TRANSPORTATION
Moving People and Goods

2030 VISION

We have many convenient transportation choices. Fast, frequent, and reliable public transit services interconnect our communities, and our major transit centers are integrated with housing, retail shops, food courts, shade-covered benches, and well-maintained restrooms. More of our residents who have cars opt to leave them at home and families need fewer cars per household. Overall, it’s easier and more convenient to get around by walking, biking, and using transit. As a result, many children walk or bike to school, as we used to do when we were younger.

Many of our existing regional freeways, highways, and major roadways have been expanded and include an extensive managed lane network for transit and carpools. These systems are linked to the international airport, ensuring effective access to world markets. Roads, rails, and vehicles are better managed with technology, which increases public safety. In-road sensors and cameras help detect traffic incidents and slowing. Automated systems notify traffic-response teams in real-time and electronically adjust ramp meters and traffic signals to moderate traffic flow.

Despite nearly three decades of population and employment growth, the average commute time is less than 30 minutes, and traffic congestion in key corridors has improved. By better linking transportation and land use decisions in the past, more people now live close to their jobs and leave their cars at home. As a result, more people have additional leisure time and less travel-related stress.

INTRODUCTION

There was a time when rush hour was just that—an hour in the morning and an hour in the evening. Today, rush hour lasts at least two to three times as long. Frustrated commuters are spending more time than ever in their cars or on buses—time that erodes the quality of their lives, decreases their productivity, and pumps more pollutants into the air.

That’s just one reason why transportation plays a pivotal role in the Regional Comprehensive Plan. This initial RCP focuses on the relationship—or lack thereof—between regional transportation plans and local land use plans and policies. Planning and building great places to live, work, and play is only half the job. We need to think about how we get to and from those places; how we can do it smarter, faster and easier, and in a way that will foster future growth and prosperity in the region.
This chapter of the RCP seeks to develop a transportation system that better connects our communities and efficiently moves both people and goods.

EXISTING SETTING

It’s a fact of life in modern society: people are traveling more. Like most major metropolitan areas in the nation, the San Diego region has not been able to keep pace with the public’s demand for daily travel. Growth in travel consistently has outpaced growth in population and employment over the past two decades, and this trend is projected to continue through 2030. Roads and freeways are clogged. In fact, many of the region’s major transportation facilities are operating at or beyond their capacity.

The increasing amount of travel and its consequences depend on many factors, including who lives where (residential locations), who works where (employment locations), and what’s built where (land uses). Our lifestyles and the state of the economy also play key roles.

Between 1990 and 2000, the percentage of San Diego region residents who drove alone to work increased, while commuting by carpool, transit, and all other modes decreased or stayed the same (see Figure 4B.1). This increase in solo commuting can be attributed, in part—to the continuing increase in two-worker households—which in turn, has increased the need for car trips. It is also a function of the fact that more households can afford to own two or more cars. The availability of plentiful, low-cost parking also has played a factor. And, of course, cultural factors play a part—Californians have always cherished the status, independence and convenience associated with car ownership.

FIGURE 4B.1—COMMUTING TO WORK – 1990 vs. 2000 CENSUS

In 1990, people living in the region made 13 million trips a day by car, truck, bus and train. Today, we make an estimated 15 million daily trips. That number is expected to reach more than 20 million daily trips by 2030.

Figure 4B.2 below compares the percentage change since 1980 in travel (measured in vehicle miles traveled, or VMT), population, and employment. Growth in travel consistently has outpaced growth
in population and employment over the past two decades. This trend is projected to continue through 2030. Potential factors affecting growth in VMT include the shift to solo commuting and demographic and economic factors, such as increases in two-worker households and household vehicle ownership. The completion of critical links and the widening of roadways in our regional transportation system post-1980 also are likely factors influencing VMT growth.

**FIGURE 4B.2—GROWTH VEHICLE MILES TRAVELED, POPULATION, & EMPLOYMENT**

Of all trips taken by all transportation modes, the average length is five miles. Most of the highway travel—73 percent—is non-work related. Work travel comprises 27 percent. Work trips tend to be longer than non-work trips. Today's average work trip length is 10.5 miles, compared to 4.5 miles for the non-work trip.

Figure 4B.3 shows average daily trips by hour of the day and trip purpose. Work trips make up the largest portion of travel demand during the morning and afternoon peak periods, although there are large shares of other trips (e.g., shopping, recreation, etc.), particularly in the afternoon hours. Morning trips tend to be commuter trips, going directly from home to work. Evening trips involve a greater variety of origins and destinations, causing the evening peak period to spread out over a longer period of time. School trips constitute the smallest shares throughout the day.

**FIGURE 4B.3—AVERAGE DAILY TRIPS BY HOUR AND TRIP PURPOSE**
Peak travel demand during short periods of the day—such as rush hours—strains the regional transportation system. But during off-peak times, there’s more than enough capacity on our roads. As bad as it seems here, traffic congestion in the San Diego region is slightly better than in other metropolitan areas around the country. A recent nationwide study found that the typical traveler in the San Diego region experienced an average of 25 hours of traffic delays in 2001, compared to an annual average of 26 hours of traffic delays among the country’s top 75 metropolitan areas.1

The average commute time in the region grew by only three minutes between 1990 and 2000, indicating that people make personal adjustments and change their departures to keep commute times reasonable. But the result is a peak period that lasts longer every morning and afternoon. To prevent our traffic congestion problems from worsening, we must reduce travel demand and provide attractive and convenient alternatives to solo commuting, especially during peak travel periods. We must also find ways to adequately fund all of our needed transportation improvements.

EXISTING PLANS AND PROGRAMS

Here’s what is being done to address our regional transportation needs.

Regional Transportation Plan

In March 2003, the SANDAG Board of Directors approved MOBILITY 2030—the Regional Transportation Plan (RTP). MOBILITY 2030 is the blueprint to address the challenges of getting around; challenges made harder by our region’s growth. This $42 billion plan covers public policies, strategies, and investments to maintain, manage, and improve the regional transportation system through the year 2030.

MOBILITY 2030 was developed around four main components: Land Use, Systems Development, Systems Management, and Demand Management. Each component has a unique, yet interdependent, role in improving mobility.

MOBILITY 2030 includes new and better connections to more efficiently move people on buses, trolleys, trains, and cars. The plan encourages smart growth urban design to promote pedestrian movements as well. The plan also gives new meaning to the term “information superhighway,” taking advantage of technological advances that provide drivers and transit riders with real-time travel conditions during rush hours when most of our traffic congestion occurs. When implemented, the Mobility Network improvements (Figure 4B.4) will transform the region’s highway and roads network into a robust system with more carpool lanes and buses integrated with new high-quality regional transit services. The plan includes a flexible roadway system, which can be used by transit and high occupancy vehicles (HOVs), to improve the movement of people and goods through the region.

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1 Texas Transportation Institute, 2003 Urban Mobility Study
Figure 48.4
2030 MOBILITY NETWORK
Adopted March 2003

- Transit
- Managed/HOV Lanes
- General Purpose Lanes
- Freeway Connectors
- HOV Connectors

MILES
0 2 4 6
KILOMETERS
0 4.83 9.6

SANDEG
Since much of rush hour demand is driven by the need to commute to and from work and school, MOBILITY 2030 completes and upgrades our existing highway network. The plan also looks at incentives that will make it more desirable to ride transit, carpool, or vanpool during peak hours, or bike or walk to work or school. In our fast-paced world, saving time is a real and powerful incentive for encouraging these more sustainable travel choices.

MOBILITY 2030 serves as the transportation component of the RCP and supports the RCP’s vision to promote smarter, more sustainable growth. Implementation of MOBILITY 2030 requires regional transportation planners and local land use planners to work together.

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.

Transportation investments can be particularly important to low income communities. While most people still use the automobile to reach a job site, the availability of good transportation choices, such as affordable public transit, can mean the difference between employment and unemployment for many hovering on the fringes of poverty. Transportation investments create more opportunities for low income workers, and also make under-served communities more attractive to outside investment and growth.

The Regional Transportation Plan is updated every three years. The vision, goals, policy objectives, and actions developed with this first Regional Comprehensive Plan will drive the next update of MOBILITY 2030 in 2006, setting the stage for future transportation decisions.

Key components in MOBILITY 2030 and other planning efforts include the Regional Transit Vision, the Short-Range Transit Plan, the Congestion Management Program, and the Regional Transportation Improvement Program, discussed below.

Regional Transit Vision

MOBILITY 2030 envisions better trolley and bus service through the Regional Transit Vision (RTV). The RTV’s goal is to make public transit competitive with solo driving during peak periods. It envisions a network of convenient, reliable, fast, and safe transit services that crisscross the region, providing commuters with more options.

Our local jurisdictions will play a significant role in creating communities that support the RTV. MOBILITY 2030 recognizes that transit improvements need to be focused in areas with compatible land uses that support an efficient transit system. The Urban Form chapter expands on this close relationship. Transit is not for every area and every trip.
Two key concepts of the RTV are:

- Integrating transit into our more populous urban communities,
- Surrounding transit with supportive land uses.

Bus and trolley stations could serve as hubs not only for transit, but shopping, employment and recreation, as well. Local jurisdictions should plan for a dynamic mix of land uses near transit including homes, offices, and retail. These mixed use neighborhood and community centers of moderate to higher densities will encourage walking and bicycling 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.

The cleanest technology available for our transit systems should be pursued as more people live and play near transit stations and corridors.

Additionally, particular attention should be paid to urban form. Local jurisdictions should strive to create pleasant, tree-lined sidewalks; design standards that emphasize the human scale; and streets that encourage slower, smooth flowing vehicular traffic. To help make this happen, SANDAG in June 2002 adopted model pedestrian design guidelines that can be incorporated into local land use and transportation policy documents, ordinances, regulations, and street-design guidelines.²

Supportive transit services also must provide circulator services within these communities and connect them to our larger employment centers and schools. Such transit-oriented land uses are critical to improving livability and maximizing the number of people with access to transit.

As part of MOBILITY 2030, the region’s cities and the County of San Diego identified a number of potential neighborhood and community centers that were incorporated into the MOBILITY 2030 land use assumptions, although more land needs to be set aside for this type of development. Redevelopment and infill of existing urban areas also must occur to realize the RTV’s potential.

Preliminary analyses indicate that while local smart growth commitments used in the MOBILITY 2030 result 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 over time is expected to improve future performance of the transportation system.

MOBILITY 2030 identifies current and potential users of transit. Regional transit is important to many seniors and persons with disabilities. Approximately 14 percent of the San Diego region’s population is age 60 and older. Based on national surveys, about 18 percent of our population has a disability affecting their life activities. Most seniors and persons with disabilities drive or ride in private cars or vans, but many others need specialized transportation. These needs are met by transit and paratransit services, mostly in the urbanized areas of the region.

² Source: Planning and Designing for Pedestrians - Model Guidelines for the San Diego Region; SANDAG, June 2002.
All public transit vehicles are accessible to persons using wheelchairs. Many buses have either a “kneeling” feature, where the bus can be lowered closer to the curb so that a special-needs person can board more easily, or are “low floor” so the passenger has one or no steps to climb to enter. The Coaster commuter rail cars are “low floor,” and new trolleys will be easier to board.

Curb-to-curb paratransit or van shuttles are available for people with disabilities who can’t use public transit. Federal law and other regulations govern who can use this service and how often. In addition to public transit services, many nonprofit social and health agencies provide limited transportation for their clients.

The RTV also promotes priority measures that will allow transit to bypass congested roadways and intersections. These could include traffic signals that allow buses to go first, dedicated transit lanes, or grade-separated intersections that use overpasses or underpasses to eliminate traffic conflicts at intersections.

SANDAG and its transportation partners are evaluating several potential venues to showcase the RTV’s high-quality transit services. Demonstrating these showcase services within the next few years will give people a firsthand look at a new kind of vehicle, a new kind of station, new sources for transit information, and a new way of providing public transit services.

Short-Range Transit Plan

While it is important to develop new transit services to support the region’s growth, it is equally important to maintain and optimize the existing system to improve the quality of service for current riders. We are faced with hard decisions on how best to balance the vision of transit in the future with the fiscal and operational realities of today.

The Short-Range Transit Plan (SRTP) lays out a strategy for balancing the short-term needs associated with managing existing transit services, while beginning to implement the long-term regional transit vision identified in MOBILITY 2030. As such, the SRTP provides a framework for transit system development over the next five years.

SANDAG is now responsible for transit planning, programming, and construction in the region. In February 2004, SANDAG adopted the first consolidated SRTP for the San Diego region, detailing planned transit service improvements for fiscal years 2004 to 2008. The new SRTP provides an opportunity for consolidated transit planning throughout the region, reflecting the goals and direction for service development as described in MOBILITY 2030.
The SRTP serves five primary purposes. The plan:

- Outlines the goals and objectives for transit service planning and development, based on the Regional Transit Vision;
- Provides an evaluation of current and future travel demand and the existing transit system, and identifies deficiencies and gaps in service;
- Identifies transit service, program, and policy changes to address identified travel demand, deficiencies, and gaps in service;
- Provides guidance in the preparation of SANDAG’s Regional Transportation Improvement Program, as well as state and federal grant applications; and
- Coordinates and guides the Transportation Development Act (TDA) claims approval process and the Metropolitan Transit System (MTS) and North San Diego County Transit Development Board (NCTD) budget development processes.

The SRTP supports the vision of MOBILITY 2030 by providing a short-term (five-year) plan for transit system adjustments and enhancements. As a revenue-constrained plan, the SRTP recommends specific service, operational, and capital improvements that balance the goals of maintaining a productive and cost-effective transit system with implementing enhancements envisioned in MOBILITY 2030. The short-term nature of the SRTP allows SANDAG the opportunity to annually adjust investment priorities between service maintenance and enhancements based on system monitoring, available funding, and operational constraints.

**Congestion Management Program**

In 1990, California voters approved Proposition 111, which increased the state sales tax to fund road and transit improvements. The measure also required urban areas to prepare and regularly update traffic Congestion Management Programs (CMP). SANDAG is the designated Congestion Management Agency (CMA) for the San Diego region and must update the CMP every two years. The SANDAG Board of Directors adopted the most recent update, the 2002 CMP, in January 2003.

The CMP takes the temperature of our regional transportation system, develops programs to address traffic congestion, and better integrates transportation and land use planning. The CMP focuses on two main activities: (1) addressing existing congestion through regular roadway monitoring and figuring out ways to streamline traffic flow, and (2) identifying and mitigating future congestion resulting from new development. SANDAG, Caltrans, and the local jurisdictions implement the CMP through the following:

- **Deficiency Plans** - Through regular roadway monitoring, we can identify congestion “hot spots” where delays and travel speeds are below the required CMP standards. Working together, SANDAG, Caltrans, and local jurisdictions are responsible for adopting deficiency plans
that address existing congestion. These plans identify the causes of congestion, potential solutions, and establish funding mechanisms for improvements that help manage congestion.

- Enhanced CEQA Review - The CMP recognizes that local land use decisions may contribute to traffic congestion. To address future congestion, local jurisdictions must take their review processes a step further, conducting enhanced California Environmental Quality Act (CEQA) review for large development projects (generating 2,400 or more average daily trips or 200 or more peak period trips). In these cases, local agencies must look at the potential problems on a regional level and find ways to minimize them, to the extent feasible.

The 2002 CMP proposals go well beyond standard road improvements. They emphasize a wide range of non-traditional strategies that focus on near-term, low-cost efforts, such as transportation demand management (rideshare programs, transit pass subsidies, flexible work hours, telecommuting, etc.), transportation system management (signal synchronization, peak period parking restrictions, bicycle paths, etc.), and project design guidelines to encourage walking, bicycling, ridesharing, and transit use. Many of these strategies are already employed by local jurisdictions to help reduce the local impacts of new development projects. These strategies, if used consistently and effectively, can help local jurisdictions better address new development impacts at the onset, reducing the need for more capital-intensive regional solutions in the future.

Additional research for the CMP has developed three new tools: a Congestion Mitigation Strategies Toolbox, a Model Trip Reduction Program, and Supplemental Traffic Impact Study Guidelines. The Toolbox contains 40 strategies to increase the system’s capacity, or its efficiency, encourage alternative travel modes, shift trips out of the peak period, or reduce vehicle trips. The Trip Reduction Ordinance (TRO) is a voluntary travel demand management program that does what its name suggests. The Traffic Impact Study (TIS) Guidelines provide new information for assessing the true traffic impact of developments that encourage walk, bike, and transit trips. Jurisdictions can use these three tools to accurately address and alleviate traffic impacts.

The RCP encourages a mix of land uses and more concentrated housing, offices, and retail around transit stations. These may result in more traffic in certain areas and some localized congestion. But the payoff is on the regional level. It can reduce congestion levels overall, make more efficient use of transportation infrastructure investments, and significantly decrease overall land consumption. The new CMP tools can help local agencies lessen the potential localized problems associated with smart growth. In addition, local jurisdictions can adopt alternative CMP standards for areas designated “infill opportunity zones.” To qualify, these areas must be zoned for compact residential or mixed use commercial development and located within one-third mile of existing or future transit stations.

Regional Transportation Improvement Program

Integral to the development of the region’s long-range transportation plan is the Regional Transportation Improvement Program (RTIP), which the SANDAG Board of Directors updates every two years. The RTIP prioritizes projects included in the region’s overall strategy for improving mobility, while reducing transportation-related air pollution. The RTIP incrementally implements the vision laid out in the Regional Transportation Plan (RTP). Accordingly, the RTIP is required by federal and state law to be consistent with the RTP.
The 2002 RTIP is a $4.4 billion, five-year improvement program of major regional transit, highway, arterial, and non-motorized projects being developed in the San Diego region from Fiscal Year 2003 to Fiscal Year 2007. Funding for the transportation projects in the RTIP comes from federal, state, and local revenue sources, including TransNet, the local transportation sales tax program.

Future biennial RTIP updates will provide the opportunity to prioritize transportation improvements that are consistent with the long-range goals and policy objectives of the RCP. The RCP identifies several areas in the region where smart growth opportunities exist for jobs, housing, or both. RTP projects in corridors that serve these areas could receive higher priority for RTIP funds.

Local Circulation Elements

Every city and the county has a circulation element in its general plan designed to meet the needs of anticipated development as laid out by that jurisdiction. These circulation elements address the needs of each jurisdiction, from local roads in neighborhoods to major arterials with thousands of cars a day. Some of these arterials provide critical links to the highway network and serve as alternative or parallel routes to the highways; examples are Palomar Airport Road, Mira Mesa Boulevard, and Friars Road. While all levels of the transportation system—interregional, regional, and local—are considered important, MOBILITY 2030 identified certain arterial facilities as part of a system referred to as the Regionally Significant Transportation Network.

Completing the arterial component of the Regionally Significant Transportation Network (Figure 4B.5) is a priority in MOBILITY 2030. In addition to major transit and highway improvements, the plan sets aside $500 million in regional transportation dollars to widen and extend regionally significant arterials. To accomplish the plan’s goal to improve public transit services, new regional arterials and improvements to existing regional arterials will need to accommodate efficient transit operations.

Local jurisdictions also are expected to provide matching dollars for the regional funding. The county and the region’s 18 cities are responsible for improving regional roadways and local streets to meet their residents’ needs and offset or lessen the effects of local developments. MOBILITY 2030 funds projects that enhance capacity and also coordinates traffic signals and monitors traffic levels and speeds. It also provides money for transit priority measures, and management systems needs to optimize the arterial network and integrate arterial operations with other modes.
Regional Airport Planning

The San Diego County Regional Airport Authority (SDCRAA) is the operator of San Diego International Airport (SDIA), the one major full-service commercial airport in the region. The SDCRAA, or the Authority, also is responsible for airport planning in the region.

The Authority reviews proposed development near all of the airports in the county, ensuring compatibility with commercial and general aviation operations. The SDCRAA will adopt the first regional Comprehensive Land Use Plan (CLUP) by June 2005, covering all the airports in San Diego County. The Authority also is working to site a new regional airport facility. SDIA cannot meet the projected demand for passenger and air cargo services, even with the additional runway included in the maximum expansion scenario considered in the Airport Master Plan. Therefore, alternative sites and options both within and outside of San Diego County are being explored.

Until the airport siting study is completed, MOBILITY 2030 assumes that SDIA will continue to serve as the region’s primary commercial airport. The SDCRAA is required to place a measure on the ballot no later than November 2006 recommending an airport site or proposal. Any recommended location for a new regional commercial airport will be incorporated into future updates of the RTP and RCP.

Potential High Speed Rail

The state legislature created the California High Speed Rail Authority in 1996 to develop a plan to construct, operate, and finance a statewide, intercity high speed passenger rail system that would augment the state’s existing commuter and intercity rail service. The Authority has developed plans for a 700-mile system between Sacramento and San Diego that consists of five corridors connecting the major metropolitan areas of the state.

The proposed high speed rail system would connect to the San Diego region through two potential corridors, one inland and one coastal. The Inland Corridor stretches from the Los Angeles area through the Riverside and Temecula areas to downtown San Diego via Interstate 15. The Coastal Corridor follows existing tracks from the Los Angeles area through Orange County to San Diego with stops tentatively identified at Oceanside, University Towne Centre, and downtown San Diego. Future RTPs will incorporate the proposed high speed rail system, once the California High Speed Rail Authority finalizes proposed alignments, time frame, and other project specifics for service in the San Diego region.

Maritime Shipping

The region enjoys broad access to coastal waters that provide opportunities for maritime commerce, navigation, fisheries and recreation. The Port of San Diego oversees and plans for development of these activities within San Diego Bay and the surrounding tidelands. The 10th Avenue Marine Terminal in San Diego and the National City Marine Terminal at 24th Street conduct maritime commerce on San Diego Bay.
Together, the two marine terminals handle approximately 2.1 million tons of cargo annually.\textsuperscript{3} Built in the 1950s, the 10th Avenue Marine Terminal is San Diego’s general cargo terminal. It supports cool/frozen storage, break bulk, dry/liquid bulk, and small container operations. National City is the primary port of entry for automobiles and trucks, which are prepped for distribution to dealerships by rail and truck throughout the United States. Recent terminal improvements, including rail infrastructure, have resulted in more than a 50 percent increase of Port maritime revenues. Lumber is another important commodity handled at the National City Marine Terminal, which is transported by barge and break bulk ships from the Pacific Northwest.

Near-term infrastructure improvements, such as lengthening wharf areas and improving food-handling capacity, are planned for both marine terminals to increase their efficiency. The Port of San Diego’s master and strategic plans include developing the 10th Avenue terminal incrementally into a container terminal, including the development of a multi-purpose cargo terminal; continued development of the National City terminal for automobile and lumber storage and distribution; and development of alternative railroad service for intermodal cargo users.

Improved ground access into both marine terminals was recently evaluated with proposed improvements incorporated into MOBILITY 2030. Efficient intermodal operations are dependent on more direct access between the freeway and the terminals, while minimizing local impacts.

Interregional and International Planning

Regional transportation facilities and services connect to larger transportation systems beyond the San Diego region’s boundaries (freeways and rail networks in other parts of the state and nation and in Baja California, Mexico). Interregional and international commuting has increased in the last several years, and these trends are recognized in the 2030 Final Forecast.

- **Interregional Partnerships** - Agencies in this region and neighboring ones are exploring ways to coordinate planning strategies across our borders. Through the I-15 Interregional Partnership (IRP), local elected officials from SANDAG, the Western Riverside Council of Governments, and the Southern California Association of Governments are identifying short- and long-term solutions related to jobs/housing inaccessibility and traffic congestion along the north I-15 corridor. SANDAG also has plans for similar interregional partnerships with Orange and Imperial Counties to address interregional issues of mutual concern. Several of these solutions are explored more fully in the Borders and Housing chapters of the RCP.

- **Binational Transportation** - To accommodate the dynamic border transportation system, MOBILITY 2030 includes major projects to improve access to international border crossings, expand freight rail service and intermodal connections, and coordinate commercial vehicle crossings. Collectively, these projects will modernize and transform transportation infrastructure along the U.S./Mexico border from San Diego/Tijuana east to Arizona/Sonora. They are essential components in realizing our shared regional economic potential with Mexico. The Bi-State Transportation Technical Advisory Committee (BTTAC) meets regularly to coordinate transportation plans and projects that affect the international border. Participants from both sides of the border include state transportation planning departments, regional planning

\textsuperscript{3} Port of San Diego, Maritime Master Plan (1999) and 2002-2006 Compass Strategic Plan (2002)
agencies (i.e., SANDAG, the Southern California Association of Governments, the Imperial Valley Association of Governments), and border cities and counties.

- Tribal Governments - The San Diego region is home to 18 reservations represented by 17 tribal governments.\(^4\) Transportation is key among the many planning issues facing these reservations. Gaming-related development has led to rapid economic growth for tribes as well as increases in traffic, jobs-housing accessibility issues, and the need for additional resources such as water and energy. To address these issues, local governments and SANDAG are working to increase communications with tribal governments (see Chapter 5, Borders, for a more detailed discussion).

**KEY ISSUES**

Implementing the 2030 Mobility Network

Traffic congestion is among the most tangible and frustrating quality of life issues facing the San Diego region. Dramatic increases in motorized travel, combined with limited financial capacity to improve roads and build more transit, have resulted in severe congestion on many of our major roadways during rush hours. Besides simply being annoying, this hampers our region's productivity and long-term economic prosperity.

If traffic congestion were an easy problem to solve, every region would have open roads where the traffic flows freely. But of course it's not that simple. In addition to changing the way we plan for and build homes, offices, and retail uses, the solution requires a combination of key transportation infrastructure investments, such as added lanes, HOV lanes and expanded bus, train and trolley service. There must also be efforts to reduce peak period travel and better manage the efficiency of our transportation systems.

The "2030 Mobility Network" that is laid out in our Regional Transportation Plan, MOBILITY 2030, will provide the infrastructure necessary to meet our overall mobility needs into the future. Implementation of the network improvements in a cost-effective and efficient manner is an important part of our overall effort to improve mobility in this region.

Improving Connectivity

Many of us have experienced examples of inefficient transportation systems: a car or bus that must use the freeway because a local connecting street hasn’t been built yet; a local commuter shuttle that only greets half the trains that pull into the station; or a commuter train that has plenty of eager riders but inadequate parking at suburban stations. All of these are examples of poor connections or facilities that discourage would-be users of transit or encourage out-of-direction trips on the highway network. The transportation system

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\(^4\) While each Reservation has its own government, Barona and Viejas also jointly administer one Reservation, Capitan Grande.
can be enhanced greatly when multimodal centers are fully functional and directly connected to other modal hubs.

Transportation Funding

The funding of necessary improvements to our existing regional transportation system is a major challenge. MOBILITY 2030 is based on a “Reasonably Expected Revenue” financing option, a $42 billion Regional Mobility Network that includes highways, regional arterials, and regional transit service, as well as transportation systems and transportation demand management programs. More than half of the future expenditures identified in the RTP ($22 billion) are earmarked for capital expenditures. The remainder ($20 billion) is for operating and maintenance costs.

The RTP funding option assumes current sources and levels of federal, state, and local transportation revenue, as well as additional revenue from three primary sources: an extension of the TransNet half-cent local sales tax, higher levels of state and federal discretionary funds, and increases in state and federal gasoline taxes based on historical trends. These three additional revenue sources account for $12 billion of the $42 billion plan. Other potential funding sources, such as development impact fees, user fees, and private investments, could augment traditional revenues available for transportation projects, programs, and services.

If these revenue sources do not become available, and if other funding sources for construction and operation of transportation facilities are not developed, the region’s transportation system will not be able to meet desired operational standards. An alternative $30 billion financing option, the “Revenue Constrained Scenario”, was developed as part of MOBILITY 2030 to depict a lower-level of transportation infrastructure and service investments given revenue constraints.

Coordination Among Agencies

Many of the transportation planning and development issues facing this region cut across the boundaries of individual jurisdictions and agencies. With the increasingly complex network of highway, arterial, and transit facilities, it is becoming more important to bring together tribal governments, neighboring jurisdictions, transportation agencies, and the private sector to plan, develop, and finance facilities that cross jurisdictional boundaries. In order to facilitate this kind of coordination, a systematic approach to subregional transportation planning and implementation within the region will be developed and implemented. Subregional planning (discussed in further detail in Chapter 9 - Implementation) can address transportation and land use issues at either the corridor level or for smaller subareas of the region.

The Land Use-Transportation Connection

The regional transportation system and the housing and employment needs of a growing and mobile population are increasingly interrelated. Land use decisions and development patterns affect our transportation systems and the travel choices we make. Where we choose to build homes and businesses, and the intensity of these land uses, directly affect local roads and trolley/bus services, as well as freeway and rail efficiency.

Lower density development that expands beyond existing developed areas makes it harder to get around the region and forces more people to rely on their cars. This impedes our ability to provide
effective public transit, ridesharing, biking, and walking opportunities. Transit improvements in particular need to be focused in areas with compatible land uses that support an efficient transit system. The Urban Form chapter of the RCP identifies a number of ways that communities can plan for smart growth that will actually improve the efficiency of our regional transportation system, based on both the distribution of land uses, and urban design that reduces auto dependency.

Timing Transportation Projects and New Development

In addition to the importance of coordinating the distribution and design of urban land uses, aligning the timing of transportation projects and related land use development also is critical to meeting our mobility objectives. In many cases, long-term transportation solutions will resolve congestion problems; however, if these solutions are delayed due to funding problems or other constraints, the impact of development on existing transportation facilities can lead to increased congestion in the short-term. Therefore, it is important to better coordinate the timing of transportation projects with the phasing of related urban development.

To achieve better timing, some local jurisdictions have established maximum development thresholds that cannot be exceeded until new regional and/or local transportation facilities are in place. Advancing important regional transportation projects through innovative financing techniques (such as bonding used to advance the I-15 Managed Lanes project) also may allow the region to better coordinate the phasing of transportation projects and development. In addition, the RCP subregional planning and implementation process (discussed further in Chapter 9, Implementation Framework) could be used to identify priorities for transportation project implementation in conjunction with the phasing of related developments.

Transportation Priorities and Smart Growth

One of the most powerful incentives to implement smart growth may rest in SANDAG’s responsibility for regional transportation programming decisions. As the Metropolitan Planning Organization, Regional Transportation Planning Agency, and Regional Transportation Commission, SANDAG is responsible for major federal, state, and local transportation (TransNet) funding decisions in the San Diego region.

Following the adoption of MOBILITY 2030, SANDAG began a process to update the criteria used to decide how major highway, transit, and regional arterial system projects are prioritized. The intent was to simplify the existing criteria as well as to ensure that SANDAG’s decisions regarding key regional transportation investments are consistent with the goals and objectives of the RCP. Working with the region’s planning directors, public works directors, and the Regional Planning Stakeholders Working Group, the following principles for a revised set of transportation project evaluation criteria were identified:

1. Implement the adopted Regional Transportation Plan “2030 Mobility Network” in an efficient and cost-effective manner.

   - Project is cost-effective
   - Project results in improved mobility
   - Project results in improved system efficiency
   - Project results in improved mode choice
- Project improves safety (auto, pedestrian, bike, etc.) and allows safe crossings

2. Enhance transportation systems by improving connectivity between interrelated modes of transportation.
   - Project provides a critical link for transportation network
   - Project provides necessary connections between regional corridors
   - Project results in improved connectivity between transit station and other modes
   - Project is compatible with the regional system effectiveness goals
   - Project minimizes impacts to community in terms of access, safety, noise, air quality, etc.

3. Provide adequate funding to meet both the capital and operational and maintenance needs of our transportation systems.
   - Degree to which the net impacts of new development and redevelopment on project have been mitigated through impact fees or other means
   - Level at which local agencies are leveraging/contributing funding toward project
   - Project has viable plan for funding operations and maintenance

4. Facilitate coordination through subregional planning among jurisdictions where proposed regional transportation and commuter transit service corridors cross jurisdictional boundaries.
   - Project has been incorporated into a subregional transportation/land use plan, and participating agencies have committed to planning and financing strategies contained in that plan

5. Consider regional and local mobility objectives in planning and approving new land uses.
   - Level at which existing and future development in smart growth opportunity areas served by the project is consistent with RCP policy objectives related to land use distribution and intensity, housing, and other land use considerations
   - Project is consistent with applicable habitat conservation plans
   - Project is consistent with CMP deficiency plans

6. Design development to reduce auto dependency and improve the walking environment through safe and pleasant streetscapes.
   - Degree to which development in smart growth opportunity areas served by the project is consistent with urban design and policy objectives in the RCP and related guidelines

7. Align the timing of related transportation and land use development.
   - Development served by the project is being phased by the local jurisdiction in order to ensure that mobility standards are maintained, or at least not worsened
   - Degree to which project is “expandable” or “upgradeable”
   - Degree to which land use decisions are matched to transportation investments
By including criteria that address transportation and land use related factors, the proposed approach can create significant incentives for local jurisdictions to plan for smart growth within their communities. The subject areas and criteria themes described above should be used as a starting point for developing an updated set of transportation project evaluation criteria which would be used in future updates of the Regional Transportation Improvement Program.

Ensuring Economic Prosperity

The transportation network is the lifeline of commerce, and that lifeline is slowly being strangled by growing congestion. Regional surface streets, freeways and rail systems connect to larger transportation systems beyond the San Diego region’s boundaries. Investments in airports, marine terminals, and international ports of entry contribute to the overall regional economy and support the movement of goods throughout the region.

Through the RCP and existing and future transportation plans and programs, we need to prioritize transportation system investments and develop flexible and well-integrated transportation systems that move both people and goods. As transportation projects are developed that improve access to truck transfer centers and facilities, they need to be sensitive to the impacts on adjacent communities—especially where there are residential land uses.

Potential Replacement Airport Site

Recent studies have shown that the San Diego International Airport can’t meet the region’s long-term needs for air passenger and air cargo demands. As the San Diego County Regional Airport Authority studies potential solutions and other airport sites both within and outside of San Diego County, ground access and the impacts on existing and planned land uses will be two of the many important issues to consider. Detailed environmental studies will be required if a new site is recommended, and impacts to future RTPs and the RCP could be significant. Convenient highway and transit access is a top priority of any major airport. If a new site is selected, the loss of the land uses under the footprint of the airport as well as the changes to adjacent land uses should be analyzed in relation to RCP objectives.

Effects of Transportation Services and Projects on Low Income Communities

Level of service is not the only concern when analyzing the effects of transportation service and projects on low income and minority communities. SANDAG’s next update to MOBILITY 2030 will need to reflect this issue. For instance, how we site transportation infrastructure, such as roads, railroads, or airports, needs to be analyzed to ensure that it is not disproportionately affecting low income and minority communities. Negative impacts could include, but are not limited to, increased air pollution, noise pollution, and neighborhood traffic.

We need to ensure that transit is not out of reach for low income residents (see Chapter 6, Social Equity and Environmental Justice Assessment). The cost of transportation options is important to low income communities. The region could invest substantially in improved road or transit access to
low income communities, but if people who live there can’t afford the cost of using these services, then the investment makes little sense.

Access to Transit Services

As comprehensive as the public transit and paratransit services are, their service areas are limited to the more dense urban areas of the region. Many persons in newly developed communities and in more suburban and rural areas, where housing may be cheaper, have extremely limited, if any, public transportation. Even if transit exists nearby, geography or even a lack of sidewalks prohibit some seniors and people with disabilities from using it.

Simply put, public transit can sometimes be a hassle. When bus schedules are poorly timed, riders can miss transfers between routes, causing lengthy trips. Many bus stops do not have benches or shelters from weather. Buses usually run only every half hour or hour, making for a lengthy and tiring trip. Many do not know how to use the transit system and there is very limited education for new users.

Paratransit services are in high demand, particularly for seniors and the disabled, and appointments can be difficult to schedule, especially in the morning and afternoon hours. The certification process to establish eligibility for the (ADA) paratransit service is lengthy and complicated. Most persons using public transit (outside the express rush hour routes) are low income and have few other choices for transportation. A sustainable investment in public transportation is critical for the well-being of many people in the region.

GOALS, POLICY OBJECTIVES, AND ACTIONS

Goal

1. Develop a flexible, sustainable, and well-integrated transportation system that focuses on moving people and goods—not just vehicles.

Policy Objectives

1. Implement the 2030 MOBILITY Network in an efficient and cost-effective manner.
2. Provide a wide range of convenient, efficient, and safe travel choices.
3. Reduce traffic congestion on freeways and arterials.
4. Develop a network of fast, convenient, high-quality transit services that are competitive with the cost and time to drive alone during peak periods.
5. Improve service levels and the quality of transit service.
6. Create more walkable and bicycle-friendly communities consistent with good urban design concepts.

7. Give priority to serving regional roadway and transit investments in smart growth opportunity areas while recognizing the need for transportation improvements elsewhere in the region.

8. Provide improved access to goods movement centers and intermodal facilities to promote economic prosperity.

9. Improve the connectivity of different transportation modes where it will result in better overall mobility.

10. Ensure adequate funding to cover the capital, operational, and maintenance costs of the regional transportation system.

11. Provide equitable and accessible transportation services for all residents, regardless of income, age, or ability.

12. Ensure that the benefits and potential burdens of transportation projects are equitable.

Actions

Planning, Design, and Coordination

1. Update the Regional Transportation Plan, incorporating major RCP concepts.

2. Develop a process to prepare subregional transportation studies and implementation programs focused on subregional areas where transportation and land use issues cross jurisdictional boundaries.

3. Identify priority corridors and phase highway, arterial, and transit improvements to meet those priorities, while synchronizing transportation improvements with local land use development.

4. Complete necessary transportation networks (including the high-occupancy vehicle/managed lane system) with missing links, provide parallel routes where appropriate, and preserve corridors for future transportation projects.

5. Ensure that appropriate transportation projects routinely accommodate or provide for pedestrian and bicycle access in their design.

6. Enhance pedestrian and bike connections to transit stations.

7. Identify modal connection points and related transportation improvement requirements.

8. Ensure that transit is accessible, available, and within the financial reach of as many residents as possible.
9. Design new transportation projects in such a way that they do not result in disproportionate health-related and environmental impacts on any community.

10. Develop a regional airport solution that meets long-term demand for passenger and freight air travel.

11. Ensure good multimodal access to the new regional airport and/or the reconfigured San Diego International Airport.

12. Improve access to goods movement centers and intermodal facilities while minimizing the impacts to surrounding neighborhoods.

13. Ensure that the development review process addresses the transit planning needs both within and adjacent to proposed developments.

14. Take actions to support the California High Speed Rail Authority in its efforts to bring high speed interregional passenger rail service to San Diego County.

15. Ensure that the environmental review of large development projects includes consideration of applicable policy objectives contained in the RCP, Congestion Management Program (CMP), and the RTP.

Program and Project Development and Implementation

1. Increase the use of Transportation Demand Management (TDM) programs that encourage alternatives to driving alone during peak periods, such as carpooling, vanpooling, telecommuting, and flexible work hours.

2. Efficiently manage the regional transportation system through programs such as ramp metering, movable lanes, and priority signalization.

3. Develop and implement integrated programs for areas served by transit that facilitate and encourage transit use including car sharing, shuttle service, bike lockers, and other programs.

4. Develop and implement programs such as paratransit that improve transportation options for seniors and persons with disabilities.

5. Ensure that the Short-Range Transit Plan and the network and service priorities established through the subregional studies and implementation programs are coordinated and consistent with each other.

Funding

1. Secure funding for implementation of transportation projects included in the 2030 Mobility Network and future updates.
2. Develop Transportation Project Evaluation Criteria based on the preliminary criteria themes in the RCP in order to prioritize transportation funding and transit service in areas where smart growth development has already occurred or is planned.

3. Research the use of fees, exactions, or other means to mitigate the net impact of new development or redevelopment on regional transportation facilities.

4. Pursue financing opportunities such as user fees, congestion pricing, and private investments to help pay for needed transportation improvements.

CONCLUSION

Developing a transportation system that better connects our communities and efficiently moves both people and goods is vital to our quality of life as well as to our region’s economic prosperity. Transportation plays a fundamental role in achieving the broad goals of the Regional Comprehensive Plan.

This first RCP focuses on improving the relationship between regional transportation plans and local land use plans and policies. By using transportation investments as an incentive to promote better land use planning and policymaking, we hope to affect the way in which our region grows. Planning and building great places to live, work, and play is only half the job. We need to think about how we get to and from those places; how we can do it smarter, faster and easier, and in a way that will foster future growth, sustainability, and prosperity in the region.