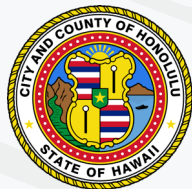


# ALA WAI ALTERNATIVES ANALYSIS

## APPENDIX A: PURPOSE AND NEED STATEMENT



## MEMORANDUM

To: Dr. Nicola Szibbo, MCP, PhD

From: Dr. Drusilla van Hengel, PhD and Lauren Squires

Date: December 13, 2018

Subject: Ala Wai Bridge Alternatives Analysis – DRAFT Purpose & Need Statement v2

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### DRAFT Purpose & Need Statement

#### Purpose

The purpose of the project is to improve access for people travelling by foot or by bicycle across the Ala Wai Canal between Ala Moana Boulevard and the Manoa/Palolo Stream. The project's primary purpose is to improve multimodal network connectivity and enhance public safety for people walking and bicycling. The secondary purposes are to assure comfortable, sustainable mobility options that enhance economic vitality, environmental health, and social equity.

#### Need

##### Safety from Traffic

Travel time, safety, and convenience are the top three priorities 2018 Origin-Destination respondents cited when making the decision to walk or bike across the Ala Wai Canal.<sup>1</sup> A history of collisions involving people walking and bicycling on and near existing canal crossings indicates the need for an additional safe, comfortable, convenient crossing of the canal that reduces the travel time and exposure for people walking and bicycling. Between 2012 and 2016, seventeen car collisions involving people walking and bicycling were reported on the existing bridges.<sup>2</sup> O-D survey respondents agreed that existing bridges over the canal have a lot of traffic congestion (79%).<sup>3</sup> Consistent with Complete Streets Objective 1 to improve safety<sup>4</sup>, respondents who bike, walk or scooter strongly agreed that the existing facilities are unsafe (76%), uncomfortable (65%) and out of the way (67%).<sup>5</sup>

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<sup>1</sup> Ala Pono Origin-Destination Intercept and Online Survey Responses, 2018  
<https://www.honolulu.gov/completestreets/alapono>

<sup>2</sup> Ala Wai Advanced Project Planning Report for Potential Improvements to Route No. 7710 (Ala Wai Boulevard) from the Waikiki, Ala Moana, and McCully/Moiliili neighborhoods in Honolulu, 2018

<sup>3</sup> Ala Pono Origin-Destination Intercept and Online Survey Responses, 2018  
<https://www.honolulu.gov/completestreets/alapono>

<sup>4</sup> Revised Ordinances of Honolulu 14-33.2 Complete Streets Policy; principles,  
[https://www.honolulu.gov/rep/site/ocs/roh/ROH\\_Chapter\\_14a20\\_\\_33.pdf](https://www.honolulu.gov/rep/site/ocs/roh/ROH_Chapter_14a20__33.pdf)

<sup>5</sup> Ibid.

### **Improved Non-Motorized Emergency Evacuation and Public Safety**

All evacuation routes out of Waikiki today rely on three existing vehicle bridges (Ala Moana, McCully and Kalakaua) concentrated on the west end of the neighborhood. Waikiki hosts 32,000 regular employees and 26 million visitors annually.<sup>6</sup> Evacuation options by foot and by bike for both residents and tourists are imperative in the event of a tsunami or emergency. A new walking and bicycling connection bisecting the 1.33 mile Ala Wai Canal can serve as an alternative evacuation route out of Waikiki in the event of a hazardous situation.

### **Complete Streets Connectivity**

Identified by the Waikiki Regional Circulator Study (2013) as a significant barrier in Honolulu's multimodal transportation network, the Ala Wai Canal between McCully Street and Kapahulu Avenue decreases pedestrian and bicycle connectivity between Waikiki and McCully-Moiliili neighborhoods. In line with Complete Streets Objectives 3 and 4 to protect and promote accessibility and mobility for all and balance the needs and comfort of all users<sup>7</sup>, over half of the O-D survey respondents indicated "lack of connections" and "poor infrastructure" as barriers that kept them from biking or walking more often across the canal.

### **Travel Time and Convenience**

The 2018 O-D survey indicated that travel time and convenience are key factors influencing people's travel decisions: 75% of people responding to the survey identified travel time as a top travel priority and 57% selected convenience.<sup>8</sup> A new crossing of the Ala Wai Canal could save 20 minutes of travel time for people on foot and 10 minutes for travelers by bike.<sup>9</sup>

### **Environmental and Public Health**

The 2018 O-D survey indicated that people walking and bicycling represent 65% of travelers who cross the canal most frequently (several times a day).<sup>10</sup> A more direct connection for people walking and biking will support Honolulu's progress toward Complete Streets Objective 7, which encourages opportunities for physical activity<sup>11</sup>. Additionally, enhancing the comfort and convenience of active travel modes increases public health as it supports higher levels of physical activity, mitigating chronic disease and obesity. Further, improving the walking and bicycling connection across the canal meets Complete Streets Objective 6 energy efficiency in travel<sup>12</sup>, in addition to the

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<sup>6</sup> Waikiki Business Improvement District, (2010) Profile of Waikiki, <http://www.waikikibid.org/waikikiprofile.htm>

<sup>7</sup> Revised Ordinances of Honolulu 14-33.2 Complete Streets Policy; principles, [https://www.honolulu.gov/rep/site/ocs/roh/ROH\\_Chapter\\_14a20\\_\\_33.pdf](https://www.honolulu.gov/rep/site/ocs/roh/ROH_Chapter_14a20__33.pdf)

<sup>8</sup> Ala Pono Origin-Destination Intercept and Online Survey Responses, 2018 <https://www.honolulu.gov/completestreets/alapono>

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Revised Ordinances of Honolulu 14-33.2 Complete Streets Policy; principles, [https://www.honolulu.gov/rep/site/ocs/roh/ROH\\_Chapter\\_14a20\\_\\_33.pdf](https://www.honolulu.gov/rep/site/ocs/roh/ROH_Chapter_14a20__33.pdf)

<sup>12</sup> Ibid.

Mayor's Directive on Climate Change and Sea Level Rise which mandates proactive solutions to reduce fossil fuel greenhouse gas emissions.<sup>13</sup>

### **Vibrant Canal**

The areas within a convenient walking and biking distance of Central Waikiki with a new crossing over the Ala Wai Canal<sup>14</sup> host 96,000 residents<sup>15</sup>, 87,000 employees<sup>16</sup>, and 23,000 students<sup>17</sup>. The appearance and experience of the canal plays a role in not only the quality of life of these surrounding areas but also in Waikiki's role as a world-class destination attracting 26 million visitors annually.<sup>18</sup> Bolstering the economic vibrancy and environmental vitality of the Ala Wai Canal with quicker, attractive access to destinations and public space will enhance the canal as a regional destination.

### **Affordable Access**

Upwards of 25% of Waikiki, McCully, and Moiliili residents do not own a car and regularly commute by means other than a private automobile.<sup>19</sup> Additionally, these neighborhoods are home to relatively high proportions of transportation marginalized residents, with 17% of residents over 65 years of age<sup>20</sup> and 7% of households living under the poverty level<sup>21</sup>. In Hawaii, the poverty level for a family of three is \$23,900. With housing costs averaging at 36% of income and transportation costs at 14%<sup>22</sup>, many low-income Honolulu residents experience affordability challenges. Increasing the convenience and comfort of walking and bicycling for residents around the canal provides lower cost transportation options for people who would benefit the most and are most likely walk or bike.

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<sup>13</sup> Mayor Kirkwell City-Wide Directive on Climate Change, July 16, 2018, <https://static1.squarespace.com/static/59af5d3cd7bdce7aa5c3e11f/t/5b725bcda4a998f8502eb4f/1534221263208/Mayor%27s+Directive+18-02.pdf>

<sup>14</sup> Walk and Bikeshed Analysis, Ala Pono Kickoff Presentation, 2018, <https://www.honolulu.gov/completestreets/alapono>

<sup>15</sup> 2010 United States Census, Census Tracts in Waikiki Bikeshed, Table QT-P1, <https://factfinder.census.gov/>

<sup>16</sup> 2015 LEHD (Longitudinal Employer-Household Dynamics) Origin-Destination Employment Statistics, Block groups in Waikiki Bikeshed, <https://lehd.ces.census.gov/data/>

<sup>17</sup> 2010 United States Census, Census Tracts in Waikiki Bikeshed, Table QT-P1, <https://factfinder.census.gov/>

<sup>18</sup> Waikiki Business Improvement District, (2010) Profile of Waikiki, <http://www.waikikibid.org/waikikiprofile.htm>

<sup>19</sup> OahuMPO 2017-2020 Transportation Alternatives Program, Ala Wai Pedestrian and Bicycle Safety and Mobility Project Application, <https://www.oahumpo.org/2017-2020-transportation-alternatives-program/>

<sup>20</sup> 2010 United States Census, Census Tracts in Waikiki Bikeshed, Table QT-P1, <https://factfinder.census.gov/>

<sup>21</sup> 2016 American Community Survey 5-year estimates, United States Census, Census Tracts in Waikiki Bikeshed, Table S1903, <https://factfinder.census.gov/>

<sup>22</sup> Bureau of Labor Statistics, Consumer Expenditures for the Honolulu Metropolitan Area: 2015-2016 [https://www.bls.gov/regions/west/news-release/2017/pdf/consumerependitures\\_honolulu\\_20171205.pdf](https://www.bls.gov/regions/west/news-release/2017/pdf/consumerependitures_honolulu_20171205.pdf)

## Project Goals

### **Safety from Traffic**

The project will provide a safer, more comfortable, and lower-stress walking and biking connection across the canal than those existing connections with high volumes of vehicular congestion and collisions.

### **Improved Non-Motorized Emergency Evacuation and Public Safety**

The project will increase overall public safety by creating an additional walking and bicycling connection over the Ala Wai Canal to serve as an alternate emergency evacuation route out of Waikiki. This evacuation route would be immediately accessible 24-hours per day by foot or bicycle thereby decreasing evacuation times in the event of a hazardous situation.

### **Complete Streets Connectivity**

The project will fill a gap in Honolulu's multimodal transportation network and expand the reach of walk and bikesheds around the Ala Wai Canal with an accessible crossing that creates direct connections between destinations and decreases travel time for people walking and biking.

### **Travel Time and Convenience**

The project will reduce travel times by providing a more direct, convenient connection for walking and biking trips.

### **Improve Environmental and Public Health**

The project will provide a safe, comfortable, connected walking and bicycling connection across the canal that allows more people the option of using active transportation of daily transportation thereby encouraging physical activity, reducing emissions, improving air quality, and bolstering public health.

### **Vibrant Canal**

The project will support neighborhood and regional vibrancy with an attractive, world-class crossing of the Ala Wai Canal that enhances Honolulu's cityscape and public realm, further establishes the canal and Waikiki as a regional destination, and celebrates of Hawaiian heritage and character.

### **Affordable Access**

The project will enhance public health and social equity by providing access to safe, affordable active transportation options for low-income and elderly populations that may rely on walking and bicycling for transportation.