

San Diego Association of Governments
REGIONAL PLANNING STAKEHOLDERS WORKING GROUP

December 7, 2010

AGENDA ITEM NO.: **3**

Action Requested: DISCUSSION

2050 REGIONAL TRANSPORTATION PLAN: ENVIRONMENTAL
JUSTICE ANALYSIS OF REVENUE CONSTRAINED TRANSPORTATION
NETWORK SCENARIOS

File Number 3100500

INTRODUCTION

Although there are federal and state laws in place to ensure compliance with Title VI of the 1964 Civil Rights Act, the spirit and purpose of 1994 Executive Order 12898 (Environmental Justice) was to encourage federal, state, regional, and local governments to go beyond basic legal requirements. Federal guidelines encourage public agencies to be proactive and continually improve their programs and processes. As SANDAG is constantly striving to improve its processes, the agency is undertaking a significantly more robust, regionwide environmental justice analysis for the 2050 Regional Transportation Plan (RTP), engaging Communities of Concern in the development of the framework, identifying the populations to be analyzed, and evaluating the results of social equity performance measures. Between September and November 2010, the SANDAG Board of Directors and Policy Advisory Committees evaluated four initial Revenue Constrained Transportation Network Scenarios known as: Transit Emphasis, Highway Emphasis, Rail/Freight Emphasis, and Fusion Scenarios. On November 19, 2010, the Board of Directors directed staff to create a new Scenario, which is known as the Hybrid Scenario. A social equity analysis using specified performance measures has been performed on all five of the Scenarios.

This report provides a summary of the demographics of the low income and minority (LIM) populations in the region; identifies the Communities of Concern, based on feedback from stakeholders; provides the definitions of the performance measures to be utilized in the analysis; provides a series of maps that illustrate relationships to planned land uses and transportation infrastructure investment for all Scenarios for LIM populations in the region; and provides the environmental justice analysis of the performance measures of each scenario for each of the Communities of Concern. In some discussion areas of this report, LIM populations are referenced in the aggregate, but in some of the attachments and certain sections of this report, the low income and minority populations are analyzed and referenced separately since there is not a direct overlap of these populations.

DISCUSSION

Demographics

Current and Future Conditions

Today the San Diego region is a “majority minority” county, meaning that no single race or ethnic group accounts for more than half of the region’s population. As the region continues to grow, the ethnic composition will continue to change. Table 1 displays the projected regionwide changes in population from 2008 to 2050 for eight race/ethnic groups: Hispanic, and non-Hispanic Whites¹, Blacks, American Indians, Asians, Hawaiian/Pacific Islander, Other, and Two or More Races. Most notably, by 2050 the Hispanic population is expected to double while the number of non-Hispanic Whites is expected to decline slightly.

Table 1: The Region’s Race And Ethnic Mix Will Change

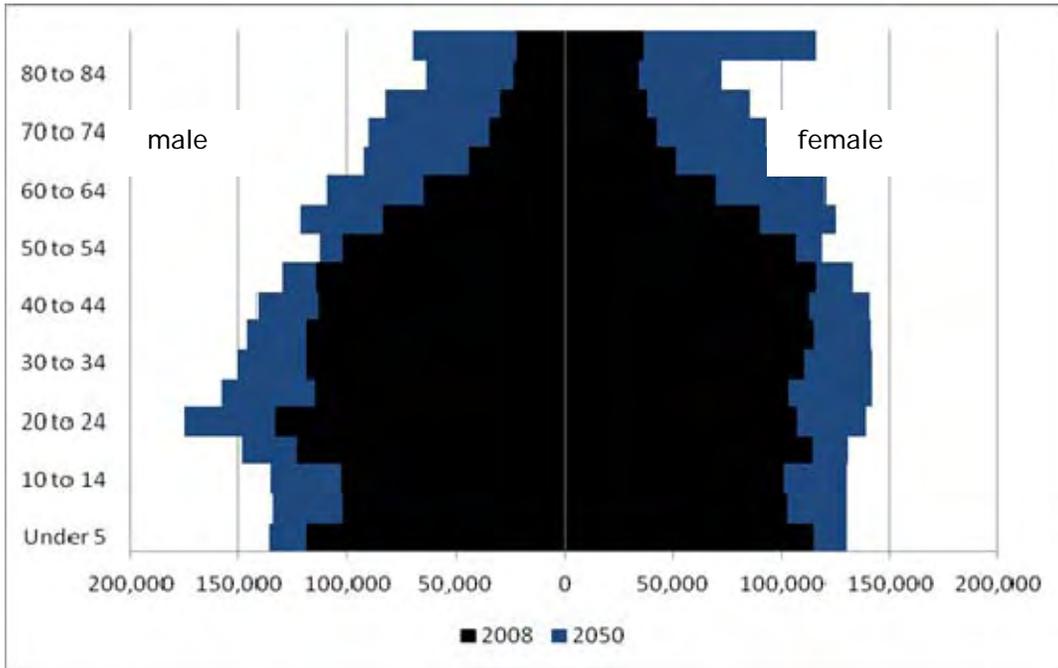
	2008	2020	2030	2040	2050	Change	
						Numeric	%
Total Population	3,131,552	3,535,000	3,870,000	4,163,688	4,384,867	1,253,315	40%
Hispanic	934,521	1,198,032	1,430,829	1,669,265	1,881,719	947,198	101%
White, non-Hispanic	1,576,085	1,606,817	1,622,176	1,600,571	1,549,069	-27,016	-2%
Black	164,931	191,395	208,693	221,376	229,860	64,929	39%
American Indian	16,218	17,464	17,438	16,866	15,906	-312	-2%
Asian	315,037	375,986	422,596	466,100	502,492	187,455	60%
Hawaiian or Pac. Isl.	14,615	18,245	20,658	22,908	24,517	9,902	68%
Other	7,780	9,459	10,992	12,301	13,293	5,513	71%
2 or More Races	102,365	117,602	136,618	154,301	168,011	65,646	64%

By 2050, Hispanics are predicted to account for more than 42 percent of the total population. The share of non-Hispanic Whites is expected to decline from 50 percent in 2008 to approximately 35 percent in 2050. It is estimated that there will be virtually no change in terms of total population share for non-Hispanic Blacks, Asians, Hawaiian or Pacific Islanders, Other, or Two or More Races groups.

In addition to race/ethnic changes, the region’s population is predicted to age considerably by 2050 (See Figure 1). During the 42-year forecast period, the region’s median age is expected to increase by more than 3 years, from 34.9 to 38.6, as the Baby Boom and Generation X generations continue to experience long life expectancy.

¹ Hispanic is an ethnic group (i.e., French, Russian, German, etc.), not a racial group (White, Black, Asian, etc.). Therefore, non-Hispanic Whites are White people (racial group) who are not of Hispanic ethnic origin.

Figure 1: Population by Age 2008 and 2050



During the forecast period, the number of residents aged 65-84 is expected to more than double, and the number of residents age 85 and older is expected to more than triple. A full 10 percent of the region's population growth between 2008 and 2050 is expected to be in the oldest age group (85 and older). Thus by 2050 nearly 19 percent of the region's population will be 65 or older – a higher percentage than is seen today in the retirement-oriented state of Florida.

As the region continues to grow and evolve, transportation plans must adapt to support the needs of the region's population.

Identifying San Diego's Communities of Concern

In order to conduct a social equity analysis, it is necessary to identify people who are vulnerable or disadvantaged. Pursuant to Title VI, Executive Order 12898, and the 1999 Department of Transportation Memorandum entitled "Implementing Title VI Requirements in Metropolitan and State Planning," SANDAG must provide information on the effects of the RTP on LIM populations. Attachment 1 shows the distribution of the LIM populations in the San Diego region compared to the rest of the population. SANDAG has engaged the region's stakeholders from the beginning and attempted to work together with the stakeholders throughout the process of developing the 2050 RTP. SANDAG engaged in discussions early on with representatives from the Regional Planning Stakeholders Working Group (SWG) to identify vulnerable segments of the population that should be considered as part of the analysis.

Several workshops² were held in the beginning of the process to examine both the demographic categories of populations to be analyzed, as well as the possible performance measures to utilize. Through a collaborative process, SANDAG staff worked with members of the SWG and members of the public interested in social equity and environmental justice to identify four types of “Communities of Concern” as described below. The tables below provide details of the definition of each type of community of concern, and the source data used to define the communities. (See Tables 2a – 2d).

Table 2a: Low-Income Communities of Concern

Indicator	Definition	Threshold	Source
Low Income	Household income less than \$30,000 per year	33%	2050 Regional Growth Forecast 2008 Current Estimates
Severe overcrowding	Percentage of households with 2 or more occupants per room	10%	Census 2000
Poverty 100%	Percentage of population living at or below 100% of the poverty level.	25%	Census 2000

A Low Income Community of Concern is any community in which 33 percent or more of households are low income, and/or 10 percent or more of the households are severely overcrowded, and/or 25 percent of the population is in poverty.

Table 2b: Minority Communities of Concern

Indicator	Definition	Threshold	Source
Minority Population	Communities where minorities comprise at least 65% of the population	65%	2050 Regional Growth Forecast 2008 Current Estimates

A Minority Community of Concern is any community in which 65 percent or more of the population is non-White.

Table 2c: Mobility Communities of Concern

Indicator	Definition	Threshold	Source
Zero-Car Households	Percentage of households who do not have access to a vehicle	25%	Census 2000
Disabled Population	Percentage of population suffering from one or more types of disability	25%	Census 2000
Population age 75 and over	Percentage of population aged 75+	20%	2050 Regional Growth Forecast 2008 Current Estimates

² Special Workshops on Environmental Justice Analysis for 2050 RTP - Session 1 – ‘Framework and Potential Indicators,’ SANDAG offices. January 26, 2010; Session 2 – Selecting Communities of Concern, March 1, 2010. Both of these were open to anyone from the public who was interested. Environmental Justice Subcommittee of the SWG met twice, June 25 and July 26, 2010, to provide input on the structure of the Environmental Justice Chapter and the policy issues to be discussed for further analysis.

A Mobility Community of Concern is any community in which 25 percent or more of households have no auto available, and/or 25 percent of the population is disabled, and/or 20 percent of the population is aged 75 or older.

Table 2d: Community Engagement Communities of Concern

Indicator	Definition	Threshold	Source
Linguistic Isolation	Percentage of households where English is not the primary language and English is not spoken very well	20%	Census 2000
Educational Attainment	Percentage of population over age 25 who have not earned a high school diploma	20%	Census 2000

A Community Engagement Community of Concern is any community in which 20 percent or more of households do not speak English as a primary language, and do not speak English well, and/or 20 percent of the population age 25 and older have less than a high school level of education.

These four community types serve as the basis for analyzing the performance of the alternative Scenarios considered in the development of the Draft 2050 Regional Transportation Plan (See Attachments 2a and 2b – Communities of Concern Map). Scenario maps only show the *Low-Income/Minority* Communities of Concern.

By 2050 approximately 51 percent (2.23 million) of the region’s projected population (4.38 million) is expected to live in a *Minority* Community of Concern, 27 percent (1.2 million) is expected to live in a *Low Income* Community of Concern, 27 percent (1.2 million) is expected to live in a *Mobility* Community of Concern, and 33 percent (1.45 million) is expected to live in a *Community Engagement* Community of Concern. LIM populations are expected to make up 54 percent (2.38 million) of the population by 2050. Any one neighborhood may be classified as one or more of the community types. For example, a community may be a Low Income Community of Concern and a Mobility Community of Concern. The countywide population within one or more of the Communities of Concern is projected to be 65 percent (2.86 million) in 2050.

Data, Sources, and Baseline Mapping

Data and Sources

The 2010 Census data will not be released in time for use in the development of the 2050 RTP. Therefore, the information in this report relies upon a variety of sources, including the following:

U.S. Census Bureau

- 2000 Census

SANDAG

- 2008 Current Estimates (demographic/economic)
- 2050 Regional Growth Forecast

Wherever possible, SANDAG uses the smallest level of geographic detail available for analysis and mapping. In many cases this is a Traffic Analysis Zone (TAZ), which is a geographic unit used for transportation modeling. TAZs are smaller than census tracts (and are also smaller than TDZs³), which were the primary unit of analysis for the 2030 RTP, and thus provide a finer level of detail for analysis.

Baseline Mapping

In order to have a point of reference to analyze the impacts of the distribution of the transportation investments for the various Scenarios on both low income and minority populations, a set of baseline maps was created to facilitate stakeholder discussion and analysis:

2050 RTP: Higher Employment Intensity/Housing Density: Based on the 2050 Regional Growth Forecast, a new map has been prepared to illustrate low income and minority population relative to planned higher density housing and higher intensity employment (Attachment 3. This map indicates the concentration of the employment centers that have 50 or more jobs per acre and the housing where densities are 20 dwelling units per acre or higher. The overlay of the LIM populations illustrates how those communities are served by the existing transportation network.

2050 RTP No-Build Scenario: Attachments 4 and 5 show the Low-Income and Minority Communities of Concern overlaid with the 2050 RTP No-Build Scenario. These can be juxtaposed against each of the Scenarios to evaluate visually the differences in the Scenarios. Attachment 6 is the 2050 RTP No-Build Scenario with the low-income population shown, while Attachment 7 is the 2050 RTP No-Build Scenario with the minority population shown.

Environmental Justice Analysis of Alternative Revenue Constrained Transportation Network Scenarios

As discussed in previous reports, staff prioritized the future projects in all modes included in the Unconstrained Transportation Network using the Board-approved transportation project evaluation criteria. Based on revenue projections to 2050, staff developed the Scenarios with a range of modal emphases based on possible flexible funding using this prioritized project list and other factors.

Based on input from the Board, the Regional Planning and Transportation Committees, working groups, and the public, all of the Scenarios propose to fully implement the Transportation Demand Management (TDM) and Transportation System Management (TSM) programs and projects, as well as Active Transportation programs identified through 2050. Active Transportation refers to bicycling and walking modes of transportation as an alternative to the automobile. These programs provide flexible and cost-effective solutions to help reduce greenhouse gas emissions in the short term compared to longer term capital improvements.

To inform the Board of Directors prior to its expected selection of the preferred Revenue Constrained Transportation Network Scenario on December 17, 2010, staff has analyzed the five Scenarios for consistency with Title VI of the Civil Rights Act as using the Board-approved performance measures.

³ Trip Distribution Zones is a SANDAG unit of geography used in the Regional Travel Demand Model. The San Diego region is covered by 2,000 Trip Distribution Zones. Coverage in the urban areas is denser than in the eastern rural portions of the region.

In order to analyze the distribution of RTP expenditures per capita and to analyze the impact of the Scenarios on LIM populations, a series of maps have been produced (contained in CD). Two sample maps are printed in this report for the Hybrid Scenario (Attachments 6 and 7), but all maps are included in the attached CD. There are two sets of maps for LIM populations. They include each Scenario with travel time contours (auto vs. transit) for each of the four amenities (schools, airport, healthcare, and parks/beaches). This will allow the stakeholders to view graphically the performance of each Scenario with regard to access to amenities for both auto and transit.

1. *Transit Emphasis Scenario* – This Scenario focuses on expansion of the regional transit system, given flexible funding availability.
2. *Rail/Freight Scenario* – This Scenario focuses on expansion of the regional transit system with an emphasis on rail projects and also highway improvements to support freight, given flexible funding availability.
3. *Highway Emphasis Scenario* – This Scenario focuses on expansion of highway system improvements that provide systemwide congestion relief for people and freight, given flexible funding availability.
4. *Fusion Scenario* – This Scenario focuses on implementing projects and programs considering the preferred choices identified in the recent public opinion telephone survey. These include: new public transit services (rail and bus), highway improvements (bottleneck relief and new lanes), and increased frequencies to existing transit routes.
5. *Hybrid Scenario* – This Scenario contains a variety of multimodal projects from each of the initial four alternative Revenue Constrained Scenarios. These projects include improvements to the existing trolley system as well as a number of new light rail transit (LRT) services in other high demand travel corridors. High performing bus rapid transit (BRT) and Rapid Bus routes, along with frequency enhancements to the existing local bus system, also have been included. The Hybrid Scenario includes improvements for all of the major freeway and highway corridors.

Performance Measures for the Alternative Revenue Constrained Transportation Network Scenarios

The Social Equity performance measures require some elaboration as the data must be evaluated in several ways. Social equity analyses were conducted for eight indicators, which were approved by the SANDAG Board on July 23, 2010. As part of the performance evaluation of the Scenarios, using Board-approved performance measures, social equity analyses have been conducted for the social equity indicators, as follows:

1. **Average Travel Time:** Travel time is measured as the average time per person per trip across all modes (drive alone, carpool, transit, bike/walk) and all trip types (commute, school, etc...). Data are reported for individual modes (drive alone / SOV, carpool / vanpool, transit) as well.
2. **Job Access:** Percent of work trips accessible in 30 minutes in peak periods by drive alone, carpool, and transit;

3. **Transit Service:** Transit service is measured as the percent of homes within ½ mile of a transit stop, which includes trolley and light rail stations, bus stops, etc. This measure shows the density and distribution of transit services around the region.

Access to Amenities: Percent of Population within. . .

4. **30 Minutes of Schools:** This measure of education access focuses on higher education, including universities, colleges, and job training centers.
5. **30 Minutes of Airport:** Travel times are determined to the San Diego International Airport.
6. **15 Minutes of Healthcare:** Healthcare includes hospitals and community clinics. This should not be considered a proxy for emergency response time, but rather a measure of access to basic health services.
7. **15 Minutes of Parks and Beaches:** Parks and Beaches are defined as federal, state, and county parks, beaches, and local parks (including campgrounds, open space areas, picnic areas, recreation centers, etc...), excluding small neighborhood parks. The reason for this exclusion is that feedback from the SWG was clear that, while there may be a neighborhood park in a Community of Concern, the quality and size of the park may be insufficient for the population served.

For access to the amenities, travel times results show access based on auto and transit travel times. Transit travel assumes that the trip includes the time to walk to a transit stop, time on-vehicle, transfer time, and time to walk from the transit stop to the destination. Auto time assumes walking to vehicle, driving, parking, and walking to final destination.

8. **Distribution of Proposed RTP Expenditures per Capita:** Distribution of Proposed RTP expenditures is calculated by assuming that populations within three miles of highway and major transit infrastructure improvements (e.g., rail and BRT lines) and populations within one mile of local bus improvements will receive a benefit from the investment. To calculate the measure, the estimated costs of the dollars for a project are distributed per capita to all people living within the specified distance of the project. These investments are then summed up across all neighborhoods, and evaluated between Communities of Concern and other communities. Because there may be more or fewer people in a Community of Concern than in other communities, the results will be displayed per capita – taking the total dollars planned for a Community of Concern and dividing by the total population in that Community of Concern.

Attachment 8 shows draft results for these indicators for LIM populations and non-LIM populations. Additional social equity performance measures for Mobility and Community Engagement populations also are included. The subsection below provides a detailed description of the impact of each indicator on Communities of Concern compared against the existing conditions (2008) and 2050 No-Build alternative, and a summary across all indicators is shown in the following subsection.

Average Travel Time: Average travel time per person trip (minutes)

While average travel time per person trip for both LIM and non-LIM populations, as well as other Communities of Concern, is marginally higher in 2050 (16-17 minutes) than existing conditions (15-16 minutes), each of the scenarios shows improvement of approximately one minute in travel

times over the No-Build Scenario. Moreover, when comparing travel times by mode, there are substantial improvements in transit travel times (5-7 minute travel time savings per trip, on average, for both LIM and non-LIM) compared with existing conditions, and even more substantial improvements (6-8 minutes) when compared with the No-Build Scenario. There are no significant differences in improvements for LIM and non-LIM populations.

Job Access: Percent of work trips accessible in 30 minutes

When comparing job access (i.e., the proportion of jobs accessible within a 30-minute commute trip) between No Build and the five Scenarios, there are similar levels of improvement (5-7 percentage points) in job access by auto (drive alone and carpool) for both Communities of Concern and for other neighborhoods. The biggest gains are seen in job access by transit, which improves by 7-10 percentage points for Communities of Concern when comparing the build alternatives with the No-Build alternative.

When comparing job access against existing conditions (i.e., 2008 job access), there are some decreases in job access by auto (both drive-alone and carpool); however, with major transit investments in the plan, job access by transit increases substantially for both Communities of Concern and other areas, with slightly greater improvements accruing to Communities of Concern (7-10 percentage point improvement, across Scenarios).

It should be noted that while each of the Scenarios improves transit access to jobs, there is still a considerable gap between transit and auto access to jobs. While more than three quarters of the region's jobs are accessible within a 30-minute auto commute time (drive alone or carpool) from all Communities of Concern, the most robust transit investment options only bring that ratio up to 23% for transit-based commute trips. An important reason for this variation is that transit trips involve a longer access time than auto trips (the average driver has a car available at-home – requiring no additional travel time to start a trip, while the average transit rider must walk to or get a ride to the nearest transit stop – which adds time to the trip).

Transit Service: Percent of homes within a half-mile of a transit stop

The performance measures show that most low income and minority homes (93% and 81%, respectively) are within ½ mile of a planned transit stop in 2008. The No Build Scenario would reduce these shares to 90% and 78% respectively. Each of the Scenarios maintain or increase the share of housing served by transit in Low Income, Minority, Mobility, and Community Engagement Communities of Concern as compared with the No Build Scenario. Accessibility gains are slightly higher for other communities than for Communities of Concern, as each of the Scenarios extends some transit services to areas not previously served by transit.

Access to Amenities: Percent of Population within

- *30 Minutes of Schools*

This measure shows that under current conditions 97 percent of Low Income, Minority, and Community Engagement Communities of Concern have access to higher education and job training centers within a 30-minute auto travel time, and that 94 percent of the Mobility Communities of Concern have access to those higher education facilities. Due to the more suburban distribution of other communities (those not in a Community of Concern), access to higher education is slightly lower both in the current year and across future years.

Access to higher education via transit shows substantial improvement across all of the scenarios, compared with both existing conditions and the No Build Scenario. Accessibility gains are higher for LIM communities than for non-LIM communities in the base year, while non-LIM communities show slightly higher accessibility gains in all of the Scenarios. All Scenarios substantially improve access for Communities of Concern and maintain higher levels of access for Communities of Concern as compared with other communities. Staff has analyzed the Scenario maps for LIM populations and currently is evaluating local bus route stops to ensure continued access to educational facilities from Communities of Concern.

- *30 Minutes of Airport*

Under existing conditions, three quarters of Low Income and Minority Communities of Concern and approximately 70 percent of the Mobility and Community Engagement Communities of Concern can access San Diego International Airport (SDIA) within a 30-minute auto travel time, and about 3 percent of the region's population (both LIM and non LIM) has access to the airport within a 30-minute transit travel time. Under existing conditions, other communities (those not in a Community of Concern) have lower levels of auto access to the airport.

Across all communities, each of the Scenarios improves auto access as compared with No Build, with slightly lower accessibility gains for Communities of Concern as compared with other communities. However, LIM communities maintain higher levels of auto-access to SDIA than non-LIM communities in 2050. When comparing the Scenarios to existing conditions, the Scenarios result in a decrease in airport access for non-LIM communities, but maintain consistent levels of access for Communities of Concern. Transit access to the airport shows no significant changes across any of the Scenarios when compared with the base year and when compared with No Build. Staff has analyzed the Scenario maps for LIM populations and currently is evaluating local bus route stops to ensure continued access to the SDIA from Communities of Concern.

- *15 Minutes of Healthcare*

Access via auto to the region's major hospitals and community clinics is high, under existing conditions, for nearly all communities. Between 96-99 percent of the region's populations can access a hospital or community clinic within a 15-minute drive. Each of the Scenarios preserves the high level of access for Communities of Concern as compared with both existing conditions and No Build. Access remains higher for LIM than for non-LIM populations in the future.

Access via transit to the region's major hospitals and community clinics is higher for Communities of Concern than for other communities under existing conditions. However, under existing conditions less than one quarter of the region's Communities of Concern can access a hospital or community clinic within a 15-minute transit travel time. Staff has analyzed the Scenario maps for LIM populations and currently is evaluating local bus route stops to ensure continued access to healthcare facilities from Communities of Concern.

- *15 Minutes of Parks and Beaches*

Based on existing travel conditions and the existing distribution of parks (including federal, state, regional, and community parks, and beaches) most of the region's population (between 98-100 percent) can access a park within a 15-minute drive both under existing conditions and across all Scenarios. While that may seem like a high level of accessibility, consider that the region has beaches along nearly the entire western edge of the urban area, and that more than

90 percent of the region's population lives in the western third of the region. The results for transit access differ. Under existing conditions, about one quarter of the region's Communities of Concern can access a park within a 15-minute transit travel time. Under the various Scenarios, the Transit, Rail/Freight, and Highway Scenarios generally maintain existing levels of access, and perform better than the No Build Scenario. The Fusion and Hybrid Scenarios improve access for all communities, with the largest improvements accruing to Communities of Concern. Staff has analyzed the Scenario maps for LIM populations and currently is evaluating local bus route stops to ensure continued access to parks and beaches from Communities of Concern. The Fusion and Hybrid Scenarios also provide streetcar services that add additional park access.

Distribution of Proposed RTP Expenditures per Capita

The analysis for low income populations shows that all Scenarios would result in higher increases in RTP investment per capita for low-income populations compared to non-low income populations, as follows:

- *Transit Emphasis Scenario*: the rate of growth in investment per capita would increase by 121 percent for low income populations compared to 92 percent for non-low income populations.
- *Highway Emphasis Scenario*: the rate of growth in investment per capita would go up by 132 percent for low income populations compared to 108 percent for non-low income populations.
- *Fusion Scenario*: it would result in 117 percent increase in investment per capita for low income populations compared to 96 percent for non-low income populations.
- *Rail/Freight Emphasis Scenario*: the rate of increase in investment per capita is projected at 104 percent for low income populations compared to 89 percent for non-low income populations.
- *Hybrid Scenario*: the rate of increase in investment per capita is projected to be 122 percent for low income populations compared with 99 percent for non-low income populations.

Conversely, the analysis for minority populations shows that all Scenarios would result in higher increases in RTP investment per capita for non-minority populations compared to minority populations, as follows:

- *Transit Emphasis Scenario*: the rate of growth in investment per capita would be 98 percent for minority populations compared to 102 percent for non-minority populations.
- *Fusion Scenario*: the rate of increase in investment per capita is projected at 97 percent for minority populations compared to 107 percent for non-minority populations.
- *Highway Emphasis Scenario*: it would result in 111 percent increase investment per capita for minority populations compared to 118 percent for non-minority populations.
- *Rail/Freight Emphasis Scenario*: the rate of increase in investment per capita is projected at 87 percent for minority populations compared to 100 percent for non-minority populations.
- *Hybrid Scenario*: the rate of increase in investment per capita is projected to be 101 percent for minority populations compared with 104 percent for non-minority populations.

When the low income and minority populations are combined, the Transit Emphasis and Hybrid Scenarios would result in a slightly higher growth in investment per capita for LIM populations compared to non-LIM populations. The Highway Emphasis Scenario results in equal increase for LIM and non-LIM populations. The other Scenarios show a slightly lower growth in investment per capita for LIM populations compared to non-LIM populations.

Summary of Performance Measures

Preliminary analyses of the Scenarios have been conducted to determine whether any of the Scenarios would conflict with requirements in Title VI of the Civil Rights Act or other applicable social equity laws, which require that the benefits and burdens of the projects in the various Scenarios be equitably distributed between the LIM and non-LIM populations. A threshold question is whether each of the Scenarios will improve conditions for LIM populations, relative to the 2050 No Build alternative or 2008 existing conditions.

2050 No Build Analysis

The initial modeling results for the performance indicators referenced above show that all of the Scenarios will maintain or improve conditions for LIM populations compared to the 2050 No Build alternative. LIM populations would fare better in the mobility and accessibility indicators with the investments proposed in every Scenario. RTP investments per capita for LIM populations would range from an increase of nearly 90 percent, to more than doubling for each of the 2050 Scenarios compared to the 2050 No Build Alternative. Moreover, none of the Scenarios when compared to one another has a significantly different impact on LIM populations.

The next question analyzed was whether LIM populations would receive a similar or greater benefit compared to non-LIMs under each of the Scenarios relative to the No Build alternative. Key findings are outlined below:

1. The preliminary modeling results show no difference in average travel times between LIM and non-LIM populations for each of the Scenarios in 2050.
2. LIM populations would receive slightly greater accessibility gains for drive alone, carpool, and transit peak period work trips (within 30 minutes) compared to non-LIM populations.
3. The percent of homes within a half-mile of a transit stop shows accessibility gains for the LIM populations, but those gains are slightly higher for non-LIM populations.
4. Access to schools within a 30-minute drive would remain virtually constant for both LIM and non-LIM populations, and access via transit improves both for LIM and non-LIM populations, with slightly higher accessibility gains for non-LIM populations,
5. Access to SDIA via auto shows similar levels of accessibility for both minority and non-minority populations, and marginally higher gains for non-low income populations. Access to SDIA via transit would remain virtually constant for both LIM and non-LIM populations.
6. Access to healthcare facilities within a 15-minute auto or transit travel time is projected to remain at virtually the same level for both LIM and non-LIM populations.

7. No difference in auto access to parks/beaches is projected for LIM and non-LIM population. However there are considerable improvements in transit access in the Fusion, and Hybrid scenarios compared with No Build. The other Scenarios show little variation between LIM and non-LIM accessibility gains.

2008 Existing Conditions Analysis

In addition, the draft results of the social equity performance measures outlined above for each of the Scenarios were compared to 2008 existing conditions to find out how mobility and accessibility indicators would change over time (2050) for LIM populations compared to non-LIM populations. Data for 2008 investment per capita is not available for LIM and non-LIM populations; therefore, an analysis of this performance measure was not possible. Key findings for the other performance measures are outlined below:

1. The draft modeling results suggest similar levels of mobility (travel time) for both LIM and non-LIM populations.
2. The percent of drive alone and carpool peak period work trips accessible within 30 minutes would decline for both LIM and non-LIM populations in a similar fashion, while access using transit would increase for both populations, with slightly higher gains for the LIM population.
3. The percent of homes within a half-mile of a transit stop shows gains for LIM and non-LIM populations, but slightly higher accessibility gains for non-LIM populations when compared to accessibility conditions for LIM populations. None of the Scenarios has a significantly different impact on LIM populations when they are compared to each other.
4. The percent of population within a 30-minute drive of schools would remain at similar levels for both LIM and non-LIM populations. Access via transit improves slightly more for LIM than for non-LIM communities.
5. The percent of population within 30 minutes of SDIA would stay at current levels for LIM populations, both for drive and transit access. However, non-LIM populations would experience a decline in auto accessibility to SDIA.
6. The percent of LIM population within a 15-minute drive time of a healthcare facility would continue at similar levels in 2050 compared with existing conditions. For transit access there are minor accessibility losses compared with existing conditions, but the Transit, Rail/Freight, Fusion, and Hybrid scenarios perform as well or better than No Build.
7. The percent of LIM and non-LIM populations that could access parks/beaches within 15 minutes, both via auto and transit, in 2050 would remain at virtually the same levels as in 2008, with the highest levels of transit access improvements under the Fusion and Hybrid Scenarios.

A similar analysis of the initial modeling results indicates all Scenarios would result in similar performance compared to 2008 existing conditions. None of the Scenarios when compared to one another has a considerably different impact on LIM populations.

As described above, even though several accessibility metrics for LIM populations are projected to remain at current levels with any of the Scenarios, convenient access to schools, healthcare, and parks/beaches would range between 98 percent and 100 percent for LIM populations. In addition, for all Scenarios, 81 percent to 91 percent of homes for LIM populations would be within a half-mile of a transit stop. Data suggest that non-LIM populations would achieve higher accessibility gains in the number of homes near transit due to new transit services being proposed in areas not currently served by transit.

Based on this initial analysis, the Hybrid and Transit Emphasis Scenarios appear to be the most beneficial for LIM populations in terms of the distribution of RTP expenditures. The data for all Social Equity performance measures indicate, however, that none of the Scenarios would create a substantial statistical disparity for LIM populations compared to non-LIM populations. Since none of the Scenarios would create a prohibited disparate impact, the Board should have the flexibility to choose any of the Scenarios within the context of Title VI and other equity laws.

POLICY ISSUES

During the process of developing the 2050 RTP Environmental Justice framework, there were issues raised that would require a policy level discussion for future plans, including some that should be part of the policy discussion for the update of the next Regional Comprehensive Plan (RCP). The following is a list of policy issues that were raised and reviewed by the Ad Hoc Environmental Justice Subcommittee for consideration in the policy issue section of the Environmental Justice chapter of the 2050 RTP:

- *Voice in the Decision-making Process*
 - Timely/Meaningful Input
 - Structure of Involvement
 - Degree of Engagement
 - Feedback Mechanisms
- *Public Health and Transportation*
 - Safety
 - Access/Mobility for Seniors
 - Community Cohesion/Inclusionary Design
- *Infrastructure*
 - Local Air Pollution/Noise
 - Transit Oriented Development vs. Gentrification
 - Adequate Infrastructure and Amenities
 - Cumulative disadvantage; how do you measure past investment?
 - Jobs/Housing Fit

NEXT STEPS

Staff will forward the comments of the SWG to the Board of Directors for their December 17, 2010 meeting for consideration in their review of the alternate Scenarios and recommendation for the Preferred Scenario. Based on the input of the SWG regarding the policy issues, staff will include a discussion of these topics in the draft 2050 RTP Environmental Justice chapter for the Working Group's review/comment in January 2011.

Attachments: **PLEASE NOTE: A CD INCLUDING ALL MAPS IS INCLUDED IN THIS PACKET**

1. 2050 RTP – Low-Income/Minority Population Density
2. 2050 RTP – Communities of Concern
 - a. Low Income and Minority;
 - b. Low Mobility and Community Engagement
3. 2050 RTP – Higher Employment Intensity/Housing Density
4. 2050 RTP – No-Build Scenario (low income population)
5. 2050 RTP – No-Build Scenario (minority population)
6. 2050 RTP -- Hybrid Scenario/Low Income/Schools (AUTO travel times)
7. 2050 RTP -- Hybrid Scenario/Low Income/Schools (TRANSIT travel times)
8. Preliminary Social Equity Performance Measures

Key Staff Contacts: Jane Riquelme, (619) 699-1909, jcl@sandag.org
Beth Jarosz, (619) 699-6997, bj@sandag.org