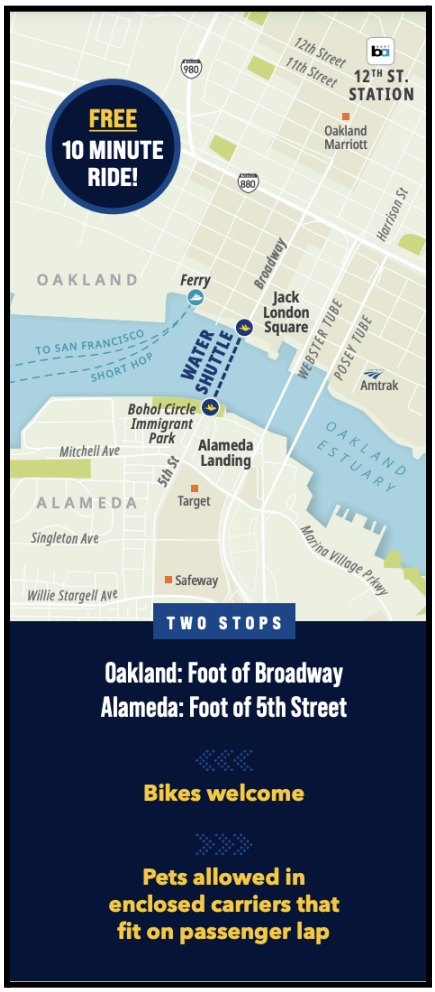
Attachment #3: Case Study 3 - Oakland Alameda Water Shuttle (Woodstock)



Woodstock "Two Stops" Route Map

The Oakland Alameda Water Shuttle, or Woodstock, is a newly-developed, free ferry service that connects passengers between Oakland's Jack London Square and Alameda Landing. Just shy of a year ago, this project was launched on July 17, 2024 to improve sustainable transportation options and reduce vehicle traffic. The 45-foot yellow pontoon vessel initially began as a project under Bike Walk Alameda that aimed to implement a service between the two now-existing stops with minimum of 20-minute headways (Bike Walk Alameda). In 2009, the shuttle as the form of transit for this crossing was identified as the main alternative for bicyclists traveling this route. Thus, the City of Alameda placed this project within its priority for its Transportation Choices Plan (City of Alameda, 2018). Woodstock closes the one-mile distance across the Oakland-Alameda Estuary (City of Alameda, 2018) from a varying 30 minute route into a 5 to 10 minute crossing.

The ADA-accessible, pilot shuttle carries around 30 passengers and 15 bikes per trip (Port of Oakland, 2024), offering 37 trips per day. The water shuttle was a collaborative effort between Bike Walk Alameda, the Port of Oakland, City of Alameda, Alameda Transportation Management Association (ATMA), SF Bay Berry, and private partners like CIM Group (City of Alameda, 2023). These coalition of groups argued that there is no adequate, safe, or convenient access for pedestrians to cross the Oakland Alameda Estuary Crossing. Thus, they decided that the water shuttle should be the short- to medium-term solution for this gap (City of Alameda City Council 2023). The SF Bay Ferry manages the operation of the OAWS Woodstock (Port of Oakland, 2024). The project was launched in 2024 as a pilot project scheduled for two years (Alameda Post, July 2024). Within the first 3 months, the operation carried over 34,000 riders and 7,400 bikes (Alameda Post, October 2024), causing a winter expansion to an additional 52 more trips.

The pilot had a capital stack of the City of Alameda's one million dollar grant from the Alameda County Transportation Commission to fund 25-percent of the operating costs and the remaining 75-percent receiving local matches covered by the City of Alameda's Measure BB funds and

other private partners. The funding from this program were relatively low-cost despite its free fare to its riders. Additionally, from this project, there was a reduction in auto-reliance for pedestrians, with 22-percent of riders investing in bicycles (Rudick 2024).

WEDNESDAY - THURSDAY		FRIDAY		SATURDAY - SUNDAY	
LEAVES OAKLAND	LEAVES ALAMEDA	LEAVES OAKLAND	LEAVES ALAMEDA	LEAVES OAKLAND	LEAVES ALAMEDA
7:00am	7:15am	8:00am	8:15am	8:00am	8:15am
7:30am	7:45am	8:30am	8:45am	8:30am	8:45am
8:00am	8:15am	9:00am	9:15am	9:00am	9:15am
8:30am	8:45am	9:30am	9:45am	9:30am	10:35am
9:00am	9:15am	10:00am	11:05am	10:50am	11:05am
9:30am	9:45am	11:20am	11:35am	11:20am	11:35am
10:00am	11:05am	11:50am	12:05pm	11:50am	12:05pm
11:20am	11:35am	12:20pm	12:35pm	12:20pm	12:35pm
11:50am	12:05pm	12:50pm	1:05pm	12:50pm	1:05pm
12:20pm	12:35pm	1:20pm	1:35pm	1:20pm	1:35pm
2:20pm	2:35pm	4:00pm	4:15pm	2:20pm	2:35pm
2:50pm	3:05pm	4:30pm	4:45pm	2:50pm	3:05pm
4:10pm	4:25pm	5:00pm	5:15pm	5:05pm	5:20pm
4:40pm	4:55pm	5:30pm	5:45pm	5:35pm	5:50pm
5:10pm	5:25pm	6:00pm	6:15pm	6:05pm	6:20pm
5:40pm	5:55pm	6:30pm	6:45pm	6:35pm	6:50pm
6:10pm	6:25pm	7:00pm		7:05pm	
6:40pm	6:55pm	7:45pm	7:30pm	7:50pm	7:35pm
7:10pm	7:25pm	8:15pm	8:00pm	8:20pm	8:05pm

FREE 10 MINUTE RIDE!

NO SERVICE MONDAY & TUESDAY

OAKLAND

ALAMEDA

WATER SHUTTLE

OAWS Woodstock Original Shuttle Schedule

LEAVING ALAMEDA		LEAVING OAKLAND	
WED / THURS	FRI / SAT / SUN	WED / THURS	FRI / SAT / SUN
7:30am	8:30am	7:41am	8:41am
7:52am	8:52am	8:03am	9:03am
8:14am	9:14am	8:25am	9:40am
8:36am	9:51am	8:47am	10:02am
8:58am	10:13am	10:25am	11:10am
10:36am	11:22am	11:33am	11:34am
11:45am	11:46am	11:57am	11:58am
12:09pm	12:10pm	12:36pm	12:22pm
12:48pm	12:49pm	1:00pm	1:01pm
1:12pm	1:13pm	1:54pm	1:25pm
2:05pm	1:37pm	2:16pm	1:49pm
2:27pm	2:01pm	2:38pm	2:13pm
2:49pm	2:25pm	3:16pm	3:07pm
3:27pm	3:19pm	3:38pm	3:31pm
3:49pm	3:43pm	4:46pm	4:10pm
4:58pm	4:22pm	5:10pm	4:34pm
5:22pm	4:46pm	5:34pm	4:58pm
5:46pm	5:10pm	5:58pm	6:07pm
6:10pm	6:19pm	6:22pm	6:31pm
6:34pm	6:43pm	6:46pm	6:55pm
7:13pm	7:07pm	7:25pm	7:34pm
7:37pm	7:46pm	7:49pm	7:58pm
8:01pm	8:10pm	8:13pm	8:22pm
	8:34pm		8:46pm
	8:58pm		

FREE 7 MINUTE RIDE!

NO SERVICE MONDAY & TUESDAY

OAKLAND - ALAMEDA WATER SHUTTLE

GREY LINES = SERVICE BREAK

OAWS Woodstock Expanded Shuttle Schedule

Importance for the NASA Ames Berkeley Space Center Development

With a high ridership of nearly 775 passengers per day for free, OAWS Woodstock is a leading water transportation example in the Bay Area of cost-friendly, environmentally-aware, community-driven transportation project. By closing the waterfront terminal gap between frequent riders of the SF Bay Ferry, Woodstock provides a solution for both first mile, last mile transportation planning as well as reducing parking demand for transportation developments. Due to the Berkeley Space Center estimating an exponential growth in riders to travel through the SF Bay Ferry system to the new Redwood City terminal development, the already-existing model of high ridership within Woodstock showcases how riders will utilize projects that minimize their travel time to ferry systems. Projects that are community-demanded, such as the desire for a quicker method of transportation across the East Bay to the South Bay, represents the estimated success of implementing a water-based transportation system for traveling to the Berkeley Space Center. Not only this, the excited surrounding the community's use of this is celebrated due to its community-driven roots. Thus, ensuring a community-based participatory development like a shuttle to the SF Bay Ferry would determine high ridership status.

Additionally, the public-private partnerships demonstrate a successful collaborative funding and operations model that resulted in free fares, high ridership, reliable access, and low-cost infrastructure. Because the development of the NASA Ames Berkeley Space Center project is already underway as a public-private partnership with SKS Partners, this financial operation allows for a modeling of the method of establishing a public-private partnership for transportation as well, and how it would benefit both parties.

S.W.O.C. Analysis

Strengths:

- *Cost-Effectiveness*: Woodstock itself was low-cost in relation to its infrastructure and provided a solution to high-demand in minimal timing. The quick implementation of the program launched within 12 months of governmental planning, although beginning as a bike-pedestrian movement.
- *Community Participation*: Not only in ridership, but the community-based participation in the planning process–starting as a grassroots demand–showed that communities have a voice in their preferred method of transportation. Community-based participation leads to direct community participation in transportation.
- *Accessibility to Shuttle Service:* The expanded schedule is able to accommodate for more riders, the shuttle is ADA accessible, and also prioritizes transporting bicycles for

pedestrians. The shuttle is free for all riders, which does not limit the demographic of any riders and minimizes riders' costs.

Weaknesses:

- *Capacity Constraints:* High-utilization of Woodstock leads to frequent overcrowding given the 31-person limitations. This may lead to the need for frequent repairs and maintenance. If ridership continues to increase steadily, schedule expansion might also be in-demand.
- *Weather Vulnerability:* There is limited infrastructure at the docks that provide shelter for riders during winter weather conditions. High winter winds disrupts the service provided, which may push away riders for its reliability during this particular season. This also affects maintenance of water-based transportation.

Opportunities:

- *Test-Based Services:* Following suit of Woodstock, starting with a pilot program of a land-based shuttle service to the ferry terminal for the route to Berkeley Space Center would allow room for expansion or reduction of service times. This room for growth ensures that riders are being heard in the continuous development of this transportation system.
- *Timeframe for Implementation:* Woodstock was implemented within 12 months of planning, which could be mimicked through Berkeley Shuttles service expansion. Quick implementation of the plans would increase riders' trust in this transportation service.
- *Public-Private Partnership Financial Model:* Already reflecting a public-private partnership financial model, Berkeley Space Center could benefit from expanding its plans to include transportation in its existing plan with SKS Partners. The capital stack of City of Berkeley grants and private funding would further minimize costs of the shuttle services. Further, water shuttles are significantly more expensive than land-based shuttles due to water-based infrastructure and maintenance. The BSC proposed project aims to utilize land-based shuttles to transport riders to the ferry terminal, which would minimize estimated costs greatly.
- *Bike and Pedestrian-Focused:* This project aligns with Berkeley's goals to reduce autocentric infrastructure and support sustainable transportation to the waterfront ferry terminal. This could also increase utilization of bicycles in the Berkeley Space Center campus overall.

Challenges:

- *Parking management:* Determining the parking space of expanded Berkeley Shuttles would be important to plan for. Additionally, the need for transit-adjacent parking might be in-demand with the idea of 54-percent of projected Berkeley ferry riders may drive to the terminal stop (City of Berkeley, 2025).

- *Capacity Constraints:* Existing Berkeley shuttles have limited capacity and are for smaller designs. The land-based shuttles would need to ensure comfortability and larger space to accommodate for ADA accessibility and a longer travel time—relative to around campus—to the ferry terminal.
- *Schedule Design:* In order for riders to choose the shuttle to SF Bay Ferry route as the engaged form of transportation within the pilot program with minimal marketing, there would need to be an implementation of this transportation within transit applications such as Transit. This would increase reliability and show real-time transportation information for breaking trust barriers and increasing ridership.

Overall Recommendations:

Reflecting on the Woodstock plan, there are three main points to consider when implementing the Berkeley Space Center transportation project:

1. Launch a pilot program with a single vessel to test routes and schedules before larger-scale development. This would prioritize the Berkeley and East Bay staff and students that travel to NASA Ames on a weekly basis already.
2. Secure multi-agency funding to incorporate different transportation plans and private developers to minimize costs and generate excitement and management over the transit service. This would also create sub-projects available for students to develop a GIS mapping system for real-time transportation information and application usage of shuttles and ferry-based transportation.
3. Include Berkeley students and faculty in the planning process of this transit project to center the transportation method around what students and faculty are interested in riding. Pushing for water-based transportation would increase student awareness of the SF Bay Ferry as reliable methods of transportation, especially used by workers as their main form of transportation. This would close the bridge between Berkeley students and the SF Bay Ferry, while also ensuring their own voice represented in the plans.
4. Ensure that the shuttles and shuttle stops are visible and accessible for the Berkeley riders. Similar to Woodstock's nickname and yellow design, this would generate excitement over the use and reliability of the transit form.

Already existing trust in Berkeley shuttles are great for students and faculty to generate more use of the proposed transportation plan. Woodstock's community-driven roots are reflective of this plan's commitment to community-driven usage.

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