This Chapter focuses on interrelationships of population growth, land use, and the environment to the region’s mobility. Will our future growth simply be business as usual, or is there a smarter way? Can a regional approach to land use patterns, and a greatly enhanced transit system combine to improve mobility and livability? If so, will everyone benefit, or will there be winners and losers?

A BETTER WAY TO GROW

Using a baseline transportation network, alternative land use scenarios were evaluated against the Plan’s smart growth land use. The analysis yielded similar measures of transportation system performance, but smart growth saved rural lands, resulted in less interregional commuting, and provided the most housing opportunities within the region.

MOBILITY 2030 is based on the long-range population, housing, and employment projections of the preliminary 2030 Cities/County Forecast. This forecast assumes that the region will encourage more and more smart growth development over time. To that end, the forecast identifies potential smart growth areas in nearly every jurisdiction.

The City of San Diego’s forward-thinking City of Villages concepts are incorporated in the forecast. The City of Chula Vista, which has long supported the smart growth elements of the Otay Ranch master plan, identifies several other areas of the city where they believe smart growth development and redevelopment makes sense. The County’s general plan update, GP2020, includes changes to land use plans and densities that will help to reduce urban sprawl and preserve open space in the backcountry.

These are the major players so far, but all of the 18 cities and the county have made some level of commitment to smart growth, which are reflected in the forecast used for MOBILITY 2030. This represents a significant change from the past forecast, which contained smart growth assumptions in the form of future increases in residential and employment densities around transit focus areas, but for which the jurisdictions had made no commitments.

SANDAG is committed to smart growth as well, and among other actions, will create a five-year, $25 million incentive program for smart growth pilot projects. Grant funds will be made available to all jurisdictions for projects that incorporate concepts such as the integration of transportation and land use, or the revitalization of community centers that includes making an area more conducive to

SANDAG is committed to smart growth and will create a five-year, $25 million incentive program for smart growth pilot projects.
mixed land uses, transit, walking, and biking. SANDAG’s Regional Planning Committee and Transportation Committee, along with working groups of planning and public works directors and other local agencies and interest groups, will craft the details of this incentive program.

If the program proves successful, it could be extended and expanded. Over time, the SANDAG Board of Directors may wish to commit substantially more discretionary funds toward fostering smart growth development in the region.

By definition, smart growth development helps to achieve four of MOBILITY 2030’s seven policy goals. It improves Livability by making neighborhoods more walkable and, with proper design, more aesthetic. It puts people closer to jobs and transit, thereby reducing sprawl and increasing the region’s Mobility and Sustainability. And, by providing true choices in housing types and making transit service available to that housing, it helps to support the Equity goals.

Figures 5.1 and 5.2 show four ranges each of population and employment densities, respectively, per quarter square mile in 2030. Figure 5.3 displays smart growth focus areas (combinations of population and employment densities) in the region in the year 2030.

Regional Comprehensive Plan
The REGION2020 Growth Management Strategy was developed and launched in conjunction with the last RTP. The Strategy was a first step toward informing elected officials and the general public about growth issues in general and illustrating specific ways that the region could grow in a smarter, more sustainable manner. REGION2020 also provided jurisdictions with an opportunity to make their own commitments to smart growth.

REGION2020 was not intended to be a one-size-fits-all approach to growth management. It was always recognized that the region’s jurisdictions, and the communities within the jurisdictions, have different needs and priorities.

However, the land use plans and policies within the individual jurisdictions do have a cumulative impact on the region as a whole. REGION2020 was intended to be a framework that the jurisdictions could tailor to improve their own livability, while at the same time enhancing that of the region. Growth and change will continue in the region over the next several decades. All jurisdictions can make positive contributions toward preparing for that change.

REGION2020 is now evolving into the Regional Comprehensive Plan (RCP), which will build upon the Strategy’s smart growth goals and principles. It will serve as the smart growth framework for strengthening the relationship between local plans and policies and regional plans and policies as well as between land use and transportation plans.
Figure 5.1
2030 POPULATION DENSITIES
San Diego Urbanized Region
April 2003
Persons Per Quarter Square Mile
- 0 to 1,500
- 1,501 to 3,000
- 3,001 to 4,500
- Over 4,500
Figure 5.2
2030 EMPLOYMENT DENSITIES
San Diego
Urbanized Region
April 2003

Employees Per Quarter Square Mile

- 0 to 1,500
- 1,501 to 3,000
- 3,001 to 4,500
- Over 4,500
Figure 5.3
2030 SMART GROWTH
April 2003
Population and Employment Densities Per Quarter Square Mile

Employment Density per 1/4 Sq. Mile

Low    Medium   High

Population Density per 1/4 Sq. Mile

Low    Medium   High

MILES
0  3  6

KILOMETERS
0  4.83  9.6

SANDAG
Implementation of MOBILITY 2030 requires coordination with the region’s local land use plans and policies. For example, creating efficient and cost-effective transit routes and service levels depends on appropriate residential and employment densities, particularly in our urban areas. Central to resolving our transportation dilemma is addressing our region’s affordable housing crisis, building new communities and rebuilding older ones around mixes of land use, public transit, walking, and biking, and providing other needed infrastructure to support smart growth development.

The current land use plans need to be better connected to these objectives. First through MOBILITY 2030, and later the Regional Comprehensive Plan, the land use-transportation connection will be strengthened where opportunities exist.

MOBILITY 2030 includes all of the local agencies’ smart growth commitments. Preliminary analyses indicate that although the addition of these smart growth areas results in fairly minimal impacts on the region’s overall transportation system performance in the near term, they are clearly a step in the right direction. Adding more such land use changes over time could indeed improve future performance of the transportation system. This process will be facilitated through iterative, ongoing updates of the local plans, the RTP, and the RCP. The Regional Comprehensive Plan will provide the structure for connecting local land use plans and transportation investments so that we can better meet our future needs.

INTEGRATING TRANSIT

In the San Diego region of today, as in many urban areas of the western United States, the distribution of homes, offices, schools, retail stores, and other major activity centers and the transportation network that connects them, have been shaped primarily by our dependence on the automobile. The land uses and transportation networks in our region are widely dispersed compared to some other regions of the country.

We cannot sustain our historical patterns of land use and build enough roadways to keep up with projected increases in motorized travel. Congestion in urban areas will generally worsen over time unless options are available that allow people to get out of their single occupant vehicles, especially during peak travel periods.
MOBILITY 2030 envisions vastly improving regional transit service through the implementation of the Regional Transit Vision (RTV), adopted by SANDAG in November 2001. The RTV is a joint effort by SANDAG, the Metropolitan Transit Development Board (MTDB), and the North San Diego County Transit Development Board (NCTD) to make public transit the first choice for many of our trips. The Plan recognizes that transit, however, is not for every area and every trip.

The RTV calls for transit to be integrated into many of our communities and neighborhoods, with the design and location of transit stations serving as central activity centers. The RTV envisions a network of convenient, reliable, fast, and safe services that interconnect the region. Neighborhoods and communities will be improved and strengthened by providing the facilities we need to make mobility through transit use, biking, and walking more convenient, faster, and safer. These include a better mix of land uses accompanied by pleasant, tree-lined sidewalks, design standards that emphasize the human scale, and streets that encourage slower but more smoothly flowing automobile traffic.

Local jurisdictions need to establish such neighborhood and community centers with a mix of retail, office, service, and residential uses. These centers of moderate to higher densities will encourage walking as a major travel option for access to jobs and services as well as to transit. The result will be shorter trips overall, with a higher proportion of them made within the neighborhood. Such transit-oriented land uses are critical to improving livability and maximizing the number of people with access to transit.

The region’s cities and the county have identified a number of potential neighborhood and community centers that have been incorporated into the land use assumptions used in MOBILITY 2030. Our local jurisdictions, by power of their land use authority, will play a significant role in creating these people-friendly activity centers. With sufficient population and employment, these areas will serve as key locations for transit stations.

Other commitments on the part of local jurisdictions are needed. Local jurisdictions must work with Caltrans, SANDAG, MTDB, and NCTD to implement appropriate transit priority measures that will allow transit to bypass congested roadways and intersections. These could include signal priority, dedicated transit lanes, or grade-separated intersections.
The transportation agencies must do their part as well. Coordination and cooperation among SANDAG, Caltrans, MTDB, NCTD, and the local jurisdictions to better integrate transit with land use are essential. Several key travel corridors in the region are currently under study as showcase projects for the high quality transit services contained in the Regional Transit Vision. Public outreach and involvement programs are planned to demonstrate to the public that these transit services are unlike anything that is currently available. It is important that these showcase services be implemented within the next few years so that people can see and experience a new kind of vehicle, a new kind of station, new sources for transit information, and a new way of providing public transit services.

AIR QUALITY

The federal Clean Air Act requires the Environmental Protection Agency to set national air quality standards. The State of California has adopted even more stringent standards. Although the region now meets the federal one-hour standard for ozone (one of the main components of smog), we remain a “non-attainment area” by the stricter state standards.

Under federal and state air quality regulations, special requirements in non-attainment areas ensure that proposed transportation activities - plans, programs, and projects - do not cause new, or contribute to existing air quality problems. Compliance with these regulations is referred to as “transportation conformity,” which requires analyses that demonstrate that forecasted emissions are within healthy air quality limits. The air quality conformity analysis for the Plan is included in Appendix C.

Cleaner Air

The San Diego region’s primary air pollution problems are caused by ozone, also known as photochemical smog. Emissions from cars, power plants, chemical plants, and other sources cause smog. Pollution transported from the Los Angeles air basin also adversely affects our region’s smog levels.

In spite of large increases in vehicle miles traveled over the past two decades, the region’s air quality has actually gotten better over time. Figure 5.4 displays the downward trends in air pollution levels in the region since 1980. There were no exceedances of the federal one-hour ozone standard in the San Diego air basin in 1999, 2000, and 2002. The region exceeded the federal standard on two days in 2001, compared with 12 days in 1995 and 87 days in 1980. Days exceeding the more stringent state standards also declined over the same period.
Improvements from the transportation sector are primarily the result of advances in technology. The elimination of lead in gasoline, lower fuel volatility, and the advancement of emissions control systems have significantly reduced air quality emissions, including reactive hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx).

Continued Commitment to Better Air
Air quality remains an important concern for the region. Federal and state standards are safeguards against the adverse health effects of pollution. MOBILITY 2030 reaffirms the region’s commitment to maintain air quality standards. The integration of smart growth development combined with the investments in public transit, managed/high occupancy vehicle, pedestrian, and bicycle facilities will help lessen dependency on motor vehicle travel, which in turn, will benefit the region’s air quality.

FIGURE 5.4—DAYS EXCEEDING OZONE CLEAN AIR STANDARDS—SAN DIEGO AIR BASIN

* pphm – parts per hundred million
SOURCE: SAN DIEGO AIR POLLUTION CONTROL DISTRICT
ENVIRONMENTAL JUSTICE

Environmental Justice is defined 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. SANDAG’s plans, projects, and programs comply with the principles of environmental justice and all associated federal and state requirements.

Environmental Justice encourages better land use decisions, improves access to jobs, helps promote good air quality, and strengthens neighborhoods. It also supports community involvement in regional planning and programming through improved communications and active engagement with the process.

Promoting Public Involvement
In order to avoid any adverse impacts of the RTP on minority\(^1\), low income, or other populations at risk of adverse impacts, SANDAG is undertaking a program to promote community involvement in the planning process. Through its expanded community outreach, SANDAG is attempting to learn of the community’s needs for improved transportation and listen to proposals for accomplishing the improvements.

A public outreach program began prior to the release of the preliminary draft MOBILITY 2030. Appendix B provides additional information about the public outreach activities. Through this program, SANDAG Directors and staff members have participated in community events throughout the region to discuss transportation needs with residents. SANDAG continued this program throughout the planning process.

To remain in contact with the community and open to its comments, SANDAG has a number of committees and working groups to advise it on transportation and transit plans and programs. Comments from the members have guided SANDAG’s Plan development and provided valuable information from the community.

SANDAG will continue to seek out community information through its speaker’s bureau and at community meetings, forums, and events. SANDAG maintains an extensive Web site of information and invites public communications through e-mail, phone, and attendance at meetings.

SANDAG continues its program of promoting the use of public transit and invites the low income community, especially those who are transit dependent, to communicate with SANDAG on their needs to access jobs, school, and personal business locations. With the 2003 consolidation of SANDAG with the planning departments of the region’s transit districts, this effort will be enhanced.

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\(^1\) Minority groups include African-American, Asian, American Indian or Alaskan Native, and Native Hawaiian or Other Pacific Islander. In addition, persons of Hispanic ethnicity are considered a minority group.
There are 18 Native American reservations and 17 tribal governments in the San Diego region. A specific outreach effort is being made to these sovereign governments to ensure that they have access to the planning process, and that the transportation needs of the tribal members and the residents of the reservations are considered in the Plan development. On October 11, 2002, SANDAG held the first ever Tribal Governments/SANDAG Board of Directors Summit to promote cooperation between SANDAG and the Tribal Governments. Additional summits will be held to continue the dialogue between the governments.

Recently, SANDAG conducted a quantitative evaluation to understand the extent to which benefits or adverse impacts of proposed transportation projects and policies affect minority and low income populations. Geographic Information System (GIS) methods were used to analyze demographic, socio-economic, and transportation data. The primary purpose of this analysis was to determine whether a proposed transportation improvement strategy would result in disproportionate negative impacts to minority and low income populations. If that were the case, the proposed improvements would be evaluated to minimize unfavorable impacts. The results of this analysis did not show substantive disproportionate effects. Additional information is provided in Technical Appendix 5.

Population and Ethnicity
The San Diego region is an ethnically diverse area, and it will become more so by 2030. Just ten years ago, the non-Hispanic White population of the region was 65 percent of total population. Census 2000 data show that non-Hispanic Whites now constitute 56 percent of the population, continuing to decline to 41 percent by 2030. Hispanics comprise 27 percent of the region’s population today and will make up 39 percent of the population by 2030.

Between 2000 and 2030, the Asian/Other population will increase from 11 percent to 15 percent. The Native American population, which is a portion of the Asian/Other population, will remain steady at about one percent of the region’s total population. The share of Black/African American population will remain at five percent to six percent.

Population and Age
The median age of the population of the San Diego region is increasing. In 1990, the median age was 31 years, increasing to 33 years in 2000. In 2030, median age is expected to increase to 36 years. In 1990, the percent of children under 18 years of age was 26 percent, the same percentage reported in the 2000 Census. By 2030, children under 18 years of age are expected to account for only 21 percent of the population.
Income and Other Factors

In 1999, the region’s median household income as reported by the U.S. Census Bureau was $47,067, with 12 percent of the population of the region living below the federal poverty thresholds. Comparable figures for 1989 were $35,000 median household income and 11 percent of the population below the poverty thresholds. By 2030, the median household income is predicted to increase to $72,000 (in 1999 dollars).

Other characteristics of the region’s population of concern to Environmental Justice programs include the following:

- In 2000, 33 percent of the region’s population spoke a language other than English at home.
- 21.5 percent of the population was foreign-born.
- Persons with disabilities accounted for 18 percent of the non-institutionalized population.
The following actions support the Plan's Land Use-Transportation Connection Chapter recommendations.

### LAND USE & ENVIRONMENT

<table>
<thead>
<tr>
<th>Proposed Actions</th>
<th>Responsible Parties</th>
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<tbody>
<tr>
<td><strong>Smart Growth and the Regional Comprehensive Plan</strong> – The following proposed actions support the RTP goals of Accessibility, Livability, Sustainability, and Equity.</td>
<td></td>
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<tr>
<td>1. Support the preparation and implementation of the Regional Comprehensive Plan, and update local general and community plans and zoning codes to encourage smart growth development and to strengthen the implementation of the Regional Comprehensive Plan.</td>
<td>Local jurisdictions</td>
</tr>
<tr>
<td>2. Support legislation that provides low-cost loans and/or tax incentives to developers of smart growth projects; that helps provide housing for all; and that addresses fiscal reform issues, consistent with smart growth principles and regional strategies.</td>
<td>SANDAG and local jurisdictions</td>
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<td>3. Develop design guidelines that encourage aesthetically pleasing high-density housing.</td>
<td>Local jurisdictions</td>
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<td>4. Establish a five-year, $25 million pilot program to provide incentives for integrating transportation and smart growth development.</td>
<td>SANDAG</td>
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<tr>
<td><strong>Integrating Transit</strong> – The following proposed actions support the RTP goals of Mobility, Accessibility, Livability, Sustainability, and Equity.</td>
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<td>5. Integrate local land use plans and policies with smart growth and the Regional Transit Vision (RTV) principles and goals.</td>
<td>Local jurisdictions</td>
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<td>6. Prepare RTV design guidelines to permit transit facilities to be successfully integrated into community and neighborhood centers, and identify areas where future transit stations can be located to best integrate with activity centers to maximize transit ridership.</td>
<td>SANDAG and local jurisdictions</td>
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<td>7. Revisit the RTV annually and compile a progress report on efforts to implement the vision.</td>
<td>SANDAG</td>
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<td><strong>Air Quality and Conformity</strong> – The following proposed actions support the RTP goal of Sustainability.</td>
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<td>8. Implement the Regional Air Quality Strategy (RAQS) with the assistance of SANDAG where appropriate, and ensure that transportation plans contribute to the implementation of the RAQS and conform to the current State Implementation Plan (SIP).</td>
<td>APCD and SANDAG</td>
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<td>Proposed Actions</td>
<td>Responsible Parties</td>
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<tr>
<td><strong>Air Quality and Conformity</strong> - The following proposed actions support the RTP goal of Sustainability.</td>
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<td>9. Review and update the Transportation Control Measures (TCM) Plan for Air Quality for consistency with changing goals and policies. Any revisions to the TCM Plan would be submitted to the APCD for inclusion in mandated updates of the RAQS and the SIP.</td>
<td>SANDAG and APCD</td>
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<td>10. Encourage local jurisdictions to implement smart growth strategies, including the APCD’s Air Quality/Land Use Guidelines.</td>
<td>SANDAG</td>
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<tr>
<td><strong>Environmental Justice</strong>—The following proposed actions support the RTP goals of Accessibility and Equity.</td>
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<td>11. Seek comments from minority and low income communities in planning and programming efforts to ensure that plans and programs do not adversely affect the communities.</td>
<td>SANDAG</td>
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<tr>
<td>12. Work with the region’s transit operators to ensure that transit services are available to minority, disabled, elderly, and low income persons so that they have access to services, employment, and schools.</td>
<td>SANDAG</td>
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