Honolulu High-Capacity Transit Corridor Project
Alternatives Analysis

Final Definition of Alternatives Report

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Chapter 1 Introduction

On December 22, 2006 the Honolulu City Council selected a fixed-guideway alternative from Kapolei to the University of Hawai‘i at Mānoa and Waikīkī as the Locally Preferred Alternative (LPA) for the Honolulu High-Capacity Transit Corridor Project. The LPA selection was made with recognition of the fact that currently identified revenue sources, including revenues from the 0.5 percent General Excise Tax surcharge in place from January 1, 2007 through December 31, 2022, and a reasonable expectation of funds available from Section 5309 New Starts, would not be sufficient to fund the capital cost of the project. Thus a financially feasible first project, or Minimum Operable Segment, needed to be chosen. The City Council, on February 27, 2007, selected East Kapolei to Ala Moana Center, via Salt Lake Boulevard as the first project to be implemented.

This first project, East Kapolei to Ala Moana Center, via Salt Lake Boulevard, is the City’s proposed “New Start” project; the project seeking entry into preliminary engineering.

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Chapter 2 No-Build Alternative

The No-Build Alternative includes existing transit and highway facilities and most committed transportation projects anticipated to be operational in the assumed opening year of the New Start project (2018), with additional projects anticipated to be operational by 2030. There are two types of projects included in the No-Build: highway projects and transit projects. Committed highway transportation projects are those programmed in the financially constrained *2030 O'ahu Regional Transportation Plan (ORTP)* prepared by O'ahuMPO. The ORTP identifies projects for completion in the period from 2006 to 2015 and in the period from 2016 to 2030. Projects in the earlier period are assumed to be in place in 2018. Transit projects included are those that are in the financially constrained *ORTP* and are also included as funded projects in the *Statewide Transportation Improvement Program (STIP)* prepared by the Hawai'i Department of Transportation, with the exception Honolulu High-Capacity Transit project. The existing facilities and committed projects in the No-Build Alternative also will be included in all other alternatives.

Some of the committed projects would affect bus transit service. These include the two lane reversible Nimitz Highway High-Occupancy Vehicle (HOV) Flyover, two new HOV lanes on H-1 between Waiawa Interchange and Makakilo, p.m. "zipper lane" facilities on H-1 between Ke'ehi Interchange and Kunia Interchange, intra-island ferry service, and new transit centers in Mililani, Wahiawā, and Wai'anae. Note that while transit centers at Pearl City and 'Aiea are also contained in the ORTP, they are not in the STIP; hence, they are not included in the No-Build Alternative.

There are no new park-and-ride lots included in this alternative.

New Bus Services

There are two types of service modifications identified to respond to population and employment growth. The first are those new routes necessary to serve entirely new large scale developments. These are predominantly community circulators designed to operate between the new development and the nearest transit center. The type of operation for each community circulator is consistent with those in operation today including span of service and frequency of service.

The span of service matches those of other comparable routes operating into neighborhoods. The frequency of service is normally on a clocked headway interval consistent with other routes serving the same transit center such that timed-transfer connections can be made without any significant wait time (normally less than five minutes). The day of operation is consistent with the size of the development and comparable service to other similar sized developments. All community circulators provide all-day, Saturday and Sunday services.

One new *CountryExpress* route is identified in the No-Build Bus Alternative. Route D serving Wahiawa, Mililani, Downtown Honolulu and UH Mānoa is a limited-stop, all-

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day, two-directional, express bus route with an emphasis on direct service between transit centers. The service operating characteristics are consistent with existing *CountryExpress* bus operations (including the Route C). Its function is to serve as a high-capacity trunk operation using articulated (60 foot) buses. It is scheduled to make timed-connections at transit centers or to operate with frequent intervals so timed-connections are not essential. Therefore, the transfer time between community circulators and *CountryExpress* routes should be made without any significant wait times.

The other routes added to the existing bus route network all relate to ferry operations. Two of the routes are specifically designed to time connect with passenger only ferry vessel departures and arrivals at the Kalaeloa/Barbers Point ferry terminal. One route is a water taxi connecting Ko ʻOlina with the ferry terminal. Two of the routes are the ferry services themselves. One of the ferry routes operates between Kalaeloa/Barbers Point and Aloha Tower and the other between Ocean Pointe Marina and Aloha Tower.

The community circulator service in the developing Ocean Pointe area in ʻEwa is supplemented with a ferry oriented bus feeder service from ʻEwa Beach.

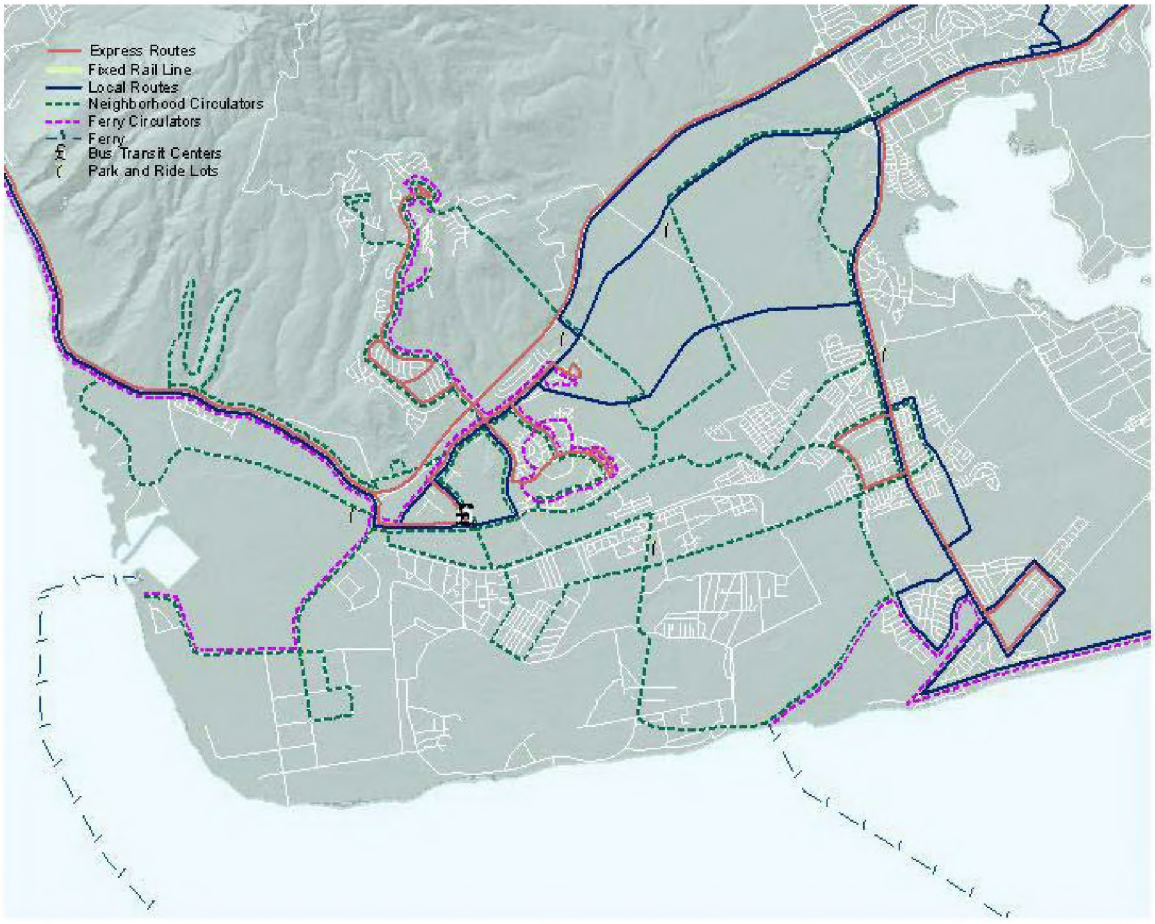
ʻEwa and Kapolei Area Bus Services

The ʻEwa and Kapolei area bus services have been redesigned to accommodate the extensive growth occurring in the region. Minor routing changes will occur for routes serving the Kapolei Transit Center due to its relocation to Wākea and Kapolei Parkway. The following section provides a description of changed and new bus services presented in Figure 2-1.

Route C: Mākaha/Kapolei/Honolulu Limited Stop Route. A minor alignment change will occur for Route C. The route will exit/enter H-1 at the North-South Road interchange instead of Makakilo Drive. This change will provide a direct connection to the UH West Oʻahu Campus. Added stops will include Farrington Hwy and Kapouka Place (replacing the Makakilo Drive and Farrington stop), Farrington Hwy and Kōwelo Avenue (west side of intersection) and Farrington Hwy and prior to North-South Road to allow access to UH West Oʻahu Campus.

Route 40: Mākaha/Honolulu Local Route. Route 40 will no longer provide service to Hawaiian Waters Adventure Park. That service will be provided by Route 419 serving Makaīwa. The route will access the Kapolei Transit Center eastbound via H-1, to Kalaeloa Blvd, to left on Kamokila and right on Wākea. From the transit center the route will travel Kapolei Parkway to left on Fort Barrette Road and right on Farrington Highway.

Figure 2-1. ‘Ewa and Kapolei Area Bus Services



Route 41: ‘Ewa/Kapolei Local Route. Route 41 will be realigned to serve the UH West O‘ahu Campus enroute to ‘Ewa Beach from Kapolei. From the Kapolei Transit Center, the route will travel Kamokila Blvd, to Farrington, to right on UH West O‘ahu Road (west), left on internal UH West O‘ahu Road, crossing North-South Road to an ‘Ewa road makai of Farrington Hwy and connecting to Fort Weaver Road. The route continues on Fort Weaver to left on Kolowaka Drive, right on Keaunui Drive to left on Fort Weaver, right on Keone‘ula Blvd, left on Kapolei Parkway, left on Kaimalie to right on Fort Weaver to the ‘Ewa Transit Center (located near Fort Weaver Road and ‘Ewa Beach Shopping Center at Pāpipi Road. At the ‘Ewa Transit Center, the route is interlined with Route 421.

Route 411: Makakilo Heights Community Circulator. Route 411 will interline with Route 417 at Makakilo Drive and Ala Hoi continuing to UH West O‘ahu Campus.

Route 413: Campbell Industrial Park Community Circulator. Mid-day service will be added to the weekday schedule offering 60-minute frequency.

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Route 415: Kalaeloa/Ocean Pointe Marina/Waipahu Community Circulator. The current Route 415 has one morning and one evening trip to the US Veteran's Housing in Kalaeloa. The revised Route 415 will offer all day service on a substantially altered alignment. Proceeding from the Kapolei Transit Center along Wākea serving the new commercial retail center in Kalaeloa, traveling along Roosevelt to right on Coral Sea Road to left on 'Ewa area road to the Ocean Pointe Marina to left on Kapolei Parkway, right on Geiger to left on Fort Weaver Road, left on Old Fort Weaver Road, right on Farrington to Leokū and Farrington Highway in Waipahu.

Route 416: Kapolei West/Ko 'Olina Community Circulator. The Kapolei West Development Concept Plan prepared by 'Āina Nui Corporation in 2004 shows the extension of Kapolei Parkway connecting with Aliinui Drive in Ko 'Olina. The Kapolei West project encompasses approximately 550 acres and will contain about 2,400 single and multi-family homes. Route 416 is designed to offer service to those new residential areas and some of the existing unserved residential areas predominantly along the roadway extension using Kapolei Parkway to Aliinui Drive from the Kapolei Transit Center. At the Kapolei Transit Center Route 416 is interlined with Route 419 serving Makaīwa Hills.

Route 417: West O'ahu Campus Community Circulator. The University of Hawai'i Board of Regents approved the Long Range Plan for a new West O'ahu Campus in July 2004. The plan is for a 500-acre site that will accommodate 7,600 students and privately developed commercial and residential land use on approximately 169 acres of the site. The community circulator will originate at the Kapolei Transit Center, proceed along Kapolei Parkway to the North-South Road, turning left to serve the transit oriented development occurring on the site. The route will turn left to serve internal UH West O'ahu sites returning to the North-South Road. This route will be further extended along the North-South Road and Makakilo Drive to interline with the current Route 411 community circulator in Makakilo, turning right on Ala Hoi, left on Hunekai, left on Kīkaha and right on Makakilo Drive.

Route 418: Kalaeloa Community Circulator. The Kalaeloa Master Plan, dated February 17, 2006, was prepared by the State of Hawai'i, Hawai'i Community Development Authority. The plan is for a 3,700-acre site formally occupied by military related functions. It will be redeveloped with 6,500 homes and employment offering 7,000 jobs. The plan shows potential transit connections that were used to develop this circulator route. The community circulator leaves the transit center along Kapolei Parkway turning left on Wākea, right on Kamokila to Farrington, right on Kealanani, left on Kamaaha, right on Kai'au, left on Maluohai, left on Kapolei Parkway, right on Geiger to East-West Spine Road, left on Enterprise, right on Yorktown, right on Lexington, left on Wākea, left on Roosevelt, right onto Kamokila and right onto Kapolei Parkway returning to the transit center.

Route 419: Makaīwa Hills Community Circulator. Makaīwa Hills is an area of 1,300 acres that will be developed for a potential build-out of 2,000 residential units. Route 419 will leave the relocated Kapolei Transit Center, traveling Kapolei Parkway to left

on Wākea, right on Kamokila, left on Farrington Hwy (to serve the Hawaiian Waters Adventure Park), continuing on Farrington to serve Makaīwa Road 1 and 2. The route is interlined with Route 416 at the Kapolei Transit Center.

Route 421: 'Ewa Beach Community Circulator. Route 421 will interline with Route 41 at the 'Ewa Transit Center located near the 'Ewa Beach Shopping Center.

Route 422: 'Ewa/Waipahu Community Circulator. Route 422 is a realignment of current Route 431. Anchored in Waipahu at Leokū and Farrington, the route travels Farrington Hwy to left on an 'Ewa road between Old Farrington Hwy and the North-South Road, continuing right on 'Ewa Road to left on North-South Road, left on Kapolei Parkway, left on Renton Road, continuing across Fort Weaver to serve the park-and-ride lot, returning to Fort Weaver, to left on Kolowaka, right on Keaunui, right on Iroquois to Geiger, right on Kolowaka to left on Fort Weaver returning to Waipahu.

Central O'ahu Bus Services

Two new circulators and one limited stop route are added to the Central O'ahu services as described in the following paragraphs.

Route 440: Koa Ridge to Ka Uka (transfer point) Community Circulator. The Koa Ridge development encompasses 750 acres. Concept plans have been offered for 3,000 to 3,500 dwelling units and a potential medical campus. Route 440 would traverse through the Koa Ridge development and be anchored at a transfer point in the vicinity of Ka Uka and H-2 where transfers would be made available to existing routes currently traveling the H-2 alignment. Current Route 433 serving the Kaiser Medical Center in Waipi'o would be extended to the transfer point to allow for passenger connections and possible interlining with Route 440.

Route 441: Waiawa Community Circulator. The Waiawa Development involves several developers on the Diamond Head side of H-2 and will be served by Route 441. Route 441 will traverse through the Waiawa developments and be anchored on the west side at a transfer point in the vicinity of Ka Uka and H-2 where transfers will be made available to existing routes currently traveling the H-2 alignment. The east end of the route will travel Central Mauka Road to Kamehameha to connect to the shopping areas in Pearl Highlands, continuing left on Acacia to Kuala, right on Waimano Home Road, right on Kamehameha to return to Waiawa.

CountryExpress! Route D: Wahiawā/Downtown Honolulu/University of Hawai'i at Mānoa. Route D is a limited-stop, two-directional, all-day, service serving the Wahiawā Transit Center at California and Cane, traveling to Kamehameha, turning left onto Leilehua Golf Course Road to serve the Park-and-Ride Lot located at the Armory, accessing H-2 south to the Mililani Mauka Park-and-Ride Lot, returning to H-2 to serve the new transfer point at Ka Uka and H-2, continuing on H-2 to H-1 proceeding to Downtown Honolulu via Vineyard to the University of Hawai'i at Mānoa via the King and Beretania couplet. Route D service would utilize the AM

and PM Zipper lanes. A stop list for the limited-stop portion of the route is shown. Stops marked with a "*" indicate stops will be located in both directions.

- California/Cane Terminus
- Kamehameha/California*
- Armory Park-and-Ride Lot*
- Mililani Mauka P& R Lot*
- Ka Uka/H-2 Transfer Pt.*
- Vineyard/Liliha*
- Liliha/King*
- King/Maunakea (westbound)
- King/Alakea (westbound)
- King/Punchbowl (westbound)
- King/Alapa'i (westbound)
- King/Ward (westbound)
- King/Ke'eaumoku (westbound)
- King/Kalākaua (westbound)
- University/King*
- Sinclair Circle Terminus
- Beretania/Kalākaua (eastbound)
- Beretania/Ke'eaumoku (eastbound)
- Beretania/Pensacola (eastbound)
- Beretania/Ward (eastbound)
- Beretania/Alapa'i (eastbound)
- Beretania/Punchbowl (eastbound)
- Beretania/Pali (eastbound)
- Beretania/Nu'uanu (eastbound)
- Beretania/River (eastbound)

Ferry Bus Service Connections

The following describes the two ferry routes from 'Ewa/Kapolei to downtown Honolulu and one connecting water taxi.

Route 900F: Kalaeloa/Barbers Point Passenger Ferry. The passenger ferry with a capacity of 149 passengers will operate a seventeen (17) mile route to Aloha Tower with a 44-minute travel time. The service will provide three departures in the morning peak from Kalaeloa and three departures from Aloha Tower in the evening peak period.

Route 901F: Ko 'Olina Water Taxi. Route 901F operates from Ko 'Olina Marina to the opposite side of the Kalaeloa/Barbers Point Harbor to provide timed connections with the passenger only ferry departures and arrivals from Aloha Tower. It is assumed one small vessel will be required for the operation.

Route 910F: Ocean Pointe Marina Passenger Ferry. The passenger ferry will provide service to Aloha Tower in Downtown Honolulu taking 23 minutes on an eleven mile run. Four morning and four evening departures will be provided.

The following bus routes will serve the Kalaeloa/Barbers Point Ferry Terminal and Ocean Pointe Marina.

Route 41F: Villages of Kapolei/Kalaeloa/Barbers Point Ferry Terminal. Route 41F adds three morning and three evening trips on a modified alignment to the Route 41 schedule. Morning trips would travel from Farrington and Kealanani to right on Kealanani, right on Kumuiki, right on Kamaaha, left on Kai'au to Kekuilani, right on Kamaaha, right on Kuloa, right on Kealanani, right on Farrington, right on Kōwelo, right on Oanianai, right on Papaiāulu, left on Farrington to Kamokila serving the

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Kapolei Transit Center, right on Kamokila, right on Kapolei Parkway, left on Kalaeloa, and right on Malakole to the ferry terminal. Evening trips would operate in the reverse direction.

Route 93F: Mākaha to Kalaeloa/Barbers Point Ferry Terminal. Route 93F provides three morning and three evening peak trips from Mākaha to the Kalaeloa/Barbers Point passenger only Ferry Terminal via Farrington Highway to Kalaeloa Blvd., turning right onto Malakole to the Terminal during the morning peak. The afternoon peak reverses the alignment.

Route 411F: Makakilo/Kalaeloa/Barbers Point Ferry Terminal. Route 411F serves Makakilo including Pānānā Street residents supplementing both Route 411 and Route 412 services. Morning services would travel from Makakilo/Pānānā via Pānānā to the turnaround at Hame, Pānānā to right on Makakilo, left on Ala Hoi, left on Hunekai, left on Kīkaha, right on Makakilo, right on Farrington, right on Farrington at Kamokila, left on Kalaeloa, and right on Malakole to the Ferry Terminal. Evening trips would travel in the reverse direction.

Route 413F: Kapolei Transit Center to Kalaeloa/Barbers Point Ferry Terminal. Route 413F provides three morning and three evening peak period trips to the Terminal from the Kapolei Transit Center. These trips are in addition to the current trips on Route 413.

Route 415F: ʻEwa Beach to Ocean Pointe Marina. Route 415F provides three morning and three evening peak period trips on a modified Route 421/415 alignment. From the Route 421 turnaround on Fort Weaver at ʻEwa Beach Park the route will travel Fort Weaver to Pahakupuna to right on Pāpipi, left on Fort Weaver, right on Kuhina, right on Hanakahi, right on North, right on Fort Weaver, left on Kaimalie, right on Kapolei Parkway, left on Keoneʻula to ʻEwa area road serving the Marina.

The following routes will serve the Aloha Tower Ferry Terminal.

Route 4F: Downtown/UH Mānoa/Aloha Tower Ferry Terminal. Route 4F provides service to downtown Honolulu, serving several private schools and the University of Hawaiʻi at Mānoa. Seven trips in both the AM and PM peak periods would be provided. From Aloha Tower the route travels right on Fort, right on Nimitz, left on Alakea, right on King, left on Keʻeaumoku, right on Wilder, left on Metcalf, right on University, left on Dole, right on St. Louis, right on Waiʻalae, to Kapiʻolani and University. The westbound trips would travel from Kapiʻolani and Dole to Waiʻalae, left on St. Louis, left on Dole, right on University, left on Metcalf, right on Wilder, left on Pensacola, right on Beretania, left on Bishop and right to Aloha Tower Ferry Terminal.

Route 8F: Waikīkī/Ala Moana/Aloha Tower Ferry Terminal. Route 8F provides service to Kakaʻako, Ala Moana and Waikīkī. From Aloha Tower the route travels Ala Moana, right on Forrest, left on Ilalo to Ward, right on Auahi to Queen, left on Ala Moana, right on Kālia, left on Saratoga to Kālaimoku, right on Kūhiō, right on

Kapahulu, left on Kalākaua to Monsarrat and Kapi‘olani Park. Afternoon trips would operate in the reverse direction. Seven trips in the AM peak and seven trips in the PM peak (to serve ferries from both Kalaeloa and Ocean Pointe) would be provided.

Route 30F: Downtown CBD/Chinatown/Kalihi/Aloha Tower Ferry Terminal. Route 30F provides service to downtown Honolulu, Chinatown and Kalihi via Dillingham Boulevard. Seven trips in both the AM and PM peak periods would be provided. From Aloha Tower the route would travel right on Fort, right on Nimitz, left on Alakea, left on Hotel to King, left on Dillingham, right on Middle and right to the Kalihi Transit Center. The eastbound trips would travel from the Kalihi Transit Center to left on Middle, left on Kamehameha to Dillingham, right on King to Hotel, right on Bishop and right to the Aloha Tower Ferry Terminal.

Table 2-1 details the operating characteristics for the added routes.

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Table 2-1. No-Build Alternative Characteristics of Bus Route Additions

NEW ROUTES		VEHICLE SIZE	MILES	MPH	BEGIN SERVICE	END SERVICE	PEAK CYCLE TIME	HEADWAYS AM Peak	Mid-Day	PM Peak	Even.	WEEKEND SAT.	SUN.
	CountryExpress Limited Stop												
D	Wahiawa-UH Manoa	60	50.6	20.2	5:00 AM	10:00 PM	150	15	30	15	30	30	30
	Community Circulators:												
415	Kalaeloa-Ocean Pointe-Waipahu	40	21.4	12.2	5:30 AM	11:00 PM	105	30	30	30	30	30	30
416	Kapolei West-Ko Olina	40	5.2	10.4	5:30 AM	10:00 PM	30	30	30	30	30	30	30
417	West Oahu Campus	40	10.8	10.8	5:00 AM	12:30 AM	60	30	30	30	30	30	30
418	Kalaeloa	40	10.9	10.9	5:00 AM	11:00 PM	60	30	30	30	30	30	30
419	Makaiwa Hills (not in 2018)	40	7.1	14.2	5:00 AM	11:00 PM	30	30	30	30	30	30	30
422	West Oahu-Ocean Pointe-Ewa	40	16.2	16.2	5:00 AM	12:30 AM	60	30	30	30	30	30	30
434	Royal Kunia Extension	40	5.8	11.6	4:30 AM	1:00 AM	30	30	30	30	60	30	30
440	Koa Ridge-Ka Uka (not in 2018)	40	5.6	11.2	5:00 AM	10:00 PM	30	30	30	30	30	30	30
441	Waiawa-Ka Uka (partial in 2018)	40	11.2	11.2	5:00 AM	10:00 PM	60	30	30	30	30	30	30
	Ferry Services:												
4F	Downtown/UH/Aloha Terminal	40	9.2	9.2	5:00 AM	6:35 PM	60	15	0	15	0	0	0
8F	Waikiki/Ala Moana/Aloha Terminal	40	12.4	9.9	5:00 AM	6:35 PM	75	15	0	15	0	0	0
30F	Chinatown/Kalihi/Aloha Terminal	40	7.2	9.6	5:00 AM	6:35 PM	45	15	0	15	0	0	0
41F	Kapolei Villages-Kalaeloa Ferry	40	12.1	12.1	5:00 AM	6:35 PM	60	30	0	30	0	0	0
93F	Makaha-Kalaeloa Ferry	40	32.3	16.2	5:00 AM	6:35 PM	120	30	0	30	0	0	0
411F	Makakilo-Kalaeloa Ferry	35	13.6	13.6	5:00 AM	6:35 PM	60	30	0	30	0	0	0
413F	Kapolei-Kalaeloa Ferry	40	7.1	14.2	6:20 AM	6:45 PM	30	30	0	30	0	0	0
415F	Ewa Beach/Ocean Pointe Marina	40	7.1	14.2	6:20 AM	6:45 PM	30	30	0	30	0	0	0

Bus Service Changes

There are four types of changes to the existing route network that are identified that do not require a new route: 1) changes to existing routes to provide capacity caused by new connecting services, 2) changes to existing routes to provide capacity caused by population and employment growth along the alignment, 3) changes to existing routes to extend service into developing areas and 4) changes to existing routes operating on H-1 due to implementation of a PM Zipper Lane identified in the O‘ahu Regional Transportation Plan 2030.

Service changes to the existing routes are necessary when the added community circulators feed transit centers with higher volumes of riders requiring more capacity on existing routes that are near or already over the load standard. There are also a few routes in the primary urban corridor that are currently near or at capacity that will require minor increases in service. Finally, existing community circulators will be extended to serve new development expected between now and the year 2030.

Changes Due to Connecting Services

Routes C, E, 40, 42 and 52 receive service increases to account for increased demand from new connecting services. Routes C and E will double service in all time periods going from 30-minute to 15-minute headways. Route 40 will add 25 bus trips to accommodate demand, providing 15-minute peak period service.

Routes 42 and 52 will receive span of service increases to offer later evening and earlier morning trip opportunities. Route 42 will have an added 22 bus trips, providing 15-minute peak period service. Route 52 will add nineteen (19) additional bus trips mostly in the evening hours. The span of service for both routes will increase to effectively provide 24-hour service.

Changes Due to Capacity Requirements

Routes A, B, C, D, E, 1, 1L, 3, 8, 13, 19, 20, 40, 42, 51, 52, 53, 54, 55, 81, 83, 84, 93, 98, 101 and102 will run primarily with articulated buses to accommodate passenger demand. Route 19 will add 15 trips from Waikīkī to the airport to accommodate increased demand due to employment and population growth.

Changes to Expand into Developing Areas

Route A will continue along Farrington Highway from Leokū to the West O‘ahu University of Hawai‘i Campus, which will serve as its new terminus.

Route 52 will add a stop at the Ka Uka Blvd. and H-2 transfer point in Waipi‘o adding five minutes to the route’s running time.

Route 433 will be extended to the Ka Uka Blvd. and H-2 transfer point and interlined with Route 440 linking the future location of the Wahiawā General Hospital and the Kaiser Medical Center on Moaniani in Waipi‘o. This extension will have minimal impact on the route’s running time.

Route 434 Village Park will be extended to serve Royal Kunia Development. From Kupuna Loop on Route 434 the route turns right onto Kupuohi providing service to commercial area, right onto Anonui circling through new development connecting to Anoiki, left to Anonui, right onto Kupuohi returning to regular route along Kupuna Loop to Waipahu.

Changes Due to PM Zipper Lane and Nimitz Flyover

The addition of the PM Zipper Lane and Nimitz Flyover projects will impact the operation of *TheBus* freeway routes serving Leeward and Central O‘ahu.

PM Zipper Lane. The PM Zipper Lane on H-1, anticipated to be in place by 2018, is expected to decrease the running time of evening buses by at least 20 minutes over today’s HOV operation if properly regulated and enforced. The following routes will

utilize the zipper lane: C, D, E, 43, 52, 81, 83, 83A, 84, 84A, 92, 93, 96, 97, 98, 101, 102, and 103.

Nimitz Flyover. The Nimitz Flyover, anticipated to be in place by 2030, is expected to decrease the running time of morning and evening buses by as much as 8 minutes over today's operation due to the avoidance of traffic lights and the congestion at the merge of H-1 and Moanalua Freeways. Buses will access Hotel Street from the Flyover by turning left on Awa to Iwilei Road to N. King and Hotel Street. The following routes will utilize the Nimitz Flyover: E, 81, 83, 83A (assuming an entrance is available for Pearl Harbor traffic), 84, 84A, 92, 93, 93A (assuming an entrance is available for Pearl Harbor traffic), 96, 97, 98, 101, 102 and 103.

Bus Operations Summary

Bus operations summary tables, by time period, are included for 2018 and 2030 in Appendices A and B, respectively.

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The Baseline Alternative is designed to be the best that can be done to improve transit service within the corridor without a major new fixed guideway investment. The TSM Alternative from the Alternatives Analysis is assumed as the Baseline.

The Baseline Alternative incorporates the planned bus improvements defined previously for the No-Action Alternative and utilizes the capital projects and road improvements identified for Oahu. Road improvements that would benefit transit include the PM zipper lane, in place by 2018, the Nimitz Flyover, in place by 2030, and other projects identified in the 2030 Oahu Regional Transportation Plan.

In addition to the committed projects included in the No-Build Alternative, the Baseline Alternative would include new transit centers in Pearl City and ʻAiea to facilitate the new hub-and-spoke bus network implemented in this alternative.

Park-and-ride facilities will be incorporated into the plan and the bus network will service the new park-and-ride facilities. There are four new park-and-ride lot locations planned throughout the corridor to improve service. The size of the park-and-ride lots was determined by the projected demand at each location. Table 3-1 shows the location and number of stalls for each of the new park-and-ride lot locations.

Table 3-1. Baseline Alternative New Park-and-Ride Lots

Park-and-Ride Location	Size
Ka Uka Boulevard and H-2 Freeway	1,000 stalls
Kapolei	1,350 stalls
East Kapolei	1,450 stalls
Aloha Stadium	1,650 stalls

The Baseline Alternative relies upon an increased investment in vehicles and annual operating hours to support the transportation needs of Oahu using buses. Bus services focus on strengthening the major east-west corridors offering enhanced frequencies and connections with community circulators.

The bus improvements include significantly increasing the rolling stock fleet of articulated (60-foot) buses. The addition of at least one more bus operating base and downtown bus staging area is required for the implementation of the alternative.

Bus Service Modifications – 2018

There are three types of service modifications identified to provide the best mobility without a major capital project to serve the population and employment growth in the

project corridor. The first includes frequency adjustments primarily in the peak periods to serve work trip demands. Frequency adjustments involve adding trips to community circulators, limited stop express routes and the ferry services. The ferry operations are increased to offer additional departures and reverse-commute opportunities from downtown Honolulu. The number of trips provided by the connecting ferry bus routes are increased to serve the additional ferry trips.

The second modification is the addition of two peak period bus express routes to serve demand in developing areas including Royal Kunia and Waiawa.

The third modification is the restructuring of bus services in Pearl City and ʻAiea, the restructuring of some urban Honolulu bus routes and the restructuring of Windward services.

The evening peak period definition is changed from 3:00 p.m.-6:00 p.m. to 3:00 p.m.-7:00 p.m. to account for the added traffic congestion. This impacts the number of bus trips provided during the peak periods for those bus routes identified to receive frequency changes.

Bus Service Frequency Adjustments

A number of bus routes will offer enhanced frequencies to account for mobility demand. Community circulators in Central and Leeward Oʻahu will offer 15-minute peak period service to connect to limited-stop express routes operating on 5-minute headways. Limited-stop express Route A will operate on 7.5-minute, peak period, peak direction headways and 10-minute off-peak direction headways. Route E will operate on 10-minute headways in the peak periods and 15-minute headways during the mid-day.

Limited-stop express Route C will offer 15-minute headways from Mākaha and 5-minute headways from Kapolei in the peak periods. Community circulators 401, 402 and 403 serving the Waiʻanae Coast will provide 30-minute peak period service to connect to Route C. In Kapolei, community circulators 411 and 417 and local Route 41 will offer 15-minute peak period service to connect to Route C.

Community circulators 417 and 422 connect to Route A at the West Oʻahu Campus. Circulators 415 and 422 connect to Route A in Waipahu at Leokū and Farrington. Community circulators 415, 421 and 422 provide connections to Route E at various stops in ʻEwa. Community circulators in Haleʻiwa, Wahiawā and Mililani will provide more frequent peak period connections to Routes 50, 51, 52 and D.

Limited-stop express Route D will provide 15-minute peak period and 30-minute mid-day service. Limited-stop express Route 1L will provide 10-minute peak period, peak direction service and 20-minute midday service. Off-peak direction service will be provided every 15 minutes. Local Routes 50 and 51 will provide 15-minute peak period services.

Ferry Services

The ferry operations are expected to double the number of trip offerings from three (3) in the morning and afternoon to six (6) trips each peak period. It is anticipated that interest in a reverse commute by ferry will be realized with at least two (2) trips from Aloha Tower to Ocean Pointe and Kalaeloa in the mornings and afternoons to be operated.

This increase in ferry operations will result in the need to increase the bus routes connecting to the ferry terminals. The downtown routes add four trips more than the twelve expected to meet the ferry runs. These trips are added to accommodate the reverse commute demand.

Peak Period Express Route Additions

Two new peak period express routes are required to meet the demands of new residential areas in Royal Kunia and Waiawa neighborhoods. Route 434X serves Royal Kunia and Route 441X serves Waiawa. Both routes will provide four (4) morning peak period trips and four (4) afternoon peak period trips. The descriptions for the routes are:

Route 434X Royal Kunia/Downtown Honolulu. Express 434 follows the Royal Kunia circulator alignment looping through Royal Kunia, then traveling to Kunia to access H-1. From H-1 the route travels the zipper lane to downtown using Hotel Street, to Richards, to King, to the Alapa‘i Transit Center. In the afternoon the route travels from the Alapa‘i Transit Center to Beretania, then follows the alignment in reverse to loop through Royal Kunia.

Route 441X Waiawa/Downtown Honolulu. Express 441 follows the Waiawa circulator alignment looping through Waiawa, then serving the Ka Uka Park-and-Ride and accessing H-2. From H-2 the route travels to H-1 utilizing the zipper lane to downtown using Hotel Street, to Richards, to King, to the Alapa‘i Transit Center. In the afternoon the route travels from the Alapa‘i Transit Center to Beretania, then follows the alignment in reverse to loop through Waiawa.

Waipahu and Central O‘ahu Service Route Additions

Central O‘ahu services will provide enhanced service frequencies on many circulators. Express Route 98 will provide direct service to Mililani Mauka and new Route 435 will provide new direct service from Waipahu to Leeward Community College (LCC).

Route 98 Mililani Mauka/Downtown Honolulu. Express 98 will offer six AM and six PM peak period trips. The route will no longer serve the Wahiawā Park-and-Ride Facility at the Armory. The morning trips will be in service at the H-2 and Mililani Mauka interchange continuing on Meheula, right on Ainamakua Drive completing the loop, right on Meheula, right on Makaikai, left on Kaapeha, right on Meheula, right on Lehiwa Drive, right on Halepahu, left on Kapanoe, left on Meheula, left on Kuaō‘a, left on Meheula, right on Makaikai, left on Ukuwai (serving Mililani Mauka

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Park-and-Ride), right on Ainamakua, right on Meheula to H-2 and continuing to downtown Honolulu. The afternoon trips sere the Ainamakua loop, cross to the park-and-ride then continue via the Route 501 alignment after leaving H-2.

Route 435: LCC Community Circulator. Route 435 connects Leeward Community College with the Waipahu Transit Center and the Pearlridge Transit Center. Route 435 replaces the intermittent LCC service provided by shuttle Route 73. Westbound from the Pearlridge Transit Center, the route travels Kamehameha to Farrington Highway, left on Waiawa Road, right on Ala 'Ike and left into the campus. From the campus, the route returns to Farrington Highway to right on Mokuola and left on Hikimoe to the Waipahu Transit Center. From the Waipahu Transit Center the route returns to Farrington via Hikimoe to left on Waipahu Depot Road and left onto Farrington. The route continues along the same alignment in reverse serving both Waipahu High School, LCC and businesses along Kamehameha to the Pearlridge Transit Center.

Pearl City/'Aiea Service Restructure

The Pearl City/'Aiea bus transit restructure service area extends from Aloha Stadium and the Makalapa Park neighborhoods in the east and Leeward Community College in the west. The current shuttle routes of 71, 73 and 74 have changed little over the years to serve the growing communities in Pearl City and 'Aiea's ridges and valleys.

Routes 71 and 74 provide peak period only service and Route 73 provides service on an intermittent schedule. The communities served by these three shuttle routes have a higher than average percent of elderly residents requiring service beyond the peak period.

Local Routes 53 and 54 are used as community circulators and local connector routes to downtown Honolulu and the Ala Moana Transit Center. The result is that community services often suffer with extensive delays due to the buses being stuck in downtown traffic.

Routes 53 and 54 are restructured into one very frequent local route (new Route 54) operating between the Pearlridge Transit Center and the Ala Moana Transit Center. During the morning and afternoon peak periods selected trips on Route 547 serving Pacific Palisades and selected trips on Route 548 will be interlined with Route 54 trips.

Connecting to the new Route 54 are eight community circulators. One of the new circulators is a Community Access route providing services that deviate up to ½ mile off the alignment to pick up or drop off Americans With Disabilities Act (ADA) eligible passengers. Pearl City and 'Aiea related services include:

Route 54: Pearlridge Transit Center/Ala Moana Transit Center. Local Route 54 provides frequent (10-minute) service between the Pearlridge Transit Center along Kaonohi to right on Moanalua to the Moanalua Freeway serving Red Hill and H-1. From H-1 the route travels Vineyard to Liliha, King to Hotel, Richards, King, Kapi'olani to Pensacola, to Kona at the Ala Moana Transit Center. The route travels

around Ala Moana returning to Aiea via Ala Moana, Pi‘ikoi, Kapi‘olani, and Beretania to King, Liliha, Vineyard and H-1 to continue to the Pearlridge Transit Center via Red Hill and Moanalua to Pali Momi to right on Kamehameha to the Transit Center.

Ten morning peak period trips and ten afternoon peak period trips are interlined with community circulator Routes 547 (five trips each time period) and 548 (five trips each time period).

Route 541: Hālawa Heights Community Circulator. Route 541 replaces shuttle route 74 and alignment portions of old Route 54 providing all-day service between Aloha Stadium, Hālawa Heights and the Pearlridge Transit Center. Eastbound: from the Pearlridge Transit Center the route travels Kaonohi, right on Moanalua, left on Kaimakani, right on Ulune, left on Ali‘ipoe, left on Paihi, right on Poko, right on Kealaluina, left to Hālawa Heights, right Elrod to Hālawa Heights, left ‘Iwa‘iwa, right Ulune, left Kahuapa‘ani, right Salt Lake, left Kalaloa, right Kamehameha, right Salt Lake to Salt Lake/Kalaloa. Westbound the route travels in reverse to Moanalua then left on Pali Momi, right on Kamehameha to the Pearlridge Transit Center.

Route 542: ‘Aiea Heights Community Circulator. Route 542 replaces shuttle route 74 and provides all-day service between the Pearlridge Transit Center and ‘Aiea Heights. Eastbound from the Pearlridge Transit Center the route travels Kaonohi to right on Moanalua, left on Kaamilo, left Aiea Heights, right Ho‘āpono to ‘Aiea Heights/ Ho‘āpono terminus. Westbound the route travels ‘Aiea Heights to right on Moanalua, left Pali Momi, right Kamehameha to the Pearlridge Transit Center.

Route 543: Kaonohi Community Circulator. Route 543 replaces shuttle route 74 and provides all-day service for residents along Koanohi. From the Pearlridge Transit Center, the route travels Kaonohi to Kaonohi/Kahapili. The return trip follows Kaonohi/Kahapili, to right on Kahapili, right on Kaonohi, left on Moanalua, right on Pali Momi, right on Kamehameha to the transit center.

Route 544: Kilinoe Community Access Route. Community Access Route 544 offers new service to neighborhoods along Kilinoe. Community Access routes serve identified bus stops along their alignment on a specified schedule. They are scheduled to allow the time to deviate from the route up to ½ mile on either side to accommodate ADA eligible passengers. Westbound from the Pearlridge Transit Center the route travels Kaonohi, to right on Moanalua, left on Kōāuka, left on Kōāuka, right on Pali Momi, right on Kamehameha, right on Kaahumanu, right on Moanalua, left on Ka‘ahele, right on Kilinoe to Kilinoe/Kūle‘a. Eastbound from Kilinoe/Kūle‘a, the route travels Kilinoe, to left on Ka‘ahele, right on Moanalua, left on Ka‘ahumanu, left on Kamehameha to the Pearlridge Transit Center.

Route 545: Newtown Community Circulator. Route 545 replaces portions of shuttle Route 71. Route 545 offers all day service connecting Newtown with the Pearlridge Transit Center. Westbound from the Pearlridge Transit Center, the route travels Kaonohi, to left on Moanalua, right on Ka‘ahele, left on Ainanui to Ainanui and

Ka‘ahele. Eastbound the route travels from Ainanui and Ka‘ahele, to right on Kaahele, right on Komo Mai, right on Hapaki, left on Piki, left on Nahele, right on Komo Mai, left on Ka‘ahumanu, left Kamehameha to the Pearlridge Transit Center.

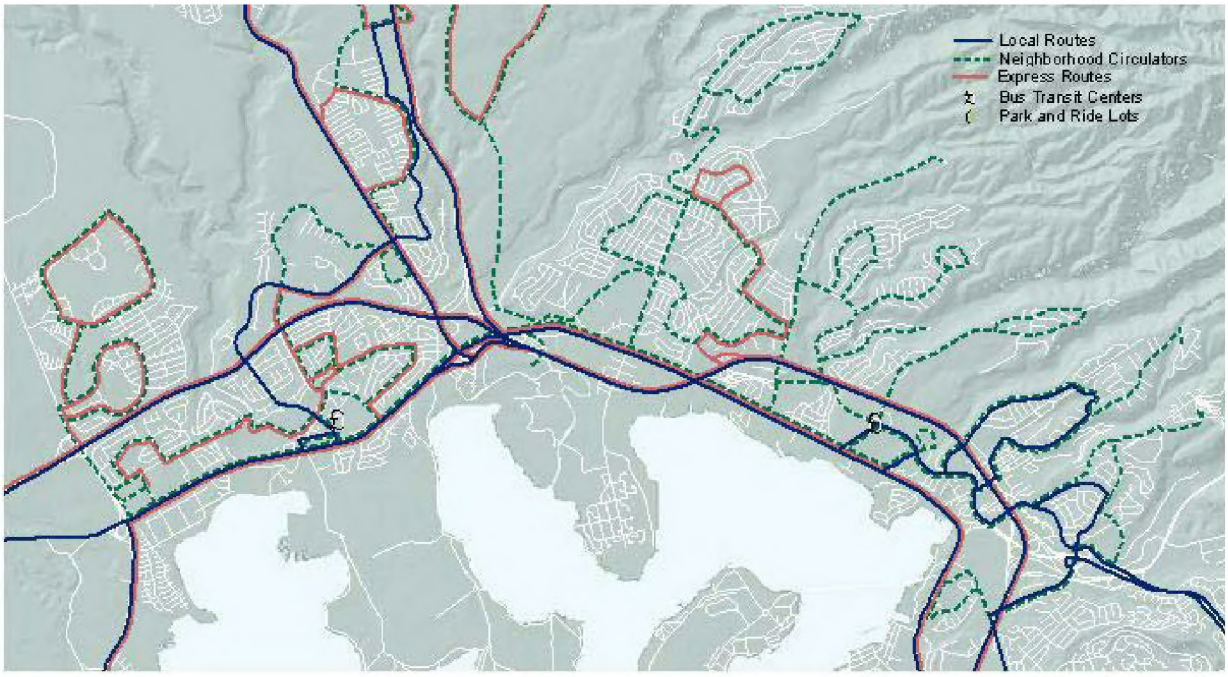
Route 546: Ka‘ahumanu Community Circulator. Route 546 offers new service to the growing residential areas along Ka‘ahumanu. From the Pearlridge Transit Center the route travels Kamehameha to right on Ka‘ahumanu to the turnaround prior to the gated community at the end of Ka‘ahumanu. The route returns to the Pearlridge Transit Center along the same alignment.

Route 547: Pacific Palisades Community Circulator. Route 547 follows the same alignment as the current Route 53 from Pearlridge to Pacific Palisades. The route will be interlined with new Route 54 for five trips in the morning peak period and five trips in the afternoon peak period to accommodate work trips. However, during most of the schedule the route operates independently of the long local allowing for predictable service to the community. From the Pearlridge Transit Center, the route travels on Kamehameha to right on Waimano Home Road, left on Komo Mai Drive to Komo Mai and ‘Auhuhu. The route returns to the Pearlridge Transit Center via right on ‘Auhuhu, left on ‘Aumakua to left on Komo Mai Drive, right on Waimano Home Road and left on Kamehameha to the Pearlridge Transit Center.

Route 548: Pearl City Community Circulator. Route 548 is a combination of the upper and lower loops of the current Route 54 tails. By combining the two loops, intending passengers can catch any Route 548 bus and know they will get to their destination. Route 548 is interlined with new Route 54 for five morning peak period trips and five afternoon peak period trips. Counterclockwise from the Pearlridge Transit Center the route travels Kaonohi to left on Moanalua, right on Ka‘ahele, left on Komo Mai, left on Ka‘ahumanu, right on Hookanike, right on Ho‘omalu, left on Komo Mai, right on Ho‘omoana, left on Ho‘olaule‘a, left on Waimano Home Road, right on Kuahaka, left on Kāwelokā, left on Makamua, right on Ho‘oma‘ema‘e, right on Ho‘olaulea, left on Ho‘omalu, right on Noelani, right on Ka‘ahumanu and left on Kamehameha to the Pearlridge Transit Center. Clockwise the route follows the same alignment in reverse.

The Waipahu, Pearl City and ‘Aiea area bus services are presented in Figure 3-1.

Figure 3-1. Waipahu, Pearl City and ‘Aiea Area Bus Services



Urban Honolulu Route Structure Changes

Urban Honolulu is well served by *TheBus*. A substantial amount of service is provided comparable to or exceeding what may be found in any other United States urban area. There are few places that are underserved in Honolulu with the exception of the Kaka‘ako area makai of Ala Moana Boulevard. Restructured Route 17 provides that connection. The following urban routes are restructured to provide a more cohesive bus network.

Route 4: Downtown/Makiki/University/Waikīkī. Route 4 is restructured to serve the Interisland Ferry Terminal providing service through Iwilei, Downtown, Makiki, the University and Waikīkī. Eastbound from the Interisland Ferry Terminal, the route travels Nimitz to left Access Road to Nimitz Westbound, left Nimitz, right on Pacific, right on Iwilei, right onto King to Hotel and right on Richards, left on King, left on Ward, right on Green, left on Thurston, right on Wilder, left on Metcalf, right on University, left on Dole, right on Saint Louis, right Wai‘alae to Kapi‘olani, left Kaimukī, right on Kapahulu, right on Kūhiō, right on Pau, left on Ala Wai, left on Niu to the terminus at Niu and Ala Wai. Returning to Pier 19 the route travels Niu, left on Kalākaua to Kūhiō, left on Kapahulu, left on Kaimukī, right on Kapi‘olani to Wai‘alae, left on Saint Louis, left on Dole, right on University, left on Metcalf, right on Wilder, left on Thurston, right on Green, left on Ward, right on Beretania, left on Richards, right on Hotel to King, left on Iwilei, left on Pacific, left on Nimitz and right on Pier 19 to the terminal.

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Route 8: Waikīkī/Ala Moana. Route 8 is extended beyond the Ala Moana Transit Center to the Victoria and Ward Centers. From Waikīkī the route travels the current alignment to Ala Moana continuing straight to right on Queen to Auahi and Kamakeʻe. The return trip from Auahi and Kamakeʻe follows Auahi to left on Ward, left on Ala Moana, left on Piʻikoi to right on Kona following the current Route 8 alignment to Waikīkī.

Route 17: Nuʻuanu/Ala Moana/Makiki. The restructured Route 17 provides service from Nuʻuanu through Downtown to Aloha Tower and the developing Kakaʻako neighborhoods to the Ala Moana Transit Center and terminating in Makiki. Eastbound from Old Pali and Niniko, the route travels Old Pali, to Nuʻuanu Pali to Nuʻuanu, left on Nimitz, right on Bishop, left to Aloha Tower and Ala Moana, right on Forrest, left Ilalo to Ward, right on Auahi to Queen, left on Ala Moana, left on Piʻikoi, right at Kona, left on Makukona to Kāheka, left on Rycroft, right on Keʻeaumoku, left on Nehoa to Nehoa and Lewalani. The return follows Nehoa to left on Prospect, left on Pensacola, right Nehoa, right Keʻeaumoku, left Kona, left Piʻikoi, right to Ala Moana, right Queen to Auahi, left Ward to Ilalo, right Forrest, left Ala Moana to Nimitz, left Richards, right Aloha Tower, right Fort, left on Nimitz, right on Bethel, left Beretania, right Nuʻuanu, right Wyllie to Pali, right Nuʻuanu Pali to left Old Pali, left Māmalahoa to Old Pali and Niniko.

Route 30: Kalihi/Pālama/Pauoa/Kakaʻako Local Route. Route 30 connects the Kalihi Transit Center with Pālama Medical District, Punchbowl, Ward Avenue, Kakaʻako and the Ala Moana Station and Transit Center. Eastbound from the Kalihi Transit Center the route turns left on Middle Street, left on Kamehameha/Dillingham, left on Mokauea, right on King, left on Houghtailing, right on School, left on Lanakila, right on Kuakini, left on Nuʻuanu, right on Pauoa, right on Lusitana, left on ʻIolani to Prospect, right on Ward, left on Auahi to Queen, left on Ala Moana, left on Piʻikoi and right on Kona to the Ala Moana Center.

Route 301: Kalihi/Airport/Moanalua Community Circulator. Route 301 replaces current Route 16, which only provides service during the peak periods bringing passengers from Moanalua Valley to the Kalihi Transit Center at Middle Street. New Route 301 connects residents of Moanalua with shopping, school and other opportunities in Salt Lake. From the Kalihi Transit Center the route travels left on Middle, right on-ramp to H-1 West to Exit 16 "Airport", to Departures. Upon leaving the airport the route travels Paiea, left to Aolele, right on Rodgers, right on Nimitz, left on Camp Catlin, left on Arizona, left on Salt Lake, right on Ala Lilikoʻi, right Likini, left on Ala Napunani, right Ala Aolani, right Moanalua, left Ala Kapouna, left Moanalua to serve the Kaiser Foundation Hospital, left Ala Napunani, left Ala Aolani to Ala Aolani and Ala Uwila. The return trip follows the from Moanalua Valley Park to Ala Aolani, right on Moanalua (again serving Kaiser), left Ala Kapuna, left Moanalua, right Ala Napunani, right Likini, left Ala Lilikoʻi, left Salt Lake, right Arizona, right Camp Catlin, left Rodgers, right

Aolele taking the ramp to "Departures." Leaving the airport the route returns to Kalihi Transit Center via H-1 East, to the Dillingham Blvd/Middle Street exit, left on Middle Street to the Transit Center.

Route 302: Tripler Army Medical Center Community Circulator. Route 302 is a revised alignment of current Route 31. The route services the Kalihi Transit Center, Fort Shafter, Moanalua Gardens, the Veterans Affairs Office and Tripler Medical Center. Westbound from the Kalihi Transit Center, the route will travel right on Middle, left on Kaua, right on Ala Mahamoe, right on Jarrett-White, left on Ward, right on Krukowski to Tripler Hospital Porte Cochere. The route returns to Kalihi via Tripler Hospital Porte Cochere, left on Krukowski, right on Jarrett-White, left on Kaua, right on Funston, to the Moanalua Freeway on ramp to the Frontage Road and right on Middle to the Kalihi Transit Center.

Route 303: Kalihi Valley Homes Community Circulator. Route 303 provides a direct connection for Kalihi Valley Homes to the Kalihi Transit Center. The alignment along with Route 305 is part of a revised current Route 7. Route 303 provides service from Kalihi Transit Center to Fort Shafter, Dole Middle School, Kalihi District Park and Kalihi Valley Homes. Eastbound from Kalihi Transit Center and Middle Street Station, the route travels right on Middle Street to School, left on Kamehameha IV, left on Kalena to Kalena and ʻAlu. The route returns via Kalena and ʻAlu, to Kalena, right on ʻAlu, right on Likelike to Kamehameha IV, right on School to Middle Street to the Kalihi Transit Center.

Route 304: Kalihi/Liliha/ʻĀlewa Community Circulator. Route 304 is a revision of current Route 10 providing a connection to the Kalihi Transit Center. The route provides service to Gulick Avenue, the Kamehameha Shopping Center, Liliha and ʻĀlewa Heights. This alignment will no longer serve Sand Island, which will be served by Route 305. Eastbound from the Kalihi Transit Center, the route travels Middle Street, right on King, left on Gulick, right on School, left on Houghtailing, left on Hillcrest, right on Keālia, right on Makanani to Lolena and Iholena, left on Judd, left on Nuʻuanu, left on Wyllie, left on ʻĀlewa to left on Hoʻomaikaʻi, right on Kualono, right on Kalikimaka to Kalikimaka and Alewa. The route returns to the Kalihi Transit Center via Kalikimaka, right on ʻĀlewa, right on Wyllie, right on Nuʻuanu, right on Judd, right on Iholena to Lolena and Makanani, left on Keālia, left on Hillcrest, right on School, left on Gulick, right on King to Kaua, left on Middle to the transit center.

Route 305: Kalihi Valley/Sand Island Community Circulator. Route 305 provides all day, frequent service to Sand Island, Kalihi Kai, Farrington High School, Kamehameha Shopping Center and Kalihi Uka. Eastbound from the Kalihi Transit Center the route travels left on Middle Street, left on Kamehameha/Dillingham, right on Mokauea, left on Auiki, left on Kalihi to Likelike to Kalihi and Ahuahu. The route returns to the Kalihi Transit Center along the same alignment.

Windward Service Restructure

Windward O'ahu has seen little change in bus service over the past several years. A few circulators serve windward communities on limited schedules. Local services are not adequate to meet demand for downtown Honolulu and beyond.

Local service connections to downtown Honolulu will be strengthened with more frequent service with the restructure. Circulators will operate on consistent all-day schedules with Saturday and Sunday service. A Kāne'ohe Transit Center will be developed near the Windward Mall at Kawa between Mehana and Kahuhipa.

Route 60: Honolulu/Kailua/'Aikahi Park Local Route. Route 60 replaces Route 56 serving Ala Moana Transit Center, downtown Honolulu, Kailua Town, 'Aikahi Park and Kāne'ohe Marine Base on a frequent schedule. Westbound from the Ala Moana Transit Center the route travels Kona (from Kona and Pi'ikoi) to Māhukona, right on Atkinson, right on Ala Moana to Nimitz, right on Alakea, left on Kukui, right on Pali, to Kalaniana'ole, serving Kailua, left on Oneawa, right on Mōkapu, left to Kāne'ohe Bay, right on the H-3 East on-ramp "G", right on Mōkapu, right on Harris, right on Selden to Selden and Craig. The return trip continues left on 3rd to left on G, to H-3 West exiting at "Kailua", then right on Kāne'ohe Bay, right on Mōkapu, left on Oneawa, right on Kailua to Kalaniana'ole to Pali and Bishop, then left to Aloha Tower, to Ala Moana, left on Pi'ikoi, right on Kona to Kona and Pi'ikoi. The current Route 56 averages 17 miles per hour all day. The new Route 60 is scheduled to average 15.9 miles per hour to account for anticipated slowing of traffic.

Route 61: Honolulu/Kalihi/Kāne'ohe Local Route. Route 61 provides new service along Vineyard connecting Kalihi to downtown Honolulu serving Ala Moana Shopping Center, downtown Honolulu, Kalihi Valley, Windward Community College and Windward Mall. Westbound from the Ala Moana Transit Center the route travels Kona (from Kona and Pi'ikoi) to Māhukona, right on Atkinson, right on Ala Moana to Nimitz, right on Alakea, left on Kukui, left on Vineyard to H-1 WEST to Exit 20A "Likelike Hwy," continuing on Likelike, to Kalihi, left on Nalanieha, right on Likelike, to Kahekili, left on Kea'ahala, serving Windward Community College Hale Alakai Loop, continuing on Kea'ahala, left on Kahekili, right on Kahuhipa, left on Kamehameha, left on Mehana, left on Kawa to the Kāne'ohe Transit Center located along Kawa at Kāne'ohe Town Center. Returning from the transit center the route travels from Kawa to right on Kahuhipa, left on Kahekili, right on Kea'ahala serving Windward Community College Hale Alakai Loop, to Kea'ahala, right on Kahekili, right on Likelike, right on Nalanieha, right on Kalihi, left on Likelike to H-! East taking Exit 20B "Vineyard Blvd," to Vineyard to right on Pali to Bishop, left on Aloha Tower to Ala Moana, left on Pi'ikoi to right on Kona at the Ala Moana Transit Center.

Route 62: Kāne'ohe/Circle Island Local Route. Route 62 replaces current Route 55 providing all day service from downtown Honolulu to Kāne'ohe continuing along the windward coast to Hale'iwa where it is interlined with Route 52.

(During adverse weather or traffic conditions, Routes 52 and 62 will turn back in Hale‘iwa and will not interline.) Westbound from Kona and Pi‘ikoi (at the Ala Moana Transit Center) the route travels Kona to Māhukona, right on Atkinson, right on Ala Moana to Nimitz, right on Alakea, left on Kukui, right on Pali, left on Kamehameha, left on Kahuhipa, right on Kawa to serve the Kāne‘ohe Transit Center, continuing right on Mehana, left on Kamehameha, left on Ha‘ikū, right on Alaloa, right on He‘eia, left on Kamehameha, right on Kuilima to serve the Turtle Bay Resort, returning to Kamehameha to the Hale‘iwa Transit Center. The return trip to the Ala Moana Transit Center follows the same alignment with the exception of Bishop to Aloha Tower versus Alakea to account for one-way streets. Routes 52 and 62 will increase the number of trips to provide 24-hour service.

Route 63: Kailua/Sea Life Park Local Route. Route 63 replaces current Route 57 and is interlined with Route 23 at Sea Life Park serving Ala Moana Center, downtown Honolulu, Kailua and Waimānalo. There is no change in route alignment from current Route 57; however, later evening service will be provided.

Route 64: Keolu/Kailua/‘Aikahi/Kāne‘ohe Local Route. Route 64 replaces portions of current Routes 56, 57A and 70. Route 64 will provide all day service between Keolu and the Kāne‘ohe Transit Center serving Kāne‘ohe Bay, ‘Aikahi Park, Kailua Town and Keolu Hills. Westbound from Keolu and Hele, the route travels on Keolu, right on Kupau, right on Hele, left on Keolu following Keolu around to left on Hāmākua, right on Hahani, left on Kailua, right on Kuulei, left on Maluniu, right on Kainui, left on Kalaheo to Kāne‘ohe Bay, right on Kāne‘ohe Bay, right on Kamehameha, left on Mehana, left on Kawa to the Kāne‘ohe Transit Center. The route returns to Keolu and Hele via Kawa to left on Kahuhipa, right on Kamehameha and following the same alignment as the westbound trip.

Route 65: Kāne‘ohe/Kailua/Waimānalo Local Route. Route 65 provides service to the Kāne‘ohe Transit Center, Hawai‘i Pacific University, the Castle Medical Center, Waimānalo Jobs Corps and Waimānalo Homesteads replacing current Route 77. Westbound from Nalu and Ala Koa the route travels on Nalu, left on Nakini, right on Poliala, left on Huli, right on Nakini, left on Kalaniana‘ole, left on Hīhīmanu to Poalima, left on Kalaniana‘ole, right on Kamehameha, left on Mehana, left on Kawa to the Kāne‘ohe Transit Center. From the Kāne‘ohe Transit Center the route travels Kawa, to left on Kahuhipa, right on Kamehameha returning to Nalu and Ala Koa along the same alignment. During the mid-day and evening period, Route 65 is interlined with Routes 611 and 612.

Route 66: Kāne‘ohe/Pearlridge Local Route. Route 66 provides a new service connection between the Kāne‘ohe Transit Center and the Pearlridge Transit Center. Westbound from the Kāne‘ohe Transit Center the route travels Kawa, right on Mehana, right on Kamehameha, right on Likelike Hwy to H-3, exit Moanalua (west), exit to Kamehameha to the Pearlridge Transit Center. The return trip to Kāne‘ohe follows the same alignment in reverse.

Route 611: ʻĀhuimanu/Kahaluʻu Community Circulator. Route 611 replaces current Route 65 providing half hour peak period and hourly off peak service to the Kāneʻohe Transit Center, Valley of the Temples, Koʻolau Center, ʻĀhuimanu Hills and ʻĀhuimanu Road. Westbound from the Kāneʻohe Transit Center the route travels right on Mehana, left on Kamehameha, left on Haʻikū, right on Kahekili, right on E. Hui Iwa to W. Hui Iwa, right on Hui Ulili, left on ʻĀhuimanu Road, right on Kahekili to W. Hui Iwa and Kahekili. The route returns to the Kāneʻohe Transit Center via W. Hui Iwa to E. Hui Iwa, left on Kahekili, left on Haʻikū, right on Kamehameha, right on Kahuhipa and right on Kawa to the transit center. During the morning and afternoon peak periods, Route 611 is interlined with Route 612. In the mid-day and evening period, route 611 is interlined with Routes 65 and 612.

Route 612: Puohala/Keapuka/Mokulele Community Circulator. Route 612 replaces Route 56 providing service to the Kāneʻohe Transit Center, Castle High School, Windward City Shopping Center, Hawaiian Memorial Park and Pohai Nani. Eastbound from the Kāneʻohe Transit Center the route travels Kawa to left on Kahuhipa, right on Kamehameha, left on Pua Inia, right on Puohala, right on Kāneʻohe Bay to Likelike, left on ʻAnoʻi, left on Luluku, right on Kamehameha, left on Mokulele, right on Nāmoku, left on Mikihilina, right on Mokulele, right on Kāneʻohe Bay, right on Nāmoku to Nāmoku and Mikihilina. The route returns to the Kāneʻohe Transit Center via Nāmoku to left on Mokulele, right on Kamehameha, left on Luluku, right on ʻAnoʻi, right on Likelike to Kāneʻohe Bay, left on Puohala, left on Pua Inia, right on Kamehameha, left on Mehana to Kawa at the transit center. During the morning and afternoon peak periods, Route 612 is interlined with Route 611. Route 612 is interlined with Routes 65 and 611 in the midday and evening period.

Route 613: Haʻikū/Kahuhipa Community Access. Route 613 provides new service connecting the Kāneʻohe Transit Center, Aliʻi Shores, Crown Terrace, Haʻikū Village and Haʻikū Gardens on an hourly schedule. The bus can deviate off the route up to ½ mile to pick up and drop off ADA certified passengers. Pick ups are arranged 24 hours in advance. Westbound from the Kāneʻohe Transit Center the route travels right on Mehana, left on Kamehameha, right on Lilpuna, left on Nahiku, left on Heʻeia, right on Haʻikū, left on Kahekili, right on Kahuhipa to Kahuhipa and Haʻikū. The route returns to the transit center via Kahuhipa to right on Haʻikū, left on Heʻeia, right on Nahiku, right on Lilipuna, left on Kamehameha, right on Kahuhipa and right on Kawa. At the transit center the route is interlined with Community Access Route 614.

Route 614: Lilipuna/Keaʻahala/Kapunahala Community Access. Route 614 provides hourly service from the Kāneʻohe Transit Center to Lilipuna, William Henry, Keaʻahala and Kapunahala. Westbound the route travels from ʻAnoʻi and Kukane to ʻAnoʻi, right on Kukane, left on Keneke, right on Kapoo, left on Paleka, right on ʻAnoʻi, right on Keaʻahala to William Henry, left on Wailele, right on Makahinu, left on Lilipuna, right on Kamehameha, left on Mehana, left

on Kawa to the Kāne‘ohe Transit Center. Eastbound the route travels from the transit center on Kawa to left on Kahuhipa to Lilipuna, right on Makahinu, right on Wailele, right on William Henry to Kea‘ahala, left on ‘Ano‘i to Kapunahala, left on Kulukeoe, right on Keneke, following Keneke around to left on ‘Ano‘i to ‘Ano‘i and Kukane. The route is interlined with Community Access Route 613 at the Kāne‘ohe Transit Center.

Route 615: Maunawili/Lanikai Community Circulator. Route 615 replaces current Route 70 providing service to Maunawili, Kailua Town, Kailua Beach and Lanikai. Westbound from Aalapapa and Mokulua the route travels Aalapapa to left on Mokulua to Alāla, right on Kawailoa, left on Kailua to left on Auloa, left on Lunaai, left on Lunahelu, right on Maunawili, right on Aloha Oe, left on Maleko to Maleko and Aloha Oe. The route returns to Lanikai via Maleko to left on Puualoha, eight on Aloha Oe, left on Maunawili to Auloa to right on Kalanianaole to Kailua, right on Kalaheo to Kawailoa, left on Alāla to Aalapapa and Mokulua.

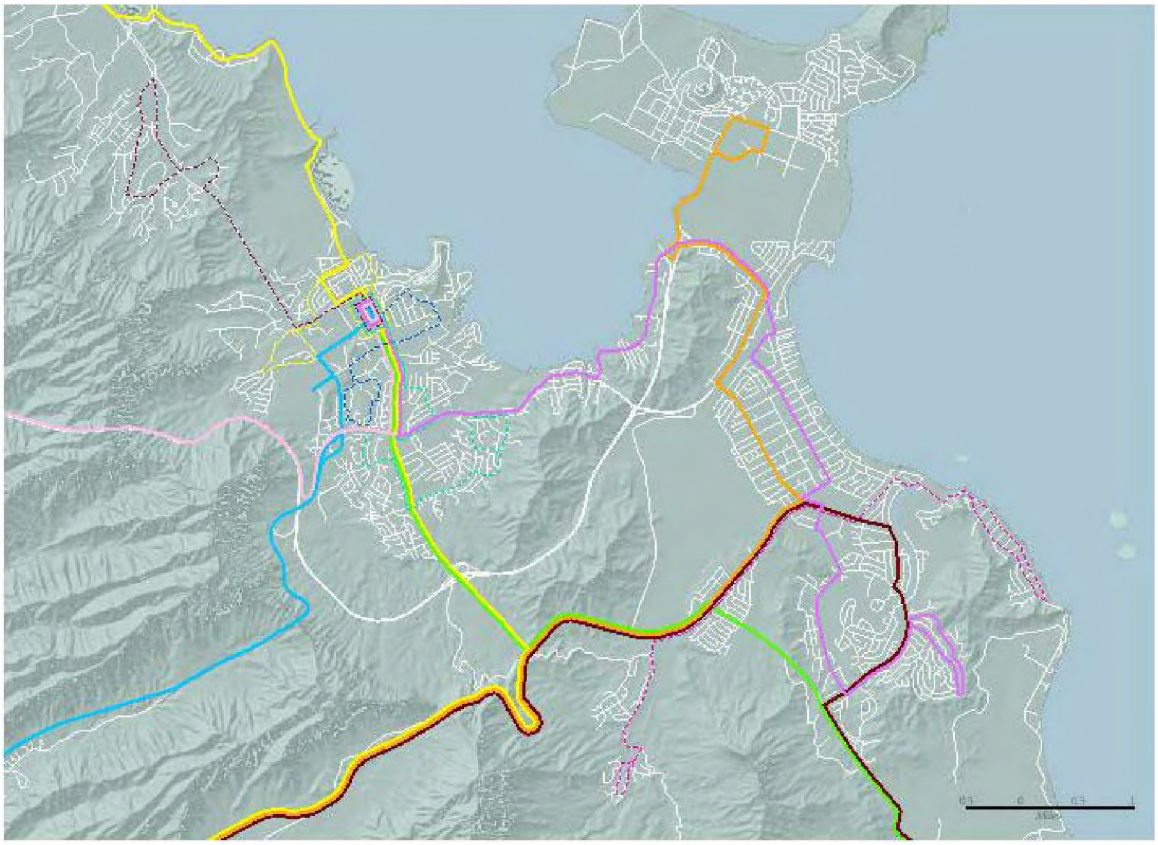
North Shore Added Service

A new community circulator, Route 523, is added to serve north shore communities including Waimea Valley Nature Park and Pupukea.

Route 523: Hale‘iwa/Waimea/Pupukea Community Circulator. Route 523 provides new connections from the Hale‘iwa Transit Center with Waimea Valley Nature Park, Waimea Bay, Shark’s Cove, Pupukea Shopping Center and the residential area of Pupukea. The Hale‘iwa Transit Center is located on Kamehameha near Kilioe Place and Pa‘ala‘a Road (by Cane Haul Road). Northbound from the Hale‘iwa Transit Center the route travels on Kamehameha turning right into the Waimea Valley Nature Park to serve Waimea Valley, returning to right on Kamehameha, right on Pupukea, left on Alapio serving the north Alapio Road loop and south Alapio Road loop back to Pupukea. The return to Hale‘iwa from Alapio Road and Pupukea, the route travels Pupukea to left on Kamehameha, left on Waimea Valley to the Nature Park returning to Kamehameha to the transit center.

The Kāne‘ohe and Kailua area bus services are presented in Figure 3-2.

Figure 3-2. Kāneʻohe and Kailua Area Bus Service



Bus Service Modifications – 2030

There are three types of service modifications identified to provide the best mobility without a major capital project to serve the population and employment growth in the project corridor. The first includes frequency adjustments primarily in the peak periods to serve work trip demands. Frequency adjustments involve adding trips to community circulators to provide convenient connections to the limited stop express routes. The ferry operations will operate as defined for the 2018 Baseline network.

The second modification is the addition of one peak period bus express route to serve demand in the developing area of Koa Ridge. The third modification is the addition of new community circulators to serve developing areas that will occur during the 2018 to 2030 timeframe.

The 2018 Baseline network described the restructuring of bus services for Pearl City and ʻAiea, urban Honolulu and Windward areas. As the 2030 Baseline network builds from the 2018 route structure, only those changes or additions to the 2018 system are described in the following sections.

Bus Service Frequency Adjustments

A number of community circulators will offer enhanced frequencies to account for mobility demand. These include routes in Central and Leeward O‘ahu where additional development will occur.

Routes 412, 413, 415, 416, 418 and 419 serving ‘Ewa and Kapolei neighborhoods will offer 15-minute peak period service. Central Route 441 serving the Waiawa development will provide 15-minute service to the Ka Uka park-and-ride lot.

Ferry Services

Ferry operations for the 2030 Baseline alternative will operate as described for the 2018 network.

Kapolei Route Addition

Development in Makaīwa Hills will require the addition of community circulator Route 419. Route 419 will provide service to the new neighborhoods and the Hawaiian Waters Adventure Park enroute to the Kapolei Transit Center. The route will interline with Route 416 at the transit center.

Route 419: Makaīwa Hills Community Circulator. Makaīwa Hills is an area of 1,300 acres that will be developed for a potential build-out of 2,000 residential units. Route 419 will leave the relocated Kapolei Transit Center, traveling Kapolei Parkway to left on Wākea, right on Kamokila, left on Farrington Hwy (to serve the Hawaiian Waters Adventure Park), continuing on Farrington to serve Makaīwa Road 1 and 2.

Central O‘ahu Service Route Addition

One new community circulator, Route 440, will be added to serve the Koa Ridge development. Route 441, serving Waiawa neighborhoods, will have a changed alignment due to the construction of the Central Mauka Road providing connections to Pearl Highlands.

Route 440: Koa Ridge Community Circulator. The Koa Ridge development encompasses 750 acres. Concept plans have been offered for 3,000 to 3,500 dwelling units and a potential medical campus. Route 440 would traverse through the Koa Ridge development and be anchored at a transfer point in the vicinity of Ka Uka and H-2 where transfers would be made available to existing routes currently traveling the H-2 alignment. Current Route 433 serving the Kaiser Medical Center in Waipi‘o would be extended to the transfer point to allow for passenger connections and possible interlining with Route 440.

Bus Operations Summary

Bus operations summary tables, by time period, are included for 2018 and 2030 in Appendices C and D, respectively.

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Fixed Guideway Physical Description

The New Start Project would include the construction and operation of a fixed guideway transit line between East Kapolei and Ala Moana Center. The system could use any fixed guideway transit technology meeting performance requirements and could either be automated or employ drivers. Supporting facilities would include a vehicle maintenance facility, park-and-ride lots and transit centers. Existing bus service would be reconfigured and enhanced to bring riders on local buses to nearby transit stations. The guideway would be constructed within existing street or highway rights-of-way where possible, but would require the acquisition of additional property in various locations. This alternative would not preclude future extensions of the system within the corridor, or to other parts of O'ahu.

Technologies Being Considered

A broad range of technologies was considered for application to this alternative, including light rail transit, personal rapid transit, automated people mover, monorail, magnetic levitation (maglev), commuter rail, and emerging technologies that are still in the development stage. Through a screening process, seven transit technologies were selected and will be considered as possible options. Those seven potential technologies include: conventional bus, guided bus, light rail, people mover, monorail, maglev and rapid rail. Technologies that were not carried forward from the screening process include personal rapid transit, commuter rail, and the emerging technologies. The technology screening process and results are documented in the *Honolulu High-Capacity Transit Corridor Project Technology Options Memo.*

Fixed Guideway Operations and Passenger Facilities

The fixed guideway would operate in both directions from 4 a.m. – 12 p.m. The headways would be 3 minutes during peak hours, 6 minutes for off-peak hours and 10 minutes for night hours. The general headway plan is as follows in Table 4-1.

Table 4-1. Fixed Guideway Headway Plan

Hours	Headway (minutes)
4 a.m. – 6 a.m.	6
6 a.m. – 9 a.m.	3
9 a.m. – 3 p.m.	6
3 p.m. – 6 p.m.	3
6 p.m. – 8 p.m.	6
8 p.m. – 12 a.m.	10

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Trains are planned as a two-car consist and they may be expanded in time as needed for demand. Currently, demand forecasting models show that a two-car consist is sufficient to manage expected demand.

Fares are expected to remain consistent with current fare levels for TheBus. Transfers between TheBus and the fixed guideway system would be seamless; both TheBus and the fixed guideway would operate under a unified fare system. As an example of fare rates for TheBus, Table 4-2 shows the current fare structure. The actual rates are subject to change based on inflation. The guiding rate policy is that rates would also be managed to maintain the farebox recovery levels within 27 – 33% of operating costs.

Table 4-2. TheBus Current Fare Structure (as of 2007)

Category	Ticket Type	Fare
Adult	One-way	$2 (+ 1 transfer)
	Monthly Pass	$40
	Annual Pass	$440
Senior / Disability	One-way	$1 (+ 1 transfer)
	One-time Senior / Disability Card purchase	$10
	Monthly Pass	$5
	Annual Pass	$30
Youth	One-way	$1 (+ 1 transfer)
	Monthly Pass	$20
	Annual Pass	$220
U.S. Medicare Card	One-way	$1 (+ 1 transfer)
U-Pass (valid for students of participating Universities)	Academic Year Pass	$100
Visitor Adult	4 – Day Pass	$20
Football Express	One-way	$3
	Round-trip	$6

The fixed guideway system will be a proof-of-payment system. There will be ticket kiosks within the stations, but there will be no barriers to enter the system. Tickets will be checked by transit system monitors on a consistent basis and the penalty for riding without a valid ticket or pass will be high enough to deter riders from riding without a ticket.

Passenger Facilities

The stations would be located as listed:

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- North-South Road between Kapolei Parkway and Farrington Highway
- UH West O'ahu at North-South Road, makai of Farrington Highway
- Farrington Highway between North-South Road and Fort Weaver Road
- Farrington Highway and Leokū Street
- Farrington Highway and Mokuola Street (integrated with the Waipahu Transit Center),
- Leeward Community College,
- Kamehameha Highway and Kuala Street
- Kamehameha Highway and Kaonohi Street.
- Aloha Stadium
- Salt Lake Boulevard and Ala Nioi Place
- Middle Street Transit Center
- Dillingham Boulevard and Mokauea Street
- Dillingham Boulevard and Kōkea Street
- Dillingham Boulevard and Ka'aahi Street
- Nimitz Highway and Kekaulike Street
- Nimitz Highway and Fort Street
- Halekauwila Street and South Street
- Halekauwila Street and Ward Avenue
- Kona Street and Ke'eaumoku Street

Park-and-ride lots are planned at various locations along the alignment. Projected lot sizes are listed in Table 4-3. There would be no charge for using the park-and-ride facilities. All park-and-ride facilities would be lighted and would have trees for aesthetic and shade purposes. Certain park-and-ride locations may be multi-level, depending on the space available and projected demand for the facilities.

Table 4-3. Park-and-Ride Locations for Fixed Guideway Alignment

Park-and-Ride Location	Size
UH West O'ahu at North-South Road, makai of Farrington Highway	1,700 Stalls
Pearl Highlands	1,500 Stalls
Aloha Stadium	1,500 Stalls

All stations would have covered bicycle parking where bicycles can be secured by the rider. Each station will have space for at least 10 bicycles and some may have more depending on the projected bicycle access of the station.

Bus Service Guiding Principles

The bus network has been developed building upon the No Build and Baseline (TSM) alternatives previously detailed. The bus networks follow several guiding principles. They are defined as:

1. Ferry services will operate as described in the No-Build Alternative.

2. A route will be realigned and truncated at a fixed guideway station if the estimated out of direction passenger travel time for local and community circulator routes is impacted by no more than five (5) minutes. The route is not realigned if the impact is eight (8) or more minutes.

3. Local routes are either discontinued or reclassified as a feeder service where major local routes serve the same alignment as the fixed guideway. The exception will be for those routes deemed essential to provide local bus stop service along the fixed guideway alignment.

4. Peak period, peak direction express bus routes in competition with the fixed guideway system are discontinued in favor of the fixed guideway alignment if the estimated passenger travel time is impacted by no more than an additional 15 minutes.

5. Community circulator routes are reoriented and extended to serve a fixed guideway station if the mileage impact is no more than an additional two (2) miles. The exception will be for those route changes deemed necessary, especially during the peak periods, to avoid a double transfer to reach a fixed guideway station. This principle was increased to five (5) miles for the initial segment.

6. Community circulator routes will retain the same span of service and headways as detailed in the Baseline Alternative unless a route has the same alignment as the fixed guideway and is eliminated or forecasted ridership is such that additional service is warranted due to severe overcrowding.

7. The highly urban area routes will not be modified to directly link to a fixed guideway station if they pass within three (3) blocks of a station and deviating the route has been deemed disruptive to the majority of the passengers.

Bus Service Modifications – 2018

Connecting Bus Services: Wai'anae to Waipahu

Wai'anae community circulator routes will operate on the 2018 Baseline headways to provide convenient connections to Routes C, 40 and 93. Route C will terminate at the fixed guideway terminus on North-South Road. The route will continue from the Kapolei Transit Center via Kapolei Parkway to left on the North-South Road. The route will offer 10-minute peak period service and 20-minute off peak service. Route 40 will continue to operate to downtown Honolulu via a modified alignment and operating conditions.

Express Routes 92, 93A and 102 will be discontinued as they duplicate the fixed guideway service. Express Route 93 will provide peak period service to the UH West O'ahu station.

Kapolei and 'Ewa services will operate along the 2017 no-build alignments with the exception of Route 416 which will be extended to serve the fixed guideway station at the UH West O'ahu Campus. Route 421 will extend to serve Iroquois Point housing and will be interlined with Route 42. Route 42 will operate from 'Ewa Beach to the Mokuola and Farrington Highway Station (Waipahu Transit Center) in Waipahu during the fixed-guideway hours of operation. The route's alignment from Waikīkī to 'Ewa Beach will be retained for owl services when the fixed guideway is closed.

'Ewa express Route 101 and limited stop Route E are discontinued.

Route 40/40A: Mākaha/Downtown Honolulu/Ala Moana Transit Center Local Route: Route 40 will continue along its present alignment to the Kapolei Transit Center from Wai'anae. Accessing the Kapolei Transit Center in the Koko Head bound direction, the route will travel Kamokila Boulevard to right on Wakea to the transit center. Continuing Koko Head bound from the transit center, the route will travel Kapolei Parkway to left on Fort Barrett Road and right onto Farrington Highway.

Route 40/40A will provide 10-minute combined peak period and 20-minute mid-day service between Mākaha and Leoku and Farrington Highway in Waipahu. The route will provide 20-minute peak and mid-day service between Waipahu and the Ala Moana Transit Center.

Route 42: 'Ewa Beach/Waipahu Local Route: Route 42 will connect 'Ewa communities with Waipahu and serve both the Leoku and Farrington Highway and Mokuola and Farrington Highway stations. The route will service all stops in Waipahu and 'Ewa providing 10-minute peak, 20-minute mid-day and 30-minute evening service. The complete Route 42 alignment from Waikīkī to 'Ewa Beach will operate when the fixed guideway is closed.

Route 421: 'Ewa Beach Community Circulator: Route 421 will continue to Iroquois Point housing via Cormorant Ave, left on Iroquois Drive, right on Ibis Avenue, right on Heron Avenue, left on Iroquois and left on Cormorant Avenue to return to Kapolei. The route will provide 20-minute peak and 40-minute off peak service and will interline with Route 42 at the 'Ewa Transit Center.

Connecting Bus Services: Waipahu/Pearl City/'Aiea

Connections to the fixed guideway occur at the Farrington Highway and Leoku and Mokuola Stations in Waipahu and the LCC, Pearl Highlands and Pearlridge Stations on Kamehameha in Pearl City/Aiea. Route 50 will operate on its full 2018 Baseline alignment. Routes D, 83, 83A, 84, 84A and 98 will all terminate at the Pearl Highlands Station. Route 441 will be extended to serve the Pearl Highlands Station via H-2 to Kamehameha. Route 441X will be discontinued. Route 51 will terminate at the Pearlridge Station.

Waipahu Routes 43, 81, 96, 97, 103, 434X and 435 will be discontinued since they operate along a major portion of the same alignment as the fixed guideway. Route A will be shortened to provide service between Kalihi Transit Center and UH Mānoa. All circulators will operate on the Baseline headways and span of service.

Route 441: Waiawa Community Circulator. Route 441 will be modified to serve the Pearl Highlands Station and Waiawa neighborhoods via development roads, across Ka Uka to connect to the park-and-ride lot, continuing on H-2 to the Pearl Highlands Station. The route continues from the station on Kamehameha to left on Acacia, right on Kuala, right on Waimano Home Road returning to the Pearl Highlands Station, H-2 and continuing to Waiawa.

Few changes will occur in Pearl City and Aiea. Routes 11 and 90 express will be discontinued and Route 54 will operate on less frequent headways (15-minute peak and 20-minute off-peak schedule). Route 54 will not be interlined with Routes 547 and 548 in the peak periods. Route 547 will be modified to provide a direct connection to the fixed guideway at the Pearl Highlands Station. The route will not serve Pearlridge.

Route 547: Pacific Palisades Community Circulator. Route 547 serves Pacific Palisades via Komo Mai/Aumakua loop then right on Waimano Home Road, right on Kuala, right on Kamehameha to the Pearl Highlands Station, continuing on Kamehameha to right on Waihona to serve development (TAZ 480) then returning to the Pearl Highlands Station and Pacific Palisades via the same alignment.

Connecting Bus Services: Salt Lake Boulevard

This section includes bus route connections in Salt Lake, the Airport, Pearl Harbor and Hickam Air Force Base. Fixed guideway stations include those located at Salt Lake Boulevard and Kahuapaani Street (serving Aloha Stadium) and Salt Lake Boulevard and Ala Nioi Place serving Salt Lake neighborhoods.

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Both Pearl Harbor and Hickam Air Force Base will be served by circulators (new Routes 312 and 313) connecting at fixed guideway stations. Route 312 serving Pearl Harbor will connect with the Salt Lake Boulevard and Kahuapaani Street Station. Hickam bus services will connect from the Salt Lake Boulevard and Ala Nioi Place Station.

Route 9 will no longer serve the area; terminating its current alignment at the Ala Moana Station. Route 19 (alignment change is described in Section 2.2.5) will terminate at the Airport. Route 20 will be discontinued.

Similarly, Route 3 will be redesigned into two separate routes to provide quick and convenient access to the fixed guideway from Salt Lake in the west end and providing local service along Kapi'olani in the eastern portion of the route.

Route 31: Salt Lake Community Circulator. Route 31 will provide the Salt Lake portion of the current Route 3 alignment. Westbound from the Kalihi Transit Center, the route travels right on Middle Street, left on Kaua to Damon, Kikowaena, left on Ahua, right on Pūkōloa to Salt Lake, right on Ala Napunani, to follow its current alignment through Salt Lake neighborhoods. Passengers will be able to connect to the fixed guideway at Ala Ilima and Ala Nioi Place. The route will return to the Kalihi Transit Center along the same alignment providing 10-minute peak period service and 15-minute off-peak service.

Route 311: Moanalua Valley/Salt Lake/Airport Community Circulator. Route 311 is a revision to TSM Route 301 and is renumbered to reflect its orientation to Salt Lake. Route 311 will not serve the Kalihi Transit Center. Route 311 will serve Ala Ilima between Ala Napunani and Ala Lilikoi (instead of Likini which is served by Route 301) to access the fixed guideway at Ala Ilima and Ala Nioi Place. The route will access the Airport via right on Nimitz and left on Rogers to serve airport destinations. From the Airport the route will travel right on Aolele to left on Lagoon Drive, then left on Nimitz to right on Camp Catlin to return to Salt Lake and Moanalua Valley. The route will provide 15-minute peak and 30-minute off-peak service.

Route 312: Pearl Harbor Community Circulator. Route 312 will provide all day connections from the Salt Lake Boulevard and Kahuapaani Street Station via Salt Lake Boulevard, right on Bougainville, right on Radford Drive to Pearl Harbor destinations following the alignment of the current Route 9 from Radford Drive. The route will serve the Navy Supply Center then travel to Landing C along the current alignment returning to Radford Drive and continuing to the fixed guideway station directly from Landing C. Fifteen-minute peak period and 30-minute off-peak service will be provided from 5:30 AM to 8:00 PM weekdays.

Route 313: Hickam Air Force Base Community Circulator. Route 313 provides all day connections to Hickam Air Force Base replacing service currently provided by Route 19. The route will follow the Route 19 alignment through Hickam Air Force Base to Nimitz and Elliott where the route turns left on Nimitz, right on Valkenburgh, right on Radford Drive, right on Salt Lake Boulevard, left

on Ala Lilikoi, right on Ala Ilima, right on Ala Napunani, right on Salt Lake Boulevard to return to Hickam Air Force Base via left on Radford Drive. The route will provide 15-minute peak and 30-minute off peak service from 5:30 AM to 1:20 AM. Weekend service is provided at reduced levels consistent with current Route 19 trips to Hickam Air Force Base.

Route 314: Aloha Stadium/Arizona Memorial Community Circulator. Route 314 will serve the fixed guideway station on Salt Lake Boulevard at Kahuapaani Street and continue on Salt Lake Boulevard to a right turn on Bougainville, right on Radford Drive right on Kamehameha to the Arizona Memorial parking lot. The route returns to Aloha Stadium along the same alignment. The route will provide 15-minute all day service from Aloha Stadium to the Arizona Memorial.

Connecting Bus Services: Dillingham Boulevard

Connecting Dillingham Boulevard bus services are anchored at the Kalihi Transit Center. A number of routes will connect at the transit center. Mauka/makai services will be enhanced. The following describes route changes for Middle Street and Kalihi services.

Route A: University of Hawaii at Manoa/Kalihi TC Limited Stop Route. Route A will connect the Kalihi Transit Center with the University of Hawai‘i at Mānoa along its current alignment.

Route 30: Kalihi/Palama/Pauoa/Kaka‘ako Local Route. Route 30 will connect the Kalihi Transit Center with Pālama Medical District, Punchbowl, Ward Avenue, Kaka‘ako and the Ala Moana Station and Transit Center. Eastbound from the transit center the route turns left on Middle Street, left on Kamehameha/Dillingham, left on Mokauea, right on King, left on Houghtailing, right on School, left on Lanakila, right on Kuakini, left on Nu‘uanu, right on Pauoa, right on Lusitana, left on ‘Iolani to Prospect, right on Ward, left on Auahi to Queen, left on Ala Moana, left on Pi‘ikoi and right on Kona to the Ala Moana Transit Center. The route will provide 60-minute peak and off-peak service.

Route 301: Kalihi/Salt Lake/Foster Village/Aloha Stadium Community Circulator. Route 301 will follow a similar alignment of current Route 32 with a couple of modifications. Westbound from the Kalihi Transit Center, the route will travel right on Middle Street, left on Kaua to Damon, Kikowaena, left on Ahua, right on Pūkōloa to Salt Lake, right on Ala Napunani, left on Likini, left on Ala Lilikoi, left on Ala Ilima to serve the fixed guideway station, returning on Ala Ilima to left on Ala Lilikoi, right on Salt Lake, right on Likini Place, left Likini, right on Aila, left on Āliamanu, right on Wanaka, left on Miko, right on Ukana, left on Keaka, right on Pakini, right on Punihi, right on Halupa, left on Haloa, right on Ala Oli, right on Salt Lake to the Salt Lake Boulevard and Kahuapaani Station, left on Kamehameha, left on Kalaloa to right on Salt Lake Boulevard to return to the Kalihi Transit Center. The route returns to the Kalihi Transit Center along the same alignment. The route will provide 15-minute peak and 30-minute off-peak service.

Route 302: Tripler Army Medical Center Community Circulator. Route 302 is a revised alignment of current Route 31. The route services the Kalihi Transit Center, Fort Shafter, Moanalua Gardens, the Veterans Affairs Office and Tripler Medical Center. Westbound from the Kalihi Transit Center, the route will travel right on Middle, left on Kaua, right on Ala Mahamoe, right on Jarrett-White, left on Ward, right on Krukowski to Tripler Hospital Porte Cochere. The route returns to Kalihi via Tripler Hospital Porte Cochere, left on Krukowski, right on Jarrett-White, left on Kaua, right on Funston, to the Moanalua Freeway on ramp to the Frontage Road and right on Middle Street to the transit center. The route will offer 30-minute service.

Route 303: Kalihi Valley Homes Community Circulator. Route 303 provides a direct connection for Kalihi Valley Homes to the Kalihi Transit Center. The alignment along with Route 305 is part of a revised current Route 7. Route 303 provides service from Kalihi Transit Center to Fort Shafter, Dole Middle School, Kalihi District Park and Kalihi Valley Homes. Eastbound from the Kalihi Transit Center, the route travels right on Middle Street to School Street, left on Kamehameha IV, left on Kalena to Kalena and Alu. The route returns via Kalena and Alu, to Kalena, right on Alu, right on Likelike to Kamehameha IV, right on School Street to the transit center. The route will provide 15-minute peak and 30-minute off-peak service.

Route 304: Kalihi/Liliha/Alewa Community Circulator. Route 304 is a revision of current Route 10 providing a connection to the Kalihi Transit Center. The route provides service to Gulick Avenue, the Kamehameha Shopping Center, Liliha and ʻĀlewa Heights. This alignment will no longer serve Sand Island, which will be served by Route 305. Eastbound from the Kalihi Transit Center, the route travels Middle Street, right on King, left on Gulick, right on School, left on Houghtailing, left on Hillcrest, right on Kealia, right on Makanani to Lolena and Iholena, left on Judd, left on Nuʻuanu, left on Wyllie, left on ʻĀlewa to left on Hoomaikai, right on Kualono, right on Kalikimaka to Kalikimaka and ʻĀlewa. The route returns to the Kalihi Transit Center via Kalikimaka, right on Alewa, right on Wyllie, right on Nuʻuanu, right on Judd, right on Iholena to Lolena and Makanani, left on Kealia, left on Hillcrest, right on School, left on Gulick, right on King to Kaua, left on Middle Street to the transit center. The route will provide 15-minute peak and 30-minute off-peak service.

Route 305: Kalihi Valley/Sand Island Community Circulator. Route 305 provides all day, frequent service to Sand Island, Kalihi Kai, Farrington High School, Kamehameha Shopping Center and Kalihi Uka. Eastbound from the Kalihi Transit Center the route travels left on Middle Street, left on Kamehameha/Dillingham, right on Mokauea, left on Auiki, left on Kalihi to Likelike to Kalihi and Ahuahu. The route returns to the Kalihi Transit Center along the same alignment. The route will provide 30-minute service.

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Route 306: Lagoon Drive Community Circulator. Route 306 will provide service from the Kalihi Transit Center to Lagoon Drive via Māpunapuna. From the transit center the route turns right on Middle Street, left on Kaua to Damon and Kikowaena, left on Ahua, right on Pūkōloa, left on Pu'uloa Road crossing Nimitz to Lagoon Drive to its terminus at Palekona. The route returns to the Kalihi Transit Center along the same alignment. Service will be provided hourly from 5:00 AM to 9:00 PM.

Connecting Bus Services: Halekauwila/Kona/Ala Moana

The fixed guideway alignment will operate along Halekauwila to its terminus at the Ala Moana Shopping Center. Some urban Honolulu routes will be modified to connect to the fixed guideway stations. East Honolulu routes will operate as described in the TSM alternative.

Route 3: Kaimukī/Downtown Honolulu Local Route. The eastern end of Route 3 will operate on its current alignment serving Kaimukī, providing connections to the fixed guideway at Ala Moana Transit Center and Station and continuing on Kapi'olani to provide local service. The route returns to Kaimukī from Kapi'olani via right on Alapa'i, left on Beretania, left on Richards, left on S. King to Kapi'olani and Kaimukī. The route will provide 10-minute peak period service and the same span of service as offered in the TSM Alternative.

Route 4: Inter-Island Ferry Terminal/Waikiki Local Route. The eastern end of Route 4 will provide service to Waikiki continuing on Dole from Wilder, right on St. Louis Drive, right on Wai'alae, to Kapi'olani, left on Kaimukī, right on Kapahulu, left on Kalākaua, left on Monsarrat, left on Paki to return to Kapahulu. The western end of Route 4 will be operate as described in the TSM alternative serving the Inter-island Ferry Terminal.

Route 6: Ala Moana/UH Mānoa Community Circulator. Route 6 provides the major local connection to the University from the Kona Station at Ala Moana Center. The full Route 6 alignment provides 20-minute peak period service to Mānoa from Ala Moana. During the peak periods, this route will be supplemented between Ala Moana and the University providing 10-minute combined service between the two destinations.

Route 8: Waikīkī/Kāhala Mall Community Circulator. Route 8 provides the major connection to Waikīkī from the fixed guideway station at Ala Moana on Kona. The route will provide 5-minute service between the station and Waikīkī. Route 8 will provide 10-minute peak and 20-minute off-peak service between Ala Moana and Kāhala Mall providing access for East Honolulu residents to Waikīkī, Ala Moana and the fixed guideway alignment.

Route 9: Pālolo Valley Community Circulator. Route 9 will terminate at the Ala Moana Station providing 15-minute and 30-minute off-peak service.

Route 13: Liliha Community Circulator. Route 13 will operate along the current Route 13 Baseline alignment along Liliha terminating at the Alapa‘i Transit Center via right on Punchbowl, left on Ala Moana Boulevard and left on South to Alapa‘i connecting passengers with the fixed guideway at the Halekauwila and South Station. The route will provide 10-minute peak period service. The eastern portion of the route from Waikīkī to Kāhala Mall will become part of Route 8.

Route 15: Pacific Heights/Papakolea Community Circulator. Route 15 provides all day feeder service to Pacific Heights and Tantalus residents on two branches connecting in downtown Honolulu. The route serves Pacific Heights, Queen's Medical Center, Punchbowl, Punchbowl Cemetery and Papakolea. Eastbound from the route's terminus at 3180 Pacific Heights Road, the route travels Pacific Heights, left on Pauoa, right on Lusitana to Queen Emma, left on Vineyard, right on Punchbowl, left on Ala Moana Blvd, left on South, right on King, left on Pi‘ikoi, right on Pensacola to ‘Auwaiolimu, left on Hookui, left on Puowaina to Tantalus, right on Makiki Heights, right on Mott-Smith, right on Nehoa to Nehoa and Lewalani.

The route will deviate into Punchbowl Cemetery when it is open: via right on Puowaina to Punchbowl Cemetery, turning around at the Visitors' Center and returning to Tantalus. The route returns to Pacific Heights from Nehoa and Lewalani via left on Pensacola, right on Beretania, left on Ward, right on Ala Moana, right on South, left on Beretania, right on Punchbowl, left on Vineyard, right on Queen Emma to Lusitana, left on Pauoa, right on Pacific Heights to the terminus.

Route 19: Waikīkī/Iwilei/Salt Lake/Airport Local Route. The western end of Route 19 will terminate at the Airport. From the Airport the route travels the upper departure level of the airport returning to Rogers, right on Nimitz, left on Camp Catlin to Arizona, right on Salt Lake Boulevard serving the Salt Lake Boulevard and Ala Nioi Station (providing connections to the Airport and Iwilei), right on Pu‘uloa Road, and left on Nimitz to resume the Route 19 alignment through Iwilei. Hickam Air Force Base will be served by new Route 313. Route 19 will operate along Hotel Street to right on Punchbowl (Alakea in ‘Ewa direction) and left on Ala Moana. The route turns right on Keawe, to serve Kaka‘ako development, left on Ilalo, left on Ahui and right on Ala Moana Boulevard. The route continues across Ala Moana to serve the Ward Warehouse area returning to Ala Moana via Queen to continue to Waikīkī. The route terminates in Waikīkī on Monsarrat. Returning via Paki and Kapahulu to Kuhio.

Bus Service Modifications – 2030

2030 bus service connections with the fixed guideway line mostly will be the same as in 2018. Consistent with the Baseline Alternative, a number of community circulators will offer enhanced frequencies to accommodate expected demand in areas where additional development will occur between 2018 and 2030. Routes 412, 413, 415, 416 and 418

serving ‘Ewa and Kapolei neighborhoods will offer 15-minute peak period service, rather than 30-minute peak period service.

Route 419: Makaīwa Hills Community Circulator will be instituted as described for the 2030 Baseline Alternative. It will be interlined with Route 416 at the Kapolei Transit Center, providing for direct access from Makaīwa Hills to the fixed guideway line.

In Central O‘ahu, consistent with the Baseline Alternative, a new community circulator, Route 440, will be added to serve the Koa Ridge development. Route 441, serving Waiawa neighborhoods, will have a changed alignment due to the construction of the Central Mauka Road providing connections to Pearl Highlands.

Route 440: Koa Ridge Community Circulator. Route 440 will traverse through the Koa Ridge development to a transfer point in the vicinity of Ka Uka and H-2 where transfers would be made available to existing routes currently traveling the H-2 alignment. During peak periods Route 440 will be extended via H-2 to Kamehameha Highway to serve the Pearl Highlands Station.

Route 441: Waiawa Community Circulator. Route 441 will be modified to serve the Pearl Highlands Station and lower Waiawa development via a lower loop with Central Mauka Road on the Koko Head side and a new road on the ‘Ewa side of the loop. The route will connect with Pearl Highlands Station then continue on Kamehameha to left on Acacia to Kuala, right on Waimano Home Road, right on Kamehameha to the Pearl Highlands Station then returning to Waiawa.

One additional route will be added to the restructured Pearl City/Aiea bus services. Route 549 will connect new neighborhoods on Ford Island with the Aloha Stadium Station.

Route 314: Ford Island/Aloha Stadium/Arizona Memorial Community Circulator. Route 314 will serve the fixed guideway station on Salt Lake Boulevard at Kahuapaani Street after circulating through Ford Island and continue on Salt Lake Boulevard to a right turn on Bougainville, right on Radford Drive right on Kamehameha to the Arizona Memorial parking lot. The route returns to Aloha Stadium along the same alignment. The route will provide 15-minute peak service to Ford Island and all day service from Aloha Stadium to the Arizona Memorial and 30-minute mid-day service to Ford Island.

Bus Operations Summary

Bus operations summary tables, by time period, are included for 2018 and 2030 in Appendices E and F, respectively.

Appendix A: Bus Operating Details for No-Build Alternative, 2018

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	375	75	6	137	2,212	308	28	657
B	LS	87	3	3	24	966	294	28	223
C	LS	768	114	10	385	3,297	483	35	1,355
D	LS	197	20	4	115	1,450	170	20	572
E	LS	402	78	8	206	1,554	126	21	544
1	L	696	104	16	149	1,728	252	36	335
1L	LS	330	30	6	89	2,072	238	35	518
2	L	400	87	9	83	2,589	317	49	449
3	L	204	23	3	43	2,603	117	37	521
4	L	400	50	5	60	2,240	280	28	333
5	CC	0	0	0	0	540	60	20	102
6	L	105	5	2	20	2,024	106	32	302
7	CC	100	20	4	24	715	197	30	159
8	L	0	0	0	0	210	42	12	44
9	L	83	7	3	21	2,146	304	35	443
10	CC	29	1	1	5	336	64	12	63
11	L	0	0	0	0	744	206	10	162
13	L	570	55	10	113	2,415	315	42	474
15	CC	28	2	1	4	371	26	20	61
16	CC	0	0	0	0	328	40	4	31
17	CC	0	0	0	0	162	63	13	24
18	CC	0	0	0	0	438	102	12	80
19	L	273	22	4	60	1,206	194	18	264
20	L	140	30	2	33	1,476	204	26	313
23	L	0	0	0	0	942	318	12	265
31	CC	86	3	4	26	356	12	11	92
32	L	118	12	2	31	854	196	14	214
40	L	1,279	131	10	401	2,985	215	20	808
41	L	147	28	3	40	777	63	14	189
42	L	722	58	8	205	3,150	420	28	738
43	L	0	0	0	0	528	112	8	168
50	L	98	22	2	32	735	105	14	224
51	L	379	71	5	122	1,872	288	20	489
52	L	567	105	5	241	1,743	147	14	678
53	L	274	18	5	57	1,686	156	21	328
54	L	256	4	7	71	1,447	109	21	300
55	L	247	20	2	86	1,506	174	12	514
56	L	175	18	3	68	838	100	12	264
57	L	192	20	6	77	1,203	159	25	412
57A	L	0	0	0	0	315	44	7	108
65	L	133	22	2	36	773	134	11	215
70	CC	0	0	0	0	153	6	5	46
71	CC	0	0	0	0	195	25	8	44
73	CC	0	0	0	0	120	48	12	52
74	CC	0	0	0	0	147	29	7	33
77	CC	0	0	0	0	189	22	5	59
131	CC	0	0	0	0	50	10	4	11
132	CC	0	0	0	0	50	10	4	12
133	CC	25	5	2	7	150	30	12	41

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
134	CC	55	5	2	16	330	30	12	94
231	CC	80	10	4	20	240	30	12	59
232	CC	62	28	4	15	217	98	14	53
401	CC	80	29	4	22	120	20	6	32
402	CC	44	29	4	14	66	20	6	21
403	CC	94	43	3	24	183	41	6	45
411	CC	100	20	4	14	350	70	14	48
412	CC	70	9	5	18	189	21	14	49
413	CC	15	0	1	3	154	56	14	48
414	CA	37	53	3	9	72	108	6	18
415	CC	73	17	2	24	595	35	14	165
416	CC	25	5	2	7	175	35	14	49
417	CC	110	10	4	22	330	30	12	65
418	CC	28	2	2	10	84	6	6	29
421	CC	Included with Route 41							
422	CC	110	10	4	32	392	28	14	113
432	CC	100	20	8	19	325	70	26	62
433	CC	43	17	2	12	301	119	14	87
434	CC	70	20	3	18	371	49	14	84
441	CC	25	5	2	1	75	15	6	4
501	CC	0	0	0	0	182	28	14	47
502	CC	0	0	0	0	175	35	14	34
503	CA	64	14	5	15	141	42	6	29
504	CC	0	0	0	0	165	15	6	22
505	CC	0	0	0	0	45	15	6	10
511	CC	75	15	6	12	175	35	14	29
512	CC	52	8	4	15	156	24	12	44
513	CC	50	10	4	9	150	30	12	27
521	CC	33	16	2	10	99	48	6	29
522	CC	55	16	2	19	165	48	6	56
FERRY ROUTES									
4F	F	0	0	0	0	193	18	4	32
8F	F	0	0	0	0	196	14	4	43
30F	F	0	0	0	0	158	18	4	25
41F	F	0	0	0	0	83	8	2	18
93F	F	0	0	0	0	180	0	2	48
411F	F	0	0	0	0	48	12	2	20
413F	F	0	0	0	0	66	24	3	21
415F	F	0	0	0	0	69	0	3	38

Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
EXPRESS ROUTES									
80	X	0	0	0	0	349	0	6	111
80A	X	0	0	0	0	350	0	5	99
80B	X	0	0	0	0	33	0	1	11
81	X	280	0	4	80	560	0	8	159
82	X	49	0	1	16	147	0	3	47
83	X	473	0	6	174	329	0	4	114
83A	X	124	0	2	53	0	0	0	0
84	X	130	0	2	55	153	0	2	57
84A	X	69	0	1	26	222	0	3	81
85	X	0	0	0	0	240	0	3	67
85A	X	0	0	0	0	159	0	3	50
86	X	65	0	1	26	0	0	0	0
86A	X	70	0	1	28	0	0	0	0
88	X	0	0	0	0	116	0	2	31
88A	X	378	0	2	141	0	0	0	0
89	X	0	0	0	0	116	0	2	36
90	X	0	0	0	0	146	0	2	37
91	X	240	0	4	97	340	0	5	121
92	X	124	0	2	52	62	0	1	26
93	X	1,044	0	8	287	930	0	11	285
93A	X	123	0	1	38	0	0	0	0
95	X	65	0	1	31	0	0	0	0
96	X	0	0	0	0	110	0	2	36
97	X	52	0	1	20	156	0	3	59
98	X	51	0	1	23	102	0	2	46
101	X	122	0	2	45	183	0	3	67
102	X	60	0	1	25	120	0	2	51
103	X	0	0	0	0	110	0	2	32
203	X	0	0	0	0	86	0	2	19
441X	X	0	0	0	0	224	0	4	75
TOTALS		14,954	1,673	290	4,661	68,943	8,734	1,346	17,744

CA	Community Access	L	Local Routes
CC	Community Circulator	LS	Limited Stop
F	Ferry Routes	X	Peak Period Express

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	3,144	456	48	1,127	1,896	264	24	563
B	LS	1,416	384	48	382	828	252	24	191
C	LS	3,744	576	48	1,864	2,826	414	30	1,168
D	LS	1,140	300	24	678	1,284	156	18	504
E	LS	1,260	180	24	627	1,332	108	18	475
1	L	2,088	72	48	447	1,728	252	36	335
1L	LS	1,980	180	36	533	1,776	204	30	444
2	L	2,250	200	50	459	2,216	272	42	385
3	L	2,766	474	42	582	2,248	102	32	444
4	L	2,880	360	36	428	2,400	300	30	357
5	CC	552	168	24	122	486	54	18	92
6	L	1,890	252	36	353	1,710	90	27	275
7	CC	634	126	26	149	609	163	26	135
8	L	1,035	45	60	221	630	126	36	132
9	L	1,415	312	23	311	1,541	192	19	302
10	CC	298	70	11	59	308	59	11	59
11	L	798	84	14	225	721	201	10	161
13	L	4,068	252	72	812	2,130	280	37	417
15	CC	420	48	18	69	336	24	18	56
16	CC	0	0	0	0	492	60	6	47
17	CC	294	56	28	52	231	45	15	27
18	CC	840	240	24	160	438	102	12	80
19	L	1,596	204	24	350	1,072	173	16	232
20	L	1,146	249	18	271	1,256	174	22	266
23	L	1,800	360	24	530	942	318	12	265
31	CC	394	18	11	94	271	9	8	60
32	L	708	102	12	183	732	168	12	183
40	L	3,102	498	24	969	2,648	193	18	730
41	L	1,188	252	24	324	666	54	12	162
42	L	2,431	299	26	685	2,504	330	22	583
43	L	1,320	120	24	504	660	140	10	210
50	L	1,176	264	24	384	630	90	12	192
51	L	1,824	336	24	588	1,560	240	18	444
52	L	2,736	504	24	1,162	2,241	189	18	871
53	L	1,316	158	21	369	1,075	90	13	220
54	L	1,512	318	25	382	1,602	123	22	337
55	L	2,470	330	20	856	1,255	145	10	428
56	L	1,450	168	21	474	939	122	14	308
57	L	1,137	320	23	463	902	195	16	325
57A	L	474	246	12	194	230	56	6	80
65	L	768	126	12	250	860	111	13	243
70	CC	356	12	8	98	174	9	6	44
71	CC	7	3	1	2	182	28	6	39
73	CC	234	126	24	99	105	55	11	46
74	CC	0	0	0	0	140	18	6	30
77	CC	296	64	8	96	153	37	4	50
131	CC	150	30	12	34	100	20	8	22
132	CC	150	30	12	35	100	20	8	24
133	CC	300	60	24	83	150	30	12	41

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
134	CC	660	60	24	188	330	30	12	94
231	CC	200	25	10	49	240	30	12	59
232	CC	135	15	10	38	186	84	12	45
401	CC	240	86	12	65	120	20	6	32
402	CC	132	86	12	42	66	20	6	21
403	CC	394	185	13	97	183	41	6	45
411	CC	600	120	24	82	300	60	12	41
412	CC	324	36	24	85	162	18	12	42
413	CC	132	48	12	41	132	48	12	41
414	CA	144	216	12	35	72	108	6	18
415	CC	438	102	12	141	510	30	12	141
416	CC	300	60	24	84	150	30	12	42
417	CC	660	60	24	129	330	30	12	65
418	CC	168	12	12	58	84	6	6	29
421	CC	Included with Route 41							
422	CC	330	30	12	97	336	24	12	97
432	CC	600	120	48	114	300	60	24	57
433	CC	552	168	24	149	258	102	12	75
434	CC	515	175	23	137	318	42	12	72
441	CC	150	30	12	8	75	15	6	4
501	CC	312	48	24	81	156	24	12	40
502	CC	300	60	24	58	150	30	12	29
503	CA	288	72	12	58	160	33	8	32
504	CC	275	25	10	36	110	10	4	14
505	CC	75	25	10	17	30	10	4	7
511	CC	300	60	24	50	150	30	12	25
512	CC	312	48	24	88	156	24	12	44
513	CC	300	60	24	54	150	30	12	27
521	CC	198	96	12	58	99	48	6	29
522	CC	330	96	12	112	165	48	6	56
FERRY ROUTES									
4F	F	0	0	0	0	193	18	4	32
8F	F	0	0	0	0	196	14	4	43
30F	F	0	0	0	0	158	18	4	25
41F	F	0	0	0	0	83	8	2	18
93F	F	0	0	0	0	180	0	2	48
411F	F	0	0	0	0	48	12	2	20
413F	F	0	0	0	0	66	24	3	21
415F	F	0	0	0	0	69	0	3	38

Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
EXPRESS ROUTES									
80	X	0	0	0	0	270	0	5	92
80A	X	60	0	1	15	257	0	3	53
80B	X	0	0	0	0	33	0	1	11
81	X	0	0	0	0	630	0	9	192
82	X	0	0	0	0	147	0	3	47
83	X	0	0	0	0	593	0	7	201
83A	X	0	0	0	0	129	0	2	53
84	X	0	0	0	0	300	0	4	107
84A	X	0	0	0	0	292	0	4	100
85	X	0	0	0	0	373	0	5	115
85A	X	0	0	0	0	150	0	3	45
86	X	0	0	0	0	63	0	1	25
86A	X	0	0	0	0	66	0	1	29
88	X	0	0	0	0	116	0	2	33
88A	X	0	0	0	0	377	0	2	161
89	X	0	0	0	0	100	0	2	36
90	X	0	0	0	0	146	0	2	27
91	X	0	0	0	0	504	0	7	170
92	X	0	0	0	0	186	0	3	76
93	X	0	0	0	0	1,590	0	10	398
93A	X	0	0	0	0	123	0	1	37
95	X	0	0	0	0	65	0	1	31
96	X	0	0	0	0	110	0	2	34
97	X	0	0	0	0	208	0	4	75
98	X	0	0	0	0	153	0	3	69
101	X	0	0	0	0	305	0	5	110
102	X	0	0	0	0	180	0	3	74
103	X	0	0	0	0	110	0	2	34
203	X	0	0	0	0	86	0	2	22
441X	X	0	0	0	0	224	0	4	75
TOTALS		74,377	12,255	1,743	21,407	65,671	8,035	1,270	17,194

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	847	128	13	304	0	0	0	0
B	LS	828	232	28	223	0	0	0	0
C	LS	1,560	240	20	777	0	0	0	0
D	LS	753	199	16	451	0	0	0	0
E	LS	1,470	210	28	732	0	0	0	0
1	L	1,305	45	30	279	783	117	18	168
1L	LS	1,155	105	21	311	550	50	10	148
2	L	1,170	130	26	238	135	10	3	28
3	L	1,197	63	18	252	337	43	5	71
4	L	1,120	140	14	167	320	40	4	48
5	CC	252	78	11	56	0	0	0	0
6	L	735	105	14	137	105	0	2	20
7	CC	317	60	13	75	0	0	0	0
8	L	690	30	40	147	0	0	0	0
9	L	709	133	11	158	128	12	4	33
10	CC	216	56	8	42	0	0	0	0
11	L	196	10	4	65	0	0	0	0
13	L	2,070	90	36	406	560	40	10	113
15	CC	280	20	10	46	0	0	0	0
16	CC	0	0	0	0	0	0	0	0
17	CC	189	54	18	33	0	0	0	0
18	CC	700	200	20	133	140	40	4	27
19	L	1,330	170	20	292	329	71	5	72
20	L	326	34	4	67	0	0	0	0
23	L	1,200	240	16	353	0	0	0	0
31	CC	226	9	8	65	0	0	0	0
32	L	472	68	8	122	0	0	0	0
40	L	3,619	301	28	1,131	2,585	415	20	808
41	L	792	168	16	216	0	0	0	0
42	L	2,444	106	26	688	1,696	210	18	477
43	L	0	0	0	0	0	0	0	0
50	L	980	220	20	320	0	0	0	0
51	L	533	97	7	172	304	56	4	98
52	L	1,140	210	10	484	1,140	60	10	484
53	L	602	68	11	171	17	0	1	6
54	L	660	134	12	170	0	0	0	0
55	L	1,235	165	10	428	992	88	8	343
56	L	507	56	8	174	0	0	0	0
57	L	575	140	11	227	0	0	0	0
57A	L	14	0	1	3	0	0	0	0
65	L	390	54	7	136	0	0	0	0
70	CC	88	6	4	25	0	0	0	0
71	CC	7	0	1	2	0	0	0	0
73	CC	0	0	0	0	0	0	0	0
74	CC	8	0	1	2	0	0	0	0
77	CC	0	0	0	0	0	0	0	0
131	CC	0	0	0	0	0	0	0	0
132	CC	0	0	0	0	0	0	0	0
133	CC	100	20	8	28	0	0	0	0

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
134	CC	220	20	8	63	0	0	0	0
231	CC	280	35	14	69	160	20	8	39
232	CC	108	12	8	30	0	0	0	0
401	CC	160	57	8	43	0	0	0	0
402	CC	88	57	8	28	0	0	0	0
403	CC	262	114	9	74	0	0	0	0
411	CC	220	28	16	63	68	8	4	22
412	CC	54	6	4	14	0	0	0	0
413	CC	0	0	0	0	0	0	0	0
414	CA	24	17	2	6	0	0	0	0
415	CC	292	68	8	94	0	0	0	0
416	CC	175	35	14	49	0	0	0	0
417	CC	550	50	20	108	110	10	4	22
418	CC	112	8	8	39	0	0	0	0
421	CC	Included with Route 41							
422	CC	275	25	10	81	55	5	2	16
432	CC	386	78	31	74	126	22	10	24
433	CC	322	98	14	87	46	14	2	12
434	CC	335	115	15	89	90	30	4	24
441	CC	75	15	6	4	0	0	0	0
501	CC	208	32	16	54	0	0	0	0
502	CC	200	40	16	39	0	0	0	0
503	CA	69	16	3	14	0	0	0	0
504	CC	0	0	0	0	0	0	0	0
505	CC	0	0	0	0	0	0	0	0
511	CC	250	50	20	42	25	5	2	4
512	CC	104	16	8	29	0	0	0	0
513	CC	100	20	8	18	100	20	8	18
521	CC	66	32	4	19	0	0	0	0
522	CC	110	32	4	37	0	0	0	0
FERRY ROUTES									
4F	F	0	0	0	0	0	0	0	0
8F	F	0	0	0	0	0	0	0	0
30F	F	0	0	0	0	0	0	0	0
41F	F	0	0	0	0	0	0	0	0
93F	F	0	0	0	0	0	0	0	0
411F	F	0	0	0	0	0	0	0	0
413F	F	0	0	0	0	0	0	0	0
415F	F	0	0	0	0	0	0	0	0

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
EXPRESS ROUTES									
80	X	0	0	0	0	0	0	0	0
80A	X	0	0	0	0	0	0	0	0
80B	X	0	0	0	0	0	0	0	0
81	X	70	0	1	21	0	0	0	0
82	X	0	0	0	0	0	0	0	0
83	X	0	0	0	0	0	0	0	0
83A	X	0	0	0	0	0	0	0	0
84	X	0	0	0	0	0	0	0	0
84A	X	0	0	0	0	0	0	0	0
85	X	0	0	0	0	0	0	0	0
85A	X	0	0	0	0	0	0	0	0
86	X	0	0	0	0	0	0	0	0
86A	X	0	0	0	0	0	0	0	0
88	X	0	0	0	0	0	0	0	0
88A	X	0	0	0	0	0	0	0	0
89	X	0	0	0	0	0	0	0	0
90	X	0	0	0	0	0	0	0	0
91	X	79	0	1	24	0	0	0	0
92	X	0	0	0	0	0	0	0	0
93	X	0	0	0	0	0	0	0	0
93A	X	0	0	0	0	0	0	0	0
95	X	0	0	0	0	0	0	0	0
96	X	0	0	0	0	0	0	0	0
97	X	0	0	0	0	0	0	0	0
98	X	0	0	0	0	0	0	0	0
101	X	0	0	0	0	0	0	0	0
102	X	0	0	0	0	0	0	0	0
103	X	0	0	0	0	0	0	0	0
203	X	0	0	0	0	0	0	0	0
441X	X	0	0	0	0	0	0	0	0
TOTALS		40,201	5,670	920	11,622	10,901	1,386	170	3,124

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
A	LS	119	8,474	1,231	9,705	161.8	2,788.8	4:15 AM to 10:37 PM
B	LS	131	4,125	1,165	5,290	88.2	1,042.8	4:55 AM to 11:02 PM
C	LS	143	12,195	1,827	14,022	233.7	5,547.7	3:07 AM to 10:53 PM
D	LS	82	4,824	845	5,669	94.5	2,319.8	5:00 AM to 10:00 PM
E	LS	99	6,018	702	6,720	112.0	2,583.2	4:30 AM to 10:00 PM
1	L	184	8,328	842	9,170	152.8	1,713.0	4:00 AM to 2:00 AM
1L	LS	138	7,863	807	8,670	144.5	2,044.5	4:00 AM to 1:30 AM
2	L	179	8,760	1,016	9,776	162.9	1,641.4	4:10 AM to 1:44 AM
3	L	137	9,355	822	10,177	169.6	1,912.9	4:15 AM to 1:26 AM
4	L	117	9,360	1,170	10,530	175.5	1,392.3	5:00 AM to 12:30 AM
5	CC	73	1,830	360	2,190	36.5	371.6	5:36 AM to 10:02 PM
6	L	113	6,569	558	7,127	118.8	1,105.7	5:03 AM to 11:58 PM
7	CC	101	2,426	566	2,992	49.9	579.6	4:39 AM to 11:07 PM
8	L	148	2,565	243	2,808	46.8	543.9	7:24 AM to 10:43 PM
9	L	95	6,022	960	6,982	116.4	1,267.6	5:10 AM to 12:56 AM
10	CC	43	1,459	250	1,709	28.5	399.1	4:53 AM to 10:41 PM
11	L	38	2,459	501	2,960	49.3	613.0	5:48 AM to 10:14 PM
13	L	207	11,813	1,032	12,845	214.1	2,333.6	5:00 AM to 1:00 AM
15	CC	80	1,435	120	1,555	25.9	484.6	5:30 AM to 10:23 PM
16	CC	10	820	100	920	15.3	77.5	6:00 AM to 8:00 PM
17	CC	74	876	218	1,094	18.2	135.7	5:00 AM to 12:30 AM
18	CC	72	2,556	684	3,240	54.0	479.9	6:00 AM to 12:00 AM
19	L	87	5,806	834	6,640	110.7	1,269.8	4:13 AM to 1:48 AM
20	L	72	4,344	691	5,035	83.9	950.1	5:14 AM to 7:33 PM
23	L	64	4,884	1,236	6,120	102.0	1,412.2	6:00 AM to 10:00 PM
31	CC	42	1,333	51	1,384	23.1	336.6	4:30 AM to 10:11 PM
32	L	49	2,930	546	3,476	57.9	751.8	5:10 AM to 9:50 PM
40	L	120	16,218	1,753	17,971	299.5	4,846.8	4:00 AM to 3:59 AM
41	L	76	3,628	565	4,193	69.9	1,064.4	4:47 AM to 10:10 PM
42	L	128	12,947	1,423	14,370	239.5	3,375.8	4:00 AM to 3:59 AM
43	L	42	2,508	372	2,880	48.0	882.4	7:00 AM to 6:27 PM
50	L	72	3,619	701	4,320	72.0	1,150.9	5:00 AM to 11:00 PM
51	L	78	6,472	1,088	7,560	126.0	1,913.0	4:30 AM to 1:37 AM
52	L	81	9,567	1,215	10,782	179.7	3,919.7	4:00 AM to 3:59 AM
53	L	72	4,970	490	5,460	91.0	1,151.3	4:49 AM to 11:26 PM
54	L	91	5,604	688	6,292	104.9	1,336.6	5:00 AM to 11:11 PM
55	L	62	7,705	922	8,627	143.8	2,654.5	4:00 AM to 3:59 AM
56	L	60	4,007	464	4,471	74.5	1,326.7	4:48 AM to 10:37 PM
57	L	81	4,009	834	4,843	80.7	1,503.5	4:58 AM to 11:30 PM
57A	L	26	1,033	346	1,379	23.0	385.4	5:32 AM to 6:25 PM
65	L	46	2,953	447	3,400	56.7	898.4	5:12 AM to 10:15 PM
70	CC	25	840	33	873	14.6	251.6	6:09 AM to 7:45 PM
71	CC	16	391	56	447	7.5	87.5	Peak Period
73	CC	47	459	229	688	11.5	197.8	6:14 AM to 5:47 PM
74	CC	14	295	47	342	5.7	65.6	Peak Period
77	CC	17	638	123	761	12.7	204.1	5:32 AM to 6:22 PM
131	CC	24	300	60	360	6.0	67.2	6:00 AM to 6:35 PM
132	CC	24	300	60	360	6.0	70.8	6:20 AM to 6:45 PM
133	CC	58	725	145	870	14.5	200.1	5:30 AM to 10:00 PM

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
134	CC	58	1,595	145	1,740	29.0	455.3	5:30 AM to 10:00 PM
231	CC	60	1,200	150	1,350	22.5	293.7	5:00 AM to 1:00 AM
232	CC	48	708	237	945	15.8	181.7	5:00 AM to 8:00 PM
401	CC	36	720	212	932	15.5	194.8	3:50 AM to 9:34 PM
402	CC	36	396	212	608	10.1	127.3	4:20 AM to 9:58 PM
403	CC	37	1,116	423	1,539	25.7	286.0	4:15 AM to 10:22 PM
411	CC	74	1,638	306	1,944	32.4	268.6	4:30 AM to 12:49 AM
412	CC	59	799	90	889	14.8	208.9	4:30 AM to 6:48 PM
413	CC	39	433	152	585	9.8	132.6	5:30 AM to 5:55 PM
414	CA	29	349	502	851	14.2	85.6	4:30 AM to 6:43 PM
415	CC	48	1,908	252	2,160	36.0	565.0	5:30 AM to 11:00 PM
416	CC	66	825	165	990	16.5	231.0	5:30 AM to 10:00 PM
417	CC	76	2,090	190	2,280	38.0	408.5	5:00 AM to 12:30 AM
418	CC	34	476	34	510	8.5	165.6	5:00 AM to 11:00 PM
421	CC	Included with Route 41						
422	CC	54	1,498	122	1,620	27.0	436.9	5:00 AM to 12:30 AM
432	CC	147	1,837	370	2,207	36.8	351.0	4:41 AM to 1:28 AM
433	CC	68	1,522	518	2,040	34.0	423.3	5:00 AM to 11:26 PM
434	CC	71	1,699	431	2,130	35.5	424.9	4:41 AM to 12:52 AM
441	CC	32	400	80	480	8.0	22.4	5:00 AM to 10:00 PM
501	CC	66	858	132	990	16.5	221.4	5:30 AM to 10:00 PM
502	CC	66	825	165	990	16.5	160.7	5:30 AM to 10:00 PM
503	CA	34	722	177	899	15.0	148.4	4:33 AM to 7:53 PM
504	CC	20	550	50	600	10.0	71.8	5:30 AM to 7:00 PM
505	CC	20	150	50	200	3.3	33.4	5:30 AM to 7:00 PM
511	CC	78	975	195	1,170	19.5	162.2	4:30 AM to 11:30 PM
512	CC	60	780	120	900	15.0	220.2	5:00 AM to 8:00 PM
513	CC	68	850	170	1,020	17.0	154.4	5:00 AM to 1:00 AM
521	CC	30	495	240	735	12.3	144.6	5:00 AM to 8:00 PM
522	CC	30	825	240	1,065	17.8	281.1	5:00 AM to 8:00 PM
FERRY ROUTES								
4F	F	7	385	35	420	7.0	64.4	Peak Period
8F	F	7	392	28	420	7.0	86.8	Peak Period
30F	F	7	315	35	350	5.8	50.4	Peak Period
41F	F	3	165	15	180	3.0	36.3	Peak Period
93F	F	3	360	0	360	6.0	96.9	Peak Period
411F	F	3	96	24	120	2.0	40.8	Peak Period
413F	F	6	132	48	180	3.0	42.6	Peak Period
415F	F	6	138	0	138	2.3	75.2	Peak Period

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
EXPRESS ROUTES								
80	X	11	619	0	619	10.3	203.7	Peak Period
80A	X	9	667	0	667	11.1	166.1	Peak Period
80B	X	2	66	0	66	1.1	22.3	Peak Period
81	X	22	1,540	0	1,540	25.7	452.4	Peak Period
82	X	7	343	0	343	5.7	109.8	Peak Period
83	X	17	1,395	0	1,395	23.3	489.3	Peak Period
83A	X	4	253	0	253	4.2	106.2	Peak Period
84	X	8	583	0	583	9.7	219.6	Peak Period
84A	X	8	583	0	583	9.7	206.6	Peak Period
85	X	8	613	0	613	10.2	181.3	Peak Period
85A	X	6	309	0	309	5.2	95.0	Peak Period
86	X	2	128	0	128	2.1	51.8	Peak Period
86A	X	2	136	0	136	2.3	56.7	Peak Period
88	X	4	232	0	232	3.9	64.7	Peak Period
88A	X	4	755	0	755	12.6	301.9	Peak Period
89	X	4	216	0	216	3.6	71.8	Peak Period
90	X	4	292	0	292	4.9	63.8	Peak Period
91	X	17	1,163	0	1,163	19.4	412.3	Peak Period
92	X	6	372	0	372	6.2	153.6	Peak Period
93	X	29	3,564	0	3,564	59.4	969.5	Peak Period
93A	X	2	246	0	246	4.1	74.2	Peak Period
95	X	2	130	0	130	2.2	62.0	Peak Period
96	X	4	220	0	220	3.7	70.3	Peak Period
97	X	8	416	0	416	6.9	153.6	Peak Period
98	X	6	306	0	306	5.1	137.3	Peak Period
101	X	10	610	0	610	10.2	221.4	Peak Period
102	X	6	360	0	360	6.0	150.5	Peak Period
103	X	4	220	0	220	3.7	66.7	Peak Period
203	X	4	172	0	172	2.9	40.4	Peak Period
441X	X	8	448	0	448	7.5	151.0	Peak Period
TOTALS		5,771	275,796	37,752	313,548	5,225.8	76,532.6	

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
A	LS	6	12	10	12	10	0	60
B	LS	3	6	5	6	5	0	40
C	LS	10	18	12	18	12	0	60
D	LS	4	8	4	8	5	0	60
E	LS	6	15	4	15	8	0	60
1	L	10	11	6	11	9	5	60
1L	LS	5	11	6	11	4	4	60
2	L	9	14	7	14	5	3	60
3	L	3	13	9	13	7	5	60
4	L	5	12	9	12	12	4	40
5	CC	0	3	2	3	2	0	40
6	L	2	10	7	10	4	2	60
7	CC	2	6	3	6	3	0	40
8	L	0	3	3	3	3	0	40
9	L	2	12	5	12	4	2	40
10	CC	1	2	1	2	1	0	30
11	L	0	5	3	5	2	0	60
13	L	8	13	12	13	10	10	60
15	CC	1	2	2	2	1	2	30
16	CC	0	1	1	1	1	0	40
17	CC	3	10	5	10	5	2	40
18	CC	0	3	3	3	3	3	40
19	L	4	7	5	7	5	4	60
20	L	2	8	7	8	6	0	40
23	L	0	7	6	7	6	0	40
31	CC	1	2	2	2	1	0	35
32	L	2	5	2	5	2	0	35
40	L	10	16	10	16	14	10	60
41	L	3	4	4	4	4	0	40
42	L	8	17	7	17	10	7	60
43	L	0	4	4	4	0	0	40
50	L	2	4	4	4	4	0	40
51	L	5	14	6	14	3	3	60
52	L	5	9	9	9	9	4	60
53	L	3	9	4	9	4	0	60
54	L	3	8	5	8	5	0	40
55	L	2	8	8	8	8	3	60
56	L	3	7	6	10	4	0	60
57	L	3	7	5	5	5	0	60
57A	L	0	3	2	3	0	0	40
65	L	2	8	3	8	2	0	60
70	CC	0	1	1	1	1	0	35
71	CC	0	1	0	1	0	0	35
73	CC	0	1	1	1	0	0	35
74	CC	0	1	0	1	0	0	35
77	CC	0	1	1	1	0	0	35
131	CC	0	0.5	0.5	0.5	0	0	30
132	CC	0	0.5	0.5	0.5	0	0	30
133	CC	1	1	1	1	1	0	30

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
134	CC	2	2	2	2	1	0	30
231	CC	1.5	1.5	1	1.5	1	1	35
232	CC	1.5	1.5	1	1.5	1	0	35
401	CC	0.90	0.90	0.90	0.90	0.90	0	35
402	CC	0.60	0.60	0.60	0.60	0.60	0	35
403	CC	1.50	1.50	1.50	1.50	1.50	0	35
411	CC	2	2	2	2	2	1	60
412	CC	1	2	1	2	1	0	35
413	CC	1	1	1	1	0	0	40
414	CA	1	1	1	1	1	0	Van
415	CC	3	3	2	3	2	0	40
416	CC	1	1	1	1	1	0	40
417	CC	2	2	2	2	2	2	60
418	CC	1	1	1	1	1	0	40
421	CC	Included with Route 41						
422	CC	2	2	1	2	1	1	40
432	CC	2	2	2	2	2	1	40
433	CC	0	2	2	2	2	1	40
434	CC	2	2	2	2	2	1	60
441	CC	1	1	1	1	1	0	40
501	CC	0	1	1	1	1	0	40
502	CC	0	1	1	1	1	0	40
503	CA	1	1	1	1	1	0	Van
504	CC	0	0.75	0.75	0.75	0	0	35
505	CC	0	0.25	0.25	0.25	0	0	35
511	CC	1	1	1	1	1	1	40
512	CC	1	1	1	1	1	0	40
513	CC	1	1	1	1	1	1	60
521	CC	0.75	0.75	0.75	0.75	0.75	0	35
522	CC	1.25	1.25	1.25	1.25	1.25	0	35
FERRY ROUTES								
4F	F	0	4	0	4	0	0	40
8F	F	0	4	0	4	0	0	40
30F	F	0	3	0	3	0	0	40
41F	F	0	3	0	3	0	0	40
93F	F	0	3	0	3	0	0	40
411F	F	0	3	0	3	0	0	35
413F	F	0	2	0	2	0	0	40
415F	F	0	1	0	1	0	0	40

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Weekday Bus Operations Summary Table 2018 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
EXPRESS ROUTES								
80	X	0	6	0	5	0	0	40
80A	X	0	3	0	3	0	0	40
80B	X	0	1	0	1	0	0	40
81	X	0	8	0	6	0	0	40
82	X	0	3	0	3	0	0	40
83	X	0	6	0	6	0	0	40
83A	X	0	2	0	2	0	0	40
84	X	0	4	0	4	0	0	40
84A	X	0	4	0	4	0	0	40
85	X	0	6	0	5	0	0	40
85A	X	0	3	0	2	0	0	40
86	X	0	1	0	1	0	0	40
86A	X	0	1	0	1	0	0	40
88	X	0	2	0	2	0	0	40
88A	X	0	2	0	2	0	0	40
89	X	0	2	0	2	0	0	40
90	X	0	2	0	2	0	0	40
91	X	0	6	0	7	0	0	40
92	X	0	3	0	3	0	0	40
93	X	0	9	0	9	0	0	40
93A	X	0	1	0	1	0	0	40
95	X	0	1	0	1	0	0	40
96	X	0	2	0	2	0	0	40
97	X	0	4	0	4	0	0	40
98	X	0	3	0	3	0	0	40
101	X	0	5	0	5	0	0	40
102	X	0	3	0	3	0	0	40
103	X	0	2	0	2	0	0	40
203	X	0	2	0	2	0	0	40
441X	X	0	4	0	4	0	0	40
TOTALS		172	507	258	504	242	83	

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Appendix B: Bus Operating Details for No-Build Alternative, 2030

AR00076640

Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	393	41	6	137	2,631	218	29	680
B	LS	87	15	3	24	1,004	216	27	215
C	LS	844	125	11	425	2,833	377	30	1,167
D	LS	197	20	4	115	1,152	153	15	427
E	LS	402	78	8	206	2,142	168	28	732
1	L	880	80	16	142	1,980	180	36	320
1L	LS	330	30	6	89	990	90	18	267
2	L	400	87	9	83	2,589	317	49	449
3	L	642	45	11	131	2,890	150	42	575
4	L	400	50	5	60	2,240	280	28	333
5	CC	0	0	0	0	540	60	20	102
6	L	105	5	2	20	2,024	106	32	302
7	CC	100	20	4	24	715	197	30	159
8	L	0	0	0	0	216	36	12	44
9	L	83	7	3	21	2,146	304	35	443
10	CC	29	1	1	5	336	64	12	63
11	L	0	0	0	0	744	206	10	162
13	L	620	55	10	113	2,862	336	45	506
15	CC	28	2	1	4	371	26	20	61
16	CC	0	0	0	0	328	40	4	31
17	CC	0	0	0	0	162	63	13	24
18	CC	0	0	0	0	660	60	12	87
19	L	429	55	9	108	1,614	180	22	285
20	L	140	30	2	33	1,537	143	26	313
23	L	0	0	0	0	942	318	12	265
31	CC	86	3	4	26	356	12	11	92
32	L	118	12	2	31	882	168	14	214
40	L	1,411	96	10	402	3,839	546	24	966
41	L	159	21	3	40	1,099	161	14	189
42	L	734	136	8	213	3,472	518	28	758
43	L	0	0	0	0	588	92	8	168
50	L	108	12	2	32	840	210	14	224
51	L	408	42	5	122	2,036	292	20	489
52	L	567	105	5	241	1,855	245	14	678
53	L	292	20	5	57	1,686	156	21	328
54	L	357	33	7	71	1,536	219	21	300
55	L	248	22	2	86	1,536	264	12	514
56	L	175	18	3	68	838	100	12	264
57	L	192	20	6	77	1,203	159	25	412
57A	L	0	0	0	0	418	82	9	139
65	L	133	22	2	36	773	134	11	215
70	CC	0	0	0	0	153	6	5	46
71	CC	0	0	0	0	195	25	8	44
73	CC	0	0	0	0	120	48	12	52
74	CC	0	0	0	0	147	29	7	33
77	CC	0	0	0	0	189	22	5	59
131	CC	0	0	0	0	50	10	4	11
132	CC	0	0	0	0	50	10	4	12
133	CC	25	5	2	7	150	30	12	41

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Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
134	CC	55	5	2	16	330	30	12	94
231	CC	80	10	4	20	240	30	12	59
232	CC	62	28	4	15	186	84	12	45
401	CC	80	10	4	22	120	15	6	32
402	CC	80	10	4	14	120	15	6	21
403	CC	89	51	3	24	168	102	6	45
411	CC	100	20	4	14	350	70	14	48
412	CC	70	9	5	18	173	18	13	45
413	CC	15	0	1	3	120	44	11	37
414	CA	37	53	3	9	72	108	6	18
415	CC	97	23	2	21	582	138	12	129
416	CC	25	5	2	7	150	30	12	40
417	CC	110	10	4	22	330	30	12	65
418	CC	100	20	4	22	300	60	12	65
419	CC	50	10	4	14	150	30	12	43
421	CC	Included with Route 41							
422	CC	110	10	4	32	330	30	12	97
432	CC	100	20	8	19	325	70	26	62
433	CC	43	17	2	12	301	119	14	87
434	CC	75	18	3	18	455	123	13	78
440	CC	40	20	4	6	120	60	12	17
441	CC	98	22	4	27	966	84	28	192
501	CC	0	0	0	0	182	28	14	47
502	CC	0	0	0	0	175	35	14	34
503	CA	64	14	5	15	141	42	6	29
504	CC	0	0	0	0	165	15	6	22
505	CC	0	0	0	0	45	15	6	10
511	CC	75	15	6	12	150	30	12	25
512	CC	52	8	4	15	156	24	12	44
513	CC	50	10	4	9	150	30	12	27
521	CC	33	16	2	10	99	48	6	29
522	CC	55	16	2	19	165	48	6	56
FERRY ROUTES									
4F	F	0	0	0	0	193	18	4	32
8F	F	0	0	0	0	245	18	4	43
30F	F	0	0	0	0	175	18	4	25
41F	F	0	0	0	0	83	8	2	18
93F	F	0	0	0	0	180	0	2	48
411F	F	0	0	0	0	83	8	2	20
413F	F	0	0	0	0	90	0	3	21
415F	F	0	0	0	0	90	0	3	38

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Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
EXPRESS ROUTES									
80	X	0	0	0	0	354	0	6	111
80A	X	0	0	0	0	351	0	5	99
80B	X	0	0	0	0	33	0	1	11
81	X	308	0	4	80	616	0	8	159
82	X	49	0	1	16	147	0	3	47
83	X	481	0	6	174	337	0	4	114
83A	X	124	0	2	53	0	0	0	0
84	X	130	0	2	55	153	0	2	57
84A	X	69	0	1	26	222	0	3	81
85	X	0	0	0	0	222	0	3	67
85A	X	0	0	0	0	189	0	3	50
86	X	50	0	1	26	0	0	0	0
86A	X	49	0	1	28	0	0	0	0
88	X	0	0	0	0	122	0	2	31
88A	X	391	0	2	141	0	0	0	0
89	X	0	0	0	0	82	0	2	36
90	X	0	0	0	0	158	0	2	37
91	X	340	0	4	97	425	0	5	121
92	X	144	0	2	52	72	0	1	26
93	X	1,044	0	8	287	930	0	11	285
93A	X	116	0	1	38	0	0	0	0
95	X	64	0	1	31	0	0	0	0
96	X	0	0	0	0	120	0	2	36
97	X	63	0	1	20	189	0	3	59
98	X	60	0	1	23	120	0	2	47
101	X	152	0	2	45	228	0	3	67
102	X	70	0	1	25	140	0	2	51
103	X	0	0	0	0	120	0	2	32
203	X	0	0	0	0	110	0	2	19
441X	X	0	0	0	0	224	0	4	75
TOTALS		16,671	1,763	316	4,898	73,777	9,499	1,381	17,863

CA	Community Access	L	Local Routes
CC	Community Circulator	LS	Limited Stop
F	Ferry Routes	X	Peak Period Express

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Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	3,288	312	48	1,127	2,355	190	25	592
B	LS	1,387	376	47	374	888	192	24	191
C	LS	3,744	576	48	1,870	2,541	339	27	1,053
D	LS	1,140	300	24	679	1,152	153	15	422
E	LS	2,520	360	48	1,254	1,836	144	24	627
1	L	2,640	240	48	427	2,420	220	44	392
1L	LS	1,320	120	24	356	990	90	18	267
2	L	2,250	200	50	459	2,216	272	42	385
3	L	3,232	512	50	678	2,406	124	34	471
4	L	2,880	360	36	428	2,400	300	30	357
5	CC	552	168	24	122	486	54	18	92
6	L	1,890	252	36	353	1,710	90	27	275
7	CC	634	126	26	149	609	163	26	135
8	L	960	192	48	176	648	108	36	132
9	L	1,415	312	23	311	1,541	192	19	302
10	CC	298	70	11	59	308	59	11	59
11	L	798	84	14	225	721	201	10	161
13	L	4,464	576	72	812	2,543	299	40	452
15	CC	420	48	18	69	336	24	18	56
16	CC	0	0	0	0	492	60	6	46
17	CC	294	56	28	52	231	45	15	27
18	CC	1,320	120	24	174	660	60	12	87
19	L	2,842	375	37	485	1,337	195	17	260
20	L	1,146	249	18	271	1,308	122	22	266
23	L	1,800	360	24	530	942	318	12	265
31	CC	394	18	11	94	271	9	8	60
32	L	708	102	12	183	756	144	12	183
40	L	3,414	546	24	972	4,403	637	28	1,133
41	L	1,284	156	24	324	942	138	12	162
42	L	2,483	247	26	704	2,774	406	22	594
43	L	1,392	288	24	504	735	115	10	210
50	L	1,296	144	24	384	720	180	12	192
51	L	2,280	240	24	588	1,650	258	18	444
52	L	2,736	504	24	1,162	1,590	210	12	581
53	L	1,316	158	21	369	1,075	90	13	220
54	L	1,554	276	25	382	1,750	260	22	337
55	L	2,976	264	24	1,028	1,536	264	12	514
56	L	1,450	168	21	474	939	122	14	308
57	L	1,137	320	23	463	902	195	16	325
57A	L	474	246	12	194	267	47	6	84
65	L	768	126	12	250	860	111	13	243
70	CC	356	12	8	98	174	9	6	44
71	CC	7	3	1	2	182	28	6	39
73	CC	234	126	24	99	105	55	11	46
74	CC	0	0	0	0	140	18	6	30
77	CC	296	64	8	96	153	37	4	50
131	CC	150	30	12	34	100	20	8	22
132	CC	150	30	12	35	100	20	8	24
133	CC	300	60	24	83	150	30	12	41

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Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
134	CC	660	60	24	188	330	30	12	94
231	CC	200	25	10	49	240	30	12	59
232	CC	135	15	10	38	186	84	12	45
401	CC	240	30	12	65	120	15	6	32
402	CC	240	30	12	42	120	15	6	21
403	CC	359	221	13	97	168	102	6	45
411	CC	600	120	24	82	300	60	12	41
412	CC	324	36	24	85	162	18	12	42
413	CC	132	48	12	41	150	30	12	41
414	CA	144	216	12	35	72	108	6	18
415	CC	828	252	24	258	582	138	12	129
416	CC	300	60	24	79	150	30	12	40
417	CC	660	60	24	129	330	30	12	65
418	CC	600	120	24	131	300	60	12	65
419	CC	300	60	24	85	150	30	12	43
421	CC	Included with Route 41							
422	CC	660	60	24	194	330	30	12	97
432	CC	600	120	48	114	300	60	24	57
433	CC	552	168	24	149	258	102	12	75
434	CC	549	138	23	137	455	123	13	78
440	CC	240	120	24	35	120	60	12	17
441	CC	588	132	24	164	828	72	24	164
501	CC	312	48	24	81	156	24	12	40
502	CC	300	60	24	58	150	30	12	29
503	CA	288	72	12	58	160	33	8	32
504	CC	275	25	10	36	110	10	4	14
505	CC	75	25	10	17	30	10	4	7
511	CC	300	60	24	50	150	30	12	25
512	CC	312	48	24	88	156	24	12	44
513	CC	300	60	24	54	150	30	12	27
521	CC	198	96	12	58	99	48	6	29
522	CC	330	96	12	112	165	48	6	56
FERRY ROUTES									
4F	F	0	0	0	0	193	18	4	32
8F	F	0	0	0	0	245	18	4	43
30F	F	0	0	0	0	175	18	4	25
41F	F	0	0	0	0	83	8	2	18
93F	F	0	0	0	0	180	0	2	48
411F	F	0	0	0	0	83	8	2	20
413F	F	0	0	0	0	90	0	3	21
415F	F	0	0	0	0	90	0	3	38

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Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
EXPRESS ROUTES									
80	X	0	0	0	0	270	0	5	92
80A	X	60	0	1	15	254	0	3	53
80B	X	0	0	0	0	33	0	1	11
81	X	0	0	0	0	693	0	9	192
82	X	0	0	0	0	147	0	3	47
83	X	0	0	0	0	613	0	7	201
83A	X	0	0	0	0	129	0	2	53
84	X	0	0	0	0	300	0	4	107
84A	X	0	0	0	0	292	0	4	100
85	X	0	0	0	0	344	0	5	115
85A	X	0	0	0	0	189	0	3	45
86	X	0	0	0	0	50	0	1	25
86A	X	0	0	0	0	49	0	1	29
88	X	0	0	0	0	122	0	2	33
88A	X	0	0	0	0	391	0	2	161
89	X	0	0	0	0	82	0	2	36
90	X	0	0	0	0	158	0	2	27
91	X	0	0	0	0	595	0	7	170
92	X	0	0	0	0	246	0	3	76
93	X	0	0	0	0	1,590	0	10	398
93A	X	0	0	0	0	116	0	1	37
95	X	0	0	0	0	64	0	1	31
96	X	0	0	0	0	120	0	2	34
97	X	0	0	0	0	252	0	4	75
98	X	0	0	0	0	180	0	3	67
101	X	0	0	0	0	380	0	5	110
102	X	0	0	0	0	210	0	3	74
103	X	0	0	0	0	120	0	2	34
203	X	0	0	0	0	122	0	2	22
441X	X	0	0	0	0	224	0	4	75
TOTALS		82,050	13,153	1,863	22,786	71,800	8,999	1,328	17,612

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Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	886	85	13	304	0	0	0	0
B	LS	828	224	28	223	0	0	0	0
C	LS	1,720	260	22	858	0	0	0	0
D	LS	1,200	165	16	451	0	0	0	0
E	LS	1,470	210	28	732	0	0	0	0
1	L	1,650	150	30	267	990	90	18	160
1L	LS	1,155	105	21	311	550	50	10	148
2	L	1,170	130	26	238	135	10	3	28
3	L	1,259	206	19	265	337	43	5	71
4	L	1,120	140	14	167	320	40	4	48
5	CC	252	78	11	56	0	0	0	0
6	L	735	105	14	137	105	0	2	20
7	CC	317	60	13	75	0	0	0	0
8	L	800	160	40	147	0	0	0	0
9	L	709	133	11	158	128	12	4	33
10	CC	216	56	8	42	0	0	0	0
11	L	196	10	4	65	0	0	0	0
13	L	2,286	234	36	406	635	65	10	113
15	CC	280	20	10	46	0	0	0	0
16	CC	0	0	0	0	0	0	0	0
17	CC	189	54	18	33	0	0	0	0
18	CC	1,100	100	20	145	220	20	4	29
19	L	1,355	285	20	386	266	30	5	88
20	L	326	34	4	67	0	0	0	0
23	L	1,200	240	16	353	0	0	0	0
31	CC	226	9	8	65	0	0	0	0
32	L	472	68	8	122	0	0	0	0
40	L	4,552	320	32	1,295	2,150	210	20	810
41	L	856	104	16	216	0	0	0	0
42	L	2,498	248	26	706	1,734	172	18	489
43	L	0	0	0	0	0	0	0	0
50	L	1,080	120	20	320	0	0	0	0
51	L	667	154	7	172	306	54	4	98
52	L	1,140	210	10	484	1,140	60	10	484
53	L	602	68	11	171	17	0	1	6
54	L	674	115	12	170	0	0	0	0
55	L	1,736	154	14	599	992	88	8	343
56	L	507	56	8	174	0	0	0	0
57	L	575	140	11	227	0	0	0	0
57A	L	14	0	1	3	0	0	0	0
65	L	390	54	7	136	0	0	0	0
70	CC	88	6	4	25	0	0	0	0
71	CC	7	0	1	2	0	0	0	0
73	CC	0	0	0	0	0	0	0	0
74	CC	8	0	1	2	0	0	0	0
77	CC	0	0	0	0	0	0	0	0
131	CC	0	0	0	0	0	0	0	0
132	CC	0	0	0	0	0	0	0	0
133	CC	100	20	8	28	0	0	0	0

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ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
134	CC	220	20	8	63	0	0	0	0
231	CC	280	35	14	69	160	20	8	39
232	CC	108	12	8	30	0	0	0	0
401	CC	160	20	8	43	0	0	0	0
402	CC	160	20	8	28	0	0	0	0
403	CC	242	136	9	74	0	0	0	0
411	CC	220	28	16	63	68	8	4	22
412	CC	54	6	4	14	0	0	0	0
413	CC	0	0	0	0	0	0	0	0
414	CA	24	17	2	6	0	0	0	0
415	CC	552	168	16	172	0	0	0	0
416	CC	175	35	14	46	0	0	0	0
417	CC	550	50	20	108	110	10	4	22
418	CC	440	40	16	87	0	0	0	0
419	CC	200	40	16	57	0	0	0	0
421	CC	Included with Route 41							
422	CC	550	50	20	162	110	10	4	32
432	CC	386	78	31	74	126	22	10	24
433	CC	322	98	14	87	46	14	2	12
434	CC	357	90	15	89	96	24	4	24
440	CC	140	70	14	20	0	0	0	0
441	CC	343	77	14	96	0	0	0	0
501	CC	208	32	16	54	0	0	0	0
502	CC	200	40	16	39	0	0	0	0
503	CA	69	16	3	14	0	0	0	0
504	CC	0	0	0	0	0	0	0	0
505	CC	0	0	0	0	0	0	0	0
511	CC	250	50	20	42	25	5	2	4
512	CC	104	16	8	29	0	0	0	0
513	CC	100	20	8	18	100	20	8	18
521	CC	66	32	4	19	0	0	0	0
522	CC	110	32	4	37	0	0	0	0
FERRY ROUTES									
4F	F	0	0	0	0	0	0	0	0
8F	F	0	0	0	0	0	0	0	0
30F	F	0	0	0	0	0	0	0	0
41F	F	0	0	0	0	0	0	0	0
93F	F	0	0	0	0	0	0	0	0
411F	F	0	0	0	0	0	0	0	0
413F	F	0	0	0	0	0	0	0	0
415F	F	0	0	0	0	0	0	0	0

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ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
EXPRESS ROUTES									
80	X	0	0	0	0	0	0	0	0
80A	X	0	0	0	0	0	0	0	0
80B	X	0	0	0	0	0	0	0	0
81	X	64	0	1	21	0	0	0	0
82	X	0	0	0	0	0	0	0	0
83	X	0	0	0	0	0	0	0	0
83A	X	0	0	0	0	0	0	0	0
84	X	0	0	0	0	0	0	0	0
84A	X	0	0	0	0	0	0	0	0
85	X	0	0	0	0	0	0	0	0
85A	X	0	0	0	0	0	0	0	0
86	X	0	0	0	0	0	0	0	0
86A	X	0	0	0	0	0	0	0	0
88	X	0	0	0	0	0	0	0	0
88A	X	0	0	0	0	0	0	0	0
89	X	0	0	0	0	0	0	0	0
90	X	0	0	0	0	0	0	0	0
91	X	79	0	1	24	0	0	0	0
92	X	0	0	0	0	0	0	0	0
93	X	0	0	0	0	0	0	0	0
93A	X	0	0	0	0	0	0	0	0
95	X	0	0	0	0	0	0	0	0
96	X	0	0	0	0	0	0	0	0
97	X	0	0	0	0	0	0	0	0
98	X	0	0	0	0	0	0	0	0
101	X	0	0	0	0	0	0	0	0
102	X	0	0	0	0	0	0	0	0
103	X	0	0	0	0	0	0	0	0
203	X	0	0	0	0	0	0	0	0
441X	X	0	0	0	0	0	0	0	0
TOTALS		45,344	6,418	995	12,537	10,866	1,077	172	3,164

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ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
A	LS	121	9,553	846	10,399	173.3	2,839.5	4:15 AM to 10:37 PM
B	LS	129	4,194	1,023	5,217	87.0	1,026.8	4:55 AM to 11:02 PM
C	LS	138	11,682	1,677	13,359	222.7	5,373.1	3:07 AM to 10:53 PM
D	LS	74	4,841	791	5,632	93.9	2,094.6	5:00 AM to 10:00 PM
E	LS	136	8,370	960	9,330	155.5	3,550.8	4:30 AM to 10:00 PM
1	L	192	10,560	960	11,520	192.0	1,708.8	4:00 AM to 2:00 AM
1L	LS	97	5,335	485	5,820	97.0	1,437.1	4:00 AM to 1:30 AM
2	L	179	8,760	1,016	9,776	162.9	1,641.4	4:10 AM to 1:44 AM
3	L	161	10,766	1,080	11,846	197.4	2,190.5	4:15 AM to 1:26 AM
4	L	117	9,360	1,170	10,530	175.5	1,392.3	5:00 AM to 12:30 AM
5	CC	73	1,830	360	2,190	36.5	371.6	5:36 AM to 10:02 PM
6	L	113	6,569	558	7,127	118.8	1,105.7	5:03 AM to 11:58 PM
7	CC	101	2,426	566	2,992	49.9	579.6	4:39 AM to 11:07 PM
8	L	136	2,624	496	3,120	52.0	499.8	7:24 AM to 10:43 PM
9	L	95	6,022	960	6,982	116.4	1,267.6	5:10 AM to 12:56 AM
10	CC	43	1,459	250	1,709	28.5	399.1	4:53 AM to 10:41 PM
11	L	38	2,459	501	2,960	49.3	613.0	5:48 AM to 10:14 PM
13	L	213	13,410	1,565	14,975	249.6	2,401.3	5:00 AM to 1:00 AM
15	CC	80	1,435	120	1,555	25.9	484.6	5:30 AM to 10:23 PM
16	CC	10	820	100	920	15.3	77.3	Peak Period
17	CC	74	876	218	1,094	18.2	135.7	6:00 AM to 9:48 PM
18	CC	72	3,960	360	4,320	72.0	522.0	6:00 AM to 12:00 AM
19	L	110	7,843	1,120	8,963	149.4	1,612.7	4:13 AM to 1:48 AM
20	L	72	4,457	578	5,035	83.9	950.1	5:14 AM to 7:33 PM
23	L	64	4,884	1,236	6,120	102.0	1,412.2	6:00 AM to 10:00 PM
31	CC	42	1,333	51	1,384	23.1	336.6	4:30 AM to 10:11 PM
32	L	49	2,982	494	3,476	57.9	751.8	5:10 AM to 9:50 PM
40	L	138	19,769	2,355	22,124	368.7	5,577.7	4:00 AM to 3:59 AM
41	L	76	4,398	580	4,978	83.0	1,064.4	4:47 AM to 10:10 PM
42	L	128	13,695	1,727	15,422	257.0	3,464.7	4:00 AM to 3:59 AM
43	L	42	2,715	495	3,210	53.5	882.4	7:00 AM to 6:27 PM
50	L	72	4,044	666	4,710	78.5	1,150.9	5:00 AM to 11:00 PM
51	L	78	7,347	1,040	8,387	139.8	1,913.0	4:30 AM to 1:37 AM
52	L	75	9,028	1,334	10,362	172.7	3,629.3	4:00 AM to 3:59 AM
53	L	72	4,988	492	5,480	91.3	1,151.3	4:49 AM to 11:26 PM
54	L	91	5,998	903	6,901	115.0	1,336.6	5:00 AM to 11:11 PM
55	L	72	9,024	1,056	10,080	168.0	3,082.7	4:00 AM to 3:59 AM
56	L	60	4,007	464	4,471	74.5	1,326.7	4:48 AM to 10:37 PM
57	L	81	4,009	834	4,843	80.7	1,503.5	4:58 AM to 11:30 PM
57A	L	28	1,173	375	1,548	25.8	419.9	5:32 AM to 6:25 PM
65	L	46	2,953	447	3,400	56.7	898.4	5:12 AM to 10:15 PM
70	CC	25	840	33	873	14.6	251.6	6:09 AM to 7:45 PM
71	CC	16	391	56	447	7.5	87.5	Peak Period
73	CC	47	459	229	688	11.5	197.8	6:14 AM to 5:47 PM
74	CC	14	295	47	342	5.7	65.6	Peak Period
77	CC	17	638	123	761	12.7	204.1	5:32 AM to 6:22 PM
131	CC	24	300	60	360	6.0	67.2	6:00 AM to 6:35 PM
132	CC	24	300	60	360	6.0	70.8	6:20 AM to 6:45 PM
133	CC	58	725	145	870	14.5	200.1	5:30 AM to 10:00 PM

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ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
134	CC	58	1,595	145	1,740	29.0	455.3	5:30 AM to 10:00 PM
231	CC	60	1,200	150	1,350	22.5	293.7	5:00 AM to 1:00 AM
232	CC	46	677	223	900	15.0	174.1	5:00 AM to 8:00 PM
401	CC	36	720	90	810	13.5	194.8	3:50 AM to 9:34 PM
402	CC	36	720	90	810	13.5	127.3	4:20 AM to 9:58 PM
403	CC	37	1,026	612	1,638	27.3	286.0	4:15 AM to 10:22 PM
411	CC	74	1,638	306	1,944	32.4	268.6	4:30 AM to 12:49 AM
412	CC	58	783	87	870	14.5	204.7	4:30 AM to 6:48 PM
413	CC	36	417	122	539	9.0	122.4	5:30 AM to 5:55 PM
414	CA	29	349	502	851	14.2	85.6	4:30 AM to 6:43 PM
415	CC	66	2,641	719	3,360	56.0	708.2	5:30 AM to 11:00 PM
416	CC	64	800	160	960	16.0	211.2	5:30 AM to 10:00 PM
417	CC	76	2,090	190	2,280	38.0	408.5	5:00 AM to 12:30 AM
418	CC	68	1,740	300	2,040	34.0	370.9	5:00 AM to 11:00 PM
419	CC	68	850	170	1,020	17.0	241.4	5:00 AM to 11:00 PM
421	CC	Included with Route 41						
422	CC	76	2,090	190	2,280	38.0	614.8	5:00 AM to 12:30 AM
432	CC	147	1,837	370	2,207	36.8	351.0	4:41 AM to 1:28 AM
433	CC	68	1,522	518	2,040	34.0	423.3	5:00 AM to 11:26 PM
434	CC	71	1,987	516	2,503	41.7	425.7	4:41 AM to 12:52 AM
440	CC	66	660	330	990	16.5	95.7	5:00 AM to 10:00 PM
441	CC	94	2,823	387	3,210	53.5	643.0	5:00 AM to 10:00 PM
501	CC	66	858	132	990	16.5	221.4	5:30 AM to 10:00 PM
502	CC	66	825	165	990	16.5	160.7	5:30 AM to 10:00 PM
503	CA	34	722	177	899	15.0	148.4	4:33 AM to 7:53 PM
504	CC	20	550	50	600	10.0	71.8	5:30 AM to 7:00 PM
505	CC	20	150	50	200	3.3	33.4	5:30 AM to 7:00 PM
511	CC	76	950	190	1,140	19.0	158.1	4:30 AM to 11:30 PM
512	CC	60	780	120	900	15.0	220.2	5:00 AM to 8:00 PM
513	CC	68	850	170	1,020	17.0	154.4	5:00 AM to 1:00 AM
521	CC	30	495	240	735	12.3	144.6	5:00 AM to 8:00 PM
522	CC	30	825	240	1,065	17.8	281.1	5:00 AM to 8:00 PM
FERRY ROUTES								
4F	F	7	385	35	420	7.0	64.4	Peak Period
8F	F	7	490	35	525	8.8	86.8	Peak Period
30F	F	7	350	35	385	6.4	50.4	Peak Period
41F	F	3	165	15	180	3.0	36.3	Peak Period
93F	F	3	360	0	360	6.0	96.9	Peak Period
411F	F	3	165	15	180	3.0	40.8	Peak Period
413F	F	6	180	0	180	3.0	42.6	Peak Period
415F	F	6	180	0	180	3.0	75.2	Peak Period

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Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
EXPRESS ROUTES								
80	X	11	624	0	624	10.4	203.7	Peak Period
80A	X	9	665	0	665	11.1	166.1	Peak Period
80B	X	2	66	0	66	1.1	22.3	Peak Period
81	X	22	1,681	0	1,681	28.0	452.4	Peak Period
82	X	7	343	0	343	5.7	109.8	Peak Period
83	X	17	1,431	0	1,431	23.9	489.3	Peak Period
83A	X	4	253	0	253	4.2	106.2	Peak Period
84	X	8	583	0	583	9.7	219.6	Peak Period
84A	X	8	583	0	583	9.7	206.6	Peak Period
85	X	8	566	0	566	9.4	181.3	Peak Period
85A	X	6	378	0	378	6.3	95.0	Peak Period
86	X	2	100	0	100	1.7	51.8	Peak Period
86A	X	2	98	0	98	1.6	56.7	Peak Period
88	X	4	244	0	244	4.1	64.7	Peak Period
88A	X	4	782	0	782	13.0	301.9	Peak Period
89	X	4	164	0	164	2.7	71.8	Peak Period
90	X	4	316	0	316	5.3	63.8	Peak Period
91	X	17	1,439	0	1,439	24.0	412.3	Peak Period
92	X	6	462	0	462	7.7	153.6	Peak Period
93	X	29	3,564	0	3,564	59.4	969.5	Peak Period
93A	X	2	232	0	232	3.9	74.2	Peak Period
95	X	2	128	0	128	2.1	62.0	Peak Period
96	X	4	240	0	240	4.0	70.3	Peak Period
97	X	8	504	0	504	8.4	153.6	Peak Period
98	X	6	360	0	360	6.0	137.0	Peak Period
101	X	10	760	0	760	12.7	221.4	Peak Period
102	X	6	420	0	420	7.0	150.5	Peak Period
103	X	4	240	0	240	4.0	66.7	Peak Period
203	X	4	232	0	232	3.9	40.4	Peak Period
441X	X	8	448	0	448	7.5	151.0	Peak Period
TOTALS		6,087	301,257	40,908	342,165	5,702.7	79,640.3	

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ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
A	LS	6	13	10	13	10	0	60
B	LS	3	6	5	6	5	0	40
C	LS	11	18	12	18	15	0	60
D	LS	4	9	4	9	9	0	60
E	LS	6	11	8	11	8	0	60
1	L	12	12	8	12	12	6	60
1L	LS	5	6	4	6	4	4	60
2	L	9	14	7	14	5	3	60
3	L	11	16	11	14	10	5	60
4	L	5	12	9	12	12	4	40
5	CC	0	3	2	3	2	0	40
6	L	2	10	7	10	4	2	60
7	CC	2	6	3	6	3	0	40
8	L	0	3	4	3	4	0	40
9	L	2	12	5	12	4	2	40
10	CC	1	2	1	2	1	0	30
11	L	0	5	3	5	2	0	40
13	L	8	15	14	15	10	10	60
15	CC	1	2	2	2	1	2	30
16	CC	0	1	0	1	0	0	35
17	CC	0	2	1	2	1	0	40
18	CC	0	4	4	4	4	4	40
19	L	5	18	17	20	10	5	60
20	L	2	8	7	8	6	0	60
23	L	0	7	6	7	6	0	40
31	CC	1	2	2	2	1	0	35
32	L	2	4	2	4	2	0	35
40	L	10	24	11	24	20	8	60
41	L	3	6	4	6	4	0	40
42	L	8	19	7	19	11	7	60
43	L	0	5	5	5	0	0	40
50	L	2	5	4	5	4	0	40
51	L	5	15	7	15	4	3	60
52	L	5	10	9	10	9	4	60
53	L	3	9	4	9	4	0	60
54	L	3	9	5	9	5	0	40
55	L	2	10	9	10	9	3	60
56	L	3	7	6	10	4	0	60
57	L	3	7	5	5	5	0	40
57A	L	0	3	2	3	0	0	40
65	L	2	8	3	8	2	0	40
70	CC	0	1	1	1	1	0	35
71	CC	0	1	0	1	0	0	35
73	CC	0	1	1	1	0	0	35
74	CC	0	1	0	1	0	0	35
77	CC	0	1	1	1	0	0	35
131	CC	0	0.5	0.5	0.5	0	0	30
132	CC	0	0.5	0.5	0.5	0	0	30
133	CC	1	1	1	1	1	0	30

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ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
134	CC	2	2	2	2	1	0	30
231	CC	1.5	1.5	1	1.5	1	1	35
232	CC	1.5	1.5	1	1.5	1	0	35
401	CC	0.75	0.75	0.75	0.75	0.75	0	35
402	CC	0.75	0.75	0.75	0.75	0.75	0	35
403	CC	1.5	1.5	1.5	1.5	1.5	0	35
411	CC	2	2	2	2	2	1	60
412	CC	1	1	1	1	1	0	35
413	CC	1	1	1	1	0	0	40
414	CA	1	1	1	1	1	0	Van
415	CC	4	4	3	4	3	0	60
416	CC	1	1	1	1	1	0	60
417	CC	2	2	2	2	2	2	60
418	CC	2	2	2	2	2	0	40
419	CC	1	1	1	1	1	0	40
421	CC	Included with Route 41						
422	CC	2	2	2	2	2	2	40
432	CC	2	2	2	2	2	1	40
433	CC	0	2	2	2	2	1	40
434	CC	2	3	2	3	2	1	60
440	CC	1	1	1	1	1	0	60
441	CC	2	5	2	5	2	0	60
501	CC	0	1	1	1	1	0	40
502	CC	0	1	1	1	1	0	40
503	CA	1	1	1	1	1	0	Van
504	CC	0	0.75	0.75	0.75	0	0	35
505	CC	0	0.25	0.25	0.25	0	0	35
511	CC	1	1	1	1	1	1	40
512	CC	1	1	1	1	1	0	40
513	CC	1	1	1	1	1	1	40
521	CC	0.75	0.75	0.75	0.75	0.75	0	35
522	CC	1.25	1.25	1.25	1.25	1.25	0	35
FERRY ROUTES								
4F	F	0	4	0	4	0	0	40
8F	F	0	5	0	5	0	0	40
30F	F	0	3	0	3	0	0	40
41F	F	0	3	0	3	0	0	40
93F	F	0	3	0	3	0	0	40
411F	F	0	3	0	3	0	0	35
413F	F	0	2	0	2	0	0	40
415F	F	0	1	0	1	0	0	40

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Weekday Bus Operations Summary Table 2030 No-Build Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
EXPRESS ROUTES								
80	X	0	6	0	5	0	0	40
80A	X	0	3	0	3	0	0	40
80B	X	0	1	0	1	0	0	40
81	X	0	8	0	6	0	0	60
82	X	0	3	0	3	0	0	40
83	X	0	6	0	6	0	0	40
83A	X	0	2	0	2	0	0	40
84	X	0	4	0	4	0	0	40
84A	X	0	4	0	4	0	0	40
85	X	0	6	0	5	0	0	40
85A	X	0	3	0	2	0	0	40
86	X	0	1	0	1	0	0	40
86A	X	0	1	0	1	0	0	40
88	X	0	2	0	2	0	0	40
88A	X	0	2	0	2	0	0	40
89	X	0	2	0	2	0	0	40
90	X	0	2	0	2	0	0	40
91	X	0	6	0	7	0	0	60
92	X	0	3	0	3	0	0	40
93	X	0	9	0	9	0	0	60
93A	X	0	1	0	1	0	0	40
95	X	0	1	0	1	0	0	40
96	X	0	2	0	2	0	0	40
97	X	0	4	0	4	0	0	40
98	X	0	3	0	3	0	0	40
101	X	0	5	0	5	0	0	40
102	X	0	3	0	3	0	0	40
103	X	0	2	0	2	0	0	40
203	X	0	2	0	2	0	0	40
441X	X	0	4	0	4	0	0	40
TOTALS		186	537	285	534	272	83	

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Appendix C: Bus Operating Details for Baseline (TSM) Alternative, 2018

AR00076656

Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	375	75	6	137	3,962	658	49	1,144
B	LS	99	36	3	24	1,162	518	28	223
C	LS	768	114	10	385	4,710	630	68	2,065
D	LS	197	20	4	115	1,450	170	20	572
E	LS	402	78	8	206	2,527	203	35	909
1	L	696	104	16	149	1,728	252	36	335
1L	LS	330	30	6	89	2,072	238	35	518
2	L	400	87	9	83	2,589	317	49	449
3	L	642	45	11	131	2,890	150	42	575
4	L	205	39	4	36	1,414	266	28	252
5	CC	0	0	0	0	540	60	20	102
6	L	105	5	2	20	2,024	106	32	302
7	CC	100	20	4	24	715	197	30	159
8	L	0	0	0	0	264	72	12	53
9	L	83	7	3	21	2,146	304	35	443
10	CC	29	1	1	5	336	64	12	63
11	L	0	0	0	0	744	206	10	162
13	L	570	55	10	113	2,580	402	45	506
15	CC	28	2	1	4	371	26	20	61
17	CC	122	29	3	26	1,869	231	42	361
18	CC	0	0	0	0	438	102	12	79
19	L	273	47	4	60	1,340	260	20	292
20	L	140	30	2	33	1,476	204	26	313
23	L	0	0	0	0	942	318	12	265
31	CC	86	3	4	26	356	12	11	92
32	L	118	12	2	31	854	196	14	214
40	L	1,279	131	10	401	3,659	361	24	963
41	L	147	28	3	40	1,554	126	28	378
42	L	722	58	8	205	3,150	420	28	738
43	L	0	0	0	0	528	112	8	168
50	L	98	22	2	32	1,470	210	28	448
51	L	379	71	5	122	1,872	288	20	489
52	L	567	105	5	241	2,739	341	22	1,065
54	L	66	10	2	22	1,911	399	42	491
60	L	96	24	2	36	1,188	252	24	426
61	L	84	16	2	30	701	139	14	203
62	L	249	22	2	86	2,580	420	20	856
63	L	96	24	2	41	990	270	18	362
64	L	129	51	3	36	630	210	14	167
65	L	60	30	2	21	420	210	14	147
66	L	94	26	4	56	420	210	14	195
131	CC	0	0	0	0	50	10	4	11
132	CC	0	0	0	0	50	10	4	12
133	CC	25	5	2	7	150	30	12	41
134	CC	55	5	2	16	330	30	12	94
231	CC	80	10	4	20	240	30	12	59
232	CC	62	28	4	15	217	98	14	53
301	CC	0	0	0	0	903	147	14	136
401	CC	80	29	4	22	280	47	14	76

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
402	CC	44	29	4	14	154	47	14	49
403	CC	94	43	3	24	427	95	14	106
411	CC	100	20	4	14	700	140	28	95
412	CC	70	9	5	18	189	21	14	49
413	CC	15	0	1	3	154	56	14	48
414	CA	37	53	3	9	72	108	6	18
415	CC	73	17	2	24	595	35	14	165
416	CC	25	5	2	7	175	35	14	49
417	CC	110	10	4	22	660	60	24	129
418	CC	56	4	4	19	196	14	14	68
421	CC	Included with Route 41							
422	CC	110	10	4	32	1,176	84	42	340
432	CC	100	20	8	19	325	70	26	62
433	CC	43	17	2	12	602	238	28	174
434	CC	70	20	3	18	742	98	28	168
435	CC	0	0	0	0	255	45	10	55
441	CC	50	10	4	3	175	35	14	10
501	CC	0	0	0	0	182	28	14	47
502	CC	0	0	0	0	175	35	14	34
503	CA	64	14	5	15	141	42	6	29
504	CC	0	0	0	0	330	30	12	43
505	CC	0	0	0	0	90	30	12	20
511	CC	75	15	6	12	350	70	28	58
512	CC	52	8	4	15	156	24	12	44
513	CC	50	10	4	9	150	30	12	27
521	CC	33	16	2	10	231	112	14	67
522	CC	55	16	2	19	385	112	14	131
523	CC	40	20	2	14	120	60	6	41
541	CC	70	5	2	14	910	65	26	181
542	CC	44	16	2	7	308	112	14	48
543	CC	25	5	2	5	325	65	26	67
544	CC	25	5	2	6	196	14	14	44
545	CC	40	20	2	7	280	140	14	49
546	CC	25	5	2	5	175	35	14	38
547	CC	340	35	10	52	952	98	28	146
548	CC	480	45	10	95	1,344	126	28	267
611	CC	40	5	2	13	280	35	14	91
612	CC	40	5	2	13	280	35	14	91
613	CC	25	5	2	5	75	15	6	14
614	CC	25	5	2	5	75	15	6	14
615	CC	50	10	2	11	150	30	6	32

Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	0	0	0	0	440	128	8	74
8F	F	0	0	0	0	440	40	8	99
30F	F	0	0	0	0	320	40	8	65
41F	F	0	0	0	0	165	15	3	36
93F	F	0	0	0	0	480	0	4	129
411F	F	0	0	0	0	220	20	4	54
413F	F	0	0	0	0	150	0	5	36
415F	F	0	0	0	0	300	0	5	63
EXPRESS ROUTES									
80	X	0	0	0	0	349	0	6	111
80A	X	0	0	0	0	350	0	5	99
80B	X	0	0	0	0	33	0	1	11
81	X	280	0	4	80	560	0	8	159
82	X	49	0	1	16	147	0	3	47
83	X	473	0	6	174	329	0	4	114
83A	X	124	0	2	53	0	0	0	0
84	X	130	0	2	55	153	0	2	57
84A	X	69	0	1	26	222	0	3	81
85	X	0	0	0	0	240	0	3	67
85A	X	0	0	0	0	159	0	3	50
86	X	65	0	1	26	0	0	0	0
86A	X	70	0	1	28	0	0	0	0
88	X	0	0	0	0	116	0	2	31
88A	X	378	0	2	141	0	0	0	0
89	X	0	0	0	0	116	0	2	36
90	X	0	0	0	0	146	0	2	37
91	X	240	0	4	97	340	0	5	121
92	X	124	0	2	52	62	0	1	26
93	X	1,044	0	8	287	930	0	11	285
93A	X	123	0	1	38	0	0	0	0
95	X	65	0	1	31	0	0	0	0
96	X	0	0	0	0	110	0	2	36
97	X	52	0	1	20	156	0	3	59
98	X	65	0	1	23	130	0	2	47
101	X	122	0	2	45	183	0	3	67
102	X	60	0	1	25	120	0	2	51
103	X	0	0	0	0	110	0	2	32
203	X	0	0	0	0	86	0	2	19
434X	X	0	0	0	0	252	0	4	87
441X	X	0	0	0	0	224	0	4	75
TOTALS		16,264	2,065	342	4,947	89,926	13,314	1,935	23,655

CA	Community Access	L	Local Routes
CC	Community Circulator	LS	Limited Stop
F	Ferry Routes	X	Peak Period Express

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	3,144	456	48	1,127	3,396	564	42	992
B	LS	1,656	504	48	382	996	444	24	191
C	LS	3,744	576	48	1,864	4,562	598	62	1,967
D	LS	1,140	300	24	678	1,284	156	18	504
E	LS	2,520	360	48	1,254	2,166	174	30	788
1	L	2,088	72	48	447	1,728	252	36	335
1L	LS	1,980	180	36	533	1,776	204	30	444
2	L	2,250	200	50	459	2,216	272	42	385
3	L	3,232	512	50	678	2,406	124	34	471
4	L	1,818	342	36	324	1,515	285	30	270
5	CC	552	168	24	122	486	54	18	92
6	L	1,890	252	36	353	1,710	90	27	275
7	CC	634	126	26	149	609	163	26	135
8	L	1,620	180	72	317	792	216	36	158
9	L	1,415	312	23	311	1,541	192	19	302
10	CC	298	70	11	59	308	59	11	59
11	L	798	84	14	225	721	201	10	161
13	L	4,068	252	72	812	2,295	358	40	452
15	CC	420	48	18	69	336	24	18	56
17	CC	1,458	342	36	310	1,602	198	36	310
18	CC	840	240	24	159	438	102	12	79
19	L	2,394	486	36	525	1,206	234	18	263
20	L	1,146	249	18	271	1,256	174	22	266
23	L	1,800	360	24	530	942	318	12	265
31	CC	394	18	11	94	271	9	8	60
32	L	708	102	12	183	732	168	12	183
40	L	3,102	498	24	969	4,179	441	28	1,131
41	L	1,188	252	24	324	1,332	108	24	324
42	L	2,431	299	26	685	2,504	330	22	583
43	L	1,320	120	24	504	660	140	10	210
50	L	2,352	528	48	767	1,260	180	24	384
51	L	3,648	672	48	1,177	1,560	240	18	444
52	L	2,736	504	24	1,162	2,241	279	18	871
54	L	1,704	456	48	561	1,638	342	36	421
60	L	1,183	377	26	462	1,485	315	30	533
61	L	1,032	408	24	344	873	207	18	258
62	L	2,988	252	24	1,028	2,322	378	18	771
63	L	1,313	247	26	523	990	270	18	362
64	L	1,118	442	26	310	540	180	12	143
65	L	360	180	12	126	360	180	12	126
66	L	282	78	12	167	360	180	12	167
131	CC	150	30	12	34	100	20	8	22
132	CC	150	30	12	35	100	20	8	24
133	CC	300	60	24	83	150	30	12	41
134	CC	660	60	24	188	330	30	12	94
231	CC	200	25	10	49	240	30	12	59
232	CC	135	15	10	38	186	84	12	45
301	CC	522	198	12	116	774	126	12	116
401	CC	240	86	12	65	240	41	12	65

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
402	CC	132	86	12	42	132	41	12	42
403	CC	394	185	13	97	366	81	12	91
411	CC	600	120	24	82	600	120	24	82
412	CC	324	36	24	85	162	18	12	42
413	CC	132	48	12	41	132	48	12	41
414	CA	144	216	12	35	72	108	6	18
415	CC	876	204	24	282	510	30	12	141
416	CC	300	60	24	84	150	30	12	42
417	CC	660	60	24	129	660	60	24	129
418	CC	336	24	24	117	168	12	12	58
421	CC	Included with Route 41							
422	CC	660	60	24	194	1,008	72	36	291
432	CC	600	120	48	114	300	60	24	57
433	CC	552	168	24	149	516	204	24	149
434	CC	515	175	23	137	636	84	24	144
435	CC	432	288	24	131	306	54	12	65
441	CC	300	60	24	17	150	30	12	8
501	CC	312	48	24	81	156	24	12	40
502	CC	300	60	24	58	150	30	12	29
503	CA	288	72	12	58	160	33	8	32
504	CC	275	25	10	36	220	20	8	29
505	CC	75	25	10	17	60	20	8	13
511	CC	300	60	24	50	300	60	24	50
512	CC	312	48	24	88	156	24	12	44
513	CC	300	60	24	54	150	30	12	27
521	CC	198	96	12	58	198	96	12	58
522	CC	330	96	12	112	330	96	12	112
523	CC	240	120	12	82	120	60	6	41
541	CC	684	36	24	167	840	60	24	167
542	CC	420	300	24	83	264	96	12	41
543	CC	325	65	26	67	300	60	24	62
544	CC	300	60	24	75	168	12	12	38
545	CC	468	260	26	91	240	120	12	42
546	CC	300	60	24	66	150	30	12	33
547	CC	504	216	24	126	816	84	24	126
548	CC	1,152	288	24	229	1,152	108	24	229
611	CC	240	120	12	78	240	30	12	78
612	CC	240	120	12	78	240	30	12	78
613	CC	150	30	12	27	75	15	6	14
614	CC	150	30	12	27	75	15	6	14
615	CC	300	60	12	64	150	30	6	32

Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	0	0	0	0	330	30	6	55
8F	F	0	0	0	0	330	30	6	74
30F	F	0	0	0	0	240	30	6	49
41F	F	0	0	0	0	165	15	3	36
93F	F	0	0	0	0	480	0	4	129
411F	F	0	0	0	0	220	20	4	54
413F	F	0	0	0	0	120	0	4	28
415F	F	0	0	0	0	240	0	4	50
EXPRESS ROUTES									
80	X	0	0	0	0	270	0	5	92
80A	X	60	0	1	15	257	0	3	53
80B	X	0	0	0	0	33	0	1	11
81	X	0	0	0	0	630	0	9	192
82	X	0	0	0	0	147	0	3	47
83	X	0	0	0	0	593	0	7	201
83A	X	0	0	0	0	129	0	2	53
84	X	0	0	0	0	300	0	4	107
84A	X	0	0	0	0	292	0	4	100
85	X	0	0	0	0	373	0	5	115
85A	X	0	0	0	0	150	0	3	45
86	X	0	0	0	0	63	0	1	25
86A	X	0	0	0	0	66	0	1	29
88	X	0	0	0	0	116	0	2	33
88A	X	0	0	0	0	377	0	2	161
89	X	0	0	0	0	100	0	2	36
90	X	0	0	0	0	146	0	2	27
91	X	0	0	0	0	504	0	7	170
92	X	0	0	0	0	186	0	3	76
93	X	0	0	0	0	1,590	0	10	398
93A	X	0	0	0	0	123	0	1	37
95	X	0	0	0	0	65	0	1	31
96	X	0	0	0	0	110	0	2	34
97	X	0	0	0	0	208	0	4	75
98	X	0	0	0	0	195	0	3	67
101	X	0	0	0	0	305	0	5	110
102	X	0	0	0	0	180	0	3	74
103	X	0	0	0	0	110	0	2	34
203	X	0	0	0	0	86	0	2	22
434X	X	0	0	0	0	252	0	4	87
441X	X	0	0	0	0	224	0	4	75
TOTALS		88,301	16,872	2,230	25,577	84,597	12,143	1,787	22,585

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	847	128	13	304	0	0	0	0
B	LS	972	288	28	223	0	0	0	0
C	LS	1,560	240	20	777	0	0	0	0
D	LS	753	199	16	451	0	0	0	0
E	LS	1,470	210	28	732	0	0	0	0
1	L	1,305	45	30	279	783	117	18	168
1L	LS	1,155	105	21	311	550	50	10	148
2	L	1,170	130	26	238	135	10	3	28
3	L	1,259	206	19	265	337	43	5	71
4	L	707	133	14	126	202	38	4	36
5	CC	252	78	11	56	0	0	0	0
6	L	735	105	14	137	105	0	2	20
7	CC	317	60	13	75	0	0	0	0
8	L	800	160	40	176	0	0	0	0
9	L	709	133	11	158	128	12	4	33
10	CC	216	56	8	42	0	0	0	0
11	L	196	10	4	65	0	0	0	0
13	L	2,070	90	36	406	560	40	10	113
15	CC	280	20	10	46	0	0	0	0
17	CC	810	190	20	172	162	32	4	34
18	CC	700	200	20	132	140	40	4	26
19	L	1,596	324	24	350	329	71	5	72
20	L	326	34	4	67	0	0	0	0
23	L	1,200	240	16	353	0	0	0	0
31	CC	226	9	8	65	0	0	0	0
32	L	472	68	8	122	0	0	0	0
40	L	4,136	664	32	1,292	2,585	415	20	808
41	L	792	168	16	216	0	0	0	0
42	L	2,444	106	26	688	1,696	210	18	477
43	L	0	0	0	0	0	0	0	0
50	L	980	220	20	320	0	0	0	0
51	L	533	97	7	172	304	56	4	98
52	L	1,140	210	10	484	1,140	60	10	484
54	L	1,065	135	30	351	71	9	2	23
60	L	728	232	16	284	91	20	2	36
61	L	688	272	16	229	0	0	0	0
62	L	1,743	147	14	599	992	88	8	343
63	L	808	152	16	322	101	19	2	40
64	L	688	272	16	191	0	0	0	0
65	L	120	60	4	42	0	0	0	0
66	L	188	52	8	111	0	0	0	0
131	CC	0	0	0	0	0	0	0	0
132	CC	0	0	0	0	0	0	0	0
133	CC	100	20	8	28	0	0	0	0
134	CC	220	20	8	63	0	0	0	0
231	CC	280	35	14	69	160	20	8	39
232	CC	108	12	8	30	0	0	0	0
301	CC	174	26	4	39	0	0	0	0
401	CC	160	57	8	43	0	0	0	0

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
402	CC	88	57	8	28	0	0	0	0
403	CC	262	114	9	74	0	0	0	0
411	CC	220	28	16	63	68	8	4	22
412	CC	54	6	4	14	0	0	0	0
413	CC	0	0	0	0	0	0	0	0
414	CA	24	17	2	6	0	0	0	0
415	CC	584	136	16	188	0	0	0	0
416	CC	175	35	14	49	0	0	0	0
417	CC	550	50	20	108	110	10	4	22
418	CC	224	16	16	78	0	0	0	0
421	CC	Included with Route 41							
422	CC	880	80	32	259	110	10	4	32
432	CC	386	78	31	74	126	22	10	24
433	CC	322	98	14	87	46	14	2	12
434	CC	335	115	15	89	90	30	4	24
435	CC	288	192	16	87	0	0	0	0
441	CC	175	35	14	10	0	0	0	0
501	CC	208	32	16	54	0	0	0	0
502	CC	200	40	16	39	0	0	0	0
503	CA	69	16	3	14	0	0	0	0
504	CC	0	0	0	0	0	0	0	0
505	CC	0	0	0	0	0	0	0	0
511	CC	250	50	20	42	25	5	2	4
512	CC	104	16	8	29	0	0	0	0
513	CC	100	20	8	18	100	20	8	18
521	CC	66	32	4	19	0	0	0	0
522	CC	110	32	4	37	0	0	0	0
523	CC	160	80	8	55	0	0	0	0
541	CC	570	30	20	139	0	0	0	0
542	CC	440	160	20	69	0	0	0	0
543	CC	200	40	16	42	0	0	0	0
544	CC	150	30	12	38	0	0	0	0
545	CC	320	160	16	56	0	0	0	0
546	CC	150	30	12	33	0	0	0	0
547	CC	504	216	24	126	105	45	5	26
548	CC	1,152	288	24	229	288	72	6	57
611	CC	160	80	8	52	0	0	0	0
612	CC	160	80	8	52	0	0	0	0
613	CC	100	20	8	18	0	0	0	0
614	CC	100	20	8	18	0	0	0	0
615	CC	200	40	8	43	0	0	0	0

Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	275	25	5	46	0	0	0	0
8F	F	350	25	5	62	0	0	0	0
30F	F	200	25	5	41	0	0	0	0
41F	F	110	10	2	24	0	0	0	0
93F	F	240	0	2	65	0	0	0	0
411F	F	110	10	2	27	0	0	0	0
413F	F	60	0	2	14	0	0	0	0
415F	F	120	0	2	25	0	0	0	0
EXPRESS ROUTES									
80	X	0	0	0	0	0	0	0	0
80A	X	0	0	0	0	0	0	0	0
80B	X	0	0	0	0	0	0	0	0
81	X	70	0	1	21	0	0	0	0
82	X	0	0	0	0	0	0	0	0
83	X	0	0	0	0	0	0	0	0
83A	X	0	0	0	0	0	0	0	0
84	X	0	0	0	0	0	0	0	0
84A	X	0	0	0	0	0	0	0	0
85	X	0	0	0	0	0	0	0	0
85A	X	0	0	0	0	0	0	0	0
86	X	0	0	0	0	0	0	0	0
86A	X	0	0	0	0	0	0	0	0
88	X	0	0	0	0	0	0	0	0
88A	X	0	0	0	0	0	0	0	0
89	X	0	0	0	0	0	0	0	0
90	X	0	0	0	0	0	0	0	0
91	X	79	0	1	24	0	0	0	0
92	X	0	0	0	0	0	0	0	0
93	X	0	0	0	0	0	0	0	0
93A	X	0	0	0	0	0	0	0	0
95	X	0	0	0	0	0	0	0	0
96	X	0	0	0	0	0	0	0	0
97	X	0	0	0	0	0	0	0	0
98	X	0	0	0	0	0	0	0	0
101	X	0	0	0	0	0	0	0	0
102	X	0	0	0	0	0	0	0	0
103	X	0	0	0	0	0	0	0	0
203	X	0	0	0	0	0	0	0	0
434X	X	0	0	0	0	0	0	0	0
441X	X	0	0	0	0	0	0	0	0
TOTALS		50,852	9,082	1,268	14,486	11,639	1,586	192	3,338

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
A	LS	158	11,724	1,881	13,605	226.8	3,703.4	4:15 AM to 10:37 PM
B	LS	131	4,885	1,790	6,675	111.3	1,042.8	4:55 AM to 11:02 PM
C	LS	208	15,344	2,158	17,502	291.7	7,056.1	3:07 AM to 10:53 PM
D	LS	82	4,824	845	5,669	94.5	2,319.8	5:00 AM to 10:00 PM
E	LS	149	9,085	1,025	10,110	168.5	3,889.7	4:30 AM to 10:00 PM
1	L	184	8,328	842	9,170	152.8	1,713.0	4:00 AM to 2:00 AM
1L	LS	138	7,863	807	8,670	144.5	2,044.5	4:00 AM to 1:30 AM
2	L	179	8,760	1,016	9,776	162.9	1,641.4	4:10 AM to 1:44 AM
3	L	161	10,766	1,080	11,846	197.4	2,190.5	4:15 AM to 1:26 AM
4	L	116	5,861	1,103	6,964	116.1	1,043.8	5:00 AM to 12:30 AM
5	CC	73	1,830	360	2,190	36.5	371.6	5:36 AM to 10:02 PM
6	L	113	6,569	558	7,127	118.8	1,105.7	5:03 AM to 11:58 PM
7	CC	101	2,426	566	2,992	49.9	579.6	4:39 AM to 11:07 PM
8	L	160	3,476	628	4,104	68.4	704.0	7:24 AM to 10:43 PM
9	L	95	6,022	960	6,982	116.4	1,267.6	5:10 AM to 12:56 AM
10	CC	43	1,459	250	1,709	28.5	399.1	4:53 AM to 10:41 PM
11	L	38	2,459	501	2,960	49.3	613.0	5:48 AM to 10:14 PM
13	L	213	12,143	1,197	13,340	222.3	2,401.3	5:00 AM to 1:00 AM
15	CC	80	1,435	120	1,555	25.9	484.6	5:30 AM to 10:23 PM
17	CC	141	6,023	1,022	7,045	117.4	1,213.4	5:00 AM to 12:30 AM
18	CC	72	2,556	684	3,240	54.0	475.6	6:00 AM to 12:00 AM
19	L	107	7,138	1,422	8,560	142.7	1,561.5	4:13 AM to 1:48 AM
20	L	72	4,344	691	5,035	83.9	950.1	5:14 AM to 7:33 PM
23	L	64	4,884	1,236	6,120	102.0	1,412.2	6:00 AM to 10:00 PM
31	CC	42	1,333	51	1,384	23.1	336.6	4:30 AM to 10:11 PM
32	L	49	2,930	546	3,476	57.9	751.8	5:10 AM to 9:50 PM
40	L	138	18,940	2,510	21,450	357.5	5,564.5	4:00 AM to 3:59 AM
41	L	102	5,071	682	5,753	95.9	1,415.4	4:47 AM to 10:10 PM
42	L	128	12,947	1,423	14,370	239.5	3,375.8	4:00 AM to 3:59 AM
43	L	42	2,508	372	2,880	48.0	882.4	7:00 AM to 6:27 PM
50	L	122	6,160	1,160	7,320	122.0	1,950.2	5:00 AM to 11:00 PM
51	L	102	8,296	1,424	9,720	162.0	2,501.3	4:30 AM to 1:37 AM
52	L	89	10,563	1,499	12,062	201.0	4,306.9	4:00 AM to 3:59 AM
54	L	164	6,582	1,351	7,933	132.2	1,945.2	5:00 AM to 11:30 PM
60	L	100	4,771	1,220	5,991	99.9	1,776.4	5:00 AM to 12:00 AM
61	L	74	3,378	1,042	4,420	73.7	1,063.6	5:00 AM to 11:00 PM
62	L	86	10,874	1,307	12,181	203.0	3,682.1	4:00 AM to 3:59 AM
63	L	82	4,298	982	5,280	88.0	1,651.2	5:00 AM to 12:00 AM
64	L	71	3,105	1,155	4,260	71.0	847.4	5:00 AM to 10:00 PM
65	L	44	1,320	660	1,980	33.0	463.3	5:00 AM to 8:00 PM
66	L	50	1,344	546	1,890	31.5	695.5	4:30 AM to 10:00 PM
131	CC	24	300	60	360	6.0	67.2	6:00 AM to 6:35 PM
132	CC	24	300	60	360	6.0	70.8	6:20 AM to 6:45 PM
133	CC	58	725	145	870	14.5	200.1	5:30 AM to 10:00 PM
134	CC	58	1,595	145	1,740	29.0	455.3	5:30 AM to 10:00 PM
231	CC	60	1,200	150	1,350	22.5	293.7	5:00 AM to 1:00 AM
232	CC	48	708	237	945	15.8	181.7	5:00 AM to 8:00 PM
301	CC	42	2,373	497	2,870	47.8	407.6	6:00 AM to 8:00 PM
401	CC	50	1,000	259	1,259	21.0	270.5	3:50 AM to 9:34 PM

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
402	CC	50	550	259	809	13.5	176.8	4:20 AM to 9:58 PM
403	CC	51	1,543	518	2,061	34.3	391.9	4:15 AM to 10:22 PM
411	CC	100	2,288	436	2,724	45.4	357.3	4:30 AM to 12:49 AM
412	CC	59	799	90	889	14.8	208.9	4:30 AM to 6:48 PM
413	CC	39	433	152	585	9.8	132.6	5:30 AM to 5:55 PM
414	CA	29	349	502	851	14.2	85.6	4:30 AM to 6:43 PM
415	CC	68	2,638	422	3,060	51.0	800.4	5:30 AM to 11:00 PM
416	CC	66	825	165	990	16.5	231.0	5:30 AM to 10:00 PM
417	CC	100	2,750	250	3,000	50.0	537.5	5:00 AM to 12:30 AM
418	CC	70	980	70	1,050	17.5	340.9	5:00 AM to 11:00 PM
421	CC	Included with Route 41						
422	CC	142	3,944	316	4,260	71.0	1,148.8	5:00 AM to 12:30 AM
432	CC	147	1,837	370	2,207	36.8	351.0	4:41 AM to 1:28 AM
433	CC	94	2,081	739	2,820	47.0	585.2	5:00 AM to 11:26 PM
434	CC	97	2,388	522	2,910	48.5	580.6	4:41 AM to 12:52 AM
435	CC	62	1,281	579	1,860	31.0	337.9	6:30 AM to 10:00 PM
441	CC	68	850	170	1,020	17.0	47.6	5:00 AM to 10:00 PM
501	CC	66	858	132	990	16.5	221.4	5:30 AM to 10:00 PM
502	CC	66	825	165	990	16.5	160.7	5:30 AM to 10:00 PM
503	CA	34	722	177	899	15.0	148.4	4:33 AM to 7:53 PM
504	CC	30	825	75	900	15.0	107.7	5:30 AM to 7:00 PM
505	CC	30	225	75	300	5.0	50.1	5:30 AM to 7:00 PM
511	CC	104	1,300	260	1,560	26.0	216.3	4:30 AM to 11:30 PM
512	CC	60	780	120	900	15.0	220.2	5:00 AM to 8:00 PM
513	CC	68	850	170	1,020	17.0	154.4	5:00 AM to 1:00 AM
521	CC	44	726	352	1,078	18.0	212.1	5:00 AM to 8:00 PM
522	CC	44	1,210	352	1,562	26.0	412.3	5:00 AM to 8:00 PM
523	CC	34	680	340	1,020	17.0	233.2	5:00 AM to 9:00 PM
541	CC	96	3,074	196	3,270	54.5	667.7	5:30 AM to 10:00 PM
542	CC	72	1,476	684	2,160	36.0	248.8	5:30 AM to 10:00 PM
543	CC	94	1,175	235	1,410	23.5	243.9	5:30 AM to 9:00 PM
544	CC	64	839	121	960	16.0	201.0	5:30 AM to 9:00 PM
545	CC	70	1,348	700	2,048	34.1	245.0	5:30 AM to 9:00 PM
546	CC	64	800	160	960	16.0	175.4	5:30 AM to 9:00 PM
547	CC	115	3,221	694	3,915	65.3	601.4	4:30 AM to 12:30 AM
548	CC	116	5,568	927	6,495	108.3	1,105.5	4:30 AM to 12:30 AM
611	CC	48	960	270	1,230	20.5	312.0	5:00 AM to 10:00 PM
612	CC	48	960	270	1,230	20.5	312.0	5:00 AM to 10:00 PM
613	CC	34	425	85	510	8.5	76.7	5:00 AM to 9:30 PM
614	CC	34	425	85	510	8.5	76.7	5:00 AM to 9:00 PM
615	CC	34	850	170	1,020	17.0	180.9	5:00 AM to 9:00 PM

Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
FERRY ROUTES								
4F	F	19	1,045	183	1,228	20.5	174.8	Peak Period
8F	F	19	1,120	95	1,215	20.3	235.6	Peak Period
30F	F	19	760	95	855	14.3	154.7	Peak Period
41F	F	8	440	40	480	8.0	96.8	Peak Period
93F	F	10	1,200	0	1,200	20.0	323.0	Peak Period
411F	F	10	550	50	600	10.0	136.0	Peak Period
413F	F	11	330	0	330	5.5	78.1	Peak Period
415F	F	11	660	0	660	11.0	137.9	Peak Period
EXPRESS ROUTES								
80	X	11	619	0	619	10.3	203.7	Peak Period
80A	X	9	667	0	667	11.1	166.1	Peak Period
80B	X	2	66	0	66	1.1	22.3	Peak Period
81	X	22	1,540	0	1,540	25.7	452.4	Peak Period
82	X	7	343	0	343	5.7	109.8	Peak Period
83	X	17	1,395	0	1,395	23.3	489.3	Peak Period
83A	X	4	253	0	253	4.2	106.2	Peak Period
84	X	8	583	0	583	9.7	219.6	Peak Period
84A	X	8	583	0	583	9.7	206.6	Peak Period
85	X	8	613	0	613	10.2	181.3	Peak Period
85A	X	6	309	0	309	5.2	95.0	Peak Period
86	X	2	128	0	128	2.1	51.8	Peak Period
86A	X	2	136	0	136	2.3	56.7	Peak Period
88	X	4	232	0	232	3.9	64.7	Peak Period
88A	X	4	755	0	755	12.6	301.9	Peak Period
89	X	4	216	0	216	3.6	71.8	Peak Period
90	X	4	292	0	292	4.9	63.8	Peak Period
91	X	17	1,163	0	1,163	19.4	412.3	Peak Period
92	X	6	372	0	372	6.2	153.6	Peak Period
93	X	29	3,564	0	3,564	59.4	969.5	Peak Period
93A	X	2	246	0	246	4.1	74.2	Peak Period
95	X	2	130	0	130	2.2	62.0	Peak Period
96	X	4	220	0	220	3.7	70.3	Peak Period
97	X	8	416	0	416	6.9	153.6	Peak Period
98	X	6	390	0	390	6.5	137.0	Peak Period
101	X	10	610	0	610	10.2	221.4	Peak Period
102	X	6	360	0	360	6.0	150.5	Peak Period
103	X	4	220	0	220	3.7	66.7	Peak Period
203	X	4	172	0	172	2.9	40.4	Peak Period
434X	X	8	504	0	504	8.4	173.4	Peak Period
441X	X	8	448	0	448	7.5	151.0	Peak Period
TOTALS		7,781	342,133	55,062	397,195	6,619.9	95,273.6	

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
A	LS	6	22	10	22	10	0	60
B	LS	3	8	6	8	6	0	40
C	LS	10	30	12	34	12	0	60
D	LS	4	8	4	8	6	0	60
E	LS	6	15	8	15	8	0	60
1	L	10	11	6	11	9	5	60
1L	LS	5	11	6	11	4	4	60
2	L	9	14	7	14	5	3	60
3	L	11	16	11	14	10	5	60
4	L	4	8	6	8	8	4	40
5	CC	0	3	2	3	2	0	40
6	L	2	10	7	10	4	2	60
7	CC	2	6	3	6	3	0	40
8	L	0	4	5	4	4	0	40
9	L	2	12	5	12	4	2	40
10	CC	1	2	1	2	1	0	30
11	L	0	5	3	5	2	0	60
13	L	8	14	12	14	10	10	60
15	CC	1	2	2	2	1	2	30
17	CC	3	10	5	10	5	2	40
18	CC	0	3	3	3	3	3	40
19	L	4	8	8	8	8	4	60
20	L	2	8	7	8	6	0	60
23	L	0	7	6	7	6	0	40
31	CC	1	2	2	2	1	0	35
32	L	2	5	2	5	2	0	35
40	L	10	22	10	22	20	10	60
41	L	3	8	4	8	4	0	40
42	L	8	17	7	17	10	7	60
43	L	0	4	4	4	0	0	40
50	L	2	8	8	8	4	0	40
51	L	5	14	12	14	3	3	60
52	L	5	14	9	14	9	4	60
54	L	2	11	6	11	4	2	40
60	L	2	8	4	8	4	2	60
61	L	2	6	4	6	4	0	40
62	L	2	15	9	15	9	3	60
63	L	2	7	4	7	4	2	60
64	L	3	4	4	4	4	0	40
65	L	2	3	2	3	2	0	40
66	L	2	3	1	3	1	0	40
131	CC	0	0.5	0.5	0.5	0	0	30
132	CC	0	0.5	0.5	0.5	0	0	30
133	CC	1	1	1	1	1	0	30
134	CC	2	2	2	2	1	0	30
231	CC	1.5	1.5	1	1.5	1	1	35
232	CC	1.5	1.5	1	1.5	1	0	35
301	CC	0	5	2	5	2	0	40
401	CC	0.90	1.56	0.90	1.56	0.90	0	35

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Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
402	CC	0.60	0.96	0.60	0.96	0.60	0	35
403	CC	1.50	2.48	1.50	2.48	1.50	0	35
411	CC	2	4	2	4	2	1	60
412	CC	1	2	1	2	1	0	35
413	CC	1	1	1	1	0	0	40
414	CA	1	1	1	1	1	0	Van
415	CC	3	3	3	3	3	0	40
416	CC	1	1	1	1	1	0	60
417	CC	2	4	2	4	2	2	60
418	CC	1	1	1	1	1	0	40
421	CC	Included with Route 41						
422	CC	2	6	2	6	6	2	40
432	CC	2	2	2	2	2	1	40
433	CC	0	2	2	4	2	1	40
434	CC	2	4	2	4	2	1	40
435	CC	0	2	2	2	2	0	40
441	CC	1	1	1	1	1	0	40
501	CC	0	1	1	1	1	0	40
502	CC	0	1	1	1	1	0	40
503	CA	1	1	1	1	1	0	Van
504	CC	0	1.50	0.75	1.50	0	0	35
505	CC	0	0.50	0.25	0.50	0	0	35
511	CC	1	2	1	2	1	1	40
512	CC	1	1	1	1	1	0	40
513	CC	1	1	1	1	1	1	60
521	CC	0.75	0.75	0.75	0.75	0.75	0	35
522	CC	1.25	1.25	1.25	1.25	1.25	0	35
523	CC	1	1	1	1	1	0	35
541	CC	2	5	2	5	2	0	35
542	CC	2	2	2	2	2	0	35
543	CC	2	2	1	2	1	0	35
544	CC	1	1	1	1	1	0	Van
545	CC	2	2	2	2	2	0	35
546	CC	1	1	1	1	1	0	35
547	CC	5	5	2	5	2	2	40
548	CC	7	7	4	7	4	4	40
611	CC	1.50	1.50	1	1.50	1	0	35
612	CC	1.50	1.50	1	1.50	1	0	35
613	CC	0.50	0.50	0.50	0.50	0.50	0	Van
614	CC	0.50	0.50	0.50	0.50	0.50	0	Van
615	CC	1	1	1	1	1	0	35

Weekday Bus Operations Summary Table 2018 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
FERRY ROUTES								
4F	F	0	5	0	4	0	0	40
8F	F	0	4	0	4	0	0	40
30F	F	0	3	0	3	0	0	40
41F	F	0	4	0	4	0	0	40
93F	F	0	4	0	4	0	0	40
411F	F	0	3	0	3	0	0	35
413F	F	1	1	0	1	0	0	40
415F	F	0	2	0	2	0	0	40
EXPRESS ROUTES								
80	X	0	6	0	5	0	0	40
80A	X	0	3	0	3	0	0	40
80B	X	0	1	0	1	0	0	40
81	X	0	8	0	6	0	0	40
82	X	0	3	0	3	0	0	40
83	X	0	6	0	6	0	0	40
83A	X	0	2	0	2	0	0	40
84	X	0	4	0	4	0	0	40
84A	X	0	4	0	4	0	0	40
85	X	0	6	0	5	0	0	40
85A	X	0	3	0	2	0	0	40
86	X	0	1	0	1	0	0	40
86A	X	0	1	0	1	0	0	40
88	X	0	2	0	2	0	0	40
88A	X	0	2	0	2	0	0	40
89	X	0	2	0	2	0	0	40
90	X	0	2	0	2	0	0	40
91	X	0	6	0	7	0	0	60
92	X	0	3	0	3	0	0	40
93	X	0	9	0	9	0	0	60
93A	X	0	1	0	1	0	0	40
95	X	0	1	0	1	0	0	40
96	X	0	2	0	2	0	0	40
97	X	0	4	0	4	0	0	40
98	X	0	3	0	3	0	0	40
101	X	0	5	0	5	0	0	40
102	X	0	3	0	3	0	0	40
103	X	0	2	0	2	0	0	40
203	X	0	2	0	2	0	0	40
434X	X	0	4	0	4	0	0	40
441X	X	0	4	0	4	0	0	40
TOTALS		209.00	612.00	300.00	611.00	284.87	96.00	

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Appendix D: Bus Operating Details for Baseline (TSM) Alternative, 2030

AR00076672

Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	393	41	6	137	4,557	693	49	1,144
B	LS	99	36	3	24	1,162	518	28	223
C	LS	768	114	10	387	5,082	618	68	2,068
D	LS	197	20	4	115	1,632	198	20	572
E	LS	402	78	8	206	2,814	378	35	909
1	L	880	80	16	149	1,980	180	36	335
1L	LS	330	30	6	89	1,925	175	35	518
2	L	400	87	9	83	2,589	317	49	449
3	L	642	45	11	131	2,890	150	42	575
4	L	400	50	5	46	2,240	280	28	252
5	CC	0	0	0	0	540	60	20	102
6	L	105	5	2	20	2,024	106	32	302
7	CC	100	20	4	24	715	197	30	159
8	L	0	0	0	0	264	72	12	53
9	L	83	7	3	21	2,146	304	35	443
10	CC	29	1	1	5	336	64	12	63
11	L	0	0	0	0	744	206	10	162
13	L	620	55	10	113	2,862	336	45	506
15	CC	28	2	1	4	371	26	20	61
17	CC	122	29	3	26	1,869	231	42	361
18	CC	0	0	0	0	660	60	12	79
19	L	303	37	4	60	1,630	170	20	292
20	L	140	30	2	33	1,537	143	26	313
23	L	0	0	0	0	942	318	12	265
31	CC	86	3	4	26	356	12	11	92
32	L	118	12	2	31	882	168	14	214
40	L	1,411	96	10	402	3,839	546	24	966
41	L	159	21	3	40	2,198	322	28	378
42	L	734	136	8	213	3,472	518	28	758
43	L	0	0	0	0	588	92	8	168
50	L	108	12	2	32	1,680	420	28	448
51	L	408	42	5	122	2,036	292	20	489
52	L	567	105	5	241	2,915	385	22	1,065
54	L	66	10	2	22	2,058	462	42	491
60	L	96	24	2	36	1,188	252	24	426
61	L	100	20	2	30	700	140	14	203
62	L	249	22	2	86	2,580	420	20	856
63	L	96	24	2	41	990	270	18	362
64	L	129	51	3	36	630	210	14	167
65	L	60	30	2	21	420	210	14	147
66	L	94	26	4	56	441	189	14	195
131	CC	0	0	0	0	50	10	4	11
132	CC	0	0	0	0	50	10	4	12
133	CC	25	5	2	7	150	30	12	41
134	CC	55	5	2	16	330	30	12	94
231	CC	80	10	4	20	240	30	12	59
232	CC	62	28	4	15	217	98	14	53
301	CC	0	0	0	0	903	147	14	136
401	CC	80	10	4	22	280	35	14	76

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
402	CC	80	10	4	14	280	35	14	49
403	CC	89	51	3	24	392	238	14	106
411	CC	100	20	4	14	700	140	28	95
412	CC	70	9	5	18	378	42	28	99
413	CC	15	0	1	3	308	112	28	95
414	CA	37	53	3	9	72	108	6	18
415	CC	97	23	2	21	1,358	322	28	300
416	CC	25	5	2	7	350	70	28	92
417	CC	110	10	4	22	660	60	24	129
418	CC	100	20	4	22	700	140	28	153
419	CC	50	10	4	14	350	70	28	99
421	CC	Included with Route 41							
422	CC	110	10	4	32	1,491	189	42	340
432	CC	100	20	8	19	325	70	26	62
433	CC	43	17	2	12	602	238	28	174
434	CC	75	18	3	18	994	266	28	168
435	CC	0	0	0	0	350	100	10	55
440	CC	40	20	4	6	280	140	28	41
441	CC	98	22	4	27	966	84	28	192
501	CC	0	0	0	0	182	28	14	47
502	CC	0	0	0	0	175	35	14	34
503	CA	64	14	5	15	141	42	6	29
504	CC	0	0	0	0	330	30	12	43
505	CC	0	0	0	0	90	30	12	20
511	CC	75	15	6	12	350	70	28	58
512	CC	52	8	4	15	156	24	12	44
513	CC	50	10	4	9	150	30	12	27
521	CC	33	16	2	10	231	112	14	67
522	CC	55	16	2	19	385	112	14	131
523	CC	40	20	2	14	120	60	6	41
541	CC	70	5	2	14	910	65	26	181
542	CC	44	16	2	7	308	112	14	48
543	CC	25	5	2	5	325	65	26	67
544	CC	25	5	2	6	196	14	14	44
545	CC	40	20	2	7	280	140	14	49
546	CC	25	5	2	5	175	35	14	38
547	CC	340	35	10	52	952	98	28	146
548	CC	505	95	10	95	1,414	266	28	267
549	CC	25	5	2	6	175	35	14	42
611	CC	40	5	2	13	280	35	14	91
612	CC	40	5	2	13	280	35	14	91

Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
613	CC	25	5	2	5	75	15	6	14
614	CC	25	5	2	5	75	15	6	14
615	CC	50	10	2	11	150	30	6	32
FERRY ROUTES									
4F	F	0	0	0	0	440	128	8	74
8F	F	0	0	0	0	480	40	8	99
30F	F	0	0	0	0	400	40	8	58
41F	F	0	0	0	0	165	15	3	36
93F	F	0	0	0	0	360	0	4	129
411F	F	0	0	0	0	220	20	4	54
413F	F	0	0	0	0	150	0	5	36
415F	F	0	0	0	0	300	0	5	63
EXPRESS ROUTES									
80	X	0	0	0	0	349	0	6	111
80A	X	0	0	0	0	350	0	5	99
80B	X	0	0	0	0	33	0	1	11
81	X	308	0	4	80	616	0	8	159
82	X	49	0	1	16	147	0	3	47
83	X	481	0	6	174	326	0	4	114
83A	X	124	0	2	53	0	0	0	0
84	X	154	0	2	55	164	0	2	57
84A	X	72	0	1	26	238	0	3	81
85	X	0	0	0	0	220	0	3	67
85A	X	0	0	0	0	189	0	3	50
86	X	50	0	1	26	0	0	0	0
86A	X	49	0	1	28	0	0	0	0
88	X	0	0	0	0	122	0	2	31
88A	X	391	0	2	141	0	0	0	0
89	X	0	0	0	0	82	0	2	36
90	X	0	0	0	0	158	0	2	37
91	X	344	0	4	97	430	0	5	121
92	X	146	0	2	52	73	0	1	26
93	X	1,044	0	8	287	930	0	11	285
93A	X	116	0	1	38	0	0	0	0
95	X	65	0	1	31	0	0	0	0
96	X	0	0	0	0	120	0	2	36
97	X	63	0	1	20	189	0	3	59
98	X	70	0	1	23	140	0	2	47
101	X	152	0	2	45	228	0	3	67
102	X	70	0	1	25	140	0	2	51
103	X	0	0	0	0	120	0	2	32
203	X	0	0	0	0	92	0	2	19
434X	X	0	0	0	0	328	0	4	87
440X	X	0	0	0	0	220	0	4	72
441X	X	0	0	0	0	224	0	4	75
TOTALS		17,459	2,097	353	5,018	99,908	15,298	2,093	24,471

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	3,288	312	48	1,127	3,906	606	42	992
B	LS	1,656	504	48	382	996	444	24	191
C	LS	3,744	576	48	1,870	4,918	614	62	1,970
D	LS	1,140	300	24	679	1,440	180	18	505
E	LS	2,520	360	48	1,254	2,412	324	30	788
1	L	2,640	240	48	447	1,980	180	36	335
1L	LS	1,980	180	36	533	1,650	150	30	444
2	L	2,250	200	50	459	2,216	272	42	385
3	L	3,232	512	50	678	2,406	124	34	471
4	L	2,880	360	36	324	2,400	300	30	270
5	CC	552	168	24	122	486	54	18	92
6	L	1,890	252	36	353	1,710	90	27	275
7	CC	634	126	26	149	609	163	26	135
8	L	1,620	180	72	317	792	216	36	158
9	L	1,415	312	23	311	1,541	192	19	302
10	CC	298	70	11	59	308	59	11	59
11	L	798	84	14	225	721	201	10	161
13	L	4,464	576	72	812	2,543	299	40	452
15	CC	420	48	18	69	336	24	18	56
17	CC	1,458	342	36	310	1,602	198	36	310
18	CC	1,320	120	24	159	660	60	12	79
19	L	2,502	378	36	525	1,467	153	18	263
20	L	1,146	249	18	271	1,308	122	22	266
23	L	1,800	360	24	530	942	318	12	265
31	CC	394	18	11	94	271	9	8	60
32	L	708	102	12	183	756	144	12	183
40	L	3,414	546	24	972	4,403	637	28	1,133
41	L	1,284	156	24	324	1,884	276	24	324
42	L	2,483	247	26	704	2,774	406	22	594
43	L	1,392	288	24	504	735	115	10	210
50	L	2,592	288	48	767	1,440	360	24	384
51	L	4,560	480	48	1,177	1,650	258	18	444
52	L	2,736	504	24	1,162	2,385	315	18	871
54	L	1,704	456	48	561	1,764	396	36	421
60	L	1,183	377	26	462	1,485	315	30	533
61	L	1,200	240	24	344	900	180	18	258
62	L	2,988	252	24	1,028	2,322	378	18	771
63	L	1,313	247	26	523	990	270	18	362
64	L	1,118	442	26	310	540	180	12	143
65	L	360	180	12	126	360	180	12	126
66	L	282	78	12	167	378	162	12	167
131	CC	150	30	12	34	100	20	8	22
132	CC	150	30	12	35	100	20	8	24
133	CC	300	60	24	83	150	30	12	41
134	CC	660	60	24	188	330	30	12	94
231	CC	200	25	10	49	240	30	12	59
232	CC	135	15	10	38	186	84	12	45
301	CC	522	198	12	116	774	126	12	116
401	CC	240	30	12	65	240	30	12	65

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
402	CC	240	30	12	42	240	30	12	42
403	CC	359	221	13	97	336	204	12	91
411	CC	600	120	24	82	600	120	24	82
412	CC	324	36	24	85	324	36	24	85
413	CC	132	48	12	41	300	60	24	82
414	CA	144	216	12	35	72	108	6	18
415	CC	828	252	24	258	1,164	276	24	258
416	CC	300	60	24	79	300	60	24	79
417	CC	660	60	24	129	660	60	24	129
418	CC	600	120	24	131	600	120	24	131
419	CC	300	60	24	85	300	60	24	85
421	CC	Included with Route 41							
422	CC	660	60	24	194	1,278	162	36	291
432	CC	600	120	48	114	300	60	24	57
433	CC	552	168	24	149	516	204	24	149
434	CC	549	138	23	137	852	228	24	144
435	CC	504	216	24	131	420	120	12	65
440	CC	240	120	24	35	240	120	24	35
441	CC	588	132	24	164	828	72	24	164
501	CC	312	48	24	81	156	24	12	40
502	CC	300	60	24	58	150	30	12	29
503	CA	288	72	12	58	160	33	8	32
504	CC	275	25	10	36	220	20	8	29
505	CC	75	25	10	17	60	20	8	13
511	CC	300	60	24	50	300	60	24	50
512	CC	312	48	24	88	156	24	12	44
513	CC	300	60	24	54	150	30	12	27
521	CC	198	96	12	58	198	96	12	58
522	CC	330	96	12	112	330	96	12	112
523	CC	240	120	12	82	120	60	6	41
541	CC	684	36	24	167	840	60	24	167
542	CC	420	300	24	83	264	96	12	41
543	CC	325	65	26	67	300	60	24	62
544	CC	300	60	24	75	168	12	12	38
545	CC	468	260	26	91	240	120	12	42
546	CC	300	60	24	66	150	30	12	33
547	CC	504	216	24	126	816	84	24	126
548	CC	1,176	264	24	229	1,212	228	24	229
549	CC	300	60	24	73	150	30	12	36
611	CC	240	120	12	78	240	30	12	78
612	CC	240	120	12	78	240	30	12	78

Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
613	CC	150	30	12	27	75	15	6	14
614	CC	150	30	12	27	75	15	6	14
615	CC	300	60	12	64	150	30	6	32
FERRY ROUTES									
4F	F	0	0	0	0	330	30	6	55
8F	F	0	0	0	0	360	30	6	74
30F	F	0	0	0	0	300	30	6	43
41F	F	0	0	0	0	165	15	3	36
93F	F	0	0	0	0	360	0	4	129
411F	F	0	0	0	0	220	20	4	54
413F	F	0	0	0	0	120	0	4	28
415F	F	0	0	0	0	240	0	4	50
EXPRESS ROUTES									
80	X	0	0	0	0	270	0	5	92
80A	X	60	0	1	15	257	0	3	53
80B	X	0	0	0	0	33	0	1	11
81	X	0	0	0	0	693	0	9	192
82	X	0	0	0	0	147	0	3	47
83	X	0	0	0	0	637	0	7	201
83A	X	0	0	0	0	124	0	2	53
84	X	0	0	0	0	348	0	4	107
84A	X	0	0	0	0	332	0	4	100
85	X	0	0	0	0	342	0	5	115
85A	X	0	0	0	0	189	0	3	45
86	X	0	0	0	0	50	0	1	25
86A	X	0	0	0	0	49	0	1	29
88	X	0	0	0	0	122	0	2	33
88A	X	0	0	0	0	391	0	2	161
89	X	0	0	0	0	82	0	2	36
90	X	0	0	0	0	158	0	2	27
91	X	0	0	0	0	602	0	7	170
92	X	0	0	0	0	219	0	3	76
93	X	0	0	0	0	1,590	0	10	398
93A	X	0	0	0	0	116	0	1	37
95	X	0	0	0	0	65	0	1	31
96	X	0	0	0	0	120	0	2	34
97	X	0	0	0	0	252	0	4	75
98	X	0	0	0	0	210	0	3	67
101	X	0	0	0	0	380	0	5	110
102	X	0	0	0	0	210	0	3	74
103	X	0	0	0	0	120	0	2	34
203	X	0	0	0	0	92	0	2	22
434X	X	0	0	0	0	328	0	4	87
440X	X	0	0	0	0	220	0	4	72
441X	X	0	0	0	0	224	0	4	75
TOTALS		94,442	16,726	2,302	25,929	93,823	13,852	1,923	23,290

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	886	85	13	304	0	0	0	0
B	LS	972	288	28	223	0	0	0	0
C	LS	1,560	240	20	779	0	0	0	0
D	LS	1,200	165	16	451	0	0	0	0
E	LS	1,470	210	28	732	0	0	0	0
1	L	1,650	150	30	279	990	90	18	168
1L	LS	1,155	105	21	311	550	50	10	148
2	L	1,170	130	26	238	135	10	3	28
3	L	1,259	206	19	265	337	43	5	71
4	L	1,120	140	14	126	320	40	4	36
5	CC	252	78	11	56	0	0	0	0
6	L	735	105	14	137	105	0	2	20
7	CC	317	60	13	75	0	0	0	0
8	L	800	160	40	176	0	0	0	0
9	L	709	133	11	158	128	12	4	33
10	CC	216	56	8	42	0	0	0	0
11	L	196	10	4	65	0	0	0	0
13	L	2,286	234	36	406	635	65	10	113
15	CC	280	20	10	46	0	0	0	0
17	CC	810	190	20	172	162	32	4	34
18	CC	1,100	100	20	132	220	20	4	26
19	L	1,668	252	24	350	347	53	5	72
20	L	326	34	4	67	0	0	0	0
23	L	1,200	240	16	353	0	0	0	0
31	CC	226	9	8	65	0	0	0	0
32	L	472	68	8	122	0	0	0	0
40	L	4,552	320	32	1,295	2,150	210	20	810
41	L	856	104	16	216	0	0	0	0
42	L	2,498	248	26	705	1,734	172	18	489
43	L	0	0	0	0	0	0	0	0
50	L	1,080	120	20	320	0	0	0	0
51	L	667	154	7	172	306	54	4	98
52	L	1,140	210	10	484	1,140	60	10	484
54	L	1,065	135	30	351	71	9	2	23
60	L	728	232	16	284	91	20	2	36
61	L	800	160	16	229	0	0	0	0
62	L	1,743	147	14	599	992	88	8	343
63	L	808	152	16	322	101	19	2	40
64	L	688	272	16	191	0	0	0	0
65	L	120	60	4	42	0	0	0	0
66	L	188	52	8	111	0	0	0	0
131	CC	0	0	0	0	0	0	0	0
132	CC	0	0	0	0	0	0	0	0
133	CC	100	20	8	28	0	0	0	0
134	CC	220	20	8	63	0	0	0	0
231	CC	280	35	14	69	160	20	8	39
232	CC	108	12	8	30	0	0	0	0
301	CC	174	26	4	39	0	0	0	0
401	CC	160	20	8	43	0	0	0	0

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
402	CC	160	20	8	28	0	0	0	0
403	CC	242	136	9	74	0	0	0	0
411	CC	220	28	16	63	68	8	4	22
412	CC	54	6	4	14	0	0	0	0
413	CC	0	0	0	0	0	0	0	0
414	CA	24	17	2	6	0	0	0	0
415	CC	552	168	16	172	0	0	0	0
416	CC	175	35	14	46	0	0	0	0
417	CC	550	50	20	108	110	10	4	22
418	CC	440	40	16	87	0	0	0	0
419	CC	200	40	16	57	0	0	0	0
421	CC	Included with Route 41							
422	CC	880	80	32	259	110	10	4	32
432	CC	386	78	31	74	126	22	10	24
433	CC	322	98	14	87	46	14	2	12
434	CC	357	90	15	89	96	24	4	24
435	CC	336	144	16	87	0	0	0	0
440	CC	140	70	14	20	0	0	0	0
441	CC	343	77	14	96	0	0	0	0
501	CC	208	32	16	54	0	0	0	0
502	CC	200	40	16	39	0	0	0	0
503	CA	69	16	3	14	0	0	0	0
504	CC	0	0	0	0	0	0	0	0
505	CC	0	0	0	0	0	0	0	0
511	CC	250	50	20	42	25	5	2	4
512	CC	104	16	8	29	0	0	0	0
513	CC	100	20	8	18	100	20	8	18
521	CC	66	32	4	19	0	0	0	0
522	CC	110	32	4	37	0	0	0	0
523	CC	160	80	8	55	0	0	0	0
541	CC	570	30	20	139	0	0	0	0
542	CC	440	160	20	69	0	0	0	0
543	CC	200	40	16	42	0	0	0	0
544	CC	150	30	12	38	0	0	0	0
545	CC	320	160	16	56	0	0	0	0
546	CC	150	30	12	33	0	0	0	0
547	CC	504	216	24	126	105	45	5	26
548	CC	1,176	264	24	229	294	66	6	57
549	CC	275	55	22	67	25	5	1	6
611	CC	160	80	8	52	0	0	0	0
612	CC	160	80	8	52	0	0	0	0

Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
613	CC	100	20	8	18	0	0	0	0
614	CC	100	20	8	18	0	0	0	0
615	CC	200	40	8	43	0	0	0	0
FERRY ROUTES									
4F	F	275	25	5	46	0	0	0	0
8F	F	350	25	5	62	0	0	0	0
30F	F	200	25	5	36	0	0	0	0
41F	F	110	10	2	24	0	0	0	0
93F	F	240	0	2	65	0	0	0	0
411F	F	110	10	2	27	0	0	0	0
413F	F	60	0	2	14	0	0	0	0
415F	F	120	0	2	25	0	0	0	0
EXPRESS ROUTES									
80	X	0	0	0	0	0	0	0	0
80A	X	0	0	0	0	0	0	0	0
80B	X	0	0	0	0	0	0	0	0
81	X	70	0	1	21	0	0	0	0
82	X	0	0	0	0	0	0	0	0
83	X	0	0	0	0	0	0	0	0
83A	X	0	0	0	0	0	0	0	0
84	X	0	0	0	0	0	0	0	0
84A	X	0	0	0	0	0	0	0	0
85	X	0	0	0	0	0	0	0	0
85A	X	0	0	0	0	0	0	0	0
86	X	0	0	0	0	0	0	0	0
86A	X	0	0	0	0	0	0	0	0
88	X	0	0	0	0	0	0	0	0
88A	X	0	0	0	0	0	0	0	0
89	X	0	0	0	0	0	0	0	0
90	X	0	0	0	0	0	0	0	0
91	X	86	0	1	24	0	0	0	0
92	X	0	0	0	0	0	0	0	0
93	X	0	0	0	0	0	0	0	0
93A	X	0	0	0	0	0	0	0	0
95	X	0	0	0	0	0	0	0	0
96	X	0	0	0	0	0	0	0	0
97	X	0	0	0	0	0	0	0	0
98	X	0	0	0	0	0	0	0	0
101	X	0	0	0	0	0	0	0	0
102	X	0	0	0	0	0	0	0	0
103	X	0	0	0	0	0	0	0	0
203	X	0	0	0	0	0	0	0	0
434X	X	0	0	0	0	0	0	0	0
440X	X	0	0	0	0	0	0	0	0
441X	X	0	0	0	0	0	0	0	0
TOTALS		54,784	8,782	1,320	14,724	11,779	1,296	193	3,358

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
A	LS	158	13,030	1,737	14,767	246.1	3,703.4	4:15 AM to 10:37 PM
B	LS	131	4,885	1,790	6,675	111.3	1,042.8	4:55 AM to 11:02 PM
C	LS	208	16,072	2,162	18,234	303.9	7,073.8	3:07 AM to 10:53 PM
D	LS	82	5,609	863	6,472	107.9	2,322.6	5:00 AM to 10:00 PM
E	LS	149	9,618	1,350	10,968	182.8	3,889.7	4:30 AM to 10:00 PM
1	L	184	10,120	920	11,040	184.0	1,713.0	4:00 AM to 2:00 AM
1L	LS	138	7,590	690	8,280	138.0	2,044.5	4:00 AM to 1:30 AM
2	L	179	8,760	1,016	9,776	162.9	1,641.4	4:10 AM to 1:44 AM
3	L	161	10,766	1,080	11,846	197.4	2,190.5	4:15 AM to 1:26 AM
4	L	117	9,360	1,170	10,530	175.5	1,053.0	5:00 AM to 12:30 AM
5	CC	73	1,830	360	2,190	36.5	371.6	5:36 AM to 10:02 PM
6	L	113	6,569	558	7,127	118.8	1,105.7	5:03 AM to 11:58 PM
7	CC	101	2,426	566	2,992	49.9	579.6	4:39 AM to 11:07 PM
8	L	160	3,476	628	4,104	68.4	704.0	7:24 AM to 10:43 PM
9	L	95	6,022	960	6,982	116.4	1,267.6	5:10 AM to 12:56 AM
10	CC	43	1,459	250	1,709	28.5	399.1	4:53 AM to 10:41 PM
11	L	38	2,459	501	2,960	49.3	613.0	5:48 AM to 10:14 PM
13	L	213	13,410	1,565	14,975	249.6	2,401.3	5:00 AM to 1:00 AM
15	CC	80	1,435	120	1,555	25.9	484.6	5:30 AM to 10:23 PM
17	CC	141	6,023	1,022	7,045	117.4	1,213.4	5:00 AM to 12:30 AM
18	CC	72	3,960	360	4,320	72.0	475.6	6:00 AM to 12:00 AM
19	L	107	7,917	1,043	8,960	149.3	1,561.5	4:13 AM to 1:48 AM
20	L	72	4,457	578	5,035	83.9	950.1	5:14 AM to 7:33 PM
23	L	64	4,884	1,236	6,120	102.0	1,412.2	6:00 AM to 10:00 PM
31	CC	42	1,333	51	1,384	23.1	336.6	4:30 AM to 10:11 PM
32	L	49	2,982	494	3,476	57.9	751.8	5:10 AM to 9:50 PM
40	L	138	19,769	2,355	22,124	368.7	5,577.7	4:00 AM to 3:59 AM
41	L	102	6,439	879	7,318	122.0	1,415.4	4:47 AM to 10:10 PM
42	L	128	13,695	1,727	15,422	257.0	3,462.8	4:00 AM to 3:59 AM
43	L	42	2,715	495	3,210	53.5	882.4	7:00 AM to 6:27 PM
50	L	122	6,900	1,200	8,100	135.0	1,950.2	5:00 AM to 11:00 PM
51	L	102	9,627	1,280	10,907	181.8	2,501.3	4:30 AM to 1:37 AM
52	L	89	10,883	1,579	12,462	207.7	4,306.9	4:00 AM to 3:59 AM
54	L	164	6,855	1,468	8,323	138.7	1,945.2	5:00 AM to 11:30 PM
60	L	100	4,771	1,220	5,991	99.9	1,776.4	5:00 AM to 12:00 AM
61	L	74	3,700	740	4,440	74.0	1,063.6	5:00 AM to 11:00 PM
62	L	86	10,874	1,307	12,181	203.0	3,682.1	4:00 AM to 3:59 AM
63	L	82	4,298	982	5,280	88.0	1,651.2	5:00 AM to 12:00 AM
64	L	71	3,105	1,155	4,260	71.0	847.4	5:00 AM to 10:00 PM
65	L	44	1,320	660	1,980	33.0	463.3	5:00 AM to 8:00 PM
66	L	50	1,383	507	1,890	31.5	695.5	4:30 AM to 10:00 PM
131	CC	24	300	60	360	6.0	67.2	6:00 AM to 6:35 PM
132	CC	24	300	60	360	6.0	70.8	6:20 AM to 6:45 PM
133	CC	58	725	145	870	14.5	200.1	5:30 AM to 10:00 PM
134	CC	58	1,595	145	1,740	29.0	455.3	5:30 AM to 10:00 PM
231	CC	60	1,200	150	1,350	22.5	293.7	5:00 AM to 1:00 AM
232	CC	48	708	237	945	15.8	181.7	5:00 AM to 8:00 PM
301	CC	42	2,373	497	2,870	47.8	407.6	6:00 AM to 8:00 PM
401	CC	50	1,000	125	1,125	18.8	270.5	3:50 AM to 9:34 PM

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
402	CC	50	1,000	125	1,125	18.8	176.8	4:20 AM to 9:58 PM
403	CC	51	1,418	850	2,268	37.8	391.9	4:15 AM to 10:22 PM
411	CC	100	2,288	436	2,724	45.4	357.3	4:30 AM to 12:49 AM
412	CC	85	1,150	129	1,279	21.3	300.7	4:30 AM to 6:48 PM
413	CC	65	755	220	975	16.3	221.0	5:30 AM to 5:55 PM
414	CA	29	349	502	851	14.2	85.6	4:30 AM to 6:43 PM
415	CC	94	3,999	1,041	5,040	84.0	1,008.6	5:30 AM to 11:00 PM
416	CC	92	1,150	230	1,380	23.0	303.6	5:30 AM to 10:00 PM
417	CC	100	2,750	250	3,000	50.0	537.5	5:00 AM to 12:30 AM
418	CC	96	2,440	440	2,880	48.0	523.7	5:00 AM to 11:00 PM
419	CC	96	1,200	240	1,440	24.0	340.8	5:00 AM to 11:00 PM
421	CC	Included with Route 41						
422	CC	142	4,529	511	5,040	84.0	1,148.8	5:00 AM to 12:30 AM
432	CC	147	1,837	370	2,207	36.8	351.0	4:41 AM to 1:28 AM
433	CC	94	2,081	739	2,820	47.0	585.2	5:00 AM to 11:26 PM
434	CC	97	2,923	764	3,687	61.5	580.6	4:41 AM to 12:52 AM
435	CC	62	1,610	580	2,190	36.5	337.9	6:30 AM to 10:00 PM
440	CC	94	940	470	1,410	23.5	136.3	5:00 AM to 10:00 PM
441	CC	94	2,823	387	3,210	53.5	643.0	5:00 AM to 10:00 PM
501	CC	66	858	132	990	16.5	221.4	5:30 AM to 10:00 PM
502	CC	66	825	165	990	16.5	160.7	5:30 AM to 10:00 PM
503	CA	34	722	177	899	15.0	148.4	4:33 AM to 7:53 PM
504	CC	30	825	75	900	15.0	107.7	5:30 AM to 7:00 PM
505	CC	30	225	75	300	5.0	50.1	5:30 AM to 7:00 PM
511	CC	104	1,300	260	1,560	26.0	216.3	4:30 AM to 11:30 PM
512	CC	60	780	120	900	15.0	220.2	5:00 AM to 8:00 PM
513	CC	68	850	170	1,020	17.0	154.4	5:00 AM to 1:00 AM
521	CC	44	726	352	1,078	18.0	212.1	5:00 AM to 8:00 PM
522	CC	44	1,210	352	1,562	26.0	412.3	5:00 AM to 8:00 PM
523	CC	34	680	340	1,020	17.0	233.2	5:00 AM to 9:00 PM
541	CC	96	3,074	196	3,270	54.5	667.7	5:30 AM to 10:00 PM
542	CC	72	1,476	684	2,160	36.0	248.8	5:30 AM to 10:00 PM
543	CC	94	1,175	235	1,410	23.5	243.9	5:30 AM to 9:00 PM
544	CC	64	839	121	960	16.0	201.0	5:30 AM to 9:00 PM
545	CC	70	1,348	700	2,048	34.1	245.0	5:30 AM to 9:00 PM
546	CC	64	800	160	960	16.0	175.4	5:30 AM to 9:00 PM
547	CC	115	3,221	694	3,915	65.3	601.4	4:30 AM to 12:30 AM
548	CC	116	5,777	1,183	6,960	116.0	1,105.5	4:30 AM to 12:30 AM
549	CC	76	950	190	1,140	19.0	230.3	6:30 AM to 10:00 PM
611	CC	48	960	270	1,230	20.5	312.0	5:00 AM to 10:00 PM
612	CC	48	960	270	1,230	20.5	312.0	5:00 AM to 10:00 PM

Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
613	CC	34	425	85	510	8.5	76.7	5:00 AM to 9:30 PM
614	CC	34	425	85	510	8.5	76.7	5:00 AM to 9:00 PM
615	CC	34	850	170	1,020	17.0	180.9	5:00 AM to 9:00 PM
FERRY ROUTES								
4F	F	19	1,045	183	1,228	20.5	174.8	Peak Period
8F	F	19	1,190	95	1,285	21.4	235.6	Peak Period
30F	F	19	900	95	995	16.6	136.8	Peak Period
41F	F	8	440	40	480	8.0	96.8	Peak Period
93F	F	10	960	0	960	16.0	323.0	Peak Period
411F	F	10	550	50	600	10.0	136.0	Peak Period
413F	F	11	330	0	330	5.5	78.1	Peak Period
415F	F	11	660	0	660	11.0	137.9	Peak Period
EXPRESS ROUTES								
80	X	11	619	0	619	10.3	203.7	Peak Period
80A	X	9	667	0	667	11.1	166.1	Peak Period
80B	X	2	66	0	66	1.1	22.3	Peak Period
81	X	22	1,687	0	1,687	28.1	452.4	Peak Period
82	X	7	343	0	343	5.7	109.8	Peak Period
83	X	17	1,444	0	1,444	24.1	489.3	Peak Period
83A	X	4	248	0	248	4.1	106.2	Peak Period
84	X	8	666	0	666	11.1	219.6	Peak Period
84A	X	8	642	0	642	10.7	206.6	Peak Period
85	X	8	562	0	562	9.4	181.3	Peak Period
85A	X	6	378	0	378	6.3	95.0	Peak Period
86	X	2	100	0	100	1.7	51.8	Peak Period
86A	X	2	98	0	98	1.6	56.7	Peak Period
88	X	4	244	0	244	4.1	64.7	Peak Period
88A	X	4	782	0	782	13.0	301.9	Peak Period
89	X	4	164	0	164	2.7	71.8	Peak Period
90	X	4	316	0	316	5.3	63.8	Peak Period
91	X	17	1,462	0	1,462	24.4	412.3	Peak Period
92	X	6	438	0	438	7.3	153.6	Peak Period
93	X	29	3,564	0	3,564	59.4	969.5	Peak Period
93A	X	2	232	0	232	3.9	74.2	Peak Period
95	X	2	130	0	130	2.2	62.0	Peak Period
96	X	4	240	0	240	4.0	70.3	Peak Period
97	X	8	504	0	504	8.4	153.6	Peak Period
98	X	6	420	0	420	7.0	137.0	Peak Period
101	X	10	760	0	760	12.7	221.4	Peak Period
102	X	6	420	0	420	7.0	150.5	Peak Period
103	X	4	240	0	240	4.0	66.7	Peak Period
203	X	4	184	0	184	3.1	40.4	Peak Period
434X	X	8	656	0	656	10.9	173.4	Peak Period
440X	X	8	440	0	440	7.3	144.2	Peak Period
441X	X	8	448	0	448	7.5	151.0	Peak Period
TOTALS		8,212	372,749	58,051	430,800	7,180.0	97,476.4	

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
A	LS	6	25	10	25	10	0	60
B	LS	3	8	6	8	6	0	40
C	LS	10	30	12	34	12	0	60
D	LS	4	9	4	9	9	0	60
E	LS	6	15	8	15	8	0	60
1	L	12	12	8	12	12	6	60
1L	LS	5	10	6	10	4	4	60
2	L	9	14	7	14	5	3	60
3	L	11	16	11	14	10	5	60
4	L	5	12	9	12	12	4	40
5	CC	0	3	2	3	2	0	40
6	L	2	10	7	10	4	2	60
7	CC	2	6	3	6	3	0	40
8	L	0	4	5	4	4	0	40
9	L	2	12	5	12	4	2	40
10	CC	1	2	1	2	1	0	30
11	L	0	5	3	5	2	0	60
13	L	8	15	14	15	10	10	60
15	CC	1	2	2	2	1	2	30
17	CC	3	10	5	10	5	2	40
18	CC	0	4	4	4	4	4	40
19	L	4	9	8	9	8	4	60
20	L	2	8	7	8	6	0	40
23	L	0	7	6	7	6	0	40
31	CC	1	2	2	2	1	0	35
32	L	2	4	2	4	2	0	35
40	L	10	24	11	24	20	8	60
41	L	3	12	4	12	4	0	60
42	L	8	19	7	19	11	7	60
43	L	0	5	5	5	0	0	40
50	L	2	10	8	10	4	0	40
51	L	5	15	14	15	4	3	60
52	L	5	15	9	15	9	4	60
54	L	2	12	6	12	4	2	40
60	L	2	8	4	8	4	2	60
61	L	2	6	4	6	4	0	60
62	L	2	15	9	15	9	3	60
63	L	2	7	4	7	4	2	60
64	L	3	4	4	4	4	0	40
65	L	2	3	2	3	2	0	40
66	L	2	3	1	3	1	0	40
131	CC	0	0.5	0.5	0.5	0	0	30
132	CC	0	0.5	0.5	0.5	0	0	30
133	CC	1	1	1	1	1	0	30
134	CC	2	2	2	2	1	0	30
231	CC	1.5	1.5	1	1.5	1	1	35
232	CC	1.5	1.5	1	1.5	1	0	35
301	CC	0	5	2	5	2	0	40
401	CC	0.75	1.50	0.75	1.50	0.75	0	35

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Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
402	CC	0.75	1.50	0.75	1.50	0.75	0	35
403	CC	1.5	3.0	1.5	3.0	1.5	0	35
411	CC	2	4	2	4	2	1	60
412	CC	1	2	1	2	1	0	35
413	CC	1	2	1	2	0	0	40
414	CA	1	1	1	1	1	0	Van
415	CC	4	8	3	8	3	0	60
416	CC	1	2	1	2	1	0	60
417	CC	2	4	2	4	2	2	60
418	CC	2	4	2	4	2	0	40
419	CC	1	2	1	2	1	0	40
421	CC	Included with Route 41						
422	CC	2	8	2	8	6	2	40
432	CC	2	2	2	2	2	1	40
433	CC	0	2	2	4	2	1	40
434	CC	2	6	2	6	2	1	40
435	CC	0	3	2	3	2	0	40
440	CC	1	2	1	2	1	0	40
441	CC	2	5	2	5	2	0	60
501	CC	0	1	1	1	1	0	40
502	CC	0	1	1	1	1	0	40
503	CA	1	1	1	1	1	0	Van
504	CC	0	1.50	0.75	1.50	0	0	35
505	CC	0	0.50	0.25	0.50	0	0	35
511	CC	1	2	1	2	1	1	40
512	CC	1	1	1	1	1	0	40
513	CC	1	1	1	1	1	1	60
521	CC	0.75	0.75	0.75	0.75	0.75	0	35
522	CC	1.25	1.25	1.25	1.25	1.25	0	35
523	CC	1	1	1	1	1	0	35
541	CC	2	5	2	5	2	0	35
542	CC	2	2	2	2	2	0	35
543	CC	2	2	1	2	1	0	35
544	CC	1	1	1	1	1	0	Van
545	CC	2	2	2	2	2	0	35
546	CC	1	1	1	1	1	0	35
547	CC	5	5	2	5	2	2	40
548	CC	8	8	4	8	4	4	40
549	CC	1	1	1	1	1	1	40
611	CC	1.50	1.50	1	1.50	1	0	35
612	CC	1.50	1.50	1	1.50	1	0	35

Weekday Bus Operations Summary Table 2030 Baseline Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
613	CC	0.50	0.50	0.50	0.50	0.50	0	Van
614	CC	0.50	0.50	0.50	0.50	0.50	0	Van
615	CC	1	1	1	1	1	0	35
FERRY ROUTES								
4F	F	0	5	0	4	0	0	40
8F	F	0	5	0	5	0	0	40
30F	F	0	3	0	3	0	0	40
41F	F	0	4	0	4	0	0	40
93F	F	0	4	0	4	0	0	40
411F	F	0	3	0	3	0	0	35
413F	F	1	1	0	1	0	0	40
415F	F	0	2	0	2	0	0	40
EXPRESS ROUTES								
80	X	0	6	0	5	0	0	40
80A	X	0	3	0	3	0	0	40
80B	X	0	1	0	1	0	0	40
81	X	0	8	0	6	0	0	40
82	X	0	3	0	3	0	0	40
83	X	0	6	0	6	0	0	40
83A	X	0	2	0	2	0	0	40
84	X	0	4	0	4	0	0	40
84A	X	0	4	0	4	0	0	40
85	X	0	6	0	5	0	0	40
85A	X	0	3	0	2	0	0	40
86	X	0	1	0	1	0	0	40
86A	X	0	1	0	1	0	0	40
88	X	0	2	0	2	0	0	40
88A	X	0	2	0	2	0	0	40
89	X	0	2	0	2	0	0	40
90	X	0	2	0	2	0	0	40
91	X	0	6	0	7	0	0	60
92	X	0	3	0	3	0	0	40
93	X	0	9	0	9	0	0	60
93A	X	0	1	0	1	0	0	40
95	X	0	1	0	1	0	0	40
96	X	0	2	0	2	0	0	40
97	X	0	4	0	4	0	0	40
98	X	0	3	0	3	0	0	40
101	X	0	5	0	5	0	0	40
102	X	0	3	0	3	0	0	40
103	X	0	2	0	2	0	0	40
203	X	0	2	0	2	0	0	40
434X	X	0	4	0	4	0	0	40
440X	X	0	4	0	4	0	0	40
441X	X	0	4	0	4	0	0	40
TOTALS		219.00	667.00	317.00	666.00	303.00	97.00	

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Appendix E: Bus Operating Details for New Start Alternative, 2018

AR00076688

Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	152	28	6	42	1,176	84	42	300
B	LS	99	6	3	24	1,176	84	28	223
C	LS	546	154	13	222	1,276	274	29	496
D	LS	96	24	4	43	700	140	28	301
1	L	740	110	17	158	2,079	231	42	391
1L	LS	525	75	10	148	2,079	231	35	518
2	L	622	78	14	128	2,600	104	52	477
3	L	405	45	10	77	1,680	210	42	325
4	L	228	6	5	41	1,218	42	28	221
5	CC	0	0	0	0	308	49	15	62
6	L	220	20	4	40	1,560	240	40	250
8	L	440	40	16	85	2,876	267	118	574
9	L	52	6	2	11	602	28	28	131
13	L	117	33	6	23	819	231	42	158
15	CC	0	0	0	0	710	90	20	121
17	CC	162	28	4	34	1,848	252	42	361
18	CC	0	0	0	0	1,050	210	28	185
19	L	565	35	10	126	1,708	70	28	354
23	L	0	0	0	0	942	138	12	265
30	L	78	12	2	15	267	3	6	46
31	CC	162	8	8	31	798	42	42	155
40	L	1,532	288	22	469	3,286	337	54	955
41	L	120	15	3	34	948	132	24	270
42	L	490	10	10	147	2,198	62	41	603
50	L	145	5	3	48	1,400	70	28	448
51	L	232	34	6	89	1,386	84	28	414
52	L	1,016	68	9	436	1,958	106	16	777
54	L	268	32	10	100	1,134	126	28	279
60	L	43	2	1	18	1,164	96	24	426
61	L	45	5	1	15	676	140	14	203
62	L	502	40	4	171	2,277	63	18	771
63	L	104	16	2	39	758	82	14	280
64	L	129	6	3	36	616	14	14	167
65	L	58	2	2	21	406	14	14	147
66	L	94	26	4	56	399	21	14	195
131	CC	0	0	0	0	50	10	4	11
132	CC	0	0	0	0	50	10	4	12
133	CC	25	5	2	7	150	30	12	41
134	CC	55	5	2	16	330	30	12	94
231	CC	50	10	4	18	150	30	12	54
232	CC	50	10	4	15	150	30	12	45
301	CC	69	0	2	15	1,008	252	28	205
302	CC	29	1	2	6	203	7	14	41
303	CC	42	3	6	11	196	14	28	50
304	CC	29	1	1	5	910	140	28	151
305	CC	88	12	4	22	315	35	14	76
306	CC	27	3	2	5	81	9	6	14
311	CC	127	15	3	24	1,526	154	28	215
312	CC	0	0	0	0	510	170	34	107

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
313	CC	0	0	0	0	770	70	28	182
314	CC	40	5	2	11	520	65	26	144
401	CC	48	12	4	18	156	24	12	54
402	CC	42	18	4	14	138	42	12	43
403	CC	84	12	3	24	312	48	12	91
411	CC	144	36	4	41	1,050	210	28	288
412	CC	65	10	5	18	182	28	14	50
413	CC	15	0	1	3	234	21	17	58
414	CA	37	53	3	9	72	108	6	18
415	CC	78	12	2	24	1,316	154	28	337
416	CC	25	5	2	7	350	70	28	98
417	CC	Included with Route 411							
418	CC	50	10	4	20	175	35	14	68
421	CC	Included with Route 42							
422	CC	122	10	4	38	924	126	28	263
432	CC	100	20	8	21	325	70	26	69
433	CC	43	17	2	12	602	238	28	174
434	CC	61	1	3	18	686	154	28	168
441	CC	25	5	2	14	175	35	14	96
501	CC	0	0	0	0	175	35	14	55
502	CC	0	0	0	0	175	35	14	46
503	CA	64	14	5	15	141	42	6	29
504	CC	0	0	0	0	110	10	4	16
505	CC	0	0	0	0	30	10	4	7
511	CC	Included with Route 51							
512	CC	52	8	4	15	156	24	12	44
513	CC	50	10	4	9	150	30	12	27
521	CC	33	16	2	10	231	112	14	67
522	CC	55	16	2	19	385	112	14	131
523	CC	40	20	2	14	120	60	6	41
541	CC	70	5	2	14	980	70	28	195
542	CC	44	16	2	7	308	112	14	48
543	CC	25	5	2	5	175	35	14	36
544	CA	25	5	2	6	196	14	14	44
545	CC	40	20	2	7	280	140	14	49
546	CC	25	5	2	5	175	35	14	38
547	CC	140	10	10	40	812	28	28	113
548	CC	480	20	10	95	1,288	182	28	267
549	CC	0	0	0	0	60	30	6	9
611	CC	40	5	2	13	280	35	14	91
612	CC	40	5	2	13	280	35	14	91
613	CA	25	5	2	5	75	15	6	14
614	CA	25	5	2	5	75	15	6	14
615	CC	50	10	2	11	150	30	6	32

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	0	0	0	0	440	40	8	74
8F	F	0	0	0	0	560	40	8	99
30F	F	0	0	0	0	320	40	8	65
41F	F	0	0	0	0	165	15	3	36
93F	F	0	0	0	0	480	0	4	129
411F	F	0	0	0	0	220	20	4	54
413F	F	0	0	0	0	150	0	5	36
EXPRESS ROUTES									
80	X	0	0	0	0	349	0	6	111
80A	X	0	0	0	0	350	0	5	99
80B	X	0	0	0	0	33	0	1	11
82	X	49	0	1	16	147	0	3	47
83	X	253	0	5	88	252	0	6	101
83A	X	40	0	2	20	0	0	0	0
84	X	61	0	2	27	62	0	2	27
84A	X	38	0	1	11	115	0	3	32
85	X	0	0	0	0	213	0	3	67
85A	X	0	0	0	0	183	0	3	50
88	X	0	0	0	0	116	0	2	31
88A	X	377	0	2	141	0	0	0	0
89	X	0	0	0	0	82	0	2	36
93	X	390	0	6	156	260	0	4	104
95	X	64	0	1	31	0	0	0	0
98	X	52	4	2	24	104	8	4	49
TOTALS		14,204	1,752	382	4,185	71,102	8,195	2,053	17,926

CA	Community Access	L	Local Routes
CC	Community Circulator	LS	Limited Stop
F	Ferry Routes	X	Peak Period Express

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	1,248	192	48	342	1,008	72	36	257
B	LS	1,647	118	47	374	1,008	72	24	191
C	LS	1,530	270	36	616	1,188	252	27	462
D	LS	600	120	24	258	600	120	24	258
1	L	2,064	96	48	447	1,782	198	36	335
1L	LS	1,890	270	36	533	1,782	198	30	444
2	L	3,204	396	72	660	2,200	88	44	403
3	L	2,880	360	72	557	1,458	162	36	279
4	L	1,566	234	36	284	1,044	36	24	189
5	CC	387	63	18	74	286	45	11	48
6	L	2,200	180	40	404	1,404	216	36	225
8	L	4,032	288	180	781	2,444	228	100	487
9	L	576	144	24	112	516	24	24	112
13	L	1,404	396	72	271	702	198	36	136
15	CC	620	80	20	121	639	81	18	109
17	CC	1,548	252	36	310	1,728	72	36	310
18	CC	1,680	120	48	317	900	180	24	159
19	L	2,712	168	48	606	1,464	72	24	303
23	L	1,800	360	24	530	942	138	12	265
30	L	468	72	12	92	267	3	6	46
31	CC	684	36	36	133	684	36	36	133
40	L	5,712	1,128	96	1,629	4,392	450	72	1,274
41	L	960	120	24	270	948	132	24	270
42	L	1,764	36	36	530	1,926	54	36	530
50	L	2,304	96	48	767	1,200	60	24	384
51	L	1,920	240	48	709	1,188	72	24	354
52	L	4,050	270	36	1,742	1,619	83	13	627
54	L	972	108	36	359	972	108	24	239
60	L	1,092	168	24	426	1,164	96	24	426
61	L	1,056	24	24	344	900	180	18	258
62	L	3,012	228	24	1,028	2,277	63	18	771
63	L	1,188	252	24	483	990	90	18	362
64	L	1,032	48	24	286	792	18	18	215
65	L	348	12	12	126	348	12	12	126
66	L	282	78	12	167	342	18	12	167
131	CC	150	30	12	34	100	20	8	22
132	CC	150	30	12	35	100	20	8	24
133	CC	300	60	24	83	150	30	12	41
134	CC	660	60	24	188	330	30	12	94
231	CC	125	25	10	45	150	30	12	54
232	CC	125	25	10	38	150	30	12	45
301	CC	828	252	24	176	864	216	24	176
302	CC	348	12	24	70	174	6	12	35
303	CC	168	12	24	43	168	12	24	43
304	CC	696	24	24	129	780	120	24	129
305	CC	528	72	24	131	270	30	12	65
306	CC	144	36	12	28	81	9	6	14
311	CC	972	108	24	185	1,308	132	24	185
312	CC	300	60	24	75	540	180	36	113

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
313	CC	636	84	24	156	660	60	24	156
314	CC	960	120	48	266	480	60	24	133
401	CC	156	24	12	54	156	24	12	54
402	CC	138	42	12	43	138	42	12	43
403	CC	330	30	12	91	330	30	12	91
411	CC	864	216	24	247	900	180	24	247
412	CC	312	48	24	86	156	24	12	43
413	CC	162	18	12	41	252	18	18	61
414	CA	144	216	12	35	72	108	6	18
415	CC	936	144	24	289	1,128	132	24	289
416	CC	300	60	24	84	300	60	24	84
417	CC	Included with Route 411							
418	CC	300	60	24	117	150	30	12	59
421	CC	Included with Route 42							
422	CC	852	228	24	226	792	108	24	226
432	CC	600	120	48	128	300	60	24	64
433	CC	552	168	24	149	516	204	24	149
434	CC	549	138	23	137	588	132	24	144
441	CC	300	60	24	164	150	30	12	82
501	CC	300	60	24	95	150	30	12	47
502	CC	300	60	24	78	150	30	12	39
503	CA	288	72	12	58	160	33	8	32
504	CC	275	25	10	41	110	10	4	16
505	CC	75	25	10	17	30	10	4	7
511	CC	Included with Route 51							
512	CC	312	48	24	88	156	24	12	44
513	CC	300	60	24	54	150	30	12	27
521	CC	198	96	12	58	198	96	12	58
522	CC	330	96	12	112	330	96	12	112
523	CC	240	120	12	82	120	60	6	41
541	CC	684	36	24	167	840	60	24	167
542	CC	420	300	24	83	264	96	12	41
543	CC	325	65	26	67	150	30	12	31
544	CA	300	60	24	75	168	12	12	38
545	CC	468	260	26	91	240	120	12	42
546	CC	300	60	24	66	150	30	12	33
547	CC	336	24	24	97	696	24	24	97
548	CC	1,176	264	24	229	1,104	156	24	229
549	CC	240	120	24	36	120	60	12	18
611	CC	240	120	12	78	240	30	12	78
612	CC	240	120	12	78	240	30	12	78
613	CA	150	30	12	27	75	15	6	14
614	CA	150	30	12	27	75	15	6	14
615	CC	300	60	12	64	150	30	6	32

Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	0	0	0	0	330	30	6	55
8F	F	0	0	0	0	420	30	6	74
30F	F	0	0	0	0	240	30	6	49
41F	F	0	0	0	0	165	15	3	36
93F	F	0	0	0	0	480	0	4	129
411F	F	0	0	0	0	220	20	4	54
413F	F	0	0	0	0	120	0	4	28
EXPRESS ROUTES									
80	X	0	0	0	0	270	0	5	92
80A	X	60	0	1	15	257	0	3	53
80B	X	0	0	0	0	33	0	1	11
82	X	0	0	0	0	147	0	3	47
83	X	0	0	0	0	474	0	11	189
83A	X	0	0	0	0	40	0	2	20
84	X	0	0	0	0	120	0	4	54
84A	X	0	0	0	0	152	0	4	44
85	X	0	0	0	0	333	0	5	115
85A	X	0	0	0	0	183	0	3	45
88	X	0	0	0	0	116	0	2	33
88A	X	0	0	0	0	377	0	2	161
89	X	0	0	0	0	82	0	2	36
93	X	0	0	0	0	650	0	10	398
95	X	0	0	0	0	64	0	1	31
98	X	0	0	0	0	156	12	6	73
TOTALS		82,024	11,816	2,557	22,145	66,832	7,358	1,896	17,301

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	624	96	24	171	0	0	0	0
B	LS	840	60	24	191	0	0	0	0
C	LS	765	135	18	308	0	0	0	0
D	LS	400	80	16	172	0	0	0	0
1	L	1,305	195	30	279	783	117	18	168
1L	LS	1,365	195	26	385	525	75	10	148
2	L	2,136	264	48	440	774	36	18	165
3	L	1,760	220	44	341	400	50	10	77
4	L	1,044	156	24	189	174	6	4	32
5	CC	226	17	11	45	0	0	0	0
6	L	1,650	150	30	303	110	10	2	20
8	L	1,650	150	60	320	216	24	6	42
9	L	480	120	20	93	0	0	0	0
13	L	702	108	36	136	234	6	12	45
15	CC	248	32	8	49	0	0	0	0
17	CC	1,032	168	24	207	172	8	4	34
18	CC	700	100	20	132	140	20	4	26
19	L	2,260	140	40	505	791	49	14	177
23	L	900	180	12	265	0	0	0	0
30	L	468	72	12	92	100	20	2	15
31	CC	684	36	36	133	114	6	6	22
40	L	3,324	656	52	951	1,584	276	24	486
41	L	600	75	15	169	320	40	8	90
42	L	1,470	30	30	441	588	32	8	167
50	L	960	40	20	320	0	0	0	0
51	L	960	120	24	354	200	25	5	74
52	L	1,800	120	16	774	1,125	75	10	484
54	L	648	72	24	239	216	24	8	80
60	L	546	84	12	213	91	14	2	36
61	L	704	16	16	229	0	0	0	0
62	L	2,008	152	16	685	1,004	76	8	343
63	L	792	168	16	322	99	21	2	40
64	L	688	32	16	191	0	0	0	0
65	L	116	4	4	42	0	0	0	0
66	L	188	52	8	111	0	0	0	0
131	CC	0	0	0	0	0	0	0	0
132	CC	0	0	0	0	0	0	0	0
133	CC	100	20	8	28	0	0	0	0
134	CC	220	20	8	63	0	0	0	0
231	CC	175	35	14	63	100	20	8	36
232	CC	100	20	8	30	100	20	8	30
301	CC	345	105	10	73	0	0	0	0
302	CC	116	4	8	23	0	0	0	0
303	CC	168	12	24	43	14	1	2	4
304	CC	232	8	8	43	0	0	0	0
305	CC	220	30	10	55	0	0	0	0
306	CC	72	18	6	14	0	0	0	0
311	CC	486	54	12	92	0	0	0	0
312	CC	125	25	10	31	0	0	0	0

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
313	CC	530	70	20	130	265	35	10	65
314	CC	400	50	20	111	0	0	0	0
401	CC	96	24	8	36	0	0	0	0
402	CC	92	28	8	28	0	0	0	0
403	CC	200	32	8	61	0	0	0	0
411	CC	740	168	28	214	212	44	8	63
412	CC	52	8	4	14	0	0	0	0
413	CC	0	0	0	0	0	0	0	0
414	CA	24	36	2	6	0	0	0	0
415	CC	624	96	16	193	0	0	0	0
416	CC	175	35	14	49	0	0	0	0
417	CC	Included with Route 411							
418	CC	200	40	16	78	0	0	0	0
421	CC	Included with Route 42							
422	CC	710	190	20	188	142	0	4	38
432	CC	386	78	31	83	126	22	10	26
433	CC	322	98	14	87	46	14	2	12
434	CC	357	90	15	89	96	24	4	24
441	CC	175	35	14	96	0	0	0	0
501	CC	175	35	14	55	0	0	0	0
502	CC	175	35	14	46	0	0	0	0
503	CA	69	16	3	14	0	0	0	0
504	CC	165	15	6	25	0	0	0	0
505	CC	45	15	6	10	0	0	0	0
511	CC	Included with Route 51							
512	CC	104	16	8	29	0	0	0	0
513	CC	100	20	8	18	100	20	8	18
521	CC	66	32	4	19	0	0	0	0
522	CC	110	32	4	37	0	0	0	0
523	CC	160	80	8	55	0	0	0	0
541	CC	570	30	20	139	0	0	0	0
542	CC	440	160	20	69	0	0	0	0
543	CC	200	40	16	42	0	0	0	0
544	CA	150	30	12	38	0	0	0	0
545	CC	320	160	16	56	0	0	0	0
546	CC	150	30	12	33	0	0	0	0
547	CC	336	24	24	97	84	6	5	20
548	CC	1,176	264	24	229	294	66	6	57
549	CC	120	60	12	18	0	0	0	0
611	CC	160	80	8	52	0	0	0	0
612	CC	160	80	8	52	0	0	0	0
613	CA	100	20	8	18	0	0	0	0
614	CA	100	20	8	18	0	0	0	0
615	CC	200	40	8	43	0	0	0	0

Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	275	25	5	46	0	0	0	0
8F	F	350	25	5	62	0	0	0	0
30F	F	200	25	5	40	0	0	0	0
41F	F	110	10	2	24	0	0	0	0
93F	F	240	0	2	65	0	0	0	0
411F	F	110	10	2	27	0	0	0	0
413F	F	60	0	2	14	0	0	0	0
EXPRESS ROUTES									
80	X	0	0	0	0	0	0	0	0
80A	X	0	0	0	0	0	0	0	0
80B	X	0	0	0	0	0	0	0	0
82	X	0	0	0	0	0	0	0	0
83	X	0	0	0	0	0	0	0	0
83A	X	0	0	0	0	0	0	0	0
84	X	0	0	0	0	0	0	0	0
84A	X	0	0	0	0	0	0	0	0
85	X	0	0	0	0	0	0	0	0
85A	X	0	0	0	0	0	0	0	0
88	X	0	0	0	0	0	0	0	0
88A	X	0	0	0	0	0	0	0	0
89	X	0	0	0	0	0	0	0	0
93	X	0	0	0	0	0	0	0	0
95	X	0	0	0	0	0	0	0	0
98	X	0	0	0	0	0	0	0	0
TOTALS		50,181	7,153	1,490	13,309	11,339	1,282	260	3,165

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
A	LS	156	4,208	472	4,680	78.0	1,112.0	4:45 AM to 9:26 PM
B	LS	126	4,770	340	5,110	85.2	1,003.0	4:50 AM to 11:04 PM
C	LS	123	5,305	1,085	6,390	106.5	2,104.4	3:07 AM to 10:53 PM
D	LS	96	2,396	484	2,880	48.0	1,030.6	5:00 AM to 10:00 PM
1	L	191	8,753	947	9,700	161.7	1,778.2	4:00 AM to 2:00 AM
1L	LS	147	8,166	1,044	9,210	153.5	2,177.8	4:00 AM to 1:30 AM
2	L	248	11,536	966	12,502	208.4	2,274.2	4:10 AM to 1:44 AM
3	L	214	8,583	1,047	9,630	160.5	1,656.4	4:15 AM to 1:26 AM
4	L	121	5,274	480	5,754	95.9	955.3	5:00 AM to 12:00 AM
5	CC	55	1,207	174	1,381	23.0	229.0	5:36 AM to 10:02 PM
6	L	152	7,144	816	7,960	132.7	1,243.6	5:03 AM to 11:58 PM
8	L	480	11,658	997	12,655	210.9	2,290.1	4:00 AM to 12:00 AM
9	L	98	2,226	322	2,548	42.5	458.9	5:00 AM to 10:20 PM
13	L	204	3,978	972	4,950	82.5	769.1	5:00 AM to 1:00 AM
15	CC	66	2,217	283	2,500	41.7	400.3	5:30 AM to 10:23 PM
17	CC	146	6,490	780	7,270	121.2	1,256.3	5:00 AM to 12:00 AM
18	CC	124	4,470	630	5,100	85.0	819.0	6:00 AM to 12:00 AM
19	L	164	9,500	534	10,034	167.2	2,072.1	4:13 AM to 1:48 AM
23	L	60	4,584	816	5,400	90.0	1,323.9	6:00 AM to 10:00 PM
30	L	40	1,648	182	1,830	30.5	305.4	5:00 AM to 12:00 AM
31	CC	164	3,126	164	3,290	54.8	606.7	4:45 AM to 12:25 AM
40	L	320	19,830	3,135	22,965	382.8	5,763.9	4:00 AM to 3:59 AM
41	L	98	3,896	514	4,410	73.5	1,104.5	4:47 AM to 10:10 PM
42	L	157	8,044	196	8,240	137.3	2,309.5	4:00 AM to 3:59 AM
50	L	123	6,009	271	6,280	104.7	1,966.4	5:00 AM to 11:00 PM
51	L	135	5,886	575	6,461	107.7	1,993.9	4:30 AM to 1:37 AM
52	L	100	11,568	722	12,290	204.8	4,841.4	4:00 AM to 3:59 AM
54	L	130	4,210	470	4,680	78.0	1,296.9	4:30 AM to 1:00 AM
60	L	87	4,100	460	4,560	76.0	1,544.9	5:00 AM to 12:00 AM
61	L	73	3,381	365	3,746	62.4	1,048.8	5:00 AM to 11:00 PM
62	L	88	11,080	622	11,702	195.0	3,767.7	4:00 AM to 3:59 AM
63	L	76	3,931	629	4,560	76.0	1,526.7	5:00 AM to 12:00 AM
64	L	75	3,257	118	3,375	56.3	895.1	5:00 AM to 10:00 PM
65	L	44	1,276	44	1,320	22.0	463.3	5:00 AM to 8:00 PM
66	L	50	1,305	195	1,500	25.0	695.5	4:30 AM to 10:00 PM
131	CC	24	300	60	360	6.0	67.2	6:00 AM to 6:35 PM
132	CC	24	300	60	360	6.0	70.8	6:20 AM to 6:45 PM
133	CC	58	725	145	870	14.5	200.1	5:30 AM to 10:00 PM
134	CC	58	1,595	145	1,740	29.0	455.3	5:30 AM to 10:00 PM
231	CC	60	750	150	900	15.0	270.0	5:00 AM to 1:00 AM
232	CC	54	675	135	810	13.5	204.4	5:00 AM to 8:00 PM
301	CC	88	3,114	825	3,939	65.7	644.6	5:10 AM to 9:50 PM
302	CC	60	870	30	900	15.0	174.3	4:30 AM to 10:11 PM
303	CC	108	756	54	810	13.5	194.4	4:30 AM to 12:00 AM
304	CC	85	2,647	293	2,940	49.0	457.0	5:00 AM to 11:00 PM
305	CC	64	1,421	179	1,600	26.7	349.1	5:00 AM to 11:00 PM
306	CC	32	405	75	480	8.0	75.4	5:00 AM to 9:00 PM
311	CC	91	4,419	463	4,882	81.4	700.8	5:00 AM to 8:00 PM
312	CC	104	1,475	435	1,910	31.8	326.0	5:30 AM to 8:00 PM

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
313	CC	106	2,861	319	3,180	53.0	687.4	5:30 AM to 1:20 AM
314	CC	120	2,400	300	2,700	45.0	664.8	6:30 AM to 10:00 PM
401	CC	48	612	108	720	12.0	215.3	3:50 AM to 9:34 PM
402	CC	48	548	172	720	12.0	170.4	4:20 AM to 9:58 PM
403	CC	47	1,256	152	1,408	23.5	356.9	4:15 AM to 10:22 PM
411	CC	116	3,910	854	4,764	79.4	1,099.3	4:30 AM to 12:49 AM
412	CC	59	767	118	885	14.8	211.0	4:30 AM to 6:48 PM
413	CC	48	663	57	720	12.0	163.2	5:30 AM to 5:55 PM
414	CA	29	349	521	870	14.5	85.6	4:30 AM to 6:43 PM
415	CC	94	4,082	538	4,620	77.0	1,131.8	5:30 AM to 11:00 PM
416	CC	92	1,150	230	1,380	23.0	322.0	5:30 AM to 10:00 PM
417	CC	Included with Route 411						
418	CC	70	875	175	1,050	17.5	342.3	5:00 AM to 11:00 PM
421	CC	Included with Route 42						
422	CC	104	3,542	662	4,204	70.1	977.6	5:00 AM to 12:30 AM
432	CC	147	1,837	370	2,207	36.8	391.0	4:41 AM to 1:28 AM
433	CC	94	2,081	739	2,820	47.0	585.2	5:00 AM to 11:26 PM
434	CC	97	2,337	539	2,876	47.9	580.6	4:41 AM to 12:52 AM
441	CC	66	825	165	990	16.5	451.4	5:00 AM to 10:00 PM
501	CC	64	800	160	960	16.0	252.8	5:30 AM to 10:00 PM
502	CC	64	800	160	960	16.0	208.0	5:30 AM to 10:00 PM
503	CA	34	722	177	899	15.0	148.4	4:33 AM to 7:53 PM
504	CC	24	660	60	720	12.0	98.2	5:30 AM to 10:00 PM
505	CC	24	180	60	240	4.0	40.1	5:30 AM to 10:00 PM
511	CC	Included with Route 51						
512	CC	60	780	120	900	15.0	220.2	5:00 AM to 11:00 PM
513	CC	68	850	170	1,020	17.0	154.4	5:00 AM to 1:00 AM
521	CC	44	726	352	1,078	18.0	212.1	5:00 AM to 8:00 PM
522	CC	44	1,210	352	1,562	26.0	412.3	5:00 AM to 8:00 PM
523	CC	34	680	340	1,020	17.0	233.2	5:00 AM to 9:00 PM
541	CC	98	3,144	201	3,345	55.8	681.6	5:30 AM to 10:00 PM
542	CC	72	1,476	684	2,160	36.0	248.8	5:30 AM to 10:00 PM
543	CC	70	875	175	1,050	17.5	181.7	5:30 AM to 9:00 PM
544	CA	64	839	121	960	16.0	201.0	5:30 AM to 9:00 PM
545	CC	70	1,348	700	2,048	34.1	245.0	5:30 AM to 9:00 PM
546	CC	64	800	160	960	16.0	175.4	5:30 AM to 9:00 PM
547	CC	115	2,404	116	2,520	42.0	463.6	4:30 AM to 12:30 AM
548	CC	116	5,518	952	6,470	107.8	1,105.5	4:30 AM to 12:30 AM
549	CC	54	540	270	810	13.5	80.5	4:30 AM to 12:30 AM
611	CC	48	960	270	1,230	20.5	312.0	5:00 AM to 10:00 PM
612	CC	48	960	270	1,230	20.5	312.0	5:00 AM to 10:00 PM
613	CA	34	425	85	510	8.5	76.7	5:00 AM to 9:30 PM
614	CA	34	425	85	510	8.5	76.7	5:00 AM to 9:00 PM
615	CC	34	850	170	1,020	17.0	180.9	5:00 AM to 9:00 PM

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
FERRY ROUTES								
4F	F	32	1,045	95	1,140	19.0	174.8	Peak Period
8F	F	32	1,330	95	1,425	23.8	235.6	Peak Period
30F	F	32	760	95	855	14.3	153.7	Peak Period
41F	F	12	440	40	480	8.0	96.8	Peak Period
93F	F	12	1,200	0	1,200	20.0	323.0	Peak Period
411F	F	12	550	50	600	10.0	136.0	Peak Period
413F	F	12	330	0	330	5.5	78.1	Peak Period
EXPRESS ROUTES								
80	X	11	619	0	619	10.3	203.7	Peak Period
80A	X	9	667	0	667	11.1	166.1	Peak Period
80B	X	2	66	0	66	1.1	22.3	Peak Period
82	X	7	343	0	343	5.7	109.8	Peak Period
83	X	22	979	0	979	16.3	378.4	Peak Period
83A	X	4	80	0	80	1.3	39.6	Peak Period
84	X	8	243	0	243	4.1	107.2	Peak Period
84A	X	8	305	0	305	5.1	86.6	Peak Period
85	X	8	546	0	546	9.1	181.3	Peak Period
85A	X	6	366	0	366	6.1	95.0	Peak Period
88	X	4	232	0	232	3.9	64.7	Peak Period
88A	X	4	754	0	754	12.6	301.9	Peak Period
89	X	4	164	0	164	2.7	71.8	Peak Period
93	X	20	1,300	0	1,300	21.7	657.4	Peak Period
95	X	2	128	0	128	2.1	62.0	Peak Period
98	X	12	312	24	336	5.6	146.5	Peak Period
TOTALS		8,682	295,290	37,528	332,818	5,547.0	77,922.7	

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
A	LS	4	6	4	6	4	0	60
B	LS	3	6	5	6	5	0	40
C	LS	8	8	5	8	5	0	40
D	LS	3	4	2	4	3	0	40
1	L	10	11	6	11	10	5	60
1L	LS	6	11	6	11	6	6	60
2	L	10	13	10	13	10	6	60
3	L	6	9	9	9	6	3	60
4	L	5	6	5	6	5	3	40
5	CC	0	2	1	2	1	0	40
6	L	4	9	7	9	6	2	40
8	L	8	15	12	15	6	4	60
9	L	2	3	2	3	2	0	40
13	L	6	5	5	5	3	2	40
15	CC	0	4	2	4	2	0	30
17	CC	4	10	5	10	5	3	40
18	CC	0	6	5	6	3	3	40
19	L	8	8	8	8	8	4	60
23	L	0	6	6	6	6	0	40
30	L	2	2	2	4	2	2	40
31	CC	4	4	2	4	2	1	40
40	L	21	27	19	27	19	5	60
41	L	3	6	3	6	3	3	60
42	L	5	11	5	11	5	6	60
50	L	3	7	7	7	3	0	60
51	L	4	7	6	7	3	3	60
52	L	5	13	13	13	6	4	60
54	L	3	6	3	6	3	2	40
60	L	1	7	4	7	4	2	60
61	L	1	6	3	6	3	0	60
62	L	4	13	9	13	9	5	60
63	L	2	6	4	6	4	2	60
64	L	3	3	3	3	3	0	40
65	L	2	2	1	2	1	0	40
66	L	2	2	1	2	1	0	40
131	CC	0	0.5	0.5	0.5	0	0	30
132	CC	0	0.5	0.5	0.5	0	0	30
133	CC	1	1	1	1	1	0	30
134	CC	2	2	2	2	1	0	30
231	CC	1	1	0.5	1	0.5	0.5	35
232	CC	1	1	0.5	1	0.5	0.5	35
301	CC	2	6	3	6	3	0	35
302	CC	1	1	1	1	1	0	40
303	CC	1	1	1	1	1	1	40
304	CC	1	5	2	5	1	0	30
305	CC	2	2	2	2	2	0	40
306	CC	1	1	1	1	1	0	40
311	CC	3	8	3	8	3	0	35
312	CC	0	4	1	4	1	0	60

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
313	CC	0	4	2	4	2	2	40
314	CC	1	3	3	3	2	0	40
401	CC	0.5	1	0.5	1	0.5	0	35
402	CC	0.5	1	0.5	1	0.5	0	35
403	CC	1	2	1	2	1	0	35
411	CC	3	6	3	6	3	1	60
412	CC	1	1	1	1	1	0	30
413	CC	1	2	1	2	0	0	40
414	CA	1	1	1	1	1	0	Van
415	CC	3	7	3	7	3	0	40
416	CC	1	2	1	2	1	0	60
417	CC	Included with Route 411						
418	CC	2	1	1	1	1	0	40
421	CC	Included with Route 42						
422	CC	2	5	3	5	3	2	60
432	CC	2	2	2	2	2	1	40
433	CC	0	4	2	4	2	1	40
434	CC	2	4	2	4	2	1	60
441	CC	1	1	1	1	1	0	60
501	CC	0	1	1	1	1	0	40
502	CC	0	1	1	1	1	0	35
503	CA	1	1	1	1	1	0	Van
504	CC	0	0.75	0.75	0.75	0.75	0	35
505	CC	0	0.25	0.25	0.25	0.25	0	35
511	CC	Included with Route 51						
512	CC	1	1	1	1	1	0	40
513	CC	1	1	1	1	1	1	60
521	CC	0.75	0.75	0.75	0.75	0.75	0	35
522	CC	1.25	1.25	1.25	1.25	1.25	0	35
523	CC	1	1	1	1	1	0	35
541	CC	2	5	2	5	2	0	40
542	CC	2	2	2	2	2	0	40
543	CC	1	1	1	1	1	0	40
544	CA	1	1	1	1	1	0	Van
545	CC	2	2	2	2	2	0	40
546	CC	1	1	1	1	1	0	35
547	CC	2	4	1	4	1	1	40
548	CC	7	7	4	8	4	4	40
549	CC	0	1	1	1	1	0	40
611	CC	1.5	1.5	1	1.5	1	0	35
612	CC	1.5	1.5	1	1.5	1	0	35
613	CA	0.5	0.5	0.5	0.5	0.5	0	Van
614	CA	0.5	0.5	0.5	0.5	0.5	0	Van
615	CC	1	1	1	1	1	0	35

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Weekday Operations Summary Table 2018 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
FERRY ROUTES								
4F	F	0	4	0	4	0	0	40
8F	F	0	5	0	5	0	0	40
30F	F	0	3	0	3	0	0	40
41F	F	0	4	0	4	0	0	40
93F	F	0	4	0	4	0	0	40
411F	F	0	3	0	3	0	0	30
413F	F	1	1	0	1	0	0	40
EXPRESS ROUTES								
80	X	0	6	0	5	0	0	40
80A	X	0	3	0	3	0	0	40
80B	X	0	1	0	1	0	0	40
82	X	0	3	0	3	0	0	40
83	X	5	6	0	11	0	0	60
83A	X	2	0	0	2	0	0	40
84	X	2	2	0	2	0	0	40
84A	X	1	2	0	2	0	0	40
85	X	0	6	0	5	0	0	40
85A	X	0	3	0	2	0	0	40
88	X	0	2	0	2	0	0	40
88A	X	0	2	0	2	0	0	40
89	X	0	2	0	2	0	0	40
93	X	6	4	0	8	0	0	60
95	X	0	1	0	1	0	0	40
98	X	1	3	0	3	0	0	60
TOTALS		237.00	453.00	265.00	464.00	237.00	92.00	

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Appendix F: Bus Operating Details for New Start Alternative, 2030

AR00076704

Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	152	28	6	42	1,176	84	42	300
B	LS	99	6	3	24	1,176	84	28	223
C	LS	546	154	13	226	1,276	274	29	503
D	LS	96	24	4	43	700	140	28	301
1	L	740	110	17	158	2,079	231	42	391
1L	LS	525	75	10	148	2,079	231	35	518
2	L	622	78	14	128	2,730	182	52	477
3	L	405	45	10	77	1,680	210	42	325
4	L	228	6	5	41	1,218	42	28	221
5	CC	0	0	0	0	308	49	15	62
6	L	220	20	4	40	1,560	240	40	250
8	L	440	40	16	85	2,876	267	118	574
9	L	52	6	2	11	602	28	28	131
13	L	117	33	6	23	819	231	42	158
15	CC	0	0	0	0	710	90	20	121
17	CC	162	28	4	34	1,848	252	42	361
18	CC	0	0	0	0	1,050	210	28	185
19	L	565	35	10	126	1,736	154	28	354
23	L	0	0	0	0	942	138	12	265
30	L	78	12	2	15	651	189	14	107
31	CC	162	8	8	31	798	42	42	155
40	L	1,532	288	22	469	3,391	386	54	955
41	L	120	15	3	34	1,080	180	24	270
42	L	635	65	10	147	2,611	269	41	603
50	L	174	6	3	48	1,680	210	28	448
51	L	232	34	6	89	1,386	84	28	414
52	L	1,029	144	9	436	2,078	282	16	777
54	L	268	32	10	100	1,134	126	28	279
60	L	43	2	1	18	1,164	96	24	426
61	L	45	5	1	15	676	140	14	203
62	L	502	40	4	171	2,322	198	18	771
63	L	104	16	2	39	758	82	14	280
64	L	129	6	3	36	616	14	14	167
65	L	58	2	2	21	406	14	14	147
66	L	94	26	4	56	399	21	14	195
131	CC	0	0	0	0	50	10	4	11
132	CC	0	0	0	0	50	10	4	12
133	CC	25	5	2	7	150	30	12	41
134	CC	55	5	2	16	330	30	12	94
231	CC	50	10	4	18	150	30	12	54
232	CC	50	10	4	15	150	30	12	45
301	CC	69	0	2	15	1,008	252	28	205
302	CC	29	1	2	6	203	7	14	41
303	CC	42	3	6	11	196	14	28	50
304	CC	29	1	1	5	910	140	28	151
305	CC	88	12	4	22	315	35	14	76
306	CC	27	3	2	5	81	9	6	14
311	CC	127	15	3	24	1,652	238	28	215
312	CC	0	0	0	0	510	170	34	107

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
313	CC	0	0	0	0	770	70	28	182
314	CC	40	5	2	11	520	65	26	144
401	CC	48	12	4	18	156	24	12	54
402	CC	42	18	4	14	138	42	12	43
403	CC	84	12	3	24	312	48	12	91
411	CC	144	36	4	41	1,050	210	28	288
412	CC	65	10	5	18	351	54	27	96
413	CC	15	0	1	3	318	42	24	82
414	CA	37	53	3	9	72	108	6	18
415	CC	78	12	2	24	1,526	154	28	337
416	CC	84	6	2	25	1,274	196	28	349
417	CC	Included with Route 411							
418	CC	64	10	4	20	560	70	28	137
419	CC	Included with Route 416							
421	CC	Included with Route 42							
422	CC	142	10	4	38	1,659	231	42	395
432	CC	100	20	8	21	325	70	26	69
433	CC	43	17	2	12	602	238	28	174
434	CC	68	22	3	18	910	140	28	168
440	CC	50	10	4	18	350	70	28	129
441	CC	50	10	4	27	350	70	28	192
501	CC	0	0	0	0	175	35	14	55
502	CC	0	0	0	0	175	35	14	46
503	CA	64	14	5	15	141	42	6	29
504	CC	0	0	0	0	275	25	10	41
505	CC	0	0	0	0	75	25	10	17
511	CC	Included with Route 51							
512	CC	52	8	4	15	156	24	12	44
513	CC	50	10	4	9	150	30	12	27
521	CC	33	16	2	10	231	112	14	67
522	CC	55	16	2	19	385	112	14	131
523	CC	40	20	2	14	120	60	6	41
541	CC	70	5	2	14	980	70	28	195
542	CC	44	16	2	7	308	112	14	48
543	CC	25	5	2	5	175	35	14	36
544	CA	25	5	2	6	196	14	14	44
545	CC	40	20	2	7	280	140	14	49
546	CC	25	5	2	5	175	35	14	38
547	CC	340	35	10	52	952	98	28	146
548	CC	505	95	10	95	1,414	266	28	267
549	CC	0	0	0	0	60	30	6	9
611	CC	40	5	2	13	280	35	14	91
612	CC	40	5	2	13	280	35	14	91
613	CA	25	5	2	5	75	15	6	14
614	CA	25	5	2	5	75	15	6	14
615	CC	50	10	2	11	150	30	6	32

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		4:00 AM to 5:29 AM				5:30 AM to 8:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	0	0	0	0	440	40	8	74
8F	F	0	0	0	0	560	40	8	99
30F	F	0	0	0	0	320	40	8	65
41F	F	0	0	0	0	165	15	3	36
93F	F	0	0	0	0	480	0	4	129
411F	F	0	0	0	0	220	20	4	54
413F	F	0	0	0	0	150	0	5	36
EXPRESS ROUTES									
80	X	0	0	0	0	349	0	6	111
80A	X	0	0	0	0	350	0	5	99
80B	X	0	0	0	0	33	0	1	11
82	X	49	0	1	16	147	0	3	47
83	X	253	0	5	88	294	0	6	101
83A	X	40	0	2	20	0	0	0	0
84	X	61	0	2	27	62	0	2	27
84A	X	38	0	1	11	115	0	3	32
85	X	0	0	0	0	220	0	3	67
85A	X	0	0	0	0	189	0	3	50
88	X	0	0	0	0	122	0	2	31
88A	X	391	0	2	141	0	0	0	0
89	X	0	0	0	0	82	0	2	36
93	X	390	0	6	156	260	0	4	104
95	X	64	0	1	31	0	0	0	0
98	X	52	4	2	24	104	8	4	49
TOTALS		14,805	2,021	388	4,250	76,658	9,970	2,163	18,808

CA	Community Access	L	Local Routes
CC	Community Circulator	LS	Limited Stop
F	Ferry Routes	X	Peak Period Express

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	1,248	192	48	342	1,008	72	36	257
B	LS	1,647	118	47	374	1,008	72	24	191
C	LS	1,530	270	36	626	1,188	252	27	470
D	LS	600	120	24	258	600	120	24	258
1	L	2,064	96	48	447	1,782	198	36	335
1L	LS	1,890	270	36	533	1,782	198	30	444
2	L	3,204	396	72	660	2,310	154	44	403
3	L	2,880	360	72	557	1,458	162	36	279
4	L	1,566	234	36	284	1,044	36	24	189
5	CC	387	63	18	74	286	45	11	48
6	L	2,200	180	40	404	1,404	216	36	225
8	L	4,032	288	180	781	2,444	228	100	487
9	L	576	144	24	112	516	24	24	112
13	L	1,404	396	72	271	702	198	36	136
15	CC	620	80	20	121	639	81	18	109
17	CC	1,548	252	36	310	1,728	72	36	310
18	CC	1,680	120	48	317	900	180	24	159
19	L	2,712	168	48	606	1,488	132	24	303
23	L	1,800	360	24	530	942	138	12	265
30	L	936	144	24	183	558	162	12	92
31	CC	684	36	36	133	684	36	36	133
40	L	5,712	1,128	96	1,629	4,527	513	72	1,274
41	L	960	120	24	270	1,080	180	24	270
42	L	2,088	72	36	530	2,286	234	36	530
50	L	2,760	120	48	767	1,440	180	24	384
51	L	1,920	240	48	709	1,188	72	24	354
52	L	4,104	576	36	1,742	1,754	226	13	627
54	L	972	108	36	359	972	108	24	239
60	L	1,092	168	24	426	1,164	96	24	426
61	L	1,056	24	24	344	900	180	18	258
62	L	3,012	228	24	1,028	2,322	198	18	771
63	L	1,188	252	24	483	990	90	18	362
64	L	1,032	48	24	286	792	18	18	215
65	L	348	12	12	126	348	12	12	126
66	L	282	78	12	167	342	18	12	167
131	CC	150	30	12	34	100	20	8	22
132	CC	150	30	12	35	100	20	8	24
133	CC	300	60	24	83	150	30	12	41
134	CC	660	60	24	188	330	30	12	94
231	CC	125	25	10	45	150	30	12	54
232	CC	125	25	10	38	150	30	12	45
301	CC	828	252	24	176	864	216	24	176
302	CC	348	12	24	70	174	6	12	35
303	CC	168	12	24	43	168	12	24	43
304	CC	696	24	24	129	780	120	24	129
305	CC	528	72	24	131	270	30	12	65
306	CC	144	36	12	28	81	9	6	14
311	CC	972	108	24	185	1,416	204	24	185
312	CC	300	60	24	75	540	180	36	113

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
313	CC	636	84	24	156	660	60	24	156
314	CC	960	120	48	266	480	60	24	133
401	CC	156	24	12	54	156	24	12	54
402	CC	138	42	12	43	138	42	12	43
403	CC	330	30	12	91	330	30	12	91
411	CC	864	216	24	247	900	180	24	247
412	CC	312	48	24	86	312	48	24	86
413	CC	162	18	12	41	324	36	24	82
414	CA	144	216	12	35	72	108	6	18
415	CC	936	144	24	289	1,308	132	24	289
416	CC	1,008	72	24	299	1,092	168	24	299
417	CC	Included with Route 411							
418	CC	660	60	24	117	480	60	24	117
419	CC	Included with Route 416							
421	CC	Included with Route 42							
422	CC	852	228	24	226	1,422	198	36	338
432	CC	600	120	48	128	300	60	24	64
433	CC	552	168	24	149	516	204	24	149
434	CC	549	138	23	137	780	120	24	144
440	CC	300	60	24	67	300	60	24	111
441	CC	300	60	24	164	300	60	24	164
501	CC	300	60	24	95	150	30	12	47
502	CC	300	60	24	78	150	30	12	39
503	CA	288	72	12	58	160	33	8	32
504	CC	275	25	10	41	275	25	10	41
505	CC	75	25	10	17	75	25	10	17
511	CC	Included with Route 51							
512	CC	312	48	24	88	156	24	12	44
513	CC	300	60	24	54	150	30	12	27
521	CC	198	96	12	58	198	96	12	58
522	CC	330	96	12	112	330	96	12	112
523	CC	240	120	12	82	120	60	6	41
541	CC	684	36	24	167	840	60	24	167
542	CC	420	300	24	83	264	96	12	41
543	CC	325	65	26	67	150	30	12	31
544	CA	300	60	24	75	168	12	12	38
545	CC	468	260	26	91	240	120	12	42
546	CC	300	60	24	66	150	30	12	33
547	CC	504	216	24	126	816	84	24	126
548	CC	1,176	264	24	229	1,212	228	24	229
549	CC	240	120	24	36	120	60	12	18
611	CC	240	120	12	78	240	30	12	78
612	CC	240	120	12	78	240	30	12	78
613	CA	150	30	12	27	75	15	6	14
614	CA	150	30	12	27	75	15	6	14
615	CC	300	60	12	64	150	30	6	32

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		9:00 AM to 2:59 PM				3:00 PM to 5:59 PM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	0	0	0	0	330	30	6	55
8F	F	0	0	0	0	420	30	6	74
30F	F	0	0	0	0	240	30	6	49
41F	F	0	0	0	0	165	15	3	36
93F	F	0	0	0	0	480	0	4	129
411F	F	0	0	0	0	220	20	4	54
413F	F	0	0	0	0	120	0	4	28
EXPRESS ROUTES									
80	X	0	0	0	0	270	0	5	92
80A	X	60	0	1	15	257	0	3	53
80B	X	0	0	0	0	33	0	1	11
82	X	0	0	0	0	147	0	3	47
83	X	0	0	0	0	547	0	11	189
83A	X	0	0	0	0	40	0	2	20
84	X	0	0	0	0	120	0	4	54
84A	X	0	0	0	0	152	0	4	44
85	X	0	0	0	0	342	0	5	115
85A	X	0	0	0	0	189	0	3	45
88	X	0	0	0	0	122	0	2	33
88A	X	0	0	0	0	391	0	2	161
89	X	0	0	0	0	82	0	2	36
93	X	0	0	0	0	650	0	10	398
95	X	0	0	0	0	64	0	1	31
98	X	0	0	0	0	156	12	6	73
TOTALS		84,862	12,518	2,593	22,558	71,760	8,914	1,992	18,061

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
A	LS	624	96	24	171	0	0	0	0
B	LS	840	60	24	191	0	0	0	0
C	LS	765	135	18	313	0	0	0	0
D	LS	400	80	16	172	0	0	0	0
1	L	1,305	195	30	279	783	117	18	168
1L	LS	1,365	195	26	385	525	75	10	148
2	L	2,136	264	48	440	774	36	18	165
3	L	1,760	220	44	341	400	50	10	77
4	L	1,044	156	24	189	174	6	4	32
5	CC	226	17	11	45	0	0	0	0
6	L	1,650	150	30	303	110	10	2	20
8	L	1,650	150	60	320	216	24	6	42
9	L	480	120	20	93	0	0	0	0
13	L	702	108	36	136	234	6	12	45
15	CC	248	32	8	49	0	0	0	0
17	CC	1,032	168	24	207	172	8	4	34
18	CC	700	100	20	132	140	20	4	26
19	L	2,260	140	40	505	791	49	14	177
23	L	900	180	12	265	0	0	0	0
30	L	558	162	12	92	100	20	2	15
31	CC	684	36	36	133	114	6	6	22
40	L	3,324	656	52	951	1,584	276	24	486
41	L	600	75	15	169	320	40	8	90
42	L	1,740	60	30	441	624	36	8	167
50	L	1,150	50	20	320	0	0	0	0
51	L	960	120	24	354	200	25	5	74
52	L	1,824	96	16	774	1,140	60	10	484
54	L	648	72	24	239	216	24	8	80
60	L	546	84	12	213	91	14	2	36
61	L	704	16	16	229	0	0	0	0
62	L	2,008	152	16	685	1,004	76	8	343
63	L	792	168	16	322	99	21	2	40
64	L	688	32	16	191	0	0	0	0
65	L	116	4	4	42	0	0	0	0
66	L	188	52	8	111	0	0	0	0
131	CC	0	0	0	0	0	0	0	0
132	CC	0	0	0	0	0	0	0	0
133	CC	100	20	8	28	0	0	0	0
134	CC	220	20	8	63	0	0	0	0
231	CC	175	35	14	63	100	20	8	36
232	CC	100	20	8	30	100	20	8	30
301	CC	345	105	10	73	0	0	0	0
302	CC	116	4	8	23	0	0	0	0
303	CC	168	12	24	43	14	1	2	4
304	CC	232	8	8	43	0	0	0	0
305	CC	220	30	10	55	0	0	0	0
306	CC	72	18	6	14	0	0	0	0
311	CC	486	54	12	92	0	0	0	0
312	CC	125	25	10	31	0	0	0	0

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
313	CC	530	70	20	130	265	35	10	65
314	CC	400	50	20	111	0	0	0	0
401	CC	96	24	8	36	0	0	0	0
402	CC	92	28	8	28	0	0	0	0
403	CC	200	32	8	61	0	0	0	0
411	CC	740	168	28	214	212	44	8	63
412	CC	52	8	4	14	0	0	0	0
413	CC	0	0	0	0	0	0	0	0
414	CA	24	36	2	6	0	0	0	0
415	CC	624	96	16	193	0	0	0	0
416	CC	588	42	14	174	0	0	0	0
417	CC	Included with Route 411							
418	CC	440	40	16	78	0	0	0	0
419	CC	Included with Route 416							
421	CC	Included with Route 42							
422	CC	710	190	20	188	142	0	4	38
432	CC	386	78	31	83	126	22	10	26
433	CC	322	98	14	87	46	14	2	12
434	CC	357	90	15	89	96	24	4	24
440	CC	175	35	14	39	0	0	0	0
441	CC	175	35	14	96	0	0	0	0
501	CC	175	35	14	55	0	0	0	0
502	CC	175	35	14	46	0	0	0	0
503	CA	69	16	3	14	0	0	0	0
504	CC	165	15	6	25	0	0	0	0
505	CC	45	15	6	10	0	0	0	0
511	CC	Included with Route 51							
512	CC	104	16	8	29	0	0	0	0
513	CC	100	20	8	18	100	20	8	18
521	CC	66	32	4	19	0	0	0	0
522	CC	110	32	4	37	0	0	0	0
523	CC	160	80	8	55	0	0	0	0
541	CC	570	30	20	139	0	0	0	0
542	CC	440	160	20	69	0	0	0	0
543	CC	200	40	16	42	0	0	0	0
544	CA	150	30	12	38	0	0	0	0
545	CC	320	160	16	56	0	0	0	0
546	CC	150	30	12	33	0	0	0	0
547	CC	504	216	24	126	105	45	5	26
548	CC	1,176	264	24	229	294	66	6	57
549	CC	120	60	12	18	0	0	0	0
611	CC	160	80	8	52	0	0	0	0
612	CC	160	80	8	52	0	0	0	0
613	CA	100	20	8	18	0	0	0	0
614	CA	100	20	8	18	0	0	0	0
615	CC	200	40	8	43	0	0	0	0

Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS							
		6:00 PM to 10:59 PM				11:00 PM to 3:59 AM			
Number	Function	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage	Running Time (Minutes)	Layover (minutes)	Number of Trips	Mileage
FERRY ROUTES									
4F	F	275	25	5	46	0	0	0	0
8F	F	350	25	5	62	0	0	0	0
30F	F	200	25	5	40	0	0	0	0
41F	F	110	10	2	24	0	0	0	0
93F	F	240	0	2	65	0	0	0	0
411F	F	110	10	2	27	0	0	0	0
413F	F	60	0	2	14	0	0	0	0
EXPRESS ROUTES									
80	X	0	0	0	0	0	0	0	0
80A	X	0	0	0	0	0	0	0	0
80B	X	0	0	0	0	0	0	0	0
82	X	0	0	0	0	0	0	0	0
83	X	0	0	0	0	0	0	0	0
83A	X	0	0	0	0	0	0	0	0
84	X	0	0	0	0	0	0	0	0
84A	X	0	0	0	0	0	0	0	0
85	X	0	0	0	0	0	0	0	0
85A	X	0	0	0	0	0	0	0	0
88	X	0	0	0	0	0	0	0	0
88A	X	0	0	0	0	0	0	0	0
89	X	0	0	0	0	0	0	0	0
93	X	0	0	0	0	0	0	0	0
95	X	0	0	0	0	0	0	0	0
98	X	0	0	0	0	0	0	0	0
TOTALS		51,751	7,493	1,504	13,507	11,411	1,310	260	3,171

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
A	LS	156	4,208	472	4,680	78.0	1,112.0	4:45 AM to 9:26 PM
B	LS	126	4,770	340	5,110	85.2	1,003.0	4:50 AM to 11:04 PM
C	LS	123	5,305	1,085	6,390	106.5	2,138.0	3:07 AM to 10:53 PM
D	LS	96	2,396	484	2,880	48.0	1,030.6	5:00 AM to 10:00 PM
1	L	191	8,753	947	9,700	161.7	1,778.2	4:00 AM to 2:00 AM
1L	LS	147	8,166	1,044	9,210	153.5	2,177.8	4:00 AM to 1:30 AM
2	L	248	11,776	1,110	12,886	214.8	2,274.2	4:10 AM to 1:44 AM
3	L	214	8,583	1,047	9,630	160.5	1,656.4	4:15 AM to 1:26 AM
4	L	121	5,274	480	5,754	95.9	955.3	5:00 AM to 12:00 AM
5	CC	55	1,207	174	1,381	23.0	229.0	5:36 AM to 10:02 PM
6	L	152	7,144	816	7,960	132.7	1,243.6	5:03 AM to 11:58 PM
8	L	480	11,658	997	12,655	210.9	2,290.1	4:00 AM to 12:00 AM
9	L	98	2,226	322	2,548	42.5	458.9	5:00 AM to 10:20 PM
13	L	204	3,978	972	4,950	82.5	769.1	5:00 AM to 1:00 AM
15	CC	66	2,217	283	2,500	41.7	400.3	5:30 AM to 10:23 PM
17	CC	146	6,490	780	7,270	121.2	1,256.3	5:00 AM to 12:00 AM
18	CC	124	4,470	630	5,100	85.0	819.0	6:00 AM to 12:00 AM
19	L	164	9,552	678	10,230	170.5	2,072.1	4:13 AM to 1:48 AM
23	L	60	4,584	816	5,400	90.0	1,323.9	6:00 AM to 10:00 PM
30	L	66	2,881	689	3,570	59.5	503.9	5:00 AM to 12:00 AM
31	CC	164	3,126	164	3,290	54.8	606.7	4:45 AM to 12:25 AM
40	L	320	20,070	3,247	23,317	388.6	5,763.9	4:00 AM to 3:59 AM
41	L	98	4,160	610	4,770	79.5	1,104.5	4:47 AM to 10:10 PM
42	L	157	9,592	708	10,300	171.7	2,309.5	4:00 AM to 3:59 AM
50	L	123	7,204	566	7,770	129.5	1,966.4	5:00 AM to 11:00 PM
51	L	135	5,886	575	6,461	107.7	1,993.9	4:30 AM to 1:37 AM
52	L	100	11,929	1,384	13,313	221.9	4,841.4	4:00 AM to 3:59 AM
54	L	130	4,210	470	4,680	78.0	1,296.9	4:30 AM to 1:00 AM
60	L	87	4,100	460	4,560	76.0	1,544.9	5:00 AM to 12:00 AM
61	L	73	3,381	365	3,746	62.4	1,048.8	5:00 AM to 11:00 PM
62	L	88	11,170	892	12,062	201.0	3,767.7	4:00 AM to 3:59 AM
63	L	76	3,931	629	4,560	76.0	1,526.7	5:00 AM to 12:00 AM
64	L	75	3,257	118	3,375	56.3	895.1	5:00 AM to 10:00 PM
65	L	44	1,276	44	1,320	22.0	463.3	5:00 AM to 8:00 PM
66	L	50	1,305	195	1,500	25.0	695.5	4:30 AM to 10:00 PM
131	CC	24	300	60	360	6.0	67.2	6:00 AM to 6:35 PM
132	CC	24	300	60	360	6.0	70.8	6:20 AM to 6:45 PM
133	CC	58	725	145	870	14.5	200.1	5:30 AM to 10:00 PM
134	CC	58	1,595	145	1,740	29.0	455.3	5:30 AM to 10:00 PM
231	CC	60	750	150	900	15.0	270.0	5:00 AM to 1:00 AM
232	CC	54	675	135	810	13.5	204.4	5:00 AM to 8:00 PM
301	CC	88	3,114	825	3,939	65.7	644.6	5:10 AM to 9:50 PM
302	CC	60	870	30	900	15.0	174.3	4:30 AM to 10:11 PM
303	CC	108	756	54	810	13.5	194.4	4:30 AM to 12:00 AM
304	CC	85	2,647	293	2,940	49.0	457.0	5:00 AM to 11:00 PM
305	CC	64	1,421	179	1,600	26.7	349.1	5:00 AM to 11:00 PM
306	CC	32	405	75	480	8.0	75.4	5:00 AM to 9:00 PM
311	CC	91	4,653	619	5,272	87.9	700.8	5:00 AM to 8:00 PM
312	CC	104	1,475	435	1,910	31.8	326.0	5:30 AM to 8:00 PM

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
313	CC	106	2,861	319	3,180	53.0	687.4	5:30 AM to 1:20 AM
314	CC	120	2,400	300	2,700	45.0	664.8	6:30 AM to 10:00 PM
401	CC	48	612	108	720	12.0	215.3	3:50 AM to 9:34 PM
402	CC	48	548	172	720	12.0	170.4	4:20 AM to 9:58 PM
403	CC	47	1,256	152	1,408	23.5	356.9	4:15 AM to 10:22 PM
411	CC	116	3,910	854	4,764	79.4	1,099.3	4:30 AM to 12:49 AM
412	CC	84	1,092	168	1,260	21.0	299.5	4:30 AM to 6:48 PM
413	CC	61	819	96	915	15.3	207.4	5:30 AM to 5:55 PM
414	CA	29	349	521	870	14.5	85.6	4:30 AM to 6:43 PM
415	CC	94	4,472	538	5,010	83.5	1,131.8	5:30 AM to 11:00 PM
416	CC	92	4,046	484	4,530	75.5	1,145.4	5:30 AM to 10:00 PM
417	CC	Included with Route 411						
418	CC	96	2,204	240	2,444	40.7	469.4	5:00 AM to 11:00 PM
419	CC	Included with Route 416						
421	CC	Included with Route 42						
422	CC	130	4,927	857	5,784	96.4	1,222.0	5:00 AM to 12:30 AM
432	CC	147	1,837	370	2,207	36.8	391.0	4:41 AM to 1:28 AM
433	CC	94	2,081	739	2,820	47.0	585.2	5:00 AM to 11:26 PM
434	CC	97	2,760	534	3,294	54.9	580.6	4:41 AM to 12:52 AM
440	CC	94	1,175	235	1,410	23.5	365.1	5:00 AM to 10:00 PM
441	CC	94	1,175	235	1,410	23.5	643.0	5:00 AM to 10:00 PM
501	CC	64	800	160	960	16.0	252.8	5:30 AM to 10:00 PM
502	CC	64	800	160	960	16.0	208.0	5:30 AM to 10:00 PM
503	CA	34	722	177	899	15.0	148.4	4:33 AM to 7:53 PM
504	CC	36	990	90	1,080	18.0	147.2	5:30 AM to 10:00 PM
505	CC	36	270	90	360	6.0	60.1	5:30 AM to 10:00 PM
511	CC	Included with Route 51						
512	CC	60	780	120	900	15.0	220.2	5:00 AM to 11:00 PM
513	CC	68	850	170	1,020	17.0	154.4	5:00 AM to 1:00 AM
521	CC	44	726	352	1,078	18.0	212.1	5:00 AM to 8:00 PM
522	CC	44	1,210	352	1,562	26.0	412.3	5:00 AM to 8:00 PM
523	CC	34	680	340	1,020	17.0	233.2	5:00 AM to 9:00 PM
541	CC	98	3,144	201	3,345	55.8	681.6	5:30 AM to 10:00 PM
542	CC	72	1,476	684	2,160	36.0	248.8	5:30 AM to 10:00 PM
543	CC	70	875	175	1,050	17.5	181.7	5:30 AM to 9:00 PM
544	CA	64	839	121	960	16.0	201.0	5:30 AM to 9:00 PM
545	CC	70	1,348	700	2,048	34.1	245.0	5:30 AM to 9:00 PM
546	CC	64	800	160	960	16.0	175.4	5:30 AM to 9:00 PM
547	CC	115	3,221	694	3,915	65.3	601.4	4:30 AM to 12:30 AM
548	CC	116	5,777	1,183	6,960	116.0	1,105.5	4:30 AM to 12:30 AM
549	CC	54	540	270	810	13.5	80.5	4:30 AM to 12:30 AM
611	CC	48	960	270	1,230	20.5	312.0	5:00 AM to 10:00 PM
612	CC	48	960	270	1,230	20.5	312.0	5:00 AM to 10:00 PM
613	CA	34	425	85	510	8.5	76.7	5:00 AM to 9:30 PM
614	CA	34	425	85	510	8.5	76.7	5:00 AM to 9:00 PM
615	CC	34	850	170	1,020	17.0	180.9	5:00 AM to 9:00 PM

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Weekday Totals						
Number	Function	Weekday Trips	Running Time (Minutes)	Layover (minutes)	Total Time (minutes)	Total Time Hours	Total Weekday Mileage	Span of Service
FERRY ROUTES								
4F	F	32	1,045	95	1,140	19.0	174.8	Peak Period
8F	F	32	1,330	95	1,425	23.8	235.6	Peak Period
30F	F	32	760	95	855	14.3	153.7	Peak Period
41F	F	12	440	40	480	8.0	96.8	Peak Period
93F	F	12	1,200	0	1,200	20.0	323.0	Peak Period
411F	F	12	550	50	600	10.0	136.0	Peak Period
413F	F	12	330	0	330	5.5	78.1	Peak Period
EXPRESS ROUTES								
80	X	11	619	0	619	10.3	203.7	Peak Period
80A	X	9	667	0	667	11.1	166.1	Peak Period
80B	X	2	66	0	66	1.1	22.3	Peak Period
82	X	7	343	0	343	5.7	109.8	Peak Period
83	X	22	1,094	0	1,094	18.2	378.4	Peak Period
83A	X	4	80	0	80	1.3	39.6	Peak Period
84	X	8	243	0	243	4.1	107.2	Peak Period
84A	X	8	305	0	305	5.1	86.6	Peak Period
85	X	8	562	0	562	9.4	181.3	Peak Period
85A	X	6	378	0	378	6.3	95.0	Peak Period
88	X	4	244	0	244	4.1	64.7	Peak Period
88A	X	4	782	0	782	13.0	301.9	Peak Period
89	X	4	164	0	164	2.7	71.8	Peak Period
93	X	20	1,300	0	1,300	21.7	657.4	Peak Period
95	X	2	128	0	128	2.1	62.0	Peak Period
98	X	12	312	24	336	5.6	146.5	Peak Period
TOTALS		8,944	310,855	42,198	353,053	5,884.2	80,246.1	

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
A	LS	4	6	4	6	4	0	60
B	LS	3	6	5	6	5	0	40
C	LS	8	8	5	8	5	0	40
D	LS	3	4	2	4	3	0	60
1	L	10	11	6	11	10	5	60
1L	LS	6	11	6	11	6	6	60
2	L	10	14	10	14	10	6	60
3	L	6	9	9	9	6	3	60
4	L	5	6	5	6	5	3	60
5	CC	0	2	1	2	1	0	40
6	L	4	9	7	9	6	2	40
8	L	8	15	12	15	6	4	60
9	L	2	3	2	3	2	0	60
13	L	6	5	5	5	3	2	40
15	CC	0	4	2	4	2	0	30
17	CC	4	10	5	10	5	3	40
18	CC	0	6	5	6	3	3	40
19	L	8	9	8	9	8	4	60
23	L	0	6	6	6	6	0	40
30	L	2	4	3	4	2	2	40
31	CC	4	4	2	4	2	1	40
40	L	21	28	19	28	19	5	60
41	L	3	7	3	7	3	3	60
42	L	7	14	6	14	6	6	60
50	L	3	9	8	9	4	0	60
51	L	4	7	6	7	3	3	60
52	L	5	15	13	15	6	4	60
54	L	3	6	3	6	3	2	40
60	L	1	7	4	7	4	2	60
61	L	1	6	3	6	3	0	60
62	L	4	14	9	14	9	5	60
63	L	2	6	4	6	4	2	60
64	L	3	3	3	3	3	0	40
65	L	2	2	1	2	1	0	40
66	L	2	2	1	2	1	0	40
131	CC	0	0.5	0.5	0.5	0	0	30
132	CC	0	0.5	0.5	0.5	0	0	30
133	CC	1	1	1	1	1	0	30
134	CC	2	2	2	2	1	0	30
231	CC	1	1	0.5	1	0.5	0.5	35
232	CC	1	1	0.5	1	0.5	0.5	35
301	CC	2	6	3	6	3	0	35
302	CC	1	1	1	1	1	0	40
303	CC	1	1	1	1	1	1	40
304	CC	1	5	2	5	1	0	30
305	CC	2	2	2	2	2	0	40
306	CC	1	1	1	1	1	0	40
311	CC	3	9	3	9	3	0	35
312	CC	0	4	1	4	1	0	60

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
313	CC	0	4	2	4	2	2	40
314	CC	1	3	3	3	2	0	40
401	CC	0.5	1	0.5	1	0.5	0	35
402	CC	0.5	1	0.5	1	0.5	0	35
403	CC	1	2	1	2	1	0	35
411	CC	3	6	3	6	3	1	60
412	CC	1	2	1	2	1	0	30
413	CC	1	2	1	2	0	0	40
414	CA	1	1	1	1	1	0	Van
415	CC	3	8	3	8	3	0	40
416	CC	1	7	3	7	3	0	60
417	CC	Included with Route 411						
418	CC	2	3	2	3	2	0	40
419	CC	Included with Route 416						
421	CC	Included with Route 42						
422	CC	2	9	3	9	3	2	60
432	CC	2	2	2	2	2	1	40
433	CC	0	4	2	4	2	1	40
434	CC	2	5	2	5	2	1	60
440	CC	2	2	1	2	1	0	40
441	CC	2	2	1	2	1	0	60
501	CC	0	1	1	1	1	0	40
502	CC	0	1	1	1	1	0	35
503	CA	1	1	1	1	1	0	Van
504	CC	0	1.5	0.75	1.5	0.75	0	35
505	CC	0	0.5	0.25	0.5	0.25	0	35
511	CC	Included with Route 51						
512	CC	1	1	1	1	1	0	40
513	CC	1	1	1	1	1	1	60
521	CC	0.75	0.75	0.75	0.75	0.75	0	35
522	CC	1.25	1.25	1.25	1.25	1.25	0	35
523	CC	1	1	1	1	1	0	35
541	CC	2	5	2	5	2	0	40
542	CC	2	2	2	2	2	0	40
543	CC	1	1	1	1	1	0	40
544	CA	1	1	1	1	1	0	Van
545	CC	2	2	2	2	2	0	40
546	CC	1	1	1	1	1	0	35
547	CC	5	5	2	5	2	2	40
548	CC	8	8	4	8	4	4	40
549	CC	0	1	1	1	1	0	40
611	CC	1.5	1.5	1	1.5	1	0	35
612	CC	1.5	1.5	1	1.5	1	0	35
613	CA	0.5	0.5	0.5	0.5	0.5	0	Van
614	CA	0.5	0.5	0.5	0.5	0.5	0	Van
615	CC	1	1	1	1	1	0	35

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Weekday Operations Summary Table 2030 New Start Alternative

ROUTE		WEEKDAY OPERATIONS						
		Maximum Vehicles Required						
Number	Function	4:00 AM to 5:29 AM	5:30 AM to 8:59 AM	9:00 AM to 2:59 PM	3:00 PM to 5:59 PM	6:00 PM to 10:59 PM	11:00 PM to 3:59 AM	Vehicle Size
FERRY ROUTES								
4F	F	0	4	0	4	0	0	40
8F	F	0	5	0	5	0	0	40
30F	F	0	3	0	3	0	0	40
41F	F	0	4	0	4	0	0	40
93F	F	0	4	0	4	0	0	40
411F	F	0	3	0	3	0	0	30
413F	F	1	1	0	1	0	0	40
EXPRESS ROUTES								
80	X	0	6	0	5	0	0	40
80A	X	0	3	0	3	0	0	40
80B	X	0	1	0	1	0	0	40
82	X	0	3	0	3	0	0	40
83	X	5	6	0	11	0	0	60
83A	X	2	0	0	2	0	0	40
84	X	2	2	0	2	0	0	40
84A	X	1	2	0	2	0	0	40
85	X	0	6	0	5	0	0	40
85A	X	0	3	0	2	0	0	40
88	X	0	2	0	2	0	0	40
88A	X	0	2	0	2	0	0	40
89	X	0	2	0	2	0	0	40
93	X	6	4	0	8	0	0	60
95	X	0	1	0	1	0	0	40
98	X	1	3	0	3	0	0	60
TOTALS		246.00	488.00	273.00	496.00	244.00	93.00	

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