SANDAG

infobits

2021 State of the Commute Report

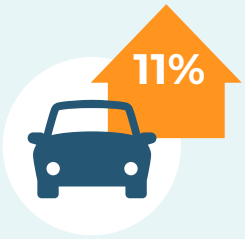
May 2022

TransNet is the half-cent sales tax for local transportation projects that was first approved by voters in 1988 and extended in 2004 for another 40 years. The funding collected through TransNet have been distributed to local agency grants; environmental projects; and highway, transit, and bikeway projects. The TransNet Ordinance states that one of the responsibilities of the Independent TransNet Oversight Committee (ITOC) is: "On an annual basis, review ongoing SANDAG system performance evaluations, including SANDAG's 'State of the Commute' report, and provide an independent analysis of information included in that report. This evaluation process is expected to include such factors as level of service measurements by roadway segment and by time of day, throughput in major travel corridors, and travel time comparisons by mode between major trip origins and destinations. Such information will be used as a tool in the Regional Transportation Plan (RTP) development process."

This 14th annual 2021 State of the Commute report fulfills this mandate in the TransNet ordinance. The pandemic and stay home order issued on March 19, 2020 has had a significant impact on society, including how people travel across the region. As described in this InfoBits report, the number of vehicle miles traveled on our highways, highway and transit commute times, and transit ridership all began to increase from their 2020 pandemic lows, similar to other large cities across the nation, and bicycle ridership did decrease. As the pandemic continues in 2022, SANDAG will continue to monitor these data trends in partnership with the ITOC.

Summary

Overall 2021 Commute Trends

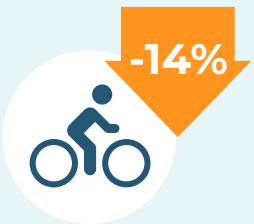


Peak period highway travel was up 11%

Highway travel times on 16 major commute corridors were up

Transit travel times did not change on 15 of 16 selected routes

Ridership on transit in 2021 increased (3%), from 2020



Bike activity across eight bike routes decreased 14%

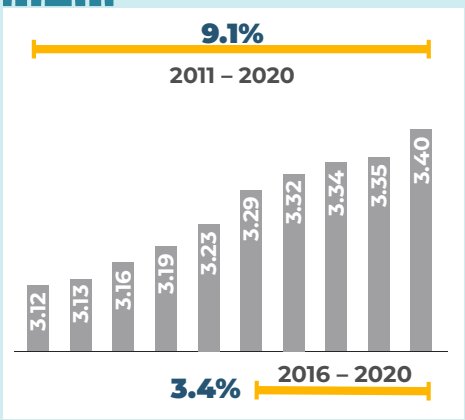
211,000 one way passenger trips through the Senior Mini Grant program

Note: Overall 2021 commute trends compared to 2020 trends.

Regional Transportation Performance

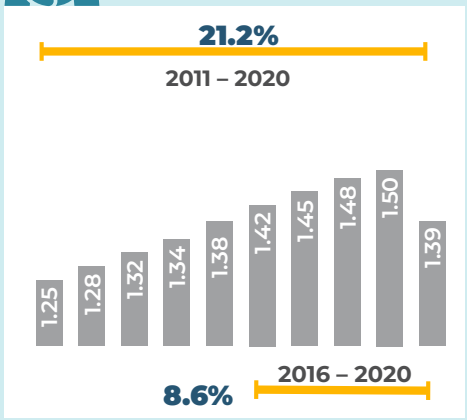
This report provides a high-level summary of performance trends for the regional transportation system in calendar year 2021 including highway and transit use and travel times, as well as transit performance. Before the transportation performance data are presented, it is helpful to consider how the region has changed during the past ten years in terms of population, employment, and gross domestic product. As Figures 1 through 3 show, since 2011, the region's population has grown 9% and the gross domestic product has grown 39%. Employment has grown 21%, between 2011 and 2020, but dropped by 8% from 2019 to 2020, as has been described in other recent SANDAG reports. Given the data for population, employment, and gross domestic product were not available for 2021 at the time of this report, 2020 data is being presented and shows that the region's population growth continued, employment and gross domestic product decreased in the midst of the pandemic.

Figure 1
population
in millions



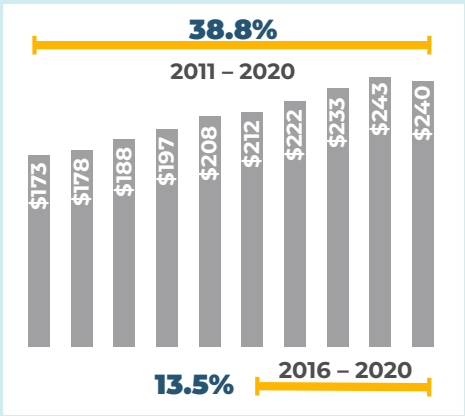
Source: Population Estimates, SANDAG

Figure 2
employment
in millions



Source: California Employment Development Department

Figure 3
gross domestic product
in billions of dollars

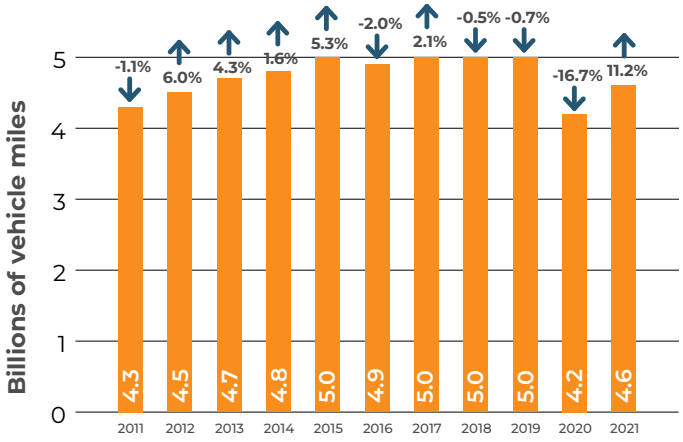


Source: U.S. Bureau of Economic Analysis

NOTE: 2021 data for Figures 2 and 3 were not available at the time this InfoBits report was produced.

Travel on the regional highways during peak periods* rose 11.2% from its 2020 pandemic lows in 2021, to just over 4.6 billion vehicle miles, as would be expected due to loosening local and state pandemic restrictions (Figure 4).

Figure 4
Peak Period Highway Travel



**Peak periods are weekdays from 6–10 a.m. and from 3–7 p.m.*
Source: Performance Measurement System (PeMS), Caltrans

TransNet funds specialized transportation services for seniors age 60 and older through the Senior Mini Grant program. In 2021, SANDAG provided approximately $1.3 million to grantees who were able to use this funding to leverage other resources and as a result, provide around 211,000 one-way passenger trips. From the start of the pandemic and throughout 2021, grantees were allowed to perform alternative services such as delivery of food, prescriptions, and other essential services in their trip counts. The demand for more funding remains high due to the increase in grant applications despite perceived drops in the volume of rides provided (215,000 one-way passenger trips in 2020). One jurisdiction had lower trip counts due to their program concluding and another experienced delays in the kickoff of their program.

Traffic Volumes

The California Department of Transportation (Caltrans) defines a bottleneck as a specific location where there is a large enough speed drop from one detector station to the next. In 2021, the number of vehicles passing through some of the regions most congested bottlenecks increased from 2020. Average Daily Traffic (ADT) at the number one bottleneck during the A.M. peak period in our region increased from 16,491 vehicles in 2020 to 18,593 vehicles in 2021 (Table 1). At the number one bottleneck in the P.M. peak period in the region, ADT increased from 88,626 vehicles in 2020 to 97,838 vehicles in 2021 (Table 2). Overall, 19 of the 20 A.M. and P.M. bottlenecks had an increase in ADT from 2020 to 2021, while 15 of the 19 were still below their respective averages when compared to 2017.

NEW

Table 1

Highway Routes by ADT: Peak AM Times

2021 Rank	Route	2017 Avg. Daily ADT	2020 Avg. Daily ADT	2021 Avg. Daily ADT
1	NB I-15 at Citracado Pkwy	20,528	16,491	18,593
2	NB I-5 at SR 52	25,602	14,864	18,136
3	NB I-5 N/O Encinitas Blvd	23,869	17,779	16,659
4	SB I-805 at Division St	17,565	15,225	16,192
5	EB SR 78 at Rancho Santa Fe Rd	17,263	13,350	15,070
6	SB I-805 at Imperial Ave	12,451	10,735	11,956
7	SB I-5 N/O 28th St	11,687	9,887	11,148
8	EB SR 94 at 32nd St	9,765	7,887	9,486
9	NB I-805 N/O I-5/I-805 Split	4,660	4,042	4,591
10	EB SR 76 E/O Ramona Dr	N/A	2,140	2,781

NEW

Table 2

Highway Routes by ADT: Peak PM Times

2021 Rank	Route	2017 Avg. Daily ADT	2020 Avg. Daily ADT	2021 Avg. Daily ADT
1	WB I-8 at College Ave	113,303	88,626	97,838
2	SB I-5 N/O H St	26,213	23,459	25,118
3	NB I-5 N/O H St	18,935	16,714	19,018
4	NB I-5 S/O Aliso Creek Rest Area	13,092	11,174	13,328
5	NB I-5 at Cristianitos Rd	14,519	9,216	11,111
6	EB SR 56 at El Camino Rd	12,491	8,698	10,315
7	WB I-8 at Waring Rd	25,877	7,362	8,923
8	EB I-8 W/O Lake Jennings Pk Rd	8,591	7,796	8,596
9	EB SR 905 at Caliente Ave	7,521	6,327	7,511
10	WB I-8 E/O Lake Jennings Pk Rd	5,952	5,344	6,031

NEW

Safety

As a part of SANDAG's 2021 Regional Plan, the agency committed to pursue the goals of the national Vision Zero campaign which uses a variety of strategies to work toward eliminating deaths and severe injuries on our streets. A part of this plan is to collect and analyze crash data to help SANDAG and local jurisdictions identify and resolve safety issues. Leveraging data from the Transportation Injury Mapping System (TIMS), which reports data collected and maintained by the California Highway Patrol (CHP), San Diego County experienced 264 fatal crashes, along with 1,028 crashes which resulted in a severe injury in 2021 (Figure 5). Of all crashes in the region reported to CHP, 7% involved a pedestrian, 5% involved a bicyclist, and 10% involved a motorcycle (Figure 6).

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Figure 5

Car Crash Severity in 2021

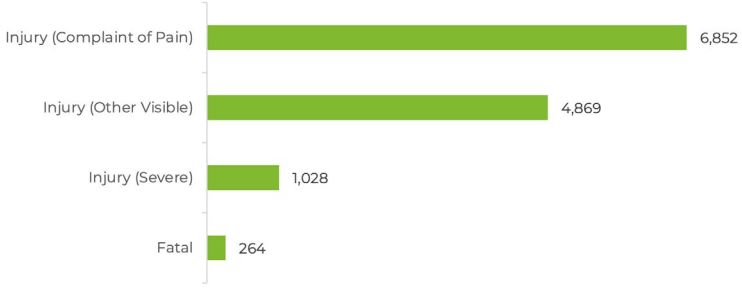

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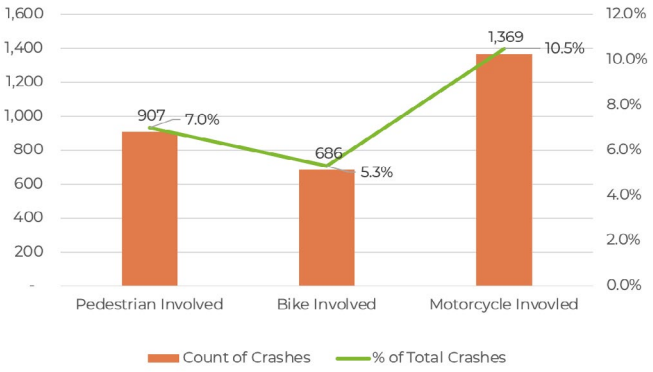
Figure 6

Parties Involved In Car Crashes in 2021



NOTE: Figures 5 & 6 represent car crashes reported to CHP in all of San Diego County. 2021 totals are provisional and subject to change.
Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022

Map 1

2021 A.M. Highway and transit travel times on major commute corridors

As this map shows, for A.M. travel times on the 12 selected highway corridors, 4 had decreases, 5 had increases, and 3 had no change from 2020 to 2021 (ranging from -2 to 3 minutes).

For the 8 transit routes with data for both 2020 and 2021, 7 had no change, and 1 increased by 2 minutes.

There were no consistent trends in the changes seen across highway and transit travel times. This pattern reflects the varying speeds of reopening that different areas and industries of the region have experienced since the 2020 stay at home orders have begun to ease.

Highway travel
Average highway travel times departing at 8 a.m.

Travel times reflect weekday travel on all Tuesdays, Wednesdays, and Thursdays throughout the calendar year.

Transit travel
Average transit travel times departing nearest 8 a.m.

Travel times reflect weekday transit schedules which run Monday - Friday except on holidays.

NOTE: The number in parentheses represents the change in minutes from 2020 to 2021. Not applicable (N/A) is shown if route had no data collected in 2020 due to the pandemic. In 2021, new transit start and end stops were chosen to more closely align with highway corridors affecting travel times.

Source: Highway Travel Times - PeMS, Caltrans;
Transit Travel Times - SANDAG Passenger Counting Program, Metropolitan Transportation System (MTS), North County Transit District (NCTD)

Map 2

2021 P.M. Highway and transit travel times on major commute corridors

As this map shows, for P.M. travel times on the 12 selected highway corridors, 10 had increases and 2 had no change in travel times from 2020 to 2021 (ranging from 0 to 11 minutes).

For the 8 transit routes with data for both 2020 and 2021, 8 had no change.

There were no consistent trends in the changes seen across highway and transit travel times. This pattern reflects the varying speeds of reopening that different areas and industries of the region have experienced since the 2020 stay at home orders have begun to ease.

Highway travel
Average highway travel times departing at and 5 p.m.

Travel times reflect weekday travel on all Tuesdays, Wednesdays, and Thursdays throughout the calendar year.

Transit travel
Average transit travel times departing nearest 5 p.m.

Travel times reflect weekday transit schedules which run Monday - Friday except on holidays.

NOTE: The number in parentheses represents the change in minutes from 2020 to 2021. Not applicable (N/A) is shown if route had no data collected in 2020 due to the pandemic. In 2021, new transit start and end stops were chosen to more closely align with highway corridors affecting travel times.

Source: Highway Travel Times - PeMS, Caltrans;
Transit Travel Times - SANDAG Passenger Counting Program, MTS, NCTD

After a sharp decrease from 2019 to 2020, regional transit ridership increased 3% from 2020 to 2021, to over 163,000 average weekday boardings in 2021 compared to 159,000 in 2020, but still significantly lower than it was in 2019 (Figure 7). In November of 2021, the Mid-Coast trolley extension on the Blue Line Trolley opened, extending the light rail transit service from downtown to UTC. Transit travel also increased to around 836,000 passenger miles (from 679,000 in 2020) (Figure 8). The drop in ridership and service levels (in revenue miles) due to the COVID-19 pandemic stopped in 2021 (Figure 9) although transit productivity decreased from 1.42 to 1.38 passengers per revenue mile in 2021 (Figure 10). Ridership increased on three of the five major rail routes from 2020 to 2021 (Table 3). Ridership on 5 out of the 10 busiest bus routes in the region increased in 2021 (Table 4).

Figure 7
Average Weekday Transit Ridership*

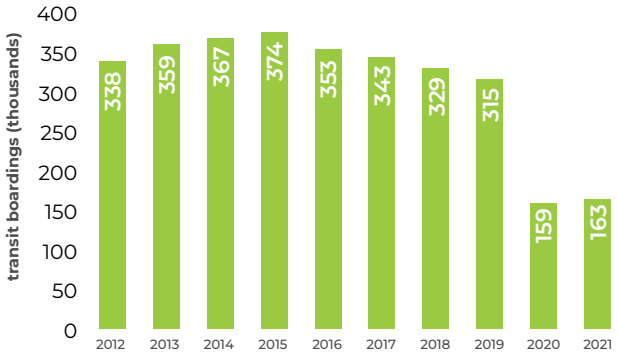


Figure 8
Average Weekday Transit Passenger Miles

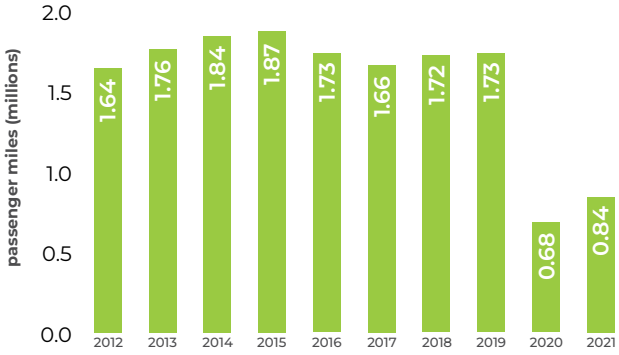


Figure 9
Average Weekday Transit Revenue Miles*

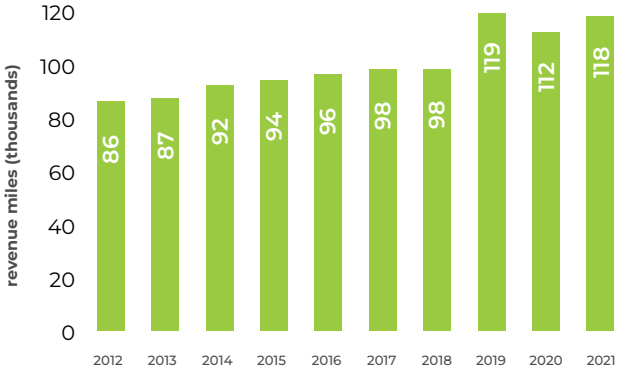


Figure 10
Average Weekday Transit Passengers per Revenue Miles*

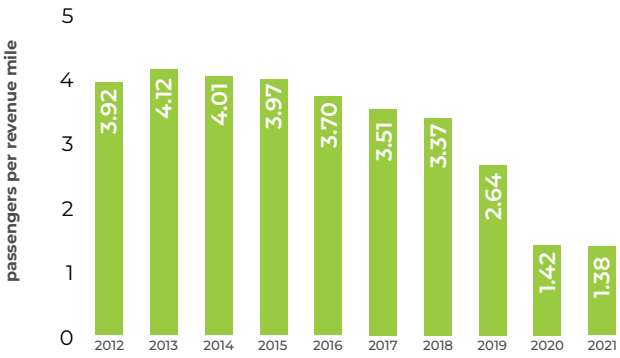


Table 3
Rail Routes by Ridership

2021 Rank	Route	Route Description	Transit Mode	2020 Avg. Daily Passengers	2021 Avg. Daily Passengers
1	UC San Diego Blue Line Trolley	UTC to San Ysidro	Light Rail	35,270	40,118
2	Green Line Trolley	Santee to Downtown SD / 12th & Imperial via La Mesa / Mission Valley	Light Rail	16,934	17,332
3	Orange Line Trolley	El Cajon to Downtown SD / America Plaza via Southeastern Communities	Light Rail	14,298	13,970
4	SPRINTER	Oceanside to Escondido	Light Rail	4,844	4,340
5	COASTER	Oceanside to Downtown San Diego	Commuter Rail	1,154	1,175

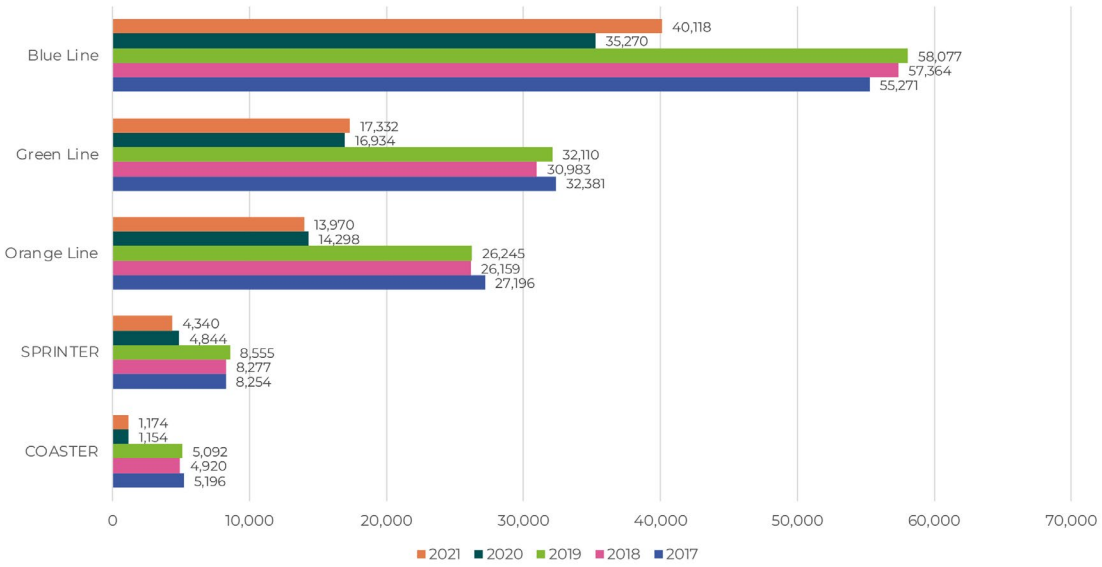
Table 4
Top 10 Bus Routes by Ridership

2021 Rank	Route	Route Description	Transit Mode	2020 Avg. Daily Passengers	2021 Avg. Daily Passengers
1	7	La Mesa to Downtown	Local Bus	3,655	3,629
2	929	Downtown San Diego to Iris Avenue Trolley	Local Bus	3,527	3,327
3	13	Kaiser Hospital / Grantville Trolley to 24th Street Trolley	Local Bus	3,196	3,251
4	3	UCSD Medical Center /Hillcrest to Euclid Trolley	Local Bus	2,668	2,682
5	Rapid 215	SDSU to Downtown	Rapid Bus	2,923	2,601
6	303	Oceanside to Vista	Local Bus	1,972	2,386
7	955	SDSU Transit Center to 8th Street Trolley	Local Bus	2,310	2,267
8	1	Fashion Valley to La Mesa	Local Bus	2,120	2,163
9	10	University & College to Old Town Transit Center	Local Bus	2,026	2,025
10	932	8th St Trolley to San Ysidro	Local Bus	1,899	1,927

Source: SANDAG Passenger Counting Program, MTS, NCTD
NOTE: Changes in trends in 2019 transit data due to the incorporation of MTS Access and Access Taxi data (*).

Figure 11
Regional Rail Transit Ridership

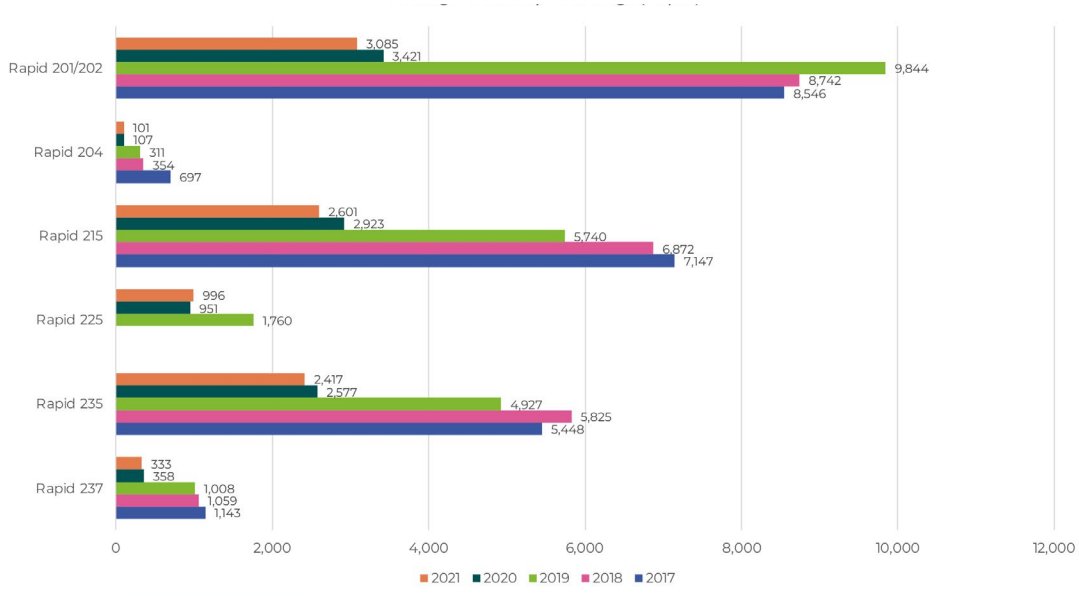
The region's rail transit experienced increases from 2020 to 2021 for two out of three most frequently used lines (Green Line up 2%, UC San Diego Blue Line up 14%, and Orange Line down -2%). The SPRINTER had a decrease of 10% while the COASTER saw an increase of 2% (Figure 11).



NOTE: The UC San Diego Blue Line runs from San Ysidro to UTC, the Green Line from Santee to 12th Street and Imperial, and the Orange Line from El Cajon to Courthouse Station Downtown.

Figure 12
Regional Bus Transit Ridership

Five of six Rapid bus routes monitored for this report had decreases, ranging from -5% to -11%, with the Rapid 215 (SDSU to Downtown) having the most significant decrease. The 225 (Escondido to Downtown) saw a 5% increase from 2020 to 2021.



NOTE: The SuperLoop Rapid 201/202 connects the UTC Transit Center to UC San Diego, La Jolla Village Square, and other locations. The SuperLoop Rapid 204 connects the UTC Transit Center to the Nobel Athletic Area and employers east of Genesee. The Rapid 215 connects SDSU to Downtown. The Rapid 225 connects East Palomar Station to Downtown (Rapid 225 began on January 27, 2019, data prior to 2019 were not applicable). The Rapid 235 connects the Escondido Transit Center to Downtown. The Rapid 237 connects Miramar College to UC San Diego via Mira Mesa Boulevard.

Source: SANDAG Passenger Counting Program, MTS, NCTD

In addition to average weekday boardings, two other performance measures for bus transit include the average number of passengers per hour on weekdays (Table 5) and the percent of seats occupied on these bus routes (also known as load factor) (Table 6). As Table 5 shows, the average number of weekday passengers per hour across the six lines varied from 5 (Rapid 237) to 21 (Rapid 201/202) in 2021. Similar to the data presented in Figure 12, the Rapid 201/202 saw the largest one-year increase and the Rapid 215 saw the largest decrease. In terms of percent of seats occupied (Table 6), the Rapid 204 had the smallest transit load factor in 2021 (5%) and the Rapid 235 had the highest (15%).

Table 5
Regional Bus Transit Passengers per hour – TransNet Program

	2017	2020	2021
Rapid 201/202	131	15	21
Rapid 204	5	5	5
Rapid 215	39	20	17
Rapid 225	--	8	8
Rapid 235	30	10	9
Rapid 237	23	5	6

Table 6
Regional Transit Load Factor – TransNet Program (All Day)

	2017	2020	2021
Rapid 201/202	22%	4%	6%
Rapid 204	1%	4%	5%
Rapid 215	24%	12%	11%
Rapid 225	--	10%	10%
Rapid 235	37%	18%	15%
Rapid 237	20%	7%	7%

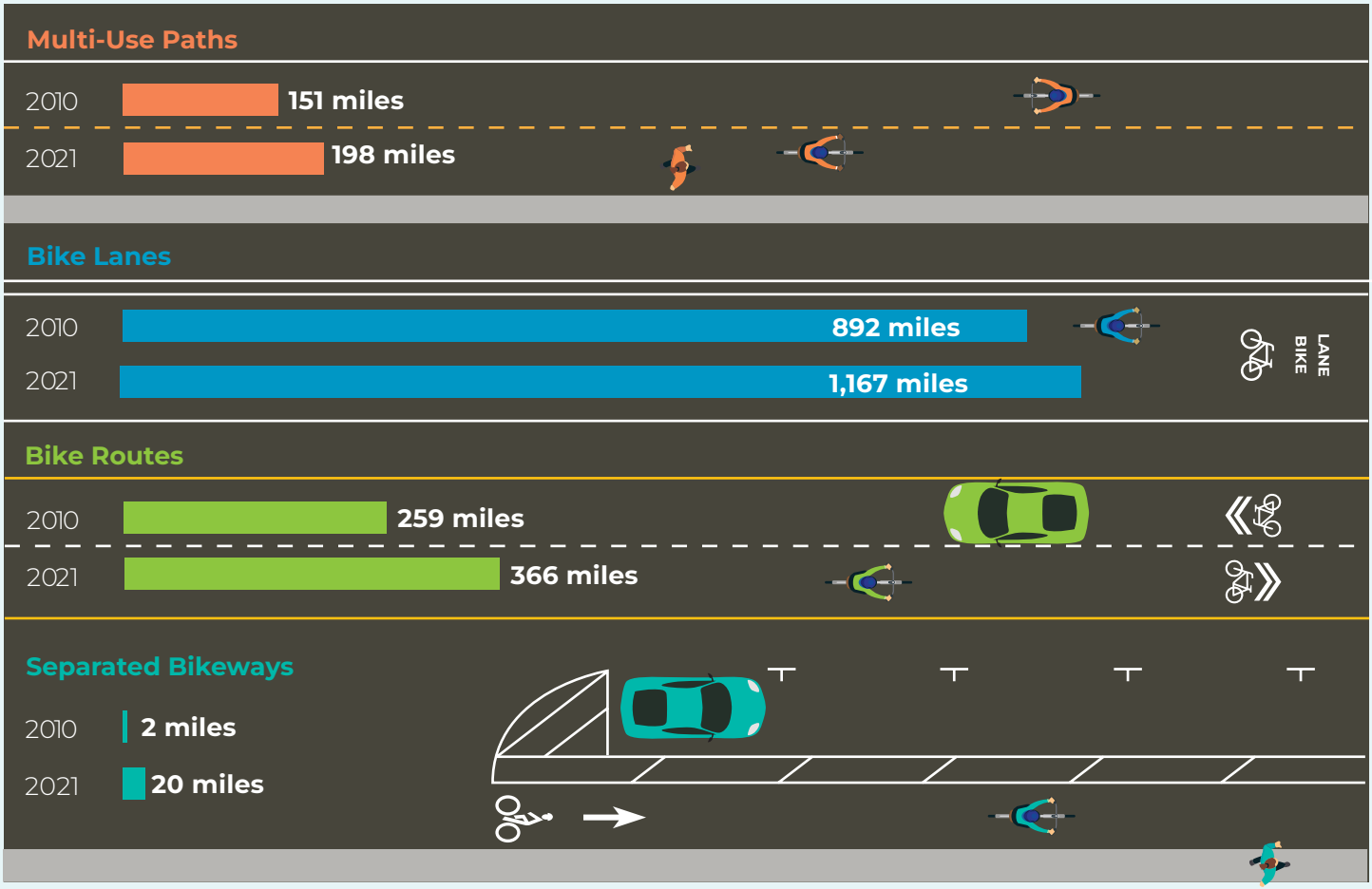
Source: SANDAG Passenger Counting Program, MTS, NCTD

NOTE: The SuperLoop Rapid 201/202 connects the UTC Transit Center to UCSD, La Jolla Village Square, and other locations. The SuperLoop Rapid 204 connects the UTC Transit Center to the Nobel Athletic Area and employers east of Genesee. The Rapid 215 connects SDSU to Downtown. The Rapid 225 connects East Palomar Station to Downtown (Rapid 225 began on January 27, 2019, data prior to 2019 were not applicable). The Rapid 235 connects the Escondido Transit Center to Downtown. The Rapid 237 connects Miramar College to UC San Diego via Mira Mesa Boulevard.

TransNet has also funded key segments of the San Diego Regional Bike Network, with several projects that are in the planning, environmental, or construction phases, which will help improve connectivity throughout the region and create safer and more inviting environments for everyone. With the SANDAG Board of Directors approving the Regional Bike Plan in 2011, SANDAG has focused on providing a diverse system of interconnected bicycle corridors, support facilities, and programs to make biking more practical and desirable to a broader range of people in our region. SANDAG and local agency partners implemented more than 400 miles of bikeways since 2010, often with TransNet funds. This is a 31% increase in the total centerline regional bikeways mileage from a 2010 baseline as shown in Figure 13.

There are 4 main bikeway types or "classes" present in the San Diego region, as codified in the California Vehicle Code 890.4. A Class 1 **Multi-Use Path** provides completely separated right-of-way designated for the exclusive use of bicycles and pedestrians. Class 2 **Bike Lanes** provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with travel by motor vehicles or pedestrians prohibited. A Class 3 **Bike Route** provides a right-of-way on-street designated by signs or permanent markings and is shared with pedestrians and motorists. The Class 4 **Separated Bikeway** is a hybrid type bicycle facility that combines the experience of a separated path with the on-street infrastructure of a conventional bike lane providing a right-of-way designated exclusively for bicycle travel adjacent to a roadway and separated from vehicular traffic.

Figure 13
Regional Bikeways Mileage



In 2021, bike activity counted across eight corridors decreased 14% from 2020's historic "bike boom" period (Table 7). Compared to 2017 though, 2021 saw a 27% increase in bike activity, indicating an upward trend. It's also important to note that in 2021 three of the eight corridors – "Landis Street", "30th Street", and "Fourth & Fifth Avenues" were active bikeway construction sites. People biking likely avoided these corridors' due to temporary traffic control conditions and construction activities.

Table 7
Total Bike Counts

Regional Bikeway Corridor	2017	2020	2021
Rose Canyon Bike Path	133,870	181,461	165,320
Landis Street	30,507	28,925	25,276
Coast Highway & Coastal Rail Trail	298,988	435,600	359,002
University Avenue	74,787	131,068	107,738
30th Street	42,517	58,429	51,982
Fourth & Fifth Avenues	59,781	79,183	60,781
Mission Road & Inland Rail Trail	42,169	63,908	60,995
Bayshore Bikeway	109,414	184,043	171,630
TOTAL	792,033	1,162,617	1,002,724

Source: SANDAG Eco-Counters
NOTE: For more information please see Bike Riding in the San Diego Region Since COVID-19 InfoBits.

About infobits

SANDAG serves as the San Diego region's clearinghouse for information and data. Infobits publish timely, relevant information as well as provide context on complex issues facing the region.

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