

May 4, 2020



2019 Muir Woods Shuttle
Evaluation Report

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Introduction

The Muir Woods Shuttle provides service to Muir Woods National Monument in Marin County, California. The Shuttle began operation in 2005 as a demonstration project to provide an alternative to automobile access and alleviate parking demand and traffic congestion. The Shuttle is an integral mode of access to the park and carries almost 18 percent of all park visitors throughout the year.

Shuttle History

The Shuttle represents a unique partnership of governments on a number of levels. The service was originally designed as a partnership of the National Park Service, County of Marin, and Golden Gate Transit. In 2009, responsibility for the Shuttle shifted to Marin County Transit District (Marin Transit) under a funding agreement with the National Park Service (NPS). In 2013, Marin Transit formed an additional partnership with the Golden Gate National Parks Conservancy to administer a new fare collection process. The change in how passengers pay their fares eased boarding delays and provided additional convenience for customers.

To manage visitation and parking demand, NPS implemented a new web-based parking and transit reservation system for Muir Woods in 2018, which allows visitors to purchase their

parking reservation and pre-purchase shuttle tickets for a specific window of time.

Funding

The first three years of operation were funded primarily through a grant from the Federal Highway Administration (FHWA) through 2007. Funds for the 2008 season were provided by a combination of federal TCSP (Transportation and Community and System Preservation Program) and PLH (Public Lands Highway Discretionary Program) funds. In May 2009, the Shuttle became a permanent Marin Transit route funded partly by the Transit District and partly by NPS.

Description of Service

For the 2019 season, shuttle service was provided on weekends, holidays and select summer weekdays. In previous years, Marin Transit typically operated service during a regular season that began in May and continued through October.

Since introducing winter holiday service in 2013, Marin Transit operates additional service around Thanksgiving weekend and between Christmas and New Year's Day.

During the 2015 season, Marin Transit introduced summer weekday service as a pilot. Summer weekday service is typically operated

from the third week in June through the second week of August.

In 2019, Marin Transit operated the Shuttle year round on weekends and holidays. Weekend and holiday service began on Saturday, January 1 and operated through Monday, December 31. The service ran on the following five holidays: President's Day, Memorial Day, Independence Day, Labor Day, and Veteran's Day (Observed). Weekday service operated from Monday, June 17 through Friday, August 9.

Figure 1 shows the routing of the Shuttle for the 2019 season. Service is provided along two routes. Route 66 serves the Pohono Park & Ride lot, and Route 66F serves downtown Sausalito and Marin City.

In 2019, schedules for weekend and holiday service were divided into peak and off-peak periods that correspond to different levels of service. The peak period runs from Memorial Day weekend through Labor Day weekend and the off-peak season runs the other months of the y

During the peak season, service on Route 66 between the Pohono Park & Ride Lot and Muir Woods is provided approximately every ten minutes. The first trip departs at 8:35 am and the last return trip leaves the park at 7:35 pm. During the off-peak season, service is provided every 20 minutes on Route 66 with generally the same span of hours as the peak season. Span of service is reduced a couple other times

during the year based on changes to the Park closure times.

Service on Route 66F to and from Sausalito is provided every hour during the off-peak season. The route serves the Sausalito Ferry Terminal and Marin City to provide connections to and from regional and local buses. During the peak season, additional service is added to provide half-hourly service to and from Sausalito.

Route 66F operates on weekends every half hour. The tenants of the adjacent office building utilize the Pohono Park & Ride lot during the work week (Monday-Friday). For this reason, the Shuttle does not operate the Route 66 alignment on weekdays.

In 2019, the Shuttle provided service on 72 peak summer days (including 39 weekdays), and 83 off-peak season days (including New Year's Day).

Table 1 summarizes service changes over the last five years of operations.

Figure 1: 2019 Muir Woods Shuttle Map

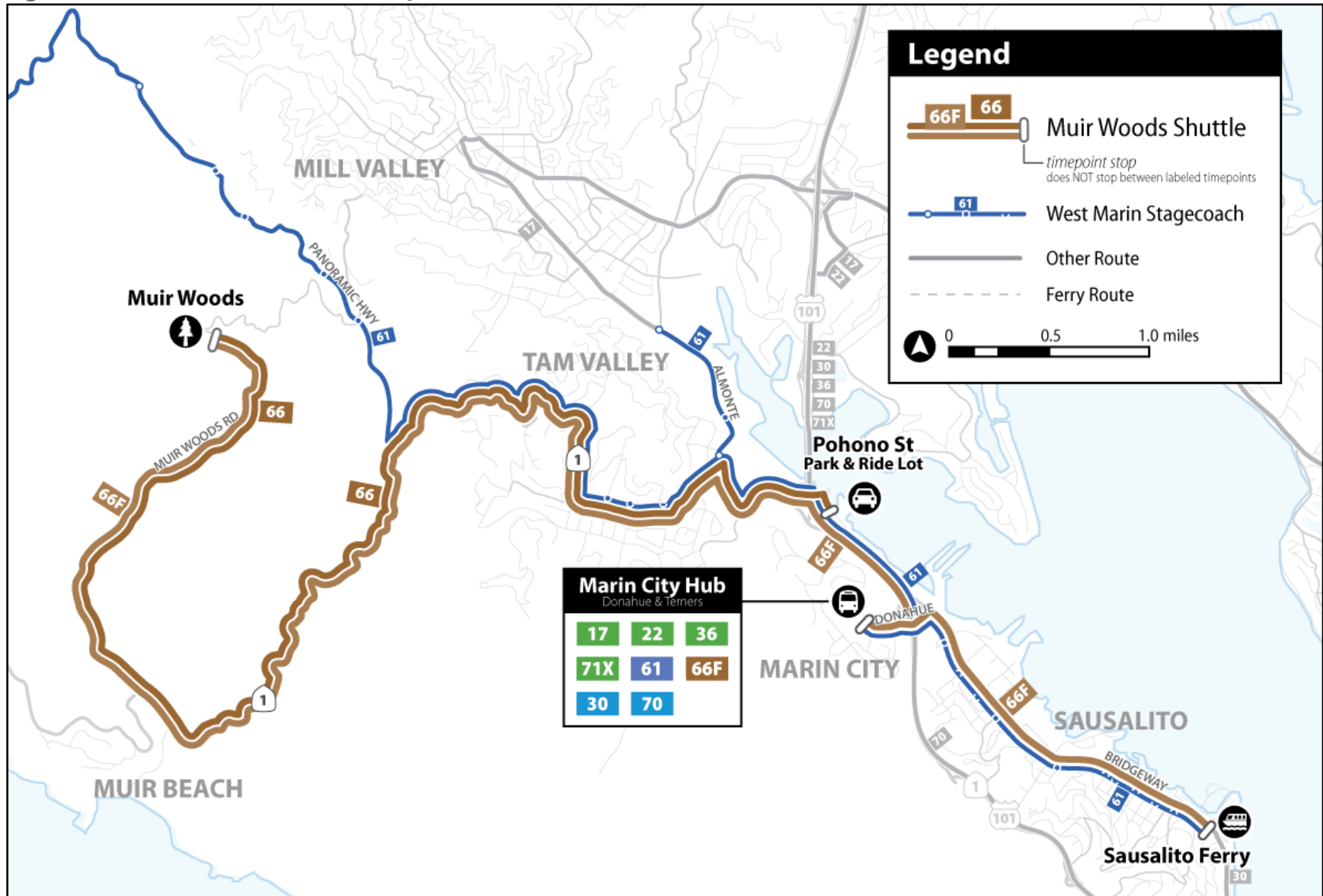


Table 1: Summary of Operations, 2014–2018

	2014	2015	2016	2017	2018	2019
Season Start	March 29	April 4	April 2	May 13 ⁽²⁾	January 1	January 1
Weekend & Holiday Service	65 days	63 days	79 days	64 days	108 days	113 days
Weekday Service	-	39 days	39 days	44 days	39 days	39 days
Avg. Frequency (Off-peak/Peak/Weekday)	20/10/- min	20/10/30 min	20/10/30 min	20/10/30 min	20/10/30 min	20/10/30 min
Service Hours ⁽¹⁾	4,619	4,620	4,672	4,376	6,428	6,381
Standard Fare (adult round-trip)	\$5.00	\$5.00	\$5.00	\$5.00	\$3.00	\$3.00

Notes:

(1) Actual operated hours may differ from planned hours due to canceled or added service.

(2) Season start delayed due to closure of Highway 1.

The District has continually taken steps to improve the service in response to customer feedback and service evaluations. In 2018 Marin Transit added a mobile information kiosk at Pohono Park & Ride to help guide passengers of the Muir Woods Shuttle service and provide drivers with a break area. The Shuttle partners implemented a new web-based reservation system that enables visitors to plan their trips in advance and reserve shuttle seats and a parking space.

Fares

In late 2017, the NPS implemented a new web-based parking and transit reservation system for Muir Woods to manage visitation and parking demand. The partner agencies upgraded the reservation system in 2018 to include shuttle fare payment. Under the new system, visitors are required to purchase their parking reservation and can pre-purchase shuttle tickets for a specific time window.

The round-trip adult fare is \$3.00 per person. No fare is charged for youth ages 15 and younger, seniors with a Lifetime NPS Pass, and disabled individuals with a Federal Lands Access Pass. One-way fares are not available.

In previous years, passengers had the option of purchasing a Day Pass for riding the Shuttle when transferring from another Marin Transit route. This option is not available under the online reservation system. (Figure 2)

The reservation system has alleviated capacity issues on the Shuttle by making passenger arrival patterns more predictable.

The pricing structure of \$8 for a parking reservation and \$3 to reserve a Shuttle seat provides an incentive to take the Shuttle for groups less than three.

Figure 2: MWS Reservation System



Customer Liaisons

Marin Transit hires Customer Liaisons to assist passengers waiting for the Shuttle at the Pohono Park & Ride Lot and at the Sausalito Ferry. The liaisons provide passengers with park and Shuttle service information and fare payment in particular .

This season Marin Transit scheduled one liaison at Pohono on weekends from 9:30 am to 3:30 pm. An additional staff member was stationed in Sausalito to perform similar duties and assist passengers transferring from the ferry.

A full-time Operations Supervisor is stationed at Muir Woods to facilitate vehicle circulation and check for proof of payment. This supervisor also ensures that passengers board the correct bus for their return trip to Sausalito or Pohono. After the last bus departs from Sausalito, typically one of the liaisons

relocates to Muir Woods to assist with loading returning passengers.

Customer Liaisons have continually proven to be an integral part of the service and significantly enhance the customer experience. Many Shuttle passengers are tourists who are not familiar with Marin County. Some are also not accustomed to using public transit. The liaisons and supervisor help ensure efficient operations and a quality passenger experience.

Customer Liaisons at the Sausalito stop have proven extremely valuable. As demand from that location has grown, the service had begun to experience similar challenges to those at the Pohono stop due to overcrowding and passenger confusion.

In 2018 and 2019, the District added an Operations Supervisor at Pohono to support the ticket validation system. This position increased stability and staffing reliability at Pohono, and was included in the new operations contract with MV Transportation that started on July 1, 2018.

Marketing and Passenger Information

Marketing for the Shuttle service has primarily focused on Bay Area visitors, with emphasis on travelers based in San Francisco. Information on the Shuttle is distributed through the park visitor information center, online, and on electronic message signs near the highway exits.

Shuttle service messaging has changed across all marketing platforms to inform visitors that they need to pre-plan and pre-purchase their shuttle seats and parking. The new strategy relies more on educating visitors in advance and less on intercepting visitors travelling to the National Monument.

The Changeable Message Signs (CMS) installed along Highway 101 notify incoming visitors that they need to reserve parking in advance. The CMS continue to be an effective means of advertising the Muir Woods Shuttle and assist visitors in wayfinding to the Pohono Park & Ride exit.

Most passengers used to learn about the Shuttle through the CMS, however due to recent changes and the reservation system, increasing numbers of passengers are finding Shuttle information online through web searches and NPS's online reservation system.

To assist with wayfinding and accommodate walk-up passengers, schedules and signage are posted at each stop. This includes entry signage to parking areas and schedule information at transit stops.

Information is also provided to customers online and over the phone by Marin Transit and National Park Service staff and the NPS reservation website.

In 2019, Marin Transit printed a pocket guide to provide passengers with information on how to use the Shuttle to return to their

original boarding location. The pocket guide includes timetables, fares, information about the park, and a route map with Shuttle pickup locations. This brochure is distributed at Pohono and Sausalito stops. It is also available on the bus and at the Muir Woods visitor information center.

Evaluation Methodology

Visitors are encouraged to purchase their advanced tickets through the NPS web-based reservation system. Pending seat availability, the Shuttle accepts same day walk-ups through an on-board fare collection process. Data on Shuttle ridership and fare revenues is obtained through a combination of farebox data and fare collection reports from the NPS reservation system.

NPS staff also provide data on park visitation levels. Marin Transit staff compile the Shuttle financial numbers and operating statistics.

Customer Liaisons, NPS and Conservancy staff, and MV Transportation operations staff provide qualitative observations of the service. These include commentary on on-time performance, weather conditions, traffic circulation, fare collection, pass ups, and service strengths and weaknesses, and suggestions on how to improve the service.

This evaluation report provides an overview of trends and changes over time and presents recommendations for the Shuttle's future.

Ridership and Productivity

This section presents the number of Muir Woods Shuttle passengers, productivity or passengers per revenue hour, and the proportion of Muir Woods visitors who chose to ride the Shuttle in 2019 compared to prior years.

Ridership

Ridership is measured as one-way, unlinked passenger trips. During the 2019 season, there were 146,941 one-way passenger trips on the Shuttle. Although this was the second highest ridership year ever, this represents a 17.2%

decrease in ridership compared to 2018. Table 2 shows total ridership trends over the past five seasons by month.

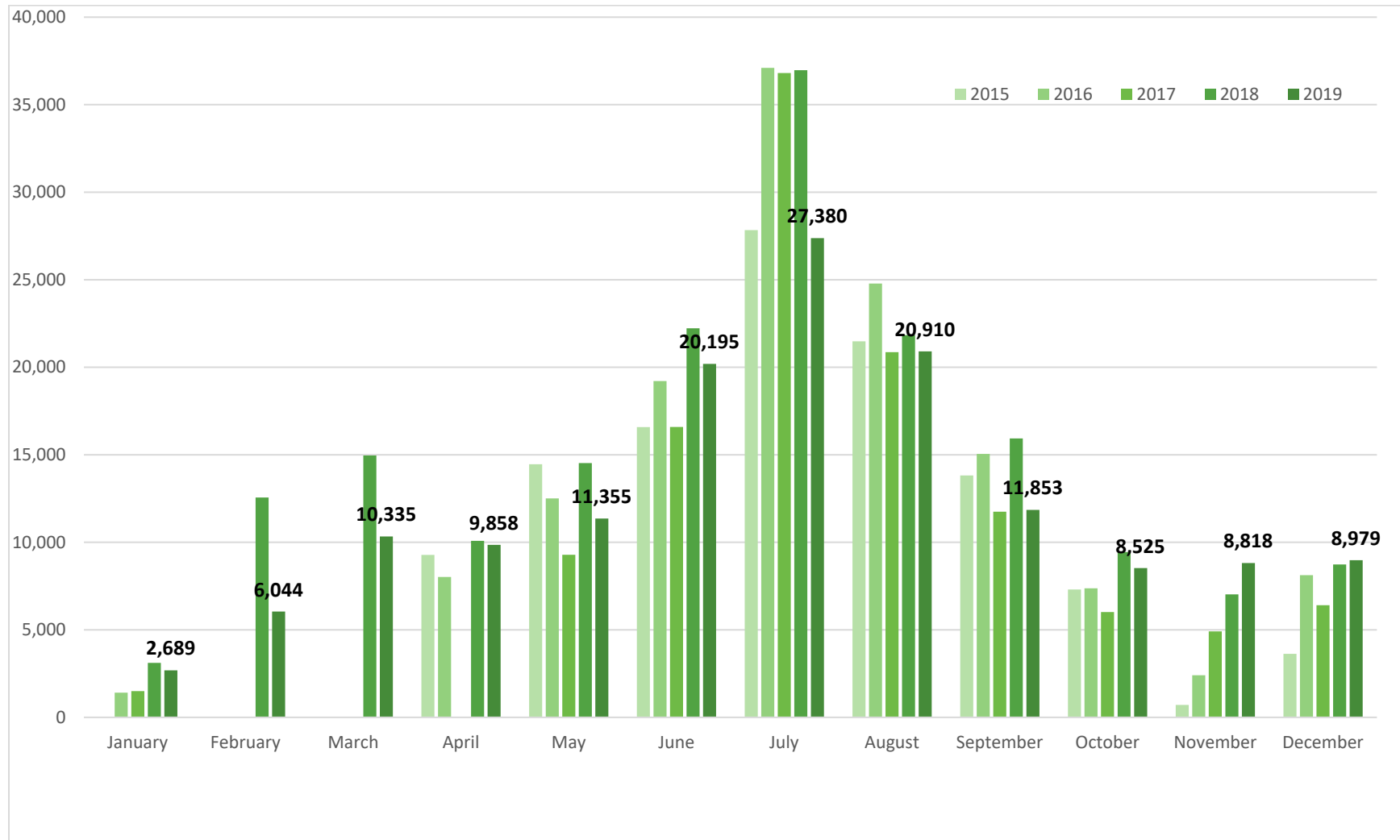
July had the highest total monthly ridership, largely due to the higher number of days the shuttle operates. There were fewer shuttle riders in 2019 season during the weekends and holidays compared to the previous year.

Despite the decline in the number of park visitors, Shuttle ridership significantly increased on weekdays in the peak period.

Table 2: Shuttle Ridership by Month 2015–2019 (unlinked passenger trips)

Month	2015	2016	2017	2018	2019	% Change 2018–2019
January	0	1,414	1,502	3,112	2,689	-13.6%
February	-	-	-	12,560	6,044	-51.9%
March	-	-	-	14,964	10,335	-30.9%
April	9,278	8,018	-	10,084	9,858	-2.2%
May	14,462	12,506	9,284	14,530	11,355	-21.9%
June	16,586	19,216	16,588	22,226	20,195	-9.1%
July	27,832	37,103	36,806	36,970	27,380	-25.9%
August	21,484	24,780	20,860	21,836	20,910	-4.2%
September	13,820	15,050	11,750	15,934	11,853	-25.6%
October	7,302	7,370	6,016	9,442	8,525	-9.7%
November	712	2,404	4,908	7,022	8,818	25.6%
December	3,630	8,127	6,410	8,732	8,979	2.8%
Total	115,106	135,988	114,124	177,412	146,941	-17.2%

Figure 3: Shuttle Ridership by Month, 2015 – 2019 (unlinked passenger trips)



Staff attribute the weekday increase in riders to the NPS reservation system. The system encourages visitors to plan their trip, pre-purchase tickets, and reserve a parking space. This makes visitors aware of the option to take the Muir Woods Shuttle on weekdays and to avoid crowds on weekends during the peak period.

Other factors that contributed to decrease in Shuttle ridership include:

- Ten percent decrease in Muir Woods National Monument visitors in 2019 compared to previous year;
- Issues with scanners and ticket validations due to glare at some stop locations. This impacted the ability to record actual

redeemed ticket and subsequently led to under reporting ridership; and

- Government shutdown and park closures in January and cancelled service due to bad weather.

In addition, the capacity of online reservations for late day time slots was reduced in 2019, to alleviate late day capacity issues and balancing out the return demand during the late day peaks.

This may have contributed to lower shuttle ridership on days when there were fewer walk-up visitors are lower.

Figure 4 shows 2019 daily ridership on weekends and holidays. Figure 5 shows ridership for the peak season and weekday service. At 2,192 trips, Sunday, May 26 had the

Table 3: Shuttle Productivity, 2018 – 2019

Month	Passengers per Trip			Passengers per Hour		
	2018	2019	% Change	2018	2019	% Change
January	17.3	7.6	-56.1%	20.8	9.2	-55.7%
February	31.0	17.2	-44.5%	32.0	20.8	-34.9%
March	36.1	22.0	-39.0%	35.8	25.4	-28.9%
April	26.8	25.3	-5.7%	26.3	26.0	-1.3%
May	24.8	19.1	-23.3%	28.7	22.5	-21.4%
June	19.4	13.7	-29.4%	24.2	21.6	-10.9%
July	23.4	14.3	-38.8%	28.6	25.2	-11.7%
August	20.7	16.5	-20.3%	26.7	25.7	-3.4%
September	21.0	19.8	-5.8%	28.8	22.1	-23.3%
October	21.4	25.4	18.5%	29.8	25.4	-14.8%
November	17.5	18.7	6.7%	23.5	23.0	-2.2%
December	14.5	16.1	10.7%	19.3	21.4	10.8%
Total	22.3	16.7	-25.1%	27.3	23.0	-15.6%

highest daily ridership. There were an additional three days when daily ridership surpassed 2,000 unlinked trips.

Productivity

Service productivity is measured in passengers per revenue hour or per trip. Overall, the service carried an average of 23 passengers per hour and 16.7 passengers per trip for the 2019 season. Weekend and holiday service averaged

22 passengers per hour, or about 17.6 passengers per trip, while weekday service averaged 30.4 passengers per hour and 13.2 passengers per trip.

Table 3 shows productivity measures by month compared to 2018. Overall, productivity measured in passengers per hour and passengers per trip decreased compared to the 2018 season.

Figure 4: Daily Weekend & Holiday Ridership, 2019 (unlinked passenger trips)

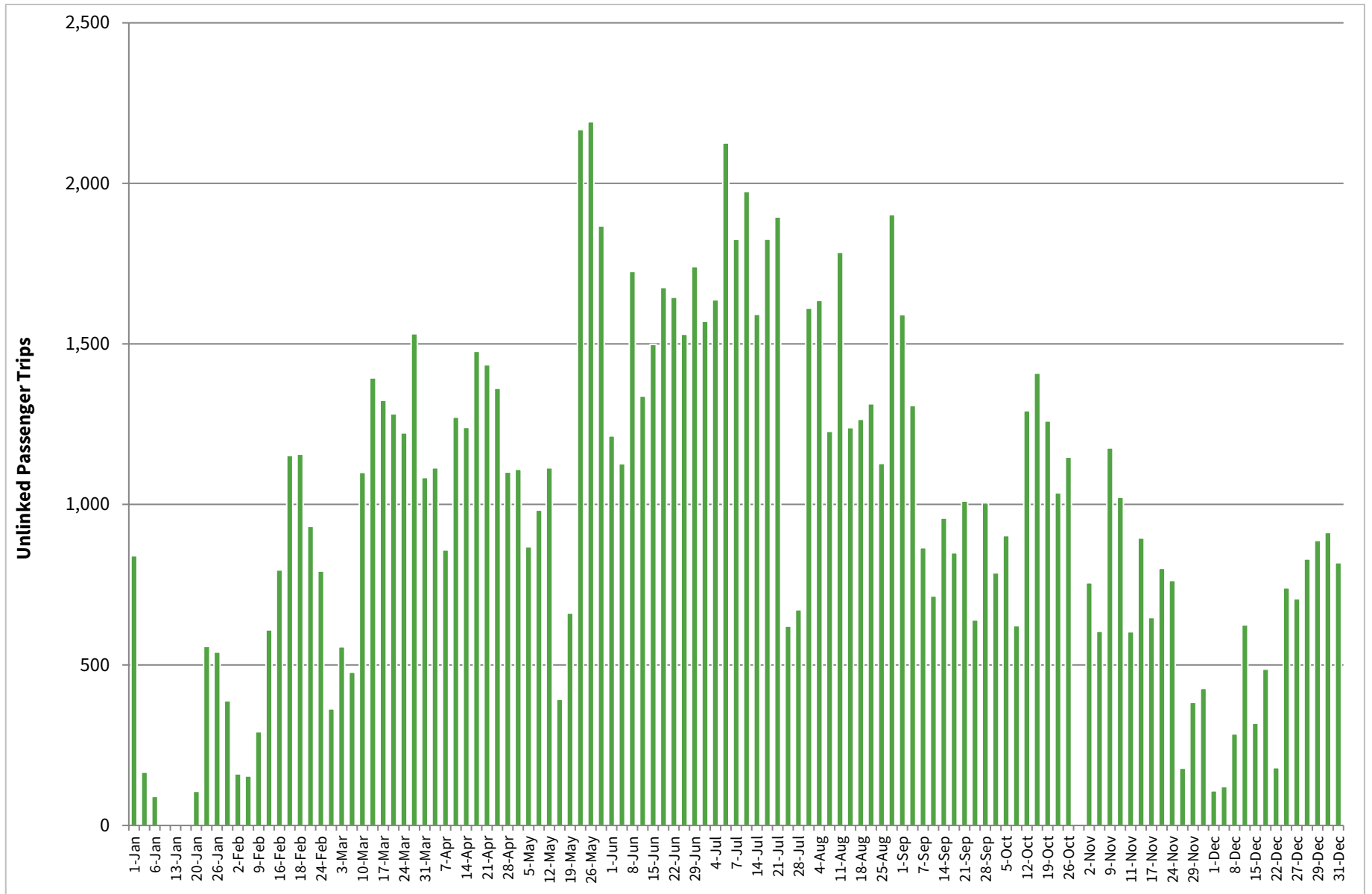
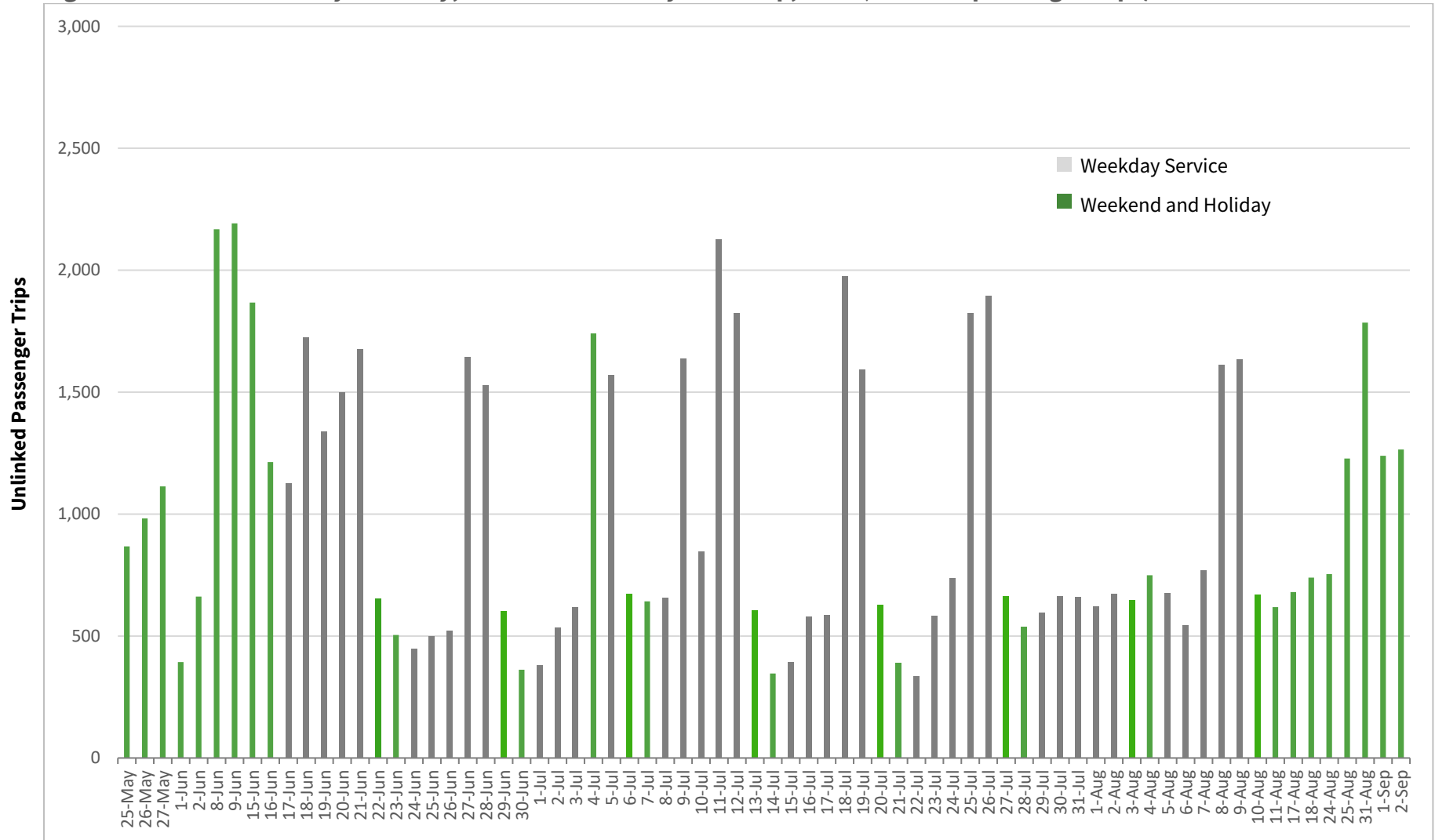


Figure 5: Peak Season Daily Weekday, Weekend & Holiday Ridership, 2019 (unlinked passenger trips)



Mode Share

The percentage of park visitors who choose to take the Shuttle is another important indicator of Shuttle service success. Mode share is the transportation term for the proportion of park visitors that take the Shuttle.

During days that the Shuttle was in service, a total of 465,231 people visited Muir Woods. Of this number, 73,470 chose to ride the Shuttle¹. This represents a 15.8% average mode share, which is lower than 17.6% mode share in 2018.

Figures 6 and 7 show the percentage mode share of the Shuttle by day during the peak and off-peak seasons including weekday service. On some of the busiest days, the Shuttle carried up to 25% of all park visitors.

Weather has a significant impact on the level of park visitation. It has an even greater effect on Shuttle ridership and mode share. This is likely due to less traffic and more available parking on lower visitation days when driving to the park is less of a hassle. On rainy days, Shuttle mode share typically drops by 10%.

Pass-Ups

Passenger pass-ups occur when passenger demand exceeds bus capacity for any given trip. The Shuttle buses carry no more than 37 seated passengers. Standees are not permitted due to the steep and winding nature of the roadway. In previous seasons, there were lines and significant wait times for many passengers despite the high frequency of service at Pohono and additional service from Sausalito.

Table 4: Mode Share, 2018 – 2019

		2018	2019	% Change 2018-2019
Peak Weekend/Holidays	Park Visitations	148,831	136,035	-8.6%
	Shuttle users	36,743	27,247	-25.8%
	Mode Share	24.70%	20.03%	-18.9%
Peak Weekdays	Park Visitation	129,909	121,405	-6.5%
	Shuttle users	10,583	11,558	9.2%
	Mode Share	8.40%	9.52%	13.3%
Off-Peak Weekend/Holidays	Park Visitation	224,572	207,791	-7.5%
	Shuttle users	41,380	34,665	-16.2%
	Mode Share	18.40%	16.68%	-9.3%
Total	Park Visitations	503,325	465,231	-7.6%
	Shuttle users	88,706	73,470	-17.2%

¹ Assumes that each visitor using the Shuttle took a round trip

This was due to the irregularity of passenger arrival times coupled with high numbers in the midday.

The online reservations system enabled shuttle riders to pre-purchase their shuttle tickets for specific buses on the Sausalito route or specific time slots on the Pohono route. This alleviated shuttle capacity issues by balancing out the peaks and making bus arrival times more predictable. Limited seats are held back from the advanced ticketing process to accommodate riders who show up without tickets.

The process of validating passes also changed under the reservation system. Dedicated staff members use handheld scanners to validate pre-purchased tickets and sell walk-up tickets. In previous years, patrons boarded buses for Muir Woods and purchased tickets at the park entry booth.

The online ticketing system and validation process has reduced passenger wait times. It has also significantly alleviated issues of full Shuttle buses leaving passengers behind during the peak season.

Figure 6: Off-Peak Season Daily Weekend & Holiday Shuttle Mode Share, 2019

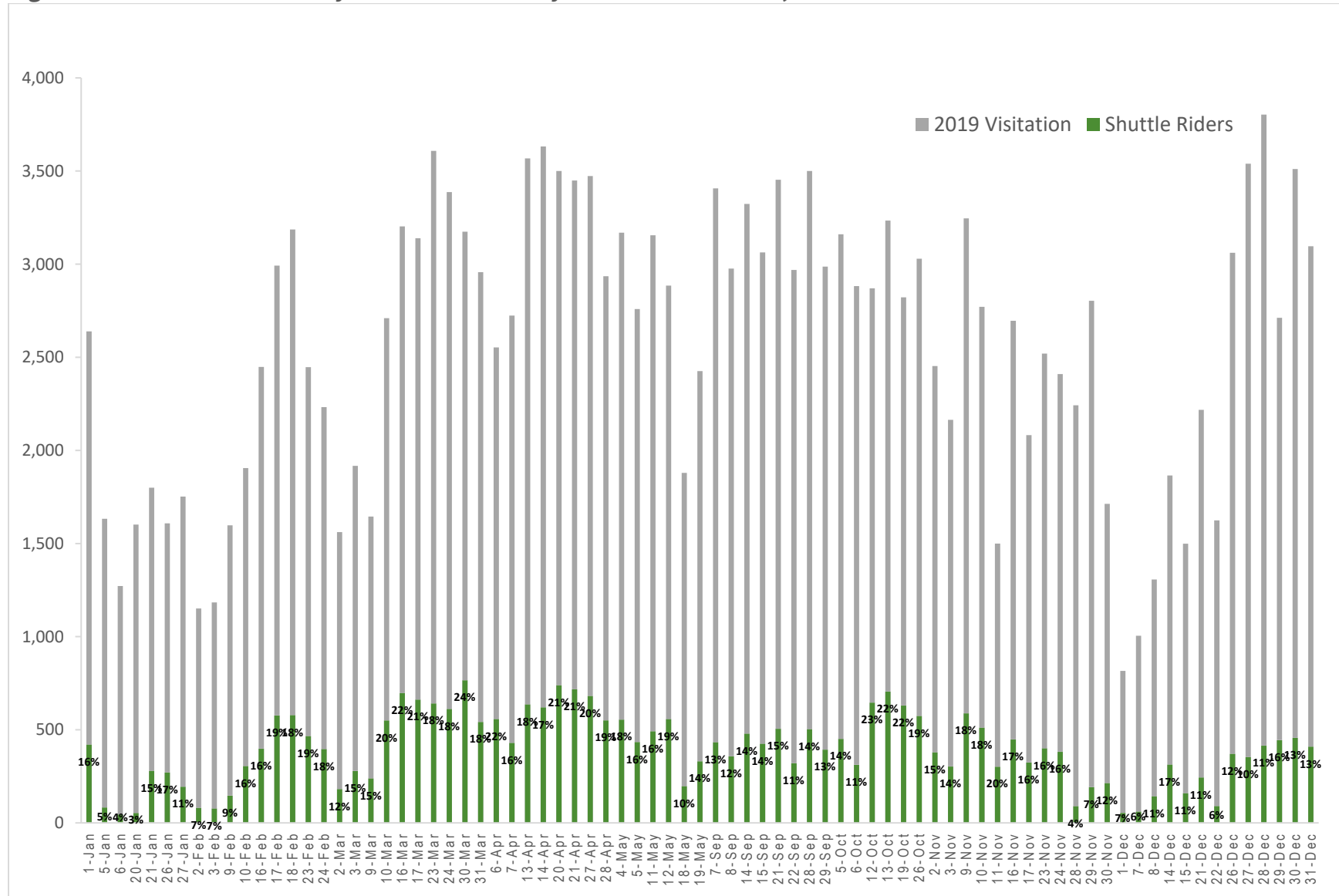
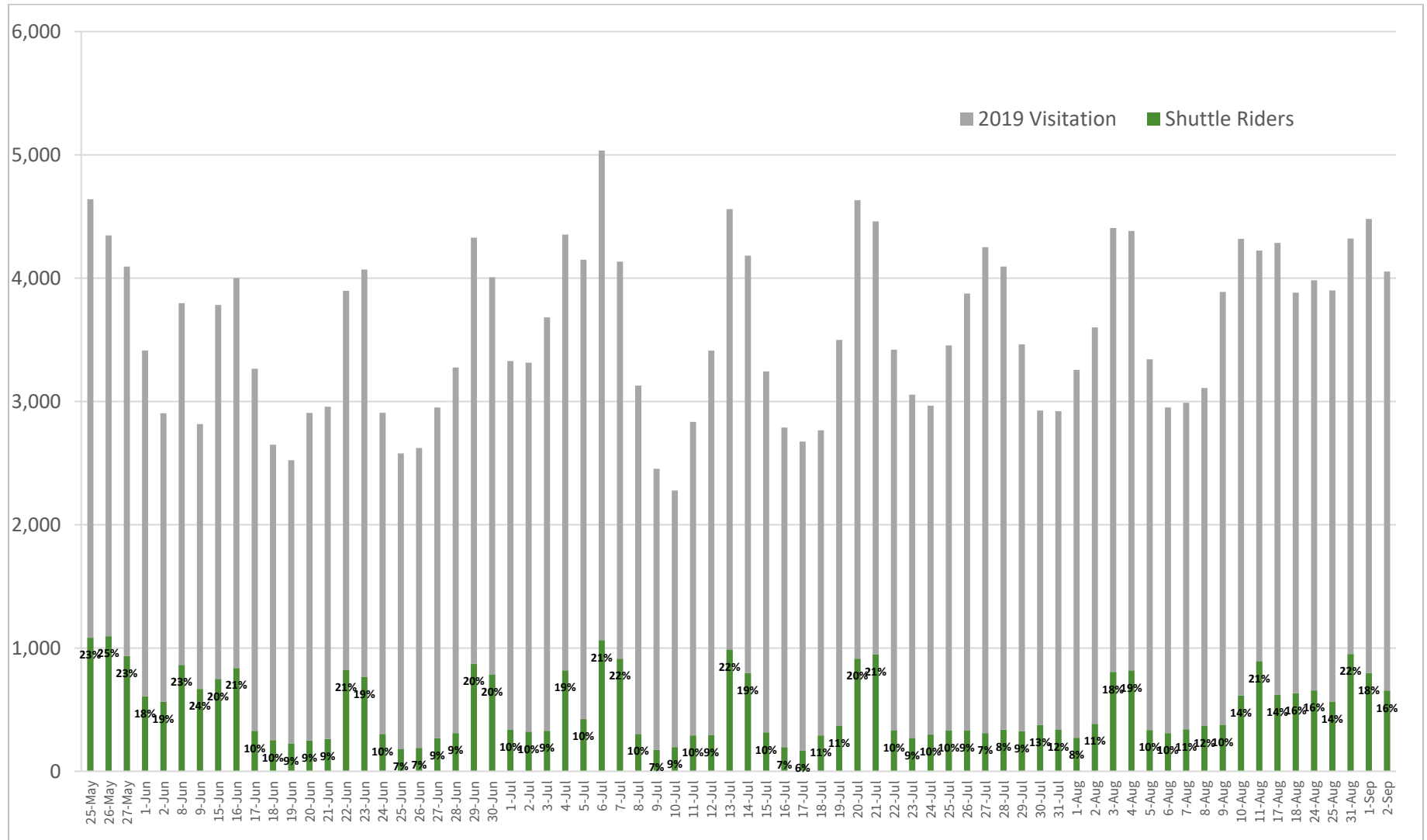


Figure 7: Peak Season Daily Weekday, Weekend & Holiday Shuttle Mode Share, 2019



Service Cost and Farebox Recovery

This section summarizes expenses and revenues for the 2019 season including the weekday service and compares them to the prior year.

Table 5 provides a breakdown of the total cost and revenue for the Shuttle compared to the previous four seasons. Table 6 summarizes cost-related performance measures. Costs are defined as total program costs. These are shared with the National Park Service as follows:

For the first 4,035 revenue hours of each federal fiscal year, operating costs net passenger revenue are shared 50/50 with the National Park Service. The NPS pays 100% of operating expenses for revenue hours beyond the 4,035 hours threshold.

All passenger revenues are calculated as \$5.00 per rider over age of sixteen. The NPS credits those revenues to Marin Transit.

The total service cost for the 2019 season was \$1,051,988, approximately 28.1% higher than last year. This includes operating, administration, and marketing costs. Operating cost in 2019 was \$935,346,

approximately 29.6% higher than previous year. The additional operating costs reflect the fee increases under the new operations contract with MV Transportation for Rural and Seasonal Services effective July 1, 2018.

The 2019 Shuttle costs included the full 12 months under the higher contract rates, compared to 2018 season, that included six months under the previous contract and six months under the new contract.

Three additional days of service and higher gas prices in 2019 also contributed to increased operating costs.

Compared to the 2018 season, the net program cost increased by 67% which is due to increase in operations, maintenance, and equipment costs and decreased fare revenue as a result of lower ridership.

Pass validation changed under the new reservation model, and this has increased the administrative costs associated with validating tickets and customer service. Under the new validation process, dedicated staff members validate pre-purchased tickets and sell walk-up tickets. The partner agencies provide a

dedicated position to support the ticket validation system.

Staff administrative costs slightly decreased in 2019 season. These costs had significantly increased in 2018 due the substantial operational changes triggered by the new reservation system.

Generally, the expanding the operation to year-round Shuttle service has reduced the need for a formal transition between each season. This reduces the need to focus on increased mobilization for driver training, signage, and marketing materials.

No major changes were made to the service this season. Staff reused information signs and reduced the amount of time dedicated to preparing for the start of the new season.

Marketing costs in 2019 increased compared to previous year. This season additional informational signs were provided at the Pohono Park & Ride Lot during weekdays to direct riders to the bus stop near the Sausalito Ferry Terminal. In addition, a new series of pocket guides with Shuttle and park information were printed in 2019. These also contributed to the increase in marketing costs.

As part of the fare collection process implemented in 2013, the Golden Gate National Parks Conservancy collected a 10% administrative fee. This fee was based on total ticket sales and covered the cost of fare

collection services. The 10% fees are no longer applicable with the new reservation system.

Farebox Recovery

The regular adult Shuttle fare is \$3.00 per round-trip. Youth under 16, seniors with a Lifetime National Park Pass, and disabled individuals with a Federal Lands Access Pass ride the Shuttle for free.

As shown in Table 5, the Shuttle collected \$426,510 in fares during the 2019 season. This was a decrease of approximately 4.6% from 2018. The amount collected represents a farebox recovery rate of 40.5%, about 26% lower than in 2018.

Cost per Service Hour

The average cost per service hour for the 2019 season was \$164.86, a this was a 0.6% increase over the previous season due to higher operating costs.

Cost per Trip

The cost per one-way passenger trip increased to \$7.16, about 54.7% higher than the previous year. The increase in cost per trip was due to higher overall costs and lower productivity during the off-peak periods in 2019.

Subsidized Cost per Trip

The average subsidy increased to \$4.26 per passenger in 2019. This is a 101.9% higher subsidy per trip compared to the 2018 season. The average subsidy in 2019 did not met the District's cost effectiveness target of \$3.00 per passenger.

Table 5: Shuttle Service Costs, 2015 – 2019

	2015	2016	2017	2018	2019	% Change 2018-2019
Operating Costs	\$386,054	\$364,799	\$341,911	\$721,916	\$935,346	29.6%
Marketing	\$7,239	\$5,087	\$2,758	\$1,909	\$3,594	88.2%
Maintenance & Equipment	\$37,161	\$47,364	\$49,735	\$19,675	\$36,335	84.7%
Marin Transit Admin/ Customer Liaisons	\$40,230	\$17,541	\$46,710	\$74,895	\$73,549	-1.8%
Fare Collection ⁽¹⁾	\$23,117	\$26,692	\$21,753	\$112	-	-100.0%
Total Cost of Program	\$512,015	\$461,966	\$466,368	\$821,081	\$1,051,988	28.1%
Fare Revenue	-	-	-	\$275,492	\$265,930	-3.5%
NPS \$2 subsidy	-	-	-	\$171,616	\$160,580	-6.4%
Total Fare Revenue	\$238,543	\$268,829	\$219,416	\$447,108	\$426,510	-4.6%
Net Program Cost	\$273,472	\$193,137	\$246,953	\$373,973	\$625,477	67%
Total NPS Share of Program Cost⁽²⁾	\$136,736	\$96,569	\$123,476	\$219,757	\$433,654	97%

Notes:

(1) As part of the fare collection process implemented in 2013, a 10% administrative fee based on total ticket sales covered the cost of fare collection services provided by the Golden Gate National Parks Conservancy.

(2) As part of the new agreement with National Park Service, net passenger revenue is shared 50/50 for first 4,035 revenue hours in each federal fiscal year. The National Park Service reimburses Marin Transit for operating costs for revenue hours exceeding 4,035 hours. The NPS reimburses Marin Transit for all passenger revenues based on \$5.00 per rider over the age of sixteen.

Table 6: Shuttle Cost Effectiveness Measures, 2015 – 2019

	2014	2015	2016	2017	2018	% Change 2018-2019
Farebox Recovery	46.6%	58.2%	47.0%	54.5%	40.5%	-26%
Cost per Service Hour	110.83	96.73	104.91	126.26	164.86	30.6%
Cost per passenger Trip	\$4.45	\$3.40	\$4.09	\$4.63	\$7.16	54.7%
Subsidy per Passenger	\$2.38	\$1.42	\$2.16	\$2.11	\$4.26	101.9%
Average Fare	\$2.07	\$1.98	\$1.92	\$2.52	\$2.90	15.2%

Conclusions and Recommendations

The Muir Woods Shuttle plays an increasing role in reducing congestion and provides a viable alternative transportation option to access the park. The goals of mitigating traffic and parking congestion are more and more important as park visitation levels increase. At the same time, the Shuttle has reached maximum capacity during the peak season. There are no additional vehicles available to increase service.

Parking

In January 2016, the County gradually began to restrict parking along sections of Muir Woods Road. In prior years, as many as 400 vehicles parked along the roadway's narrow shoulder during busy weekends. This led to environmental issues, including erosion, and safety and congestion issues due to visitors walking in the roadway from their cars to the park entrance. Marin County is preparing to eliminate all parking along Muir Woods Road in the next few years.

Under the new reservation model, the partner agencies changed the parking strategy to emphasize pre-planning and pre-purchase of parking reservations.

Reservations are required for all personal vehicles and shuttle riders visiting Muir Woods National Monument. The pricing incentivizes use of the Shuttle over driving, at \$8 for a parking reservation and \$3 for a Shuttle seat.

Sausalito Ferry Terminal

The Sausalito bus stop is not immediately visible from the ferry terminal. As demand for the Shuttle from Sausalito has grown, there are more passengers who have difficulty finding the stop.

Crowds and lack of signage also lead to passenger confusion in this location. More visible signage and a clearly defined waiting area should improve this issue. Staff continue to work with the City of Sausalito and Golden Gate Transit to determine appropriate means and locations for better signage and pavement markings where feasible.

Larkspur Ferry Terminal

In recent years, there have been ongoing issues with flooding at the Pohono Park & Ride lot during king tide season in winter. The flooding impacts access to the Pohono Park & Ride lot. As a result, Shuttle service cannot be accommodated during those Winter/Holiday

weekends at this location. Riders who had a reservation at Pohono had to be redirected to Sausalito or Marin City boarding locations. This has led to a lot of confusion and customer service issues.

Staff have been closely monitoring this issue. They are considering whether to permanently move the Pohono service to an alternative site to alleviate this recurring problem.

Larkspur ferry terminal is considered as an alternative location to provide Shuttle service in lieu of the Pohono Park & Ride lot. Operating the service from Larkspur will provide connections to Larkspur ferry and the SMART train. It would also expand the Shuttle coverage from Sausalito to further north in Marin County.

Muir Woods

In recent years, staff are increasingly concerned about long wait times for the return trip from the National Monument. Long waits primarily happen at the end of the day when the park closes. This issue is compounded by the number of visitors who take transportation network company services to the park. These visitors cannot order a return trip due to lack of cellular service and must rely on the Shuttle for their return.

The will-call line at Pohono has started to lengthen as more visitors arrive at the end of the day. The Shuttle must provide additional trips at the end of the day to take passengers

to Muir Woods and return them to Pohono when the park closes.

This has continued to be an issue even with the reservation system. Visitors who pre-purchase their shuttle seats are not required to pre-book their return on specific buses on the Sausalito route or specific time slots on the Pohono route.

In response to this issue, the partners reduced the capacity of online reservations for late day time slots to accommodate visitors who walk-up late in the day.

Staff continue to closely monitor this activity to identify additional solutions to alleviate late day capacity issues and balance the return demand during the late day peaks.

Ticket Sales and Validation

Under the reservation system, dedicated staff members use handheld scanners to validate pre-purchased tickets and sell walk-up tickets. The scanning process has improved the speed of ticket validation at Pohono.

There have been problems with scanners not validating tickets due to glare at some stop locations. This has impacted recording actual redeemed tickets and subsequently led to under reporting ridership.

Staff are considering alternatives to speed the validation process and reduce issues related to glare at the stop locations and the length of passenger wait times.

