The annual SANDAG State of the Commute report presents a range of data that assesses commute travel characteristics in the San Diego region, giving readers a sense for the overall condition of the transportation system. The State of the Commute provides a comprehensive review of changes in commute transportation performance and trends in congestion, as well as reporting data and statistics under the ongoing SANDAG performance monitoring program. The report supports the agency’s efforts to understand just how well the region’s transportation system is performing. It also helps identify opportunities to maximize system efficiency, sustain regional mobility, and track the benefits of transportation improvements.

The 2013 report provides an update of transportation performance data through December 2013. It focuses on regional travel trends, key system performance indicators, and corridor-level performance indicators. The information reveals trends and changes in highway and transit travel, highway commute travel times, and highway system delays. These statistics are evaluated to document where – and how much – change has occurred from regional, system, and corridor perspectives.

Accordingly, the State of the Commute is organized into three distinct sections:

- **Getting Around the Region** – This section provides an overview of regional travel trends. It quantifies traffic flows on our freeways, as well as transit ridership levels. It also lays the groundwork for future reporting on walking, biking, and other commute modes.

- **How is the System Working?** – This section provides performance statistics, including regional and corridor travel-delay data and information on the most heavily used transit routes.

- **My Corridor Commute** – This section analyzes the performance of a number of specific travel corridors in the region. It measures progress relative to benchmarks set for usage, travel times, and other key statistics, highlighting completed or planned projects designed to reduce congestion and minimize delay.

In general, data in the 2013 State of the Commute report indicates that use of the transportation system increased as compared to 2012, with various factors influencing how commuters get to work. Weekday travel on the region’s highways, quantified by vehicle miles traveled (VMT), increased by approximately 6 percent in 2013. Peak period freeway delay also increased, up 24 percent. Overall travel by public transit in the region increased by 7 percent (quantified by passenger miles traveled) in comparison to 2012.
A handful of roadway infrastructure and transit improvements in the region were completed in 2013. One major freeway project provided significant benefits to North County commuters. Improvements to State Route 78 (SR 78) and surrounding roadways in San Marcos in early 2013 resulted in delay reductions (in vehicle hours) of nearly 30 percent. Travel times on eastbound SR 78 during the evening commute decreased by three minutes and became more reliable as a result of the improvements.

Future State of the Commute reports will provide completed data analysis documenting performance trends linked to key roadway improvements that were under construction in 2014, including the high occupancy vehicle (HOV) lane improvements on Interstate 805 (I-805) in the Golden Triangle area of San Diego and in South County. Furthermore, major transit service improvements are scheduled to begin operations in 2014, including Mid-City Rapid Bus and Interstate 15 (I-15) Bus Rapid Transit services.

Basics for reading the State of the Commute

The 2013 State of the Commute report focuses on calendar year data reported through December 2013. The emphasis is on reporting trends and changes in highway and transit travel, highway commute travel times, and highway system delay during peak travel periods – Monday through Friday, from 6 to 10 a.m. and from 3 to 7 p.m. The report includes analyses of where, and how much, change has occurred from regional, system, and corridor perspectives.

Highway travel is quantified by vehicle miles traveled (VMT), which is defined as a specific vehicle count/use of roadway multiplied by the length of the roadway segment during an average weekday. Transit travel is quantified by passenger miles traveled (PMT), which is comparable to vehicle miles traveled, to illustrate the cumulative number of miles traveled by all transit passengers during a typical weekday on the region’s buses, shuttles, trolleys, and commuter trains. Transit use is quantified by passenger boardings (ridership).

Travel time is a key metric for assessing changes in trip quality. The time it takes us to travel along key regional corridors during morning and afternoon commute periods provides an indication of delay and other constraints on mobility. The reliability of travel times also is measured by the additional time (or budget time) a traveler needs to build into a trip to ensure on-time arrival 95 percent of the time. Delay is another key metric for assessing changes in congestion and can be quantified as the total time that we lose due to congested conditions (how much time is lost when we travel on the freeway at speeds less than 35 miles per hour).

The My Corridor Commute section provides data showing how specific commute routes have changed over time, including average weekday corridor VMT, travel times, budgeted travel times, and transit ridership levels. The My Corridor Commute section in the 2013 report presents data for Interstate 5 (I-5) North, I-15/State Route 163 (SR 163), I-805/SR 94, I-805, I-5 South, and SR 78.
The state of the transportation data

One of the goals of the State of the Commute is to report travel characteristics for all transportation modes. For the majority of commute modes, vehicle miles traveled (VMT) is the most common and readily available performance measure. Determining VMT for all vehicular modes of travel requires robust and reliable sources of data, such as roadway vehicle detection stations and transit passenger counters. Currently, only freeway travel has enough data sources available for consistent, complete reporting. SANDAG and its local and regional partners continue to look for additional sources of consistent and reliable transportation data, especially for bicycling, walking, public transit, and other alternative modes.

SANDAG is in the process of developing performance measures for bicycling and walking in the region, and identifying corridors to track bicyclist and pedestrian activity over time. Once these bicycling/walking performance metrics and corridors have been identified, this data will be included in the annual State of the Commute report.

This year, SANDAG has introduced performance measures for two key roadway (non-freeway) segments in the My Corridor Commute section of the report. Specifically, travel time statistics are provided for Mira Mesa Boulevard in San Diego and Telegraph Canyon Road in Chula Vista. With the introduction of this arterial performance data, our efforts move closer to the goal of reporting door-to-door travel times. Note that this new travel time data does not reflect the delay experienced at freeway on-ramps and off-ramps that add time to many commutes in the region. SANDAG will continue to work with Caltrans to establish a methodology for determining travel time between local arterials and freeways. Future reports will expand upon the reporting of available arterial data and may include arterial roadway use, speed profiles, and travel time trends made available through the Regional Arterial Detection deployment effort. This effort seeks to improve performance monitoring and reporting, arterial signal timing operations and management, and traveler information reporting.

SANDAG also continues to work with Caltrans District 11 to fill vehicle detection gaps in the regional freeway system, including recently completed freeway alignments such as state routes 52, 125, and 905.
How much are we using the transportation system?

The number of miles traveled on the region’s surface transportation system is strongly influenced by population, employment levels, and the health of the regional economy. San Diego County’s location on the international border, as well as its role as an employment center for residents of Mexico, Imperial County, and Southwest Riverside County, are contributing factors to the amount of travel that occurs on the region’s roadways. The measure of vehicle miles traveled (VMT) also is used as an indication of the environmental impact attributable to passenger vehicles and commercial trucks.

According to Public Road Data reported by Caltrans, approximately 75 million vehicle miles were traveled on all San Diego County roads each day in 2012 (both on and off freeways). Over the course of the year, that amounts to more than 27 billion vehicle miles of travel in the region.

When looking just at the region’s freeway system, total weekday travel increased from 8.8 billion vehicle miles in 2012 to 9.3 billion vehicle miles in 2013, an increase of almost 6 percent. Overall, per capita weekday freeway travel grew slightly to approximately 11.8 vehicle miles traveled per person, as illustrated in Figure 1.1. (Please note that data in this chart may not match previous reports as VMT and population figures for prior years have been updated.) This growth in freeway travel reflects the steady economic recovery that has taken place in the region since 2009. In addition, the region’s population has grown to 3.15 million, almost 3 percent higher than the population in 2009. In 2013, employment in San Diego County was approximately 6 percent higher than the lowest employment level observed in 2009.

Freeway travel during the peak commute periods makes up slightly more than half of all weekday freeway travel. Figure 1.2 shows average freeway travel per hour throughout a typical weekday in the San Diego region. Peak period freeway travel grew by 5.6 percent between 2012 and 2013, with travel during the morning commute growing slightly more than the evening commute. This figure also illustrates the rising growth in freeway travel during the middle of the day and late evening (6.2 percent increase in 2013). Hourly freeway travel for 2007 and 2008 are included to show travel patterns prior to and during the recent economic downturn.
Regional travel by transit

Increased transit usage decreases traffic congestion and increases the sustainability of our transportation system. Transit helps to reduce vehicle miles traveled and the associated environmental impacts. Passenger miles traveled (PMT) is often used as a transit counterpart to vehicle miles traveled to illustrate the cumulative number of miles traveled by all transit passengers during a typical weekday on the region’s buses, shuttles, trolleys, and commuter trains. As seen in Figure 1.3, transit passenger miles traveled in 2013 increased by approximately 7 percent compared to the previous year.

In 2013, there were approximately 360,000 passenger boardings in the region each weekday, an increase of approximately 20,000 passengers per day over 2012. (See Figure 1.4) Transit ridership continues to be influenced by the availability of transit services, the price of gasoline, and the state of the economy.

Transit revenue miles are an indication of the amount of transit service available to the public in the region. Between 2009 and 2013, transit revenue miles decreased by 6 percent. (See Figure 1.5) A couple of key factors account for the decline: service reductions due primarily to state and federal funding cuts; and system-wide operational changes by both the North County Transit District (NCTD) and the Metropolitan Transit System (MTS) to increase efficiency.

Transit operators have become more efficient. When looking at the data over the last five years, the transit system has carried roughly the same number of passengers each year while reducing overall revenue miles. The result was a nearly 6 percent increase in weekday passengers per revenue mile. (See Figure 1.6) Both major transit operators in the region have been proactive in achieving these productivity gains. The MTS Comprehensive Operations Analysis and the NCTD Mobility Plan led to a number of changes in route
structure and service frequencies that resulted in increased efficiency.

Overall, rail and bus ridership trends remained consistent from 2009 through 2013. Bus ridership continues to be the backbone of the transit system, carrying close to two-thirds of total riders. (See Figure 1.7) Bus ridership in the San Diego region is composed of the MTS and NCTD service areas, including MTS local, Express, and Premium Express services, as well as NCTD BREEZE local bus services. Over the last five years, weekday bus ridership has fluctuated up and down slightly. Weekday rail ridership – which includes patrons on the Trolley, COASTER, and SPRINTER services – increased dramatically in 2013 after a substantial decline in 2012. A portion of this increase in rail ridership can be attributed to MTS switching to automatic passenger counting (APC) data for Trolley ridership estimates. The margins of error using APC data are much smaller than the previous sampling method. Looked at over a five-year period, rail ridership has experienced a slight increase.
What alternative choices are travelers using?

In addition to transit, alternative travel modes such as carpooling, vanpooling, biking, walking, and telework reduce the number of single occupancy vehicles (SOVs) using the transportation system to commute to work. The resulting decrease in traffic reduces peak period congestion and its associated environmental impacts.

American Community Survey (ACS) Journey to Work data from the U.S. Census Bureau offers information about travel options San Diego County residents choose for commuting to work. (See Figure 1.8) The 2012 ACS data is consistent with the 2011 data, with roughly three-quarters of the region’s commuters driving alone and the remainder taking transit, carpooling, biking, walking, or working from home. ACS Journey to Work data is helpful in discerning high-level commuting trends; however, the ACS data is limited in that it captures only the primary mode used by the commuter. The data does not include multi-modal work trips or use of different modes during the course of the work week. Furthermore, ACS data does not distinguish between various types of teleworkers, such as individuals who primarily work from home (and thus do not create daily commute-related trips) and employees who occasionally telework but normally commute to their employer’s workplace on their non-telework days. In this regard, ACS data is not useful for accurately measuring the trip reduction that results from telework.

To supplement the ACS data with a more localized and granular view of the journey to work, SANDAG conducted a Commute Behavior Survey in 2013 to obtain information on commute characteristics and establish a local baseline dataset. A total of 2,000 residents from the San Diego region who work at least 30 hours per week participated in the survey. Detailed questions were asked about multimodal commute trips and commute behavior for each day of the week.

Most notable from the 2013 Commute Behavior Survey was the large number of individuals who reported that they telework (5.4 percent). When combined with those individuals who “work at home” (7.5 percent), the total (12.9 percent) is nearly double the percentage previously reported in the ACS (6.7 percent).

The survey also reflects the growing complexity of the commute to work. Non-SOV trips are often multimodal in nature. Residents who indicated that they primarily carpooled,

(Fig. 1.8) WHAT ALTERNATIVE CHOICES ARE COMMUTERS USING?
vanpooled, or used transit at least one day per week to get to and from work were asked about the transportation method used to access their primary commute mode and their final destination, i.e., the first and last mile of their commute trips.

Commuters whose primary mode did not start at home (such as those who took a bus or trolley), stated that their travel to their primary mode was as follows:

» 30 percent walked
» 22 percent drove alone
» 10 percent were dropped off
» 4 percent used a form of transit
» 3 percent used a bicycle

Commuters who did not get dropped off at their final destination traveled from their primary commute mode to the final destination in this way:

» 44 percent walked
» 2.4 percent used a bicycle
» 2 percent used a form of transit
» 1.5 percent got picked up

Commuters who rode the bus to work were most likely to walk to and from the transit stop, whereas commuters who vanpooled were most likely to drive alone to their pickup location. These trips to and from transit stops and meeting locations were often short – one to two miles.

**Vanpooling**

As of December 2013, the iCommute vanpool program consisted of 742 vanpools carrying more than 5,700 daily passengers. The most traveled vanpool routes were:

» Temecula to Naval Air Station North Island
» Temecula to Camp Pendleton
» Murrieta to Camp Pendleton
» Murrieta to 32nd Street Naval Station
» Chula Vista to Naval Air Station North Island
» Chula Vista to UC San Diego

The SANDAG Transportation Demand Management (TDM) Program, iCommute, plays an important role in reducing the region’s congestion. iCommute assists commuters by providing no-cost ridematching services; a subsidized vanpool program; bicycling encouragement; the Guaranteed Ride Home program; the SchoolPool ridematching service for schools and parents; and support for teleworking. iCommute also provides no-cost assistance to local businesses, helping them develop and implement customized employee commute benefit programs that lower costs, increase productivity, and help the environment.

**Bicycling and walking**

Since the approval of Riding to 2050: The San Diego Regional Bicycle Plan in 2010, work continues to advance active transportation improvement projects throughout the region. In September 2013, the SANDAG Board of Directors approved the Regional Bike Plan Early Action Program (EAP) to expand the regional bicycle network and finish high-priority projects within a decade. The $200 million Bike EAP is composed of 42 projects that will result in approximately 77 miles of new bikeways. Connecting with local bikeways implemented by individual cities, these regional paths will make it much easier for travelers to ride their bikes to school, work, transit stations, and other major destinations. The Bike EAP is funded by TransNet, the regional half-cent sales tax for transportation approved by San Diego County voters. TransNet funding will be leveraged to bring in additional state and federal dollars, which may result in the completion of more bike projects in the Bicycle Plan. Additional information is available at sandag.org/bike.

While bicycle and pedestrian trips are often used by commuters, they also represent important travel options outside the daily trip to work. They are particularly important when it comes to accessing transit facilities. Safe and convenient bicycle and pedestrian infrastructure near transit stops is a critical part of the region’s transportation system. To this end, SANDAG is planning and implementing the Safe Routes to Transit program to provide high quality bicycle and pedestrian facilities.
as part of new transit station projects being completed throughout the region.

Short trips of two miles or less typically account for a substantial portion of bicycle and pedestrian travel. These utilitarian trips made by walking or biking include not only commute trips to work or school, but trips with such purposes as running errands, eating lunch during a workday or dinner in the neighborhood, or visiting a friend.

SANDAG is currently developing performance metrics to quantify travel done by walking and bicycling in the region. This effort includes identification of a number of key corridors where SANDAG is investing in active transportation infrastructure, including corridors in the Regional Bike Plan EAP. The data will be included in future State of the Commute reports.

**HOW is the SYSTEM WORKING?**

The performance of the surface transportation system is best evaluated by measures such as roadway delay, travel time, and travel time reliability. Transit performance is currently evaluated through measures such as ridership levels and on-time performance. These indicators can be used to assess improvements, identify bottlenecks, and develop strategies and investment plans.

Total freeway delay during peak hour commute

As the economy has pulled out of the recession, and employment numbers have begun to recover, peak hour demand has increased on the region’s roadways.

Overall delay during peak commute periods provides a snapshot of how the transportation system is working. Severe congestion is measured in terms of the number of vehicle hours the freeway operates below 35 miles per hour.

In 2013, San Diego commuters experienced their fourth consecutive year of growth in freeway congestion during peak commute periods. In 2013, nearly 5.4 million vehicle hours of delay were observed on the region’s freeways during peak commute periods, an increase of almost 24 percent compared to 2012. Freeway delay during the morning commute increased by 33 percent, while the evening delay increased by almost 20 percent. (See Figure 2.1)
The majority of the everyday congestion (happening on a recurring basis) experienced on the region’s freeways is located at specific bottlenecks in the system. Figure 2.2 identifies specific freeway segments containing some of the region’s most congested bottlenecks over the last several years. In 2013, annual delay on the region’s most congested freeway segments ranged from 5,000 to 15,000 vehicle hours per lane mile. These delay levels are relatively small compared to the top bottlenecks on I-5 and I-15 back in 2006. Due to HOV and Express Lanes improvement projects in these corridors, delay on these congested segments has remained relatively stable through the post-recession recovery. Delay through last year’s top bottleneck, eastbound SR 78 through Vista and San Marcos, has dropped approximately 30 percent since freeway and local street improvements in San Marcos were completed in spring 2013. (See the My Corridor Commute section for more information.)

(Fig. 2.2) REGIONAL BOTTLENECKS

- Eastbound SR 78 from Mar Vista Rd. to I-15
- Northbound I-5 from I-805 to Manchester Ave.
- Southbound SR 163 from I-15 to I-5
- Southbound I-805 from I-5 to I-8
- Northbound I-805 from I-8 to I-5
- Southbound I-15 from SR 78 to Centre City Pkwy
- Southbound I-15 from SR 163 to I-8
Annual delay by freeway during commute periods

Based on regional travel data for the urban freeway system, it is estimated that approximately 50 percent of daily travel is made during the morning and afternoon commute periods (weekdays from 6 to 10 a.m. and 3 to 7 p.m.). Assessing how much travel is made on the region’s primary freeway corridors during these high-demand periods provides an understanding of the total time lost due to traveling under severely congested conditions (when speeds drop to less than 35 miles per hour). In 2013, commuters experienced more than 1.7 million vehicle hours of delay during the morning commute period and almost 3.7 million vehicle hours during the afternoon commute.

The majority of freeway delay in the San Diego region occurred along the major freeway corridors (I-5, I-15, I-805, SR 78, and SR 163) in 2013 (see Figure 2.3). These five freeways account for almost 79 percent of the freeway delay observed during the morning and evening commute periods. The I-5 and I-805 freeways each account for 22 percent of the delay observed during the morning commute. During the evening commute, the I-5 freeway accounts for 31 percent of the observed delay in the region.

NOTE: Delay is based on observed data and available freeway detection.
Totals may not add up to 100 percent due to rounding.
2013 top transit routes by ridership

As shown in Figure 2.4, the Blue Line Trolley, from San Ysidro to Downtown San Diego, continues to be the busiest transit route in the region, with nearly 46,000 daily trips. Peak period ridership on the Blue Line Trolley is influenced by crossborder pedestrian traffic at the San Ysidro Port of Entry, which decreased by nearly 5 percent from 2012 to 2013. The Green and Orange Lines combined to serve nearly 75,000 daily trips. The Route 7 bus service from La Mesa to Downtown San Diego serves approximately 12,000 daily trips, and is the most patronized local bus route in the region. The SPRINTER light rail service from Escondido to Oceanside also serves nearly 8,500 daily trips along the SR 78 corridor. SPRINTER average weekday ridership reflects ridership numbers while it was in operation and does not include the period during the shutdown between March 9 and May 18, 2013.

(Fig. 2.4) 2013 TOP 10 TRANSIT ROUTES BY RIDERSHIP

<table>
<thead>
<tr>
<th>2013 Rank</th>
<th>2012 Rank</th>
<th>Route</th>
<th>Route Description</th>
<th>Transit Mode</th>
<th>Avg. Daily Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Blue Line Trolley</td>
<td>San Ysidro to America Plaza via Chula Vista / National City</td>
<td>Light Rail</td>
<td>45,870</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Green Line Trolley</td>
<td>Santee to Downtown SD / 12th &amp; Imperial via La Mesa / Mission Valley</td>
<td>Light Rail</td>
<td>40,531</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Orange Line Trolley</td>
<td>El Cajon to Downtown SD / America Plaza via Southeastern Communities</td>
<td>Light Rail</td>
<td>33,928</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>7</td>
<td>Downtown SD to La Mesa via North Park / City Heights</td>
<td>Local Bus</td>
<td>12,184</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>11</td>
<td>Skyline Hills to San Diego State University via Downtown SD</td>
<td>Local Bus</td>
<td>9,159</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>SPRINTER</td>
<td>Oceanside to Escondido via Vista / San Marcos</td>
<td>Light Rail</td>
<td>8,437</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>13</td>
<td>24th Street Trolley to Kaiser Hospital via Southeastern Communities</td>
<td>Local Bus</td>
<td>7,781</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>929</td>
<td>Downtown SD to Iris Avenue Trolley via Chula Vista / National City</td>
<td>Local Bus</td>
<td>7,776</td>
</tr>
<tr>
<td>9</td>
<td>NA</td>
<td>955</td>
<td>SDSU Transit Center to 8th Street Trolley via City Heights</td>
<td>Local Bus</td>
<td>7,540</td>
</tr>
<tr>
<td>10</td>
<td>9</td>
<td>30</td>
<td>Downtown SD to UTC / VA Medical Center via Pacific Beach</td>
<td>Local Bus</td>
<td>6,926</td>
</tr>
</tbody>
</table>
Transit ridership of TransNet-supported services

Continued investments in new transit services, as well as rehabilitation of existing networks, are key to increasing ridership. TransNet, the voter-approved regional half-cent sales tax for transportation improvements, has played an important role in developing major transit services in the region. Administered by SANDAG, the TransNet program has provided funding for key regional Trolley enhancements, including the Old Town Trolley Station and the Mission Valley East/West Extension. Most recently, the Blue and Orange Lines have benefited from new low-floor trolleys, track, and station platforms as part of the Trolley Renewal project. With construction anticipated to be finished by 2015, the revamped Trolley system is expected to run more efficiently in future years.

In 2013, TransNet-supported routes – the SuperLoop, SPRINTER, COASTER, and all San Diego Trolley lines – combined to carry nearly 138,000 weekday trips, more than one-third of all weekday transit trips in the region. (See Figure 2.5)
SANDAG continues its efforts to understand just how well our transportation system is performing from the traveler’s perspective. The My Corridor Commute section provides just that – a snapshot of annual data focusing on major commute routes. It also presents historical corridor-level data in an effort to capture and identify changes and trends in our commutes over time. This section illustrates how peak travel has changed for the I-5 North, I-15/SR 163, I-805/SR 94, I-805, I-5 South, and SR 78 commute corridors. It includes freeway performance data for these featured corridors, such as overall corridor travel, travel time, and corridor delay. Freeway performance data comes primarily from the Caltrans Performance Measurement System (PeMS), which relies on freeway detectors and is subject to the availability and “health” of those detectors. Figure 3.1 shows the existing PeMS detection coverage, including detection that was added during 2013.

Each featured corridor section reports travel times during the morning and afternoon commutes. Travel times represent trip times only while on the freeway, rather than door-to-door commute times. PeMS uses data from freeway detectors, estimates travel speeds for a given segment of freeway, and calculates travel time from one freeway on-ramp to the ultimate off-ramp. Corridor trip times are calculated for travel on the general purpose lanes of the freeway, and do not reflect the use of any available HOV or Express Lanes during the trip. Morning and evening travel times in this section assume that one enters and exits the freeway at 8 a.m. and 5 p.m., respectively.

The reported travel times in this section may differ from travel times reported in other documents, such as the SANDAG Regional Transportation Plan (RTP). While travel times in My Corridor Commute reflect actual time spent on freeways, travel times in the RTP are projected door-to-door travel times based on the San Diego Regional Transportation Model. In addition to freeways along the trip route, the Regional Transportation Model takes into account roadway configurations, traffic volumes, and intersection controls for all streets and arterials to estimate travel times. Modeled travel times are not observed data, rather they are predicted travel times based on current and future road networks, economic conditions, housing and employment patterns, population growth, etc.

Commute travel times are reported in three different ways: average, median, and budget. The average travel time is simply that: the average of all midweek travel times (Tuesdays, Wednesdays, and Thursdays) for a time period. The median (or 50th percentile) travel time is the typical travel time that occurs during the middle of the work week for the same time period. The budget time (a measure of the freeway corridor’s reliability) is the time one would need to add to one’s typical commute to ensure an on-time arrival 95 percent of the time. Higher budget times are related to less reliable travel caused by variables such as
freeway bottlenecks, higher freeway incident rates, and the prevalence of special events.

Efforts to improve PeMS and roadway performance monitoring are ongoing. Specific enhancements currently under development will allow PeMS to incorporate real-time transit and arterial data. With the completion of the monitoring network on the region’s arterials and remaining freeway segments, PeMS will have the ability to report door-to-door travel times in selected corridors for both automobiles and transit vehicles.

Transit performance data comes from the Metropolitan Transit System (MTS), North County Transit District (NCTD), and SANDAG.

New to the 2013 State of the Commute Report are data and performance measures for a limited set of key arterial roadway segments (major surface streets) based on speed and travel time datasets obtained from a third-party vendor (INRIX). The datasets are limited to general travel time statistics and speeds, as they represent anonymous data gathered from vehicles, mobile phones, and commercial truck fleets that are equipped with GPS devices. This year’s report briefly highlights arterial travel times on the I-805 commute corridor. Future State of the Commute reports will expand and integrate arterial data into ongoing performance monitoring efforts.

The My Corridor Commute section also provides information about plans for improving mobility along the region’s transportation corridors, as well as a brief assessment of the travel benefits resulting from the completion of improvement projects in some of the featured corridors.
I-5 North commute corridor

The I-5 North commute corridor serves as a critical north-south link connecting San Diego to Los Angeles County, Orange County, and Baja California, Mexico. The corridor provides several options for local, regional, and interregional trips, including the existing eight- to ten-lane freeway network, the COASTER commuter rail service, and the local street network. The corridor serves as a gateway for commuters, recreational users, goods movement, business centers, and local residents, providing access to 22 percent of the region’s total jobs. Door-to-door travel times along this corridor for solo drivers in the general purpose lanes are forecast to increase from 57 minutes (in 2008) to approximately 65 minutes, if improvements are not made by 2050, according to the 2050 Regional Transportation Plan (RTP).

Freeway congestion is prevalent in the corridor and is expected to worsen during peak commute periods as population grows over time. The average daily traffic volume along I-5 North ranges from 142,000 to 246,000 vehicles. Commute times between SR 76 in Oceanside and Front Street in Downtown San Diego averaged 43 minutes in 2013 during the southbound morning commute, an increase of almost 2 percent over the previous year. The northbound evening commute experienced a slight increase in travel times, averaging 45 minutes in 2013. (See Figure 3.3)

Congestion also affected the reliability of travel times in the corridor during 2013. Commuters needed to plan an extra nine minutes to complete their morning commute reliably and an extra 14 minutes for their evening commute. (See Figures 3.4 and 3.5)

Figure 3.6 shows that the average weekday transit ridership in the corridor decreased by 2 percent, with approximately 5,450 daily trips in 2013.

Proposed 2050 RTP improvements include the implementation of the North Coast Corridor (NCC) Program, which is composed of three primary areas: four Express Lanes on I-5 from La Jolla Village Drive to Vandegrift Boulevard; coastal rail and transit improvements; and environmental protection and coastal access improvements. The NCC Program represents a more than $6 billion investment over the next four decades.

In November 2013, the final environmental document for the I-5 Express Lanes project was released to the public. Pending approval by the California Coastal Commission, construction of the HOV lanes from Manchester Avenue to SR 78 is scheduled to begin in late 2015. The project would maintain or improve traffic conditions through 2050. Figure 3.7 indicates that the majority of all freeway delay on I-5 occurs in the North Coast segment between I-805 and SR 76. This project has been identified as a high priority and is part of the TransNet Early Action Program.

Other corridor improvements under development include the I-5 interchange project at Genesee Avenue, which will include upgrades to local streets and the addition of freeway auxiliary lanes. Construction is scheduled to begin in late 2014.

The I-805 HOV/Carroll Canyon Road Extension project, which was completed in spring 2014, extended the HOV lanes on I-805 from I-5 to Carroll Canyon Road, resulting in a continuous ten-mile HOV facility from Mira Mesa Boulevard on I-805 to Manchester Avenue on I-5. At the southern end of this facility, the HOV lanes now terminate at a north-facing Direct Access Ramp (DAR) at Carroll Canyon Road, providing direct access for carpools and vanpools to major employment centers in Sorrento Valley.

Rail improvements continued along the LOSSAN (Los Angeles-San Diego-San Luis Obispo) corridor in 2013. The first phase of the Sorrento to Miramar Double Track project was completed in spring 2014, adding a second track between the Sorrento Valley Station and Miramar Road to improve efficiency. The environmental study for the San Elijo Lagoon Double Track project is expected to be completed in late 2014, with construction anticipated to begin in 2015. Detailed project information is available at KeepSanDiegoMoving.com.

In conjunction with Caltrans and other stakeholders, in September 2013 SANDAG completed a corridor Transportation Demand Management (TDM) Plan – a comprehensive approach to encouraging the use of alternative travel modes in the corridor. The plan details options to manage congestion during future construction projects and builds a foundation for continued travel behavior change once construction is completed. Additional information is available at sandag.org/TDM.
2013 A.M. Travel Time
Southbound
Starting at 8 A.M.: 43 minutes

2013 P.M. Travel Time
Northbound
Starting at 5 P.M.: 45 minutes

2013 Average Weekday Ridership
COASTER Commuter Rail in Solana Beach: 4,549

2012 Average Daily Traffic
I-5 at Del Mar Heights Road: 244,000
I-15/SR 163 commute corridor

The I-15/SR 163 commute corridor consists of a 35-mile, four- to ten-lane stretch of freeway between SR 78 and Downtown San Diego, a transit network that includes Premium Express Bus service into Downtown from northern inland communities, a 20-mile Express Lanes facility in the median of I-15, and approximately 25 miles of parallel arterial network. The corridor is the primary inland north-south trunk line that serves travelers coming from southwest Riverside County to Downtown San Diego and other regional destinations. The corridor also serves as one element of a major interregional goods movement pathway, connecting Mexico with Riverside and San Bernardino counties, as well as Nevada. The corridor is the primary north-south link that connects northern inland communities with the urban core. Door-to-door travel times along this corridor for solo drivers in the general purpose lanes are forecast to increase from 47 minutes (in 2008) to approximately 51 minutes in 2050 without improvements to the corridor, according to the 2050 RTP.

Average daily traffic in the corridor (excluding Express Lanes) ranges from 105,000 vehicles on SR 163 near Balboa Park to 293,000 at the I-15/SR 163 junction. Travel times in the general purpose lanes between SR 78 and Balboa Park (Robinson Avenue/Washington Street) via SR 163 are estimated at 32 minutes during both the morning southbound and afternoon northbound commute periods. (See Figure 3.9) These freeway travel times represent an increase of approximately 1 percent and 3 percent, respectively, compared to 2012. Morning budget travel times also increased by two minutes in the general purpose lanes. (See Figure 3.10)

The completed I-15 Express Lanes from SR 163 all the way to SR 78 marked their second year of operation in 2013. The existing transit services in the I-15 Corridor continued to benefit from enhancements, which include Direct Access Ramps (DARs) that connect with adjacent transit centers. Corridor transit ridership has remained relatively steady in the past three years, with approximately 3,200 riders each weekday. (See Figure 3.11)

Express Lanes usage on I-15 continues to grow, demonstrating the effectiveness of the facility in moving not just vehicles, but people through the corridor. More than 35,000 vehicles used the Express Lanes each weekday through Poway, an increase of almost 10 percent. Figure 3.12 shows a comparison of the number of persons per lane on I-15 through Poway during the southbound morning and northbound evening commutes. During the 7 A.M. hour southbound commute in 2013, 3,030 people were moved per Express Lane compared to 2,070 per general purpose lane. During the 5 P.M. hour northbound commute, 2,860 people were moved per Express Lane compared to the 1,770 per general purpose lane. Productivity of the Express Lanes (in terms of persons moved per lane) is approximately 12 to 14 percent higher in 2013 than during the same period last year.

After seeing delay reductions in the first year after the final Express Lanes segment was completed in early 2012, delay on I-15 from SR 163 to SR 78 increased by about 56 percent in 2013. (See Figure 3.13) This increase in delay can be partially attributed to the 5 percent increase in travel observed in the corridor (see Figure 3.8), as well as impacts related to the construction of the final Direct Access Ramp (DAR) in the Mira Mesa community of San Diego. With improvements made to freeway detection coverage after the Express Lanes construction was completed in early 2012, more freeway delay was observed.

Starting in 2014, a Bus Rapid Transit (BRT) system will begin operating in the I-15 corridor, taking advantage of the free flow of traffic in the Express Lanes. Construction of the Miramar College Transit Station and DAR located at Hillery Drive is expected to be completed in summer 2014, providing I-15 Express Lanes access to Miramar College and Mira Mesa.

In 2013, upgrades were completed at the Del Lago and Rancho Bernardo transit stations to accommodate upcoming BRT service. The newly reopened stations feature larger bus staging areas, new shelters, real-time next-vehicle arrival signs, and improved bicycle parking facilities. The Sabre Springs/Peñasquitos Transit Station reopened for service in March 2014 with new amenities, including a 630-space parking structure with electric vehicle charging stations and fuel-efficient and smart vehicle spaces, as well as a bike parking station. Detailed project information is available at KeepSanDiegoMoving.com.
2013 A.M. Travel Time
Southbound
Starting at 8 A.M.:
32 minutes

2012 Average Daily Traffic
I-15 at Poway Road:
238,000

2013 Average Weekday Ridership
I-15 Express Bus Services
at Miramar Way: 3,192

2013 P.M. Travel Time
Northbound
Starting at 5 P.M.:
32 minutes

Note: Ridership at Miramar Way for Route 20, 210, and Series 800 Express buses. Historical data has been corrected to accurately reflect average weekday transit ridership.

I-15 IMPROVEMENTS: BEFORE AND AFTER

Fig. 3.8 Average Weekday Travel
I-15 from SR 78 to Robinson Avenue via SR 163

Fig. 3.9 Average Freeway Travel Time
I-15 from SR 78 to Robinson Avenue via SR 163

AM Southbound
PM Northbound

Fig. 3.10 A.M. Travel Time Reliability
I-15 from SR 78 to Robinson Avenue via SR 163

Budget Time
Median Travel Time

Fig. 3.11 Average Weekday Transit Ridership

Local Bus
Express Bus

Fig. 3.12 Average Person Throughput
Per Lane Per Hour I-15 at Poway Road

General Purpose Lanes
Express Lanes

Fig. 3.13 Corridor Travel and Delay
I-15 from SR 163 to SR 78

Travel (million vehicle miles)
Delay (thousands of vehicle hours)
I-805/SR 94 commute corridor

The I-805/SR 94 commute corridor consists of approximately 13 miles of eight- to ten-lane freeway stretching from SR-905 in Chula Vista to Downtown San Diego via SR-94. The corridor includes local roadway networks that provide access to regional freeway facilities. The I-805 corridor serves local, regional, and interregional travel, while the SR 94 segment serves primarily local and regional travel. It is a heavily used regional commuter route that provides one of two major commute routes between Chula Vista and the central business district in Downtown San Diego.

In 2013, travel times for the northbound morning commute to Downtown San Diego and the southbound afternoon commute to Chula Vista both remained the same compared to the previous year, with estimated travel times of 17 minutes and 13 minutes, respectively. (See Figure 3.15) Congestion during the northbound morning commute affects the reliability of travel; commuters needed to plan an extra seven minutes to complete their morning commute reliably. (See Figure 3.16)

The I-805 South Express Lanes project is intended to address current and anticipated demand. The first phase of the project includes the construction of HOV/Express Lanes facilities from Palomar Street to the I-805/I-15 interchange. Work began on the HOV lanes from Palomar Street to SR 94 in the summer of 2012, and Caltrans opened that portion of the lanes to the public in March 2014. In addition, the project includes a Palomar Street Direct Access Ramp (DAR) and associated transit station/Park & Ride. The Palomar Street DAR will provide convenient access to the freeway for future South Bay Bus Rapid Transit (BRT) service, carpools, vanpools, motorcycles, and permitted clean air vehicles. Construction on the Palomar Street DAR and Park & Ride began in April 2013 and is scheduled for completion in early 2015.

In July 2013, the SANDAG Board of Directors adopted the final EIR for the South Bay BRT project. This BRT service will operate in the HOV/Express Lanes, connecting South County to major regional employment centers in Downtown San Diego. The South Bay BRT will improve travel times when compared to other forms of transit by utilizing dedicated transit only lanes, traffic signal priority, limited transit stations, and real-time traveler information. South Bay BRT is scheduled to begin service in 2016. The I-805 South and South Bay BRT projects are both part of the TransNet Early Action Program.

Another critical project in this corridor is the State Route 94 (SR 94) Express Lanes project, which will provide commuters with enhanced transportation choices by adding two Express Lanes along SR 94 from I-5 to I-805. A key component of this project is a proposed freeway-to-freeway high occupancy vehicle (HOV) connector at I-805. This connector would provide a direct connection from the I-805 Express Lanes to the SR 94 Express lanes, improving travel times and reliability for carpools, vanpools, and South Bay BRT vehicles.

Detailed information on the SR 94, I-805 South, and South Bay BRT projects is available at KeepSanDiegoMoving.com.
2013 PM Travel Time
Southbound
Starting at 5 P.M.: 13 minutes

2012 Average Daily Traffic
I-805 at SR 54: 226,000

2013 A.M. Travel Time
Northbound
Starting at 8 A.M.: 17 minutes
I-805 commute corridor

The I-805 commute corridor consists of approximately 29 miles of eight- to ten-lane freeway from near I-5 at the San Ysidro international border crossing to the I-5 interchange in Sorrento Valley. The corridor includes a transit network that is currently limited to local route services, and a local roadway network that supports regional east-west travel to and from the communities adjacent to the freeway. The I-805 corridor serves local, regional, and interregional travel. It is a heavily used regional commuter route that provides a north-south path from South County communities to employment centers in Downtown San Diego and Sorrento Valley. It also serves as part of a larger interregional goods movement corridor, connecting international trips from Mexico to other freeway facilities and to destinations in Riverside and San Bernardino counties, as well as Nevada and the rest of the United States.

The average daily traffic volume along this corridor ranges from 102,000 to 226,000 vehicles. Commuters generally experience delays in the morning when traveling northbound to Sorrento Valley and in the evening when traveling southbound to Chula Vista. In 2013, morning commute times on I-805 to Sorrento Valley increased to 37 minutes, a 4 percent increase compared to 2012. Southbound travel time to Chula Vista during the evening commute also increased to 37 minutes, a 3 percent increase. (See Figure 3.19) These increased travel times were partially due to delays caused by bottlenecks in the northern portions of I-805. They also can be attributed to traffic impacts from freeway construction between State Route 52 (SR 52) and Mira Mesa Boulevard. Southbound commuters needed to plan on leaving an additional 16 minutes early to complete their morning commutes reliably. (See Figure 3.21)

Figure 3.22 introduces arterial performance and corridor-level travel times in the State of the Commute for the first time. For the I-805 corridor, the evening commute between Sorrento Valley and eastern Chula Vista is highlighted for the years 2011 through 2013. Based on data from INRIX, travel times on westbound Mira Mesa Boulevard from Camino Santa Fe to I-805 were approximately 5 minutes on an average weekday in 2013. The freeway portion of the commute on southbound I-805 from Mira Mesa Boulevard to Telegraph Canyon Road in Chula Vista took about 31 minutes. For the final leg of the evening commute, drivers spent an additional 5 minutes on Telegraph Canyon Road from I-805 to La Media Road. For the entire evening commute, the corridor travel time was approximately 41 minutes in 2013, with approximately one-quarter of that time spent on arterial roads. (This corridor travel time does not include delay on the Mira Mesa Road on-ramp to I-805 at the beginning of the commute, or the Telegraph Canyon Road off-ramp from I-805 toward the end of the commute.)

Construction on the first phase of the I-805 North project began in spring 2013. This phase will add one HOV lane in each direction of I-805 from SR 52 to Mira Mesa Boulevard. The south-facing Direct Access Ramp (DAR) at Carroll Canyon Road also will be completed as part of Phase one. The completion of this phase of the I-805 North project will provide direct HOV access to major employment centers in Sorrento Valley. It is expected to be completed in 2016. The I-805 North project has been identified as a high priority and is part of the TransNet Early Action Program. Detailed information is available at KeepSanDiegoMoving.com.
2013 P.M. Travel Time
Southbound
Starting at 5 P.M.: 37 minutes

2013 A.M. Travel Time
Northbound
Starting at 8 A.M.: 37 minutes

2012 Average Daily Traffic
I-805 at Governor Drive: 198,000

2012 Average Daily Traffic
I-805 at SR 54: 226,000

2013 Average PM Corridor Travel Time
Sorrento Valley to Chula Vista

Fig. 3.18 Average Weekday Travel
I-805 from SR 905 to Mira Mesa Blvd

Fig. 3.19 Average Freeway Travel Time
I-805 from SR 905 to Mira Mesa Blvd

Fig. 3.20 AM Travel Time Reliability
I-805 from SR 905 to Mira Mesa Blvd

Fig. 3.21 PM Travel Time Reliability
I-805 from Mira Mesa Blvd to SR 905

Fig. 3.22 Average PM Corridor Travel Time
Sorrento Valley to Chula Vista
I-5 South commute corridor

The I-5 South commute corridor is a critical multimodal link connecting San Ysidro to Downtown San Diego and is part of a larger interregional corridor from Baja California, Mexico, to Orange and Los Angeles counties. The corridor provides a number of options for local and regional trips, including the existing eight-lane freeway network, Blue Line Trolley service, and the local street network. I-5 South is a key travel corridor for South County commuters, recreational users, goods movement, and the military. It provides access to the region’s central business district and international airport. Door-to-door travel times along this corridor for solo drivers in the general purpose lanes are forecast to increase from 28 minutes (in 2008) to approximately 32 minutes if improvements are not made by 2050, according to the 2050 Regional Transportation Plan (RTP).

Freeway bottlenecks persist on this older, constrained corridor, and are expected to worsen during peak time commute periods as population grows over time. The average daily traffic volume along I-5 South ranges from 36,000 to 209,000 vehicles. Commute times between SR 905 in San Ysidro and Downtown San Diego were an estimated 18 minutes during the northbound morning commute in 2013, an increase of 13 percent over 2012. The southbound evening peak period commute remained relatively unchanged, averaging 16 minutes in 2013. (See Figure 3.24) Congestion also affects the reliability of travel times in this corridor; in 2013, commuters needed to plan an extra ten minutes to complete their morning commute reliably. (See Figure 3.25)

Improvements included in the 2050 Regional Transportation Plan focus on making carpooling/vanpooling and transit more competitive with driving alone by providing Express Lanes in the corridor. Express Lanes allow carpoolers, vanpoolers, and transit riders to bypass congestion in the general purpose lanes, ensuring they have fast and reliable travel. The plan includes a project to add two Express Lanes on I-5 between Palomar Street and I-15 by 2030, which will potentially support future BRT service from San Ysidro to Downtown and Kearny Mesa.

Figure 3.27 shows that the average weekday transit ridership in the corridor (which includes Trolley and Route 929 bus service) between National City and Chula Vista decreased by 21 percent (approximately 21,800 daily trips). The decrease may have been due to the decline in pedestrian crossings at the San Ysidro Port of Entry and lingering effects of Trolley route realignments.

Since 2010, MTS and SANDAG have been working to complete the Trolley Renewal project, which includes adding station amenities, raising station platforms to accommodate low-floor vehicles, replacing old rail and overhead wire, and improving switching, signaling, and crossovers. Construction began on the Blue Line (from Barrio Logan to San Ysidro) portion of the Trolley Renewal project in summer 2013 and is expected to be completed by late 2015. The project is part of the TransNet Early Action Program. More information is available at KeepSanDiegoMoving.com.

Improvements are also being made to provide more intermodal connections between the Port of San Diego and I-5 with the goal of increasing the flow of commerce to and from the port. The Port Freeway Access Improvement projects include improvements at Bay Marina Drive at I-5, Civic Center Drive at Harbor Drive and I-5, and 10th Avenue at Harbor Drive. The projects will benefit traffic operations, goods movement, air quality, and safety in Barrio Logan, as well as encourage diversion of truck traffic from the Cesar E. Chavez Parkway residential neighborhood. Construction began in January 2014 and is expected to last until late 2014.

The Bayshore Bikeway is a proposed 24-mile bicycle facility separated from vehicle traffic that will stretch all the way around San Diego Bay. Approximately 15 miles of the bikeway are completed at this point. The rest of the facility consists of on-street sections designated as either bicycle lanes or bicycle routes. SANDAG is developing additional improvements to the bikeway based on the Bayshore Bikeway Plan, adopted in 2006 to identify opportunities to improve the bikeway along the eastern portion of San Diego Bay. The goal of the Plan is to enable bicyclists to ride all the way around San Diego Bay on a dedicated path separate from local streets. More information is available at KeepSanDiegoMoving.com/BayshoreBikeway.
2013 P.M. Travel Time
Southbound
Starting at 5 P.M.: 16 minutes

2013 A.M. Travel Time
Northbound
Starting at 8 A.M.: 18 minutes

2013 Average Weekday Ridership
Blue Line Trolley at Sweetwater River: 19,809

2012 Average Daily Traffic
I-5 at Division Street: 190,000
SR 78 serves as a principal commute corridor in North County. The six-lane freeway from Oceanside to Escondido is approximately 17 miles. It provides one of the region’s east-west roadways connecting the I-5 and I-15 corridors. Portions of SR 78 west of I-15 are currently experiencing congestion and delay during peak periods. Door-to-door travel times for solo drivers in the general purpose lanes from Oceanside to Escondido along this corridor are forecast to increase from 32 minutes (in 2008) to approximately 39 minutes in 2050 without improvements to the freeway, according to the 2050 RTP.

In 2013, westbound travel times on SR 78 from I-15 to I-5 during the morning commute remained relatively consistent at 16 minutes. Eastbound travel times to I-15 during the evening commute decreased by approximately 3 minutes, with an average travel time of 24 minutes. (See Figure 3.29) The eastbound evening commute on SR 78 also grew more reliable, with commuters needing to budget 10 extra minutes to ensure an on-time arrival, compared to 12 extra minutes in 2012. (See Figure 3.30)

These travel time reductions were the result of a series of roadway improvements completed by SANDAG, Caltrans, San Marcos, and Escondido in 2012 and 2013. In May 2013, an additional eastbound auxiliary lane between Barham Drive, Woodland Parkway, and Nordahl Road was completed. The improvement eased severe traffic congestion, especially during the afternoon commute hours. The improvements had a particularly strong impact on eastbound SR 78 from Mar Vista Drive to I-15, where delay decreased by nearly 30 percent compared to 2012. (See Figure 3.32)

Average daily traffic in this corridor ranges from 121,000 at the western end near I-5 to 164,000 at the eastern approach to I-15. Because the SPRINTER runs parallel to SR 78, connecting Oceanside, Vista, San Marcos, and Escondido, it is an important transit alternative to driving in the corridor. The SPRINTER rail service now supports nearly 8,500 passengers each weekday. Roughly 4,000 SPRINTER riders traveled through Vista each weekday in 2013. (See Figure 3.31)

Focus has now shifted toward advancing future Express Lane improvements in the SR 78 Corridor as recommended by the SANDAG SR 78 Corridor Study completed in 2012. Caltrans also continues engineering and environmental studies for improvements to the freeway interchanges at both I-5 and I-15.
2013 Average Weekday Ridership
SPRINTER Rail at Vista Transit Center:
4,153

2013 A.M. Travel Time
Westbound Starting at 8 A.M.:
16 minutes

2012 Average Daily Traffic
SR 78 at Barham Road:
158,000

2013 Travel Time
Eastbound Starting at 5 P.M.:
24 minutes

2013 Travel Time
Westbound Starting at 8 A.M.:
16 minutes

2012 Average Daily Traffic
SR 78 at Barham Road:
158,000

(Fig. 3.29) Average Freeway Travel Time
SR 78 from I-5 to I-15

(Fig. 3.30) PM Travel Time Reliability
SR 78 from I-5 to I-15

(Fig. 3.31) Average Weekday Transit Ridership
Note: Ridership at Vista Transit Center for SPRINTER

(Fig. 3.32) Corridor Delay and Travel
Eastbound SR 78 from Mar Vista Drive to I-15

Travel (million vehicle miles)
Delay (thousands of vehicle hours)
SR 76 corridor

SR 76 serves as a major regional and interregional route in northern San Diego County. Starting at I-5, it links the City of Oceanside with the communities of Bonsall, Fallbrook, Pala, Pauma Valley, Rincon, and Lake Henshaw. East of I-15, SR 76 serves mainly rural communities and tribal reservations. Portions of SR 76 are currently experiencing delay during peak periods. Insufficient highway capacity, lack of parallel routes, and cross-street traffic access all contribute to the problem.

SANDAG and Caltrans are currently constructing the last of three segments of the SR 76 project from South Mission Road to I-15 as part of the TransNet Early Action Program. Construction on the first phase of the SR 76 East Segment was completed in summer 2013, widening and upgrading the SR 76/I-15 interchange. The second phase of the East Segment, widening and realigning SR 76 from two to four lanes, is scheduled to begin in winter 2014. More information is available at KeepSanDiegoMoving.com.

Mid-Coast corridor

The Mid-Coast Corridor Transit project proposes to extend the San Diego Trolley from the Old Town Transit Center north to UC San Diego and University City. Travel demand is expected to increase in the Mid-Coast Corridor, and this Trolley extension will provide a fast, reliable, high-capacity transit choice.

The route will run parallel to I-5 from Old Town north to UC San Diego, then east and south to the Westfield UTC Transit Center. The Draft Supplemental Environmental Impact Statement/ Subsequent Environmental Impact Report (SEIS/ SEIR) was released in May 2013 for public review and comment. In November 2013, the SANDAG Board adopted a number of refinements to the Locally Preferred Alternative in response to feedback from the public and comments received on the draft environmental document. The refinements include:

» Adding a station at the VA Medical Center
» Eliminating one of the two design options for the Genesee Avenue aerial guideway
» Adjustments to the alignment in select areas

The changes will be included in the final SEIS/SEIR, which is expected to be released in summer 2014.

The Mid-Coast Trolley Extension is the highest priority transit project in the region. Half of the funding for the project will come from the TransNet half-cent sales tax, as well as other regional and state sources. SANDAG is seeking the remaining funding from the Federal Transit Administration (FTA) New Starts Program. In September 2011, the FTA approved the Mid-Coast project’s entry into preliminary engineering, officially placing it in the pipeline to receive New Starts funding. The project is part of the TransNet Early Action Program. More information is available at KeepSanDiegoMoving.com.

Mid-City Rapid Bus

Mid-City Rapid will be a high-frequency, limited-stop bus service between San Diego State University and Downtown San Diego along El Cajon and Park boulevards. The ten-mile rapid bus service will provide North Park, City Heights, and College area residents, students, and workers with a fast and reliable way to get around in one of the region’s key transportation corridors. Key project features include enhanced stations, technology integration, and street improvements. Buses will travel on both dedicated bus lanes and shared travel lanes improved by transit signal priority. Stations will be equipped with customized shelters and electronic signs showing the arrival time of the next bus.

Mid-City Rapid is one of the TransNet Early Action Program projects (EAP) approved by the region’s voters in 2004. Construction of new stations and related street improvements for Mid-City Rapid began in July 2013, and the service is scheduled to begin in summer/fall 2014.

SR 11 corridor

State Route 11 (SR 11) is a planned four-lane highway, extending approximately 2.5 miles east from SR 905 to a proposed federal port of entry (POE) between the United States and Mexico. The project will be developed in three segments. Segment 1, which started construction in December 2013, includes connectors to SR 905, plus a stretch of the new SR 11 highway from SR 905 east to
Enrico Fermi Drive. Construction is expected to be completed in Winter 2015/2016.

Segments 2 and 3 – as well as similar facilities to be built by project partners in Mexico – will be built as funding becomes available, possibly starting construction as soon as 2016. Segment 2 will include a tolled highway segment, extending SR 11 from Enrico Fermi Drive to Siempre Viva Road, and a proposed commercial vehicle enforcement facility. Segment 3 will include construction of the Otay Mesa East Port of Entry. The new highway and port of entry will ease congestion and reduce lengthy border wait times at the existing Otay Mesa POE, providing a major economic boost to the region. Additional information is available at sandag.org/borders.

SR 125 – South Bay Expressway

SANDAG acquired the toll road franchise for South Bay Expressway in 2011 as part of the Board of Directors’ strategic plan to improve mobility in South County. The Board subsequently lowered tolls on the facility to draw traffic away from local arterials and I-805 with the goal of reducing congestion on those roadways and making further improvements unnecessary. South Bay Expressway (State Route 125) is a 10-mile toll road from SR 905 near the Otay Mesa Port of Entry to SR 54 near Spring Valley. The toll road provides quick and convenient travel choices between eastern Chula Vista, Downtown San Diego, East County, Sorrento Valley, I-8, I-15, Otay Mesa, and Mexico.

During fiscal year 2013 overall usage of the toll road exceeded 11.63 million trips, surpassing targets set to ensure that funds were available to pay for debt service and operation of the facility. Average daily traffic grew to more than 35,500 trips, 23 percent higher than the previous year.

Based on a trip diversion study conducted by SANDAG using anonymous mobile phone and GPS data, approximately 50 percent of the traffic growth that occurred on SR 125 was from trips previously occurring on I-805. The study confirmed the validity of traffic forecasts that were central to the Board’s goal of shifting traffic from I-805 and local streets.

Other regional corridors

This report also monitors the performance of additional regional corridors, including the commute from Santee to Kearny Mesa; El Cajon to Downtown San Diego, via both I-8 and SR 94; El Cajon to Sorrento Valley; and Carmel Valley to Rancho Peñasquitos. Exhibits for these corridors can be found on the following pages.
2013 P.M. Travel Time
Eastbound
Starting at 5 P.M.:
20 minutes

2012 Average Daily Traffic
at SR 52 at Santo Road:
95,000

2013 A.M. Travel Time
Westbound
Starting at 8 A.M.:
15 minutes

(Fig. 3.33) Average Weekday Travel
SR 52 from Genesee Ave. to Mast Blvd.

(Fig. 3.35) AM Travel Time Reliability
SR 52 from Mission Gorge Rd. to Genesee Ave.

(Fig. 3.34) Average Freeway Travel Time
SR 52 from Genesee Ave. to Mast Blvd.

(Fig. 3.36) PM Travel Time Reliability
SR 52 from Genesee Ave. to Mast Blvd.
### Average Weekday Travel

**El Cajon to Downtown San Diego via I-8/SR 163**

<table>
<thead>
<tr>
<th>Year</th>
<th>Travel Time (minute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>25</td>
</tr>
<tr>
<td>2010</td>
<td>25</td>
</tr>
<tr>
<td>2011</td>
<td>25</td>
</tr>
<tr>
<td>2012</td>
<td>25</td>
</tr>
<tr>
<td>2013</td>
<td>25</td>
</tr>
</tbody>
</table>

### Average Freeway Travel Time from El Cajon to Downtown San Diego via I-8/SR 163

<table>
<thead>
<tr>
<th>Year</th>
<th>AM to Downtown</th>
<th>PM to El Cajon</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>2010</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>2011</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>2012</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>2013</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

### Average Weekday Transit Ridership

**Carlsbad**

- 2009: 10,345 riders
- 2010: 10,345 riders
- 2011: 10,345 riders
- 2012: 10,345 riders
- 2013: 10,345 riders

**Poway**

- 2009: 10,345 riders
- 2010: 10,345 riders
- 2011: 10,345 riders
- 2012: 10,345 riders
- 2013: 10,345 riders

**San Diego**

- 2009: 10,345 riders
- 2010: 10,345 riders
- 2011: 10,345 riders
- 2012: 10,345 riders
- 2013: 10,345 riders

### Average Freeway Travel Time from El Cajon to Downtown San Diego via I-8/SR 163

<table>
<thead>
<tr>
<th>Year</th>
<th>Travel Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>14</td>
</tr>
<tr>
<td>2010</td>
<td>15</td>
</tr>
<tr>
<td>2011</td>
<td>17</td>
</tr>
<tr>
<td>2012</td>
<td>18</td>
</tr>
<tr>
<td>2013</td>
<td>20</td>
</tr>
</tbody>
</table>

### AM Travel Time Reliability from El Cajon to Downtown San Diego via I-8/SR 163

- **Budget Time**
- **Median Travel Time**

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget Time</th>
<th>Median Travel Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>2010</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>2011</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>2012</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>2013</td>
<td>20</td>
<td>17</td>
</tr>
</tbody>
</table>
2013 Average Weekday Ridership
Orange Line Trolley at I-5: 15,070

2012 Average Weekday Traffic
SR 94 at Euclid Avenue: 174,000

2013 P.M. Travel Time
Eastbound
Starting at 5 P.M.: 11 minutes

Year 2013 A.M. Travel Time
Westbound
Starting at 8 a.m.
16 minutes
2013 P.M. Travel Time
Southbound/Eastbound
Starting at 5 P.M.: 29 minutes

2012 Average Weekday Traffic
I-8 at Waring Road:
228,000

2013 A.M. Travel Time
Westbound/Northbound
Starting at 8 A.M.: 30 minutes
2012 Average Daily Traffic
SR 56 Carmel Creek Road:
72,000

2013 P.M. Travel Time
Eastbound
Starting at 5 P.M.:
13 minutes

2013 A.M. Travel Time
Westbound
Starting at 8 A.M.:
18 minutes

(Fig. 3.49) Average Weekday Travel
SR 56 from I-5 to I-15

(Fig. 3.50) Average Freeway Travel Time
SR 56 from I-5 to I-15

(Fig. 3.51) AM Travel Time Reliability
SR 56 from I-15 to I-5

(Fig. 3.52) PM Travel Time Reliability
SR 56 from I-5 to I-15
## State of the Commute performance measures

### Regional Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
<td>SANDAG</td>
<td>Persons (thousands)</td>
<td>2,976</td>
<td>2,998</td>
<td>3,033</td>
<td>3,064</td>
<td>3,095</td>
<td>3,116</td>
<td>3,129</td>
</tr>
<tr>
<td><strong>Total Employment (as of December)</strong></td>
<td>CA Employment Development Department</td>
<td>Jobs (thousands)</td>
<td>1,320</td>
<td>1,322</td>
<td>1,289</td>
<td>1,229</td>
<td>1,238</td>
<td>1,251</td>
<td>1,280</td>
</tr>
<tr>
<td><strong>Gross Regional Product</strong></td>
<td>San Diego Economic Ledger</td>
<td>US dollars (billions)</td>
<td>$167.7</td>
<td>$164.9</td>
<td>$165.9</td>
<td>$172.6</td>
<td>$180.1e</td>
<td>$187.6f</td>
<td></td>
</tr>
<tr>
<td><strong>Average California Fuel Price (in December)</strong></td>
<td>US Energy Information Administration</td>
<td>US dollars</td>
<td>$2.81</td>
<td>$3.08</td>
<td>$3.51</td>
<td>$2.68</td>
<td>$3.09</td>
<td>$3.81</td>
<td>$4.05</td>
</tr>
<tr>
<td><strong>Registered Vehicles (estimate)</strong></td>
<td>Department of Motor Vehicles</td>
<td>Vehicles (thousands)</td>
<td>2,642</td>
<td>2,637</td>
<td>2,643</td>
<td>2,654</td>
<td>2,670</td>
<td>2,654</td>
<td>2,672</td>
</tr>
<tr>
<td><strong>Licensed Drivers</strong></td>
<td>Department of Motor Vehicles</td>
<td>Persons (thousands)</td>
<td>2,044</td>
<td>2,081</td>
<td>2,100</td>
<td>2,106</td>
<td>2,122</td>
<td>2,139</td>
<td>2,172</td>
</tr>
</tbody>
</table>

### Commute Mode Share

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>Percentage of Travelers Over 16</th>
<th>74.80%</th>
<th>74.90%</th>
<th>74.32%</th>
<th>75.80%</th>
<th>76.16%</th>
<th>76.29%</th>
<th>76.17%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drove Alone</strong></td>
<td>US Census</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Carpool/Vanpool</strong></td>
<td></td>
<td></td>
<td>10.80%</td>
<td>10.80%</td>
<td>11.26%</td>
<td>9.87%</td>
<td>10.11%</td>
<td>9.82%</td>
<td>9.88%</td>
</tr>
<tr>
<td><strong>Public Transit</strong></td>
<td></td>
<td></td>
<td>3.10%</td>
<td>3.60%</td>
<td>3.41%</td>
<td>3.08%</td>
<td>3.28%</td>
<td>3.03%</td>
<td>2.79%</td>
</tr>
<tr>
<td><strong>Walk</strong></td>
<td></td>
<td></td>
<td>2.70%</td>
<td>2.90%</td>
<td>3.26%</td>
<td>2.80%</td>
<td>2.76%</td>
<td>2.75%</td>
<td>2.66%</td>
</tr>
<tr>
<td><strong>Bicycle</strong></td>
<td></td>
<td></td>
<td>0.60%</td>
<td>0.60%</td>
<td>0.64%</td>
<td>0.62%</td>
<td>0.82%</td>
<td>0.72%</td>
<td>0.74%</td>
</tr>
<tr>
<td><strong>Worked at Home</strong></td>
<td></td>
<td></td>
<td>6.50%</td>
<td>6.20%</td>
<td>5.84%</td>
<td>6.61%</td>
<td>5.90%</td>
<td>6.32%</td>
<td>6.59%</td>
</tr>
<tr>
<td><strong>Taxicab</strong></td>
<td></td>
<td></td>
<td>0.05%</td>
<td>0.02%</td>
<td>0.02%</td>
<td>0.03%</td>
<td>0.02%</td>
<td>0.05%</td>
<td>0.05%</td>
</tr>
<tr>
<td><strong>Motorcycle</strong></td>
<td></td>
<td></td>
<td>0.42%</td>
<td>0.38%</td>
<td>0.53%</td>
<td>0.52%</td>
<td>0.37%</td>
<td>0.42%</td>
<td>0.58%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td>1.01%</td>
<td>0.66%</td>
<td>0.70%</td>
<td>0.67%</td>
<td>0.59%</td>
<td>0.61%</td>
<td>0.55%</td>
</tr>
<tr>
<td><strong>Average Commute Time</strong></td>
<td>Minutes</td>
<td>26.1</td>
<td>25.5</td>
<td>26</td>
<td>24.5</td>
<td>24.3</td>
<td>24.8</td>
<td>24.9</td>
<td>25.5</td>
</tr>
<tr>
<td><strong>FSP Assists</strong></td>
<td>SANDAG</td>
<td>Assists</td>
<td>49,521</td>
<td>51,692</td>
<td>50,736</td>
<td>51,181</td>
<td>51,220</td>
<td>45,479</td>
<td>40,403</td>
</tr>
<tr>
<td><strong>Vanpools (in December)</strong></td>
<td>SANDAG</td>
<td>Vehicles</td>
<td>541</td>
<td>591</td>
<td>641</td>
<td>661</td>
<td>673</td>
<td>749</td>
<td>708</td>
</tr>
<tr>
<td><strong>Regional Travel</strong></td>
<td>Caltrans HPMS</td>
<td>Daily vehicle miles (thousands)</td>
<td>73,491</td>
<td>72,013</td>
<td>76,492</td>
<td>75,290</td>
<td>76,955</td>
<td>75,151</td>
<td>75,652</td>
</tr>
</tbody>
</table>

### Freeway Travel

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>Vehicle miles (millions)</th>
<th>4,237</th>
<th>4,338</th>
<th>4,244</th>
<th>4,231</th>
<th>4,307</th>
<th>4,260</th>
<th>4,482</th>
<th>4,733</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weekday Peak</strong></td>
<td>Caltrans PeMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AM Peak (6 to 10 a.m.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PM Peak (3 to 7 p.m.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weekday Off-Peak</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Midday (10 a.m. to 3 p.m.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evening (7 p.m. to 6 a.m.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Weekday</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Weekend/Holidays</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Freeway Delay (at 35 MPH or less)</strong></td>
<td>Caltrans PeMS</td>
<td>Vehicle hours (thousands)</td>
<td>7,341</td>
<td>6,161</td>
<td>3,499</td>
<td>2,835</td>
<td>3,755</td>
<td>3,953</td>
<td>4,379</td>
<td>5,417</td>
</tr>
<tr>
<td><strong>AM Peak (6 to 10 a.m.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PM Peak (3 to 7 p.m.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weekday Off-Peak</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Midday (10 a.m. to 3 p.m.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evening (7 p.m. to 6 a.m.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Weekday</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Weekend/Holidays</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Freeway Delay (at 35 MPH or less) - AM Peak

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-5</td>
<td>Caltrans PeMS</td>
<td>Vehicle hours (thousands)</td>
<td>809</td>
<td>803</td>
<td>345</td>
<td>142</td>
<td>277</td>
<td>293</td>
<td>287</td>
</tr>
<tr>
<td>I-8</td>
<td>&quot;</td>
<td>&quot;</td>
<td>141</td>
<td>113</td>
<td>54</td>
<td>26</td>
<td>55</td>
<td>62</td>
<td>88</td>
</tr>
<tr>
<td>I-15</td>
<td>&quot;</td>
<td>&quot;</td>
<td>1,018</td>
<td>647</td>
<td>298</td>
<td>260</td>
<td>306</td>
<td>336</td>
<td>188</td>
</tr>
<tr>
<td>SR 52</td>
<td>&quot;</td>
<td>&quot;</td>
<td>100</td>
<td>84</td>
<td>27</td>
<td>10</td>
<td>15</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>SR 54</td>
<td>&quot;</td>
<td>&quot;</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>SR 56</td>
<td>&quot;</td>
<td>&quot;</td>
<td>28</td>
<td>43</td>
<td>42</td>
<td>27</td>
<td>30</td>
<td>24</td>
<td>56</td>
</tr>
<tr>
<td>SR 67</td>
<td>&quot;</td>
<td>&quot;</td>
<td>2</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR 78</td>
<td>&quot;</td>
<td>&quot;</td>
<td>36</td>
<td>27</td>
<td>30</td>
<td>191</td>
<td>199</td>
<td>147</td>
<td>165</td>
</tr>
<tr>
<td>SR 94</td>
<td>&quot;</td>
<td>&quot;</td>
<td>92</td>
<td>79</td>
<td>51</td>
<td>34</td>
<td>45</td>
<td>53</td>
<td>69</td>
</tr>
<tr>
<td>SR 125</td>
<td>&quot;</td>
<td>&quot;</td>
<td>37</td>
<td>60</td>
<td>45</td>
<td>6</td>
<td>14</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>SR 163</td>
<td>&quot;</td>
<td>&quot;</td>
<td>10</td>
<td>13</td>
<td>12</td>
<td>13</td>
<td>23</td>
<td>141</td>
<td>136</td>
</tr>
<tr>
<td>I-805</td>
<td>&quot;</td>
<td>&quot;</td>
<td>498</td>
<td>377</td>
<td>219</td>
<td>125</td>
<td>219</td>
<td>253</td>
<td>268</td>
</tr>
<tr>
<td>SR 905</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&lt;1</td>
<td>0.002</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

### Freeway Delay (at 35 MPH or less) - PM Peak

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-5</td>
<td>Caltrans PeMS</td>
<td>Vehicle hours (thousands)</td>
<td>1,921</td>
<td>1,642</td>
<td>799</td>
<td>604</td>
<td>870</td>
<td>945</td>
<td>1,029</td>
</tr>
<tr>
<td>I-8</td>
<td>&quot;</td>
<td>&quot;</td>
<td>215</td>
<td>195</td>
<td>138</td>
<td>153</td>
<td>200</td>
<td>126</td>
<td>157</td>
</tr>
<tr>
<td>I-15</td>
<td>&quot;</td>
<td>&quot;</td>
<td>746</td>
<td>510</td>
<td>438</td>
<td>385</td>
<td>484</td>
<td>314</td>
<td>322</td>
</tr>
<tr>
<td>SR 52</td>
<td>&quot;</td>
<td>&quot;</td>
<td>184</td>
<td>206</td>
<td>164</td>
<td>97</td>
<td>38</td>
<td>111</td>
<td>150</td>
</tr>
<tr>
<td>SR 54</td>
<td>&quot;</td>
<td>&quot;</td>
<td>12</td>
<td>1</td>
<td>0.492</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>SR 56</td>
<td>&quot;</td>
<td>&quot;</td>
<td>57</td>
<td>109</td>
<td>72</td>
<td>64</td>
<td>109</td>
<td>106</td>
<td>126</td>
</tr>
<tr>
<td>SR 67</td>
<td>&quot;</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>81</td>
</tr>
<tr>
<td>SR 78</td>
<td>&quot;</td>
<td>&quot;</td>
<td>313</td>
<td>395</td>
<td>280</td>
<td>315</td>
<td>346</td>
<td>332</td>
<td>402</td>
</tr>
<tr>
<td>SR 94</td>
<td>&quot;</td>
<td>&quot;</td>
<td>16</td>
<td>18</td>
<td>12</td>
<td>13</td>
<td>18</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>SR 125</td>
<td>&quot;</td>
<td>&quot;</td>
<td>146</td>
<td>143</td>
<td>77</td>
<td>22</td>
<td>34</td>
<td>31</td>
<td>23</td>
</tr>
<tr>
<td>SR 163</td>
<td>&quot;</td>
<td>&quot;</td>
<td>54</td>
<td>64</td>
<td>54</td>
<td>51</td>
<td>74</td>
<td>298</td>
<td>296</td>
</tr>
<tr>
<td>I-805</td>
<td>&quot;</td>
<td>&quot;</td>
<td>906</td>
<td>630</td>
<td>340</td>
<td>289</td>
<td>394</td>
<td>321</td>
<td>459</td>
</tr>
<tr>
<td>SR 905</td>
<td>&quot;</td>
<td>&quot;</td>
<td>0.019</td>
<td>0.273</td>
<td>0.864</td>
<td>3.493</td>
<td>3.242</td>
<td>2.432</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

### Daytime Transit Ridership

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTS, NCTD, SANDAG</td>
<td>Passenger miles (thousands)</td>
<td>1,687</td>
<td>1,725</td>
<td>1,770</td>
<td>1,683</td>
<td>1,764</td>
<td>1,764</td>
<td>1,639</td>
<td>1,759</td>
</tr>
</tbody>
</table>

### Weekend Transit Ridership

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTS, NCTD, SANDAG</td>
<td>Passengers (thousands)</td>
<td>317</td>
<td>328</td>
<td>345</td>
<td>360</td>
<td>334</td>
<td>353</td>
<td>338</td>
<td>338</td>
</tr>
</tbody>
</table>

### Weekday Rail Ridership

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTS, NCTD, SANDAG</td>
<td>Passengers</td>
<td>60,505</td>
<td>63,031</td>
<td>65,315</td>
<td>64,699</td>
<td>60,476</td>
<td>64,945</td>
<td>50,234</td>
<td>45,870</td>
</tr>
</tbody>
</table>

### Weekday Transit Revenue Miles

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTS, NCTD, SANDAG</td>
<td>Revenue miles (thousands)</td>
<td>93</td>
<td>88</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Weekday Transit Passengers per Revenue Mile

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTS, NCTD, SANDAG</td>
<td>Passengers per revenue mile</td>
<td>3.44</td>
<td>3.78</td>
<td>3.88</td>
<td>3.80</td>
<td>4.08</td>
<td>3.92</td>
<td>4.12</td>
<td></td>
</tr>
</tbody>
</table>
### Regional Measures (Continued)

#### Weekday Bus Ridership (selected routes)

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 3 (Euclid Trolley to UCSD)</td>
<td>MTS, NCTD, SANDAG</td>
<td>Passengers</td>
<td>6,008</td>
<td>6,585</td>
<td>6,846</td>
<td>7,105</td>
<td>5,753</td>
<td>6,779</td>
<td>7,280</td>
</tr>
<tr>
<td>Route 7 (Downtown SD to La Mesa)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>10,808</td>
<td>11,759</td>
<td>10,389</td>
<td>12,030</td>
<td>8,198</td>
<td>12,259</td>
<td>12,390</td>
</tr>
<tr>
<td>Route 11 (Skyline Hills to SDSU)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>9,136</td>
<td>8,727</td>
<td>8,639</td>
<td>9,723</td>
<td>9,278</td>
<td>9,398</td>
<td>8,941</td>
</tr>
<tr>
<td>Route 13 (24th Street to Kaiser Hosp.)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>2,394</td>
<td>3,404</td>
<td>6,327</td>
<td>6,965</td>
<td>6,742</td>
<td>7,467</td>
<td>7,698</td>
</tr>
<tr>
<td>Route 201/202/204 (SuperLoop)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2,056</td>
<td>3,248</td>
<td>4,419</td>
<td>4,793</td>
</tr>
<tr>
<td>Route 929 (Downtown to Iris Ave. Trolley)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>6,898</td>
<td>9,060</td>
<td>11,654</td>
<td>11,054</td>
<td>9,850</td>
<td>8,456</td>
<td>8,456</td>
</tr>
</tbody>
</table>

Note: "e" indicates estimate, "f" indicates forecast

#### Corridor Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceanside to Downtown SD via I-5</td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td>7,552</td>
<td>7,401</td>
<td>7,070</td>
<td>7,270</td>
<td>7,347</td>
<td>7,184</td>
<td>7,058</td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Downtown SD</td>
<td>&quot;</td>
<td>minutes</td>
<td>54</td>
<td>55</td>
<td>43</td>
<td>39</td>
<td>44</td>
<td>43</td>
<td>41</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td>&quot;</td>
<td>&quot;</td>
<td>53</td>
<td>56</td>
<td>42</td>
<td>42</td>
<td>43</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td>95%ile Weekday Travel Time</td>
<td>&quot;</td>
<td>&quot;</td>
<td>72</td>
<td>74</td>
<td>56</td>
<td>48</td>
<td>54</td>
<td>54</td>
<td>48</td>
</tr>
<tr>
<td>Oceanside to Downtown SD via I-5</td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td>2,261</td>
<td>2,225</td>
<td>2,173</td>
<td>2,116</td>
<td>2,203</td>
<td>2,142</td>
<td>2,075</td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Downtown SD</td>
<td>&quot;</td>
<td>minutes</td>
<td>16</td>
<td>16</td>
<td>14</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td>&quot;</td>
<td>&quot;</td>
<td>16</td>
<td>15</td>
<td>14</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>95%ile Weekday Travel Time</td>
<td>&quot;</td>
<td>&quot;</td>
<td>20</td>
<td>21</td>
<td>18</td>
<td>17</td>
<td>17</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>San Ysidro to Downtown SD via I-5</td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td>5,668</td>
<td>5,402</td>
<td>5,557</td>
<td>5,267</td>
<td>5,262</td>
<td>5,176</td>
<td>5,334</td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Downtown SD</td>
<td>&quot;</td>
<td>minutes</td>
<td>47</td>
<td>41</td>
<td>36</td>
<td>34</td>
<td>34</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td>&quot;</td>
<td>&quot;</td>
<td>48</td>
<td>41</td>
<td>36</td>
<td>33</td>
<td>32</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>95%ile Weekday Travel Time</td>
<td>&quot;</td>
<td>&quot;</td>
<td>56</td>
<td>51</td>
<td>44</td>
<td>42</td>
<td>47</td>
<td>48</td>
<td>39</td>
</tr>
<tr>
<td>Escondido to Downtown SD via I-15/SR 163</td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Downtown SD</td>
<td>&quot;</td>
<td>minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td>&quot;</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95%ile Weekday Travel Time</td>
<td>&quot;</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corridor Measures (Continued)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chula Vista to Downtown SD via I-805/SR 94</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Weekday Travel</td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td>2,383</td>
<td>2,323</td>
<td>2,215</td>
<td>2,192</td>
<td>2,170</td>
<td>2,141</td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Downtown SD</td>
<td>“”</td>
<td>minutes</td>
<td>20</td>
<td>19</td>
<td>17</td>
<td>17</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td>“”</td>
<td>“”</td>
<td>20</td>
<td>18</td>
<td>16</td>
<td>15</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>95%ile Weekday Travel Time</td>
<td>“”</td>
<td>“”</td>
<td>29</td>
<td>28</td>
<td>23</td>
<td>22</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>Average Weekday Travel Time - P.M. to Chula Vista</td>
<td>“”</td>
<td>“”</td>
<td>19</td>
<td>18</td>
<td>15</td>
<td>15</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td>“”</td>
<td>“”</td>
<td>20</td>
<td>18</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>95%ile Weekday Travel Time</td>
<td>“”</td>
<td>“”</td>
<td>23</td>
<td>21</td>
<td>18</td>
<td>19</td>
<td>19</td>
<td>17</td>
</tr>
</tbody>
</table>

| **Chula Vista to Sorrento Valley via I-805** | | | | | | | | |
| Average Weekday Travel | Caltrans PeMS 12.3 | Vehicle miles (thousands) | 4,789 | 4,887 | 4,742 | 4,737 | 4,706 | 4,672 | 4,636 | 4,736 |
| Average Weekday Travel Time - A.M. to Sorrento Valley | “” | minutes | 39 | 36 | 32 | 28 | 32 | 32 | 33 | 37 |
| Median Weekday Travel Time | “” | “” | 38 | 35 | 31 | 28 | 31 | 31 | 33 | 37 |
| 95%ile Weekday Travel Time | “” | “” | 52 | 48 | 40 | 35 | 41 | 42 | 40 | 47 |
| Average Weekday Travel Time - P.M. to Chula Vista | “” | “” | 44 | 36 | 31 | 30 | 32 | 29 | 34 | 37 |
| Median Weekday Travel Time | “” | “” | 43 | 35 | 30 | 29 | 30 | 28 | 33 | 37 |
| 95%ile Weekday Travel Time | “” | “” | 56 | 47 | 42 | 37 | 43 | 40 | 48 | 53 |

| **Oceanside to Escondido via SR 78** | | | | | | | | |
| Average Weekday Travel | Caltrans PeMS 12.3 | Vehicle miles (thousands) | 2,096 | 2,061 | 2,016 | 1,955 | 1,950 | 1,947 | 1,937 | 1,999 |
| Average Weekday Travel Time - A.M. to Oceanside | “” | minutes | 17 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Median Weekday Travel Time | “” | “” | 16 | 16 | 16 | 16 | 15 | 15 | 16 | 15 |
| 95%ile Weekday Travel Time | “” | “” | 19 | 18 | 17 | 19 | 19 | 17 | 18 | 18 |
| Average Weekday Travel Time - P.M. to Escondido | “” | “” | 25 | 27 | 24 | 22 | 25 | 26 | 27 | 24 |
| Median Weekday Travel Time | “” | “” | 25 | 27 | 24 | 23 | 25 | 26 | 26 | 23 |
| 95%ile Weekday Travel Time | “” | “” | 37 | 38 | 34 | 32 | 39 | 34 | 38 | 33 |

| **El Cajon to Downtown SD via SR 94/SR 125** | | | | | | | | |
| Average Weekday Travel | Caltrans PeMS 12.3 | Vehicle miles (thousands) | 1,536 | 1,586 | 1,576 | 1,491 | 1,499 | 1,505 | 1,501 | 1,515 |
| Average Weekday Travel Time - A.M. to Downtown SD | “” | minutes | 16 | 14 | 13 | 14 | 14 | 15 | 15 | 16 |
| Median Weekday Travel Time | “” | “” | 16 | 16 | 14 | 13 | 14 | 14 | 15 | 16 |
| 95%ile Weekday Travel Time | “” | “” | 21 | 22 | 20 | 19 | 19 | 21 | 22 | 23 |
| Average Weekday Travel Time - P.M. to El Cajon | “” | “” | 12 | 12 | 11 | 12 | 10 | 11 | 11 | 11 |
| Median Weekday Travel Time | “” | “” | 12 | 12 | 12 | 11 | 10 | 10 | 10 | 10 |
| 95%ile Weekday Travel Time | “” | “” | 15 | 16 | 15 | 13 | 16 | 13 | 15 | 14 |
### Corridor Measures (Continued)

<table>
<thead>
<tr>
<th>Source</th>
<th>Units</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>El Cajon to Downtown SD via I-8/SR 163</strong></td>
<td></td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Weekday Travel</td>
<td></td>
<td>2,657</td>
<td>2,763</td>
<td>2,714</td>
<td>2,711</td>
<td>2,689</td>
<td>2,633</td>
<td>2,581</td>
<td>2,642</td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Downtown SD</td>
<td></td>
<td>minutes</td>
<td>20</td>
<td>17</td>
<td>14</td>
<td>16</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td></td>
<td></td>
<td>20</td>
<td>19</td>
<td>17</td>
<td>14</td>
<td>15</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>95th Weekday Travel Time</td>
<td></td>
<td></td>
<td>31</td>
<td>31</td>
<td>24</td>
<td>18</td>
<td>24</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>Average Weekday Travel Time - P.M. to El Cajon</td>
<td></td>
<td></td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td></td>
<td></td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>14</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>95th Weekday Travel Time</td>
<td></td>
<td></td>
<td>20</td>
<td>21</td>
<td>19</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td><strong>Santee to Kearny Mesa via SR 52</strong></td>
<td></td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Weekday Travel</td>
<td></td>
<td>1,091</td>
<td>1,063</td>
<td>1,098</td>
<td>1,052</td>
<td>1,046</td>
<td>1,052</td>
<td>1,083</td>
<td>1,121</td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Kearny Mesa</td>
<td></td>
<td>minutes</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td></td>
<td></td>
<td>14</td>
<td>13</td>
<td>13</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>95th Weekday Travel Time</td>
<td></td>
<td></td>
<td>17</td>
<td>18</td>
<td>16</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Average Weekday Travel Time - P.M. to Santee</td>
<td></td>
<td></td>
<td>17</td>
<td>18</td>
<td>16</td>
<td>13</td>
<td>13</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td></td>
<td></td>
<td>17</td>
<td>18</td>
<td>16</td>
<td>14</td>
<td>13</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>95th Weekday Travel Time</td>
<td></td>
<td></td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>18</td>
<td>17</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td><strong>El Cajon to Sorrento Valley via I-8/I-805</strong></td>
<td></td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Weekday Travel</td>
<td></td>
<td>3,663</td>
<td>3,890</td>
<td>3,817</td>
<td>3,812</td>
<td>3,796</td>
<td>3,726</td>
<td>3,590</td>
<td>3,561</td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Sorrento Valley</td>
<td></td>
<td>minutes</td>
<td>31</td>
<td>27</td>
<td>24</td>
<td>20</td>
<td>23</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td></td>
<td></td>
<td>30</td>
<td>26</td>
<td>23</td>
<td>19</td>
<td>22</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>95th Weekday Travel Time</td>
<td></td>
<td></td>
<td>42</td>
<td>41</td>
<td>33</td>
<td>24</td>
<td>32</td>
<td>37</td>
<td>34</td>
</tr>
<tr>
<td>Average Weekday Travel Time - PM to El Cajon</td>
<td></td>
<td></td>
<td>25</td>
<td>24</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td></td>
<td></td>
<td>24</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>95th Weekday Travel Time</td>
<td></td>
<td></td>
<td>33</td>
<td>31</td>
<td>32</td>
<td>27</td>
<td>30</td>
<td>29</td>
<td>34</td>
</tr>
<tr>
<td><strong>Carmel Valley to Rancho Penasquitos via SR 56</strong></td>
<td></td>
<td>Caltrans PeMS 12.3</td>
<td>Vehicle miles (thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Weekday Travel</td>
<td></td>
<td>722</td>
<td>668</td>
<td>634</td>
<td>617</td>
<td>619</td>
<td>602</td>
<td>668</td>
<td>719</td>
</tr>
<tr>
<td>Average Weekday Travel Time - A.M. to Rancho Penasquitos</td>
<td></td>
<td>minutes</td>
<td>12</td>
<td>14</td>
<td>14</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td></td>
<td></td>
<td>11</td>
<td>14</td>
<td>13</td>
<td>11</td>
<td>13</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>95th Weekday Travel Time</td>
<td></td>
<td></td>
<td>17</td>
<td>23</td>
<td>22</td>
<td>14</td>
<td>18</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Average Weekday Travel Time - P.M. to Carmel Valley</td>
<td></td>
<td></td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Median Weekday Travel Time</td>
<td></td>
<td></td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>95th Weekday Travel Time</td>
<td></td>
<td></td>
<td>17</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>14</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>
Data Sources and Methodology

Getting Around the Region

Figure 1.1
Average Weekday Freeway Travel per Person
Sources: Caltrans, Freeway Performance Measurement System (PeMS Version 12.3); SANDAG Population Estimates
Data: Freeway vehicle miles traveled (VMT), County of San Diego population
Period: Annual, Calendar Years 2006 through 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figure 1.2
Average Weekday Freeway Travel by Time of Day
Source: Freeway Performance Measurement System (PeMS Version 12.3)
Data: Average hourly vehicle miles of travel (VMT)
Days: Weekdays (Monday through Friday)
Hours: All

Figure 1.3
Average Weekday Transit Passenger Miles
Sources: San Diego Metropolitan Transit System, North County Transit District, SANDAG Passenger Counting Program
Data: Passenger miles of travel
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figure 1.4
Average Weekday Transit Ridership
Source: San Diego Metropolitan Transit System, North County Transit District, SANDAG Passenger Counting Program
Data: Passenger boardings, includes fixed-route buses, Trolley, COASTER, and SPRINTER. Excludes Coronado Ferry
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figure 1.5
Average Weekday Transit Revenue Miles
Source: San Diego Metropolitan Transit System, North County Transit District, SANDAG Passenger Counting Program
Data: Revenue mileage, includes fixed-route buses, Trolley, COASTER, and SPRINTER. Excludes Coronado Ferry
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figure 1.6
Average Weekday Transit Passengers per Revenue Mile
Source: San Diego Metropolitan Transit System, North County Transit District, SANDAG Passenger Counting Program
Data: Passenger boardings and revenue mileage, includes fixed-route buses, Trolley, COASTER, and SPRINTER. Excludes Coronado Ferry
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figure 1.7
Average Weekday Bus and Rail Ridership
Source: San Diego Metropolitan Transit System, North County Transit District, SANDAG Passenger Counting Program
Data: Passenger boardings for Trolley, COASTER, and SPRINTER
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figure 1.8
What Alternative Choices are Commuters Using?
Source: American Community Survey, One-Year Estimates, U.S. Census Bureau
Data: Annual, Means of Transportation to Work (Table B8301)
Geography: San Diego County, California
Period: Calendar Years 2008 through 2012

How is the System Working?

Figure 2.1
Annual Peak Period Freeway Delay - Weekdays
Source: Freeway Performance Measurement System (PeMS Version 12.3), Caltrans
Data: Vehicle hours of delay (35 mph threshold)
Period: Annual, Calendar Years 2006 through 2013
Days: Weekdays (Monday through Friday)
Hours: All
Delay normalized by lane mileage for each freeway segment. Eastbound SR 78 from Mar Vista Road to I-15: 8.5 miles, three lanes, 25.5 lane miles Northbound I-5 from I-805 to Manchester Avenue: 8.1 miles, four lanes, 32.4 lane miles Southbound SR-163 from I-15 to I-5: 3.5 miles, two lanes and 7.5 miles, four lanes, 37 lane miles Southbound I-805 from I-5 to I-8: 10.9 miles, four lanes, 43.6 lane miles Northbound I-805 from I-8 to I-5: 10.9 miles, four lanes, 43.6 lane miles SB I-15 from SR 78 to Centre City Pkwy: 3.9 miles, four lanes, 15.6-lane-miles
SB I-15 from SR 163 to I-8: 5.6 miles, four lanes, 22.4 lane-miles

Figure 2.2
Regional Bottlenecks
Source: Freeway Performance Measurement System (PeMS Version 12.3), Caltrans
Data: Vehicle hours of delay (35 mph threshold) by selected freeway segment
Period: Annual, Calendar Years 2006 through 2013
Days: Weekdays (Monday through Friday)
Hours: All
Delay normalized by lane mileage for each freeway segment. Southbound I-805 from I-5 to I-8: 10.9 miles, four lanes, 43.6 lane miles Northbound I-805 from I-8 to I-5: 10.9 miles, four lanes, 43.6 lane miles SB I-15 from SR 78 to Centre City Pkwy: 3.9 miles, four lanes, 15.6-lane-miles
SB I-15 from SR 163 to I-8: 5.6 miles, four lanes, 22.4 lane-miles

Figure 2.3
Delay by Freeway During Commute Periods
Source: Freeway Performance Measurement System (PeMS Version 12.3), Caltrans
Data: Vehicle hours of delay (35 mph threshold)
Period: Annual, Calendar Year 2013
Days: Weekdays (Monday through Friday)
Hours: 6 to 10 A.M., 3 to 7 P.M.
Delay aggregated for each freeway corridor in both directions for the portions of freeway route with available detection.

Figure 2.4
2013 Top 10 Transit Routes by Ridership
Source: San Diego Metropolitan Transit System, North County Transit District, SANDAG Passenger Counting Program
Data: Transit boardings for selected routes
Period: Annual, Calendar Years 2012 and 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figure 2.5
Regional Transit Ridership – TransNet Program
Source: San Diego Metropolitan Transit System, North County Transit District, SANDAG Passenger Counting Program
Data: Transit boardings for selected routes
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All
My Corridor Commute

Figure 3.1
The San Diego Region’s Freeway System
Source: Freeway Performance Measurement System (PeMS Version 12.3), Caltrans
Data: Freeway Detection Coverage
Period: As of December 31, 2013

Figures 3.2, 3.8, 3.14, 3.23, 3.28, 3.33, 3.37, 3.41, 3.45, and Figure 3.49
Average Weekday Travel
Source: Freeway Performance Measurement System (PeMS Version 12.3), Caltrans
Data: Average vehicle miles of travel (VMT)
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figures 3.3, 3.9, 3.15, 3.24, 3.29, 3.34, 3.38, 3.42, 3.46, and Figure 3.50
Average Freeway Travel Time
Source: Freeway Performance Measurement System (PeMS Version 12.3), Caltrans
Data: Average (mean) departure travel time
Period: Annual, Calendar Years 2009 through 2013
Days: Midweek (Tuesday through Thursday)
Hours: Morning departure time: 8 A.M., evening departure time: 5 P.M.

Figures 3.4, 3.5, 3.10, 3.16, 3.17, 3.20, 3.21, 3.25, 3.26, 3.30, 3.35, 3.36, 3.39, 3.43, 3.47, 3.48, 3.51 and Figure 3.52
Freeway Travel Time Reliability
Source: Freeway Performance Measurement System (PeMS Version 12.3), Caltrans
Data: Annual 50-percentile (median) departure travel time, annual 95-percentile departure travel time
Period: Annual, Calendar Years 2009 through 2013
Days: Midweek (Tuesday through Thursday)
Hours: Morning departure time: 8 A.M., evening departure time: 5 P.M.
Budget time is calculated as the difference between the 95-percentile travel time and the 50-percentile travel time.

Figures 3.6, 3.11, 3.27, 3.31, 3.40, and Figure 3.44
Average Weekday Transit Ridership
Source: San Diego Metropolitan Transit System, North County Transit District, SANDAG Passenger Counting Program Reporting
Data: Transit ridership for specific routes and at selected route screenlines
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All

Figure 3.7
Annual Weekday Delay by I-5 Segment
Source: Freeway Performance Measurement System (PeMS Version 12.3), Caltrans
Data: Vehicle hours of delay (35 mph threshold)
Period: Annual, Calendar Years 2009 through 2013
Days: Weekdays (Monday through Friday)
Hours: All
Delay aggregated for each freeway segment in both directions of I-5 for the portions of freeway route with available detection.