

OahuMPO Transportation Alternatives Program Application

# OahuMPO Transportation Alternatives Program Application



## Instructions

Complete application in the space provided. Submit completed application and attachments electronically to [oahumpo@oahumpo.org](mailto:oahumpo@oahumpo.org) and mail three hard copies of application and attachments to: Oahu Metropolitan Planning Organization 707 Richards Street, Suite 200 Honolulu, Hawaii 96813

## General Information

**Project Title:** Purchase of Bikeshare Equipment for Honolulu System Expansion

**Project Location, street, zip code, and facility name:** Urban Honolulu (Bounded by Chinatown, Downtown, Ala Moana, Makiki, Moilili, UH Manoa, Kapahulu, Diamond Head, Waikiki), Kailua, and Haleiwa

**Project Length (miles) and location/termini:**

**Applicant:** Department of Transportation Services

**Contact Person:** Kelly Akasaki

**Telephone:** 768-8320

**Email:** [kelly.akasaki@honolulu.gov](mailto:kelly.akasaki@honolulu.gov)

**Project Sponsor Agency (if different):**

**Contact Person:**

**Telephone:**

**Email:**

## Project Screening Criteria

*Check all that apply*

- Project is consistent with the regional goals and objectives of the ORTP
- Project is consistent with the City and County of Honolulu's Complete Streets Policy
- Project is one of the three eligible activities for OahuMPO's TA program
- Project is directly related to the surface transportation system
- Project is within the planning area of the MPO and is open to public access

## Budget Summary

Project Phase	Total	Federal Funds		Match
		TAP	Other	
Planning				
Design				
Right of Way (ROW)				
Construction	\$5,723,200	\$4,577,520		\$1,145,680
TOTAL	\$5,723,200	\$4,577,520		\$1,145,680
Overall Match Ratio: 79.98%, 20.02%				

## Project Type

*Check all that apply*

- On-road and off-road bicycle or pedestrian facilities
- Safe routes for non-drivers
- Conversion and use of abandoned railroad corridors for bicycles or pedestrians

## Project Information

### 1. Project Description

Bikeshare Hawaii is a 501(c)3 non-profit organization currently contracted with the Department of Transportation Services (DTS) to administer a bikeshare system in Honolulu. Since 2015, Bikeshare Hawaii has been undergoing a capital campaign to launch Hawaii's first full-scale bikeshare system in Urban Honolulu in the summer of 2017. The initial system coverage area will be approximately 5.14 square miles and include Downtown to Waikiki and will extend up to the University of Hawaii at Manoa campus. This area includes Chinatown, Downtown, Hawaii Capital Historic District, Kaka'ako, Ala Moana, McCully-Moiliili, Waikiki, and Lower Manoa Valley neighborhoods and connects directly to five future Honolulu Area Rail Transit (HART) stations.

The proposed project will leverage the 2016 HDOT TAP award to DTS that included \$1,254,200 for the purchase of 21 bikeshare stations and 236 bikeshare bikes. The HDOT TAP award will be combined with private financing to launch the Honolulu bikeshare system in June of 2017 with a total of 1,236 bikeshare bikes (approx. 121 stations).

In June 2014 the Department of Permitting and Planning released the *Honolulu Bikeshare Organizational Study*. The study proposed two scenarios for launching bikeshare: a "moderate density" system of 141 stations and 1,340 bikes; and an "optimal density" system of 187 stations and 1,676 bikes. The scope of the proposed project applies \$5,860,700 in project funds to the **purchase and shipping of 440 bikes** (and approx. 66 stations) to expand the Honolulu system to its optimal size as well as **purchase and ship 381 bikes** (and approx. 37 stations) for those systems.

See attached "Bikeshare Equipment Design and Dimensions".

The expansion of bikeshare services throughout Oahu will leverage the existing operational agreement between Bikeshare Hawaii and its private financier to operate the equipment.

This proposal requests \$4,557,520 in federal funding (83% of available federal match available under the OMPO TAP program, and 79.98% of the total proposed project budget) and requires \$1,145,680 in local matching funds (20.02% of the total budget). Bikeshare Hawaii will provide DTS with the local matching funds required to release the OMPO TAP federal funding. Anticipated revenue streams to raise the match are described in the attached Project Cost Estimates and Project Schedule. The scope of the project does not include the cost of installation or operations. A \$2,000,000 grant from DTS and the Department of Health (DOH) and operational agreement with private operator, Secure Bikeshare, already in place gives Bikeshare Hawaii the operating capacity required to implement a bikeshare program with the purchased equipment. (See attached "Path to Launch" for details on Bikeshare Hawaii's history and the significance of this funding).

The proposed project is ready to be launched and can be implemented as soon as funding allows. Should funding be obligated early within any program year, the project has the flexibility to be executed earlier than the application timeline has scheduled. Additionally, the scope of this project is flexible to meet the program objectives of the Transportation Alternative Program and the funds available. Because the system is scheduled to be operational when funds are available to be obligated, incremental amounts of funding at any level can be used to improve service and achieve the potential of the optimal bikeshare system in Urban Honolulu and deliver as much service as

possible to other communities in Honolulu County. Should the full project budget requested not be awarded, it is suggested that expansion into Kailua and Haleiwa be postponed until the Honolulu system reaches “moderate density” at a minimum.

The proposed schedule allocates available funds to achieve the ideal expansion timeline, however, as stated before this schedule is flexible. As proposed, 100% of federal funds available in 2017 and 65% of federal funds available in 2018 will purchase 264 bikeshare bikes (and approx. 33 bikeshare stations) to expand the Honolulu bikeshare system slightly above the “moderate density” recommended by the study. 43% of federal funds available in 2019 will purchase 176 bikeshare bikes (and approx. 33 bikeshare stations) to expand the Honolulu bikeshare system to the “optimal density” recommended in the study.

57% of federal funds available in 2019 will purchase 381 bikeshare bikes (and approx. 37 bikeshare stations) to launch those systems.

## **2. Describe how the project will improve the public travel experience, travel options, and benefit the community.**

Bikeshare addresses three core issues impacting the health and experience of residents and visitors to the state.

**Traffic Congestion:** Honolulu’s mobility challenges stem from geographic constraints, capacity issues on the urban bus system, cultural reliance on the automobile, and some of the nation’s worst traffic congestion.

**Public Health:** Many people throughout Hawaii are afflicted with preventable diseases related to inactivity and sedentary lifestyles. Roughly 22% of Oahu adults do not engage in regular physical activity. Bikeshare is a tool that can reverse this trend by enabling into active transportation.

**Living Costs:** Hawaii faces the highest electricity costs in the nation, high fuel costs, and high costs for homeownership and rent. Bikeshare members across the nation see reduced transportation expenses, including eliminating the need for some to own a personal vehicle

Bringing bikeshare to Honolulu was deemed desirable, valuable, and feasible by the *Honolulu Bikeshare Organizational Study* mentioned above. Over the course of the study, over 200 stakeholders across a multitude of industries talked about their vision of how bikeshare can enhance Honolulu. Key themes that emerged relating to the public travel experience and travel options include:

- Bikeshare helps reduce traffic congestion and improve automobile and transit times.
- Bikeshare expands transportation options, increasing walking, bicycling, and enabling more people to use transit.
- Bikeshare fills gaps in the transit system and reduces crowding on TheBus.
- Bikeshare can seamlessly integrate with TheBus and the future HART rail system—aiding the City’s goals for transit-oriented community development (TOD).
- Bikeshare creates an intergenerational bicycling culture in Honolulu that normalizes the bicycle for transportation and recreation, stimulates public support for expanding bicycle infrastructure.

Additionally, bikeshare has demonstrated in cities across the U.S. the ability to improve local environmental health, energy sustainability, quality of life, public health, and economic activity. No other form of public transportation is able to unlock such wide ranging benefits for the same modest level of capital funds. The proposed project will expand the Honolulu bikeshare system that will launch in June 2017 to "optimal density" (an increase of 43%) by 2020, and potentially as soon as 2018. At "optimal density" Bikeshare Hawaii anticipates 1.5 million rides or 2.5 rides per bike per day and anticipates 3,350-5,030 residential members and 351,750-402,000 visitor members. At this level of use, Honolulu will see the following community benefits:

- 141-173 million calories and 45,000 pounds of fat burned each year
- 4.3 million in potential annual VMT savings
- 3.9-4.3 million estimated pounds of carbon saved annually
- 33-36 new jobs created directly by bike share operations
- \$195,000-\$255,000 net increase in retail spending near stations (conservative estimate)
- \$2.5 million in potential annual savings from reduced driving

The proposed OMPO TAP project can allow for a phased launch of the Honolulu system that enables DTS to purchase and own a greater percent of the Honolulu bikeshare equipment (from 18% to 43%), giving greater assurance that system expansion is planned with equity and utility in mind for more residents.

Public funding for bikeshare (HDOT and OMPO TAP funding, plus Grant in Aid Capital Improvement Project funds (GIA CIP) awarded by the State Legislature in 2015. See attached "Funding Raised to Date") is slated to purchase bikeshare stations that will be placed in primarily residential areas that bring greater utility to residents, but generate a low volume of walk-up revenue. This means an increase in use of the system by bikeshare members anticipated to subscribe to fixed membership fees, thus increasing the cost to operate and maintain the specific station without subsequent increased revenue generated by the specific station. Anticipated walk-up revenue generated from the 33 stations included in this proposal that bring the Honolulu system to "moderate density" combined is approximately \$40,000/year, or 1% of the system's projected annual revenue.

Under the membership options designed with Honolulu residents in mind, the more you use the system the greater the value of the membership fee, and the farther your transportation dollars invested in bikeshare membership goes. While these stations help Bikeshare Hawaii fulfill the mission to offer affordable and equitable transportation services, they provide a low incentive for prioritization by private financing partners and thus exemplify an efficient use and quality investment for public funding. Yet, it is important to note that each expansion will substantially increase the utility of the full network as more stations come online, increasing revenue projections for every previous station. As an example, 51 of the stations (84%) purchased by OMPO TAP will generate \$638.75/station/year in walk-up revenue, or 2% of what is projected of each of the eight stations at Ala Moana (\$30,600/station/year). Yet the utility added by the expansion of bikeshare stations purchased under OMPO TAP funds increases Ala Moana station's revenue projections over 100%, revenue that will be split between Bikeshare Hawaii and their private financing partners. Additionally, when stations purchased with OMPO TAP funds bring the Honolulu network to "moderate density", they will also increase HDOT station's annual revenue projections by 70%.

**3. Describe how the project provides a connection between modes, improves the transportation choices, or connects to land use services (such as job locations, a civic center, library, market, medical office, school, etc.). Include modes and list of specific land uses connected within ½ mile of the project.**

Bikeshare expands mobility and multi-modal transportation, creates new bicyclists, and reduces automobile use by making biking a more convenient, accessible and affordable transportation option. This is achieved by providing a dense network of on-demand bikes available to the public.

In Capital Bikeshare's 2014 Annual Survey of members, 50% said they ride a bike much more often<sup>1</sup>. Denver B-cycle's 2015 annual report noted that of their 67,142 memberships, half of their riders use the system at least twice a week and 46% of 2015 rides replaced car trips<sup>2</sup>.

Bikeshare enables multi-modal transportation between walking, biking, and transit when stations are strategically placed within residential areas and the urban core and adjacent to public transit. This allows for the flexibility to use biking as a one-way trip. Biking can then serve as the last mile connectivity between home, work, and transit stops. Currently, TheBus' transfer rate hovers around 40% of all passengers. The heavy weight on transfer activity signals a potential service gap that can be accommodated by bikeshare and reduces urban core crowding on transit. In neighborhoods underserved by transportation options or with inefficient public transit routing (e.g., loop routes), bikeshare can expand mobility and access options, improve connections to transit, reduce transit wait times, and even eliminate the need to transfer between routes or transit services.

The Honolulu Authority for Rapid Transportation (HART) rail transit project, scheduled to begin operations in 2017 (first 10 miles only) and be completed by 2019, projects an estimated 116,300 weekday passenger trips by the year 2030. With 70% of Oahu's residents living within the HART corridor, quick and convenient access between HART stations and destinations will be required. Bikeshare systems in other cities with rapid transit service have seamlessly provided these transit connections. The Civic Center, Kaka'ako, and Ala Moana HART rail stations are anticipated to be designed to accommodate bikeshare stations when they open.

Bikeshare users commuting by car into bikeshare service areas can leave it parked during the work/school day, and opt for bikeshare for short trips throughout the day. This expands their access to retail and services while saving time spent otherwise spent in traffic, re-parking, or walking while still getting physical activity. For the Honolulu system, bikeshare connects job centers and University facilities (Downtown, Kaka'ako, the Federal Building, Hawaii Capital Historic District, Hawaii Pacific University, JABSOM, University of Hawaii at Manoa, and Richardson School of Law to name a few) more efficiently to local restaurants, retail centers, recreational parks, grocery stores, and services (Downtown restaurants and farmer's markets, post offices, Thomas Square Park, Ala Moana Beach Park, Kaka'ako Waterfront Park, Foodland, Times Supermarket, the Food Pantry, Sinclair Library, and Queens Medical Center to name a few). The increase in density in the proposed project will ensure users are never more than a 5 minute walk from a station.

---

<sup>1</sup> <http://www.capitalbikeshare.com/assets/pdf/cabi-2014surveyreport-execsummary.pdf>

<sup>2</sup> [https://denver.bcycle.com/docs/librariesprovider34/default-document-library/annual-reports/dbs\\_annualreport\\_2015\\_04.pdf?sfvrsn=2](https://denver.bcycle.com/docs/librariesprovider34/default-document-library/annual-reports/dbs_annualreport_2015_04.pdf?sfvrsn=2)

**4. Describe how the project relates to an adopted plan such as the Statewide Pedestrian Master Plan, Oahu Bike Plan, the Hawaii State Bike Plan, the Hawaii Strategic Highway Safety Plan, or a future rail transit access connectivity plan.**

It is anticipated that bikeshare users will include cyclists that already bike habitually, but additionally, DTS and Bikeshare Hawaii anticipate bikeshare will introduce or re-introduce Honolulu residents and visitors to biking. The Honolulu system expansion and Kailua and Haleiwa system launches will contribute to increasing the number of people biking on Oahu and will make biking a more viable, safe, and convenient form of transportation and subsequently reducing VMT and traffic congestion. This is consistent with HDOT's mission, plans, and policies, including the Statewide Federal-Aid Highways 2035 *Transportation Plan*, *Oahu Regional Transportation Plan 2040*, Complete Streets policy and principles, and City and State Bike plans (*2012 Oahu Bike Plan* and *2002 Bike Plan Hawaii*).

The City and County of Honolulu is dedicated to making O'ahu a bicycle-friendly place. In 2012, DTS published the O'ahu Bike Plan, an update to the 1999 Honolulu Bicycle Master Plan. The new plan guides planning to better integrate bicycling into the island's transportation system, and includes bikeshare. The above plans discuss the significant need and desire for a flexible, multi-modal transportation system that encourages biking as a viable transportation option.

The Hawaii Strategic Highway Safety Plan seeks to reduce yearly transportation fatalities from 100, to 80 or fewer by 2018, toward the ultimate goal of zero deaths. Bikeshare use can contribute to reducing fatalities by reducing car trips, and making cycling safer. The 2016 Bikesharing and Bicycle Safety report issued by the Mineta Transportation Institute finds that, "Collision and injury rates for bikesharing are lower than previously computed rates for personal bicycling. Experts and focus group participants independently pointed to bikesharing rider behavior and bikesharing bicycle design as possible factors. In particular, bikesharing bicycles are generally designed in ways that promote stability and limited speeds, which mitigate the conditions that contribute to collisions." Additionally, Bikeshare supports the Statewide Pedestrian Master plan as bikeshare stations can serve as wayfinding for all cyclist and pedestrians, highlighting safe bicycle and pedestrian routes, in addition to bikeways like protected bike lanes and bicycle parking and other bicycling amenities.

The Honolulu Authority for Rapid Transportation (HART) rail transit project, scheduled to begin operations in 2017 (first 10 miles only) and be completed by 2019, projects an estimated 116,300 weekday passenger trips by the year 2030. With 70% of Oahu's residents living within the HART corridor, quick and convenient access between HART stations and destinations will be required. Bikeshare systems in other cities with rapid transit service have seamlessly provided these transit connections. The Civic Center, Kaka'ako, and Ala Moana HART rail stations are anticipated to be designed to accommodate bikeshare stations when they open.

In anticipation of the rail project, DPP and the Hawaii Community Development Authority (HCDA) have published Neighborhood TOD Plans for the communities with rail stations within their respective jurisdictions. TODs can be characterized as providing a rich set of land uses - housing, jobs, and services - in an efficient manner while creating vibrant, dynamic pedestrian and bicycle-friendly communities. Bikeshare contributes to TODs by increasing the accessibility of bicycles and transit, introducing new cyclist, and creating an intergenerational bicycling culture that normalize the bicycle for transportation and recreation and stimulates public support for expanding bicycle infrastructure.



