

SMART BOARD OF DIRECTORS RIDERSHIP DATA COLLECTION AND REPORTING February 5, 2020



SMART Riders: More than 1.76 million strong



Plus:

- Over 171,000 bikes
- Over 6,500 wheelchairs



REMINDER:

RIDERSHIP – 3 WAYS OF COLLECTING DATA

- SMART still developing three ridership data collection methods
 - On Board Manual Counts
 - Paid Fare Media Ridership Reports
 - National Transit Database (NTD) Ridership Surveys
- SMART posting daily On Board and Paid Fare rider counts within 30 days of the close of a month (Example: posting through April 30 by May 31) here:

<http://sonomamarintrain.org/RidershipReports>

REMINDER: RIDERSHIP – HOW TO LOOK AT THE DATA

- ***Fiscal Year (July 1– June 30) = Industry Standard***
- Monthly evaluations with fiscal-year-end summaries to monitor trends
- Average Weekday Ridership is the standard used to determine commute impacts.
 - Does not include Holiday service that falls on a weekday and days with no service (in SMART's case service has only be canceled due to PG&E power shut off)

REMINDER: RIDERSHIP – HOW TO ANALYZE FOR POLICY DECISIONS

- What information is helpful?
 - Tracking your Fiscal Year-to-Date tells us how we are doing relative to our fiscal year budget
 - Tracking Monthly trends Year-over-Year smooths out differences in weather and seasonal shifts
 - Example: Comparing November 2019 to November 2018 yields useful trend information, instead of comparing July 2019 (no school in session) to October 2019 (school in session).

DECEMBER 2019 DATA

Monthly Totals Year-over-Year	Dec 2018	Dec 2019	% Difference
Total	51,670	58,199	+13%
Average Weekday	2,197	2,391	+9%
Average Weekend/Holiday	741	814	+10%

SMART CHANGES FOR 2020

1. Larkspur Station and Ferry connection
2. Downtown Novato Station
3. Addition of 4 trips weekdays to 38 trips per weekday
4. Closure of prior schedule “gaps” so now there’s 32 minute service in *each* direction during weekday commutes
5. Earlier weekend/holiday service
6. Two new fare incentive programs (Weekender pass through February and Sail & Rail pass for six months),
7. Launching of Clipper card acceptance at BikeLink lockers (located at every SMART station)

PRELIMINARY JANUARY 2020 DATA

Monthly Totals Year-over-Year	Jan 2019	Jan 2020	% Difference
Total	57,136	71,974	+26%
Average Weekday	2,289	2,847	+24%
Average Weekend/Holiday	754	1,037	+38%

PRELIMINARY FISCAL YEAR TO DATE

FISCAL YEAR-TO-DATE	First 6 months FY19	First 6 months FY20	% Difference
Total	427,634	443,538	+4%
Average Weekday	2,447	2,595	+6%
Average Weekend/Holiday	1,002	981	-2%*

*SIX MONTH TOTAL DOESN'T REFLECT TRENDS FROM NEW SERVICES:

December 2020 Weekend/Holiday Average **up 10%** over Dec. 2019

January 2020 Weekend/Holiday Average is 1,037 - **up 38%** over January 2019

HOW MANY “RIDERS” DO WE HAVE?

- January average weekday ridership of 2,847 does not mean only 1,423 people rode SMART in Jan 2020
- Daily Riders not always the same people.
- 12,597 unique people paid to ride SMART in Dec 2019
- 13,711 unique people paid to ride SMART in Jan 2020

CONCLUSIONS ABOUT JANUARY RIDERSHIP?

- January 2020 monthly total ridership up 26% over January 2019
- Not only On Board counts are increasing but also January 2020 saw a higher number of riders being counted through Paid Fare media than ever before
 - 4 out of top 5 Paid Fare ridership days ever in January 2020
 - Highest number of Paid Fare riders in one day
 - 2,822 on Jan. 30, 2020
- Month of January 2020
 - Highest number of SMART Mobile App activations ever (11,201)
 - 3rd highest number of unique people paying to ride SMART (13,711)
 - Sep. 2017 and July 2018 were higher

CONCLUSIONS ABOUT JANUARY RIDERSHIP?

January 2020	Mondays	Tuesdays	Wednesdays	Thursdays	Fridays	Saturdays	Sundays
TOTALS for MONTH	10,377	11,421	12,578	14,514	14,691	4,633	3,760

- Thursdays & Fridays have the highest weekday totals
- Saturday ridership higher than Sunday ridership
- Determining what the impact of each of the 7 system changes is on ridership will take resources and time, if even possible.

HOW FULL ARE THE TRAINS?

For January 2020 we tracked passengers, bicycles and wheelchairs by train and have formatted the raw data into weekly workbooks with tabs for each day.

Southbound																			
	4:30 AM	5:02 AM	6:06 AM	6:38 AM	7:10 AM	7:42 AM	8:14 AM	9:18 AM	9:50 AM	12:45 PM	2:21 PM	2:53 PM	3:25 PM	3:57 PM	4:29 PM	5:01 PM	5:33 PM	6:05 PM	6:37 PM
Passenger Count	34	88	163	140	178	123	78	42	53	70	67	35	96	81	44	60	47	36	26
Bike Count	5	11	30	13	17	17	5	4	7	5	5	0	15	13	7	6	13	3	3
Wheelchair Count	0	0	0	0	1	0	0	1	1	1	0	0	0	0	1	0	0	0	0
Northbound																			
	6:06 AM	6:38 AM	7:42 AM	8:14 AM	8:46 AM	9:18 AM	9:50 AM	11:41 AM	2:21 PM	3:25 PM	3:57 PM	4:29 PM	5:01 PM	5:33 PM	6:05 PM	6:37 PM	7:09 PM	7:41 PM	8:29 PM
Passenger Count	56	150	54	27	20	22	27	46	109	93	152	152	186	105	40	50	46	12	34
Bike Count	7	15	10	3	3	4	4	5	14	11	16	11	22	11	6	6	1	1	5
Wheelchair Count	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0

EXAMPLE: Monday, January 27, 2020



HOW FULL ARE THE TRAINS?

For the Weeks of January 6-12 and January 27-31, the first and last workweek of the month, we looked at the percent of riders versus manufacturer specification of seats per 2-car train (158) by day of the week.

First example: Week of January 6-12, daily evaluation for Thursday, January 9, 2020

Southbound																			
	4:30 AM	5:02 AM	6:06 AM	6:38 AM	7:10 AM	7:42 AM	8:14 AM	9:18 AM	9:50 AM	12:45 PM	2:21 PM	2:53 PM	3:25 PM	3:57 PM	4:29 PM	5:01 PM	5:33 PM	6:05 PM	6:37 PM
Passenger Count	45	78	176	122	169	168	78	43	50	56	70	43	79	46	54	59	57	18	96
Bike Count	9	8	9	10	20	17	10	4	4	6	4	2	4	8	4	6	7	2	7
Wheelchair Count	0	0	0	0	1	0	1	0	3	0	0	0	0	0	0	0	0	0	0
% Seated Capacity	28%	49%	111%	77%	107%	106%	49%	27%	32%	35%	44%	27%	50%	29%	34%	37%	36%	11%	61%

Northbound																			
	6:06 AM	6:38 AM	7:42 AM	8:14 AM	8:46 AM	9:18 AM	9:50 AM	11:41 AM	2:21 PM	3:25 PM	3:57 PM	4:29 PM	5:01 PM	5:33 PM	6:05 PM	6:37 PM	7:09 PM	7:41 PM	8:29 PM
Passenger Count	50	102	49	19	10	22	15	41	126	102	199	154	171	111	58	56	41	23	41
Bike Count	5	14	2	5	1	0	1	4	14	14	10	12	21	9	3	3	1	4	3
Wheelchair Count	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0
% Seated Capacity	32%	65%	31%	12%	6%	14%	9%	26%	80%	65%	126%	97%	108%	70%	37%	35%	26%	15%	26%

Green highlights = >75% of seats

Seated Capacity (2-car trainset)	158
Total daily available seats	6,004
Total Ridership For Day	2,897
Total Capacity For Day	48%



HOW FULL ARE THE TRAINS?

Second example: Week of January 27-31, daily evaluation for Wednesday, January 29, 2020

Southbound																			
	4:30 AM	5:02 AM	6:06 AM	6:38 AM	7:10 AM	7:42 AM	8:14 AM	9:18 AM	9:50 AM	12:45 PM	2:21 PM	2:53 PM	3:25 PM	3:57 PM	4:29 PM	5:01 PM	5:33 PM	6:05 PM	6:37 PM
Passenger Count	46	88	184	141	195	122	98	53	49	82	66	25	57	85	41	77	54	17	26
Bike Count	9	11	31	13	14	18	7	9	2	5	4	2	4	12	9	4	7	6	4
Wheelchair Count	0	0	1	1	1	1	0	1	1	2	1	0	0	0	0	1	0	1	0
% Seated Capacity	29%	56%	116%	89%	123%	77%	62%	34%	31%	52%	42%	16%	36%	54%	26%	49%	34%	11%	16%

Northbound																			
	6:06 AM	6:38 AM	7:42 AM	8:14 AM	8:46 AM	9:18 AM	9:50 AM	11:41 AM	2:21 PM	3:25 PM	3:57 PM	4:29 PM	5:01 PM	5:33 PM	6:05 PM	6:37 PM	7:09 PM	7:41 PM	8:29 PM
Passenger Count	65	138	45	21	12	23	40	45	130	115	165	170	192	112	46	41	28	22	49
Bike Count	13	15	7	4	4	4	2	5	23	13	17	18	21	15	1	3	1	2	7
Wheelchair Count	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
% Seated Capacity	41%	87%	28%	13%	8%	15%	25%	28%	82%	73%	104%	108%	122%	71%	29%	26%	18%	14%	31%

Green highlights = >75% of seats

Seated Capacity (2-car trainset)	158
Total daily available seats	6,004
Total Ridership For Day	2,965
Total Capacity For Day	49%



HOW FULL ARE THE TRAINS?

We then looked at the whole week of January 6 by commute period, midday and evening versus train seat capacity of 158 seats.

WEEK of 1/6/20	Monday	Tuesday	Wednesday	Thursday	Friday
Weekday AM Southbound Commute (5-8:30 am; 6 trains)	80%	86%	88%	83%	69%
Weekday AM Northbound Commute (6-9 am; 5 trains)	26%	31%	30%	29%	27%
Weekday Midday Southbound (3 trains)	32%	39%	39%	31%	38%
Weekday Midday Northbound (3 trains)	19%	22%	17%	16%	31%
Weekday PM Southbound Commute (2:20-5:30pm; 6 trains)	40%	47%	37%	37%	47%
Weekday PM Northbound Commute (2:20-6 pm; 6 trains)	82%	82%	101%	91%	94%
Weekday Evening Southbound (3 trains)	18%	22%	18%	36%	27%
Weekday Evening Northbound (5 trains)	25%	19%	26%	28%	30%
	Weekend/Holiday				
Weekend/Holiday Southbound	71%				
Weekend/Holiday Northbound	71%				

Week of January 6, 2020. Green highlights = >75% of seats



HOW FULL ARE THE TRAINS?

We then looked at the whole week of January 27 by commute period, midday and evening versus train seat capacity of 158 seats.

WEEK of 1/27/20	Monday	Tuesday	Wednesday	Thursday	Friday
Weekday AM Southbound Commute (5-8:30 am; 6 trains)	81%	87%	87%	88%	74%
Weekday AM Northbound Commute (6-9 am; 5 trains)	39%	35%	36%	35%	33%
Weekday Midday Southbound (3 trains)	35%	35%	39%	49%	54%
Weekday Midday Northbound (3 trains)	20%	22%	23%	31%	27%
Weekday PM Southbound Commute (2:20-5:30pm; 6 trains)	40%	38%	37%	44%	49%
Weekday PM Northbound Commute (2:20-6 pm; 6 trains)	84%	94%	93%	100%	98%
Weekday Evening Southbound (3 trains)	23%	17%	20%	23%	25%
Weekday Evening Northbound (5 trains)	23%	22%	24%	28%	30%

Week of January 27, 2020. Green highlights = >75% of seats



HOW FULL ARE THE TRAINS?

- Our manufacturer says each 2-car train seats “158 passengers, depending on the mix of bicycles, wheelchairs, strollers, etc.”
- Our operations team and riders are still learning what the ‘real world’ seated capacity of train might be.
- Seat capacity might be effected by bicycles and other space being consumed and we will continue to evaluate what our seated and standing passenger loads look like.

CONCLUSIONS ABOUT JANUARY CAPACITY?

- Commute peaks earlier than expected
 - The afternoon commute begins at 2:20 northbound and southbound
 - Evening commute ends earlier in each direction than expected
- Southbound morning and Northbound evening has highest usage with peak spreading across multiple trains
- Northbound morning commute starting, likely due to Southbound afternoon frequency now being at 32-minutes
 - By the fourth week of January the 6:38 am Northbound commute nearing capacity (>87% full) 4 out of 5 days of the week
- Determining what the real world capacity of the trains are during commute periods is still a work in progress
 - Schedule change seems to have lead to peak spreading

SMART'S RIDERSHIP: POSTING DATA AND DEVELOPING ANALYSIS

- Continue posting daily On Board and Paid Fare rider counts every month within 30 days of the end of the month.
- Start posting the raw data regarding train capacity (On Board counts by train departure) for every month within 30 days of the end of the month
 - For January we will expedite and post by the end of this week (February 7)
- Include a system capacity evaluation in any future monthly reports.

SMART'S RIDERSHIP: FUTURE MONTHLY REPORTS

Reminder that monthly ridership reports will begin at your March 2020 meeting and will include:

- Total Monthly Riders
- Average Weekday
- Average Weekend/Holiday
- Total Bicycles and Wheelchairs
- Fiscal Year to Date Ridership
- Year-over-Year ridership by month
- A Train Capacity Analysis

Every month the daily ridership data and by-train on board counts from the prior month will be posted on our web site.



CONCLUSION - SMART RIDERSHIP GROWING

- In every way of looking at the data, SMART's Average Weekday Ridership is growing every year.
- SMART is serving 24% more Weekday Commuters since launching service changes in January 2020 compared to January 2019.
- SMART data shows early signs of a growing reverse commute and a healthy rebound to Weekend ridership.

For More Information

<http://sonomamarintrain.org/RidershipReports>

