MOBILITY 2030

The Transportation Plan for the San Diego Region

SANDAG

Final
April 2003

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San Diego's Regional Planning Agency

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TABLE OF CONTENTS

PAGE

CHAPTER

LIST OF TABLES

PAGE

CHAPTER

PAGE

APPENDICES

LIST OF FIGURES

PAGE

CHAPTER

APPENDICES

CHAPTER 1
EXECUTIVE SUMMARY

CHAPTER CONTENTS

Ask anyone what's the biggest problem in San Diego, and you'll probably hear "traffic." However, if we have learned anything in the last decade, it's that we can't build our way out of traffic congestion. This leaves us at a crossroads – the road less traveled may hold the key to how we commute in the future.

As one local newspaper editorialized, the SANDAG Regional Transportation Plan "…will not unclog the county's freeways overnight. Instead of being a silver bullet, it's more like the discovery of an old prospector's map indicating that there may be a silver lode somewhere in the far-off mountains."

During the next 30 years, we can expect to share our communities with more than a million new neighbors. We will create half a million more jobs and need to build 340,000 new homes. The major appeal is our region's quality of life. While it may mean different things to different people, we can all agree that quality of life encompasses safe and livable communities, affordable housing, competitive job opportunities, a healthy environment, good schools and community facilities, and a transportation system that provides easy access to work, school, and other activities. MOBILITY 2030, San Diego's Regional Transportation Plan (RTP), is our region's blueprint for a transportation system that enhances our quality of life and meets our mobility needs now and in the future.

MOBILITY 2030 is our region's blueprint for a transportation system that enhances our quality of life and meets our mobility needs now and in the future. The foundation of MOBILITY 2030 lies in better connecting our freeway, transit, and road networks, to our homes, schools, work, shopping, and other activities.

A SMARTER PLAN

The foundation of MOBILITY 2030 lies in better connecting our freeway, transit, and road networks, to our homes, schools, work, shopping, and other activities. In this era of budget and infrastructure deficits, the ultimate success of this Plan will be measured by how well we implement smart growth as our communities are developed and redeveloped over time. To this end, MOBILITY 2030 helps strengthen the land use – transportation connection and offers regional transportation funding incentives to support smarter, more sustainable land use.

Improving transportation is one component of a much larger vision to sustain and improve our region's quality of life. SANDAG currently is preparing a Regional Comprehensive Plan (RCP) that will serve as a foundation for integrating land uses, transportation systems, infrastructure needs, and public investment strategies within a regional smart growth framework. The RCP will be the regional vision to prepare for change and meet our future needs. MOBILITY 2030 is the transportation component of the upcoming RCP.

At the heart of MOBILITY 2030 is the Regional Transit Vision, a 21st century strategy to develop a seamless public transportation system for the region – one that is integrated with our growing communities and that ultimately is competitive with driving your car during rush hours.

SANDAG last updated the Regional Transportation Plan in 2000. Since then, public policy discussions have helped shape a new and evolving vision for the San Diego region's future. At the heart of MOBILITY 2030 is the Regional Transit Vision, a 21st century strategy to develop a seamless public transportation system for the region – one that is integrated with our growing communities and that ultimately is competitive for many with driving your car during rush hours.

How is the Plan Developed?

In development for nearly three years, MOBILITY 2030 is the product of collaboration between SANDAG, all 18 Cities and the County government, and our transportation partners – the San Diego Metropolitan Transit Development Board (MTDB), the North San Diego County Transit District (NCTD), and the California Department of Transportation (Caltrans) – along with a wide range of interest groups and other agencies.

With this RTP, SANDAG has begun an effort to better communicate and cooperate with the 17 sovereign tribal governments in the region. The San Diego region contains 18 reservations, more than any other county in the United States. In October 2002, SANDAG held a Summit with representatives of the region's tribal governments. The tribal representatives explained their sovereignty, described the programs that they conduct on the reservations, and discussed the need for better communications between the tribes and SANDAG. The representatives recommended that SANDAG should recognize the rural road needs of the tribes in the RTP. Future summits will be held to continue the dialogue between the governments.

MOBILITY 2030 also looks beyond the San Diego region to link transportation and land use planning across our borders with Orange, Riverside, and Imperial Counties, and Baja California, Mexico. The last several years have seen a steady increase in interregional and international commuting, as more people are choosing to live in Riverside County or Baja California, Mexico while keeping their jobs here. New with MOBILITY 2030, the 2030 Regional Growth Forecast recognizes these travel trends and accounts for future housing both within the San Diego region as well as outside of the region's boundaries.

To accommodate the dynamic cross-border transportation system, MOBILITY 2030 includes major projects to improve access to border crossings, expand freight rail service, and coordinate commercial vehicle crossings. On a collective basis, these projects will modernize and transform transportation infrastructure along the U.S./Mexico border from San Diego/Tijuana east to Arizona/Sonora.

Building on Our Progress

MOBILITY 2030 builds upon the existing transportation system in place today and the major projects in progress from the 2020 RTP. Several highway improvements are currently under construction, including the I-5/I-805 merge widening, completion of State Route (SR) 56 between Interstates 5 and 15, SR 125 between Fletcher Parkway and SR 94, various widening projects on Interstates 5 and 15, and freeway-to-freeway interchange connecting ramps at I-5/SR 78, I-15/SR 56, and SR 94/SR 125.

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Transit projects in the construction phase are the Oceanside-Escondido Light Rail, the Mission Valley East Trolley extension, and modifications to several Trolley and Coaster stations, such as San Ysidro, East Village, Nobel Drive, and Sorrento Valley. Construction also is underway on the San Diego Bayshore Bikeway, the Oceanside-Escondido bikeway, the extension of Rancho del Oro Drive in Oceanside, widening Rancho Santa Fe Road in Carlsbad and San Marcos, and incident detection systems (installation of closed circuit television) along stretches of Interstates 8, 15, and 805, and SR 163.

In addition, design and environmental work are underway on the I-15 Managed Lanes (new carpool lanes and bus rapid transit stations), parking lot expansions at several Coaster commuter rail stations, and regional bikeways, such as the Coastal Rail Trail. Roadway projects in the design or environmental phases include SR 905, SR 52 east of SR 125, I-5 North, and over two dozen regional arterials.

FIGURE 1.1—FOUR COMPONENTS OF MOBILITY

A PLAN FOR BETTER MOBILITY

MOBILITY 2030 is developed around four main components: Land Use, Systems Development, Systems Management, and Demand Management (Figure 1.1). Each component has a unique, yet interdependent, role in improving mobility and travel in the San Diego region through the year 2030.

Land Use determines where our homes, schools, work, shopping, and other activities are located and can profoundly affect the way in which we move around the region and within our communities. Systems Development provides needed regional transportation improvements, viable travel choices, and connections to our daily activities.

Systems Management helps to maximize system operations so that we make the best use of our existing transportation resources and provide travelers with real-time travel information to assist them in making informed travel choices.

Finally, Demand Management focuses on reducing trips on the transportation system during peak periods and encouraging alternatives to driving alone (e.g., transit, carpooling, vanpooling, biking, and walking).

Growth and change will continue in the region over the next several decades, and all local jurisdictions can make positive contributions toward preparing for that change.

Land Use-Transportation Connection: We Must Grow Smarter

MOBILITY 2030 is founded on a land use plan that reflects the commitments from the 18 Cities and County to "smart growth."[1] It recognizes that growth and change will continue in the region over the next several decades, and all local jurisdictions can make positive contributions toward preparing for that change. Transportation infrastructure and services must be coordinated with land use planning if we are to avoid increased traffic congestion, reduced mobility, and a deteriorating quality of life. Figures 1.2 and 1.3 show population and employment densities per quarter square mile in the year 2030. We cannot fix our persistent transportation problems by focusing solely on transportation. For the first time, MOBILITY 2030 includes a five-year, $25 million incentive pilot program to foster the integration of smart growth land uses and transportation facilities in our communities.

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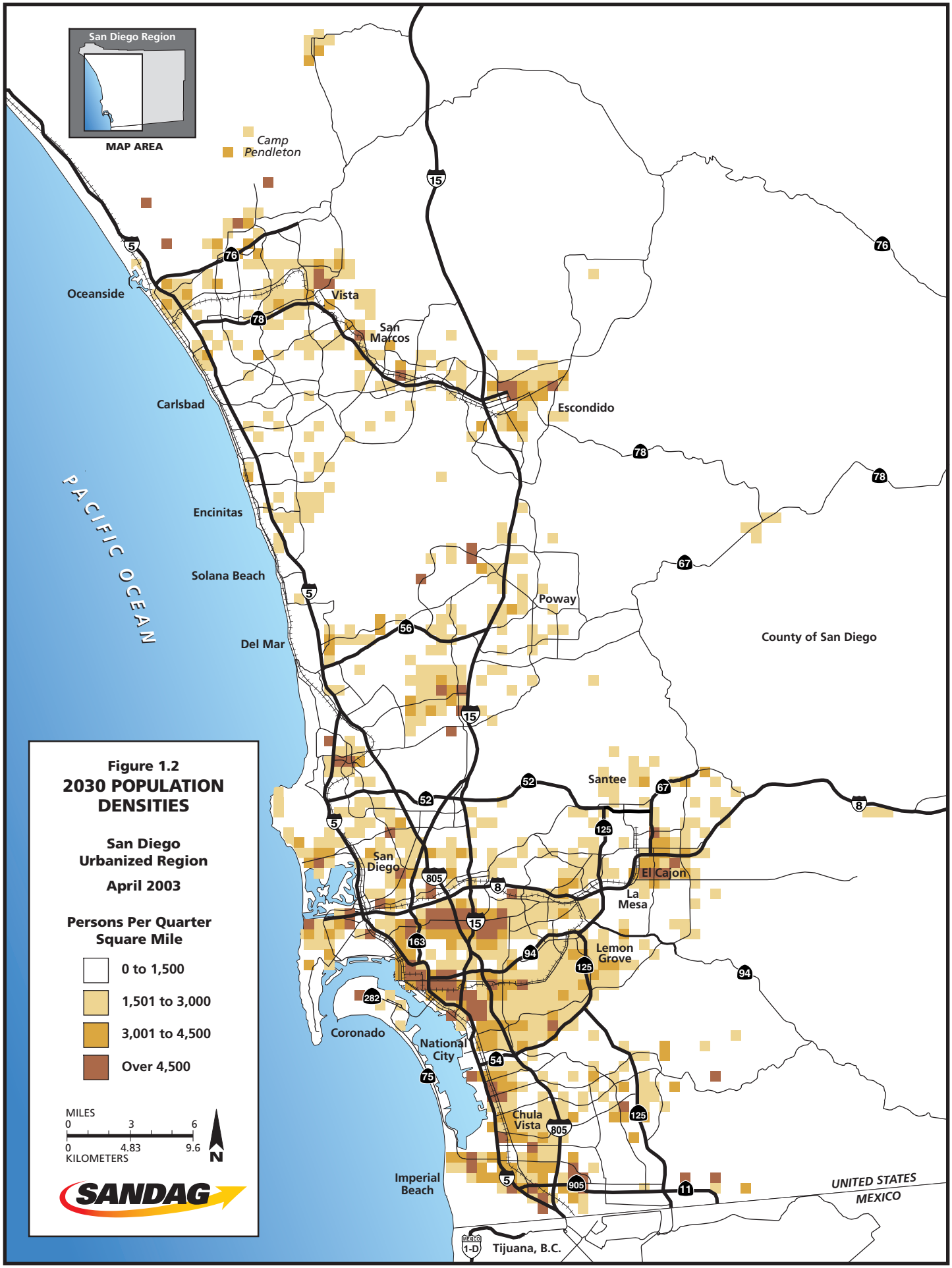
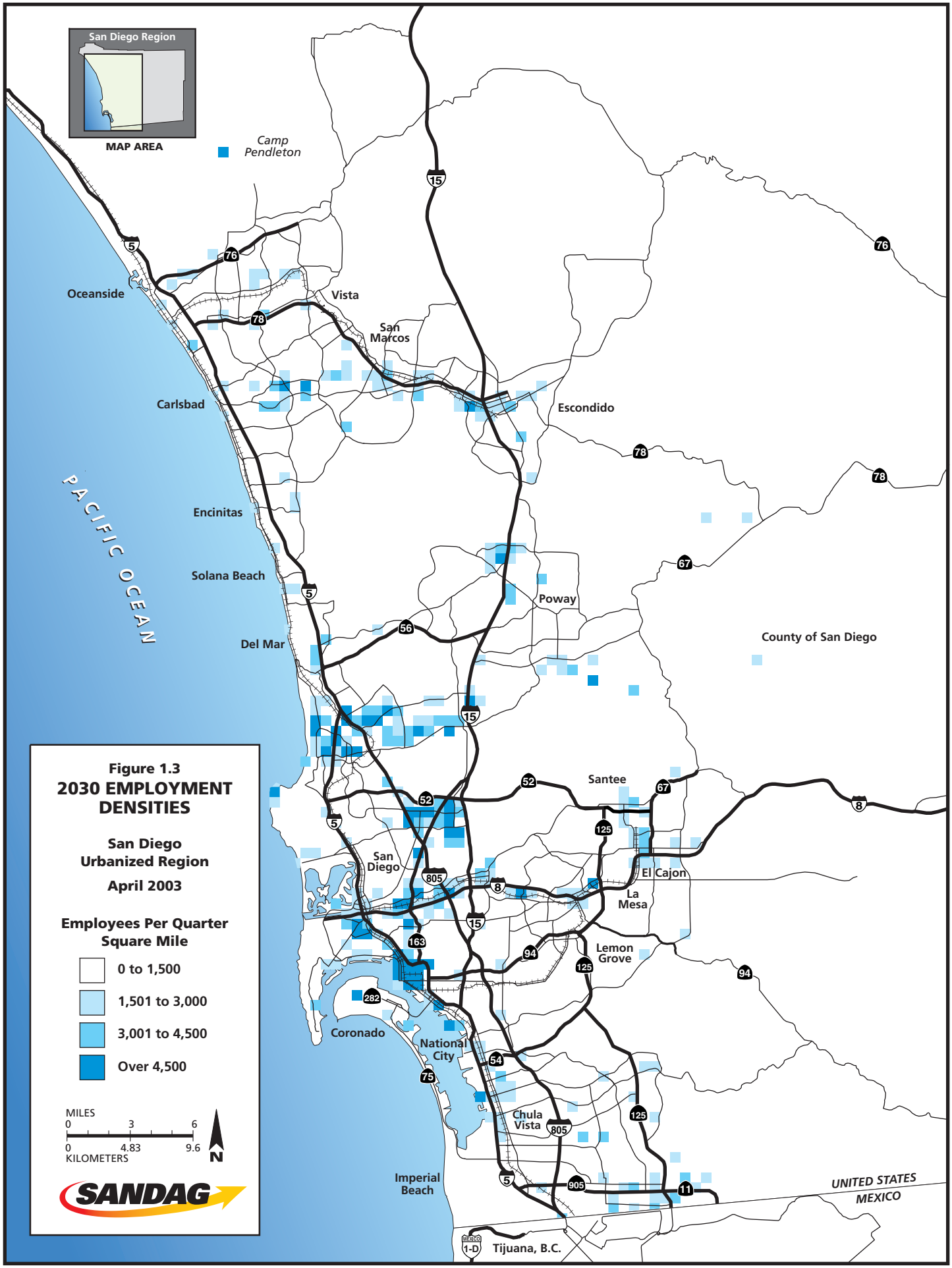
Systems Development: More Travel Choices

New and better connections are planned to more efficiently move people on buses, trolleys, trains, and cars throughout the region. When implemented, the improvements in MOBILITY 2030 will complete the region's highway and roads network, and transform it into a robust system with more lanes dedicated to carpools and buses integrated with more than a dozen new high-quality regional transit services. The Plan includes a flexible roadway system which can be used by transit and high occupancy vehicles (HOVs), and improves goods movement through the region.

[1] Smart growth is a compact, efficient, and environmentally sensitive pattern of development that provides people with additional travel, housing, and employment choices by focusing future growth away from rural areas and closer to existing and planned job centers and public facilities.


San Diego Region
MAP AREA
Camp Pendleton
Oceanside
Vista
San Marcos
Carlsbad
Escondido
PACIFIC OCEAN
Encinitas
Solana Beach
Del Mar
Poway
County of San Diego
Santee
El Cajon
La Mesa
Lemon Grove
San Diego
Coronado
National City
Chula Vista
Imperial Beach
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 1.2
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
MILES
0 3 6
0 4.83 9.6
KILOMETERS
N
SANDAG


San Diego Region
MAP AREA
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La Mesa
Lemon Grove
San Diego
Coronado
National City
Chula Vista
Imperial Beach
Tijuana, B.C.
UNITED STATES
MEXICO
Figure 1.3
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
MILES
0 3 6
0 4.83 9.6
KILOMETERS
N
SANDAG

MOBILITY 2030 (Figure 1.4) looks into the future to deliver a new transportation vision. It focuses on providing real-time, competitive travel choices during rush hours when most of our traffic congestion occurs. Since much of this demand is driven by the need to commute to and from work and school, the Plan looks at incentives for encouraging alternative commuter travel choices. This includes making it more convenient, fast, and safe 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 very real and powerful incentive for encouraging these more sustainable travel choices.

The Plan focuses on providing real-time, competitive travel choices during rush hours when most of our traffic congestion occurs.

Regional Transit Vision

MOBILITY 2030 calls for a network of fast, flexible, reliable, safe, and convenient transit services that connect us to the region's major employment and activity centers. Other proposed services showcase the integration of public transportation and local land uses, a central theme of MOBILITY 2030. The new routes operate at higher speeds, averaging 40 miles per hour for regional services and 25 miles per hour for corridor services.

In our local communities, transit stations must be integrated into the activity centers. These areas will be pedestrian- and bicycle-friendly and serve as pleasant walk and wait environments for customers.

There is particular attention to the transit customer in the Plan. The proposed transit services take advantage of a new generation of advance-design vehicles, which have the flexibility of buses and the look and feel of rail. These low-floor vehicles along with smart fare cards allow for easier and speedier boarding. Upgraded stations and real-time information will let patrons know when the next vehicle will be arriving.

The Plan includes an extensive network of Managed/HOV lanes on the highway system designed to accommodate transit services as well as carpools, vanpools, and fee-paying patrons. These same lanes also could be used in the off-peak for goods movement.

Integrating Transit and Roadways

Competitive transit service must be able to operate in congestion-free lanes. The Plan includes an extensive network of Managed/HOV lanes on the highway system designed to accommodate transit services as well as carpools, vanpools, and fee-paying patrons (similar to I-15 FasTrak™ where fees fund transit services in the I-15 corridor). On arterials, the Plan includes funding for transit priority treatments, and regional funding to help complete regionally significant arterials. The Plan also includes major transit capital projects, such as transitways, double tracking, direct access ramps, and grade separations, and provides operational funding for the expanded regional transit system.

Systems Management: Making Better Use of What We Have

Systems Management helps get the most efficiency out of our existing system, makes travel services more reliable, convenient, and safe, and reduces traffic delays caused by accidents and incidents.

Billions of dollars have already been invested in roads and transit in the San Diego region. We need to maximize the return on this significant investment through better management and more efficient operation of the existing networks. A wide range of systems management strategies totaling more than a half billion dollars is included in the Plan. Systems Management helps get the most efficiency out of our existing system, makes travel services more reliable, convenient, and safe, and reduces traffic delays caused by accidents and incidents.

Freeway Service Patrol

Specific programs and projects include expanding the Freeway Service Patrol (FSP), roving tow trucks that today patrol 204 miles of the region's highways during rush hours to assist stranded motorists whose vehicles break down or run out of fuel. By removing disabled vehicles from the roadway quickly, the FSP has helped ease traffic congestion caused by minor incidents.

HOT Lanes

MOBILITY 2030 also includes plans for "HOT lanes" on our major north-south freeways, including Interstates 5, 15, and 805. HOT (high occupancy toll) lanes are limited access lanes in which carpools, vanpools, and buses have first priority and travel for free, while other vehicles gain access by paying a fee. The lanes are managed through variable pricing to maintain free flow conditions even during rush hours, and revenues are used to support transportation improvements within the corridor.

The expansion of HOT lanes builds upon the success of the I-15 FasTrak™ program, which has been operating since 1996 on the I-15 Express Lanes from the I-15/SR 163 junction to SR 56. The net revenues generated by the program currently fund the Inland Breeze express bus service in the corridor.

New Technologies

The cornerstone of the region's new technology strategy is the development of the Regional Intermodal Network that interconnects all of the region's local transportation management centers.

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- *Freeway Management* – Installs loop detectors, cameras, communications, and new computer hardware and software to improve incident detection and clear accidents, and coordinate freeway and arterial operations.


San Diego Region
MAP AREA
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PACIFIC OCEAN
Santee
El Cajon
La Mesa
Lemon Grove
San Diego
Coronado
National City
Chula Vista
Imperial Beach
Tijuana, B.C.
UNITED STATES
MEXICO
Figure 1.4
2030
MOBILITY NETWORK
April 2003
Transit
Managed/HOV Lanes
General Purpose Lanes
Freeway Connectors
HOV Connectors
MILES
0 3 6
0 4.83 9.6
KILOMETERS
N
SANDAG

- *Arterial Management* – Provides new hardware and software to local jurisdictions to improve traffic signal timing, optimize traffic flow on regional arterials, and coordinate signals with freeway ramps, bus rapid transit service, and rail crossings.

- *Transit Management* – Provides new in-vehicle equipment and computer hardware and software to improve route planning, scheduling, and on-time performance.

- *Traveler Information/Performance Monitoring* – The real-time data collected from the freeway, arterial, and transit systems will be provided to travelers so that they can better plan the time and path of their trips.

Demand Management: Taking the Pressure Off the System

Steps to reduce peak period travel or change when and how people travel will become increasingly important in the future. Demand Management focuses on encouraging alternatives to driving alone and minimizing demand on the transportation system during peak periods.

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The strategies in the Plan to manage demand are not all new. Since 1995, SANDAG has operated a regional transportation demand management program called RideLink. Programs offered through RideLink include a regional vanpool program, a regional bike locker program, and a regional subsidy program to provide start-up funds to employers to provide their employees with financial incentives to try new ways to commute. New emphasis is on encouraging teleworking and flexible work hours to help manage peak demand.

HOW DO WE IMPLEMENT THE PLAN?

Implementing MOBILITY 2030 requires close cooperation and coordination among all transportation agencies, local jurisdictions, and the traveling public. The Plan relies on efficient and more cost-effective use of our existing transportation funds and expanding sources of transportation revenues to fund the proposed improvements.

A new regional approach to transportation planning and project implementation is underway. SB 1703, when it became law in January 2003, put under one roof all of the responsibilities and roles of SANDAG, and many of the transit functions of both the San Diego Metropolitan and North County Transit Development Boards. The law enables local mayors, council members, and county supervisors in this region to streamline transportation decision-making. In essence, all regional transportation planning, money allocation, project development, and construction, especially in the public transit arena, are now the responsibility of a new consolidated regional agency.

Critical to the implementation of MOBILITY 2030 is providing sufficient financial resources to fund the Plan's proposed improvements.

The new law will help local officials get critical transportation projects completed across jurisdictional boundaries. Policy decisions about the future of public transit and how buses, trolleys, and rail projects connect with travel on local roads and highways can be better integrated into the Regional Transportation Plan.

Funding and Financial Scenarios

Critical to the implementation of MOBILITY 2030 is providing sufficient financial resources to fund the Plan's proposed improvements. MOBILITY 2030 is based upon a "Reasonably Expected Revenue" scenario totaling more than $42 billion for the development, operation, and maintenance of the transportation facilities and services in the Plan. This assumes both current sources of transportation revenue as well as future revenue sources – such as an extension of the local *TransNet* transportation sales tax measure set to expire in 2008. It also assumes attracting additional federal funds for major capital projects, and increases in state and federal gas taxes based on historical trends.

Measuring the Plan's Success

MOBILITY 2030 was developed by examining how different land use and transportation network scenarios meet regional measures of performance. The evaluation of performance measures is the first step in establishing performance standards that will enable us to benchmark our progress toward meeting the Plan's policy goals and objectives.

The Plan significantly reduces roadway congestion compared to a "no build" scenario, slightly lower than even current conditions. Figure 1.5 shows level of service by direction in the year 2000, and Figure 1.6 shows projected level of service by direction in 2030 with the Plan's improvements in place. Transportation performance monitoring will gauge progress in meeting agreed upon performance standards, which will be reported in annual "State of the Commute" reports beginning in FY 2004.


Orange County
San Diego Region
MAP AREA
Riverside County
San Diego County
Camp Pendleton
Oceanside
Vista
San Marcos
Carlsbad
Escondido
Encinitas
Solana Beach
Del Mar
PACIFIC OCEAN
Poway
County of San Diego
Santee
San Diego
El Cajon
La Mesa
Lemon Grove
Coronado
National City
Chula Vista
Imperial Beach
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 1.5
2000
MODELED
LEVEL OF SERVICE
April 2003
A to E (HOV Lanes)
A to E (Main Lanes)
F (0 to 2 Hours)
F (> 2 to 4 Hours)
F (> 4 Hours)
MILES
0 3 6
0 4.83 9.6
KILOMETERS
N
SANDAG


Orange County
San Diego Region
MAP AREA
Riverside County
San Diego County
Camp Pendleton
Oceanside
Vista
San Marcos
Carlsbad
Escondido
Encinitas
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Del Mar
PACIFIC OCEAN
Poway
County of San Diego
Santee
San Diego
El Cajon
La Mesa
Lemon Grove
Coronado
National City
Chula Vista
Imperial Beach
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 1.6
2030
MOBILITY NETWORK
LEVEL OF SERVICE
April 2003
A to E (HOV Lanes)
A to E (Main Lanes)
F (0 to 2 Hours)
F (> 2 to 4 Hours)
F (> 4 Hours)
MILES
0 3 6
0 4.83 9.6
KILOMETERS
N
SANDAG