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State of Affairs: City and County of Honolulu Transportation Options in Regards to Oahu’s Kupuna

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State of Affairs

City and County of Honolulu Transportation Options in Regards to Oahu’s Kupuna

Morgan Wynne

Research Project (Urban and Regional Planning)
Mentors: Tom Dinell and John Goody

This report examines the numerous transportation options available to our kupuna, or elderly community, on the island of Oahu. Each form of transit is explored based on what it does successfully and what that particular service fails to do. This report examines what transportation options that are most accessible and feasible for improvement. Does a specific option require more funding to be successful or does it need more vehicles or employees? Do the issues behind the service fall on the operator or the user? Each of these questions and more are taken into account to establish whether or not a specific transit option should be improved and how it can be improved.

In examining the existing conditions this report suggests changes to two transportation services: improve or add simple shelters facilitating comfort and accessibility, and with 25% of the public bus’s ridership above the age of 55, improved bus stop infrastructure creates better environments for long waits in rural areas for our island’s elderly.

Rideshare is a transportation option that allows for continued autonomy and quick, efficient pickups and drop offs. This service is impeded by spotty coverage in high elderly population neighborhoods. The use of government subsidies or financial programs may create an incentive for drivers to pick up individuals within these neighborhoods allowing for rideshare to be more readily available to those in a higher age demographic.

The purpose of this study is to address some of the issues associated with the Age-Friendly Cities (AFC)’s goal of Timely and Responsive Public Transport, with reference to an elderly ( >65) ridership foremost in mind. Among the concerns expressed in the AFC Implementation Plan with regard to Transportations are:

- Promoting ease of intermodal switching
- Address the needs of rural riders
- Promote the integration of transportation into the larger AFC plan

Initial research focuses on examining the successes and shortcomings within current modes of transportation that are already in existence within the City and County of Honolulu. Through this initial research we

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will be able to look at the gaps within our current system. The next step in the process is to address potential shortfalls and establish actions that can possibly fix or alleviate present challenges.

The 2015 population of the City and County of Honolulu was 998,714 people. It is expected that by the year 2040 almost 27% of our local population will be above the age of 65. Between 2010 and 2040 it is expected that identified population will increase 104% (AFC). This consistent trend implies that Hawai‘i will need to adapt to make sure our elderly populations can stay fit, healthy and comfortable.

The high-density areas of elderly revolve around the city center areas with a median density and then spread out (Figure 1). High-density areas like Hawai‘i Kai, Pearl City, and Aiea located on the fringe of the metropolitan center are just far enough to be separate from the urban core, but not far enough to be isolated from it. In fact, more than half of Honolulu’s older population, about 57%, have lived within their current communities for twenty years or more (AFC).

The current high-density location of our elderly populations has created a need for improved transportation for our city. The Age Friendly City Plan envisions “a city where everyone has access to suitable, safe, clean, affordable, and timely transportation throughout the Island of Oahu” (AFC), potentially developing Honolulu into a truly age-friendly city.

Section 1: The Bus

Established in 1971, TheBus, has been run by Oahu Transit Services and covers the entire island encompassing 93 routes. The price-point per trip ranges between $1 and $2.50 depending on age and passes. There are 335 vehicles in the fleet with 4200 stops across the island. Yearly estimated ridership is 68 million people. TheBus is the preferred option for elderly transportation due to its island-wide reach and affordability (TheBus).

There are several major bus fares used by the current ridership:

- The adult fare applying to everyone 17 and older at $2.50 a trip, most commonly used day-to-day
- There are $60 monthly passes available for purchase at TheBus offices, Foodland grocery stores, 7 Eleven convenience stores, City Halls, and University of Hawai‘i campuses
- A full year bus pass for $660 at the abovementioned locations (TheBus)

Additionally the disability fare, which allows those with disability identification to pay a reduced fare of $1.00 per bus trip. There is an application process required for this pass only filled out at satellite city halls and TheBus Pass Office. This pass also offers an option for a $30 one-year pass and a $60 two-year pass. Riders with this pass must carry their disability card and present to the bus driver (TheBus).

The last relevant fare is the senior fare, which is a $1.00 permanent reduced fare for those over the age of 65. The bus will either accept a form of identification and a cash payment per trip or seniors may purchase an annual bus pass priced at the same one-year and two-year rate as a disability bus pass. A monthly pass sticker for an individual’s identification card may also be purchased for $5.00. The senior pass is unique because the holder has the ability to renew their pass via mail, removing any requirement for to return to the bus pass office or satellite city hall for a new pass (TheBus).

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1. Making Honolulu an Age Friendly City. See page 6 for more details
2. Making Honolulu an Age Friendly City. See page 6 for more details
3. Making Honolulu an Age Friendly City. See page 4 for more details
Figure 2  Map showing the locations of Satellite city halls on Oahu

The distribution of satellite city halls are only based in high-density population areas. This specific distribution leaves riders within rural communities challenged when obtaining proper services from those far away locations. Many people will pay the regular fee for a ride, but the lack of convenience and the mandatory nature of the in-person purchase of passes could be problematic for those with transportation difficulties, and compounded by the lack of amenities at many rural (outside the immediate vicinity of Honolulu) bus stops throughout the island. Rural bus stops are often neglected and in disrepair lacking proper sun shading that could make the often longer wait times unbearable for riders in the area.

Like many of the services that were assessed during this research TheBus is one where information on times and routes is most easily accessed through the Internet and personal phones (TheBus). TheBus’s use of applications and online printable schedules is beneficial for the community at large, but for those who are digitally challenged the bus needs improvements to better serve the community.

Existing bus routes work efficiently, but the infrastructure around bus stops in many rural areas are not ideal for our island environment. The 2015 bus stop requirements for a pavilion or roof are as follows: “Shelters—transfer points, two or more bus routes that service a pick-up stop (normally used by boarding passengers), and stops on bus routes with headways greater than 40 minutes.” (Title VI Program Report). These requirements are reasonable for the general public but don’t take into account Honolulu’s climates effect on our elderly, or the distance our elderly are able to travel on foot. A 1983 study found that only 40% are willing to walk 1000 feet for a stop (Nation Wide Transportation Study). With this in mind it can be assumed that elderly in our community would be more inclined to go to a bus stop with proper amenities.

TheBus’s service has adequately served the greater Oahu community, but it continues to have many aspects requiring comprehensive improvements. The massive transportation coverage and affordable rates, allows our island riders to get from place to place efficiently and affordably. No matter how good the bus may be, it still has its shortfalls regarding areas with high elderly populations such as, Kailua, Hawai‘i Kai, and Aiea. All have ample coverage by buses such as the 1, 57, and 11 routes, but these routes also run on hourly or half-hourly timetables. While this is a negative for these areas, the ridership is considerably lower going into and out of those neighborhoods due to the smaller populations in comparison to more urban areas. Improvement to wait times, poor rural infrastructure and addressing the technology gap for scheduling are needed improvements in TheBus moving forward.

Section 2: The Handi-Van

The Handi-Van is a massive resource run through the Department of Transportation Services. This service utilizes a membership system set up through TheBus office to transport the elderly and those with disabilities throughout the city. There is a monthly pass sticker that is affixed to the front of a Handi-Van identification card that is received after this pass has been approved. Riders pay a $2.00 fare when they take the Handi-Van per one-way trip payable by cash or ticket similar to TheBus. The service is available island-wide Monday through Sunday from 4am to 1am. An all-day service is available to areas located within ¾ of a mile of TheBus routes 2 and 40 (TheBus). A rider is required to go to Kalihi Transit Center Bus Pass Office to purchase any form of ticket, sticker or yearly pass. The system requires an appointment made by phone one to three days in advance.

Studies indicate a linear correlation of the population in several different neighborhoods to the amount of Handi-Van pickups in those same areas. This further il-
The service is widely and consistently utilized throughout the island especially in high-density populations for pick-ups and drop-offs, such as Ewa Beach, Liliha, and Waipahu; areas with high elderly populations (Handi Van Data).

The data seen in \( \geq 65 \) section in the table 1 has, on average, more riders than the 65+ section for both drop off and pick ups. This could mean that, while used mostly by the above-65 populous, the service is actually more readily available to those with disabilities at any age.

### Section 3: Ridesharing

Both Uber and Lyft are rideshare companies that operate within Hawai‘i using a phone application as a medium to connect drivers and passengers.

<table>
<thead>
<tr>
<th>AFFORDABLE CAR</th>
<th>UBERX</th>
<th>LYFT-STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Fare</td>
<td>$2</td>
<td>$2</td>
</tr>
<tr>
<td>Per Minute</td>
<td>$0.20</td>
<td>$0.22</td>
</tr>
<tr>
<td>Per Mile</td>
<td>$1</td>
<td>$1.10</td>
</tr>
<tr>
<td>Cancellation Fee</td>
<td>$5</td>
<td>$5</td>
</tr>
<tr>
<td>Service Fee</td>
<td>$1.20</td>
<td>$1.55</td>
</tr>
<tr>
<td>Minimum Fee</td>
<td>$4</td>
<td>$5</td>
</tr>
</tbody>
</table>

Uber is a considerably cheaper when using the most affordable options from either company. The payment method is similar to metered taxis except the final price of the trip is taken from the credit card or debit card that is connected to the passenger’s account with the company (Uber Hawaii).

In comparison to the more affordable options available to both companies Lyft is the cheaper alternative with large groups (Table 3). This service-type while currently popular with a younger demographic could be effectively adapted to work for elderly community activities.

Uber has two other options of transportation for their subscribers, as well as frequent community-boosting deals based on the city of residence.

The two options available to patrons are as follows: 
**UberSELECT** is a luxury transportation option that is really only used for business and high-end events.

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7 Highlighted spaces are areas with the highest total’s in the County

and is not pertinent to this research. On the other hand, UberASSIST is a transportation alternative that allows mobility-challenged individuals to utilize Uber services. Each driver that operates the UberASSIST vehicle is trained by the Open Doors Organization to give the patrons the best service possible. All UberASSIST vehicles can accommodate wheelchairs, walkers, and scooters. Originally a Los Angeles start-up, it has relocated to Oahu. UberASSIST is the ideal transportation option for individuals that need a quick transportation option between destinations without the need to schedule a pick up ahead of time. The current issue with UberASSIST is that drivers with the ability to pick up those who require additional assistance also act as normal UberX drivers who pick up passengers who do not require additional assistance. In prioritizing rides, many select UberX over UberAssist trips due to reduced strain on the driver.

Table 3  Price Breakdown differences of alternative vehicles available

<table>
<thead>
<tr>
<th>GROUP VEHICLE</th>
<th>UBERXL</th>
<th>LYFT-PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Fare</td>
<td>$3.84</td>
<td>$3</td>
</tr>
<tr>
<td>Per Minute</td>
<td>$0.35</td>
<td>$0.45</td>
</tr>
<tr>
<td>Per Mile</td>
<td>$2.80</td>
<td>$2.60</td>
</tr>
<tr>
<td>Cancellation Fee</td>
<td>$5</td>
<td>$5</td>
</tr>
<tr>
<td>Service Fee</td>
<td>$1.20</td>
<td>$1.55</td>
</tr>
<tr>
<td>Minimum Fee</td>
<td>$7</td>
<td>$6</td>
</tr>
</tbody>
</table>

Table 4  Price Breakdown differences of alternative vehicles available

<table>
<thead>
<tr>
<th></th>
<th>UBERASSIST</th>
<th>UBERSELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Fare</td>
<td>$2</td>
<td>$5</td>
</tr>
<tr>
<td>Per Minute</td>
<td>$0.20</td>
<td>$0.35</td>
</tr>
<tr>
<td>Per Mile</td>
<td>$1</td>
<td>$3</td>
</tr>
<tr>
<td>Cancellation Fee</td>
<td>$5</td>
<td>$10</td>
</tr>
<tr>
<td>Service Fee</td>
<td>$1.20</td>
<td>$1.20</td>
</tr>
<tr>
<td>Minimum Fee</td>
<td>$4</td>
<td>$10</td>
</tr>
</tbody>
</table>

Uber and Lyft are subject to fluctuating prices depending on current demand of the services. This fluctuating demand is called “surge pricing” and is a multiplier of the normal price that the trip would be. For example, an average trip to Ward Cinems from the Honolulu Zoo is roughly $8. Prior to confirming the trip, the application will inform you that demand is high and surge pricing is in effect resulting in a final trip cost of “x 3.8” and possibly higher depending on demand (Uber Honolulu). Surge pricing impacts around rush hour in the morning and afternoon as well as during the late evening, and weekends.

Uber and Lyft are both successful nationwide and worldwide ridesharing programs that are very effective in Honolulu. While both companies supply affordable transit alternatives that are easy to use, convenient, and reliable there are several gaps within them that are unique to Hawaii. These ridesharing companies share several faults with TheBus:

- Scheduling reliant upon personal technology (i.e. smartphones)
- Severely limited service in outlying or rural areas
- Presenting issues for an elderly market that limits the repeated use of their services.

The largest negative both of these services exhibits is that each individual driver is essentially their own boss. This translates to drivers sourcing out where the money is, rendering rural areas without service while urban areas have the majority of drivers. Therefore, riders in areas like Kailua and the North Shore are unable to source the company services at all due to a lack of drivers in their area.

Furthermore, Uber and Lyft both utilize average people to drive, most of whom work for rideshare in addition to their main daytime job. Approximately 70% of all ride share drivers use Uber and Lyft as a form of secondary income (Sherpa Share). This leaves the daytime hours while most drivers are at work with a reduced amount of drivers servicing the community, when the majority of elderly riders are at greatest need for rideshare services. This rider-driver disconnect leaves customers with fewer options for transportation.

Possible solutions to these problems may be facilitated through state legislature incentivizing each neighborhood to have a required amount of drivers servicing in or near identified major rural neighborhoods within established peak hours. Developing a state-run organization/network is another option. This organization/network could potentially operate based on already existing business models dedicated to service a more rural-based clientele while dovetailing into the urban core of Uber and Lyft. Such an organization/network in place would make transportation options for the elderly more effective, low cost, and efficient.
Section 4: Bicycles

Many cities throughout the world have adopted bicycling to combat urban sprawl, improve health, and combat global environmental issue and Hawaii is no exception to this trend. However, in comparison to cities like Copenhagen and Tokyo, Honolulu is still considered an infant in the bicycling world. With one official protected bike lane on the island and several others being planned, Honolulu is making progress in becoming a more bike-friendly city.

In the 2015 yearly bike count, the city recorded 5655 bikes being utilized by the populace over the course of three business days. The data was gleaned through bike counter locations that were strategically spread out across the urban area in places like Waialae Avenue, Monsarrat Avenue, Kapahulu Avenue, Dole Street, King Street, Nu’uanu Avenue, Dillingham Boulevard, Pearl Harbor Bike Path, Fort Weaver Road, and Kapolei Parkway. These varying locations created a localized data set, but left out a large portion of the islands biking population.9

The city’s lone street-safe protected bikeway is located along King Street has improved ridership by 88% since its implementation along that main thoroughfare (Bike Count). This implies that protected bike lanes are a worthwhile investment for other parts of our city and can diminish our reliance on motor vehicles in the urban core. There are a total of ten other bike loops that are frequently used by tourists and local cyclists alike. However, these routes are often narrow, unprotected and run along high traffic roads. While the city makes strides in improved biking culture on O’ahu we still face challenges inherent to bicycling as a form of transportation. Cycling has positive impacts in reducing living and transportation expenses while promoting healthful lifestyle options for our aging population, which is invaluable to the AFC.

Section 5: Taxi services

There are over ten different taxi companies that operate on the island of, including popular ones such as Charlie’s Taxi, The Cab and newcomer Eco Cabs. The cab business in Hawaii has flourished for as long as the islands have been a tourist hub, making companies such as Charlie’s Taxi and The Cab local icons. They operate by utilizing a standard metered payment method common in most cities.

Charlie’s Taxi boasts no surcharge pricing and has flat rates to many tourist destinations throughout Oahu. They also utilize an app similar to Uber that allows for quick scheduled pick-up and drop-off times. Their services can also be requested in advance through their phone dispatch system. Standard services also include airport shuttles, other island destinations, and a Medicab service. The Medicab service is advertised as transportation to and from doctor’s appointments and other similar medical service locations. Medicab drivers are trained in CPR and other emergency practices but are not paramedics.

Table 5 Rates for Charlie’s Taxi: Medicab Service10

<table>
<thead>
<tr>
<th>FARE</th>
<th>TAXIMETER RATE OF ELAPSED TIME AND DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door-to-door Escort Fee</td>
<td>$5</td>
</tr>
<tr>
<td>Escort to Upper floors</td>
<td>$5 Additional if service is requested</td>
</tr>
<tr>
<td>Wheelchair pick up/return</td>
<td>$5 Additional if service is required</td>
</tr>
</tbody>
</table>

The Cab service is nearly identical to Charlie’s Taxi in terms of business model utilizing the standard meter system as well as a phone app or phone dispatch to request rides. They also feature an Americans with Disabilities Act (ADA) accessible services called Accessible Van. Accessible Vans are fitted with air conditioning, tinted windows, and ADA-approved features. Each accessible van can seat one wheelchair passenger and up to three non-wheelchair passengers without luggage. The rates are as follows:

Table 6 Rates for the Cab Taxi: ADA Accessible service11

<table>
<thead>
<tr>
<th>FARE</th>
<th>TAXIMETER RATE OF ELAPSED TIME AND DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door to Door, Pickup/drop off</td>
<td>$30+3.90/mile</td>
</tr>
<tr>
<td>Curb to Curb, Pickup/Drop off</td>
<td>$20+3.90/mile</td>
</tr>
<tr>
<td>Rural Area Surcharge</td>
<td>$16.50</td>
</tr>
<tr>
<td>Hours of Operation</td>
<td>7/Day 5am to 9pm</td>
</tr>
</tbody>
</table>

While taxi companies like Charlie’s Taxi and The Cab are respected local icons they serve little purpose as an alternative mode of transportation for our aging community. The metered rates are often higher fares than if they were able to use similar forms of transit. The main ben-

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10 Charly’s taxi has detailed information about all of their transportation options (Medicab)
11 See the Accessible section for more information and how to reserve a trip (The Cab Hawaii.)
benefit that cabs have over rival services and even TheBus is they service clients anywhere on the island. Another benefit is their accessible ADA services that are more comprehensive than other companies. However, the aforementioned Handi-Van and other transit options are available, taxi's pricing and accessibility of their services renders them not cost optimal.

**Section 8: Pedestrian**

The Hawai‘i environment is an ideal climate that welcomes a lively pedestrian lifestyle both in rural and urban areas. Based upon the Dangerous by Design 2014 report done by Smart Growth America the elderly only comprise 12.6% of the total population of the United State but adults aged 65 and older account for nearly 21 percent of pedestrian fatalities nationwide from 2003 to 2010 (Dangerous by Design 21). Hawai‘i is the worst for elderly pedestrian fatalities with 6.81 deaths per 100,000 of those aged above 65. This statistic is three times the statewide rate for all ages; illustrating a definite issue that needs to be addressed.

Walking is a healthy and accessible form of transportation that supports all ages, but if the streets are too dangerous for pedestrians, then locomotion becomes a negative for everyone. The danger for pedestrians is attributed to many different things, but one of the highest is poor pedestrian infrastructure.

Figure 4 depicts the number of road complaints across the island. This illustrates that the density of road complaints illustrates that Honolulu’s main sidewalk problems are within dense urban areas, which may be due to several factors including high pedestrian use, area construction, or lack of maintenance on the city’s part.

Figure 5 illustrates that while there have been roads repaved in recent years. This does not necessarily mean that sidewalk complaints (Figure 4) were addressed. Recent projects like the Kapauhulu Ave repaving in Summer and Fall of 2015 repaved the whole stretch of the road from Waikiki to the H-1 Highway but left all the sidewalks along that same stretch without maintenance.

As seen in Figure 6 the majority of pedestrian accidents happened within the urban core and other high population areas. Areas with the highest amounts of accidents during the years of 2007–2013 are also the areas

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12 http://gis.hicentral.com/storyboards/transportation/index.html


that have had repaving or maintenance done since 2013. This implies that steps have not been made by the city to improve the current problems. While the repaving of roads and streets might have reduced complaints the amount of accidents still remain high especially within the above-65 demographic, which is seen by the data presented within the Dangerous by Design report in table 7 below.

Table 7 State pedestrian fatality rate per 100,000 persons, among persons aged 65 and older, 2003–2010

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Pedestrian fatalities per 100,000 people 65 and older (2003–2010)</th>
<th>Pedestrian fatalities per 100,000 people 75 and older (2003–2010)</th>
<th>Pedestrian fatalities per 100,000 people of all ages (2003–2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hawaii</td>
<td>6.81</td>
<td>9.75</td>
<td>2.23</td>
</tr>
<tr>
<td>2</td>
<td>California</td>
<td>5.03</td>
<td>6.40</td>
<td>2.28</td>
</tr>
<tr>
<td>3</td>
<td>New York</td>
<td>4.94</td>
<td>6.02</td>
<td>1.96</td>
</tr>
<tr>
<td>4</td>
<td>District of Columbia</td>
<td>4.47</td>
<td>4.24</td>
<td>2.99</td>
</tr>
<tr>
<td>5</td>
<td>Florida</td>
<td>3.92</td>
<td>4.73</td>
<td>3.08</td>
</tr>
</tbody>
</table>

Table 7 above illustrates that Hawai‘i is in a dangerous position for elderly pedestrians with an almost 2 percent lead over California and New York. Hawai‘i needs to make changes to how we approach our pedestrian population. While there has been work to improve our current infrastructure to meet the norms of the 21st-century the city has not seized the opportunity to focus on the pedestrian experience during these construction projects. A focus on vehicular transportation, and the lack of civic projects like complete streets and sidewalk planted trees reduces the safety of the pedestrian population within the city.

**Section 9: Conclusion**

This project has examined all available transportation options in Honolulu that are available to our island’s kupuna. The goal for the first portion of the research was to examine the shortcomings and successes of the existing transportation options to evaluate if they are sufficient enough for our kupuna’s needs. From there the research examined what possible solutions were available to remedy issues that were discovered during the first portion of research. The final challenge was to combine this information and find a few solutions that could be feasible enough to implement in the near future.

The Handi-Van is the most popular option for elderly transportation in Honolulu. It is a service that relies on specific destination pick-ups that are told to the company ahead of time. The service is predominantly dominated by the mobility impaired and the advanced elderly. Handi-Van is immensely popular resulting in overtaxed drivers and missed pick up times due to overscheduling and diminished vehicle support. This service also picks up all disabled individuals, including those under 65 years of age, which detracts from the elderly transportation aspect that this study focuses on. There is potential in expanding the Handi-Van service, or creating an additional service that is specifically for those above the age of 65 years as a means of transportation.

Pedestrian accessibility is a constant challenge in Hawai‘i. Areas like Waikiki, Ala Moana, and other tourist locations are ideal pedestrian environments but many residential and rural areas on Oahu have little to no sidewalks or sidewalks that are severely damaged or in disarray. The 2015 Dangerous Cities study found Honolulu to be the most dangerous city for pedestrian accidents within the 65 and above age group (Dangerous by Design). Numerous sidewalk complaints and pedestrian accidents throughout the island’s rural and metropolitan neighborhoods discourage an elderly pedestrian lifestyle. In addition, many streets with or without sidewalks lack trees that give shade, which would make many areas more hospitable for a walking culture in Hawaii. For the purposes of this research pedestrian life in Hawai‘i is more of a support service in that it is imperative to the safety of those utilizing other services but it is too costly and intrusive to focus exclusively on.

Bicycling shares many of the same flaws with Honolulu’s pedestrian culture but is improving at a more rapid pace. With the new inclusion of the King Street Bike Lane and many newly painted lanes in other neighborhoods cycling culture in Honolulu is improving. The main challenges that persist with biking currently are that there tends to be two separate polarized groups of cyclists that are each getting attention separately. Bike routes like Diamond Head Loop are focused on recreational and tourist bicyclist and are often popular because they get heavy use but are still dangerous due to lack of protection from vehicles. The King Street Bike Lane is Honolulu’s premier example of a properly protected bike lane in Hawai‘i, and is heavily used by the business commuting community, but the route itself is short. The King Street Bike Lane shows that protected bike lanes are used and can be installed in other areas that could promote a healthy bike culture. Potential areas for protected bike lanes include...
a route from Hawai‘i Kai to Kahala to connect shopping and retail centers, as well as opening up popular eastside recreational bike routes to users. Other routes that could potentially benefit from a protected bike lane would be connecting Kapolei to Pearl City and Kaneohe to Lanikai, allowing for a safe alternate transportation for all ages in those communities.

Other transportation options like taxis and private transit companies do exist within Honolulu but often are too expensive or do not have the required infrastructure to support our elderly community. This leaves the city to rely on overworked organizations like the Handi-Van. In January 2017 there was discussion of utilizing rideshare companies to handle overflow riders from the Handi-Van. For example, if there is a huge delay in a Handi Van pick-up the organization could connect their clients with rideshare drivers instead to make sure there is no wait time. This option has potential due to rideshare’s various driver options including ADA-accessible vehicles with trained drivers. The issue lies within the ease of setting up a partnership with these rideshare companies.

Rideshare is a transportation option that is affordable and easily accessible for the majority of the population but is less accessible to the aging population of this study. These elderly populations reside in more rural areas like Kapolei, Hawaii Kai, and Mililani where rideshare availability is spotty if nonexistent. These companies’ reliance on independent drivers means areas with less business will remain with less business than a more popular area. Services like Uber and Rideshare make the most money in the evenings and mornings with a younger crowd, leaving the business hours of the day fairly blank. This is because the people they hire often have normal nine-to-five jobs and work Uber/Lyft on the side. On the opposite end of the spectrum services like TheBus and ParaTransit only work during normal business hours and not during the night. This isn’t usually a challenge for the elderly in our community since many prefer to be active in the day, but it restricts them to one or two forms of transportation that can be difficult to use as age progresses. The issue then becomes how to make independent drivers available in these neighborhoods. The nagging issue hindering Rideshare as an elderly transit option is their reliance on technology for the utilization of its services.

Rideshare is a transportation option for the island’s elderly that is most open to improvement. In Hawai‘i it is especially useful for riders to safely get from place to place while leaving personal autonomy intact, without reliance on a bus or train schedule. While this allows riders of all ages to access a vehicle for transportation, not all rides are treated equally. Rideshares focus on autonomy where individual drivers can choose where they want to go to pick up rides. This causes drivers to go to high-density urban areas to pick up, leaving more rural urban areas with no drivers and a larger rider demand. Many rural or suburban urban areas like Kailua, Hawai‘i Kai, and Kapolei continue to have limited driver presence.

Figure 7 above raises the question of how to get more drivers to stay in rural and suburban areas throughout the island. By drawing rideshare to suburban neighborhoods a safe and reliable alternate form of transit will be more available to the elderly in those communities. This in turn potentially reduces accidents and improves safety while allowing those same elderly a certain amount of autonomy without relying on a transportation option that works on a schedule. There has been a precedent for city subsidies to promote riders to utilize rideshare within their city. Altamonte Springs a county in Orlando, Florida has initiated a pilot program that has a $500,000 budget and will cover 20% of all riders’ fares within the city that begin or end their rides near transit centers (Reuters). Another similar rideshare subsidy in Tampa Bay area offers to pay $3 of every fare that starts and ends at a bus stop (Reason). While both of these particular subsidies promote and endorse the use of rideshare and public transportation, they are ineffective at solving problems inherent to rideshare as it stands today.

Rideshare on Oahu is focused on the urban cen-
ter, leaving large rural communities reliant on personal vehicles and the bus. A potential solution to this problem is the creation of rural zones where drivers will make a slightly larger amount of money if they pick up or drop off riders in those areas. These pay increases could then be subsidized by the local government to facilitate ease of use for the drivers and their respective rideshare companies. These pay increase zones have the potential to keep drivers in the rural areas where they dropped off. This will also entice drivers to linger or even stay within these areas during daylight hours allowing more access of their services to the elderly community. While there are other issues inherent to rideshare within the Oahu community, making these services more available to the island as a whole will benefit not only our elderly community, but the entire island as well.

TheBus is Honolulu's oldest and most reliable form of public transit. It is one of the most popular forms of transportation among the elderly with almost 22% of all ridership in 2013 being above the age of 55 (Oahu Transit Services). This leaves The Bus as the most accessible form of transportation for the elderly in our community. While the bus itself may be an established, efficient, and affordable form of transportation some of the existing policies and regulations need to be adjusted to be more encompassing of all age groups.

Rural areas like Kapolei and Kaneohe have adequate bus access, but like many areas, lack proper amenities to make longer wait times more comfortable in those rural areas. Bus routes like C, 1, 23, 40, 41, 43, and 56 are all thirty minutes to an hour in wait time (Oahu Transit Services).

Improved bus stops and sidewalks near rural bus stops improve safety and enjoyment of using that service. The TriMet line in Portland, Oregon is an example of bus stops and street improvements fixing problems like poor connectivity and safety issues.

In Table 8 we can see that after the renovation of bus stops along the TriMet line lift ramp usage increased every year showing a positive correlation between stop renovations and increase in usage. The improvements at the stops along the TriMet route saved the city’s ADA Para transit service almost $60,000 per year since their update (TCRP). While the TriMet project focused on a large-scale renovation, Honolulu, in comparison, does not need to go that far to start improvements. Rural area bus stops can be improved simply with leveled stops and coverings to promote safety and comfort at the stop. As funds become available and sidewalk renovation start in those areas the bus stops will already be completed and funds will not be required for them.

After examining all of the existing transportation options for the elderly in Hawaii, rideshare and TheBus are the most feasible for effective change. Uber and Lyft are both affordable and consistent transportation options available to everyone on the island, but are held back by drivers focusing on urban areas for making money. TheBus system is an island-wide established form of transportation that is massively accessible but is hindered by the lack of infrastructure and safety at rural stops and locations. Improving these transportation systems will not only open the island up more for our elderly but it will also improve the lives of all ages in our island community.

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