



City of Sedona
Transit Advisory Committee

**MEETING OF THE SEDONA TRANSIT ADVISORY
COMMITTEE (STAC)**

**MEETING MINUTES
May 22, 2023**

Present:	Mark TenBroek Kent Ellsworth David K. O'Donnell Lars Romig Mike Berlly	Citizen of Sedona Verde Valley Care Givers Citizen of Sedona Citizen/Verde Valley Cyclist Coalition Citizen of Sedona
Absent:	Steve Segner Tom Huthwaite	Sedona Lodging Council Uptown Business Sector
City Staff:	Robert Weber Savannah Sandoval	Transit Administrator Grant Analyst
Public:	John Federico	
Guests:	None	

An apology is made for any misspelling of a name.

1. CALL TO ORDER

1 Roll Call:

The meeting was called to order at 11:02 am by Chair Kent Ellsworth. Robert Weber, Transit Administrator, conducted a roll call and established a quorum.

1.2 Introduction of Members and Guests:

John Federico (*former STAC member*) was in attendance via Zoom and did not make a statement.

2. PUBLIC FORUM:

There were no public comments.

3. APPROVAL OF MINUTES FROM PREVIOUS MEETINGS:

3.1 Approval of April 24, 2023, meeting minutes

Mark TenBroek motioned to approve April 24, 2023, meeting minutes.
Seconded by David O'Donnell. Motion passed; all were in favor.

4. REGULAR BUSINESS:

4.1 Discussion: STAC By-laws & Open Meeting Law – Chair Kent Ellsworth

Chairman Ellsworth reminded the Committee that Arizona open meeting laws require that topics discussed by this body must be properly noticed to the public and on the agenda before the Committee can discuss the item. Committee members must follow the agenda. If items come up during the meeting outside the agenda, the Committee must refrain from discussing them until they can be added to a future agenda and posted to the public. Additionally, committee members cannot hold side meetings without notifying the public.

Weber reminded the group that we receive FTA funding, and they want to see these committees in place and that they are open to the public. It is essential to have transparency because this Committee's recommendations can influence how public dollars are spent.

Ellsworth stated there are restrictions on how we run and conduct the meetings. Those restrictions are outlined in the Committee's by-laws.

TenBroek wanted to know if it was still okay for members to get together and work on a project. Ellsworth stated yes if it was an agenda item, and they were directed to meet by the Committee.

TenBroek wanted to commend the city staff on keeping the Sedona Shuttle website and meeting information available.

O'Donnell asked if items could be added to the agenda in-between meetings, or do they have to be formally made during a meeting? Weber stated that a standing item on the agenda is

"Future Agenda Items." That is the appropriate time to add items so that the topic can be adequately noticed to the public.

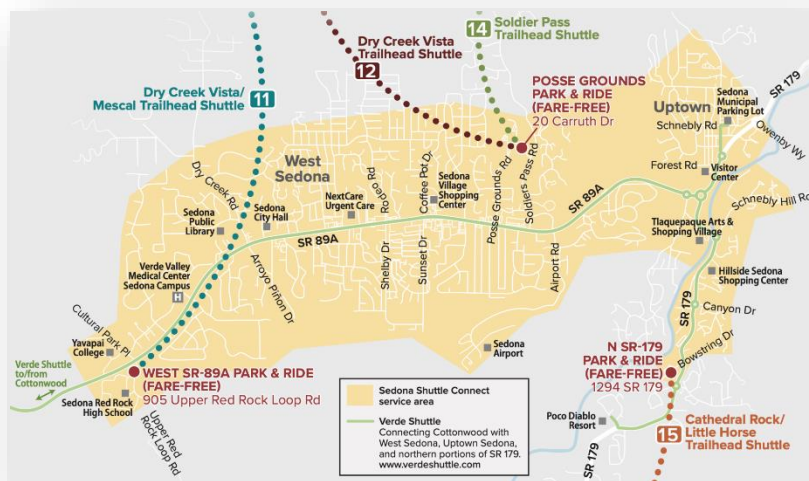
Ellsworth asked the Committee if they agreed to follow the Open Meeting Law. All members in attendance agreed.

Weber then asked the group if there were any changes they wanted to see made to the STAC By-laws. At the first STAC meeting in July of 2022, members had an opportunity to make changes. However, the Committee chose to defer any changes to a later date. Currently, the Committee does not want to recommend any changes.

TenBroek said he thought the by-laws looked great and expressed curiosity about the section where the group can vote to remove a member from the Committee. Weber stated that in his past experiences, he was confronted with a problematic/disruptive committee member and having this section in the by-laws ensures that a mechanism exists to remove such individuals should it become necessary.

4.2 Comprehensive operational briefing & discussion – Sedona Shuttle Connect Service (City Transit Administrator)

Weber showed the Committee a map of the Sedona Shuttle Connect service area. All pick-ups and drop-offs will originate and conclude within this zone.



Microtransit is a curbside-to-curbside on-demand service. Riders can book a trip three ways; through the app, website, or by calling a live agent. Due to budgetary constraints, the service will run Thursday through Sunday from 6:30 am – 6:00 pm and mirror the trailhead shuttles.

The objective is to encourage riders to leave their cars at home or the hotel and book the Sedona Shuttle Connect service. We want to get vehicles off the road, and it should be noted that all three of the trailhead shuttle Park and Rides are included within the service area. This provides connectivity between the two modes of service.

Weber stated that since the city has no historical transit data, TransLoc utilized the data from the city's hotel occupancy, cell phone hits, and traffic data to develop several Microtransit simulations. This is a starting point, and as more microtransit service data is collected, better

forecasting can help us to enhance the service further. Over time we will see the service zone morph based on ridership and public feedback.

We have identified several Flag Stops: Jordan Road in Uptown, the Roundabout in front of the Los Abrigados hotel in Tlaquepaque, and the Hillside Shopping Center near the Javelina Cantina. Establishing these flag stops will centralize pick-ups and drop-offs to maximize efficiency in these highly congested areas. These are the initial stops; once we become operational, additional flag stops may be added.

Committee member Romig wanted to know why the service area stopped before Chapel Road. Weber stated that if we continue to extend the service area with the vehicles that we currently have, service quality will likely be degraded.

Weber stated that based on the simulation(s) provided by TransLoc, the recommendation is to strive for a 15-minute (*or less*) wait time (*the time a passenger waits for the program vehicle*) and arrive within that timeframe 90% of the time. Response time and reliability are essential for the success of this type of service as studies have shown that passengers typically will tolerate wait times of up to fifteen minutes and will likely to use the service again.

With four vehicles and 150 ride requests, the average wait time will be 14.5 minutes. Adding an additional 50 ride requests will increase the average wait time to 34.4 minutes.

Ride Quality Metrics

Average Wait Time by Scenario (Minutes)

		Vehicles			
		3	4	5	6
Ride Requests	100	13.3	6.1	5.0	4.5
	150	33.4	14.5	7.9	6.5
	200	68.1	34.4	16.0	9.1
	250	102.6	54.9	30.0	15.2
	300	143.8	93.9	50.1	34.4

Therefore, the service zone was established to include the most central and congested areas within the city. If the zone included all of Sedona, wait times would substantially increase. Microtransit is both data-rich and data-driven. And as more service data becomes available, the service zone can be modified to serve the community better.

4.3 Discussion: Future shuttle stops and destinations.

This matter was deferred to a future meeting.

5. REPORTS AND INFORMATION ITEMS:

The Committee will receive these reports, which do not require action by the Committee.

5.1 MV Transportation Inc service update (Bruce Morrow GM Division 536)

Morrow stated that the buses were busy over the weekend, and he drove Line 11, averaging about 10-20 people per trip. He noted that since the parking lots were full, he observed people parking next to the boulders on Dry Creek Road and witnessed an individual move a boulder to park along the roadway.

Weber reported that as of last Sunday (5/21/23), average daily boardings were up 18.25% over May 2022, and 375,000 boardings have been recorded since launch.

5.2 Updated TH Shuttle Performance Analysis (Committee Member Tenbroek)

See attached PowerPoint presentation.

6. FUTURE AGENDA ITEMS:

These items shall be included in the future agenda for discussion and possible action.

- 1) Future Trailhead Shuttle stops and destinations.
 - Jordan Road Trailhead Stop
 - Boynton Canyon Trailhead Stop
- 2) USFS Trailhead Cathedral Rock trailhead relocation.
- 3) Expanded public parking at the gun range on Dry Creek Road.
- 4) Review public comments on recommended Microtransit fare policy.

7. NEXT MEETING DATE:

7.1 The committee agreed to hold the next STAC meeting on June 26, 2023, at 11:00 a.m. in the Vultee Conference Room at City Hall and via Zoom.

8. ANNOUNCEMENTS AND RECOGNITIONS:

8.1 Revised preliminary FTA 5339 Grant Award – Two Microtransit Vehicles. ADOT has revised the city's 5339 Grant Award and increased it by \$250,000 for two of the five microtransit vehicles planned for the service. Once FTA funds this, it will reduce the cost to \$0.15 on the dollar for the city to purchase these two vehicles.

8.2 Recognition of Committee Member Michia Casebier's outstanding service to the Sedona Transit Advisory Committee. She submitted her letter of resignation.

9. ADJOURN:

With no further business to discuss, Ellsworth adjourned the meeting at 12:54 p.m.

PREPARED BY:



Transit Administrator
City of Sedona

NEXT MEETING DATE: JUNE 26, 2023
NEXT MEETING TIME: 11:00 A.M.
VENUE: IN PERSON & ZOOM

Please check online at <https://sedonashuttle.com/transit-advisory-committee/> for future meeting dates, agendas, Zoom conference login credentials and other information.

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Upon request, The City of Sedona shall provide written materials in appropriate alternative formats, including disability-related modifications or accommodations, auxiliary aids, or services to enable individuals with disabilities to participate in public meetings. Please send a written request, including your name, mailing address, phone number, description of the requested materials, and preferred alternative format or auxiliary aid or service at least three working days prior to the meeting at the address below.

If information is needed in another language, contact (928) 203-5199. *Para información en Español llame: Victor Estrada, Right-of-Way Specialist, (928) 204-7800.

Public comments may be submitted for any item on the agenda by contacting the city of Sedona: Mail: Attn: Transit Administrator, 102 Roadrunner Dr., Sedona AZ, 86336 Website: [https:// SedonaShuttle.com/](https://SedonaShuttle.com/) FAQ & More/ Contact-Us/ • Email: sedonashuttle@sedonashuttle.gov • Phone: (928) 203-5086

Sedona Trailhead Shuttle

March 2022 - March 2023

Mark TenBroek for the
SEDONA TRANSIT ADVISORY COMMITTEE

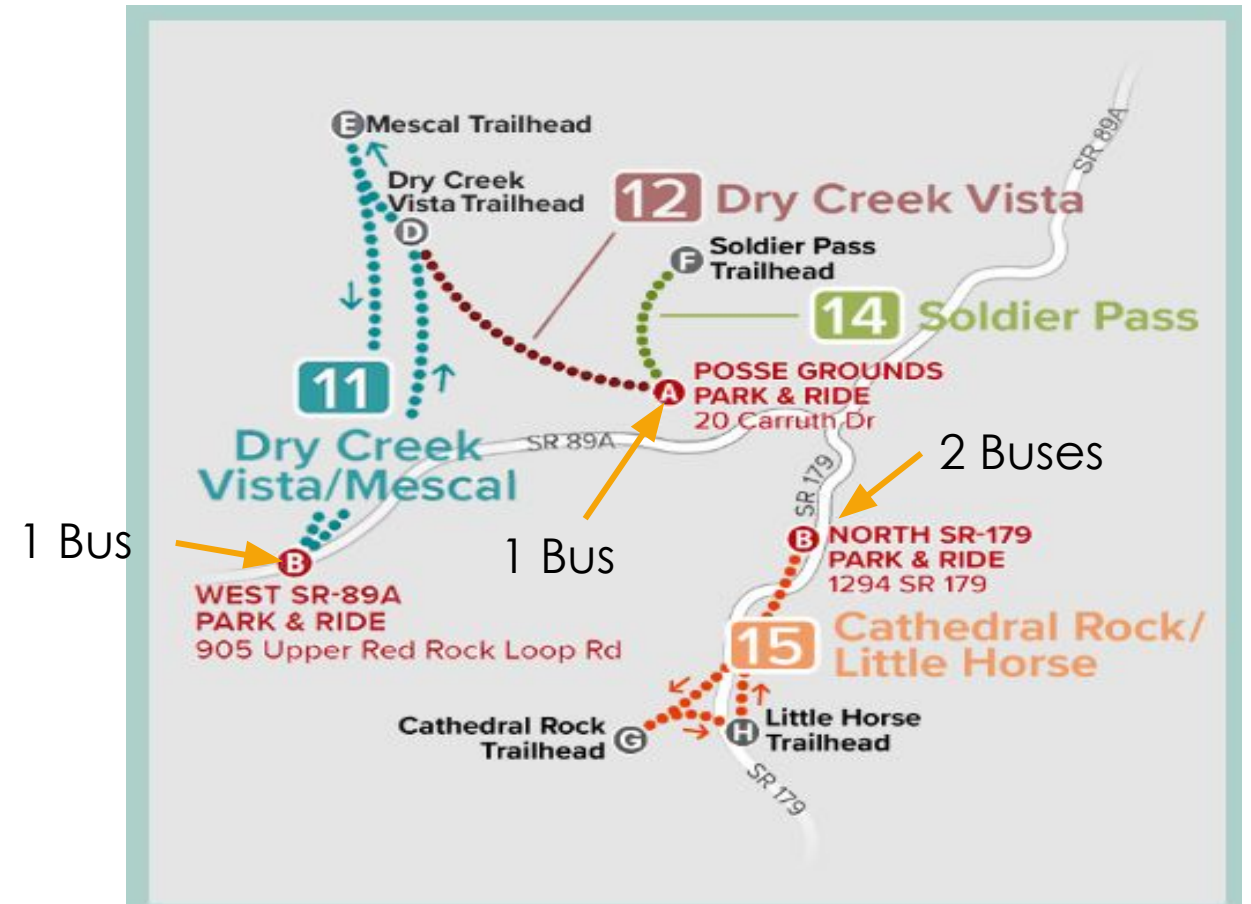
May 22, 2023

Rationale for Trailhead Shuttle

- ▶ Make it easier for residents and visitors to get to popular trailheads in a safe and sustainable way
- ▶ Protect the fragile environment around trailheads by reducing the number of vehicles
- ▶ Reduce parking in neighborhoods near trailheads
- ▶ Reduce danger to pedestrians and traffic safety around key trailheads –Cathedral Rock, Soldiers Pass Trail, Dry Creek, Mescal, Little Horse

Where is the Trailhead Shuttle operating?

- ▶ Route 11 – Dry Creek Vista/Mescal (West Park & Ride)
- ▶ Route 12 – Dry Creek Vista (Posse Grounds)
- ▶ Route 14 – Soldier Pass (Posse Grounds)
- ▶ Route 15 – Cathedral Rock/Little Horse (SR 179 Park & Ride)



USFS Permit Trailhead Daily Limits

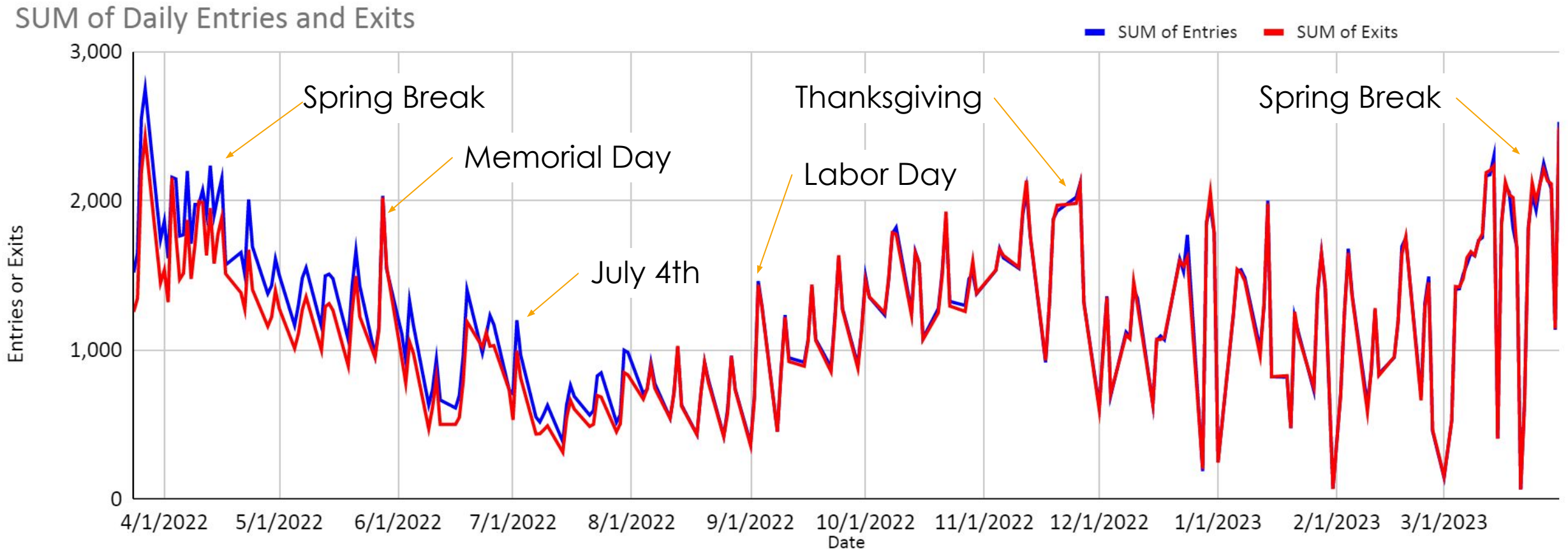
● Cathedral Rock	600
● Dry Creek Vista	500
● Little Horse	500
● Mescal	300
● Soldiers Pass	<u>300</u>
● TOTAL	2,200

Notes:

- ~7:00 AM to ~5:30 PM operations
- Thursday - Sunday Operations
(Except Spring Break every day)
- Cathedral Rock Parking closed
- Soldiers Pass Parking closed
- Dry Creek Vista Parking open
- Mescal Parking open

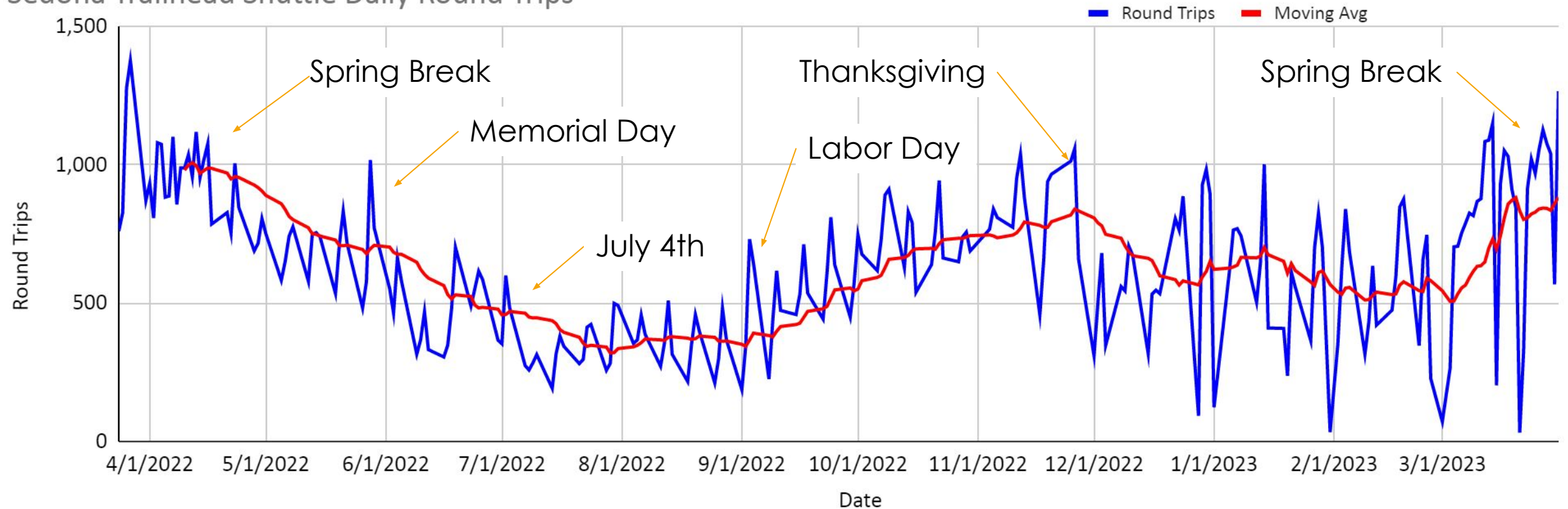
Total ridership over past year

Daily Round Trips about 50% of these numbers



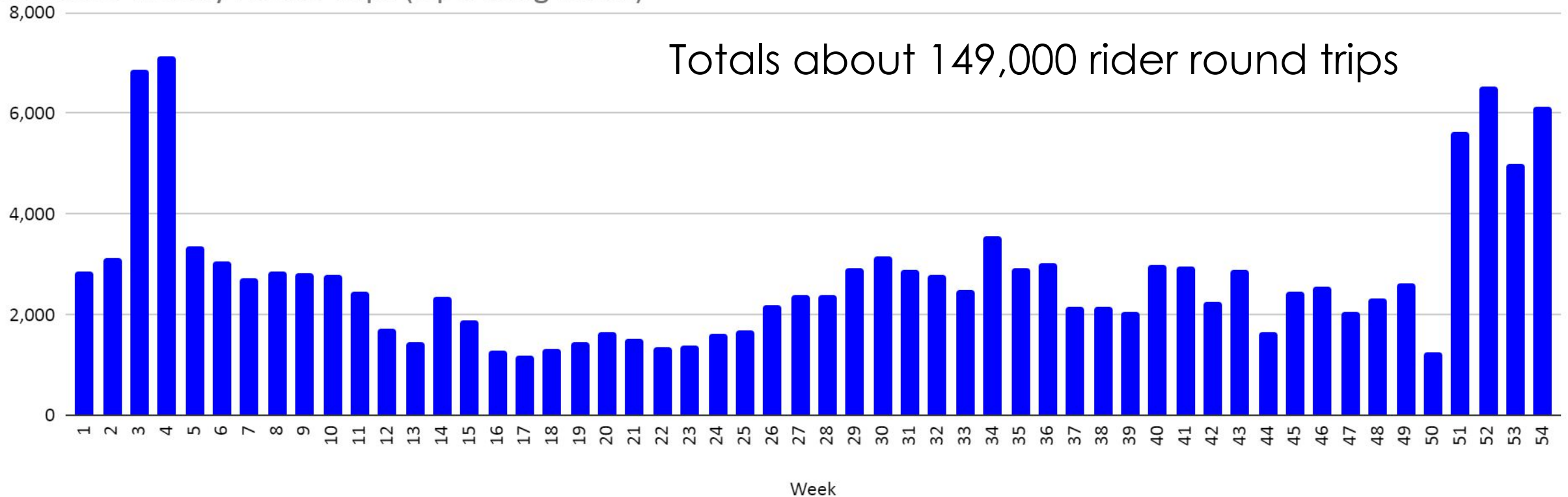
Total ridership over past year

Sedona Trailhead Shuttle Daily Round Trips



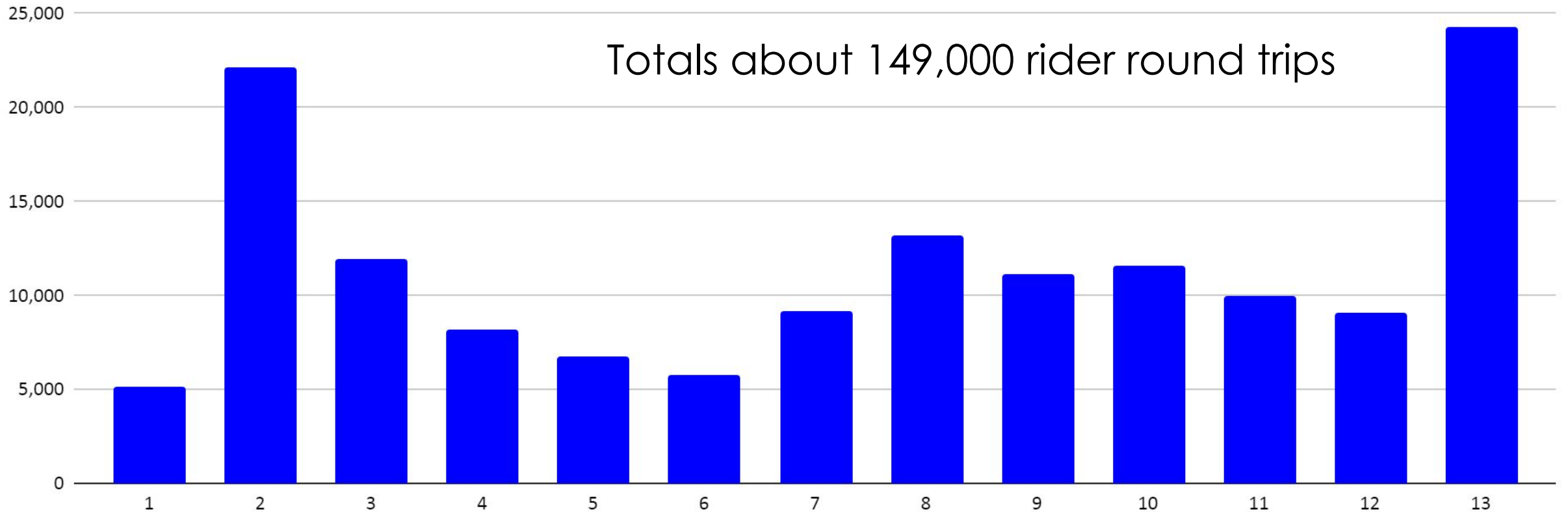
Trailhead Shuttle round trips by Week

Estimated Weekly Round Trips (Operating Week)



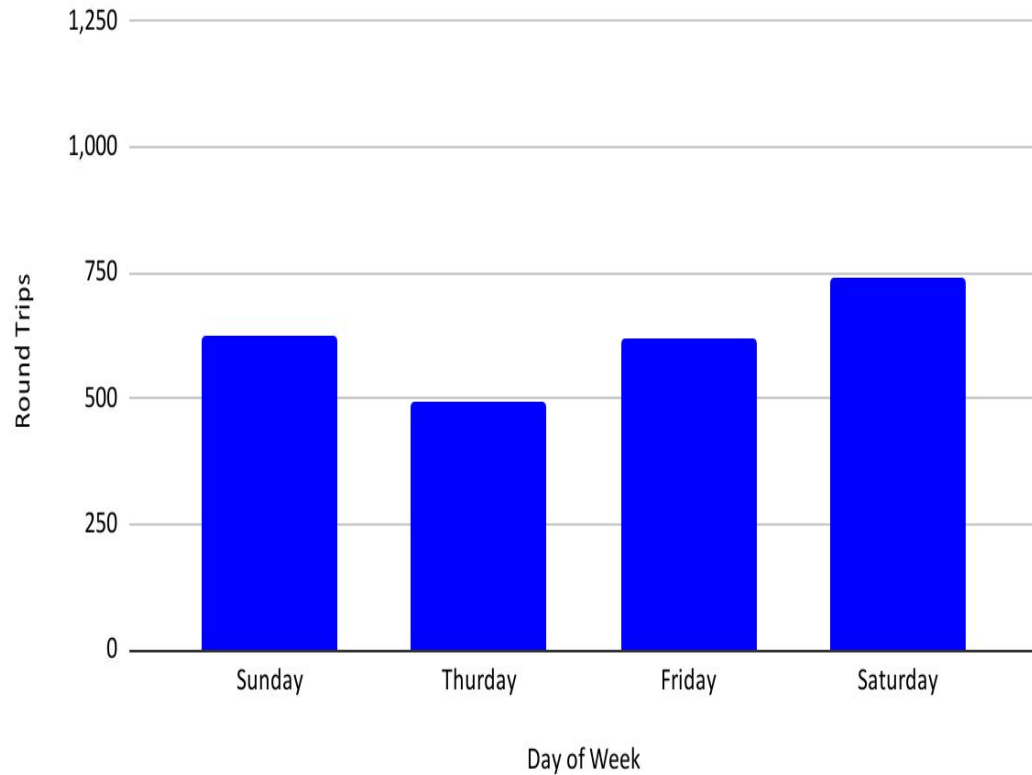
Trailhead Shuttle round trips by Month

Estimated Monthly Round Trips (Operating Month)

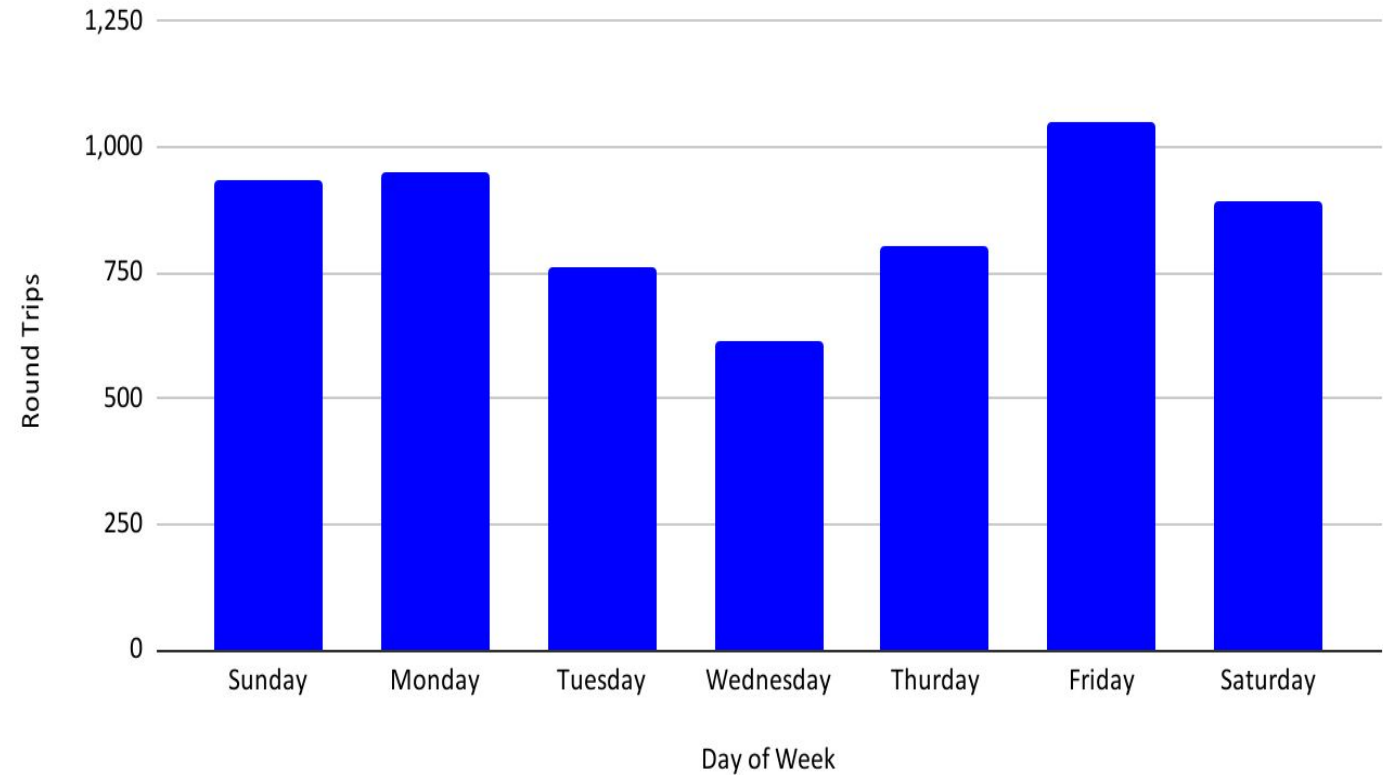


Trailhead Shuttle Round Trips by Day of Week

Daily Round Trips vs. Day of Week - First Year



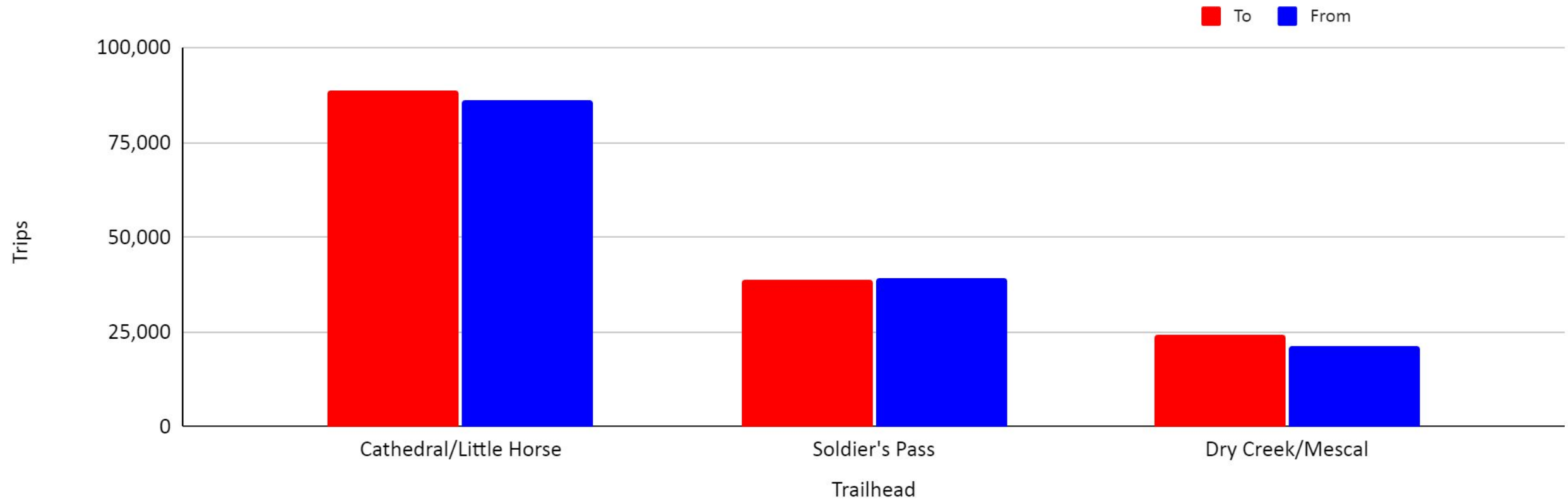
Daily Round Trips vs. Day of Week - Spring Break



Trailhead Shuttle use by area

10

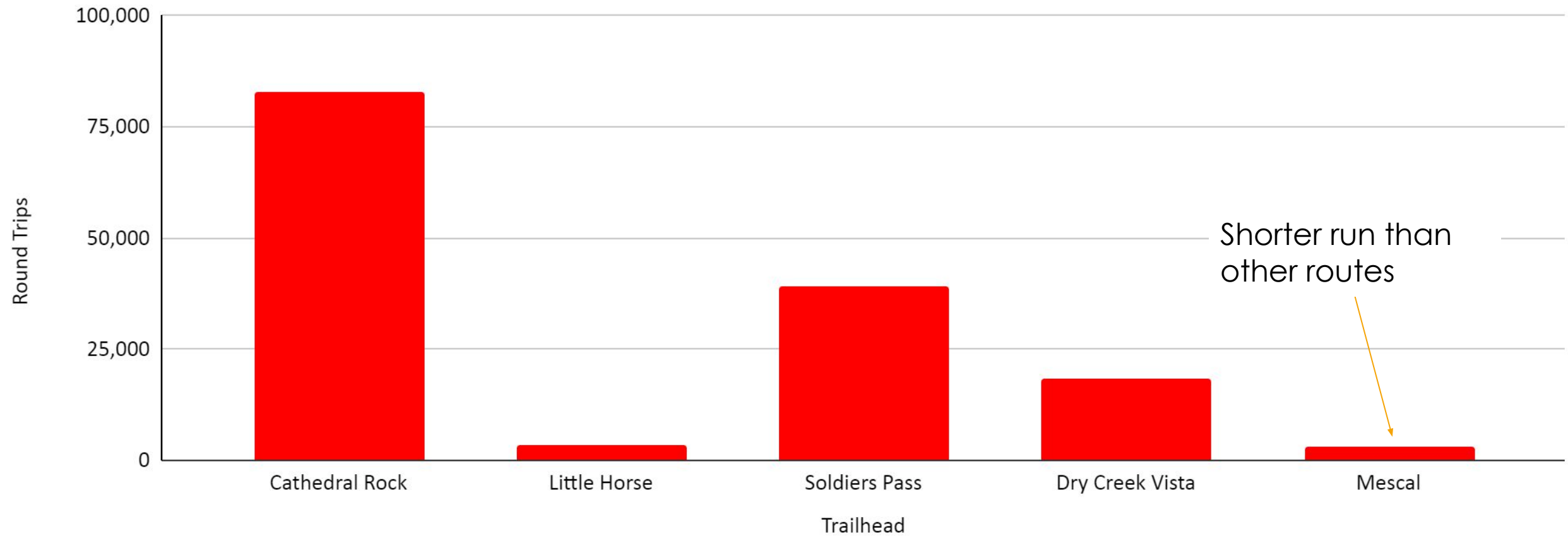
Estimated Trips by Trailhead



Trailhead Shuttle use by route

11

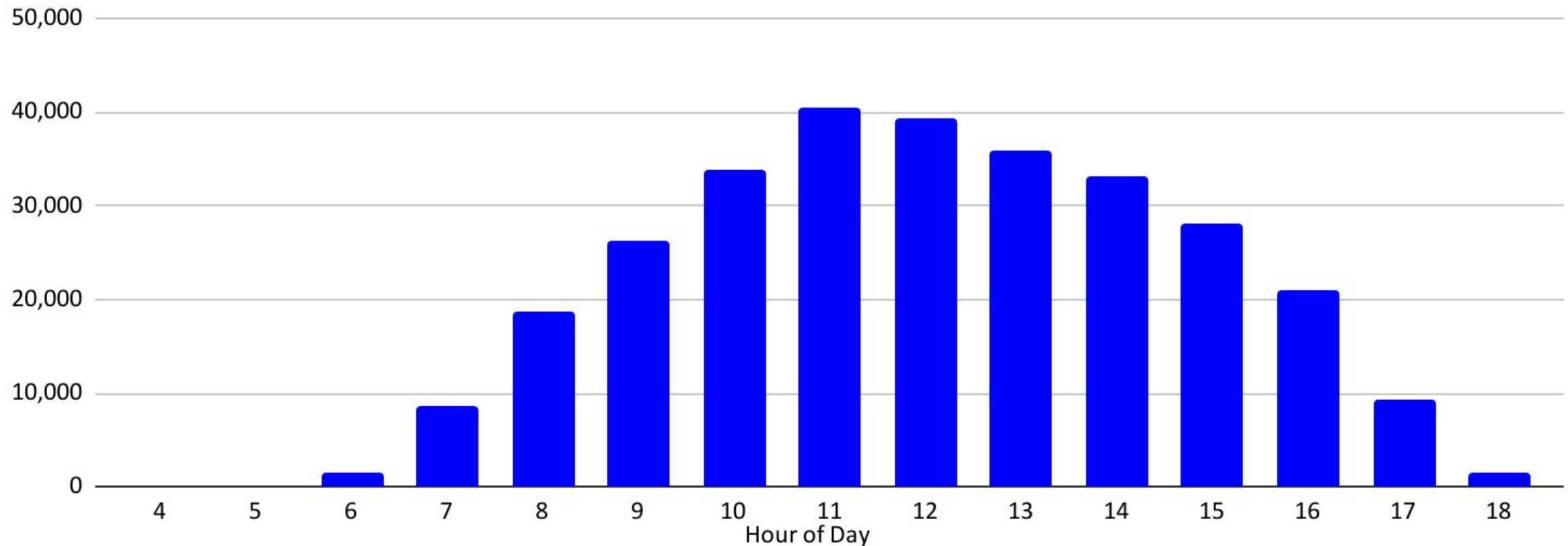
Estimated Round Trips (using trips from Trailhead)



When is the Trailhead Shuttle used during the day?

12

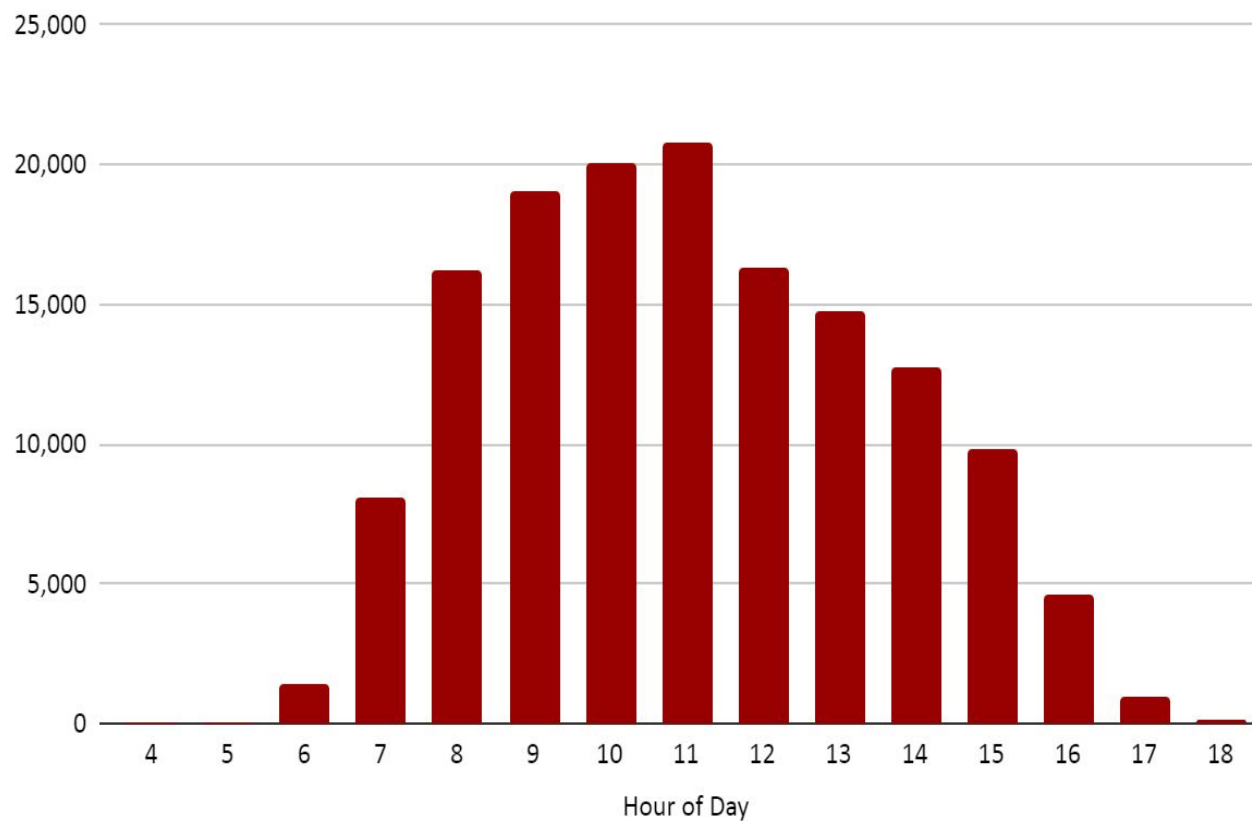
Times Trailhead Shuttle is Used



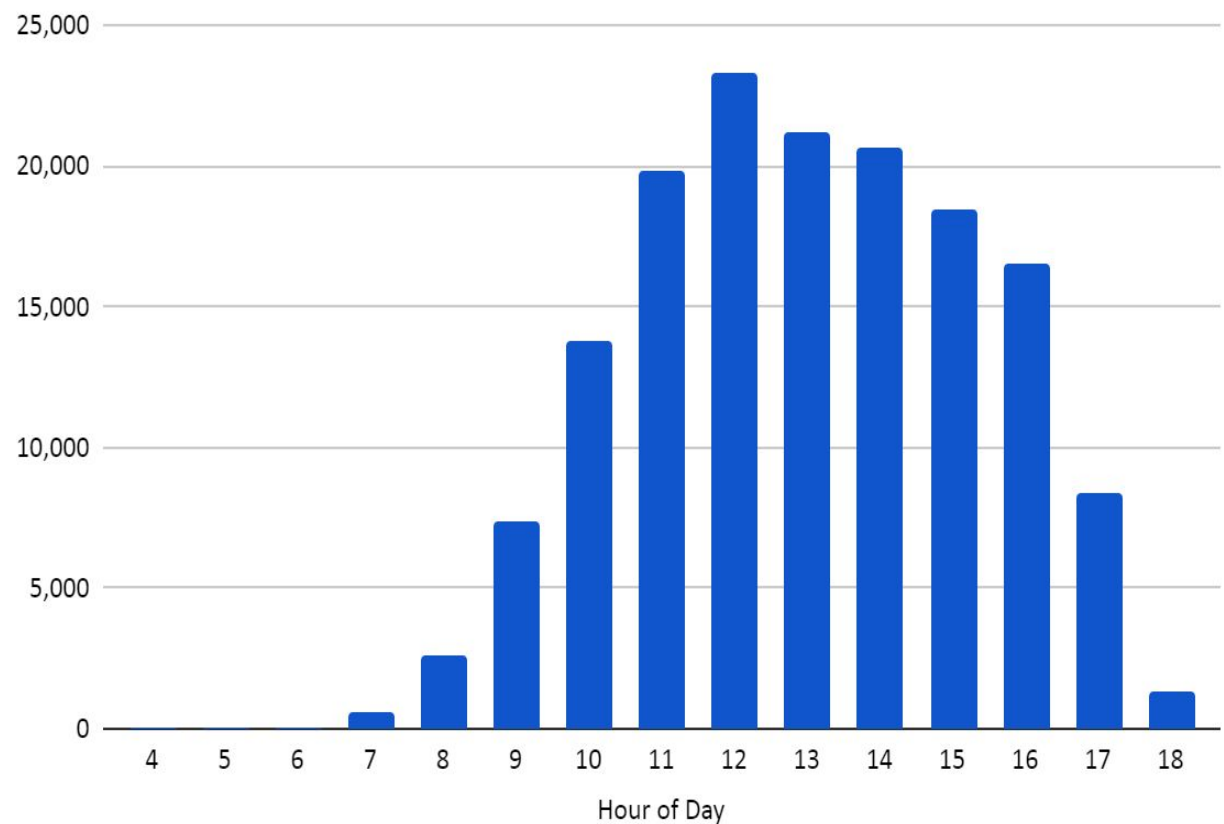
When do hikers go to and from the trailheads?

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Going to Trailheads

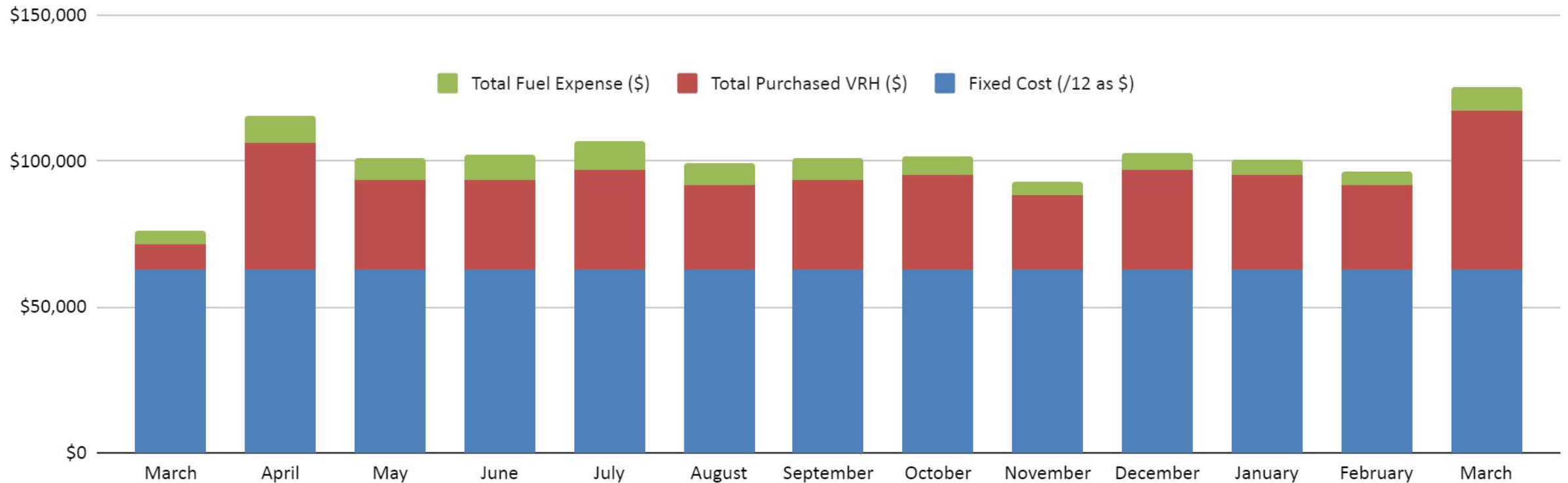


Leaving Trailheads



Cost of the Trailhead Shuttle

Monthly Trailhead Shuttle Costs

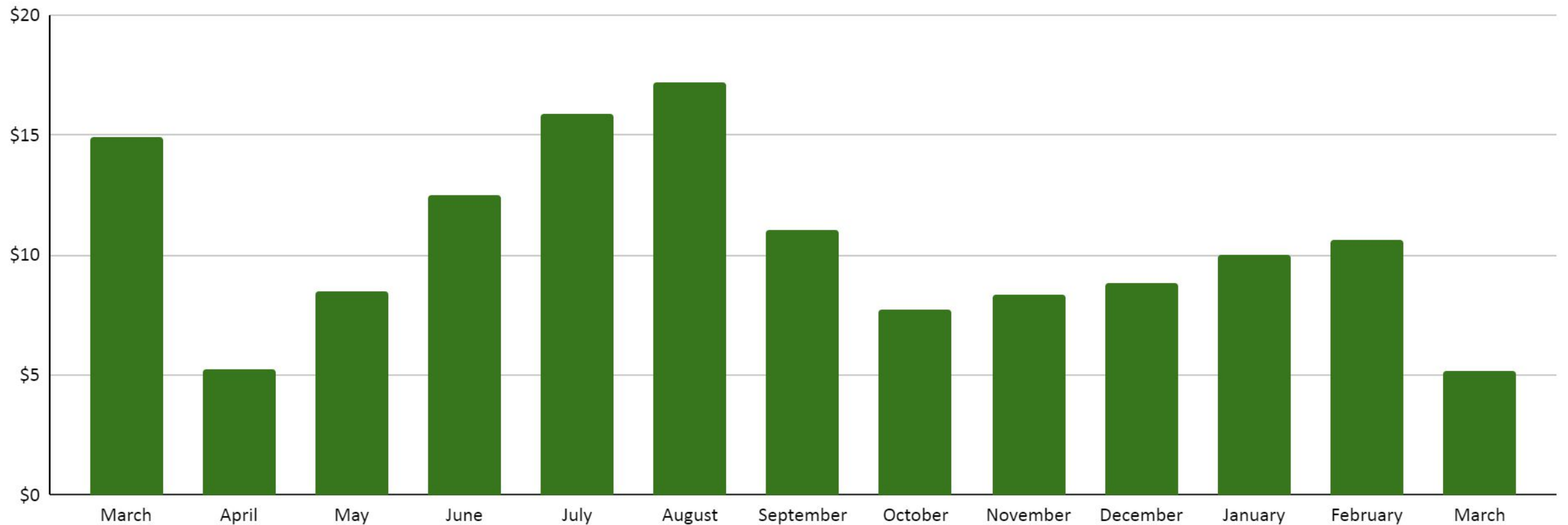


Trail Shuttle cost calculations

Cost Per VRH, Mile, & Passenger Trip	Annual	March	April	May	June	July	August	September	October	November	December	January	February	March	Total	Notes
Data Element																
1 Annual Fixed Cost (Year 1)	\$751,814															
Fixed Cost (/12 as \$)		\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$62,651	\$814,465	Annual Fixed Cost /12
Service Days		5	24	17	17	19	16	18	18	15	18	17	16	29	229	Scheduled each month
Daily Vehicle Revenue Hours (VRHs)		41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	Scheduled Operating Hours
Total VRH(s)		206	988	700	700	782	659	741	741	618	741	700	659	1,194	9,430	Monthly VRHs
Variable Cost Per VRH		\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	\$44.17	Contract Rate (\$/VRH)
Total Purchased VRH (\$)		\$9,095	\$43,654	\$30,922	\$30,922	\$34,559	\$29,103	\$32,741	\$32,741	\$27,284	\$32,741	\$30,922	\$29,103	\$52,749	\$416,533	Calculated
Total Fuel Expense (\$)		\$4,257	\$9,323	\$7,697	\$8,817	\$9,860	\$7,808	\$7,700	\$6,464	\$4,693	\$5,361	\$4,931	\$4,407	\$8,289	\$89,606	Actual Invoiced
Daily Drive Miles		589	589	589	589	589	589	589	589	589	589	589	589	589	589	All Routes Estimated
Fuel (\$/mile)		\$1.45	\$0.66	\$0.77	\$0.88	\$0.88	\$0.83	\$0.73	\$0.61	\$0.53	\$0.51	\$0.49	\$0.47	\$0.49	\$0.66	Using April Unit Costs
Monthly Fleet Passenger Miles		2,944	14,131	10,010	10,010	11,187	9,421	10,598	10,598	8,832	10,598	10,010	9,421	17,075	134,835	Estimated Route Miles * Trips
Monthly Fleet Actual Miles		6,965	14,667	11,002	11,024	12,332	10,726	12,421	12,239	10,184	12,055	10,833	10,716	18,811	153,975	From odometers
Total Monthly Cost		\$76,003	\$115,628	\$101,270	\$102,389	\$107,070	\$99,562	\$103,092	\$101,856	\$94,628	\$100,753	\$98,504	\$96,160	\$123,689	\$1,320,604	Fixed + VRH + Fuel
Cost Per Passenger Use Miles		\$25.82	\$8.18	\$10.12	\$10.23	\$9.57	\$10.57	\$9.73	\$9.61	\$10.71	\$9.51	\$9.84	\$10.21	\$7.24	\$9.79	Total Cost / Passenger Miles
Cost Per Total Monthly Miles		\$10.91	\$7.88	\$9.20	\$9.29	\$8.68	\$9.28	\$8.30	\$8.32	\$9.29	\$8.36	\$9.09	\$8.97	\$6.58	\$8.58	Total Cost / Odometer Miles
Bus Round Trips		420	2,016	1,428	1,428	1,596	1,344	1,512	1,512	1,260	1,512	1,428	1,344	2,436	19,236	From Schedule
Cost Per Passenger Bus Trip		\$180.96	\$57.36	\$70.92	\$71.70	\$67.09	\$74.08	\$68.18	\$67.37	\$75.10	\$66.64	\$68.98	\$71.55	\$50.78	\$68.65	Calculated for all legs
Monthly Boardings		10,205	44,309	23,902	16,359	13,471	11,589	18,820	26,359	23,867	22,987	19,941	18,120	48,120	298,049	Total Boardings
Cost per Boarding		\$7.45	\$2.61	\$4.24	\$6.26	\$7.95	\$8.59	\$5.48	\$3.86	\$3.96	\$4.38	\$4.94	\$5.31	\$2.57	\$4.43	Each Trip To or From
Estimated Cost per Round Trip		\$14.90	\$5.22	\$8.47	\$12.52	\$15.90	\$17.18	\$10.96	\$7.73	\$7.93	\$8.77	\$9.88	\$10.61	\$5.14	\$8.86	Two Boardings per RT

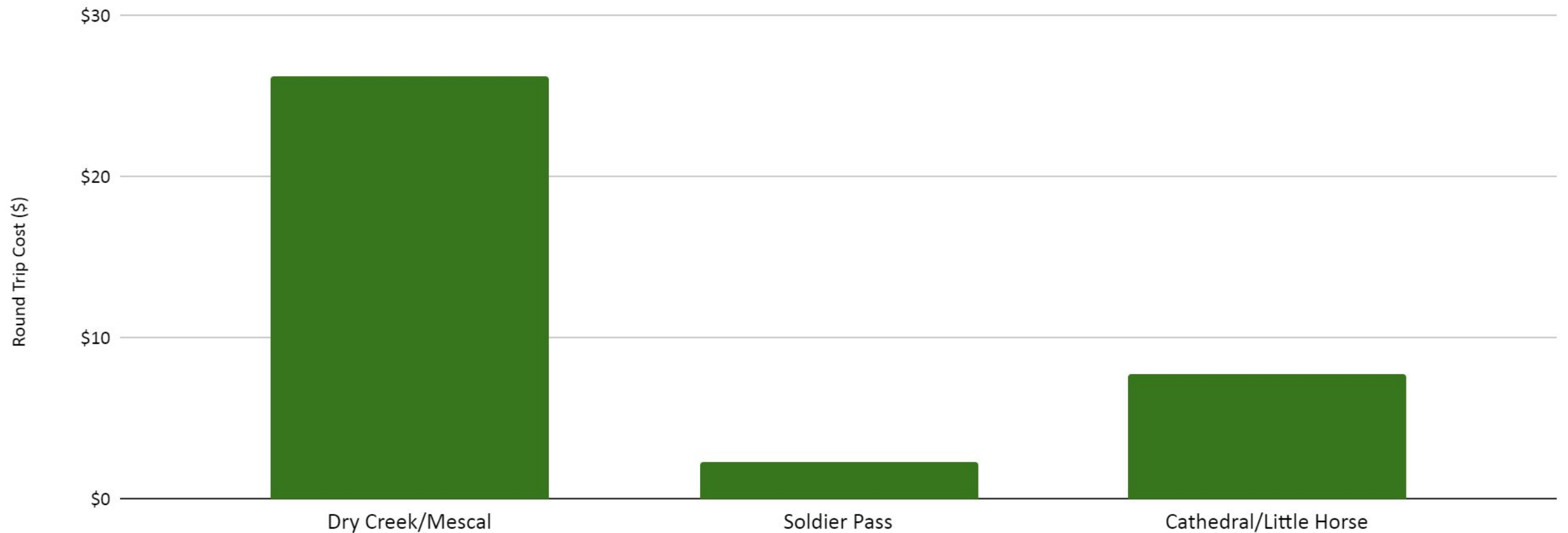
Total cost per round trip by month

Cost per Round Trip



Average round trip cost by area

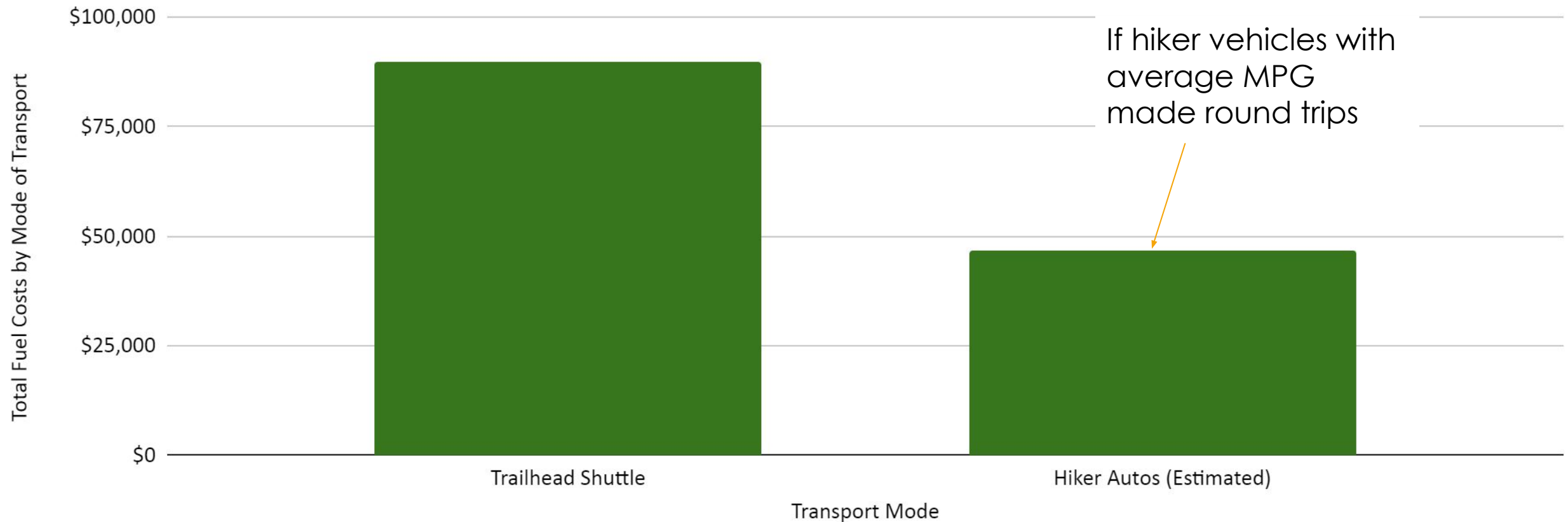
Aggregate Route Round Trip Costs



Trailhead Shuttle vs. auto transport fuel costs

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Fuel Costs for Service to Date



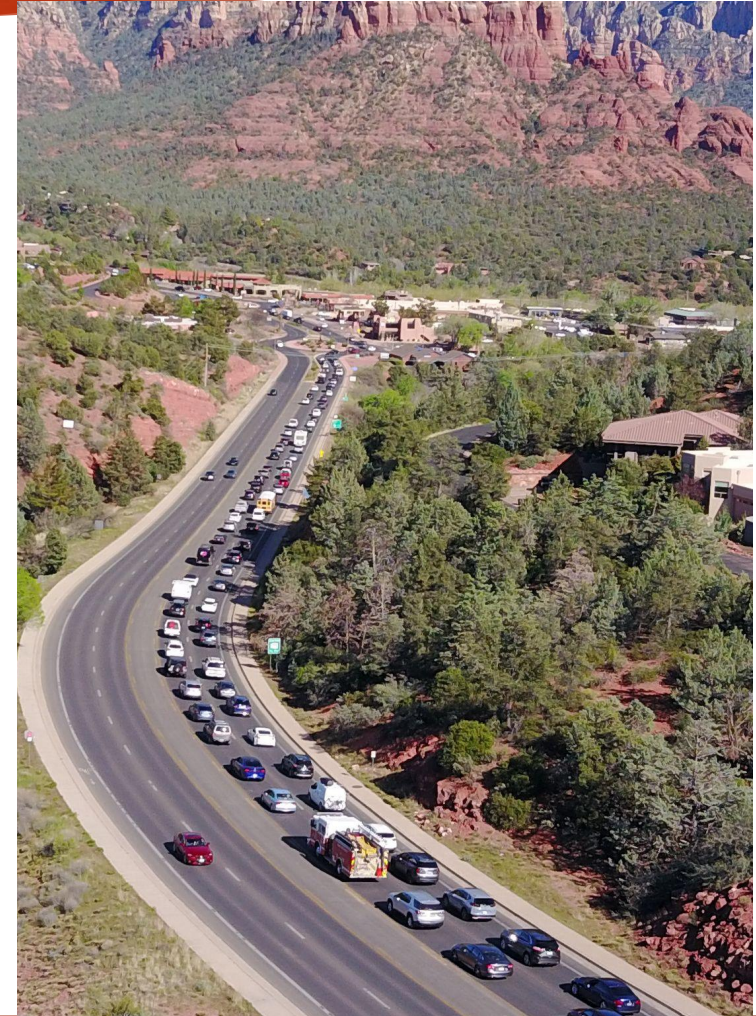
Question: Does the Trailhead Shuttle reduce local street parking issues?

- ▶ Back O' Beyond and Soldier Pass neighborhoods have both reported reduced visitor conflicts
- ▶ Dry Creek Vista and Boynton Pass roads continue to have traffic and roadside parking issues
- ▶ Roadside parking problems and safety issues may be addressed west of Sedona by City and County "No Parking" initiative



Question: Does the Trailhead Shuttle reduce local traffic congestion?

- ▶ Shuttle parking locations requires hikers to drive to lots in town
- ▶ Trailhead Shuttle return volumes peak between 12:00 and 5:00 PM when in town traffic is also at its peak
- ▶ Peak visitor days (50,000 daily visitors with 16,000 cars) include a maximum of 1,000 people (~300 cars, or 2%) using Trailhead Shuttle



Question: Does the Trailhead Shuttle reduce environmental impacts in Sedona?

- ▶ Hikers must still drive to access the Trailhead Shuttle parking lots
- ▶ During non-peak periods the Trailhead Shuttles run with lower occupancy
- ▶ The Trailhead Shuttle appears to increase trail pressure by moving more hikers to the high use trails
- ▶ At peak times, the USFS trail permit limits may be exceeded
- ▶ Carbon impact likely not reduced



Open discussion

- ▶ Could parking limits at trailheads and elimination of roadside parking better reduce Sedona traffic congestion?
- ▶ Could controlling Back O' Beyond access only (no shuttle) or new trailhead address the local congestion problems?
- ▶ Could existing parking limits and new walking path to Soldier Pass trailhead (no shuttle) address local neighborhood issues?
- ▶ Could Micro Transit provide more effective trailhead access because it can better flex capacity needs during peak periods?

Additional items for discussion

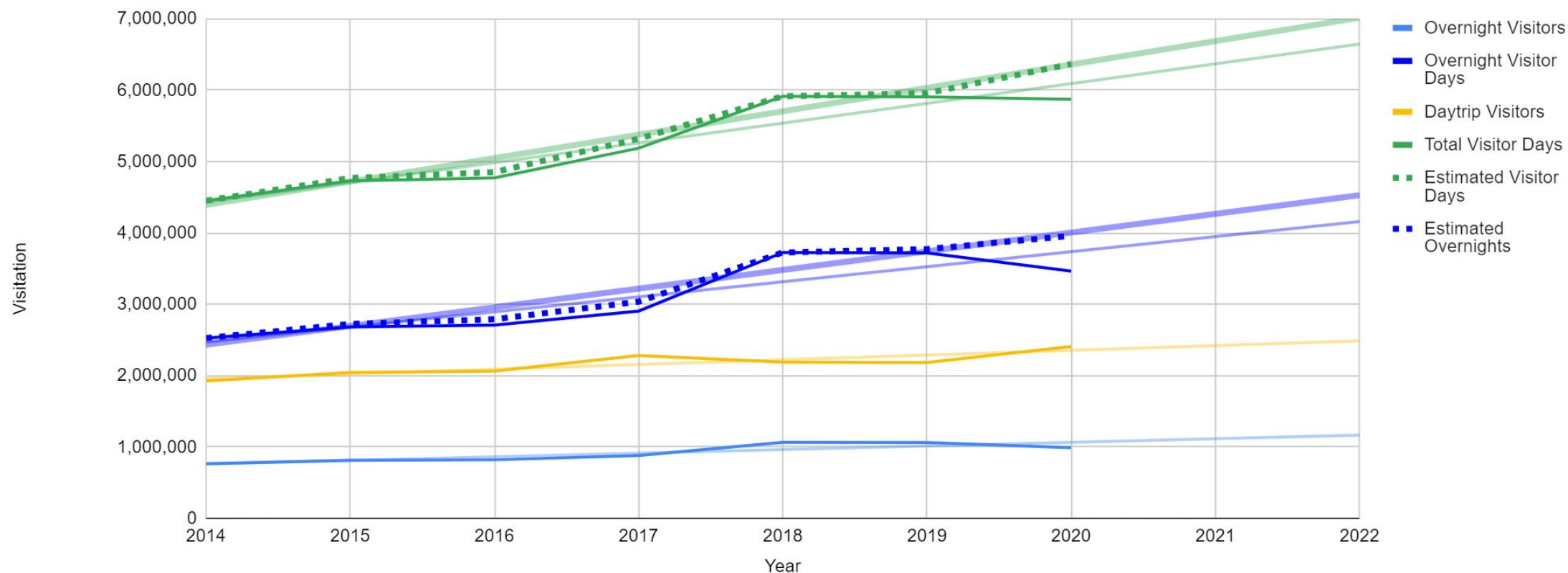
- ▶ Do the benefits justify the expenses? (Trailhead Shuttle is 100% City funded)
- ▶ Could private hotel shuttles and entrepreneurs fill the peak period trail shuttle transit needs?
- ▶ Could the Trail Shuttles buses be repurposed for worker and tourist traffic between Cottonwood, Rim Rock, VOC and Sedona resorts and other destinations (hop on hop off)?

Assumptions

- ▶ Annual equipment fixed cost divided evenly by month
- ▶ Variable Revenue Hours rate used for route based hours only
- ▶ Fuel costs included in the month they occurred
- ▶ Only boarding numbers were used for rider round trip counts due to lower exits
- ▶ Three shuttle riders estimated for each automobile parked
- ▶ Fuel for automobiles estimated at average of \$4.50/gallon
- ▶ Automobile fuel economy average estimated at 25.7 mi/gal
- ▶ Sedona staff costs for management and traffic control not included

Background: Sedona's Increasing Visitor Numbers

Revised Sedona Visitation





Boynton Canyon Rd
Already No Parking

Boynton Canyon
Parking (30 spaces)

Long Canyon Parking
(Add 10 Roadside
spaces)

Fay Canyon
Parking (40 spaces)

Mescal Parking
(40 spaces)

Long Canyon Rd
Recommend
NO PARKING
(Except as noted)

Dry Creek Parking
(45 spaces)

Doe/Bear Mountain
Parking (25 spaces)

Boynton Pass Rd
Recommend
NO PARKING

Boynton Pass Rd
Recommend
NO PARKING

Dry Creek Rd
Recommend
NO PARKING

Already
No
Parking

Dry Creek in Sedona
Already Bouldered

Recommended No Parking Areas West of Sedona

THE END