San Francisco Mobility Trend Report 2018

San Francisco Municipal Transportation Agency Jan 28, 2019 San Francisco, California

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Executive Summary

San Francisco Today

San Francisco has grown dramatically since the recession in the last decade. Since 2009, the city has added over 78,000 residents and over 175,000 jobs, outpacing all projections, and now has a population of 883,000 and 720,000 total jobs, all within 49 square miles.

San Francisco is hosting the most residents and jobs in its history, and the city is facing an array of transportation challenges including increased travel demand, greater infrastructure needs, and growing congestion — all against the backdrop of a wide variety of emerging transportation options. To execute its Charter mandated Transit First Policy and achieve the city's new climate action goal, the San Francisco Municipal Transportation Agency (SFMTA) has continued to encourage and promote sustainable modes like transit, bicycling and walking. However, San Francisco is projected to grow even more. Between now and 2040, the City is expected to add another 200,000 new residents and 150,000 new jobs. Further investment in the sustainable modes will facilitate the city achieving its new goal of 80 percent of all trips taken by sustainable modes by 2030 and net zero greenhouse gas emissions by 2050.

This report examines transportation trends over the last decade to show how the transportation sector is changing and helps inform how the city can adapt to the changes.

Since 2010, San Francisco has seen:

- Population grow by 9 percent
- Employment grow by 32 percent, and unemployment drop from 8.5 percent to 2.4 percent
- Transit ridership increase by 5 percent
- Vehicular traffic entering San Francisco grow by 27 percent
- Vehicle registration within San Francisco increase by 6 percent
- Citywide bike trips increase by 6 percent
- Private auto speeds decline by 23 percent

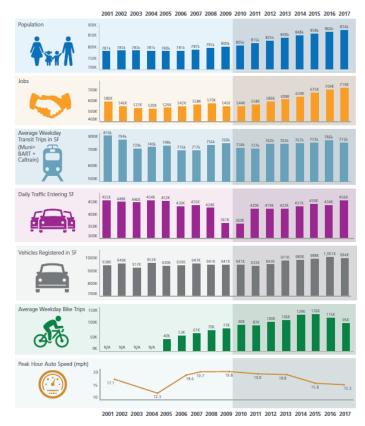


Chart title: Transportation trends in San Francisco.

This chart shows the trends of seven key transportation indicators for the City of San Francisco.

The first indicator is population. The year of 2001 had about 781,000 residents living in San Francisco, 2002 had 783,000. 2003 had 783,000. 2004 had 781,000. 2005 had 780,000. 2006 had 781,000. 2007 had 787,000. 2008 had 795,000. 2009 had 800,000. 2010 had 805,000. 2011 had 815,000. 2012 had 825,000. 2013 had 840,000. 2014 had 848,000. 2015 had 858,000. 2016 had 866,000. 2017 had 874,000.

The second indicator is number of jobs. The year of 2001 had about 586,000 jobs in San Francisco, 2002 had 546,000. 2003 had 527,000. 2004 has 520,000. 2005 had 529,000. 2006 had 542,000. 2006 had 542,000. 2007 had 558,000. 2008 had 570,000. 2009 had 545,000. 2010 had 544,000. 2011 had 558,000. 2012 had 586,000. 2013 had 608,000. 2014 had 634,000. 2015 had 675,000. 2016 had 704,000. 2017 had 719,000.

The next indicator is Average Weekday Transit Trips in San Francisco including Muni trips, BART trips within San Francisco and Caltrain trips within San Francisco. The year of 2001 had 819,000 transit trips on an average weekday. 2002 had 794,000, 2003 had 729,000. 2004 had 740,000. 2005 had 748,000. 2006 had 716,000. 2007 had 717,000. 2008 had 756,000. 2009 had 769,000. 2010 had 734,000. 2011 had 727,000. 2012 had 762,000. 2013 had 762,000. 2014 had 767,000. 2015 had 772,000. 2016 had 786,000. 2017 had 772,000.

The next indicator is Daily Traffic Entering San Francisco. The year of 2001 had about 455 vehicles entered San Francisco County lines on California State highways. 2002 had 448,000. 2003 had 446,000. 2004 had 454,000. 2005 had 452,000. 2006 had 430,000. 2007 had 435,000. 2008 had 424,000. 2009 had 361,000. 2010 had 360,000. 2011 had 420,000. 2012 had 419,000. 2013 had 422,000. 2014 had 431,000. 2015 had 439,000. 2016 had 434,000. 2017 had 456,000.

The next indicator is Vehicle Registered in San Francisco. The year of 2001 had 938,000 vehicles registered in San Francisco. 2002 had 949,000. 2003 had 917,000. 2004 had 953,000. 2005 had 930,000. 2006 had 939,000. 2007 had

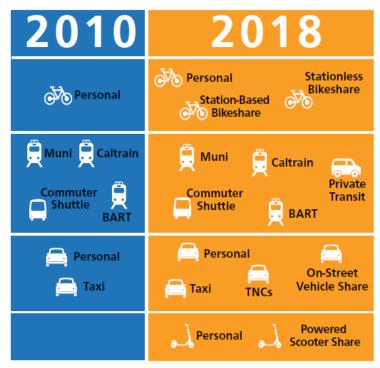
947,000. 2008 had 941,000. 2009 had 941,000. 2010 had 941,000. 2011 had 933,000. 2012 had 943,000. 2013 had 971,000. 2014 had 980,000. 2015 had 988,000. 2016 had 1,001,000. 2017 had 994,000.

The next indicator is Average Weekday Bike Trips. The year of 2005 had 40,000 trips taken by bike on an average weekday in San Francisco. 2006 had 53,000. 2007 had 61,000. 2008 had 70,000. 2009 had 77,000. 2010 had 90,000. 2011 had 87,000. 2012 had 100,000. 2013 had 106,000. 2014 had 124,000. 2015 had 126,000. 2016 had 115,000. 2017 had 95,000.

The last indicator is Average Peak Hour Auto Speed on Congestion Management Program Roads in San Francisco. The year of 2001 had the average peak hour auto speed as 17.1 mile per hour. 2004 had 12.3. 2006 had 18.6. 2007 had 19.7. 2009 had 19.8. 2011 had 19. 2013 had 18.8. 2015 had 15.8. 2017 had 15.3.

San Francisco has more transportation options than ever

Since 2010, San Francisco has seen a proliferation of new transportation options. These options are primarily enabled by smartphone technology, usually driven by demand in real time, and are privately operated. These emerging options include station-based and stationless bike share services, powered scooter, Transportation Network Companies (TNCs) like Uber and Lyft, privately operated transit, and more.



Graph title: transportation options in 2010 and 2018

This graph compares the transportation options of San Francisco in 2010 and today in 2018, For bicycling, 2010 had only private bike while 2018 has additional options of station-based bike share and stationless bike share. For auto driving, 2010 had private vehicle and taxi while 2019 had additional options of on-street vehicle share and transportation network companies such as Uber and Lyft. For transit, 2010 had Muni, BART, Caltrain and commuter shuttle while 2018 has additional option of private transit. 2018 has a new form of transportation in San Francisco as powered scooter, which can be private or shared.

Transit

Public transit remains the backbone of San Francisco's transportation network, despite recent nationwide trends. Transit ridership in the US has declined six percent since 2014, with bus ridership declining nine percent. In 2017, total bus ridership in the United States reached its lowest in the past three decades. However, San Francisco's Muni system has continued to buck the national trends over this period, with ridership holding steady at 712,000 average weekday boardings. This is in part due to improvement the SFMTA has made in the system.

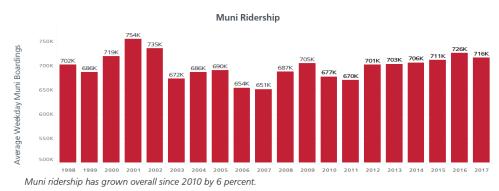


Chart title: Muni Ridership

Chart caption: Muni ridership has grown overall since 2010 by 6 percent.

This chart depicts Average Weekday Muni Boardings over time. The year of 2001 had 754,000 Muni boarding on an average weekday. 2002 had 735,000, 2003 had 672,000. 2004 had 686,000. 2005 had 690,000. 2006 had 654,000. 2007 had 651,000. 2008 had 687,000. 2009 had 705,000. 2010 had 677,000. 2011 had 670,000. 2012 had 701,000. 2013 had 703,000. 2014 had 706,000. 2015 had 711,000. 2016 had 726,000. 2017 had 716,000.

Muni ridership has been growing where the agency made investments. Over the past four years, the SFMTA has implemented some of the most significant service changes in Muni history, including launching the Rapid Network, realigning routes to better meet demand, and improving reliability through travel time improvements. The Rapid network has seen double-digit ridership growth and reliability has improved on corridors such as the combined 9/9R San Bruno. Additionally, Muni service has increased by 20% since 2010.

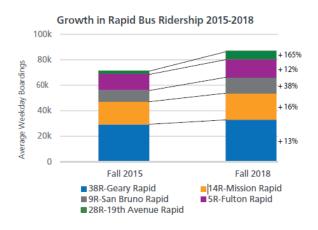


Chart title: Growth in Rapid Bus Ridership 2015-2018

This chart depicts growth in Rapid Bus Ridership from fall 2015 to fall 2018. The 5R-Fulton Rapid had 12,800 daily boardings in 2015 and 14,300 in 2018, which has grown 12%. The 9R San Bruno Rapid had 9,000 daily boardings in 2015 and 12,400 in 2018, which has grown 38%. he 14R Mission Rapid had 17,800 daily boardings in 2015 and 20,600 in 2018, which has grown 16%. The 28R 19th Avenue Rapid had 2,600 daily boardings in 2015 and 6,900 in 2018, which has grown 165%. The 38R Geary Rapid had 29,300 daily boardings in 2015, and 33,000 in 2018, which has grown 13%.

Paratransit

SF Paratransit is an integral part of the city's transportation network, providing door-to-door services to ADA eligible seniors and individuals with disabilities who are unable to access the Muni fixed route system. In 2018, SF Paratransit provided 775,000 trips for 13,000 riders, with over 2,000 trips on an average weekday across various services.

BART/Caltrain

Combined BART and Caltrain ridership to San Francisco has grown by 30 percent since 2010. Caltrain ridership to San Francisco has almost tripled in the last decade and half.

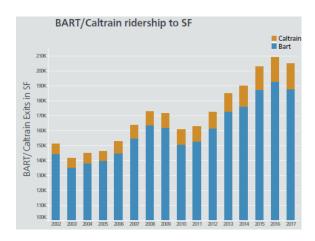


Chart title: BART and Caltrain ridership to SF

This chart depicts BART and Caltrain ridership to San Francisco on an average weekday. BART had 144,000 exits at stations within San Francisco on an average weekday in 2002, 135,000 in 2003, 138,000 in 2004, 140,000 in 2005, 145,000 in 2006, 155,000 in 2007, 164,000 in 2008, 162,000 in 2009, 151,000 in 2010, 153,000 in 2011, 161,000 in 2012, 173,000 in 2013, 176,000 in 2014, 188,000 in 2015, 193,000 in 2016, 188,000 in 2017.

Caltrain had 6,800 exits at stations within San Francisco on an average weekday in 2002, 6,400 in 2003, 6,600 in 2004, 6,400 in 2005, 8,000 in 2006, 8,800 in 2007, 9,300 in 2008, 9,600 in 2009, 9,700 in 2010, 10,000 in 2011, 11,000 in 2012, 12,000 in 2013, 14,000 in 2014, 15,000 in 2015, 16,000 in 2016, 17,000 in 2017.

Bicycling

Bicycling provides an environmentally-friendly, healthy, and reliable way for many San Francisco's residents, workers, and visitors to get around the city. According to Census data, bike commute trips in San Francisco increased by 140 percent between 2005 and 2015. It is estimated that 95,000 bike trips were made in the City on a typical weekday in 2017. However, since 2015, there has been a decline in bicycle commuting that corresponds to a similar dip in the national trends.



Chart title: Total Bicycle Commuter, San Francisco and United State

Chart caption: The share of SF residents commuting by bicycle has shot up since 2011, although it has started to dip in the last few years, mirroring national trends.

This chart depicts the total bicycle commuters in United State and that in San Francisco from 2005 to 2017. United States had 532,000 bicycle commutes in 2005, 691,000 in 2006, 696,000 in 2007, 864,000 in 2008, 693,000 in 2009, 822,000 in 2010, 830,000 in 2011, 845,000 in 2012, 858,000 in 2013, 875,000 in 2014, 890,000 in 2015, 902,000 in 2016, 764,000 in 2017. San Francisco had 6,900 bicycle commutes in 2005, 9,100 in 2006, 10,400 in 2007, 864,000 in 2008, 693,000 in 2009, 822,000 in 2010, 830,000 in 2011, 845,000 in 2012, 858,000 in 2013, 875,000 in 2014, 890,000 in 2015, 902,000 in 2016, 764,000 in 2017.

There are a few factors to consider when examining this recent trend:

- The trend is based wholly on bike commuting, and only captures the predominant mode in a multimodal trip. Changes in recreational, personal business, and other non-commute bike trips are not accounted for over time.
- Bicycling is becoming more popular in serving first mile/last mile trips to transit, which is not
 captured in the commute trend. Between 2008 and 2015, the share of passengers accessing San
 Francisco BART stations via bike has grown substantially. For example, the share of total riders
 accessing 16th Street Station has doubled.

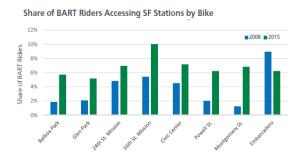


Chart Title: Share of BART Riders Accessing San Francisco Stations by Bike. Chart caption: Bicycle access to SF BART stations has increased since 2008.

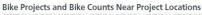
This chart compares the share of BART Riders Accessing San Francisco stations by Bike in 2008 and 2015. Balboa Park BART station had 2% of riders accessing the station by bike in 2008, and 6% in 2015. The Glen Park station had 2% in 2008 and 5% in 2015. The 24th Street Mission station had 5% in 2008 and 7% in 2015. The 16th Street Mission station had 5% in 2008 and 10% in 2015. The Civic Center Station had 4% in 2008 and 7% in 2015. The Powell Street station had 2% in 2008 and 6% in 2015. The Montgomery station had 1% in 2008 and 7% in 2015. The Embarcadero Station had 9% in 2008 and 6% in 2015.

- National bicyclist commute mode share started to drop around the same time that global oil prices started to decline.
- Similar to trends in Muni ridership, bike ridership has grown where the SFMTA has made investments, particularly in protected bike lanes that are separated from vehicle traffic using physical barriers like flexible posts, concrete barriers, or street parking.

Nevertheless, the declining trend in commute bicycling is concerning and worth close examination.

Bike Investment & Bike Ridership

Recent data indicates that there may be a growing preference in San Francisco for protected bike lanes. For instance, since the completion of the Folsom Street protected bike lanes in 2018, bicycle counts have increased by over 20 percent in peak hours without seeing a decline from nearby Market Street. Conversely, the Valencia corridor, which has typically seen high bike ridership since the streetscape project in 2010, saw bicycle counts decline by 10 percent in the last two years. Increasing congestion in the city and an increase in double parking and pick-ups/drop-offs along Valencia make it less desirable for cyclists.





Map title: Bike Projects and Bike Counts Near Project Locations
Map caption: Bike ridership has increased around areas with new infrastructure

This map shows the bike project locations and bike count near each project locations before and after the project was implemented. The project of Polk Street near-term improvement had bike count increased 21% after project was implemented. The project of Folsom Street near-term improvement had bike count increased 21% after project was implemented. The project of FordGo Bike Station Expansion had bike count increased 10% after project is implemented.

Driving

While San Francisco residents may be driving their own cars less, multiple indicators show that overall driving and congestion is growing. Since 2010, vehicle registration per capita has declined by three percent. But since the overall population has grown, the total number of vehicles registered in the city have grown by six percent, adding 26,000 more vehicles.



Chart Title: Vehicle Registration in San Francisco

Chart caption: Vehicle registration per capita has declined; however, total vehicles registered in SF has grown due to population growth.

The chart depicts Vehicle Registration and Vehicle Registration per capita in San Francisco. 2001 had 469,000 vehicles registered in San Francisco, 2002 had 475,000, 2003 had 458,000, 2004 had 476,000, 2005 had 465,000, 2006 had 469000, 2007 had 474,000, 2008 had 470,000, 2009 had 470,000, 2010 had 470,000, 2011 had 466,000, 2012 had 471,000, 2013 had 485,000, 2014 had 409,000, 2015 had 494,000, 2016 had 500,000, 2017 had 500,000. Vehicle registered per capita in San Francisco was 0.6 in 2001, 0.61 in 2002, 0.59 in 2003, 0.61 in 2004, 0.6 in 2005, 0.6 in 2006, 0.6 in 2007, 0.59 in 2008, 0.59 in 2009, 0.58 in 2010, 0.57 in 2011, 0.57 in 2012, 0.58 in 2013, 0.58 in 2014, 0.58 in 2015, 0.58 in 2016 and 0.57 in 2017.

Since 2010, San Francisco's employment and population have grown, but employment growth has been triple that of population growth. Today, more people who work in San Francisco live elsewhere. As such, traffic entering San Francisco has grown by 27 percent and rebounded to previous levels seen in the early 2000s. The recent growth is driven mostly by Bay Bridge traffic, which was cut in half during the recession. Traffic from the Peninsula, South Bay and Marin County has remained relatively stable over the last two decades.

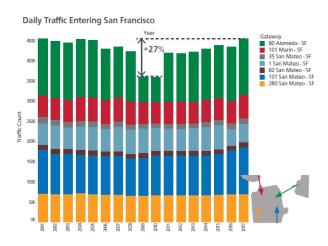


Chart Title: Daily Traffic Entering San Francisco

Chart Caption: Inbound vehicle traffic to San Francisco has rebounded to levels seen in the early 2000s.

This chart depicts daily traffic entering San Francisco.

About 139,000 vehicles entered San Francisco County daily from San Mateo County on State Route 80 in 2001, 140,000 in 2002, 142,000 in 2003, 143,000 in 2004, 142,500 in 2005, 126,000 in 2006, 125,500 in 2007, 124,000 in 2008, 63,000 in 2009, 61,500 in 2010, 122,000 in 2011, 120,000 in 2012, 123,000 in 2013, 126,500 in 2014, 130,000 in 2015, 132,500 in 2016, 139,000 in 2017.

About 54,000 vehicles entered San Francisco County daily from Marin County on US 101 in 2001, 54,000 in 2002, 54,000 in 2003, 58,500 in 2004, 59,000 in 2005, 59,000 in 2006, 59,000 in 2007, 56,500 in 2008, 53,000 in 2009, 52,500 in 2010, 53,500 in 2011, 55,000 in 2012, 52,500 in 2013, 54,500 in 2014, 55,000 in 2015, 56,000 in 2016, 58,800 in 2017.

About 15,750 vehicles entered San Francisco County daily from San Mateo County on State Route 35 in 2001, 14,000 in 2002, 14,000 in 2003, 14,250 in 2004, 13,250 in 2005, 13,250 in 2006, 13,250 in 2007, 12,500 in 2008, 12,250 in 2009, 11,850 in 2010, 12,000 in 2011, 12,000 in 2012, 12,000 in 2013, 13,000 in 2014, 13,250 in 2015, 13,250 in 2016, 13,950 in 2017.

About 53,500 vehicles entered San Francisco County daily from San Mateo County on State Route 1 in 2001, 57,500 in 2002, 53,500 in 2003, 58,500 in 2004, 59,000 in 2005, 56,000 in 2006, 61,000 in 2007, 61,500 in 2008, 61,000 in 2009, 56,000 in 2010, 55,500 in 2011, 54,500 in 2012, 57,500 in 2013, 59,000 in 2014, 60,000 in 2015, 43,000 in 2016, 45,150 in 2017.

About 12,750 vehicles entered San Francisco County daily from San Mateo County on State Route 82 in 2001, 12,569 in 2002, 12,500 in 2003, 12,141 in 2004, 12,500 in 2005, 11,500 in 2006, 11,400 in 2007, 11,400 in 2008, 11,350 in 2009, 11,350 in 2010, 11,350 in 2011, 11,350 in 2012, 11,350 in 2013, 11,100 in 2014, 11,100 in 2015, 11,100 in 2016, 11,950 in 2017.

About 108,000 vehicles entered San Francisco County daily from San Mateo County on US 101 in 2001, 99,500 in 2002, 99,500 in 2003, 95,000 in 2004, 95,500 in 2005, 95,500 in 2006, 96,000 in 2007, 92,000 in 2008, 94,500 in 2009, 98,500 in 2010, 99,000 in 2011, 99,000 in 2012, 98,000 in 2013, 99,000 in 2014, 101,000 in 2015, 108,000 in 2016, 116,500 in 2017.

About 71,908 vehicles entered San Francisco County daily from San Mateo County on US 280 in 2001, 70,888 in 2002, 70,500 in 2003, 72,847 in 2004, 70,500 in 2005, 69,000 in 2006, 69,000 in 2007, 66,500 in 2008, 66,000 in 2009, 68,000 in 2010, 67,000 in 2011, 67,500 in 2012, 67,500 in 2013, 67,500 in 2014, 69,000 in 2015, 70,500 in 2016, 70,500 in 2017.

Additionally, total vehicle miles traveled (VMT) in San Francisco has increased. This includes total mileage driven within San Francisco by residents, commuters from other areas, commercial vehicles, TNCs, and tourists. According to an analysis by the San Francisco County Transportation Authority, total VMT in the city has increased by 13 percent from 2010 to 2016, and given the trends seen in other indicators, it is likely that this has continued to grow into 2018.

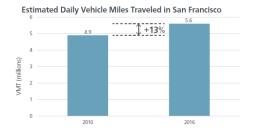


Chart title: Estimated Daily Vehicle Miles Traveled in San Francisco

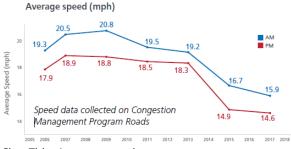
Chart caption: Daily VMT within San Francisco has increased by 13 percent to 5.6 million miles driven in 2016

This chart depicts the estimated daily vehicle miles traveled in San Francisco in 2010 and 2016. About 4.9 million vehicle miles traveled daily in 2010 and 5.6 million in 2016.

Taxis continue to play an important role in the city's transportation system. Through the SFMTA's program, taxis provide benefits not comparable to other ride hailing services, such as equity of access to all users including seniors, people with disabilities, and riders without smart phones; a fleet comprised of 95% clean vehicles; and a high level of requirements ensuring safety and rider protection. There are about 9,000 trips taken by Taxi on an average weekday in 2018. In the next year, the SFMTA will track wait times at San Francisco International Airport and total taxi trips starting in San Francisco proper to better measure the effectiveness of taxi service.

Congestion

As driving has increased, so has congestion within San Francisco. This can mean many things. On one hand, congestion is often correlated with population and employment growth, and is a sign – and perhaps even a result – of a booming economy. On the other hand, congestion is also an indicator of an inefficient use of time and resources. When people must drive within San Francisco, ensuring reliable and reasonable travel times on our streets also supports San Francisco's vibrancy and livability.



Char Title: Average speed

Speed data collected on Congestion Management Program Roads.

This chart depicts the average speed on Congestion Management Program Roads for peak hours. 2006 had average speed of 19.3 mile per hour for AM peak hours and 17.9 for PM peak hours. 2007 had 20.5 for AM and 18.9 for PM. 2009 had 20.8 for AM and 18.8 for PM. 2011 had 19.5 for AM and 18.5 for PM. 2013 had 19.2 for AM and 18.3 for PM. 2015 had 16.7 for AM and 14.9 for PM. 2017 had 15.9 for AM and 14.6 for PM.

Average auto speed is one measure of congestion, and vehicles are moving slower in San Francisco. Average peak speeds on both freeways and arterial streets (such as Geary Boulevard and Mission Street) dropped by 16 percent in 2015 since 2013 and have continued to slow. However, while auto speeds have steadily declined, transit speeds and transit reliability have remained steady, meaning that transit is getting more competitive with driving than in the past.



Chart title: Auto/Transit Speed Ratio

For example, a value of 2 indicates that auto speeds are twice as fast as transit.

This chart depicts Auto speed to transit speed ratio on San Francisco Congestion Management Program roads. 2006 had 1.87, indicating auto speeds are 1.87 times as fast as transit in 2006. 2007 had 2.15. 2009 had 1.84, 2011 had 2.25, 2013 had 2.04. 2015 had 1.71. 2017 had 1.67.

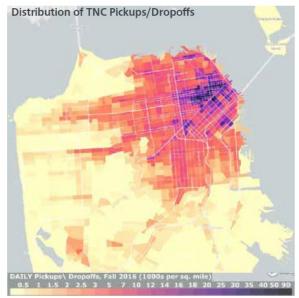
Over the next 20 years, San Francisco is projected to add over 150,000 new jobs and 200,000 new residents. This would drive total jobs to 865,000 and overall population to 1.1 million. The city will not be able to sustain a corresponding increase in driving and congestion in the future. Continuous investment in transit, walking and bicycling, as well as adopting further demand management strategies, will allow San Francisco to accommodate the growing demand of travel in a sustainable and efficient way.

Transportation Network Companies

Transportation Network Companies (TNCs) like Uber and Lyft are increasingly common on San Francisco streets. TNC vehicles now comprise a significant portion of traffic in the city, and their usage has increased rapidly. Based on analyses of 2016 data by the San Francisco County Transportation Authority:

- TNCs make 170,000 daily trips on a typical weekday, representing 15% of all intra-San Francisco vehicle trips
- TNCs make 12 times the number of taxi trips
- 45,000 Uber and Lyft drivers operate in the city
- 5,700 TNC vehicles operate during peak period
- TNC trips comprise about 4 percent of all trips
- TNCs generate 570,000 daily VMT, accounting for 20% of all local daily VMT within San Francisco
- TNCs account for about half of the total increase in congestion in SF between 2010 and 2016, with population and employment responsible for the other half.

A 2018 report from Schaller Consulting indicated that TNC ridership has increased 37% nationwide from 2016 to 2017.



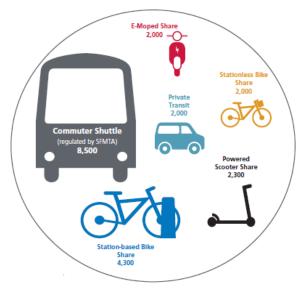
Map title: Distribution of TNC Pickup and Dropoffs

This map shows distribution of TNC Pickup and dropoff concentration. This map shows that TNC trips are concentrated in downtown San Francisco and SOMA, while TNCs serve lower level of trip in south and southwest San Francisco.

New Forms of Mobility

Transportation options in San Francisco are significantly different today than they were just a few years ago. New technology-enabled services have greatly changed the transportation landscape, and given San Francisco's role in the regional economy, the city continues to be a hub to test and implement these emerging mobility services.

These new mobility services present both opportunities and challenges to the safe and efficient movement of people and goods in San Francisco. They also have the potential to complement further the city's policy goals for achieving 80 percent of trips taken through sustainable modes by 2030 and reaching net zero greenhouse gas (GHG) emissions by 2050.



Graph title: Average weekday trips for new forms of mobility in 2018

This graph depicts the average weekday trips for new forms of mobility in San Francisco in 2018. Station-based bike share had 4,300 trips on a typical weekday. Stationless bike share had 2,000 trips. Private transit had 2,000 trips. Powered Scooter share had 2,300 trips. E-moped share had 2,000 trips. Commuter Shuttle regulated by SFMTA had 8,500.

Bike Share

Bike share continues to grow in San Francisco. In 2017, Ford GoBike expanded upon the previous station-based Bay Area Bike Share system to reach a footprint of over 140 stations and 1,500 bicycles in the city, which has served over 1.5 million trips between June 2017 and October 2018. In 2018, the SFMTA also launched a Stationless Bikeshare pilot permit program, and issued a permit to Jump. Between January and September 2018, the Jump system saw strong growth and served 380,000 total trips. The program sees about 2,200 trips on an average weekday and 15,0000 unique users every month. In October 2018, the SFMTA allowed the Jump footprint to expand from 250 to 500 bikes, which is expected to fuel further growth in trips.



Chart Title: Total Bike Share trips, June 2017 to present.

This chart depicts the total bike share trips by month for Ford GoBike and Jump. Ford GoBike had 2,689 trips in June 2017, 37,420 in July 2017, 66,207 in August 2017, 78,088 in September 2017, 86,162 in October 2017, 74,316 in November 2017, 66,404 in December 2017, 72,552 in January 2018, 79,138 in February 2018, 81,332 in March 2018, 94,678 in April 2018, 133,991 in May 2018, 143,948 in June 2018, 142,867 in July 2018, 136,047 in August 2018, 134,016 in September 2018, 147,439 in October 2018, 98503 in November 2018, and 96545 in December 2018. Jump had 4,515 trips in January 2018, 23,446 in February 2018, 37,383 in March 2018, 44,684 in April 2018, 47,689 in May 2018, 50,832 in June 2018, 55,800 in July 2018, 60,914 in August 2018, 57,895 in September 2018, 76165 in October 2018, 70489 in November 2018, and 63816 in December 2018.

Powered Scooter Share

In 2018, the SFMTA established the Powered Scooter Share Permit and Pilot Program, and issued permits to Skip and Scoot, with a maximum of 625 scooters for each company. Thus far, the program sees about 2,300 trips on an average weekday and about 23,000 unique users every month.

On-street Vehicle Share

The SFMTA has operated an On-Street Shared Vehicle Permit Program since 2011. Currently, there are 202 spaces permitted to Getaround, Zipcar, Maven and U-Haul. Over 2 million car share trips have been made in San Francisco since 2015, and each shared vehicle in an on-street space serves an average of 19 unique users every month. Furthermore, nearly 20 percent of members of these services report selling or donating a car due to availability of on-street car share.

Commuter Shuttle

Certain employers provide privately-operated commuter shuttles to transport employees who live in San Francisco to their workplace, most of which are outside of the city. Many of the commuter shuttle providers participate in the SFMTA's Commuter Shuttle Program that provides access to a network of 100 permitted stops for pick-ups and drop-offs. About 8,500 average weekday trips are taken on the various providers that participate in the program.

Private Transit

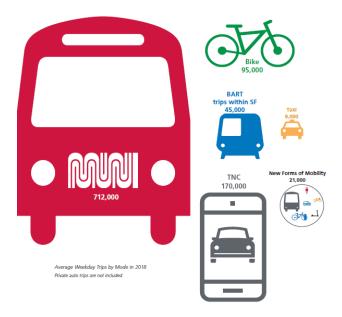
Private Private Transit Vehicles (PTV) are shared, privately-operated transportation services that are open to the public. In 2017, the SFMTA established a Private Transit Vehicle Permit Program and issued an operating permit to Chariot in April 2018. Chariot operates 12 routes in the AM peak and 9 routes during the PM peak and has seen 266,000 total trips in San Francisco in its first six months of permitted operation. However, Chariot is expected to cease operations in early 2019.

E-Moped

The Shared Electric Moped Parking Permit Program was created in June 2017 to further facilitate the use of this transportation option. Under the program, shared electric mopeds can utilize the small curb spaces between cars or short curb segments between driveways that cannot be used by a typical automobile, which yields more efficient use of curb space. The sole permittee, Scoot, has a fleet of about 550 vehicles that serve about 2,000 average weekday trips.

New Forms of Mobility

Besides the services regulated by SFMTA, there are more transportation options in San Francisco that do not participate in regulatory programs. While there has been a significant influx and growth of the new forms of mobility in recent years, their share of total trips in San Francisco remains relatively low. The 21,000 daily trips taken by all the regulated services are dwarfed by other modes such as the 95,000 trips taken on all bikes, the 170,000 trips taken by TNC and the approximately 712,000 daily trips on Muni. As San Francisco's population and employment grows, investing in sustainable modes will be the most effective way to support the system and ensure livability.



Graph title: Trips by Mode Private auto trips are not included

This graph depicts the average weekday trip by mode in San Francisco in 2018. The combined new forms of mobility had 21,000 trips on a typical weekday in 2018. Taxi had 9,000. TNC had 170,000. Bicycling had 95,000. BART within San Francisco had 45,000. Muni had 712,000.

Sources

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Muni Ridership: SFMTA (data is reported by fiscal year)

BART Exits in SF: Bart ridership reports (data is reported by fiscal year),

https://www.bart.gov/about/reports/ridership

Caltrans Exits in SF: Caltrain annual count ridership (data is reported by fiscal year),

http://www.caltrain.com/about/statsandreports/Ridership.html

Transit Ridership of Systems other than Muni: Federal Transit Administration: National

Transit

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Estimated Bike Trips: American Community Survey + SFMTA Travel Decision Survey

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https://www.bart.gov/about/reports/profile

Traffic Entering San Francisco: California Department of Transportation: Traffic Census Program,

http://www.dot.ca.gov/trafficops/census/

VMT: SFCTA TNC and Congestion

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Auto Speed and Transit Speed: SFCTA Congestion Management Porgram,

https://www.sfcta.org/congestion

TNC Trips: SFCTA TNC today, https://www.sfcta.org/emerging-mobility/tncs-today

TNC Growth: Schaller Consulting, http://www.schallerconsult.com/rideservices/automobility.pdf

Trips Taken by New Forms of Mobility: SFMTA

Appendix: Methodology

Traffic entering San Francisco: Traffic entering San Francisco is estimated based on the traffic counts collected on State Highways at San Francisco County lines provided by California Department of Transportation (Caltrans). Estimated total traffic is the summation of northbound traffic observed on US-101 at San Francisco/San Mateo County line, northbound traffic on US-280 at San Francisco/San Mateo County line, northbound traffic on CA-82 (El Camino Real) at San Francisco/San Mateo County line, northbound traffic on CA-1 at San Francisco/San Mateo County line, northbound traffic on CA-35 (Skyline Blvd) at San Francisco/San Mateo County line, westbound traffic on I-80 (Bay Bridge) at San Francisco/Alameda County line, and southbound traffic on US-101 (Golden Gate Bridge) at San Francisco/Marine County line.

Average Weekday Transit Trips in San Francisco: Average weekday transit boardings in San Francisco is estimated by combining Muni ridership, BART ridership within San Francisco and Caltrain ridership within San Francisco.

Average Weekday Bike Trips: Average weekday bike trips is estimated based on the American Community Survey average count/sample of workers who commute by bike, and the Travel Decision Survey conducted by SFMTA. This American Community Survey provides an estimate of total workers (16 years and over) in San Francisco and the share of workers that bike to work. The SFMTA Travel Decision Survey provides an estimate of the share of bicycle travel that is commute-related (34% of bike trips made in San Francisco is commute-related).

Bike Ridership: Bike ridership is measured by collecting data from a network of automated bike counters, which use sensors embedded in the pavement, and by conducting manual bike counts at key locations around the city. To evaluate effectiveness of bike investment, bike count data collected in weekday peak hours (7am to10am and 4pm to7pm) within quarter mile of project locations before and after project implementation are compared to analyze change in bike ridership.