

California Avenue  
Solutions Meetings Report

*Let's Take Action for a Safer California Avenue & Wahiawa!*



Report by Hawaii Bicycling League and Blue Zones Project - Wahiawa

9/13/19



## California Avenue Solutions Meetings Report

### Executive Summary:

In 2015 and 2017, two people were killed while walking on a short section of California Avenue. Additionally, California Ave has a documented history of pedestrian, bicycle, and motorist crashes and injuries in recent years. The two deaths and clear need for improved traffic safety brought Hawaii Bicycling League and Blue Zones Project – Wahiawa to organize a Solutions Meetings on June 24, 2019 to discuss and pursue solutions to make the street safer for walking and everyone. The Solutions Meeting was well attended by a broad cross-section of government departments, elected officials, community organizations, businesses, and general community members. The group discussed a wide range of solutions, including:

- Implement the changes proposed in the California Honolulu Complete Streets Implementation Study Location Report (June 2015). Specific items in this plan that would drastically improve pedestrian safety and should be advanced include:
  - Implement a Road Diet – transitioning the street from four to three vehicular lanes with one thru lane in each direction and center left turn lane. This treatment is known to drastically reduce speeding and eliminates “multiple treat” risks at pedestrian crossing, both dramatically improving pedestrian safety, as well as the safety of all road users.
  - Implement Pedestrian Crossing Islands – This provides a refuge for pedestrians to stop at in the middle of the road and allows them to give their attention to approaching drivers from one direction at a time. The results are dramatically improved pedestrian safety.
  - Implement Roundabouts at select intersections – The 2015 City study proposes Roundabouts at the California Ave intersections with Lehua St/Muliwai St and North Canes St. Roundabouts dramatically improve safety at intersections by reducing speeds through intersections, eliminating the dangers associated with left turns, and reducing the points of potential conflict.
- Increase enforcement focused on speeding, failure to yield at crosswalks, running red lights, and other pedestrian safety related violations. Including through pursuing legislation for automated camera enforcement that will allow for 24-7 enforcement in critical areas.
- Increase education on safe driving, walking, and bicycling

The above are some of the most promising solutions to improve pedestrian safety and general traffic safety on California Avenue. In addition to these, many others were discussed and are detailed in the report. All of these solutions require action by a variety of parties, whether it be supporting changes as a community member, enforcing laws as an HPD officer, funding improvements as an elected official, or designing and implementing street changes as a transportation official. Please take action to make these changes a reality so we can achieve a safer California Ave and Wahiawa where everyone can choose to walk, bike, or drive.

## California Avenue Solutions Meetings Report

### California Avenue – Solutions Meeting

On June 24, 2019 Hawaii Bicycling League and Blue Zones Project Wahiawa convened a Solutions Meeting in response to deaths of Jose C. Malapit and Millard Clifton Jr. who were struck and killed while walking on California Ave and due to the documented history of traffic safety issues on California Ave. The Solutions Meeting focused on actions that can be taken in terms of engineering, enforcement, and education to reduce the likelihood of pedestrian and bicycle fatalities and injuries occurring in the future.

### Background on Solutions Meetings

Solutions Meetings bring together police, transportation officials, emergency responders, public health organizations, elected officials, victims and survivors, community groups, and anyone interested in a safer street at the site where someone walking or biking was killed or seriously injured to discuss and pursue solutions to prevent a future tragedy from occurring in the area. While we seek to understand the contributing factors to the tragic crash the objective isn't to assign blame to any parties, but to provide for an informed conversation about solutions. We also collect data on crashes and known safety issues in the area to provide additional information so that solutions can address the traffic safety needs of the area. Solutions include engineering (changes to the street), education (to drive, bike, walk safely), and enforcement (to deter those that endanger others).

Solution Meetings are built off the Vision Zero concept that 1) traffic deaths are unacceptable; 2) traffic deaths are preventable; 3) we can and should take all necessary actions to prevent future deaths and injuries on our streets.

### California Avenue – Conditions and Documented Safety Issues

California Avenue between Kamehameha Hwy and North Cane St serves as a “main street” for Wahiawa with many stores, offices, and services along the 0.4-mile section of street. The street is a constant flow of people walking, biking, and driving, as well as is home to Wahiawa Transit Center. The street generally has 4 lanes – two in each direction – bike lanes, parking on both sides, and sidewalks.

While the street has dedicated walkways and bike lanes, the design has some inherent safety issues. The wide and multi-lane street is conducive to speeding which creates safety hazards to all users of the road. The 4 lanes to cross provide a hazard to pedestrians, particularly at the 3 unsignalized crosswalks where there is the “multiple treat” risk of one motorist stopping for a crossing pedestrian and blocking the line of sight of another motorist approaching in the second lane. Unsignalized pedestrian crossings of multi-lane roads are known to have lower rates of motorists yielding to pedestrians and higher danger to pedestrians. The multi-lane street also makes left turns dangerous for both motorists and pedestrians and bicyclists as it makes it more challenging for the motorist to identify all road users they must yield to before turning. The street also has wide turn radii (wide turns) that allow motorists to take right turns at a high rate of speed and reduce the chances of a motorist seeing and stopping for a crossing pedestrian. The issues described are consistent with those documented in the City's “Honolulu

## California Avenue Solutions Meetings Report

Complete Streets Implementation Study Location Report – California Avenue from Kamehameha Highway to Wahiawa District Park” (June 2015).<sup>1</sup>

The dangers of the street are documented in the record of injuries on the street. In the 5 years from 2014-2018, the 0.4-mile section of California Avenue had 41 serious injuries requiring an ambulance response – 12 pedestrians, 3 bicyclists, and 26 motorists (EMS data, note that the location is that of the person that calls 911 and not necessarily where the crash occurred). While specific details on the injuries aren’t available, it shows a clear trend of safety issues for pedestrians, bicyclists, and motorists.

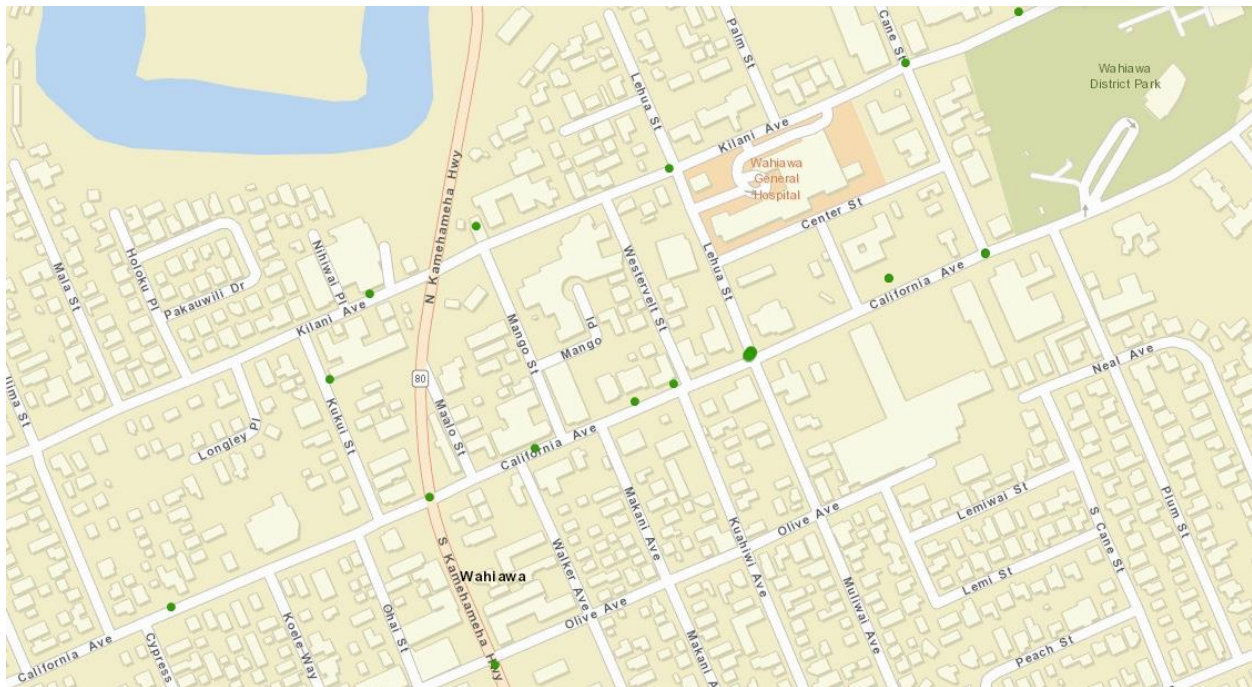


Figure 1 - Map of Pedestrian Injuries 2014-18

### California Avenue – information on 2 tragedies

Jose C. Malapit - On April 1, 2015 at about 1:20pm, Jose C. Malapit was struck and killed while walking on California Ave near North Cane St. Mr. Malapit was walking on the sidewalk in front of the former Payless when a motorist veered off the road onto the sidewalk and collided with him, killing him.

Millard Clifton Jr. - On December 1, 2017 at about 10:05am, Millard Clifton Jr. was struck and killed while walking at the intersection of California Ave and Kuahiwi St. Mr. Clifton was crossing Kuahiwi St a little back from California Ave when a motorist turning left off of California Ave struck him.

<sup>1</sup> [http://www.honolulu.gov/rep/site/dts/dts\\_docs/160907\\_CS\\_Implementation\\_Report\\_Wahiawa\\_FINAL.pdf](http://www.honolulu.gov/rep/site/dts/dts_docs/160907_CS_Implementation_Report_Wahiawa_FINAL.pdf)

## California Avenue Solutions Meetings Report

### Solutions Meeting – Description

The Solutions Meeting was held on Monday June 24 from 2:30-4:30pm at the Civic Center Lawn in front of the Hawaii Public Health Nursing Office (910 California Ave). It included a walk to site of the both fatalities.

### Solutions Meeting – Participation

Hawaii Bicycling League and Blue Zones Project – Wahiawa invited a wide range of people to participate in the Solutions Meeting and all who were interested in a safer street were welcome to participate. The Solutions Meeting was well attended by a broad cross section of government departments, elected officials, community organizations, businesses, and general community members, with a total of 36 participants.

#### List of Participants and Affiliations

<u>Name</u>	<u>Affiliation</u>
Renee Espiau	CCH Complete Streets
Justin Iha	CCH Dept of Transportation Services
Dayna Jones	Lanakila Pacific Kupuna Wellness Center
Mark Arinaga	Dept of Education
Dori Nakahira	Community member
Lynnette Higa	Dept of Health, Public Health Nursing
Kristine Kurohara	Dept of Health, Public Health Nursing
Amy Perruso	State House, District 46
Winona Aguero	Community member
Keoni Ahlo	WCBA
Nahoku Ahlo	Lions
Duncan Osorio	State Senate
Daria Ano	State Senate
Marge Streb	Olelo
Noelle Sutherland	Blue Zones Project Wahiawa
Darius	Community member
Kelly Anaya	Councilmember Tsuneyoshi's office
Norman Hann	EMS
Stephen Miyake	Community member
Arene Ah You	Honolulu Police Department
Billy Masaniai	Honolulu Police Department
Diane Dohm	OahuMPO
Kiana Otsuka	OahuMPO
Cynthia Au	Blue Zones Project Wahiawa
Joslyn Sato	Blue Zones Project Wahiawa
Blanie Kawamura	Hawaii Dept of Transportation, Highways
Kari Benes	Dept of Health, EMSIPSB



## California Avenue Solutions Meetings Report

Darin Uesugi	Wahiawa Fresh!
Stephen Silva	Honolulu Police Dept, Traffic Division
Alesia Au	Wahiawa Neighborhood Board
Carl Otsuka	Honolulu Fire Dept
Logan Takeda	OahuMPO
Layden Akasaki	City Dept of Transportation Services
Jeffrey Alameida	Blue Zones Project Wahiawa
Anthony Chang	Hawaii Bicycling League
Daniel Alexander	Hawaii Bicycling League

### Solutions Meetings – Solutions Discussed

In the nearly two-hour long meeting, all participants were asked to contribute any engineering (changes to the street), education (to drive, bike, walk safely), and/or enforcement (to deter those that would endanger others) solutions that they felt would help make the street safer and prevent another tragedy from occurring. The below is a list of the solutions mentioned (duplicate solutions were combined):

- roundabouts at California Ave intersections
- pedestrian crossing islands
- improving visibility at crosswalks through making sure there is sufficient line of sight
- bulb-outs/curb extensions,
- more different modes of transportation (buses, bicycles)
- education on pedestrians making eye contact and drivers needing to look out for pedestrians
- social media campaign to spread traffic safety awareness
- sharper corners, corners are round, more trees
- additional speed limit signs
- pedestrian bridges, tunnels across California Ave
- more enforcement from HPD
- striping the stop bar at crosswalks further back
- bus only lane on the curb lane
- improved pedestrian warning signs
- better lighting at the crosswalks
- pedestrian beacon to warn motorists when a pedestrian is crossing
- leading interval for pedestrians - letting pedestrians cross first, 5 seconds early, before the light turns green for motorists
- make Kuahiki St and other side streets one way to minimize danger with vehicles turning in and out of these streets and to provide a safe place to walk on the side street
- sign waving to bring more awareness to this issue, making crosswalks more visible
- flags at each side of crosswalk, make pedestrians more visible
- in-road pedestrian warning signs (flappers)
- speed bump or raised crossing at different intersections

## California Avenue Solutions Meetings Report

### Solutions Meetings – Further Analysis on Solutions

Many of solutions aligned with changes proposed in the City's "Honolulu Complete Streets Implementation Study Location Report – California Avenue from Kamehameha Highway to Wahiawa District Park" (June 2015). Given that these solutions were identified in the 2015 report and noted again by Solutions Meeting's participants the solutions seem to be particularly promising and warranting further pursuit. The below provide some additional information on these solutions to hopefully help push forward their further consideration and ultimately their implementation.

### Road Diet

A Road Diet would convert California Ave from four to three vehicles lanes with one thru lane in each direction and center left turn lane. This treatment is known to drastically improve safety - studies have found that Road Diets reduce crashes by 19-47%<sup>2</sup>. While some might fear this would delay traffic significantly, that isn't likely to be the case for California Ave. On streets with less than 25,000 vehicles per day, road diets have been shown to be implemented without having a significant negative impact on traffic flow and according the City's 2015 report California Ave had 18,100 average vehicles per day. Part of the reason Road Diets don't have traffic impacts is that left turns are dealt with more efficiently; this would be particularly effective on California Ave where many people are making lefts into the various stores and side streets.

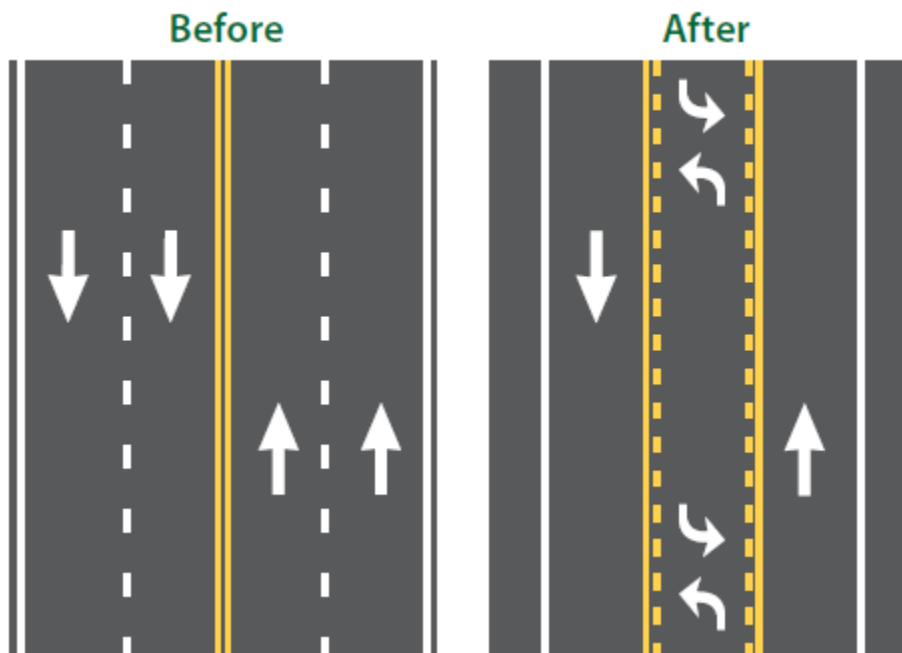


Figure 2 - Road diet diagram

The road diet such major positive safety impacts for a number of reasons:

<sup>2</sup> [https://safety.fhwa.dot.gov/provencountermeasures/road\\_diets/](https://safety.fhwa.dot.gov/provencountermeasures/road_diets/)

## California Avenue Solutions Meetings Report

- **Reduces speeding** – The reduction to one through lane in each direction reduces speeding, particularly high-end speeding (more than 15mph over) by eliminating the opportunity for speeding motorists to pass slower moving motorists. The reduction in speed has a dramatic positive impact on reducing collisions through reducing stopping distance and increasing motorists field of vision, and in reducing severity of collisions due the lesser damages and injuries occurring at lower speeds.
- **Reduces the number of motorists that need to stop for a crossing pedestrian** – The reduction to one through lane in each direction reduces the number of drivers that must see and yield to crossing pedestrians.
- **Removes “multiple threat” risk for pedestrians crossing** – The reduction to one through lane in each direction eliminates the hazard situation whereby one motorist stops for a pedestrian in a crosswalk and blocks the line of sight of a motorist approaching in the second lane.
- **Reduces crossing distance for pedestrians** – The reduction of one travel lane reduces pedestrian crossing distance exposed to motorized traffic. The Road Diet configuration also works well with pedestrian safety crossing islands which can further reduce crossing distance and provide midpoint refuges.
- **Improves lines of sights** – Reduction to one lane in each direction eliminates conditions where the vehicle in one lane blocks line of sight for a motorist in the other lane. This dramatically improves safety of all crossing (for example: pedestrians at unsignalized crosswalks, turning vehicles, vehicles crossing from a side street).
- **Eliminates rear-ends collisions of left turning vehicles** – Through providing a left turn lane, left turning motorists are removed from the path of travel of through-moving vehicles.
- **Eliminates weaving** – Reduction to one lane in each direction eliminates motorists weaving and abrupt lane changes to avoid vehicles waiting to make a turn.

The City has successfully implemented Road Diets on several Oahu streets including Kelou Dr (Kailua), Kamehameha IV Rd (Kalihi), Ala Napunani St (Salt Lake), and Lehua Ave (Pearl City). The City’s Complete Streets Design Manual (adopted in 2016) includes Road Diets as an important “Complete Streets” traffic safety solution and describes benefits consistent with the above.

A Road Diet should be pursued further on California Ave as it would dramatically improve safety, preventing the likely of further people being killed or seriously injured and making the street conducive to walking, bicycling, and driving.

### [Pedestrian Crossing Islands](#)

Pedestrian Crossing Islands would be used at unsignalized crossings on California Ave (three currently exist) to provide a refuge for pedestrians to cross. Studies have shown pedestrian



## California Avenue Solutions Meetings Report

crossing islands improve pedestrian safety by 56%<sup>3</sup>. The dramatic positive safety impact for pedestrians is due to:

- Pedestrians cross half of the street at a time – this allows a pedestrian to more easily engage motorists to ensure that they are stopping and yielding for pedestrians to cross, after the refuge at the middle of the street the pedestrian can engage any approaching motorists to cross the other side of the street safely.
- Focuses drivers' attention on the crossing – the presence of the island focuses drivers' attention on the crossing and alerts them that someone maybe crossing
- Slows traffic – the islands tend to slow traffic by visually and physically constricting the roadway, which makes it more likely motorists will see crossing pedestrians and yield.



*Figure 3 - Pedestrian Crossing Island example*

Pedestrian Crossing Islands have been used successfully implemented on Oahu and should be brought to California Ave to improve pedestrian safety. Pedestrian crossing islands work well with a Road Diet, as the Road Diet provides the need space for the island. Combining the Pedestrian Crossing Islands and a Road Diet would have a dramatic safety benefit for pedestrians.

### Roundabouts

Roundabouts on California Ave would transform intersections by creating a “circular intersection” designed to be navigated at a slow speed and where vehicles entering yield to those already in the Roundabout. Studies have shown Roundabouts to reduce injuries by 76% and fatalities by 90%.<sup>4</sup> This very high safety improvement is achieved by:

- Reducing speeds – Roundabouts are generally designed to be navigated at a maximum of 15mph, which results in major safety benefits both in reducing crashes and, even

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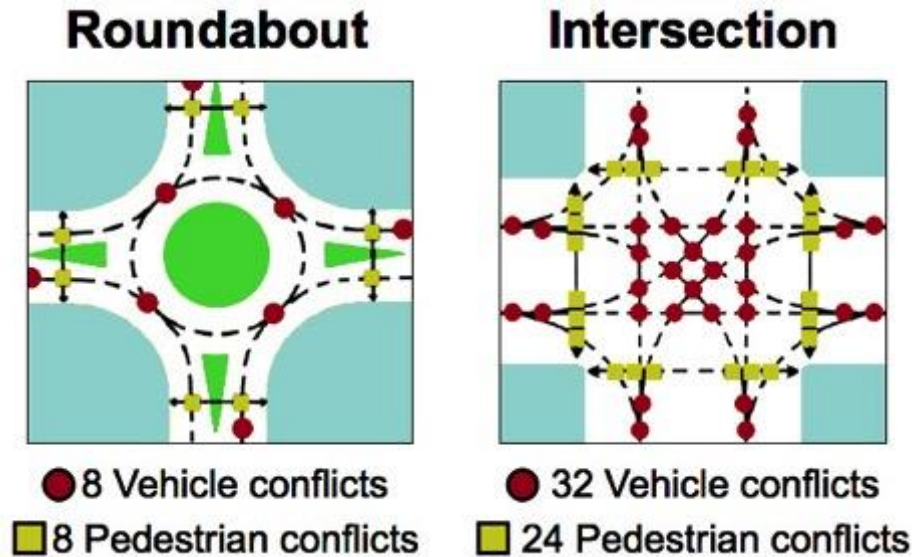
<sup>3</sup> [https://safety.fhwa.dot.gov/provencountermeasures/ped\\_medians/](https://safety.fhwa.dot.gov/provencountermeasures/ped_medians/)

<sup>4</sup> <https://safety.fhwa.dot.gov/intersection/innovative/roundabouts/fhwasa08006/>

## California Avenue Solutions Meetings Report

more importantly, reducing severity of injuries from the crashes that do occur, nearly eliminating most fatal crashes.

- Eliminates left turns – left turns are one of the most dangerous maneuvers and Roundabouts completely eliminate them, as all turns become right turns (entering or exiting the Roundabout).
- Reduced points of conflict – the design of roundabouts relative to the traditional intersection significantly reduces the points of conflict – where two vehicles, or a vehicle and pedestrian/bicyclist may collide. The figure below shows the reduction in conflicts.



*Figure 4 - Conflict Points Roundabout vs. Traditional Intersection*



*Figure 5 - Ala Napunani St/Likini St Roundabout example*

## California Avenue Solutions Meetings Report

The City has successfully implemented Roundabouts in a number of places on Oahu such as Kaneohe, Kailua, Makiki, and including at Ala Napunani St/Likini St in Salt Lake, as shown in the picture above.

The 2015 City plan proposes roundabouts at intersections with Lehua St/Muliwai St and North Canes St. Roundabouts should be considered further at these intersections and others along California Ave and implemented as a solution to make the streets significantly safer for everyone.

### Action

How do we go from ideas to solutions? It's going to take action! From all us!

All of these solutions require action by a variety of parties, whether it be supporting changes as a community member, enforcing laws as an HPD officer, funding improvements as an elected official, or designing and implementing street changes as a transportation official.

Special mahalo to HPD officers who committed to get straight to work doing speed enforcement on California Ave. HBL and Blue Zones Project Wahiawa commits to work in pursuit of seeing solutions in place. Many of the solutions are engineering changes and DTS is the primary responsible party - we'll be following up with DTS specifically on the proposed solutions. DTS will need support from community groups, elected officials, and those who want to see Wahiawa a safer place for walking, biking, and driving. Please take action to make these changes a reality so we can achieve a safer California Ave and Wahiawa where everyone can choose to walk, bike, or drive.

### Contact

On behalf of the Hawaii Bicycling League and Blue Zones Project – Wahiawa thank you for reading this report and your interest in making California Ave and Wahiawa a place where everyone can safely walk, bike, and drive. Please get in touch with us to push for solutions.

Hawaii Bicycling League, [www.hbl.org](http://www.hbl.org), 808-735-5756, POC – Daniel Alexander, [daniel@hbl.org](mailto:daniel@hbl.org)

Blue Zones Project – Wahiawa, [www.facebook.com/bzpwahiawa/](https://www.facebook.com/bzpwahiawa/), POC – Jeffrey Alameida, [Jeffrey.Alameida@sharecare.com](mailto:Jeffrey.Alameida@sharecare.com)