

**Department of Transportation Services (DTS)  
Public Transit Division Title VI Program  
Service Equity Analysis Report  
Local Routes: 60 Ala Moana – Haleiwa via Pali Highway  
65 Downtown – Kaneohe – Kahaluu  
70 Lanikai – Maunawili – Marine Corps Base Hawaii**

**Introduction**

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1B, which requires any FTA recipient providing 50 or more fixed route vehicles in peak service located in an urbanized area (UZA) and serving a population of 200,000 or greater to evaluate any major service change at the planning stage to determine whether those changes have a disparate impact on minority populations and disproportionate burden on low-income populations.

The City and County of Honolulu (City) comprises the entire island of Oahu and includes the Honolulu UZA, 200K to 1M in population, and the Kailua-Kaneohe UZA, 50K to 199.9K in population. UZA Kailua-Kaneohe is located in the City's Windward region, northeast of Urban Honolulu and separated by the Koolau mountain range.

A future rail line is under construction to connect Leeward Oahu with Urban Honolulu and DTS is currently in the initial bus-rail integration planning phase for communities located along or adjacent to the rail line. Since the rail line will not directly benefit Windward Oahu communities; prior to the full commitment of time and resources to bus-rail integration planning, it was important for DTS to evaluate Windward bus service to address current ridership trends and provide connectivity to the future rail line.

In 2017, while conducting route analyses and public outreach for peak express routes, the 2018 Windward TheBus Routes Redesign Project (WBRR) was initiated to evaluate and propose modifications to peak express and local routes that serve the Windward communities of Waimanalo, Kailua, Kaneohe, and Kahaluu. This report is the service equity analysis of the changes DTS is proposing for TheBus\* Routes 60, 65, and 70 tentatively scheduled for implementation in June 2019. (\*Honolulu's bus system is named TheBus). The results of this service equity analysis will also be included in the 2019 Title VI Program.

**Background**

Windward bus service was established incrementally over the last 40 years and there has been relatively little change to current bus routing in the Windward region while the Kailua-Kaneohe communities have experienced major growth and development during this time, as evidenced by their UZA status.

The construction of the Pali, Likelike, and H-3 Interstate Highways and Tunnels is the contributing factor to the development of the Kailua-Kaneohe communities. Pali Highway directly connects Kailua to Urban Honolulu's Central Business District (CBD),

Likelike Highway connects Kaneohe to Urban Honolulu's Kalihi District, and the H-3 Highway connects Joint Base Pearl Harbor-Hickam (JBPHH) located on the western fringe of Urban Honolulu in the Aiea District with Marine Corps Base Hawaii (MCBH) located in the Aikahi community, the boundary between Kailua and Kaneohe.

As the direct connection to CBD, Windward bus service began operating along Pali Highway and with the exception of a few peak period express routes, most Windward bus service currently operate on Pali Highway to connect to Urban Honolulu. As Kaneohe grew, these Kailua-centric routes were extended to include Kaneohe with different route variations for cost containment and to address new development.

The main goals of restructuring Windward bus service in the WBRR are:

- Evaluate current service and address service demand/productivity to maximize service delivery/quality based on the priority of need, operating efficiency, and resource allocation.
- Connect Windward communities more effectively and provide more connections to Windward Community College.
- Connect Windward districts with Honolulu, Kalihi Transit Center, and the future rail system.

Public outreach for the WBRR Phase 1 was conducted in early 2018 to provide the public with the opportunity to provide feedback to DTS and included informing the public through: Councilmember (CM) and Neighborhood Board (NB) presentations, TheBus webpage, and distribution of written materials about DTS' proposed route modifications. The public comment was collected through an online survey, email, NB, voicemail, or speaking directly with DTS or Oahu Transit Services, Inc. (OTS), the City's bus operations contractor staff.

Public outreach for the WBRR Phase 2 was conducted in late 2018 and consisted of notifying riders of route modifications based on public comments from Phase 1. The public was able to submit comments through the same means that were available to them during WBRR Phase 1.

### **Route 60: Ala Moana – Haleiwa via Pali Highway and Windward Coast**

Route 60 provides service between Ala Moana Center (AMC), CBD, Kaneohe, and the North Shore via the Pali Highway and Windward coast. DTS plans to reroute the Route 60 from Pali Highway to Likelike Highway via the H-1 freeway, provide new service to Anoi and Luluku Streets residents and Windward City Shopping Center, and transfer a segment of Heeia service to Route 65.

### **Route 65: Downtown – Kaneohe – Kahaluu**

Route 65 provides service between CBD, Kaneohe, and Kahaluu via the Pali Highway. The proposed Route 65 will be extended to AMC due to the Route 60 restructure from Pali Highway to Likelike Highway and to the Heeia segment being discontinued by Route 60.

**Route 70: Lanikai, Maunawili, Marine Corps Base Hawaii**

Route 70 provides service between Maunawili Valley, Kailua Town, MCBH, and Lanikai. The proposed route will discontinue service to MCBH.

**Proposed Changes:**

Attachment 1 contains the existing and proposed route maps for Routes 60, 65, and 70. The route redesign will generally use the existing bus network to provide restructured service. The proposed changes are summarized and detailed below.

<b>Routes 60, 65, and 70</b>		
<b>Route #</b>	<b>Existing Routing</b>	<b>Proposed Routing</b>
<b>60</b>	AMC, CBD, Kaneohe, Heeia, Windward Coast, North Shore	AMC, CBD, Kalihi, Anoi/Luluku, Kaneohe, Windward Coast, North Shore
<b>65</b>	CBD, Kaneohe, Kahaluu	AMC, CBD, Kaneohe, Heeia, Kahaluu
<b>70</b>	Lanikai, Kailua Town, MCBH, Maunawili	Lanikai, Kailua Town, Maunawili

AMC: Ala Moana Center  
 CBD: Central Business District (Downtown Honolulu)  
 MCBH: Marine Corps Base Hawaii

<b>Routes 55, 60, and 70 Proposed Changes</b>	
<b>Existing Route #</b>	<b>Proposed Changes</b>
<b>60</b>	1) Transfer Pali Hwy segment to H-1 & Likelike Hwys; 2) extend routing to Anoi/Luluku Rds; 3) provide service to Windward City Shopping Center; 4) transfer Heeia segment to Route 65.
<b>65</b>	1) Extends all trips to AMC, 2) extend service to Heeia/Alaloa Sts; 3) increase frequency
<b>70</b>	1) Discontinue service to MCBH

AMC: Ala Moana Center  
 MCBH: Marine Corps Base Hawaii

**Route 60**

- 1) Transfer Pali Highway segment to Likelike Highway via H-1 freeway.
- 2) Route is extended to serve Anoi and Luluku Roads and Windward City Shopping Center.
- 3) Discontinue service on Heeia and Alaloa Streets. Route 65 will serve this segment, however this routing causes discontinuation of service along Haiku Road between Alaloa Street and Kamehameha Highway.
- 4) No change to the amount of trips and frequencies.
- 5) Schedule revisions to account for new service areas.

**Route 65**

- 1) Extend all trips to AMC.
- 2) Extend service to Heeia and Alaloa Streets; this extension causes discontinuation of service on Haiku Road between Kamehameha Highway and Alaloa Street.
- 3) Increase number of trips and frequencies.

- 4) Schedule revisions to account for new service areas.

### Route 70

- 1) Discontinue service to MCBH.
- 2) No change to the amount of trips and headways.
- 3) Schedule revisions to account for discontinuation of MCBH service area.

### **Public Engagement Process**

In 2018, DTS conducted public outreach in two (2) phases for the WBRR, in accordance with DTS' Public Participation Standard Operating Procedures. Routes 60, 65, and 70 are included in the WBRR public outreach.

Riders of the affected routes, as well as the public were encouraged to provide comments and suggestions via email, phone call, voicemail, or online survey. Public outreach included notifying affected CM/NB, distributing informational material, posting notices on TheBus website/on-board buses/at selected bus stops, conducting surveys, and on-board rider checks.

DTS' efforts to engage minority, low income, and Limited English Proficient (LEP) riders included posting notices at bus stops located in minority and low income Census block groups, posting car cards on all the buses, and conducting on-board distribution of notices, brochures, and surveys.

To engage LEP persons, the informational brochures were translated into the languages identified in DTS' 2016 Public Transit Title VI program for printing, upon request. Informational material on the website was available in a format to use the translation feature.

The timeline below outlines DTS and OTS, public engagement activities.

November 2017

to May 2018: Conducted WBRR public outreach/surveys Phase 1 that included Routes 60, 65, and 70.

In November 2017, notified and discussed the WBRR with CM and City Council Transportation Committee (CTC). Routes 60, 65, and 70 were included in the WBRR.

In December 2017, notified affected NBs of the proposed plans in the WBRR and that presentations would be made upon request. Brochures and notices were provided to affected NBs for distribution. Conducted on-board rider checks for Route 70.

During January – April 2018, Phase 1 public outreach and comment period commenced. Detailed proposal information including route detail and maps were made available for public review and comment via online SurveyMonkey. Brochures and/or

notices were distributed to riders on-board affected routes, at selected bus stops, on placards posted onboard all buses, and at public libraries, Satellite City Halls, and selected businesses and schools in affected districts. Affected riders and the public were encouraged to attend NB meetings, obtain information/provide feedback online at DTS and TheBus websites or through phone calls, emails, or in-person. Presentations made at the CTC meeting, and at the Koolauloa, Kahaluu, Kaneohe, Kailua, and Waimanalo NB meetings.

June to  
October 2018: Based on public input and current data, revised and finalized WBRR which included Routes 60, 65, and 70.

November to  
December 2018: Conducted WBRR public outreach and comment period Phase 2 using the same methods as Phase 1.

January 2019: Routes 60, 65, and 70 service changes are scheduled for implementation in June 2019, with public outreach and rider notification in April 2019.

MCBH access point changes causing a Route 70 detour which decreases service. Met with MCBH regarding the discontinuation of service.

April to  
May 2019: Public outreach and notification scheduled for Routes 60, 65, and 70.

Notices will be distributed to CM, CTC, and NBs. Presentations will be conducted upon request by NBs. OTS webpage will be updated to inform riders of the June implementation date with details, and potential public outreach opportunities.

Notices will be distributed onboard to riders and posted at selected bus stops and on DTS/OTS websites.

June 2019: Scheduled implementation for Routes 60, 65, and 70.

### **Survey Results for Public Outreach Phase 2**

**Route 60:** Results showed that the riders were about evenly split in favoring or being against the proposed changes. A small majority preferred: 1) retaining the route on Kamehameha Highway (instead of Kahekili Hwy); 2) removing the Heeia segment; 3) new routing to Anoi/Luluku Roads; and 4) new routing on H-1/Likelike Highways.

Based on Phase 2 public feedback, changes will be made as proposed. Results of the WBRR Phase 2 survey: (39 favored/37 opposed/36 comments).

**Route 65:** Results showed the majority of riders preferred retaining the route on Kahekili Highway (instead of Kamehameha Hwy) and extending to AMC. No comments were received regarding Heeia segment.

Based on Phase 2 public feedback, routing will remain on Kahekili Highway and extend to AMC. Results of the WBRR Phase 2 survey: (93 favored/7 opposed/27 comments).

**Route 70:** The survey showed that majority of riders preferred discontinuing the MCBH segment.

Based on Phase 2 public feedback, routing to MCBH will be discontinued. Results of the WBRR Phase 2 survey: (27 favored/15 opposed/9 comments).

### **Title VI Policies and Definitions**

DTS' Title VI Program contains the policies and procedures to determine if service changes are considered "major" and to evaluate the impact of major service changes to minority and low income populations.

**Major Service Change Policy:** Eliminating a route segment is defined as major service change that requires DTS to perform a service equity analysis during the planning phase prior to implementation.

**Disparate Impact Policy:** DTS determines the occurrence of a disparate impact when adverse effects of a major service change disproportionately affects minority populations by more than 10% based on the difference between the proportion of the total minority and non-minority populations in the total service area and the proportion of the affected minority and non-minority populations within the affected service area, a ½ mile radius of the route.

**Disproportionate Burden Policy:** DTS determines the occurrence of a disproportionate burden when adverse effects of a major service change disproportionately affects low income populations by more than 10% based on the difference between the proportion of the total low income and non-low income populations in the total service area and the proportion of the affected low income and non-low income populations within the affected service area, a ½ mile radius of the route.

### **Analysis Framework**

**Methodology:** Population data using Census block groups were used to determine:

- Minority/non-minority and low income/non-low income proportion of the total service area population in the Census block groups served by the Windward Routes.
- Minority/non-minority and low income/non-low income proportion of the affected service area population located within a ½ mile radius of the Windward Routes.

The differences between the minority proportions and low income proportions were calculated to determine disparate impact on minority populations and disproportionate burden on low income populations. Differences exceeding 10% indicate that the major service change affected minority populations disparately and low income populations disproportionately.

**Data Tables:**

**Table 1: Census Block Group Minority Populations**

Route	Total Service Area			Affected Service Area			% Difference Total-Affected Service Areas	Disparate Impact >10%
	Total Population	Minority Population	% Minority	Affected Population	Minority Population	% Minority		
60	157,225	43,070	27%	135,714	46,437	34%	+8%	No
65	100,963	19,996	20%	107,508	21,124	20%	0%	No
70	43,670	12,421	28%	27,249	5,001	18%	-10%	No

**Table 2: Census Block Group Low Income Populations**

Route	Total Service Area			Affected Service Area			% Difference Total-Affected Service Areas	Disparate Impact >10%
	Total Population	Low Income Population	% Low Income	Affected Population	Low Income Population	% Low Income		
60	157,225	22,142	14%	135,714	25,996	19%	+5%	No
65	100,963	10,314	10%	107,508	12,649	12%	+2%	No
70	43,670	0	0%	27,249	0	0%	0%	No

**Required Maps:** (see Attachment 1)

Affected census block groups with minority and low income area block groups.

**Assessing Impacts**

**Disparate Impact:** The minority Census block group populations for the Routes' total service and affected service areas are shown in Table 1 above.

The effects of the service changes to Routes 60, 65, and 70 do not exceed the disparate impact policy threshold of 10%.

- The minority population for Route 60 in the affected service area is 8% more than the minority population in the total service area.
- The minority population for Route 65 in the affected service area is the same as the minority population in the total service area.
- The minority population for Route 70 in the affected service area is 10% less than the minority population in the total service area.

**Disproportionate Burden:** The low income Census block group populations for the Routes' total service and affected service areas are shown in Table 2 above.

The effects of the service changes to Routes 60, 65, and 70 do not exceed the disproportionate burden policy threshold of 10%.

- The low income population for Route 60 in the affected service area is 5% more than the low income population in the total service area.

- The low income population for Route 65 in the affected service area is 2% more than the low income population in the total service area.
- There is no low income population in the total or affected service areas for Route 70.

### **Service Equity Analysis**

Based on the thresholds established in the DTS Major Service & Fare Change Policy and Disparate Impact & Disproportionate Burden Policies, the proposed service changes to Routes 60, 65, and 70 do not disproportionately affect minority and low income populations, and can be implemented as proposed.

**Route 60:** DTS' assessment of Route 60 revealed consistent issues with scheduling and on-time performance. As the longest route in the system, it is being restructured to provide more direct service between CBD and Kaneohe to reduce the overall travel time of the entire route (AMC – Haleiwa). To improve operating efficiency and provide direct service between CBD and Kaneohe, the restructured Route 60 will travel on Likelike Highway via the H-1 Freeway to Luluku/Anoi Roads and resume service along Kamehameha Highway. Traveling along the H-1/Likelike Highways will reduce the number of bus stops served in both directions from 30 to six (6), and provides Kaneohe riders a direct connection to main Routes 1 and 2 with access to the Kalihi Transit Center, where riders have more travel opportunities to communities located in the Central Oahu, Ewa, and Leeward regions.

Due to time, distance, and an average on-time performance of 58%, the following segments will be discontinued, however, there is no loss of service since they will be serviced by the Route 65.

- Pali Highway and Kamehameha Highway between Luluku Road and Pali Highway
- Heeia segment: Alaloa and Heeia Streets.

Loss of service affects a short segment of Haiku Road between Kamehameha Highway and Alaloa Street. Two (2) bus stops in this segment will be relocated to nearby locations on Alaloa Street, and one (1) bus stop will be discontinued, however riders can easily access the adjacent bus stops on Kamehameha Highway to continue to use this route. In addition, the discontinued segments are located in Census block groups identified as predominantly non-minority and non-low income.

The route will be extended to service residents of Anoi and Luluku Roads in order to retain service to Windward City Shopping Center. Two (2) new bus stops will be established on Anoi Road, and two (2) new bus stops will be established on Luluku Road.

**Route 65:** The Route 65 restructure is relatively minor and involves extending the route to AMC from CBD and to the Heeia segment being discontinued by Route 60. Frequencies will be increased with more trips to compensate for the loss of Route 60 service along Pali/Kamehameha Highways. Loss of service in the Heeia area affects a short segment of Haiku Road between Kamehameha Highway and Alaloa Street (see

Route 60 above). The extension to AMC provides additional service to low income Census block groups.

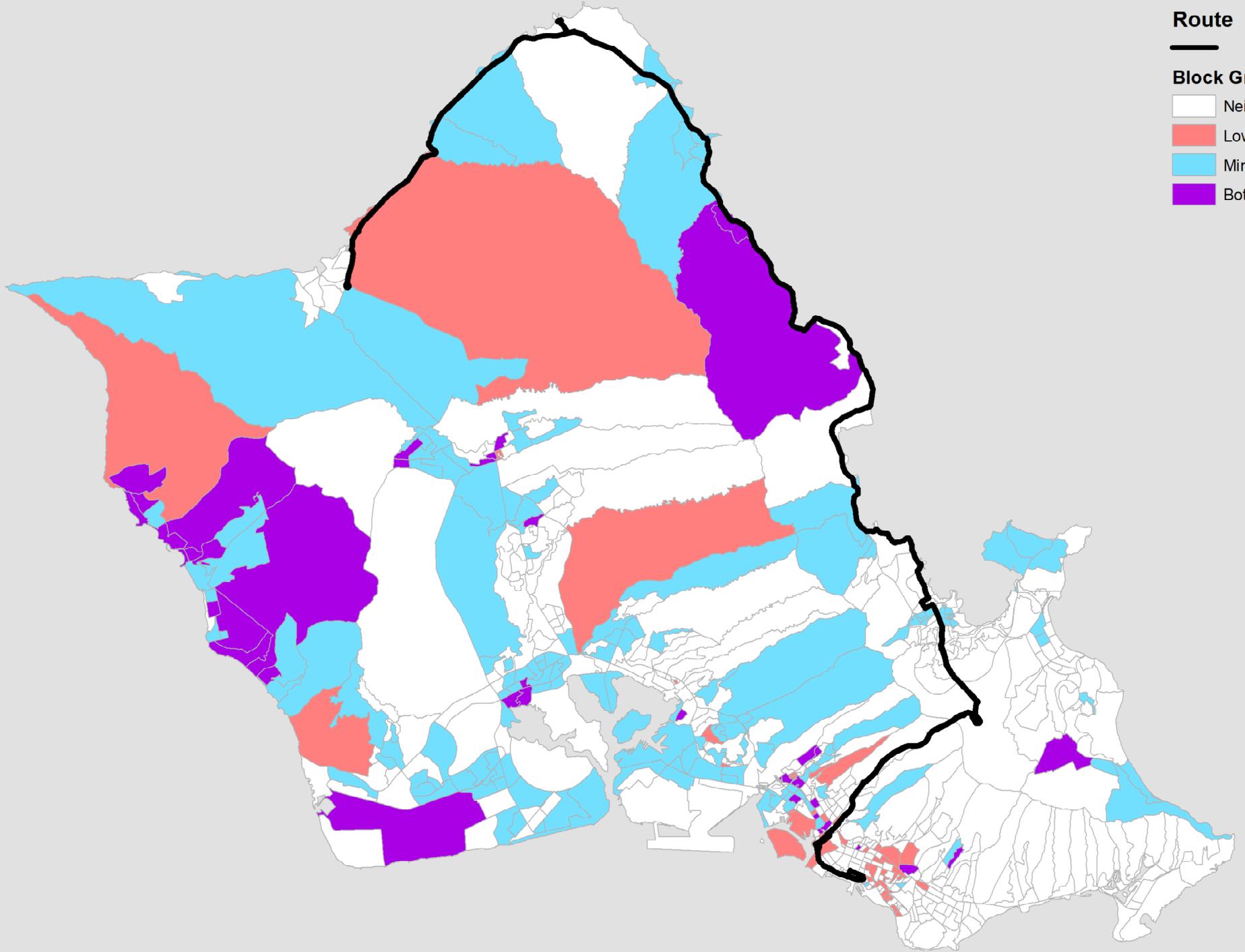
**Route 70:** DTS' assessment of Route 70 revealed continued low ridership in the MCBH segment and an average on-time performance of 60%. DTS plans to discontinue the MCBH segment; the restructured route will travel between Maunawili Valley, Kailua town, and Lanikai, and terminate at Aikahi Park Shopping Center.

Beginning in March 2016, there have been continual service delays caused by multiple unexpected gate closures that have negatively affected service resulting in the ability to only service 3 out of the original 12 bus stops, and a further reduction in ridership. According to ridership data, total route ridership along this segment averages 0 – 2 riders per day, and for majority of the sample days, there were no boardings or alightings in this segment. The time and distanced saved will be absorbed into the rest of the route to improve on-time performance.

# **ATTACHMENT 1**

## **Individual Route Maps 60, 65, 70**

# Route 60 existing - TVI/EJ Block Groups



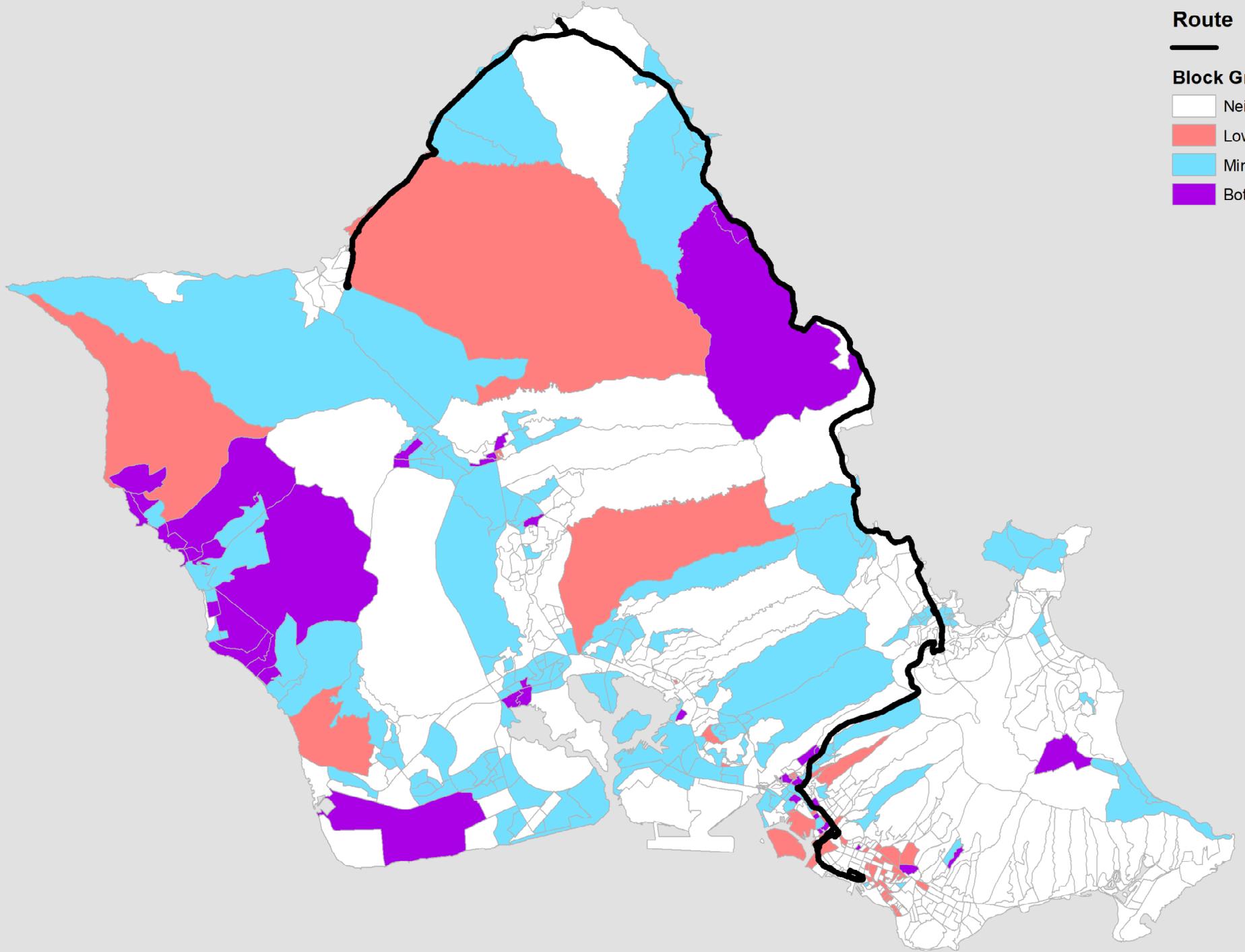
## Route



## Block Groups

- Neither
- Low Income
- Minority
- Both

# Route 60 proposed - TVI/EJ Block Groups



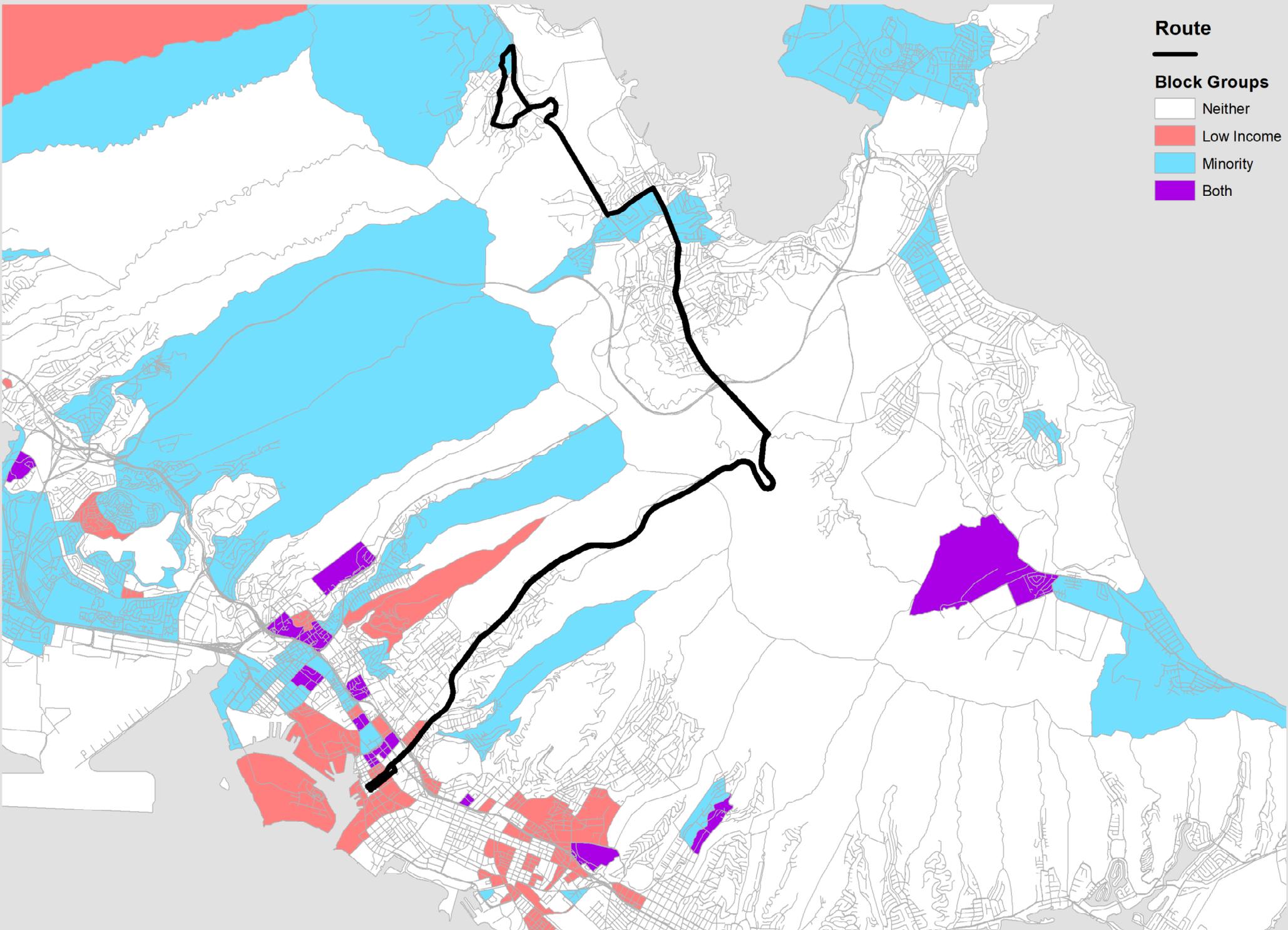
## Route



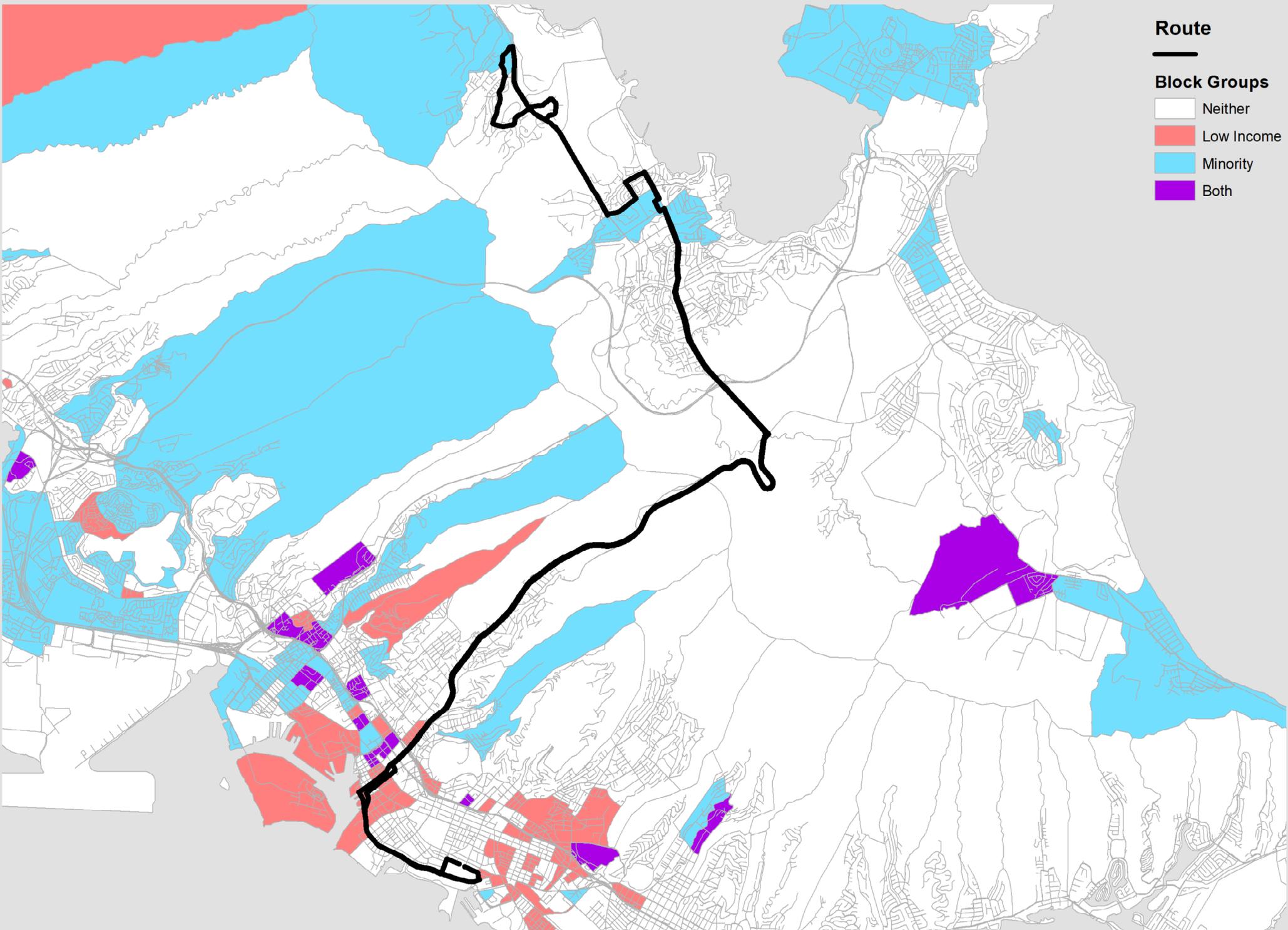
## Block Groups

- Neither
- Low Income
- Minority
- Both

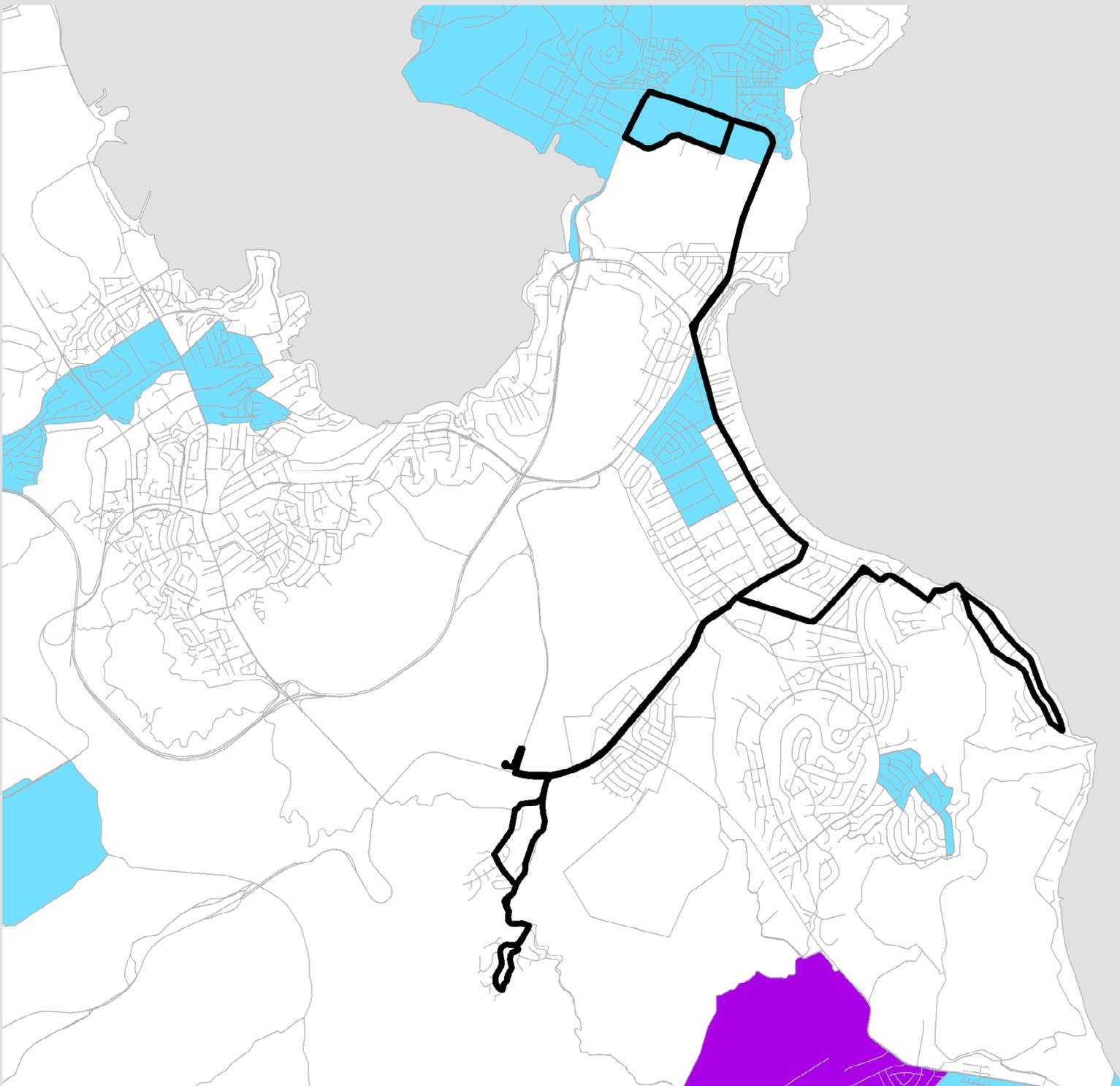
# Route 65 existing - TVI/EJ Block Groups



# Route 65 proposed - TVI/EJ Block Groups



# Route 70 existing - TVI/EJ Block Groups



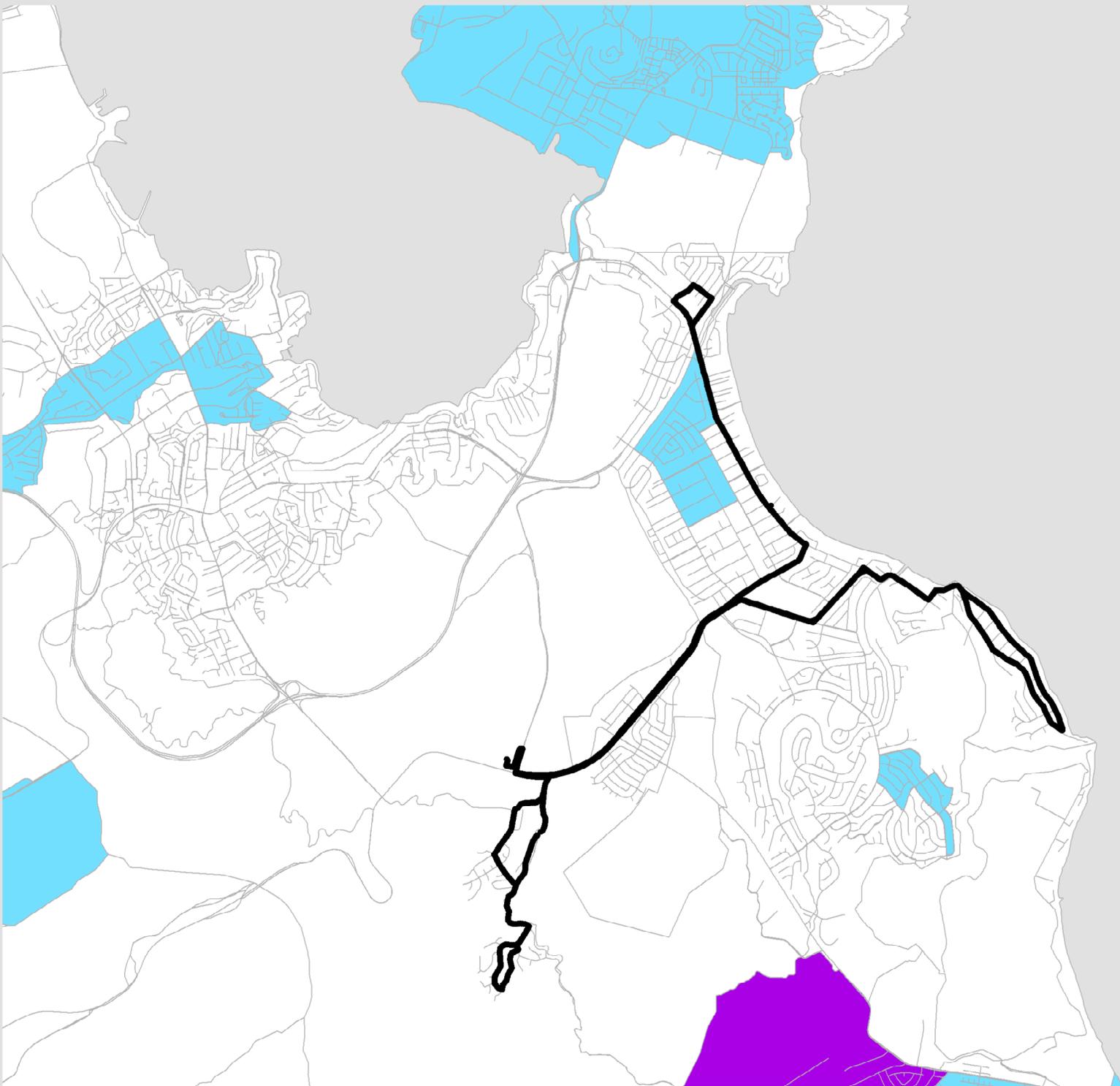
## Route



## Block Groups

-  Neither
-  Low Income
-  Minority
-  Both

# Route 70 proposed - TVI/EJ Block Groups



## Route



## Block Groups

- Neither
- Low Income
- Minority
- Both