

REGIONAL EQUITY WORKING GROUP

Wednesday, May 10, 2017, 11:15 AM to 1:15 AM
Yerba Buena Conference Room (1st Floor)
Metropolitan Transportation Commission
375 Beale Street, San Francisco, CA 94105

Conference Call Number
Dial 1-888-273-3658
Password 9427202

AGENDA

11:15 a.m. **1. Welcome and Introductions**

11:35 **2. Review Chapter 5: Analysis Results**
Chapter 5 of the Equity Analysis Report of the Draft Plan Bay Area 2040
includes analysis results for equity measures and transportation investments.
The full report is available for download at: www.2040.planbayarea.org.

1:15 **Close**

The next REWG meeting is tentatively scheduled for June 14, 2017.

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Chapter 5. Analysis Results

This chapter summarizes the equity analysis results for the Draft Plan, incorporating relevant findings from related Title VI analyses (in the distribution of investment benefits and the spatial distribution of projects included in the plan, intended to satisfy federal nondiscrimination requirements) and environmental justice analyses (intended to address whether communities of concern [CoCs] are subject to disproportionately high and adverse effects). The complete results from the Title VI and EJ analysis are presented in Chapter 6.

The analysis presented in this chapter has two parts. The first uses the six equity measures described in Chapter 2 to evaluate the plan as well as four alternatives studied in the Draft Environmental Impact Report (EIR) for their relative benefits to communities of concern and low-income populations. The EIR alternatives incorporate a range of land use and transportation policies, programs and projects to test their relative performance on the 13 performance targets, as well as other environmental indicators required by state law.¹ As described in Chapter 2, six of the 13 targets are also considered equity measures.

For a description of EIR scenario alternatives, see: <http://www.planbayarea.org/2040-plan/environmental-impact-report>. For a description of the 13 performance targets, see the Draft Plan. For a description of all the environmental and equity topics studied in the EIR, see the Draft Plan Bay Area 2040 EIR report.

The second part of the equity analysis is conducted on the transportation investments included in the Draft Plan, to assess their relative benefits to low-income and minority populations compared to non-low-income and non-minority populations. This analysis is conducted using the population-based, use-based and project mapping methodologies, described in more detail in Chapter 2. Chapter 7 describes a range of proposed or adopted land use and transportation policies, programs and planning efforts that address many of the challenges identified throughout this chapter as well as in Chapters 3 and 4 in regional trends.

Analysis of Equity Measures

To conduct the analysis of benefits and burdens on disadvantaged communities, MTC and ABAG adopted six quantitative performance targets, or *equity measures*, in January 2016. These six measures are a subset of 13 Performance Targets² for the entire plan. The equity measures for the plan include:

1. *Healthy and Safe Communities* (Performance Target #3) – to measure the health benefits and burdens associated with air quality, road safety and physical inactivity for high- and low-income households;³
2. *Equitable Access* (Performance Target #5) – to measure a lower-income household’s share of income consumed by transportation and housing costs, compared to a higher-income household;⁴
3. *Equitable Access* (Performance Target #6) – to measure the share of affordable housing in Priority Development Areas (PDAs), Transit Priority Areas (TPAs), or High-Opportunity Areas (HOAs),⁵

¹ For more details on state requirements for environmental impact reports for regional transportation plans, see: http://www.leginfo.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_cfa_20070531_141448_sen_comm.html.

² Plan Bay Area 2040 Performance Targets; see: <https://mtc.legistar.com/LegislationDetail.aspx?ID=2542165&GUID=D89FCABA-8814-4F0C-990D-B6803291A4D5>.

³ Households that earned more than \$100,000 (in 2000 dollars) are considered high-income, and those that earn less than \$30,000 (in 2000 dollars) are considered low-income for this analysis.

⁴ Households that earned more than \$60,000 (in 2000 dollars) are considered higher-income, and those that earn less than \$60,000 (in 2000 dollars) are considered lower-income for this analysis.

⁵ See the Fair Housing and Equity Assessment report, ABAG, 2015, for a definition of High-Opportunity Areas: http://abag.ca.gov/files/1_FHEAFinalReport_3.13.15.pdf.

within and outside CoCs;

4. *Equitable Access* (Performance Target #7) – to measure the share of low- and moderate-income households in PDAs, TPAs and HOAs that are at an increased risk of displacement, within and outside CoCs;
5. *Economic Vitality* (Performance Target #8) – to measure the share of jobs that are accessible by auto and transit in congested conditions, within and outside CoCs; and
6. *Economic Vitality* (Performance Target #9) – to measure the share of middle-wage jobs in the region, within and outside CoCs.

Table 5-1 summarizes the modeled results for each of the six measures as well as for the baseline year, No Project Alternative, Main Streets Alternative, Big Cities Alternative, Environment Equity and Jobs (EEJ) Alternative, and the Draft Plan. The Draft Plan performs better than or as well as the other EIR alternative for the six performance measures.

Table 5-1: Summary of Performance Results for EIR Alternatives

| Equity Measures | Sub-Geography | Plan Target | Base Year | No Project | EIR Alternatives | | | |
|--|---------------|-------------|----------------------|------------|------------------|------------|------|------------|
| | | | | | Main Streets | Big Cities | EEJ | Draft Plan |
| 3. Reduce Adverse Health Impacts | HI-HHs | -10% | 204,593 ⁶ | -1% | -1% | -1% | -1% | -1% |
| | LI-HHs | | 142,064 | -0% | -0% | -1% | -1% | -1% |
| 5. Decrease H+T * Share for LI-HHs | HI-HHs | -10% | 20% | +5% | +5% | +5% | +5% | +5% |
| | LI-HHs | | 54% | +15% | +13% | +13% | +12% | +13% |
| 6. Increase Share of Affordable Housing | RoR ** | +15% | 8% | +0% | +3% | +2% | +3% | +3% |
| | CoCs | | 23% | -2% | -1% | -2% | +3% | -0% |
| 7. Share of LI-HHs at Risk of Displacement | RoR | +0% | 14% | +16% | +9% | +8% | +8% | +7% |
| | CoCs | | 32% | +25% | -1% | +13% | -0% | +1% |
| 8. Increase Share of Jobs Accessible | RoR | +20% | 17% | -3% | -1% | -1% | -3% | -0% |
| | CoCs | | 20% | -1% | -2% | -2% | -3% | +0% |
| 9. Increase Middle-Wage Jobs | RoR | +38% | 38% | +43% | +43% | +43% | +43% | +43% |
| | CoCs | | 38% | +43% | +43% | +43% | +43% | +43% |

Source: MTC Analysis

Notes: For equity measure #3, low-income households (LI-HHs) earn less than \$30,000, and high-income households earn more than \$100,000, in year-2000 dollars. For equity measure #5, lower-income households earn less than \$60,000, and higher-income households earn more than \$60,000 in year-2000 dollars. For equity measures #6 and #7, the measures are specific to Priority Development Areas, Transit Priority Areas or High-Opportunity Areas. Note that communities of concern do not generally overlap with High-Opportunity Areas.

* Housing and Transportation (H+T)

** Remainder of the Region (RoR)

The main finding of the equity analysis is that housing affordability remains the most significant challenge for the Bay Area. Some of these challenges are described in more detail in Chapters 3 and 4. While there are a number of factors that contribute to the lack of housing affordability at the neighborhood and regional levels (most of which are beyond the direct control or influence of regional agencies), the outcomes negatively affect every equity measure adopted for the plan (see Table 5-1 above).

⁶ Health outcomes are measured as DALYs, or disability-adjusted life years. For more information about this measure, see: http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/.

Public agencies have a role to play in solving this crisis. Regional agencies can support local jurisdictions and facilitate the construction of new housing units (both market rate and affordable) to keep pace with job growth, and the plan can provide incentives and planning assistance to communities that are willing to adopt supportive policies and programs. Local jurisdictions can allow new high-density residential development and protect vulnerable populations, while the state can alter its tax policies and regulatory requirements to allow more housing to be built and preserved for working families, low-income populations, seniors, veterans, the homeless and people with disabilities.

Health Outcomes

For the health measure, the Draft Plan reduces negative health outcomes for households earning less than \$30,000 per year by one percentage point over the 24-year planning horizon of Plan Bay Area 2040. The benefit for households earning more than \$100,000 per year is the same. While this may not seem like much, a reduction of even this magnitude is challenging given the predominantly dispersed nature of development in the region. Unless a large number of residents move to mixed-use, walkable communities, this benefit is unlikely to rise significantly, despite substantial investments in active transportation, road safety and public transit. Still, the role of transportation in improving health outcomes is well established, and the Draft Plan makes some progress in realizing this potential.

Housing and Transportation Costs

For the combined housing and transportation cost measure, the Draft Plan increases the total cost for households that earn less than \$60,000 per year by 13 percentage points. Of this increase, 12 percentage points are attributable to housing costs and one percentage point to rising gas prices due to inflation. More than any other equity measure, the combined cost of housing and transportation accurately reflects the huge role that housing affordability plays in the everyday challenges faced by lower-income households in the region.

But while the Draft Plan performs as well as or better than other EIR alternatives for this measure, the outcome for higher-income households (those earning more than \$60,000 per year) is brighter, with a five percentage point increase over the 24-year period. The relatively modest increase for higher-income households is also from a much lower base of 19 percent (in combined housing and transportation costs) in the baseline year (2005). By 2040, the combined cost of housing and transportation for higher-income households will rise to 23 percent of income, and for lower-income households to 67 percent.

Affordable Housing

For the affordable housing measure, which estimates the share of affordable housing units in PDAs, TPAs and HOAs, the Draft Plan decreases the share of affordable housing units in communities of concern (CoCs) by less than one percentage point. Despite this shift in the wrong direction, the Draft Plan performs better than two of the other three EIR alternatives in CoCs. The exception is the EEJ scenario, which increases the share of affordable housing by 3 percentage points. The Draft Plan, however, performs better in the remainder of the region, which is the area outside CoCs but still within PDAs, TPAs and HOAs, by increasing the share of affordable units by 3 percentage points. This is better than or as good as the other EIR alternatives.

Even though the share of affordable units in the remainder of the region increases by 3 percentage points (from 8 percent in 2010 to 11 percent in 2040), the overall share of affordable units within CoCs is still much higher, at 20 percent (though down from 21 percent in 2010). The region must continue to build more affordable units in PDAs, TPAs and HOAs to accommodate lower-income households near amenities and services, irrespective of whether these units are within or outside CoCs, especially since concentrating low-income housing within existing disadvantaged communities raises fair housing concerns.

Risk of Displacement

For the displacement measure, the Draft Plan increases the risk for low-income households by one percentage point within CoCs and 7 percentage points in the remainder of the region. The Draft Plan performs better within CoCs than the remainder of the region, and it performs marginally worse than the Main Streets and EEJ alternatives. Still, 37 percent of all low-income households in PDAs, TPAs and HOAs are at risk of displacement in 2040 within CoCs (up from 36 percent in 2010), and 21 percent in the remainder of the region (up from 14 percent in 2010).

By definition, the risk of displacement for this measure is higher in areas that accept more growth, especially if these areas also have existing low-income populations. This definition of risk does not account for communities that resist residential development and at the same time continue to add a significant number of jobs, which increases housing affordability pressures on neighboring communities, lower-income households and working families. Those who have fewer resources face limited choices – double up to stay in the same community, or move away.

In the Bay Area, this pattern of displacement has resulted in a significant shift of the lower-income population from urban to suburban and exurban areas that have limited access to transit, job opportunities and many other amenities and services. More choices for housing close to transit and job centers can relieve this pressure, but the Bay Area has a large deficit of housing production that dates back to the 1970s.

Solving the region's housing affordability crisis will require a significant push to build more housing at all income levels, to build these units closer to transit and jobs, and to build them at a much faster pace than has been managed even in this current boom.

Job Access

For the job access measure, the Draft Plan increases the share of jobs that are accessible by auto or transit in congested conditions by less than one percentage point within CoCs, compared to no change in the remainder of the region. Of all the EIR scenarios, only the Draft Plan moves the CoCs in the right direction. The accessibility measures for all the other scenarios is negative, reflecting the anticipated rise in traffic congestion across the region in 2040.

Middle-Wage Jobs

For the middle-wage jobs measure, the Draft Plan increases the share of well-paying jobs in high-growth industries by 43 percentage points, thereby exceeding the target set at 38 percentage points. All the EIR scenarios, however, increase the share of middle-wage jobs by 43 percentage points, since the growth projections for middle-wage jobs are independent of the land use and transportation policies studied in the plan development process.

The Draft Plan does not meet the performance targets for most equity measures (except for the middle-wage jobs measure), and in three instances, moves in the opposite direction. This outcome is not entirely unexpected in a built-out region such as the Bay Area. Not only are the plan targets ambitious, but meeting or exceeding them requires sustained commitment for action from multiple stakeholders and public agencies at numerous levels over a long period of time. By recognizing, measuring and prioritizing the housing challenge in the Bay Area, the Draft Plan is laying the foundation for a more informed and collaborative regional discussion regarding effective regional policy solutions and implementation.

Transportation Investment Analysis

This section summarizes the results from an analysis of Draft Plan investments for their relative impact on minority and low-income populations, compared to non-minority and non-low-income populations. The methodology for conducting the investment analysis is described in more detail in Chapter 2. The legal and policy context for the analysis is provided in Chapter 1.

The transportation investment analysis includes the following two components:

- *A population/use-based analysis* – which quantifies the benefits of the region’s transportation investments, and assigns these benefits to low-income and minority populations based on their share of system usage for both roadway and transit modes of travel. This share of benefits is then compared to the overall share of minority and low-income populations in the region.
- *A mapping analysis* – which relies on a qualitative assessment of the spatial distribution of major roadway and transit projects in relation to the location of minority and low-income populations.

Population/Use-Based Analysis

The population/use-based investment analysis is conducted in four distinct steps, described below.

Step 1: Determine the Share of Population and System Usage

For the population/use-based analysis, as a first step, the region’s total population and total trips are assigned to four subgroups: low-income, non-low-income, minority and non-minority populations (see Table 5-2 below). The trip data includes both transit and roadway trips calculated as average daily trips for the entire region. Note that the minority subgroup’s share of average daily trips is lower than its share of the regional population. Some of this difference is attributable to the fact that demographic numbers in the 2010-2014 American Community Survey dataset differ slightly from those in the 2012/2013 California Household Travel Survey datasets.⁷

Table 5-2: Share of Population and System Usage by Subgroup

| | Population | | Average Daily Trips | |
|------------------------------|------------------|------------|---------------------|------------|
| | # | % of Total | # | % of Total |
| Low-Income Status * | 1,837,830 | 25% | 6,730,534 | 28% |
| <i>Non-Low-Income Status</i> | 5,501,132 | 75% | 17,059,291 | 72% |
| Minority Status ** | 4,305,728 | 59% | 12,803,815 | 54% |
| <i>Non-Minority Status</i> | 3,033,234 | 41% | 11,098,119 | 46% |

Source: 2010-2014 American Community Survey, 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, 2012/2013 Bay Area Household Travel Survey

* Low-income status includes population in households with incomes below \$50,000 per year in 2006 dollars

** Minority status includes populations that are not White

Relative to their share of the regional population, minority and low-income populations have different travel behaviors. Low-income populations comprise 25 percent of the regional population but take 28 percent of all trips in the region (average daily trips). Minority populations, on the other hand, comprise 59 percent of the regional population but account for only 54 percent of all trips. When factoring in the mode of travel (transit ridership and roadway trips, see Table 5-3 below), the variations are even more significant. Low-income populations account for the majority of transit trips in the region, at 52 percent, which is more than twice their regional share of the population, and minority populations account for 62 percent of transit trips.

Though low-income populations account for a disproportionately large share of transit ridership in the region, 88 percent (or a little less than 6 million trips out of a total of about 6.7 million trips) still drive alone or carpool to their destinations. That share is even higher for minority populations, at 92 percent (or

⁷ The differences in the share of trips and population are primarily due to differences in overall regional demographics from the 2012/2013 California Household Travel Survey (which was weighted according to the region’s 2010 Census population), used to allocate funding on the basis of usage, and the 2014 Census data, used for the overall regional population comparison.

about 11.5 million out of a total of 12.5 million trips). The dependence on non-transit modes of travel for both low-income and minority populations may in large part be a function of the dispersed development pattern in the region, where a majority of jobs and homes are not transit-accessible.

Table 5-3: Share of System Usage by Mode by Subgroup

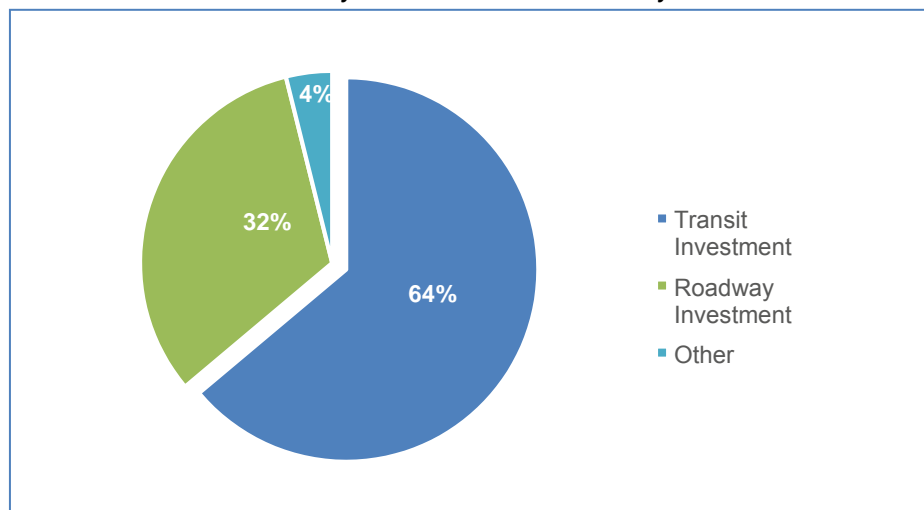
| | Transit Ridership (All Operators) | | Roadway Trips (All Counties) | |
|--------------------------|-----------------------------------|------------|------------------------------|------------|
| | # ⁸ | % of Total | # | % of Total |
| Low-Income Status | 782,633 | 52% | 5,947,902 | 27% |
| Non-Low-Income Status | 720,325 | 48% | 16,338,965 | 73% |
| Minority Status | 998,992 | 62% | 11,506,128 | 53% |
| Non-Minority Status | 616,075 | 38% | 10,482,044 | 47% |

Source: 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, 2012/2013 Bay Area Household Travel Survey

Step 2: Determine the Share of Plan Investments by Mode

The next step in the analysis is to determine how much of the total investment in the Draft Plan is allocated to the following two travel modes: transit (which includes investments in operations and capital improvements) and roadways (which includes investments in roads, highways and bridges). As shown in Chart 5-A below, the largest share of the investment in the Draft Plan is in public transit, at 64 percent, followed by roadways, at 32 percent. A portion of the investment is excluded from the analysis, in cases where investments had no modal component or otherwise could not be assigned to a particular county or transit operator (such as regional planning funds, Climate Program funds, etc.).

Chart 5-A: Share of Plan Bay Area 2040 Investments by Mode



Source: MTC

The total investment included in the Draft Plan is around \$303.45 billion (year-of-expenditure) over a 24-year period. See the Draft Plan for more information on the investment strategy.

⁸ Note that the total transit rides by low- and non-low-income population equals about 1.5 million, whereas the total for minority and non-minority population equals about 1.6 million. These numbers are inconsistent in the transit surveys.

Step 3: Assign Investment Benefit by Mode to Population Subgroups

Next, investments for each mode are allocated to the four population subgroups—minority, non-minority, low-income and non-low-income—based on their level of usage of that particular mode. For example, if the Draft Plan invests \$100 in System A, if half of their users are low-income and three-quarters are minority, then the “benefit” of the \$100 investment is allocated as follows: \$50 to low-income and \$75 to minority populations.

This is a multi-step process that is different for each mode. For transit, investments are first aggregated by transit operator (which may include expenditures for operations, capital improvement, modernization, etc.). Then, a share of this investment is allocated to low-income and minority riders based on their share of use (by operator). Once all investments are allocated to the four population subgroups, the total for each subgroup determines how much they benefit from the Draft Plan’s investments in transit relative to the other subgroups.

A similar approach is used to assign roadway investments to low-income and minority populations, but instead of assigning investments to transit operators, they are assigned to each county. Again, based on their relative usage of roadways in each county, each population subgroup is allocated a share of the county’s investment in roadways. These allocations, once aggregated for all nine counties, determine how much each subgroup benefits from the Draft Plan’s investments in roadways relative to the other subgroups. The results of this assessment by mode by subgroup is summarized in Table 5-4 below.

Table 5-4: Share of Investment by Mode by Subgroup

| | Transit Investment | | Roadway Investment | |
|--------------------------|--------------------|-------------|--------------------|-------------|
| | \$ millions | % of Total | \$ millions | % of Total |
| Low-Income Status | \$92,240 | 48% | \$26,591 | 27% |
| Non-Low-Income Status | \$101,704 | 52% | \$73,146 | 73% |
| Minority Status | \$117,386 | 61% | \$51,736 | 52% |
| Non-Minority Status | \$76,557 | 39% | \$48,001 | 48% |
| Total | \$193,944 | 100% | \$93,717 | 100% |

Source: 2010-2014 American Community Survey, 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, 2012/2013 Bay Area Household Travel Survey, MTC analysis of Draft Plan investments

Step 4: Compare the Share of Investment Benefit to the Share of Population and System Usage

The final calculation involves combining the investment benefits for both modes into one metric for each subgroup. This data, along with shares of population, trips by mode and investments by mode, are summarized in Table 5-5 below.

As noted before, in the Bay Area, transit investments provide relatively higher benefits to low-income and minority populations relative to their share of the region’s population. This is primarily due to their propensity for using transit. Conversely, because minority populations are underrepresented in the share of regional roadway usage (53 percent) relative to their share of the region’s population (59 percent), investments in roads, highways and bridges provide relatively lower benefits to minority populations.

Equally important is the finding that investments in roads, highways and bridges also provide relatively higher benefits to low-income populations, though not as much as transit investments, compared to non-low-income populations in the Bay Area. In summary, any investment in improving transportation infrastructure and services regardless of mode will benefit low-income populations, but the higher the investment in transit, the greater the benefits to both low-income and minority populations.

Table 5-5: Summary of Population/Use-Based Analysis Results

| | Share of People | Share of Trips | | | Share of Investments | | |
|------------------------------|-----------------|-------------------|---------|---------|----------------------|---------|---------|
| | | Transit + Roadway | Transit | Roadway | Transit + Roadway | Transit | Roadway |
| Low-Income Status * | 25% | 28% | 52% | 27% | 40% | 48% | 27% |
| <i>Non-Low-Income Status</i> | 75% | 72% | 48% | 73% | 60% | 52% | 73% |
| Minority Status ** | 59% | 54% | 62% | 53% | 58% | 61% | 52% |
| <i>Non-Minority Status</i> | 41% | 46% | 38% | 47% | 42% | 39% | 48% |

Source: 2010-2014 American Community Survey, 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, 2012/2013 Bay Area Household Travel Survey, MTC Analysis

Overall, across both modes, low-income populations receive a higher share of the Draft Plan investment benefits (40 percent) relative to their overall share of the region’s population (25 percent) and trips (28 percent). Minority populations across both modes receive a slightly lower share of the Draft Plan investments benefits (58 percent) relative to their overall share of the region’s population (59 percent) and trips (54 percent).

As noted earlier in this chapter, there is a small but not insignificant margin of error in these calculations, because of both the nature of the analysis and the fact that data for this analysis is derived from multiple sources. For example, demographic data in the 2010-2014 American Community Survey (ACS) dataset differs slightly from those in the 2012/2013 California Household Travel Survey datasets. The same is true for trip data from ACS and transit passenger surveys conducted by operators and MTC.

In addition, since the analysis is conducted at a regional, aggregate level, there are bound to be factors such as system reliability, user cost and location of transportation services that are not captured here. Lastly, the distribution of the four population subgroups varies by county, so it is safe to assume that an investment in a county does not benefit all populations that live there, but this level of data is not currently available. Given all these limitations with the analysis methodology and data, it is prudent to look at the orders of magnitude rather than the exact percentages when determining whether low-income and minority populations benefit significantly less or more than non-low-income and non-minority populations from the Draft Plan.

Project Mapping

The second part of the investment analysis is to map the location of transit and roadway projects included in the Draft Plan, overlaid with census tracts that are designated as CoCs and have a higher-than-regional-average (>57 percent) concentration of minority populations. The purpose of this analysis is to qualitatively assess the spatial distribution of projects for any apparent systematic exclusion of CoCs or minority populations at a regional level, or for any apparent systematic imbalances between the distribution of projects between CoCs and the remainder of the region, or between minority and non-minority populations.

This assessment is intended to provide a regional-level analysis of the Draft Plan’s investments. Individual projects will be subject to their own Title VI and environmental justice analyses during implementation, as required under federal and state laws.

Results for Communities of Concern

Transit and Roadway projects that can be mapped are included in Maps 5e and 5f. For a list of all transit and roadway projects, see the Draft Plan. Each map is also overlaid with CoCs. Projects that represent transit stations or freeway interchange are mapped as dots, and transit routes or roadway corridors as lines.

Since the Draft Plan emphasizes a focused growth approach that calls for a majority of future housing and jobs growth to be located in transit-accessible areas, and since a majority of all CoCs are located in the region's urban core, with the exception of CoCs in Napa, Solano and Contra Costa counties, there is significant overlap between the projects included in the Draft Plan and the region's CoCs.

Based on this limited and qualitative assessment, there does not appear to be any systematic exclusion of CoCs from the benefits of the Draft Plan, nor imbalance in the spatial distribution of projects in the region. It is important to note that a significant number of projects could not be mapped, even when they represent a significant share of the funding in the Draft Plan, such as maintenance and operation of the region's transportation system. The maps also do not distinguish between the relative magnitudes of investments in terms of project costs.

Results for Minority Populations

For the analysis of minority populations, the project layers from maps 4e and 4f are overlaid with census tracts in the region that have a higher-than-regional-average (>57 percent) concentration of minority populations. As with the CoC analysis, there is a strong relationship between the spatial distribution of investments in the Draft Plan and minority tracts. Based on this assessment, there does not appear to be any systematic exclusion of communities from Plan investments on the basis of minority status, or imbalances in the distribution of projects between minority and non-minority communities.

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Chapter 6. Title VI and Environmental Justice

This chapter summarizes the results of the Title VI and Environmental Justice analyses. While both of these analyses are part of the overall equity analysis framework (see Chapter 2 for more details on the equity framework), they are called out separately in this chapter, since this report is in part intended to satisfy federal requirements related to nondiscrimination and environmental justice in the metropolitan planning process. For more information on the legal, regulatory and policy framework underlying these analyses, see Chapter 1.

Title VI Analysis and Results

The purpose of this analysis is for MTC to demonstrate compliance with federal laws and regulations related to Title VI of the Civil Rights Act of 1964. The U.S. Department of Transportation’s (DOT’s) Title VI regulations prohibit recipients of federal transportation funds from utilizing criteria or methods of administration that have the effect of subjecting persons to discrimination based on their race, color or national origin. As an operating entity within DOT, the Federal Transit Administration (FTA) provides more specific guidance to metropolitan planning organizations on how to demonstrate Title VI compliance (see Chapter 1 for more details).

The first step in the analysis is to identify the combined share of federal and state transit investments in Plan Bay Area 2040 (see Table 6-1). The investments included in the plan total \$303.5 billion over a 24-year period, for a wide range of projects that include express lanes, freight improvements, active transportation programs and transit operations. Of the total plan investments, \$203.5 billion are allocated to transit operations, maintenance, modernization and expansion. Transit is by far the largest investment made in Plan Bay Area 2040. Of the total transit investments, 18 percent (or \$53.4 billion) comes from various federal and state sources (see Chapter 2 for a list of sources). The Title VI analysis in this report is conducted on this amount (i.e., \$53.4 billion).

Table 6-1: Sources of Funding by Mode of Transportation, Plan Bay Area 2040

| | Total | Federal and State | | Local / Other | |
|--------------------------------|------------------|-------------------|------------|------------------|------------|
| | \$ million | \$ million | % | \$ million | % |
| Roadway / Bridge | \$88,701 | \$29,220 | 33% | \$59,482 | 67% |
| Bicycle and Pedestrian | \$5,150 | \$1,325 | 26% | \$3,825 | 74% |
| Freight | \$2,743 | \$1,938 | 71% | \$805 | 29% |
| Other Programs | \$3,401 | \$1,072 | 32% | \$2,329 | 68% |
| Public Transit | \$203,449 | \$53,362 | 26% | \$150,087 | 74% |
| Plan Bay Area 2040 Investments | \$303,445 | \$86,917 | 29% | \$216,528 | 71% |

Source: MTC Analysis of Plan Bay Area 2040 Investments

¹ Ridership data by race/ethnicity is available for 24 of the 27 transit operators in the Bay Area. Data is not available for Amtrak (\$92 million), City of Dixon (\$17 million) and the Sonoma-Marina Area Rail Transit (SMART) (\$623 million). Data is also not available for the California High Speed Rail project (\$8.5 billion). These amounts are therefore not included in the population/use-based analysis.

Since this analysis relies on ridership data by race/ethnicity for each transit operator,¹ the assessment is further limited to only those operators for whom this information is available through a transit passenger survey (either conducted by the transit operator or MTC). This subset of the total federal and state transit funding for which data is available is \$43.6 billion, or 82 percent of the total.

Next, federal and state investments in transit are allocated to minority and non-minority populations using the same methodology used in the transportation investment analysis (the population/use-based analysis) outlined in Chapter 5. Essentially, federal and state investments are broken out by transit operator and allocated to minority or non-minority populations, based on their respective shares of ridership on that particular transit system. The allocations by transit operator are then added to provide the total federal and state funding that is allocated to minority and non-minority populations. This allocation of funding to minority and non-minority populations based on their use of various transit systems constitutes “benefit.” The results for each subgroup are compared to estimate the relative benefit accrued to minority and non-minority populations (see Table 6-2).

Table 6-2: Summary of Population/Use-Based Analysis for Federal and State Transit Funding

| Population | Share of Population | Share of Transit Ridership | Investments (\$ million) | | Share of Investments (%) | |
|---------------------|---------------------|----------------------------|--------------------------|-----------------------|--------------------------|-----------------------|
| | | | PBA 2040 | Federal/State Transit | PBA 2040 | Federal/State Transit |
| Minority | 59% | 62% | \$117,386 | \$25,797 | 61% | 59% |
| Non-Minority | 41% | 38% | \$76,557 | \$17,850 | 39% | 41% |

Source: 2010-2014 American Community Survey, 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, MTC’s Analysis of Plan Bay Area Investments

Finally, investments are distributed on a per capita and a per-rider basis, so that investment benefits allocated to the region’s minority populations and riders can be compared to investment benefits allocated to the region’s non-minority populations and riders. The results from this analysis are summarized in Tables 6-3 and 6-4 below.

Following FTA guidance, MTC’s disparate impact analysis of plan investments reveals that, on a per-capita basis, minority populations in the region would receive 59 percent of Plan Bay Area 2040’s investment benefits for public transit using federal and state sources, compared to 41 percent for non-minority populations. The share of investment benefits based on a per capita basis is proportional to the share of minority (59 percent) and non-minority (41 percent) populations in the region.

On a transit-ridership basis, minority transit riders would again receive 59 percent of the benefit, compared to 41 percent for non-minority transit riders. The share of investment benefits based on a per-rider basis is proportional to the share of minority (62 percent) and non-minority (38 percent) transit ridership.

Table 6-3: Disparate Impact Analysis Results, Population-Based

| | Population (2014) | | Federal and State Transit Investments | | Per capita Benefit |
|---------------------|-------------------|------------|---------------------------------------|------------|--------------------|
| | # | % | \$ millions | % | \$ |
| Minority | 4,305,728 | 59% | \$25,797 | 59% | \$5,991 |
| Non-Minority | 3,033,324 | 41% | \$17,850 | 41% | \$5,885 |

Source: 2010-2014 American Community Survey, 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, MTC investment analysis

Table 6-4: Disparate Impact Analysis Results, Ridership-Based

| | Ridership | | Federal and State Transit Investments | | Per-Rider Benefit |
|---------------------|----------------|------------|---------------------------------------|------------|-------------------|
| | # | % | \$ millions | % | \$ |
| Minority | 998,992 | 62% | \$25,797 | 59% | \$25.82 |
| Non-Minority | 616,075 | 38% | \$17,850 | 41% | \$28.97 |

Source: 2012-2015 MTC Transit Surveys, Multiple Transit Operator Surveys, MTC investment analysis

Based on the results presented in Tables 6-3 and 6-4, MTC concludes that the Draft Plan is in compliance with Title VI of the Civil Rights Act of 1964 for the distribution of federal and state transit funds.

Environmental Justice Analysis and Results

Under Executive Order 12898 and the associated DOT Order on Environmental Justice, MTC must assist DOT, FTA and the Federal Highway Administration (FHWA) in their mission “to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects” on environmental-justice (EJ) populations. For this analysis, adverse effects are determined using the results for the six equity measures, described in Chapter 2, and EJ populations are either low-income households or communities of concern (CoCs), also described in Chapter 2. The analysis must determine if EJ populations share in the benefits of the plan’s investments without bearing a disproportionate share of the burdens.

As notes in Chapter 2, to make this determination, this report uses the DOT definition of a “disproportionately high and adverse effect,” which relies on meeting either of the following two conditions:

- An adverse impact is predominately borne by minority and/or a low-income populations, or
- An adverse impact on minority and/or low-income populations is significantly more severe or greater in magnitude than the adverse effect on non-minority and/or non-low-income populations.

Table 6-5 below summarizes the EJ analysis results for each of the six equity measures. Although none of the measures analyzed found both a disproportionately high *and* adverse effect on EJ populations, this analysis confirms broad regional trends related to housing affordability for lower-income households, who are also more likely to be minority populations, in PDAs, TPAs and HOAs. Chapter 7 identifies a number of policies and programs that address these concerns, though fully recognizing that solving the housing affordability crisis in the Bay Area requires a more concerted effort on behalf of local governments as well as state and federal agencies, and stronger partnerships and collaboration between the public and private sectors.

MTC finds no disproportionately high and adverse impact on EJ populations from the Draft Plan for any of the six equity measures. Regardless, this analysis again confirms the importance of addressing housing affordability challenges for low-income populations in the Bay Area. Chapter 7 lists a few of the initiatives that will be, or are already being, funded by the Draft Plan to address the housing affordability crisis in the Bay Area.

Table 6-5: Summary of Environmental Justice Analysis Results for the Draft Plan

| Equity Measures | Does the Draft Plan have an Adverse Effect on EJ Populations? * | Is the Adverse Effect Disproportionately High? ** |
|--|---|--|
| | Draft Plan vs. No Project Alternative for Low-Income and CoCs (see Table 4-1) | Low-Income and CoCs vs. Non-Low-Income and Remainder of the Region (see Table 4-1) |
| 3. Reduce adverse health impacts (+) | Same | Same |
| 5. Decrease H+T *** for lower-income households (+) | No | No ² |
| 6. Increase the share of affordable housing | No | No ³ |
| 7. Do not increase the risk of displacement | No | No ⁴ |
| 8. Increase share of jobs accessible in congested conditions | No | No |
| 9. Increase jobs in middle-wage industries | Same | Same |

Notes:

(+) Compares results for lower-income vs. higher-income households instead of communities of concern vs. remainder of the region. Low- and lower-income households, as well as communities of concern, are considered EJ populations for this analysis.

* Compares the analysis results for the No Project Alternative and the Draft Plan to determine whether the measure is moving in the right direction for EJ populations (low-income households or communities of concern).

** Compares the analysis results for the Draft Plan relative to EJ and non-EJ populations. An EJ population is determined to experience “disproportionately high adverse effect” when the Draft Plan has an adverse effect on EJ populations AND when the adverse impact from the Draft Plan is greater than the adverse impact of the No Project Alternative.

*** Housing and transportation costs

Cumulative Benefits of the Draft Plan

Though not a federal requirement for Title VI or EJ compliance, or mandated by other state or local laws, MTC has conducted a qualitative analysis that tests whether the Draft Plan contributes to a *reduction in existing disparities* between communities of concern and the remainder of the region. A similar analysis was also conducted in the equity report for Plan Bay Area 2013.

² The Draft Plan does not have a disproportionately high adverse effect on EJ populations since the second of the two conditions is not met (see ** notes under Table 6-5 for more detail). While for the Draft Plan, the share of household income spent in the combined cost of housing and transportation increases by 13 percentage points for low-income households and 5 percentage points for higher income households, the impact is less when compared to the No Project Alternative, which would increase the share by 15 percentage points

³ The Draft Plan does not have a disproportionately high adverse effect on EJ populations since the second of the two conditions is not met (see ** notes under Table 6-5 for more detail). While for the Draft Plan, the share of affordable units remains about the same within CoCs and increases by 3 percentage points in the remainder of the region, the impact is less when compared to the No Project Alternative. Also, overall, the share of affordable units within CoCs remains almost twice as high as in the remainder of the region in 2040 (23 percent compared to 11 percent).

⁴ The Draft Plan does not have a disproportionately high adverse effect on EJ populations since the second of the two conditions is not met (see ** notes under Table 6-5 for more detail). While the risk of displacement for the Draft Plan increases by 7 percentage point within CoCs and by 1 percentage points in the remainder of the region, the impact is less when compared to the No Project Alternative, which would increase the risk of displacement by 25 percentage points within CoCs.

Table 6-6 below summarizes the results of this analysis, which answers the following two questions:

1. Do disparities currently exist between communities of concern and the remainder of the region; and
2. Does the Draft Plan reduce any existing disparity?

Table 6-6: Summary of Cumulative Benefits Analysis Results for the Draft Plan

| <i>Equity Measures</i> | <i>Do disparities currently exist between CoCs and the RoR? *</i> | <i>Does the Draft Plan reduce any existing disparity? **</i> |
|---|---|--|
| <i>3. Reduce adverse health impacts (+)</i> | Yes | Marginally ⁵ Reduces |
| <i>5. Decrease H+T for lower-income households (+)</i> | Yes | Increases |
| <i>6. Increase share of affordable housing</i> | Yes | Marginally Increases |
| <i>7. Do not increase the risk of displacement</i> | Yes | Marginally Increases |
| <i>8. Increase share of jobs accessible in congested conditions</i> | Yes | Marginally Reduces |
| <i>9. Increase jobs in middle-wage industries</i> | No (++) | Reduces |

Notes:

See Table 5-1 in Chapter 5 for more detailed results for the Baseline, No Project Alternative and EIR Alternatives.

(+) Compares results for lower-income vs. higher-income households instead of CoCs and remainder of the region.

(++) The measure does not lend itself to a spatial or population-based assessment of disparate impacts. For example, both the location of middle-wage jobs and lower-income workers is dispersed across the region. In addition, an increase in the number of middle-wage jobs will largely benefit lower-income workers.

** Compares low-income or CoCs with high-income or remainder of the region in the baseline year (2005/2010).*

*** Compares the Base Year to the Draft Plan for low-income households or CoCs.*

Existing Disparities

Five of the six equity measures show existing disparities in the region between low-income households or CoCs and high-income households or the remainder of the region. These measures include adverse health impacts; combined cost of housing and transportation; share of affordable housing in PDAs, TPAs and HOAs; risk of displacement; and share of jobs accessible in congested conditions. None of these findings should be surprising.

Household income is the strongest predictor of individual and family health outcomes,⁶ so it follows that lower-income households in the region will experience worse health compared to higher-income households. High housing costs are also more burdensome on lower-income households. They spend a much higher share of their income on rent or the cost of owning a home compared to higher-income households, even though almost everyone who either moved here or bought a home in the Bay Area in the last decade is overpaying for housing. This has direct implications for both a household’s budget and its vulnerability to being priced out of a neighborhood as costs rise faster than wages.

⁵ The impact on low-income households or CoCs is considered marginal if the Draft Plan results in a change of up to + or – one percentage point compared to the Base Year.

⁶ For more information on the social determinants of health, see: <http://www.acphd.org/media/144727/lduc-part1.pdf> or http://publichealth.lacounty.gov/epi/docs/sociald_final_web.pdf.

It is important to note that a lack of existing disparity is not a sign of prosperity for disadvantaged populations in the Bay Area. For example, by definition, there is a higher concentration of low-income and minority populations within a CoC compared to the rest of the region (even though a larger share of all low-income and minority populations live in the remainder of the region). CoCs are therefore likely to have a high share of lower-priced homes, both renter- and owner-occupied. This is likely the primary reason why the share of affordable housing in CoCs is higher than the remainder of the region.

CoCs are also more likely to be located in the urban core, where transit and access to a broad range of services and amenities is better than in the suburbs. And even though a growing share of low-income populations are now living in suburban communities, the relative concentration of poverty is still higher in urban cores like Richmond, East Oakland, East Palo Alto and East San Jose. The same factors that increase the risk of displacement, i.e., proximity to transit and jobs, also increase the access for low-income and minority populations to job centers. This is likely the primary reason why the share of jobs accessible in congested conditions is higher in CoCs.

Benefits of the Draft Plan

When compared to base year conditions, the Draft Plan improves or marginally improves conditions for low-income households or CoCs for three equity measures. These measures include adverse health impacts, share of jobs accessible in congested conditions and middle-wage jobs. For two of these measures (health and job access), disparities currently exist between low-income households or CoCs and high-income households or remainder of the region.

These results suggest that the land use and transportation policies included in the Draft Plan are contributing to a reduction in some existing disparities in the region. An emphasis on transit, transit-oriented development and active transportation in the Draft Plan is contributing to improving health outcomes for lower-income households, by increasing opportunities for physical activity. More investments in affordable housing in the urban core, close to transit and jobs, are contributing to improved access to jobs and potentially other services.

On the other hand, the Draft Plan may result in worse or marginally worse conditions for low-income households or CoCs for three measures, including the combined cost of housing and transportation; share of affordable housing in PDAs, TPAs and HOAs; and risk of displacement. For each of these measures, disparities currently exist between low-income or CoCs and high-income or remainder of the region.

Despite small gains, much more work is needed to make real progress in improving health outcomes, housing and transportation affordability, and neighborhood stability for disadvantaged communities in the Bay Area.

Chapter 7. Next Steps

This chapter summarizes some of the next steps for MTC and ABAG, which build upon the findings from the equity analysis. These next steps refer to implementation of the Draft Plan as well as refinements to the equity analysis for the next update.

Transportation Plans, Programs and Investments

The Draft Plan allocates almost 64% of the total plan revenue, or about \$194 billion of \$303 billion,¹ to transit operations, modernization and expansion over a 24-year period. This investment reflects the region's commitment to transit sustainability and transit-oriented development, which has the potential to deliver significant environmental and economic benefits. This investment also supports the region's commitment to equity.

Low-income residents were about 25% of the region's total population in 2014,² but they accounted for about 52% of all transit trips in the region. Transit investments therefore disproportionately benefit low-income populations in the Bay Area. Similarly, minority residents are about 59% of the region's population and take 62% of all transit trips. They too, like low-income populations, benefit from transit investments. The agency's commitment to meeting the mobility and access needs of low-income, minority and other transportation-disadvantaged populations such as seniors and people with disabilities is reflected in MTC's programs and planning efforts, listed below.

Community-Based Transportation Planning Program

In 2002, MTC created the Community-Based Transportation Planning (CBTP) Program to provide planning grants for low-income communities to identify and prioritize transportation projects, programs and services that would improve their residents' mobility and access. Funding is provided to county congestion management agencies (CMAs) to implement a collaborative planning process involving residents, community- and faith-based organizations, transit operators, local jurisdictions, and MTC, among other stakeholders.

As of December 2016, more than 35 CBTP grants have been completed across the region.³ The second round of the One Bay Area Grant (OBAG) program, adopted in 2016, includes \$1.5 million to develop plans for new CoCs identified in the Draft Plan and to update the ones that are no longer current.

Lifeline Transportation Program

In 2005, MTC created the Lifeline Transportation Program (LTP) to fund projects and programs that meet mobility and access needs of low-income populations in the region. Since 2005, MTC has awarded over \$255 million in LTP funds to more than 280 projects, across all nine counties. LTP projects are administered by CMAs and involve determining the eligibility of grant proposals and appointing local review teams to evaluate outcomes. LTP projects must address transportation gaps or barriers identified in CBTP or other local planning efforts in low-income neighborhoods.⁴ The type of projects funded through

¹ The total plan revenue does not include project costs and funding that occurred before fiscal year 2016-2017. The amounts are in year-of-expenditure dollars.

² 2010-2014 American Community Survey 5-year average.

³ For a list of completed Community-Based Transportation Plans, see: <http://mtc.ca.gov/our-work/plans-projects/other-plans/community-based-transportation-plans>.

⁴ For more information about the Lifeline Transportation Program, see: <http://mtc.ca.gov/our-work/plans-projects/equity-accessibility/lifeline-transportation-program>.

LTP include: fixed-route bus service, transit stop improvements, pedestrian and bicycle access improvements, transportation services for seniors and children, community shuttles, and auto loan programs.

Regional Means-Based Transit Fare Study

In 2015, MTC launched a study to evaluate the feasibility and effectiveness of implementing a transit fare subsidy program based on household income. The Regional Means-Based Transit Fare Study includes three main objectives: make transit more affordable for low-income residents, move toward a more consistent regional standard for fare discounts, and avoid worsening transit operators' service levels or financial performance. MTC formed a technical advisory committee, composed of transit operators, community groups, and other stakeholders, to advise staff on the scope and methodology for the analysis. Key areas of focus for the study include identifying the following: possible fare structures and payment methods, eligible recipients, overall program costs, potential funding sources, impact on transit agencies' fare revenue, relationships to existing discounts, and any anticipated technical challenges. The final report is expected to be completed by mid-2017.⁵

Coordinated Public Transit–Human Services Transportation Plan

MTC's Coordinated Public Transit–Human Services Transportation (Coordinated) Plan seeks to improve transportation coordination in the region to address the transportation needs of low-income populations, seniors and persons with disabilities. Consistent with requirements established by the Fixing America's Surface Transportation (FAST) Act⁶, MTC is currently updating the Coordinated Plan to coincide with the adoption of Plan Bay Area 2040. MTC's current Coordinated Plan was adopted in 2013.⁷

Federal law requires that projects selected for funding under the Elderly Individuals and Individuals with Disabilities (Section 5310)⁸ be derived from a locally developed, coordinated public transit-human services transportation plan. Federal law also requires that the plan be developed through a process that includes representatives of public, private, and non-profit transportation and human services providers. Participation by members of the public is additional requirement. Plans must identify the transportation needs of low-income populations, seniors and persons with disabilities; provide strategies for meeting these needs; and prioritize transportation services for funding and implementation.

This report is consistent with the 2013 Coordinated Plan as well as the current update, which is anticipated to be adopted at the same time as Plan Bay Area 2040.

One Bay Area Grant Program

MTC's OBAG program supports California's smart-growth goals (as defined by Senate Bill 375) by incentivizing local agencies to fund transportation projects in Priority Development Areas (PDAs)—areas designated by local jurisdictions for higher-density, walkable, mixed-use communities.⁹ OBAG funds may be used by local jurisdictions for complete streets projects, including: stand-alone bicycle and pedestrian paths, bicycle lanes, pedestrian bulb-outs, lighting, new sidewalks, and Safe Routes to Transit and Safe Routes to School projects.

To be eligible for OBAG funds, each jurisdiction in the region is required to adopt a complete streets

⁵ For more information on the Means-Based Transit Fare Subsidy Study, see: <http://mtc.ca.gov/our-work/plans-projects/other-plans/means-based-fare-study>.

⁶ For more details on the FAST Act, see: <https://www.fhwa.dot.gov/fastact/legislation.cfm>.

⁷ For more information about the Coordinated Plan, see: <http://mtc.ca.gov/our-work/plans-projects/other-plans/coordinated-public-transit-human-services-transportation-plan>.

⁸ Formula funding to states for the purpose of assisting private nonprofit groups in meeting transportation needs of the elderly and persons with disabilities. See: <https://www.transit.dot.gov/grants>.

⁹ For more information on the OBAG Program, see: <http://mtc.ca.gov/our-work/invest-protect/focused-growth/one-bay-area-grants>.

policy and a state-certified housing element, consistent with state law. Many low-income households, seniors and people with disabilities reside within PDAs and will benefit from street improvements that expand access and mobility. But the same communities set to benefit from such projects may also be at risk of displacement, in the absence of protections and investment in affordable housing. The program thus also provides an incentive to local jurisdictions to produce more housing (including affordable housing) by including it in the funding allocation criteria. These requirements were strengthened in the recently adopted OBAG program.

Bay Area Transit-Oriented Affordable Housing Fund

In 2011, MTC committed \$10 million in seed funding to the Transit-Oriented Affordable Housing (TOAH) fund, which provides flexible, affordable loans to developers for the purchase of properties near transit for the development of affordable housing, retail space, and other critical services such as child care centers, fresh food outlets and health clinics. By supporting growth along transit corridors in Priority Development Areas, TOAH promotes compact land use patterns, which aligns with the region's Sustainable Community Strategy. MTC committed an additional \$10 million to the fund in 2014.¹⁰

Active Transportation, Complete Streets and Safe Routes to School Programs

MTC's bicycle and pedestrian planning program supports multiple initiatives. These include: bike to work, complete streets, Bay Area Bike Share, the Bay Trail, and connectivity across the region's bridges. Plan Bay Area (PBA) 2040 commits \$5.1 billion to bicycle and pedestrian improvements in the region over the plan period. PBA also makes a significant commitment to improve bicycle and pedestrian safety by supporting complete streets policies. MTC's complete streets efforts include regular trainings and workshops for residents as well as the development of an online checklist. Bicycle and pedestrian networks and safety improvements could benefit transportation-disadvantaged communities that rely on this mode for a higher share of essential trips.¹¹

The Bay Area Bike Share will offer \$5 first-year membership and cash transactions for low-income residents, and will broaden community outreach when the expansion program launches in spring 2017. After the first year, low-income members will pay only \$5 per month to keep riding. The Safe Routes to School (SRTS) program, part of OBAG, provides ~\$5 million annually in grants to cities, counties and congestion management agencies to fund projects such as: bicycle and pedestrian paths to schools; on-street bike lanes; bicycle racks or other secure parking facilities; traffic calming on streets around schools; bike safety training; and education and outreach for students and families. Bicycle and pedestrian networks and safety improvements around neighborhood schools could benefit transportation-disadvantaged communities by encouraging more active lifestyles and reducing road-traffic injuries.

San Francisco Bay Area Goods Movement Plan

In early 2016, MTC published the San Francisco Bay Area Goods Movement Plan, which is closely integrated with the Alameda County Transportation Commission's countywide planning efforts. The plan identifies five key goals, many of which benefit communities of concern. These include: increasing economic growth and prosperity; reducing environmental and community impacts and improving the quality of life in communities most affected by goods movement; providing safe, reliable, efficient and well-maintained freight movement facilities; promoting innovative technology strategies to improve efficiency; and preserving and strengthening the multi-modal transportation system that supports freight movement.¹²

¹⁰ For more information on the TOAH Program, see: <http://bayareatod.com/>.

¹¹ For more information on the region's active transportation program, see: <http://mtc.ca.gov/our-work/invest-protect/investment-strategies-commitments/protect-our-climate/active-transportation>.

¹² For more information on the Bay Area Goods Movement Plan, see: <http://mtc.ca.gov/our-work/plans-projects/economic-vitality/san-francisco-bay-area-goods-movement-plan>.

Regional Climate Initiative

The Draft Plan commits \$794 million for climate initiatives to reduce greenhouse gas emissions and other pollutants. Examples of initiatives include: commuter benefits (a pre-tax commute program), car-sharing, vanpooling, a Clean Vehicle Feebate Program, smart driving strategies, a vehicle buy-back and purchase incentive program, a regional electric vehicle charger network, and the climate initiatives innovative grants. Low-income people of color may be most vulnerable to impacts of climate change. If structured well, efforts to reduce emissions could benefit all residents in the region, including vulnerable populations.¹³

Other Federal Programs

FTA's Section 5307 program can be used to finance up to 80 percent of project costs for a wide range of transit investments, including: operating assistance; construction of maintenance and passenger facilities; vehicle replacement and rehabilitation; rehabilitation of tracks, signals, communications and computer systems; planning, engineering design and project evaluation; and crime prevention and security equipment.

Funding through Section 5307 is based on formulas established by Congress that incorporate population, transit ridership, revenue-service mileage and other factors. Section 5307 funds can be used to cover up to 90 percent of costs for bicycle-related projects and investments to comply with the Americans with Disabilities Act (ADA) and the Clean Air Act.

MTC sets aside 10% of Section 5307 funds for ADA paratransit service. The program provides approximately \$20 million annually to eligible paratransit service in urbanized areas. In addition to 5307 funds, STA sets aside 15.6% of its population-based formula allocations for paratransit service. STA provides approximately \$8 million annually to eligible paratransit service.

MTC partners with Caltrans to administer the Section 5310 funds to meet the mobility needs of seniors and people with disabilities in the Bay Area. The program provides approximately \$4.5 million annually to eligible projects in the region. Section 5310 funds are distributed to states to provide grants for nonprofit agencies that provide transportation services to seniors and people with disabilities. In the last cycle of funding (fiscal years 2013 and 2014), 56% of Section 5310 funding was used for mobility management, 32% for purchasing vehicles, and 12% for operations.

Section 5311 provides funds for transit capital projects and operations in non-urbanized areas. These funds are also eligible for paratransit service. The program provides approximately \$1.5 million annually to eligible projects in rural communities.

State and Federal Support

In order to meaningfully address the region's key challenges such as housing affordability, displacement and underfunded transit needs, ABAG and MTC will continue to advocate for legislative changes at both the state and federal levels. These initiatives, detailed further in the Draft Plan, include:

- *Local funding tools and mechanisms* – MTC and ABAG will continue to advocate for finding a replacement for redevelopment funding that was lost in 2011. Redevelopment Agencies (RDAs) had the authority to assemble parcels and pay for infrastructure improvements necessary to promote infill development. RDAs were the largest source of funding and financing for these improvements as well as affordable housing in the state. With the demise of RDAs, the Bay Area lost about \$1 billion in annual tax-increment financing for affordable housing projects, critical infrastructure improvements, and economic development projects in designated areas.

¹³ For more information on the Regional Climate Initiative, see: <http://mtc.ca.gov/our-work/plans-projects/climate-change-clean-vehicles/climate-initiatives-program>.

- *Federal funding for housing and community development programs* – MTC and ABAG will continue to advocate for stabilizing and potentially growing housing-related programs and funding at the federal level, including the HOME Investment Partnership Program and the Community Development Block Grants, which help local jurisdictions increase the supply of a variety of workforce housing opportunities. In recent decades, though, funding for both programs has fallen drastically.
- *State funding for transportation* – MTC and ABAG will continue to urge the Bay Area’s state delegation to create new permanent revenue sources for transportation to achieve Plan Bay Area 2040’s financial assumptions, increase funding to sustain transit service, and increase the efficiency of the existing network.

Next Equity Analysis

In response to input received from the Regional Equity Working Group (REWG), MTC and ABAG will continue to refine the methodology, data collection and modeling capabilities for the equity analysis.

Some of the enhancements suggested by the REWG include:

- Revisiting the criteria for designating communities of concern (CoCs) – the current definition is based in part on the presence of a significant concentration of both low-income and minority populations. Since many low-income areas in the North Bay do not satisfy the minority criteria, these communities are underrepresented in the regional designation;
- Revisiting the geography for analysis – the current analysis is conducted at a census tract level, which may not capture the neighborhood level variations, especially in suburban communities;
- Refining the methodology for estimating displacement risk – the current approach for estimating risk does not account for the loss of existing low-income communities. Instead, the methodology relies on the presence of low-income populations in the horizon year;
- Developing a new methodology for the middle-wage jobs measure – the current performance target does not capture sub-regional variability in the distribution of middle-wage jobs across the region;
- Developing a new methodology for designating high-opportunity areas (HOAs) – the current methodology and designations were developed by the Kirwan Institute in 2010-2011 using data that was available at the time. The methodology also does not disaggregate the measure into its three sub-categories: education, economics and neighborhood quality;
- Developing county-specific profiles that can be used by the respective congestion management agencies when conducting an equity analysis for sub-regional planning (county transportation plans); and
- Investigating key regional trends that affect low-income and minority communities in greater detail.

Specific to FTA requirements for Title VI analysis, MTC will continue to assess the feasibility of upgrading future regional transportation plan project databases to allow for mapping transit projects that receive state or federal funds, and developing modeling sub-networks to be able to use the regional travel model for Title VI analysis.

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