

Service Implementation Plan FY2020



June 2019

Transit Operations Assumptions for FY2020

There are no increases or decreases in service levels planned for FY2020. Under that assumption, the operating statistics for COASTER, SPRINTER, BREEZE, and FLEX have been updated from FY2019 to reflect the respective modal weekday, Saturday, and Sunday schedules, inclusive of special event, school and holiday service for FY2020. LIFT is an on-demand service; therefore, the average weekday, Saturday, and Sunday year-to-date operating statistics for FY2019 were used to forecast the service levels for FY2020.

The process for establishing the upcoming year service plan begins in February, with staff compiling and reviewing historic service levels and ridership. Upon approval by the Executive Director, the forecasts are provided to city managers and the Board of Directors for review in April and provided to the Marketing, Service Planning, and Business Development Committee in May. The cost associated with the proposed services are calculated after service assumptions have been approved based on contractual agreements that NCTD has or will negotiate with private sector contractors and public partners. The costs are then included in the annual Operating Budget.

Ridership Assumptions

For all modes, forecasted ridership is based on the percent change in average actual ridership by day type and month between calendar year 2017 and 2018. It includes a 4.7% decrease which was estimated by SANDAG based on the fare changes that were approved in FY2019 and expected to be implemented within the first quarter of FY2020.

Table 1 Proposed Operating Statistics and Ridership FY2020

Mode	Proposed Operating Statistics and Ridership FY2020				
	Vehicle Revenue Miles	Total Miles	Vehicle Revenue Hours	Total Hours	Ridership
COASTER	274,559	288,253	9,760	10,264	1,374,894
SPRINTER	518,645	520,061	23,477	24,564	2,280,670
BREEZE	5,163,458	5,861,730	430,965	464,136	6,173,873
FLEX	305,392	328,197	16,918	17,930	30,219
LIFT	1,708,422	2,034,560	103,779	127,999	172,877
Total	7,970,476	9,032,801	584,898	644,894	10,032,533

FY2018 Actuals and FY2019 and FY2020 Projected Comparisons

As stated above, the FY2020 operating statistics and ridership projections are derived from analyzing actual ridership trends between FY2016 and FY2019, resulting in slight changes in the year over year comparisons. Further adjustments are made for events such as potential service enhancements or reductions, potential fare adjustments, and other factors such as actual work days or impacts on holidays falling on a service day. For FY2020, there are three (3) irregularities to note:

1. Fare adjustments have been approved which will result in a short-term loss of ridership estimated at 4.7%;
2. FY2020 has four (4) holidays operating with a Saturday schedule, compared to zero (0) in FY2019; and

3. FY2020 has three holidays operating with a Sunday schedule, compared to six in FY2019.

Table 2 compares the BREEZE FY2020 proposed statistics to the FY2018 Actuals and FY2019 Actuals (July–December 2018) and Budgeted (January–June 2019).

Table 2 BREEZE Operating Statistics and Ridership

BREEZE	FY2018 Actuals	FY2019 Actuals and Budgeted	FY2020 Proposed	Change from FY2019 to FY2020
Total Revenue Miles	5,222,538	5,068,755	5,163,458	1.87%
Weekday Revenue Miles	4,141,345	3,991,438	4,089,189	2.45%
Saturday Revenue Miles	577,260	548,542	591,476	7.83%
Sunday Revenue Miles	503,933	528,775	482,793	-8.70%
Total Miles	5,942,629	5,800,345	5,861,730	1.06%
Weekday Total Miles	4,751,247	4,604,326	4,670,869	1.45%
Saturday Total Miles	638,716	612,147	656,842	7.30%
Sunday Total Miles	552,666	583,872	534,019	-8.54%
Total Revenue Hours	448,656	425,072	430,965	1.39%
Weekday Revenue Hours	362,972	339,871	347,772	2.32%
Saturday Revenue Hours	45,769	43,219	45,901	6.21%
Sunday Revenue Hours	39,915	41,982	37,292	-11.17%
Total Hours	482,084	459,457	464,136	1.02%
Weekday Total Hours	391,364	368,949	375,731	1.84%
Saturday Total Hours	48,709	46,311	48,808	5.39%
Sunday Total Hours	42,011	44,197	39,597	-10.41%
Total Ridership*	6,482,912	6,351,051	6,173,873	-2.79%
Weekday Ridership	5,375,704	5,261,446	5,111,653	-2.85%
Saturday Ridership	590,784	572,718	597,376	4.31%
Sunday Ridership	516,424	516,888	464,844	-10.07%

*FY2019 Ridership includes Actuals through March 2019

Table 3 compares the COASTER FY2020 proposed statistics to the FY2018 Actuals and FY2019 Actuals (July–December 2018) and Budgeted (January–June 2019). There is minimal change in revenue and total miles between all three years because service levels have not changed.

Table 3 COASTER Operating Statistics and Ridership

COASTER	FY2018 Actuals	FY2019 Actuals and Budgeted	FY2020 Proposed	Change from FY2019 to FY2020
Total Revenue Miles	272,015	273,381	274,559	0.43%
Weekday Revenue Miles	234,780	234,688	236,245	0.66%
Saturday Revenue Miles	20,369	20,680	21,693	4.90%
Sunday Revenue Miles	16,865	18,013	16,621	-7.73%
Total Miles	288,253	288,535	288,253	-0.10%
Weekday Total Miles	248,354	247,411	247,570	0.06%
Saturday Total Miles	21,992	22,021	22,997	4.43%
Sunday Total Miles	17,907	19,103	17,685	-7.42%
Total Revenue Hours**	9,577	9,422	9,760	3.59%
Weekday Revenue Hours	8,248	8,069	8,403	4.14%
Saturday Revenue Hours	726	719	755	5.03%
Sunday Revenue Hours	603	634	602	-4.94%
Total Hours**	10,569	10,258	10,264	0.06%
Weekday Total Hours	9,224	8,833	8,829	-0.04%
Saturday Total Hours	716	754	799	6.04%
Sunday Total Hours	629	672	636	-5.40%
Total Ridership*	1,433,125	1,391,390	1,374,894	-1.19%
Weekday Ridership	1,248,285	1,234,722	1,201,301	-2.71%
Saturday Ridership	113,378	88,198	107,209	21.55%
Sunday Ridership	71,462	68,470	66,384	-3.05%

*FY2019 Ridership includes Actuals through March 2019

** FY2018 data differs from amounts previously reported in the National Transit Database (NTD) due to a change in calculation methodology. Revenue hours now include layover/recovery time as defined by NTD.

Table 4 compares the SPRINTER FY2020 proposed statistics to the FY2018 Actuals and FY2019 Actuals (July–December 2018) and Budgeted (January–June 2019). There is minimal change in operating statistics between the three years because service levels have remained constant.

Table 4 SPRINTER Operating Statistics and Ridership

SPRINTER	FY2018 Actuals	FY2019 Actuals and Budgeted	FY2020 Proposed	Change from FY2019 to FY2020
Total Revenue Miles	516,894	516,786	518,645	0.36%
Weekday Revenue Miles	389,938	390,286	391,827	0.39%
Saturday Revenue Miles	65,999	63,416	67,024	5.69%
Sunday Revenue Miles	60,957	63,084	59,794	-5.22%
Total Miles	518,986	519,007	520,061	0.20%
Weekday Total Miles	390,540	391,100	392,847	0.45%
Saturday Total Miles	66,747	64,067	67,200	4.89%
Sunday Total Miles	61,700	63,841	60,014	-5.99%
Total Revenue Hours	23,489	23,631	23,477	-0.65%
Weekday Revenue Hours	17,726	17,847	17,741	-0.59%
Saturday Revenue Hours	2,995	2,925	3,032	3.67%
Sunday Revenue Hours	2,768	2,859	2,703	-5.43%
Total Hours	23,605	24,163	24,564	1.66%
Weekday Total Hours	17,783	18,274	18,676	2.20%
Saturday Total Hours	3,026	2,967	3,088	4.08%
Sunday Total Hours	2,797	2,921	2,800	-4.15%
Total Ridership*	2,532,731	2,353,221	2,280,670	-3.08%
Weekday Ridership	2,109,447	1,958,368	1,898,544	-3.05%
Saturday Ridership	227,815	208,211	216,552	4.01%
Sunday Ridership	195,469	186,643	165,574	-11.29%

*FY2019 Ridership includes Actuals through March 2019

Table 5 compares the FLEX FY2020 proposed statistics to the FY2018 Actuals and FY2019 Actuals (July–December 2018) and Budgeted (January–June 2019). The increase in operating statistics from FY2018 to projected FY2020 is due to the conversion of two BREEZE routes to FLEX routes in October 2017. The increase in ridership from FY2018 actual is due to conversion of the BREEZE routes to FLEX routes.

Table 5 FLEX Operating Statistics and Ridership

FLEX	FY2018 Actuals	FY2019 Actuals and Budgeted	FY2020 Proposed	Change from FY2019 to FY2020
Total Revenue Miles	245,191	304,454	305,392	0.31%
Weekday Revenue Miles	208,569	252,481	253,932	0.57%
Saturday Revenue Miles	18,079	24,053	25,962	7.94%
Sunday Revenue Miles	18,543	27,920	25,498	-8.67%
Total Miles	269,206	325,933	328,197	0.69%
Weekday Total Miles	229,800	269,722	272,817	1.15%
Saturday Total Miles	19,453	26,276	27,939	6.33%
Sunday Total Miles	19,953	29,935	27,440	-8.33%
Total Revenue Hours	16,525	16,618	16,918	1.81%
Weekday Revenue Hours	13,674	12,668	12,913	1.93%
Saturday Revenue Hours	1,371	1,824	2,021	10.76%
Sunday Revenue Hours	1,480	2,126	1,985	-6.65%
Total Hours	18,079	17,793	17,930	0.77%
Weekday Total Hours	15,071	13,520	13,720	1.47%
Saturday Total Hours	1,414	1,978	2,124	7.38%
Sunday Total Hours	1,593	2,294	2,086	-9.06%
Total Ridership*	27,646	31,321	30,219	-3.52%
Weekday Ridership	24,438	27,188	26,079	-4.08%
Saturday Ridership	1,419	1,990	2,001	0.53%
Sunday Ridership	1,789	2,143	2,140	-0.16%

*FY2019 Ridership includes Actuals through March 2019

Table 6 compares the proposed LIFT FY2020 proposed statistics to the FY2018 Actuals and FY2019 Actuals (July–December 2018) and Budgeted (January–June 2019). LIFT has improved in efficiency since FY2018 which can be seen in the reduction in projected operating statistics in FY2020.

Table 6 LIFT Operating Statistics and Ridership

LIFT	FY2018 Actuals	FY2019 Actuals and Budgeted	FY2020 Proposed	Change from FY2019 to FY2020
Total Revenue Miles	1,814,488	1,703,199	1,708,422	0.31%
Weekday Revenue Miles	1,563,488	1,474,801	1,474,801	0.00%
Saturday Revenue Miles	158,975	132,428	142,615	7.69%
Sunday Revenue Miles	92,025	95,970	91,006	-5.17%
Total Miles	2,155,682	2,028,276	2,034,560	0.31%
Weekday Total Miles	1,846,568	1,749,346	1,749,346	0.00%
Saturday Total Miles	194,292	160,996	173,380	7.69%
Sunday Total Miles	114,822	117,933	111,833	-5.17%
Total Revenue Hours	115,313	103,463	103,779	0.31%
Weekday Revenue Hours	98,573	89,626	89,626	0.00%
Saturday Revenue Hours	10,583	8,017	8,633	7.69%
Sunday Revenue Hours	6,157	5,820	5,519	-5.17%
Total Hours	137,058	127,604	127,999	0.31%
Weekday Total Hours	116,455	110,292	110,292	0.00%
Saturday Total Hours	12,724	10,034	10,806	7.69%
Sunday Total Hours	7,878	7,278	6,902	-5.17%
Total Ridership*	186,120	173,349	172,877	-0.27%
Weekday Ridership	162,846	152,916	152,718	-0.13%
Saturday Ridership	14,845	11,689	12,655	8.26%
Sunday Ridership	8,429	8,744	7,505	-14.17%

*FY2019 Ridership includes Actuals through March 2019

Ten-Year Outlook

The ten-year forecasts are based on increases to service levels on both COASTER and SPRINTER, the details of which are described below. The ridership increases resulting from additional service are assumed to be 5%. This percentage may be refined as the service implementation date nears.

As shown in Table 7, BREEZE operating statistics and ridership are expected to remain relatively stable between FY2020–FY2029 due to no current plans for expansion or reduction. NCTD will kick off a Strategic Multimodal Transit Implementation Plan in FY2019, which will inform future service changes. In FY2027, BREEZE ridership is anticipated to increase by 5% as a result of increases in SPRINTER frequency to every 20 minutes. NCTD customers use SPRINTER as the backbone to the BREEZE system; therefore, it is anticipated that increasing service on the SPRINTER will have complementary effects on BREEZE ridership.

Table 7 BREEZE Operating Statistics FY2020–FY2029

BREEZE	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Revenue Miles	5,163,458	5,157,984	5,165,628	5,165,750	5,194,396	5,165,750	5,191,092	5,191,092	5,207,128	5,185,618
Total Miles	5,861,730	5,855,142	5,865,196	5,865,725	5,898,709	5,865,725	5,895,588	5,895,588	5,913,905	5,889,000
Revenue Hours	430,965	430,421	431,375	431,494	433,969	431,494	433,835	433,835	435,199	433,291
Total Hours	464,136	463,535	464,620	464,767	467,449	464,767	467,331	467,331	468,804	466,729
Ridership	6,173,873	6,222,688	6,242,557	6,245,314	6,283,962	6,245,314	6,284,898	6,537,428	6,558,476	6,275,431

As shown in Table 8, COASTER operating statistics show an increase in FY2021 due to the deployment of new locomotives and the completion of rail projects in the corridor, which will allow for additional eight (8) weekday trips with a frequency of 45-minutes during the peak and 90 minutes in the off-peak. The planned purchase and delivery of two expansion train sets by SANDAG prior to or not later than FY2024 will allow for twelve (12) more weekday trips, resulting in a 30-minute peak and 60-minute off-peak frequencies. SANDAG has not provided a firm commitment to fund the two new trainsets required to implement increased frequencies specified in the 2050 Regional Transportation Plan (RTP). Ridership is expected to increase by 5% in FY2021 and then an additional increase of 5% in FY2022 due to the increase in service levels. Operating statistics are assumed to remain stable between FY2024–FY2029.

Table 8 COASTER Operating Statistics FY2020–FY2029

COASTER	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Revenue Miles	274,559	390,187	391,781	392,073	580,611	576,908	580,927	580,927	582,835	579,912
Total Miles	288,253	429,206	430,959	431,280	638,672	634,598	639,019	639,019	641,119	637,903
Revenue Hours	9,760	13,870	13,928	13,941	20,641	20,513	20,652	20,652	20,720	20,615
Total Hours	10,264	15,257	15,320	15,335	22,705	22,564	22,717	22,717	22,792	22,677
Ridership	1,374,894	1,462,987	1,539,633	1,539,852	1,621,845	1,609,845	1,623,239	1,623,239	1,628,657	1,620,288

Table 9 shows the average weekday, Saturday and Sunday trips for COASTER between FY2020-FY2029. Weekday trips are expected to increase by eight (8) in FY2021 and an additional twelve (12) in FY2024 with the increased frequency described above.

Table 9 Average COASTER Trips by Day FY2020–FY2029

COASTER	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Average Weekday Trips	22	30	30	30	42	42	42	42	42	42
Average Saturday Trips	10	10	10	10	10	10	10	10	10	10
Average Sunday Trips	8	8	8	8	8	8	8	8	8	8

As shown in Table 10, SPRINTER operating statistics will remain relatively stable until FY2027 when they are expected to increase due to increased headways of 20-minutes which will be possible following the construction of double tracking and other operational improvements. Ridership is expected to remain stable until it increases in FY 2027 and FY 2028 as a result of the increase in service. Staff assume ridership will increase 5% based on the service increases; this percentage is used for planning purposes and will be further refined as cost benefit analyses of capital improvements needed to operate higher levels of service are prepared.

Table 10 SPRINTER Operating Statistics FY2020–FY2029

SPRINTER	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Revenue Miles	518,645	518,305	518,237	518,248	520,563	518,248	519,815	753,732	755,960	753,240
Total Miles	520,061	519,721	519,651	519,665	521,982	519,665	521,231	791,419	793,758	790,902
Revenue Hours	23,477	23,461	23,458	23,459	23,564	23,459	23,530	34,119	34,219	34,096
Total Hours	24,564	24,546	24,549	24,555	24,663	24,555	24,630	35,824	35,930	35,801
Ridership	2,280,670	2,298,588	2,306,385	2,307,403	2,321,989	2,307,403	2,322,562	2,415,884	2,539,116	2,526,990

Table 11 shows the average weekday, Saturday, and Sunday trips between FY2020–FY2029. The additional frequency will increase the number of trips by 43% in FY2027.

Table 11 Average SPRINTER Trips by Day FY2020–FY2029

SPRINTER	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Average Weekday Trips	70	70	70	70	70	70	70	100	100	100
Average Saturday Trips	55	55	55	55	55	55	55	55	55	55
Average Sunday Trips	50	50	50	50	50	50	50	50	50	50

As shown in Table 12, FLEX operating statistics and ridership are expected to remain stable between FY2020–FY2029; there are no current plans for expansion or reduction.

Table 12 FLEX Operating Statistics FY2020–FY2029

FLEX	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Revenue Miles	305,392	304,860	305,993	306,525	308,053	306,525	308,121	308,121	309,117	307,589
Total Miles	328,197	327,626	328,840	329,411	331,051	329,411	331,123	331,123	332,193	330,552
Revenue Hours	16,918	16,903	16,911	16,925	16,991	16,925	16,969	16,969	17,020	16,955
Total Hours	17,930	17,915	17,924	17,940	18,010	17,940	17,988	17,988	18,042	17,972
Ridership	30,219	30,438	30,600	30,677	30,834	30,677	30,862	30,862	30,965	30,795

As shown in Table 13, LIFT operating statistics and ridership are expected to remain relatively stable between FY2020–FY2029.

Table 13 LIFT Operating Statistics FY2020–FY2029

LIFT	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Revenue Miles	1,708,422	1,705,185	1,713,241	1,713,802	1,726,390	1,713,802	1,727,972	1,727,972	1,733,756	1,724,735
Total Miles	2,034,560	2,030,796	2,040,055	2,040,631	2,055,506	2,040,631	2,057,237	2,057,237	2,064,097	2,053,473
Revenue Hours	103,779	103,581	104,073	104,109	104,873	104,109	104,970	104,970	105,321	104,772
Total Hours	127,999	127,760	128,353	128,390	129,332	128,390	129,446	129,446	129,879	129,207
Ridership	172,877	177,779	178,791	178,899	180,269	178,899	180,513	180,513	181,130	180,129

Sorrento Valley COASTER Connection

MTS, through an agreement with NCTD, operates Sorrento Valley COASTER Connection (SVCC) shuttle service during weekday peak periods between the Sorrento Valley COASTER Station and surrounding employment areas. Per the agreement, NCTD pays MTS half the annual operating cost, plus \$1 per rider. FY2018 total annual ridership was 93,162, which was 13% lower than FY2017 ridership of 107,283. NCTD and SANDAG are exploring alternative first-mile, last-mile connections from the station, including designated scooter/bike-share locations.

Rail 2 Rail Service

NCTD and Amtrak have a Rail2Rail (R2R) program that allows COASTER day or monthly pass holders to ride any Amtrak Pacific Surfliner train at no extra cost (blackout days apply). This provides NCTD COASTER customers additional options without the additional costs of operating more COASTER trains. Per the agreement, NCTD reimburses Amtrak a set amount per rider. Ridership was 50,476 in FY2018, which was 35% below the FY2017 ridership of 77,978.

Mobility Hub Pilot Projects

NCTD and SANDAG have initiated two Mobility Hub pilot projects to provide improved access to major ridership hubs.

Carlsbad Poinsettia COASTER Station Rideshare Program

The first pilot project includes an on-demand shuttle service that connects commuters from the Poinsettia COASTER Station to employment centers in Carlsbad. NCTD, SANDAG, and the City of Carlsbad are collaborating to provide this service, which would enable riders to book a seat in a shuttle during peak commuting hours to make their first/last mile connection with COASTER service.

Project planning for this pilot is ongoing, with a targeted implementation date of July 1, 2019. NCTD staff estimates that the one-year pilot program would provide approximately 6,000 hours of service through the selected vendor RideCo. Existing BREEZE Route 444, which connects Carlsbad businesses to the Poinsettia COASTER station, generates approximately 8,000 annual riders. It is expected that the pilot program will increase this ridership base by providing greater service levels and a more direct connection to employers primarily located along Palomar Airport Road.

Cal State University San Marcos (CSUSM) Micromobility Pilot

The second pilot project includes micromobility services at the CSUSM SPRINTER station to connect students, staff, and faculty to the campus. This pilot will include shared bikes and/or scooters, pending the selection of a single vendor to provide these services. NCTD has been collaborating with CSUSM, the City of San Marcos, and SANDAG on this effort, with a targeted implementation date to coincide with CSUSM's fall 2019 semester.

In an initial survey of potential vendors, it was estimated that approximately 100-200 scooters and/or bikes be provided given the size of the student population (approximately 17,000). NCTD and its project partners will work to procure a vendor, design a geofenced service area, and implement the micromobility program through Q1 of FY2020.