Appendix H

Social Equity: Engagement and Analysis

Appendix Contents

Introduction

Legal Framework

Process/Outreach

Partnering with Community-Based Organizations

Demographics: Current and Future Conditions

Social Equity Analysis

Issues Raised and Suggestions for On-Going Process

Improvement

Data and Sources

Attachment:

- 1. CBO Partner Profiles
 - Able-Disabled Advocacy
 - Alliance for Regional Solutions
 - BAME Renaissance Community Development Corporation
 - Casa Familiar
 - City Heights Community Development Corporation/ Mid-City Community Advocacy Network
 - Chula Vista Community Collaborative
 - El Cajon Collaborative
 - International Rescue Committee
 - Jacobs Center for Neighborhood Innovation
 - Linda Vista Collaborative (Bayside Community Center)
 - Mountain Empire Collaborative (Mountain Health & Community Services)
 - North Coastal Prevention Coalition
 - Operation Samahan
 - Serving Seniors

Social Equity: Engagement and Analysis

Introduction

"Social equity" is a shorthand term SANDAG uses for an overarching goal that combines the concepts of environmental justice, the federal laws in Title VI of the Civil Rights Act, and various other federal and state laws intended to promote an equitable distribution of benefits and burdens resulting from SANDAG projects and programs. Transit, freeways, and other transportation infrastructure may have a significant effect on the quality of life for a region's residents by shaping access to jobs, education, housing, services, and recreational opportunities. Achieving social equity in the development of a comprehensive transportation system is vital to the sustainability goals for the region. It requires making investments that provide everyone – regardless of age, race, color, national origin, income, or physical ability – with opportunities to work, shop, study, be healthy, and play.

Without proper planning and development, transportation systems can degrade the quality of life in communities. The construction of roads, freeways, and rail transit systems may place health burdens on many low-income and minority communities. New transportation projects may physically divide communities, resulting in long-lasting social and economic costs. It is important to understand the impacts of transportation investments on our most vulnerable communities in order to better plan for the future.

Promoting social equity in transportation planning requires involvement from a wide variety of communities and stakeholders. In the not so distant past, cities and communities with high concentrations of low-income residents and minority populations in the San Diego region, as well as federally recognized tribes, were underserved and underrepresented in the planning process. SANDAG continually strives to:

- engage the most vulnerable and disenfranchised communities of the region in the planning and decision-making process; and
- improve methods for analyzing how the Regional Plan affects those populations

From the beginning of San Diego Forward: The Regional Plan, SANDAG engaged affected communities in the planning process through an innovative collaborative effort with Community-Based Organizations (CBOs) and Collaboratives from around the region (see Appendix F: Public Involvement Program). SANDAG incorporated their issues and concerns into the design and decision-making process, as well as in the definition of disadvantaged communities, the development of social equity project evaluation criteria and performance measures. The goal of these efforts is for low-income and minority (LIM) communities to share equitably in the benefits of the transportation investments without bearing a disproportionate burden from the system when compared to non-LIM communities.

In developing the Regional Plan, SANDAG has used performance measures and other evidence to make decisions intended to ensure compliance with Title VI requirements and environmental justice principles. As pointed out by the National Cooperative Highway Research Program, however, "the fact that federal policy mandates consideration of environmental justice should not be the only driving force behind considering it; a more compelling argument is that it makes for good transportation planning." ¹

Legal Framework

Over the last several decades, federal law and guidance have been created to ensure that the spirit and intent of Title VI of the Civil Rights Act are incorporated into the guiding principles and missions of federal, state, and local public agencies. Title VI of the Civil Rights Act of 1964 states that:

"no person in the United States, shall, on the grounds of race, color or national origin be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance."

In 1994, Executive Order 12898 on Environmental Justice was issued, and it expanded social equity principles to cover low-income as well as minority groups. ² More recently the focus has been expanded to individuals with limited English proficiency (LEP). Federal and state agencies have created guidance and implemented procedures to protect the interests of these various disadvantaged groups. ³

While Title VI prohibits discrimination, the concept of implementing environmental justice is discussed in Executive Order 12898 as the process of "identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of [a federal agency's] programs, policies, and activities on minority populations and low-income populations." ⁴ There are many definitions available of the concept of environmental justice and methods of implementation. The U.S. Department of Transportation's Order 5610.2 and FHWA's Order 6640.23 expand on Executive Order 12898 and describe the process for incorporating Environmental Justice into their respective departments' programs, policies, and activities.

California Government Code Section 65040.12(e) defines environmental justice in the context of city and county general plans as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws and policies. In addition, Government Code 11135 states that no state agency, or agency funded by the state, shall deny full and equal access to benefits of any program or activity on the basis of race, national origin, ethnic group, religion, sex, sexual orientation, or disability.

In the context of transportation planning, the California Department of Transportation (Caltrans) considers environmental justice to be activities taken by a recipient of federal funding to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.⁵

Fair treatment means that no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or from the execution of federal, state, local, and tribal programs and policies.

Meaningful involvement means that:

- Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.
- The public's contribution can influence the regulatory agency's decision.
- The concerns of all participants involved will be considered in the decision-making process.
- The decision-makers seek out and facilitate the involvement of those who are potentially affected.

SANDAG Board Policy Number 025, which is entitled *Public Participation/Involvement Policy*, incorporates concepts from federal and state laws, and guidance. The Policy states that social equity and environmental justice are meant to ensure the meaningful involvement of low-income, minority, limited English speakers, disabled, senior, and other traditionally under-represented communities and is a key component of SANDAG public participation activities. The Board Policy also states that social equity means ensuring that all people are treated fairly and are given equal opportunity to participate in the planning and decision-making process, with an emphasis on ensuring that traditionally disadvantaged groups are not left behind.

The objective of SANDAG, when complying with Title VI, Executive Order 12898, and state nondiscrimination laws, is to ensure that SANDAG plans, policies, and actions do not result in a disproportionate effect for low-income populations or a disparate impact for minority populations. SANDAG has evaluated whether there are disproportionate effects or disparate impacts that will result from the Regional Plan by confirming equitable distribution of the Regional Plan's benefits and burdens such that minorities will not receive comparatively worse treatment when compared to non-minorities, and low-income populations will not receive comparatively worse treatment than non-low income groups.

In addition to the federal and state laws discussed above, SANDAG ensures its programs and projects comply with the federal Americans with Disabilities Act, which prohibits discrimination and guarantees that people with disabilities have the same opportunities as everyone else to participate in the mainstream of life. Finally, although there is no law that specifically requires an equity analysis with regard to seniors in the context of transportation planning, SANDAG and the Community-based Organizations focused on seniors as another disadvantaged population group to analyze to ensure social equity principles were applied.

Process/Outreach

Everyone should be involved in the future of their region. For most of us it's difficult to get involved in regional planning because of our busy lives. For some of us it is particularly hard because of additional barriers to involvement that include language, not understanding our rights, not being familiar with the process, and in some cases being afraid to get involved.

SANDAG is committed to robust public participation and involvement in decision-making regarding regional planning and transportation infrastructure. The SANDAG agency-wide Public Participation Plan (PPP) describes the process for communicating with, and obtaining input from, the public concerning agency programs, projects, and program funding. The guidelines and principles outlined in the PPP guide the agency's public outreach and involvement efforts for regional transportation projects; transit fare changes; smart growth, environmental, and other planning efforts; growth forecasts; RTP; Regional Transportation Improvement Program (RTIP); Regional Comprehensive Plan (RCP); Overall Work Program (OWP); tribal consultation; and other mandated or Board initiatives. The current PPP was adopted by the Board of Directors on December 21, 2012. (The PPP and Language Assistance Plan are available at sandag.org/ppp.)

The PPP reflects the SANDAG commitment to public participation and involvement to include all community members and stakeholders in the regional planning process. The PPP was developed in accordance with guidelines established by the FHWA for metropolitan transportation planning (23 CFR §450.316), addresses nondiscrimination requirements related to Title VI of the Civil Rights Act, and reflects the principles of social equity and environmental justice. Included in the PPP are procedures, strategies, and outcomes associated with the ten requirements listed in 23 CFR §450.316. The PPP also incorporates FTA's guidance on Public Involvement Techniques for Transportation Decision-Making.

To support the development of San Diego Forward: The Regional Plan, a specific Public Involvement Plan (PIP) was created that outlined tactics and strategies to coordinate outreach, input, and communications efforts. The PIP established a process and outlined specific activities for communicating with the public throughout the Regional Plan development process, per Government Code Section 65080(b)(2)(F). The PIP was intended to create a variety of opportunities for individuals, organizations, agencies, and other stakeholders to provide meaningful input. The PIP was created based on input obtained throughout the fall of 2012 from the SANDAG Board of Directors, Policy Advisory Committees, working groups, surveys, recipients of 2050 RTP community-based outreach grants, and a public workshop held in October 2012. SANDAG's overall Public Participation Plan provided guidelines for drafting the PIP (for complete details of the PIP see Appendix F).

Adopted in early 2013, the PIP provided a menu of options for SANDAG to gather input on the various anticipated components of the Regional Plan, including sustainability and land use goals; priorities for transportation projects, programs, and services; transportation networks; infrastructure recommendations; funding alternatives; policies and programs; performance measures; techniques for meeting greenhouse gas emission targets; and other related issues. A tribal consultation work plan also was developed in parallel (see Appendix G).

This PIP included the establishment of a network of community-based organizations to support outreach and encourage the involvement of vulnerable communities around the region.

Partnering with community-based organizations

To help ensure that all communities were meaningfully involved in the development of the San Diego Forward: The Regional Plan, including LEP portions of the population, SANDAG developed an innovative partnership program with community collaboratives as well as community-based organizations in vulnerable areas around the region, drawing on their leadership and knowledge of their communities, and providing resources to them to support their collaboration.

Collaboratives are made up of a variety of social institutions, including social service providers, ethnic associations, schools, churches, chambers of commerce, and other community-based organizations within an identified low-income/minority community.

Community-Based Organizations (CBOs) are often non-profit service providers who work with the target populations in their community and are part of the community fabric, advocating for their needs.

These groups, acting as forums for local institutions of all kinds, provide a culturally relevant structure for developing local protocols, crossing language barriers, and structuring meetings according to the needs of their communities. If their stakeholders make connections between their local concerns and regional planning efforts, they can begin to understand regional planning in a way that is relevant and meaningful to their communities.

SANDAG believes that trust-building is a crucial component in ensuring meaningful public involvement and that can only be established when stakeholders have been engaged early and consistently in the process. The CBO Partners already have this leverage with their constituents, and therefore can be highly instrumental in bridging the gap between SANDAG decision-makers and traditionally under-represented communities.

From the very beginning, fourteen⁶ CBOs and collaboratives from around the San Diego region were selected to partner with SANDAG to create a community-based network. As stated above, the partners facilitated the timely and meaningful involvement of traditionally under-represented communities in the process to develop the Regional Plan (Table H.1: List of CBO Partners). The CBO Partners selected share several important qualities, including: (a) a well-established and trusted role in their respective communities with a reputation for consistency and excellence in service; (b) institutional capacity – the resources, staff, and time – to handle various outreach tasks such as survey

distribution, community workshops, and others activities, in addition to their regular services; (c) a capacity to convene large groups of community members, especially low-income, minority, newcomers with limited English, youth, and senior populations, and catalyze significant public involvement from these groups; and (d) representation of the different geographic areas in the region in order to maximize the amount and variety of people reached.

Table H.1 List of CBO Partners	
 Able Disabled Advocacy (ADA) 	• International Rescue Committee (IRC)
• Alliance for Regional Solutions (ARS)	• Jacobs Center for Neighborhood Innovation (JCNI)
BAME Renaissance CDC	• Linda Vista Collaborative (Bayside Community Center)
• Casa Familiar	Mountain Empire Collaborative
Chula Vista Community Collaborative	Operation Samahan
• City Heights CDC/Mid-City Community Advocacy Network (CAN)	Serving Seniors
• El Cajon Collaborative	Vista Community Clinic

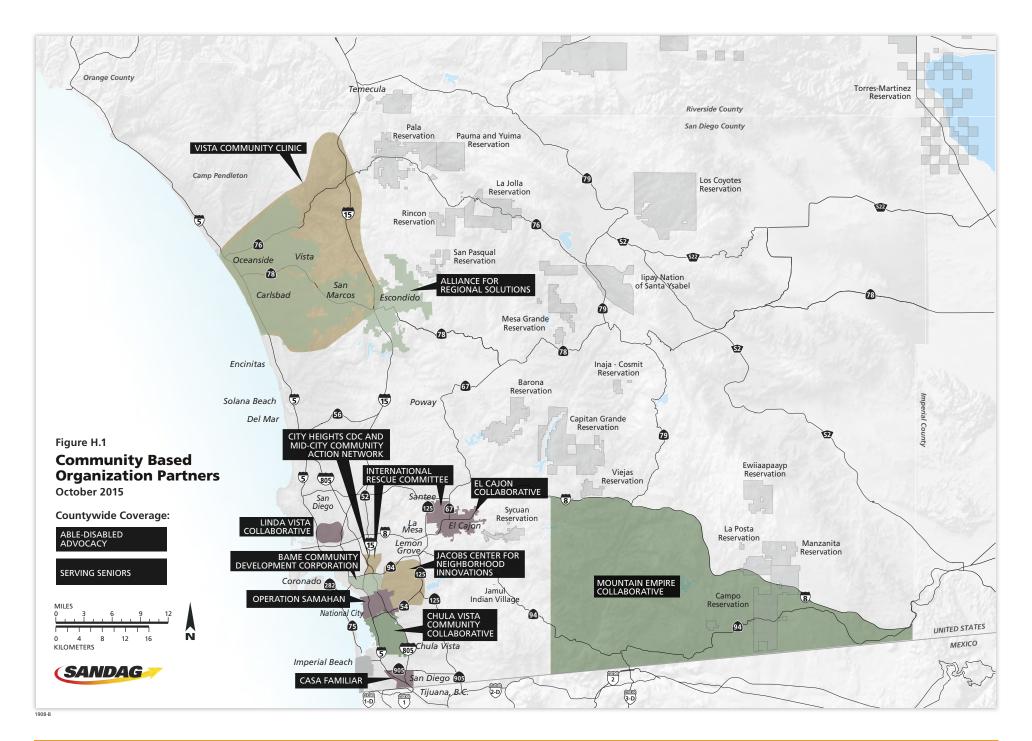
Figure H.1 shows the geographic distribution of the selected CBO Partners and their areas of outreach focus. For a more detailed description of each CBO Partner and the communities they serve, see Attachment 1.

Role of CBO Outreach Network

The CBO Partners began their work in the spring of 2013, immediately after the PIP for the Regional Plan was approved. This network of eleven organizations⁷ from the region's most vulnerable communities formed the CBO Outreach Network and worked closely with SANDAG staff throughout the process, meeting on a regular basis (at least monthly, but often more frequently) to learn about the process and the steps in the planning process, share their insights as the planning process evolved, develop outreach strategies for engaging their communities, contribute to the social equity analysis, coordinate outreach in their communities, and bring their respective community's input into the process at key decision-making milestones. Their role in this process was twofold:

Peer Group on Social Equity: The project managers from each CBO Partner formed the Social Equity Peer Group. They provided feedback and input at each step in the process, providing a social equity perspective on key elements of the Regional Plan as well as contributing to the Social Equity Analysis. When there was a key element for consideration, workshops were convened in which the CBO Partners invited their community members and other organizations from their community who had an interest in environmental justice and could advocate for their concerns.

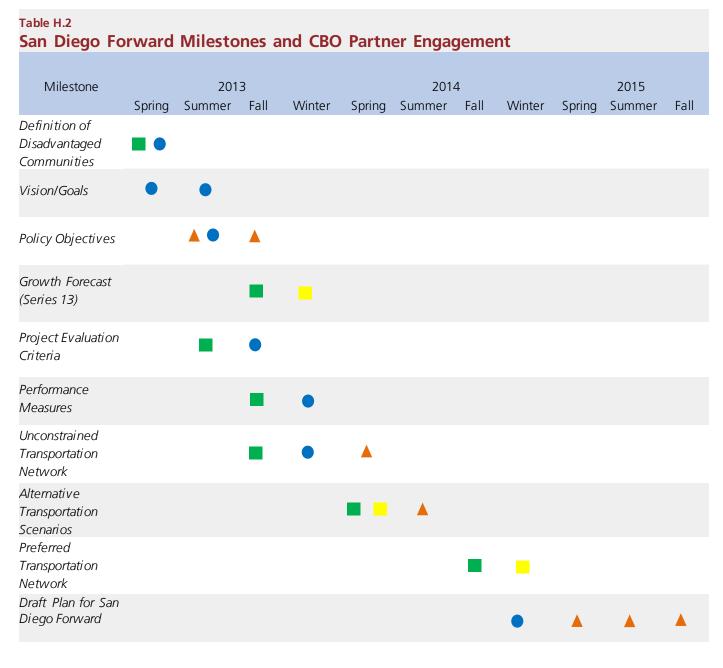
Education of CBO Outreach Network: Throughout the planning process SANDAG staff worked with the CBO Partner project managers to explain and educate them on each step of the planning process so that they could in turn educate their community members. Regional transportation planning is complex and for the Regional Plan there was the added challenge of incorporating other regional planning issues from the Regional Comprehensive Plan (RCP) into the process. A significant amount of time and effort was dedicated to the CBO Partner project managers understanding what is involved in the development of a regional plan.



Community Outreach/Engagement/Education: To engage their respective communities in the planning process from the very beginning, each CBO Partner was asked to develop an outreach strategy appropriate to the needs and character of their community. In this way they provided an ongoing forum for discussion on the development of the Regional Plan at each key milestone and were also able to educate their constituents in more general issues of the scales of planning and what relates to community/city/region issues. Several CBOs were also able to connect their collaboration with the County's 'Live Well San Diego' efforts to create Resident Leadership Academies (RLAs) engaging the same residents to make the connection between their community quality of life issues and the larger regional system. In particular these groups have focused on understanding the connections between public health and their built environment, including access to transportation. This capacity building effort is empowering residents to advocate for their issues in their community and to the larger region.



Methodologies for Community Outreach: A key component of outreach was to develop context-specific methodologies that would help community members understand the elements of the Regional Plan and provide meaningful input. CBO staff, SANDAG staff, and communications consultants worked together to try and make technical/jargon-laden information being shared into meaningful concepts that the community members could understand. Many CBO Partners absorbed the information and created innovative ideas for how to share it with their community members to make the dialogue meaningful. This included translation into multiple languages, including a survey in Braille and interactive games.



Symbols: CBO Education Community Education A Outreach/Engagement Peer Group on Social Equity

Throughout the process the CBO Partners serving as a Peer Group also contributed their input from a social equity perspective on various policy issues being considered in the Regional Plan including:

- Public Health and Transportation
- Climate Change

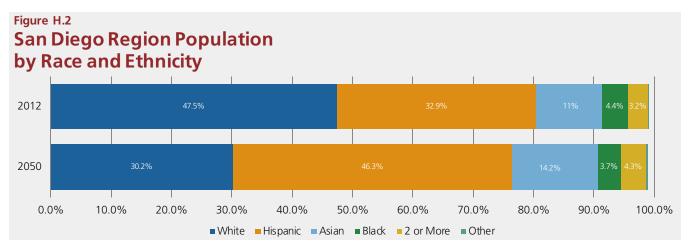
8

- Economic Prosperity
- Emerging Technologies
- Regional Transit Oriented Development Strategy
- Regional Complete Streets Policy

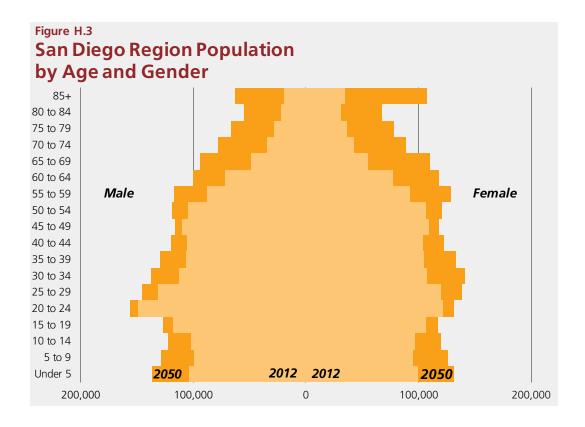
Demographics: Current and Future Conditions

It's official! The 2010 Census confirmed that the region has become a "majority minority" county. This means that no single race or ethnic group comprises more than 50 percent of the region's total population. As the region continues to grow, its ethnic composition will continue to change. Figure H.2 displays the projected regionwide changes in population from 2012 to 2050 for eight racial/ethnic groups: (1) Hispanic, (2) non-Hispanic White, (3) Black, (4) American Indian, (5) Asian, (6) Hawaiian/Pacific Islander, (7) Other, and (8) Two or More Races. Most notably, by 2050 the Hispanic population is expected to increase by nearly 82 percent, while the number of non-Hispanic Whites is expected to decline by over 18 percent.

By 2050, Hispanics are predicted to account for more than 46 percent of the total population. The percentage of non-Hispanic Whites is expected to decline, from 47 percent in 2012 to about 30 percent in 2050. The Asian population is expected to increase from 11 percent today to 14 percent in 2050. It is estimated that there will be virtually no change between 2012 and 2050 in the percentage of the following groups: Black, Hawaiian/Pacific Islander, Other, or Two or More Races.



In addition to racial and ethnic changes, the region's population is forecast to age considerably by 2050 (See Figure H.3). During the 38-year forecast period, the region's median age is expected to increase by more than 3 years, from 34.8 to 38.9, as the Baby Boom and Generation X generations live longer than previous generations. During the forecast period, the number of residents between 65 and 84 years old is expected to more than double, and the number of residents 85 years old and above is expected to nearly triple. Twelve percent of the region's population growth between 2012 and 2050 is expected to be in the oldest age group (85 and older). Therefore, by 2050 nearly 20 percent of the region's population will be 65 and older – a higher percentage than is seen today in the retirement-oriented state of Florida. Paying attention to their unique needs for transportation is critical. As the region continues to grow and evolve, transportation plans must adapt to support the needs of the region's changing population.



Identifying the San Diego region's disadvantaged populations

The first step in the SANDAG social equity analysis was to identify the population groups who are vulnerable or disadvantaged. Pursuant to Title VI, Executive Order 12898, and the 1999 Department of Transportation Memorandum "Implementing Title VI Requirements in Metropolitan and State Planning," SANDAG must provide information on the effects of the San Diego Forward: The Regional Plan on Low-Income and Minority (LIM) populations. SANDAG went beyond this minimum, however, by asking the public what other disadvantaged groups should be analyzed in addition to LIM populations.

Several workshops were held in the beginning of the process in March of 2013 to consider what demographic categories of populations would be analyzed. The core participants of these workshops were the CBO Partners; however, these workshops were open to any and all stakeholders interested in the issue. The CBOs recruited many other stakeholder groups from their communities and advocacy organizations concerned with the issue of whether there were other population groups that would be given a closer look for the Regional Plan.

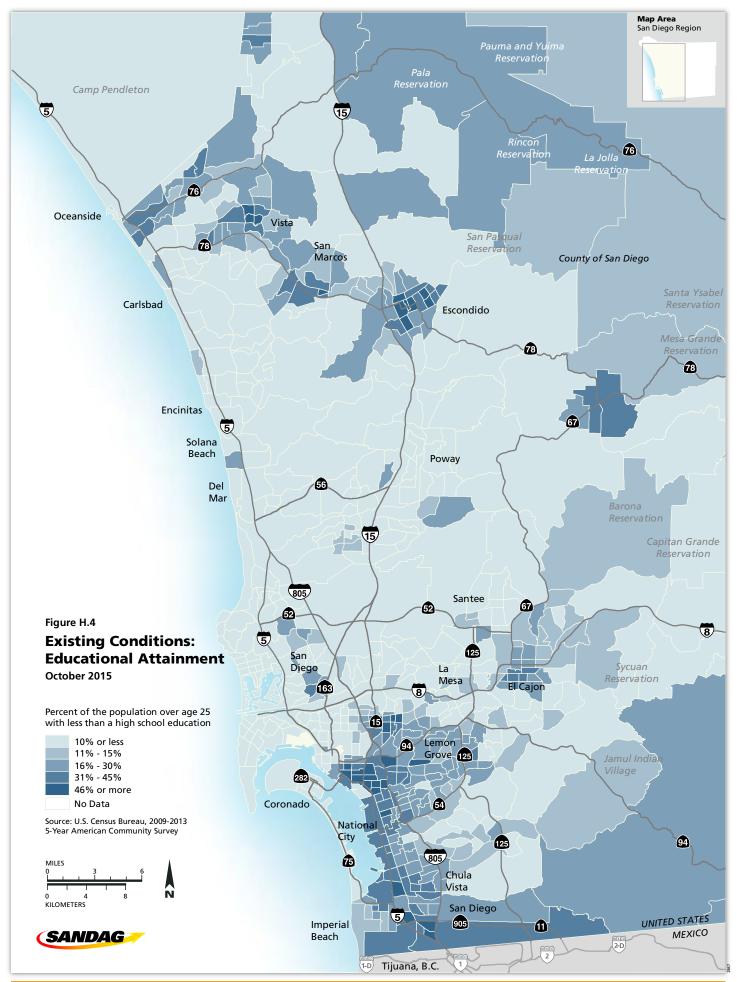
The use of Traffic Analysis Zones (TAZs), a geographic unit used for transportation modeling purposes, was standard in the 2050 RTP/SCS. TAZs are fairly small – smaller than a census tract and in many cases, about the size of a census block. A major shift in how to analyze impacts to disadvantaged communities for the Regional Plan was the incorporation of the Activity-Based Model (ABM), which analyzes traveler behavior at the household level instead of by generalizing travel at the TAZ level like the Travel Demand Model used in previous RTP cycles. With the Travel Demand Model it was possible for a sparsely populated area in East County that covered a large geography to show the entire geography as low-income even if only three of the six households in it were low-income. Conversely, there could be a cluster of low-income households in Vista but if they represented less than 50 percent of the households in the geographic unit, the tract would not be counted as low-income at all. With the ABM model, traveler characteristics (such as age, ethnicity, and income) are modeled at the household level so the information is more detailed.

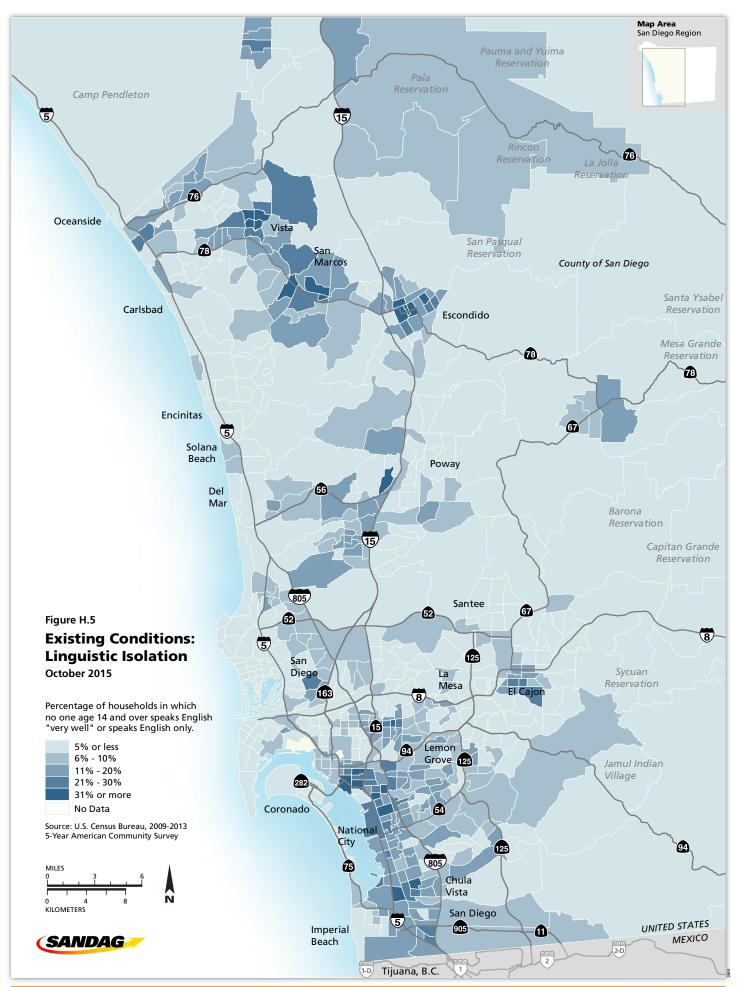
After examining mapped data using both the previous indicators and various populations proposed for a social equity analysis, and with input from the social equity stakeholders, SANDAG then selected three population groups that represent the disadvantaged communities that are analyzed in the Regional Plan: (1) minorities, (2) low-income populations, and (3) seniors. Since the ABM model looks at all travelers (instead of groups of travelers) within geographic areas, there is no longer a need to have a threshold percentage for determining if a certain geographic area should be counted as a disadvantaged community as was done in previous RTP cycles. It was, however, still necessary to select demographic thresholds for low-income and seniors that were appropriate for the San Diego region. The threshold for seniors selected was 75 and older. This threshold came from a dialogue with stakeholders regarding mobility and age with the conclusion that at that age seniors may become transit dependent, but are still mobile. For low-income, the threshold selected was 200 percent of the 2012 federal poverty level. The rationale to use 200 percent of the federal poverty level was twofold. First, 200 percent of the poverty level reflects the higher cost of living in the San Diego region as compared to other areas of the state and nation. Second, this indicator can be forecasted and serves as a good replacement for the indicators used in the last cycle that were not able to be forecasted into the future (educational attainment, linguistic isolation, and disability status). The new poverty indicator captures the majority of the disadvantaged population identified in the last cycle.

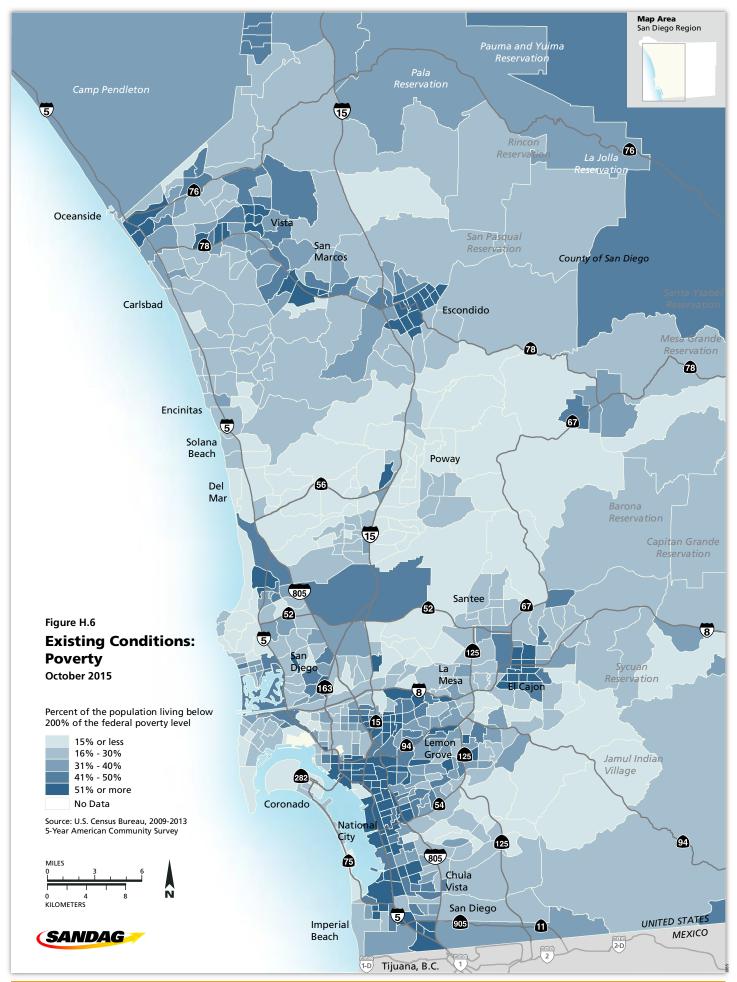
Existing Conditions in Disadvantaged Communities in the Region

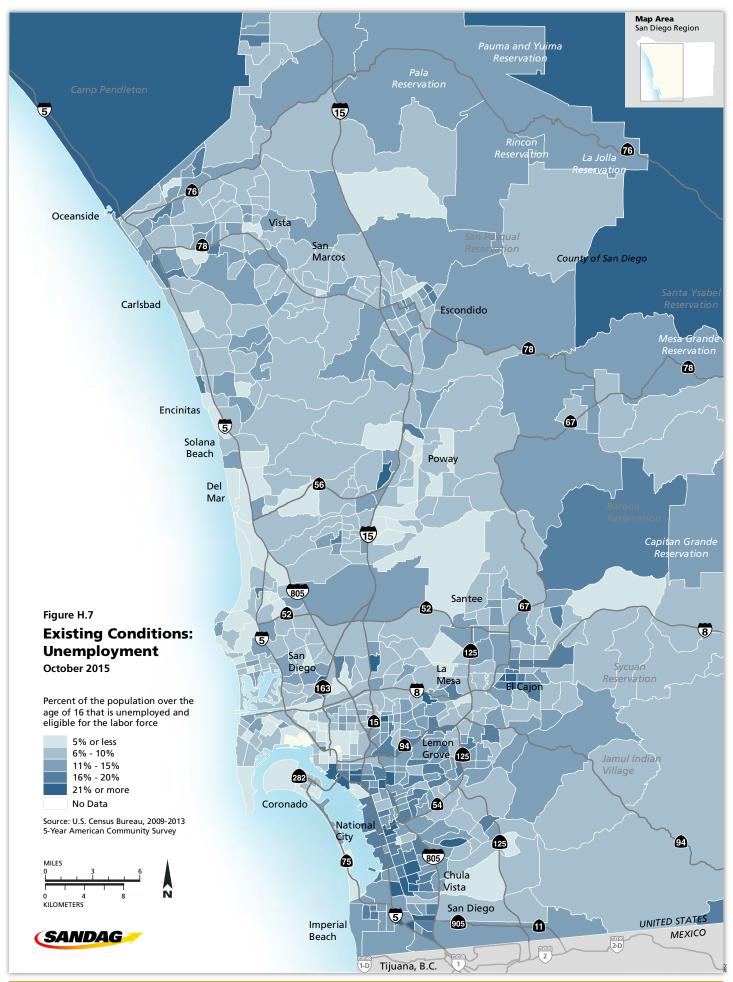
The definitions of disadvantaged communities (for the purpose of analyzing the impact of the transportation investments) used indicators that were possible to forecast to 2050, but it is also important to have an understanding of vulnerable communities in the region in terms of existing conditions. In workshops, to define the disadvantaged communities for the Regional Plan, the participants were concerned that some of the indicators of vulnerability that were not used for the purposes of the travel model and performance measures still be documented to provide a current snapshot of cumulative socio-economic and population characteristics that make some communities more vulnerable than others. Maps showing the western two-thirds of the region illustrate each of these indicators, and profiles for each of the communities identified are described below with the following population characteristics:

- Figure H.4 Educational Attainment: Percent of the population over age 25 with less than a high school education (5-year estimate, 2009-2013).
- Figure H.5 Linguistic Isolation: Percentage of households in which no one age 14 and over speaks English very well or speaks English only (5-year estimate, 2009-2013).
- Figure H.6 Poverty: Percent of the population living below two times the federal poverty level (5-year estimate, 2009-2013).
- Figure H.7 Unemployment: Percent of the population over the age of 16 that is unemployed and eligible for the labor force. Excludes retirees, students, homemakers, institutionalized persons (except prisoners), those not looking for work, and military personnel on active duty (5-year estimate, 2009-2013).









What follows is a snapshot of the key socio-economic characteristics for the most disadvantaged communities in the region. ⁹ These were the communities that were the focus of our most intense outreach through our partnership with CBOs in those communities.

City of San Diego: The City of San Diego is the most populous city in the region in terms of population with 1.3 million according to the 2010 Census. There are several neighborhoods within the city that have significant percentages of disadvantaged populations. These communities are extremely diverse in terms of cultures and languages, but often are underserved in terms of infrastructure and economic opportunities. These communities are described below.

Barrio Logan: Seventy-four percent of the population in this neighborhood is Hispanic, 15 percent White, 6.4 percent African American, 2.5 percent Asian and Pacific Islander, and the remainder other races. 76.2 percent of the residents live in poverty with an unemployment rate of 24.5 percent. Almost 44 percent of the adult population did not graduate from high school and 31.5 percent of the residents do not speak English well.

City Heights: Fifty-nine percent of the population in this neighborhood is Hispanic, 16.8 percent Asian and Pacific Islander, 11 percent African American, 10.4 percent White, and the remainder other races. Almost 65 percent of the residents live in poverty with an unemployment rate of 13 percent. Almost 36 percent of the residents do not speak English well.

Encanto: Fifty-three percent of the population in this neighborhood is Hispanic while 20.5 percent are African American, followed by almost 17 percent Asian and Pacific Islander and 6.6 percent are White. Almost 53 percent live in poverty with a 14 percent unemployment rate. Thirty-two percent of the adults did not finish high school and 14 percent do not speak English.

Linda Vista: Thirty-seven percent of the population in this neighborhood is white while 33 percent is Hispanic and 20.5 percent Asian and Pacific Islander. Five percent are African American, and the remainder of other races. Forty-one percent live in poverty while unemployment is 12.5 percent. Almost 18 percent of the adult population did not finish high school and 11.4 percent of households are isolated linguistically.

San Ysidro: Almost 94 percent of the population in this neighborhood (directly on the border with Mexico) is Hispanic. The remainder of the population is 2.4 percent White, 2.2 percent Asian and Pacific Islander, and 0.9 percent African American or other race. Almost 60 percent of the residents live in poverty with an unemployment rate of 16.3 percent. Forty-four percent of those over 25 do not have a high school diploma and 22.4 percent of households are isolated linguistically.

Skyline–Paradise Hills: Thirty-eight percent of the population in this neighborhood is Hispanic, while 32 percent are Asian or Pacific Islanders. Almost 14 percent of the population is African American while only 11 percent are White. The remainder is other races. Thirty-six percent live in poverty with an unemployment rate of 13.5 percent. Nine percent of households are isolated linguistically and 18.5 percent of residents 25 and older did not finish high school.

Southeastern San Diego: Eighty-four percent of the population in this neighborhood is Hispanic, while almost 8 percent are African American. Only 3.5 percent are White and 2.4 percent Asian or Pacific Islander with the remainder of other races. Seventy percent of the population lives in poverty while unemployment is almost 17 percent. Fifty percent of the population 25 and older did not finish high school and almost 2 percent of households are linguistically isolated.

City of Chula Vista: Almost 60 percent of the population in this city is Hispanic. Twenty percent are White, 14.2 percent Asian or Pacific Islanders, 3.5 percent are African American and the remainder are other races. Almost 30 percent of the population lives in poverty with an unemployment rate of 12.5 percent. Almost 19 percent of adults 25 and older did not finish high school while 11.2 percent of households are linguistically isolated.

City of Escondido: Almost 51 percent of the population of Escondido is Hispanic, while 39 percent is White. Six percent is Asian or Pacific Islander and almost 2 percent is African American. The remainder is of other races. Approximately 46 percent of the population lives in poverty while unemployment is 10 percent. Almost 28 percent of the population 25 and older does not have a high school education while almost 15 percent of households live in linguistic isolation.

City of El Cajon: Fifty-six percent of the population in the City of El Cajon is White, while Hispanics make up almost 30 percent. Only 5.3 percent of the population is African American while the next highest category is 'other races' which could be the Chaldean immigrant population. Almost 4 percent are Asian or Pacific Islanders. Almost 50 percent of the population lives in poverty, while the unemployment rate is 14 percent. Almost 21 percent of the population 25 and older did not finish high school and 10.4 percent of households live in linguistic isolation.

City of National City: Hispanics make up almost 65 percent of the population in National City, while almost 18 percent are Asian or Pacific Islanders. Eleven percent is White, while 4 percent are African American. The remainder are other races. Almost 56 percent of the population lives in poverty, while unemployment is 12.6 percent. Approximately 30 percent of adults 25 and older did no graduate from high school and almost 21 percent of households live in linguistic isolation.

City of Vista: Almost 49 percent of the population in the City of Vista is Hispanic, while almost 41 percent are White. Approximately 5 percent are Asian or Pacific Islander and 2.4 percent African American while the remainder are other races. The low-income Spanish-speaking population is in dense clusters in several areas of the city; mostly in the rural areas. Approximately 45 percent of the population lives in poverty while the unemployment rate is 9 percent. Approximately 25 percent of adults 25 and older do not have a high school diploma while 19 percent of households live in linguistic isolation.

Social Equity Analysis

Framework

SANDAG prioritized projects detailed in the Unconstrained Transportation Network by using transportation project evaluation criteria approved by the Board of Directors. Based on revenue projections to 2050, staff developed three alternative phased Revenue Constrained Transportation Network Scenarios. They showed a range of emphases on different transportation modes, alternative phasing of projects and other considerations. A social equity analysis, using Board-approved performance measures, was conducted for all scenarios to make sure they were consistent with Title VI of the Civil Rights Act. On September 10, 2014, the Board accepted a preferred Revenue Constrained Scenario from among the alternative scenarios it considered.

Through the process of developing the performance measures, a subset of measures was identified as a framework for the social equity analysis in which data would be produced comparing the three vulnerable populations against their respective 'non'-population (minority versus non-minority, low-income versus non-low income, and senior versus non-senior).

Although Title VI itself prohibits only intentional discrimination, agency regulations such as those discussed above, which were adopted to implement Title VI, direct SANDAG to ensure that it does not engage in practices that have the effect of discriminating on the basis of race, color or national origin. Many times statistics are used as a way to screen for such unintentionally caused discriminatory impacts. The threshold percentage often used to screen for disparate impact or disproportionate effect is 20 percent due to the so-called "four-fifths" or "80/20" rule because it is only presumed that a case for disparate impact or disproportionate effect is created when there is a substantially different rate of impact for a particular group. ¹⁰ A rate that is different by more than 20 percentage points is regarded as substantial because statistically it is unlikely to occur on a random basis. Although this relatively stringent standard

is only required when checking for disparities for minorities under Title VI, SANDAG also analyzed low-income and senior groups using this screening process.

During the process of evaluating the Alternative Transportation Scenarios for each disadvantaged population and its respective non-disadvantaged population, the percent difference was calculated between the No-Build projections and each scenario for each phase (2020, 2035, and 2050) to determine how each group fared under each scenario. As part of the analysis, the percentages of each disadvantaged population group were compared to its comparable non-disadvantaged population group to determine whether the percentage point difference between the groups is substantial enough to potentially qualify for further evaluation as a disparate impact or disproportionate effect. Anything above a 20 percentage point difference would be considered significant and cause for SANDAG to conduct further analysis. The results in this appendix compare the No-Build to the Preferred Scenario. Additional methodological information is provided in the section below titled "Results for Social Equity Performance Measures."

Defining performance measures for social equity

As part of the social equity analysis process, several workshops were held with the CBO Partners and other interested stakeholders in the fall of 2013 and spring of 2014 to help identify performance measures for San Diego Forward: The Regional Plan that could be analyzed from a social equity perspective. Input from affected communities was incorporated into the performance measures that ultimately were recommended to the SANDAG Board. Seven social equity performance measures were approved by the SANDAG Board as part of the broader set of performance measures and one additional environmental burden measure was developed to respond to Title VI considerations. They are defined as follows:

Average Travel Time: Travel time is measured as the average time per person per trip across all modes of transportation (drive alone, carpool, transit, bike/walk) and all types of trips (commuting to work, traveling to school, etc.). Data are reported for overall travel time as well as drive alone/SOV, carpool/vanpool, and transit.

Change in Percent of Income Consumed by Out-of-Pocket Transportation Costs: Out-of-pocket transportation costs include: auto operating costs, cost of tolls, parking costs, and transit fares. Total percent of income consumed by out-of-pocket transportation costs is calculated by summing up these costs at the household level and then dividing this number into total household income. The change in percent of income consumed by out-of-pocket transportation costs is derived by comparing the scenario expenditures to 2012 expenditures (build scenario percent of income minus 2012 percent of income = change in percent of income).

Percentage of population within 0.5 mile of high frequency transit stops: The total number of persons residing within zones whose centroid is within 0.5 miles of a high frequency transit stop (defined as having headways of at least 15 minutes during the peak and midday) is divided by the total number of persons in the region. This measure is calculated separately for each set of disadvantage population in relation to non-population (low-income/minority/ seniors).

Percentage of population within 0.5 mile of a transit stop: The total number of persons residing within zones whose centroid is within 0.5 mile of any transit stop is divided by the total number of persons in the region. This measure is calculated separately for each set of disadvantage population in relation to non-population (low-income/minority/seniors).

Percentage of population within 0.25 mile of a bike facility: The total number of persons residing within zones whose centroid is within 0.25 mile of a class I, class II, bike track or bike boulevard is divided by the total number of persons in the region. This measure is calculated separately for each set of disadvantage population in relation to non-population (low-income/minority/seniors).

Access to Jobs/Higher Education: The percentage of population within 30 minutes of employment centers/higher education institutions during peak periods by driving alone, riding in a carpool, and taking public transit.

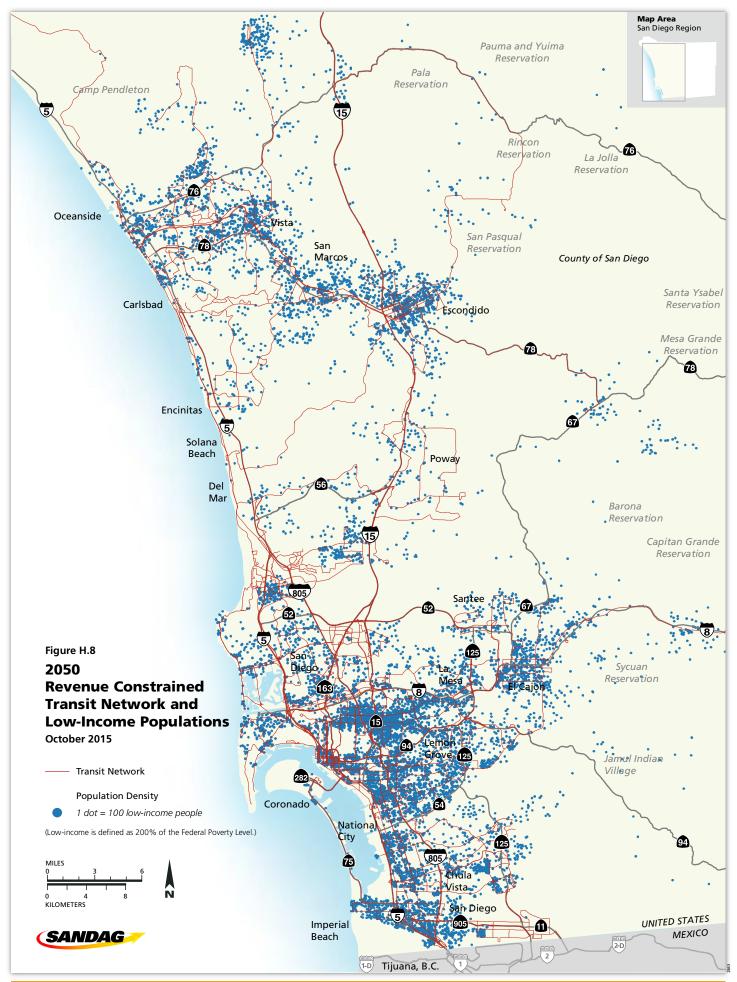
Percentage of population within 15 minutes of goods/services (retail, medical, parks, and beaches): The percentage of populations within 15 minutes of goods/services measures access to retail, healthcare, and active parks by driving alone, carpooling, taking public transit, and walking. The following definitions were used for goods and services falling in this category:

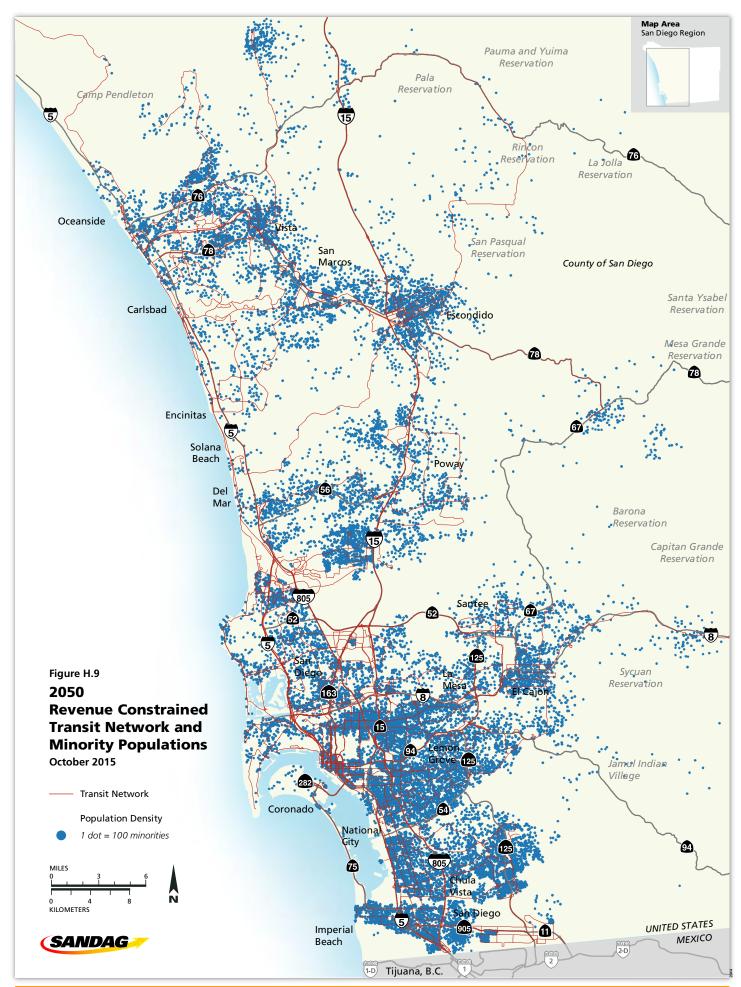
- Retail includes regional shopping centers, neighborhood shopping centers, specialty commercial, arterial commercial, automobile dealerships, other retail, and strip commercial.
- *Healthcare includes* hospitals and community clinics. This definition does not consider emergency response times, but rather it measures access to basic health services including hospitals, community clinics, and medical offices.
- Active Parks includes recreation areas and centers containing one or more of the following activities: tennis or
 basketball courts, baseball diamonds, soccer fields, or swings. Examples are Robb Field, Morley Field, Diamond
 Street Recreation Center, and Presidio Park. Smaller neighborhood parks with a high level of use are also included
 as active parks.
- Active Beaches includes accessible sandy areas along the coast or major water bodies (San Diego and Mission Bay)
 allowing swimming, picnicking, and other beach related recreational activities. Active parks usually have parking
 associated with it.

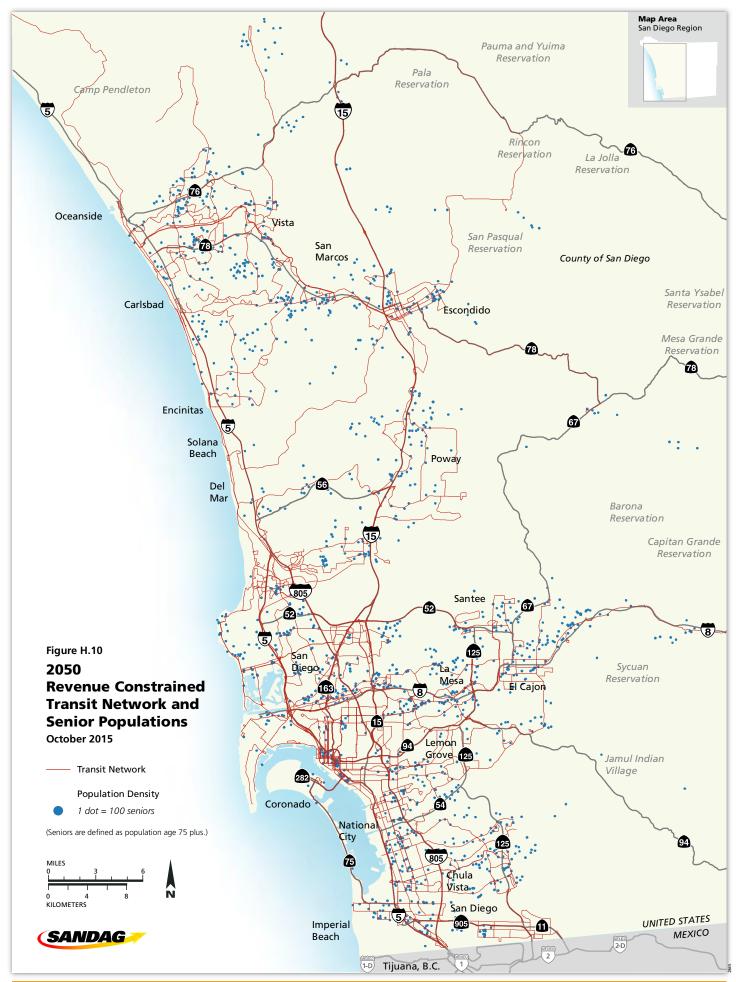
Average Particulate Matter¹¹ (PM₁₀)¹² (a type of toxic air particulate) exposure per person. The transportation network is divided into segments called 'links' (For example State Route 76 from Melrose to Interstate I5). The CT-EMFAC emissions model was run on the scenarios at link level. ¹³ A GIS model was developed using map algebra to calculate the PM₁₀ spatial distribution over a buffer area and the average PM₁₀ exposure per person for each population group. A buffer analysis of 500 feet on either side of roadways was used to compare each population against the non-population (e.g., minority versus non-minority). The emissions model analyzed exposure to anything 10 micrometers or smaller in diameter.

Baseline Mapping

To create a point of reference for analyzing how the distribution of transportation investments detailed in San Diego Forward: The Regional Plan may affect disadvantaged populations, a set of baseline maps was created to aid discussions by stakeholders. Each map shows the 2050 population with the 2050 Preferred Revenue Constrained Transit Network. Figure H.8 shows the 2050 Low-Income (200 percent of FPR) populations. Figure H.9 shows the 2050 Minority population. Figure H.10 shows the 2050 Senior population 75 and older.







Results for Social Equity Performance Measures

An analysis of the 2050 Revenue Constrained Network Scenario was conducted to determine whether the benefits and burdens of the projects in the scenario would be equitably distributed between minority and non-minority, as well as low-income and non-low income populations. In addition, a similar social equity analysis was done for seniors 75 or older and non-seniors

The result of the social equity analysis is a determination that no statistically significant differences were found between the No-Build Scenario and the 2050 Revenue Constrained Network Scenario for any of the disadvantaged populations. The summary of findings below is based on each of the social equity calculation tables shown for each performance measure. In most cases, there were some differences; however, no result came close to 20 percentage points difference that SANDAG used as a threshold for a potential disparate impact or disproportionate effect. Most social equity calculations were within 5 percentage points and often the benefit was to the disadvantaged population rather than the non-population.

Table H.3 Summary of Findings from Social Equity Analysis 14			
Performance Measure	Low-Income	Minority	Seniors
Average Peak Period Travel to Work – all modes	✓	✓	✓
Change in percent of income consumed by out-of-pocket transportation costs	✓	✓	✓
Percentage of population within 0.5 mile of high frequency transit stops	✓	✓	✓
Percentage of population within 0.5 mile of transit stops	✓	✓	✓
Percentage of population within 0.25 mile of a bike facility	✓	✓	✓
Percentage of population within 30 minutes of jobs/higher education (auto/transit)	✓	✓	✓
Percentage of population within 15 minutes of goods/services (auto/transit):			
Access to Retail	✓	✓	✓
Access to Healthcare	✓	✓	✓
Access to Active Parks	✓	✓	✓
Access to Beaches	✓	✓	✓
Exposure to PM ₁₀	✓	✓	✓

^{✓ =} No Disparate Impact or Disproportionate Effect

The modeling results for the social equity performance indicators referenced above show that the Regional Plan improves conditions for disadvantaged populations, compared with the 2050 No-Build alternative. SANDAG conducted separate analyses of low-income, minority, and senior populations and modeled the impacts on these populations separately. The discussion in the following section highlights some of the disaggregated data that is shown for each performance measure result. Tables and the corresponding social equity calculation tables are provided for each performance measure to facilitate understanding the results. For some of these metrics, maps provide a graphic display of the performance of the 2050 Revenue Constrained Network Scenario with regard to transit access to key amenities.

For each performance measure, the social equity calculation was conducted as follows:

Step 1: For each disadvantaged population and its respective non-disadvantaged population (e.g., minority and non-minority), the percent difference was calculated between the No-Build Scenario and Preferred Scenario for 2020, 2035 and 2050 to determine how each group fared.

Step 2: The percentages for the disadvantaged populations were compared to the respective non-disadvantaged populations to determine the percentage point difference between the groups. With the exception of travel times and the change in percent of income spent on out-of-pocket transportation costs, when the social equity calculation is a positive number such as 1.0, it indicates that the disadvantaged population is projected to receive a larger benefit relative to the non-population over the time period of the Plan. When the social equity calculation is a negative number, it indicates that the disadvantaged population is projected to receive less of a benefit than the non-population over the time period of the Plan. A social equity calculation of 0.0 would be parity. See the example below.

Step 3: Percentage differences of more than 20 points in the Step 2 social equity calculation would be considered a potential disparate impact or disproportionate effect. If a potential disparate impact or disproportionate effect had been found, SANDAG would have considered alternatives and mitigation that would reduce the impact/effect.

For example:

Percentage of Population Within 30 Minutes of Jobs/Higher Education by Transit (Minority v. Non-Minority):

	2050 No-Build	2050 RP (Build)
Minority	87.3%	91.7%
Non-Minority	81.8%	85.1%

Step 1 - Percent Difference

Minority = (2050 RP-2050 NB)/2050 NB = (91.7%-87.3%)/87.3% = 5.0%Non-Minority = (2050 RP-2050 NB)/2050 NB = (85.1%-81.8%)/81.8% = 4.0%

Step 2 - Percentage Point Difference between Pop/Non Pop

(Minority Percentage Difference – Non Minority Percent Difference) x 100

 $(5.0\%) - (4.0\%) \times 100 = 1.0$

Average Peak-Period Travel Time to Work

For all vulnerable populations, average peak travel time to work across all modes and particularly for the drive alone mode, remains constant with no disparate impact or disproportionate effect for any of the populations (low-income, minority, and seniors). Travel times to work by transit do improve based on a comparison between the No-Build Alternative and the preferred Revenue Constrained Scenario. For example, for the low-income population travel time to work by transit improves from 51 minutes in 2020 to 46 minutes in 2050 for the Preferred Revenue Constrained Scenario while the No-Build Scenario declines very slightly, going from 51 minutes in 2020 to 52 minutes in 2050. Results are similar for minority populations. In terms of disparity between how each disadvantaged population fared in relation to its respective 'non'-population, the data showed no disparate impacts or disproportionate effects. For low-income populations relative to non-low income, the percentage point difference was almost zero. Transit travel times for low-income populations continue to decrease over the course of the Regional Plan and improve at a greater rate in comparison to non-low income populations.

Table H.4 Average Peak-Period Travel Time to Work								
Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC	
Average travel time per person trip – All Trip Types Combined (minutes)								
Low Income	25	26	26	27	26	26	26	
Non-Low Income	28	29	30	30	29	28	28	
Minority	27	29	29	29	29	28	27	
Non-Minority	27	28	29	29	28	28	27	
Senior	25	26	26	26	25	25	24	
Non-Senior	27	29	29	29	28	28	27	
Auto, Drive Alone (mir	nutes)							
Low Income	24	25	25	26	25	24	23	
Non-Low Income	28	30	30	30	29	28	28	
Minority	27	29	29	29	28	28	27	
Non-Minority	28	29	29	30	28	28	27	
Senior	25	25	25	26	24	25	24	
Non-Senior	27	29	29	30	28	28	27	
Auto, Carpool (minute	s)							
Low Income	22	23	23	24	23	22	21	
Non-Low Income	26	27	27	28	27	26	25	
Minority	24	26	26	26	26	25	24	
Non-Minority	25	26	27	27	26	26	25	
Senior	22	22	26	25	21	21	23	
Non-Senior	25	26	26	27	26	25	24	
Transit (minutes)								
Low Income	52	51	52	52	51	48	46	
Non-Low Income	50	50	50	49	49	46	45	
Minority	51	51	51	51	51	47	46	
Non-Minority	50	49	49	50	48	46	44	
Senior	54	52	54	50	51	49	50	
Non-Senior	50	50	51	50	50	47	45	

Table H.4 (continued) Average Peak-Period Travel Time to Work							
Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Bike (minutes)							
Low Income	22	22	22	21	22	23	21
Non- Low Income	17	19	18	19	18	19	20
Minority	19	21	20	20	21	21	20
Non-Minority	18	19	18	19	19	19	20
Senior	21	32	22	18	32	23	18
Non-Senior	19	20	19	19	20	20	20
Walk (minutes)							
Low Income	21	21	21	21	21	21	21
Non- Low Income	18	18	18	18	18	18	18
Minority	20	20	20	20	20	20	20
Non-Minority	18	18	17	18	18	17	18
Senior	20	22	19	20	23	19	18
Non-Senior	19	19	19	19	19	19	19

Table H.4.1 Social Equity Calculation for Average Peak-Period Travel Times to Work ¹⁵ Percentage Point Difference – Build vs. No-Build
2020 2025 2050

	2020	2035	2050
Low Income vs. Non-Low Income			
All Modes	0.3	1.5	2.2
Drive Alone	0.2	0.4	0.0
Carpool	-0.3	-0.2	-0.5
Transit	-0.4	-0.8	-0.9
Bike	1.3	-3.1	-3.8
Walk	0.2	-1.2	-0.5

Table H.4.1 (continued) Social Equity Calculation for Times to Work	or Average	Peak-Period	Travel					
Percentage Point Difference – Build vs. No-Build								
	2020	2035	2050					
Minority vs. Non-Minority								
All Modes	0.2	0.2	-0.3					
Drive alone	0.1	-0.4	-1.2					
Carpool	0.1	-0.3	-1.3					
Transit	-0.5	0.0	1.1					
Bike	-0.8	-1.3	-2.0					
Walk	-0.8	-0.5	-2.2					
Senior vs. Non-Senior								
All Modes	-0.5	0.1	1.5					
Drive alone	-0.3	1.3	1.7					

Change in Percentage of Income Consumed by Out-of-Pocket Transportation Costs

-2.3

-0.7

2.7

5.4

The change in percent of income spent on out-of-pocket transportation costs stays relatively constant for all populations throughout the term of the Regional Plan. There is no significant gap in the percentage point differences for any of the disadvantaged groups over all phases of the Regional Plan. Indeed, most are near parity. In other words, although low-income populations spend a larger percent of their income on out-of-pocket transportation than non-low income populations, the percentage gap between the two groups remains constant for both groups over the life of the Regional Plan.

-12.2

-1.7

-1.9

-0.5

0.6

10.6

-5.3

-9.7

Carpool

Transit

Bike

Walk

Table H.5

Change in the Percentage of Income Consumed by Out-of-Pocket

Transportation Costs

Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Low-Income	N/A	0.6%	0.9%	0.9%	0.5%	0.5%	0.3%
Non-Low Income	N/A	0.5%	0.6%	0.6%	0.5%	0.4%	0.4%
Minority	N/A	0.7%	0.6%	0.3%	0.6%	0.2%	-0.2%
Non-Minority	N/A	0.4%	0.4%	0.5%	0.4%	0.3%	0.4%
Senior	N/A	0.8%	0.8%	0.8%	0.8%	0.7%	0.6%
Non-Senior	N/A	0.6%	0.7%	0.6%	0.5%	0.4%	0.2%

Table H.5.1

Social Equity Calculation for Change in Percent of Income Consumed by Out-of-Pocket Transportation Costs

Percentage Point Difference - Build vs. No Build

	2020	2035	2050
Low-Income vs. Non-Low Income	0.0	-0.2	-0.4
Minority vs. Minority	-0.1	-0.2	-0.3
Senior vs. Non-Senior	0.0	0.2	0.2

Access to High Frequency Transit Stops

Access to high frequency transit stops improves significantly for all disadvantaged populations in the 2050 Revenue Constrained Network Scenario. For the low-income population, access goes up from 47 percent to 62 percent in 2020 and from 50 percent to 70 percent in 2050 as compared to the No-Build Scenario. There is a slight difference in the improvements between low-income and non-low income, but it is not considered significant. For 2020 the difference in percentage points is -7.7, -11.5 in 2035, and -12.3 in 2050. Although the trend is not going in the preferred direction, the difference is not considered significant and SANDAG will continue to monitor this trend to ensure it does not increase enough to indicate a disproportionate effect. The non-low income population begins with far less access in the base year of 2012 with 29 percent access, while 46 percent of the low-income population had access in 2012. For minority populations, there is also a significant improvement in access to high frequency transit stops going from 44 percent to 58 percent in 2020 and from 45 percent to 67 percent in 2050 comparing the 2050 Preferred Revenue Constrained Scenario to the No-Build Scenario. Compared to the non-minority population, the minority population shows a difference of -9.7 percentage points in 2020 but flips to a positive 2.5 percentage point difference in 2050. This means that access to high frequency transit stops for minorities improves relative to non-minorities from having less access to having increased access. For seniors, access to high frequency transit stops also improves significantly, going from 36 percent to 47 percent in 2020 and from 38 percent to 56 percent in 2050. There are virtually no differences between the seniors and non-seniors over the life of the Regional Plan. Indeed, by 2050 the percentage point difference between seniors and non-seniors is negligible (-0.1).

Table H.6

Percentage of Population Within 0.5 Miles of a High Frequency Transit Stop

15 Minute or Less	Peak and Midday	Transit Stop
-------------------	-----------------	--------------

Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Low-income	46%	47%	48%	50%	62%	69%	70%
Non-low income	29%	33%	34%	36%	45%	53%	56%
Minority	43%	44%	43%	45%	58%	65%	67%
Non-Minority	26%	30%	32%	34%	42%	48%	51%
Senior	30%	36%	36%	38%	47%	53%	56%
Non-Senior	35%	38%	39%	41%	51%	58%	61%

Table H.6.1

Social Equity Calculation for Percentage of Population Within

0.5 Miles of a High Frequency Transit Stop

Percentage Point Difference - Build vs. No Build

	2020	2035	2050
Low-Income vs. Non-Low Income	-7.7	-11.5	-12.3
Minority vs. Non-Minority	-9.7	-1.2	2.5
Senior vs. Non-Seniors	-3.8	-1.6	-0.1

Note: High Frequency Transit Stop - 15 minutes or less peak and midday

Access to Transit Stops

Access to transit stops for disadvantaged populations remains relatively constant. If taken in context, it is because their access to begin with is very high. For the Revenue Constrained Network Scenario, access for low-income populations increases slightly from 83 percent to 84 percent in 2020, and from 82 percent to 85 percent in 2050 Compared to the No-Build Scenario. The same pattern appears for seniors. In none of the disadvantaged populations is there a significant difference between the population and the 'non'-population comparing the No-Build Scenario to the Preferred Revenue Constrained Scenario for each phase (2020, 2035, 2050). Indeed, the social equity calculation for minorities versus non-minorities shows almost parity in access in 2020 and minority access improves over non-minority access in 2035 (+1.3 percentage point difference) and 2050 (+2.1 percentage point difference).

Table H.7 Percentage of Population Within 0.5 Miles of a Transit Stop Performance Measure 2012 2020NB 2035NB 2050NB 2020RC 2035RC 2050RC Low-income 86% 83% 83% 82% 84% 85% 85% Non low-income 74% 72% 72% 73% 75% 76% 77% Minority 82% 79% 79% 78% 81% 82% 83% Non-Minority 73% 71% 71% 72% 74% 74% 75% Senior 77% 75% 74% 76% 77% 77% 79% Non-Senior 75% 78% 79% 80% 78% 76% 76%

Table H.7.1

Social Equity Calculation for Percentage of Population
Within 0.5 Miles of a Transit Stop

Percentage Point Difference – Build vs. No Build

2020 2035 2050

Low-Income vs. Non-Low Income -3.4 -4.6 -2.9

-0.4

-1.8

Access to Bike Facilities

Minority vs. Non-Minority

Senior vs. Non-Seniors

As the Regional Bike Network for the Regional Plan is implemented, disadvantaged populations will have significantly more access to bike facilities. The percentage of people within a quarter mile of a bike facility for all disadvantaged populations improves compared to the No-Build Scenario projections and is comparable or better than the respective 'non'-populations. For example, 58 percent of low-income populations will have access to a bike facility within a quarter of a mile in 2020, increasing to 61 percent in 2035 and 63 percent in 2050. The No-Build Scenario access is 58 percent and reduces to 54 percent in 2050. The low-income population is expected to gain more access relative to the non-low income population by 2050, therefore the difference was positive (greater benefit to low-income populations) in this performance measure. The same pattern resulted for minority populations. For the Preferred Revenue Constrained Scenario, 59 percent of minorities had access to a bike facility in 2020 increasing to 61 percent in 2035 and 64 percent in 2050, with minority populations deriving greater benefit than non-minorities in 2035 and 2050.

1.3

-0.6

2.1

-0.9

Table H.8

Percentage of Population Within 0.25 Miles of a Bike Facility

Class 1 and II, Cycletrack, and Bike Boulevard

Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Low-income	51%	58%	55%	54%	58%	61%	63%
Non low-income	58%	60%	58%	59%	60%	61%	64%
Minority	55%	59%	56%	56%	59%	61%	64%
Non-Minority	57%	59%	59%	58%	59%	61%	63%
Senior	54%	58%	57%	58%	58%	61%	64%
Non-Senior	56%	59%	57%	57%	59%	61%	64%

Table H.8.1

Social Equity Calculation for Percentage of Population Within 0.25 Miles of a Bike Facility (Class 1 and II, Cycletrack, and Bike Boulevard)

Percentage Point Difference – Build vs. No-Build

	2020	2035	2050
Low Income vs. Non-Low Income	0.1	6.6	8.4
Minority vs. Non-Minority	0.0	5.9	6.3
Senior vs. Non-Senior	0.0	-1.6	-1.6

Access to Jobs and Higher Education

Overall access to jobs and higher education for disadvantaged populations begins relatively high and remains constant or improves slightly. In the 2012 base year, almost 92 percent of low-income populations already had access to jobs and higher education via transit. For the No-Build Scenario their access increases slightly. In the 2050 Revenue Constrained Network Scenario, low-income transit access is projected to improve slightly by 2050. There is no significant difference between low-income populations and the non-low income population. The percentage point difference remains virtually the same with -4.0 in 2020 and -4.5 in 2050. Figure H.11 demonstrates the low-income population relative to the non-low income population in 2050 within 30 minutes of jobs and higher educational opportunities via transit.

For minority populations, the percentage with transit access to jobs and higher education is not quite as high as low-income with 89.1 percent having access in 2012. The No-Build Scenario projects that access would decrease to about 87 percent in 2020 and remain there through 2050. The 2050 Preferred Revenue Constrained Scenario is projected to improve access to 90.8 percent in 2020 and 91.7 percent in 2050. In terms of a gap for minorities compared to non-minorities, the percentage point difference between minorities and non-minorities goes from -0.9 in 2020 to positive 1.0 in 2050. This means that while minorities will derive less benefit in 2020 for transit access to jobs and higher education compared to non-minorities, minorities are projected to derive greater benefit in 2050. It should be noted that, as with most other transit access measures, low-income and minority populations start with significantly higher access in the 2012 base year than their respective 'non'-populations, and continue to achieve higher access rates through the phase years.

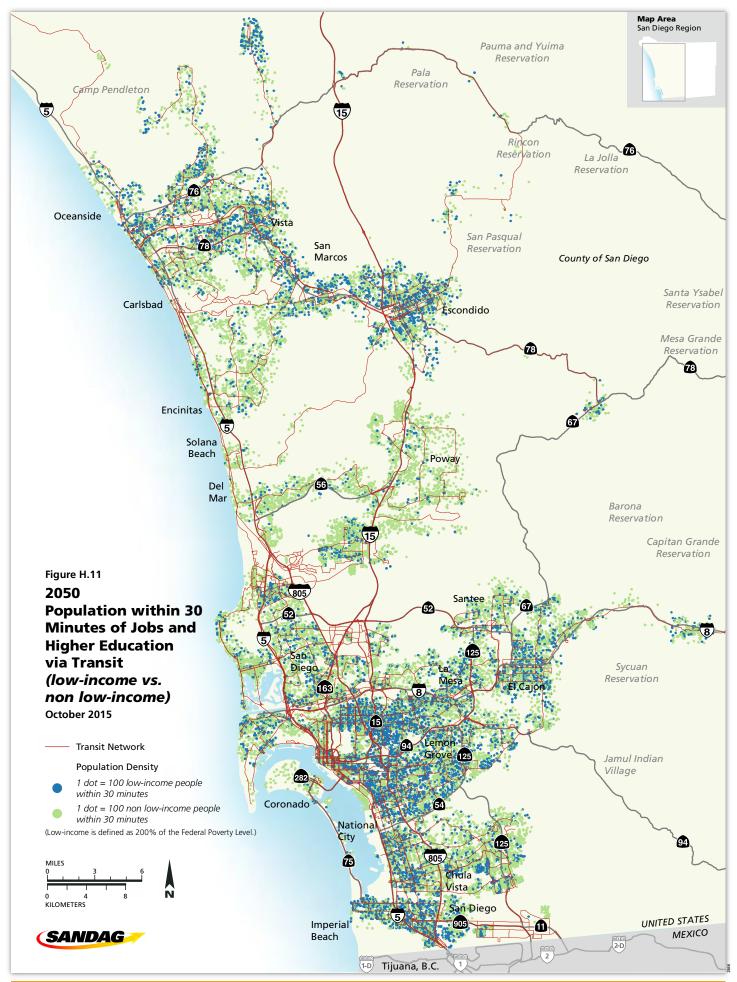


Table H.9 Percent of Population Within 30 Minutes of Jobs and Higher Education Enrollment							
Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Auto							
Low-Income	100%	100%	100%	100%	100%	100%	100%
Non-Low Income	100%	100%	100%	100%	100%	100%	100%
Minority	100%	100%	100%	100%	100%	100%	100%
Non-Minority	100%	100%	100%	100%	100%	100%	100%
Senior	100%	100%	100%	100%	100%	100%	100%
Non-Senior	100%	100%	100%	100%	100%	100%	100%
Transit							
Low-Income	91.5%	89.8%	90.6%	90.7%	91.2%	92.3%	92.3%
Non-Low Income	83.4%	81.8%	81.8%	82.6%	86.4%	86.9%	87.7%
Minority	89.1%	87.4%	87.0%	87.3%	90.8%	91.5%	91.7%
Non-Minority	82.8%	81.1%	81.4%	81.8%	84.8%	84.6%	85.1%
Senior	85.6%	83.8%	83.3%	84.3%	86.2%	86.2%	87.2%

Table H.9.1 Social Equity Calculation for Percent of Population Within 30 Minutes of Jobs and Higher Education Enrollment

84.8%

85.3%

88.2%

88.9%

89.3%

84.6%

86.1%

Percentage Point Difference – Build vs. No-Build

Non-Senior

	2020	2035	2050
Low Income vs. Non-Low Income			
Auto	0.0	0.0	0.0
Transit	-4.0	-4.4	-4.5
Minority vs. Non-Minority			
Auto	0.0	0.0	0.0
Transit	-0.9	1.2	1.0
Senior vs. Non-Senior			
Auto	0.0	0.0	0.0
Transit	-1.4	-1.4	-1.2

Access to Goods and Services

Access to key amenities is critical for everyone. We need to be able to count on the transportation system to take us to the store, to the doctor, to school, to our jobs, to the park to walk the dog or get exercise or fresh air, or to the beach. The following are the results of the indicators for other key amenities that show us how the system performs for disadvantaged populations. The results for access by driving alone or transit are in the tables below but the narrative below focuses on the results for access by transit because access by drive alone was almost 100 percent for all populations. The meaningful measure is transit access to key amenities.

Retail: Low-income access to retail via transit in the base year 2012 is relatively high at just over 80 percent. Projected access for the No-Build Scenario drops to 78.8 percent in 2020 through 2050. The Preferred Revenue Constrained Network is projected to provide slightly more access at 78.9 percent in 2020 increasing to 80.9 percent in 2050. There is no significant difference in access benefits for low-income populations and non-low income populations. In fact the small gap improves over time going from a -3.4 percentage point difference to -2.8 in 2050. This means that the minor gap closes. For minority populations, transit access in the baseline year of 2012 is slightly less than for low-income populations with 75.4 percent having access. For minorities, the No-Build Scenario is projected to drop to approximately 73 percent having transit access across all phase years. The Preferred Revenue Constrained Scenario causes slight improvement, going from 76.1 percent in 2020 to 78.5 percent with access to retail via transit in 2050. In terms of disparity, minorities start with slightly less benefit than non-minorities with the percentage point difference at -0.2 in 2020 and flipping to a positive 2.3 (greater benefit) by 2050.

Table H.10 Percent of Population Within 15 Minutes of Retail							
Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Drive Alone							
Low-Income	99.8%	99.7%	99.8%	99.8%	99.7%	99.8%	99.8%
Non-Low Income	99.6%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%
Minority	99.8%	99.7%	99.9%	99.8%	99.7%	99.9%	99.8%
Non-Minority	99.5%	99.8%	99.7%	99.7%	99.8%	99.7%	99.8%
Senior	99.7%	99.8%	99.7%	99.6%	99.8%	99.7%	99.8%
Non-Senior	99.7%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%
Transit							
Low-Income	80.1%	77.8%	78.7%	77.9%	78.9%	80.2%	80.9%
Non-Low Income	66.1%	65.2%	66.0%	67.6%	68.4%	70.4%	72.1%
Minority	75.4%	73.6%	73.3%	73.8%	76.1%	77.4%	78.5%
Non-Minority	65.8%	64.6%	65.6%	66.3%	67.0%	68.3%	69.0%
Senior	69.4%	69.1%	68.3%	70.3%	70.5%	71.1%	73.6%
Non-Senior	70.9%	69.5%	70.3%	71.0%	72.0%	73.8%	75.0%

Social Equity Calculation for Percent of Population Within 15 Minutes of Retail

Percentage Point Difference – Build vs. No-Build

2020 2035 2050

Low Income vs. Non-Low Income

Auto 0.0 0.0 0.0

Transit -3.4 -4.8 -2.8

Minority vs. Non-Minority

Table H.10.1

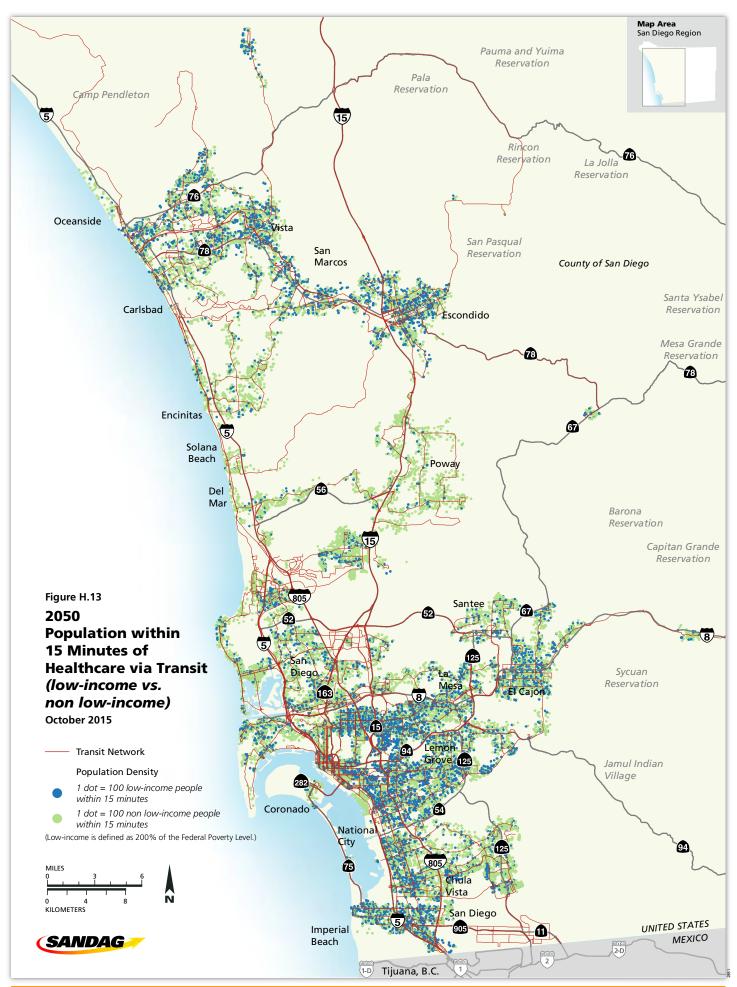
Auto	0.0	0.0	0.0
Transit	-0.2	1.4	2.3

Senior vs. Non-Senior

Auto	0.0	0.0	0.1
Transit	-1.6	-0.9	-0.9

Healthcare: Transit access to healthcare is a very important indicator of social equity, especially for seniors when they lose the option of driving. For seniors, baseline access to healthcare via transit is 68.3 percent in 2012. The No-Build Scenario projects a slight drop from 67 to 66 percent across the phase years. The Preferred Revenue Constrained Scenario projects improved access for seniors from 68 percent in 2020 to 70.5 percent in 2050 (Figure H.12 - Senior Transit Access to Healthcare) derive slightly lower benefit relative to the non-senior population with a percentage point difference of -1.0 in 2020 reducing to -0.7 by 2050. For low-income populations, 79.1 percent have transit access to healthcare facilities as a baseline. The projected access for the No-Build Scenario drops to 75.8 percent having access in 2020 through 2050. The Preferred Revenue Constrained Scenario provides slightly more benefit than the No-Build. In 2020, 76.9 percent have access increasing to 78.3 percent by 2050 (Figure H.13 – Low-Income Transit Access to Healthcare). There is no significant difference found when compared to non-low income populations with the percentage point differences improving slightly from -2.8 in 2020 to -2.4 in 2050. For minority populations the 2012 baseline access via transit is 74.4 percent. The No-Build Alternative is projected to drop to approximately 71.3 percent. The Preferred Revenue Constrained Scenario increases slightly from 74.1 percent in 2020 to 75.4 percent in 2050. The difference is not significant between minority populations and non-minority populations, from -0.8 percentage points in 2020 (slightly less benefit) to a positive 1.4 (slightly greater benefit) in 2050.





Performance Measure 2012 2020NB 2035NB 2050NB 2020RC 2035RC 2050R Drive Alone Low-Income 99.6% 99.0% 99.5% 99.5% 99.0% 99.5% 99.6% Non-Low Income 99.1% 98.4% 99.1% 98.2% 98.9% 99.1% Minority 99.5% 98.6% 99.6% 99.6% 98.4% 99.5% 99.6% Non-Minority 99.0% 98.6% 98.7% 98.6% 98.6% 98.6% 98.6% 99.3% 99.4% 99.0% 99.3% 99.4% 99.0% 99.3% 99.4% 99.0% 99.3% 99.4% 99.1% 99.3% 99.1% 99.3% 99.1% 99.3% 99.1% 99.3% 99.1% 99.3% 99.1% 99.3% 99.1% 99.3% 99.1% 99.3% 70.0% 71.3% 76.9% 78.0% 78.3% 76.4% 75.5% 76.9% 78.0% 78.3% 76.4% 75.5% 76.9% 78.0% 78.3% 76.4%	Table H.11 Percent of Population Within 15 Minutes of Healthcare							
Low-Income 99.6% 99.0% 99.5% 99.5% 99.0% 99.5% 99.6% Non-Low Income 99.1% 98.4% 99.1% 98.2% 98.9% 99.1% Minority 99.5% 98.6% 99.6% 99.6% 98.4% 99.5% 99.6% Non-Minority 99.0% 98.6% 98.7% 98.6% 98.6% 98.7% Senior 99.4% 99.4% 99.0% 99.3% 99.4% 99.0% 99.3% Non-Senior 99.2% 98.6% 99.3% 99.2% 98.4% 99.1% 99.3% Transit Low-Income 79.1% 75.8% 76.4% 75.5% 76.9% 78.0% 78.3% Non-Low Income 65.0% 63.4% 63.3% 65.0% 66.1% 67.4% 69.0% Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.4% Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5%	Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Non-Low Income 99.1% 98.4% 99.1% 99.1% 98.2% 98.9% 99.1% Minority 99.5% 98.6% 99.6% 99.6% 98.4% 99.5% 99.6% Non-Minority 99.0% 98.6% 98.7% 98.6% 98.6% 98.6% 98.6% 98.6% 98.6% 99.3% 99.4% 99.0% 99.3% 99.4% 99.0% 99.3% 99.2% 98.4% 99.1% 99.3% 99.2% 98.4% 99.1% 99.3% 76.4% 75.5% 76.9% 78.0% 78.3% 78.3% 76.4% 75.5% 76.9% 78.0% 78.3% 78.3% 78.3% 78.3% 74.1% 74.4% 69.0% 71.0% 71.3% 74.1% 74.7% 75.4% 75.4% 74.1% 74.7% 75.4% 75.5% 76.6% 66.1% 67.4% 66.4% 66.5% 66.4% 66.5% 66.4% 66.5% 66.4% 66.5% 66.4% 66.5% 66.6% 66.5% 66.5% 66.6% 66.5%	Drive Alone							
Minority 99.5% 98.6% 99.6% 98.4% 99.5% 99.6% Non-Minority 99.0% 98.6% 98.8% 98.7% 98.6% 98.6% 98.7% Senior 99.4% 99.4% 99.0% 99.3% 99.4% 99.0% 99.3% Non-Senior 99.2% 98.6% 99.3% 99.2% 98.4% 99.1% 99.3% Transit Low-Income 79.1% 75.8% 76.4% 75.5% 76.9% 78.0% 78.3% Non-Low Income 65.0% 63.4% 63.3% 65.0% 66.1% 67.4% 69.0% Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.4% Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.4%	Low-Income	99.6%	99.0%	99.5%	99.5%	99.0%	99.5%	99.6%
Non-Minority 99.0% 98.6% 98.8% 98.7% 98.6% 98.6% 98.7% Senior 99.4% 99.4% 99.0% 99.3% 99.4% 99.0% 99.3% Non-Senior 99.2% 98.6% 99.3% 99.2% 98.4% 99.1% 99.3% Transit Low-Income 79.1% 75.8% 76.4% 75.5% 76.9% 78.0% 78.3% Non-Low Income 65.0% 63.4% 63.3% 65.0% 66.1% 67.4% 69.0% Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.4% Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.4%	Non-Low Income	99.1%	98.4%	99.1%	99.1%	98.2%	98.9%	99.1%
Senior 99.4% 99.4% 99.0% 99.3% 99.4% 99.0% 99.3% Non-Senior 99.2% 98.6% 99.3% 99.2% 98.4% 99.1% 99.3% Transit Low-Income 79.1% 75.8% 76.4% 75.5% 76.9% 78.0% 78.3% Non-Low Income 65.0% 63.4% 63.3% 65.0% 66.1% 67.4% 69.0% Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.4% Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.4%	Minority	99.5%	98.6%	99.6%	99.6%	98.4%	99.5%	99.6%
Non-Senior 99.2% 98.6% 99.3% 99.2% 98.4% 99.1% 99.3% Transit Low-Income 79.1% 75.8% 76.4% 75.5% 76.9% 78.0% 78.3% Non-Low Income 65.0% 63.4% 63.3% 65.0% 66.1% 67.4% 69.0% Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.4% Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.4%	Non-Minority	99.0%	98.6%	98.8%	98.7%	98.6%	98.6%	98.7%
Transit Low-Income 79.1% 75.8% 76.4% 75.5% 76.9% 78.0% 78.3% Non-Low Income 65.0% 63.4% 63.3% 65.0% 66.1% 67.4% 69.0% Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.4% Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.4%	Senior	99.4%	99.4%	99.0%	99.3%	99.4%	99.0%	99.3%
Low-Income 79.1% 75.8% 76.4% 75.5% 76.9% 78.0% 78.3% Non-Low Income 65.0% 63.4% 63.3% 65.0% 66.1% 67.4% 69.0% Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.4% Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.4%	Non-Senior	99.2%	98.6%	99.3%	99.2%	98.4%	99.1%	99.3%
Non-Low Income 65.0% 63.4% 63.3% 65.0% 66.1% 67.4% 69.0% Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.4% Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.4%	Transit							
Minority 74.4% 72.1% 71.0% 71.3% 74.1% 74.7% 75.49 Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.49	Low-Income	79.1%	75.8%	76.4%	75.5%	76.9%	78.0%	78.3%
Non-Minority 64.5% 62.3% 62.8% 63.6% 64.6% 65.5% 66.49	Non-Low Income	65.0%	63.4%	63.3%	65.0%	66.1%	67.4%	69.0%
·	Minority	74.4%	72.1%	71.0%	71.3%	74.1%	74.7%	75.4%
Senior 68.3% 66.6% 65.8% 67.3% 68.0% 68.7% 70.5°	Non-Minority	64.5%	62.3%	62.8%	63.6%	64.6%	65.5%	66.4%
	Senior	68.3%	66.6%	65.8%	67.3%	68.0%	68.7%	70.5%
Non-Senior 69.7% 67.7% 67.8% 68.4% 69.8% 71.1% 72.19	Non-Senior	69.7%	67.7%	67.8%	68.4%	69.8%	71.1%	72.1%

Table H.11.1 Social Equity Calculation for Percent of Population Within 15 Minutes of Healthcare							
Percentage Point Difference – Build vs. No-Build							
	2020	2035	2050				
Low Income vs. Non-Low Income							
Auto	-0.2	0.2	0.0				
Transit	-2.8	-4.4	-2.4				
Minority vs. Non-Minority							
Auto	-0.2	0.0	0.0				
Transit	-0.8	1.0	1.4				
Senior vs. Non-Senior							
Auto	0.1	0.1	0.0				
Transit	-1.0	-0.5	-0.7				

Active Parks: The percent of low-income populations with transit access to active parks in the 2012 baseline year is 63.7 percent. For the No-Build Scenario this drops to 60.5 percent from 2020 to 61.8 percent in 2050. The Preferred Revenue Constrained Scenario projects improvement over the No-Build, with 61.6 percent having access in 2020 and 65.6 percent by 2050. There is no significant difference between the low-income and non-low income populations, with percentage point differences of -3.3 in 2020 and -2.3 in 2050. For minority populations, 59.6 percent have transit access to active parks in the baseline year. The No-Build Scenario drops to 57.9 percent. The Preferred Revenue Constrained Scenario projects a slight improvement from 59.8 percent to 61.2 percent. There are no significant differences between minority and non-minority populations with percentage point differences of -1.2 in 2020 and -1.0 in 2050. Finally, the percentage of seniors with transit access in 2012 is 51 percent. In the Revenue Constrained Scenario transit access for seniors goes from 50.9 percent in 2020 to 55 percent in 2050. There is no significant difference between transit access for seniors and non-seniors; the percentage point difference is -0.8 in 2020 and -0.5 in 2050.

Table H.12 Percent of Population Within 15 Minutes of Active Park							
Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Drive alone							
Low Income	99.2%	99.2%	99.1%	99.2%	99.2%	99.1%	99.2%
Non-Low Income	98.8%	98.6%	98.7%	98.6%	98.4%	98.5%	98.6%
Minority	99.3%	99.2%	99.3%	99.3%	99.0%	99.2%	99.3%
Non-Minority	98.4%	98.4%	98.1%	98.0%	98.3%	98.0%	98.0%
Senior	99.3%	99.0%	98.8%	98.8%	99.0%	98.8%	98,9%
Non-Senior	98.9%	98.8%	98.8%	98.8%	98.6%	98.7%	98.8%
Transit							
Low Income	63.7%	60.5%	61.8%	61.1%	61.6%	63.9%	64.6%
Non-Low Income	47.7%	47.2%	48.0%	49.9%	49.7%	51.8%	53.9%
Minority	59.6%	57.9%	57.5%	57.7%	59.8%	60.6%	61.7%
Non-Minority	45.9%	44.5%	45.5%	46.7%	46.5%	48.8%	50.4%
Senior	50.5%	49.4%	49.3%	51.5%	50.9%	52.5%	55.0%
Non-Senior	53.2%	51.9%	52.8%	53.7%	53.9%	56.0%	57.6%

Table H.12.1 Social Equity Calculation for Percent of Population Within 15 Minutes of Active Park Percentage Point Difference - Build vs. No-Build 2020 2035 2050 I ow Income vs. Non-I ow Income Auto 0.2 0.2 0.0 Transit -3.3 -4.5 -2.3 Minority vs. Non-Minority

-0.2

-1.2

Transit Senior vs. Non-Senior

Auto

Auto	0.1	0.1	0.1
Transit	-0.8	0.4	-0.5

Active Beaches: Overall, access to beaches via transit or car is limited and does not significantly improve for anyone with the Preferred Revenue Constrained Scenario. There is no group that exceeds 6 percent transit access or 36 percent auto access to beaches in the whole population. Seniors actually have better access than the other two disadvantaged populations. The social equity calculation shows a difference of -3.6 percentage points in 2020 but trends to parity in 2035 and by 2050 the difference is 4.7 demonstrating a relative benefit to senior transit access to active beaches. For low-income populations, the social equity calculation is positive relative to non-low income, with a percentage point difference of 1.9 in 2020 and 1.0 in 2050. Minority transit access to active beaches relative to non-minorities has a social equity calculation of 5.3 in 2020 meaning minorities derive more relative benefit than non-minorities, and this trend stays positive through 2050 with a percentage point difference of 1.0. There are no significant differences in benefits for disadvantaged populations compared to their 'non'-counterparts, and all disadvantaged populations derive greater benefit by 2050 when comparing No Build to the Preferred Revenue Constrained Scenario.

0.0

-1.9

0.0

-1.0

Table H.13 Percent of Population Within 15 Minutes of Active Beach							
Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Drive alone							
Low Income	29.2%	27.4%	25.2%	25.5%	27.8%	26.1%	27.4%
Non-Low Income	32.7%	30.7%	29.2%	29.2%	31.0%	30.4%	30.8%
Minority	27.5%	25.3%	22.8%	23.3%	25.6%	23.8%	25.1%
Non-Minority	35.9%	34.6%	35.2%	35.7%	35.1%	36.4%	37.3%
Senior	32.2%	31.1%	28.9%	29.1%	31.6%	30.9%	31.1%
Non-Senior	31.5%	29.5%	27.8%	27.9%	29.8%	28.8%	29.6%
Transit							
Low Income	3.0%	3.0%	3.2%	3.0%	3.2%	3.5%	3.4%
Non-Low Income	4.2%	4.1%	4.1%	4.3%	4.3%	4.5%	4.8%
Minority	2.6%	2.5%	2.6%	2.5%	2.7%	2.8%	2.8%
Non-Minority	5.1%	5.2%	5.7%	6.1%	5.3%	6.0%	6.8%
Senior	4.6%	5.2%	4.4%	4.0%	5.3%	4.7%	4.6%
Non-Senior	3.8%	3.6%	3.8%	3.9%	3.8%	4.1%	4.3%

Social Equity Calculation for Percent of Population Within 15 Minutes of Active Beach						
Percentage Point Difference – Build vs. No-		2025	2050			
	2020	2035	2050			
Low Income vs. Non-Low Income						
Auto	0.1	-0.4	2.1			
Transit	1.9	1.3	1.0			
Minority vs. Non-Minority						
Auto	-0.2	1.0	3.0			
Transit	5.3	2.9	1.0			
Senior vs. Non-Senior						
Auto	0.3	3.4	0.6			
Transit	-3.6	-1.1	4.7			

Table H.13.1

Exposure to PM₁₀

A review of the emission data for PM₁₀ for each of the disadvantaged populations (low-income, minority, and seniors) in comparison to their respective 'non'-populations shows no significant differences. All of the percentage point differences for each phase comparing the No-Build Scenario to the Revenue Constrained Scenario for low-income populations in comparison to non-low income populations show a difference of less than 2 percentage points (-0.4 in 2020; -0.4 in 2035, and -1.2 in 2050). PM₁₀ exposure for low-income populations in the 2020 Revenue Constrained Scenario is 8.15 grams per person, in 2035 it is 9.63, and by 2050 it is 10.09. But it is almost the same pattern for the non-low income population. The same pattern also is found for minorities. Thus, the social equity analysis did not disclose any disparate impacts or disproportionate effects for disadvantaged populations in the region. ¹⁶

Table H.14 Average PM ₁₀ Exposure Grams per Person							
Performance Measure	2012	2020NB	2035NB	2050NB	2020RC	2035RC	2050RC
Low-income	8.77	8.27	9.99	10.70	8.15	9.63	10.09
Non low-income	8.22	8.10	9.40	10.25	8.01	9.10	9.79
Minority	8.65	8.46	9.91	10.71	8.35	9.56	10.15
Non-Minority	8.13	7.79	9.15	9.89	7.72	8.87	9.46
Senior	8.34	7.98	9.69	10.19	7.90	9.39	9.69
Non-Senior	8.41	8.16	9.59	10.41	8.07	9.27	9.90

Table H.14.1 Social Equity Calculation for Average PM ₁₀ Exposure (Grams Per Person)						
Percentage Point Difference – Build v	s. No-Build					
	2020	2035	2050			
Low Income vs. Non-Low Income	-0.4	-0.4	-1.2			
Minority vs. Non-Minority	-0.4	-0.6	-0.8			
Senior vs. Non-Senior	0.1	0.2	0.1			

Benefit-Cost Analysis

Vulnerable populations will have increased mobility and better accessibility to transportation alternatives with the investments proposed in the 2050 Revenue Constrained Network Scenario. The benefit-cost analysis (BCA) tool developed for the economic analysis uses the outputs from the transportation modeling to assess and monetize the benefits and costs of the 2050 Revenue Constrained Network Scenario versus a "No-Build" Scenario. This tool can also estimate benefits for sub-populations — such as minorities, low-income residents, and seniors — to gauge the effects of the Regional Plan on social equity for these groups.

The results of this analysis are presented in Table H.15. Averaged over the time period analyzed (2015-2070), low-income (those earning 200 percent of the federal poverty level and below) residents make up 32.5 percent of the population, but receive 36.3 percent of the benefits. That is, low-income San Diegans receive a disproportionately large amount of the benefits from the proposed Regional Plan transportation network. The same holds true for

minority populations; they make up an average of 60.0 percent of the county population, but receive 67.0 percent of the benefits. For seniors (75 and over), the benefits are less than proportional: seniors make up 7.1 percent of the population, but receive only 3.7 percent of the benefits. This is to be expected, however, as most of the benefits accrue to travelers, and seniors travel much less than the population as a whole. For all disadvantaged populations, the average share of population is 70.5 percent and they receive 74.4 percent of the benefits if the Regional Plan. For details on the BCA, see Chapter 4, and Appendix P.

Table H.15	
Benefits to Disadvantaged	Populations

		Benefits to	Benefits to		Disadvantaged
Total		Disadvantaged	Disadvantaged as		Population as
Benefits		Population	a Percentage of	Benefits to non-	Share of Total
(million\$)*	Population	(million\$)	Total	Disadvantaged	Population
\$36,664	Low-Income	\$13,323	36.3%	\$23,341	32.5%
\$36,664	Minority	\$24,565	67.0%	\$12,098	60.0%
\$36,664	Seniors	\$1,358	3.7%	\$35,307	7.1%
\$36,664	TOTAL	\$27,261	74.4%	\$9,403	70.5%

^{*} Not all benefit categories calculated by the BCA tool can be apportioned to specific sub-populations. Time savings for commercial vehicles, emissions benefits, safety benefits, reliability benefits, and operating costs cannot be calculated by sub-populations, and are excluded from this analysis. With those categories, total benefits are \$53.8 Billion.

Issues Raised and Suggestions for On-Going Process Improvement

While developing the framework for the 2050 RTP/SCS, social equity stakeholders raised issues for consideration in the Regional Plan. Many of the issues raised have been addressed in the Regional Plan, while others require further analysis and discussion for ongoing improvement.



Voice in the decision-making process

Stakeholders interested in social equity and environmental issues want to make sure that vulnerable populations have a meaningful voice in the decision-making process. The Regional Plan responded to many of the issues raised in the 2050 RTP/SCS process by creating the CBO Outreach Network. In doing so, SANDAG was able to reach a broader audience of stakeholders, create permanent forums for engaging disadvantaged populations, and have knowledgeable liaisons in a broad range of the communities who could bridge the gap between everyday language and technical jargon.

Nonetheless, this is an iterative process and the social equity stakeholders who participated in the Regional Plan process had some important observations for improving the involvement of underserved communities in future cycles of the Regional Plan, including:

- Consider forming an on-going Social Equity working group to advise SANDAG regarding social equity concerns in regional plans, programs, and projects.
- Provide a decision-making structure and timeframe for input that is accessible to disadvantaged communities.
 Consider holding SANDAG Board meetings in the evening when key decisions are being made and allow for reasonable comment periods to facilitate meaningful input.
- Continue to improve the "feedback loop" to show how community input influences regional planning efforts.
- Continue to improve on closing the digital divide. The digital divide often means that computer-based tools are not always the best way to reach people. Continue to provide opportunities for residents to communicate face-to-face with regional planners, to learn about the planning process and to make meaningful contributions to planning efforts.
- Invest more resources and start earlier in producing outreach materials/techniques that are understandable both in terms of content, format, and language.
- Continue to develop modeling and other tools to improve social equity analysis.

Most of these suggestions were included in the Regional Plan and, to the extent they were not, they will be considered in the development of the next Regional Plan update. In particular, as SANDAG develops the next Public Involvement Plan (PIP) the issue of how to make the decision-making process more accessible to disadvantage populations will be incorporated into the design, as well as exploring more innovative techniques for outreach appropriate for diverse audiences.

In relation to the modeling effort, the Regional Plan is the first time that the Activity-based Model (ABM) was utilized. SANDAG staff is working diligently to expand the use of this tool for an even more enhanced social equity analysis.



Healthy communities

For the 2050 RTP/SCS significant efforts were taken to incorporate public health considerations into the planning and decision-making process. Federal transportation statutes require inclusion of quality-of-life factors in planning documents. (See, for example, 23 USC §135(f)(1)(E)).

SANDAG has coordinated its efforts with the County of San Diego to address health concerns in the region. Adopted by the County of San Diego, the 3:4:50 Principle encompasses three behaviors: (1) tobacco use, (2) poor diet, and (3) no exercise, which leads to the four chronic diseases: (1) heart disease, (2) lung disease, (3) cancer, and (4) type 2 diabetes. These diseases in turn lead to greater than 50 percent of deaths in San Diego County.

To understand better the situation of minority and low-income populations throughout the region with regard to health, SANDAG (under contract with the County of San Diego Health and Human Services Agency (HHSA)) developed The Healthy Communities Atlas as a tool for the Healthy Works program. Released in March of 2012, the Atlas reflects the Healthy Works program's focus on obesity prevention through physical activity and access to healthy foods. A set of Geographic Information System (GIS) tools were used to display environmental factors related to health outcomes based on public health research. The Healthy Communities Atlas documents key indicators for health in the region, including access to healthy food, transit, parks, safety in neighborhoods and other services. At the request of the CBO Outreach Network, the Atlas was converted into an online interactive tool and is now available to anyone to examine their neighborhoods or cities for these health indicators.

The connections between public health and transportation have become ever more evident in recent years. Public Health in Transportation was a major component of the vision for the Regional Plan and incorporated into all elements of the Regional Plan. The County and SANDAG are the first MPO and County to partner on a grant from the Centers for Disease Control (CDC) to integrate public health and transportation. The grant allowed the two agencies to collaborate on a series of projects for the region including Health Benefits and Impacts Assessment, Regional Complete Streets Policy and Implementation, Safe Routes to School Implementation Strategy, Public Health and Wellness Policies for Regional Plans and Regional Monitoring for Physical Activity and Public Health. A public health white paper was prepared for the development of the Regional Plan and health considerations were incorporated into the vision, goals, and objectives. Health metrics were also incorporated into project evaluation criteria, as well as performance measures. The White Paper and the Atlas are tools that SANDAG and all jurisdictions in the region can

review to find health trends, data and methodologies that can be used to consider health impacts in relation to projects and thereby improve the health of the region.

The social equity analysis conducted for the Regional Plan evaluated the 2050 Preferred Revenue Constrained Transportation Network for benefits and impacts of transportation investments on disadvantaged communities in the San Diego region. The performance measures used for this analysis also are related to improved health outcomes in local communities. Improved access to parks, walking, biking amenities, and public transit service should lead to increased physical activity. Equitable investments in transportation infrastructure should improve mobility for the elderly, children, people with disabilities, and households without a car.

Although much progress has been made, there is more that could be done in the future. Social equity stakeholders suggested some of the following measures for continuing to ensure health impacts are considered in regional transportation decision-making:

- Continue to improve methods for evaluating how transportation impacts air quality, noise, asthma, cancer, and cardiovascular disease.
- Continue to increase awareness of how transportation relates to public health.
- Continue to increase awareness of how safety concerns such as connectivity, first and last miles, as well as station amenities and lighting relate to public health.
- SANDAG is committed to continued analysis of, and improvements to, public health for each update to the Regional Plan.

Equity in urban design and development

The San Diego region's land use pattern reflected in The Regional Plan's Sustainable Communities Strategy calls for most of the region's future residential and employment growth to occur near existing and planned public transit facilities in the urbanized western third of the region. When general and community plans and/or rezoning and specific plans occur in the region to allow higher density development, property values can increase and gentrification may occur. The degree to which gentrification occurs and its effects vary widely; challenges cannot be addressed by a one-size-fits-all approach. The types of strategies that can be implemented to reduce the negative effects of neighborhood changes around transit stations and along transit corridors, while capitalizing on the positive effects, are largely pursued by local jurisdictions.

Even so, SANDAG, as a regional planning agency, acts as a regional resource to encourage smart growth that considers social equity issues. SANDAG supports, provides tools for, and invests its funding in efforts to address the following social equity issues in urban design:



Community Cohesion and Inclusionary Design: Studies have shown that low-income and minority communities are intensely affected when the informal social networks that form the basis of their social power are disrupted by development. In 2004, SANDAG adopted the Regional Comprehensive Plan based on the principles of smart growth and later developed the Smart Growth Concept Map, which shows smart growth opportunity areas (SGOAs). All 19 local jurisdictions in the region have at least one SGOA. The Smart Growth Toolkit is a resource for local jurisdictions seeking to encourage walkability, complete streets, and transit-oriented development (sandag.org/smartgrowth). In addition, the TransNet Smart Growth Incentive Program (SGIP) provides funding for transportation-related infrastructure improvements and planning efforts that support smart growth development in Smart Growth Opportunity Areas as shown on the Smart Growth Concept Map (updated October 2014). The goal is to fund comprehensive public infrastructure projects and planning activities that will facilitate compact, mixed use development focused around public transit that will increase housing and transportation choices. The projects funded under this program will serve as models for how investments in infrastructure and planning can make smart growth an asset to communities around the region.

Transit Oriented Development (TOD) Strategy: Communities in the region have embraced TOD as an important framework for organizing future growth. During the 2050 RTP/SCS, social equity stakeholders expressed concern regarding social equity in TOD. One of the policy elements of the Regional Plan was the development of a *Regional TOD Strategy* that takes social equity issues into consideration, particularly those related to affordable housing. This is one of the key issues being addressed in this effort.

SANDAG developed the Regional TOD Strategy to assist communities in developing TOD projects and neighborhoods. The Strategy refers to compact, walkable areas that have easy access to public transit and offer a mix of uses, including housing, retail, offices, and community facilities and gathering spaces. This type of development can help to make the region healthier by reducing greenhouse gas emissions, making it easier to get around by transit, walking or biking, and providing housing and employment opportunities.

The goal of the Regional TOD Strategy is to build on other planning efforts by gathering input and implementation ideas from diverse stakeholders, as well as local and national TOD experts. Their feedback about lessons learned and best practices informed recommendations on ways that the region, local governments, transit agencies, and the private and non-profit sectors can partner to build successful TOD projects.

The Regional TOD Strategy updates the earlier work on the SGOAs and creates prioritized action steps for local agencies and stakeholders. Recommendations relate to topics such as design, parking, land use policy and zoning, infrastructure, financing, and affordable housing. According to growth forecasts, the San Diego region will add nearly one million people, 330,000 homes, and 500,000 jobs by 2050. Organizing future housing and jobs around transit is a critical strategy in preparing for such dramatic change. The Regional TOD Strategy as well as the mobility hub concept discussed elsewhere in this Plan are important tools to realize the vision of sustainable communities.

Jobs/Housing Fit: Another social equity in urban design issue is the "fit" between the types of jobs and the appropriate stock of housing available near those jobs. The issues of jobs/housing balance and jobs/housing fit are addressed in the Regional Housing Needs Assessment (RHNA), which SANDAG prepared in conjunction with the 2050 RTP/SCS. The SANDAG RHNA is consistent with the state's housing element law (Government Code Section 65484(d)(1)-(4)), which requires that the RHNA meet the following objectives:

- Increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner, which shall result in all jurisdictions receiving an allocation of units for low and very low-income households.
- Promoting an improved intraregional relationship between jobs and housing.
- Allocating a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category, as compared to the countywide distribution of households in that category from the most recent decennial United States census.
- Promoting infill development and socioeconomic equity, the protection of environmental and agricultural resources, and the encouragement of efficient development patterns.

Senate Bill 375 requires SANDAG to integrate the preparation of the RTP with the RHNA every other cycle. The RHNA process was conducted for the 2050 RTP/SCS. The Series 12 and Series 13 2050 Regional Growth Forecasts demonstrated that local jurisdictions in the region have adopted plans and zoning ordinances with adequate residential capacity to meet the region's housing needs for the fifth housing element cycle. The planning efforts embodied in the RHNA and local housing elements have moved the region and local jurisdictions toward ensuring a mix of housing types and affordability, thus providing workers of all income levels with opportunities to live close to work. Meeting these objectives is a key focus in the development of the RHNA methodology and the RHNA plan, which was adopted in conjunction with the 2050 RTP/SCS.

Success in the actual production of affordable lower income housing units in the region, however, requires funding sources and regulatory measures adopted by local jurisdictions in addition to state and federal programs that support the construction of affordable housing such as the new funding available through the Affordable Housing and Sustainable Communities program being administered by the California Strategic Growth Council (SGC) and the federal and state Low-Income Housing Tax Credits allocated by the California Tax Credit Allocation Committee (TCAC).

Fair fares for transit

Many stakeholders concerned with social equity raised the issue of the affordability of public transportation, indicating an accessibility issue. For example, some youth in the San Diego region cannot access transit to get to school, work, or extra-curricular activities. There are several contributing factors to this lack of access: the cost is prohibitive, the fare structure is confusing, and many young people do not have previous experience using transit. High transit costs cause many young people to walk or bike through dangerous intersections or neighborhoods with high crime rates. Young people in disadvantaged communities have to travel long distances to access jobs and may not be able to access career path jobs at all without access to transit. This lack of access to transit for people at a young age leads to long-term underutilization of the transit system and poses a challenge to increasing ridership in the future.



Other regions have addressed this challenge by making transit free for all young people or all students of public schools; cities like Tempe, Phoenix, Pittsburg, Nashville, San Francisco, Boston, New York, Portland, and London. The San Diego Unified School District has begun a pilot project and has seen increases in ridership and student safety as a result. "The Free Muni for Youth" Plan in San Francisco caused a dramatic increase ridership, 41 percent increase according to the San Francisco Budget and Legislative Analyst. In London, the study commissioned for their program saw the average number of bus trips made by 12-17 year olds increase by 35 percent following the introduction of the "Zip Card."

Programs like these are seen as long-term strategies for decreasing the San Diego region's greenhouse gas emissions, in addition to their effects on public health and economic opportunities. Transit budgets, however, have experienced significant reductions over the past several years with no additional funding arriving to fill the budget gaps. Social equity stakeholders have suggested that SANDAG:

- Seek an additional funding source for transit
- Consider a fare policy change as part of any future transit-focused ballot initiative

SANDAG constantly searches for additional funding sources for transit and will continue to do so. Plans also are in the works to evaluate the potential success of a ballot measure to provide additional transit funding. In the meantime, SANDAG has taken steps to ease the economic burden on low-income transit riders. For example, several types of passes (including a 30-day pass) that can be bought on any day of the month to reduce the burden on people with limited incomes who may not have the cash to buy a pass at the end of each month. In addition, a 14-day pass was introduced to reduce the initial cash outlay but still offer a significant savings over daily cash fares. Also, the sale of day passes was introduced on buses to enable users to make more trips in one day for a low fixed price. The *TransNet* sales tax ordinance also provides a subsidy to transit operators to enable them to sell senior/disabled/Medicare passes at a 75 percent discount and youth passes at a 50 percent discount. These are among the most generous discounts in the nation and well above the 50 percent cash fare discount for seniors, disabled and Medicare patients mandated by the federal government.

Data and Sources

The information in this Appendix H relies upon a variety of sources, including the following:

- U.S. Census Bureau
- 2010 Census (foundation for base year population and housing in the Growth Forecast)
- SANDAG 2012 Current Estimates (demographic/socioeconomic)
- 2050 Regional Growth Forecast Series 13 (demographic/socioeconomic)

Since 1972, SANDAG has produced long-range forecasts of population, housing, and employment that are used as a resource by elected official, planners, academics, and the general public. Among other applications, the Series 13 Regional Growth Forecast provides the land use pattern for the Regional Plan. In addition to population, jobs, and housing, the forecast also provides detailed information on race, ethnicity, and various socioeconomic indicators such as income. The data, together with information from the ABM, forms the foundation for social equity analysis and provides the data used to identify and analyze disadvantaged populations. For more information on the Series 13 Regional Growth Forecast, see technical Appendix J.

Wherever possible, SANDAG uses the smallest level of geographic detail available for analysis and mapping. In previous transportation plans, as discussed above, with the adoption of the new ABM, social equity analysis can now be done at a more precise level – the household. With ABM's powerful technology, it is now possible to identify every household that qualifies as "disadvantaged." For example, ABM can tell us the number of households in the San Diego region that are low-income, in addition to providing information on each household's location, valuable socioeconomic detail, and travel behavior (for more information on the ABM, see Appendix T).

Endnotes

- ¹ National Cooperative Highway Research Program (NCHRP), *Effective Methods for Environmental Justice Assessment*. Report 532. Washington, DC: Transportation Research Board. 2004. pg. 5).
- ² Minority means a person who is: Black (having origins in any of the black racial groups of Africa); Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race); Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).
- These documents include, but are not limited to: U.S. Department of Transportation Order on Environmental Justice (1998); Federal Highway Administration/Federal Transit Administration (FHWA/FTA) Issue Memoranda on Implementing Title VI Requirements in Metropolitan and Statewide Planning (1999; 2007); Executive Order 13166 Improving Access to Services for Persons with Limited English Proficiency (2000); FTA Title VI Circular 4220.1A; and California's Environmental Justice Strategy AB 1553 (2001).
- ⁴ Executive Order 12898, Section 1-101.
- ⁵ California Department of Transportation, Desk quide: Environmental Justice and Transportation Planning Investments. January 2003.
- Eleven groups were selected as a result of the first request for proposals (distributed December 2012; contracted February 2013; three additional CBO Partners were selected in the second round (distributed November 2013; contracted March 2014). Two CBO Partners (Senior Community Centers; Mt. Empire Collaborative) decided not to renew their contracts for FY15. The contracts were developed to cover the entire RTP process with contract amendments and revised scope for each fiscal year. The awarded contracts were for \$20,000 each per Fiscal Year through the approval of the Plan.
- ⁷ Three more CBO Partners joined the CBO Outreach Network in 2014.
- The California Office of Environmental Health Hazard Assessment (OEHHA) has developed a modeling tool for evaluating multiple pollutants and stressors in communities, called the California Communities Environmental Health Screening Tool (CalEnviroScreen). The purpose of CalEnviroScreen is to identify the areas of the state that have historically faced multiple pollution burdens so programs and funding can be targeted appropriately toward improving the environmental health and economic vitality of the most impacted communities. For this region, CalEnviroScreen shows that minorities disproportionately reside in highly impacted communities while whites are over-represented in the least burdened communities. The maps for the region from CalEnviroscreen provide a picture of the communities in the region that currently have the highest pollution burden (see CalEnviroscreen 2.0 results). CalEnviroscreen is intended to provide a snapshot of existing conditions based on historical data, not to predict future conditions for disadvantaged communities. ACS data was used to create existing conditions maps depicting the specific socio-economic variables important to the CBOs.
- ⁹ Community Planning Area (CPA) boundaries were approximated using Census Tracts, and the data was summed from Census Tract-level American Community Survey 2009-2013 5 year estimates.
- ¹⁰ The U.S. Equal Employment Opportunity Commission (EEOC), Department of Labor, and Department of Justice uses the four-fifths (or 80%) rule when enforcing disparate impact prohibitions in Title VI of the Civil Rights Act. See 29 CFR §1607.4(D) (A selection rate for any race, sex, or ethnic group which is less than four-fifths (or 80%) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.)
- "Particulate matter," also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. epa.gov/pm
- The size of particles is directly linked to their potential for causing health problems. EPA is concerned about particles that are 10 micrometers in diameter or smaller because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. epa.gov/pm
- ¹³ The CT-EMFAC 5 model which has a horizon year of 2035 was used for this performance measure. At the time of this analysis Caltrans had not released a revised model based on EMFAC 2014 which has a horizon year of 2050.
- ¹⁴ Percentage point difference between each phase No-Build v. Build.
- ¹⁵ For this performance measure, a negative result indicates that the population (minority, low-income or senior) is benefitting relative to the 'non'-population.
- It should be noted that this social equity analysis is based on the overall network of projects and programs in the Regional Plan. More detailed analyses of air quality and health risks, which use scientific methodologies and data sources beyond what was used for this social equity analysis, and which break the transportation network down into smaller segments, can be found in the Environmental Impact Report for the Plan.



Mission:

Serving San Diego since 1976, Able-Disabled Advocacy's (A-DA) mission is to provide vocational skills, training, and educational advancement opportunities for youth and adults with disabilities to assist them in finding employment and overcoming barriers to personal and financial self-sufficiency.





Community Served

A-DA provides workforce development services to San Diego County's low-income residents who have barriers to employment. A-DA's main office is located in the City Heights community of San Diego. We also offer vocational training and employment services at three other A-DA offices located in San Diego's Central and South County regions. Affiliated organizations with which A-DA collaborates are located throughout the county.

Outreach Strategies

A-DA serves a diverse population consisting of youth (18 to 24) and adults with disabilities, the homeless and veterans. During our extensive outreach activities, we identified and established a cooperative network of related groups and individuals that we interacted with on an ongoing basis to garner input for San Diego Forward: The Regional Plan. A-DA then conducted workshops for these organizations and associations, which included the National Federation of the Blind, the San Diego Brain Injury Foundation, the Blind Community Center and the National Alliance on Mental Illness. We continued to update them on the data collection process and made additional presentations, as needed. A-DA also created on-line surveys for additional input and circulated materials to our partner organizations to encourage greater individual participation in the process. We also translated the initial transportation survey from SANDAG into Braille.

- Develop new technologies for greater access to transit
- Improve existing transit infrastructure to better serve the disability community
- Increase accessible transit to employment centers
- Increase the affordability of transit for lower income individuals

Alliance for Regional Solutions



Mission:

The mission of the Alliance for Regional Solutions is to convene stakeholders across all sectors to create and advocate for practical solutions to emerging community needs in the North County region.





Community Served

The Alliance for Regional Solutions is a collaboration of nonprofits, all cities of the North County San Diego and the County of San Diego. The populations we serve are located primarily in North County San Diego. Because our member organizations are from a variety of different nonprofits, we serve many different communities of concern including low income, minorities, disabled and seniors.

Outreach Strategies

Our main outreach strategy has consisted of meetings with small focus groups to explain what San Diego Forward is and collecting input on their thoughts and ideas about public transportation in San Diego. We have also been collecting surveys to poll our communities regarding their ideas on public transportation and also broad priority areas in the San Diego region.

We held a major forum in August 2014 with members of the Alliance to discuss the Alternative Transportation Network scenarios and to get input for San Diego Forward.

- Public transportation needs to be more affordable.
- Make it easier and safer for people to have accessibility to public transportation in their neighborhoods.
- Conveniences of public transportation- improve how bus, train, bike and pedestrian routes connect to each other.
- Protect the environment by reducing pollution caused by transportation and preserve parks, open spaces and
 hearher.
- Improvements to the SR78 need to be made sooner than later. This freeway is one of the busiest in the county and the congestion is getting worst each year.

BAME Renaissance Community Development Corporation



Mission:

Our mission is to strengthen residents and businesses in Greater Logan Heights neighborhoods through community empowerment, education, economic growth, and housing development.





Community Served

BAME strives to strengthen and revitalize one of San Diego's most economically distressed communities – the Greater Logan Heights area. The Greater Logan Heights neighborhood represents five small sub-communities that each has a unique history and experience –Memorial, Stockton, Grant Hill, Sherman Heights and Logan Heights. This community is bordered by the I-5 to its west and south, the I-15 to its east, and the SR-94 to its north.

Over 95% of the area's estimated 14,347 residents are people of color; Mexican-Americans (80%) and African Americans (11%) represent the two largest racial and ethnic populations. Recent analysis of 2010 Census Data indicates that while poverty is being reduced in most neighborhoods in the San Diego region, it continues to persist and has increased in this area of the City of San Diego.

Outreach Strategies

BAME CDC offers Greater Logan Heights residents and small business owners an array of social services and educational workshops, and encourages their active participation in neighborhood revitalization projects. To recruit diverse community stakeholders to participate in its programs, BAME CDC conducts widespread outreach by developing partnerships with other community based organizations, sharing information about our services at various community events, grassroots organizing through door-knocking and flyer distribution, and social media strategies. Through these approaches, BAME mobilizes hundreds of residents and local small business owners to participate in events, projects, and campaigns. In this way, BAME CDC helps residents expand their knowledge of issues that impact their community, and provides opportunities for residents to participate in community planning initiatives.

- Need for safer and cleaner streets, sidewalks, and transit stops to facilitate walkability and access to transit. Improvement should include better lighting, fix cracks in sidewalks, more trash cans, etc.
- More direct North-South transit routes connecting Barrio Logan with communities north of SR-94
- More funding allocated to bike and pedestrian infrastructure projects- to support people getting to transit more safely, and make transit riding more attractive (also more bike racks on transit)
- More efficient and faster transit service- less wait time, more direct routes, more frequent service (especially early morning, nights, and weekends)
- More highly visible crosswalks and stop signs at high traffic intersections



Mission:

Casa Familiar's mission is to allow the dignity, power, and worth within individuals and families to flourish, by enhancing the quality of life through education, advocacy, service programming, housing and community economic development.





Community Served

Casa Familiar was founded in 1968 directing its efforts to providing services to residents of South San Diego and in developing organizing strategies that would change the community's status from a stepchild to a full partner in determining its own future. San Ysidro is perhaps San Diego's most visible community, lying at the International Border and the first stop in the pathway of millions of vehicular trips and pedestrians every year. Today, San Ysidro has 29,564 residents for a total of 7,485 households. The population is 91.4% Latino 1.8% African American and 3.1% Asian. It has a median income almost 50% less than the California median income.

Outreach Strategies

When called on, all 36 staff become the outreach mechanism to reach San Ysidro residents. Casa Familiar utilizes door-to-door outreach; advertises to its clients through its 30+ programs and services; social media followers on Facebook and twitter; and our community outreach database. The organization also publishes Bi-lingual (English-Spanish) articles and announcements in its bi-monthly newsletter <u>Borders/Fronteras</u> with a circulation of 3,000 copies.

For the past 10 years, Casa Familiar has conducted *San Ysidro Sin Limites*, community resident bi-lingual (English-Spanish) workshops, providing residents with the opportunity to design their community. Through the *Sin Limites* strategy, community residents designed a redevelopment strategy for the oldest community neighborhood which considered: transportation, density, infrastructure, commercial zone, and recommended mixed-use areas, as well as connecting schools and public services through pedestrian infrastructure. The best results come from a personal, face to face invitation through the Casa Familiar programs.

- Public transportation fares are too high
- Lack of frequency and service on the weekends, especially on Sundays
- Lack of connectivity to hospitals or other parts of the county
- Poor infrastructure for active transportation
- Issues of bad air quality

City Heights Community Development Corporation Mid-City Community Advocacy Network



Mission:

Enhance the quality of life In City Heights by working with our community to create and sustain quality affordable housing & livable neighborhoods & foster economic self-sufficiency.





Community Served

Located in the Mid-City area of San Diego, City Heights is a cluster of neighborhoods that encompasses one of the most densely-populated and underserved communities in the urban core of San Diego. Forty-five percent of households earn less than \$30,000, as compared to 19 percent region wide. Additionally, the median age of City Heights is 28 years, with a significant portion of the population being under the age of 18 (36 percent of the City Heights population). Many households are without a vehicle, making these households dependent on transit and other alternate commuting methods. Additionally, City Heights is home to a number of refugee and minority populations; more than 30 different languages are spoken in the community.

Outreach Strategies

A crucial outreach method is the one-on-one meeting with a leader or resident to gain a deeper understanding of the person's perspective, while improving trust in the process. These meetings also build to the public workshops because they serve as a recruitment tool and a chance for individuals to enter the workshop better prepared to offer formal input. We collaborate with existing community groups to leverage outreach opportunities. Public workshops take place at regularly scheduled meetings hosted by our partners to reach a diverse group of residents, in a setting where they are already comfortable. Food and translation are provided to overcome barriers to participation. In addition, in our ongoing outreach and advocacy work, we act as community listeners in informal conversations around the neighborhood, at community celebrations, and in our advocacy projects.

- Transit fare affordability for students and low-income riders
- Phasing of transit projects community needs them sooner
- Long transit commutes need for more connectivity
- Active transportation infrastructure investments
- Overburdened share of health costs related to highway expansion

Chula Vista Community Collaborative



Mission:

Enhancing community partnerships to develop and The Chula Vista Community Collaborative (CVCC) serves the implement coordinated strategies and systems for south part of San Diego County with a special focus in future generations.

Chula Vista. The CVCC serves the entire city of Chula Vista and is





Community Served

The Chula Vista Community Collaborative (CVCC) serves the south part of San Diego County with a special focus in Chula Vista. The CVCC serves the entire city of Chula Vista and is open to anyone. Due to the demographics in the area; most of the families and residents served by CVCC are Hispanic and live in the west part of Chula Vista, with 67% of families living in the 91910 and 91911 zip codes. In addition, 98% of families are low income families.

Outreach Strategies

CVCC conducts outreach and community involvement techniques through various methods. One way to conduct outreach is through our network of five Family Resource Centers (FRC). As clients come in to the FRC, they are provided with information about upcoming workshops or events and are personally invited to participate. In addition, our more targeted outreach is through our *Promotoras*, the use of *Promotoras* is a best practice model of peer education. *Promotoras* go out into the community and set up outreach and information tables to conduct one-on-one education and personally share information, educate the residents, and invite them to participate/engage.

Outreach is conducted based on program needs and usually around events or action items. Residents want information but also an action they can take, inviting them to community events for example. The effectiveness of the CVCC's outreach model is that it's both culturally and linguistically appropriate. Outreach is done in the community by people who reflect the community.

- Access to transportation
- Cost of transportation
- Safety of transportation
- More access out of Chula Vista and within Chula Vista (east-west)
- · Public transportation evening and weekends

El Cajon Collaborative



Mission:

Through our collaboration, El Cajon's children, youth and families are safe, empowered and thriving.





Community Served

spans 14 square of valley floor surrounded by rolling foothills.

The valley is home to the highest percentage of multi-family rental dwellings in East County, and houses the county's highest concentration of families on public support. El Cajon has experienced rapid growth over the past two decades and now the disproportionate number of low-income, transient, immigrant and refugee families with high needs significantly impacts the community's resources. The ethnic diversity among new residents includes immigrants from Mexico, a growing population of Kurdish Muslims and the second largest Chaldean (Iragi Christian) population in the United States. In 2012, 40.4% of housing units were multi-unit structures and 40.3% of the households spoke languages other than English with approximately 26 languages or dialects represented.

Outreach Strategies

The El Cajon Collaborative has coordinated with several Resident Leadership Academies (RLA) in partnership with San Diego County HHSA. The RLA curriculum helps residents from disadvantaged communities gain knowledge and tools to make positive change within their communities and take on a community improvement projects. The Collaborative has worked with these groups throughout the planning process for San Diego Forward, with a particular focus on social equity. Over one hundred surveys have been administered by our Resident Leaders to collect information from our families on access to healthy foods, jobs, physical activity and transportation. The El Cajon Collaborative is also a partner in the East Region Collaborative Network (ERCN) with the other community collaboratives including, Lemon Grove, Santee, La Mesa, Spring Valley and Mt. Empire. Outreach through ERCN enabled the Collaborative to host several Transportation Equity forums throughout the East Region including El Cajon, Spring Valley, Mountain Empire and Santee. We also outreached to a robust youth leadership development program known as El Cajon, "the box" in Spanish, is the largest city in San Diego's east region with a population of 100,000. The city from throughout East County, the vast majority of who reflect these disadvantaged communities. Each community is diverse and has large populations of seniors, immigrants and lowincome families.

- Restoration of bus service routes that were cut during the recent recession. These routes ensure access from the unincorporated communities of Spring Valley and Lakeside and cities of El Cajon and Santee to regional transit centers with affordable fares.
- Transit services that offer access to employment centers, better-than-minimum-wage jobs, and higher education within 30 minutes of East County unincorporated communities of Spring Valley and Lakeside and cities of El Cajon and Santee.

The International Rescue Committee in San Diego



Mission:

The International Rescue Committee (IRC) responds to the world's worst humanitarian crises and helps people to survive and rebuild their lives. Founded in 1933 at the request of Albert Einstein, we offer lifesaving care and lifechanging assistance to refugees forced to flee from war or disaster. At work today in over 40 countries and 23 US cities, the IRC restores safety, dignity and hope to millions who are uprooted and struggling to endure. The IRC leads the way from harm to home.





Community Served

The IRC in San Diego is ideally located to serve refugees, asylees and immigrants communities with offices in the City Heights neighborhood of San Diego and in the City of El Cajon. IRC excels in serving vulnerable, low-income families from within and beyond the refugee community. Each year, IRC serves more than 7,000 individuals through a range of economic development, youth, health, food security, and immigration programs. These families come from more than 90 countries and are overwhelmingly very low-income with more than 80% reporting less than \$1,500 a month in earned income.

Outreach Strategies

The IRC in San Diego has strong connections with the refugee and immigrant populations throughout San Diego County. Because IRC serves more than 7,000 people a year, and has been resettling refugees in San Diego since 1975, the agency is able to easily seek input from marginalized residents of San Diego County who are directly affected by transportation decisions.

In particular, IRC reaches into Citizenship Education Programs, Vocational ESL classes, and other programs in order to get input into the regional transportation planning process. Input is requested through a variety of different methods including in-class discussions, surveys, and one-on-one conversations with participants. The IRC has also translated SANDAG materials into Arabic for those participants with limited English speaking and reading abilities, as well as held workshops in Arabic.

- Ease and Accessibility to public transportation to job centers in North and South County from East County
- Universal symbols for signs along bus and trolley routes
- Higher frequency transit options
- More reliable and regular public transportation options as well as language appropriate transit planning resources

Jacobs Center for Neighborhood Innovation



Mission:

The mission of the Jacobs Center for Neighborhood Innovation is to foster a thriving community envisioned and realized by its residents.





Community Served

The Jacobs Center for Neighborhood Innovation (JCNI) serves the diverse residents of Southeastern San Diego, specifically the Diamond District. Named for the area's diamond-shaped business improvement district, the Diamond Neighborhoods cluster is in the heart of San Diego's 4th City Council District. Home to more than 88,000 residents, it includes the communities of Chollas View, Emerald Hills, Lincoln Park, Mountain View, Mount Hope, North Encanto, Oak Park, South Encanto, Valencia Park, and Webster. The Diamond District has a population of 86,979 and is composed of 53% Hispanic, 21% Black, 14% Asian, 8% White, and 3% other.

Outreach Strategies

JCNI engages existing community organizations in the Diamond district to participate in the SD Forward planning process. We have partnered with Urban Collaborative, *Platicando con mi Gente*, Grandparents Connection, Writerz Blok and many other organizations and community groups. We also use our online capacity to reach out and invite residents to the events and activities as well as to share information.

- · Fares, frequency, and accessibility
- Connectivity to job centers high skilled and low-skilled jobs
- Youth access free bus pass

Linda Vista Collaborative: Bayside Community Center



Mission:

The Linda Vista Collaborative offers a forum for public deliberation among the stakeholders of Linda Vista, promoting collaboration among them with the goal of improving the quality of life for all.





Community Served

The Linda Vista Collaborative (LVC) serves the Linda Vista neighborhood in San Diego's North Central Region. Linda Vista is bounded by the I-5 to the West, Friars Road (South), the 163 (East), and Tecolote Canyon and Mesa College Drive (North). Linda Vista is incredibly diverse, with at least 15-20 languages spoken by residents. According to 2010 Census data provided by SANDAG, Kearney Mesa, which includes Linda Vista and surrounding areas, had a population of 151,208, consisting of 55.7% White residents, 22.1% Hispanic, 13.1% Asian and Pacific Islander, 4.4% Black, and 4.1% all other.

Outreach Strategies

LVC approaches outreach through several different mediums. Bayside support staff shares information regarding SANDAG and the Regional Transportation Plan with the Collaborative, both in person and via email. The Collaborative has also featured guest speakers on transportation, gathering the community's feedback on biking and walking safety.

Bayside support staff also hosted several public workshops on the Regional Transportation Plan over the course of the Plan, including several in all Spanish and all Vietnamese, reaching more than 100 residents. In addition, support staff uses its Resident Leadership Academy (RLA) as an outreach tool to engage current and graduated students (Resident Leaders in Action). This outreach includes discussions and workshops to residents about transportation, inform and educate transportation safety, and the connection between community members and regional planning, as well as through hands on activities (e.g. walkability audits and land use projects) to encourage residents to think realistically and creatively about transportation.

- Increasing access via public transportation to supermarkets and green spaces
- Increasing bus frequency
- Creating and/or improving the bus routes connecting Linda Vista to areas of employment, including, but not limited to, Sorrento Valley, Solano Beach, and Rancho Penasquitos
- Improving bus stops by providing benches and, if needed, shelters
- Connecting trolley/street car through Linda Vista

Mountain Empire Collaborative (Mountain Health & Community Services)



Mission:

To improve and maintain the health and wellbeing of the whole person by providing access to high quality healthcare and community services.





Community Served

Today, Mountain Health expects to serve over 8,000 unduplicated patients in 2014, most of who will be living at or below the federal poverty level. Mountain Health is the collaborative body in the Mountain Empire Region, which represents 1,000 square miles of high-desert communities stretching from Alpine to Imperial County, and from the Mexican border to the southern Laguna Mountains. Mountain Health serves its communities by providing health and wellness services, a stable patient-provider relationship and welcoming environment, and education and services through our people and partnerships.

Outreach Strategies

Early efforts introduced the concept of Regional Planning and addressed transportation-related challenges and visions. We had booths at two highly attended community events that drew people from all across our Mountain Region communities. We held three senior workshops in Descanso, Camp Potrero, and Campo. We also held an evening region-wide event at the Camp Community Center. These workshops used three guiding questions in a table discussion manner to facilitate dialogue.

- Seniors and our region's youth are most impacted by the lack of mobility
- Lack of transportation connectivity further impacts the health conditions of our region's population
- Limited transportation options coupled with limited access to food is a challenge
- Limited access to technology does not allow our region to be informed on para-transit programs
- Reopening the volunteer driver reimbursement program





Mission:

The mission of the North Coastal Prevention Coalition (NCPC) is to reduce the harm of alcohol, tobacco, marijuana and other drugs in the cities of Carlsbad, Oceanside and Vista through community action, education, support and collaboration, Vista Community Clinic (VCC) serves as the fiscal agent for NCPC grants and contracts, and its mission is to advance community health and hope by providing access to premier health services and education for those who need it most.





Community Served

NCPC serves the cities of Carlsbad, Oceanside and Vista. VCC is a Federally Qualified Health Center with five locations throughout Vista and Oceanside serving almost 100,000 patients annually throughout north San Diego County. The community served for SANDAG outreach on the regional plan has been concentrated in low-income, minority communities with limited English proficiency; youth groups; and organizations that work with underserved communities in the cities of Oceanside and Vista.

Outreach Strategies

A variety of approaches have been used to conduct outreach, including one on one conversations with stakeholders and community leaders; presentations to existing community groups in both English and Spanish; and community workshops with residents conducted in Spanish. Partnerships with different organizations and key leaders, particularly in the faith community, facilitated the process for scheduling presentations and convening residents for workshops. All workshops and presentations were held in the evening in an environment where participants felt safe and comfortable to share their opinions. In addition, workshops were culturally and linguistically appropriate and child care and food was provided.

- Affordability: fare price is expensive/transportation is unaffordable; special ride passes for students and low-income families are needed
- Frequency: weekend transportation should be added and should be efficient and speedy
- Access: walking distance to transit stops is too far from where residents live; more stops should be added
- Safety: environment at Sprinter stations is unsafe
- Social equity: focus resources in communities that are in greater need

Operation Samahan



Mission:





Community Served

To build healthier, happier communities together. At Operation Samahan, our emphasis lies particularly in serving the indigent, low-income, uninsured and underserved individuals and families. Two of the communities we serve are National City and the unincorporated rural Lincoln Acres, which are located in the Southern Region of San Diego County. These communities are highly diverse, consisting of new immigrants, fragmented families, persons unfamiliar with American institutions and medical procedures, marginalized, uninformed about resources and rights, non-literate, monolingual in Spanish or Tagalog, at risk youth , seniors, and low income Asian/Pacific Islander and Hispanic populations. The population in this region is roughly 413,670 where a majority of the population our organization serves are below 100% federal poverty level.

Outreach Strategies

Operation Samahan engages the community in a regular meeting-workshop to talk about transportation and environmental issues. We have also incorporated PowerPoints on San Diego Forward and regional planning during our health classes and monthly meetings. We also have partnerships with the different ethnic media/newspapers where we may be able to write about transportation concerns and challenges.

- An efficient public transit system that will lower travel and wait time for users.
- A cost-effective public transit system that will lower fares for low income seniors, students, children and mothers.
- A highly reliable and accessible public transit system that will follow strictly published schedules and routes.
- A safe, walkable and "bike-able" community.
- Accessible transportation for low-income residents to get to their healthcare facilities.



Mission:

Serving Seniors mission is helping seniors in poverty
Senior Seniors is the leading provider of services to San Diego
live healthy and fulfilling lives.

County's culturally diverse low-income at-risk seniors with





Community Served

Senior Seniors is the leading provider of services to San Diego County's culturally diverse, low-income, at-risk seniors, with our main facility in Downtown San Diego. Our programs help seniors live on their own as long as possible in order to avoid having to move to a nursing home or other assisted living facility unless absolutely necessary. We strive to foster a sense of community among these seniors, easing the isolation in which they live and promoting positive life choices that afford them the dignity they deserve.

Outreach Strategies

Serving Seniors initial outreach focused on introducing SANDAG, the Coordinated Plan, and the concept of the Regional Plan to older adults and stakeholders. We met with seniors at congregate nutrition sites in San Diego, Lemon Grove, La Mesa, San Marcos, and Escondido. We directed outreach of the Regional Policy Workshops to stakeholders at the Regional County Action Networks (Sandi - CAN and ECAN) and the Hunger Advocacy Network. For our East regional workshop, we targeted public libraries, The Springs Residential building, and the La Mesa Older Adult Enrichment Center. We utilized surveys to introduce our senior clients to SANDAG as a regional planning agency and created Transportation Assessment questionnaires to identify their transportation priorities and initiate conversations during workshops at Senior Centers in Mira Mesa, Carlsbad, and La Mesa.

- Lack of bus service on the weekends
- Lack of frequency and bus stops
- Buses do not run late enough
- Public transportation fares are too high