in accessibility to increases or decreases in in rail service as opposed to bus service. This also makes it virtually impossible to associate changes in transportation equity as a function of future investment levels in these modes. Instead of specifying rail and bus as separate mode choices within their model, MTC depicts transit mode by type of access used, either by foot or by car.

Thus, MTC’s model is designed in such a manner that an increase in rail service can mask a decrease in bus service, and lead the model to exhibit an increase in accessibility overall. As MTC’s modeler testified, “[B]asically, if the best path is improved [by RTP investments], then the accessibility will also improve.” (Purvis at p. 112.) The assumptions in MTC’s travel demand model favor a “best transit path” that provides the least transit travel time, thus favoring higher-speed transit routes, in other words, rail over bus.

With respect to the transit network, the “best path” between two zones is the fastest one “based on the travel time within the vehicle,” “the walk time associated with the travel,” “the wait time,” “the auto travel time and cost associated with auto access to travel time and transit fare.” (Purvis deposition at p. 60.) MTC determines zone-to-zone transit paths by a “minimum travel time algorithm” to find the “one best path” in terms of minimum transit travel time or



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“best weighted travel time”. (Purvis deposition at pp. 59-60, 63-64 [“[The computer] is looking at the minimum weighted . . . travel times”], 68-70 [“It will take the faster in-vehicle travel time, if all else is equal, in terms of walk distances to and from either end of the trip.”]; Kimsey deposition at p. 134 [“[W]hat gets them there [from the origin to their destination] the fastest is the overlying consideration.”].) This means that, given the choice of a BART route and an AC Transit route for the same trip (same origin and destination), the model will predict a transit rider will take BART, where both modes are available.

While the model takes cost into account, it does so only at the mode choice stage in order to determine auto access; it does not take into account whether low-income travelers can afford rail fares, and will usually assign a transit traveler to a rail “path” based solely on its being the fastest path in terms of overall travel time (including time spent traveling to and from the transit stops at the origin and destination of the transit trip, respectively).

The characteristics and assumptions for a transportation network used in travel demand modeling are prepared through a process referred to as *coding*. Each segment of the network has many fields of database information attached which describe physical design, volume, and capacity. This information is used to derive impedance values, or travel time information across each segment. The most common impedance value is distance or length of a segment. An excerpt from an MTC document refers to this process:

**Network Assumptions**

A major part of the RTP update is the definition, coding and simulation of a variety of network alternatives. Alternative definitions are needed for each study alternative, for each of the three types of networks being created: highway networks, transit networks, and pedestrian/bicycle networks. Definition of network alternatives is described in APPENDIX A.

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(From APPENDIX B, Travel Forecasting Assumptions, 2001 Update of the San Francisco Bay Area Regional Transportation Plan.)<sup>37</sup>

The way the different travel speed assumptions for rail and bus are applied within the modeling process is through *coding* each network (or route) segment with a variety of attributes. One of these attributes is an average travel speed. For a hypothetical set of travelers within the model, the links with the higher speed are going to be more attractive because they will allow faster travel (absent of congested conditions and service availability). An example would be when BART rail segments are coded with average travel speeds of 43 miles per hour (variable XYSPEED in the example coding below) and AC Transit bus routes are coded with average travel speeds of 15 miles per hour.

**Figure 5. Example attribute data for BART system**

```
----- BART LINES-----  
  
; SFO/Millbrae - Richmond - Peak Period  
LINE  
NAME=100_BART1P,ONEWAY=N,MODE=100,OWNER=2,COLOR=7,XYSPEED=43,  
FREQ[1]=15,  
N= 15542 15543 15541 15540,  
    15539 15519 15518 15517 15516 15515 15514 15513 15512 15511 15510,  
    15509 15508 15507 15525 15523 15524 15522 15521 15520  
  
; Daly City - Richmond - Off-Peak Period  
LINE  
NAME=100_BART1OP,ONEWAY=N,MODE=100,OWNER=2,COLOR=7,XYSPEED=43,  
FREQ[2]=15,  
N= 15519 15518 15517 15516 15515 15514 15513 15512 15511 15510,  
    15509 15508 15507 15525 15523 15524 15522 15521 15520
```

<sup>37</sup> "... these input assumptions that are documented . . . in Exhibit 4 [App. B above], and the methodology are the assumptions that we use for predicting the future travel behavior. So my assumption [in the model] is that these coefficients that are in the Travel Demand Model are going to be the same in, say, 20 or 30 years." (Purvis deposition at pp. 41-42.)

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```
; Richmond - Millbrae - Peak Period
LINE
NAME=100_BART1PA,ONEWAY=Y,MODE=100,OWNER=2,COLOR=7,XYSPEED
=43,
  FREQ[1]=90,
    N= 15520 15521 15522 15524 15523 15525 15507 15508 15509,
      15510 15511 15512 15513 15514 15515 15516 15517 15518,
        15519 15539 15540 15541 15543

; SFO - MILLBRAE BART SHUTTLE
;LINE
NAME=100_BART2,ONEWAY=N,MODE=100,OWNER=2,COLOR=7,XYSPEED=43
,
; FREQ[1]=15,FREQ[2]=15,
; N=15543 15542
```

Source: <ftp://ftp.abag.ca.gov/pub/mtc/planning/>

**Figure 6. Example network data for AC Transit bus system**

```
;;<<Trnbuild>>;
; AC Transit Local Routes, Northern
; TIMEFACs updated 10/27/03
;LINE NAME="38_5AAC", TIMEFAC=3.47, RUNTIME=15, ONEWAY=F,
MODE=38,
; OWNER="1", COLOR=2, XYSPEED=15, FREQ[1]=99, FREQ[2]=99, N=3008,
; 3018, 3002, 3016, 12081, 12078
;LINE NAME="38_5BAC", TIMEFAC=3.03, RUNTIME=11, ONEWAY=F,
MODE=38,
; OWNER="1", COLOR=2, XYSPEED=15, FREQ[1]=99, FREQ[2]=99, N=3008,
; 3018, 3002, 3026, 2999, 2979, 2969
;LINE NAME="38_7AC", TIMEFAC=1.98, RUNTIME=49, ONEWAY=F, MODE=38,
; OWNER="1", COLOR=2, XYSPEED=15, FREQ[1]=23, FREQ[2]=28,
; N=11523, 2461, 2452, 2451, 2450, 2558, 2560, 2547, 2550, 2621,
; 2549, 2543, 2541, 2472, 2457, 2458, 2544, 2545, -2547, -2550,
; 2551, 2596, 2599, 2602, 2603, 2578, 12065, 2577, 2572, 2573,
; 2579, 2666, 2671
```

Source: <ftp://ftp.abag.ca.gov/pub/mtc/planning/>

MTC's model favors rail over bus as the preferred transit mode for interzonal trips, even if that does not match reality. By lumping bus and rail together, the model both overestimates transit accessibility, and fails to measure equity effects. It overestimates transit accessibility, for example, by failing to take into account the well-documented fact that a lower income person is

more likely to use bus than rail when both modes are available for the same trip, based on the relative affordability of bus travel compared to rail travel. (Gregory L. Thompson. 1999.

Identifying Gainers and Losers from Transit Service Change: A Method Applied to Sacramento, *Journal of Planning Education and Research*; 18; 125.)

The model also can assume transfers from one mode to another, for example, taking a bus to a rail station—which would greatly increase the number of accessible jobs. But such a transfer might not be affordable for a low-income rider.

MTC’s model fails to measure equity effects because it expressly overlooks a critical equity effect: whether low-income bus riders of color are being treated equally compared with higher-income and whiter rail riders with respect to transit funding (inputs), transit service levels (outputs), and accessibility to destinations (outcomes).

#### **4. Urban Habitat’s Funding Equity Methodology**

In contrast to the methodology used by MTC in its Equity Analyses, Urban Habitat proposed what I found to be a sound approach for analyzing equity.

Urban Habitat, as noted earlier, is a prominent Bay Area environmental justice organization founded by Carl Anthony in 1989. In May 2006, Urban Habitat proposed a “Recommended Four-Month Plan for Implementing Principle #2” (May 18, 2006, MTCP 257379-48) to MCAC as a methodology for MTC to use in completing the analysis pursuant to the Commission’s direction to staff in March 2006 to implement MCAC’s Environmental Justice Principle #2. EJ Principle #2, as proposed by MCAC and adopted by MTC, reads as follows: “Collect accurate and current data essential to defining and understanding the presence and extent of inequities, if any, in transportation funding based on race and income.” (Memo to MCAC from Catalina Alvarado, “Update on Proposed Environmental Justice Principles,” April 4, 2006, MTCP 257442.) I understand that the Commission asked staff to complete this funding

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equity analysis within a period of four months.

In my opinion, Urban Habitat's proposed approach is an appropriate methodology for assessing the distributional equity of regional transportation investment policies under the time constraints imposed, for three primary reasons. First, it is a meaningful approach to distributional equity, and recognizes that a distribution of benefits may appear equitable to a protected group from one perspective while in fact being inequitable from another. Second, it reflects an effort to respond to requests for information and analysis that Bay Area EJ Communities had been making to MTC for many years. And third, while it does not purport to be a comprehensive analysis of equity, given the time constraints imposed by the Commission, it proposed a feasible approach based on information that should have been readily available to MTC.

The proposed methodology is meaningful from an equity/EJ perspective because it meets the key criteria that are important in analyzing equity from the perspective of compliance with Title VI and the EJ Executive Order. First, it is comparative, which is to say that it compares the benefits accruing to groups that are protected by the statute and Executive Order (minorities and low-income people) with benefits accruing to groups that are not so-protected.

Also, it recognizes the fact that people of color and low-income people are affected by transportation investments under a variety of rubrics: not only as members of a geographic community whose residents are disproportionately people of color or low-income or both, but also as transit-dependent people and as riders of particular transit services.

In the transportation equity literature, the phrase "transit dependent" generally refers to individuals who "do not have access to a car for their trip usually on some regular basis." (Sanchez and Brenman, 2007.) (See McMillan deposition at p. 637 ["Transit dependent

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generally refers to those individuals who for . . . some host of reasons do not have access to a car for their trip usually on some regular basis.”].) Research across the U.S. consistently shows that people of color and low-income people have far higher rates of transit dependency than other people. (Sanchez and Brenman, 2007)

In addition, race and income disparities commonly exist as between riders of bus and rail transit services. For instance, MTC’s recent “2006-2007 Transit Passenger Demographic Survey” found that 20.9% of AC Transit Local riders and 33.1% of AC Transit Transbay riders are white, while 46.2% BART of riders and 49% of Caltrain riders are white. Nearly 40% of the riders of AC Transit have household incomes of \$25,000 or less, while about 13% of BART riders and about 16% of Caltrain riders have household incomes of \$25,000 or less. (3-104 to 3-106, MTCP256317.) These findings are by no means atypical, and similar race and income disparities between bus riders and rail riders have been shown in national survey data reported by Pucher and Renne (2003), as well as in Gregory L. Thompson (1999). Identifying Gainers and Losers from Transit Service Change: A Method Applied to Sacramento, *Journal of Planning Education and Research*; 18; 125.

The Urban Habitat methodology appropriately incorporates each of these three dimensions to evaluate the incidence of transportation benefits and burdens across geography, transit dependency, and by individual transit operation

Finally, for each of these dimensions, the methodology incorporates three essential elements: inputs, outputs, and outcomes. “Inputs” refers to investments or funding levels, “outputs” refers to service location and frequency, and “outcomes” refers to employment accessibility or wage levels. There are several examples of transportation equity analyses that examine these elements individually. (Sanchez, Upton, Jones, and Lucas 2007). Research on

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transportation equity points to the multi-dimensional nature of the issue. (See Sanchez, Stolz, and Ma 2003). The proposed Urban Habitat methodology takes account of the multi-dimensional nature of the issue borne out by research in the field of transportation equity, and thus acknowledges the analytical deficiencies stemming from reliance on a single modeling metric to assess equity across a transportation system. The primary strength is that it examines multiple dimensions of transportation equity. Justification for such an analytical framework is supported by Litman (2007), Liu (2001), Sanchez (1998a), Sanchez (1998b), and Sanchez, Upton, Jones, and Lucas (2007).

Based on the intersection of (a) the three dimensions of geography, transit-dependency and transit ridership with (b) the three elements of inputs, outputs and outcomes, the “grid of Possible Equity Analyses” presents nine areas for which data can be assembled from secondary sources like the U.S. Census along with primary data from individual jurisdictions and transportation providers, and MTC’s data on funding allocations. Therefore, the proposed methodology as a framework for analysis is both practical and feasible because the data on which it relies is readily available.

Another important aspect of the methodology is that it responds directly to the concerns of EJ communities because it was designed in a “bottom-up” fashion and thus facilitates public participation by affected communities in the transportation planning process. As a leading Bay Area Environmental Justice organization, Urban Habitat appears to be just the kind of participant that is deserving of MTC’s attention in designing an equity analysis. The proposed methodology represents a valuable example of how public participation can occur to influence planning processes. A top-down public participation process does not serve these important purposes. A “top-down” process is one which is initiated at the behest/request of the government and from its

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perspective, with the objective of targeting particular community organizations in high-risk areas to get input. (MTC's process of conducting "Community Based Transportation Plans" in low-income and minority communities, would appear to be an example of top-down public participation process, since MTC rather than the community initiates the process, and the ultimate decisions are made by the "sponsoring agency." See Kimsey deposition, Oct. 17, 2007, at p. 91.) Such an approach often leads to community mistrust and dissatisfaction and does not usually result in meaningful public participation. The literature on public participation shows that top-down public participation processes are seen as activities initiated by government-sponsored agencies and that low income and minority community residents view them with suspicion because they do not appear designed to address community-based concerns and issues. Transportation & Environmental Justice Case Studies, US Dept. of Transportation, Federal Highway Administration and Federal Transit Administration (Dec. 2000).

On the other hand, the literature on public participation shows that bottom-up participation, because they involve or respond to initiatives by the EJ communities themselves, are more likely to result in the active involvement of EJ communities in ensuring implementation of measures that are in their best interest. *Case Studies in Environmental Justice and Public Transit Title VI Reporting*. Final Report, TCRP Project J-06, Task 47, FDOT BD 549-10 (Aug. 2005).

The literature thus indicates that top-down public participation approaches are less likely to result in actual, meaningful participation by targeted communities, because of their mistrust and suspicion of the process. Bottom-up participation approaches, by contrast, are more likely to result in active, meaningful participation by these communities because of the greater investment and ownership in the process that such an approach entails. See Glenn Robinson.



2007. Analysis of Environmental Justice Issues A Bottom UP Approach/Filling the Gap:  
Environmental Justice in Transportation Toolkit, prepared for Federal Highway Administration  
U.S Department of Transportation

In sum, the research on transportation equity points strongly in favor of the type of equity analysis proposed to MCAC by Urban Habitat – one that analyzes multiple dimensions of transportation equity and that incorporates a “bottom-up” approach that responds directly to the needs and concerns of low-income and minority communities.

**C. MTC’s Conduct With Respect To Its Equity Analyses and the MCAC Is Inconsistent With MPO Public Participation Principles**

**1. The Manner In Which MTC Conducted Its Equity Analyses**

In conducting its equity analyses, MTC has relied on a methodology that is not designed to capture certain critical dimensions of inequity and should not therefore be relied upon in an equity analysis, and in fact was designed in a manner that conceals present-day inequity as between bus riders and rail riders. As I have explained above, the travel demand model was the primary tool for conducting all three of MTC’s equity analyses. But it is a tool that relies on a whole host of assumptions that are not transparent to the public, hence making it difficult for those lacking in planning expertise to weigh in on the conclusions. In addition to designing its equity analyses in an analytically flawed manner that is particularly surprising in light of the history of specific EJ community requests and criticisms, MTC handled each of its three equity analyses in a manner that inconsistent with governing principles governing MPO public participation.

**a. 1998 RTP Equity Analysis**

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MTC's lack of responsiveness to EJ communities, and its lack of integrity, date back to its first RTP equity analysis in 1998. MTC prepared that analysis with little or no prior input from EJ communities, or even from its Minority Citizens Advisory Committee – a shortcoming for which it was criticized by the FHWA and FTA, which issued a “corrective action” that required MTC to undertake a more participatory approach in 2001. (Sanchez, Thomas W. 2006. *An Inherent Bias? Geographic and Racial-Ethnic Patterns of Metropolitan Planning Organization Boards*. Washington, DC: The Brookings Institution.)<sup>38</sup>

Two things are striking about MTC's exclusion of participation in 1998. First, it not only failed to take affirmative steps to involve EJ communities in the equity analysis, but actually rejected a “bottom-up” overture by EJ and civil rights groups to participate in an equity analysis process. In their observation of MTC meetings, Professors Innes and Gruber were struck by the fact that MTC did not respond by inviting EJ groups to participate in crafting an equity analysis that would respond appropriately to community needs, but instead “seemed to be trying to close the discussion by using authoritative statements and asserting MTC's decision-making prerogative.” (Innes and Gruber at 312.) Mr. Dahms “presented [the analysis] as something MTC would do, not as something they were planning to discuss with the letter signers.” (Id.) One challenge that many MPOs encounter is being able to engage the EJ community. However, this was not the case for MTC, where the EJ community was eager to participate, but were instead ignored. This is particularly egregious, given the affirmative obligation to involve them.

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<sup>38</sup> While the federal recertification process exists as an external review mechanism, it is very rare for MPOs to actually have funding withheld as a result of not meeting federal standards. This weakens position of the FHWA and FTA to enforce regulations should as those related to EJ and Title VI. (Wolf, Jim, Robert Puentes, Thomas W. Sanchez, and Tara Bryan. 2007. *Metropolitan Transportation Planning in the Post-ISTEA Era: What Happened and What Do We Do Now?* The 2nd Forum on the Future of Urban Transportation. Eno Foundation, Washington, DC.)

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Second, MTC's 1998 RTP Equity Analysis appears to be designed to do exactly what the internal draft memo of January 1998 suggested: to "make a prima facie case" that "would show that, far from intentionally discriminating against low-income and minority groups, MTC has made substantial efforts to see that their transportation needs are addressed." (MTCP 012320-25.) In terms of MTC's approach to the analysis, academic integrity would dictate that its framework would be more in the form of questions, tests, or hypotheses about the existence and extent of inequity. Instead, the language of the memo, as well as statements in Mr. Dahms' letter to Mr. Anthony and statements reported by Professors Innes and Gruber, give the impression that MTC already knew what the answers would be prior to actually conducting the analysis itself, and designed the analysis to reach those answers. This is consistent with Mr. Kimsey's testimony that he believed MTC did not conduct the 1998 RTP Equity Analysis to learn anything it did not already know. (Kimsey deposition at pp. 509-10.)

This internal memo specified a particular analysis:

"Investigate the level of access to jobs, schools, and other services for low-income and racial/ethnic minority groups relative to others within the region. This part of the analysis would analyze RTP alternatives relative to the 2020 No-Build, and could be undertaken in the context of the RTP EIR."

(See Purvis Exh. 5.) While MTC did not include minority groups in its analysis, and did not analyze accessibility to "schools and other services," the internal memo otherwise describes precisely the analysis that MTC conducted in its 1998 RTP Equity Analysis in which "[e]quity is measured in terms of accessibility changes to 'disadvantaged' relative to 'not-disadvantaged' neighborhoods." That analysis, which found no inequity (Kimsey deposition at p. 509), was essentially replicated in MTC's 2001 and 2005 RTP Equity Analyses (*id.* at 121), which also found no inequity.

**b. 2001 RTP Equity Analysis**

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In terms of its inability to detect inequity, MTC's 2001 RTP Equity Analysis was essentially indistinguishable from the 1998 analysis. The measurement of equity and the Travel Demand Model analysis were identical, but for the addition of minorities to low-income communities in the selection of the target communities (now called "Communities of Concern"). (Kimsey deposition at p. 512 ["The modeling process was the same" from 1998 to 2001.]").

Despite MTC's act of convening an EJ Advisory Group in 2001, it failed to implement the kind of analysis EJAG recommended that would have provided meaningful information. While EJAG asked for a financial analysis, the financial information that MTC provided in its report did not provide any comparative information that would be relevant to an equity analysis. However, comparison is the essence of an equity analysis, because benefits and burdens are relative depending on the geographic area or population that is being analyzed, and the whole point is to compare the distribution of those benefits and burdens as between protected populations and other populations. That may be why Mr. Kimsey acknowledged that the financial analysis in the 2001 RTP Equity Analysis did not say anything about funding for minority or low-income communities. (Kimsey deposition at p. 179), and is no doubt why EJAG criticized it as "very cursory." (Kimsey Exh. 13, MTCP148509.) Mr. Kimsey's testimony that MTC did not compare financial benefits to communities of concern with financial benefits to other communities because it was "not material" to determining equity (Kimsey deposition at p. 492) is nothing short of bizarre.

MTC's failure to take the suggestion of EJAG by comparing data on the racial makeup and income levels of people served by transit operators "with data on the subsidy per passenger" demonstrates a lack of responsiveness and transparency. Analyses of these types exist and have been used by agencies such as SCAG. Either MTC did not conduct research on methodologies

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of this sort or they simply ignored the request. This appears to be a recurring theme throughout.

Another aspect of MTC's approach to modeling equity by means of predicting "accessibility" supports the conclusion that the methodology was designed with a lack of integrity. On the one hand, MTC has acknowledged on various occasions that the location of a transportation investment in a particular community does not necessarily bestow any transportation benefits on that community. For instance, Mr. Lethco testified that there is a real danger in just using a travel demand model and not understanding the bigger picture, because you might look at a project and say a community is receiving \$500 million of investment, but if they do not have access to the investment, then it is not really a benefit.<sup>39</sup> (Lethco deposition at p. 51.) Mr. Kimsey agreed that you can't assign benefits to Communities of Concern and non-Communities of Concern (Kimsey deposition at pp. 642-44), asserting that "[i]t is almost impossible to look at [community benefits from transportation investments] at a disaggregate level . . . because how can you assign a benefit of a regional project to a single community of concern?" (Kimsey deposition at p. 643.)

Mr. Lethco and Mr. Kimsey were correct about this fact, which is well-attested. On the other hand, however, MTC has designed a Model-based equity analysis that rests tautologically on the assumption that "if the RTP invests in urban transit, that increases accessibility for low income and minority riders." (Kimsey deposition at pp. 447-48.) In other words, MTC's use of

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<sup>39</sup> Indeed, some EJAG members asked MTC to identify monetary benefits at the community level as part of the 2001 Equity analysis. Mr. Lethco stated, however, that doing this kind of analysis seems straightforward at first blush, but when you try and assign a dollar benefit to an individual in the region, there's a temptation to take a geographically-based investment and say that accrues a benefit to a particular community. But if you don't have access to that investment, then you don't realize that benefit, either. So it becomes a very difficult task to take dollars and assign them to members of the community and say they've actually derived a benefit, unless you can understand on the community side what is the benefit, relative to any kind of burden that might be associated with a particular project. (Lethco deposition at pp. 81-3; see also *id.* at 86-7.)

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“accessibility” as a one-dimensional proxy for equity assumes that residents of communities of concern actually do benefit from transit investments in their communities.

That explains why Mr. Kimsey testified that MTC already knew the result that its 1998 Equity Analysis would produce, and why he “doubt[ed] if we would see inequity [from the 2004 Equity Analysis]; because, again, as I had stated previously, so much of the transportation dollars are focused in the urban areas. . . . And that is where most of the communities of concern are.” (Kimsey deposition at pp. 594-95 [“So almost by that definition that [*sic*] you were going to see the communities of concern either getting as much or even more in . . . benefit from transportation improvements than noncommunities of concern.”].)<sup>40</sup>

MTC’s failure to provide EJAG with the data it requested comparing race and income status with subsidy per rider also displays a lack of responsiveness and transparency. The information EJAG asked for is very important for understanding whether spending is occurring on an equitable basis or not. EJAG was asking about transportation “inputs,” an important missing dimension in MTC’s equity analysis approach. This failure also demonstrates a lack of integrity, based on MTC’s shifting explanations over time about the meaningfulness of the subsidy-per-rider metric. In 2001, Mr. Lethco (in a communication that had been vetted by his superiors) told EJAG that there was no need to provide subsidy data in the equity analysis because “the current subsidy per rider is readily obtained from MTC’s Statistical Summary of Bay Area Transit Operators, the most recent version of which was published in September

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<sup>40</sup> Another problem with relying on an accessibility measure is that it does not actually match employers with employees or job seekers with jobs they are actually qualified for. MTC’s accessibility measure indicates that people or residents can reach job locations by transit – but not necessary their own jobs. The “analysis does not measure or capture whether transit is serving residents *when they need to travel* or *where they specifically need to go . . .*” (2005 Equity Analysis, Kimsey Exh. 9, at ES-5, MTCP002589.)

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2000.” (MTCP044363; Lethco deposition at pp. 79-80.) More recently, however, MTC has taken the position that the metric is simply worthless for equity purposes, as when Mr. Heminger wrote to Urban Habitat that “we did not calculate or publish any subsidy per rider numbers precisely because... we believe that there are major limitations of doing so without taking into consideration other factors, including total ridership, population of the service area, and capital versus operating funding.” (Corless Exh. 8, letter from Heminger to Hussain, dated October 30, 2006.) Subsidy per rider is akin to a cash transfer that quantitatively has great meaning within an equity analysis. (Mark Garrett and Brian Taylor. 1999. Reconsidering Social Equity in Public Transit. *Berkeley Planning Journal*, 13, 6-27.)

MTC rationalized its failure to provide what EJ communities had requested for years – namely, an analysis that linked bus and rail benefits to the race and income level of riders – with the claim that “critical data” was not available. That “critical data” was the race and income demographics of transit riders broken down by operator and mode. When asked for this analysis, MTC’s repeated response was that the information was not available. This response raises serious concerns.

As early as the 2001 RTP Equity Analysis report, MTC stated that “[t]he discussion with EJAG also uncovered the fact that there is some key missing data that is crucial to any equity discussion around transit, such as the number of minority and low income riders on each transit system.” (Kimsey Exh. 3, MTCP043549.) This was offered as the reason that MTC did not provide EJAG with financial tabulations comparing transit operator funding with race and income of riders. (Lethco deposition at pp. 101-4.) Therese McMillan, MTC Deputy Director of Policy, stated that MTC has been asked about the demographic characteristics of transit ridership “over a long period of time in a variety of venues.” (McMillan deposition, Nov. 8, 2007, at p.

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510.) Indeed, from MTC's perspective, "to the extent that we, as a planning agency, are sensitive to the demographics of who uses our systems just on an overall basis, it is not an unusual question to say what are the different racial groups we have." (Id. at 513.) For example, when MTC launched its Lifeline Transportation Program in 2001, MTC was asked "Who is going to benefit from that program?" (Id.)

Despite the recognized need for this data – data that MTC acknowledged in 2001 was "crucial to any equity discussion around transit" – MTC still had not obtained that data three years later, when Mr. Corless told MCAC that "one obvious data gap is the lack of consistent data being collected for the race/ethnicity and income profiles for all transit users in the Bay Area." (Corless Exh. 11 at 2, MTCP 257428.) MTC had to have been aware that this data was crucial, not just to "any equity discussion around transit," but to the specific discussion that EJ communities had been raising since at least 1998, namely, whether bus riders were being treated equally to rail riders. The fact that it was only in 2006, after the filing of civil rights litigation against it, that MTC undertook to obtain that data indicates that it was not faithful in its commitment to provide up-to-date data on a continuing basis, even several years after it recognized the importance of that data to the EJ community, and made the commitment to obtain it. This is a plain breach of the principle of continuity.

On the other hand, it appears disingenuous that MTC claims not to have been aware of the availability of rider demographic data from the on-board surveys that some of the Bay Area's largest transit operators, including AC Transit and BART, had been conducting for many years. For example, in addition to the on-board surveys that BART and AC Transit prepared in 2002, and Caltrain in 2003, MTC's on-line library catalog includes ridership surveys published by BART in 1992 and 2000, and by AC Transit in 1979, 1985 and 1993. Based on these



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documents, MTC was aware at least as early as the mid-1990s that AC Transit carried a significantly greater proportion of minorities than BART did. Indeed, when it came time finally to conduct the funding equity analysis to implement MCAC's EJ Principle #2, in 2006, MTC expressly relied on the most recent on-board surveys of AC Transit, BART, Caltrain, MUNI and VTA.

MTC's 2001 RTP Equity Analysis states that it comprises two parts: the travel demand model analysis, and various equity "initiatives." One of those initiatives was MTC's Lifeline Transportation Network Report, which measured "spatial" and "temporal" gaps in transit routes that were deemed to be critical to low-income communities. (Kimsey Exh. 1, 2001 Lifeline Transportation Network Report.) The inclusion of these additional initiatives does not alter or remedy MTC's failure to provide the information and analysis requested by EJ communities, and to do so with transparency, continuity and integrity. This is the case for at least two reasons: First, an MPO has an obligation to provide the information that EJ communities need to participate in the decision-making process, regardless of whether there are any substantive inequities or not. The inclusion of substantive initiatives like Lifeline, while it provided some additional information about gaps in certain transit routes, did not and could not take the place of providing the information and analysis that EJ communities were requesting.

Second, the gap analysis in Lifeline was not a comparative analysis. As I have stated above, it is of the essence of any EJ and equity analysis that it is a comparative analysis, one that compares benefits received by (or burdens imposed on) minority and low-income populations with those of other populations. The Lifeline study did not compare the gaps in service used by non-minority and non-low-income transit riders with the "Lifeline gaps."<sup>41</sup> As Mr. Lethco

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<sup>41</sup> In addition, I understand that MTC did not provide funding to close identified Lifeline

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himself testified, “[h]aving gaps is not inherently fair or inequitable.” (Lethco deposition at pp. 118.) But MTC fails to provide information about those gaps for communities of concern versus non-communities of concern with which to determine whether the Lifeline gaps are in fact inequitable because of their disproportionate impact on EJ communities.

**c. 2005 RTP Equity Analysis**

Despite MTC’s knowledge of the dissatisfaction that EJ communities and MTC’s own EJ and minority advisory groups had expressed in 1998 and 2001 with an equity analysis methodology that relied on MTC’s travel demand model, MTC repeated that methodology in connection with its 2005 RTP. While MTC added “essential destinations” to its job accessibility analysis, and included for the first time measures of user benefits (travel-time and out-of-pocket savings), and user burdens (emissions from vehicle miles traveled through communities of concern), these were relatively minor changes that did not change the fact that the model remained unable to distinguish inequities that affected bus riders as compared to rail riders. (See 2005 Equity Analysis, Kimsey Exh. 9, at ES-1, at MTCP002585.) Nor did these measures respond to earlier requests to assess inequity of investments, and the measure of travel time savings could be inflated by misassumptions about the benefits that rail (with its higher average speed) provides to communities of concern. MTC again failed to disaggregate results of the bus system versus rail, despite early calls to do so. (Kimsey Exh. 12, MCAC Minutes of Feb. 10, 2004, at p.5.)

Predictably, MCAC expressed the same misgivings that MTC had heard before. In its

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gaps in the 2001 RTP. The explanation given was that Lifeline gaps needed to be funded with operating funds, and there weren’t any. McMillan deposition (Dec. 7, 2007) at 38 (“the specific issue here was that what was identified in the Lifeline Transportation Plan was a need for additional operating funds, and additional operating funds was just what we could not get a handle on because the discretionary funding we had available in the RTP was all capital.”).

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Comments dated December 10, 2004, MCAC noted, among other things, that “[g]eographic proximity to a transportation mode should not be the sole criteria for determination of access,” and that “[t]he equity analysis should be refined so that it can better assist with micro-level analysis of communities of concern in addition to macro-level generalizations.” (Kimsey Exh. 33, MTCP003975.) Unfortunately, these renewed objections went unheeded: MTC did not present the 2005 RTP Equity Analysis to MCAC until December 7, 2004 (Kimsey Exh. 32, MTCP249206), but the Equity Analysis had already been finalized and adopted the previous month. (Kimsey Exh. 9.) This demonstrates how a lack of continuity can actually result in the disenfranchisement of EJ communities. MCAC was raising very similar concerns as had been raised by its predecessors. Because MTC had not addressed these concerns in the past, MCAC now had to start from scratch. Months later, MTC provided them with the product for comment only after it had been finalized, and failed to take into account their cogent input.

**2. MTC Rebuffs Efforts to Remedy Inequities Identified by MCAC, and Rebuffs MCAC’s Request That It Even Adopt a Principle that It Will Remedy Identified Inequities.**

In my opinion, the response of MCAC to the proposed equity analysis of the 2005 RTP demonstrates a healthy, democratic desire on the part of Bay Area EJ communities to participate vigorously in MTC’s decision-making process. MCAC’s initiative to deliberate over a set of EJ Principles, which arose out of issues MCAC surfaced in connection with the proposed methodology for the Equity Analysis (Kimsey Exh. 9 (2005 Equity Analysis) at 7-2, MTCP002652; Kimsey deposition at pp. 603-04), should have been welcomed by an MPO, since it facilitated the public engagement process that MPOs are affirmatively obliged to undertake. MTC’s actions indicate, however, that it did not treat MCAC as a meaningful participant in the process/was not seriously incorporating MCAC into the process. MTC resisted the advice of its

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own advisory committee, attempted to influence the committee it ostensibly convened for advice, and responded to MCAC's request for an equity analysis by producing yet another methodologically flawed analysis.

It is troubling, then, that MCAC has met such obvious resistance from MTC. MTC claims to take MCAC's advice seriously (Kimsey deposition at p. 473), but MTC's actions in connection with the EJ Principles are inconsistent with that claim. First, rather than using its advisory committee for its intended purpose – to ensure that “the views and needs of minority communities are adequately reflected in the policies of” MTC (MTC Fact Sheet about MCAC, p.1),<sup>42</sup> MTC staff appears to have taken steps to undermine the independence of MCAC's voice. For instance, where Urban Habitat's proposed language would have required that MTC “identify the presence of inequities in transportation based on race and income” (Principle #2), “measure the extent of these inequities” (Principle #3), and “change its investment decisions” in order to address the identified inequities (Principle #4) (Urban Habitat, MCAC Guiding Principles, April 12, 2004, MTCP257537), staff proposed that MCAC consider a substitute set of principles that omitted use of the term “inequities.” MTC also proposed to define “equity” as “an allocation of benefits and burdens that are “judged as ‘fair,’ though not necessarily equal.” (Memo to MCAC from Catalina Alvarado. “Discussion on Environmental Justice Principles,” June 8, 2004, MTCP 257539.) This is an inadequate definition, given the vagueness implicit in the word “fair” and in the phrase “judged as,” which provides guidance neither on who will do the judging or what criteria they will use.

Then, when MCAC adopted its EJ Principles for the first time, in November 2004, and brought them before the Commission's Legislation Committee, not only did staff provide no

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<sup>42</sup> Available at [http://mtc.ca.gov/get\\_involved/advisory/MCAC.pdf](http://mtc.ca.gov/get_involved/advisory/MCAC.pdf).

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staff report to the Committee at the January 2005 hearing, but worse, two months later staff provided a staff report that analyzed staff's substitute set of EJ Principles, instead of those MCAC had adopted. This heavy-handed approach evidences a lack of integrity because it suggests that MTC staff was not willing or able to assess MCAC's advice in an even-handed manner. Rather, it suggests that staff wanted the Legislation Committee to hear staff's views rather than the views of the minority committee that MTC constituted to advise the Commission members.

Executive Director Heminger's request that MCAC revise the language of the EJ Principles several months later appears irregular, both because the MPO should listen to its advisory committee, not negotiate with it; and because MTC brought in the Partnership after negotiating the outcome. It shows a lack of integrity in terms of MTC's failure to heed the advice of the advisory committee that it convened expressly for the purpose of advising MTC on social equity and the needs of environmental justice communities.

A particularly troubling action by MTC was its publication of the results of its "funding equity analysis to implement EJ Principle #2" in what was effectively a censored version. MCAC adopted a motion, based on Table 7b in the October 26, 2006, draft, "stating the committee's strong opinion that inequities exist, whether intentional or not, in the distribution of transportation funding based on race and income, and recommending that the commission adopt proposed EJ Principles #3 and #4. (Corless Exh. 9, Memo from MCAC to Legislation Committee, Jan. 5, 2007.) The "final" version of the funding analysis, however, which MTC presented at the final Legislation Committee hearing on the matter, reduced the chart for Cell 7b to just two bars for each transit operator: one for share of MTC discretionary funding, and a second for share of minority riders. (Id., Chart E.) It altogether omitted the share of total

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funding that MCAC found inequitable. This suppression of data and analysis shows an unfortunate lack of integrity that is especially egregious in that the data MTC chose to suppress was precisely the data on which MCAC had recently expressed its “strong opinion that inequities exist, whether intentional or not, in the distribution of transportation funding based on race and income, and recommending that the commission adopt proposed EJ Principles #3 and #4.” (Corless Exh. 9, Memo from MCAC to Legislation Committee, Jan. 5, 2007.)

MTC also breached the principle of integrity in another very important respect: It failed to categorize the riderships of transit operators according to the usual manner, which MTC accepted for purposes of identifying “communities of concern,” which is to determine where there are concentrations of minorities, that is, whether (in the case of MTC’s criterion) 70% or more were people of color. Instead, MTC presented the data in terms that served only to mask significant demographic differences: the share of the total ridership of five operators that each operator carried, and the share of total minority ridership. But the fact that a large operator may carry more total minorities than a smaller one does not change the fact that one ridership may be overwhelmingly minority and the other not. In that case, the former ridership is protected as an EJ and Title VI population, while the latter is not.

MTC’s approach of aggregating the ridership of several operators and looking at the total number of minorities erases important differences in the *concentration* of minorities on the ridership of certain operators and treats minorities as “fungible.” This approach is analytically flawed for at least two reasons. First, the purpose of an equity analysis is to determine whether minority communities are disproportionately harmed. MTC’s analysis effectively relies on the presence of some minorities on a large operator to “dilute” the effect of its policies on small operators with a high concentration of minority riders. Looking at overall raw numbers is

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meaningless in an equity analysis because minorities are, by their very nature, minorities. The fact that minorities in a disproportionately non-minority community benefit says nothing about whether minorities in a disproportionately minority community are harmed.

Second, it effectively blurs the distinction between different modes of transit, and the potentially differential impact of MTC's funding policies on each. As I have explained above, bus and rail are very different modes of transit, and their riders have not only very different demographic profiles but also very different transit needs. A *transportation* equity analysis must be sensitive not only to the minority (and low-income) status of riders, but also to their transit needs. For this reason, it is important to look at the impact of transportation funding decisions on different communities, based on the mode of transit they use. Minority rail riders are not interchangeable with minority bus riders, who may need to go to different locations at different times and may be unable to afford rail fares. By aggregating multiple operators, MTC's analysis allows the benefits received by minority rail riders to erase any burdens shouldered by minority bus riders.

MTC's claim to respect its Minority Citizens Advisory Committee seems particularly suspect in light of the fact that, after seeming to support adoption of MCAC's EJ Principles before the Legislation Committee and the full Commission in March 2006, the Executive Director did not continue to support adoption nine months later. It appears that either his initial support was not genuine, or that he was unwilling to keep the commitment of support that was at least implicit in his negotiation of the EJ Principles to his satisfaction with MCAC months earlier.

In addition to this breach of continuity, MTC's integrity is called into question by the use to which it puts MCAC. On the one hand, when it suits MTC's purpose to ask MCAC to agree

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that MTC's approach to an equity analysis is appropriate, MTC will include statements in the final product acknowledging the role of MCAC. For example, the 2005 Equity Analysis states that "MTC's [MCAC] contributed to the development of the equity analysis methodology, and provided input on the definition of communities of concern, essential destinations, vehicle miles traveled and emissions." (Kimsey Exh. 3 at ES-1, MTCP002585.) Similarly, MTC states that it decided to use MCAC to represent minority interests in 2004 when conducting the equity analysis of its 2005 RTP, rather than reconvening EJAG, because MCAC traditionally looks out for the interests of minorities and low-income residents on transportation issues. (Kimsey deposition at pp. 541-43; see Corless deposition at pp. 34-5.)

On the other hand, when MTC does not like the consequences of MCAC's advice, it does not hesitate to reject that advice. This is illustrated in a particularly striking way by MTC's actions when MCAC asserted that MTC's 2006 funding equity analysis (Corless Exhs. 6 & 7) showed inequities. MTC could have responded in one of several appropriate ways: by adopting MCAC's remaining two EJ Principles, and turning to a discussion of how to implement them; by continuing the discussion about the EJ Principles and adopting a set of different, but equally effective, principles; or even by taking direct action to address the inequity that MCAC had identified in MTC's funding analysis with respect to the total funding of transit operators like AC Transit, with riderships that met MTC's definition of "Communities of Concern." MTC did none of these things.

Instead, MTC unilaterally determined that inequity was not "convincingly demonstrated," refused to adopt the remaining EJ Principles, and has apparently let MCAC's initiative die. The probable effects of this kind of action are to demoralize and disempower community participation, and to feed an ongoing cycle of discontinuity and inertia on the part of the MPO.



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**V. CONCLUSION**

The history of MTC's dealings with EJ communities and advisory groups over the past ten years is rife with examples, some of them quite egregious, of departures from well-established principles of environmental justice, public participation, and transportation equity. MTC's failure to meet its public participation and environmental justice obligations not only disenfranchised EJ communities, but may very well have affected the results of MTC decision-making to the detriment of EJ communities.

Date: January 11, 2008

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Thomas W. Sanchez