

FY 2011/12-2015/16
TRANSIT DEVELOPMENT PLAN UPDATE
FOR HUMBOLDT COUNTY TRANSIT SYSTEMS



SUBMITTED TO
HUMBOLDT COUNTY ASSOCIATION OF GOVERNMENTS

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SUBMITTED BY



Transit Development Plan Humboldt County Transit Systems

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Executive Summary

TDP Background

The Transit Development Plan (TDP) Update is the primary planning document guiding the decisions associated with administering the public transit services operated by transit operators in Humboldt County. The purpose of a TDP is to provide a review of transit services and assess the efficiency and effectiveness of the services as well as develop a capital improvement plan for the region. This TDP update covers a five year period from FY 2011/2012 through FY 2015/2016, and covers six transit systems operating eight services. The six transit operators and eight services are:

- Humboldt Transit Authority - Redwood Transit System (RTS), Willow Creek RTS Extension, and Southern Humboldt Transit Systems
- City of Eureka - Eureka Transit Service (ETS)
- City of Arcata - Arcata & Mad River Transit System (AMRTS)
- City of Fortuna - Fortuna Senior Bus
- City of Blue Lake/Blue Lake Rancheria - Blue Lake Rancheria Transit System (BLRTS)
- Klamath-Trinity Non-Emergency Transportation – K/T NeT

Existing Conditions

Humboldt County is situated on the northern coast of California bordering Del Norte, Mendocino, Siskiyou and Trinity counties. The county was established from parts of Trinity County in 1853 and has a total area of 4,052 square miles. Humboldt County's population was 134,623 based on the 2010 U.S. Census. The population grew 6.41 percent since the 2000 U.S. Census. There are seven incorporated cities ranging in size from approximately 400 to 28,000 residents. Approximately 47 percent of the county's residents live in incorporated communities, while 59 percent live in the Humboldt Bay region. Persons aged 65 years and older comprised 13.2 percent of the population with the median age being 37.1 years.

The Humboldt County transit operators have demonstrated effort to coordinate the delivery of public transportation. Several tangible products and services have been developed as a result of this cooperative network. The installation of electronic fareboxes on the main transit buses (HTA systems, ETS, and A&MRTS) have resulted in new fare media including slide card technology that can be easily used and transferable on any of these systems.

The various transit bus routes provide a level of connectivity at major transfer points. These locations include downtown Eureka, the Bayshore Mall in Eureka, and the Arcata Transit Center. The Bayshore Mall, as well as the area of 3rd/4th/5th and H Street, provides connections between RTS, SHT, and ETS buses. The Arcata Transit Center is a central transfer facility where many bus systems stop, including RTS, Willow Creek, A&MRTS, and Blue Lake Rancheria Transit. The Transit Center also serves as the regional transfer center in the North Coast for passengers wishing to travel beyond the area. In addition to stops at the transit center by the local transit

providers, Redwood Coast Transit/Del Norte public transit and Greyhound buslines also serve the transit center. The RTS intercity bus makes multiple stops in and near Fortuna, allowing for potential connections between Fortuna Senior Transit and the RTS. The Willow Creek Extension provides connections to transit providers in Willow Creek (K/T NeT and Trinity Transit) where trips can be made between Arcata and the Hoopa Reservation and Orleans as well as to Weaverville.

HTA published the *Humboldt County Transportation Services Guide* for public transit and human service transportation. The large newspaper style guide provides maps and bus schedules for all public transportation operations in the county including for both fixed route and demand response systems. This is one of a few comprehensive print media for countywide public transit services.

The transit operators, along with representatives from other institutions such as Caltrans, Humboldt State University and College of the Redwoods, participate in the HCAOG Service Coordination Committee that acts in part to coordinate service and grant funding opportunities. As the SCC meetings are generally held at HTA offices, the transit partners discuss funding opportunities and issues of common interest.

Transit Needs

Several outreach methods were undertaken by the consultant team as part of the TDP development process to identify transit needs. The various methods were intended to capture a broad audience of local stakeholders including users and non-users of the service, transit operational staff, educational institutions, social service agencies, and elected officials. Various means of data collection and communication were used including in-person and phone interviews, and an on-board survey of each of the eight transit services. Information through an on-line survey administered by HCAOG as part of its Transit Unmet Transit Needs process was also collected for this study.

Each transit system serves a distinct market that is conducive to transit usage. A few systems have concentrations of certain riders, such as college students, while others serve more broad ridership characteristics such as those requiring trips for medical, shopping, social and work purposes. A common thread among the systems is that a fair proportion of riders tend to be transit dependent with little or no alternatives to a private vehicle, or lack the ability to drive. This ridership type provides a relatively strong market base for which the Humboldt County transit systems could evolve their systems.

Key trip origins and destinations reflect regional priority markets. These include the Humboldt State University and College of the Redwoods campuses. Employment and medical destinations in Eureka and Arcata can be reached by transferring to local ETS and A&MRTS service. The Arcata Transit Center and the ETS transfer stops at H and 3rd and the Bayshore Mall also remain key trip generators. Good connections between the local and regional services will be critical to effectively serve the local Eureka and Arcata destinations and points beyond.

Important Findings & Issues

Generally the next five years look relatively healthy for the transit systems. In most instances, ridership and productivity will remain sufficiently high to meet minimum farebox performance standards. This assumes that operating costs will not increase at a rate higher than projected, or that the respective services will not be overly ambitious in expanding service coverage to night or weekend hours when demand and subsequent productivity and farebox recovery are low. Fortuna Senior Bus Transit has been making an effort to maintain its farebox ratio minimum through cost savings measures, and will need to remain prudent over the next five years.

Areas to be monitored during the TDP period include:

- **RTS:** On time performance and schedule adherence and additional capacity within core service area between Arcata and the College of the Redwoods.
- **ETS:** Schedule adherence to make connections with RTS and the need to increase recovery time between trips.
- **A&MRTS:** Increasing capacity at the peak of the peak – eliminating the need to operate additional tripper overlays to handle peak loads (operate higher capacity buses).
- **Fortuna Senior Bus Transit:** Meeting minimum farebox ratio requirements – increase productivity to accommodate increases in demand without increasing total annual operating hours above current 2011/12 base, or increase productivity by expanding scope of service to operate as a general public dial-a-ride.
- **Blue Lake Rancheria Transit:** Maintaining service for a general ridership market that utilizes the system throughout the day. Travel demand is rather evenly spread between peak and non-peak times given the transit dependency and various reasons for making the trips.
- **K/T NeT:** Ensuring on-going contributions from the Native American Tribes that receive service from K/T NeT. The fund contributions help satisfy the farebox requirements and support lifeline service for residents on the tribal reservations who have no other means of transportation. Also, transfer opportunities to other transit systems remain an important and attractive feature of K/T NeT.

Service Recommendations

The following recommendations are made for the Humboldt County transit systems (recommendation by transit service listed):

- Reduce south bound and north bound bus stops within Arcata to the HSU Library Circle, 14th Street and Arcata Transit Center. (Redwood Transit System)

- Reduce south bound and north bound bus stops along the 4th and 5th Street corridors within Eureka. (Redwood Transit System)
- Reduce local RTS stops within Fortuna and adjust routing focus to Redwood Village Shopping Center and Redwood Memorial Hospital on Redwood Way, and the Park and Ride site at Kenmar and Atterberry. (Redwood Transit System)
- Formalize bus stops at HSU Library Circle. (Redwood Transit System, Arcata & Mad River Transit System)
- Move current bus stops and time points at 14th and B Streets west on 14th Street closer to planned Willow Walk HSU pedestrian access. (Redwood Transit System, Arcata & Mad River Transit System)
- Monitor passenger loads on peak hour RTS service within the core service corridor between the Arcata and the College of the Redwoods. (Redwood Transit System)
- Evaluate potential market for additional Saturday afternoon frequency between the College of the Redwoods and HSU. (Redwood Transit System)
- Amend RTS route numbering system to simplify schedule information for the public. (Redwood Transit System)
- Increase recovery time between ETS trips. (Eureka Transit Service)
- Specify 40-foot transit coaches in future bus replacement capital plans. (Arcata & Mad River Transit System)
- Arcata and HSU should partner and explore a shared ride taxi jitney service operating on a full cost recovery basis between HSU and the Arcata Downtown on Friday and Saturday nights outside of A&MRTS coverage hours. (Arcata & Mad River Transit System)
- HTA and the City of Fortuna conduct an alternatives analysis to assess strategies to maintain Fortuna Senior Bus Transit farebox recovery above the TDA minimum requirement. (Humboldt Transit Authority and City of Fortuna)
- Establish a quarterly system-wide monitoring and evaluation program on a trip-by-trip basis. (All transit systems)

Policy Framework

A policy framework is developed as well as suggested performance and service design standards for the transit operators. Included in the framework are goals, objectives, supportive policies and standards. Different performance standards and service design guidelines are provided for each service. Monitoring service performance remains an important task for the

transit operators. While specific standards vary, industry practice generally uses three categories - Efficiency standards, Service quality/reliability standards, and Service design standards.

New Service Warrants provide a tool for judging when new services or service extensions are appropriate. A new fixed route or route extension could be introduced when ridership forecasts based on population, school enrollment, or job density are sufficient to achieve minimum passenger revenue recovery ratios by service type. New services should be introduced on a trial basis to achieve the required minimum passenger revenue recovery ratio. Productivity expectations should be established for the evaluation of new services during the pilot project period.

Regional Intelligent Transportation Systems

The Humboldt County transit operators have embraced and invested in a series of Intelligent Transport Systems (ITS) related infrastructure that improves transit operations and performance while enhancing customer experience in riding public transit. ITS is defined as electronics, communications, or information technology, used singly or in combination, to improve the efficiency or safety of the surface transportation system. ITS applications cover numerous aspects of transit system operations including simplifying fare payment options, scheduling and dispatching, vehicle locating in virtual real time, collecting real time and more accurate operations data, and notifying and conveying timely transit information to riders. Current projects include electronic fareboxes, automated vehicle locator (AVL)/global positioning system (GPS), electronic transit information and trip planning, advanced communications, wireless internet access (Wi-Fi), and paratransit scheduling software. Future investment in ITS includes dynamic message signs that communicate real-time transit information at key bus stops to waiting passengers.

Financial and Capital Plans

Federal, State and Local funding options are identified for operations and capital projects in the county. Eligibility requirements apply to several revenue sources while others including local sources are typically discretionary. Transportation Development Act revenues remain an important source of revenue for on-going transit operations for the transit operators. Both Local Transportation Fund and State Assistance Fund programs that comprise TDA provide operations and capital funding. The State Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA) also accounts for a major portion of capital funding for large procurements. Although funding from the bond measure (Proposition 1B) is set to expire at the end of the TDP period (FY 2016), the program has provided a much needed injection of revenues for projects such as vehicle replacement and technology upgrades.

The proposed capital program for each transit system is made for the next five years. The Capital Plan has been prepared to provide for adequate development, maintenance and replacement of capital assets. Retaining this project plan in the 5-year program is essential in order to garner funding from state and federal sources. The Capital Plan includes the procurement of bus vehicles, improvements to bus stop shelters and amenities, technology

infrastructure, maintenance facility improvements, communications equipment, and replacement of staff vehicles. As future funding becomes available based upon market conditions and prioritization of limited resources, inclusion of capital projects is a critical step in the planning process to obtain funding and improve connectivity.

City of Eureka and Humboldt County Contract Review

The City of Eureka and the County of Humboldt have had a long-standing agreement in the sharing of revenue contribution to the net operating costs of ETS. The city contributes 73 percent of net ETS costs from its LTF apportionment while the county contributes the remaining 27 percent from its LTF. The contributions are intended to cover the areas served by the system that fall outside of the Eureka city limits and in the County's jurisdiction.

As a means to address whether the proportions continue to reflect current service coverage between the city and unincorporated areas, an update was conducted of both the population figures as well as the route coverage between the two areas. As a measure of parity, revenue contribution for operating costs should be weighted more toward the level of transit service provided; that is the coverage provided by the bus routes within and outside the city limits. As the greatest proportion of ETS service is provided within the city limits, varying preliminary weighting scenarios of population and vehicle miles show that the contribution percentages by the city of Eureka and the County might be warranted for review and possible modification. The modification would increase Eureka's share of LTF contribution and in turn decrease the County's share. However, it is noted that other potential performance criteria were not factored into the analysis but could be helpful in the discussion.

Marketing Strategies

The transit systems employ a number of methods to publicize their transit services and receive feedback from its ridership and the community at-large. Marketing involves not only publicizing core services to increase ridership through various media but effectively communicating the service brand and being a visible presence in the community.

A series of targeted marketing strategies has been compiled based on the feedback received from stakeholders and studies of other comparably-sized transit systems. A series of strategies are listed for consideration:

- Installation of weather –resistant cassettes at each bus stop containing a schedule and route map
- Coordinate branding effort among Humboldt County transit services.
- Improve media communication (press releases, speakers bureau)
- Expand HSU and CR partnerships
- Run special event buses (e.g. Humboldt County Fair, Arts Alive, etc)
- Continue with countywide transit guide and information
- Implement Wi-Fi technology to enable passengers to access the internet while on board transit.

- Implement AVL technology to allow for real-time arrival updates and next bus technology. An AVL system is a computer-based vehicle tracking system that uses a specific location technology (usually Global Positioning System – GPS) and a method of transmitting that real-time location of any receiver-equipped bus from the vehicle to a dispatch center. GPS satellites locate the bus and the location data are then transmitted to the transit center through the communications system. The AVL data can be used immediately for daily operations or archived for further analysis.

Chapter 1

Existing Conditions

1.1 Agency Overview

Humboldt Transit Authority

Organization

The Humboldt Transit Authority (HTA) was established in 1975 under a joint-powers agreement between the cities of Arcata, Eureka, Fortuna, Rio Dell and Trinidad and the County of Humboldt. HTA is headquartered in the county seat of Eureka. HTA is governed by a seven member Board of Directors comprised of one representative each from the five incorporated cities and two representatives from the County of Humboldt. The Authority is administered by the General Manager and is supported by staff including the Operations Manager, Equipment and Facilities Manager, Administration and Finance Manager, Administrative Assistant, and Receptionist/ADA Specialist.

Services Provided

HTA is the primary intercity public transit system in the county, providing a fixed-route trunk service along the U.S. 101 Corridor as well as an extension to Willow Creek along Highway 299. HTA also provides both intercity and local transit service in the southern portions of the county. In addition, HTA operates intra-city fixed-route service in the City of Eureka under the Eureka Transit Service (ETS), and provides maintenance service to the Arcata & Mad River Transit System (A&MRTS), both under separate contracts. Demand response services provided in Arcata, Eureka and McKinleyville are administered by and coordinated through HTA.

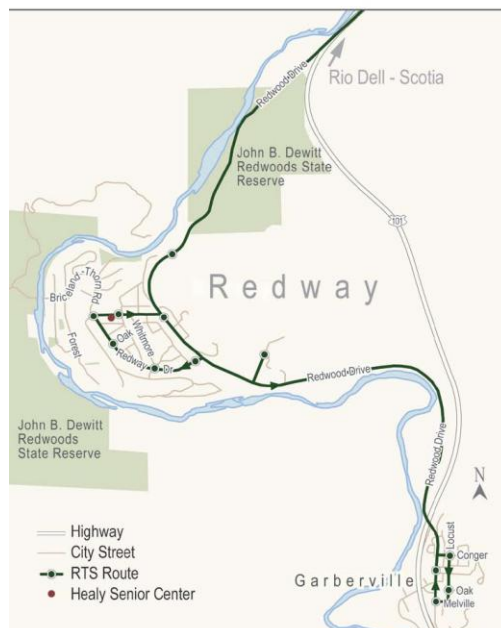
Service Area (including routes)

The HTA's mainline service, the Redwood Transit System (RTS), operates between the cities of Scotia and Trinidad from Monday through Saturday. Headways range from 30 minutes in the heaviest traveled route sectors (between Humboldt State University and College of the Redwoods) to two hours. Destinations served include Scotia, Rio Dell, Fortuna, Fernbridge, Loleta, College of the Redwoods, Fields Landing, King Salmon, Eureka, Arcata, Humboldt State University, McKinleyville, Arcata-Eureka Airport, Westhaven, and Trinidad. The Willow Creek Extension operates Monday through Friday and connects from the Arcata Transit Center to the community of Willow Creek, including stops at Valley West Boulevard and McKinleyville High School. The Southern Humboldt Intercity City service provides limited service during peak travel times in the morning and afternoon, connecting Garberville and Eureka with stops including Brice/land/Redway Drive, Phillipsville, Miranda, Myers Flat, Weott, Fortuna, and College of the Redwoods. The Southern Humboldt Local Transit System serves areas between Garberville and Weott providing deviated fixed route service. A systemwide map is presented in Figure I-1.

**Figure I-1
HTA Redwood Transit System Map**



Garberville/Redway



Source: HTA

Service Span (including schedules)

Hours of operation for the mainline RTS range between 6:00 a.m. and 11:00 p.m. Monday through Friday and between 8:30 a.m. to 7:30 p.m. on Saturdays. Other HTA transit services operate at lesser times within the mainline hours. RTS does not operate on Sunday and the following major holidays: New Year's Day, Independence Day, Thanksgiving and Christmas. Saturday service schedules operate on other major holidays. The weekday northbound and southbound schedules are presented in Figures I-2 and I-3 below:

Figure I-2
HTA Redwood Transit System
Weekday Northbound Trips

	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	61	63	
Trinidad Park & Ride			8:55					10:50									3:18				5:01					7:10						
Westhaven P.O.			8:51					10:45									3:14				4:57					7:06						
Moonstone Beach			8:49					10:44									3:12				4:55					7:04						
Clam Beach Inn			8:44					10:40									3:08				4:51					7:00						
Grange Road			8:43					10:38									3:06				4:49					6:58						
Airport Terminal		7:48	8:40		9:28			10:35	11:01			12:41		1:48			3:03	3:22			4:46		5:29		6:55		7:27		8:51			
Central & Murray		7:44	8:36		9:24			10:31	10:57			12:37		1:44			2:59	3:18			4:42		5:25		6:51		7:23		8:47			
McKinleyville High		7:42	8:34		9:22			10:29	10:55			12:35		1:42			2:57	3:16			4:40		5:24		6:49		7:21		8:45	10:10	10:51	
Railroad Avenue & Central			8:32		9:20			10:27	10:53			12:33		1:40			2:55	3:14			4:38		5:22		6:47		7:19		8:43	10:08	10:49	
McKinleyville Shops			8:29		9:17			10:24	10:51			12:30		1:37			2:52	3:11			4:35		5:19		6:44		7:16		8:40	10:07	10:48	
School Road			8:27		9:15			10:22	10:49			12:28		1:35			2:50	3:09			4:33		5:17		6:42		7:14		8:38	10:05	10:46	
Bella Vista Avenue			8:25		9:13			10:20	10:47			12:26		1:33			2:48	3:07			4:31		5:16		6:40		7:12		8:36	10:03	10:44	
Valley East			8:21					10:16				12:22					2:44				4:27				6:36				8:32	9:59	10:40	
Valley West			8:19					10:13				12:19	12:49		1:57	2:28	2:41				4:24	4:49			6:33				8:31	9:58	10:39	
Humboldt State Library	7:02	7:34	8:13	8:51	9:07		9:47	10:07	10:40			11:35	12:13	12:42	1:26	1:51	2:22	2:35	3:00		3:53	4:18	4:43	5:09	5:59	6:27		7:05		8:25	9:52	10:33
14th & B Streets/Arcata	7:00	7:32	8:11	8:48	9:04		9:45	10:05	10:36			11:33	12:11	12:41	1:24	1:49	2:20	2:33	2:58		3:50	4:14	4:41	5:07	5:57	6:24		7:03		8:23	9:50	10:31
Arcata Transit Center	6:57	7:29	8:09	8:46	9:01		9:42	10:02	10:33			11:30	12:08	12:38	1:21	1:46	2:16	2:30	2:55		3:48	4:11	4:38	5:04	5:54	6:21		7:00		8:20	9:47	10:28
G & 5th / Arcata	6:55	7:27	8:06	8:44	8:59		9:40	10:00	10:31			11:28	12:06	12:36	1:19	1:44	2:14	2:28	2:53		3:47	4:07	4:36	5:01	5:51	6:19		6:58		8:18	9:45	10:26
Manila Co. Center			7:57									11:57									3:57				6:08				8:09			
5th & U Streets	6:46	7:17		8:34	8:49		9:30	9:50	10:21			11:16		12:26	1:09	1:34	2:04	2:18	2:43		3:37		4:26	4:51	5:41			6:49		9:35	10:16	
5th & O Streets	6:45	7:15	7:49	8:32	8:47		9:28	9:48	10:19			11:16	11:48	12:24	1:07	1:32	2:03	2:15	2:41		3:35	3:48	4:24	4:49	5:39	5:58		6:47		8:00	9:33	10:14
5th & K Streets	6:44	7:14	7:47	8:31	8:46		9:27	9:47	10:18			11:15	11:47	12:23	1:06	1:31	2:02	2:14	2:40		3:34	3:47	4:23	4:48	5:38	5:57		6:46		7:59	9:32	10:13
5th & H Streets/ETS	6:43	7:13	7:46	8:30	8:45	8:43	9:26	9:46	10:17	10:48	11:14	11:45	12:22	1:05	1:30	2:01	2:13	2:39	3:16	3:33	3:46	4:22	4:47	5:37	5:56		6:45	7:33	7:58	9:31	10:12	
5th & D Streets	6:42	7:12	7:45	8:29	8:44	8:42	9:25	9:45	10:16	10:47	11:13	11:45	12:21	1:04	1:29	2:00	2:12	2:38	3:15	3:32	3:45	4:21	4:46	5:36	5:55		6:44	7:32	7:57	9:30	10:11	
Broadway & Del Norte	6:38	7:07	7:40	8:24	8:39	8:38	9:20	9:40	10:11	10:43	11:08	11:40	12:16	12:58	1:24	1:55	2:07	2:33	3:11	3:27	3:40	4:16	4:41	5:31	5:50		6:39	7:28	7:54	9:26	10:08	
Bayshore Mall	6:34	7:02	7:35	8:19	8:34	8:33	9:15	9:34	10:06	10:38	11:03	11:34	12:11	12:53	1:19	1:50	2:02	2:28	3:06	3:22	3:35	4:11	4:36	5:26	5:45	6:33	6:54	7:23	7:50	9:21	10:04	
Broadway & McCullens	6:30	6:59	7:31	8:15	8:30		9:11	9:30	10:02			10:59	11:28	12:07	12:48	1:15	1:45	1:58	2:24		3:18	3:30	4:07	4:31	5:22	5:41		6:30		7:47	9:18	10:01
Spruce Point / Humboldt Hill	6:26		7:27					9:25				10:54					1:54				3:26				5:36				7:43	9:14	9:57	
King Salmon Ave	6:24		7:25					9:23				10:52					1:52				3:24				5:34				7:41	9:12	9:55	
Fields Landing	6:23	6:54	7:24	8:10	8:24		9:06	9:22	9:57			10:51		12:02	12:43	1:10	1:51	2:19			3:23	4:02	4:26	5:17	5:33		6:25		7:40	9:11	9:54	
College of the Redwoods	6:19	6:50	7:20	8:06	8:19	8:21	9:02	9:18	9:53	10:26	10:47	11:20	11:58	12:39	1:06	1:37	1:47	2:15	2:54	3:10	3:19	3:58	4:22	5:13	5:29	6:21	6:21	7:11	7:36	9:07	9:50	
Scenic & Lolo Drive	6:09				8:08				9:42					12:28														6:10				
Fernbridge	6:04				8:03				9:37					12:23														6:05				
Palmer Boulevard	6:01				8:00				9:34					12:20														6:02				
Fortuna - 11th & N St	5:57	6:35	7:03		7:56	8:06		9:01	9:30	10:11	10:32	11:03	11:41	12:16			1:30		2:39		3:01		3:58		5:12	6:06	5:58	6:56	7:22		9:32	
Fortuna Blvd. & Smith	5:55	6:32	7:00		7:53	8:03		8:58	9:27	10:08	10:29	11:00	11:38	12:13			1:27		2:36		2:57		3:55		5:09	6:03	5:55	6:53	7:19		9:29	
Redwood Village Shops	5:53	6:30	6:58		7:51	8:01		8:56	9:25	10:06	10:27	10:58	11:36	12:11			1:25		2:34		2:55		3:53		5:07	6:01	5:53	6:51	7:17		9:27	
Redwood Memorial	5:52	6:29	6:57		7:50	8:00		8:55	9:24	10:05	10:26	10:57	11:35	12:10			1:24		2:33		2:54		3:52		5:06	6:00	5:52	6:50	7:16		9:26	
Rohnerville Rd. & School	5:48		6:53		7:46			8:51				10:53									2:50				5:02				7:12	9:22		
School St. & Ronald Ave	5:47		6:52		7:45			8:50				10:52									2:49				5:01				7:11	9:21		
Fortuna Overlook	5:44	6:23	6:47		7:40			8:45	9:18		10:20	10:47	11:29	12:04			1:18				2:44		3:45		4:56		5:46		7:06		9:16	
Center & Rigby			6:34		7:27			8:32				10:34									2:31				4:43				6:54		9:04	
Rigby & Davis			6:33		7:26			8:31				10:33									2:30				4:42				6:53		9:03	
Davis St. Off Ramp						7:49				9:54										2:22							5:49		6:39			
Rio Del City Hall			6:31		7:24			8:29				10:31									2:28					4:40				6:51		9:01
Scott/Hoby's Market			6:27		7:20			8:25				10:27									2:24				4:36				6:48		8:57	
West Off Ramp						7:31				9:36										2:04							5:31		6:21			
Myers Flat Overpass						7:25				9:30										1:58							5:25		6:15			
Miranda (Main St. & School)						7:15				9:20										1:48							5:15		6:05			
Phillipsville F.D.						7:09				9:13										1:42							5:09		5:59			
Redway / Sig. Coffee						7:00				9:04										1:33												

Source: HTA

Figure I-3
HTA Redwood Transit System
Weekday Southbound Trips

S O U T H B O U N D																																						
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58									
Trinidad Park & Ride					6:52				9:12					11:34									3:53					5:58		8:12								
Westhaven P.O.					6:56				9:16					11:38									3:57					6:02		8:16								
Moonstone Beach					6:59				9:19					11:41									4:00					6:05		8:19								
Clam Beach Inn					7:03				9:23					11:45									4:04					6:09		8:23								
Grange Road					7:06				9:26					11:48									4:07					6:12		8:26								
Airport Terminal	5:59				7:09		7:56		9:29	10:01			11:23	11:51		1:12			1:57			3:55	4:10			5:39	6:15	7:37	8:29									
Central & Murray	6:03				7:13		8:00		9:33	10:05			11:25	11:55		1:16			2:01			3:59	4:14			5:43	6:19	7:41	8:33									
McKinleyville High	6:06			7:05**	7:15		8:02		9:35	10:07			11:27	11:57		1:18			2:03			4:01	4:16			5:45	6:21	7:43	8:35									
Railroad Ave. & Central	6:07			7:07**	7:17		8:05		9:37	10:09			11:29	11:59		1:20			2:05			4:03	4:18			5:47	6:23	7:45	8:37									
McKinleyville Shops	6:10			7:10**	7:20		8:08		9:40	10:12			11:32	12:02		1:23			2:08			4:06	4:21			5:50	6:26	7:48	8:40									
School Road*	6:12			7:12**	7:22		8:10		9:43	10:14			11:36	12:04		1:25			2:10			4:09	4:23			5:52	6:28	7:50	8:43									
Bella Vista Avenue	6:14			7:14**	7:24		8:12		9:04	10:16			11:38	12:06		1:27			2:12			4:12	4:25			5:54	6:30	7:52	8:45									
Valley West*	6:19						8:17			10:22			11:42	12:11	12:58		2:04		2:17	2:56			4:30	5:05			6:35	7:57	8:51									
Valley East*	6:22						8:20			10:25			11:45	12:14	12:59		2:05		2:22	2:57			4:33	5:06			6:38	7:58	8:52									
Humboldt State Library	6:28	7:10	7:21**	7:31	8:08	8:26	8:57	9:53	10:31			11:40	11:51	12:10	1:05	1:34	2:11		2:28	3:03	4:07	4:18	4:39	5:13		6:01	6:44	8:04	8:58									
14th & B Streets - Arcata	6:30	7:12	7:29**	7:33	8:10	8:28	8:59	9:55	10:33			11:42	11:53	12:22	1:07	1:36	2:13		2:30	3:05	4:09	4:20	4:41	5:15		6:03	6:46	8:06	9:00									
Arcata Transit Center	6:33	7:16	7:29**	7:37	8:14	8:33	9:03	9:59	10:37			11:46	11:57	12:26	1:11	1:40	2:17		2:36	3:09	4:13	4:24	4:45	5:19		6:07	6:49	8:10	9:04									
H & 6th	6:35	7:18	7:31**	7:39	8:16	8:35	9:05	10:01	10:39			11:48	11:59	12:28	1:13	1:42	2:19		2:38	3:11	4:15	4:26	4:47	5:21		6:09	6:51	8:12	9:06									
Manila Co. Center	6:44						8:44							12:37								4:56					7:00											
4th & U Streets/Eureka			7:29	7:42**	7:50	8:27		9:16	10:13	10:50			12:00	12:11		1:24	1:52	2:29		2:49	3:21	4:25	4:36		5:33	6:19		8:22	9:16									
Greyhound Station	6:52	7:30	7:43**	7:52	8:28	8:52	9:17	10:15	10:52			12:02	12:13	12:45	1:26	1:54	2:31		2:52	3:23	4:26	4:37	5:04	5:38		6:20	7:08	8:23	9:17									
4th & K Streets	6:54	7:32	7:45**	7:54	8:30	8:54	9:19	10:16	10:54			12:04	12:15	12:47	1:28	1:56	2:33		2:54	3:25	4:28	4:39	5:06	5:37		6:21	7:10	8:25	9:19									
4th & H Streets/ETS	6:57	7:03	7:33	7:46**	7:57	8:31	8:57	9:20	10:19	10:57	11:28	12:07	12:18	12:50	1:30	1:58	2:34	2:53	2:57	3:26	4:29	4:40	5:08	5:39		6:23	7:12	8:26	9:20									
4th & D Streets	6:58	7:04	7:34	7:47**	7:58	8:32	8:58	9:21	10:20	10:58	11:29	12:08	12:19	12:51	1:31	1:59	2:35	2:54	2:58	3:27	4:30	4:41	5:09	5:40		6:24	7:13	8:27	9:21									
Broadway & Del Norte	7:03	7:08	7:39	7:52**	8:03	8:37	9:03	9:26	10:25	11:03	11:33	12:13	12:24	12:56	1:36	2:04	2:40	2:58	3:03	3:32	4:35	4:46	5:15	5:45		6:29	7:18	8:32	9:26									
Bayshore Mall	7:08	7:13	7:44	7:57**	8:08	8:42	9:08	9:31	10:30	11:08	11:38	12:18	12:31	1:01	1:41	2:09	2:45	3:03	3:08	3:37	4:40	4:51	5:21	5:51	6:43	7:34	8:48	9:31										
Broadway & McCullens	7:10	7:45	7:59**	8:10	8:44	9:10	9:33	10:32	11:10			12:20	12:33	1:03	1:43	2:11	2:47		3:10	3:39	4:43	4:54	5:24	5:54		6:36	7:26	8:40	9:34									
Spruce Point / Humboldt Hill					8:14				10:36			12:24				2:14						4:57	5:27				6:39		8:43	9:37								
King Salmon Ave					8:16				10:38			12:26				2:15						4:59	5:29				6:41		8:45	9:39								
Fields Landing	7:15				8:17		9:15		10:39	11:15		12:27	12:38	1:08	1:48	2:17			3:15	3:43	4:48	5:01	5:31	5:59		6:42	7:31	8:45	9:40									
College of the Redwoods*	7:20	7:54	8:07**	8:22	8:52	9:20	9:41	10:44	11:21	11:50	12:32	12:43	1:13	1:53	2:22	2:55	3:15	3:20	3:48	4:53	5:06	5:36	6:04	6:55	7:47	8:36	9:51	9:45										
Scenic & Lolo Drive					8:33		9:31		11:32					1:24					3:31				5:47				6:57											
Fernbridge					8:38		9:36		11:37					1:29					3:36				5:52				7:01											
Palmer Boulevard					8:41		9:39		11:40					1:32								5:55					7:04											
Fortuna - 11th & N Streets*	7:35	7:33			8:45		9:43	9:56	10:59	11:44	12:04		12:58	1:36		2:37		3:29	3:43			5:21	5:59	6:19	7:09	7:08	7:51		9:57									
Fortuna Blvd/Smith Lane	7:38	7:36			8:48		9:46	9:59	11:02	11:47	12:07		1:01	1:39		2:40		3:32	3:46			5:24	6:02	6:22	7:12	7:11	7:54		10:00									
Redwood Village Shops	7:40	7:38					9:48		11:04	11:49	12:09		1:03	1:41		2:42		3:34	3:48			5:26	6:04	6:24														
Redwood Memorial	7:41	7:39					9:49				12:10			1:42				3:35	3:49				6:05		7:15													
Rohnerville Rd. & School St.*	7:45						9:53							1:45				3:53																				
Compton Heights Market	7:46						9:54							1:47				3:54																				
Kragen Auto Supply					8:50			10:01	11:04	11:49			1:03			2:42						5:28		6:24			7:13	7:56		10:02								
Fortuna Overlook	7:50				8:53		9:58	10:04	11:07	11:52			1:06	1:51		2:45			3:58			5:31	6:15	6:27			7:16	7:59		10:05								
Center & Rigby	8:02						10:08															6:27					7:28											
Rigby & Davis	8:04						10:09												4:12			6:29					7:30											
Davis St. Off Ramp		7:50									12:21								3:45								7:26											
Rio Del City Hall	8:05					10:10													4:13			6:30					7:31		8:14									
Scott-Hobby's Market	8:08					10:13													4:16			6:33					7:34		8:17									
Wheeler Off Ramp	8:08										12:39											4:04					7:44											
Myers Flat Overpass	8:14										12:45											4:10					7:50											
Miranda (General Store)	8:24										12:55											4:20					8:00											
Philipsville P.O.	8:30										1:01											4:26					8:06											
Redway / Shop Smart	8:39										1:10											4:35					8:15											
Garberville	8:49																																					

Source: HTA

Fare Structure

HTA's fares are structured according to service type, passenger categories and fare media. Fares were previously structured based on a zonal system. New transit pass products are available as a result of new electronic fareboxes installed on the major fixed routes of the local transit operators. Pass products include monthly magnetic swipe passes and stored value cards good for RTS, Willow Creek, SHTS, ETS, and A&MRTS buses. Magnetic media cards in denominations \$10 and \$20 allow passengers to ride the regional transit systems for the new discounted rate. Monthly and regional transit passes can be purchased online.

Free transfers are provided between RTS buses to complete a single trip. HSU students ride the RTS fare-free as part of the JackPass program by swiping their current student identification card. Staff and faculty can buy into the JackPass program for \$60 per semester. College of the Redwoods eliminated its student ticket program due to State budget cuts. The fare structure is shown in Table I-1:

**Table I-1
HTA Transit System
RTS Fare Structure**

Fare Type	1 Ride	Multi-Ride Rate	Weekly Pass	Monthly Pass
Adult (Age 18-62)	\$2.75	\$1.75	\$15.00	\$55.00
Youth (Age 3-17)	\$2.50	\$1.50	\$13.00	\$50.00
Senior (Age 62+)	\$2.50	\$1.50	\$13.00	\$50.00
Disabled (with valid ID card)	\$2.50	\$1.50	\$13.00	\$50.00
In-town (Rides within one city, Arcata, Eureka, or Fortuna)	\$1.75			
Day Pass		\$4.50		

SHTS Fare Structure

Fare Type	1 Ride	Multi-Ride Rate	Monthly Pass
Garberville Commuter Service			
Adult (Age 18-62)	\$5.00	\$3.50	\$100.00
Youth (Age 3-17)	\$3.50	\$3.00	\$90.00
Senior (Age 62+)	\$3.50	\$3.00	\$90.00
Disabled (with valid ID card)	\$3.50	\$3.00	\$90.00
Local Southern Humboldt Service			
Adult (Age 18-62)	\$1.50	\$1.25	
Youth (Age 3-17)	\$1.10	\$0.85	
Senior (Age 62+)	\$1.10	\$0.85	
Disabled (with valid ID card)	\$1.10	\$0.85	
Deviated Fare	\$1.75		

Willow Creek Fare Structure

Fare Type	1 Ride	Multi-Ride Rate	Monthly Pass
Adult (Age 18-62)	\$4.00	\$3.50	\$75.00
Youth (Age 3-17)	\$3.50	\$2.75	\$70.00
Senior (Age 62+)	\$3.50	\$2.75	\$70.00
Disabled (with valid ID card)	\$3.50	\$2.75	\$70.00

Source: HTA

College of the Redwoods Subsidized Bus Fare Program

Humboldt Transit Authority and CR staff began meeting as far back as 1999 for the purpose of creating a subsidized bus pass program. In Spring of 2009, the CR Eureka campus began making the monthly Redwood Transit bus passes available to CR students in the Eureka area for a 50 percent discount. To qualify for the discount, students had to be enrolled in at least 6 units or more and be members of the Associated Students.

The initial budget for the district was \$75,000 for one year. Passes were purchased from HTA for full price (\$50 each) and then sold to the students with the 50% discount. The Business Office had possession of the passes, documented all exchanges and purchases related to the passes, and maintained a revolving cash fund that was utilized to purchase additional passes from the sales.

Semester	Number of Students Using CR Bus Pass	Eureka Campus Headcount	Average Unit Load	Number of Passes Sold	Average Number Passes per Student
Spring 2009	539	4,416	10.4	1,480	2.7
Fall 2009	484	4,955	13.4	1,181	2.4
Spring 2010	458	5,035	13.3	1,113	2.4

Source: College of the Redwoods

The program was able to operate for three semesters before the college was unable to continue funding the subsidized passes due to the state budget crisis. A total of \$188,700 in purchases was made with the college receiving back half after sales, for a total cost of \$94,350 for the three semesters. Currently, the Associated Students of CR is interested in creating a club to raise funds for the purpose of revitalizing the subsidized bus pass program.

Facilities

Maintenance is conducted on-site at the HTA administrative facility located at 2nd and V Streets in Eureka. The department is staffed by the Equipment and Facilities Manager, two mechanics, two technicians, a bus washer, and a cleaner. Maintenance occurs during the hours of 4:30 a.m. and 7:30 p.m., with fueling taking place through midnight. During fueling, the GFI boxes are probed for electronic mileage reading and other downloaded data. Although maintenance around the clock is possible from a financial standpoint, there is no proper supervision available to handle night work issues. The hiring of qualified mechanics that have the skill to work with large vehicles is difficult in the local market.

The maintenance facility includes three bus bays plus an extra lane if needed. There is a storage bay and a separate parts room containing vehicle spare parts that are tracked via barcodes.

Fleet Inventory

There are 12 vehicles in the transit fleet for HTA's RTS mainline services. In total, there are 19 revenue vehicles for RTS, Southern Humboldt, and Willow Creek services. Three vehicles acquired in 2007 for RTS have diesel-electric hybrid engines while the remaining vehicles have primarily diesel engines. Table I-2 shows the vehicle fleet and service type.

HTA vehicles are equipped with wheelchair lifts and tie downs, which conform to the requirements of the Americans with Disabilities Act (ADA) of 1990 requirements in regards to accessibility. Bicycle racks are available on most large buses.

Table I-2
HTA Redwood Transit System
Fleet Inventory

Year	Make & Model	Quantity	Fuel type	Service
2000	Gillig Phantom	2	Diesel	RTS
2001	Gillig Phantom	1	Diesel	RTS
2002	Freightliner	2	Diesel	Willow Creek
2002	Gillig Phantom	1	Diesel	RTS
2002	Ford Goshen	1	Diesel	SHTS
2003	Gillig Phantom	1	Diesel	RTS
2004	Gillig Phantom	2	Diesel	RTS
2007	Gillig Low Floor	3	Diesel-Electric Hybrid	RTS
2009	Chevy Aerolite	2	Diesel	SHTS
2009	Chevy Aerolite	2	Gas	SHTS
2011	Gillig Low Floor	2	Diesel	RTS
Total		19		

Source: HTA fleet inventory

Eureka Transit Service

Organization

The Eureka Transit Service (ETS) has been operating since January 1976. ETS was originally contracted to a private bus operator, and later to HTA in the mid-1980s. As a Mayor-council form of government, the five-member City Council serves as the main legislative body. The City Manager oversees the operations of City departments and services. The Finance Department currently provides oversight and management of the transit system. ETS' fixed-route system is operated under contract by HTA, while demand response service (dial-a-ride/dial-a-lift) is operated under a separate contract by City Ambulance of Eureka (CAE). A third contract is an agreement between the city and HTA for HTA to conduct day-to-day administration and reporting of the DAR/DAL program.

Services Provided

ETS operates four routes Monday through Friday and three routes on Saturdays. Routes are designated by color and cover specific areas of Eureka. Most routes originate and/or terminate at the corner of H and 3rd Streets in downtown Eureka with the exception of the Green Route. All routes run every hour on the hour. Maps of the weekday and Saturday routes are presented in Figures I-4 and I-5.

Service Area (including routes)

Gold Route: Operates Monday through Friday from 6:15 a.m. to 7:00 p.m. and Saturdays from 10:00 a.m. to 5:00 p.m. Areas of the city served include downtown Eureka, Pine Hill, Bayshore Mall and the Henderson Center.

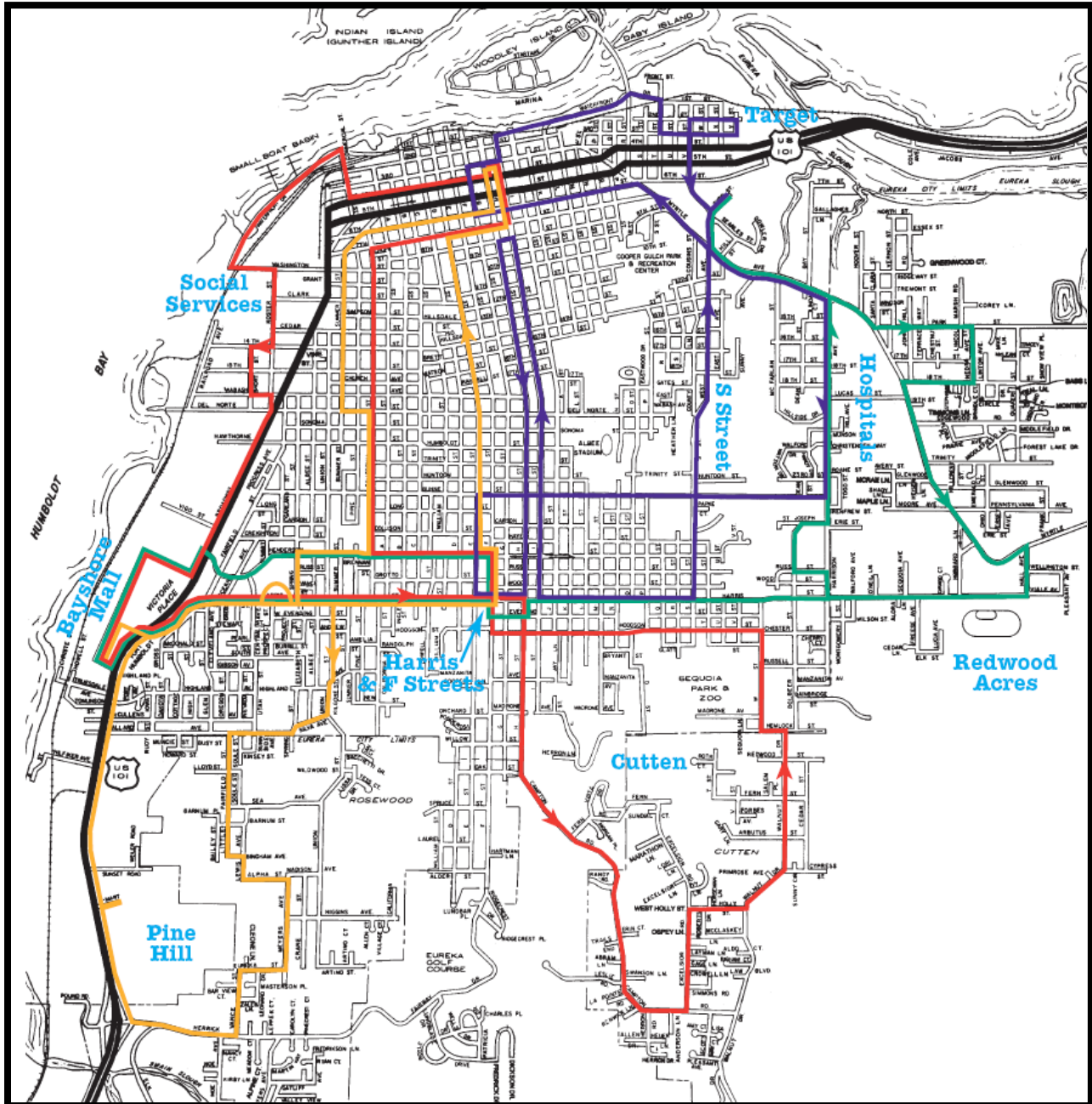
Green Route: Operates Monday through Friday from 6:37 a.m. to 6:44 p.m. Areas of the city served include downtown Eureka, Myrtletown, Silvercrest, St. Joseph and General Hospitals as well as the Bayshore Mall.

Purple Route: Operates Monday through Friday from 6:39 a.m. to 7:00 p.m. and Saturdays from 10:00 a.m. to 5:00 p.m. Areas served include downtown Eureka, the County Library, Silvercrest, General Hospital, Henderson Center and the Burre Center.

Rainbow Route: Operates Saturdays from 10:00 a.m. and 5:00 p.m. and serves a broad area of the city such as downtown, Broadway, Bayshore Mall, Henderson Center, Sequoia Park, St. Joseph and General Hospital and Myrtletown.

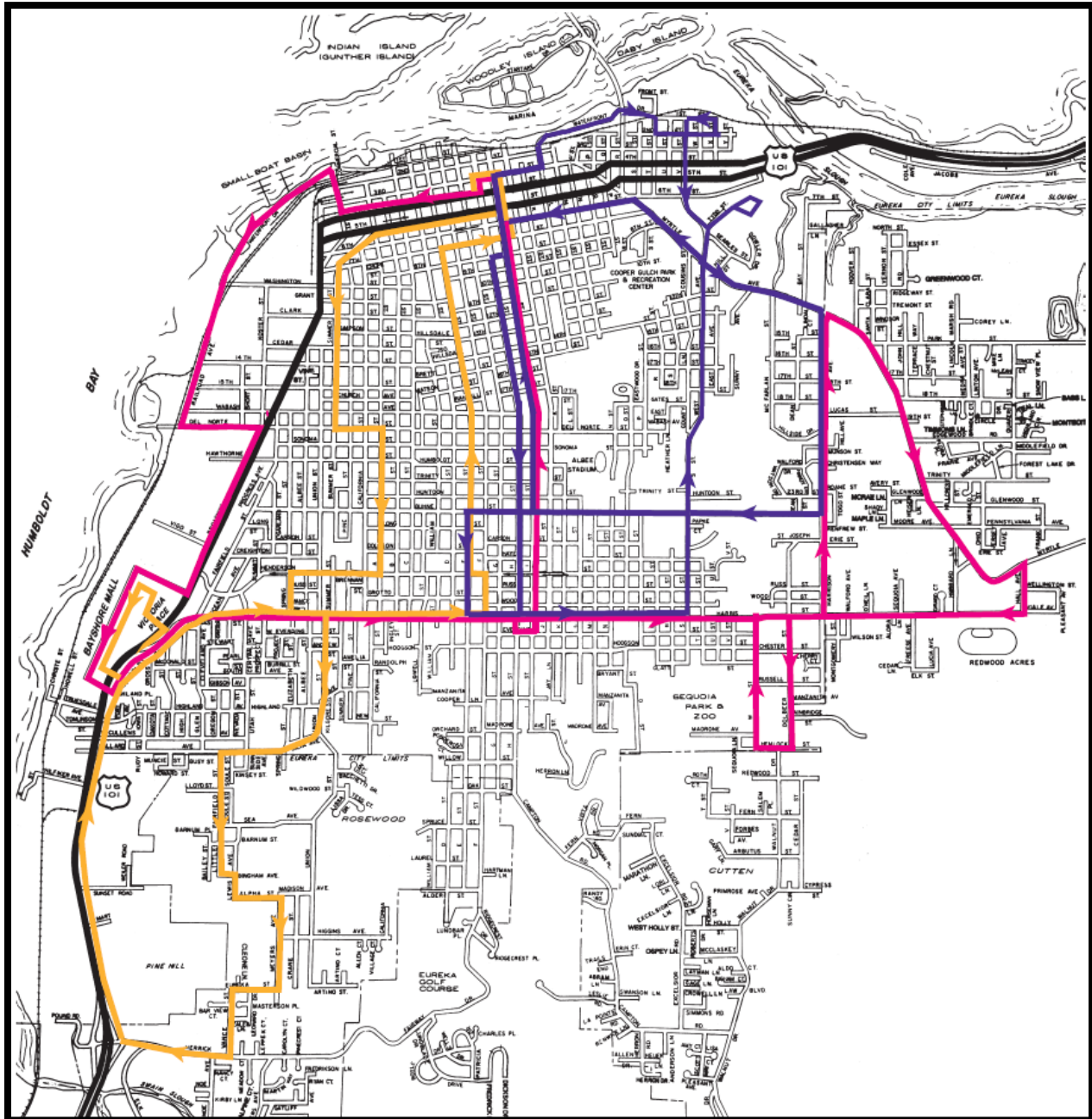
Red Route: Operates Monday through Friday from 6:28 a.m. to 7:00 p.m. and serves downtown Eureka, Broadway, Bayshore Mall, Henderson Center, Cutten and Sequoia Park.

Figure I-4
ETS System Map – Weekday Routes



Source: ETS

**Figure I-5
ETS System Map – Saturday Routes**



Source: ETS

Service Span (including schedules)

Hours of operation range between 6:00 a.m. and 7:00 p.m. Monday through Friday and between 10:00 a.m. and 5:00 p.m. on Saturdays. ETS does not operate on Sunday and the following major holidays: New Year's Day, Independence Day, Thanksgiving and Christmas. Saturday service schedules operate on other major holidays. Schedules for the weekday and Saturday services are presented in Figures I-6 and I-7:

Figure I-6
ETS Weekday Route Schedules

RED		GREEN		GOLD		PURPLE	
H & 3rd	:00	Harris & F	52	H & 3rd	:00	H & 3rd	59
4th & D	:01	Harris & K	52	6th & G	:02	Adorni Center	:00
Wharfinger Bldg.	:02	Harris & Q	53	6th & C	:03	3rd & T	:03
Koster & Washington	:04	Harris & U	54	Summer & 7th	:04	3rd & V	:04
Costco	:05	Harrison & Harris	56	Summer & Clark	:05	2nd & Y / Target	:04
Broadway & Del Norte	:06	St. Joseph's Hospital	58	Summer & 15th	:06	2nd & V	:05
Forest Service	:08	General Hospital	59	Summer & Wabash	:07	Silvercrest	:09
Bayshore Mall	14	Harris & Buhne	:01	Del Norte & Ca.(Sr. Center)	:08	Myrtle & Sunny	11
Harris & Nevada	16	Harrison & 18th	:02	California & Buhne	:09	Myrtle & Dean	12
Harris & Elizabeth	16	Silvercrest	:09	California & Dollison	:09	Harrison & 18th	13
Harris & Summer	17	Myrtle & Sunny	10	Henderson & Summer	10	General Hospital	15
Harris & Lowell	17	Myrtle & Dean	11	Spring & Harris (Winco)	12	Buhne & Harrison	16
Harris & F	18	Park & Myrtle	12	Union & West Everding	13	Buhne & S	17
Break		Lafayette School	13	Union & Highland	13	Buhne & N	18
Leave Harris & F	27	Park & Nedra	14	Union & Silva	14	Buhne & J	19
H & Manzanita	28	Nedra & 18th	14	Adult Ed School	15	Buhne & F	20
H & Oak	29	18th & Myrtle	15	Little Fairfield & Allard	15	E & Dollison	21
Moose Lodge	31	Myrtle & Glenwood	16	Little Fairfield & Sea	16	Harris & F	24
Campton & Leslie	31	Myrtle town Market	16	Bingen & Lewis	16	Break	
Campton & Herron	32	Myrtle & Hall	17	Alpha & Myers	19	Leave Harris & F	32
Excelsior & Campton	32	Hall & Viale	18	Eureka & Leonard	20	I & Huntoon	33
Excelsior & Holly	33	Granada	19	Vance & Herrick	21	I & Del Norte	34
Holly & Walnut	33	Harris & U	20	Herrick & Elk River Rd.	22	I & 15th	35
Walnut & Cypress	34	Harris & P	21	K Mart	24	I & 12th	35
Walnut & Fern	35	Harris & K	22	Broadway & McCullens	26	H & 9th	37
Walnut & Redwood	35	F & Harris	26	Bayshore Mall	31	H & 12th	37
Sequoia Park	36	Leave F & Harris	28	Eureka Mall	35	H & 15th	38
W & Chester	36	Henderson & Lowell	29	Safeway (On Central)	36	H & Del Norte	38
Hodgson & T	37	Henderson & A	30	Harris & Elizabeth	37	H & Huntoon	39
Hodgson & Q	38	Henderson & Summer	30	Harris & Summer	38	H & Russ	39
Hodgson & J	39	Henderson & Spring	31	Harris & Lowell	38	Harris & F	44
F & Harris	45	Henderson & Central	31	F & Harris	40	Harris & K	44
Henderson & Lowell	46	Forest Service	34	Break		Harris & Q	45
Henderson & A	47	Bayshore Mall	37	Leave F & Harris	48	S & Wood	46
California & Long	48	Harris & Nevada	39	E & Dollison	49	S & Carson	46
Ca. & Del Norte(Sr. Center)	49	Harris & Elizabeth	40	E & Huntoon	50	Zane	47
California & 15th	50	Harris & Summer	41	E & Del Norte	51	West & 17th	48
California & Simpson	51	Harris & Lowell	41	E & 15th	52	West & 13th	48
California & 7th	52	Harris & F	44	E & Clark	53	Burre Center	49
7th & C	52			E & 9th	53	6th & O	51
H & 3rd	59			H & 3rd	59	6th & L	52
						H & 3rd	59
		Transit Pass Cards					

Source: ETS

**Figure I-7
ETS Weekend Route Schedules**

RAINBOW		GOLD		PURPLE	
H & 3 rd	:00	H & 3 rd	:00	H & 3 rd	:00
4 th & D	:02	6 th & G	:01	Adorni Center	:01
Wharfinger Bldg.	:03	6 th & C	:02	3 rd & T	:02
Broadway & Del Norte	:06	Summer & 7 th	:03	3 rd & V	:03
Forest Service	:08	Summer & Clark	:04	Target	:04
Bayshore Mall	:14	Summer & 15 th	:05	2 nd & V	:05
Harris & Nevada	:18	Summer & Wabash	:06	Silvercrest	:09
Harris & Elizabeth	:19	Del Norte & Calif. (Sr. Ctr)	:07	Myrtle & Sunny	:12
Harris & Summer	:20	Calif. & Buhne	:08	Myrtle & Dean	:13
Harris & Lowell	:21	Calif. & Dollison	:08	Harrison & 18 th	:14
Harris & F	:22	Henderson & Summer	:09	General Hospital	:15
Harris & K	:23	Spring & Harris (Winco)	:10	Buhne & Harrison	:16
Harris & Q	:24	Union & West Everding	:11	Buhne & S	:17
Harris & U	:25	Union & Highland	:11	Buhne & N	:18
Chester & Dolbeer	:26	Union & Silva	:12	Buhne & J	:19
Hemlock & Walnut	:27	Adult Ed School	:13	Buhne & F	:20
Sequoia Park	:28	Little Fairfield & Allard	:14	E & Dollison	:21
W & Chester (Zoo)	:29	Little Fairfield & Sea	:15	Harris & F	:24
Harrison & Harris	:30	Bingen & Lewis	:16	Break	
Harrison & Erie	:31	Alpha & Myers	:17	Harris & F	:32
General Hospital	:33	Eureka & Leonard	:18	I & Huntoon	:33
Harrison & 18 th	:34	Vance & Herrick	:19	I & Del Norte	:34
Myrtletown Shops	:35	Herrick & Elk River Rd.	:20	I & 15 th	:35
Myrtle & 18 th	:37	K Mart	:22	I & 12 th	:35
Myrtletown Market	:37	Broadway & McCullens	:24	H & 9 th	:37
Myrtle & Hall	:38	Bayshore Mall	:31	H & 12 th	:37
Hall & Viale	:39	Eureka Mall	:35	H & 15 th	:38
Harris & Granada	:40	Safeway (on Central Ave)	:36	H & Del Norte	:38
Harris & U	:41	Harris & Elizabeth	:37	H & Russ	:39
Harris & P	:42	Harris & Summer	:38	Harris & F	:44
Harris & K	:43	Harris & Lowell	:39	Harris & K	:44
Harris & F	:44	Harris & F	:41	Harris & Q	:45
Break		Break		S & Wood	:46
Harris & F	:52	Harris & F	:49	S & Carson	:46
I & Huntoon	:54	E & Dollison	:50	Zane	:47
I & Del Norte	:55	E & Huntoon	:51	West Ave. & 17 th	:48
I & 15 th	:56	E & Del Norte	:52	West Ave. & 13 th	:48
I & 12 th	:56	E & 15 th	:53	Burre Center	:49
3 rd & H	:59	E & Clark	:53	6 th & O	:51
		E & 9 th	:55	6 th & L	:52
		3 rd & H	:59	3 rd & H	:59

Source: ETS

Fare Structure

ETS' fares are structured according to fare type and media. Free transfers are provided between ETS buses to complete a single trip. Humboldt State University (HSU) students ride the ETS fare-free as part of the JackPass program. The fare structure is shown in Table I-3:

Table I-3
ETS Fare Structure

Fare Type	1 Ride	Multi-Ride Rate	Day Pass	Monthly Pass
Adult (Age 18-62)	\$1.40	\$1.10	\$3.20	\$43.00
Youth (Age 3-17)	\$1.10	\$0.80	\$2.70	\$38.00
Senior (Age 62+)	\$1.10	\$0.80	\$2.70	\$38.00
Disabled (with valid ID card)	\$1.10	\$0.80	\$2.70	\$38.00

Source: ETS

On July 1, 2008 the fare was raised to the current price of \$1.40 per one-way trip. The increase was from \$1.20 that was last imposed in August 2005.

Facilities

As part of the agreement with HTA, maintenance of the fleet is conducted at HTA's administrative facility in Eureka utilizing the same maintenance staff. Vehicle spare parts are tracked via barcodes that feed into the fleet maintenance software provided by Ron Turley and Associates which separates the maintenance labor and costs by bus and department (each transit system).

Fleet Inventory

There are seven active vehicles in the ETS fleet. Two vehicles acquired in 2007 have diesel-electric hybrid engines and the remaining vehicles have diesel engines. Table I-4 summarizes the vehicle fleet.

Table I-4
ETS Fleet Inventory

Year	Make & Model	Quantity	Fuel Type
2002	Gillig Phantom	1	Diesel
2003	Gillig Phantom	1	Diesel
2007	Gillig Low Floor	2	Diesel-Electric Hybrid
2009	Gillig Low Floor	3	Diesel
Total		7	

Source: HTA Vehicle Inventory

All ETS vehicles are equipped with wheelchair lifts and tie downs, which conforms to the requirements of the Americans with Disabilities Act (ADA) of 1990 requirements in regards to accessibility. The city also provides three cutaway vehicles through a lease agreement to the contractor (CAE) for the DAR/L service, and which are maintained by CAE.

Arcata & Mad River Transit System

Organization

The A&MRTS was established by the City of Arcata in 1975 as a means of providing alternative transportation to serve HSU students, seniors, the disabled and other residents lacking access to an automobile. As a Mayor-council form of government, the five-member City Council serves as the main legislative body. The City Manager oversees the operations of City departments and services. The A&MRTS is administered by the Public Transportation Superintendent within the Public Works Department.

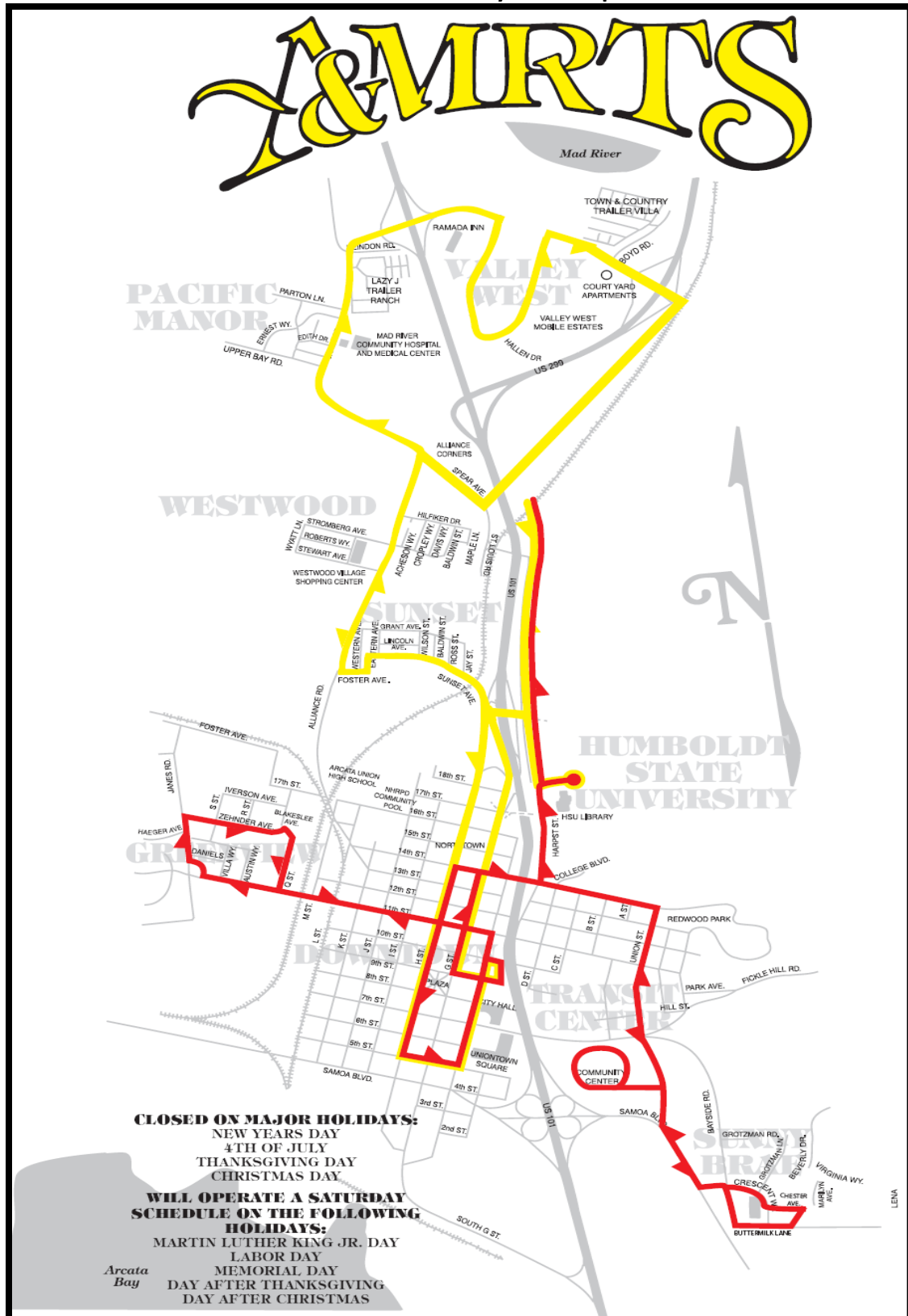
Services Provided

The transit system operates on a fixed-route basis. The system is comprised of three color coded routes that originate from and terminate at the Arcata Transit Center on hourly headways. Two routes operate on weekdays, and one on Saturdays. The Arcata Transit Center, located at 925 E Street, serves as the principal hub for the A&MRTS as well as for other local and inter-city bus services.

Service Area (including routes)

Figure I-8 features a map of the two weekday routes operated by A&MRTS.

Figure I-8
A&MRTS Transit System Map



Source: A&MRTS

Service Span (including schedules)

The Gold and Red Routes operate on weekdays between the hours of 7:05 a.m. and 10:00 p.m. The Orange Route operates Saturdays between the hours of 7:05 a.m. and 7:05 p.m. The Gold Route serves areas in the northern half of Arcata from downtown including HSU, Pacific Manor, Sunset, Valley West and Westwood. The Red Route serves areas in the southern half of town, including downtown, HSU, Grandview and Sunny Brae. The Orange Route encompasses the major timepoints of the two weekday routes.

During the fall and spring semesters at HSU, the last outbound bus leaves the Transit Center at 9:05 p.m. weekdays and 6:05 p.m. Saturdays. The first outbound bus leaves the Transit Center at 7:05 a.m. weekdays and Saturdays. During the summer and winter semesters, the last outbound bus leaves the Transit Center at 6:05 p.m. weekdays, whereas the first outbound bus leaves at 7:05 a.m. weekdays and Saturdays.

The A&MRTS does not operate on Sunday and major holidays such as New Years Day, Martin Luther King Day, 4th of July, Labor Day, Thanksgiving Day & day after and Christmas Day & day after. Service schedules for the Gold, Red and Oranges Routes are presented in Table I-5:

**Table I-5
A&MRTS System Schedule**

Gold Route (Weekdays)	Time after the hour	Red Route (Weekdays)	Time after the hour	Orange Route (Saturdays)	Time after the hour
Transit Center	:05	Transit Center	:05	Transit Center	:05
G at 10 th	:06	G & 10 th	:06	Union & 7 th	:06
G at 12 th	:07	Pythian Castle (Westbound)	:07	Parkway Apts.	:07
G at 14 th	:08	11 th & K (Westbound)	:08	Sunny Brae Centre (Eastbound)	:09
G at 16 th	:09	11 th & Q (Westbound)	:09	Beverly Drive/Buttermilk Lane	:11
G at 18 th	:10	Greenview Market	:10	Chester Avenue & Beverly Drive	:11
HSU Library Circle	:11	Zehndner & S	:11	Crescent Way	:12
L.K. Wood & California	:12	Zehndner & Q	:12	Greenview Market	:18
L.K. Wood & Ridge Road	:13	11 th & Q (Eastbound)	:13	Zehndner & S	:19
L.K. Wood & Diamond	:14	11 th & K (Eastbound)	:14	Zehndner & Q	:20
L.K. Wood & Redwood	:15	H & 11 th	:15	11 th & Q (Eastbound)	:21
Camp Curtis Apts.	:16	H & 9 th (Plaza)	:16	11 th & K (Eastbound)	:22
Sunset Avenue & Baldwin	:17	H & 6 th	:17	H & 11 th	:23
Sunset Run	:17	Uniontown Shopping	:18	H & 9 th (Plaza)	:24

Gold Route (Weekdays)	Time after the hour	Red Route (Weekdays)	Time after the hour	Orange Route (Saturdays)	Time after the hour
		Center			
Westwood	:22	City Hall (7 th & F)	:19	H & 6 th	:25
Alliance & Hilfiker Drive	:23	Transit Center	:20	Uniontown Shopping Center	:26
Alliance & Spear Avenue	:24	G & 10 th	:21	City Hall (7 th & F)	:27
Mad River Hospital	:26	G & 12 th	:22	Transit Center	:28
Lazy J. Trailer Ranch	:27	HSU Library Circle	:24	G & 10 th	:29
McDonalds (Valleywest)	:31	L.K. Wood & California	:27	G & 12 th	:30
Valleywest Blvd. (South corner)	:31	L.K. Wood & Ridge Road	:28	G & 14 th	:31
Valleyeast	:32	L.K. Wood & Diamond	:29	G & 16 th	:32
Boyd Road & Guintoli	:35	L.K. Wood & Redwood	:30	G & 18 th	:33
Renner Station	:37	Camp Curtis Apts.	:31	HSU Library Circle	:34
West End & Spear Avenue	:38	HSU Library Circle	:34	Town & Country	:37
Spear Avenue & Alliance Road	:39	14 th & B	:36	McDonalds (Valleywest)	:38
Alliance & 27 th	:41	14 th & Union (Eastbound)	:37	Valleywest Blvd. (South corner)	:39
Alliance & Stromberg (Westwood Market)	:42	Union & 11 th	:38	Valleyeast	:40
Alliance & Foster Avenue (Eastbound)	:43	Union & 7 th	:39	Lazy J. Trailer Ranch	:41
Sunset Avenue & Baldwin	:44	Parkway Apartments	:42	Mad River Hospital	:42
HSU Library Circle	:47	Sunny Brae Professional Building	:44	Spear Avenue & Alliance Road	:44
H & 18 th	:49	Sunny Brae Centre (Eastbound)	:45	Alliance & Hilfiker Drive	:45
H & 16 th	:50	Beverly Drive/Buttermilk Lane	:46	Westwood Market (Alliance & Stromberg)	:46
H & 14 th	:51	Chester Avenue/Beverly Drive	:47	Alliance & Foster Avenue	:47
H & 11 th	:52	Crescent Way	:48	Sunset Avenue & Baldwin	:48
H & 9 th (Plaza)	:53	Union Street Charter School	:49	HSU Library Circle	:54
H & 6 th	:54	14 th & Union (Westbound)	:50	14 th & B	:56

Gold Route (Weekdays)	Time after the hour	Red Route (Weekdays)	Time after the hour	Orange Route (Saturdays)	Time after the hour
Uniontown Shopping Center	:55	14 th & B (Westbound)	:50	Transit Center	:58
City Hall (7 th & F)	:56	HSU Library Circle	:53		
Transit Center	:57	14 th & B (Westbound) Transit Center	:55 :57		

Source: A&MRTS

Fare Structure

A&MRTS' fares are structured accordingly to fare type and media. Free transfers are provided between A&MRTS buses to complete a single trip. A fare increase became effective July 1, 2010. HSU students ride the A&MRTS fare-free as part of the JackPass program. The fare structure is shown in Table I-6:

**Table I-6
A&MRTS Fare Structure**

Fare Type	1 Ride	Multi-Ride Rate	Day Pass	Monthly Pass
Adult (Age 18-62)	\$1.40	\$1.00	\$2.00	\$30.00
Youth (Age 3-17)	\$1.00	\$0.75	\$1.50	\$25.00
Senior (Age 62+)	\$1.00	\$0.75	\$1.50	\$25.00
Disabled (with valid ID card)	\$1.00	\$0.75	\$1.50	\$25.00

Source: A&MRTS

Facilities

The Arcata Transit Center serves as a major regional hub for local, regional and intercity travel along the north coast. Many services begin, end and traverse their routes through the transit center. In addition to countywide services that make stops at the transit center, Redwood Coast Transit from Del Norte County operates a route between Smith River, Crescent City and Arcata for connections to Amtrak bus, Greyhound and Humboldt County transit.

Maintenance of the fleet is contracted to Humboldt Transit Authority and is conducted at its administrative facility located at 2nd and V Streets in Eureka.

Fleet Inventory

There are six fixed route vehicles in the A&MRTS fleet. Four vehicles are diesel powered, and the remaining two are gas powered. Table I-7 summarizes the vehicle fleet.

**Table I-7
A&MRTS Fleet Inventory**

Year	Make & Model	Quantity	Fuel Type	Seating
2002	Gillig Phantom	2	Diesel	35
2009	Gillig Low Floor	2	Diesel	32
2010	Ford Glaval	2	Gas	24
Total		6		

Source: HTA Vehicle Inventory

All A&MRTS vehicles are equipped with wheelchair lifts and tie downs, which conform to the requirements of the Americans with Disabilities Act (ADA) of 1990 requirements in regards to accessibility.

Fortuna Senior Bus Transit

Organization

As a Council-Manager form of government, the five-member City Council serves as the main legislative body. Each member serves a four-year term and elections are held every two years. The Mayor and Mayor Pro Tem are selected by the Council, who hold those offices for a two year term. The City Manager oversees the operations of City departments and services. Fortuna Senior Transit is administered and operated by the City's Parks and Recreation Department, with the Department's Director serving as the Transit Manager.

Services Provided

The City of Fortuna provides demand responsive transportation within its City limits to seniors aged 50 and older or disabled persons who are unable to drive. Persons under the age of 50 are eligible to utilize the service with a physician's note.

Service Area

Fortuna Senior Transit is operated using two zones as general guidance, encompassing a north zone and a south zone. Both zones have about equal ridership bases and are developed for service efficiency and effectiveness reasons.

Service Span

The service operates two buses Monday through Friday between the hours of 8:30 a.m. and 4:00 p.m. Saturday service is operated with one bus between the hours of 9:00 a.m. and 3:30 p.m. Due to budget limitations, the Saturday service was temporarily suspended for FYs 2010 and 2011. The service does not operate on Sunday and major holidays.

Riders can make same-day arrangements or call a day prior for shopping trips, social visits, banking and bill paying. For non-medical trips such as hair appointments, work, physical therapy, and senior lunch programs, rider can make arrangements one week in advance. For doctor appointments, reservations may be called in anytime during the previous calendar month of the

scheduled appointment. Beginning at 8:00 a.m. and through 5:00 p.m., riders can contact the dispatcher to make travel arrangements, which include up to three destinations per day. The dispatcher generally allows 30 minutes travel time to maintain on-time arrivals, while the driver pick ups and delivers other scheduled riders en route.

Fare Structure

A fare of \$1.25 is charged per trip. For multiple trips, a punch card is available for purchase for \$20.00 that allows for 20 trips at a reduced price. Punch cards are available for purchase from the driver or from the Parks and Recreation office at Rohner Park. Free trips are provided to Parks and Recreation sponsored programs and events.

Facilities

Transit vehicle maintenance is conducted at the City's corporation yard located at 190 Dinsmore Drive. Vehicles undergo maintenance inspections every 90-days.

Fleet Inventory

Fortuna utilizes three Ford Aerotech cutaway buses in its transit bus program. The buses were purchased in 2001, 2003 and 2006, with the 2001 bus serving as a spare vehicle. Each bus is a 14 passenger vehicle and can accommodate up to two wheelchairs per trip which conforms to the requirements of the Americans with Disabilities Act (ADA) of 1990 in regards to accessibility.

The City has submitted a federal transit grant through the FTA 5310 program to acquire a smaller 8-passenger bus with accommodations for two wheelchairs. The smaller vehicle responds to the ridership trend and potential savings on capital cost, fuel and maintenance expenses.

Blue Lake Rancheria Transit System

Organization

The transit system is operated by the Blue Lake Rancheria, a federally recognized tribe in Humboldt County. The Rancheria is located near the City of Blue Lake along State Highway 299. The service is offered in partnership with the City of Blue Lake which provides partial funding through TDA.

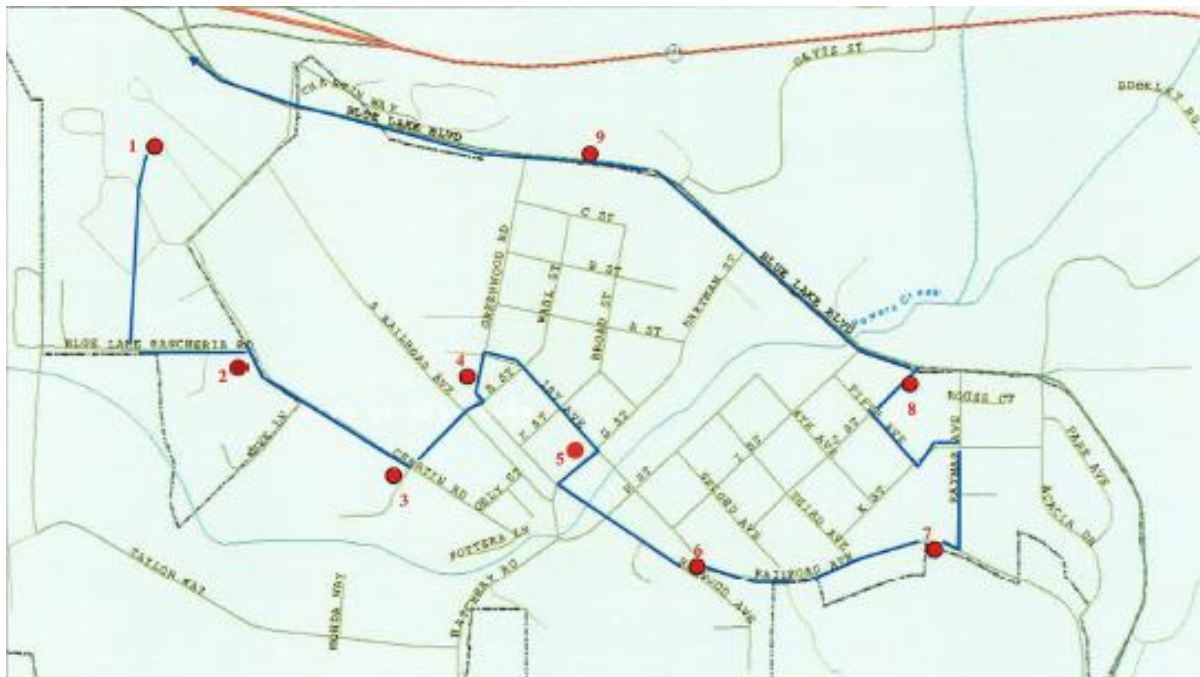
Services Provided

The Blue Lake Rancheria funds and operates a transit system to serve riders who are able to connect with Arcata Transit, Humboldt Transit and Greyhound at the Arcata Intermodal Facility. BLRTS provides affordable transportation for students attending Humboldt State University and Arcata High School for regular class hours and after-school activities. BLRTS also partners with Horizon Resources and provides transportation services so these clients are able to reliably ride the buses from city to city as needed.

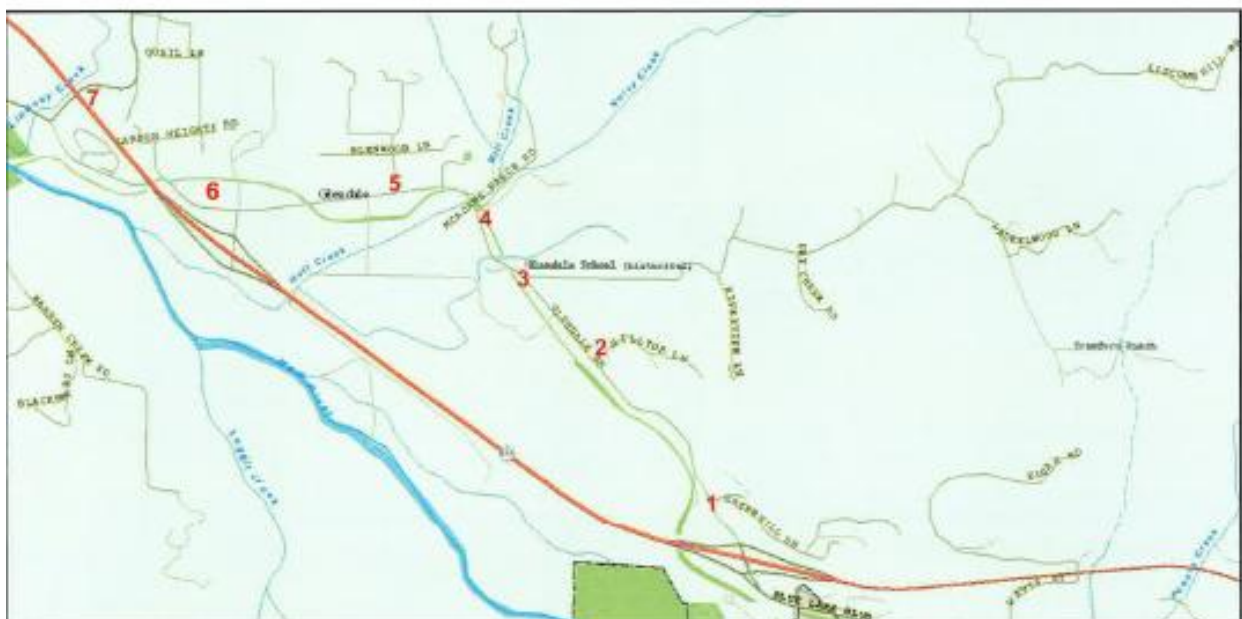
Service Area

BLRTS serves the communities of Blue Lake, Glendale and Arcata. Figure I-9 shows a map of the service area. Riders in Glendale can call for a pickup and the bus will stop at designated on-call locations. Flag stops are permissible if the driver deems the area safe to pull over.

Figure I-9
BLRTS Transit System Map



ON CALL STOPS ON GLENDALE DRIVE



Source: Blue Lake Rancheria

Service Span

The service operates Monday through Friday between the hours of 7:00 a.m. and 6:00 p.m. The bus is off-duty from 10:00 a.m. to 1:00 p.m.

Fare Structure

A regular fare of \$1.65 is charged per trip. Seniors/disabled are charged \$1.25 per trip.

Facilities

The service is administered by the Tribe's Transportation Department located on tribal land. In addition to managing the transit system, the department coordinates with the Tribe's Meals Programs to deliver meals to homebound seniors in Blue Lake and Fieldbrook.

Fleet Inventory

The Rancheria utilizes one 2005 Chevrolet Kodiak cutaway bus with accommodations for 27 passengers. There is no formal spare vehicle but there is access to a Tribal loaner vehicle which is 9- passenger Ford 350 van (not a dedicated transit vehicle).

Klamath-Trinity Non-Emergency Transportation

Organization

K/T NeT is a 501(c)3 non-profit organization. It is managed by an Executive Director who is under the supervision of a 6-member Board of Directors. There is a part time office secretary who is under the supervision of the Executive Director.

Services Provided

K/T NeT provides fixed route bus service and can not provide door to door service. The transit system enables connections to two other bus services in the community of Willow Creek. One is a connection to the RTS Willow Creek Extension bus that serves between Willow Creek and Arcata. The second is a connection to Trinity Transit that serves communities in Trinity County including Weaverville. Flag stops are not permitted due to the narrow two lane roads which do not allow for safe pullovers.

Service Area

The service area encompasses Willow Creek and areas north along Highways 96 and 196 including Hoopa Valley, Weitchpec, Pecwan/Wautec, and Orleans. TDA funding is provided for service between Willow Creek and Hoopa. The Orleans route between Hoopa and Orleans is a cooperative between the Yurok Tribe, Karuk Tribe and K/T Net. Funding for the Orleans route is provided by a grant to the Yurok Tribe from the FTA.

Service Span

The service operates Monday through Friday and begins runs from Willow Creek at 4:50 a.m. Morning and afternoon trips between Willow Creek and Weitchpec are scheduled along with an additional noon trip between Willow Creek and Hoopa. Service is scheduled to meet the RTS bus each weekday, while the service meets with Trinity Transit three days a week.

Fare Structure

Fares are distanced based with rates between \$1.00 (Weitchpec to Martins Ferry Bridge) and \$5.00 per trip (Willow Creek to Orleans). Day passes and 10 ride passes are available. Reduced rates are available for children, seniors and disabled. K/T NeT buses and drivers are also available for hire on weekends and special events.

Facilities

Administrative offices are located in Willow Creek at the corner of Highways 299 and 96. Due to lack of storage facilities, drivers park the vehicles at their homes although they live relatively close to the office. Vehicle maintenance is conducted by a local vehicle shop.

Fleet Inventory

K/T NeT owns one of the three vehicles with the other two being rented from the Yurok Tribe. The owned vehicle is a 2011 Ford cutaway gasoline fueled that seats 12 passengers and 2 wheelchairs. The rented vehicles include 2008 and 2010 Ford cutaway gasoline fueled vehicles capable of seating 14 passengers and 2 wheelchairs. All vehicles have wheelchair lifts which conform to the requirements of the Americans with Disabilities Act (ADA) of 1990 in regards to accessibility.

Regional Service Coordination

The Humboldt County transit operators have demonstrated effort to coordinate the delivery of public transportation. Several tangible products and services have been developed as a result of this cooperative network. The installation of electronic fareboxes on the main transit buses (HTA systems, ETS, and A&MRTS) have resulted in new fare media that can be easily used and transferable on any of these systems. New transit pass products include a regional pass using stored value cards good for RTS, Willow Creek, SHTS, ETS, and A&MRTS buses. Values of \$10 or \$20 magnetic media cards allow rides on the regional transit systems for the new discounted rate. The magnetic pass can be used on any system at any time, demonstrating the coordination achieved by the major transit operators in the County. The card is swiped through the electronic farebox when boarding the bus and it will deduct the correct discounted rate for that system. Fare revenues are credited to the transit agency for which the trip took place. The JackPass used by HSU riders is also a slide card. In addition, HTA is developing a 7-day pass to complement existing fare passes to further reduce the need for using cash on the buses.

HTA serves as the central depository of fare revenues from all public transit fixed route services, including for HTA intercity service, Eureka Transit and A&MRTS. As the buses are all

parked and maintained at HTA facilities after service, the vaults are taken off the buses at night during refueling and probing of the fareboxes. HTA conducts the fare counting and then distributes the fare revenue to the appropriate agency. Arcata will also send a check to HTA for transit passes sold at the Arcata Transit Center.

In recent years, some route reconfiguration was completed by HTA on ETS fixed routes to increase service efficiencies. Two routes received minor adjustments. The Red Route was adjusted in the northwest section of the city to run along Fourth Street/Highway 101 instead of along Waterfront Drive before reconnecting on W. Washington Street. The Purple Route was also adjusted in downtown to run along “H” and “I” Streets all the way to 2nd instead of 8th. In addition, the Purple Route runs continuous along 3rd Street in an east/west direction starting at “I” Street instead of along Waterfront Drive.

The various transit bus routes provide a level of connectivity at major transfer points. These locations include downtown Eureka, the Bayshore Mall in Eureka, and the Arcata Transit Center. The Bayshore Mall, as well as the area of 3rd/4th/5th and H Street, provides connections between RTS, SHT, and ETS buses. The Arcata Transit Center is a central transfer facility where many bus systems stop, including RTS, Willow Creek, A&MRTS, and Blue Lake Rancheria Transit. The Transit Center also serves as the regional transfer center in the North Coast for passengers wishing to travel beyond the area. In addition to stops at the transit center by the local transit providers, Redwood Coast Transit/Del Norte public transit and Greyhound buslines also serve the transit center.

The RTS intercity bus makes multiple stops in and near Fortuna, allowing for potential connections between Fortuna Senior Transit and the RTS. However, very few transfers occur as the local ridership on the Senior Bus is limited to seniors and disabled who have typically traveled and stayed within the City for services. The Willow Creek Extension provides connections to transit providers in Willow Creek (K/T NeT and Trinity Transit) where trips can be made between Arcata and the Hoopa Reservation and Orleans as well as to Weaverville.

HTA is contracted with the City of Arcata, City of Eureka and County of Humboldt to administer the operations of the dial-a-ride/lift programs. City Ambulance of Eureka (CAE) provides contract dial-a-ride service and has branded the DAR/L programs in a manner that promotes a uniform service and image to the riding public in the greater Humboldt Bay Area. CAE and HTA’s Customer Service staff communicate as needed to resolve issues and provide assistance.

In January 2010, HTA published the *Humboldt County Transportation Services Guide* for public transit and human service transportation. The large newspaper style guide provides maps and bus schedules for all public transportation operations in the county including for both fixed route and demand response systems. This is one of a few comprehensive print media for countywide public transit services.

The transit operators, along with representatives from other institutions such as Caltrans, Humboldt State University and College of the Redwoods, participate in the HCAOG Service Coordination Committee that acts in part to coordinate service and grant funding opportunities. As the SCC meetings are generally held at HTA offices, the transit partners discuss funding opportunities and issues of common interest.

1.2 Description of Service Area

Setting

Humboldt County is situated on the northern coast of California bordering Del Norte, Mendocino, Siskiyou and Trinity counties. The county was established from parts of Trinity County in 1853 and has a total area of 4,052 square miles. Major highways include U.S. 101 running in a north-south direction between Del Norte and Mendocino counties and State Route (SR)-299 running in an east-west direction between the Trinity county line and the junction with U.S. 101 in Arcata. The southern border of the county is located 225 miles north of San Francisco, the closest major metropolitan city reached via U.S. 101.

The county's topography consists of hilly and mountainous forested terrain punctuated with river canyons and valleys along a rugged coastline. Major rivers include the Eel, Mad and Trinity. Arcata and Humboldt Bays provide a natural harbor and estuary for wildlife and watershed drainage. The cool, moist coastal climate has been an ideal ecosystem for the growth of the redwood forests.

Population and Demographics

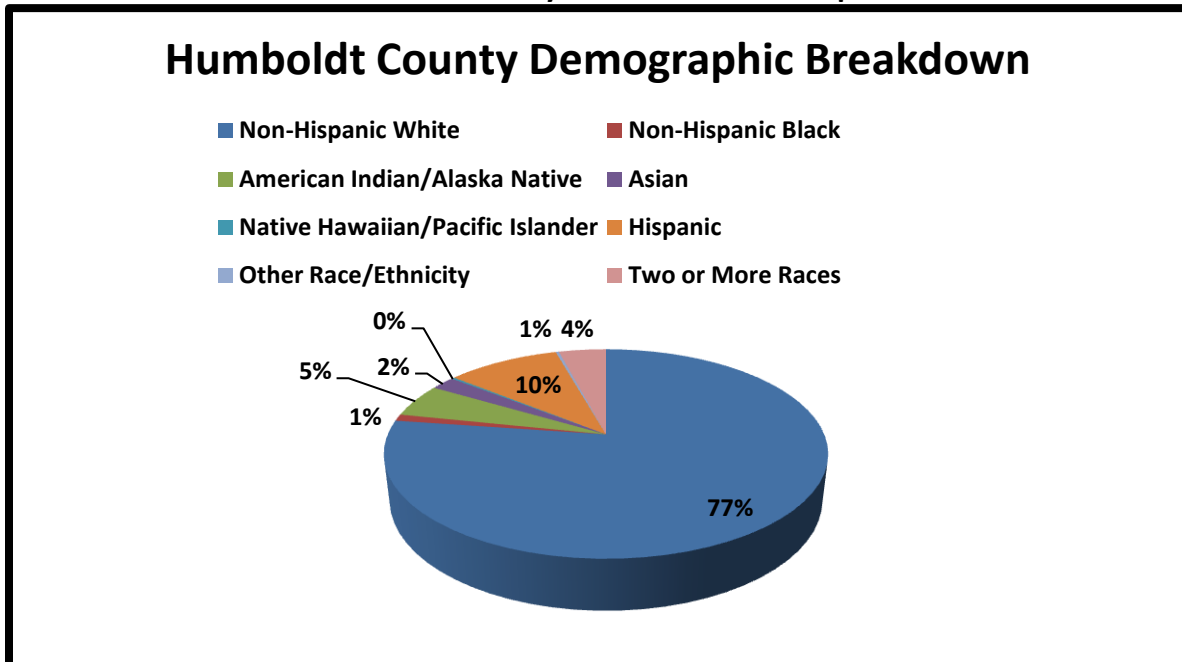
County of Humboldt

Humboldt County's population was 134,623 based on the 2010 U.S. Census. The population grew 6.41 percent since the 2000 U.S. Census. Based on the 2011 California Department of Finance estimates, Humboldt County's population currently has 135,263 residents. There are seven incorporated cities ranging in size from approximately 400 to 28,000 residents. Approximately 47 percent of the county's residents live in incorporated communities, while 59 percent live in the Humboldt Bay region. Persons aged 65 years and older comprised 13.2 percent of the population with the median age being 37.1 years.

Of the incorporated cities in Humboldt County, Eureka, the county seat, is the largest with a population of 27,191 followed by Arcata (17,231), Fortuna (11,926), Rio Dell (3,368), Ferndale (1,371), Blue Lake (1,253), and Trinidad (367). McKinleyville is the largest unincorporated community with a population of 15,177 based on the 2010 Census data.

According to the 2010 Census data, non-Hispanic Whites comprised just over 77 percent of the total population. Hispanics, who can be classified as any race, comprised 10 percent of the population. Humboldt County is also home to several federally-recognized American Indian tribal nations and communities, which make up just over 5 percent of the total population. Major tribal communities include the Hoopa, Wiyot, Karuk and Yurok. Figure I-10 provides an overview of Humboldt County's racial and ethnic groups:

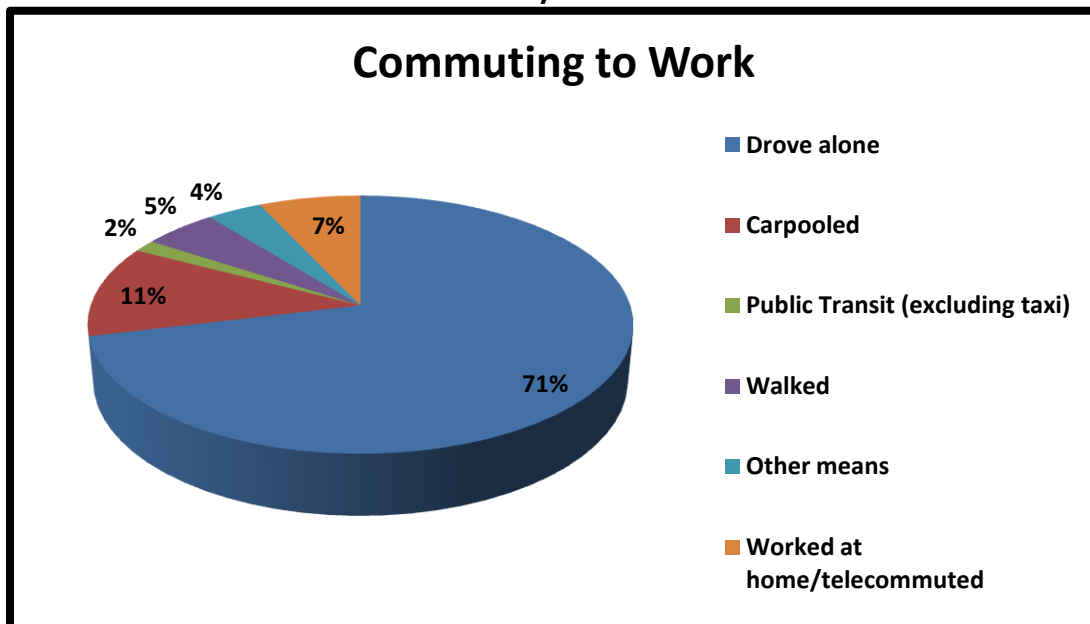
Figure I-10
Humboldt County Racial & Ethnic Groups



Source: 2010 U.S. Census

The 2005-2009 American Community Survey 5-Year Estimate provides data on the various commute modes utilized by Humboldt County residents. Data are categorized based on residents who commuted alone, carpooled, took public transit (excluding taxicab), walked, worked at home/telecommuted or commuted by other means. Figure I-11 presents a breakdown of commute modes for Humboldt County:

Figure I-11
Humboldt County Commute Modes



Source: 2005-2009 American Community Survey 5-Year Estimates

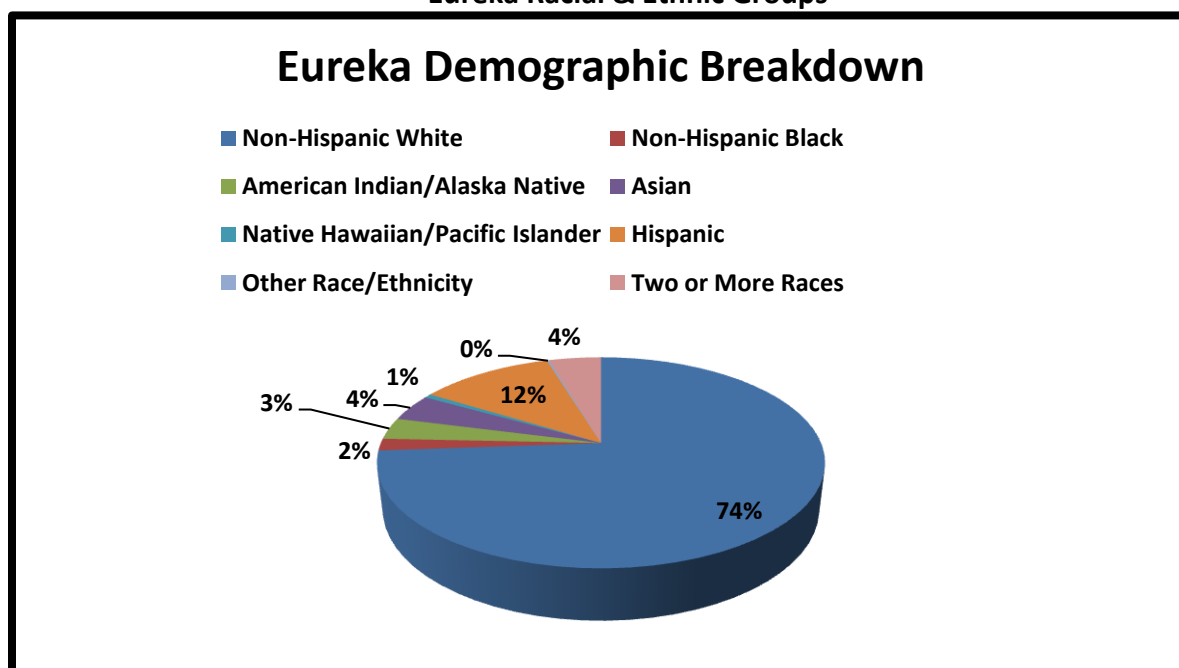
Of the residents surveyed, approximately 71 percent indicated that they drove alone, 11 percent carpooled, 7 percent worked at home or telecommuted, 5 percent walked, 4 percent utilized other means, and 2 percent took public transit.

City of Eureka

The city's population grew 4.07 percent since the 2000 U.S. Census. In contrast to the 2010 Census data, the 2011 California Department of Finance estimates show Eureka currently has 27,283 residents. Persons aged 65 years and older comprised 11.8 percent of the population with the median age being 36.2 years. The Greater Eureka area has a population of approximately 42,233, which encompasses the Eureka city limits and the adjacent unincorporated communities of Bayview, Cutten, Myrtle town, Humboldt Hill, and Pine Hills. The Greater Eureka area makes up the largest urban area on the Pacific Coast between San Francisco and Portland.

According to the 2010 Census data, non-Hispanic Whites comprised nearly 74 percent of the total population. Hispanics, who can be classified as any race, comprised 11.56 percent of the population. Asians and American Indians comprised approximately 4 percent and 3 percent of the population respectively. Persons of two or more races comprised 4.5 percent of Eureka's population. Figure I-12 provides an overview of Eureka's racial and ethnic groups:

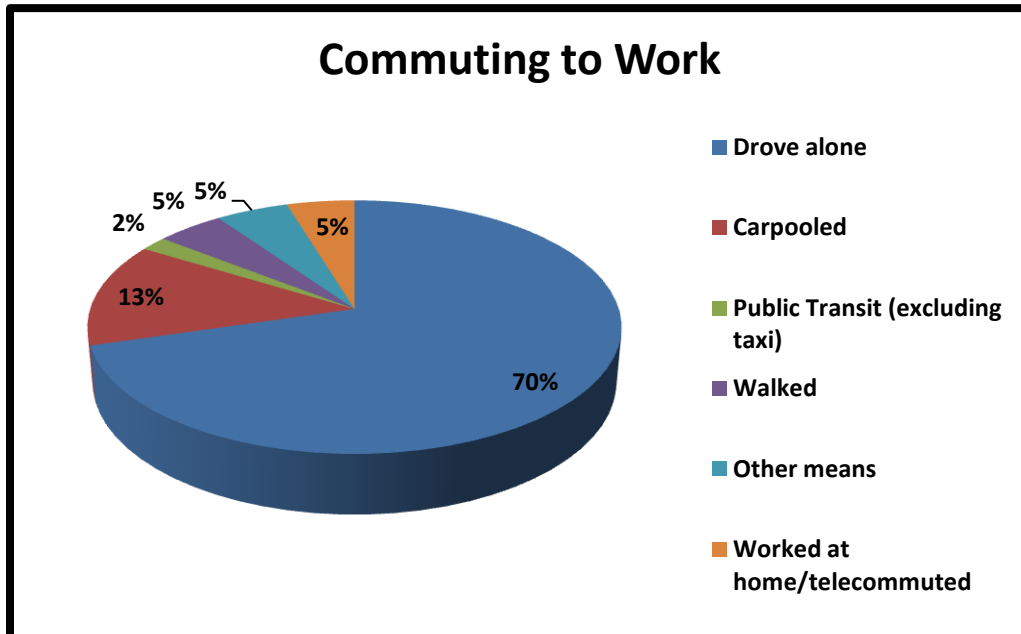
Figure I-12
Eureka Racial & Ethnic Groups



Source: 2010 U.S. Census

The 2005-2009 American Community Survey 5-Year Estimate provides data on the various commute modes utilized by Eureka residents. Data are categorized based on residents who commuted alone, carpooled, took public transit (excluding taxicab), walked, worked at home/telecommuted or commuted by other means. Figure I-13 presents a breakdown of commute modes for Eureka:

Figure I-13
Eureka Commute Modes



Source: 2005-2009 American Community Survey 5-Year Estimates

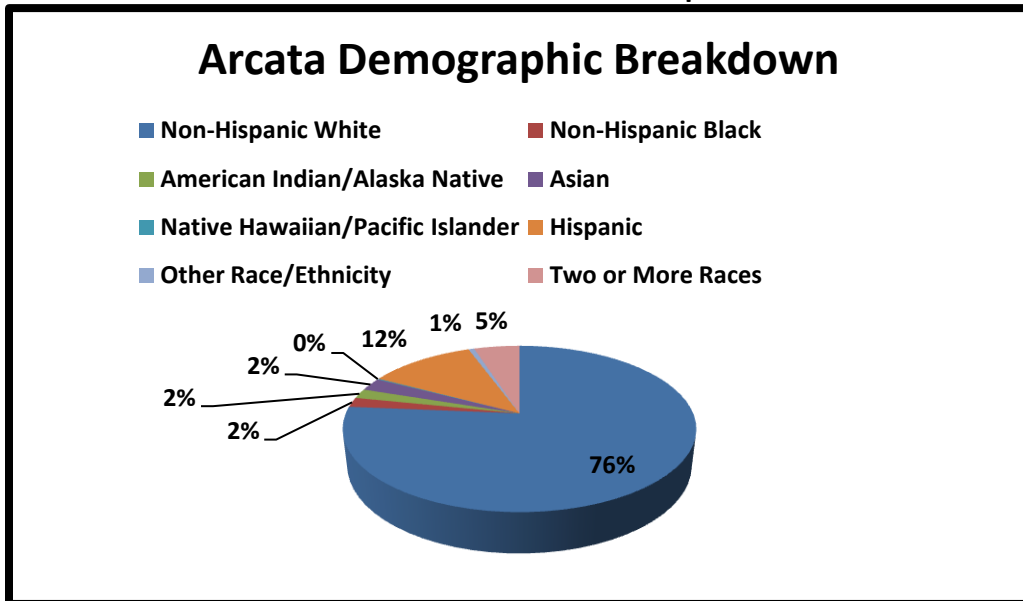
Of the residents surveyed, approximately 70 percent indicated that they drove alone, 13 percent indicated that they carpooled, 5 percent either walked, worked at home or commuted by other means, and 2 percent took public transit.

City of Arcata

The city's population grew 3.48 percent since the 2000 U.S. Census. In contrast to the 2010 Census data, the 2011 California Department of Finance estimates show Arcata currently has 17,318 residents. Persons aged 65 years and older comprised 8.2 percent of the population with the median age being 26.1 years.

According to the 2010 Census data, non-Hispanic Whites comprised just over 76 percent of the total population. Hispanics, who can be classified as any race, comprised 11.61 percent of the population. Figure I-14 provides an overview of Arcata's racial and ethnic groups:

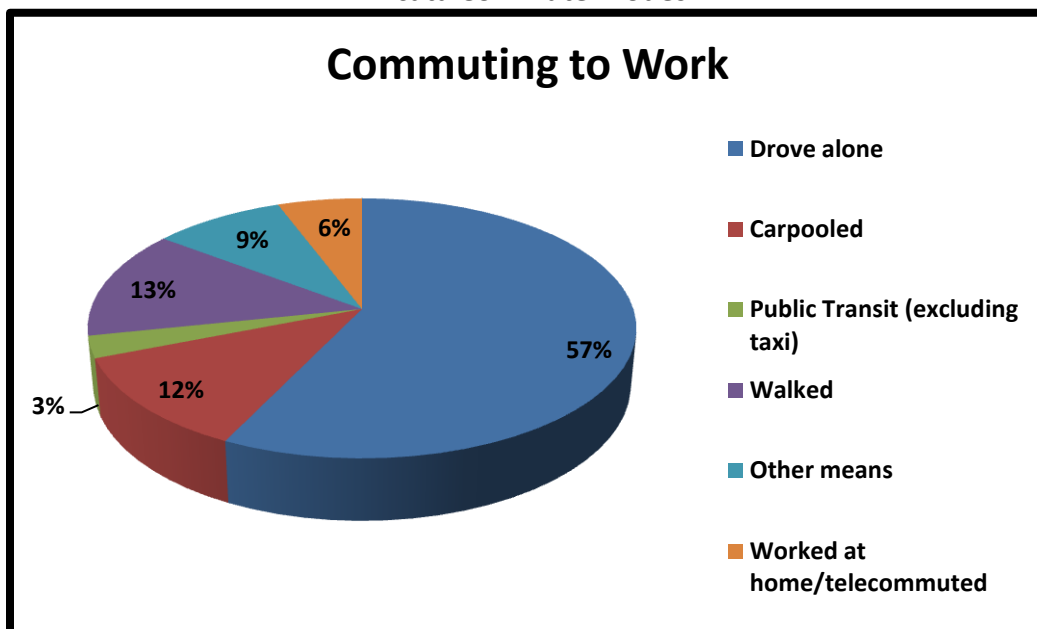
Figure I-14
Arcata Racial & Ethnic Groups



Source: 2010 U.S. Census

The 2005-2009 American Community Survey 5-Year Estimate provides data on the various commute modes utilized by Arcata residents. Data are categorized based on residents who commuted alone, carpooled, took public transit (excluding taxicab), walked, worked at home/telecommuted or commuted by other means. Figure I-15 presents a breakdown of commute modes for Arcata:

Figure I-15
Arcata Commute Modes



Source: 2005-2009 American Community Survey 5-Year Estimates

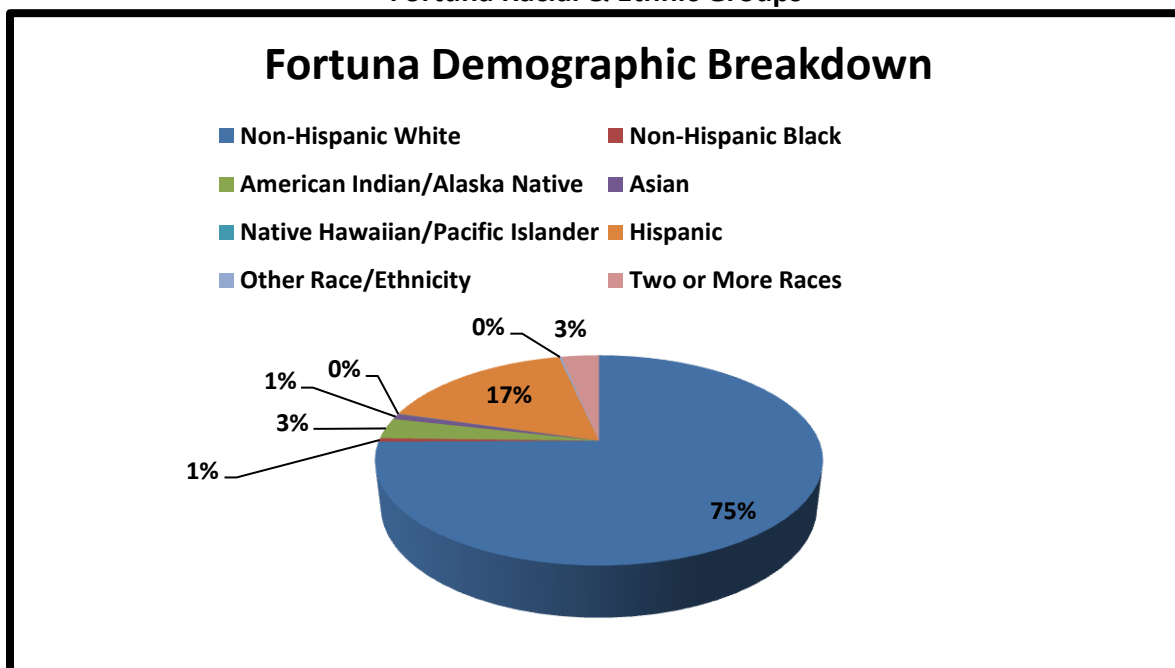
Of the residents surveyed, approximately 69 percent indicated that they drove alone, 11 percent indicated that they carpooled, 7 percent worked at home, 5 percent walked and 4 percent took public transit.

City of Fortuna

The city's population grew 13.61 percent since the 2000 U.S. Census. In contrast to the 2010 Census data, the 2011 California Department of Finance estimates show Fortuna currently has 11,977 residents. Persons aged 65 years and older comprised 17.3 percent of the population with the median age being 38.1 years.

According to the 2010 Census data, non-Hispanic Whites comprised nearly 75 percent of the total population. Hispanics, who can be classified as any race, comprised 17 percent of the population. American Indians comprised just over 3 percent of the population. Persons of two or more races comprised 3.26 percent of Fortuna's population. Figure I-16 provides an overview of Fortuna's racial and ethnic groups:

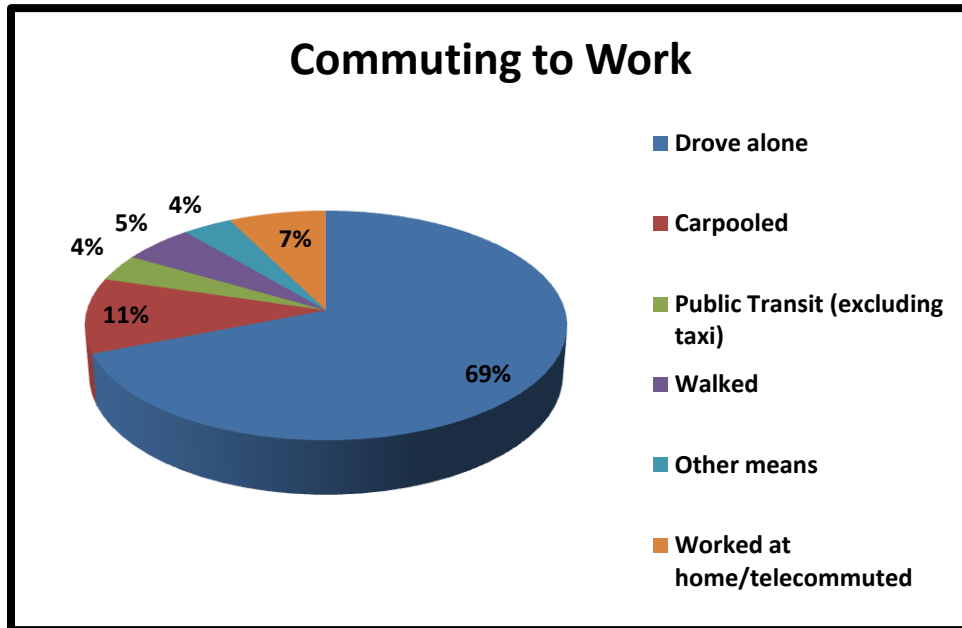
Figure I-16
Fortuna Racial & Ethnic Groups



Source: 2010 U.S. Census

The 2005-2009 American Community Survey 5-Year Estimate provides data on the various commute modes utilized by Fortuna residents. Data are categorized based on residents who commuted alone, carpooled, took public transit (excluding taxicab), walked, worked at home/telecommuted or commuted by other means. Figure I-17 presents a breakdown of commute modes for Fortuna:

Figure I-17
Fortuna Commute Modes



Source: 2005-2009 American Community Survey 5-Year Estimates

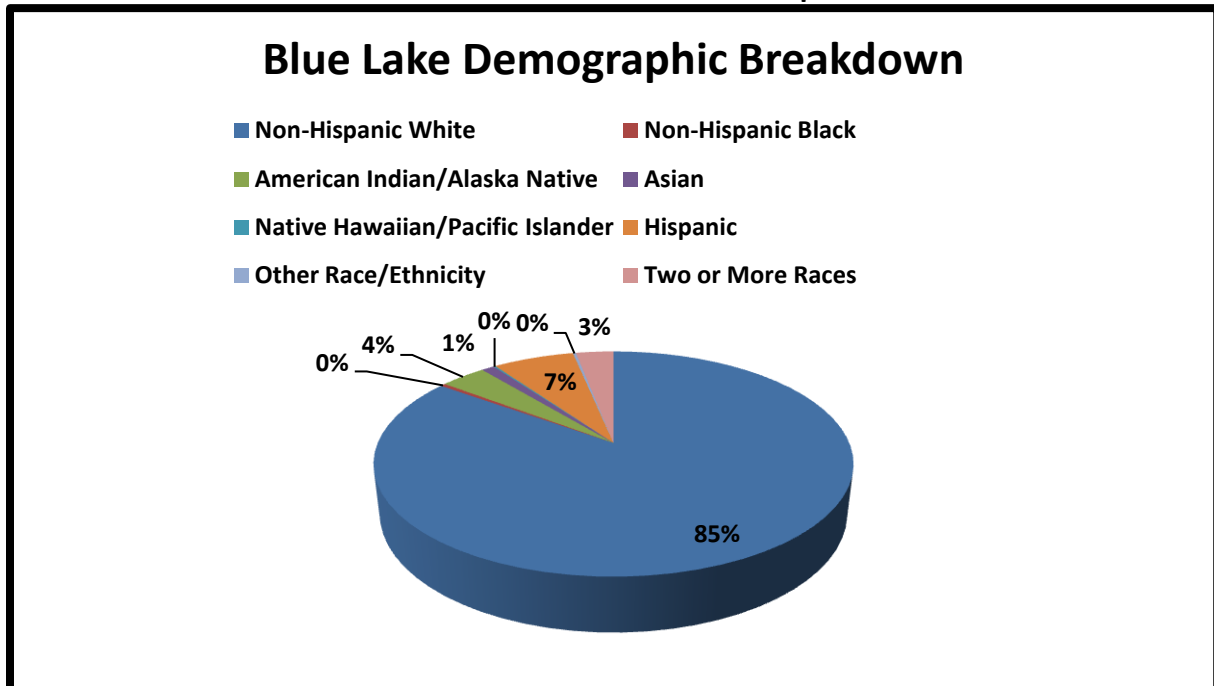
Of the residents surveyed, approximately 69 percent indicated that they drove alone, 11 percent indicated that they carpoolled, 7 percent worked at home, 5 percent walked and 4 percent took public transit.

City of Blue Lake

The city's population grew 10.4 percent since the 2000 U.S. Census. In contrast to the 2010 Census data, the 2011 California Department of Finance estimates show Blue Lake currently has 1,265 residents. Persons aged 65 years and older comprised 10.1 percent of the population with the median age being 38.3 years.

According to the 2010 Census data, non-Hispanic Whites comprised nearly 85 percent of the total population. Hispanics, who can be classified as any race, comprised 6.5 percent of the population. American Indians comprised nearly 4 percent of the population. The adjacent Blue Lake Rancheria has 53 members. Persons of two or more races comprised 3 percent of Blue Lake's population. Figure I-18 provides an overview of Blue Lake's racial and ethnic groups:

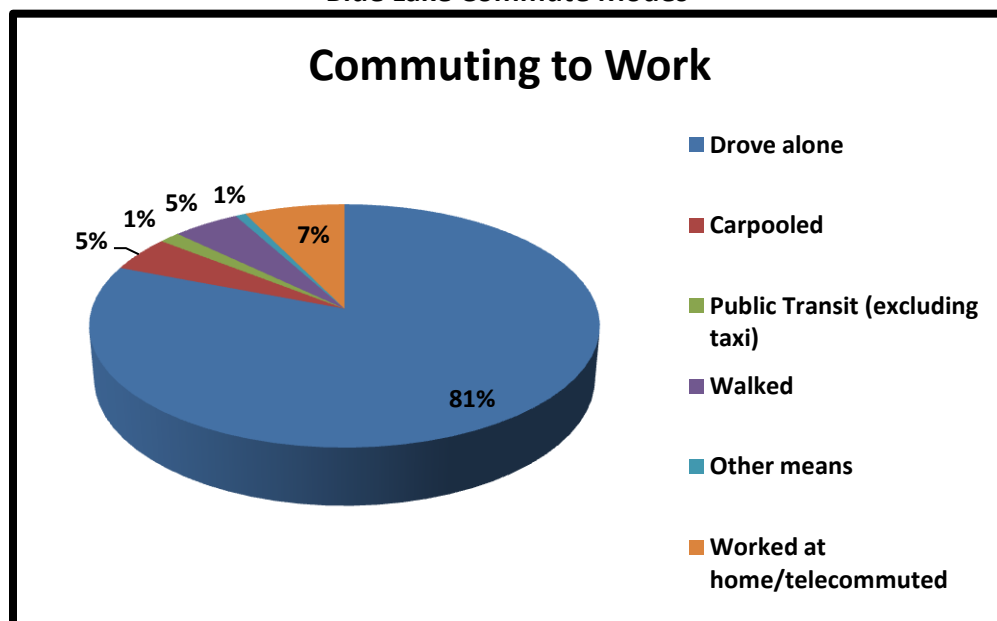
Figure I-18
Blue Lake Racial & Ethnic Groups



Source: 2010 U.S. Census

The 2005-2009 American Community Survey 5-Year Estimate provides data on the various commute modes utilized by Blue Lake residents. Data are categorized based on residents who commuted alone, carpooled, took public transit (excluding taxicab), walked, worked at home/telecommuted or commuted by other means. Figure I-19 presents a breakdown of commute modes for Blue Lake:

Figure I-19
Blue Lake Commute Modes



Source: 2005-2009 American Community Survey 5-Year Estimates

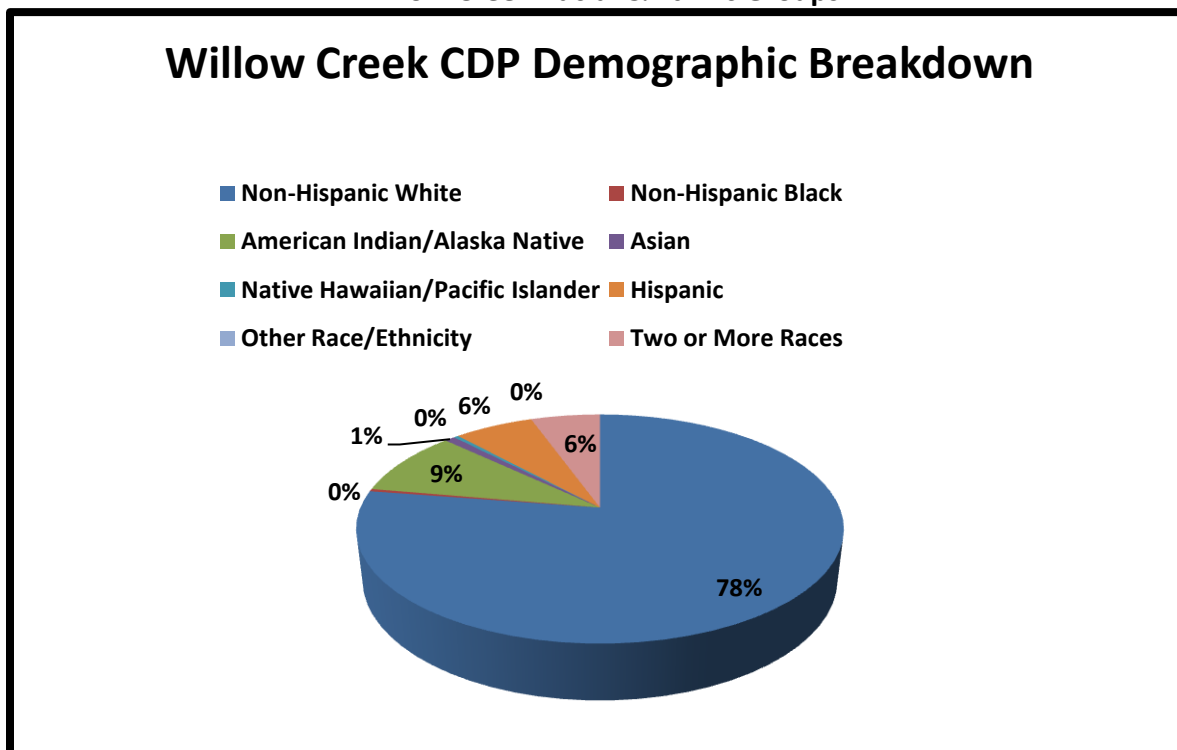
Of the residents surveyed, approximately 81 percent indicated that they drove alone, 7 percent worked at home, 5 percent walked or carpooled, and 1 percent took transit.

Willow Creek

The population for the Willow Creek census-designated place (CDP) declined slightly by 1.9 percent since the 2000 U.S. Census. Persons aged 65 years and older comprised 9 percent of the population with the median age being 49.8 years.

According to the 2010 Census data, non-Hispanic Whites comprised more than 77 percent of the total population. American Indians comprised nearly 9.25 percent of the population. Hispanics, who can be classified as any race, comprised 6.2 percent of the population. Persons of two or more races comprised 5.5 percent of Willow Creek's population. Figure I-20 provides an overview of Willow Creek's racial and ethnic groups:

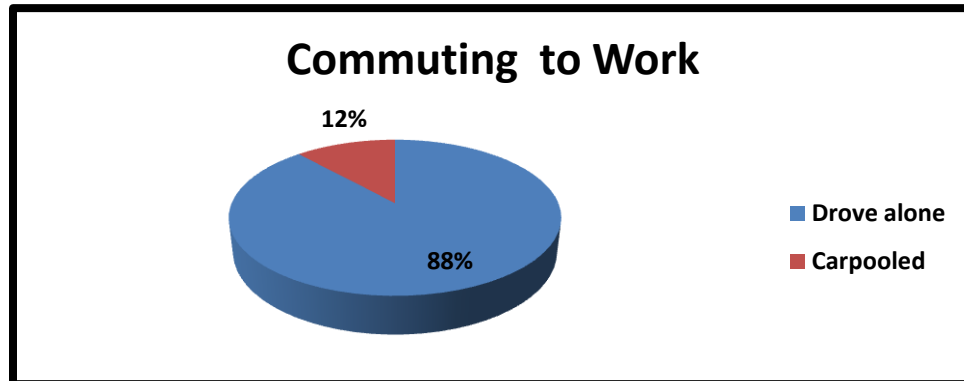
Figure I-20
Willow Creek Racial & Ethnic Groups



Source: 2010 U.S. Census

The 2005-2009 American Community Survey 5-Year Estimate provides data on the various commute modes utilized by Willow Creek residents. Data are categorized based on residents who commuted alone, carpooled, took public transit (excluding taxicab), walked, worked at home/telecommuted or commuted by other means. Figure I-21 presents a breakdown of commute modes for Willow Creek:

Figure I-21
Willow Creek Commute Modes



Source: 2005-2009 American Community Survey 5-Year Estimates

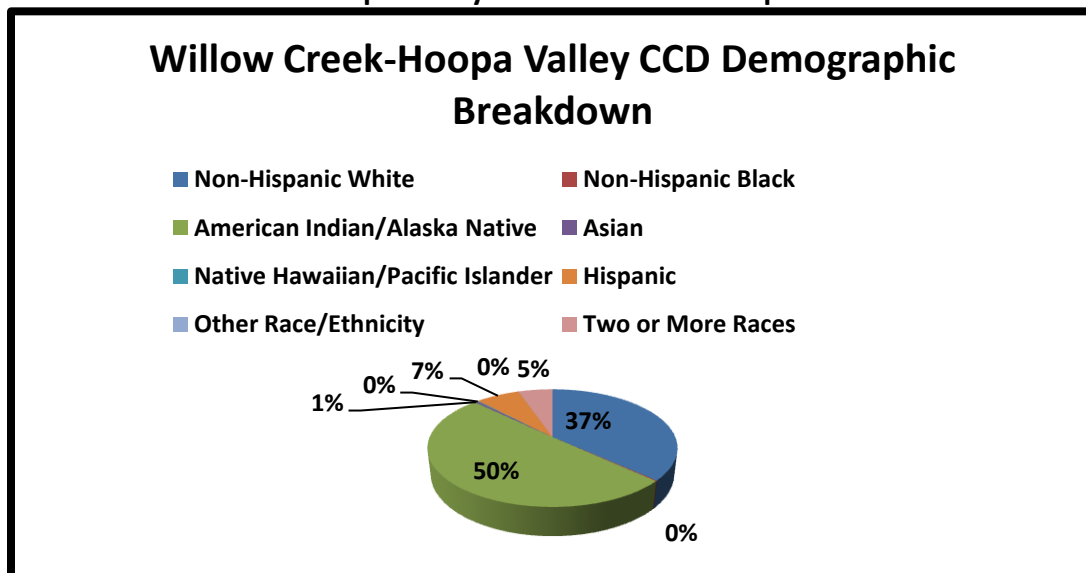
Of the residents surveyed, more than 88 percent indicated that they drove alone and the remaining 12 percent carpooled.

Hoopa Valley

U.S. Census data for the Hoopa Valley is inclusive of Willow Creek and the Hoopa Valley Indian Reservation. The 2010 Census data for the Willow Creek-Hoopa Valley census-county division (CCD) showed a population of 5,925 residents. Persons aged 65 years and older comprised 5.8 percent of the population with the median age being 34.7 years.

According to the 2010 Census data, American Indians comprised just over 50 percent of the total population. Non-Hispanic Whites comprised 36.68 percent of the population. Hispanics, who can be classified as any race, comprised 6.84 percent of the population. Persons of two or more races comprised 5.22 percent of the Hoopa Valley's population. Figure I-22 provides an overview of Hoopa Valley's racial and ethnic groups:

Figure I-22
Hoopa Valley Racial & Ethnic Groups



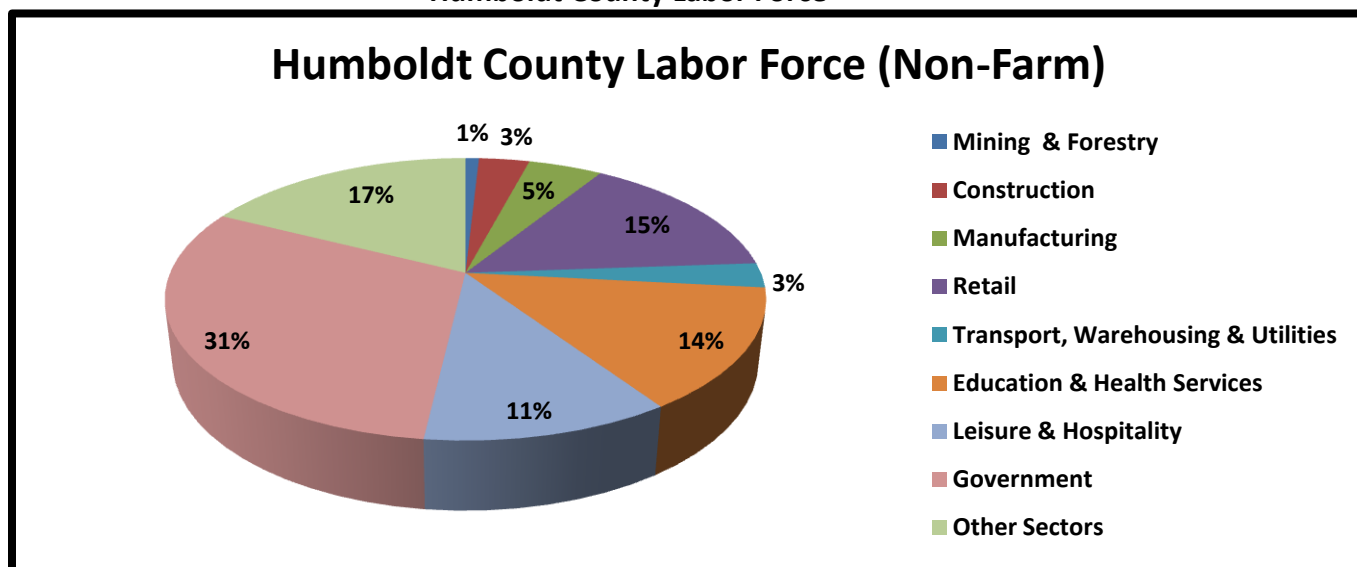
Source: 2010 U.S. Census

Economy and Employment

Humboldt County's economy has traditionally been derived from the fishing, forestry and mining industries. However, these industries have been in decline in recent decades. While fishing and forestry continue to play an important role, the majority of economic activity is primarily derived from the educational, gaming, government, health care and retail sectors. The largest employers include the Blue Lake Casino, College of the Redwoods, Humboldt State University, as well as county and local governments. The Mad River Community Hospital in Arcata, the Saint Joseph Hospital and Health System in Eureka and Redwood Memorial Hospital in Fortuna are the major health care providers. Eureka serves as the major retail center for the county and the north coast region. Major department stores such as Costco, Kohl's, Sears and Target are represented.

Based on data derived from the California State Employment Development Department (EDD), Humboldt County's labor force numbered 60,800 workers as of June 2011. Of this total, 53,900 were employed and 7,000 were unemployed, amounting to an unemployment rate of 11.4 percent (not seasonally adjusted). Of the 46,100 non-farm employed, 14,100 or 30.59 percent are employed by government, followed by 6,900 employed in retail and 6,400 employed in the education and health care sectors. Figure I-23 provides breakdown of Humboldt County's non-farm employment:

Figure I-23
Humboldt County Labor Force



Source: California EDD, 2011

The City of Eureka's local economy has traditionally been fishing and timber resource based. Currently, over 25 percent of all business is comprised of small businesses with 1 to 10 employees. The majority of Eureka's economic activity is derived from the fishing, forestry, government, health care, retail and transportation sectors. Based on data derived from the California Employment Development Department (EDD), the largest employers include Caltrans, the City of Eureka, College of the Redwoods (CR), County of Humboldt, St. Joseph's Hospital, and Target. St. Joseph's Hospital is now the largest private employer in Eureka.

Eureka's labor force numbered 11,700 workers as of October 2009 based on EDD data. Of this total, 10,300 were employed and 1,400 were unemployed, amounting to an unemployment rate of 11.8 percent (not seasonally adjusted). The 2000 U.S. Census reported that 24.9 percent of the community worked in education, health care, and social services. Another 18.4 percent were employed by the government, while self employed workers totaled 11.2 percent of all workers.

The majority of the City of Arcata's economic activity is derived from the educational, forestry, government, health care and transportation sectors. Based on data derived from the California Employment Development Department (EDD), the largest employers include the Bettendorf Trucking, Humboldt State University (HSU), Mad River Community Hospital, Sierra Pacific Industries, and the Sun Valley Group as well as county and local governments. Humboldt State University (HSU) is Arcata's largest employer.

Arcata's labor force numbered 9,100 workers as of October 2009 based on EDD data. Of this total, 8,100 were employed and 1,100 were unemployed, amounting to an unemployment rate of 11.6 percent (not seasonally adjusted). Management, professional, and related white collar occupations account for approximately 35 percent of Arcata jobs. Sales and other office occupations account for approximately 21 percent of Arcata jobs. Service occupations account for another 20 percent of Arcata jobs.

Fortuna's economy has traditionally been rooted in the agriculture and forestry sectors. The majority of Fortuna's economic activity is derived from the education, forestry, government, health care, and retail sectors. The largest employers include the City of Fortuna, Eel River Disposal, Fortuna Motors, Fortuna Union Elementary School District, Fortuna Union High School District, Redwood Memorial Hospital, Rohnerville School District, Safeway, St. Luke Healthcare and Rehabilitation Center and Wendt Construction.

Fortuna's labor force numbered 4,600 workers as of October 2009 based on EDD data. Of this total, 4,200 were employed and 400 were unemployed, amounting to an unemployment rate of 8.9 percent (not seasonally adjusted). Based on the 2005-2009 American Community Survey Estimates, sales and other office occupations accounted for about 27 percent of jobs held by Fortuna residents, followed by management, professional, and related white collar occupations at 25 percent and service jobs at 21 percent. Production and transportation occupations accounted for just over 13 percent of jobs held.

1.3 Historic Transit Ridership, Service Levels and Cost Trends

This section shows historic performance of the transit systems over a five to six year period. Systemwide, fixed route and dial-a-ride/lift data are provided in individual tables. Graphics and description of the trends are also shown.

Humboldt Transit Authority

The following tables provide historic performance data for the various HTA services.

Table I-8
HTA Systemwide Performance Indicators

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	% Change FY 2005-06-2009-10
Operating Cost	\$1,900,864	\$1,926,810	\$2,192,601	\$2,269,130	\$2,912,304	53.2%
Total Passengers	373,715	393,964	479,215	559,627	595,969	59.5%
Vehicle Service Hours	30,143	30,921	32,530	35,296	38,863	28.9%
Vehicle Service Miles	670,617	683,479	752,617	822,663	941,032	40.3%
Operating Subsidy	\$1,189,252	\$1,229,181	\$1,433,448	\$1,292,664	\$1,871,248	57.3%
Passenger Fares	\$531,387	\$697,629	\$759,153	\$976,466	\$1,041,056	95.9%
Operating Cost per Passenger	\$5.09	\$4.89	\$4.58	\$4.05	\$4.89	-3.9%
Operating Cost per Vehicle Service Hour	\$63.06	\$62.31	\$67.40	\$64.29	\$74.94	18.8%
Operating Cost per Vehicle Service Mile	\$2.83	\$2.82	\$2.91	\$2.76	\$3.09	9.2%
Passengers per Vehicle Service Hour	12.4	12.7	14.7	15.9	15.3	23.7%
Passengers per Vehicle Service Mile	0.56	0.58	0.64	0.68	0.63	13.6%
Operating Subsidy per Passenger	\$3.18	\$3.12	\$2.99	\$2.31	\$3.14	-1.3%
Average Fare per Passenger	\$1.42	\$1.77	\$1.58	\$1.74	\$1.75	22.9%
Fare Recovery Ratio	27.96%	36.21%	34.62%	43.03%	35.75%	27.9%

Source: State Controller Report, HTA, Annual Fiscal Audit

Table I-9
HTA Fixed Route Performance Indicators
Redwood Transit System, Willow Creek Extension, and Southern Humboldt Transit

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Operating Cost	\$1,739,083	\$1,758,710	\$2,013,800	\$2,084,724	\$2,748,722	\$2,864,785	64.7%
Total Passengers	360,001	380,805	464,650	545,764	583,286	612,915	70.3%
Vehicle Service Hours	24,643	25,047	26,926	30,027	34,548	38,957	58.1%
Vehicle Service Miles	586,738	604,954	667,033	727,176	864,919	1,009,489	72.1%
Operating Subsidy	\$1,031,924	\$1,098,303	\$1,288,589	\$1,149,190	\$1,747,231	\$1,871,333	81.3%
Passenger Fares	\$526,934	\$660,407	\$725,211	\$935,534	\$1,001,491	\$993,452	88.5%
Operating Cost per	\$4.83	\$4.62	\$4.33	\$3.82	\$4.71	\$4.67	-3.2%

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Passenger							
Operating Cost per Vehicle Service Hour	\$70.57	\$70.22	\$74.79	\$69.43	\$79.56	\$73.54	4.2%
Operating Cost per Vehicle Service Mile	\$2.96	\$2.91	\$3.02	\$2.87	\$3.18	\$2.84	-4.3%
Passengers per Vehicle Service Hour	14.6	15.2	17.3	18.2	16.9	15.7	7.7%
Passengers per Vehicle Service Mile	0.61	0.63	0.70	0.75	0.67	0.61	-1.0%
Operating Subsidy per Passenger	\$2.87	\$2.88	\$2.77	\$2.11	\$3.00	\$3.05	6.5%
Average Fare per Passenger	\$1.46	\$1.73	\$1.56	\$1.71	\$1.72	\$1.62	10.7%
Fare Recovery Ratio	30.30%	37.55%	36.01%	44.88%	36.43%	34.68%	14.5%

Source: State Controller Report, HTA, Annual Fiscal Audit

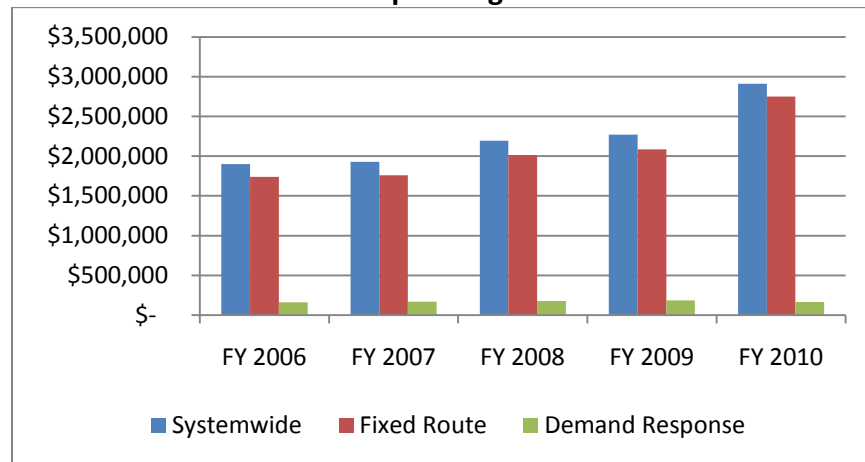
Table I-10
HTA Dial-A-Ride Performance Indicators
(Former) Quail and Arcata-Corridor DAR/L

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	% Change FY 2005-06-2009-10
Operating Cost	\$161,781	\$168,100	\$178,801	\$184,406	\$163,582	1.1%
Total Passengers	13,714	13,159	14,565	13,863	12,683	-7.5%
Vehicle Service Hours	5,500	5,875	5,605	5,269	4,315	-21.5%
Vehicle Service Miles	83,879	78,525	85,584	95,487	76,113	-9.3%
Operating Subsidy	\$157,328	\$130,878	\$144,859	\$143,474	\$124,017	-21.2%
Passenger Fares	\$4,453	\$37,222	\$33,942	\$40,932	\$39,565	788.5%
Operating Cost per Passenger	\$11.80	\$12.77	\$12.28	\$13.30	\$12.90	9.3%
Operating Cost per Vehicle Service Hour	\$29.41	\$28.62	\$31.90	\$35.00	\$37.91	28.9%
Operating Cost per Vehicle Service Mile	\$1.93	\$2.14	\$2.09	\$1.93	\$2.15	11.4%
Passengers per Vehicle Service Hour	2.5	2.2	2.6	2.6	2.9	17.9%
Passengers per Vehicle Service Mile	0.16	0.17	0.17	0.15	0.17	1.9%
Operating Subsidy per Passenger	\$11.47	\$9.95	\$9.95	\$10.35	\$9.78	-14.8%
Average Fare per Passenger	\$0.32	\$2.83	\$2.33	\$2.95	\$3.12	860.7%

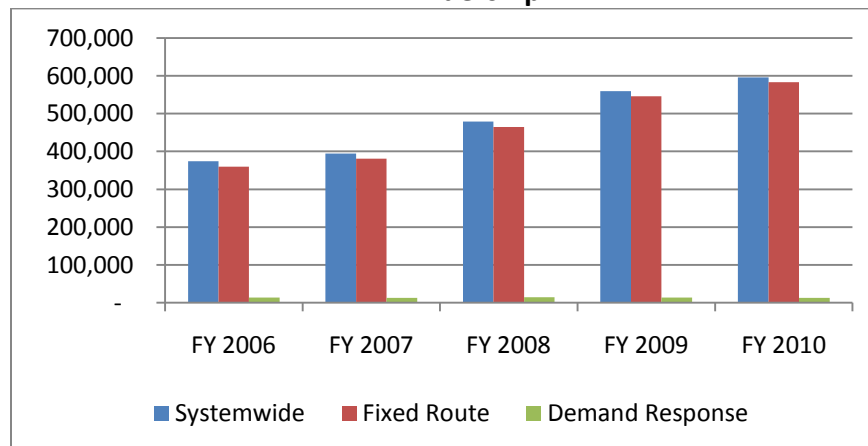
Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	% Change FY 2005-06-2009-10
Fare Recovery Ratio	2.75%	22.14%	18.98%	22.20%	24.19%	778.7%

Source: State Controller Report, HTA, Annual Fiscal Audit

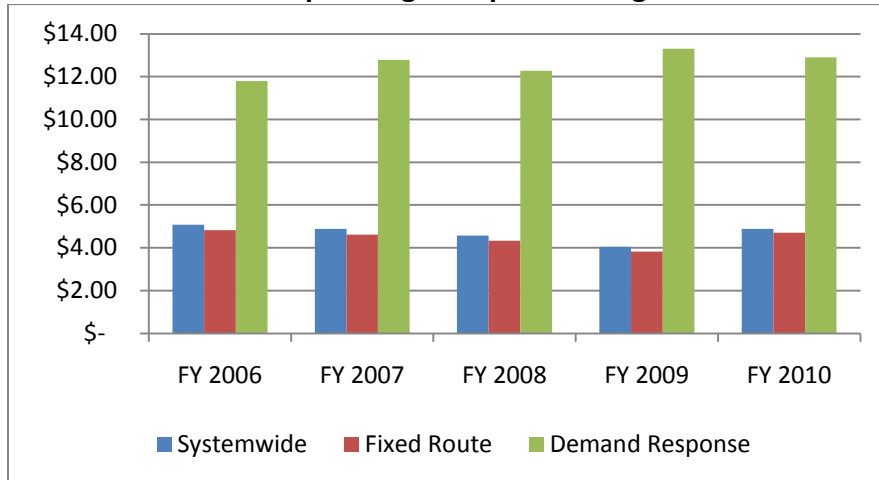
**Graph I-1
HTA Operating Costs**



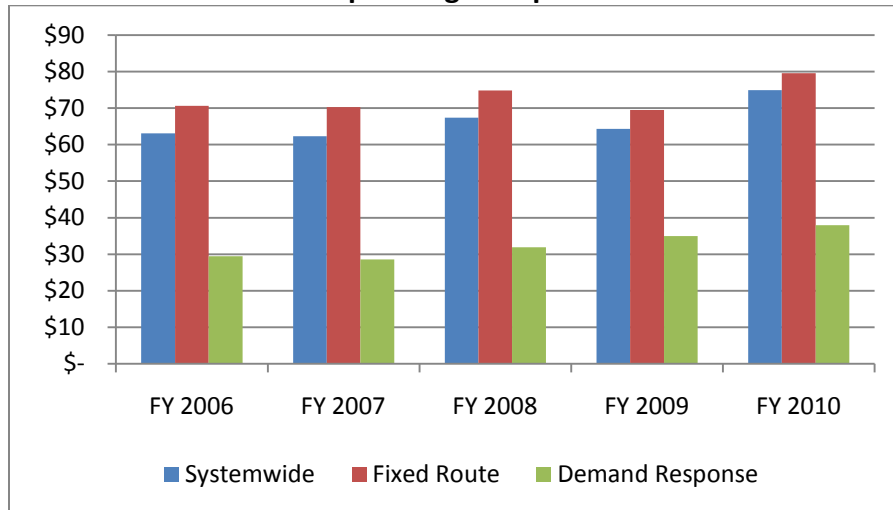
**Graph I-2
HTA Ridership**



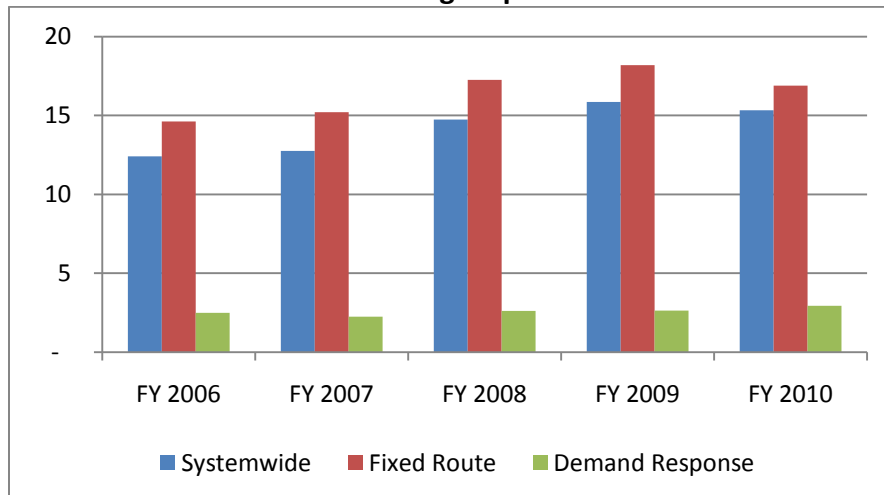
**Graph I-3
HTA Operating Cost per Passenger**



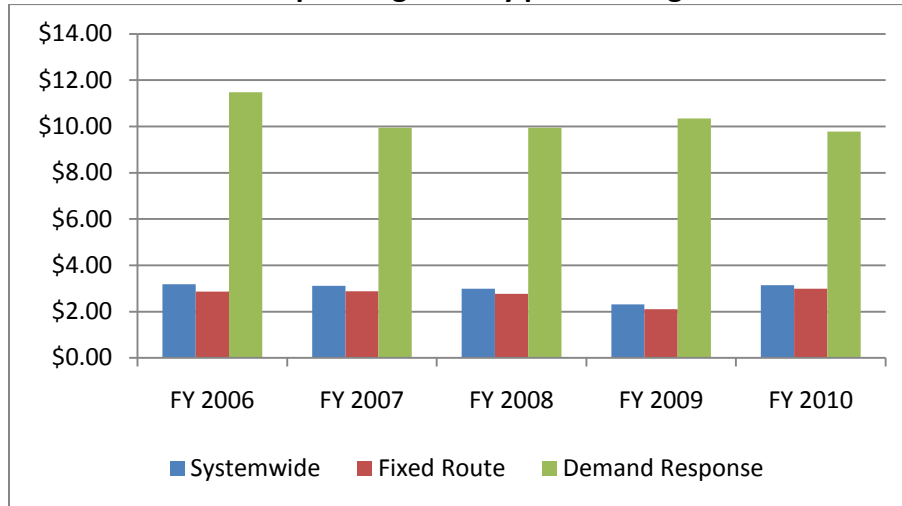
**Graph I-4
HTA Operating Cost per Hour**



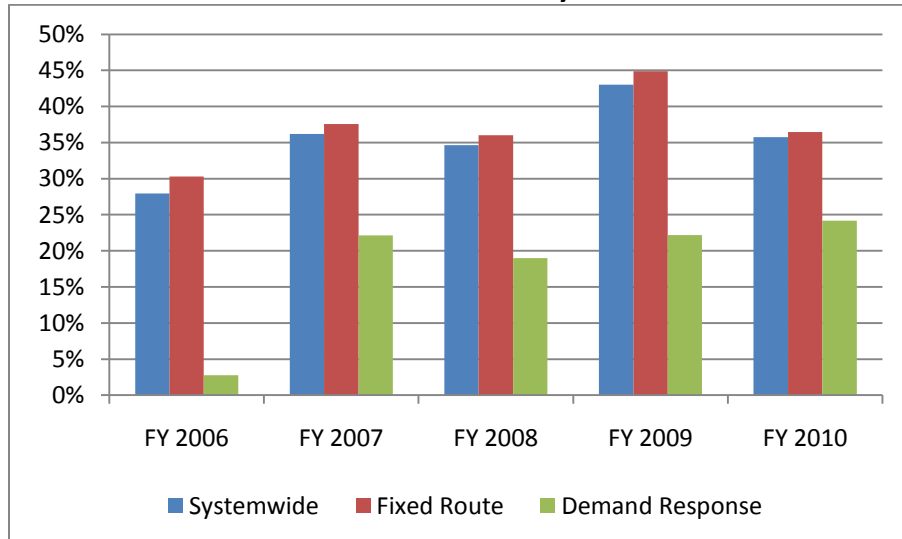
**Graph I-5
HTA Passengers per Hour**



**Graph I-6
HTA Operating Subsidy per Passenger**



**Graph I-7
HTA Farebox Recovery Ratio**



Findings from Verification and Analysis of Performance Indicators

1. **Operating cost per vehicle service hour**, an indicator of cost efficiency, increased nearly 19 percent systemwide over the five year period. For fixed route operations (RTS, Willow Creek, and subsequent Southern Humboldt services), cost per service hour increased 4.2 percent from \$70.57 to \$73.54 over a six year period. Operating costs for fixed route increased 64.7 percent during the review period along with a commensurate increase in operating hours of 58.1 percent, indicating a trend of cost efficiencies relative to service provision. Dial-A-Ride cost per service hour increased 28.9 percent from \$29.41 to \$37.91 over a five year period. Operating costs for Dial-A-Ride increased by a modest 1.1 percent during the review period although service hours exhibited a decrease of 21.5 percent. This trend had the effect of increasing DAR cost per hour.

2. **Operating cost per passenger**, an indicator of cost effectiveness, decreased by nearly 4 percent systemwide over the five year period. For fixed route, the cost per passenger exhibited a comparable decrease of 3.2 percent from \$4.83 in FY 2006 to \$4.67 in FY 2011. Similar to the growth in costs and service hours, ridership increased significantly during the review period, which resulted in the cost effective performance trend. DAR service saw its operating cost per passenger trend increase 9.3 percent from \$11.80 in FY 2006 to \$12.90 in FY 2010. As DAR costs increased slightly, ridership also declined in part to the elimination of the Quail service in southern Humboldt County in 2010.
3. **Passengers per vehicle service hour**, which measures the effectiveness of the service delivered, increased nearly 24 percent systemwide between FY 2006 and FY 2010 from 12.4 passengers per hour to 15.3 passengers per hour. Fixed route operations exhibited an increase of 7.7 percent over the same period from 14.6 to 15.7 passengers per hour. DAR operations reflected the same trend with a 17.9 percent increase from 2.5 to 2.9 passengers per hour. As the number of passengers increased faster than hours operated by the buses, these indicators showed increased productivity.
4. **Passengers per vehicle service mile**, another indicator of service effectiveness, increased 13.6 percent systemwide from 0.56 in FY 2006 to 0.63 in FY 2010. For fixed route operations, the number of passengers per service mile remained relatively consistent at 0.61 passengers. DAR services exhibited an increase of nearly 2 percent from 0.16 to 0.17 passengers per mile. As the number of passengers increased faster than miles driven by the buses, these indicators showed increased productivity.
5. **Operating subsidy per passenger** decreased slightly by 1.3 percent between FY 2006 and FY 2010 systemwide. The subsidy per passenger for fixed route increased 6.5 percent from \$2.87 to \$3.05. This modest increase shows that the system has been able to retain revenues such as fares at a consistent pace as ridership. In contrast to the fixed route trend, the operating subsidy per passenger for DAR decreased nearly 15 percent from \$11.47 to \$9.78.
6. **Farebox recovery** exhibited very positive trends, as all services except the Quail exceeded their minimum farebox recovery standards. Systemwide, farebox recovery increased 28 percent. The fixed route saw an increase of 14.5 percent from 30.30 percent in FY 2006 to 34.68 percent in FY 2011. For the new Southern Humboldt Transit Service, the local fixed route was achieving a farebox of 4.92 percent in FY 2010, and the intercity service was 12.86 percent. As a new service, Southern Humboldt Transit is exempt from the farebox requirements for two full fiscal years after the inaugural year.

Conclusion from the Analysis and Verification of Key Performance Indicators

HTA's performance indicators over the past five years reflect a growing and productive service despite the national recession. Although systemwide operating costs increased by 53 percent over a five year period from transition to new services and some increases in personnel compensation, offsetting revenues from continued increases in ridership and fare revenue have grown by a larger percentage than costs. As a result, performance measures including cost per passenger declined while other cost measures have grown within reasonable means. In

addition, service effectiveness measures such as passengers per hour and per mile increased during the review period.

As RTS is geared as a commuter service along a major highway corridor in Humboldt County, productivity measures such as farebox recovery tend to be higher than for a regular fixed route service. This is the case with RTS which has achieved a relatively high farebox ratio and must meet a higher statutory farebox requirement than a traditional rural type service.

Eureka Transit Service

The following tables provide performance data for ETS.

Table I-11
ETS Systemwide Performance Indicators

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Operating Cost	\$1,388,814	\$1,436,733	\$1,470,076	\$1,319,612	\$1,294,336	\$1,294,668	-6.8%
Total Passengers	286,807	286,684	260,252	269,991	263,933	253,839	-11.5%
Vehicle Service Hours	31,424	31,326	32,867	22,544	29,071	26,477	-15.7%
Vehicle Service Miles	297,922	310,031	318,295	306,888	265,510	253,993	-14.7%
Operating Subsidy	\$1,098,976	\$1,118,846	\$1,165,754	\$952,264	\$968,166	\$974,837	-11.3%
Passenger Fares	\$289,838	\$317,887	\$304,322	\$367,348	\$326,170	\$319,831	10.3%
Operating Cost per Passenger	\$4.84	\$5.01	\$5.65	\$4.89	\$4.90	\$5.10	5.3%
Operating Cost per Vehicle Service Hour	\$44.20	\$45.86	\$44.73	\$58.53	\$44.52	\$48.90	10.6%
Operating Cost per Vehicle Service Mile	\$4.66	\$4.63	\$4.62	\$4.30	\$4.87	\$5.10	9.3%
Passengers per Vehicle Service Hour	9.1	9.2	7.9	12.0	9.1	9.6	5.0%
Passengers per Vehicle Service Mile	0.96	0.92	0.82	0.88	0.99	1.00	3.8%
Operating Subsidy per Passenger	\$3.83	\$3.90	\$4.48	\$3.53	\$3.67	\$3.84	0.2%
Average Fare per Passenger	\$1.01	\$1.11	\$1.17	\$1.36	\$1.24	\$1.26	24.7%
Fare Recovery Ratio	20.87%	22.13%	20.70%	27.84%	25.20%	24.70%	18.4%

Source: State Controller Report, HTA, Annual Fiscal Audit, City of Eureka

Table I-12
ETS Fixed Route Performance Indicators

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Operating Cost	\$842,779	\$818,444	\$850,380	\$818,010	\$820,856	\$819,987	-2.7%
Total Passengers	239,295	235,898	239,166	230,856	224,284	232,738	-2.7%
Vehicle Service Hours	15,801	15,697	15,638	13,388	14,859	14,691	-7.0%
Vehicle Service Miles	163,573	154,810	153,915	160,668	158,207	160,748	-1.7%
Operating Subsidy	\$651,161	\$603,577	\$632,004	\$553,352	\$575,461	\$559,860	-14.0%
Passenger Fares	\$191,618	\$214,867	\$218,376	\$264,658	\$245,395	\$260,127	35.8%
Operating Cost per Passenger	\$3.52	\$3.47	\$3.56	\$3.54	\$3.66	\$3.52	0.0%
Operating Cost per Vehicle Service Hour	\$53.34	\$52.14	\$54.38	\$61.10	\$55.24	\$55.82	4.6%
Operating Cost per Vehicle Service Mile	\$5.15	\$5.29	\$5.52	\$5.09	\$5.19	\$5.10	-1.0%
Passengers per Vehicle Service Hour	15.1	15.0	15.3	17.2	15.1	15.8	4.6%
Passengers per Vehicle Service Mile	1.46	1.52	1.55	1.44	1.42	1.45	-1.0%
Operating Subsidy per Passenger	\$2.72	\$2.56	\$2.64	\$2.40	\$2.57	\$2.41	-11.6%
Average Fare per Passenger	\$0.80	\$0.91	\$0.91	\$1.15	\$1.09	\$1.12	39.6%
Fare Recovery Ratio	22.74%	26.25%	25.68%	32.35%	29.90%	31.72%	39.5%

Source: State Controller Report, HTA, Annual Fiscal Audit, City of Eureka

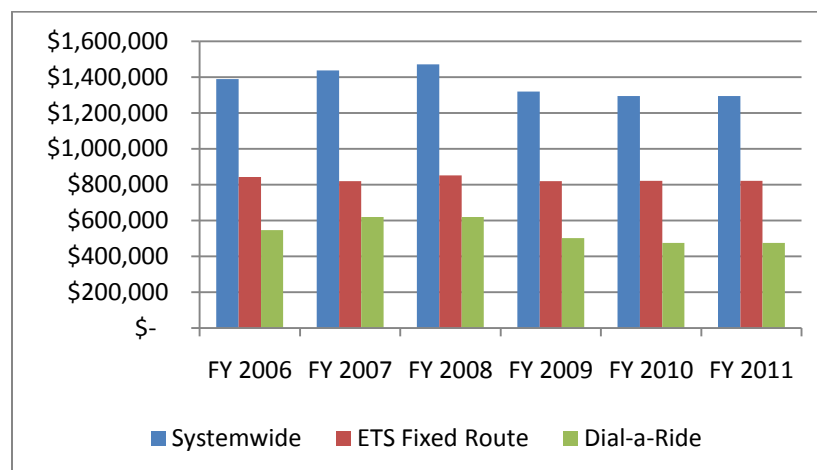
Table I-13
ETS Dial-A-Ride/Lift Performance Indicators

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Operating Cost	\$546,035	\$618,289	\$619,696	\$501,602	\$473,480	\$474,681	-13.1%
Total Passengers	47,512	50,786	21,086	39,135	39,649	21,101	-55.6%
Vehicle Service Hours	15,623	15,629	17,229	9,156	14,212	11,786	-24.6%
Vehicle Service Miles	134,349	155,221	164,380	146,220	107,303	93,245	-30.6%
Operating Subsidy	\$447,815	\$515,269	\$533,750	\$398,912	\$392,705	\$414,977	-7.3%
Passenger Fares	\$98,220	\$103,020	\$85,946	\$102,690	\$80,775	\$59,704	-39.2%
Operating Cost per Passenger	\$11.49	\$12.17	\$29.39	\$12.82	\$11.94	\$22.50	95.7%
Operating Cost per Vehicle Service Hour	\$34.95	\$39.56	\$35.97	\$54.78	\$33.32	\$40.27	15.2%

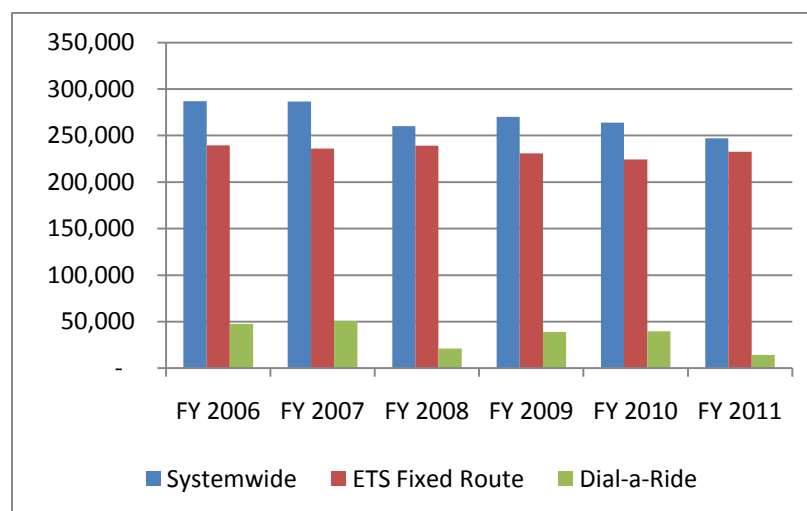
Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Operating Cost per Vehicle Service Mile	\$4.06	\$3.98	\$3.77	\$3.43	\$4.41	\$5.09	25.3%
Passengers per Vehicle Service Hour	3.0	3.2	1.2	4.3	2.8	1.8	-41.1%
Passengers per Vehicle Service Mile	0.35	0.33	0.13	0.27	0.37	0.23	-36.0%
Operating Subsidy per Passenger	\$9.43	\$10.15	\$25.31	\$10.19	\$9.90	\$19.67	108.7%
Average Fare per Passenger	\$2.07	\$2.03	\$4.08	\$2.62	\$2.04	\$2.83	36.9%
Fare Recovery Ratio	17.99%	16.66%	13.87%	20.47%	17.06%	12.58%	-30.1%

Source: State Controller Report, HTA, Annual Fiscal Audit, City of Eureka, City Ambulance

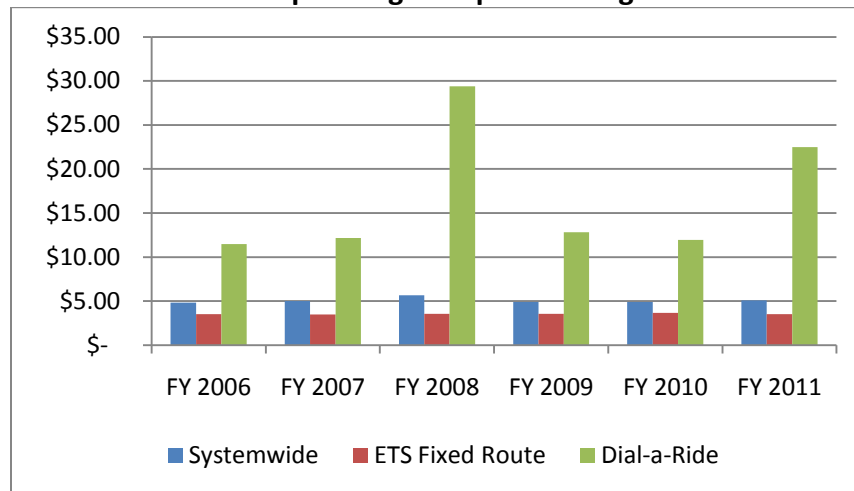
**Graph I-8
ETS Operating Costs**



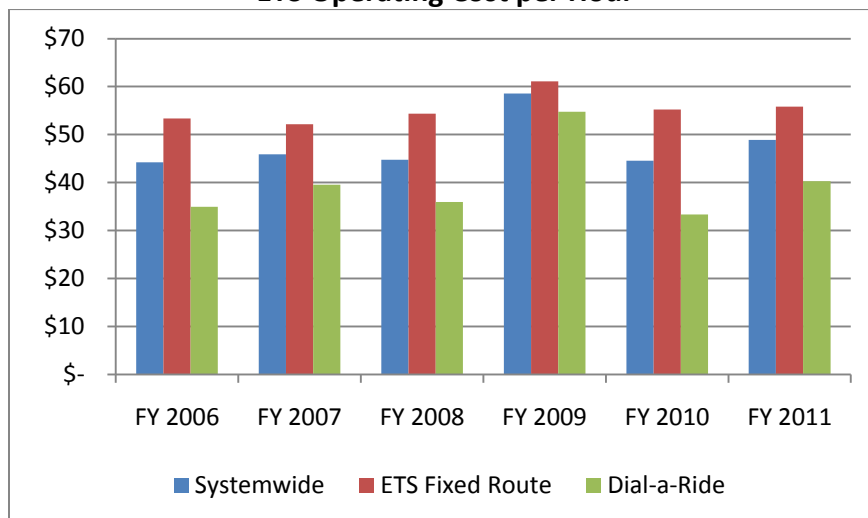
**Graph I-9
ETS Ridership**



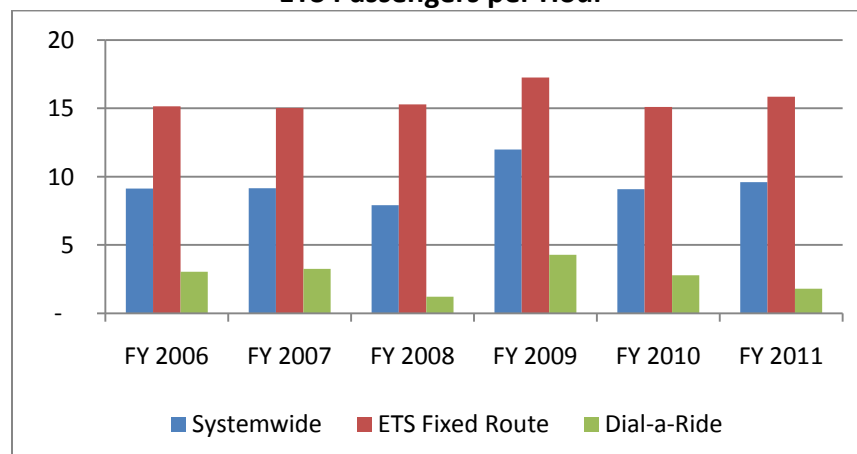
Graph I-10
ETS Operating Cost per Passenger



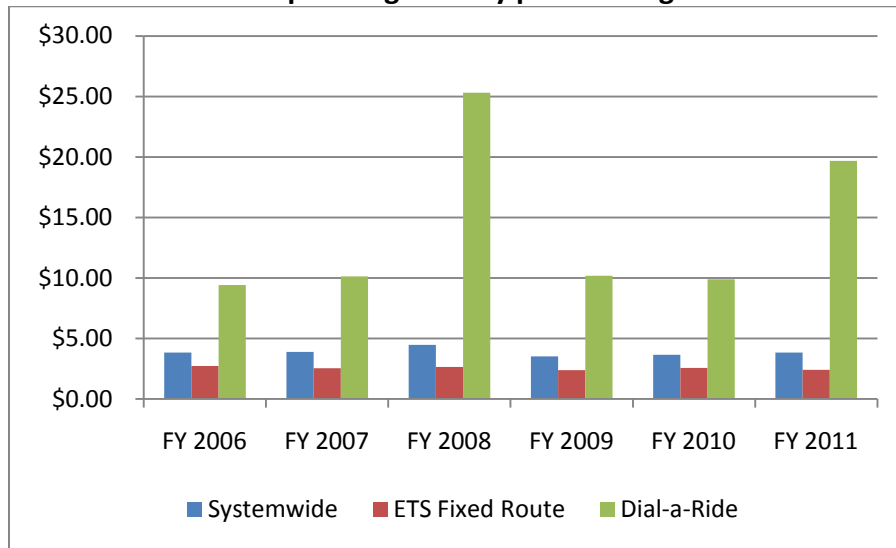
Graph I-11
ETS Operating Cost per Hour



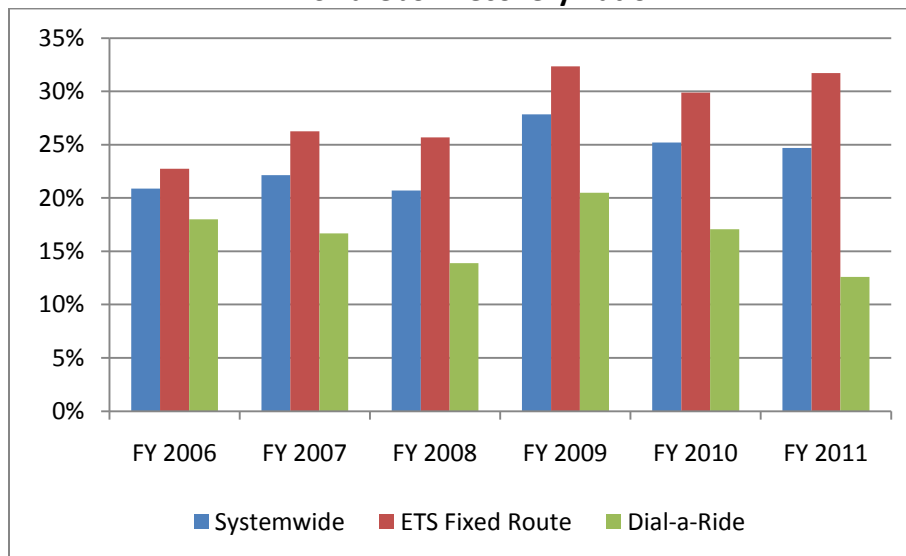
Graph I-12
ETS Passengers per Hour



Graph I-13
ETS Operating Subsidy per Passenger



Graph I-14
ETS Farebox Recovery Ratio



Findings from Verification of Key Performance Indicators

1. **Operating cost per vehicle service hour**, an indicator of cost efficiency, grew by almost 11 percent systemwide from \$44.20 in FY 2006 to \$48.90 in FY 2011. This rate of increase was equal to the inflation rate during the time period. The ETS fixed route operations cost per vehicle service hour increased about 5 percent during the period from \$53.34 to \$55.82. Demand response cost per service hour increased 15 percent from \$34.95 to \$40.27. Systemwide operating costs decreased 7 percent with operating hours decreasing 16 percent.

2. **Operating cost per passenger**, an indicator of cost effectiveness, increased by 5 percent systemwide from \$4.84 in FY 2006 to \$5.10 in FY 2011. This rate of growth in cost was also below the rate of inflation. ETS fixed route services exhibited no significant change during the period, remaining relatively flat at a cost of \$3.52 per passenger. Demand response services saw its operating cost per passenger increase significantly through year 2011 as ridership declined from prior years although operating costs remained stable.
3. **Passengers per vehicle service hour**, which measures the effectiveness of the service delivered, was fairly stable for ETS fixed route during the audit period. The measure grew by less than 5 percent, remaining at between 15 and 16 passengers per hour and peaking in FY 2009 at 17.2 passengers per hour. Passengers per hour for DAR declined significantly due to a larger decline in ridership compared to the decrease in service hours. Prior to that, ridership per hour was fairly stable and having peaked in FY 2009 when 4.3 passengers per hour were served by DAR.
4. **Passengers per vehicle service mile**, another indicator of service effectiveness, declined slightly during the time period for fixed route, going from 1.46 passengers per mile in FY 2006 to 1.45 in FY 2011. Overall, the measure was relatively stable. Passengers per vehicle mile for DAR declined by 36 percent through 2011 as ridership declined more rapidly than service miles.
5. **Operating subsidy per passenger** for fixed route decreased 12 percent between FY 2006 and FY 2011 from \$2.72 to \$2.41. This decrease shows that the system has been able to retain revenues such as fares at a consistent pace as ridership. The operating subsidy per passenger for DAR increased significantly during two years, in FY 2008 and 2011, due to declines in ridership in those years. In other years, ridership has been higher which reduced the subsidy per passenger.
6. **Farebox recovery** for fixed route continued to surpass the TDA farebox recovery requirement of 22.4 percent on an annual basis. The installation of electronic fareboxes on the ETS buses in 2008 has helped to increase the fares collected through less fare evasion and advance sales of prepaid passes and fare value cards. The DAR farebox has also exceeded its TDA requirement of 10 percent during the time period. There was an increase in the fare for DAR to \$2.80 per ticket from \$2.40 that helped raise the farebox recovery and reduce the city's general fund subsidy for the service.

Conclusion from the Analysis and Verification of Key Performance Indicators

ETS' performance indicators reflect a relatively stable transit system during challenging recessionary times. Ridership trends remained steady with some small decrease over the last three years. Operating costs increased as fuel prices spiked in 2008 and parts of 2009, however, as fuel prices subsided, the costs decreased as well. Worker's compensation costs for the DAR contractor, CAE, were also lower during the audit period and resulting in a trend of lower DAR costs. The reduction in the city general fund subsidy to zero in FY 2010 for ETS is from a combination of factors including an increase in fares from prior years, additional efficiencies in

operating the service by HTA, and operating fixed route at a cost that is equal to or slightly below the cumulative rate of inflation over the past three years.

Arcata & Mad River Transit System

The following tables provide performance data for A&MRTS.

**Table I-14
A&MRTS Systemwide Performance Indicators**

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	% Change FY 2005-06-2009-10
Operating Cost	\$645,537	\$671,175	\$713,740	\$664,138	\$690,301	6.9%
Total Passengers	209,701	221,613	237,166	231,615	233,570	11.4%
Vehicle Service Hours	12,848	11,924	11,440	10,691	10,544	-17.9%
Vehicle Service Miles	176,743	140,898	141,492	150,769	142,541	-19.4%
Operating Subsidy	\$469,064	\$463,836	\$505,002	\$428,957	\$487,565	3.9%
Passenger Fares	\$176,473	\$207,339	\$208,738	\$235,181	\$202,736	14.9%
Operating Cost per Passenger	\$3.08	\$3.03	\$3.01	\$2.87	\$2.96	-4.0%
Operating Cost per Vehicle Service Hour	\$50.24	\$56.29	\$62.39	\$62.12	\$65.47	30.3%
Operating Cost per Vehicle Service Mile	\$3.65	\$4.76	\$5.04	\$4.41	\$4.84	32.6%
Passengers per Vehicle Service Hour	16.3	18.6	20.7	21.7	22.2	35.7%
Passengers per Vehicle Service Mile	1.19	1.57	1.68	1.54	1.64	38.1%
Operating Subsidy per Passenger	\$2.24	\$2.09	\$2.13	\$1.85	\$2.09	-6.7%
Average Fare per Passenger	\$0.84	\$0.94	\$0.88	\$1.02	\$0.87	3.1%
Fare Recovery Ratio	27.34%	30.89%	29.25%	35.41%	29.37%	7.4%

Source: State Controller Report & Annual Fiscal Audit

Operating Cost & Passenger Fares are audited data (FY2005/06-2009/10)

Table I-15
A&MRTS Fixed Route Performance Indicators

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Operating Cost	\$483,756	\$575,730	\$616,925	\$563,768	\$590,643	\$547,785	13.2%
Total Passengers	195,987	212,579	227,357	222,559	225,189	217,910	11.2%
Vehicle Service Hours	7,348	7,894	7,790	7,334	7,326	7,434	1.2%
Vehicle Service Miles	92,864	94,298	92,786	92,284	92,315	92,484	-0.4%
Operating Subsidy	\$311,736	\$394,554	\$431,121	\$359,451	\$415,607	\$358,813	15.1%
Passenger Fares	\$172,020	\$181,176	\$185,804	\$204,317	\$175,036	\$188,972	9.9%
Operating Cost per Passenger	\$2.47	\$2.71	\$2.71	\$2.53	\$2.62	\$2.51	1.8%
Operating Cost per Vehicle Service Hour	\$65.84	\$72.93	\$79.19	\$76.87	\$80.62	\$73.69	11.9%
Operating Cost per Vehicle Service Mile	\$5.21	\$6.11	\$6.65	\$6.11	\$6.40	\$5.92	13.7%
Passengers per Vehicle Service Hour	26.7	26.9	29.2	30.3	30.7	29.3	9.9%
Passengers per Vehicle Service Mile	2.11	2.25	2.45	2.41	2.44	2.36	11.6%
Operating Subsidy per Passenger	\$1.59	\$1.86	\$1.90	\$1.62	\$1.85	\$1.65	3.5%
Average Fare per Passenger	\$0.88	\$0.85	\$0.82	\$0.92	\$0.78	\$0.87	-1.2%
Fare Recovery Ratio	35.56%	31.47%	30.12%	36.24%	29.63%	34.50%	-3.0%

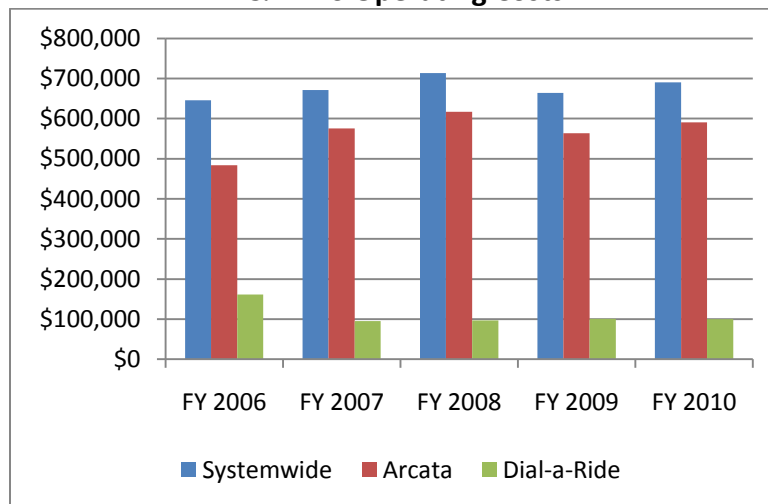
Source: HTA, State Controller Report & Annual Fiscal Audit
Operating Cost & Passenger Fares are audited data
(FY2005/06-2009/10)

Table I-16
A&MRTS Dial-A-Ride/Lift Performance Indicators

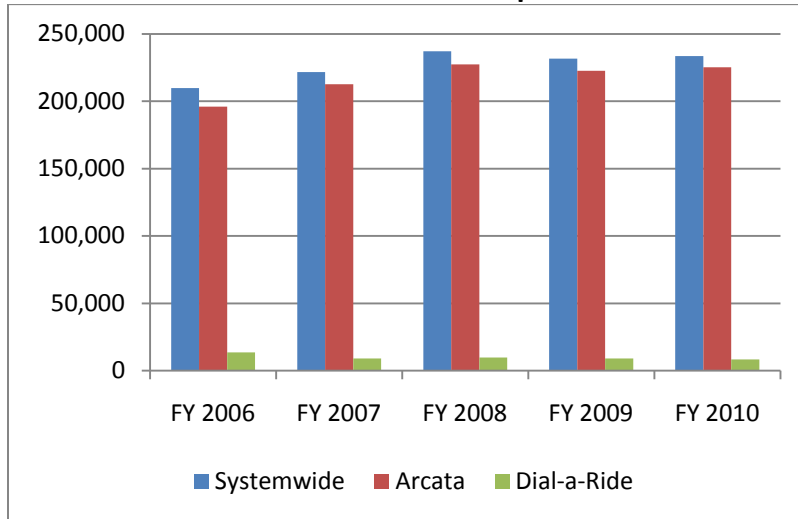
Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	% Change FY 2005-06-2009-10
Operating Cost	\$161,781	\$95,445	\$96,815	\$100,370	\$99,658	-38.4%
Total Passengers	13,714	9,034	9,809	9,056	8,381	-38.9%
Vehicle Service Hours	5,500	4,030	3,650	3,357	3,218	-41.5%
Vehicle Service Miles	83,879	46,600	48,706	58,485	50,226	-40.1%
Operating Subsidy	\$157,328	\$69,282	\$73,881	\$69,506	\$71,958	-54.3%
Passenger Fares	\$4,453	\$26,163	\$22,934	\$30,864	\$27,700	522.1%
Operating Cost per Passenger	\$11.80	\$10.57	\$9.87	\$11.08	\$11.89	0.8%
Operating Cost per Vehicle Service Hour	\$29.41	\$23.69	\$26.53	\$29.90	\$30.97	5.3%
Operating Cost per Vehicle Service Mile	\$1.93	\$2.05	\$1.99	\$1.72	\$1.98	2.9%
Passengers per Vehicle Service Hour	2.5	2.2	2.7	2.7	2.6	4.5%
Passengers per Vehicle Service Mile	0.16	0.19	0.20	0.15	0.17	2.1%
Operating Subsidy per Passenger	\$11.47	\$7.67	\$7.53	\$7.68	\$8.59	-25.2%
Average Fare per Passenger	\$0.32	\$2.90	\$2.34	\$3.41	\$3.31	917.9%
Fare Recovery Ratio	2.75%	27.41%	23.69%	30.75%	27.80%	909.8%

Source: State Controller Report, Annual Fiscal Audit, City Ambulance
FY 2010-11 data not available

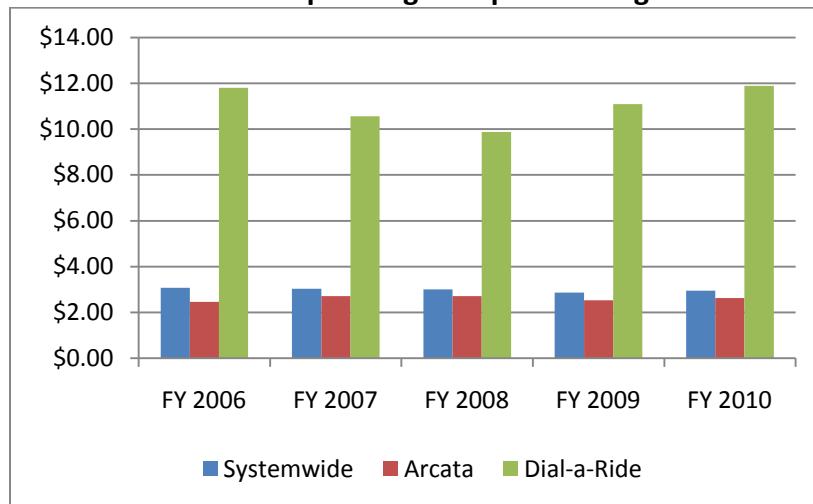
Graph I-15
A&MRTS Operating Costs



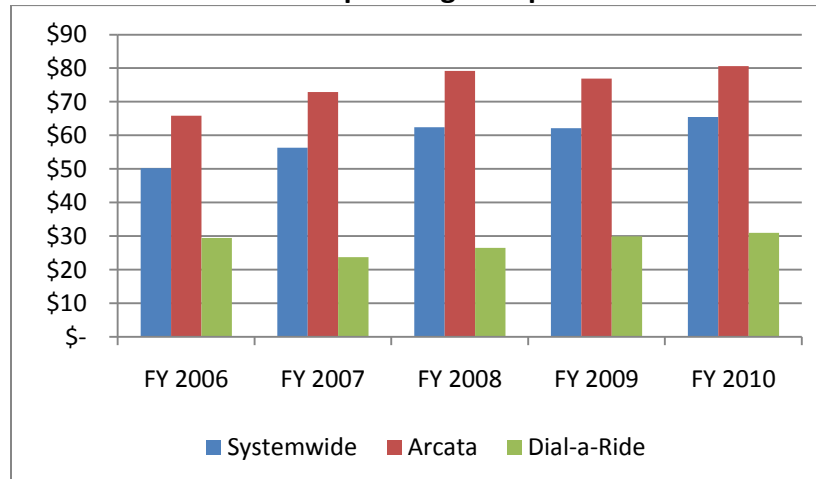
Graph I-16
A&MRTS Ridership



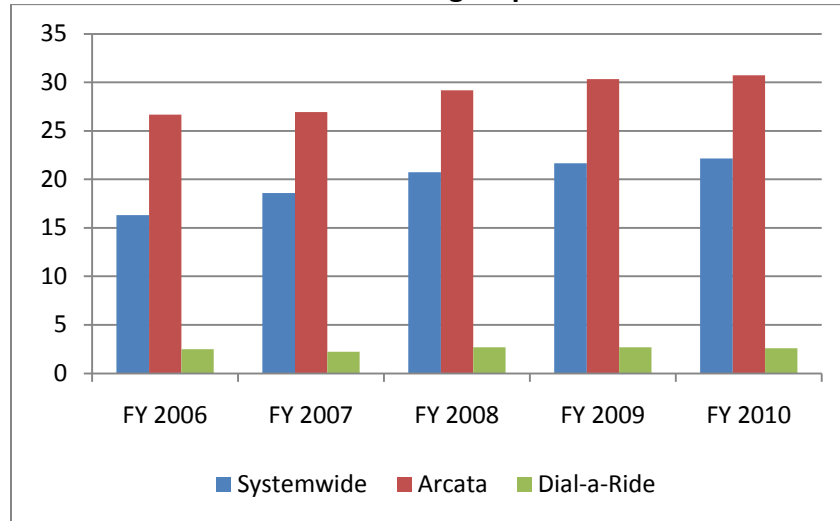
Graph I-17
A&MRTS Operating Cost per Passenger



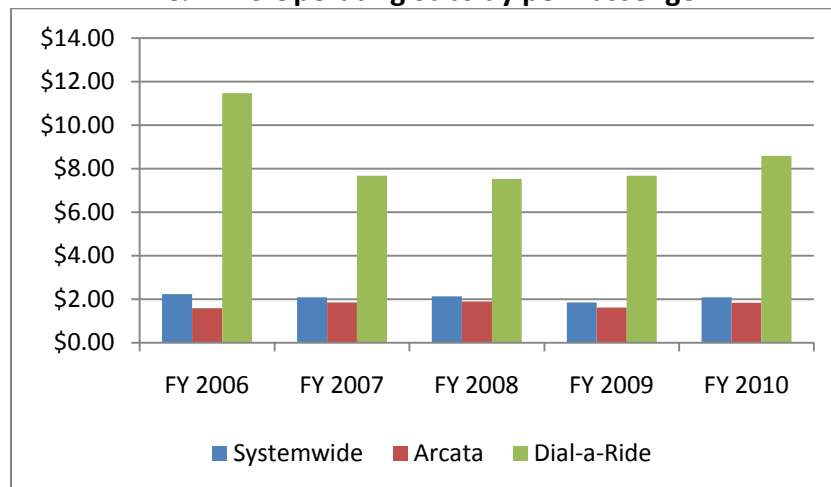
Graph I-18
A&MRTS Operating Cost per Hour



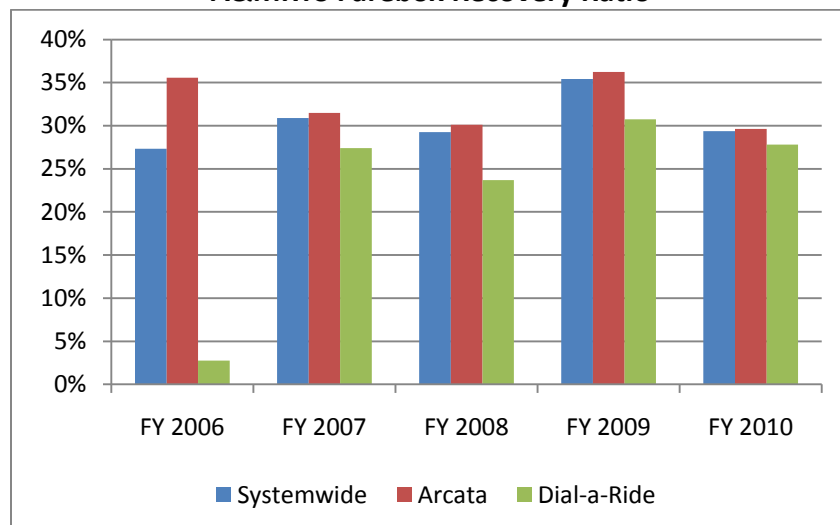
Graph I-19
A&MRTS Passengers per Hour



Graph I-20
A&MRTS Operating Subsidy per Passenger



Graph I-21
A&MRTS Farebox Recovery Ratio



Findings from Verification of Key Performance Indicators

1. **Operating cost per vehicle service hour**, an indicator of cost efficiency, increased just over 30 percent systemwide during the five year period from FY 2006 to FY 2010. Cost per hour showed an increase of 12 percent for fixed route service from \$65.84 in FY 2006 to \$73.69 in FY 2011. This rate of growth slightly exceeded the Consumer Price Index (CPI) of 10.6 percent over the six year period, albeit still showing a cost efficient service. Operating costs increased at a quicker pace than the growth in vehicle hours. Dial-a-Ride service exhibited an increase of 5.3 percent between FY 2006 and FY 2010.
2. **Operating cost per passenger**, an indicator of cost effectiveness, was stable for fixed route during the six year period. The cost per passenger increased slightly from \$2.47 to \$2.51. DAR/L cost was also stable at about \$11.89 per passenger. Both ridership and operating costs grew at about the same rate. Systemwide, cost per passenger decreased by a modest 4 percent.
3. **Passengers per vehicle service hour**, which measures the effectiveness of the service delivered, increased 10 percent for fixed route between FY 2006 and FY 2011 from 26.9 passengers per hour to 29.3 passengers per hour. While revenue hours on fixed route slightly declined in FY 2010, ridership grew during the period as the majority of riders are HSU students. Passengers per hour for dial-a-ride were stable at about 2.6. Systemwide, passengers per service hour increased nearly 36 percent during the five year period.
4. **Passengers per vehicle service mile**, another indicator of service effectiveness, increased 12 percent between FY 2006 and FY 2011 from 2.11 to 2.36 for fixed route. Despite a slight decrease in miles of service in part from the elimination of the HSU express shuttle bus in 2009, the increase in overall ridership on A&MRTS resulted in more effective service. Passengers per mile for dial-a-ride were stable at about 0.17. Systemwide, passengers per service mile increased 38 percent.
5. **Operating subsidy per passenger** increased slightly at 3.5 percent between FY 2006 and FY 2011 for fixed route from \$1.59 to \$1.65. This slight increase shows that the system has been able to retain revenues such as fares at a consistent pace as ridership. The operating subsidy per passenger for DAR has been relatively stable over the last four years. Systemwide, the subsidy per passenger decreased nearly 7 percent from FY 2006 to FY 2010.
6. **Farebox recovery** for fixed route continued to exhibit strong trends, surpassing the required farebox recovery of 18.8 percent by a significant margin on an annual basis. The farebox ratios during the months when HSU is not in session generally decline to below the required ratio. However, when HSU is in session, which is about 8 months of the year, the farebox ratio increases to maintain the annual farebox well above the standard. The installation of electronic fareboxes has also helped to increase the fares collected through less fare evasion and advance sales of prepaid fare value cards.

Conclusion from the Analysis and Verification of Key Performance Indicators

A&MRTS' performance indicators reflect a stable transit system that has a strong ridership market in HSU and which serves a relatively compact area. As there are two intra-city routes that operate throughout the city on weekdays and one intra-city route on Saturdays, operating costs can be held more constant. The new vehicles acquired over the last three years will also help with reducing maintenance expenses. During summer and winter breaks at HSU, the hours of operations are reduced by three hours at night, further keeping costs in check.

The JackPass program enabling HSU students to ride free using their student identification card is paid for through a mandatory fee with each student's registration, securing a steady fare revenue source for the transit system. According to the city transit budget, the fare revenue provided by HSU has ranged between \$135,000 and \$153,000 over the last three years based on an annual forecast of riders. These amounts comprised approximately 75 percent of the fixed route's annual total fare revenues. The contract amount is generally fixed at \$130,000 per year. The limited parking availability on campus also provides incentives to use A&MRTS and thereby maintaining demand for the service. These additional factors help to drive the farebox recovery to levels that have regularly exceeded the required minimum.

Fortuna Senior Bus Transit

The following tables provide performance data for Fortuna Transit.

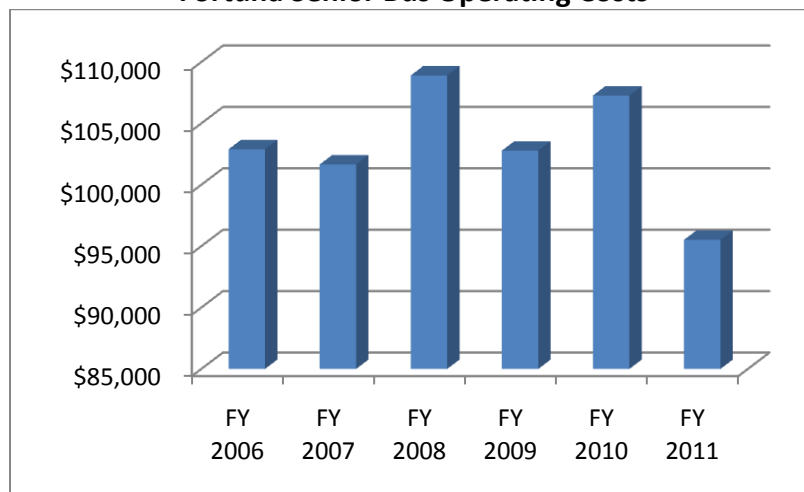
Table I-17
Fortuna Senior Transit Performance Indicators

Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Operating Cost	\$102,898	\$101,657	\$108,909	\$102,785	\$107,274	\$95,519	-7.2%
Total Passengers	14,396	14,491	12,020	11,114	9,448	11,243	-21.9%
Vehicle Service Hours	4,092	2,480	3,183	3,062	3,077	2,949	-27.9%
Vehicle Service Miles	32,373	32,959	31,290	25,960	23,040	24,544	-24.2%
Operating Subsidy	\$93,648	\$92,105	\$96,921	\$91,157	\$97,076	\$84,550	-9.7%
Passenger Fares	\$9,250	\$9,552	\$11,988	\$11,628	\$10,198	\$10,969	18.6%
Operating Cost per Passenger	\$7.15	\$7.02	\$9.06	\$9.25	\$11.35	\$8.50	18.9%
Operating Cost per	\$25.15	\$40.99	\$34.22	\$33.57	\$34.86	\$32.39	28.8%

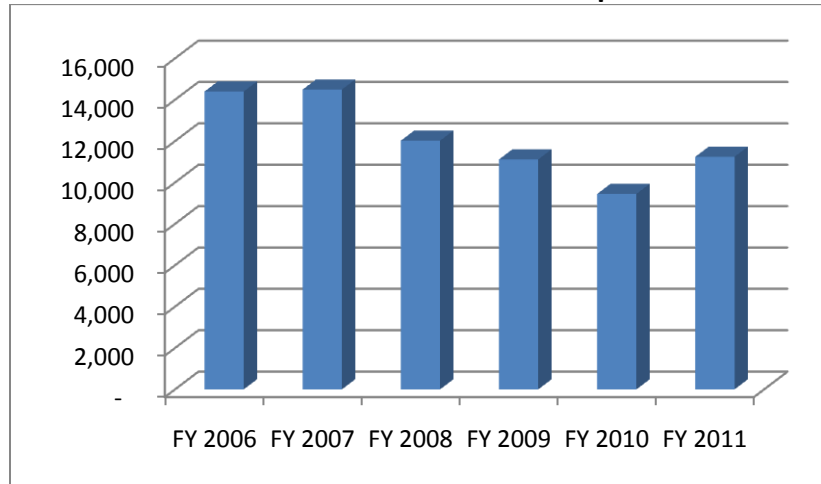
Performance Data and Indicators	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	% Change FY 2005-06-2010-11
Vehicle Service Hour							
Operating Cost per Vehicle Service Mile	\$3.18	\$3.08	\$3.48	\$3.96	\$4.66	\$3.89	22.4%
Passengers per Vehicle Service Hour	3.5	5.8	3.8	3.6	3.1	3.8	8.4%
Passengers per Vehicle Service Mile	0.44	0.44	0.38	0.43	0.41	0.46	3.0%
Operating Subsidy per Passenger	\$6.51	\$6.36	\$8.06	\$8.20	\$10.27	\$7.52	15.6%
Average Fare per Passenger	\$0.64	\$0.66	\$1.00	\$1.05	\$1.08	\$0.98	51.8%
Fare Recovery Ratio	8.99%	9.40%	11.01%	11.31%	9.51%	11.48%	27.7%

Source: State Controller Report, Senior Citizens Bus Monthly Transportation Report, Annual Fiscal Audit

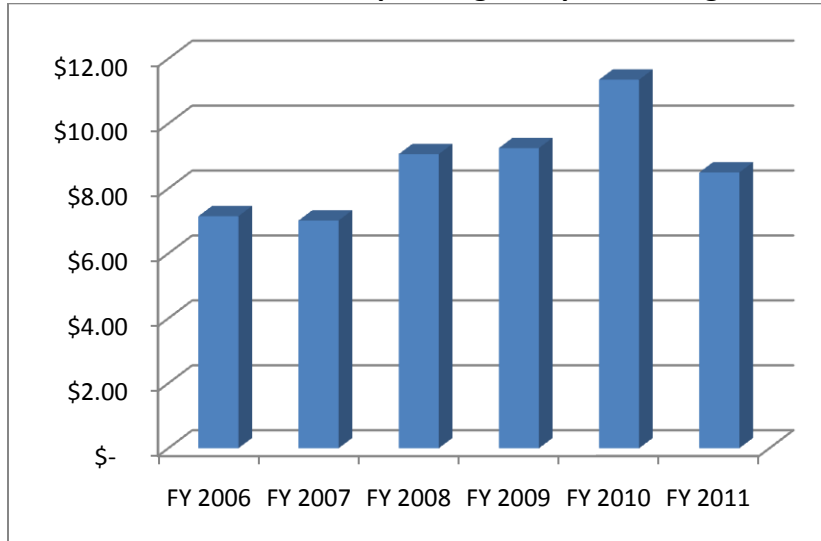
Graph I-22
Fortuna Senior Bus Operating Costs



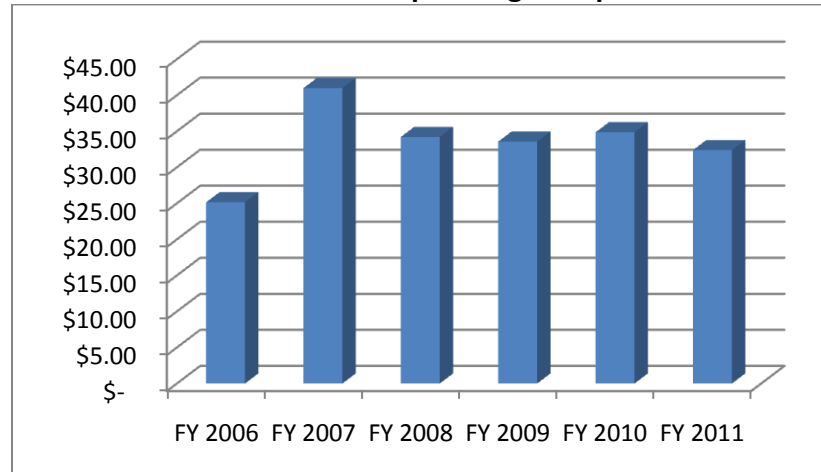
Graph I-23
Fortuna Senior Bus Ridership



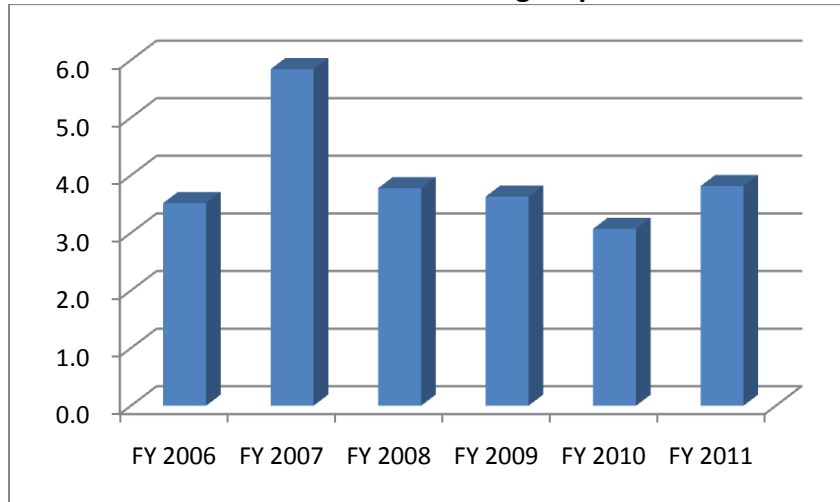
Graph I-24
Fortuna Senior Bus Operating Cost per Passenger



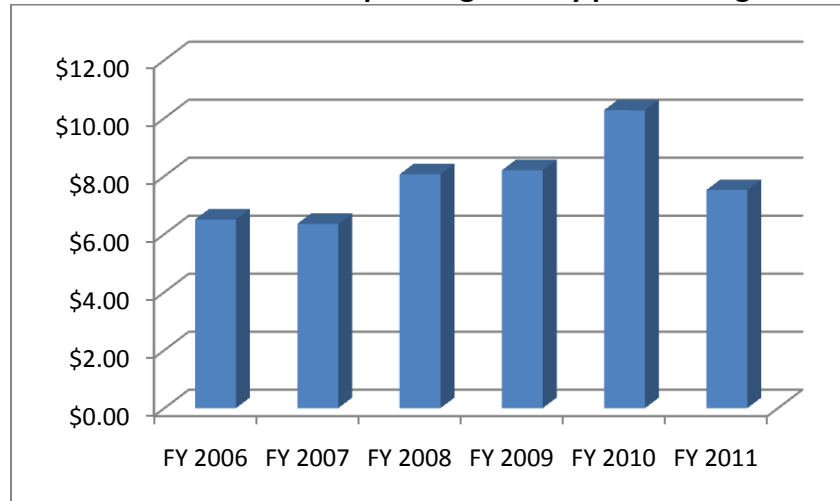
Graph I-25
Fortuna Senior Bus Operating Cost per Hour



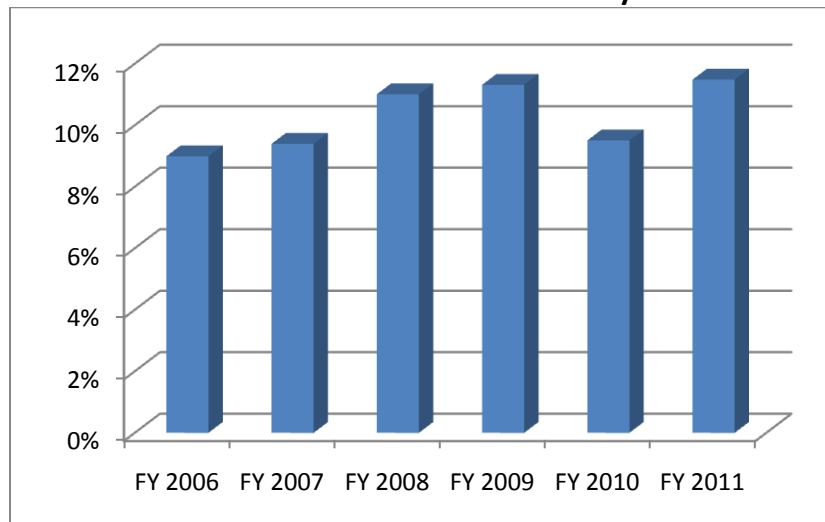
Graph I-26
Fortuna Senior Bus Passengers per Hour



Graph I-27
Fortuna Senior Bus Operating Subsidy per Passenger



Graph I-28
Fortuna Senior Bus Farebox Recovery Ratio



Findings from Verification of Performance Indicators

It is noted that the performance indicator trends relative to service hours and miles are skewed due to the change in the collection of revenue service data towards the end of the analysis period. Only total hours and miles were collected through FY 2008. From FY 2009 through FY 2011, both revenue and total hours and miles were separated and collected. When compared to the base year of FY 2006, the three year trends are affected by the differences between total and revenue service data. The current performance data using revenue service data is compliant with the definitions stipulated by the Transportation Development Act (TDA).

1. **Operating cost per vehicle service hour**, an indicator of cost efficiency, increased 28.8 percent systemwide from \$25.15 in FY 2006 to \$32.39 in FY 2011, which was nearly three times than the Consumer Price Index (CPI) of 10.6 percent over six year period. Costs per service hour peaked at \$40.99 in FY 2007, which corresponds to a 40 percent decrease in service hours. Operating costs decreased by 7.2 percent, whereas service hours decreased 27.9 percent during the period.
2. **Operating cost per passenger**, an indicator of cost effectiveness, increased nearly 19 percent from \$7.15 in FY 2006 to \$8.50 in FY 2011. This increase was larger than the CPI rate of 10.6 percent over the last six years. Although costs were relatively stable, ridership declined 21.9 percent during the period from 14,396 passengers in FY 2006 to 11,243 passengers in FY 2011.
3. **Passengers per vehicle service hour**, which measures the effectiveness of the service delivered, increased 8.4 percent between FY 2006 and FY 2011 from 3.5 passengers per hour to 3.8 passengers per hour. The relatively large decrease in ridership in FY 2010 adversely impacted this trend due to the suspension of Saturday service. The ridership decrease, combined with the increase in vehicle hours when compared to FY 2006, resulted in a significant decline in this performance indicator in FY 2010 before rebounding in FY 2011.
4. **Passengers per vehicle service mile**, another indicator of service effectiveness, increased slightly by 3 percent between FY 2006 and FY 2011 from 0.44 to 0.46 passengers. The increase in this indicator is not as dramatic as that for passengers per hour due to both ridership and service miles declining during the audit period. As discussed above, the use of revenue miles in FY 2009 through FY 2011 provide a depiction of this indicator using the correct information.
5. **Operating Subsidy per Passenger** increased 15.6 percent between FYs 2006 and FY 2011 from \$6.51 to \$7.52 per passenger. This reflects the difference between operating costs and passenger fare revenue in relation to the number of passengers carried. The indicator peaked in FY 2010 at \$10.27 before declining in FY 2011 due to the elimination of Saturday service resulting in fewer passengers carried.
6. **Farebox recovery** exhibited an overall increase of 27.7 percent during the six-year analysis period. The growth in the farebox ratio in FYs 2008 and 2009 was attributed in part to the fare increase, although ridership dropped during the same years. After these steady

increases, farebox declined 16 percent in FY 2010 corresponding to service reductions. With increases in costs between FYs 2009 and 2010, coupled with decreases in ridership and fare revenue, the farebox ratio fell below the 10 percent TDA requirement in FY 2010 before rebounding to 11.48 percent in FY 2011.

Conclusion from the Analysis and Verification of Key Performance Indicators

The performance indicators for Fortuna Senior Transit reflect a fairly stable service from a cost perspective. The City has taken further steps to reduce cost in FY 2011 from the conversion of a full time driver to a part time driving position. Ridership trends during the period showed a decrease in spite of a leveling of revenue hours and miles over the last few years. Passenger loads have decreased as a result of the ridership decline, which includes the suspension of Saturday service in FY 2010. However, ridership data in FY 2011 shows a turnaround increase in passengers from previous months.

The fare revenue decrease of over 12 percent between FYs 2009 and 2010 has followed the pattern of declining ridership as several regular riders have stopped using the service for varied reasons. For a small system such as Fortuna's, this change in ridership has impacted the performance indicators for the service as it has contributed to the cause for the farebox ratio to decline below the TDA threshold in FY 2010.

Continued development of performance indicators using revenue hours and miles will help provide an improved monitoring tool and trends to the City Transit Manager. These indicators show the productivity of Fortuna Senior Transit during actual in-service times, and will help to identify service needs.

Blue Lake Rancheria Transit System

The following tables provide performance data for BLRTS.

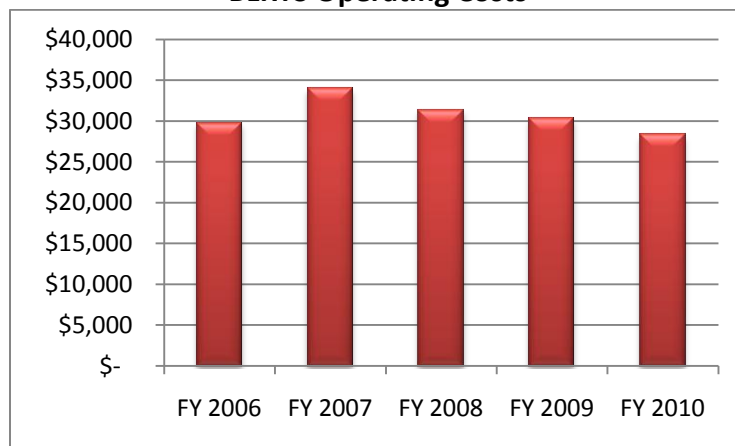
Table I-18
Blue Lake Rancheria Transit Performance Indicators

Performance Data and Indicators	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	% Change FY 2006- 2010
Operating Cost	\$29,751	\$33,918	\$31,376	\$30,251	\$28,262	-5.0%
Total Passengers	11,000	14,620	14,919	16,428	17,284	57.1%
Vehicle Service Hours	4,800	3,052	3,052	2,460	2,268	-52.8%
Vehicle Service Miles	91,000	57,694	57,694	49,785	46,855	-48.5%
Operating Subsidy	\$26,093	\$27,435	\$23,328	\$23,373	\$20,489	-21.5%
Passenger Fares	\$3,658	\$6,483	\$8,048	\$6,878	\$7,773	112.5%
Operating Cost per Passenger	\$2.70	\$2.32	\$2.10	\$1.84	\$1.64	-39.5%
Operating Cost per	\$6.20	\$11.11	\$10.28	\$12.30	\$12.46	101.0%

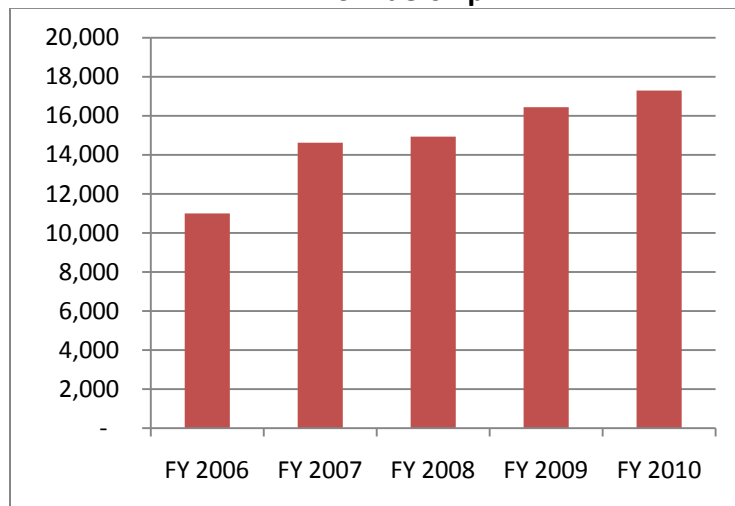
Performance Data and Indicators	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	% Change FY 2006-2010
Vehicle Service Hour						
Operating Cost per Vehicle Service Mile	\$0.33	\$0.59	\$0.54	\$0.61	\$0.60	84.5%
Passengers per Vehicle Service Hour	2.3	4.8	4.9	6.7	7.6	232.5%
Passengers per Vehicle Service Mile	0.12	0.25	0.26	0.33	0.37	205.2%
Operating Subsidy per Passenger	\$2.37	\$1.88	\$1.56	\$1.42	\$1.19	-50.0%
Average Fare per Passenger	\$0.33	\$0.44	\$0.54	\$0.42	\$0.45	35.2%
Fare Recovery Ratio	12.30%	19.11%	25.65%	22.74%	27.50%	123.7%

Source: State Controller Report, Blue Lake Rancheria

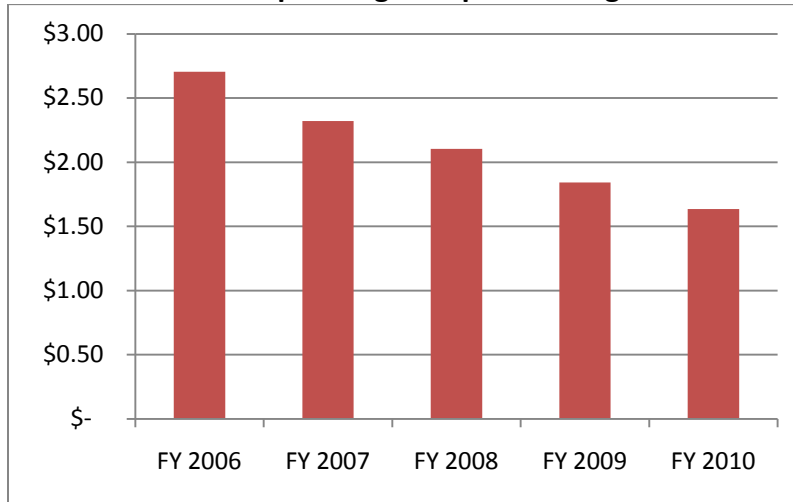
**Graph I-29
BLRTS Operating Costs**



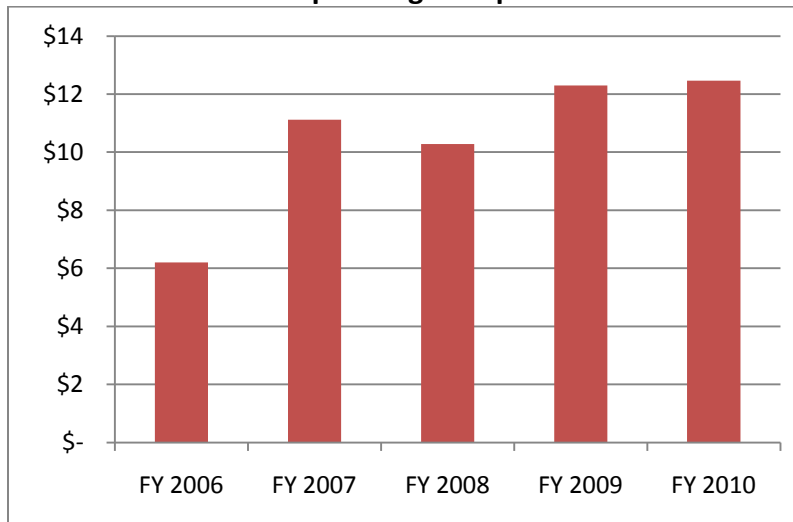
**Graph I-30
BLRTS Ridership**



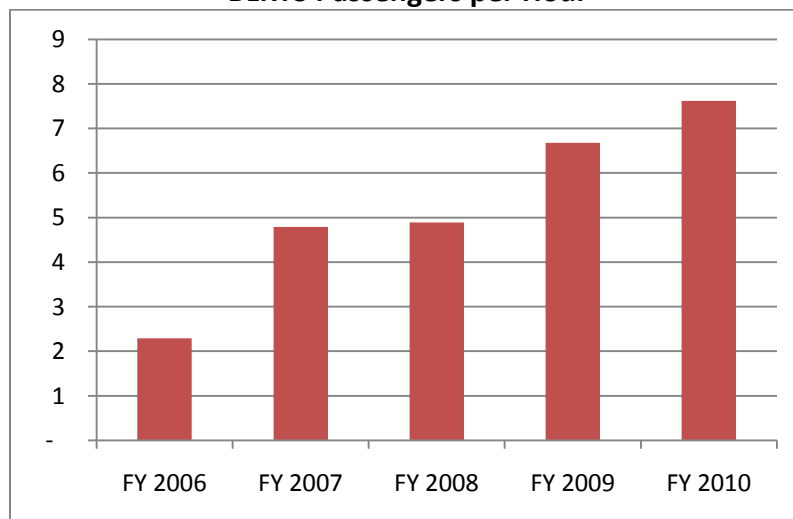
Graph I-31
BLRTS Operating Cost per Passenger



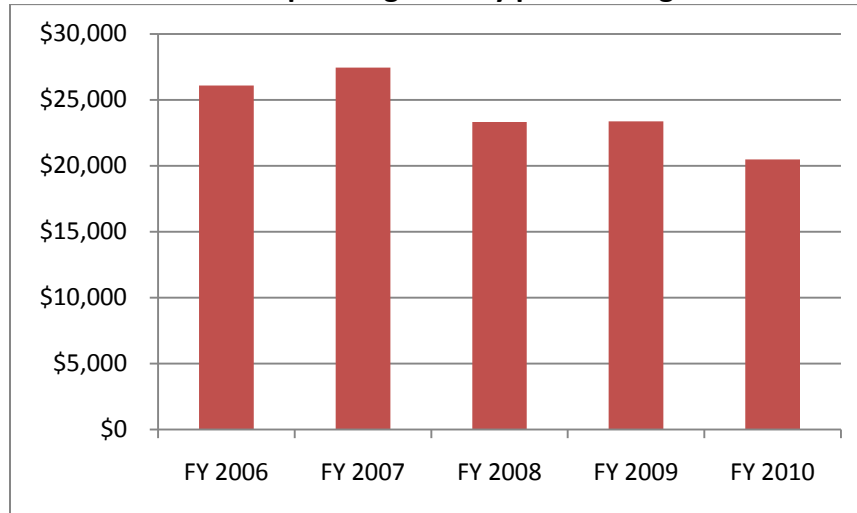
Graph I-32
BLRTS Operating Cost per Hour



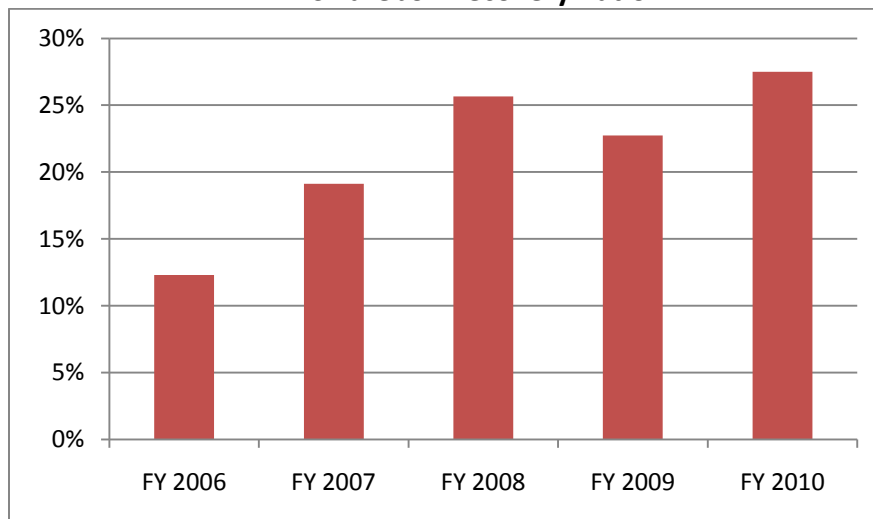
Graph I-33
BLRTS Passengers per Hour



Graph I-34
BLRTS Operating Subsidy per Passenger



Graph I-35
BLRTS Farebox Recovery Ratio



Findings from Verification of Performance Indicators

1. **Operating cost per vehicle service hour** increased substantially over the past five years from \$6.20 in FY 2006 to \$12.46 in FY 2010. The trend appears that as operating costs increased, the number of revenue hours decreased consistently and shows concern for cost efficiency. The data is based upon the annual State Controller Reports submitted by the city.
2. **Operating cost per passenger** decreased nearly 40 percent from \$2.70 in FY 2006 to \$1.64 in FY 2011. The decrease shows a trend in positive cost effectiveness. Although costs were relatively stable, ridership increased significantly from 11,000 passengers in FY 2006 to 17,284 passengers in FY 2010.
3. **Passengers per vehicle service hour**, which measures the effectiveness of the service delivered, increased substantially from 2.3 passengers per hour to 7.6 passengers per hour.

The decrease in service hours over the last five year period is contrasted with the growth in ridership, resulting in large growth in this performance indicator.

4. **Passengers per vehicle service mile**, another indicator of service effectiveness, increased substantially as a result of declining service miles coupled with ridership growth.
5. **Operating Subsidy per Passenger** decreased from \$2.37 to \$1.19 per passenger. This reflects the difference between operating costs and passenger fare revenue in relation to the number of passengers carried. The positive trend from this indicator shows a steady decline in subsidy requirements as cost and revenues have stabilized but ridership has increased.
6. **Farebox recovery** exhibited an overall increase during the past five year analysis period. The growth in the farebox ratio was attributed to growing fare revenues and stabilized costs. As the number of passengers increased, the fare per passenger also increased signifying more passengers are paying the regular fare.

Conclusion from the Analysis and Verification of Key Performance Indicators

The performance indicators for Blue Lake Rancheria Transit reflect a service that is operating in a positive direction. Based upon reported ridership and financial data to the State, the performance trends are mostly indicative of a productive service. The decrease in service provision as measured through vehicle hours and miles causes concern as cost continued to increase. However, the changes that may have taken effect when dial-a-ride was discontinued may have impacted the data that is reported. The current farebox recovery is well above the minimum requirements and allows flexibility in how the service the delivered.

Klamath-Trinity Non-emergency Transportation

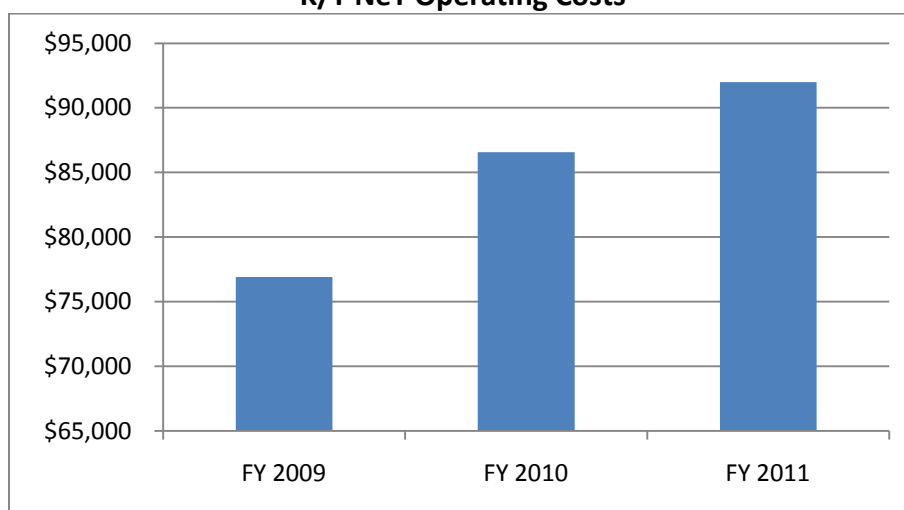
The following tables provide performance data for K/T NeT.

Table I-18
K/T NeT Performance Indicators

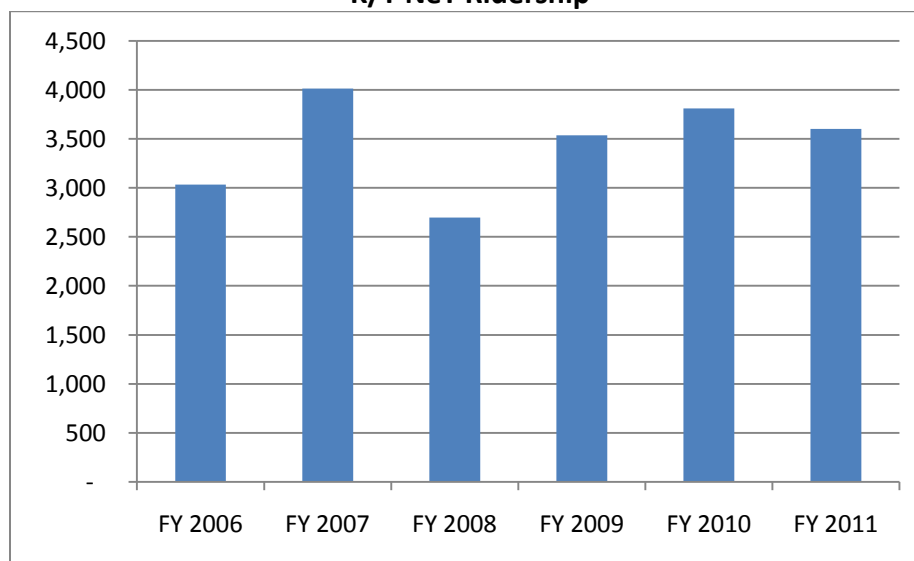
Performance Data and Indicators	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	% Change FY 2006-2011
Total Passengers	3,033	4,011	2,697	3,534	3,808	3,600	18.7%
Vehicle Service Miles	23,355	24,031	23,622	28,654	47,024	46,447	98.9%

				% Change FY 2009- 2011
Performance Data and Indicators	FY 2009	FY 2010	FY 2011	
Operating Cost	\$76,920	\$86,565	\$91,989	19.6%
Total Passengers	3,534	3,808	3,600	1.9%
Vehicle Service Miles	28,654	47,024	46,447	62.1%
Operating Cost per Passenger	\$21.77	\$22.73	\$25.55	17.4%
Operating Cost per Vehicle Service Mile	\$2.68	\$1.84	\$1.98	-26.2%
Passengers per Vehicle Service Mile	0.12	0.08	0.08	-37.2%

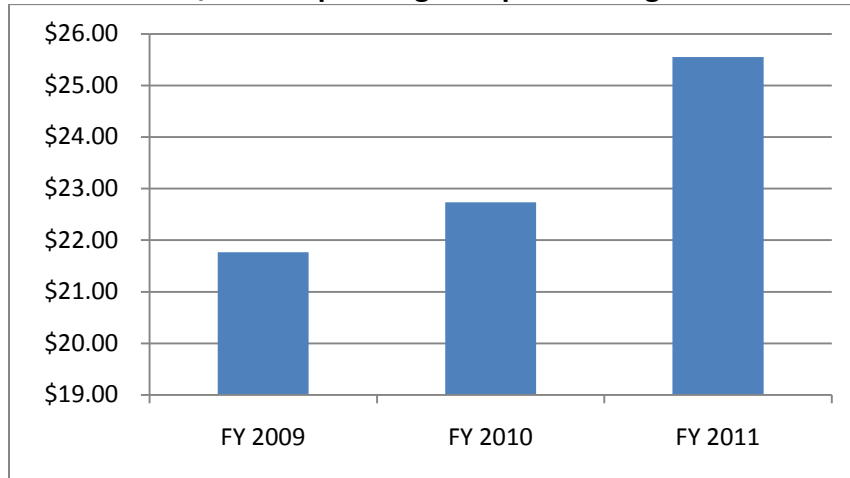
Graph I-36
K/T NeT Operating Costs



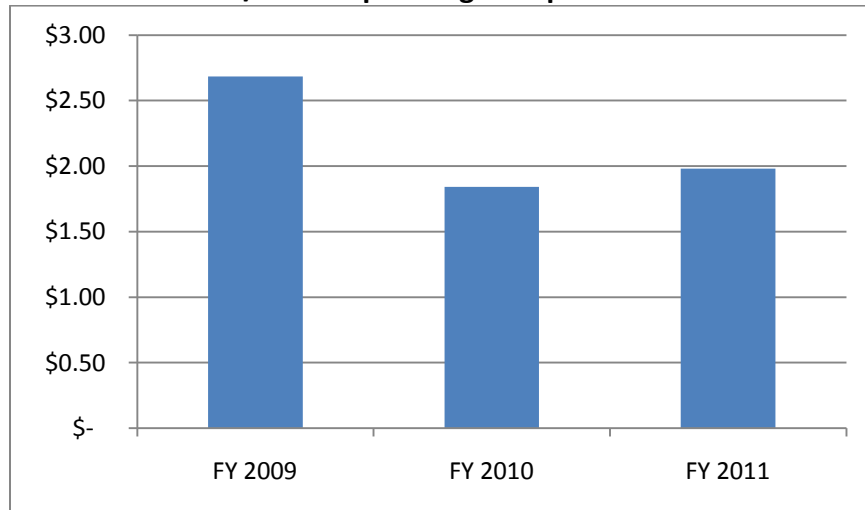
Graph I-37
K/T NeT Ridership



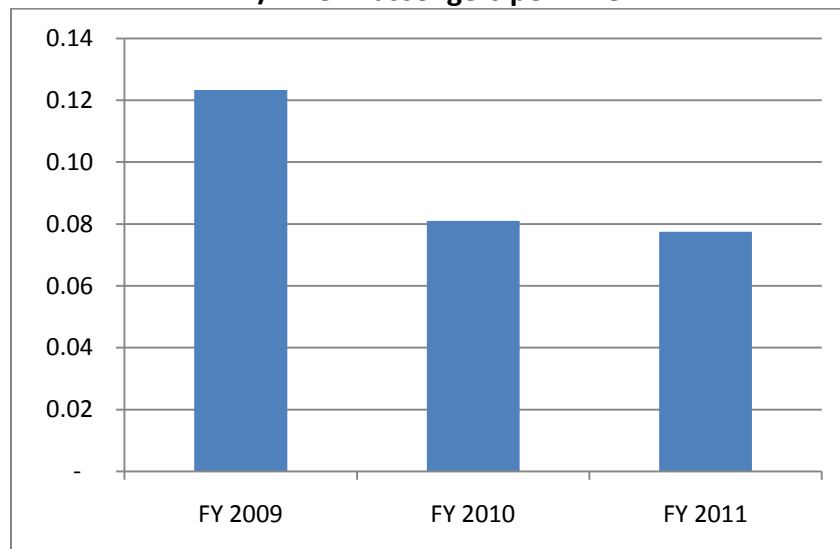
Graph I-38
K/T NeT Operating Cost per Passenger



Graph I-39
K/T NeT Operating Cost per Mile



Graph I-40
K/T NeT Passengers per Mile



Findings from Verification of Performance Indicators

1. **Ridership** fluctuated over the last six years and included areas of growth. The peak ridership was in FY 2007 when over 4,000 passengers rode the service.
2. **Operating cost per passenger** increased over the past few years as a result of increased operations expenses and lower ridership. Operating costs are based on budgeted and past financial data provided by K/T NeT.
3. **Operating cost per vehicle service mile** decreased which is a positive indicator. The number of miles increased at a faster pace than cost, leading to the positive trend.
4. **Passengers per vehicle service mile** decreased in recent years due to declining ridership coupled with growth in miles. The rural and long distance nature of the service provides for low productivity in this measure.

Conclusion from the Analysis and Verification of Key Performance Indicators

Limited data was collected; therefore no definitive conclusions or trends could be made from the performance information. K/T NeT provides a lifeline service for those living in the northeast portions of the county, both on tribal lands and in unincorporated communities. The ability of the service to provide connections from these rural areas to Willow Creek, the greater Humboldt Bay Area, and Weaverville via other transit providers enables the residents to access essential employment, educational, shopping and medical facilities. While ridership has declined in the recent year, K/T NeT continues to be a major mode of transportation in the service area.

1.4 Status of Current TDP Recommendations

The previous TDPs made recommendations for consideration. Below is a status of the implementation of the recommendations.

Humboldt Transit Authority

Service Recommendation	Action	Status
1. Develop and Distribute Service Route Map	The RTS schedule does not feature a route map of the Mainline RTS, Willow Creek and Southern Humboldt services. There is a route map featured on the RTS website with insets of various sections of each route that can be viewed in-depth. The Humboldt County Transportation Services Guide for public transit and human services transportation was published and released by HTA in January 2010. The Guide contains an overview map as well as community maps displaying the route alignments and stops.	Implemented
2. Adjust Route Schedules to Improve On-time Performance	This recommendation was based on the prevalence of schedule adherence issues observed from the ride check data of weekday operations. More recent ride check data also revealed issues with schedule adherence, which involved delays of up to 16 minutes en route. It was recommended that RTS consider a two-step approach involving recurring driver training and adjusting the current operating schedule to reflect actual travel time by five minutes. Given that schedule adherence is still an issue, it is suggested that RTS continue to take steps to implement such approaches.	Continued implementation
3. Establish Sunday Service	RTS currently operates on weekdays and Saturdays. This recommendation originally identified that Sunday service could generate an extra 15,150 riders annually at a projected	Currently being implemented.

Service Recommendation	Action	Status
	cost of \$118,025. At the time of this recommendation in 2006, HTA indicated that it was not financially feasible to implement this recommendation. The FY 2011-12 Unmet Transit Needs Findings identified the implementation of Sunday service on the RTS mainline as being reasonable to meet. The updated net cost was estimated at \$188,116, which would be incurred by the HTA members. Furthermore, passenger surveys and stakeholder interviews indicated a demand for Sunday service. Pursuant to the Unmet Transit Needs Findings, Sunday service will be implemented by RTS.	

Eureka Transit Service

Service Recommendation	Action	Status
1. Modify Rainbow Route Alignment	The ETS Rainbow Route is one of three routes that operate on Saturday. It is a weekend hybrid of the weekday Green and Red Routes serving the western, southern and southeastern areas of Eureka. A route modification was intended to improve relatively poor on-time performance by shortening the alignment. The Rainbow Route alignment has remained unchanged since this recommendation was made and would be subject to further review.	Not implemented
2. Extend Weekday Service Hours to 8:00 PM	The ETS weekday service schedule for the Gold, Purple & Red Routes currently runs until 7:00 p.m. The Green Route ends service at 6:44 p.m. While community input to the Unmet Transit Needs process identified extended hours into the	Not implemented

Service Recommendation	Action	Status
	evening, the findings have not been found to be reasonable to meet based on HCAOG adopted criteria. In addition, the city of Eureka already spends all of its TDA on transit. Should further demand for extended evening service be warranted, this service recommendation should be revisited.	

Arcata & Mad River Transit Service

Service Recommendation	Action	Status
1. Modify Schedules to Improve On-time Performance	This recommendation was based on the prevalence of schedule adherence issues observed from the ride check data of weekday operations. It was observed that there was the incidence of early departures at designated time points generally near the start of the surveyed trips. It was recommended that A&MRTS reduce the recovery time by four minutes, reallocating same time throughout the route. Schedules for both the Red and Gold Routes were proposed that increase trip running time to 54 minutes. A review of A&MRTS' current schedules show runs times of 52 minutes with buses departing the Transit Center at 5 minutes after the hour and returning 57 minutes after the hour.	Not implemented
2. Update Brochures and Collateral	A&MRTS publishes a glossy quad-fold timetable and route map. The most recent edition is dated July 2010. In addition to providing schedules for the three routes, the pocket-sized brochure contains information about fares, the Regional Transit Pass, hours of operation, general reference and transportation contacts. The Express route serving HSU was discontinued in 2009. Nevertheless, the transit service has continued to build a constructive relationship with HSU as exemplified by the introduction and	Implemented

Service Recommendation	Action	Status
	usage of the JackPass. In addition, A&MRTS introduced a dedicated website along with a presence on Google Transit that serves to elevate the agency's presence.	
3. Develop A&MRTS Website	A&MRTS has a website with its own dedicated domain name (http://arcatatransit.org/) that is easy to remember and access. The website was developed by Trillium Transit Internet Solutions, which also developed websites for Humboldt Transit System (HTA) and the Eureka Transit Service (ETS). The website address is featured on the A&MRTS timetable and in the Humboldt County Transportation Services Guide.	Implemented.
4. Increase Saturday Service Frequency	A&MRTS implemented a Saturday service, branded the Orange Route, which is a hybrid of the Red and Gold Routes that run during the week. The Orange Route runs on an hourly headway from 7:00 a.m. to 7:00 p.m.	Implemented.

Fortuna Senior Bus Transit

Service Recommendation	Action	Status
1. Consider converting the senior demand-response service to a general public demand-response service.	This recommendation was prompted by the increasing demand for transit service within the City of Fortuna. The prior TDP cited how easily the level of service could be adjusted to address the specific if the transit service was converted to general public. A general public service would also allow for interline connections with the RTS Mainline service at key transfer points (e.g., 11 th and N Streets). During the review period, the City suspended Saturday service in FY 2010. In addition, the City has continued to operate its transit service as a senior dial-a-ride since this recommendation was made and would be subject to further review.	Not implemented

Chapter 2

Transit Needs

An understanding of transit needs was gained through public and stakeholder outreach. Outreach strategies included:

- 2.1 On-line survey.
- 2.2 On-board passenger survey.
- 2.3 Stakeholder Interviews

Chapter 2 provides a summary of the methodology for and transit needs findings from the PMC outreach strategy. Several outreach methods were undertaken by the consultant team as part of the TDP development process to identify transit needs. The various methods were intended to capture a broad audience of local stakeholders including users and non-users of the service, transit operational staff, educational institutions, social service agencies, and elected officials. Various means of data collection and communication were used including in-person and phone interviews, and an on-board survey. Information through an on-line survey administered by HCAOG as part of its Transit Unmet Transit Needs process was also collected for this study. The detailed results of each survey are contained in the Appendix.

2.1 On-line Survey

2.1.1 On-line Survey: Methodology

An on-line survey was conducted through HCAOG's unmet transit needs process. The on-line survey consisted of 28 questions in total and drew 224 respondents. The survey was inclusive of all transit services in Humboldt County and was made available through May 31, 2011. The first 4 questions pertained to who the respondents were and where they resided. Questions 5 through 12 addressed commute patterns and access to transportation modes. Questions 13 through 18 gauged transit usage and the motivations for using transit. Questions 19 through 28 solicited comments in regard to customer service, requested days and hours of operation, as well as new routes and services for consideration.

2.1.2 On-line Survey: Key Findings

Of the 244 On-line Survey respondents:

- 51% were aged 30 to 61 years of age – suggesting a strong commuter passenger market.
- 55% commuted by transit, while 28% drove their own vehicle.
- 83% started their commute in the AM peak before 10:00 AM.
- The return commute trip was less concentrated with only 47% of the return commute trip starting between 4:00 and 6:00 PM.
- 74% used local Humboldt County public transit services.
- 80% did use the Jack Pass for transit service.

The findings suggest a higher response rate among transit users and a low rate among non-transit users, suggesting that unmet transit needs are more likely to be identified and requested by the existing transit community.

2.2 On-board Passenger Surveys

2.2.1 On-Board Passenger Survey: Methodology

On-board surveys were administered and collected for each transit service. Survey findings are summarized separately for each service. PMC conducted an on-board survey of RTS, ETS, and A&MRTS passengers the week of May 2, 2011, extending from May 2nd through May 6th. A sampling of routes and trips were developed by the consultant and reviewed by HTA for the conduct of the survey.

Surveys for Willow Creek, Southern Humboldt, City of Blue Lake, City of Fortuna, and K/T Net were administered and collected by the respective bus operators. The surveys were then forwarded to PMC for review and analysis. The City of Fortuna used its own passenger survey form in lieu of the PMC form. As not all transit trips were surveyed, the survey results represent a sampling of rider feedback and constitute one of several methods undertaken for this plan to obtain data on transit conditions and needs.

The two-paged PMC on-board survey was comprised of 27 questions that gauged commute patterns, service opinions, suggested improvements and demographic profile. The survey instrument and detailed question-by-question results are contained in the Appendix in the back of this report.

2.2.2 Redwood Transit System Intercity Service Survey: Summary of Responses

A total of 84 surveys were completed on-board RTS Intercity routes. The prevailing demographic profile of the survey respondents is as follows:

- 62 percent of respondents identified as male;
- 67 percent are between 18 and 34 years of age;
- 57 percent reside in the Humboldt Bay region;
- 41 percent listed their primary occupation as students;
- 52 percent have a drivers license
- 32 percent are affiliated with the HSU Universal “Jack Pass” System; and
- 78 percent of those Jack Pass users are enrolled students.

2.2.3 Redwood Transit System Intercity Service Survey: Key Findings

Travel time trends may be a reflection of RTS Intercity Service trips sampled and may not be reflective of the broader ridership base. However, the responses of the 84 interviewees reinforce a strong school/work commuter market with:

- 76 percent of the trip purposes identified as either school or work.
- 41 percent of the respondents identified themselves as students.

- 67 percent were aged 18 to 34 years of age.
- 47 percent ride transit two to five times a week, while 40 percent ride it more than five times a week.
- 78 percent used the Jack Pass.

Findings also suggest:

- Morning travel is less concentrated in the AM peak and more spread out, reflecting the importance of the post secondary school market. However, afternoon travel tends to be more concentrated in the PM peak (47 percent of travel was between 3:00 PM and 6:00 PM).
- A high transit dependent market – 40 percent of respondents do not have access to a household motor vehicle, although 77 percent of the respondents identified access to an alternative mode if transit was not available for their travel.
- A high concentration of residences and trip destinations close to transit routes – 76 percent walked to catch the bus and 81 percent indicated they would walk from the bus to their destination.
- A high degree of overall satisfaction with the service suggesting that RTS has been designed to effectively serve its priority post secondary school market.

Service improvements frequently identified by respondents included:

- Increased service availability (frequency) – identified by 17 percent of respondents.
- Later Saturday evening service – identified by 18 percent of respondents.
- Sunday service – identified by 21 percent of respondents.

2.2.4 Redwood Transit System – Willow Creek Service Survey: Summary of Responses

A total of 11 surveys were completed on-board the RTS Willow Creek route. The surveys were administered and collected by drivers, and forwarded to the consultant team. The prevailing demographic profile of the survey respondents is as follows:

- 82 percent of respondents identified as female;
- 72 percent are between 35 and 64 years of age;
- 73 percent reside in Willow Creek;
- 70 percent are employed full-time;
- 91 percent have a drivers license
- 64 percent are affiliated with the HSU Universal “Jack Pass” System; and
- 57 percent of those Jack Pass holders are extended ED/OLU users.

2.2.5 Redwood Transit System – Willow Creek Service Survey: Key Findings

It is difficult to draw any firm conclusions from findings from a small sample size of 11 respondents. The Willow Creek Service Survey respondents tend to:

- Use the service during the AM and PM peaks for commuting to and from work.

- Be a “choice” transit market, licensed to drive and have access to an alternative mode if transit was not available.
- Live and board the bus in Willow Creek.
- Be frequent riders – majority two on more days a week.
- Have destinations ranging from Arcata, HSU, Eureka and the College of the Redwoods.
- Be satisfied with service.

Desired improvements include:

- Increased service availability (increased frequency).
- Later weekday service.
- More scheduled stops.

2.2.6 Redwood Transit System – Southern Humboldt-Intercity Service Survey: Summary of Responses

A total of 6 surveys were completed on-board RTS Southern Humboldt-Intercity route. The surveys were administered and collected by drivers, and forwarded to the consultant team. The prevailing demographic profile of the survey respondents is as follows:

- 75 percent of respondents identified as male;
- 50 percent are between 18 and 34 years of age;
- All respondents reside in southern Humboldt County;
- 50 percent are employed full-time;
- 67 percent have a drivers license; and
- 40 percent boarded the bus in Garberville

2.2.7 Redwood Transit System – Southern Humboldt-Intercity Service Survey: Key Findings

It is difficult to draw any firm conclusions from findings from a small sample size of 6 respondents. The Southern Humboldt-Intercity Service Survey respondents tend to:

- Live and have travel destinations in Southern Humboldt County.
- Use transit for a variety of non-work related trips.
- Use the service once a month or less.
- Have access to one or more household vehicles.

2.2.8 Redwood Transit System – Southern Humboldt-Local Service Survey: Summary of Responses

A total of 8 surveys were completed on-board RTS Southern Humboldt-Local route. The surveys were administered and collected by drivers, and forwarded to the consultant team. The prevailing demographic profile of the survey respondents is as follows:

- 57 percent of respondents identified as male;
- 50 percent are between 55 and 64 years of age;

- 75 percent reside in southern Humboldt County;
- 50 percent are retired or employed part-time;
- 75 percent have a drivers license; and
- 38 percent boarded the bus in Garberville

2.2.9 Redwood Transit System – Southern Humboldt-Local Service Survey: Key Findings

It is difficult to draw any firm conclusions from findings from a small sample size of 8 respondents. The Southern Humboldt-Local Service Survey respondents tend to:

- Live and travel in Southern Humboldt County.
- Transit dependent
- Have a wide range of non-work trip purposes.
- Use the service less frequently than those in the county using transit for school or work commute trips.
- Would like to see increased service availability and later Saturday service.

2.2.10 Eureka Transit System Service Survey: Summary of Responses

PMC conducted an on-board survey of ETS passengers on May 3 and 6, 2011. The two-paged survey was comprised of 26 questions that gauged commute patterns, service opinions, suggested improvements and demographic profile. A total of 32 completed surveys were completed. While concerted effort was made to distribute the surveys to boarding passengers, most riders had short bus trips in Eureka and exited the bus before being able to completely fill out the survey.

The prevailing demographic profile of the survey respondents is as follows:

- 52 percent of respondents identified as female;
- 37 percent are between 35 and 54 years of age; 23 percent were 18 to 34 years old, and 23 percent were 55 to 64 years old.
- 64 percent reside in Eureka;
- 29 percent listed their primary occupation as students and additional 29 percent indicated non-employment; and
- 3 percent are affiliated with the HSU Universal “Jack Pass” System.

2.2.11 Eureka Transit System Service Survey: Key Findings

The responses of the 32 interviewees reinforce a general transit ridership market with:

- 60 percent of the trip purposes identified as either school, work, medical or shopping.
- 40 percent of the trip purposes identified personal business or social reasons.
- 45 percent use Eureka Transit more than 5 times a week. Another 32 percent use it between 2 and 5 times per week.
- 69 percent have used the bus more than a year.
- 63 percent do not have a driver’s license.

Findings also suggest:

- Morning travel is concentrated in the non-AM peak, however, afternoon travel tends to be more concentrated in the PM peak (56 percent of travel was between 3:00 PM and 6:00 PM).
- A high transit dependent market – 42 percent of respondents do not have access to a household motor vehicle, although 29 percent of the respondents identified access to a ride from a friend or relative if transit was not available for their travel.
- A high concentration of residences and trip destinations close to transit routes – 71 percent walked to catch the bus and 87 percent indicated they would walk from the bus to their destination.
- A high degree of overall satisfaction with the service suggesting that ETS has been designed to effectively serve its customers.
- The vast majority, 88 percent of respondents, consult the bus schedule first for planning a trip rather than other resources such as the internet, friend, or phone. This indicates the relative importance of the printed bus schedule.

Service improvements frequently identified by respondents included:

- Later weekday service – identified by 13 percent of respondents.
- Later Saturday evening service – identified by 21 percent of respondents.
- Sunday service – identified by 20 percent of respondents.

2.2.12 Arcata & Mad River Transit System Service Survey: Summary of Responses

PMC conducted an on-board survey of A&MRTS passengers the week of May 2, 2011. The two-paged survey was comprised of 26 questions that gauged commute patterns, service opinions, suggested improvements and demographic profile. A total of 42 surveys were completed.

The prevailing demographic profile of the survey respondents is as follows:

- 78 percent of respondents identified as female;
- 80 percent are between 18 and 34 years of age;
- 89 percent reside in Arcata;
- 51 percent listed their primary occupation as students;
- 73 percent are affiliated with the HSU Universal “Jack Pass” System; and
- 97 percent of those Jack Pass users are enrolled students.

2.2.13 Arcata & Mad River Transit System Service Survey: Key Findings

The responses of the 42 interviewees reinforce a strong school/work commuter market with:

- 78 percent of the trip purposes identified as either school or work.
- 49 percent use Arcata Transit more than 5 times a week. Another 44 percent use it between 2 and 5 times per week.
- 55 percent have used the bus more than a year.

- 40 percent do not have a driver's license.

Findings also suggest:

- Morning travel is less concentrated in the AM peak and more spread out, reflecting the importance of the post secondary school market. However, afternoon travel tends to be more concentrated in the PM peak (59 percent of travel was between 3:00 PM and 6:00 PM).
- A relatively high transit dependent market – 32 percent of respondents do not have access to a household motor vehicle, with another 39 percent that have one vehicle in their household.
- A high concentration of residences and trip destinations close to transit routes – 93 percent walked to catch the bus and 93 percent indicated they would walk from the bus to their destination.
- Overall satisfaction with the service suggesting that A&MRTS has been designed to effectively serve its priority markets including post secondary school, work, and social/recreation.

Service improvements frequently identified by respondents included:

- Increased service availability (frequency) – identified by 17 percent of respondents.
- Later Saturday evening service – identified by 18 percent of respondents.
- Sunday service – identified by 21 percent of respondents.

2.2.14 Fortuna Senior Transit Bus Service Survey: Summary of Responses and Key Findings

The City of Fortuna conducted its own on-board survey of Fortuna Senior Bus passengers which have been used for this transit plan. The one-paged survey was comprised of 9 questions that gauged frequency of usage, service opinions, and suggested improvements. A total of 54 surveys were completed and collected by the city.

Findings suggest:

- Current fare does not prevent them from using the bus – 92 percent of respondents.
- The bus is reliable - 96 percent responded that the bus has not failed to pick them up.
- Most riders do not drive – 69 percent of respondents, or have access to a car – 20 percent.
- Riders tend to use the bus on a regular basis – 67 percent use it between 1 and 5 times a month, while 28 percent use it 2 to 4 times a week.
- Ride requests are honored – 84 percent of respondents are given rides, while 16 percent have been denied rides.
- A high degree of overall satisfaction with the service suggesting that Fortuna has been designed to effectively serve its customers.

Service improvements frequently identified by respondents included:

- Weekend service – identified by 46 percent of respondents.
- Later weekday service – identified by 38 percent of respondents.

2.2.15 Blue Lake Rancheria Transit Service Survey: Summary of Responses

The Blue Lake Rancheria provided assistance in conducting the on-board survey of transit passengers. Drivers administered and collected the two-page PMC survey of 21 questions. A total of 24 surveys were completed.

The prevailing demographic profile of the survey respondents is as follows:

- 59 percent of respondents identified as male;
- 50 percent are between 18 and 34 years of age while 27 percent are between 55 and 64 years old;
- 64 percent reside in Blue Lake, and another 18 percent reside in Arcata;
- 23 percent listed their primary occupation as retired, another 23 percent as not employed, and 36 percent as employed.

2.2.16 Blue Lake Rancheria Transit Service Survey: Key Findings

The responses of the 24 interviewees reinforce a general transit ridership market with:

- 42 percent of the trip purposes identified as either medical or shopping, while another 21 percent of the trip purpose is for social/recreation.
- 74 percent use Blue Lake Transit between 2 and 5 times per week.
- 70 percent have used the bus more than a year.
- 32 percent travel to the Blue Lake Casino as their destination, while another 32 percent travel to Arcata.
- 63 percent do not have a driver's license.
- 48 percent would not have made the trip if transit was not available.

Findings also suggest:

- Travel occurs rather evenly during all periods of the day. Peak and non-peak morning and afternoon travel are relatively similar.
- 24 percent of respondents do not have access to a household motor vehicle, although 64 percent do have at least one vehicle in their immediate household.
- A high degree of overall satisfaction with the service suggesting that Blue Lake has been designed to effectively serve its customers.
- The vast majority, 86 percent of respondents, consult the bus schedule first for planning a trip rather than other resources such as the internet, friend, or phone. This indicates the relative importance of the printed bus schedule.

Service improvements frequently identified by respondents included:

- Increased service availability (frequency) – identified by 28 percent of respondents.

- Later weekday service – identified by 28 percent of respondents.
- More scheduled stops – identified by 13 percent of respondents.

2.2.17 K/T Net Transit Service Survey: Summary of Responses

K/T Net provided assistance in conducting the on-board survey of transit passengers. Drivers administered and collected the two-page PMC survey of 21 questions. A total of 25 surveys were completed.

The prevailing demographic profile of the survey respondents is as follows:

- 58 percent of respondents identified as male;
- 44 percent are between 18 and 34 years of age while 36 percent are between 35 and 35 years old;
- 50 percent of respondents reside in Hoopa Valley, while the remaining respondents reside in other communities including Willow Creek, Weitchpec, Pecwan/Wautec, and Orleans;
- 24 percent listed their primary occupation as not employed, another 20 percent as employed, and 16 percent as retired.

2.2.18 K/T Net Transit Service Survey: Key Findings

The responses of the 25 interviewees reinforce a general transit ridership market with:

- Equal percentages of trip purposes (24 percent each) identified as for 1) medical or shopping, 2) personal business, or for 3) work.
- 13 percent use K/T Net more than 5 times a week, while 38 percent use the system between 2 and 5 times per week. The remaining respondents use the system once per week or less than once a month.
- 44 percent have used the bus more than a year, while another 24 percent were first time users.
- 22 percent travel to Willow Creek as their destination, while another 13 percent indicated travel to Arcata or Eureka. Most indicated other destinations.
- 58 percent do not have a driver's license.
- 31 percent would not have made the trip if transit was not available. Another 41 percent would be driven by family or friend.

Findings also suggest:

- Travel occurs rather evenly during all periods of the day. Peak and non-peak morning and afternoon travel are relatively similar.
- 46 percent of respondents do not have access to a household motor vehicle, although another 46 percent do have at least one or two vehicles in their immediate household.
- A high degree of overall satisfaction with the service suggesting that K/T Net has been designed to effectively serve its customers.

- The vast majority, 73 percent of respondents, consult the bus schedule first for planning a trip rather than other resources such as a friend or phone. This indicates the relative importance of the printed bus schedule. Another 18 percent would consult the bus driver to help plan their trip.

Service improvements frequently identified by respondents included:

- Weekend service – identified by 45 percent of respondents.
- Increased service availability (frequency) – identified by 17 percent of respondents.

2.3 Stakeholder Interviews

In-person and telephone interviews were conducted with stakeholders during the period from late June through mid-July 2011. Stakeholder interviews were designed to gather information on existing Humboldt County transit services, issues to be considered in the TDP process, transit needs and priority transit markets. A full listing of stakeholders that were interviewed is provided in the Appendix.

While the different transit services were discussed by different stakeholders, comments regarding issues, needs and markets pertaining to RTS services are summarized below:

- Students and staff from HSU and College of the Redwoods are key markets for RTS services.
- The core RTS service area is essentially between the Arcata Transit Center and the College of the Redwoods – higher frequencies and service capacity increases should be concentrated within the this core service area as demand increases.
- Key trip origins and destinations include HSU, College of the Redwoods, the Arcata Transit Center and Downtown Eureka.
- HSU, College of the Redwoods and Eureka are school and employment commute destinations.
- RTS serves as a regional intercity service feed locally by Eureka Transit Service (ETS) and A&MRTS, and regionally by Redwood Coast Transit, Amtrak Thruway Motorcoach, and Greyhound at the Arcata Transit Center, and Trinity Transit and the Klamath Trinity Non-Emergency Transportation service at Willow Creek.
- Service strengths include – mechanical reliability, clean bus interiors, economies of scale through consolidated maintenance and fueling on RTS, ETY and A&MRTS shift to hybrid bus technology, on-board wireless internet, Jack Pass fare medium, service extensions connecting Southern Humboldt communities with Eureka and Willow Creek with Arcata, planned GPS/AVL upgrade, and up to 20 minute peak frequency in core RTS service area.
- On time performance remains a challenge – affected by increased passenger volumes (longer dwell times for boardings and alightings) , summer running times not adjusted to summer traffic volumes along Highway 101 corridor, and long length of many routes.
- Recovery time has been used to increase running times to improve schedule adherence – as traffic congestion increases recovery time must be added back into bus trip running times.

- Southbound service consisting running slow includes Routes 102 (trip 30), 106 (trip 12), 107 (trip 48), 108 (trip 16), and 110 Trip 24).
- Northbound service consisting running slow includes Routes 102 (trip 41), 106 (trip 33), 108 (trip 23), 109 (trip 45), and 111 (trip 49).
- Bicycle capacity is regularly exceeded with highest bicycle loads in Eureka (need bicycle lockers at outlying bus stops).
- Increase the number of designated bus stops in HSU Library Circle.
- Provide later bus service on Friday and Saturday evenings.
- Provide on-campus routing north/south on B Street, east/west on Laurel Drive, to College Circle to reduce walking distances for HSU transit users.
- Install new bus stops in conjunction with College Blvd. pedestrian enhancements. College Blvd (extension of Rossow Street) has been improved to serve as a formal pedestrian access onto the Campus from 14th Street. Westbound bus stop could be located on northside of 14th Street immediately east of the College Blvd. access onto 14th Street. The eastbound stop could be located on the southside of 14th Street directly across from the proposed westbound stop.
- Blue Lake Rancheria Transit System provides weekday service between Blue Lake/Glendale and the Arcata Transit center and the HSU campus (three AM and five PM round trips).
- 15 percent of College of the Redwoods ride transit, thus making the passage of a university pass like the Jack Pass unlikely. There are approximately 8,600 to 9,000 students enrolled.
- Most College of Redwoods students commute from Eureka.
- 40 percent of the 160 College of Redwoods students living on campus have a car.
- Current RTS schedules work for those College of Redwoods students commuting to class on weekdays.
- Increased weekend frequency (late morning and afternoon) would help College of Redwoods students living on campus get into Eureka for groceries and personal shopping. Increased service to HSU was also requested on Saturdays.

2.4 Existing and Potential Transit Markets

2.4.1 Priority Markets

Generally priority transit markets are those markets that use transit on a regular basis for a high percentage of their local trip needs. Depending on local circumstances, priority markets can be transit dependant riders or “choice” transit riders. As a county -wide provider, RTS serves both groups of riders. RTS priority markets include:

1. Students and to a lesser degree faculty and staff at HSU and College of the Redwoods commuting on a regular basis.
2. County residents commuting to employment in Eureka and Arcata.
3. Persons in outlying communities traveling on a less regular basis to medical facilities, government services and retail concentrations in Eureka and Arcata.

The HSU and College of the Redwoods students remain RTS's strongest market and as enrollment increases, there will be a requirement to increase capacity and frequency within RTS's core service area between Arcata and the College of the Redwoods. An aging population residing in the smaller outlying centers will still require access to the greater range of goods and services provide in Eureka and Arcata.

2.4.2 Key Trip Origins and Destinations

Key trip origins and destinations reflect RTS's priority markets. These include the HSU and College of the Redwoods campuses. Employment and medical destinations in Eureka and Arcata can be reached by transferring to local ETS and A&MRTS service. The Arcata Transit Center and the ETS transfer stops at H and 3rd and the Bayshore Mall will also remain key RTS trip generators. Good connections between the local services and RTS will be critical to effectively serve the local Eureka and Arcata destinations.

Within the core service area, the RTS service is essential for College of the Redwoods students. Access to the main campus, located eight miles south of Eureka off of a busy highway, is limited for individuals who are not able to drive. With an 11% unemployment rate and the high price of gas locally, individuals with the most need for further education are especially reliant on public transportation to access the classes they need. In addition, the 2009-2020 College of the Redwoods Education Master Plan projects that student enrollment will increase to 7,173 full time equivalents by FY 2014-15, a 46 percent increase over its base year enrollment of 4,923 students in 2007-08.

Humboldt Transit Authority staff have worked closely with CR to ensure that the bus schedule meets the needs of the students. Extended evening and increased week-end bus service have been especially appreciated by the students who live in the Resident Halls on campus as well as the growing population of evening students.

2.5 Needs That Can or Cannot be Effectively and Efficiently Served By Transit

Fixed route transit needs a sufficient density of demand to support minimum farebox recovery objectives. RTS is designed as a north/south regional corridor service connecting population concentrations to the key destinations identified in Section 2.4.2. To be effective and efficient as a regional county-wide carrier, RTS service should minimize on-board travel times for passengers and minimize wait times at transfer points. RTS should minimize stops within Eureka and Arcata, focusing on good connectivity with the two local providers.

RTS will need to continue to concentrate service within its core service area between Arcata and the College of the Redwoods. As increased capacity within this core service area becomes more critical, RTS may have to consider investing more of its resources in this service area. This will be especially important given limited funding for any service expansion. RTS mainline service hours may have to be reassigned to increase capacity in the core service area. In addition, ridership on Routes 501, 502, 503 and 505 between Eureka and Garberville are generally low. Service to/from Garberville could potentially be adjusted to retain lifeline service with possibly two round trips per day. A carpool or vanpool alternative could be considered for the work commute trips from the Southern Humboldt communities. Further, contingent on evaluation of recent ridership trends, service to Willow Creek could be reduced to one AM and one PM trip during the peak commute hours.

Chapter 3

Service Evaluation

The RTS service network is a well designed regional transit system. It provides a high weekday peak frequency within its core service area between Arcata and the College of the Redwoods and a less frequent service to the outlying communities of Willow Creek, Trinidad and Garberville. RTS is a well thought out transit service. Generally high ridership (within the service core area) helps to keep fare recovery above the approved minimum farebox recovery ratio of 26.4 percent and support the less productive services outside the core service area.

3.1 Projected TDP Performance Indicators

The following analysis is based on cost and revenue projections in Chapter 7: Financial Plan.

Tables 3-1 through 3-6 show the projected performance indicators for the transit services over the five-year TDP period. Total fixed route operating costs for each transit system are projected to increase cumulatively between 10 and 20 percent for the period FY 2011-12 through FY 2015-16. On an annual basis, the increase is about 2 to 3 percent. Fortuna Transit, with implementation of recent cost savings measures, will have a projected operating cost increase of about 11 percent over the five year period, or slightly over 2 percent annually. For HTA services, total operating costs will increase in FY 2012-13 alone by about 10 percent with the introduction of expanded Saturday service for Willow Creek and new Sunday service on the main RTS intercity service. After the expansion, operating costs will increase only marginally into a five-year cumulative growth of 20 percent.

The operating cost per revenue hour is expected to increase by approximately four to five percent during this TDP timeframe. Budgeted operating expenses is used as the basis for the forecast which may vary from actual operating costs used to calculate past performance statistics. The table summarizes the changes in the cost per revenue hour operated and the cost per passenger carried for the TDP timeframe.

Based on performance factors such as cost per revenue hour and fare revenue projections to offset operating costs, total revenue hours that the transit systems are projected to operate during the TDP period will increase cumulatively by between 8 and 15 percent. The larger range of revenue hours results from implementation of the unmet transit needs findings of increased weekend services by HTA.

With strong HSU and College of the Redwoods student markets, as well as continued use by the transit dependent, ridership will remain relatively strong through FY 2015-16. Annual ridership growth for the fixed route services could be as high as five percent for the TDP period¹. A five percent growth rate includes anticipated new ridership from the weekend service expansion. Passenger fare revenues are expected to increase annually by five percent during the TDP due to continued strength in core ridership including college students, transit dependent market, and the availability of various prepaid fare media options through the electronic fareboxes. The fareboxes also help to ensure accurate fare counting and less fare evasion. The fare revenue

¹ Based on ridership growth for the period FY 2006-07 to FY 2010-11.

projections, coupled with the operating cost forecast, anticipate that the fixed route systems will continue to exceed their minimum farebox recovery ratios required under the Transportation Development Act. Fortuna is projected to meet its farebox ratio, but must continue its cost savings measures and actively increase its ridership base.

Table 3-1
HTA Transit Performance Indicators - TDP

Year	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Ridership	643,561	675,739	709,526	745,002	782,252
Operating Costs	\$3,364,000	\$3,725,200	\$3,836,900	\$3,952,000	\$4,070,600
Revenue Hours	39,736	43,065	43,926	44,804	45,701
Operating Cost Per Hour	\$84.66	\$86.50	\$87.35	\$88.21	\$89.07
Operating Cost Per Passenger	\$5.23	\$5.51	\$5.41	\$5.30	\$5.20
Subsidy Cost Per Passenger	\$3.61	\$3.83	\$3.73	\$3.62	\$3.52
Fare Revenue	\$1,013,000	\$1,105,000	\$1,160,225	\$1,218,271	\$1,279,235
Farebox Recovery	30.1%	29.7%	30.2%	30.8%	31.4%
Average Fare per Trip	\$1.57	\$1.64	\$1.64	\$1.64	\$1.64

Table 3-2
ETS Transit Performance Indicators - TDP

Year	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Ridership	237,393	242,141	246,983	251,923	256,962
Operating Costs	\$895,000	\$921,900	\$949,600	\$978,100	\$1,007,400
Revenue Hours	14,985	15,285	15,590	15,902	16,220
Operating Cost Per Hour	\$59.73	\$60.32	\$60.91	\$61.51	\$62.11
Operating Cost Per Passenger	\$3.77	\$3.81	\$3.84	\$3.88	\$3.92
Subsidy Cost Per Passenger	\$2.65	\$2.66	\$2.66	\$2.66	\$2.67
Fare Revenue	\$265,000	\$278,250	\$292,138	\$306,754	\$322,092
Farebox Recovery	29.6%	30.2%	30.8%	31.4%	32.0%
Average Fare per Trip	\$1.12	\$1.15	\$1.18	\$1.22	\$1.25

Table 3-3
A&MRTS Transit Performance Indicators - TDP

Year	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Ridership	222,268	226,714	231,248	235,873	240,590
Operating Costs	\$564,200	\$581,100	\$598,500	\$616,500	\$635,000
Revenue Hours	7,583	7,734	7,889	8,047	8,208
Operating Cost Per Hour	\$74.41	\$75.13	\$75.86	\$76.61	\$77.37
Operating Cost Per Passenger	\$2.54	\$2.56	\$2.59	\$2.61	\$2.64
Subsidy Cost Per Passenger	\$1.70	\$1.73	\$1.76	\$1.79	\$1.82
Fare Revenue	\$186,000	\$188,800	\$191,700	\$194,800	\$198,000

Year	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Farebox Recovery	33.0%	32.5%	32.0%	31.6%	31.2%
Average Fare per Trip	\$0.84	\$0.83	\$0.83	\$0.83	\$0.82

Table 3-4
Fortuna Senior Bus Transit Performance Indicators - TDP

Year	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Ridership	11,468	11,697	11,931	12,170	12,413
Operating Costs	\$101,500	\$104,000	\$106,600	\$109,300	\$112,000
Revenue Hours	3,008	3,068	3,130	3,192	3,256
Operating Cost Per Hour	\$33.74	\$33.90	\$34.06	\$34.24	\$34.40
Operating Cost Per Passenger	\$8.85	\$8.89	\$8.93	\$8.98	\$9.02
Subsidy Cost Per Passenger	\$7.96	\$7.98	\$8.00	\$8.01	\$8.02
Fare Revenue	\$10,200	\$10,700	\$11,200	\$11,800	\$12,400
Farebox Recovery	10.0%	10.3%	10.5%	10.8%	11.1%
Average Fare per Trip	\$0.89	\$0.91	\$0.94	\$0.97	\$1.00

Table 3-5
Blue Lake Rancheria Transit Performance Indicators - TDP

Year	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Ridership	17,284	17,630	17,982	18,342	18,709
Operating Costs	\$33,000	\$34,000	\$35,000	\$36,100	\$37,200
Revenue Hours	2,313	2,360	2,407	2,455	2,504
Operating Cost Per Hour	\$14.26	\$14.41	\$14.54	\$14.70	\$14.86
Operating Cost Per Passenger	\$1.91	\$1.93	\$1.95	\$1.97	\$1.99
Subsidy Cost Per Passenger	\$1.50	\$1.51	\$1.51	\$1.52	\$1.53
Fare Revenue	\$7,000	\$7,400	\$7,800	\$8,200	\$8,600
Farebox Recovery	21.2%	21.8%	22.3%	22.7%	23.1%
Average Fare per Trip	\$0.40	\$0.42	\$0.43	\$0.45	\$0.46

Table 3-6
K/T NeT Performance Indicators - TDP

Year	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Ridership	3,672	3,745	3,820	3,897	3,975
Operating Costs	\$92,000	\$94,300	\$96,700	\$99,100	\$101,600
Revenue Hours	3,000	3,060	3,121	3,184	3,247
Operating Cost Per Hour	\$30.67	\$30.82	\$30.98	\$31.13	\$31.29
Operating Cost Per Passenger	\$25.05	\$25.18	\$25.31	\$25.43	\$25.56
Subsidy Cost Per Passenger	\$24.10	\$24.19	\$24.29	\$24.38	\$24.48
Fare Revenue	\$3,500	\$3,700	\$3,900	\$4,100	\$4,300
Tribal Contributions	\$28,000	\$28,900	\$29,900	\$30,900	\$31,900

Year	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Farebox Recovery (Fares plus Tribal Contributions)	34.2%	34.6%	35.0%	35.3%	35.6%
Average Fare per Trip	\$0.95	\$0.99	\$1.02	\$1.05	\$1.08

3.2 Factors Affecting Changes in Operating Costs

A key factor affecting the change in total operating costs is a change in service volume (more or fewer bus operating hours). Key components affecting changes in the hourly operating cost are typically fuel, insurance, and employee wage and benefits. Fuel costs remain uncertain and are outside the control of the transit agency, although, in the case of some of the large operators, with the gradual replacement of the fleet to diesel-electric technology there could be lesser dependency on fuel and its price shifts. With limited suppliers of bulk diesel fuel in the Humboldt region, pricing points will remain sensitive. For several of the systems, changes in wage and benefits are dependent on renewed agreements between HTA and its union employee contracts. A recent 2009 agreement called for incremental step pay increases. The pay increases for represented employees are in increments of 50 cents per hour for the first two years beginning in June 2009, then 75 cents in the third year for a total of \$1.75 per hour over three years. Unrepresented staff received the same increase plus an extra \$1.00 per hour starting in January 2010 because of the increase in workload from the addition of both Southern Humboldt transit services.

3.3 Changes in Funding

HTA taps into traditional sources of transit funds to fund operations and capital projects. Local Transportation Funds (LTF) provide the bulk of revenue to operate the service, followed by fare revenue, rents and leases at HTA owned property, and federal grants. Economic issues of the last several years have adversely impacted each of these sources and created additional resource constraints. TDA reserve funds are being used to help support some expanded service as a result of the HCAOG unmet transit needs process. However, future expansion will need to rely more on creating greater efficiencies within the existing service and shifting the resources where productivity and needs can be better met. This could include changes to the route structure. Incremental or flat growth from most revenues is projected through the five year TDP period which would necessitate the transit operators to prioritize productive services that serve the ridership.

3.4 On-time Performance

HTA has identified on-time performance as an issue. In recent years recovery time has been sacrificed to permit additional running time to be built into the schedules. There are still RTS routes running late.

- Southbound services consistently running slow include Routes 102 (trip 30), 106 (trip 12), 107 (trip 48), 108 (trip 16), and 110 Trip 24).

- Northbound services consistently running slow include Routes 102 (trip 41), 106 (trip 33), 108 (trip 23), 109 (trip 45), and 111 (trip 49).

With reduced recovery time built into the schedules, on-time performance issues with these routes and others developing problems in the future can be addressed by either adding additional running time to each route or by reducing the number of stops served and/or reducing the distance traveled by each route. This can be accomplished through short turning routes and straightening routes out. On-going driver training is another method to address on-time performance issues.

3.5 Productivity and Passenger Loads

System-wide Trip-by-Trip Analysis

The following summarizes PMC's review of the GFI Route Summary Report for April 2011. The report provided trip by trip data for each weekday service day. GFI data reflects average daily passenger boardings per bus trip for the service period April 1 – 30, 2011. Average daily boarding counts per trip are summarized for RTS, ETS and A&MRTS.

Redwood Transit System

Tables 3-7 and 3-8 summarize the trip by trip data for RTS. Individual bus trips with an average passenger boarding count of less than 20 passengers are highlighted.

**Table 3-7
RTS Northbound Passenger Boardings**

	Trip	Route	Departs	Ends	Daily Average Boardings
Northbound	1	100	Fta. Overlook 5:44	HSU Library 7:02	15
	3	113	Fta. Overlook 6:23	Airport Terminal 7:48	43
	5	104	Scotia/ Hoby's Market 6:27	Trinidad P&R 8:55	50
	7	100	College of the Redwds 8:06	HSU Library 8:51	30
	9	110	Scotia/ Hoby's Market 7:20	Airport Terminal 9:28	61
	11	501	Garberville 7:00	5th/H (ETS) 8:48	21
	13	113	College of the Redwds 9:02	HSU Library 9:47	29
	15	102	Scotia/ Hoby's Market 8:25	Trinidad P&R 10:50	59
	17	106	Fta. Overlook 9:18	Airport Terminal 11:01	47
		502	Garberville 7:00	5th/H (ETS) 10:48	18

	Trip	Route	Departs	Ends	Daily Average Boardings
	21	100	Fta. Overlook 10:20	HSU Library 11:35	35
	23	108/09	Scotia/ Hoby's Market 10:27	Airport Terminal 12:41	32
	25	104	Fta. Overlook 11:29	Valley West 12:49	44
	27	110	Fta. Overlook 12:04	Airport Terminal 13:48	57
	29	100/01	College of the Redwds 13:06	Valley West 13:57	40
	31	112	College of the Redwds 13:37	Valley West 14:28	31
	33	106/07	Fta. Overlook 13:18	Trinidad P&R 15:18	38
	35	104/05	College of the Redwds 14:15	Airport Terminal 15:22	18
	37	503	Garberville 13:23	5th/H (ETS) 15:11	18
	39	101	College of the Redwds 15:10	HSU Library 15:53	48
	41	102/03	Scotia/ Hoby's Market 14:24	Trinidad P&R 17:01	43
	43	112	College of the Redwds 15:58	Valley West 16:49	44
	45	109	Fta. Overlook 15:46	Airport Terminal 17:29	65
	47	101	College of the Redwds 17:13	HSU Library 17:59	37
	49	111	Scotia/ Hoby's Market 16:36	Trinidad P&R 19:10	59
	51	505	Garberville 16:55	Bayshore 18:33	6
	53	105	Fta. Overlook 17:46	Airport Terminal 19:27	40
	55	504	Garberville 17:45	5th/H (ETS) 19:33	9
	57	107	Scotia/ Hoby's Market 18:48	Airport Terminal 20:51	49
	61	105	College of the Redwds 21:07	McK H. S. 22:10	31
	63	103	Scotia/ Hoby's Market 20:57	McK H. S. 22:51	28

**Table 3-8
RTS Southbound Passenger Boardings**

	Trip	Route	Departs	Ends	Daily Average Boardings
Southbound	4	102	Airport Terminal 5:59	Scotia/ Hoby's Market 8:08	35
	6	502	4th/H (ETS) 7:03	Garberville 8:49	No Data
	8	100	HSU Library 7:10	College of the Redwds 7:54	32
	10	115	McK H. S. 7:05	College of the Redwds 8:07	39
	12	106	Trinidad P&R 6:52	Fta. Overlook 8:53	61
	14	113	HSU Library 8:08	College of the Redwds 8:52	20
	16	108	Airport Terminal 7:56	Scotia/ Hoby's Market 10:13	63
	18	100	HSU Library 8:57	Fta. Overlook 10:04	44
	20	104	Trinidad P&R 9:12	Fta. Overlook 11:07	59
	22	503	4th/H (ETS) 11:35	Garberville 13:27	20
	24	110	Airport Terminal 10:01	Fta. Overlook 11:52	67
	26	100	HSU Library 11:40	College of the Redwds 12:32	34
	28	106	Airport Terminal 11:23	Fta. Overlook 13:06	50
	30	102	Trinidad P&R 11:34	Scotia/ Hoby's Market 14:09	67
	32	104	Valley West 12:58	College of the Redwds 13:53	36
	34	109	Airport Terminal 13:12	Fta. Overlook 14:45	51
	36	505	4th/H (ETS) 14:53	Garberville 16:45	26
	38	101	Valley West 14:04	College of the Redwds 14:55	37
	40	110/11	Airport Terminal 13:57	Scotia/ Hoby's Market 16:16	31
	42	112	Valley West 14:56	College of the Redwds 15:48	44
	44	101	HSU Library 16:07	College of the Redwds 16:53	41

	Trip	Route	Departs	Ends	Daily Average Boardings
	46	105	Airport Terminal 15:55	Fta. Overlook 17:31	49
	48	107	Trinidad P&R 15:53	Scotia/ Hoby's Market 18:33	74
	50	112	Valley West 17:05	Fta. Overlook 18:27	46
	52	505	Bayshore 18:43	Garberville 20:25	15
	54	109	Airport Terminal 17:39	Scotia/ Hoby's Market 19:34	45
	56	103	Trinidad P&R 17:58	Scotia/ Hoby's Market 20:17	42
	58	105	Airport Terminal 19:37	College of the Redwds 20:51	31
	60	111	Trinidad P&R 20:12	Fta. Overlook 22:05	33

The Garberville/Eureka trips served by the new Southern Humboldt Intercity Service consistently have relatively low passenger counts. As a new service, HTA is continuing to examine the SHI and determine any adjustment. From the on-board passenger data, ridership from the Southern Humboldt communities tend to use RTS for non-commute trips. For those surveyed, shopping and personal business trips were identified.

Eureka Transit Service

Tables 3-9 through 3-12 summarize average weekday passenger boardings for ETS routes. Tables 3-13 through 3-15 summarize average Saturday passenger boardings for ETS Saturday routes. Data was sufficient to calculate the average hourly productivity from each bus trip and the average daily productivity and daily productivity per route. Individual trips with a productivity of less than 10 passengers per hour are highlighted in yellow.

Table 3-9
Red Route: Weekday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Red	6:28 AM	6	6.19
	7:28 AM	15	15.05
	8:28 AM	19	18.86
	9:28 AM	16	16.14

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
	10:28 AM	18	18.38
	11:28 AM	20	20.19
	12:28 PM	25	24.57
	1:28 PM	19	19.33
	2:28 PM	29	28.71
	3:28 PM	21	21.00
	4:28 PM	12	12.38
	5:28 PM	14	13.74
	6:28 PM	7	14.76
Average Daily Productivity			17.75

Table 3-10
Gold Route: Weekday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Gold	6:15 AM	4	4.14
	7:15 AM	16	16.29
	8:15 AM	19	18.57
	9:15 AM	22	22.48
	10:15 AM	29	28.67
	11:15 AM	21	20.86
	12:15 PM	36	35.62

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
	1:15 PM	34	33.79
	2:15 PM	26	26.33
	3:15 PM	24	24.10
	4:15 PM	18	18.29
	5:15 PM	15	15.05
	6:15 PM	10	13.71
Average Daily Productivity			21.53

Table 3-11
Green Route: Weekday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Green	6:37 AM	5	4.86
	7:37 AM	9	8.89
	8:37 AM	10	9.62
	9:37 AM	14	13.62
	10:37 AM	16	16.10
	11:37 AM	18	18.25
	12:37 PM	19	18.90
	1:37 PM	25	25.24
	2:37 PM	19	18.89
	3:37 PM	24	24.47

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
	4:37 PM	15	14.70
	5:37 PM	11	10.90
	6:37 PM	5	42.04
Average Daily Productivity			15.62

Table 3-12
Purple Route: Weekday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Purple	6:37 AM	4	3.95
	7:37 AM	9	9.29
	8:37 AM	14	14.14
	9:37 AM	15	14.57
	10:37 AM	18	18.33
	11:37 AM	19	18.95
	12:37 PM	21	20.90
	1:37 PM	22	22.05
	2:37 PM	12	12.05
	3:37 PM	17	16.76
	4:37 PM	12	11.70
	5:37 PM	10	10.10
	6:37 PM	3	24.90

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Average Daily Productivity			14.17

Table 3-13
Rainbow Route: Saturday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Rainbow	10:00 AM	25	25.40
	11:00 AM	13	13.40
	12:00 PM	22	22.40
	1:00 PM	14	14.20
	2:00 PM	26	25.80
	3:00 PM	17	17.00
	4:00 PM	10	9.50
Average Daily Productivity			18.24

Table 3-14
Purple Route: Saturday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Purple	10:00 AM	22	21.60
	11:00 AM	9	9.40
	12:00 PM	17	17.00
	1:00 PM	19	19.00
	2:00 PM	12	12.40

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
	3:00 PM	13	13.00
	4:00 PM	5	5.33
Average Daily Productivity			13.96

Table 3-15
Gold Route: Saturday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Gold	10:00 AM	21	21.40
	11:00 AM	18	18.20
	12:00 PM	24	24.40
	1:00 PM	24	24.00
	2:00 PM	20	20.40
	3:00 PM	19	19.20
	4:00 PM	19	18.80
Average Daily Productivity			20.91

Most ETS weekday and Saturday bus trips have good ridership and productivity. Weaker trips include the first weekday trips on all weekday routes and the last trip on the Saturday Purple Route. These are candidate trips to cut to reduce operating costs if necessary or to reassign revenue route to later weekday service or expanded Saturday coverage.

Arcata & Mad River Transit System

Tables 3-16 and 3-17, summarize average weekday passenger boardings for A&MRTS Gold and Red Routes. Table 3-18 summarizes average Saturday passenger boardings for the Orange Route. Data was sufficient to calculate the average hourly productivity for each bus trip and the average daily productivity and daily productivity per route. A single trip with a productivity of less than 10 passengers per hour is highlighted in yellow. Productivity for peak loads may be inflated if overlay trippers are not accounted for in the average number of daily revenue hours.

Table 3-16
Gold Route: Weekday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Gold	7:00 AM	42	41.62
	8:00 AM	47	47.31
	9:00 AM	52	52.17
	10:00 AM	42	41.79
	11:00 AM	45	44.92
	12:00 PM	30	29.94
	1:00 PM	46	45.57
	2:00 PM	38	38.27
	3:00 PM	33	32.56
	4:00 PM	34	33.50
	5:00 PM	41	41.27
	6:00 PM	34	34.36
	7:00 PM	24	23.71
	8:00 PM	22	22.09
	9:00 PM	16	15.90
Average Daily Productivity			36.33

Table 3-17
Red Route: Weekday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Red	7:00 AM	43	42.69
	8:00 AM	45	45.00
	9:00 AM	53	52.60
	10:00 AM	50	50.07
	11:00 AM	40	39.75
	12:00 PM	39	39.25
	1:00 PM	50	49.57
	2:00 PM	32	32.38
	3:00 PM	45	44.86
	4:00 PM	28	28.24
	5:00 PM	22	21.95
	6:00 PM	21	20.94
	7:00 PM	17	16.76
	8:00 PM	15	14.67
	9:00 PM	15	14.64
Average Daily Productivity			34.22

Table 3-18
Orange Route: Saturday Ridership and Productivity per Trip

Route	Trip	Average Ridership/Trip	Productivity Passengers/Revenue Hour
Orange	7:00 AM	7	6.75
	8:00 AM	12	12.00
	9:00 AM	12	12.40
	10:00 AM	15	14.80
	11:00 AM	24	23.60
	12:00 PM	23	23.00
	1:00 PM	25	25.20
	2:00 PM	29	28.80
	3:00 PM	24	23.60
	4:00 PM	18	18.40
	5:00 PM	24	24.20
	6:00 AM	20	20.40
Average Daily Productivity			19.43

Both weekday and Saturday ridership on A&MRTS is high. Peak loads occur in the traditional AM and PM peaks in conjunction with daily HSU requirements. High ridership and productivity maintain strong levels of farebox recovery.

Ridecheck Summaries

PMC conducted a series of ride checks on RTS, ETS, and A&MRTS buses for five consecutive weekdays the week of May 2nd. For RTS, PMC conducted ridechecks on six northbound and six southbound routes between the Fortuna Overlook/Riverlodge and the Trinidad Park and Ride.

Northbound Trips Sampled

Date	Trip	Origin	Destination	Time Interval	Total Number of Boardings

Date	Trip	Origin	Destination	Time Interval	Total Number of Boardings
Monday, May 2 nd	5	Fortuna Overlook	Trinidad Park 'N Ride	6:47 am - 8:55am	46
	25	Fortuna Overlook	Valley West	11:29 am - 12:49 pm	38
	35	College of the Redwoods	5 th & H Streets – Eureka	2:15 pm – 2:39 pm	10
Tuesday, May 3 rd	9	College of the Redwoods	5 th & H Streets – Eureka	8:19 am – 8:45 am	18
Wednesday, May 4 th	27	Fortuna Overlook	HSU Library Circle	12:04 pm – 1:26 pm	58
	41	Fortuna Blvd. & Smith Lane	Arcata Transit Center	2:57 pm – 4:11 pm	54

Southbound Trips Sampled

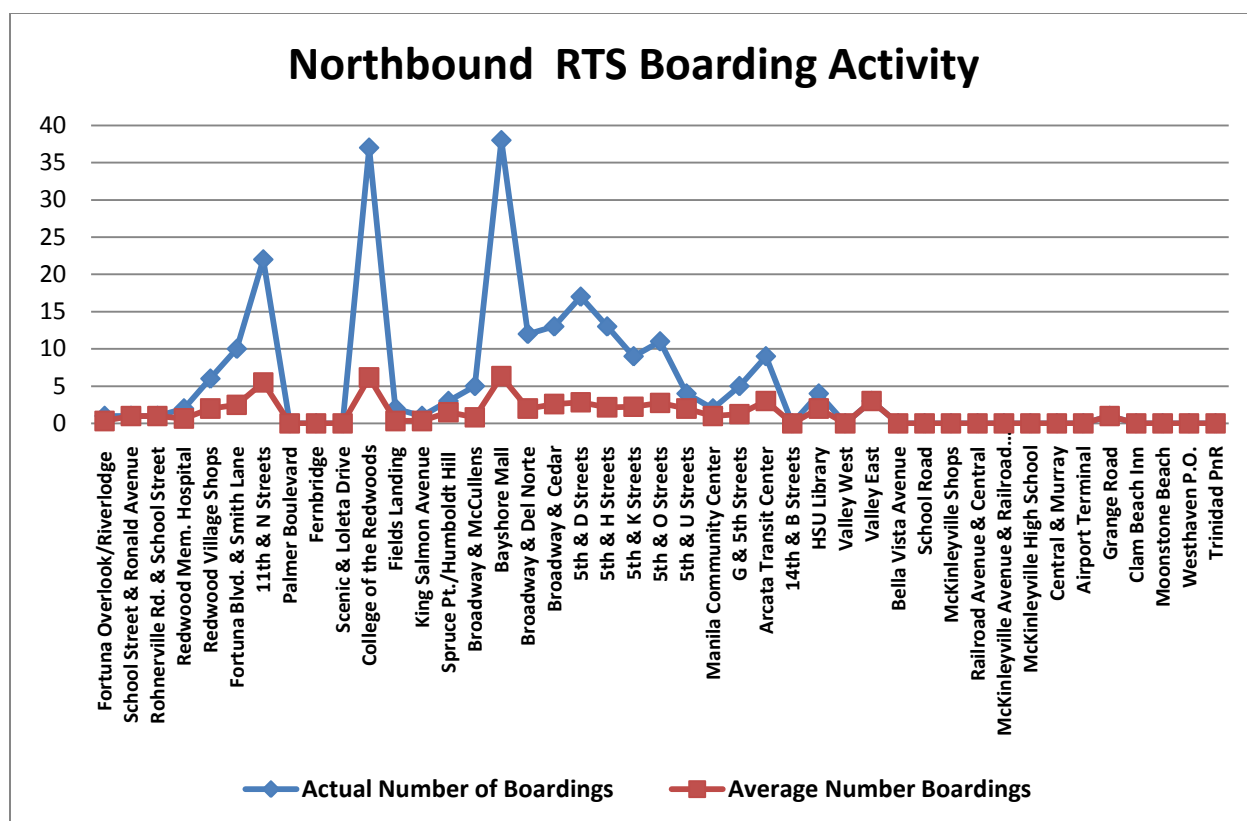
Date	Trip	Origin	Destination	Time Interval	Total Number of Boardings
Monday, May 2 nd	20	Trinidad Park 'N Ride	Fortuna Overlook	9:12 am - 11:07am	54
	32	Valley West	College of the Redwoods	12:58 pm - 1:53 pm	25
	48	Bayshore Mall	Fortuna Overlook	5:21 pm – 6:15 pm	24
Tuesday, May 3 rd	10	4 th & H Streets – Eureka	College of the Redwoods	7:46 am – 8:07 am	9
Wednesday, May 4 th	24	Arcata Transit Center	Fortuna Overlook	10:37 am – 11:52 am	54
	34	HSU Library Circle	Fortuna Blvd. & Smith Lane	1:34 pm – 2:41 pm	36

For ETS, PMC conducted ridechecks on each of the four routes and took several trips on each – Red, Gold, Green and Purple routes. For A&MRTS, PMC conducted ridechecks on each of the two routes and took several trips on each – Red and Gold routes.

Maximum Passenger Load Points

A key part of the ride check analysis included noting where passenger loads were the highest en route. The following graph and display the occurrences of the highest boarding volumes along the routes surveyed.

Redwood Transit Service



RTS Northbound Stops	Actual Number of Boardings	Average Number of Boardings
Bayshore Mall	38	6.3
College of the Redwoods	37	6.2
11 th & N Streets – Fortuna	22	5.5
5 th & D Streets – Eureka	17	2.8
Broadway & Cedar – Eureka	13	2.6

Trip 5 is a northbound morning commuter route that runs from Scotia to the Trinidad Park & Ride. The ride check for this trip originated from the Fortuna Overlook/Riverlodge just west of the U.S. 101/Kenmar Road interchange and ended at the Trinidad Park and Ride lot. There were 4 passengers already on board as the ride check commenced. PMC observed that the trip ran on schedule with a maximum load of 25 passengers between 5th & O Streets in Eureka and G & 5th Streets in Arcata. There were no occurrences of passengers standing, wheelchairs or bus stops passed up. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
11 th & N Streets (Fortuna)	6	7:04 am
5 th & O Streets (Eureka)	6	7:49 am
Broadway & Cedar (Eureka)	5	7:41 am
Fortuna Blvd. & Smith Lane	4	7:00 am

Trip 25 is a late morning/early afternoon trip that runs from the Fortuna Overlook/Riverlodge to Valley West in Arcata. The ride check for this trip encompassed the whole run. PMC observed that the trip ran on schedule with a maximum load of 22 passengers between 5th & U Streets in Eureka and G & 5th Streets in Arcata along with 2 passengers standing. There were no occurrences of wheelchairs or bus stops passed up. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
College of the Redwoods	9	11:58 am
Bayshore Mall	3	12:09 pm
Broadway & Del Norte	3	12:17 pm
Broadway & Cedar	3	12:19 pm
5 th & D (Eureka)	3	12:22 pm
5 th & H (Eureka)	3	12:23 pm
5 th & U (Eureka)	3	12:27 pm
Arcata Transit Center	3	12:39 pm

Trip 35 is a mid-afternoon trip that runs from the College of the Redwoods to the Arcata/Eureka Airport Terminal. The ride check for this trip originated at the College of the Redwoods and ended at 5th & H Streets in Eureka. PMC observed that the trip ran on schedule with a maximum load of 6 passengers between 5th & D Streets and 5th & H Streets in Eureka. One wheelchair passenger boarded at 5th & D Streets, but otherwise there were no standing passengers and no passed stops. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
5 th & D Streets (Eureka)	5	2:36 pm
College of the Redwoods	4	2:15 pm
Bayshore Mall	1	2:26 pm

Trip 9 is a morning commute trip that runs from Scotia to the Arcata/Eureka Airport Terminal. The ride check for this trip originated at the College of the Redwoods and ended at 5th & H Streets in Eureka. There was one passenger already on board as the ride check commenced. PMC observed that the trip ran on schedule with a maximum load of 20 passengers between the Bayshore Mall and 5th & H Streets in Eureka. There were no occurrences of passengers standing, wheelchairs or stops passed up. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
Bayshore Mall	7	8:34 am
5 th & D Streets	4	8:43 am
5 th & H Streets	3	8:46 am
Fields Landing	2	8:26 am

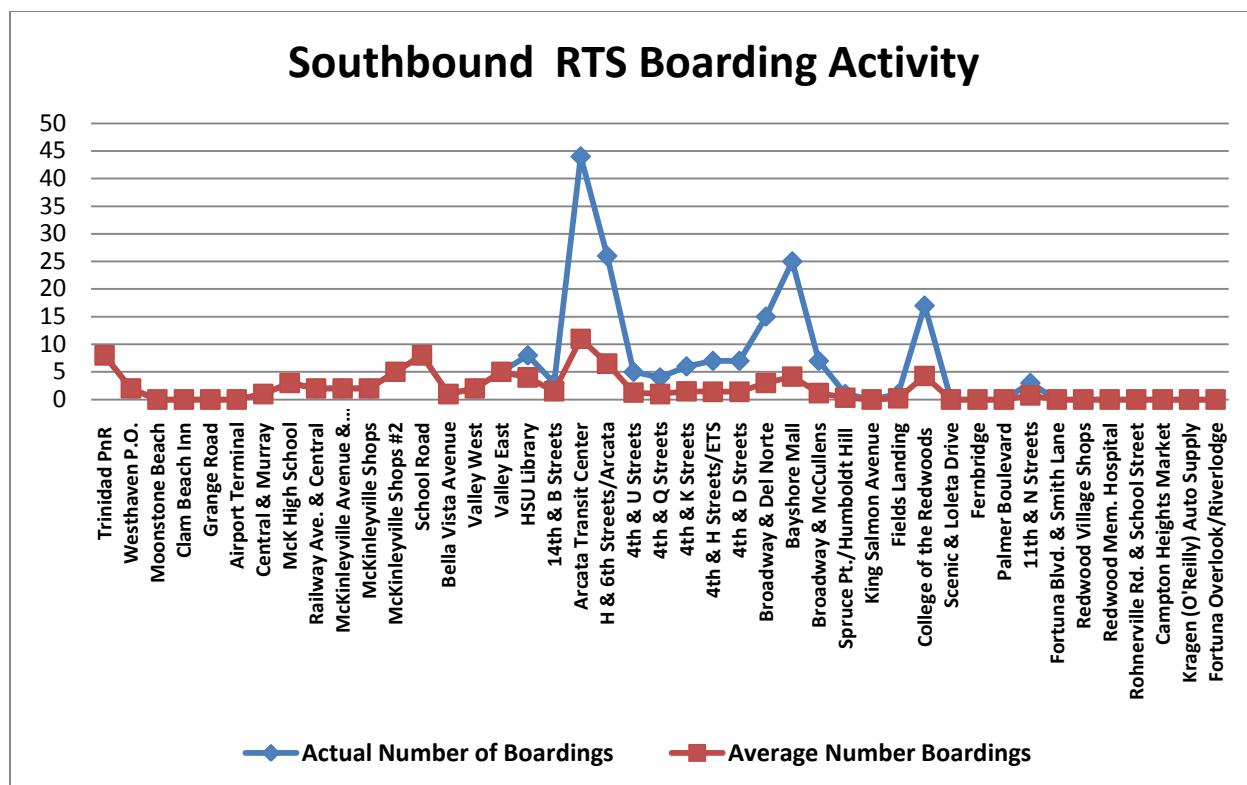
Trip 27 is an early afternoon trip that runs from Fortuna Overlook/Riverlodge to Valley West in Arcata. The ride check for this trip originated at the Fortuna Overlook and was intended to end at the HSU Library Circle. However, the segment between the Arcata Transit Center and the

HSU Library Circle was aborted because the trip was running six minutes behind schedule, which would have resulted in the surveyor missing a southbound trip from HSU. PMC observed a maximum load of 29 passengers between 5th & K Streets and 5th & O Streets in Eureka. One standing passenger between the Bayshore Mall and 5th & H Streets and four standing passengers between 5th & H and 5th & O were observed. There were no wheelchairs or passed up stops. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
Bayshore Mall	15	12:55 pm
College of the Redwoods	11	12:41 pm
5 th & H Streets (Eureka)	4	1:10 pm
Arcata Transit Center	4	1:27 pm (6 minutes late)

Trip 41 is a mid afternoon/early commute trip that runs from Scotia to the Trinidad Park & Ride. The ride check for this trip originated at Fortuna Boulevard & Smith Lane with 11 passengers already on board and ended at the Arcata Transit Center. The trip ran behind schedule between 7 and 16 minutes en route with no pass ups. In addition, there was a change of drivers at 5th & O Streets in Eureka. PMC observed a maximum load of 35 passengers between College of the Redwoods and Bayshore Mall. In addition, one wheelchair passenger boarded at 11th & N Streets and alighted at 5th & D Streets. Eight standing passengers between College of the Redwoods and Bayshore Mall; 7 standing passengers between Bayshore Mall and Broadway & Cedar and one standing passenger from Broadway & Cedar and 5th & H Streets were observed. Two bicycles boarded at 5th & O Streets and alighted at G & 5th Streets in Arcata. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
College of the Redwoods	13	3:26 pm (7 minutes late)
11 th & N Streets	11	3:10 pm (7 minutes late)
Bayshore Mall	11	3:42 pm (7 minutes late)
5 th & O Streets (Eureka)	5	4:03 pm (7 minutes late)
5 th & K Streets (Eureka)	4	4:01 pm (7 minutes late)



RTS Southbound Stops	Actual Number of Boardings	Average Number of Boardings
Arcata Transit Center	44	11.0
H & 6 th Streets – Arcata	26	6.5
Bayshore Mall	25	4.2
College of the Redwoods	17	4.3
Broadway & Del Norte – Eureka	15	3.0

Trip 20 is a southbound mid-morning commuter route that runs from the Trinidad Park & Ride to the Fortuna Overlook/Riverlodge. The ride check for this trip encompassed the whole run. PMC observed that the trip ran on schedule with a maximum load of 39 passengers between H & 6th Streets in Arcata and 4th & U Streets in Eureka. In addition, one wheelchair passenger boarded at McKinleyville and alighted at 4th & D Streets. Three standing passengers between the McKinleyville Shops and School Road; 5 standing passengers between School Road and Bella Vista Avenue; 7 standing passengers between Bella Vista Avenue and HSU Library Circle; 4 standing passengers between the Arcata Transit Center and H & 6th Streets; 5 standing passengers between H & 6th Streets and 4th & U Streets; and 2 standing passengers from 4th & U Streets and 4th & Q Streets were observed. There were no passed stops. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
Arcata Transit Center	13	10:00 am
Trinidad Park & Ride	8	9:12 am
School Road (McKinleyville)	8	9:44 am

Stop	Number of Passengers	Timepoint
H & 6 th Streets (Arcata)	6	10:04 am
McKinleyville Shops (2 nd Stop)	5	9:42 am
Broadway/Del Norte (Eureka)	5	10:26 am

Trip 32 is an early afternoon route that runs from Valley West to the College of the Redwoods. The ride check for this route encompassed the whole run. PMC observed that the trip ran on schedule with a maximum load of 20 passengers between H & 6th Streets in Arcata and 4th & U Streets in Eureka. There were no occurrences of passengers standing, wheelchairs or stops passed up. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
Arcata Transit Center	7	1:09 pm
Valley East	5	12:58 pm
HSU Library Circle	5	1:04 pm
H & 6 th Streets (Arcata)	3	1:12 pm
Valley West	2	12:58 pm

Trip 48 is a late afternoon/early evening commuter route that runs from the Trinidad Park & Ride and Scotia. The ride check for this trip originated at the Bayshore Mall with 13 passengers already on board and ended at the Fortuna Overlook/Riverlodge. PMC observed that the trip ran on schedule with a maximum load of 30 passengers between College of the Redwoods and Fernbridge. The run made one flag stop at Main and 9th Streets in Fortuna and passed up the Kragen (O'Reilly) Auto Supply stop. One standing passenger between Bayshore Mall and College of the Redwoods and 2 standing passengers between College of the Redwoods and Main & 9th Streets were observed. There were no wheelchairs during the run. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
Bayshore Mall	12	5:21 pm
College of the Redwoods	8	5:36 pm
Broadway & McCullens	3	5:21 pm

Trip 10 is a southbound morning commuter/tripper route that runs Monday through Thursday during the HSU/College of the Redwoods fall and spring semesters from McKinleyville High School to College of the Redwoods. The ride check for this trip originated at 4th & H Streets in Eureka and ended at the College of the Redwoods with 16 passengers already on board. PMC observed that the trip ran on schedule with a maximum load of 18 passengers between the Bayshore Mall and the College of the Redwoods. There were no occurrences of passengers standing, wheelchairs or stops passed up. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
Broadway & Del Norte	3	7:50 am
4 th & H Streets (Eureka)	2	7:45 am
4 th & D Streets (Eureka)	2	7:46 am

Trip 24 is a late morning route that runs from the Arcata/Eureka Airport to the Fortuna Overlook/Riverlodge. The ride check for this trip originated at the Arcata Transit Center and ended at the Fortuna Overlook/Riverlodge with 22 passengers already on board. PMC observed that the trip ran 5 to 8 minutes behind schedule with a maximum load of 51 passengers between H & 6th Streets in Arcata and 4th & U Streets in Eureka. Eight standing passengers between the Arcata Transit Center and H & 6th Streets; 20 standing passengers between H & 6th Streets and 4th & U Streets; 14 standing passengers between 4th & U Streets and 4th & H Streets; 10 standing passengers between 4th & H Streets and 4th & D Streets; 8 standing passengers between 4th & D Streets and Broadway & Del Norte; 9 standing passengers between Broadway & Del Norte and the Bayshore Mall; and 6 standing passengers between Bayshore Mall and the College of the Redwoods were observed. There were no occurrences of wheelchairs or stops passed up. The busiest board points observed en route are as follows:

Stop	Number of Passengers	Timepoint
Arcata Transit Center	19	10:37 am
H & 6 th Streets (Arcata)	10	10:44 am
Broadway & Del Norte	5	11:10 am
Bayshore Mall	4	11:13 am (5 minutes late)

Trip 34 is a mid-afternoon route that runs from the Arcata/Eureka Airport to the Fortuna Overlook/Riverlodge. The ride check for this trip was supposed to have originated at HSU Library Circle and ended at Fortuna Boulevard and Smith Lane, However, due to a late northbound trip, the segment between the HSU Library Circle and the Arcata Transit Center had to be aborted to allow the surveyor to make this trip. There were 14 passengers on board at the Arcata Transit Center. PMC observed the trip ran on schedule with a maximum load of 24 passengers between H & 6th Streets in Arcata and 4th & U Streets in Eureka. There were no occurrences of standing passengers, wheelchairs or passed up stops. However, there were two flag stops requested en route at the U.S. Forestry Service in Eureka (just before the Bayshore Mall) and at 8th & Main Streets in Fortuna. The busiest board points observed en route are as follows:

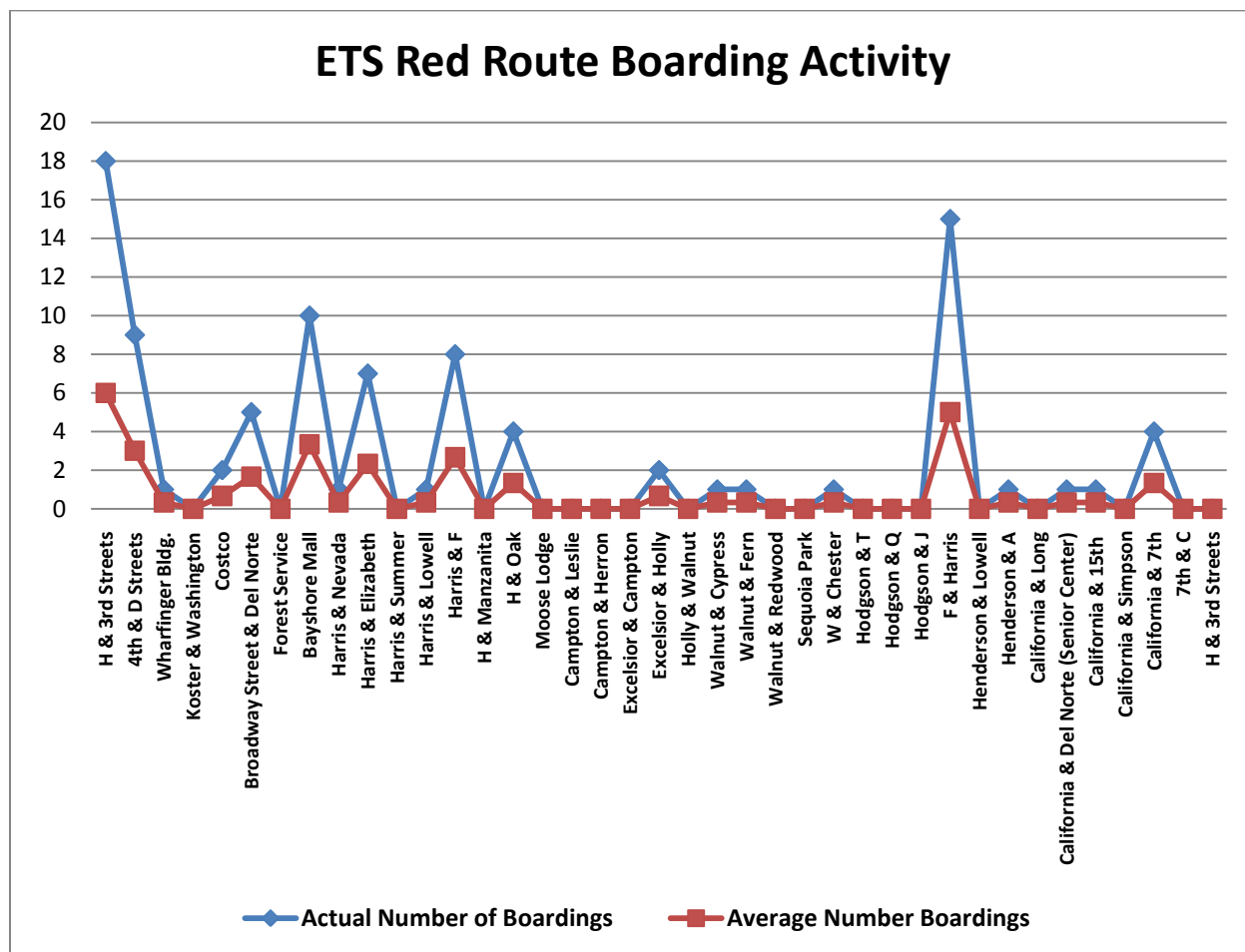
Stop	Number of Passengers	Timepoint
H & 6 th Streets (Arcata)	7	1:46 pm
College of the Redwoods	6	2:24 pm
Arcata Transit Center	5	1:40 pm
Bayshore Mall	4	2:10 pm
4 th & K Streets (Eureka)	3	1:59 pm

Passenger Pass Ups or Trip request Refusals

Based upon observations of the 12 RTS routes, there were no passenger pass ups or trip request refusals.

Eureka Transit Service

A key part of the ride check analysis included noting where passenger loads were the highest en route. The graphs and tables display the occurrences of the highest boarding volumes along the four routes surveyed.

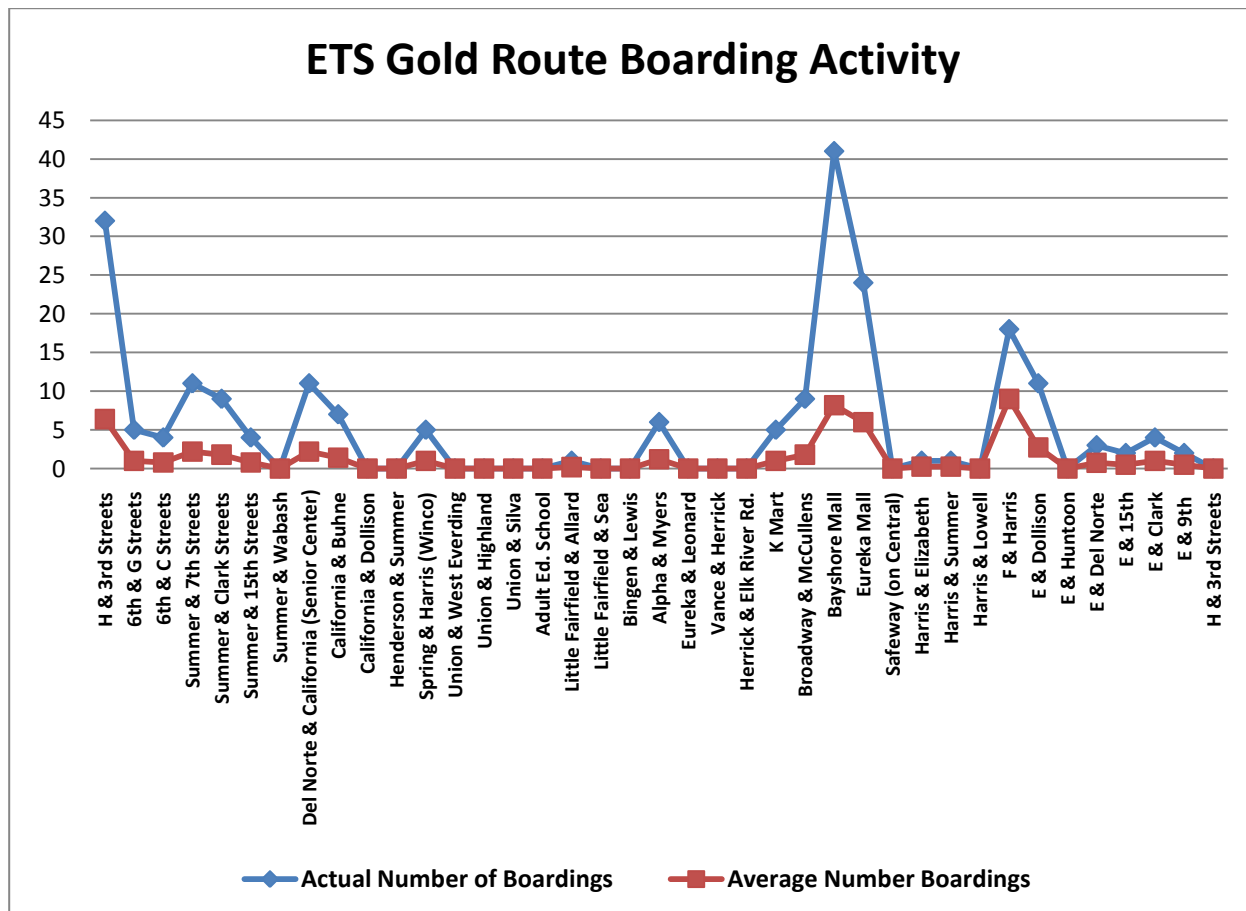


The ETS Red Route serves the western and south-central areas of Eureka, including the community of Cutten. The route originates and terminates at the corner of H & 3rd Streets in downtown Eureka at the top of the hour. The four scheduled ride checks for this route encompassed the whole run. The 3:00 p.m. trip was aborted due to a late connection from the Gold Route. PMC observed that the trips ran on schedule with a maximum load of 20 passengers on the 4:00 p.m. trip between the Wharfing Building and Broadway & Del Norte. The two morning Eureka Red Routes were fairly brisk with about 15 passengers maximum during the duration of both trips. There were no occurrences of passengers standing, wheelchairs or stops passed up. The busiest board points observed during the three trips are as follows:

Red Route Stop	Actual Number of Boardings	Average Number of Boardings
H & 3rd Streets	18	6.0
F & Harris	15	5.0

Red Route Stop	Actual Number of Boardings	Average Number of Boardings
Bayshore Mall	10	3.3
4th & D Streets	9	3.0
Harris & F	8	2.7

Date	Departure Run	Total Number of Boardings	Average Number of Passengers Per Trip	Maximum Load
Tuesday, May 3 rd	9:00 am	32	10.4	15
	10:00 am	32	9.8	15
	3:00 pm	Aborted Trip Due to Late Connection		
	4:00 pm	29	7.5	20

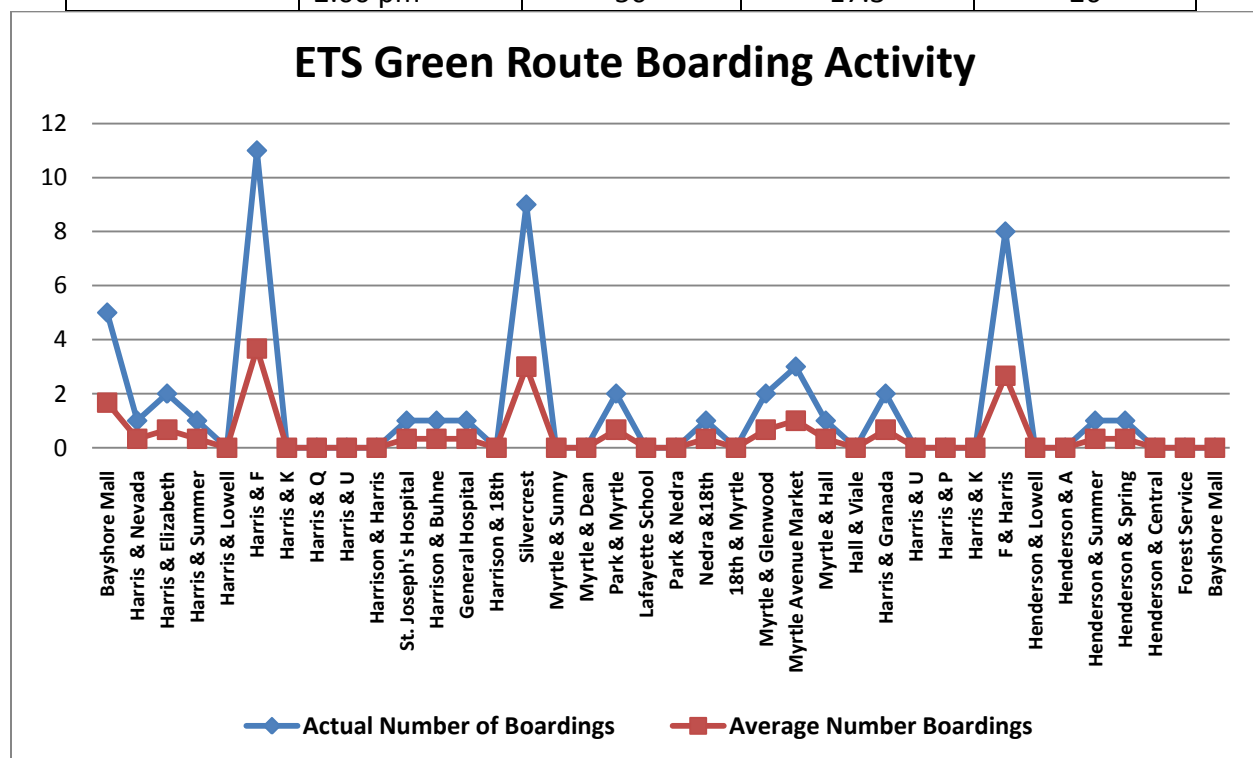


The ETS Gold Route serves the west-central and southwestern areas of Eureka, including the community of Pine Hill. The route originates and terminates at the corner of H & 3rd Streets in downtown Eureka at the top of the hour. The three scheduled ride checks for this route encompassed the whole run. PMC observed that the 12:00 p.m. trip ran on schedule, whereas the 1:00 p.m. and 2:00 p.m. trips ran behind schedule by as much as 11 minutes. The 12:00 trip had a maximum load of 28 passengers with 2 wheelchairs and 5 passengers standing at one time. The 1:00 p.m. trip was the busiest of the three due to a number of special needs program

individuals that boarded at Bayshore Mall along with two 2 wheelchairs. At one point during the trip, there were about 13 people standing out of a maximum load of 36 passengers This caused the bus to run 11 minutes behind schedule, which in turn affected the 2:00 p.m. trip. That trip had a maximum load of 26 passengers, with about 2 people standing at various points along the route. Although the driver tried to make up time during the 2:00 p.m. Gold run, he was four minutes late pulling into H & 3rd Streets, resulting in a missed 3:00 p.m. Red Route connection. There were no passed stops in route. The busiest board points observed during the three trips are as follows:

Gold Route Stop	Actual Number of Boardings	Average Number of Boardings
Bayshore Mall	41	8.2
H & 3rd Streets	32	6.4
Eureka Mall	24	6.0
F & Harris	18	9.0
Summer & 7th Streets	11	2.2
Del Norte & California (Senior Center)		
E & Dollison		

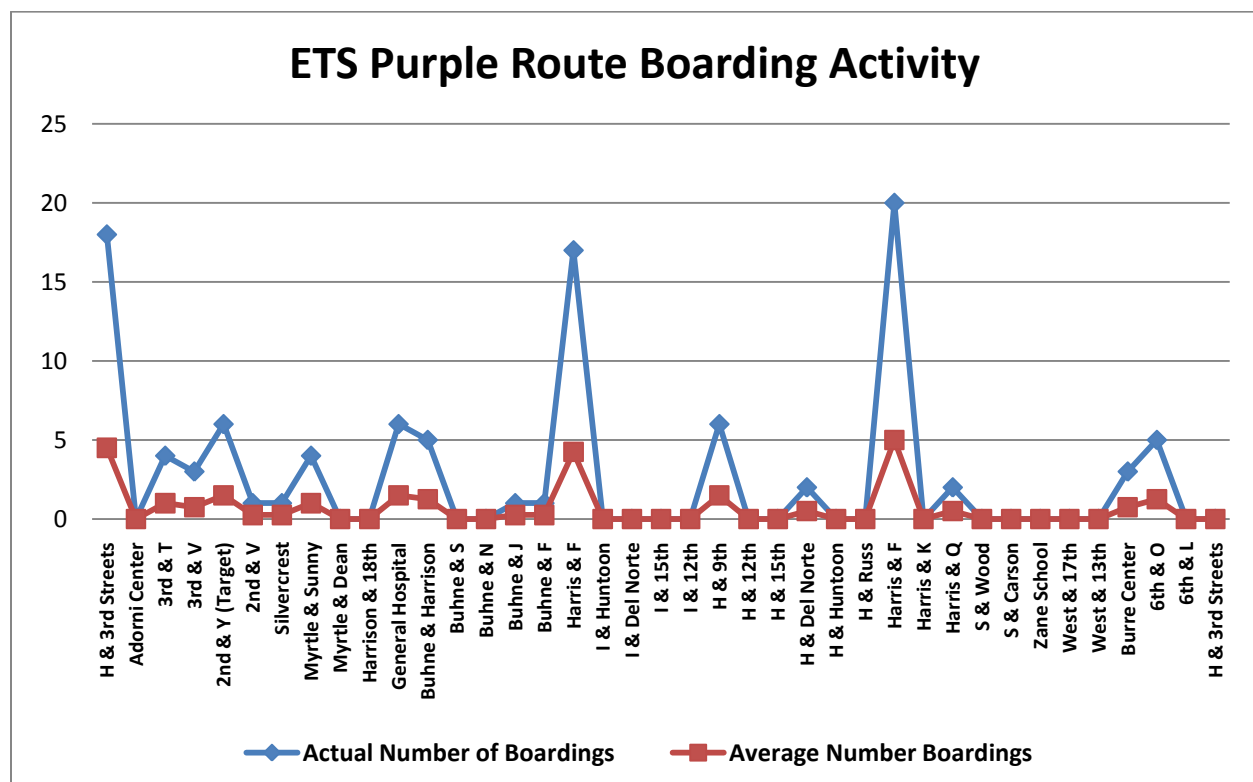
Date	Departure Run	Total Number of Boardings	Average Number of Passengers Per Trip	Maximum Load
Tuesday, May 3 rd	12:00 pm	51	14.6	28
	1:00 pm	57	29.7	42
	2:00 pm	50	17.3	26



The ETS Green Route serves the southern and eastern areas of Eureka, including the community of Myrtle town. The route originates and terminates at the corner of Harris & F Streets in near the Henderson Center at the top of the hour. The three scheduled ride checks for this route originated at the Bayshore Mall. PMC observed that the trips ran on schedule with a maximum load of 9 passengers on the 8:52 a.m. trip between Harris & F Streets and Harrison and Harris Streets. There were two wheelchair passengers on board the 9:52 a.m. trip. There were no occurrences of passengers standing or stops passed up. The busiest board points observed during the three trips are as follows:

Green Route Stop	Actual Number of Boardings	Average Number of Boardings
Harris & F	11	3.7
Silvercrest	9	3.0
F & Harris	8	2.7
Bayshore Mall	5	1.7
Myrtle Avenue Market	3	1.0

Date	Departure Run	Total Number of Boardings	Average Number of Passengers Per Trip	Maximum Load
Friday, May 6 th	7:52 am	15	4.3	7
	8:52 am	20	5.2	9
	9:52 am	18	5.3	8



The ETS Purple Route serves the central and eastern areas of Eureka. The route originates and terminates at the corner of H & 3rd Streets in downtown Eureka at the top of the hour. The four scheduled ride checks for this route for this route encompassed the whole run. PMC observed that the trips ran on schedule with a maximum load of 17 passengers on the 1:59 p.m. trip between 2nd & Y Streets (Target Store) and Silvercrest. The 1:59 p.m. trip fell behind schedule during the first half of the trip cycle due to the switch in drivers at the HTA operations facility as well as the transfers at Silvercrest with the Green Route. The Silvercrest stop was passed up on the 12:59 p.m. and 3:59 p.m. trips due to the lack of transfer and waiting passengers. There was one wheelchair passenger on board the 1:59 p.m. and 2:59 p.m. trip respectively. There were no occurrences of passengers standing. The busiest board points observed during the three trips are as follows:

Purple Route Stop	Actual Number of Boardings	Average Number of Boardings
Harris & F (2 nd Stop)	20	5.0
H & 3rd Streets	18	4.5
Harris & F (1 st Stop)	17	4.3
2nd & Y (Target)	6	1.5
General Hospital		
H & 9th		
Buhne & Harrison	5	1.3

Date	Departure Run	Total Number of Boardings	Average Number of Passengers Per Trip	Maximum Load
Friday, May 6 th	12:59 pm	24	4.9	8
	1:59 pm	32	8.4	17
	2:59 pm	27	6.2	9
	3:59 pm	22	5.7	9

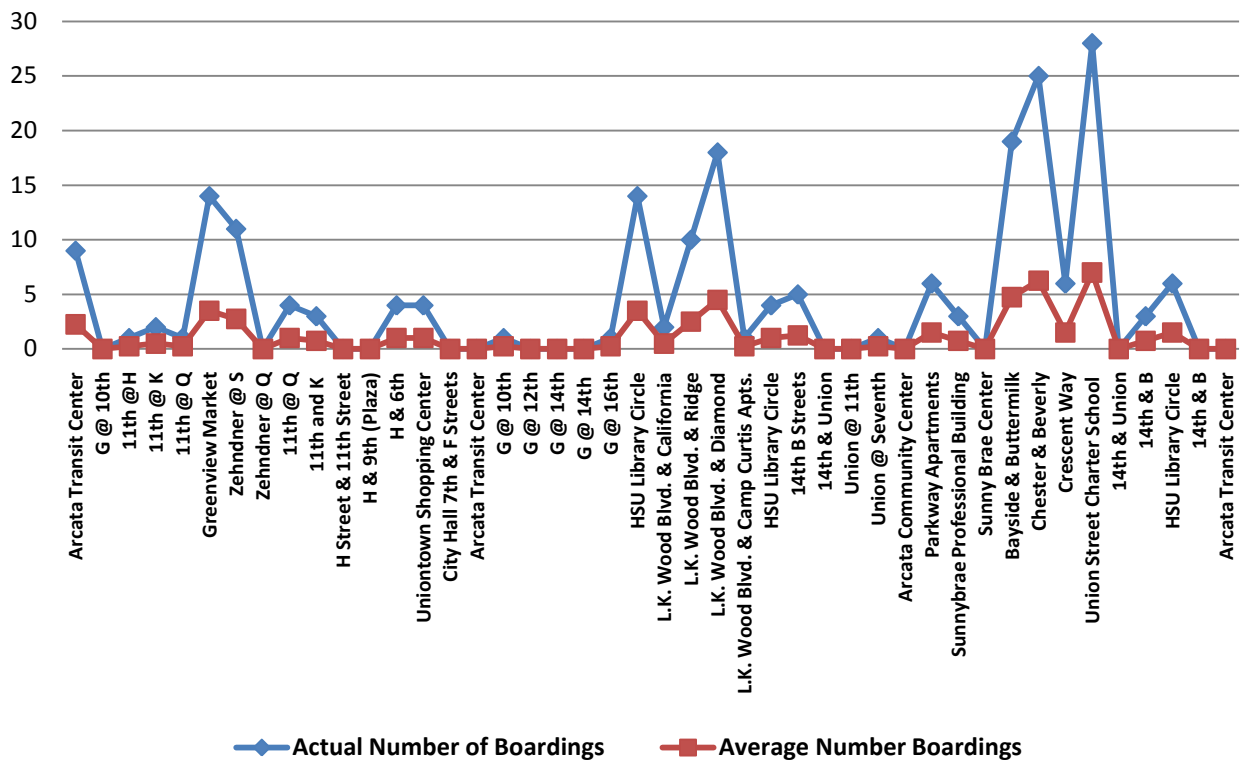
Passenger Pass Ups or Trip request Refusals

Based upon observations of the four ETS routes, there were no passenger pass ups or trip request refusals.

Arcata & Mad River Transit System

A key part of the ride check analysis included noting where passenger loads were the highest en route. The graphs and tables display the occurrences of the highest boarding volumes along the two routes surveyed.

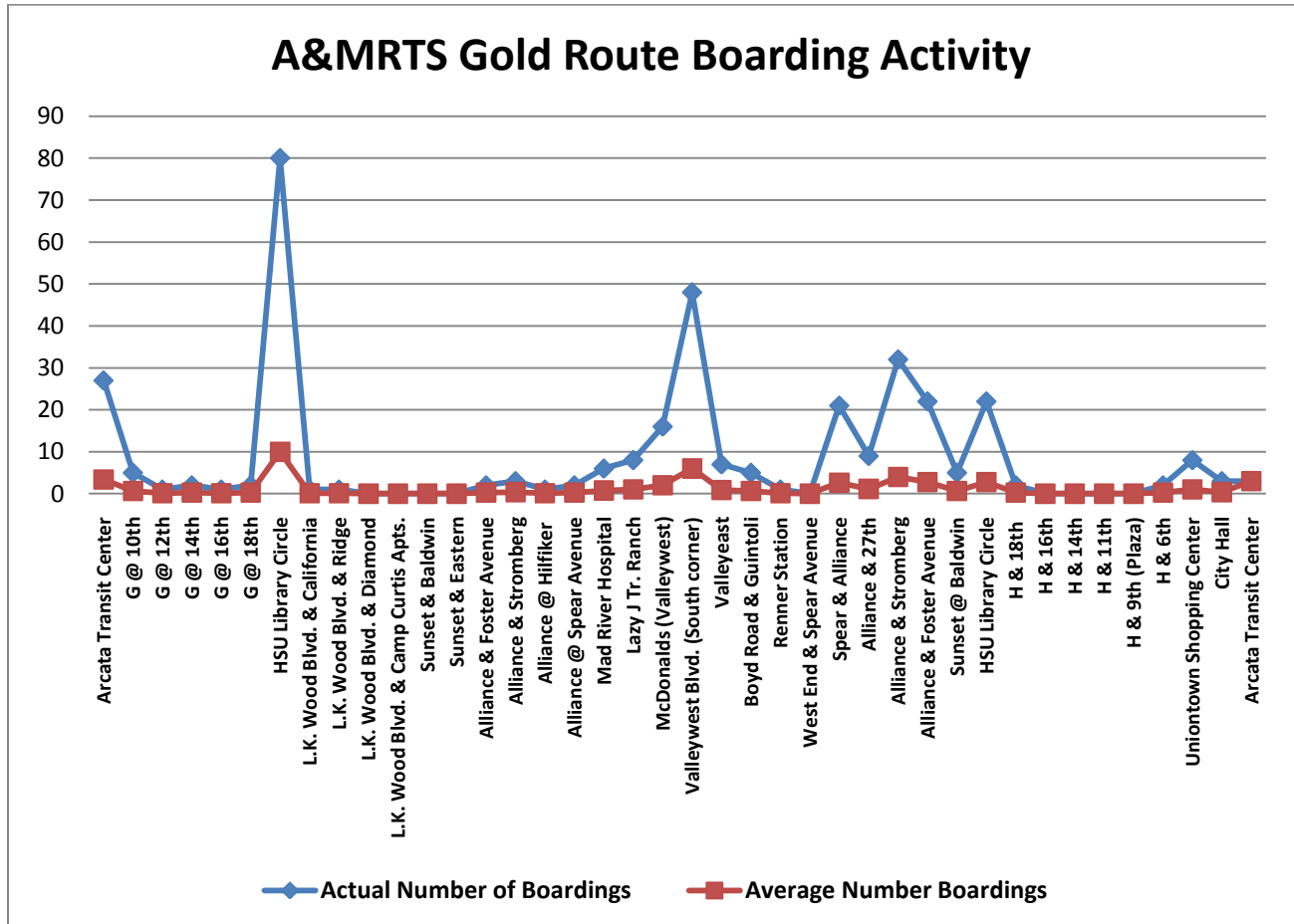
A&MRTS Red Route Boarding Activity



The A&MRTS Red Route serves the western and southeastern areas of Arcata, including the enclave of Sunny Brae & HSU. The route originates from and terminates at the Arcata Transit Center in downtown Arcata at the top of the hour. The four scheduled ride checks for this route encompassed the whole run. PMC observed that the trips ran on schedule with a maximum load of 30 passengers on the 8:05 a.m. and 9:05 a.m. trips between the Union Street Charter School and 14th & Union Streets. The highest number of boardings along the Red Route occurred toward the later half of the run between HSU Library Circle and Sunny Brae. Out of a total of 208 boardings, 28 were at the Union Street School followed by 25 boardings at the corner of Chester and Beverly and 19 boardings at Bayside and Buttermilk. The standing loads were evident between Union Street Charter School and the HSU campus. The 7:05 a.m. passed up the Arcata Community Center stop. There were no occurrences of wheelchairs. The busiest board points observed during the four trips are as follows:

Red Route Stop	Actual Number of Boardings	Average Number of Boardings
Union Street Charter School	28	7.0
Chester & Beverly	25	6.3
Bayside & Buttermilk	19	4.8
L.K. Wood Blvd. & Diamond	18	4.5
Greenview Market	14	3.5
HSU Library Circle		

Date	Departure Run	Total Number of Boardings	Average Number of Passengers Per Trip	Maximum Load
Wednesday, May 4 th	7:05 am	50	7.1	22
	8:05 am	56	7.5	30
	9:05 am	61	9.5	30
Thursday, May 5 th	5:05 pm	39	9.0	21



The A&MRTS Gold Route serves the northern and northwestern areas of Arcata, including Sunset, Westwood and Valley West. The route originates from and terminates at the Arcata Transit Center in downtown Arcata at the top of the hour. The 8 scheduled ride checks for this route encompassed the whole run. The 1:05 p.m. Gold Line was the busiest with a maximum of 57 passengers including 22 standing. This was due to a group of about 30 primary students and teachers that boarded at Valleywest Blvd headed to Arcata City Hall on a field trip. Standing loads were observed between HSU Library Circle and L.K. Wood Boulevard corridor as well as between Alliance and Stromberg and HSU Library Circle. There were no occurrences of wheelchairs or passed stops. The busiest board points observed during the 8 trips are as follows:

Gold Route Stop	Actual Number of Boardings	Average Number of Boardings
HSU Library Circle	80	10.0
Valleywest Blvd. (South corner)	48	6.0
Alliance & Stromberg	32	4.0
Arcata Transit Center	27	3.4
Alliance & Foster Avenue	22	2.8
HSU Library Circle (2 nd Stop)		

Date	Departure Run	Total Number of Boardings	Average Number of Passengers Per Trip	Maximum Load
Thursday, May 5 th	9:05 am	34	6.2	15
	10:05 am	55	9.5	39
	11:05 am	34	7.8	17
	1:05 pm	72	23.1	57
	2:05 pm	47	12.2	31
	3:05 pm	51	10.9	20
	6:05 pm	31	7.2	14
	7:05 pm	24	7.2	15

Passenger Pass Ups or Trip request Refusals

Based upon observations of the two A&MRTS routes, there were no passenger pass ups or trip request refusals.

3.6 Effectiveness in Meeting Existing and Future Transit Needs

Each of the transit systems has evolved to meet their respective markets. Tables 3-19 through 3-24 provide five year projections of annual ridership, operating costs, fares, and hourly productivity, as well as the minimum number of passengers per hour needed to meet farebox minimums for each transit system.

Table 3-19
Ridership, Operating Cost and Farebox Recovery Projections for RTS
FYs 2011/12 - 2015/16

	RTS				
	2011/12	2012/13	2013/14	2014/15	2015/16
Projected Ridership	643,561	675,739	709,526	745,002	782,252
Projected Hours	39,736	43,065	43,926	44,804	45,701
Projected Cost/hour	\$84.66	\$86.50	\$87.35	\$88.21	\$89.07
Min. Farebox Standard	26.4%	26.4%	26.4%	26.4%	26.4%
Min. Fare/hour Required	\$22.35	\$22.84	\$23.06	\$23.29	\$23.51
Projected Av. Fare/pass	\$1.57	\$1.64	\$1.64	\$1.64	\$1.64
Min. Pass/hour Required	14.24	13.92	14.06	14.20	14.34
Projected Pass/hr.	16.20	15.69	16.15	16.63	17.12

Table 3-20
Ridership, Operating Cost and Farebox Recovery Projections for ETS
FYs 2011/12 - 2015/16

	Eureka				
	2011/12	2012/13	2013/14	2014/15	2015/16
Projected Ridership	237,393	242,141	246,983	251,923	256,962
Projected Hours	14,985	15,285	15,590	15,902	16,220
Projected Cost/hour	\$59.73	\$60.32	\$60.91	\$61.51	\$62.11
Min. Farebox Standard	22.4%	22.4%	22.4%	22.4%	22.4%
Min. Fare/hour Required	\$13.38	\$13.51	\$13.64	\$13.78	\$13.91

	Eureka				
	2011/12	2012/13	2013/14	2014/15	2015/16
Projected Av. Fare/pass	\$1.12	\$1.15	\$1.18	\$1.22	\$1.25
Min. Pass/hour Required	11.95	11.75	11.56	11.29	11.13
Projected Pass/hr.	15.84	15.84	15.84	15.84	15.84

Table 3-21
Ridership, Operating Cost and Farebox Recovery Projections for A&MRTS
FYs 2011/12 - 2015/16

	Arcata				
	2011/12	2012/13	2013/14	2014/15	2015/16
Projected Ridership	222,268	226,714	231,248	235,873	240,590
Projected Hours	7,583	7,734	7,889	8,047	8,208
Projected Cost/hour	\$74.41	\$75.13	\$75.86	\$76.61	\$77.37
Min. Farebox Standard	18.8%	18.8%	18.8%	18.8%	18.8%
Min. Fare/hour Required	\$13.99	\$14.12	\$14.26	\$14.40	\$14.55
Projected Av. Fare/pass	\$0.84	\$0.83	\$0.83	\$0.83	\$0.82
Min. Pass/hour Required	16.65	17.02	17.18	17.35	17.74
Projected Pass/hr.	29.31	29.31	29.31	29.31	29.31

Table 3-22
Ridership, Operating Cost and Farebox Recovery Projections for Fortuna Senior Bus Transit
FYs 2011/12 - 2015/16

	Fortuna				
	2011/12	2012/13	2013/14	2014/15	2015/16
Projected Ridership	11,468	11,697	11,931	12,170	12,413
Projected Hours	3,008	3,068	3,130	3,192	3,256
Projected Cost/hour	\$33.74	\$33.90	\$34.06	\$34.24	\$34.40
Min. Farebox Standard	10%	10%	10%	10%	10%
Min. Fare/hour Required	\$3.37	\$3.39	\$3.41	\$3.42	\$3.44
Projected Av. Fare/pass	\$0.89	\$0.91	\$0.94	\$0.97	\$1.00
Min. Pass/hour Required	3.79	3.73	3.62	3.53	3.44
Projected Pass/hr.	3.81	3.81	3.81	3.81	3.81

Table 3-23
Ridership, Operating Cost and Farebox Recovery Projections for Blue Lake Rancheria Transit
FYs 2011/12 - 2015/16

	Blue Lake				
	2011/12	2012/13	2013/14	2014/15	2015/16
Projected Ridership	17,284	17,630	17,982	18,342	18,709
Projected Hours	2,313	2,360	2,407	2,455	2,504
Projected Cost/hour	\$14.26	\$14.41	\$14.54	\$14.70	\$14.86
Min. Farebox Standard	10%	10%	10%	10%	10%

	Blue Lake				
	2011/12	2012/13	2013/14	2014/15	2015/16
Min. Fare/hour Required	\$1.43	\$1.44	\$1.45	\$1.47	\$1.49
Projected Av. Fare/pass	\$0.40	\$0.42	\$0.43	\$0.45	\$0.46
Min. Pass/hour Required	3.52	3.43	3.35	3.29	3.23
Projected Pass/hr.	7.47	7.47	7.47	7.47	7.47

Table 3-24
Ridership, Operating Cost and Farebox Recovery Projections for K/T NeT
FYs 2011/12 - 2015/16

	K/T NeT				
	2011/12	2012/13	2013/14	2014/15	2015/16
Projected Ridership	3,672	3,745	3,820	3,897	3,975
Projected Hours	3,000	3,060	3,121	3,184	3,247
Projected Cost/hour	\$30.67	\$30.82	\$30.98	\$31.13	\$31.29
Min. Farebox Standard	10%	10%	10%	10%	10%
Min. Fare/hour Required	\$3.07	\$3.08	\$3.10	\$3.11	\$3.13
Projected Av. Fare/pass	\$0.95	\$0.99	\$1.02	\$1.05	\$1.08
Min. Pass/hour Required	3.22	3.12	3.03	2.96	2.89
Projected Pass/hr.	1.22	1.22	1.22	1.22	1.22

Generally the next five years look relatively healthy for the transit systems. In most instances, ridership and productivity will remain sufficiently high to meet minimum farebox performance standards. This assumes that operating costs will not increase at a rate higher than projected, or that the respective services will not be overly ambitious in expanding service coverage to night or weekend hours when demand and subsequent productivity and farebox recovery are

low. Fortuna Senior Bus Transit has been making an effort to maintain its farebox ratio minimum through cost savings measures, and will need to remain prudent over the next five years.

Areas to be monitored during the TDP period include:

- **RTS:** On time performance, schedule adherence and additional capacity within core service area between Arcata and the College of the Redwoods.
- **ETS:** Schedule adherence to make connections with RTS and the need to increase recovery time between trips.
- **A&MRTS:** Increasing capacity at the peak of the peak – eliminating the need to operate additional tripper overlays to handle peak loads (operate higher capacity buses).
- **Fortuna Senior Bus Transit:** Meeting the minimum farebox ratio requirement – increase productivity to accommodate increases in demand without increasing total annual operating hours above current 2011/12 base, or increase productivity by expanding scope of service to operate as a general public dial-a-ride.
- **Blue Lake Rancheria Transit:** Maintaining service for a general ridership market that utilizes the system throughout the day. Travel demand is rather evenly spread between peak and non-peak times given the transit dependency and various reasons for making the trips.
- **K/T NeT:** Ensuring on-going fund contributions from the Native American Tribes that receive service from K/T NeT. The fund contributions help satisfy the farebox requirements and support lifeline service for residents on the tribal reservations who have no other means of transportation. Also, transfer opportunities to other transit systems remain an important and attractive feature of K/T NeT.

Chapter 4

Service Recommendations

Assuming cost and revenue projections hold true, the larger transit operators will be able to maintain farebox recovery ratios above policy minimums while accommodating growth in revenue hours to serve projected ridership growth during the TDP period FY 2011/12 to 2015/16. The Fortuna Senior Bus Transit service will need to stabilize farebox recovery through increases in the number of passengers carried per revenue hour. All transit systems have been well designed and operated. All are operated in an efficient manner and have evolved to address the needs of their specific markets within funding ceilings. Each system establishes a solid framework for future transit service delivery in Humboldt County.

Service recommendations are organized by individual transit service and address issues relating to:

- Service monitoring and ongoing evaluation;
- Ensuring reliable on-time performance and connectivity;
- Ensuring sufficient capacity to accommodate peak passenger loads; and
- Meeting minimum farebox recovery benchmarks.

Service recommendations are organized by individual system and include a recommendation statement, a statement of issues to be addressed, and actions to be taken for each recommendation. RTS recommendations are numbered 4.1 to 4.9, ETS recommendations are numbered 4.10 to 4.11, A&MRTS recommendations are numbered 4.12 to 4.14, and Fortuna Senior Bus Transit recommendation is numbered 4.15. Policies presented in Chapter 5 are intended to support the service recommendations.

Redwood Transit System Recommendations

RTS service recommendations focus on:

- Improving on time performance on southbound Routes 102 (trip 30), 106 (trip 12), 107 (trip 48), 108 (trip 16), and 110 Trip 24) and northbound Routes 102 (trip 41), 106 (trip 33), 108 (trip 23), 109 (trip 45), and 111 (trip 49), as when as maintaining on time performance throughout the system.
- Bus stop enhancements and relocations at HSU (these will also enhance A&MRTS service to/from HSU).
- Ongoing monitoring to evaluate capacity requirements especially within RTS's core service corridor between Arcata and the College of the Redwoods.

Transit ridership on Humboldt County transit services is expected to increase five percent annually during the TDP period FY 2011/12 to 2015/16. For RTS, much of this growth could be concentrated within RTS' core service corridor between Arcata and the College of the Redwoods, requiring ongoing monitoring of its service within this corridor to ensure that maximum load standards are not exceeded and that there is sufficient capacity to meet increasing demand. There will also be a need to conduct ongoing service monitoring to identify

unproductive trips or route segments that could negatively impact farebox recovery, bringing the overall farebox recovery ratio below the minimum standard. Unproductive service hours can also be reassigned to increase capacity and frequency within RTS's core service corridor or to extend service coverage in response to unmet needs that are reasonable to meet.

Recommendation 4.1: Reduce south bound and north bound bus stops within Arcata to the HSU Library Circle, 14th Street and Arcata Transit Center.

Issue Identification:

RTS has identified running time issues with several of its routes. The reduction in local RTS bus stops within Arcata would reduce required running time and enhance schedule adherence.

- Strategy reinforces RTS role as a regional carrier and A&MRTS as a local provider and regional feed.
- Strategy reduces service overlap between RTS and A&MRTS.

Improvement Strategy:

- Eliminate Valley East and Valley West stops in both directions. Both stops are currently served by A&MRTS' Gold and Orange Routes.
- Transfers from RTS service to Valley East, Valley West and the Mad River Community Hospital could be made with the A&MRTS Gold and Orange Routes at the HSU Library Circle and/or the Arcata Transit Center.
- Consider eliminating 5th and G, and 6th and H stops. The Arcata Transit Center is close by as the alternative major stop.
- Running time savings should be rolled into recovery time or built into running times between time points where service is consistently late.

Action Required:

- Conduct on/off counts (five day counts for each trip) at the Valley East and Valley West stops, and at 5th and G in Arcata in both directions to determine relative importance of both stops and how many RTS passengers would be impacted by the need to transfer.
- Coordinate service change with A&MRTS to identify any load impacts on existing A&MRTS service.
- Prepare recommendation report to Board and seek Board approval.
- Inform public and RTS/A&MRTS riders of change one month prior and leading up to change date.
- Communicate change to RTS and A&MRTS operators and staff.
- Adjust running times and operator paddles.
- Update website and printed schedules.
- Suggested timeline – June 2012 through December 2012.

Recommendation 4.2: Reduce south bound and north bound bus stops along the 4th and 5th Street corridors within Eureka.

Issue Identification:

RTS has identified running time issues with several of its routes. The reduction in local RTS bus stops within Eureka would reduce required running time and enhance schedule adherence.

- Bus stops along 4th and 5th Street corridor are spaced too close for efficient regional transit operations.
- Strategy reinforces RTS role as a regional carrier and ETS as a local provider and regional feed.
- Strategy reduces service overlap between RTS and ETS.

Improvement Strategy:

- Eliminate south bound stops at 4th & K and 4th & D stops
- Eliminate north bound stops at 5th & D and 5th & K.
- Connections between RTS and ETS would remain at 4th & H (south bound) and 5th & H (north bound).
- Running time savings should be rolled into recovery time or built into running times between time points where service is consistently late.

Action Required:

- Conduct on/off counts (five day counts for each trip) at all 4th and 5th Street corridor stops to determine relative importance of stops and how many RTS passengers would be impacted by the need to transfer and increased walking distances.
- Coordinate service change with ETS to identify any load impacts on existing ETS service.
- Prepare recommendation report to Board and seek Board approval.
- Inform public and RTS/ETS riders of change one month prior and leading up to change date.
- Communicate change to RTS and ETS operators and staff.
- Adjust running times and operator paddles.
- Update website and printed schedules.
- Suggested timeline – June 2012 through December 2012.

Recommendation 4.3: Reduce local RTS stops within Fortuna and adjust routing focus to Redwood Village Shopping Center and Redwood Memorial Hospital on Redwood Way, and the Park and Ride site at Kenmar and Atterberry.

Issue Identification:

RTS has identified running time issues with several of its routes. The reduction in local RTS bus stops within Fortuna would reduce required running time and enhance schedule adherence.

Improvement Strategy:

Local RTS routing in Fortuna north of Redwood Way would be eliminated. New local routing in Fortuna would be a short loop:

- East off HWY 101 onto Kenmar, north on S. Fortuna Blvd., east on Redwood Way to Redwood Memorial Hospital, south on S. Main/Roherville Rd., west on Kenwood and Kenmar Road and back onto HWY 101. Local routing would be same for both north and south bound RTS service.
- Bus stops would be limited to Kenmar/Atterberry Park and Ride (stops on both sides on Kenmar), Redwood Village Shops (on Redwood Way), and Redwood Memorial Hospital.
- Redwood Village Shops property management could be approached for additional Park and Ride space.
- Running time savings should be rolled into recovery time or built into running times between time points where service is consistently late.

Action Required:

- Conduct on/off counts (five day counts for each trip) at all local Fortuna stops to determine relative importance of stops and how many RTS passengers would be impacted by the elimination of local stops. Should the counts show certain stops to be highly impacted by elimination, such as downtown stops, RTS should maintain flexibility to re-evaluate this recommendation and develop routing alternatives.
- Involve Fortuna Senior Bus Transit in the potential subscription local feeder service to potential transfer sites at Redwood Village Shops and Kenmar/Atterberry Park and Ride.
- Prepare recommendation report for Fortuna City Council and seek Council approval for changes to Fortuna Senior Bus Transit eligibility.
- Prepare recommendation report to HTA Board and seek Board approval.
- Inform public and RTS riders of change one month prior and leading up to change date.
- Communicate change to RTS operators and staff.
- Adjust running times and operator paddles.
- Update website and printed schedules.
- Fortuna Senior Bus Transit establish a general public feeder service for new RTS alignment. This strategy could improve Fortuna Senior Bus Transit farebox recovery.
- Suggested timeline – June 2012 through June 2013 (additional time may be required to establish Fortuna Senior Bus Transit as a general public feeder service).

Recommendation 4.4: Formalize bus stops at HSU Library Circle.

Issue Identification:

Bus stops are currently unclear and potentially in conflict with general vehicle passenger drop off activity in the HSU Library Circle. The formal designation of bus stops with RTS and A&MRTS signage would more clearly communicate to passengers where they should meet their bus. The formalization of general passenger drop off zones would better separate private vehicular traffic from bus stops.

Improvement Strategy:

- Establish formal bus stops with proper signage within HSU Library Circle.
- One stop can be located immediately within the Circle keyhole on the south curb.
- The second stop can be located immediately east of Mill Street on the north curb. The second stop could serve as a layover stop. Some short term parking stalls will be lost.
- A general vehicle drop off and pick up zone could be located and designated at the east end of the Library Circle.

Action Required:

- Establish a design and working committee with HSU administration and security staff to plan bus stop and general drop off/pick up zones.
- Stops will be shared stops with A&MRTS and Blue Lake Transit. Involve A&MRTS on the design and working committee.
- Finalize design and obtain HSU approval.
- Install signage.
- Place public notices on RTS, A&MRTS, Blue Lake and HSU websites as well as posters in HSU Library and on boards within Library Circle.
- Request HSU enforcement of parking.
- Suggested timeline – June 2012 to December 2012.

Recommendation 4.5: Move current bus stops and time points at 14th and B Streets west on 14th Street closer to planned Willow Walk HSU pedestrian access.

Issue Identification:

College Blvd (extension of Rossow Street) has been improved to serve as a formal pedestrian access onto the Campus from 14th Street. The improved pedestrian access is named Willow Walk.

- The relocation of 14th Street bus stops would improve transit rider access on/off campus.

Improvement Strategy:

- Westbound bus stop could be located on north side of 14th Street immediately east of the Willow Walk access onto 14th Street.
- The eastbound stop could be located on the Southside of 14th Street directly across from the proposed westbound stop.
- Pedestrian crosswalk will be required at Willow Walk and 14th Street.

Action Required:

- Establish a design and working committee with HSU administration and security staff to plan new bus stop locations.
- Stops will be shared stops with A&MRTS. Involve A&MRTS on the design and working committee.
- Obtain HSU, HTA Board, and City of Arcata approval.
- Communicate change to RTS operators and staff.
- Adjust schedules.
- Update website and printed schedules.
- Suggested timeline – June 2012 to December 2012.

Recommendation 4.6: Monitor passenger loads on peak hour RTS service within the core service corridor between the Arcata and the College of the Redwoods.**Issue Identification:**

RTS maximum passenger load points occur within its core service corridor. Increases in demand will be concentrated within this corridor. Passenger loads need to be monitored regularly to ensure that maximum passenger load standards are not exceeded. Standing loads are not recommended for transit routes that operate under highway conditions. This corridor may require additional capacity during the TDP period FY 2011/12 to 2015/16.

Improvement Strategy:

- Increase service monitoring and identify times and route segments with standing loads.

Action Required:

- Review north and south bound trip-by-trip passenger boardings from GFI reports.
- Ensure that bus operators are recording farebox data on an individual trip basis. From this, trips with heavy passenger loads can be identified and trends recorded.
- Establish a procedure where bus operators record standing loads as a formal exception report. Standing loads will be recorded by time, direction and route segment.
- RTS supervisory staff will review trends to determine if increased capacity is required. Capacity can be increased by increasing frequency or adding a tripper at a critical time along an affected route segment.

- Develop a service plan and operating budget to address overloads on an as required basis.
- Ongoing throughout TDP timeframe.

Recommendation 4.7: Establish a quarterly system-wide monitoring and evaluation program for all HTA services on a trip-by-trip basis.

Issue Identification:

Unproductive service can negatively affect farebox recovery, bringing the system-wide farebox ratio below the minimum standard required for TDA. Unproductive and/or duplicative service can be considered for modifications/cuts and hours reassigned to increase capacity where required (i.e. core service corridor between Arcata and the College of the redwoods) or for service expansion (evenings or increased weekend service).

Improvement Strategy:

- Formalize a quarterly review of service productivity (passenger boardings by revenue hour) on a trip-by-trip basis.

Action Required:

- Establish monthly trip-by-trip productive reports based on GFI boarding count reports and trip cycle times (revenue hours).
- Monitor productivity reports to identify poorly performing trips.
- Based on bus operator feedback conduct quarterly stop-by-stop boarding/alighting counts for poorly performing trips to determine if poor productivity is limited to a specific route segment.
- From monitoring, maintain a list of trips or trip segments that can be cut for potential assignment where additional revenue hours are needed.
- Ongoing throughout TDP timeframe.

Recommendation 4.8: Evaluate potential market for additional Saturday afternoon frequency between the College of the Redwoods and HSU.

Issue Identification:

College of the Redwoods stakeholders indicated that additional RTS Saturday headways would improve access to shopping for students living on campus.

Improvement Strategy:

- Increased north and south frequencies between 12:00 PM and 7:30 PM would provide better access to goods and services in Eureka and Arcata, and to Saturday afternoon events at HSU.

Action Required:

- Conduct a cost and demand assessment of potential service expansion.

- Service could be considered if demand forecasts were sufficient to support farebox recovery that would not bring the overall system-wide farebox recovery ratio below the minimum required by TDA.
- Implementation would assume sufficient funding to support the additional revenue hours or that hours could be reassigned from the cutting of unproductive service (Recommendation 4.7)
- Prepare Analysis in Summer/Fall 2012 for potential implementation in early 2013.

Recommendation 4.9: Amend RTS route numbering system to simplify schedule information for the public.

Issue Identification:

Current route numbering system by route and trip is unnecessarily complex.

Improvement Strategy:

Simplification would make schedule information easier for new and potential riders to understand and plan trips.

Action Required:

- Establish numbering system that assigns specific route numbers to routes operating between specific origins and destinations.
- For example: all originating trips between the Airport Terminal and Rio Dell could be designated as Route 1 throughout the service day. All trips operating between HSU and Fortuna could be designated as Route 2 throughout the service day.
- Draft new route numbering system and assign trips accordingly.
- Prepare recommendation report to Board and seek Board approval.
- Inform public and RTS riders of change one month prior and leading up to change date.
- Communicate change to RTS operators and staff.
- Update operator paddles, website and printed schedules.
- Suggested timeline – June and July 2012 planning with September 2012 implementation

Eureka Transit Service Recommendations

ETS service recommendations focus primarily on increasing recovery time between trips and the formalization of a regular service monitoring and evaluation program to identify poorly performing trips and when increased capacity may be required. In the next TDP cycle beyond 2015/16 there may be a requirement to increase capacity midday. At this later point there should be consideration to counterclockwise service based on offset schedules that facilitate 30 minute headways along each route.

Recommendation 4.10: Increase recovery time between ETS trips.

Issue Identification:

ETS schedules are tight with insufficient recovery time between when buses arrive at the route finish and start point. Scheduled recovery time ranges from 2 minutes to none. A minimum 10% recovery time should be built into a schedule between when a bus arrives back at its start point and when it depart on its next trip. Recovery time serves as a cushion to enhance connections and on time performance as well as provide an operator break.

Improvement Strategy:

Recovery time can be gained by reducing the number of bus stops along ETS routes. Buses will be able to cycle through their full route faster and have extra recovery time prior to the next departure. In urbanized areas bus stops can be spaced ½ miles apart. This establishes a ¼ mile walking distance for destinations along the route.

Action Required:

- Conduct a 100% ridecheck (boarding and alighting counts by bus stop) of ETS weekday and weekend routes to determine relative importance of bus stops based on passenger activity at each.
- Establish a list of low passenger volume stops for elimination.
- Eliminate low passenger volume bus stops using a ½ mile spacing guideline.
- Prepare recommendation report to City Council and seek Council approval.
- Inform public and ETS and RTS riders of change one month prior and leading up to change date.
- Communicate change to ETS and RTS operators and staff.
- Adjust running times and operator paddles.
- Update website and printed schedules.
- Suggested timeline – Conduct ridecheck Summer/Fall 2012, prepare bus stop plan in Fall/Winter 2012 for a July 2013 implementation (including sign removal).
- Plan should be carried out in conjunction with RTS bus stop reduction Recommendation 4.2).

Recommendation 4.11: Establish a quarterly system-wide monitoring and evaluation program for ETS service.

Issue Identification:

Unproductive service can negatively affect farebox recovery, bringing the system-wide farebox ratio below the minimum standard required for TDA. Unproductive service can be considered for modifications/cuts and hours reassigned to increase capacity where required or for service expansion (evenings or increased weekend service). Service monitoring would also identify routes or times of day that may require additional capacity to accommodate demand increases. City staff indicated

that population growth may occur south of Cutten. This potential growth may require future transit service.

Improvement Strategy:

Monitoring and evaluation program would be modeled on the one recommended for RTS in Recommendation 4.8

- Formalize a quarterly review of service productivity (passenger boardings by revenue hour) on a trip-by-trip basis.

Action Required:

- Establish monthly trip-by-trip productive reports based on GFI boarding count reports and trip cycle times (revenue hours).
- Monitor productivity reports to identify poorly performing trips.
- Based on bus operator feedback conduct quarterly stop-by-stop boarding/alighting counts for poorly performing trips to determine if poor productivity is limited to a specific route segment.
- From monitoring maintain a list of trips or trip segments that can be cut for potential assignment where additional revenue hours are needed.
- Ongoing throughout TDP timeframe.

Arcata & Mad River Transit System Recommendations

A&MRTS service recommendations focus on service monitoring, the potential need to increase peak hour capacity and a strategy to provide public transportation service between HSU and the Arcata downtown later on Friday and Saturday nights.

The bus stop changes covered in Recommendations 4.4 and 4.5 will also affect A&MRTS service. Although not a recommendation at this point, A&MRTS may want to eventually split out the Red Route into two separate but interlined routes. One route would operate on the short segment west of the Arcata Transit Center and the other route would operate on the longer segment east of the Transit Center. This may simplify the route structure to new and potential riders.

Recommendation 4.12 Establish a quarterly system-wide monitoring and evaluation program for A&MRTS service.

Issue Identification:

Unproductive service can negatively affect farebox recovery, bringing the system-wide farebox ratio below the minimum standard required for TDA. Unproductive service can be considered for modifications/cuts and hours reassigned to increase capacity where required or for service expansion (evenings or increased weekend service). Service monitoring would also identify routes or times of day that may require additional capacity to accommodate demand increases or heavy peak loads.

Improvement Strategy:

Monitoring and evaluation program would be modeled on the one recommended for RTS in Recommendation 4.8

- Formalize a quarterly review of service productivity (passenger boardings by revenue hour) on a trip-by-trip basis.

Action Required:

- Establish monthly trip-by-trip productive reports based on GFI boarding count reports and trip cycle times (revenue hours).
- Monitor productivity reports to identify poorly performing trips.
- Based on bus operator feedback conduct quarterly stop-by-stop boarding/alighting counts for poorly performing trips to determine if poor productivity is limited to a specific route segment.
- From monitoring maintain a list of trips or trip segments that can be cut for potential assignment where additional revenue hours are needed.
- Ongoing throughout TDP timeframe.

Recommendation 4.13: Specify 40-foot transit coaches in future bus replacement capital plans.

Issue Identification:

A&MRTS currently operates 35 foot transit coaches and is required to operate an overlay tripper at peak times when loads exceed bus capacity.

Improvement Strategy:

Forty foot coaches would provide additional seated and standing capacity and may reduce or eliminate the need to operate a tripper overlay. This would reduce operating costs and the reassignment of supervisory staff to operate the tripper.

Action Required:

- Specify larger capacity 40 foot transit coaches for future bus replacement and/or fleet expansion.
- Identify capital funding source and establish a capital budget for bus replacement year.
- Prepare recommendation report to City Council and seek Council approval.

Recommendation 4.14: Arcata and HSU should partner and explore a shared ride taxi jitney service operating on a full cost recovery basis between HSU and the Arcata Downtown on Friday and Saturday nights outside of A&MRTS coverage hours.

Issue Identification:

The is currently no public transportation service operating late Friday and Saturday nights between the HSU campus and night venues such as restaurants and bars concentrated in Arcata's Downtown. Potential demand is likely not

sufficient to extend A&MRTS to cover this market.

Improvement Strategy:

Arcata and HSU security could work with a local taxi provider or other organization to establish a scheduled flat rate taxi jitney between the HSU Library Circle and selected downtown bus stops.

- The service would be based on flat rate per taxi trip and established by the participating taxi company.
- Passengers could save money by ride sharing and splitting the flat rate.
- Passengers would be responsible for the full cost of the service. No public subsidy is advised.
- The service provides a safe travel alternative for HSU students and others using the taxi.

Action Required:

- Arcata and HSU conduct a feasibility study to determine student and taxi industry interest.
- Work with local taxi operator or other organization to establish a schedule and rate structure.
- HSU would assume responsibility for implementation and marketing.
- Timeframe – conduct feasibility assessment in 2012 for possible implementation in July 2013.

Fortuna Senior Bus Transit Recommendations

The Fortuna Senior Bus Transit service has served as a demand responsive service for seniors and persons with disabilities in Fortuna. The transit system has significant sensitivities to its ridership market because of the limited number of eligible passengers. This, coupled with the city's relatively small population, has resulted in reduced and/or changing demand when dedicated riders make fewer trips or no longer use the service due to factors including age and reduced mobility. Implications from this trend have resulted in farebox recovery that borders on the required minimum ratio. Should this trend continue, Fortuna Senior Bus Transit could fall below the TDA ratio during the TDP period of FY 2011/12 to 2015/16 and result in possible reduced funding.

Strategies to increase ridership and productivity include:

- Increasing the number of passengers carried per hour through more linked trip assignments.
- Expanding eligibility by operating as a general public dial-a-ride or flexroute service.
- Offering general public feeder service in conjunction with RTS recommendations to reduce intercity bus stop coverage within Fortuna.
- Consolidate local Fortuna service with RTS.

The following recommendation focuses on a feasibility study to explore the cost/benefits of the above strategies. With a limited ridership base, the status quo operation is not likely a long term option. Expansion of eligibility criteria would allow the City to operate the service independent of a consolidated RTS service. If consolidated with RTS, farebox recovery could be blended and averaged with RTS' system-wide farebox recovery.

Recommendation 4.15: HTA and the City of Fortuna conduct an alternatives analysis to assess strategies to maintain Fortuna Senior Bus Transit farebox recovery above the TDA minimum requirement.

Issue Identification:

Because of limited ridership and a small population base, Fortuna Senior Bus Transit borders on meeting the minimum TDA farebox requirement. This could in turn restrict access to TDA funding for local Fortuna transit service.

Improvement Strategy:

Strategies to increase ridership and productivity include:

- Increasing the number of passengers carried per hour through more linked trip assignments.
- Expanding eligibility by operating as a general public dial-a-ride or flexroute service.
- Offering general public feeder service in conjunction with RTS recommendations to reduce intercity bus stop coverage within Fortuna.
- Consolidate local Fortuna service with RTS.

Action Required:

- HTA and the City of Fortuna conduct an alternatives analysis to assess the above alternatives.
- Prepare a recommendations report for City Council and Board approval.
- Implement preferred strategy on a pilot project basis.
- Timeframe – conduct assessment January – March 2013 for potential implementation in July 2013.

Blue Lake Rancheria Transit Recommendations

Blue Lake Rancheria Transit reflects a service that is operating in a positive direction. Based upon reported ridership and financial data, the performance trends are mostly indicative of a productive service. The decrease in service provision as measured through vehicle hours and miles causes concern as cost continued to increase. However, the changes that may have taken effect when dial-a-ride was discontinued may have impacted the data that is reported. The current farebox recovery is well above the minimum requirements and allows flexibility in how the service the delivered.

Recommendation 4.16: City of Blue Lake/Blue Lake Rancheria should establish a system-wide monitoring and evaluation program on a trip-by-trip basis.

Issue Identification:

With a general ridership market, performance trends at different times of the day and among days should be closely monitored. Unproductive services that do not meet the policy and performance standards described in this TDP should be evaluated for their continuation.

Improvement Strategy:

Strategies to increase ridership and productivity include:

- Maintaining service for a general ridership market that utilizes the system throughout the day. Travel demand is rather evenly spread between peak and non-peak times given the transit dependency and various reasons for making the trips.
- Continue to meet HSU class schedules and connections with other transit systems so that the general ridership market will be maintained.

Action Required:

- On-going monitoring of system productivity on a regular basis (quarterly, semi-annually, or annually).
- Develop trends in performance using past and historic data, and compared to TDP performance standards.

K/T NeT Recommendations

K/T NeT provides a lifeline service for those living in the northeast portions of the county, both on tribal lands and in unincorporated communities. The ability of the service to provide connections from these rural areas to Willow Creek, the greater Humboldt Bay Area, and Weaverville via other transit providers enables the residents to access essential employment, educational, shopping and medical facilities. While ridership has declined in the recent year, K/T NeT continues to be a major mode of transportation in the service area.

Recommendation 4.17: K/T NeT should establish a system-wide monitoring and evaluation program on a trip-by-trip basis.

Issue Identification:

Limited data was collected; therefore no definitive conclusions or trends could be made from the performance information. Data collection on performance (hours/miles/ridership by route) should increase to allow K/T NeT to consider possible modifications to service. Unproductive services that do not meet the policy and performance standards described in this TDP should be evaluated for their continuation.

Improvement Strategy:

Strategies to increase ridership and productivity include:

- Ensure on-going contributions from the Native American Tribes that receive service from K/T NeT. The fund contributions help satisfy the farebox requirements and support lifeline service for residents on the tribal reservations who have no other means of transportation.
- Transfer opportunities to other transit systems remain an important and attractive feature of K/T NeT.

Action Required:

- On-going monitoring of system productivity on a regular basis (quarterly, semi-annually, or annually).
- Develop trends in performance using past and historic data, and compared to TDP performance standards.

Chapter 5

Policy Framework

Chapter 5 provides a policy framework as well as suggested performance and service design standards for the transit operators. Included in the framework are goals, objectives, supportive policies and standards. Different performance standards and service design guidelines are provided for each service.

5.1 Goals and Objectives

The majority of Humboldt County's population has access to a car. Approximately 91 percent of Humboldt County residents have access to at least one private vehicle². Approximately 82 percent of commuters in Humboldt County traveled in a private vehicle alone or as a participant in a carpool³.

In both Humboldt's urban centers and rural areas, it is and will remain difficult for transit to attract what is called the "choice rider" market. These are individuals that have good access to cars or who can easily walk (in town) to where they need to go. Unless there are significant congestion or parking problems, it is difficult to "pull" choice riders out of their cars and onto transit. Like many rural and smaller community transit agencies, Humboldt County's primary transit markets are the transportation disadvantaged – those without good access to a private vehicle. These markets include HSU and College of the Redwoods students, seniors, youth, low income, members of households with no vehicle or only one vehicle⁴, and persons with disabilities. These markets comprise transit ridership in Humboldt County, and the transit systems have evolved to effectively serve their respective markets.

A reasonable role for transit in the County remains serving the mobility requirements and travel needs of the transportation disadvantaged and student populations (living both on and off campus). Transportation disadvantaged individuals have few travel choices and can rely heavily on publicly provided community transportation to access jobs, training, and those goods, services and activities that affect social well-being and quality of life.

Recommended Service Goals

A goal is a generalized statement of what is to be achieved. Humboldt County transit service goals should reflect what each transit agency and their communities served want transit to accomplish. Transit service goals should reflect the communities' vision for transit. The following recommended goal statements reflect TDP findings and the feedback from stakeholders contacted.

Recommended goals for transit services in Humboldt County include:

² Humboldt County Department of Health and Human Services March 2008.

³ Figure 1-10, Chapter 1, Draft Transit Development Plan Humboldt County Transit Systems.

⁴ Members of households with one available vehicle do not have effective access to a private vehicle if the primary household vehicle is tied up in the commute to work.

“Provide affordable, reliable and efficient transit service that effectively meets the local mobility needs of those residents of, or visitors to Humboldt County who have limited mobility options. Where practical, also serve the needs of those who choose transit for some or all of their local travel needs for environmental or lifestyle reasons.”

“Provide a regional link to intercity transportation alternatives and destinations outside Humboldt County.”

“Operate as efficiently and economically as possible, so as to maximize the amount of service provided. Ensure the sustainability of transit service in Humboldt County”

“Support County and local land use planning, economic development, travel demand management, congestion mitigation and environmental goals, where practical.”

The first three are more immediate goals that describe what transit services in Humboldt County are already doing well. The third goal reflects the need to administer and provide transit service in a fiscally responsible manner, reflecting available funding, the need to be productive, and meet minimum farebox ratios. To do so, this may necessitate the establishment of service priorities, cutting unproductive service, or reallocating service resources to serve a greater number of Humboldt County residents. The fourth goal may have longer-range implications and may become more critical as the HSU and College of the Redwoods enrollment grows and campus development necessitates parking capacity reductions or congestion management.

Recommended Objectives and Policy Directions

An objective is a more clearly defined target, or direction to achieve a goal. Policies define an organization’s approved course of action to achieve specific objectives. The following objectives and policy statements support the service goals recommended for transit services in Humboldt County.

Objective A: Maximize service availability, reliability and convenience.

Policies:

1. Priority should be given to serving the general mobility needs of low-income households, youth, seniors, students, and persons with disabilities. These are the primary transit markets that currently use, and will continue to use public transit in Humboldt County.
2. Ensure sufficient service capacity to maximize service availability to all priority transit markets throughout the service day. Although service capacity is ultimately determined by funding, ensure that a reasonable level of service is available.
3. Adopt a zero tolerance policy for the cancellation of scheduled service due to the lack of in-service vehicles or driver availability.

4. Ensure availability of sufficient bus capacity to avoid passenger pass-ups on each fixed route. This can be accomplished by increasing bus size or service frequencies.
5. Ensure adequate bus capacity to accommodate passenger loads within the adopted maximum load standards established for the four Humboldt County transit services.
6. Ensure sufficient round trip travel times for all fixed route service to facilitate on time performance within the adopted on-time performance standard.
7. Ensure on time performance by scheduling adequate recovery time into all fixed route schedules.
8. Establish timed transfers between local services and RTS's regional services.
9. Establish schedules around critical arrival or departure times for the customers served by local fixed route and regional routes, where possible. HSU and College of the Redwoods class timetables are especially critical.
9. Operate clock-face schedules on local fixed routes and regional services, where practical.
10. Scheduled fixed route buses will not depart a time point before the published departure time in the schedule.
11. Ensure adequate ADA complementary paratransit wheelchair and ambulatory capacity to meet all confirmed ADA eligible trips within the adopted ADA service area, wait time, maximum travel time and on-time performance standards.
12. HTA shall achieve a zero trip denial rate for ADA eligible registrants⁵.

Objective B: Maximize operating efficiency without negatively impacting service quality.

Policies:

1. Establish minimum productivity performance policies for RTS, ETS, A&MRTS, Blue Lake Transit and K/T NeT fixed route, ADA paratransit and Fortuna Senior Bus Transit based on the number of passengers carried per hour needed to achieve minimum farebox ratios required by TDA. Minimum productivity policies shall be incorporated in the service performance and design standards established on an annual basis for each of the Humboldt County transit systems. Services that fall below minimum productivity performance standards should be considered for cancellation or reduction when funding is insufficient to meet full system requirements.

⁵ This assumes that travel time negotiation procedures are in effect. Under ADA, pick-up and drop-off times can be negotiated for alternatives 60 minutes before or after the requested time. If the passenger is given a pick-up or drop-off within 60 minutes before or after their requested time, and the passenger refuses it, the refused trip alternative is not considered a denial under ADA regulations.

2. Evaluate and consider requests for the extension of service hours, the expansion of service area coverage, and the introduction of additional service based on the potential of the new services to achieve minimum productivity performance policies. Humboldt County transit systems shall introduce or implement new services on a pilot project basis for a trial period not to exceed 24 months. During this period the new service will be evaluated and adjusted to improve performance. Productivity expectations shall be established for the evaluation of new services during the pilot project period.
3. Vehicle retirement program shall recognize the effective life cycle of the various vehicle types, using either FTA or best practice standards for light duty buses, medium duty buses, and heavy-duty buses.
4. Bus specifications for each system will be developed with input from both operating and maintenance staff.
5. Maximize ride sharing, linked trips and productive demand response vehicle utilization by using scheduling trip assignment parameters and procedures that ensure the achievement of the minimum productivity policy for ADA paratransit and Fortuna Senior Bus Transit.
6. Maintain a base paratransit fare for ADA eligible registrants that is double the base adult cash fare for equivalent fixed route service to be in compliance with ADA regulations. This will continue to encourage a shift from Dial-a-Ride to fixed route service – freeing up paratransit capacity to accommodate growth in demand for ADA complementary paratransit service, and increase fixed route ridership/productivity.

Objective C: Operate a productive service that remains affordable to the priority transit markets.

Policies:

1. Maintain adopted farebox ratio standards by operating productive and efficient services to minimize fare increases.
2. Maintain affordable fares for students, youth, seniors and persons with disabilities on fixed route services.
3. Offer lower fixed route fares than ADA paratransit fares to encourage a shift in ridership to fixed route service.

Objective D: Promote the coordination of service between RTS and local Humboldt County providers, as well as regional providers in neighboring counties.

Policies:

1. Maintain good connections between A&MRTS and RTS at Arcata Transit Center and ETS and RTS at 4th and H Streets (southbound), 5th and H Streets (northbound), and Bayshore Mall. RTS service should serve as the base county service with (where possible) A&MRTS and ETS services are pulsed to make connections with key RTS routes (good connections will not be possible with all RTS trips). If Fortuna Senior Bus Transit is restructured to provide a general public feeder service for RTS, the local Fortuna service should be pulsed to meet RTS service at either the Redwood Village Shops stop or at the Redwoods Memorial Hospital.
2. Where feasible coordinate RTS service with Redwood Coast transit at the Arcata Transit Center and with K/T NeT and Trinity Transit in Willow Creek (via Willow Creek Extension).
3. Encourage good connections between RTS service and Amtrak and Greyhound services at the Arcata Transit Center.

Objective E: Ensure ongoing service monitoring, evaluation and planning.

Policies:

1. Transit operators will actively monitor service performance through the review of operating and cost performance reports, and regular field spot checks.
2. HTA will coordinate a management, maintenance, and operations staff forum for: the ongoing review and resolution of operations and service quality issues; the development and amendment of vehicle specifications; and to obtain input on ongoing service planning. The existing HCAOG Service Coordination Committee serves a similar purpose.
3. Humboldt County transit system management and supervisor staff will regularly ride service in their respective service areas to develop a first hand understanding of who uses the service, operating issues, and key destinations. This requirement should be included as a formal position objective.

Objective F: Establish a formal role for transit in the local and county development process.

Policy:

1. Transit operators should actively participate in the development review process to ensure that transit operations are considered as part of new developments at the initial planning stages.

Objective G: Adhere to prudent budgeting and financial practices.

Policies:

1. Develop and maintain a five-year financial plan covering operating and capital financial needs and revenue sources preceding the annual budget process. Given the unpredictability of the economy, a financial or service plan extending out beyond

five years is not practical. A five year plan can be updated annually based on changes in costs and revenues.

2. Use realistic and fiscally conservative estimates of costs and revenues in preparing the five-year financial and service plan.
3. When feasible plan and fund annual operating and capital reserves to cushion against sudden drops in revenues. This will facilitate a planned and strategic response and minimize a “reactive” response.
4. Develop balanced annual budgets.
5. Report financial performance and anticipated service adjustments to the HTA Board and respective city councils on a monthly basis.
6. Deficit spending should be avoided. Unforeseen overruns should be offset by reserve funds.

5.2 Service Standards

Monitoring service performance remains an important task for the transit operators. Standards can be set by federal, state and local regulatory requirements, as well as goals, objectives and service priorities adopted by transit agencies. While specific standards vary, industry practice generally uses the following three categories for service performance and design:

1. Efficiency standards.
2. Service quality/reliability standards.
3. Service design standards.

Recommended Efficiency Performance Standards

Efficiency standards use operational performance data to measure the performance of a transit system. Monitoring operational efficiency and productivity requires data such as operating cost, farebox revenue recovery, vehicle revenue miles, vehicle revenue hours and boardings (unlinked passenger trips).

The monitoring and evaluation should be kept simple to free up administrative resources for service marketing, problem solving and planning. The transit operators should limit their range of efficiency performance to a few key indicators. These include:

- **Operating Cost per Passenger:** Calculated by dividing all operating and administrative costs by total passengers (with passengers defined as unlinked trips). The subsidy cost per passenger is a further refinement of this measure and is calculated by subtracting farebox revenue from gross operating and administrative costs and dividing by total passengers.
- **Operating Cost per Revenue Hour:** Calculated by dividing all operating and administrative costs by the total number of vehicle revenue hours (with revenue hours defined as time when the vehicle is actually in passenger service).

- **Passengers per Revenue Hour:** Calculated by dividing the total number of passengers (unlinked trips) by the total number of vehicle revenue hours. The number of passengers per hour is a good measure of service productivity and critical to the establishment of design standards and benchmarks for the expansion of transit service. Passengers per revenue hour should be calculated for each service type and for different time periods, such as peak, midday, Saturday, Sundays and evenings. Minimum passengers per hour standards should be established to achieve the minimum farebox recovery standard (see below).
- **Farebox Recovery Ratio:** Calculated by dividing all eligible farebox revenue by total operating costs minus depreciation, following California Transportation Development Act (TDA) definitions. TDA mandates a minimum farebox recovery for California transit systems receiving TDA funding. The minimum farebox recovery is typically calculated on a system wide basis. This allows an averaging of more productive routes with less productive routes. The current Humboldt transit farebox recovery standards are: 26.4 percent for HTA/RTS services (inclusive of Willow Creek Extension and Southern Humboldt Transit intercity and local), 22.4 percent for ETS services, 18.8 percent for A&MRTS services and 10 percent for rural bus services including Fortuna Senior Bus Transit, Blue Lake Rancheria Transit, and K/T NeT, as well as ADA paratransit services. Farebox recovery benchmarks evaluate both system efficiency (through operating cost) and productivity (through boardings). Farebox recovery ratio benchmarks are critical to the establishment of passengers per revenue hour performance and design benchmarks.

The indicators selected comply with the basic performance indicators required in the Triennial Performance Audit process and are consistent with operating and cost data already collected by the transit systems. Cost data should be separated out for each type of service and by individual route for fixed route services for summary report and evaluation purposes.

Passengers per service hour benchmarks will vary from year to year, depending on the number of passengers required to achieve the passenger revenue recovery benchmarks for each service type. The number of passengers required per revenue hour is calculated as follows:

Passenger Revenue Recovery Required per Revenue Hour = $a \times b = c$

Where: a = cost per revenue hour.

b = passenger revenue recovery benchmark.

c = actual total revenues per revenue hour required.

Number of Passengers Required = $c \text{ divided by } d = e$

Where: c = actual total revenues per revenue hour required.

d = average fare collected per passenger carried plus average advertising revenue generated per passenger carried.

e = passengers/revenue hour required to achieve the passenger revenue recovery benchmark.

Recommended Service Quality/Reliability Standards

Service quality and reliability standards should reflect system goals and support the measurement of success in achieving specific objectives and policies. Figure 5.1 summarizes the

key service quality and reliability standards and numeric values for Humboldt County transit services.

Figure 5.1: Recommended Humboldt County Transit Service Quality/Reliability Standards

Quality/Reliability Standard	RTS, ETS, A&MRTS and Rural Fixed Route Service	Fortuna Senior Bus transit and/or ADA Paratransit Service
On-Time Performance	90% of all revenue bus trips must depart the route start point and arrive at the route end point no later than four minutes after. No revenue bus trip will depart a timepoint before the departure time published in the schedule.	<u>ADA Paratransit Only</u> 90% of all pick ups must be within the policy pick up window, and 90% of all drop offs will not be earlier than 20 minutes before, or five minutes after the requested (confirmed) drop off time, unless requested by the passenger. In the case of work-, program- or school-related trips, the return trip pick up window should not begin before the shift, program or class finish time. In the case of program-related trips, no drop off will be before the program staff is available to receive the passengers, or before the facility is open.
Passenger Complaints / Passengers Carried	The number of complaints shall not exceed 0.10 % of the total boardings. Benchmark = 1 complaint/1,000 boardings.	The number of complaints shall not exceed 0.30 % of the total boardings. Benchmark = 3 complaints/1,000 boardings.
Preventable Accidents / Miles Operated <i>(While there should be no preventable accidents, a benchmark has been established to permit some flexibility in the evaluation of training efforts.)</i>	The number of preventable accidents shall not exceed 0.0005% of total service miles operated. Benchmark = 1 preventable accident/200,000 service miles.	The number of preventable accidents shall not exceed 0.0005% of total service miles operated. Benchmark = 1 preventable accident/200,000 service miles.
Roadcalls ^a / Miles Operated	Benchmark = 1 roadcall/10,000 service miles.	Benchmark = 1 roadcall/10,000 service miles.

Quality/Reliability Standard	RTS, ETS, A&MRTS and Rural Fixed Route Service	Fortuna Senior Bus transit and/or ADA Paratransit Service
Bus Trips Cancelled	No scheduled bus trips shall be cancelled because of vehicle shortages or staff absenteeism. Benchmark = zero tolerance.	No confirmed passenger trips ^b shall be cancelled because of insufficient vehicles or staff to meet the scheduled in-service pullout requirement. Benchmark = zero tolerance.
ADA Paratransit Trip Denials	NA	0% ADA trip denial rate. Under ADA regulations a trip is not considered denied if an alternative pick up or drop off time is offered within the 2 hour ADA scheduling window. An alternative time can be offered up to 60 minutes before or 60 minutes after the passengers requested time when a trip is initially booked 24 hours or more in advance of the trip.

- a) The term roadcall commonly used for any difficulty or trouble with a bus that requires transit maintenance staff to switch out a bus, to repair it on the road, or to tow it back to the garage.
- b) A confirmed passenger trip is a trip where a pick up time has been confirmed with the passenger.

Service quality and reliability standards should be monitored and reviewed by transit staff on a monthly basis and reported to the Board of Directors and respective city councils on a quarterly or as required basis.

Recommended Service Design Standards

Service design standards are critical planning tools to justify and prioritize the expansion of service to new areas and potential markets, and to guide how the service will be delivered. Transit service design incorporates a mix of interrelated social, political and economic factors. Generally these can include:

- The community's vision, goals, and objectives for transit.
- The marketability of the service(s) to be provided.
- Environmental and energy issues.
- Available technology.
- Budget limitations.
- Land use constraints and right-of-way design characteristics and limitations.

Recommended service design standards are provided for the Humboldt County fixed route services in Figure 5.2.

Figure 5.2: Recommended Humboldt County Transit Service Design Standards (Fixed Route Service)

Standard	Benchmark/Criteria
Maximum Walking Distance	Within Arcata and Eureka 75% of all residences and places of employment within the corporate boundaries should be within ¼ mile of a bus stop. Standard does not apply to RTS service in rural areas.
Bus Stop Spacing	Local service bus stops should be spaced ¼ to ½ mile apart in urbanized service areas. Bus stops outside the urbanized area will be limited to major destinations, points of interest, or residential concentrations. Express or limited stop service bus stops should be spaced ½ to 1 mile apart.
Bus Stop Location	Bus stops should be placed at the far side corner of intersections to allow clearer traffic view lines for pedestrians, wherever possible. Mid-block bus stops should be limited to major activity centers or high-density residential complexes.
Minimum Bus Stop Design	All bus stops should be clearly marked with proper signage including the designated route numbers. Where feasible, bus stops should have well-drained access; concrete or hard surface pads, and adequate lighting for passenger security and safety. Benches should be considered for bus stops with higher than average passenger volumes or senior boardings. A general guideline for consideration is: - 15 or more boardings per day. Shelters should be considered for bus stops with higher passenger volumes and at transfer locations where passengers may have to wait to make their connections. Priority should be given to facilities catering to seniors and persons with disabilities. A general guideline for consideration by is: - 25 or more boardings per day. Annual bench and shelter budgets should be established in conjunction with an installation prioritization program based on stop passenger volumes.

Standard	Benchmark/Criteria
Passenger Loads	Maximum loading on buses traveling short distances at low speeds should not exceed 150% of seated capacity on a continual basis. Maximum loading on buses exceeding 50 miles per hour should not exceed 100% of seated capacity (no standing loads) on a continual basis. Passenger loads should not exceed Gross Vehicle Weight Ratings.
Service Headways	Fixed route service headways should be such that passenger load standards are not exceeded on a continual basis. Capacity issues on high passenger volume routes can be more effectively addressed by increasing bus size.
Recovery Time	For each bus trip, build a minimum of 10% recovery time into the fixed route schedule (10% of route cycle time per trip).
Timed Transfers	Schedules should, where feasible, be built to ensure timed transfers for priority connections at planned transfer locations. Where feasible, connections should be designed to limit passenger transfer wait times to five minutes or less.
Fleet Management	Adopt a five-year or 250,000 mile life cycle for light duty buses, a seven-year or 500,000 mile for medium duty buses, and a 12-year or 1,000,000 mile life cycle for heavy-duty buses. Effectively cycle buses in-service to evenly utilize fleet resources. Operate with a <u>minimum</u> 15% spare bus ratio.

5.3 New Service Warrants

New Service Warrants provide a tool for judging when new services or service extensions are appropriate. A new fixed route or route extension could be introduced when ridership forecasts based on population, school enrollment, or job density are sufficient to achieve minimum passenger revenue recovery ratios by service type. New services should be introduced on a trial basis to achieve the required minimum passenger revenue recovery ratio (refer to Section 5.2).

As new residential areas or business developments build out, there may initially be only sufficient potential ridership to support peak-only service. With eventual build out, there may be sufficient potential ridership to support midday, evening and weekend service.

New service expansion and/or service frequency increases should always be assessed in terms of potential ridership and the achievement of the minimum passenger revenue recovery benchmark. Prior to the recommendation of new services, an analysis of ridership potential and passenger revenue recovery is required.

The formula for calculating the minimum number of passengers needed per revenue hour to meet minimum passenger revenue recovery is:

Passengers per revenue hour = (a X b) divided by d = e

Where: a = cost per revenue hour.

b = passenger revenue recovery benchmark.

d = average fare collected per passenger carried plus average advertising revenue generated per passenger carried.

e = passengers/revenue hour needed to achieve passenger revenue recovery benchmark.

The formula for calculating the potential hourly ridership in a service area is:

Potential passengers per revenue hour = f X g = h

Where: f = population within ¼ mile of the proposed new transit service.

g = per capita hourly transit trip rate.

h = potential passengers per revenue hour.

Daily ridership can also be calculated by multiplying the population in the new area (employees in a business park or students in a school) to be served by an accepted daily per capita trip rate. Hourly productivity can be calculated by dividing the projected daily demand by the number of revenue hours needed to operate the service.

The decision to introduce new service should be contingent on the number of potential passengers per revenue hour being equal to or greater than the number of passengers per hour required to achieve the passenger revenue recovery benchmark. A Go/No Go decision can be

based on the probability of attracting sufficient ridership to meet the approved minimum passenger revenue recovery benchmark within a formal pilot project timeframe.

In some cases, new services may only be warranted during weekday peaks when hourly productivity is sufficient to support passenger revenue recovery requirements. In other cases, service requests to new business parks or new residential subdivisions could be considered through a joint partnership with major employers or developers to offset passenger revenue recovery shortfalls when initial ridership during the early phases of development is too low to support the approved passenger revenue recovery minimum.

5.4 Introduction of New Services on a Trial Basis

New or expanded services should be introduced on a pilot project basis for a trial period not to exceed 24 months. During this period, the new service will be evaluated and adjusted to improve performance. Productivity expectations should be established for the evaluation of new services during the pilot project period.

New service should achieve at least 50 percent of the system-wide passenger revenue recovery within the first 18 months of operation. Any new service not achieving this minimum should be considered for discontinuation at the end of the pilot project period. The revenue hours could be reallocated to other planned service improvements. Following the pilot project period, the service could be discontinued if it continues to fall below the minimum passenger revenue recovery benchmark.

Chapter 6

Regional Intelligent Information System (ITS) Plan

The Humboldt County transit operators have embraced and invested in a series of ITS related infrastructure that improves transit operations and performance while enhancing customer experience in riding public transit. ITS is defined as electronics, communications, or information technology, used singly or in combination, to improve the efficiency or safety of the surface transportation system.⁶ ITS applications cover numerous aspects of transit system operations including simplifying fare payment options, scheduling and dispatching, vehicle locating in virtual real time, collecting real time and more accurate operations data, and notifying and conveying timely transit information to riders.

6.1 Current Humboldt County Transit ITS Projects

The following ITS projects have been implemented or are in the process of being implemented by the county transit systems.

- **Electronic Fareboxes**

The three main operators (HTA, Eureka, and Arcata) have installed electronic fareboxes on their buses. The transit industry has employed automated fare collection processes in the form of electronic fareboxes used to collect cash or instruments at the point of entry to the bus. With advances in technology, greater levels of automation allow enhancements to the fare collection process which enhance patron convenience, data management and security of funds. This advanced fare collection systems also allow for the introduction of unique fare instruments with data and value stored on magnetic stripes or even the use of credit or debit cards. HTA's fareboxes integrate the magnetic stripe technology that allows prepared cards to be swiped upon boarding.

The core function of an automated revenue management system is the collection of proper levels of revenue from passengers using the transit bus without the need to handle cash. Fare collection systems are designed to provide accurate validation of payments and to provide better security and accuracy than conventional fare collection. Automated fareboxes can also provide the transit agency with a wealth of ridership data coupled with the integration of automated vehicle locators on each bus.

- **Automated Vehicle Locators (AVL)/Global Positioning System (GPS)**

AVL/GPS enables the location of a bus to be identified in near real time at the operations headquarters, and reduces the limitations of two-way radio communication. AVL/GPS help to maintain electronic on-time performance records of all fitted vehicles without the need for a transit supervisor to physically be on-board or conduct ride-checks at designated bus stops or during ridealongs. Electronic fareboxes and AVL/GPS systems also go hand-in-hand to provide accurate statistics on passenger boardings, time of use, and passenger type. Bus stop boarding location and use of transfers can all

⁶ Caltrans, Local Assistance Program Guidelines, Chapter 13 Intelligent Transportation Systems Program.

be determined through the combination of these two technologies. The benefits are increased data collection, which ensures higher accuracy in the assessment of passenger use and the automated reporting of data required by the Federal Transit Administration. Another benefit from this technology is the ability to provide riders with real-time information on bus locations and schedules.

HTA and Eureka are close to completion on procuring a GPS Tracking System that will significantly enhance its ability to monitor and communicate with the bus vehicles while out in the field. The GPS system will provide positioning location of the buses resulting in the ability to provide real time information to riders on bus locations and schedules as well as improved safety measures, among other benefits and customer service amenities. Arcata will be pursuing a GPS Tracking System in the near future as well. City Ambulance of Eureka (CAE), the contract dial-a-ride operator, installed global positioning system/automatic vehicle locator devices on-board most of its fleet at the company's expense, including on all DAR vehicles. The GPS/AVL system complements the Trapeze scheduling software to allow dispatchers to more efficiently track the movement of vehicles in service in relative real time.

- **Electronic Transit Information and Trip Planning**

Home websites of the transit operators (such as <http://www.redwoodtransit.org/>) provide updated information on fixed route and DAR systems. The websites for RTS, ETS, and A&MRTS mirror each other in format and Google trip planning capabilities. These electronic formats are developed by the same private firm, Trillium Solutions, and provide further evidence of the level of collaboration and regionalism between the agencies in delivering public transit. Links are available to other transportation resources as well as a trip planner module on the website that helps riders plan their bus trips. The similar format and content of these websites imply continuity and coordination of services.

- **Wireless Internet Access**

Wireless internet access on transit vehicles is becoming a more viable service that increases customer experience and convenience while on-board. Wi-Fi amenities on buses and trains are becoming more common and are frequently cited as inducements for using public transit. With the growth in wireless internet carriers and growing demand to gain access, many transit bus and rail agencies have opted to invest in Wi-Fi on their longer haul commuter routes. Providing wireless internet access onboard buses could help passengers make better use of their time on-board longer distance routes.

Redwood Transit, Willow Creek, and Southern Humboldt buses are now all equipped with free Wi-Fi. Through State Transit Assistance funding, HTA offers this mobile Wi-Fi hotspot service free of charge and enables riders to surf the internet to download e-mail, work, shop, and read the latest news from their seat on the bus, especially on longer haul trips. Other transit systems have invested in mobile internet access including Monterey-Salinas Transit (MST) that equipped its 40-foot express buses for Wi-Fi through a grant from the Monterey Bay Unified Air Pollution Control District.

The offering of Wi-Fi requires an evaluation of different products on the market and consideration of existing and future infrastructure requirements. Key to a successful project is capturing the right technology and developing project partnerships with technology experts. The ability to provide useful Wi-Fi is also limited by the available bandwidth from cellular towers along the bus route and the expected number of users at any one time. Engaging in web activities that use large amounts of bandwidth (downloading movies, video, etc.) will negatively affect the online experience of other passengers. For example, the Amtrak Capital Corridors train service which recently installed Wi-Fi on its trains does not allow video streaming by its passengers until the technology can improve.

- **Dial-A-Ride Scheduling**

The contract operator for dial-a-ride service in the greater Humboldt Bay Area, City Ambulance of Eureka (CAE), installed Trapeze software that enhances the scheduling and tracking of riders and increases efficiencies in the number of passengers that can be accommodated. The software can track eligible DAR riders and their conditions of eligibility. The database of certified riders is approximately 3,200. CAE has invested time to learn the new Trapeze software and customize the program for the DAR services. Trip logs generated by the software are separated by service and can be summed for the month. Prior to implementing Trapeze, CAE was conducting manual dispatching and scheduling.

6.2 Potential Humboldt County Transit ITS Projects

There are additional ITS projects that could further enhance the provision of transit service. Subject to planning and funding constraints, these future ITS projects are described.

- **NextBus**

NextBus technology (<http://www.nextbus.com>) developed by WebTech Wireless of Emeryville, California, uses satellite technology and advanced computer modeling to track vehicles on their routes. Because traffic variations, breakdowns, and day-to-day problems faced by transit providers can interrupt service, NextBus is designed to keep riders on schedule and assist with traveling planning, even if the bus is running behind. NextBus can estimate vehicle arrivals with a high degree of accuracy. This estimate is updated constantly. Riders can access next bus information whenever, wherever, and however they want on a PC, an iPhone, a cellphone or a landline. Real-time travel information can be conveyed via phone, cell phone or SMS (Text) messaging.

NextBus Rugged Transit Displays could be installed at the bus shelters where there are a high volume of boardings. Specifically designed for the transit shelter environment, these 18 inch signs are easily mountable in the shelter or on a pole. Made of eleven-gauge steel with a Lexan screen, the NextBus Rugged Sign has proven both vandal and weather resistant. Bright red LEDs are clearly visible from yards away. These signs bring the information directly to the rider, giving them the power to make a choice about

their public transportation experience. The Unitrans system in Davis, California, which is heavily utilized by students attending the University of California, Davis, has recently implemented this technology.

- **Real-Time Transit Information Dynamic Message Signs**

Humboldt State University's enrollment growth will necessitate the attraction of increasing numbers of students to use city and county transit buses to commute to and from the campus. Research has shown that transit users overwhelmingly appreciate and use real-time transit information (RTTI), with some studies showing 90% or higher satisfaction ratings from users. Real-Time Transit Information systems have prompted tangible increases in market share for public transport, are credited as relieving passengers' anxiety while waiting at transit stops, and as a factor in making them feel safer while waiting at stops.

The necessary Global Positioning System (GPS) and Automatic Vehicle Location (AVL) technology are in the process of being installed on Humboldt Transit Authority buses serving HSU, and the University is seeking funding sources to purchase, program, and install prominent Dynamic Messaging Signs (DMSs) at each of HSU's two on-campus bus stops. These DMSs will use liquid crystal display, yellow or red light-emitting diode (LED), or video display technologies to provide information to provide arrival or departure information for a minimum of four different city and county bus routes, reassuring the customer that s/he is waiting for the right vehicle in the right place. The DMSs may also be used to provide static information about transit services and other messages.

The University's intent is to mount each DMS on a 12'-high sign-bearing structure designed in accordance with campus standards, with required electrical and network connections brought to the site.

6.3 Potential Funding for ITS Projects

Funding for ITS projects is based on limited resources that are carefully planned by the transit operator in partnership with the regional planning agency. The Humboldt County transit operators that have recently invested in AVL/GPS systems have used State Proposition 1B funds through the Public Transportation Modernization, Improvement, and Service Enhancement Account Program (PTMISEA). This funding source is slated to expire in June 2016. State Transit Assistance (STA) revenues have been another source of capital funding for transit upgrades including computer software and Wi-Fi on HTA buses. The STA program may be one of the only longer term local funding sources for capital ITS projects available in Humboldt County that is not generally committed for transit operations. While potential grants from public and private sources are possible, there are none that are considered as being viable for transit ITS implementation.

Chapter 7

Financial Plan

7.1 Five Year Operating Budget

Federal Transit Funding Sources

FTA Section 5310 Transportation for Elderly Persons and Persons with Disabilities

Federal transit funding is currently provided through the FTA Section 5310 Transportation for Elderly Persons and Persons with Disabilities Program. Section 5310 provides formula funding to States for the purpose of meeting the transportation capital needs of the elderly and persons with disabilities. Eligible subrecipients are private non-profit organizations, governmental authorities where no non-profit organizations are available to provide service, and governmental authorities approved to coordinate services. In California, an 11.47 percent local match is required for capital programs. FTA Section 5310 funds can not be used for operating assistance.

Projects are awarded through a competitive application process. The city of Eureka submitted a grant application and was approved for funding of new replacement dial-a-ride vehicles for the transit service.

FTA Section 5311 Nonurbanized Area Formula Program

Federal transit funding for rural areas is currently provided through the FTA Section 5311 Nonurbanized Area Formula Program. Section 5311 is a non-urbanized area formula funding program authorized by 49 United States Code (U.S.C) Section 5311. This federal grant program provides funding for public transit in non-urbanized areas with a population under 50,000 as designated by the Bureau of the Census. FTA apportions funds to governors of each State annually. The California State Department of Transportation (Department) Division of Mass Transportation (DMT) is the delegated grantee. In California, a 11.47 percent local match is required for capital programs and a 44.67 percent match for operating expenditures. Seventy-five percent of FTA 5311 funds statewide are regional apportionments distributed to non-urban areas based on population through Transportation Planning Agencies (TPA). Fifteen percent of FTA 5311 funds are apportioned to the Intercity Bus Program (FTA 5311(f)), while the remaining ten percent is used for State administrative expenses to administer both the 5311 & 5311(f) grant funding programs. According to the Caltrans FY 2011 apportionment, Humboldt County's share of 5311 funds is \$519,855.

HTA also received federal American Recovery and Reinvestment Act (ARRA) stimulus funds that were distributed to rural areas through the Section 5311 program. In 2009, HTA received about \$400,000 that was used for preventative maintenance expenditures. Eureka Transit received about \$150,000 and Arcata Transit received about \$85,000 in ARRA funding as well.

FTA Section 5311 (c) Public Transportation on Indian Reservations

The Public Transportation on Indian Reservations Program (Tribal Transit Program) provides funding for public transportation on Indian reservations through a set aside of Section 5311 funds for direct grants to Indian Tribes before allocation to the States. This program was created under SAFETEA-LU and provides a total of \$45 million in direct funding to federally recognized tribes for the purpose of supporting tribal public transportation in rural areas. Only Federally-recognized tribes are eligible recipients under the Tribal Transit Program. However, tribes which are not federally recognized remain eligible to apply to the State as a subrecipient for funding under the State's apportionment. Federally recognize tribes may use the funding for capital, operating, planning, and administrative expenses for public transit projects that meet the growing needs of rural tribal communities. There is no federal requirement for a local match. On an annual basis FTA conducts a national competitive selection process.

FTA Section 5311 (f) Intercity Bus Service

This program funds intercity bus projects with emphasis on connectivity. In California, 15 percent of FTA 5311 program funds are used to address the intercity travel needs of residents in rural areas. There are three objectives for this program: (1) support connections between rural areas and larger regional or national system; (2) support services to meet rural residents' intercity travel needs; and (3) support intercity bus infrastructure through planning, marketing assistance, and capital investment. Most capital and operating assistance projects are eligible providing they meet one or more program objectives. However, funding is awarded on a competitive statewide basis.

Approximately \$4.4 million in FTA 5311(f) funding is available statewide for FY 2011. Operating projects receive up to 55.33 percent in federal funding while capital projects are funded up to 88.53 percent. Intercity transit services should address a designated route in the Intercity Bus Network and vehicles should have the capacity to carry luggage. Several changes are included in recent grant cycles as a result of the California Rural Intercity Bus Study. HTA applies for FTA 5311(f) to fund the Willow Creek and Southern Humboldt Intercity Transit System.

FTA Section 5316 Job Access and Reverse Commute Program (JARC)

Federal SAFETEA-LU requires that projects selected for funding under the Elderly Individuals and Individuals with Disabilities (FTA Section 5310), Job Access and Reverse Commute (JARC) (Section 5316), and New Freedom programs (Section 5317) be derived from a locally developed, coordinated public transit-human services transportation plan and that the plan be developed through a process that includes representatives of public, private, and non-profit transportation and human services providers and participation by members of the public. These plans identify the transportation needs of individuals with disabilities, older adults, and people with low incomes, provide strategies for meeting these needs, and prioritize transportation services for funding and implementation. The *Humboldt County Coordinated Public Transit – Human Services Transportation Plan* was adopted in October 2008 and submitted to Caltrans.

The JARC grant program assists states and localities in developing new or expanded transportation services that connect welfare recipients and other low-income persons to jobs and other employment related services. Job access projects are targeted at developing new or expanded transportation services such as shuttles, vanpools, new bus routes, connector

services to mass transit, and guaranteed ride home programs for welfare recipients and low-income persons. Reverse commute projects provide transportation services to suburban employment centers from urban, rural, and other suburban locations for all populations. JARC funding is available for transit services in rural and small urban areas. An 80/20 match is required for capital projects and at least a 50/50 match of projects for operating assistance. The maximum per project per year grant award is \$200,000. In FY 2011, there was approximately \$1.8 million in funding available for non-urbanized areas (population 50,000 or less) for California.

FTA Section 5319 - Bicycle Facilities

The FTA Section 5319 program provides funds for improved bicycle access to mass transportation facilities or for bicycle shelters and parking facilities in or around mass transportation facilities. The FTA Section 5319 program provides funding for 90 percent of the project cost, with some exceptions. The installation of equipment for transporting bicycles on mass transportation vehicles is a capital project that is eligible for assistance under the FTA Sections 5309 and 5311 programs.

State Transit Funding Sources

Proposition 1B (PTMISEA)

On November 7, 2006, California voters approved Proposition 1B, the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. This Act authorized the issuance of \$19.925 billion in general obligation bonds to invest in high-priority improvements to the state's surface transportation system and to finance strategies to improve air quality. Among the programs contained in Proposition 1B is the \$3.6 billion Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA). PTMISEA funds are to be used to fund various mass transportation projects, including rehabilitation, safety or modernization improvements, capital enhancements or expansion, rail transit improvement, bus rapid transit improvements, the acquisition of rolling stock, and other similar investments. The funds in the PTMISEA are to be dispersed according to the same formula used to distribute State Transit Assistance funds.

HTA has applied for and received Proposition 1B Public Transportation Modernization, Improvement, and Service Enhancement Account Program Account (PTMISEA) monies for several projects including bus shelter improvement, and a Global Positioning (GPS) tracking system. In prior funding years, HTA was awarded about \$300,000 in bond funding for the GPS tracking system. HTA also awarded the construction contract for the Bus Shelter Improvement Project to increase customer amenities at bus stops including benches, shelters, waste receptacles, and information display units. The accepted bid totaled \$493,266, and HTA has incurred costs related to this project. About \$450,000 in PTMISEA has been allocated from prior bond sales.

PTMISEA funding has been requested for additional capital projects required to implement the TDP. They include vehicle replacement for both medium and large buses. A 30-foot diesel vehicle will replace an older vehicle, and two 40-foot diesel electric hybrid buses will replace

other older vehicles while complying with Air Resources Board regulations for air quality improvement. The capital cost of these vehicles is about \$1.4 million combined. These buses were also recommended in the prior TDP and remain important components to the provision of regional bus service.

The Eureka transit system has received PTMISEA monies for several projects including bus shelter improvement, and a Global Positioning (GPS) tracking system. In prior funding years, Eureka was awarded about \$123,000 in bond funding for the GPS tracking system, \$100,000 for its Bus Shelter Improvement Project to increase customer amenities at bus stops including benches, shelters, waste receptacles, and information display units.

PTMISEA funding for Eureka has been requested for additional capital projects required to implement the TDP. They include additional funding for implementation of the GPS tracking system, and vehicle purchase of two diesel electric hybrid buses to replace aging vehicles while complying with Air Resources Board regulations for air quality improvement. The capital cost of these projects is about \$1.2 million combined.

A&MRTS has received PTMISEA monies for bus replacement. In prior bond sales, Arcata was awarded \$219,000 for replacement of a 35-foot diesel bus. PTMISEA funding has been requested for additional allocation for bus replacement to implement the TDP and replace older vehicles.

Historic PTMISEA allocations to Humboldt County are shown below:

PTMISEA	99313 portion
Humboldt County (HCAOG)	
FY 2007-08	\$1,070,659
FY 2008-09	\$603,133
FY 2009-10	\$605,810
FY 2010-11	\$2,676,648
Annual Average	\$1,239,063

PTMISEA	99314 portion				
	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	Annual Average
Arcata	\$16,832	\$9,482	\$9,524	\$42,080	\$19,480
Eureka	\$40,616	\$22,880	\$22,982	\$101,541	\$47,005
Fortuna	\$969	\$546	\$548	\$2,422	\$1,121
HTA	\$113,574	\$63,980	\$64,264	\$283,936	\$131,439
Total	\$171,991	\$96,888	\$97,318	\$429,979	\$199,044

Source: State Controller Office

Transit System Safety, Security & Disaster Response Account (TSSSDRA)

The Transit System Safety, Security & Disaster Response Account (TSSSDRA) provides \$1 billion over a ten-year period. Safety funds may be used for eligible capital expenditures to improve

transit safety and security, such as on-board cameras, bus stop lighting, or electronic fareboxes. The California Emergency Management Agency (Cal EMA) administers the TSSDRA as the California Transit Security Grant Program – California Transit Assistance Fund (CTSGP-CTAF). Funds are allocated in accordance with the State Transit Assistance fund formula.

Humboldt County transit operators have not yet applied for projects from this source.

Transportation Development Act - Local Transportation Funding (LTF)

TDA funds are the largest single source of operating revenue for most public transportation systems in the state. The spirit of the TDA statute guiding use of Local Transportation Funds (LTF) intends for the revenue to be prioritized for transit. This means that the funds are intended to be spent on transit projects to the extent that such projects are needed to fill “unmet transit needs that are reasonable to meet” before any LTF is spent on local streets and roads. The unmet transit needs process, by law, is conducted by HCAOG. TDA funds can be used for capital or operations expenditures or a combination thereof, and can provide an important source of local match for federal funding.

The LTF revenues are derived from a one-quarter cent sales tax, which is collected by the Board of Equalization, but administered locally through HCAOG which allocates the revenue to local jurisdictions on the basis of population. LTF revenues are claimed by the parties to the HTA joint powers agreement and, when approved by HCAOG, are paid out by each party to fund HTA service. The following ratios are used to determine the level of each jurisdiction’s payment for HTA service. The ratios were historically derived from the population share of each jurisdiction where service is provided.

Local Transportation Fund Contributions to HTA By Local Jurisdiction

Jurisdiction	RTS	DAR/Lift Arcata/McKinleyville	Willow Creek	So. Humboldt Intercity	So. Humboldt Local
Arcata	13.1%	36%			
Eureka	25.6%				
Fortuna	8.1%				
Rio Dell	2.8%				
Trinidad	0.4%				
Humboldt Co	50.0%	64%	100.0%	100.0%	100.0%
Total	100.0%	100%	100.0%	100.0%	100.0%

As a result of the 2011 unmet transit needs process and findings adopted by the HCAOG board, two new services were found to be unmet needs that were reasonable to meet. These services include Saturday service to Willow Creek and Sunday service on the RTS mainline intercity route. HTA is planning to provide the service and will utilize LTF as the primary funding source.

LTF funds are also claimed by the local cities and Humboldt County for streets and roads, and for pedestrian and bicycle uses.

The County of Humboldt sets aside \$200,000 per year in TDA claims for bus replacement countywide. This has helped to procure vehicles for the Southern Humboldt Transit Service, and provides a local match for federal grants.

LTF revenues are claimed by the city of Eureka for operations and capital needs of the transit system. According to the city budget for FY 2011-12, estimates of LTF funding for the past several years have averaged about \$450,000, with some fluctuations occurring due to when matching funds for capital purchases are required. The City, in working with HCAOG, drew down on \$380,000 in LTF reserves in FY 2010-11 to repay city general funds which have been helping to fund operations.

LTF revenues are claimed by the city of Arcata for operations and capital of the transit system. According to the city budget for FY 2011-12, estimates of LTF funding for the past several years have averaged about \$450,000, with some fluctuations occurring due to when matching funds for capital purchases are required.

Transportation Development Act - State Transit Assistance (STA) Funds

The State Transit Assistance program is a second funding component of TDA. Revenues are derived primarily through the State sales tax on diesel fuel and are controlled by the State legislature. Fifty percent of statewide revenue is allocated by the State based on county population within the jurisdiction of the regional transportation planning agencies, and the remaining fifty percent is allocated based on farebox revenue returns by the transit systems.

Historically, the STA has provided a relatively stable source of revenue for public transit service. However, in times of economic downfalls and state fiscal issues, the legislature has leveraged STA funds during state budget negotiations resulting in uncertain funding levels. Part of the budget negotiations included the “gas tax swap” involving use of the revenues. In a sign of positive direction, the legislature has appropriated about \$416 million statewide in STA funds in FY 2011-12, with Humboldt County receiving about \$838,500 for the fiscal year. Of this amount, \$750,500 is derived from the population share, and the remaining \$88,000 is derived from the farebox component.

The STA funds have been allocated by HCAOG to the transit systems for various capital projects including bus shelter improvements, farebox upgrades, and facility maintenance. Specifically, during FY 2011-12 HTA receives \$400,260 in STA revenue for a variety of capital projects. Eureka receives \$67,000 in STA revenue for a variety of projects including bus stop enhancements, vehicle improvements and DAR/L operating assistance. Arcata receives \$122,000 in STA revenue for a variety of capital projects including bus shelter and ADA bus stop improvements, intermodal transfer facility improvements and other facility upgrades. Fortuna receives \$650 in STA revenue during FY 2011-12 for purchase of a radio system. Blue Lake receives \$30,000 in STA for bus shelter improvements, signage, and administration of the Rancheria Transit Agreement. STA also funds portions of transit operations of the Humboldt

Community Access Resource Center (HCAR), the designated Consolidated Transportation Services Agency for the county.

Local Transit Funding Sources

Farebox Revenues

The largest local transit revenue source is fare revenues to help support operations and meet State required performance measures. Fare revenues for combined HTA services are projected to be \$1.0 million in the coming fiscal year including for RTS, Willow Creek, regional dial-a-ride, and Southern Humboldt service. Fare revenues have been consistent over the past several years to exceed the state farebox ratio requirement for HTA to be fully eligible for TDA-LTF revenues. The minimum farebox ratio for HTA to meet each year is 26.40% for the RTS service. ETS receives fare revenue from passenger fares from fixed route and DAR/L, as well as a small amount from the Humboldt State University JackPass program. Fare revenues are projected to be about \$330,000 in the coming fiscal year. Fare revenues have been relatively consistent over the past several years due to relatively steady ridership as well as new fare media such as the swipe card. The fare increase implemented in July 2008 has also helped to support the service which has exceeded the state farebox ratio requirement for to be fully eligible for TDA-LTF revenues. The minimum farebox ratio for Eureka to meet each year is 22.4 percent.

A&MRTS receives fare revenue from passenger fares and tickets, as well as through a fare revenue agreement with Humboldt State University supported by the JackPass program. HSU students ride RTS, ETS, and A&MRTS for free as part of the JackPass program by swiping their current student identification card. The JackPass is paid for through a mandatory fee each semester with every HSU student's registration.

Arcata fare revenues are projected to be about \$186,000 in the coming fiscal year. Fare revenues have been relatively consistent over the past several years due to the JackPass program as well as new fare media such as the swipe card. The fare increase implemented in July 2010 has also helped to support the service which has exceeded the state farebox ratio requirement for to be fully eligible for TDA-LTF revenues. The minimum farebox ratio for Arcata to meet each year is 18.8 percent.

Fortuna Senior Bus Transit receives revenue from passenger fares that are projected to be about \$10,000 in the coming fiscal year. Fare revenues have been decreasing in recent years due to ridership decline, although the city indicates that recent ridership has been increasing in part through additional marketing efforts. This trend is occurring as the city employs less resources (i.e. driver staff) to provide service. The minimum farebox ratio for Fortuna to meet each year is 10.0% to be fully eligible for TDA-LTF revenues.

LTF Reserve Account

Given the uncertainty of transit funding in the future, a reserve policy for LTF would help to cushion the service from any potential revenue shocks. According to financial statements, there has been remaining LTF that is carried over each year and dependent on actual operating expenses. HTA has generally retained the budgeted LTF revenues that have been passed

through by the JPA members for service, but not expended by year end. This, in effect, has resulted in a form of a reserve account.

Eureka transit had a sizeable reserve fund of over \$350,000 which has since been applied to backfill general fund monies that were used in past years for transit operations. Arcata's transit reserve in its budget has averaged about \$100,000 over the past few years. Also, TDA set-aside that has been used to help purchase capital assets was approximately \$100,000 in FY 2010. Fortuna's transit reserve in its budget has averaged about \$25,000 over the past few years.

General Fund

To fill in budget shortfalls for Eureka Transit, the city has used general fund revenues. While a goal is to reduce the reliance on general funds to pay for transit, existing and forecasted economic conditions affecting transit revenues will continue to make it difficult for the city of wean transit service from general funds. As a municipal system, the transit service has this revenue as a safety net to maintain operations, but at the trade off of other city services funded by general funds.

Advertising

HTA has a five-year contract with a local company to sell and manage the advertising signage seen on the sides and rear of the Redwood Transit bus fleet. The contractor's goal is to have every advertising spot filled at the lowest cost to the advertiser. HTA has budgeted revenues received from advertising in its annual income.

Rents and Leases

HTA receives revenue from rents and leases to tenants on HTA owned property. One example is office property leased by HTA to another public agency on West Street in the city of Eureka.

7.2 Five Year Capital Plan

The proposed capital program for each transit system is made for the next five years. The Capital Plan has been prepared to provide for adequate development, maintenance and replacement of capital assets. Retaining this project plan in the 5-year program is essential in order to garner funding from state and federal sources. The Capital Plan includes the procurement of bus vehicles, improvements to bus stop shelters and amenities, technology infrastructure, maintenance facility improvements, communications equipment, and replacement of staff vehicles.

The capital plan also includes study of a potential future intermodal transit center in the city of Eureka that will improve the connectivity and transfers among current and potential transportation services. As future funding becomes available based upon market conditions and prioritization of limited resources, inclusion of such project in the transit development plan is a critical step in the planning process to obtain funding and improve connectivity.

Vehicles

Humboldt Transit Authority

Many of the vehicles in HTA's fixed route fleet are between 7 and 12 years old, several dating back to year 2000. These diesel vehicles have undergone significant maintenance to ensure their reliability and back up to the newer vehicles. The replacement of vehicles is typically dependent upon the minimum "useful life" of the vehicle, which is defined by the Federal Transit Administration in its April 2007 report "Useful Life of Transit Buses and Vans". Heavy-duty large buses of between 35 and 48 feet have a minimum life of 12-years or 500,000 miles, whichever comes first. For bus retirement, RTS uses 7 years for medium duty buses and 10 years for heavy duty vehicles.

Several of the large bus vehicles in the fleet will meet or exceed these useful life parameters over the next five years. These vehicles will need to be retired or utilized as back up spares with the newer buses being used either for expansion purposes or replacement of the older vehicles. HTA indicated that state funding sources are being used to replace the older vehicles. One staff vehicle, a utility truck, and a shop truck are also in need of replacement, and are included in the capital plan.

To comply with State Air Resources Board rules and regulations, HTA is transitioning the diesel fleet and procuring heavy duty large diesel/electric hybrid buses (40-foot). The new hybrid buses will complement the existing diesel-electric hybrid vehicles in the fleet. New buses will reduce maintenance expense as vehicle warranties are utilized by the agency, as well as reduced engine and other vehicle issues. The hybrid vehicles are comparatively more expensive than the standard heavy duty bus for up front cost, but result in longer term savings from such operational expense as fuel and particulate matter emissions containment. Hybrid buses are expected to have lower maintenance costs due to reduced stress and maintenance on mechanical components such as brake linings, which may extend brake life by 50 to 100 percent. In addition, the electric drive has fewer parts, therefore requiring less maintenance than a traditional transmission. Also, anecdotal evidence from bus drivers and passengers captured by studies suggests that hybrid buses offer a quieter ride when compared to conventional diesel buses.

Minimum Service-Life Categories for Buses and Vans

Category	Minimum Life (Whichever comes first)	
	Years	Miles
Heavy-Duty Large Bus	12	500,000
Heavy-Duty Small Bus	10	350,000
Medium-Duty and Purpose-Built Bus	7	200,000
Light-Duty Mid-Sized Bus	5	150,000
Light-Duty Small Bus, Cutaways, and Modified Van	4	100,000

Source: Useful Life of Transit Buses and Vans, FTA. April 2007

Eureka Transit Service

Most of the vehicles in the Eureka fixed route fleet are fairly new. Five of the seven diesel vehicles were purchased in 2007 and 2009. Two of the older vehicles were purchased in 2002 and 2003 and will need to be replaced during the five year time horizon. Eureka is planned to receive two diesel electric buses through the PTMISEA grant program.

Arcata & Mad River Transit System

Most of the vehicles in the Arcata fixed route fleet are fairly new. Four of the six diesel vehicles were purchased in 2009 and 2010. Two of the older vehicles were purchased in 2002 and will need to be replaced during the five year time horizon. PTMISEA funds are slated to fund their replacement. Arcata's recent bus purchases have been of the smaller models to better match its service parameters. However, a recommendation in this TDP is made to purchase larger 40-foot buses in the future to reduce the need for tripper overlays during peak periods. After the upcoming replacement with 35 foot vehicles, the newer bus fleet will not need to be replaced for some time. As such, the larger bus purchase will not likely occur until after the TDP period.

Fortuna Senior Bus Transit

The vehicles in the Fortuna transit fleet are aged and should be replaced during the TDP period. The three current vehicles were purchased in 2001, 2003 and 2006, with the 2001 bus serving as a spare vehicle. Fortuna is receiving a Federal 5310 Grant for \$57,000 for a Class A Ford Goshen Coach Pacer II vehicle with 8 seats plus 2 wheelchair spots. The city is in the process of submitting insurance paperwork prior to receiving bus. The new vehicle will replace the 2001 bus in the fleet, and in turn convert the next oldest vehicle into a spare.

Blue Lake Rancheria Transit System

Under a future grant cycle, the Rancheria plans to apply for a Tribal transit grant to replace the existing Chevrolet Kodiak vehicle as the active service vehicle. The Kodiak would then be used as the back up.

K/T NeT

The existing vehicle owned by K/T NeT is relatively new and will not need to be replaced during the TDP period. The oldest vehicle rented by K/T NeT from the Yurok Tribe is a 2008 Ford E-450 Starcraft. This vehicle will likely need to be replaced.

Bus Stop Amenities & Improvements

The Capital Plan includes bus stop amenities, including bus stop signs/poles, schedule holders, shelters and benches. Replacement and upgrade of damaged or worn shelters is also included. Shelters and benches should be placed at key passenger activity points along fixed routes that meet service design standards. All shelters and benches would be placed in compliance with ADA specifications. In addition, bike shelters that encourage the integration of different modes of travel could promote ridership on the transit system. The bike shelters would compliment

the bike racks available on the buses allowing passengers to more readily use bikes to and from bus stops and origins and destinations.

Electronic Fareboxes & Automated Vehicle Locators

As described in the section for ITS projects, electronic fareboxes have been installed on RTS, ETS and A&MRTS buses. Coupled with the integration of automated vehicle locators on each bus, automated fareboxes can also provide the transit agency with accurate statistics on passenger boardings, time of use, and passenger type. Bus stop boarding location and use of transfers can all be determined through the combination of these two technologies. The benefits are increased data collection, which ensures higher accuracy in the assessment of passenger use and the automated reporting of data required by the Federal Transit Administration. Another benefit from this technology is the ability to provide riders with real-time information on bus locations and schedules.

HTA and Eureka are close to completion on procuring a GPS Tracking System that will significantly enhance the ability to monitor and communicate with the bus vehicles while out in the field. The GPS system will provide positioning location of the buses resulting in the ability to provide real time information to riders on bus locations and schedules as well as improved safety measures, among other benefits and customer service amenities. Arcata is anticipated to pursue similar technology as well.

Arcata Intermodal Transfer Facility Improvements

ITF building improvements help to ensure administrative and operational capital are in efficient working condition for bus operations which allow for continued operation and passengers transfers to take place.

HSU Real-Time Transit Information Dynamic Message Signs

As described in the section for ITS projects, Humboldt State University's enrollment growth will necessitate the attraction of increasing numbers of students to use city and county transit buses to commute to and from the campus. The implementation of Real-Time Transit Information systems through Dynamic Messaging Signs (DMSs) at each of HSU's two on-campus bus stops will be part of the attraction to transit. This project will communicate travel data using the necessary GPS/AVL technology being installed on Humboldt Transit Authority buses serving HSU, and potentially A&MRTS buses in the future. Each structure, connections, programming, and DMS is expected to cost approximately \$55,000, for a total project price of \$110,000 (in 2011 dollars).

HSU Transit Mall Project

Since 2004, when the Campus Master Plan formally identified the need, Humboldt State University has been exploring potential sites, designs, and funding sources to establish a modern transit mall off L.K. Wood Blvd. The HSU Transit Mall should simultaneously accommodate a minimum of four (4) full-size 40' transit buses operated by city and county transit agencies. Buses should be able to pull forward to established sidewalk stop locations

and shelters, load/unload passengers, then continue forward to return to their routes, with little or no backing-up, enhancing pedestrian safety. There should be large-capacity bus shelters and ADA-compliant pathways linking the HSU Transit Mall to HSU campus walkways and buildings. This project is needed to support HSU's targeted enrollment growth from its current 7,500 full-time equivalent students (FTEs) to between 10,000 and 12,000 FTEs in the future.

The Transit Mall project is currently envisioned to be built on the footprint of the east end of Plaza Ave between the Student Health Center and the Library, commonly known as "Library Circle". In 2010, HSU and the City of Arcata negotiated an agreement for the City to transfer ownership of the streets in this area to HSU, which will support HSU in moving ahead with this project. The rough dimensions of the HSU Transit Mall project are about 300' by 125', with a total estimated project cost of \$2,000,000 (in 2011 dollars).

Intermodal Transit Center in Eureka

A transit center in Eureka has been studied in the past by a consultant through the "*Eureka Intermodal Transportation Center Feasibility Study*" prepared in 1994 for the Humboldt Transit Authority. In addition, in the 1997 City of Eureka General Plan, Policy 3.B.3 under Public Transit states "The City shall work with the Humboldt Transit Authority to develop an intermodal transportation center...The center would provide a central focal point for all transportation modes serving Humboldt County, including buses..." A primary transfer point in Eureka for the bus system is currently at the Bay Shore Mall along Highway 101. The prospects and parameters of a new intermodal transit center in the city would need to be studied and developed. Planning and design for such a center could be undertaken during the five year horizon of this plan.

Facilities Maintenance

Upgrades and replacement of facility assets help to ensure administrative, operational and maintenance capital are in efficient working condition for bus operations and maintenance which reduce the potential for service delays. Projects identified for facility upgrade include technology upgrades, shop equipment, replacement of one 20,000 gallon above ground diesel fuel tank, and installation of one 2,500 gallon above ground gasoline fuel tank.

Five Year Financial Plan

Assumptions

No new significant funding source for transit is assumed for the financial plan, although changes are based on local growth assumptions and current legislation such as the federal transportation reauthorization. The financial plan is based on reasonably conservative assumptions regarding funding availability. However it should be recognized that any forecasts of future subsidy funding are quite uncertain under present economic challenges.

- LTF growth is based on retail sales growth in the county. An economic forecast provided by Caltrans shows expected retail sales growth of 8.4% in Humboldt County for the next

five years. On an average basis over the five year period, the annual growth rate is 1.7%. It is assumed that growth in LTF revenues is 2.0% per year. With the new Willow Creek Saturday and RTS Sunday services, it is assumed the JPA members will claim additional LTF to fund the new services, net of expected fare revenues. These additional LTF revenues are shown in the estimates for HTA.

- For Eureka Transit, no significant LTF reserve fund contributions are assumed for transit in the near term after the backfill of LTF to the general fund. City General fund revenue is assumed to cover future operating deficits and bridge remaining funding gaps between operations costs and other revenues. Should LTF and/or other revenues increase above the assumed levels, the level of general fund contributions should decrease.
- Fare revenues are projected to increase at a rate of 5.0% per year during the TDP period based on recent budgeted figures as well from relatively solid historic ridership and fare revenue growth. In FY 2012-13, fares from the new Willow Creek Saturday and RTS Sunday services are shown for the HTA forecast. Although fares have grown higher than this assumed rate in past years, there is no fare increase recommended in this plan due to HTA being able to meet the farebox ratios. The same assumption of no fare increase applies to ETS and A&MRTS. Rather, the growth in fare revenue assumes increases from marginal growth in ridership, new service implementation, and on-going productivity improvements implemented by each agency.
- State Transit Assistance funds are assumed to remain constant during the five year period with no growth due to continued uncertainty with the state budget and condition of the economy. Despite an upswing in the recent STA allocations, it is assumed that this amount is capped.
- PTMISEA funds are assumed to continue to be allocated for the duration of the program's ten year life which extends through June 30, 2016. Although the recent delay of bond sales has impacted the availability of PTMISEA funding, annual allocations based on State Controller estimates are assumed through the TDP time period. A growth rate of 3% is assumed. For Eureka Transit, the significant levels of PTMISEA in the first year of the forecast are from requested allocations for diesel electric buses.
- Federal transit funds are assumed to remain constant as current SAFETEA-LU reauthorization activities by Congress suggest there could be some revenue reductions from past years. The effect of inflation on flat revenue growth inherently results in small reductions of funding.
- Operating costs are assumed to grow by 3% based on recent budgeted figures and excluding capital expenditures. The newer bus vehicles will help to control fuel costs as older diesel vehicles are replaced. For Fortuna, operations cost for the first year of the TDP incorporate the cost savings measures employed by the city including reducing its full time driver staff.

- The new Willow Creek Saturday service and RTS mainline Sunday service are planned to commence operations during FY 2012-13. Based on unmet transit needs findings report data, the additional Willow Creek service is anticipated to cost \$34,354 per year (\$30,855 after deducting fare revenues), and additional RTS service is projected to cost \$225,972 (\$188,116 after deducting fare revenues). These costs are added to the overall HTA operating cost figures which are assumed to grow by 3% based on recent budgeted figures and excluding capital expenditures. The planned introduction of additional hybrid bus vehicles will help to control fuel costs as older diesel vehicles are replaced or used as spares.
- Service hours outside of the new Willow Creek and RTS weekend services are assumed to increase slightly at a rate lower than the growth in overall operating costs. Revenue hours for service modifications implemented during the TDP timeframe are assumed offset in large part by the shift of hours from more unproductive service based on productivity measures recommended in the TDP. This assumes on-going performance monitoring that is conducted by the transit systems of their routes on a trip by trip basis.
- The capital projects include those described earlier in this chapter, some of which have received funding from STIP, PTMISEA and STA revenues. They include priority projects such as transit vehicles, bus shelters and bus stop improvements, GPS/AVL, communications technology, ITF building improvements, and facility upgrades and maintenance. Capital projects, in particular those described in the later years of the TDP period, are contingent on funding availability and capital grant funding approvals from the grantor agencies (e.g. Caltrans).

Table 7-1
Five Year Financial Plan
Humboldt Transit Authority

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
<u>Operations</u>					
<u>Revenues</u>					
Fares	\$1,043,000	\$1,136,500	\$1,193,300	\$1,253,000	\$1,315,700
Advertising	\$14,400	\$14,800	\$15,200	\$15,700	\$16,200
Local Transportation Fund	\$1,716,400	\$1,969,700	\$2,057,100	\$2,130,600	\$2,187,200
Federal -FTA	\$528,700	\$528,700	\$528,700	\$528,700	\$528,700
Rents & Leases	\$97,000	\$98,900	\$100,900	\$102,900	\$105,000
Interest Income	\$26,000	\$26,500	\$26,500	\$26,500	\$26,500
Miscellaneous	\$10,000	\$10,200	\$10,400	\$10,600	\$10,800
Carryover	\$101,000	\$66,600	\$17,400	\$0	\$0
Total Operating Revenues	\$3,536,500	\$3,851,900	\$3,949,500	\$4,068,000	\$4,190,100
<u>Expenses</u>					
RTS	\$2,548,300	\$2,850,700	\$2,936,200	\$3,024,300	\$3,115,000
Willow Creek	\$231,200	\$272,700	\$280,900	\$289,300	\$298,000
Southern Humboldt Intercity	\$411,400	\$423,700	\$436,400	\$449,500	\$463,000
Southern Humboldt Local	\$173,100	\$178,300	\$183,600	\$189,100	\$194,800
Arcata/Corridor Dial-A-Ride	\$105,900	\$109,100	\$112,400	\$115,800	\$119,300
Total Operating Expenses	\$3,469,900	\$3,834,500	\$3,949,500	\$4,068,000	\$4,190,100
<u>Capital</u>					
<u>Revenues</u>					
State - Prop 1B PTMISEA	\$400,000	\$412,000	\$424,400	\$437,100	\$450,200
State - State Transit Assistance	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Total Capital Revenues	\$700,000	\$712,000	\$724,400	\$737,100	\$750,200
<u>Expenses</u>					
Diesel/electric hybrid	\$576,100	\$593,400	\$611,200	\$629,500	\$648,400

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
bus (40-foot)					
Ongoing facility maintenance	\$20,000	\$20,600	\$21,200	\$21,800	\$22,500
Intermodal transit center in Eureka (planning/design)					\$75,000
Ongoing shelter upgrades and improvements	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
One replacement staff vehicle			\$25,000		
Replace diesel tanks with one 20,000 gallon above ground diesel fuel tank				\$50,000	
Purchase and installation of one 2,500 gallon above ground gasoline fuel tank		\$11,900			
Replace 2005 shop truck at ten years					\$30,000
Replace 1996 utility truck (road side repair truck)		\$30,000			
Total Capital Expenses	\$621,100	\$680,900	\$682,400	\$726,300	\$800,900

**Table 7-2
Five Year Financial Plan
Eureka Transit System**

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
<u>Operations</u>					
<u>Revenues</u>					
Passenger Fares	\$330,000	\$346,500	\$363,800	\$382,000	\$401,100
Advertising	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Local Transportation Fund	\$740,500	\$755,300	\$770,400	\$785,800	\$801,500
Federal -FTA	\$185,000	\$185,000	\$185,000	\$185,000	\$185,000
Miscellaneous -	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
Interest Income					
General Fund	\$74,000	\$143,600	\$154,900	\$165,700	\$176,600
Carryover	\$60,000	\$500	\$0	\$0	\$0
Total Operating Revenues	\$1,395,500	\$1,436,900	\$1,480,100	\$1,524,500	\$1,570,200
<u>Expenses</u>					
Fixed Route	\$895,000	\$921,900	\$949,600	\$978,100	\$1,007,400
Dial-A-Ride	\$500,000	\$515,000	\$530,500	\$546,400	\$562,800
Total Operating Expenses	\$1,395,000	\$1,436,900	\$1,480,100	\$1,524,500	\$1,570,200
<u>Capital</u>					
<u>Revenues</u>					
State - Prop 1B PTMISEA	\$800,000	\$200,000	\$206,000	\$212,200	\$218,600
State - State Transit Assistance	\$67,000	\$50,000	\$50,000	\$50,000	\$50,000
Federal - FTA 5310	\$165,000	\$0	\$0	\$0	\$0
Total Capital Revenues	\$1,032,000	\$250,000	\$256,000	\$262,200	\$268,600
<u>Expenses</u>					
Diesel/electric hybrid bus (2)	\$800,000				
DAR/L Vehicles	\$165,000				
DAR Software Maintenance	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Intermodal transit center in Eureka (planning/design)					\$100,000
Ongoing bus shelter upgrades and improvements	\$100,000	\$25,000	\$25,000	\$25,000	\$25,000
GPS/AVL	\$123,000	\$75,000			
Total Capital Expenses	\$1,198,000	\$110,000	\$35,000	\$35,000	\$135,000

Table 7-3
Five Year Financial Plan
Arcata & Mad River Transit System

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
<u>Operations</u>					
<u>Revenues</u>					
Passenger Fares and Tickets	\$56,000	\$58,800	\$61,700	\$64,800	\$68,000
Transit User Revenues (HSU)	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000
Advertising	\$600	\$600	\$600	\$600	\$600
Local Transportation Fund	\$307,400	\$313,500	\$319,800	\$326,200	\$332,700
Federal -FTA	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Other Transit Revenue	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Carryover	\$86,610	\$86,410	\$78,210	\$61,810	\$36,910
Total Operating Revenues	\$650,610	\$659,310	\$660,310	\$653,410	\$638,210
<u>Expenses</u>					
Fixed Route	\$564,200	\$581,100	\$598,500	\$616,500	\$635,000
Total Operating Expenses	\$564,200	\$581,100	\$598,500	\$616,500	\$635,000
<u>Capital</u>					
<u>Revenues</u>					
State - Prop 1B PTMISEA	\$400,000	\$100,000	\$103,000	\$106,100	\$109,300
State - State Transit Assistance	\$100,000	\$50,000	\$50,000	\$50,000	\$50,000
Total Capital Revenues	\$500,000	\$150,000	\$153,000	\$156,100	\$159,300
<u>Expenses</u>					
Two Diesel buses (35-foot)	\$440,000				
Intermodal transfer facility	\$15,000	\$15,500	\$16,000	\$16,500	\$17,000
Ongoing bus shelter upgrades and	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
improvements					
One replacement staff vehicle			\$25,000		
GPS/AVL		\$75,000	\$75,000		
DAR Software Maintenance	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Message Signs				\$55,000	\$55,000
HSU Transit Mall					\$70,000
Total Capital Expenses	\$490,000	\$125,500	\$151,000	\$106,500	\$177,000

Table 7-4
Five Year Financial Plan
Fortuna Transit System

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
<u>Operations</u>					
<u>Revenues</u>					
Passenger Fares	\$10,200	\$10,700	\$11,200	\$11,800	\$12,400
Local Transportation Fund	\$91,500	\$93,300	\$95,200	\$97,100	\$100,000
Carryover	\$0	\$200	\$200	\$0	-\$400
Total Operating Revenues	\$101,700	\$104,200	\$106,600	\$108,900	\$112,000
<u>Expenses</u>					
Transit Operations	\$101,500	\$104,000	\$106,600	\$109,300	\$112,000
Total Operating Expenses	\$101,500	\$104,000	\$106,600	\$109,300	\$112,000
<u>Capital</u>					
<u>Revenues</u>					
Local Transportation Fund	\$7,600	\$2,000	\$2,000	\$8,000	\$2,000
State - State Transit Assistance	\$600	\$600	\$600	\$600	\$600
Federal - FTA 5310	\$57,000	\$0	\$0	\$62,300	\$0
Total Capital Revenues	\$65,200	\$2,600	\$2,600	\$70,900	\$2,600

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
<u>Expenses</u>					
Passenger van (replacement)	\$62,600	\$0	\$0	\$68,300	\$0
Radio system	\$600	\$0	\$0	\$0	\$0
Ongoing bus stop upgrades and improvements	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Total Capital Expenses	\$65,200	\$2,000	\$2,000	\$70,300	\$2,000

Table 7-5
Five Year Financial Plan
Blue Lake Rancheria Transit System

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
<u>Operations</u>					
<u>Revenues</u>					
Passenger Fares	\$7,000	\$7,400	\$7,800	\$8,200	\$8,600
Local Transportation Fund	\$26,000	\$26,600	\$27,200	\$27,900	\$28,600
Total Operating Revenues	\$33,000	\$34,000	\$35,000	\$36,100	\$37,200
<u>Expenses</u>					
Transit Operations	\$33,000	\$34,000	\$35,000	\$36,100	\$37,200
Total Operating Expenses	\$33,000	\$34,000	\$35,000	\$36,100	\$37,200
<u>Capital</u>					
<u>Revenues</u>					
State - State Transit Assistance	\$3,000	\$3,100	\$3,200	\$3,300	\$3,400
Federal Tribal Grant			\$70,000		
Total Capital Revenues	\$3,000	\$3,100	\$73,200	\$3,300	\$3,400
<u>Expenses</u>					
Ongoing bus stop upgrades and	\$3,000	\$3,100	\$3,200	\$3,300	\$3,400

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
improvements					
Replacement bus			\$70,000		
Total Capital Expenses	\$3,000	\$3,100	\$73,200	\$3,300	\$3,400

**Five Year Financial Plan
K/T NeT Transit System**

	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
<u>Operations</u>					
<u>Revenues</u>					
Passenger Fares	\$3,500	\$3,700	\$3,900	\$4,100	\$4,300
Local Transportation Fund	\$60,000	\$61,200	\$62,400	\$63,600	\$64,900
Tribal Contributions	\$28,000	\$28,900	\$29,900	\$30,900	\$31,900
Other (fundraising)	\$500	\$500	\$500	\$500	\$500
Total Operating Revenues	\$92,000	\$94,300	\$96,700	\$99,100	\$101,600
<u>Expenses</u>					
Transit Operations	\$92,000	\$94,300	\$96,700	\$99,100	\$101,600
Total Operating Expenses	\$92,000	\$94,300	\$96,700	\$99,100	\$101,600
<u>Capital</u>					
<u>Revenues</u>					
State - State Transit Assistance (Humboldt County)	\$2,000	\$2,100	\$2,200	\$2,300	\$2,400
Federal Tribal Grant					\$77,200
Total Capital Revenues	\$2,000	\$2,100	\$2,200	\$2,300	\$79,600
<u>Expenses</u>					
Vehicle and facility improvements	\$2,000	\$2,100	\$2,200	\$2,300	\$2,400
Replacement bus					\$77,200
Total Capital Expenses	\$2,000	\$2,100	\$2,200	\$2,300	\$79,600

Chapter 8

City of Eureka and County of Humboldt Contract Review

The City of Eureka and the County of Humboldt have had a long-standing agreement in the sharing of revenue contribution to the net operating costs of ETS. The city contributes 73 percent of net ETS costs from its LTF apportionment while the county contributes the remaining 27 percent from its LTF. The contributions are intended to cover the areas served by the system that fall outside of the Eureka city limits and in the County's jurisdiction. As part of the TDP, an analysis is provided whether the percentage contributions are still valid relative to current ETS service.

The county areas served by ETS and are identified as census data places (CDPs) by the United States Census include Bayview, Cutten, Myrtletown, and Pine Hills. ETS fixed route and dial-a-ride provide service to these unincorporated communities adjacent to the city limits. The Gold Route serves Bayview and Pine Hills, the Red Route serves Cutten, and the Green Route serves Myrtletown. Each route provides loop service that connects these areas with stops within the city limits and for transfer opportunities.

City staff indicated that the contribution proportions have been based on historic population and vehicle route miles. As a means to address whether the proportions continue to reflect current service coverage between the city and unincorporated areas, we updated both the population figures as well as the route coverage between the two areas.

Updated population data for Eureka and the adjacent county areas was obtained from the 2010 U.S. Census. CDP information for each county area was gathered. Table 8-1 shows the 2010 population estimates, compared with the 2000 Census, and the proportion of the population in each area.

Table 8-1
2010 U.S. Census Figures

Community	2010 Population	Percent of Total		2000 Population	Percent of Total
City of Eureka	27,191	67%		26,128	67%
Unincorporated Area					
<i>Bayview</i>	2,510	6%		2,359	6%
<i>Cutten</i>	3,108	8%		2,933	8%
<i>Myrtletown</i>	4,675	12%		4,459	11%
<i>Pine Hills</i>	<u>3,131</u>	<u>8%</u>		<u>3,108</u>	<u>8%</u>
	13,424	33%		12,859	33%
Total	40,615	100%		38,987	100%

Source: 2010 U.S. Census

While the population proportions did not change between the two sets of census data, the population figures show growth among all community areas, increasing from almost 39,000 residents in year 2000 to almost 41,000 in year 2010. The city of Eureka grew to over 27,000 population while the unincorporated CDPs grew to about 13,500 residents. The estimated proportions are 67 percent of the population served by ETS reside within Eureka, while 33 percent reside outside of Eureka.

The other factor, route coverage, was determined through an estimation of the proportion of ETS weekday routes that serve both within and outside the city limits. Each fixed route length was measured for the segments serving in and out of the city limits. For the Gold Route that serves Bayview and Pine Hills, the service area outside of the city limits includes along Herrick Road, Meyers Ave, and Little Fairfield Street. For the Red Route that serves Cutten, the service area outside of the city limits includes parts of Campton Road, Holly Street, and Walnut Drive. The Green Route serves Myrtletown along Harris Street, Myrtle Ave, and Park Street. The ETS Purple Route does not go past the city limits of Eureka. Table 8-2 shows the proportions of each route serving the city and county.

Table 8-2
ETS Weekday Route Segments
Within and Outside City Limits

Route	Percentage of Route Segment		Total
	Within City Limits	In Unincorporated Area (Bayview, Cutten, Myrtletown, and Pine Hills)	
Gold Route	82%	18%	100%
Red Route	85%	15%	100%
Green Route	78%	22%	100%
Purple Route	100%	0%	100%
Total	86%	14%	100%

Source: PMC

Of all the routes, the Green Route has the greatest proportion of its route serving outside of the city limits, followed by the Gold Route, then the Red Route. In total, about 86 percent of the ETS weekday route segments are within the city limits, while 14 percent are outside. The Purple Route which does not go beyond the city limits significantly affects the route segment totals.

As both the population and route segments provide varying percentages of service coverage, a high and low end is established of potential modifications to the contribution percentages. For example, the population and vehicle routes calculated within the city limits provide the low (67 percent) and high (86 percent) range respectively for Eureka's contribution. In contrast, the vehicle routes and population calculated outside the city limits provide the low (14 percent) and high (33 percent) range respectively for the County's contribution. In between these ranges for Eureka and the County are weighted measures that account for both factors.

For example, if both population and ETS route coverage were given equal weighting, the modified contribution level would be 77 percent Eureka, and 23 percent County. If route coverage was given more weighting (example 70 percent), the modified contribution level

would be higher for Eureka at 80 percent and 20 percent for the County. Currently, the existing LTF revenue contributions for Eureka at 73 percent, and for the County at 27 percent, are the result of a weighting of about 70 percent toward population and 30 percent toward route mileage. Table 8-3 provides an illustration of these options.

Table 8-3
Samples of Weighted Allocations
Between Population and Route Coverage

	Percentage in Eureka	Percentage in Unincorporated	Total
Population (2010 Census)	67%	33%	100%
Route Length	86%	14%	100%
Weighted Formula:			
Current Scenario - 70% pop'n /30% route weighting (estimate)	City Share=	$(0.7*0.67)+(0.3*0.86)=$	72.8%
	County Share=	$(0.7*0.33)+(0.3*0.14)=$	27.2%
	Total		100.0%
Scenario #1 - 50% route/50% pop'n weighting	City Share=	$(0.5*0.67)+(.5*0.86)=$	76.7%
	County Share=	$(0.5*0.33)+(.5*0.14)=$	23.3%
	Total		100.0%
Scenario #2 - 70% route/30% pop'n weighting	City Share=	$(0.3*0.67)+(0.7*0.86)=$	80.5%
	County Share=	$(0.3*0.33)+(0.7*0.14)=$	19.5%
	Total		100.0%

As a measure of parity, revenue contribution for operating costs should be weighted more toward the level of transit service provided; that is the coverage provided by the bus routes within and outside the city limits. As the greatest proportion of ETS service is provided within the city limits, the contribution percentages by the city of Eureka and the County might be warranted for review and possible modification.

As shown above, a 50/50 weighting of population and routes would increase Eureka's existing contribution percentage from 73 to 77 percent, while a 70 percent route weighting would increase the city's contribution up to 80 percent. Under existing population and route configurations, a modification that would increase Eureka's share of LTF contribution and in turn decrease the County's share should be discussed and using these percentages as preliminary ranges. However, it is noted that other potential performance criteria that were not factored into the analysis but could be helpful include ridership figures within and outside city limits, origin destination data, weekend route coverage, and dial-a-ride pick ups. These additional criteria would create a more complex determination while requiring further data research and analysis.

Chapter 9

Marketing Strategies

The transit systems employ a number of methods to publicize their transit services and receive feedback from its ridership and the community at-large. Marketing involves not only publicizing core services to increase ridership through various media but effectively communicating the service brand and being a visible presence in the community.

Print and Electronic Collateral

The three large transit operators (HTA, ETS and A&MRTS) each publish fold out pocket timetables and route maps. As routes are adjusted, updated editions are printed generally once or twice a year. The pocket-sized brochures contain information about fares, the Regional Transit Pass, and days and hours of operation. There is also a link to the transit system website on the brochure. HTA has also developed a tri-fold guide targeted to bicyclists who use the bus.

In January 2010, HTA published the *Humboldt County Transportation Services Guide* for public transit and human service transportation. The large newspaper style guide provides maps and bus schedules for all public transportation operations in the county including for both fixed route and demand response systems. Out-of-county transit services are also listed, as are the transit operator websites for online trip planning. A countywide map is shown in the front of the guide that then references specific geographic areas and more detailed maps and transit providers in those areas. The guide is produced by HTA with support from Redwood Community Action Agency Division of Natural Resources Services, and funded by the Caltrans Environmental Justice Program. It is also available on-line. For the rollout of the Southern Humboldt Transit Service, HTA printed a full page ad in the local newspaper.

As discussed in the ITS Chapter, the home websites (such as <http://www.redwoodtransit.org/>) of the larger transit systems provide updated information on both fixed route and DAR systems. Links are available to other transportation resources and a trip planner module on the website to help riders plan their bus trips. The format and content of the operator websites are similar among each other, implying continuity and coordination of services.

Marketing Strategies

Existing marketing efforts and partnerships have allowed the transit systems to command high ridership levels and visibility in the community. Transfer hubs at the Arcata Transit Center, Bayshore Mall, downtown Eureka, and HSU Library Circle have allowed for connections with each other and long-distance services. This coordination is essential in leveraging further marketing efforts. A series of targeted marketing strategies has been compiled based on the feedback received from stakeholders and studies of other comparably-sized transit systems. A series of strategies are listed for consideration:

- Installation of weather –resistant cassettes at each bus stop containing a schedule and route map
- Coordinate branding effort among Humboldt County transit services.

- Improve media communication (press releases, speakers bureau)
- Expand HSU and CR partnerships
- Run special event buses (e.g. Humboldt County Fair, Arts Alive, etc)
- Continue with countywide transit guide and information
- Implement Wi-Fi technology to enable passengers to access the internet while on board transit.
- Implement AVL technology to allow for real-time arrival updates and next bus technology. An AVL system is a computer-based vehicle tracking system that uses a specific location technology (usually Global Positioning System – GPS) and a method of transmitting that real-time location of any receiver-equipped bus from the vehicle to a dispatch center. GPS satellites locate the bus and the location data are then transmitted to the transit center through the communications system. The AVL data can be used immediately for daily operations or archived for further analysis.⁷

⁷ Federal Transit Administration, Automatic Vehicle Location Fact Sheet

Appendices

Appendix A: Stakeholder Interviews

The following stakeholders were interviewed during the TDP development process of the Humboldt County transit operators to gain perceptions about current and potential transit operations.

- Nel Fregoso, General Manager (retired), Humboldt Transit Authority
- Greg Pratt, General Manager, Humboldt Transit Authority
- Jim Wilson, Equipment and Facilities Manager, Humboldt Transit Authority
- Consuelo Espinosa, Receptionist/ADA Specialist, Humboldt Transit Authority
- Larry Pardi, Transportation Superintendent, City of Arcata
- Sanna Wood, Interim Assistant Finance Director, City of Eureka
- Russell Shorey, Finance Director, City of Eureka
- John Crotty, Transit Manager, Parks and Recreation Director, City of Fortuna
- Anita Huff, Transit Director, Blue Lake Rancheria Transit
- Terri Castner, Executive Director, Klamath Trinity Non-Emergency Transportation (K/T Net)
- Susan Harincar-Driscoll, Transportation Coordinator, Humboldt Community Access and Resource Center
- Jaison Chand, Chief Operating Officer, City Ambulance of Eureka, Inc.
- Peggy Holverson, Scheduler City Ambulance of Eureka, ADA Dial-A-Ride Contractor
- Thomas Dewey, Chief of Police/Director of Parking & Emergency Management, Humboldt State University
- Traci Ferdolage, Director of Planning and Design, Humboldt State University
- Cheryl Tucker, Director of Special Programs, College of the Redwoods
- Kintay Johnson, Assistant Director Residential and ASCR Advisor, College of the Redwoods
- Garry Patrick, Director Maintenance and Operations, College of the Redwoods
- Marcella Clem, Executive Director, Humboldt County Association of Governments
- Debra Dees, Associate Planner, Humboldt County Association of Governments
- Oona Smith, Senior Planner, Humboldt County Association of Governments
- Mark Lovelace, Supervisor, County of Humboldt, Chair of Humboldt Transit Authority
- Michael Winkler, Vice Mayor, City of Arcata; HTA Board of Directors
- Christine Tomascheski, Site Coordinator, City of Arcata Senior Resource Center
- Julie Damron, Director, Adult Day Health Care Of Mad River
- Aaron Antrium, Principal Consultant, Trillium Transit Internet Solutions/Transit Vision
- Emily Sinkhorn, Senior Planner, Redwood Community Action Agency/Greenwheels

Appendix B: On-Board Passenger Survey Forms

Redwood Transit System Survey Form

Please help improve transit services by answering this survey and returning it to the surveyor.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of bus stop: _____

3. How did you get to this bus?

☐ Dropped off ☐ Walked ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer from another bus (please list route or service) _____
☐ Other (explain) _____

4. What is the purpose of today's transit trip? (check only one) If you are going home, what was the main purpose of your trip?

☐ Work ☐ School ☐ Medical Shopping ☐ Personal Business
☐ Social/Recreation ☐ Other (please specify) _____

5. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

6. How will you get from this bus to your final destination?

☐ Picked up in a car ☐ Walk ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer to another bus (please list route or service) _____
☐ Other (explain) _____

7. How will you make your return trip?

☐ Bus ☐ Drive my car ☐ Walk ☐ Bicycle ☐ I'm going one way only ☐ Ride with someone

8. What time do you have to be at your destination? _____ ☐ am or ☐ pm

9. What time do you usually travel home?

_____ ☐ am or ☐ pm

10. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

11. Is this a regular commute trip for work, school, or medical treatment?

☐ Yes ☐ No

12. Generally, how often do you use Redwood Transit System?

☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

13. How long have you used the bus?

☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

14. If you needed help planning your trip, which would you use first?

- ☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐ Telephone
Other (Explain) _____

15. Do you have a driver's license?

- ☐ Yes ☐ No

16. How many vehicles are owned by members of your immediate household?

- ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

TURN OVER 

17. If transit service was not available, how would you have made the trip?(Check all that might apply.)

- ☐ Driven by family or friend ☐ Taxi ☐ Not made the trip ☐ Drive myself
☐ Van or carpool ☐ Regular dial-a-ride transit service
☐ Social service agency (please specify) _____
☐ Non-profit agency (please specify) _____
☐ Other (please specify) _____

18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5
E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

19. What improvements would you like to see to the transit program?

- ☐ Increased service availability-if so, when? _____
☐ New or extended routes- if so, where? _____
☐ More direct service ☐ Earlier weekday service
☐ Later weekday service ☐ Earlier Saturday service
☐ Later Saturday Service ☐ Sunday service
☐ More scheduled stops – if so, where? _____
☐ Better connections with other bus systems (e.g. Eureka Transit, Arcata Transit, Del Norte Transit). Explain: _____

20. If you ride the bus in Manila, would you rather have the bus stops located on or off Highway 255 (New Navy Base Road)?

- ☐ On the Highway ☐ Off the Highway

21. Are you affiliated with Humboldt State's Universal "Jack Pass" System?

- ☐ Yes ☐ No

22. If Yes, what is your affiliation?

- ☐ I am an enrolled student Jack Pass User

- ☐ I am a staff/faculty Jack Pass User
☐ I am an extended ED/OLLI Jack Pass User

23. What is your occupation?

- ☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
☐ Retired ☐ Unable to work ☐ Not employed

24. What is your age?

- ☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

25. Are you: ☐ Male ☐ Female

26. What community do you live in? _____

27. Please add additional comments and thoughts.

Thank you for helping us improve Redwood Transit System by participating in this survey!

RTS Willow Creek – Arcata Service Survey Form

Please help improve transit services by answering this survey and returning it to the surveyor.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of bus stop: _____

3. How did you get to this bus?

- ☐ Dropped off ☐ Walked ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer from another bus (please list route or service) _____
☐ Other (explain) _____

4. What is the purpose of today's transit trip? (check only one) If you are going home, what was the main purpose of your trip?

- ☐ Work ☐ School ☐ Medical ☐ Shopping ☐ Personal Business
☐ Social/Recreation ☐ Other (please specify) _____

5. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

6. How will you get from this bus to your final destination?

- ☐ Picked up in a car ☐ Walk ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer to another bus (please list route or service) _____
☐ Other (explain) _____

7. How will you make your return trip?

- ☐ Bus ☐ Drive my car ☐ Walk ☐ Bicycle ☐ I'm going one way only
☐ Ride with someone

8. What time do you have to be at your destination? _____ ☐ am or ☐ pm

9. What time do you usually travel home?

_____ ☐ am or ☐ pm

10. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

11. Is this a regular commute trip for work, school, or medical treatment?

☐ Yes ☐ No

12. Generally, how often do you use Redwood Transit-Willow Creek Service?

☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

13. How long have you used the bus?

☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

14. If you needed help planning your trip, which would you use first?

☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐ Telephone
Other (Explain) _____

15. Do you have a driver's license?

☐ Yes ☐ No

TURN OVER 

16. How many vehicles are owned by members of your immediate household?

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

17. If transit service was not available, how would you have made the trip?(Check all that might apply.)

☐ Driven by family or friend ☐ Taxi ☐ Not made the trip ☐ Drive myself
☐ Van or carpool ☐ Regular dial-a-ride transit service
☐ Social service agency (please specify) _____
☐ Non-profit agency (please specify) _____
☐ Other (please specify) _____

18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5
E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

19. What improvements would you like to see to the transit program?

☐ Increased service availability-if so, when? _____
☐ New or extended routes- if so, where? _____

- ☐ More direct service ☐ Earlier weekday service
☐ Later weekday service ☐ Earlier Saturday service
☐ Later Saturday Service ☐ Sunday service
☐ More scheduled stops – if so, where? _____
☐ Better connections with other bus systems (e.g. Redwood Transit System, Arcata Transit, Del Norte Transit). Explain: _____

20. Are you affiliated with Humboldt State's Universal "Jack Pass" System?

- ☐ Yes ☐ No

21. If Yes, what is your affiliation?

- ☐ I am an enrolled student Jack Pass User
☐ I am a staff/faculty Jack Pass User
☐ I am an extended ED/OLLI Jack Pass User

22. What is your occupation?

- ☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
☐ Retired ☐ Unable to work ☐ Not employed

23. What is your age?

- ☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

24. Are you: ☐ Male ☐ Female

25. What community do you live in?

26. Please add additional comments and thoughts.

Thank you for helping us improve Redwood Transit-Willow Creek Service by participating in this survey!

RTS Southern Humboldt Intercity Transit System Survey Form

Please help improve transit services by answering this survey and returning it to the surveyor.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of bus stop: _____

3. How did you get to this bus?

- ☐ Dropped off ☐ Walked ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer from another bus (please list route or service) _____
☐ Other (explain) _____

4. What is the purpose of today's transit trip? (check only one) If you are going home, what was the main purpose of your trip?

- ☐ Work ☐ School ☐ Medical ☐ Shopping ☐ Personal Business
☐ Social/Recreation ☐ Other (please specify) _____

5. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

6. How will you get from this bus to your final destination?

- ☐ Picked up in a car ☐ Walk ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer to another bus (please list route or service) _____
☐ Other (explain) _____

7. How will you make your return trip?

- ☐ Bus ☐ Drive my car ☐ Walk ☐ Bicycle ☐ I'm going one way only
☐ Ride with someone

8. What time do you have to be at your destination? _____ ☐ am or ☐ pm

9. What time do you usually travel home?

_____ ☐ am or ☐ pm

10. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

11. Is this a regular commute trip for work, school, or medical treatment?

- ☐ Yes ☐ No

12. Generally, how often do you use RTS Southern Humboldt Intercity Transit System?

- ☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

13. How long have you used the bus?

- ☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

14. If you needed help planning your trip, which would you use first?

- ☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐
☐ Telephone
Other (Explain) _____

15. Do you have a driver's license?

- ☐ Yes ☐ No

TURN OVER 

16. How many vehicles are owned by members of your immediate household?

- ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

17. If transit service was not available, how would you have made the trip?(Check all that might apply.)

- ☐ Driven by family or friend ☐ Taxi ☐ Not made the trip ☐ Drive myself
☐ Van or carpool ☐ Regular dial-a-ride transit service
☐ Social service agency (please specify) _____
☐ Non-profit agency (please specify) _____
☐ Other (please specify) _____

18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5

E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

19. What improvements would you like to see to the transit program?

- ☐ Increased service availability-if so, when? _____
- ☐ New or extended routes- if so, where? _____
- ☐ More direct service ☐ Earlier weekday service
- ☐ Later weekday service ☐ Earlier Saturday service
- ☐ Later Saturday Service ☐ Sunday service
- ☐ More scheduled stops – if so, where? _____
- ☐ Better connections with other bus systems (e.g. Redwood Transit System, Arcata Transit, Del Norte Transit). Explain: _____

20. Are you affiliated with Humboldt State's Universal "Jack Pass" System?

- ☐ Yes ☐ No

21. If Yes, what is your affiliation?

- ☐ I am an enrolled student Jack Pass User
- ☐ I am a staff/faculty Jack Pass User
- ☐ I am an extended ED/OLLI Jack Pass User

22. What is your occupation?

- ☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
- ☐ Retired ☐ Unable to work ☐ Not employed

23. What is your age?

- ☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

24. Are you: ☐ Male ☐ Female

25. What community do you live in?

26. Please add additional comments and thoughts.

Thank you for helping us improve RTS Southern Humboldt Intercity Transit System by participating in this survey!

RTS Southern Humboldt Local Transit System Survey Form

Please help improve transit services by answering this survey and returning it to the surveyor.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of bus stop: _____

3. How did you get to this bus?

- ☐ Dropped off ☐ Walked ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer from another bus (please list route or service) _____
☐ Other (explain) _____

4. What is the purpose of today's transit trip? (check only one) If you are going home, what was the main purpose of your trip?

- ☐ Work ☐ School ☐ Medical ☐ Shopping ☐ Personal Business
☐ Social/Recreation ☐ Other (please specify) _____

5. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

6. How will you get from this bus to your final destination?

- ☐ Picked up in a car ☐ Walk ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer to another bus (please list route or service) _____
☐ Other (explain) _____

7. How will you make your return trip?

- ☐ Bus ☐ Drive my car ☐ Walk ☐ Bicycle ☐ I'm going one way only
☐ Ride with someone

8. What time do you have to be at your destination? _____ ☐ am or ☐ pm

9. What time do you usually travel home?

_____ ☐ am or ☐ pm

10. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

11. Is this a regular commute trip for work, school, or medical treatment?

- ☐ Yes ☐ No

12. Generally, how often do you use RTS Southern Humboldt Local Transit System?

- ☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

13. How long have you used the bus?

- ☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

14. If you needed help planning your trip, which would you use first?

- ☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐
☐ Telephone
Other (Explain) _____

15. Do you have a driver's license?

- ☐ Yes ☐ No

TURN OVER 

16. How many vehicles are owned by members of your immediate household?

- ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

17. If transit service was not available, how would you have made the trip?(Check all that might apply.)

- ☐ Driven by family or friend ☐ Taxi ☐ Not made the trip ☐ Drive myself
☐ Van or carpool ☐ Regular dial-a-ride transit service
☐ Social service agency (please specify) _____
☐ Non-profit agency (please specify) _____
☐ Other (please specify) _____

18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5
E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

19. What improvements would you like to see to the transit program?

- ☐ Increased service availability-if so, when? _____
☐ New or extended routes- if so, where? _____
☐ More direct service ☐ Earlier weekday service
☐ Later weekday service ☐ Earlier Saturday service
☐ Later Saturday Service ☐ Sunday service
☐ More scheduled stops – if so, where? _____
☐ Better connections with other bus systems (e.g. Redwood Transit System, Arcata Transit, Del Norte Transit). Explain: _____

20. Are you affiliated with Humboldt State's Universal "Jack Pass" System?

- ☐ Yes ☐ No

21. If Yes, what is your affiliation?

- ☐ I am an enrolled student Jack Pass User
☐ I am a staff/faculty Jack Pass User
☐ I am an extended ED/OLLI Jack Pass User

22. What is your occupation?

- ☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
☐ Retired ☐ Unable to work ☐ Not employed

23. What is your age?

- ☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

24. Are you: ☐ Male ☐ Female

25. What community do you live in?

26. Please add additional comments and thoughts.

Thank you for helping us improve RTS Southern Humboldt Local System by participating in this survey!

Eureka/Arcata Dial-A-Ride Survey Form

Please help improve transit services by answering this survey and returning it to the bus driver.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of stop: _____

3. What is the purpose of today's transit trip? (*check only one*) If you are going home, what was the main purpose of your trip?

☐ Work ☐ School ☐ Medical ☐ Shopping ☐ Personal Business
☐ Social/Recreation ☐ Other (please specify) _____

4. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

5. How will you make your return trip?

☐ Bus ☐ I'm going one way only ☐ Ride with someone

6. What time do you have to be at your destination? _____ ☐ am or ☐ pm

7. What time do you usually travel home?

_____ ☐ am or ☐ pm

8. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

9. Is this a regular commute trip for work, shopping, social service/recreation or medical treatment?

☐ Yes ☐ No

10. Generally, how often do you use Dial-A-Ride?

☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

11. How long have you used the bus?

☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

12. If you needed help planning your trip, which would you use first?

☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐
☐ Telephone
Other (Explain) _____

13. Do you have a driver's license?

☐ Yes ☐ No

14. How many vehicles are owned by members of your immediate household?

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

15. If transit service was not available, how would you have made the trip? (Check all that might apply.)

☐ Driven by family or friend ☐ Taxi ☐ Not made the trip ☐ Drive myself
☐ Van or carpool
☐ Social service agency (please specify) _____
☐ Non-profit agency (please specify) _____
☐ Other (please specify) _____

TURN OVER 

16. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5
E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

17. What improvements would you like to see to the transit program?

☐ Increased service availability-if so, when? _____
☐ New or extended routes- if so, where? _____
☐ More direct service ☐ Earlier weekday service
☐ Later weekday service ☐ Earlier Saturday service
☐ Later Saturday Service ☐ Sunday service
☐ More scheduled stops – if so, where? _____
☐ Better connections with other bus systems (e.g. Redwood Transit System, Eureka Transit, Arcata Transit, Del Norte Transit). Explain: _____

18. What is your occupation?

☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
☐ Retired ☐ Unable to work ☐ Not employed

19. What is your age?

☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

20. Are you: ☐ Male ☐ Female

21. What community do you live in?

22. Please add additional comments and thoughts.

Thank you for helping us improve Eureka/Arcata Dial-A-Ride Service by participating in this survey!

Eureka Transit Service Survey Form

Please help improve transit services by answering this survey and returning it to the surveyor.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of bus stop: _____

3. How did you get to this bus?

☐ Dropped off ☐ Walked ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer from another bus (please list route or service) _____
☐ Other (explain) _____

4. What is the purpose of today's transit trip? (*check only one*) If you are going home, what was the main purpose of your trip?

☐ Work ☐ School ☐ Medical Shopping ☐ Personal Business
☐ Social/Recreation ☐ Other (please specify) _____

5. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

6. How will you get from this bus to your final destination?

☐ Picked up in a car ☐ Walk ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer to another bus (please list route or service) _____
☐ Other (explain) _____

7. How will you make your return trip?

☐ Bus ☐ Drive my car ☐ Walk ☐ Bicycle ☐ I'm going one way only
☐ Ride with someone

8. What time do you have to be at your destination? _____ ☐ am or ☐ pm

9. What time do you usually travel home?

_____ ☐ am or ☐ pm

10. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

11. Is this a regular commute trip for work, school, or medical treatment?

☐ Yes ☐ No

12. Generally, how often do you use Eureka Transit Service?

☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

13. How long have you used the bus?

☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

14. If you needed help planning your trip, which would you use first?

☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐
☐ Telephone
Other (Explain) _____

15. Do you have a driver's license?

☐ Yes ☐ No

TURN OVER 

16. How many vehicles are owned by members of your immediate household?

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

17. If transit service was not available, how would you have made the trip?(Check all that might apply.)

☐ Driven by family or friend ☐ Taxi ☐ Not made the trip ☐ Drive myself
☐ Van or carpool ☐ Regular dial-a-ride transit service
☐ Social service agency (please specify) _____
☐ Non-profit agency (please specify) _____
☐ Other (please specify) _____

18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5
E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

19. What improvements would you like to see to the transit program?

☐ Increased service availability-if so, when? _____
☐ New or extended routes- if so, where? _____
☐ More direct service ☐ Earlier weekday service
☐ Later weekday service ☐ Earlier Saturday service
☐ Later Saturday Service ☐ Sunday service
☐ More scheduled stops – if so, where? _____
☐ Better connections with other bus systems (e.g. Redwood Transit System, Arcata Transit, Del Norte Transit). Explain: _____

20. Are you affiliated with Humboldt State's Universal "Jack Pass" System?

☐ Yes ☐ No

21. If Yes, what is your affiliation?

☐ I am an enrolled student Jack Pass User
☐ I am a staff/faculty Jack Pass User
☐ I am an extended ED/OLLI Jack Pass User

22. What is your occupation?

- ☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
☐ Retired ☐ Unable to work ☐ Not employed

23. What is your age?

- ☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

24. Are you: ☐ Male ☐ Female

25. What community do you live in?

26. Please add additional comments and thoughts.

Thank you for helping us improve Eureka Transit Service by participating in this survey!

Arcata Transit System Survey Form

Please help improve transit services by answering this survey and returning it to the surveyor.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of bus stop: _____

3. How did you get to this bus?

- ☐ Dropped off ☐ Walked ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer from another bus (please list route or service) _____
☐ Other (explain) _____

4. What is the purpose of today's transit trip? (*check only one*) If you are going home, what was the main purpose of your trip?

- ☐ Work ☐ School ☐ Medical Shopping ☐ Personal Business
☐ Social/Recreation ☐ Other (please specify) _____

5. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

6. How will you get from this bus to your final destination?

- ☐ Picked up in a car ☐ Walk ☐ Drove ☐ Bicycle ☐ Wheelchair
☐ Transfer to another bus (please list route or service) _____
☐ Other (explain) _____

7. How will you make your return trip?

- ☐ Bus ☐ Drive my car ☐ Walk ☐ Bicycle ☐ I'm going one way only
☐ Ride with someone

8. What time do you have to be at your destination? _____ ☐ am or ☐ pm

9. What time do you usually travel home?

_____ ☐ am or ☐ pm

10. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

11. Is this a regular commute trip for work, school, or medical treatment?

☐ Yes ☐ No

12. Generally, how often do you use Arcata Transit System?

☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

13. How long have you used the bus?

☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

14. If you needed help planning your trip, which would you use first?

☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐
☐ Telephone ☐ Other (Explain) _____

15. Do you have a driver's license?

☐ Yes ☐ No

TURN OVER 

16. How many vehicles are owned by members of your immediate household?

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

17. If transit service was not available, how would you have made the trip?(Check all that might apply.)

☐ Driven by family or friend ☐ Taxi ☐ Not made the trip ☐ Drive myself
☐ Van or carpool ☐ Regular dial-a-ride transit service
☐ Social service agency (please specify) _____
☐ Non-profit agency (please specify) _____
☐ Other (please specify) _____

18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5
E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

19. What improvements would you like to see to the transit program?

☐ Increased service availability-if so, when? _____
☐ New or extended routes- if so, where? _____
☐ More direct service ☐ Earlier weekday service
☐ Later weekday service ☐ Earlier Saturday service
☐ Later Saturday Service ☐ Sunday service

- ☐ More scheduled stops – if so, where? _____
- ☐ Better connections with other bus systems (e.g. Eureka Transit, Redwood Transit System, Del Norte Transit). Explain: _____

20. Are you affiliated with Humboldt State's Universal "Jack Pass" System?

- ☐ Yes ☐ No

21. If Yes, what is your affiliation?

- ☐ I am an enrolled student Jack Pass User
- ☐ I am a staff/faculty Jack Pass User
- ☐ I am an extended ED/OLLI Jack Pass User

22. What is your occupation?

- ☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
- ☐ Retired ☐ Unable to work ☐ Not employed

23. What is your age?

- ☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

24. Are you: ☐ Male ☐ Female

25. What community do you live in?

26. Please add additional comments and thoughts.

Thank you for helping us improve Arcata Transit System by participating in this survey!

Blue Lake Transit Survey Form

Please help improve transit services by answering this survey and returning it to the bus driver.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of stop: _____

3. What is the purpose of today's transit trip? (check only one) If you are going home, what was the main purpose of your trip?

- ☐ Work ☐ School ☐ Medical ☐ Shopping ☐ Personal Business
- ☐ Social/Recreation ☐ Other (please specify) _____

4. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

5. How will you make your return trip?

- ☐ Bus ☐ I'm going one way only ☐ Ride with someone

6. What time do you have to be at your destination? _____ ☐ am or ☐ pm

7. What time do you usually travel home?

_____ ☐ am or ☐ pm

8. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

9. Is this a regular commute trip for work, shopping, social service/recreation or medical treatment?

☐ Yes ☐ No

10. Generally, how often do you use Blue Lake Transit?

☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

11. How long have you used the bus?

☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

12. If you needed help planning your trip, which would you use first?

☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐ Telephone
Other (Explain) _____

13. Do you have a driver's license?

☐ Yes ☐ No

14. How many vehicles are owned by members of your immediate household?

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

15. If transit service was not available, how would you have made the trip? (Check all that might apply.)

☐ Driven by family or friend ☐ Taxi ☐ Not made the trip ☐ Drive myself
☐ Van or carpool
☐ Social service agency (please specify) _____
☐ Non-profit agency (please specify) _____
☐ Other (please specify) _____

TURN OVER 

16. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5
E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

17. What improvements would you like to see to the transit program?

- ☐ Increased service availability-if so, when? _____
- ☐ New or extended routes- if so, where? _____
- ☐ More direct service ☐ Earlier weekday service
- ☐ Later weekday service ☐ Earlier Saturday service
- ☐ Later Saturday Service ☐ Sunday service
- ☐ More scheduled stops – if so, where? _____
- ☐ Better connections with other bus systems (e.g. Redwood Transit System, Eureka Transit, Arcata Transit, Del Norte Transit). Explain: _____

18. What is your occupation?

- ☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
- ☐ Retired ☐ Unable to work ☐ Not employed

19. What is your age?

- ☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

20. Are you: ☐ Male ☐ Female

21. What community do you live in?

22. Please add additional comments and thoughts.

Thank you for helping us improve Blue Lake Transit Service by participating in this survey!

K/T Net Transportation Survey Form

Please help improve transit services by answering this survey and returning it to the bus driver.

All responses are confidential. Thank you!

PLEASE FILL OUT THIS FORM EACH TIME YOU GET ONE

1. What time did you board the bus for this ride?

_____ ☐ am or ☐ pm

2. Where did you get on this bus?

Name or location of stop: _____

3. What is the purpose of today's transit trip? (check only one) If you are going home, what was the main purpose of your trip?

- ☐ Work ☐ School ☐ Medical ☐ Shopping ☐ Personal Business
- ☐ Social/Recreation ☐ Other (please specify) _____

4. What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

5. How will you make your return trip?

- ☐ Bus ☐ I'm going one way only ☐ Ride with someone

6. What time do you have to be at your destination? _____ ☐ am or ☐ pm

7. What time do you usually travel home?

_____ ☐ am or ☐ pm

8. Are there other times of the day you need to travel? Please list even if outside regular bus service hours.

Day(s) of Week	Time of Day	Trip Purpose
	am or pm	
	am or pm	
	am or pm	

9. Is this a regular commute trip for work, shopping, social service/recreation or medical treatment?

☐ Yes ☐ No

10. Generally, how often do you use K/T Net Transportation?

☐ Once a month or less ☐ Once a week ☐ 2 to 5 times a week ☐ More than 5 times a week

11. How long have you used the bus?

☐ First time ☐ Under 6 months ☐ 6 months to the year ☐ More than a year

12. If you needed help planning your trip, which would you use first?

☐ Bus Schedule ☐ Friend/co-worker ☐ Internet ☐ Driver of the bus ☐

☐ Telephone

Other (Explain) _____

13. Do you have a driver's license?

☐ Yes ☐ No

14. How many vehicles are owned by members of your immediate household?

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4+

15. If transit service was not available, how would you have made the trip? (Check all that might apply.)

☐ Driven by family or friend ☐ Not made the trip ☐ Drive myself

☐ Van or carpool

☐ Social service agency (please specify) _____

☐ Non-profit agency (please specify) _____

☐ Other (please specify) _____

TURN OVER 

16. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest. (Please circle your answer or leave blank if you have no opinion.)

A. System safety	1	2	3	4	5
B. On-time performance	1	2	3	4	5
C. Driver courtesy	1	2	3	4	5
D. Travel time	1	2	3	4	5
E. Areas served	1	2	3	4	5
F. Bus cleanliness	1	2	3	4	5
G. Bus comfort	1	2	3	4	5
H. Phone info. services	1	2	3	4	5
I. Printed info. services	1	2	3	4	5
J. Internet based services	1	2	3	4	5
K. Cost of bus fare	1	2	3	4	5
L. Overall Rating	1	2	3	4	5

17. What improvements would you like to see to the transit program?

☐ Increased service availability-if so, when? _____

☐ New or extended routes- if so, where? _____

- ☐ More direct service ☐ Earlier weekday service
- ☐ Later weekday service ☐ Saturday service
- ☐ Sunday service
- ☐ More scheduled stops – if so, where? _____
- ☐ Better connections with other bus systems (e.g. Redwood Transit System, Trinity Transit).
Explain: _____

18. What is your occupation?

- ☐ Full-time employed ☐ Part-time employed ☐ Student ☐ Homemaker
- ☐ Retired ☐ Unable to work ☐ Not employed

19. What is your age?

- ☐ Under 18 ☐ 18 to 34 ☐ 35 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or over

20. Are you: ☐ Male ☐ Female

21. What community do you live in?

22. Please add additional comments and thoughts.

Thank you for helping us improve K/T Net Transportation Service by participating in this survey!

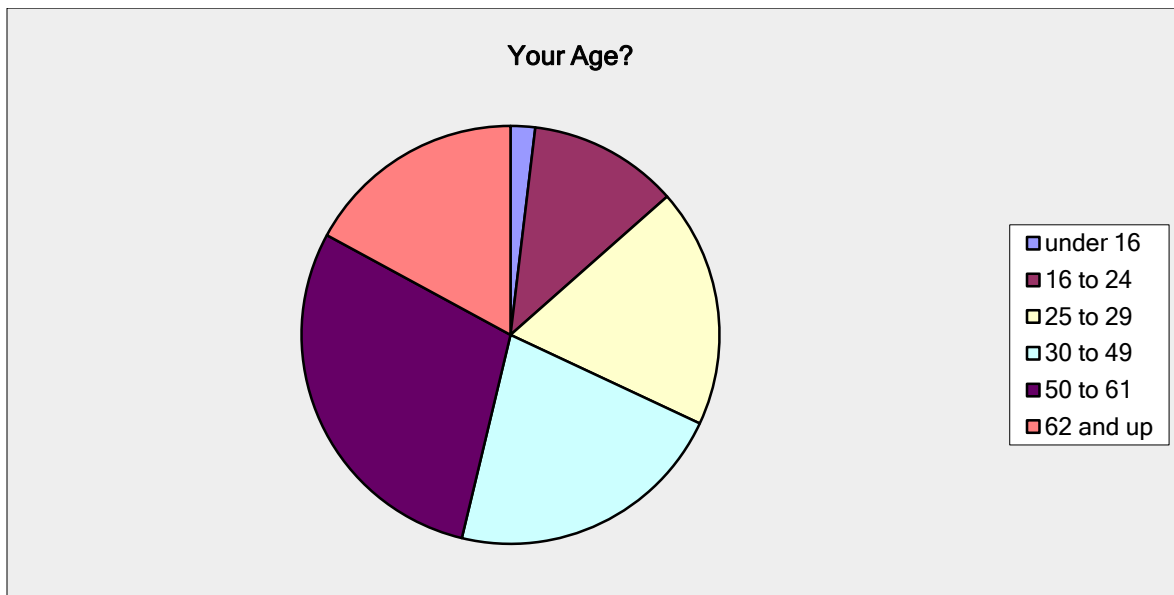
Appendix C: Survey Results

The detailed question-by-question results of the on-line and on-board surveys are shown in the following tables and graphics. The on-board survey results are organized and labeled for each transit system.

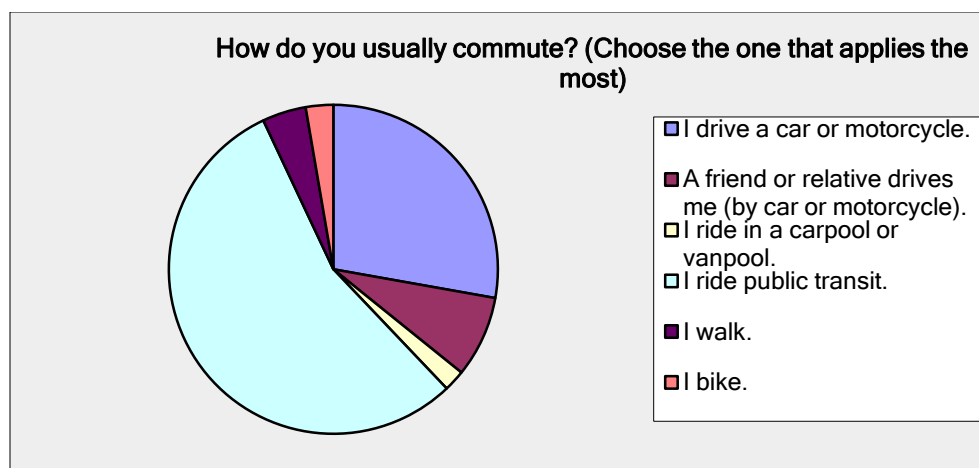
C.1 On-line Survey

The following is a sampling of the questions and responses from the on-line survey:

Question 3: Your Age?		
under 16	4	2%
16 to 24	25	12%
25 to 29	40	19%
30 to 49	47	22%
50 to 61	63	29%
62 and up	37	17%
Total	216	100%

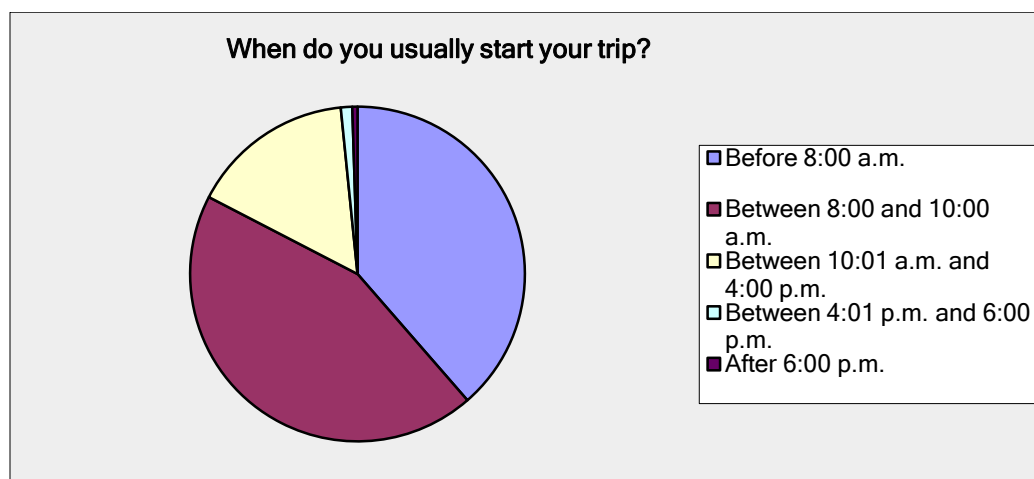


Question 9: How do you usually commute? (Choose the one that applies the most)		
I drive a car or motorcycle.	52	28%
A friend or relative drives me (by car or motorcycle).	15	8%
I ride in a carpool or vanpool.	4	2%
I ride public transit.	103	55%
I walk.	8	4%
I bike.	5	3%
Total	187	100%



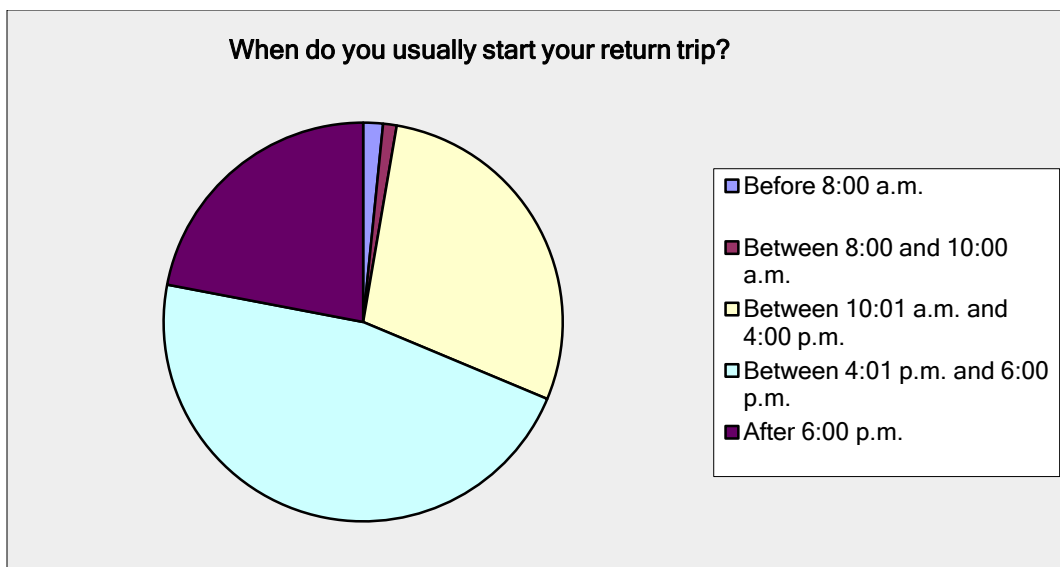
Question 10: When do you usually start your trip?

Before 8:00 a.m.	71	39%
Between 8:00 and 10:00 a.m.	81	44%
Between 10:01 a.m. and 4:00 p.m.	29	16%
Between 4:01 p.m. and 6:00 p.m.	2	1%
After 6:00 p.m.	1	1%
Total	184	100%

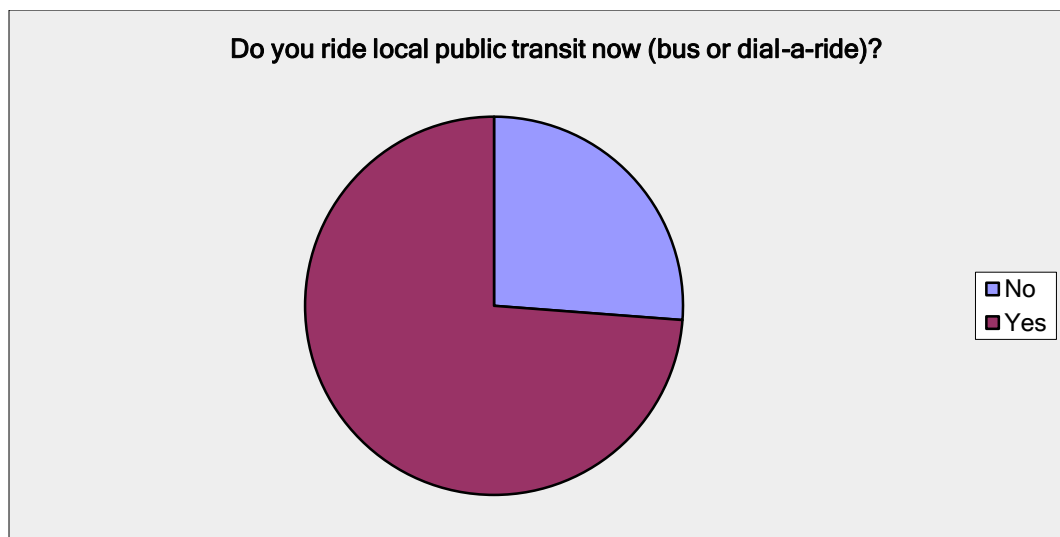


Question 11: When do you usually start your return trip?

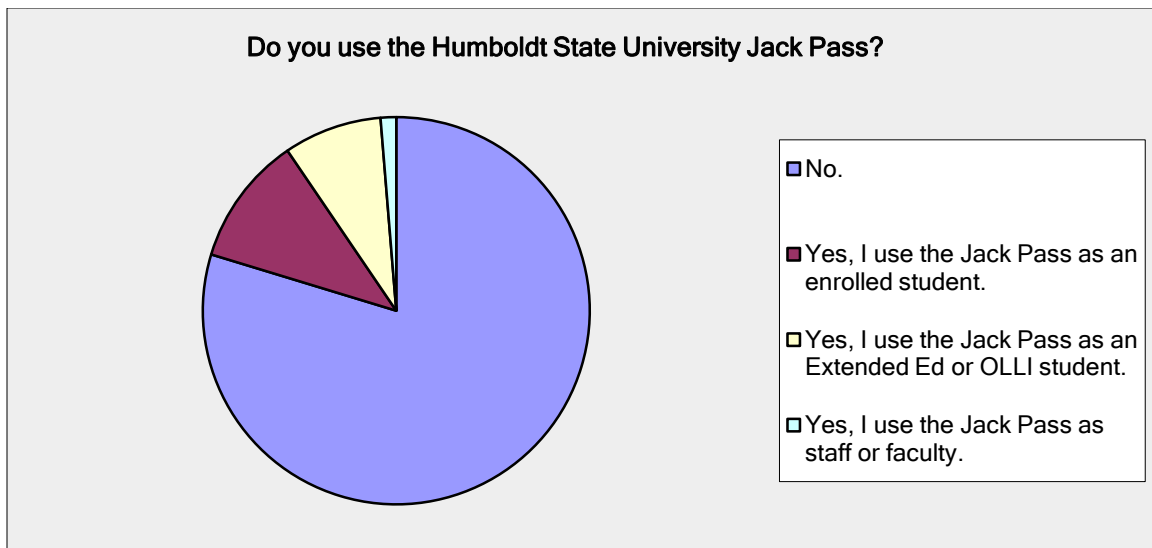
Before 8:00 a.m.	3	2%
Between 8:00 and 10:00 a.m.	2	1%
Between 10:01 a.m. and 4:00 p.m.	52	29%
Between 4:01 p.m. and 6:00 p.m.	85	47%
After 6:00 p.m.	40	22%
Total	182	100%



Question 12: Do you ride local public transit now (bus or dial-a-ride)?		
No	58	26%
Yes	163	74%
Total	221	100%

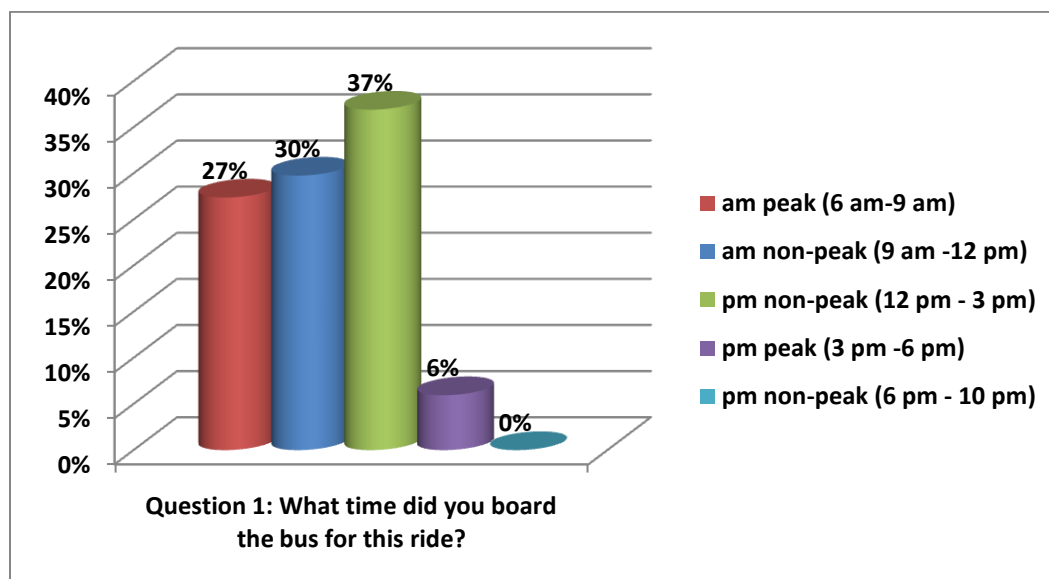


Question 16: Do you use the Humboldt State University Jack Pass?		
No.	126	80%
Yes, I use the Jack Pass as an enrolled student.	17	11%
Yes, I use the Jack Pass as an Extended Ed or OLLI student.	13	8%
Yes, I use the Jack Pass as staff or faculty.	2	1%
Total	158	100%



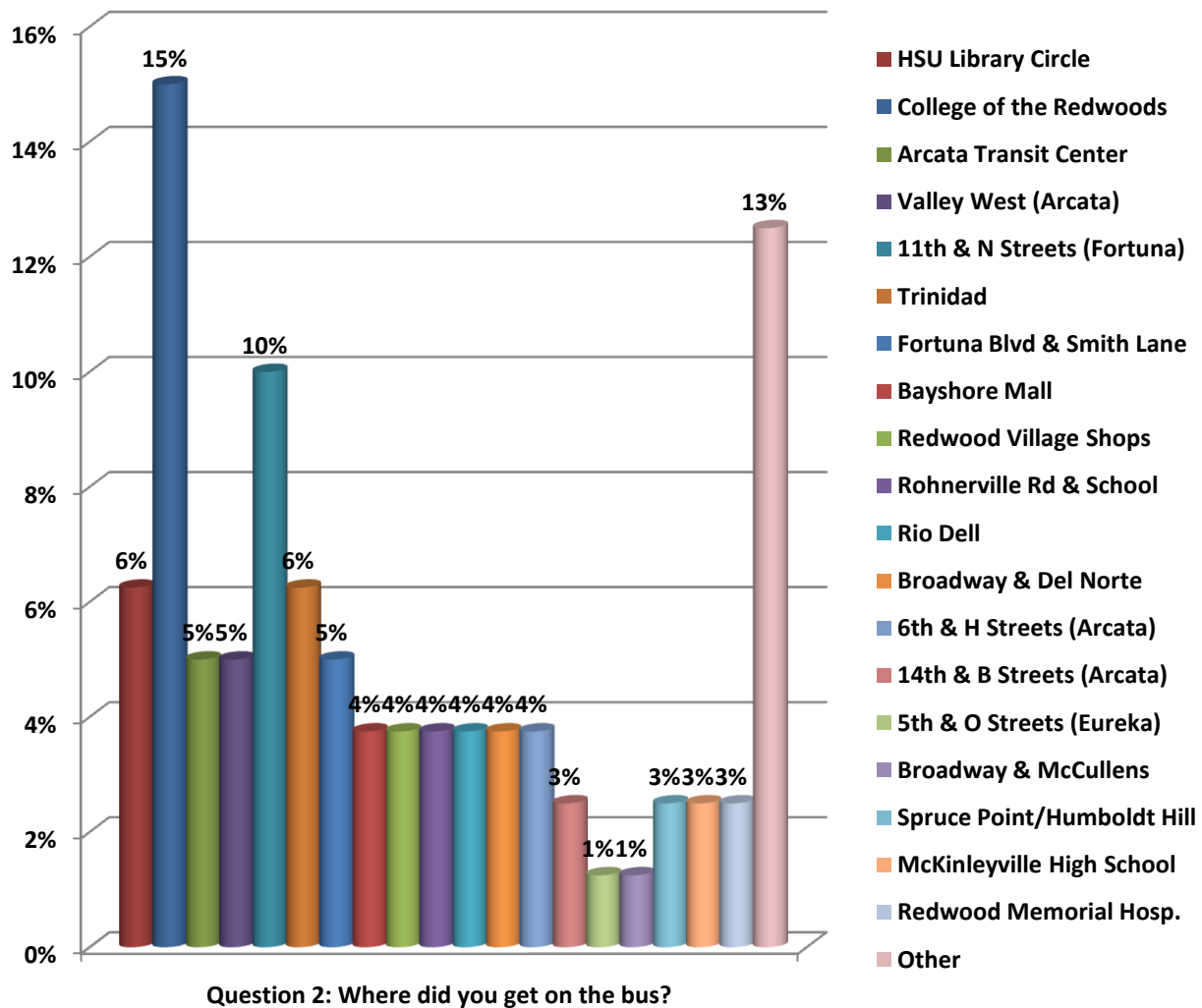
C.2 Redwood Transit System Intercity Service Survey

Question 1: What time did you board the bus for this ride?		
am peak (6 am-9 am)	23	27%
am non-peak (9 am -12 pm)	25	30%
pm non-peak (12 pm - 3 pm)	31	37%
pm peak (3 pm -6 pm)	5	6%
pm non-peak (6 pm - 10 pm)	0	0%
Total	84	100%



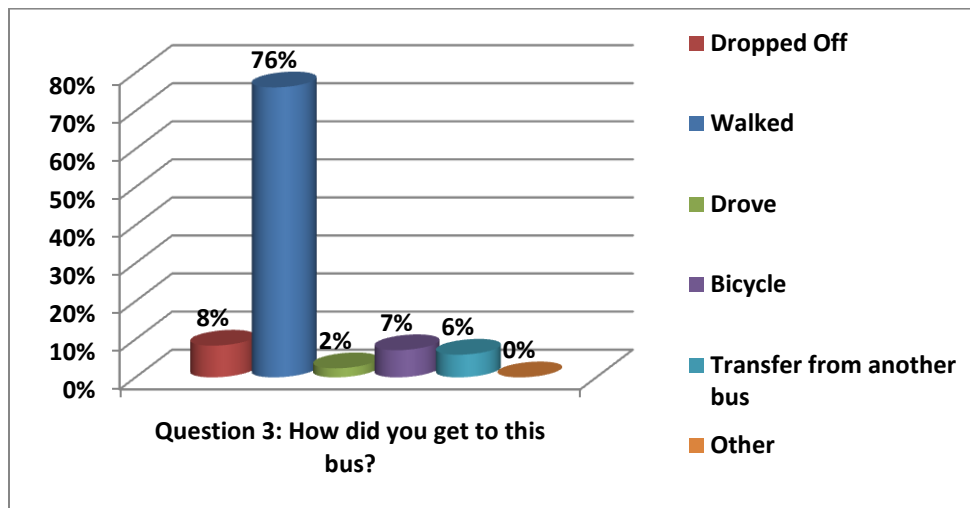
Question 2: Where did you get on the bus?		
HSU Library Circle	5	6%
College of the Redwoods	12	15%
Arcata Transit Center	4	5%
Valley West (Arcata)	4	5%
11th & N Streets (Fortuna)	8	10%

Question 2: Where did you get on the bus?		
Trinidad	5	6%
Fortuna Blvd & Smith Lane	4	5%
Bayshore Mall	3	4%
Redwood Village Shops	3	4%
Rohnerville Rd & School	3	4%
Rio Dell	3	4%
Broadway & Del Norte	3	4%
6th & H Streets (Arcata)	3	4%
14th & B Streets (Arcata)	2	3%
5th & O Streets (Eureka)	1	1%
Broadway & McCullens	1	1%
Spruce Point/Humboldt Hill	2	3%
McKinleyville High School	2	3%
Redwood Memorial Hosp.	2	3%
Other	10	13%
Total	80	100%

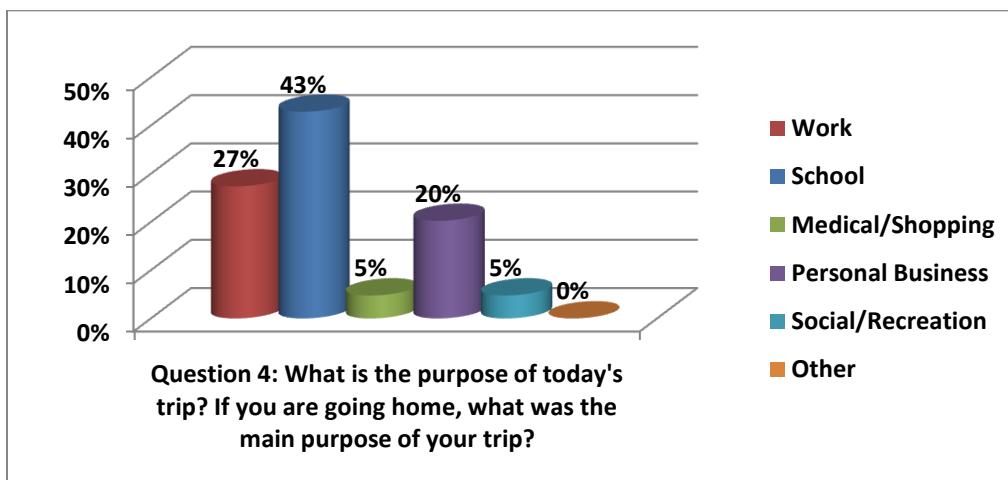


Question 3: How did you get to this bus?

Dropped Off	7	8%
Walked	64	76%
Drove	2	2%
Bicycle	6	7%
Transfer from another bus	5	6%
Other	0	0%
Total	84	100%

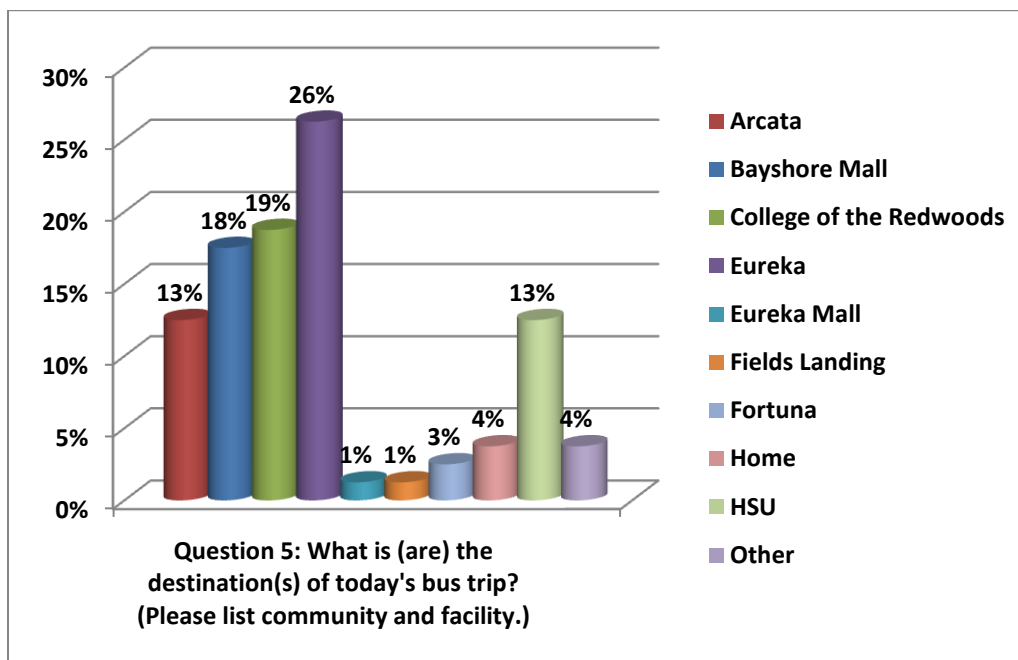
**Question 4: What is the purpose of today's trip? If you are going home, what was the main purpose of your trip?**

Work	23	27%
School	36	43%
Medical/Shopping	4	5%
Personal Business	17	20%
Social/Recreation	4	5%
Other	0	0%
Total	84	100%



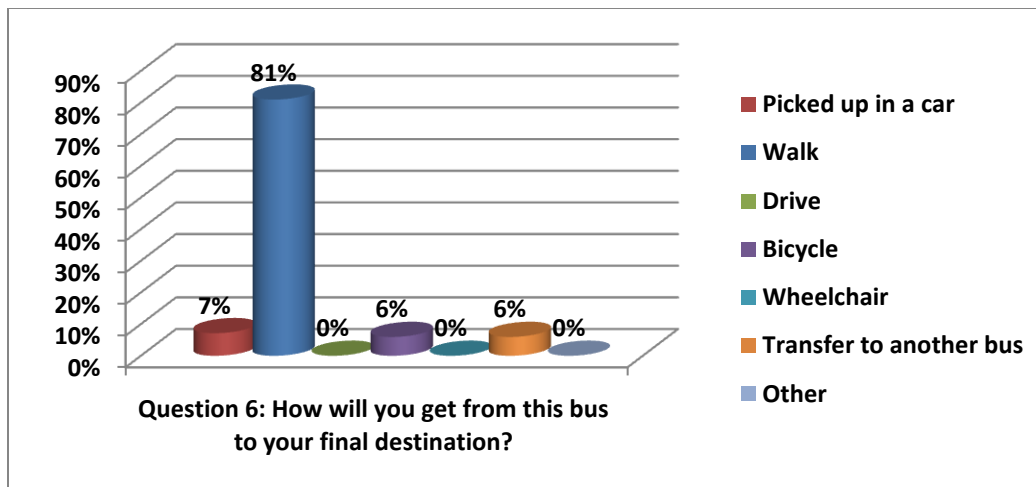
Question 5: What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

Arcata	10	13%
Bayshore Mall	14	18%
College of the Redwoods	15	19%
Eureka	21	26%
Eureka Mall	1	1%
Fields Landing	1	1%
Fortuna	2	3%
Home	3	4%
HSU	10	13%
Other	3	4%
Total	80	100%

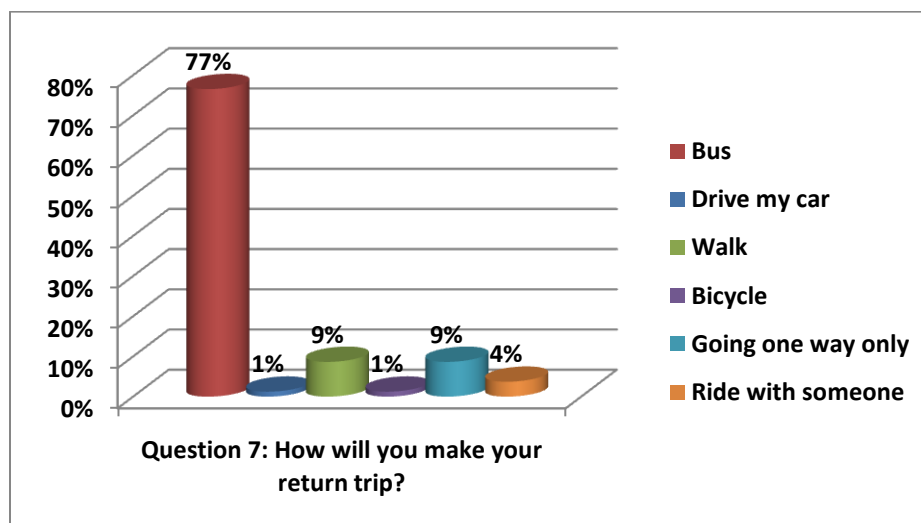


Question 6: How will you get from this bus to your final destination?

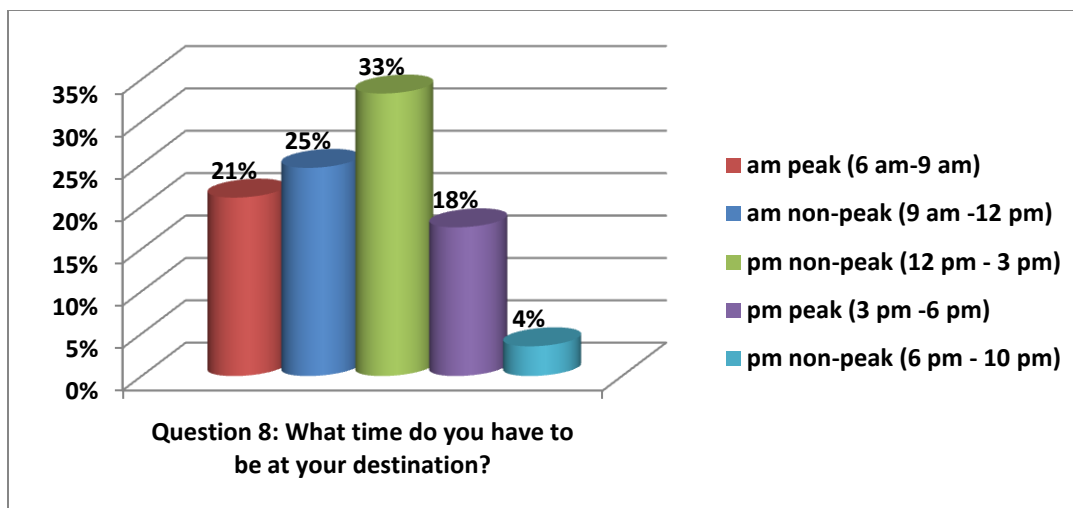
Picked up in a car	6	7%
Walk	68	81%
Drive	0	0%
Bicycle	5	6%
Wheelchair	0	0%
Transfer to another bus	5	6%
Other	0	0%
Total	84	100%



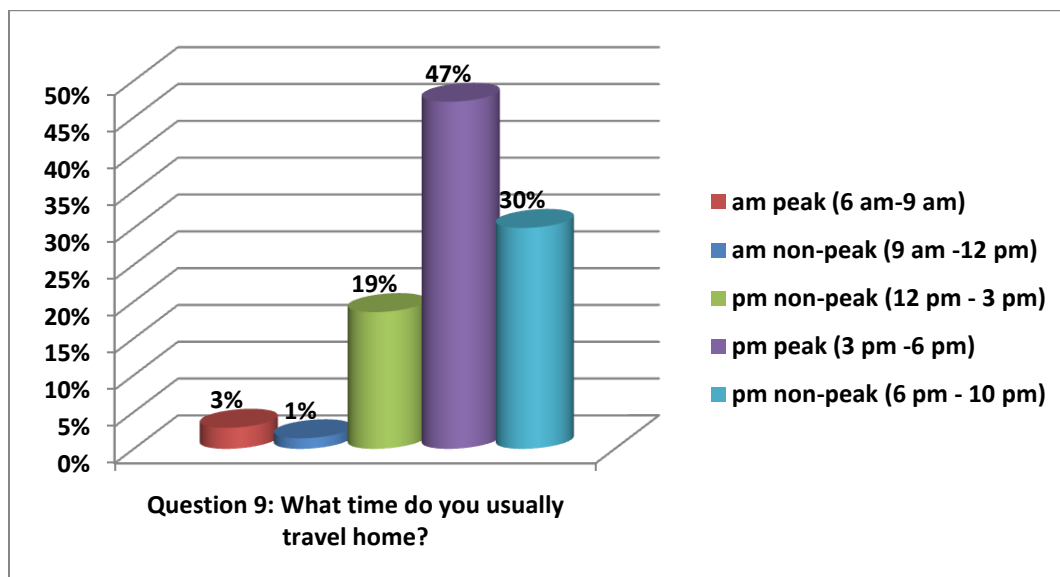
Question 7: How will you make your return trip?		
Bus	62	77%
Drive my car	1	1%
Walk	7	9%
Bicycle	1	1%
Going one way only	7	9%
Ride with someone	3	4%
Total	81	100%



Question 8: What time do you have to be at your destination?		
am peak (6 am-9 am)	12	21%
am non-peak (9 am -12 pm)	14	25%
pm non-peak (12 pm - 3 pm)	19	33%
pm peak (3 pm -6 pm)	10	18%
pm non-peak (6 pm - 10 pm)	2	4%
Total	57	100%

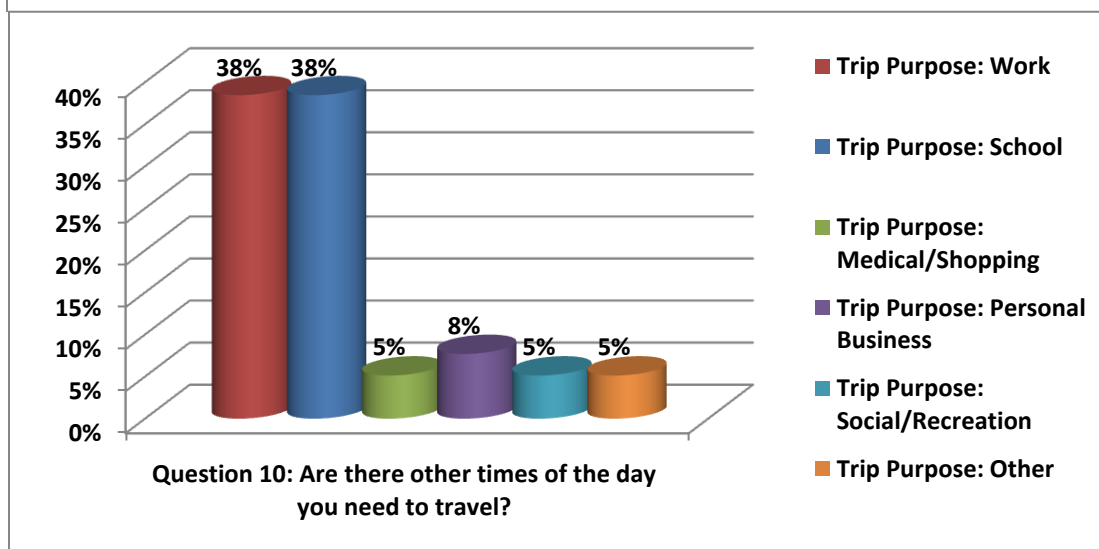
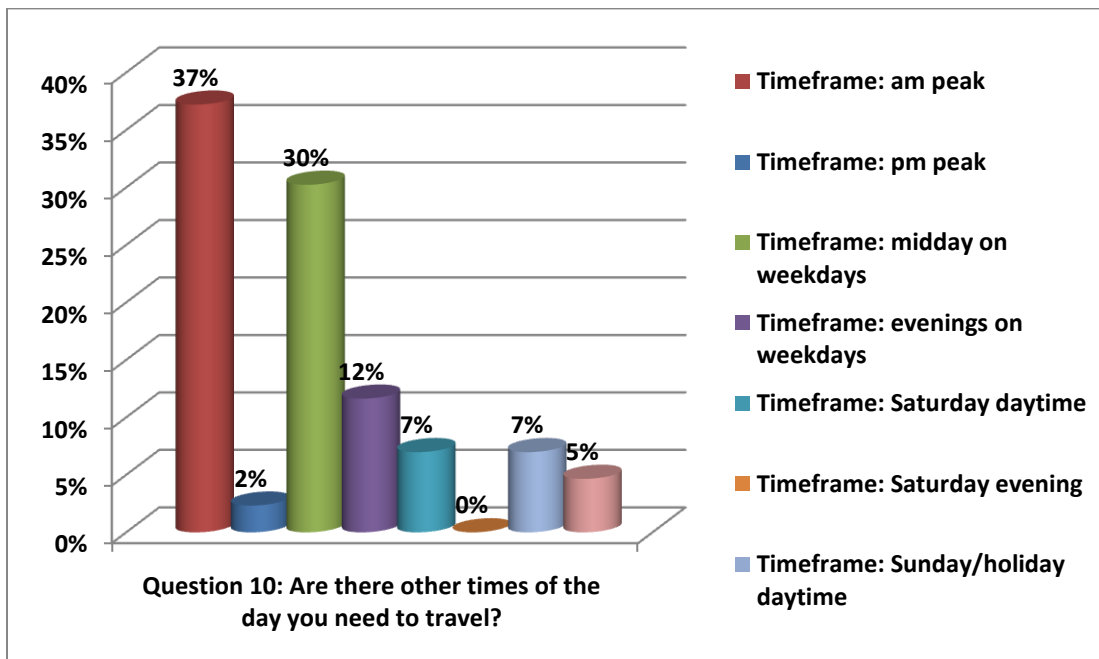


Question 9: What time do you usually travel home?		
am peak (6 am-9 am)	2	3%
am non-peak (9 am -12 pm)	1	1%
pm non-peak (12 pm - 3 pm)	13	19%
pm peak (3 pm -6 pm)	33	47%
pm non-peak (6 pm - 10 pm)	21	30%
Total	70	100%



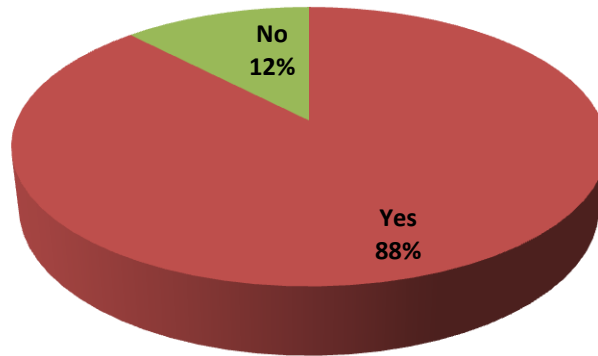
Question 10: Are there other times of the day you need to travel?					
Timeframe			Trip Purpose		
Timeframe: am peak	16	37%	Trip Purpose: Work	15	38%
Timeframe: pm peak	1	2%	Trip Purpose: School	15	38%
Timeframe: midday on weekdays	13	30%	Trip Purpose: Medical/Shopping	2	5%
Timeframe: evenings on weekdays	5	12%	Trip Purpose: Personal Business	3	8%
Timeframe: Saturday	3	7%	Trip Purpose:	2	5%

daytime			Social/Recreation		
Timeframe: Saturday evening	0	0%	Trip Purpose: Other	2	5%
Timeframe: Sunday/holiday daytime	3	7%			
Timeframe: Sunday/holiday evening	2	5%			
Total	43	100%	Total	39	100%



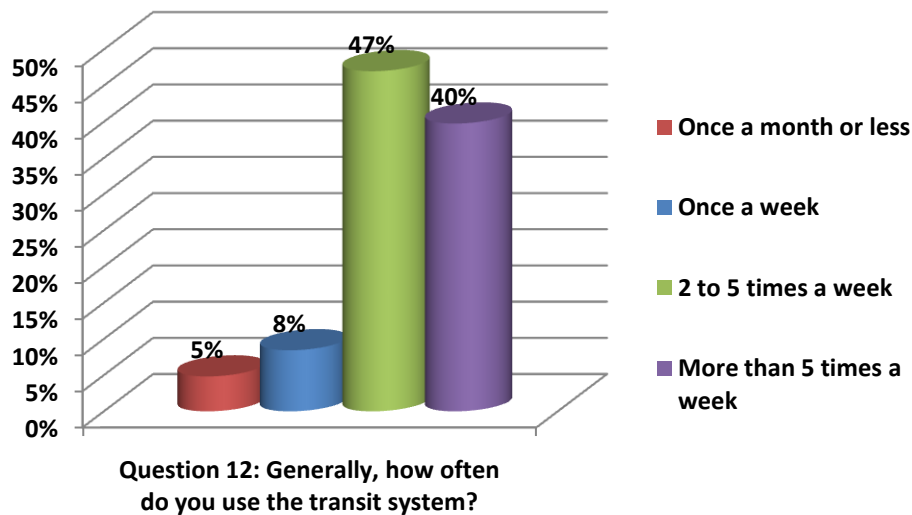
Question 11: Is this a regular commute trip for work, school, or medical treatment?		
Yes	72	88%
No	10	12%
Total	82	100%

Question 11: Is this a regular commute trip for work, school, or medical treatment?



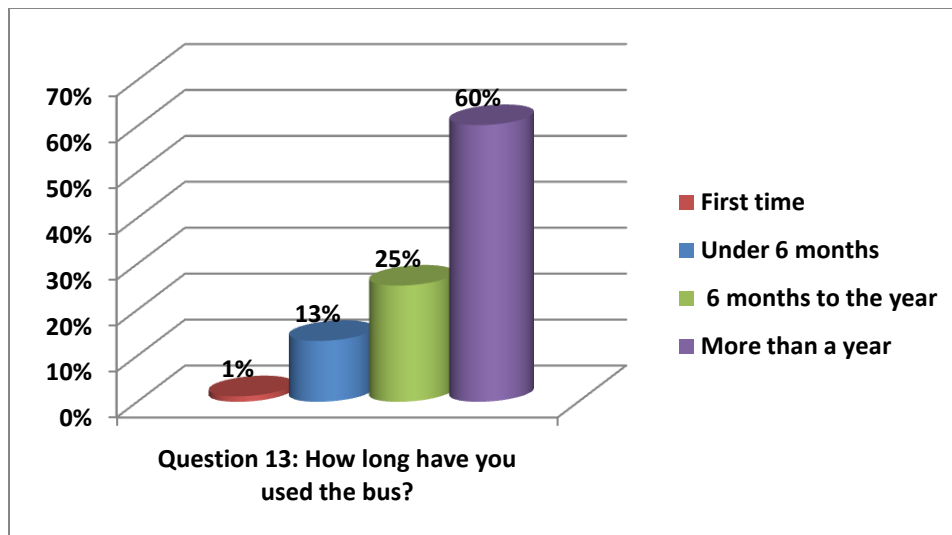
Question 12: Generally, how often do you use the transit system?

Once a month or less	4	5%
Once a week	7	8%
2 to 5 times a week	39	47%
More than 5 times a week	33	40%
Total	83	100%

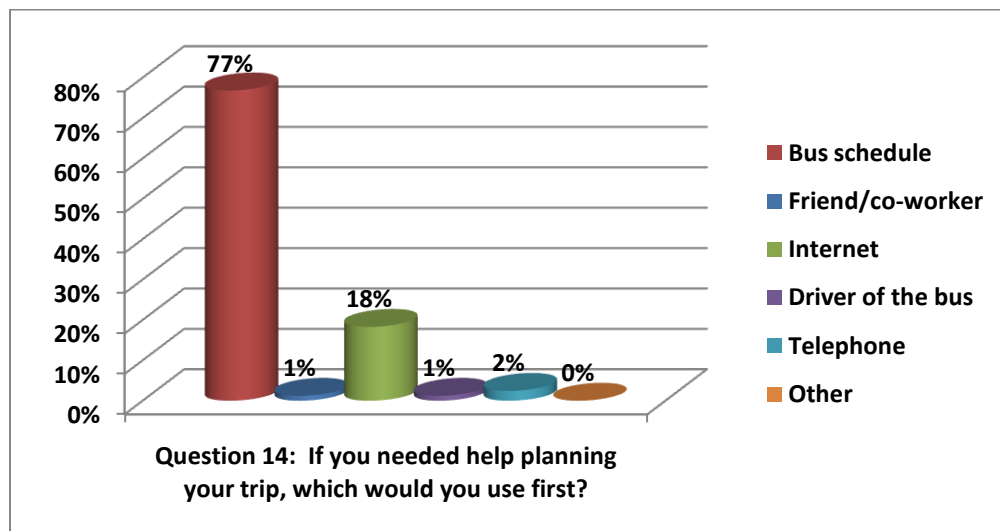


Question 13: How long have you used the bus?

First time	1	1%
Under 6 months	11	13%
6 months to the year	21	25%
More than a year	50	60%
Total	83	100%

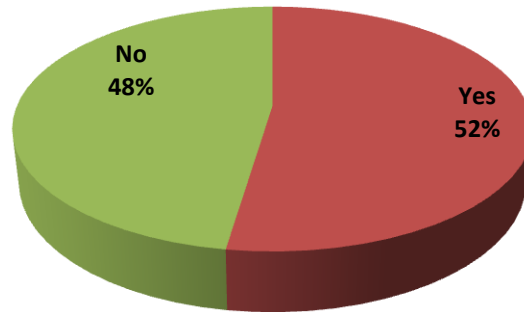


Question 14: If you needed help planning your trip, which would you use first?		
Bus schedule	63	77%
Friend/co-worker	1	1%
Internet	15	18%
Driver of the bus	1	1%
Telephone	2	2%
Other	0	0%
Total	82	100%



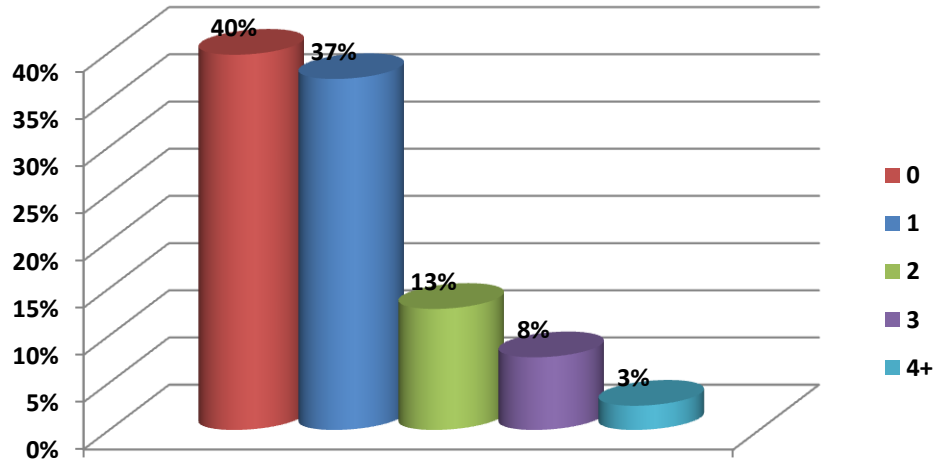
Question 15: Do you have a driver's license?		
Yes	44	52%
No	40	48%
Total	84	100%

Question 15: Do you have a driver's license?



Question 16: How many vehicles are owned by members of your immediate household?

0	31	40%
1	29	37%
2	10	13%
3	6	8%
4+	2	3%
Total	78	100%

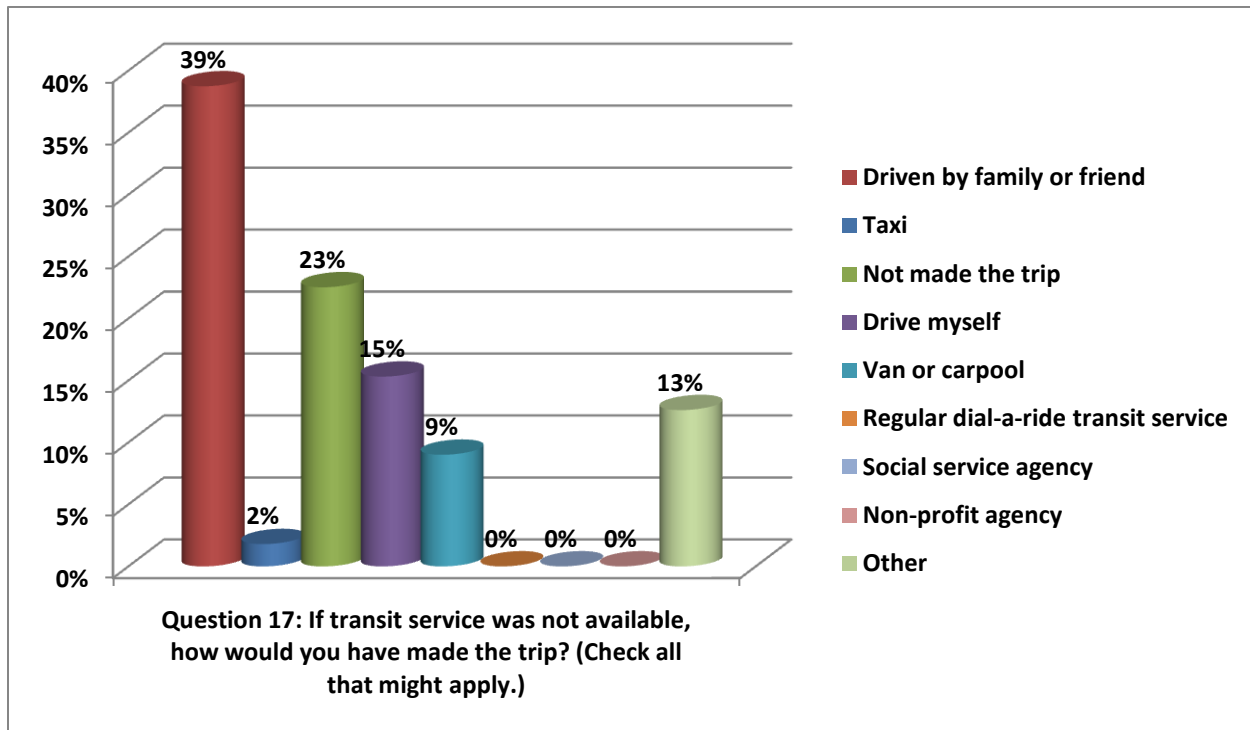


Question 16: How many vehicles are owned by members of your immediate household?

Question 17: If transit service was not available, how would you have made the trip? (Check all that might apply.)

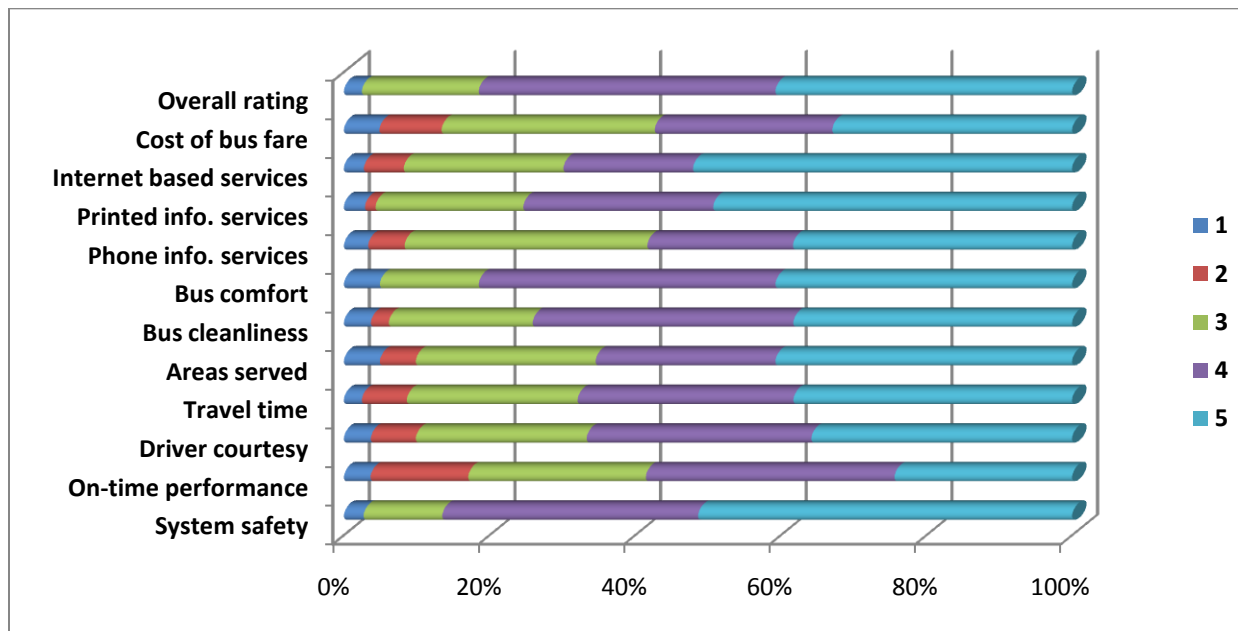
Driven by family or friend	43	39%
Taxi	2	2%
Not made the trip	25	23%
Drive myself	17	15%
Van or carpool	10	9%
Regular dial-a-ride transit service	0	0%

Social service agency	0	0%
Non-profit agency	0	0%
Other	14	13%
Total	111	100%

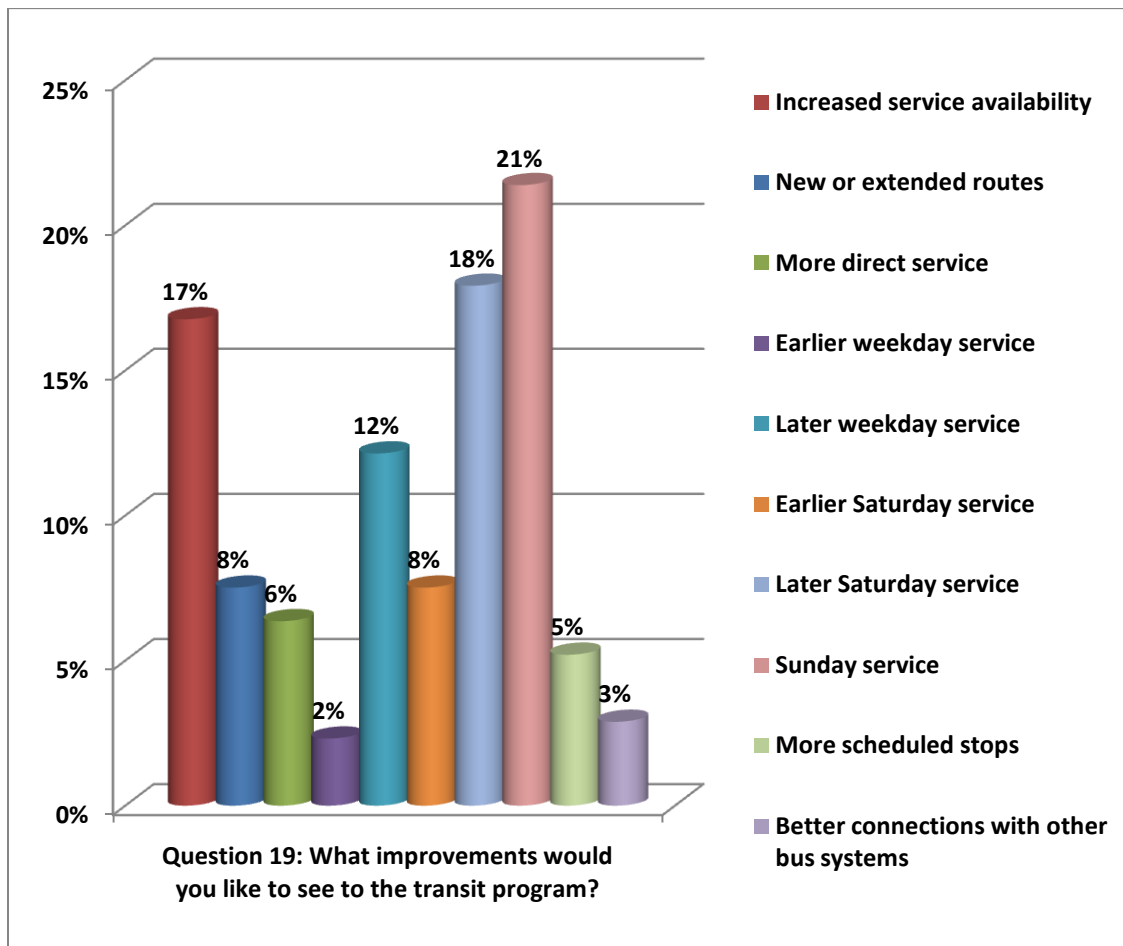


Question 18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest.

	System safety	On-time performance	Driver courtesy	Travel time	Areas served	Bus cleanliness	Bus comfort	Phone info. services	Printed info. services	Internet based services	Cost of bus fare	Overall rating
1	2	3	3	2	4	3	4	2	2	2	4	2
2	0	11	5	5	4	2	0	3	1	4	7	0
3	8	20	19	19	20	16	11	20	14	16	24	13
4	26	28	25	24	20	29	33	12	18	13	20	33
5	38	20	29	31	33	31	33	23	34	38	27	33
Total	74	82	81	81	81	81	81	60	69	73	82	81

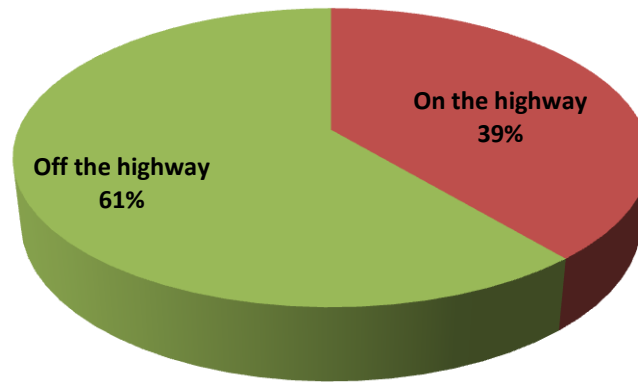


Question 19: What improvements would you like to see to the transit program?		
Increased service availability	29	17%
New or extended routes	13	8%
More direct service	11	6%
Earlier weekday service	4	2%
Later weekday service	21	12%
Earlier Saturday service	13	8%
Later Saturday service	31	18%
Sunday service	37	21%
More scheduled stops	9	5%
Better connections with other bus systems	5	3%
Total	173	100%



Question 20: If you ride the bus in Manila, would you rather have the bus stops located on or off Highway 255 (New Navy Base Road)?		
On the highway	14	39%
Off the highway	22	61%
Total	36	100%

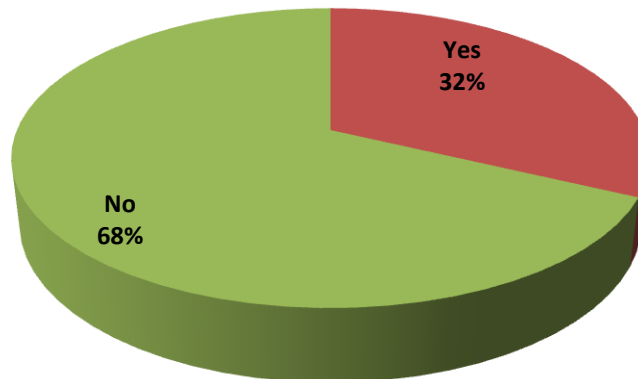
Question 20: If you ride the bus in Manila, would you rather have the bus stops located on or off Highway 255 (New Navy Base Road)?



Question 21: Are you affiliated with Humboldt State's Universal "Jack Pass" System?

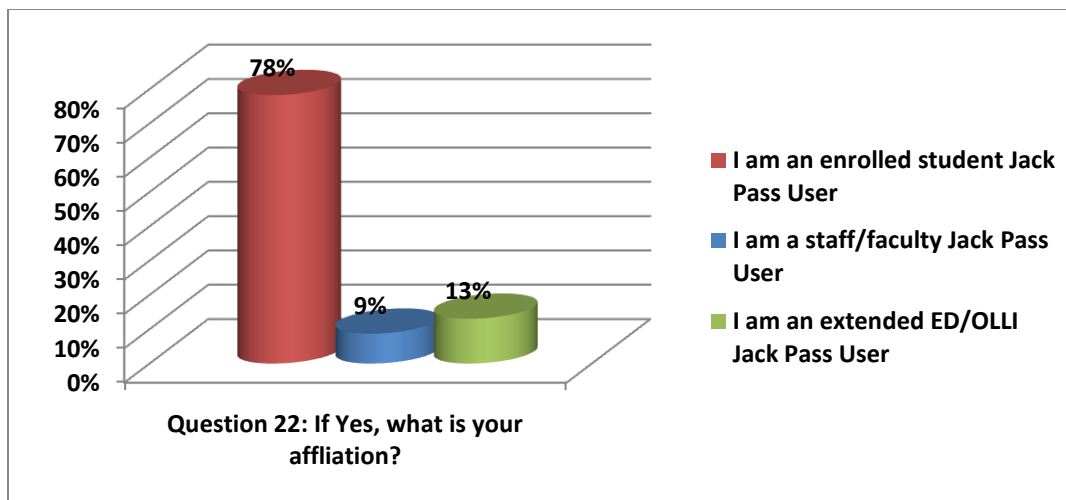
Yes	25	32%
No	53	68%
Total	78	100%

Question 21: Are you affiliated with Humboldt State's Universal "Jack Pass" System?

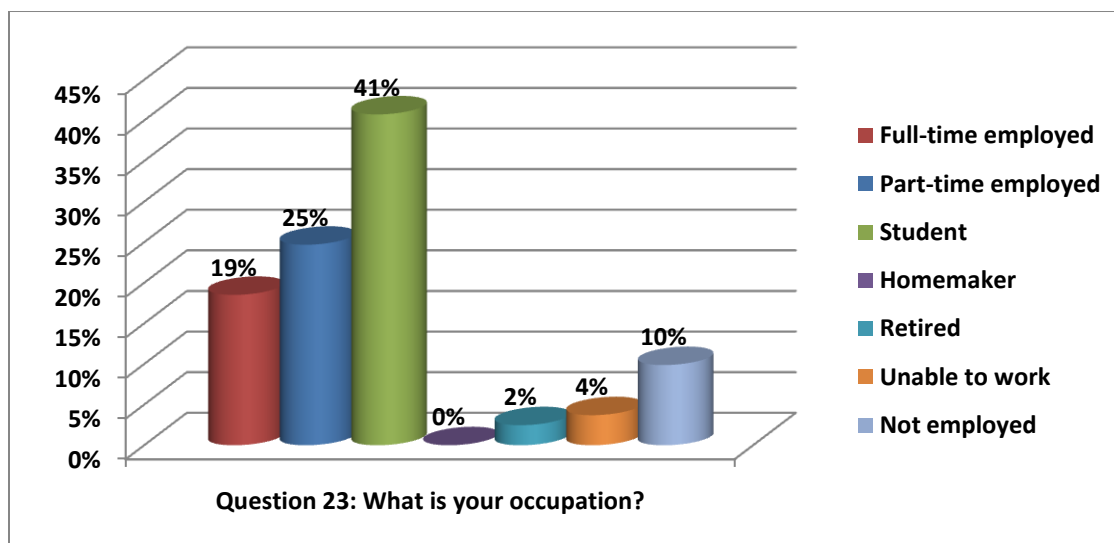


Question 22: If Yes, what is your affiliation?

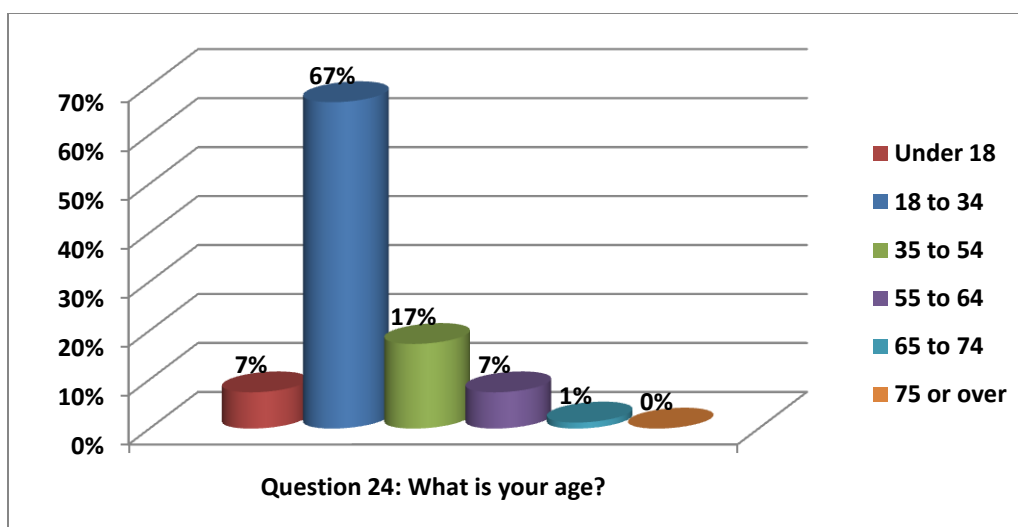
I am an enrolled student Jack Pass User	18	78%
I am a staff/faculty Jack Pass User	2	9%
I am an extended ED/OLLI Jack Pass User	3	13%
Total	23	100%



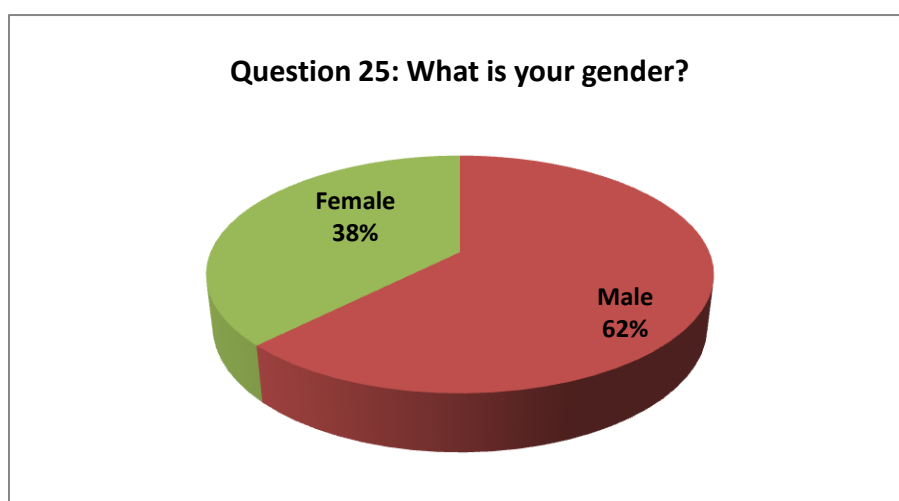
Question 23: What is your occupation?		
Full-time employed	15	19%
Part-time employed	20	25%
Student	33	41%
Homemaker	0	0%
Retired	2	2%
Unable to work	3	4%
Not employed	8	10%
Total	81	100%



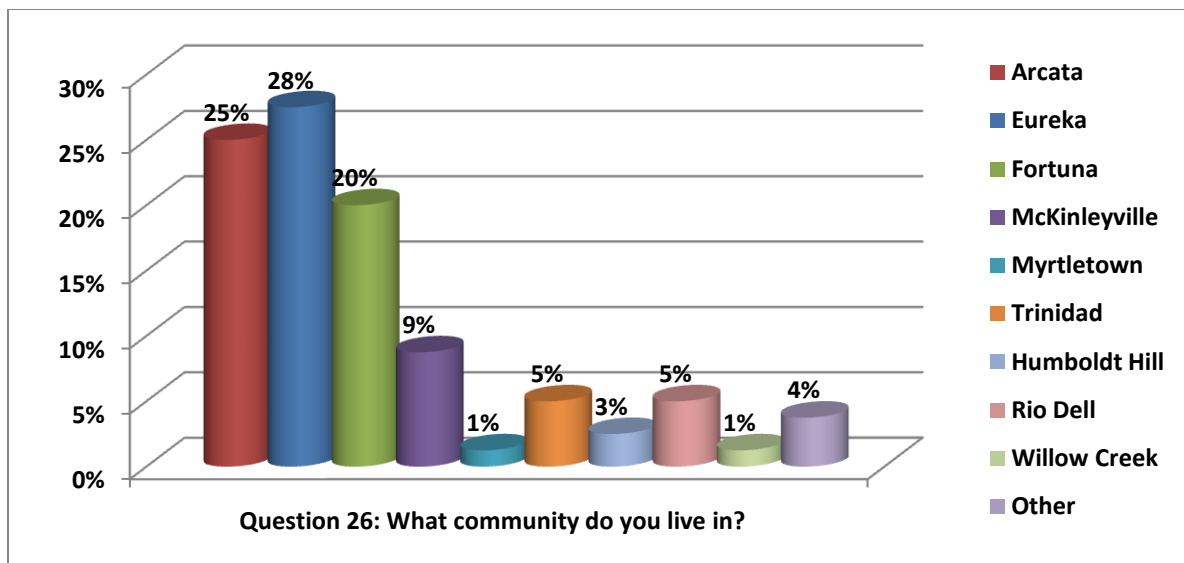
Question 24: What is your age?		
Under 18	6	7%
18 to 34	54	67%
35 to 54	14	17%
55 to 64	6	7%
65 to 74	1	1%
75 or over	0	0%
Total	81	100%



Question 25: What is your gender?		
Male	50	62%
Female	30	38%
Total	80	100%

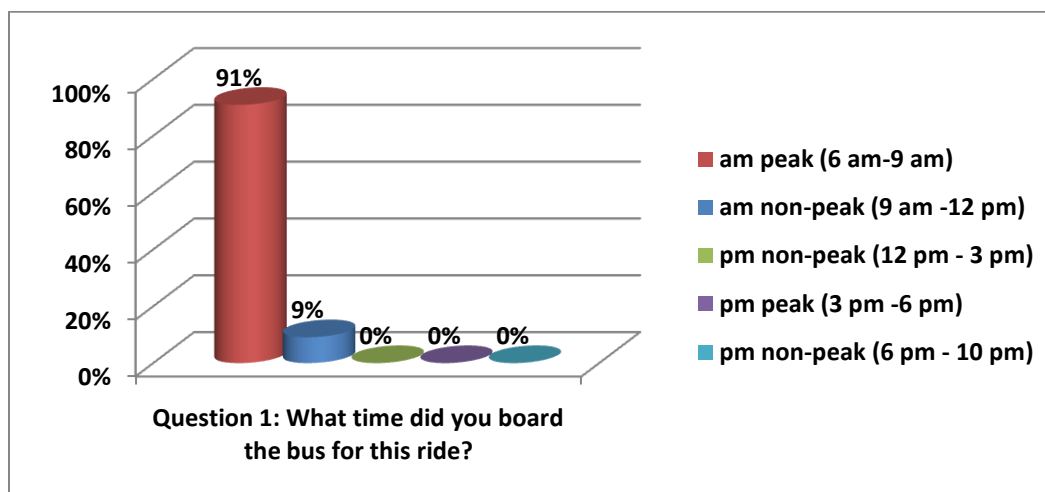


Question 26: What community do you live in?		
Arcata	20	25%
Eureka	22	28%
Fortuna	16	20%
McKinleyville	7	9%
Myrtletown	1	1%
Trinidad	4	5%
Humboldt Hill	2	3%
Rio Dell	4	5%
Willow Creek	1	1%
Other	3	4%
Total	80	100%

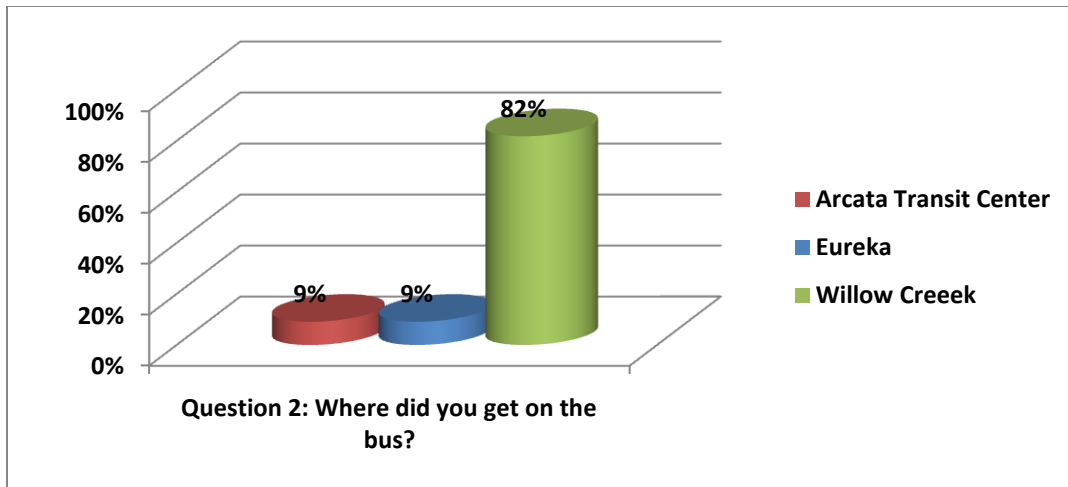


C.3 Redwood Transit System Willow Creek Service Survey

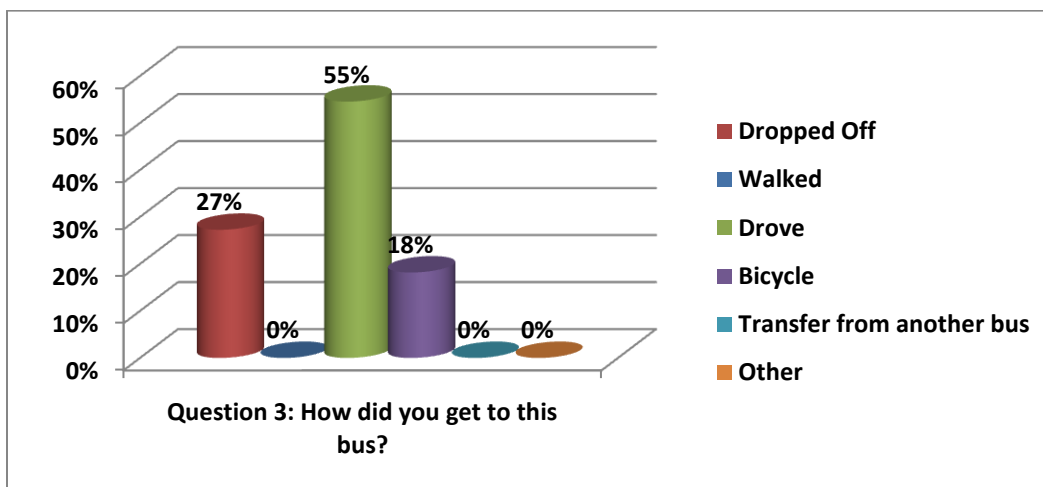
Question 1: What time did you board the bus for this ride?		
am peak (6 am-9 am)	10	91%
am non-peak (9 am -12 pm)	1	9%
pm non-peak (12 pm - 3 pm)	0	0%
pm peak (3 pm -6 pm)	0	0%
pm non-peak (6 pm - 10 pm)	0	0%
Total	11	100%



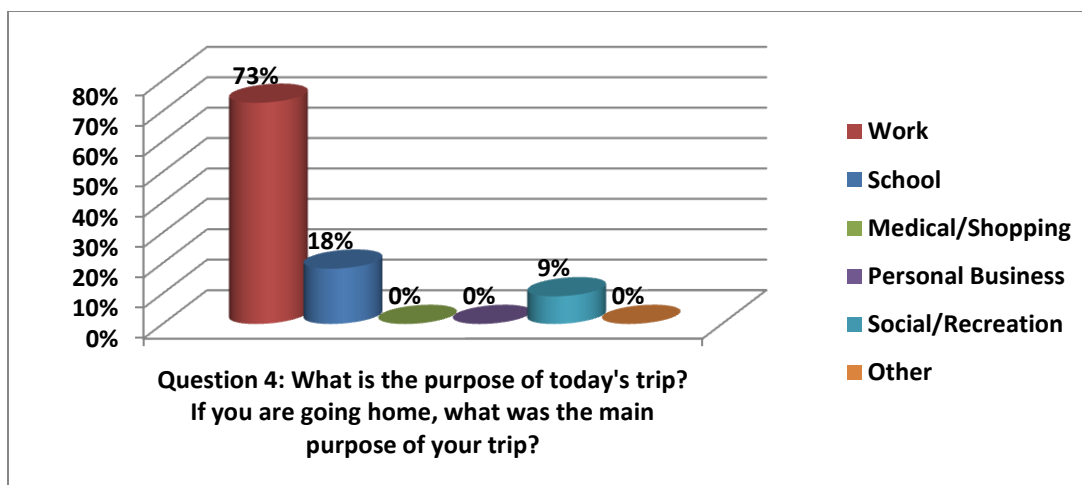
Question 2: Where did you get on the bus?		
Arcata Transit Center	1	9%
Eureka	1	9%
Willow Creek	9	82%
Total	11	100%



Question 3: How did you get to this bus?		
Dropped Off	3	27%
Walked	0	0%
Drove	6	55%
Bicycle	2	18%
Transfer from another bus	0	0%
Other	0	0%
Total	11	100%

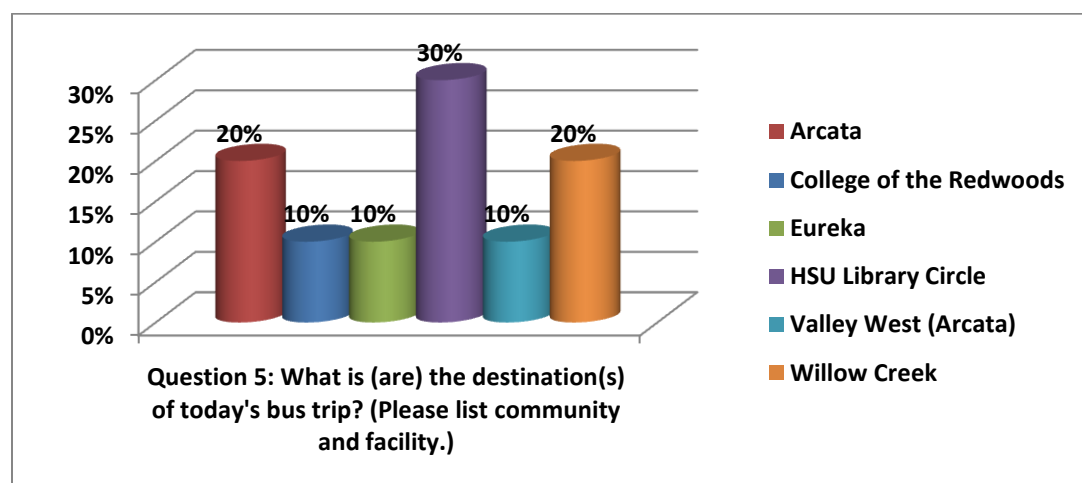


Question 4: What is the purpose of today's trip? If you are going home, what was the main purpose of your trip?		
Work	8	73%
School	2	18%
Medical/Shopping	0	0%
Personal Business	0	0%
Social/Recreation	1	9%
Other	0	0%
Total	11	100%



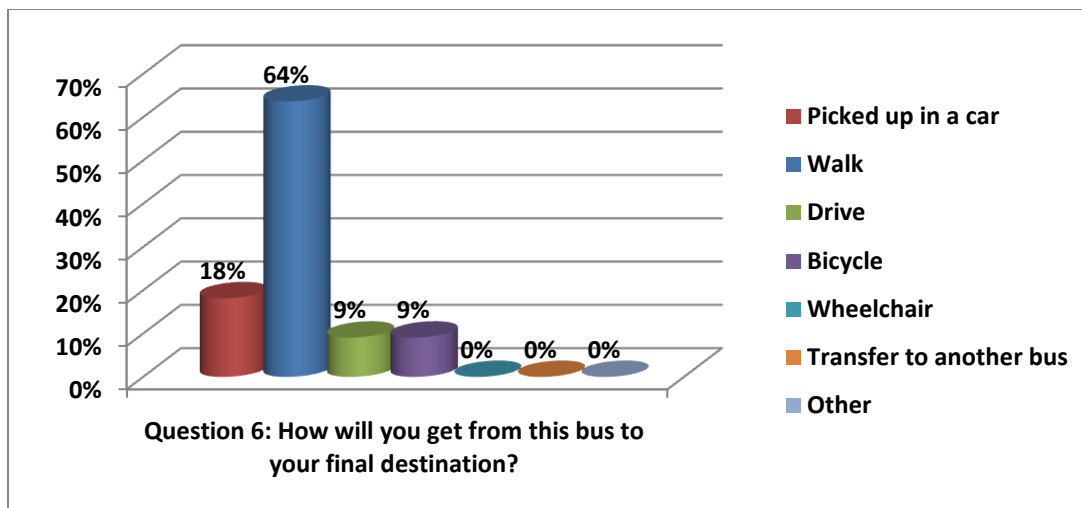
Question 5: What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

Arcata	2	20%
College of the Redwoods	1	10%
Eureka	1	10%
HSU Library Circle	3	30%
Valley West (Arcata)	1	10%
Willow Creek	2	20%
Total	10	100%



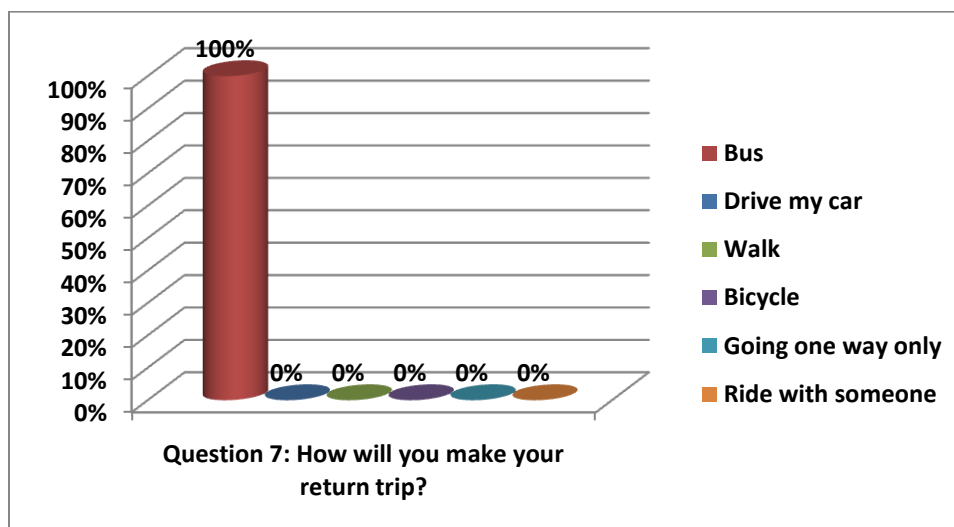
Question 6: How will you get from this bus to your final destination?

Picked up in a car	2	18%
Walk	7	64%
Drive	1	9%
Bicycle	1	9%
Wheelchair	0	0%
Transfer to another bus	0	0%
Other	0	0%
Total	11	100%



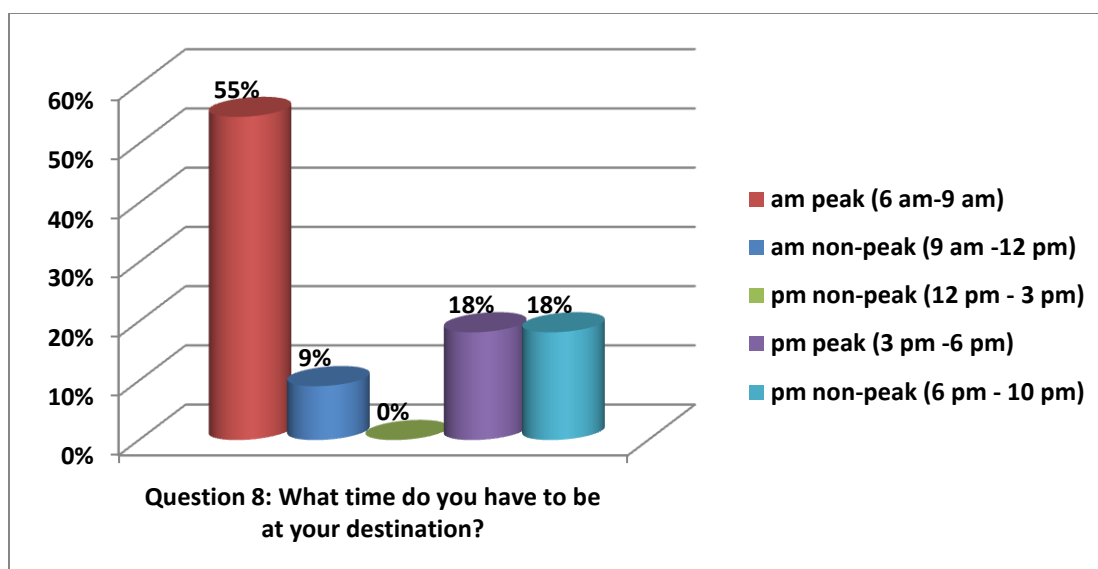
Question 7: How will you make your return trip?

Bus	11	100%
Drive my car	0	0%
Walk	0	0%
Bicycle	0	0%
Going one way only	0	0%
Ride with someone	0	0%
Total	11	100%

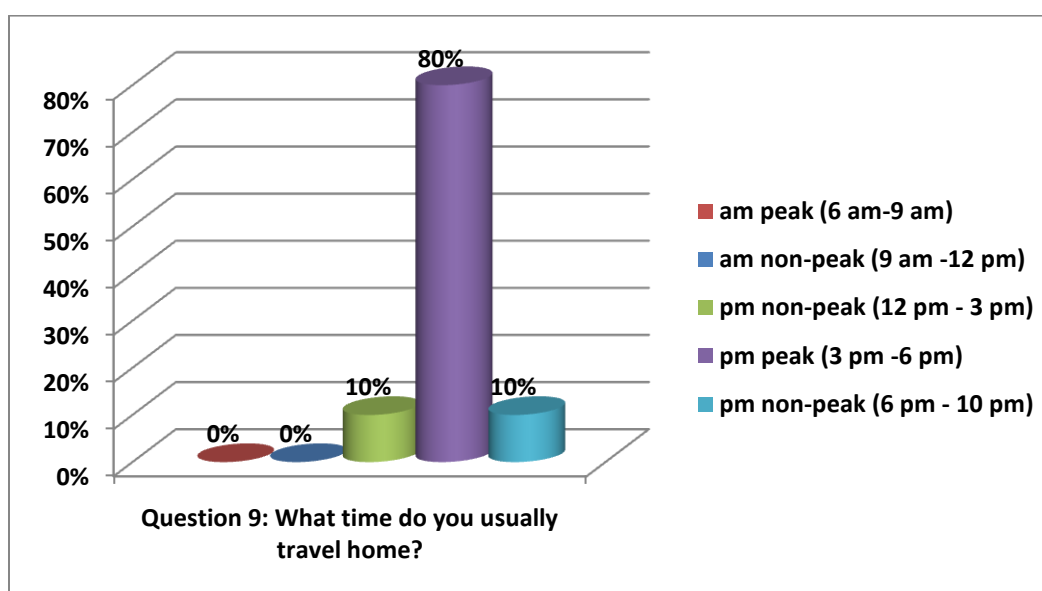


Question 8: What time do you have to be at your destination?

am peak (6 am-9 am)	6	55%
am non-peak (9 am -12 pm)	1	9%
pm non-peak (12 pm - 3 pm)	0	0%
pm peak (3 pm -6 pm)	2	18%
pm non-peak (6 pm - 10 pm)	2	18%
Total	11	100%



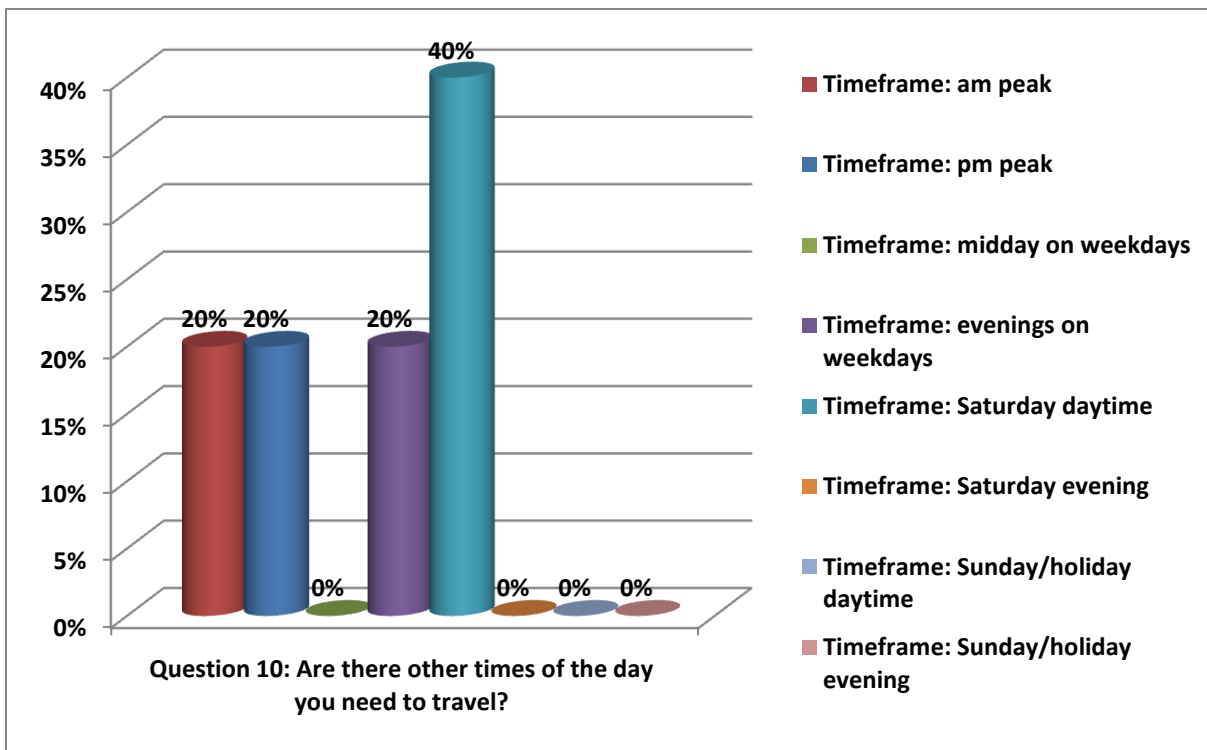
Question 9: What time do you usually travel home?		
am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	0	0%
pm non-peak (12 pm - 3 pm)	1	10%
pm peak (3 pm -6 pm)	8	80%
pm non-peak (6 pm - 10 pm)	1	10%
Total	10	100%

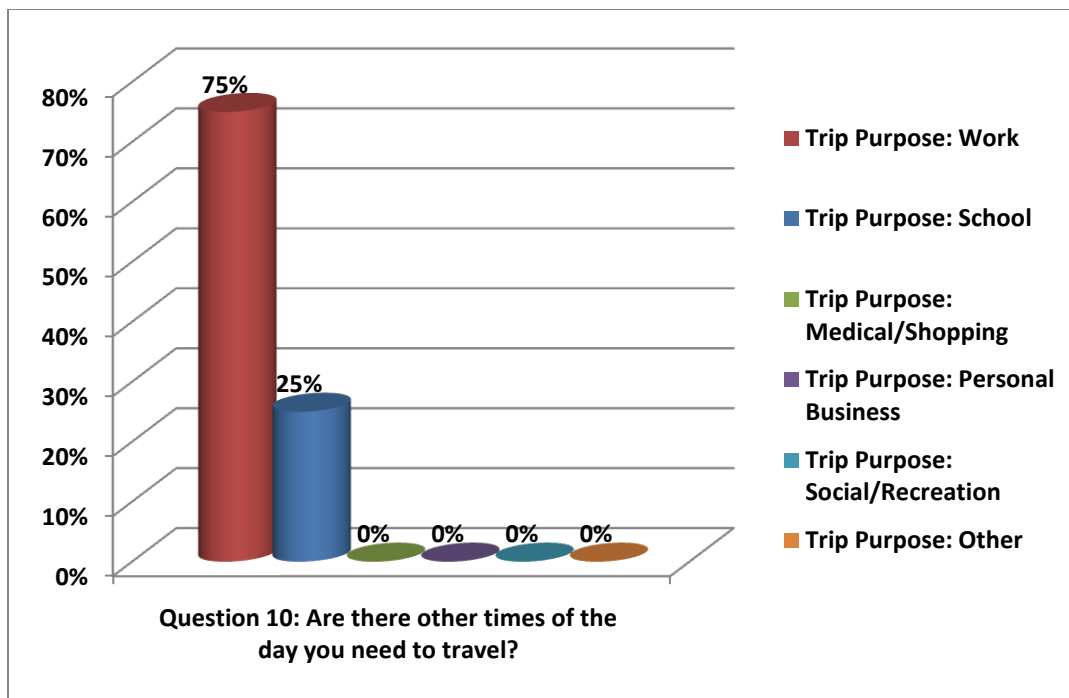


Question 10: Are there other times of the day you need to travel?					
Timeframe			Trip Purpose		
Timeframe: am peak	1	20%	Trip Purpose: Work	3	75%
Timeframe: pm peak	1	20%	Trip Purpose: School	1	25%
Timeframe: midday on weekdays	0	0%	Trip Purpose: Medical/Shopping	0	0%
Timeframe:	1	20%	Trip Purpose: Personal	0	0%

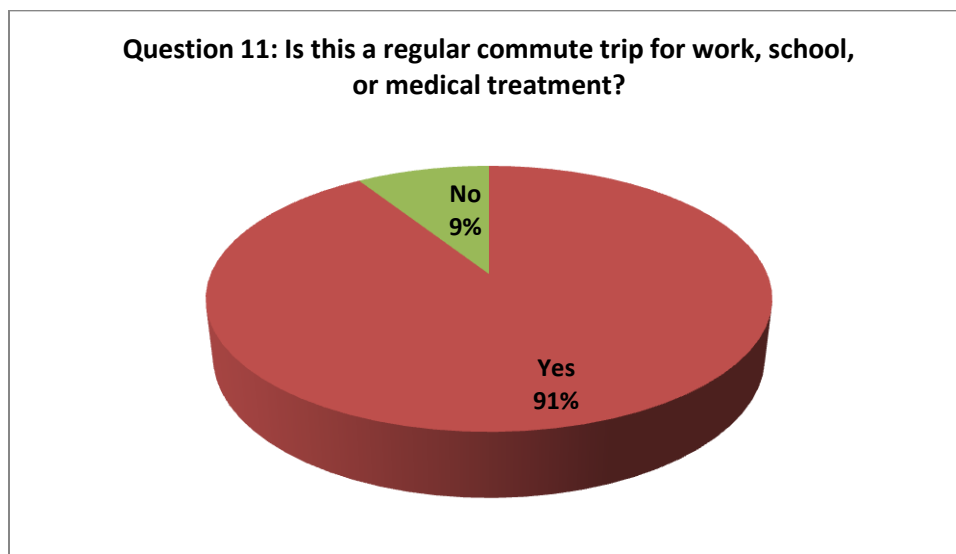
Question 10: Are there other times of the day you need to travel?

Timeframe			Trip Purpose		
evenings on weekdays			Business		
Timeframe: Saturday daytime	2	40%	Trip Purpose: Social/Recreation	0	0%
Timeframe: Saturday evening	0	0%	Trip Purpose: Other	0	0%
Timeframe: Sunday/holiday daytime	0	0%			
Timeframe: Sunday/holiday evening	0	0%			
Total	5	100%	Total	4	100%

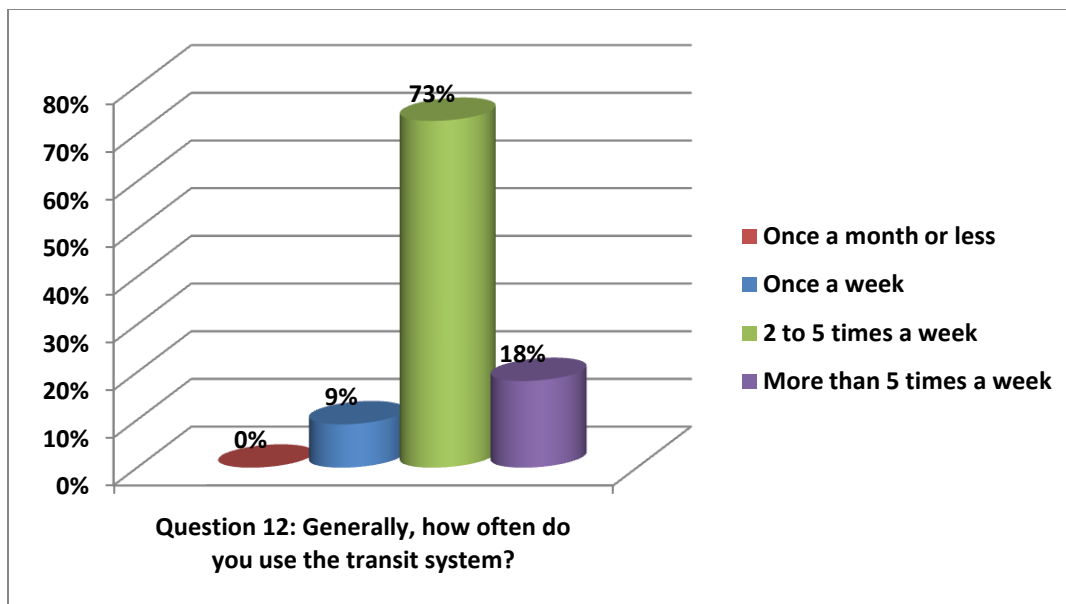




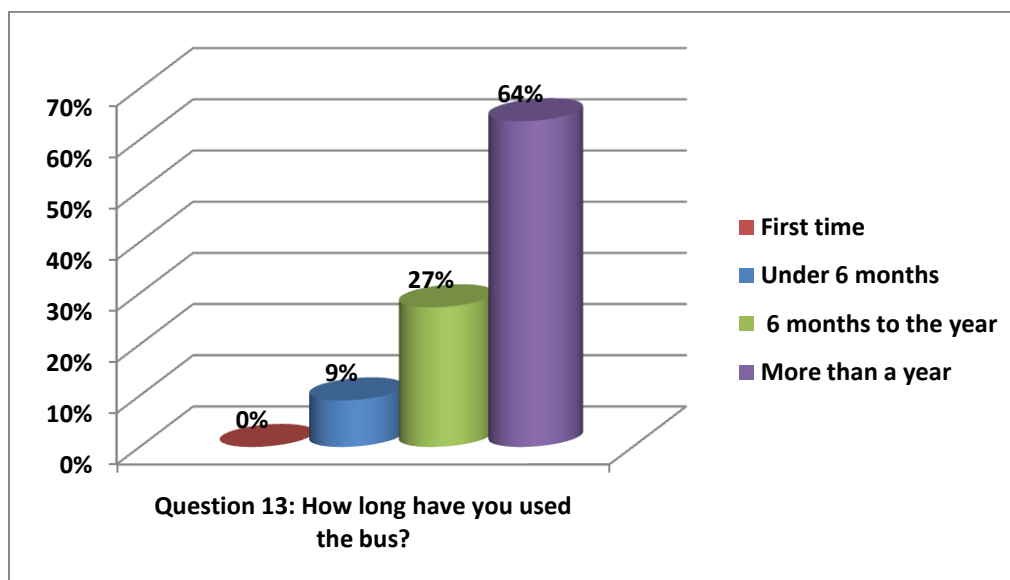
Question 11: Is this a regular commute trip for work, school, or medical treatment?		
Yes	10	91%
No	1	9%
Total	11	100%



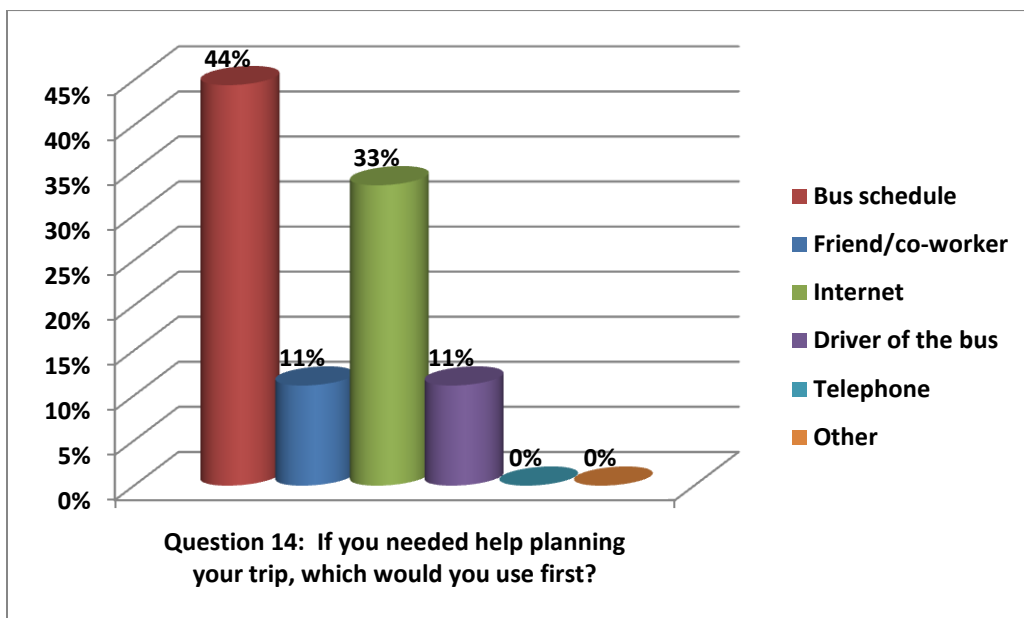
Question 12: Generally, how often do you use the transit system?		
Once a month or less	0	0%
Once a week	1	9%
2 to 5 times a week	8	73%
More than 5 times a week	2	18%
Total	11	100%



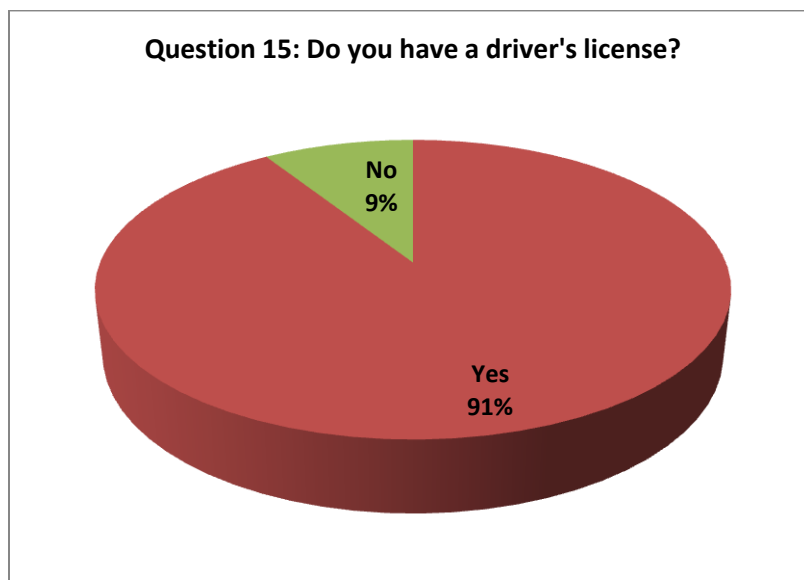
Question 13: How long have you used the bus?		
First time	0	0%
Under 6 months	1	9%
6 months to the year	3	27%
More than a year	7	64%
Total	11	100%



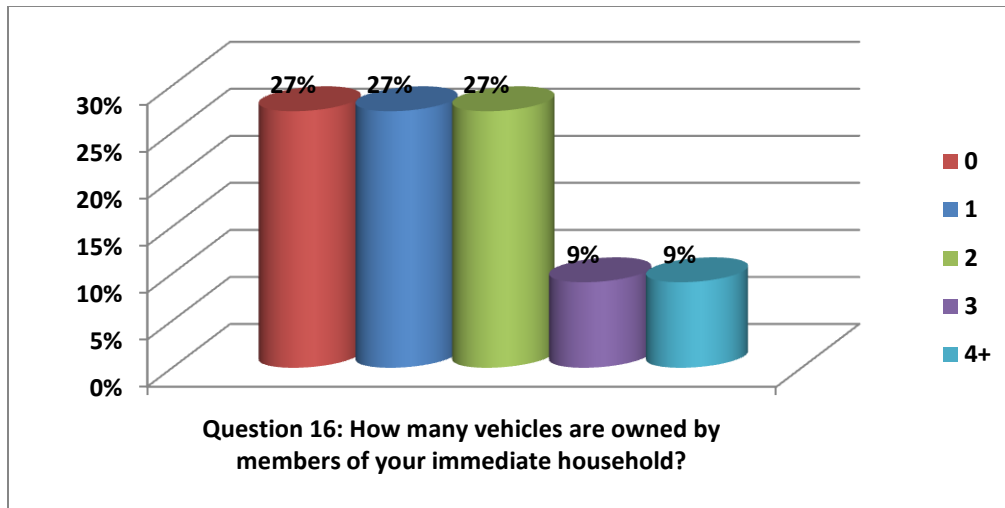
Question 14: If you needed help planning your trip, which would you use first?		
Bus schedule	4	44%
Friend/co-worker	1	11%
Internet	3	33%
Driver of the bus	1	11%
Telephone	0	0%
Other	0	0%
Total	9	100%



Question 15: Do you have a driver's license?		
Yes	10	91%
No	1	9%
Total	11	100%

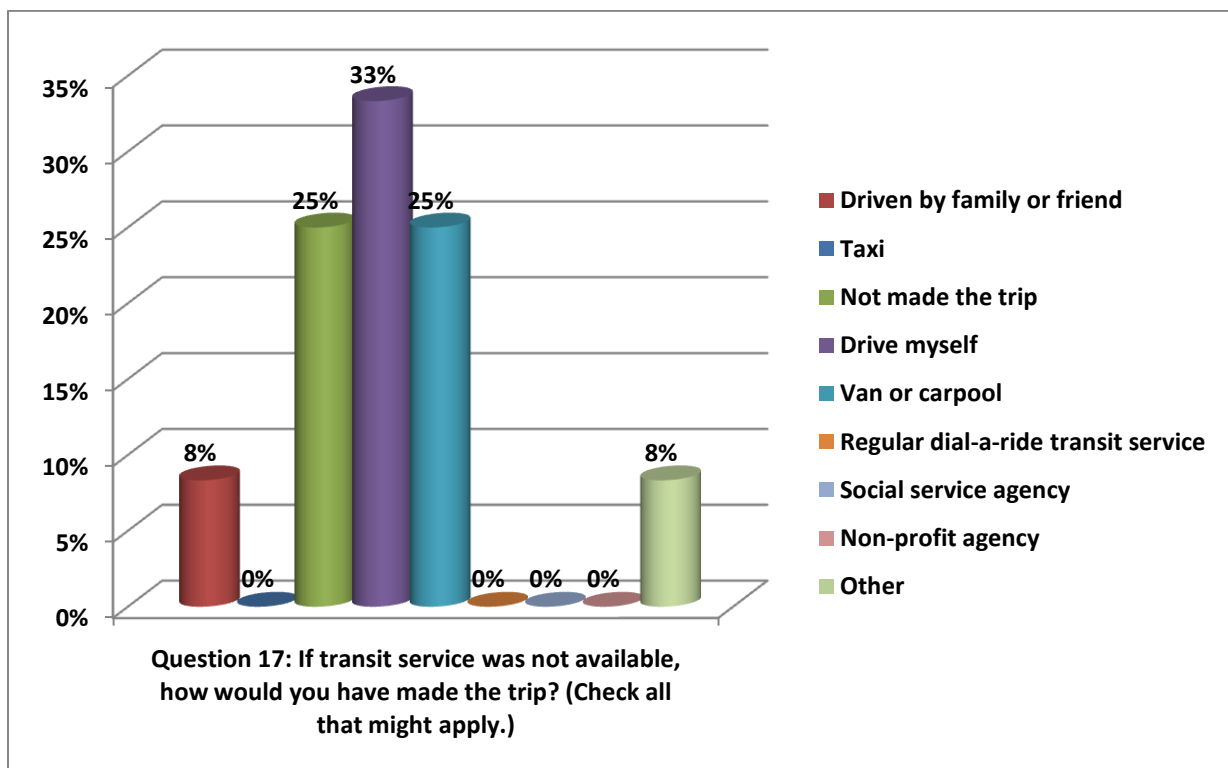


Question 16: How many vehicles are owned by members of your immediate household?		
0	3	27%
1	3	27%
2	3	27%
3	1	9%
4+	1	9%
Total	11	100%



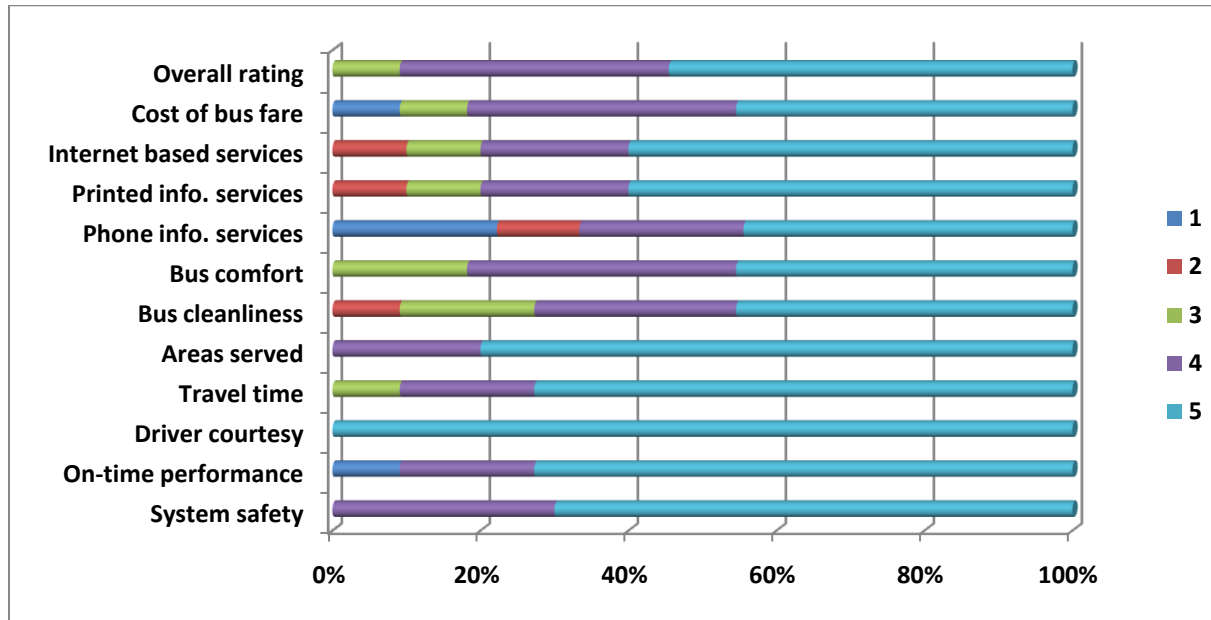
Question 17: If transit service was not available, how would you have made the trip? (Check all that might apply.)

Driven by family or friend	1	8%
Taxi	0	0%
Not made the trip	3	25%
Drive myself	4	33%
Van or carpool	3	25%
Regular dial-a-ride transit service	0	0%
Social service agency	0	0%
Non-profit agency	0	0%
Other	1	8%
Total	12	100%

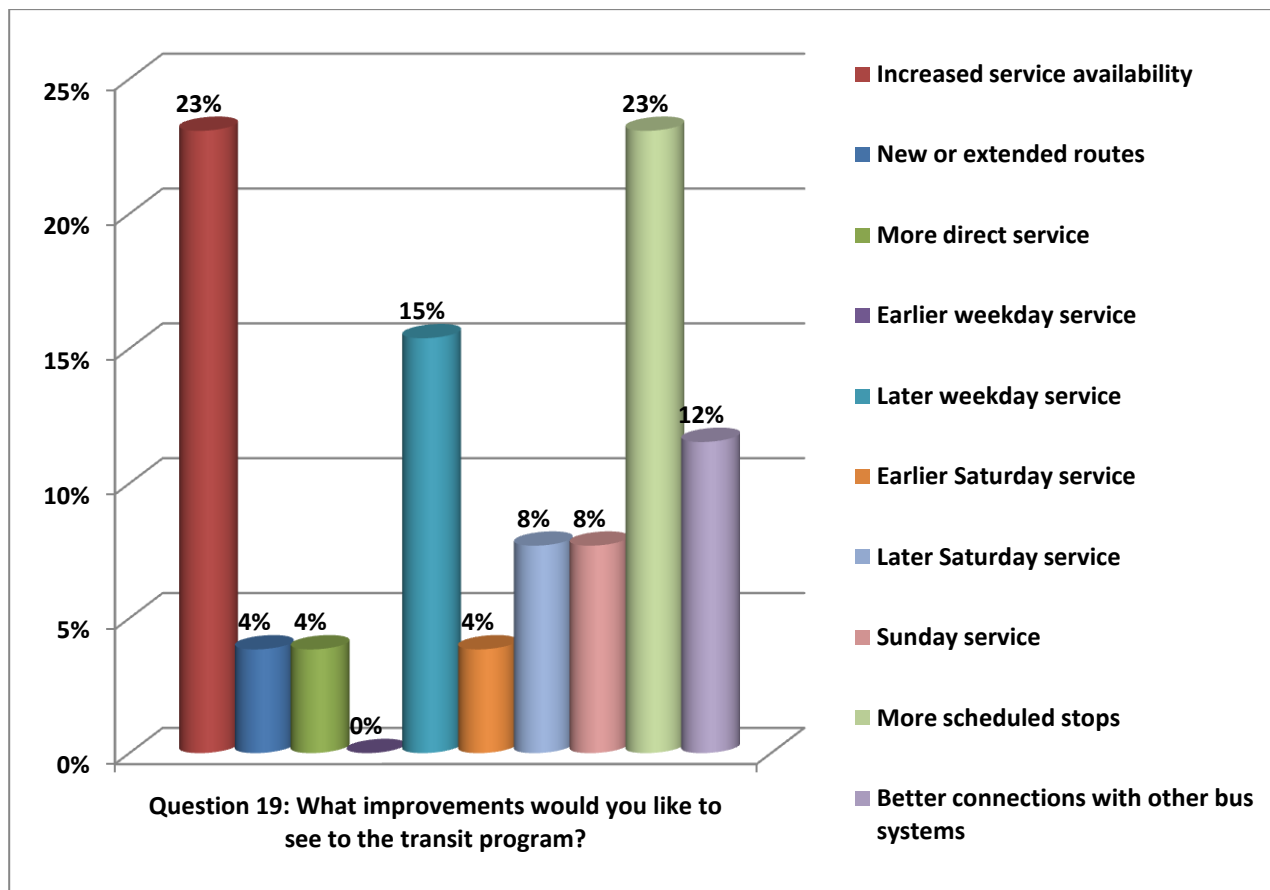


Question 18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest.

	System safety	On-time performance	Driver courtesy	Travel time	Areas served	Bus cleanliness	Bus comfort	Phone info. services	Printed info. services	Internet based services	Cost of bus fare	Overall rating
1	0	1	0	0	0	0	0	2	0	0	1	0
2	0	0	0	0	0	1	0	1	1	1	0	0
3	0	0	0	1	0	2	2	0	1	1	1	1
4	3	2	0	2	2	3	4	2	2	2	4	4
5	7	8	11	8	8	5	5	4	6	6	5	6
Total	10	11	11	11	10	11	11	9	10	10	11	11

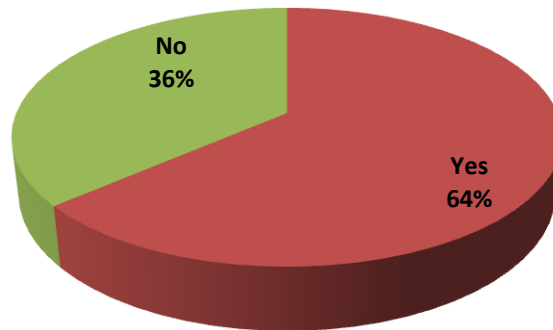


Question 19: What improvements would you like to see to the transit program?		
Increased service availability	6	23%
New or extended routes	1	4%
More direct service	1	4%
Earlier weekday service	0	0%
Later weekday service	4	15%
Earlier Saturday service	1	4%
Later Saturday service	2	8%
Sunday service	2	8%
More scheduled stops	6	23%
Better connections with other bus systems	3	12%
Total	26	100%



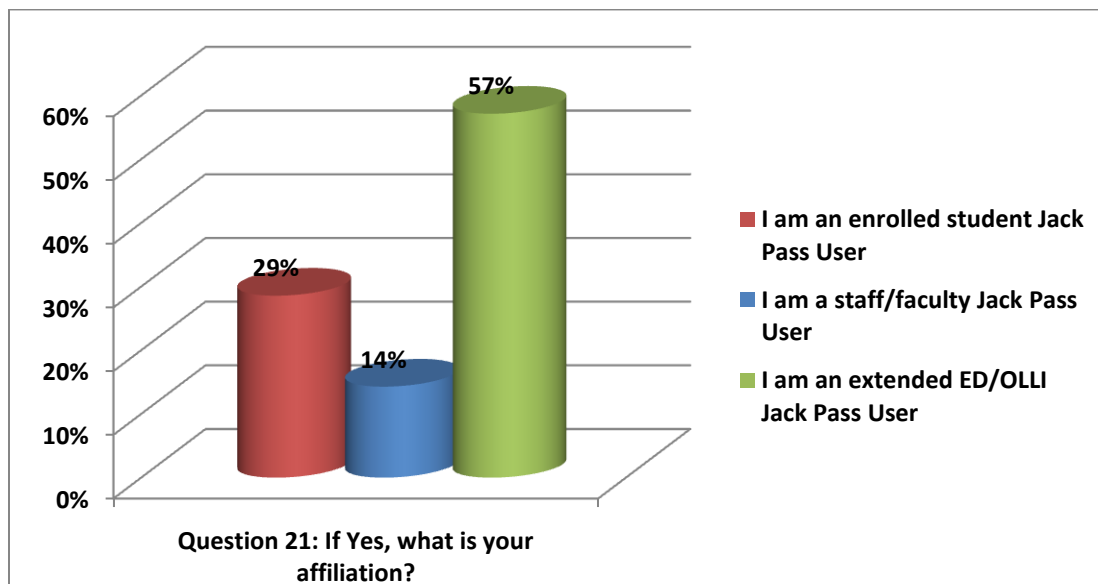
Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?		
Yes	7	64%
No	4	36%
Total	11	100%

Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?



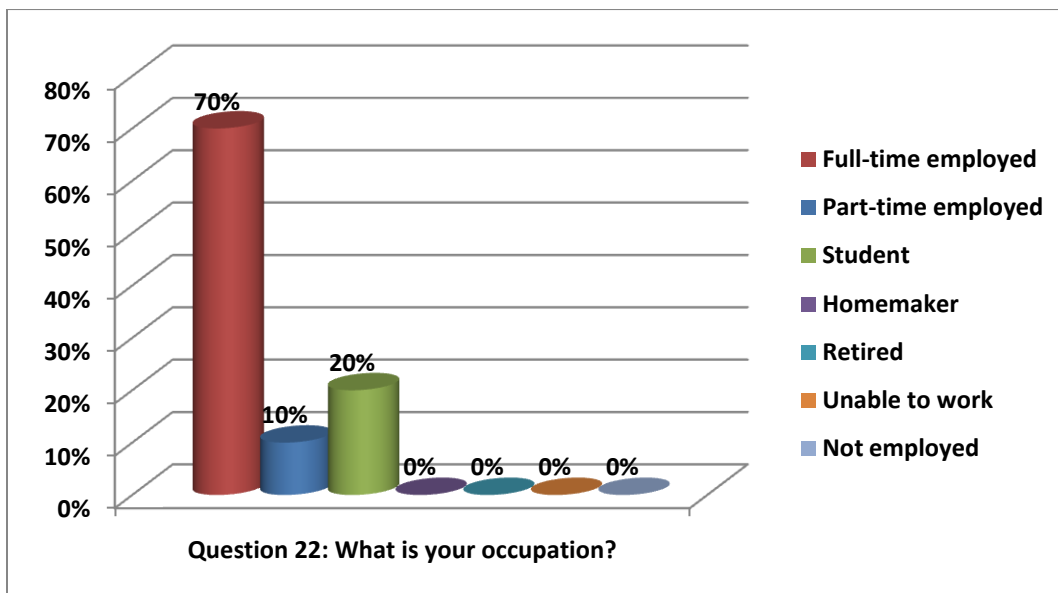
Question 21: If Yes, what is your affiliation?

I am an enrolled student Jack Pass User	2	29%
I am a staff/faculty Jack Pass User	1	14%
I am an extended ED/OLLI Jack Pass User	4	57%
Total	7	100%

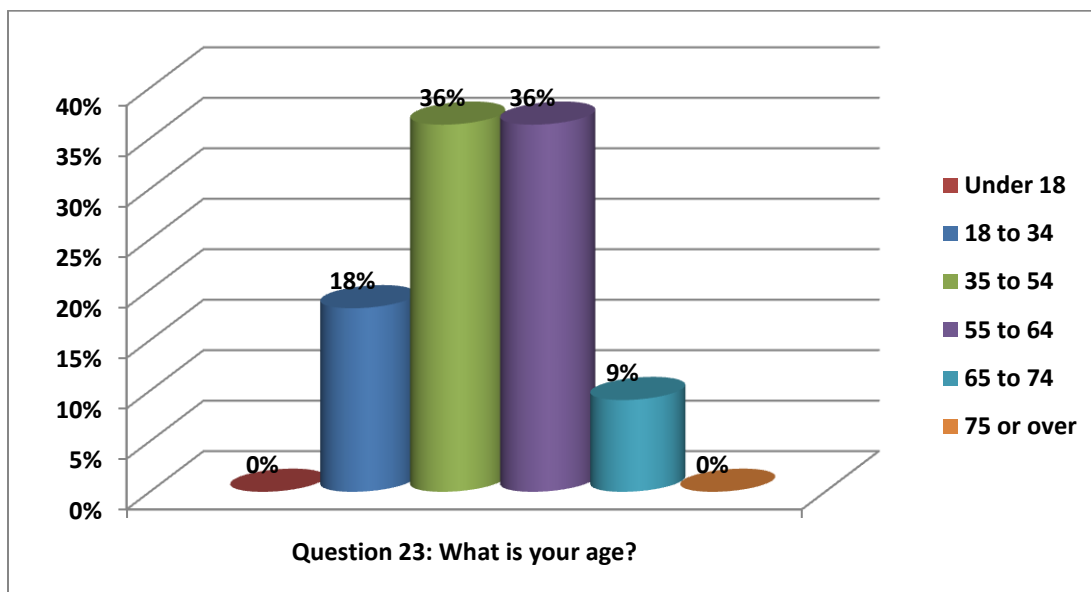


Question 22: What is your occupation?

Full-time employed	7	70%
Part-time employed	1	10%
Student	2	20%
Homemaker	0	0%
Retired	0	0%
Unable to work	0	0%
Not employed	0	0%
Total	10	100%

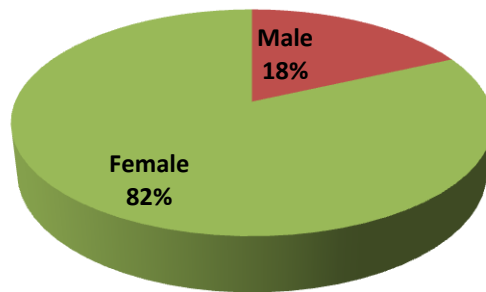


Question 23: What is your age?		
Under 18	0	0%
18 to 34	2	18%
35 to 54	4	36%
55 to 64	4	36%
65 to 74	1	9%
75 or over	0	0%
Total	11	100%



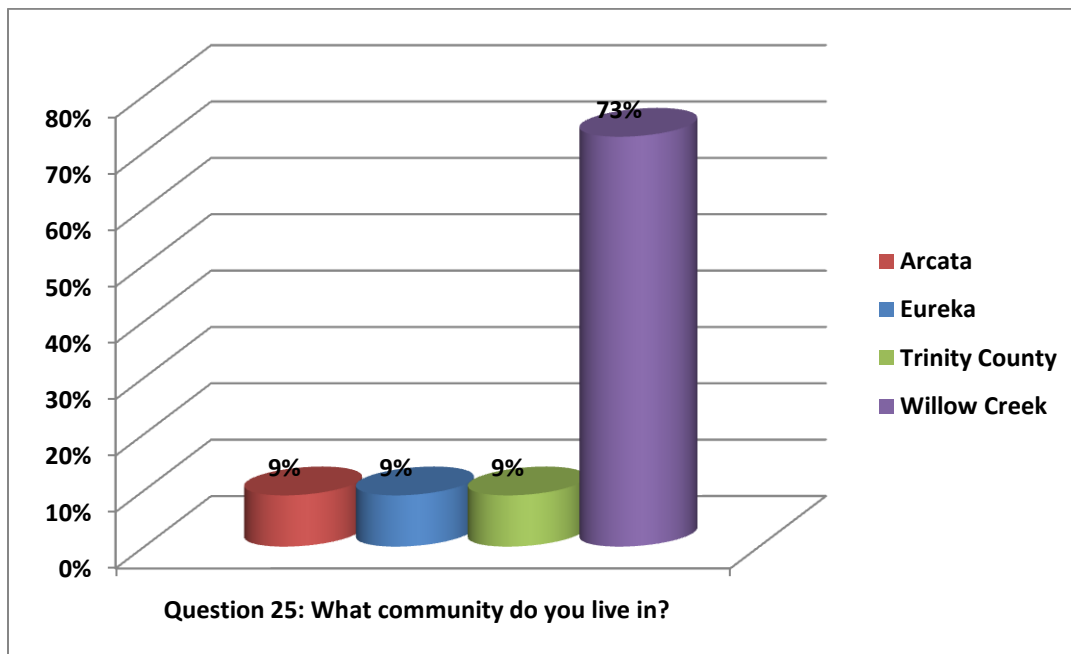
Question 24: What is your gender?		
Male	2	18%
Female	9	82%
Total	11	100%

Question 24: What is your gender?



Question 25: What community do you live in?

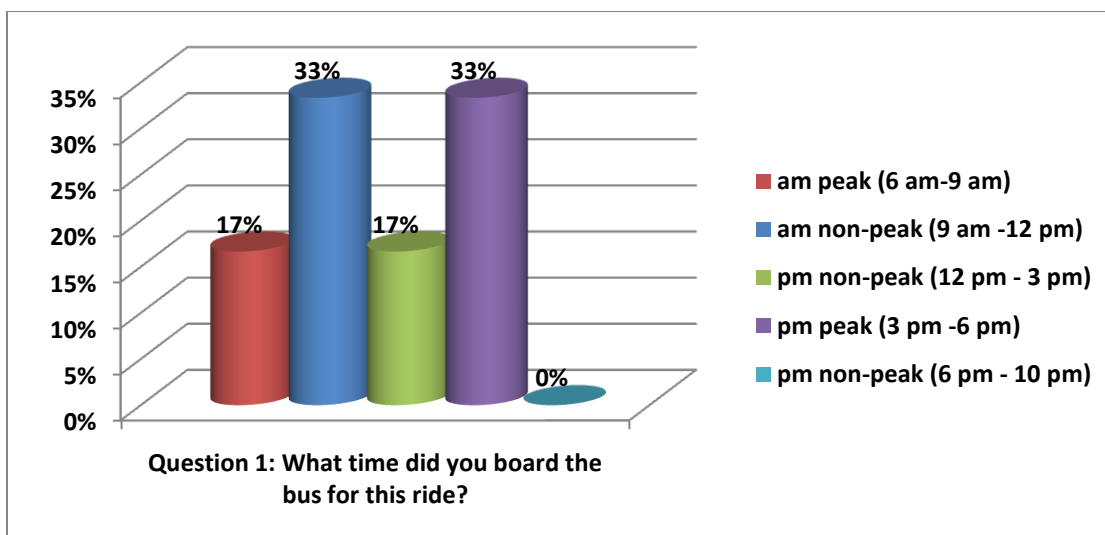
Arcata	1	9%
Eureka	1	9%
Trinity County	1	9%
Willow Creek	8	73%
Total	11	100%



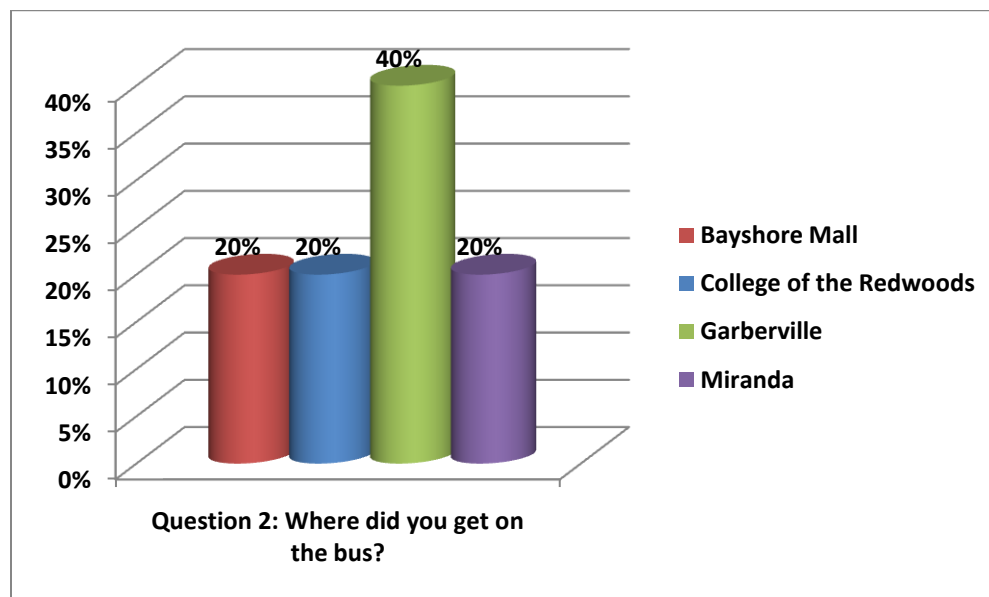
C.3 Redwood Transit System Southern Humboldt-Intercity Service Survey

Question 1: What time did you board the bus for this ride?

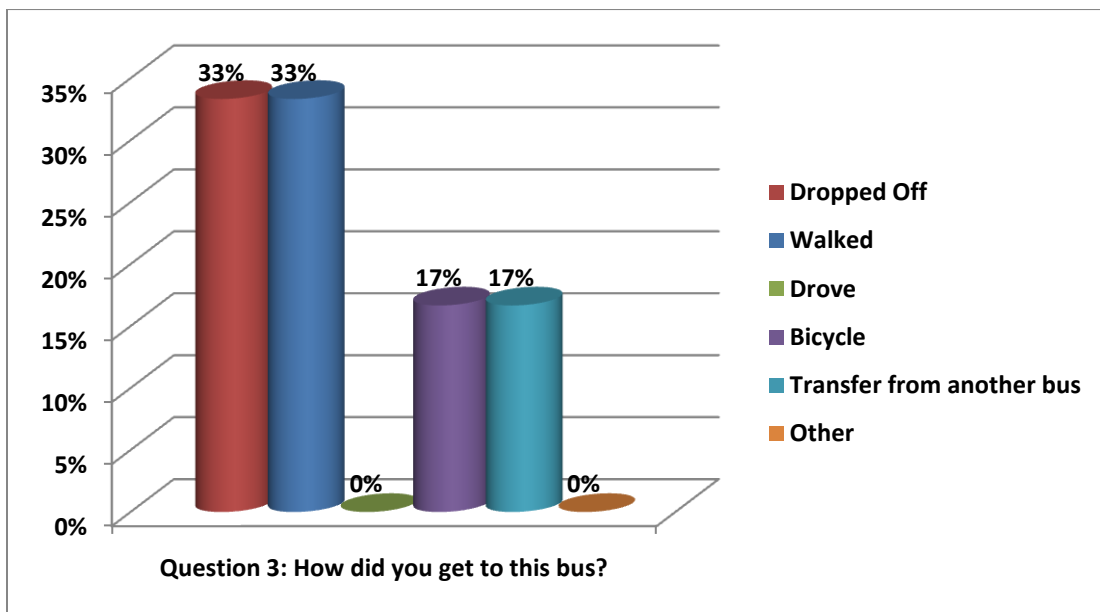
am peak (6 am - 9 am)	1	17%
am non-peak (9 am - 12 pm)	2	33%
pm non-peak (12 pm - 3 pm)	1	17%
pm peak (3 pm - 6 pm)	2	33%
pm non-peak (6 pm - 10 pm)	0	0%
Total	6	100%



Question 2: Where did you get on the bus?		
Bayshore Mall	1	20%
College of the Redwoods	1	20%
Garberville	2	40%
Miranda	1	20%
Total	5	100%

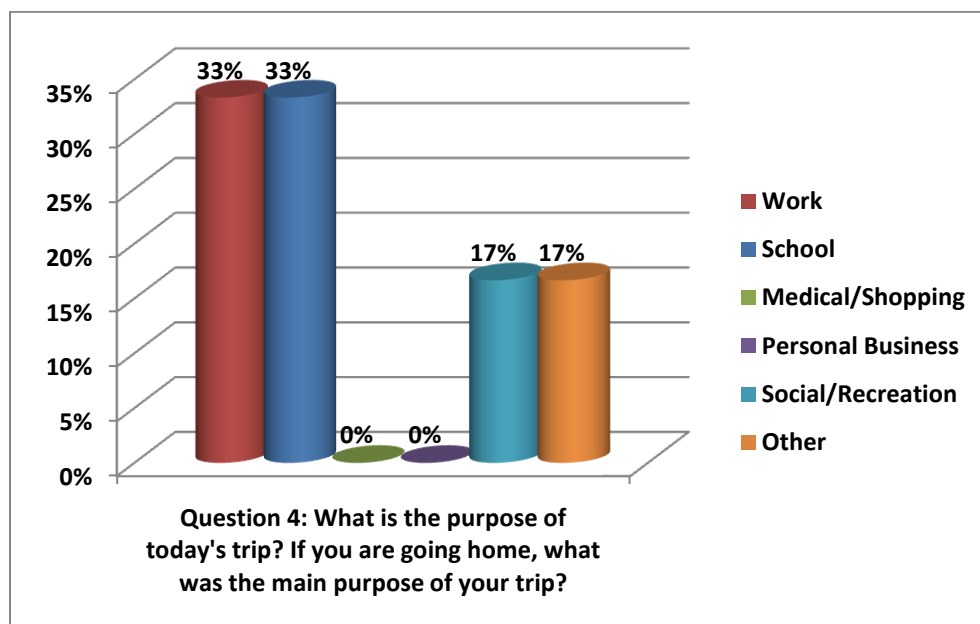


Question 3: How did you get to this bus?		
Dropped Off	2	33%
Walked	2	33%
Drove	0	0%
Bicycle	1	17%
Transfer from another bus	1	17%
Other	0	0%
Total	6	100%



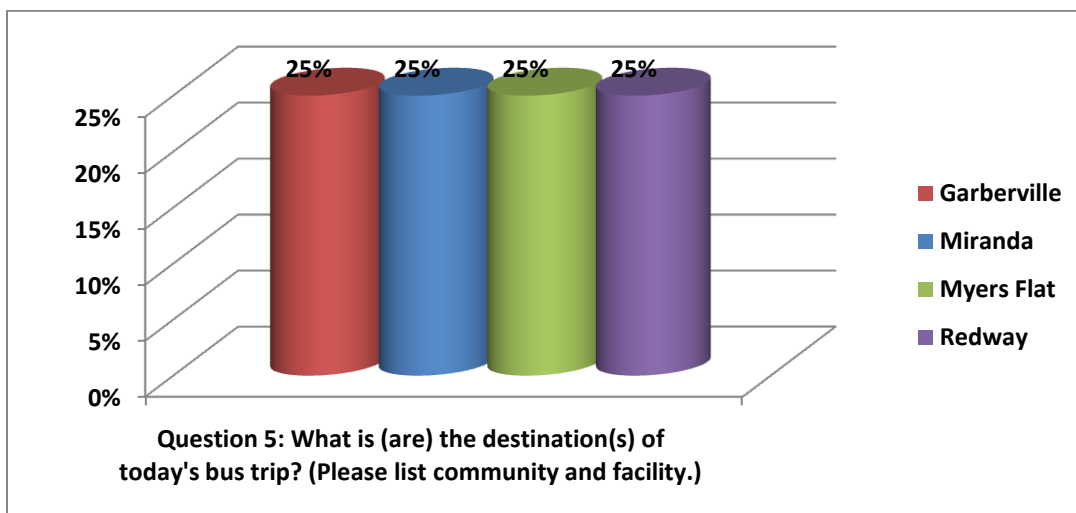
Question 4: What is the purpose of today's trip? If you are going home, what was the main purpose of your trip?

Work	2	33%
School	2	33%
Medical/Shopping	0	0%
Personal Business	0	0%
Social/Recreation	1	17%
Other	1	17%
Total	6	100%



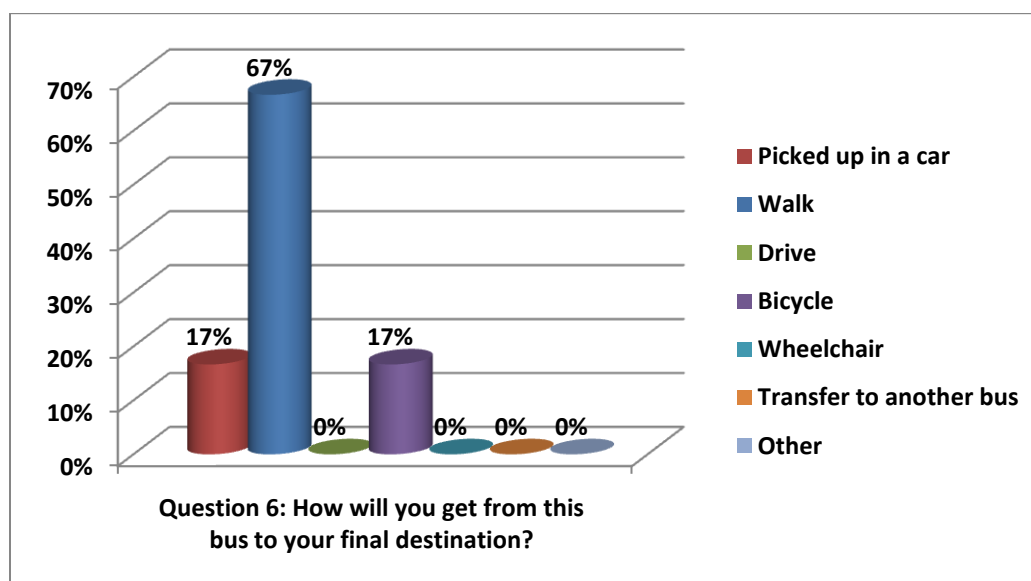
Question 5: What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

Garberville	1	25%
Miranda	1	25%
Myers Flat	1	25%
Redway	1	25%
Total	4	100%

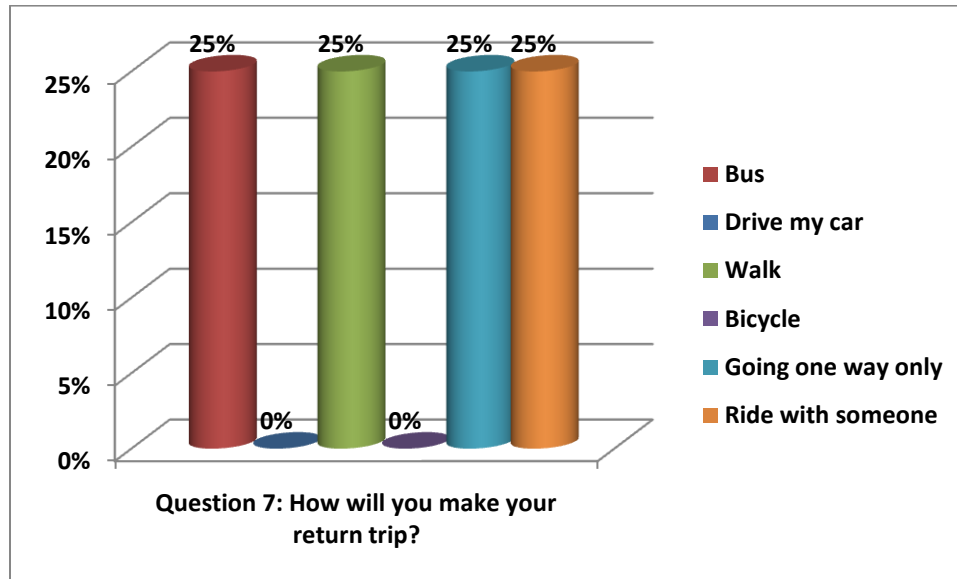


Question 6: How will you get from this bus to your final destination?

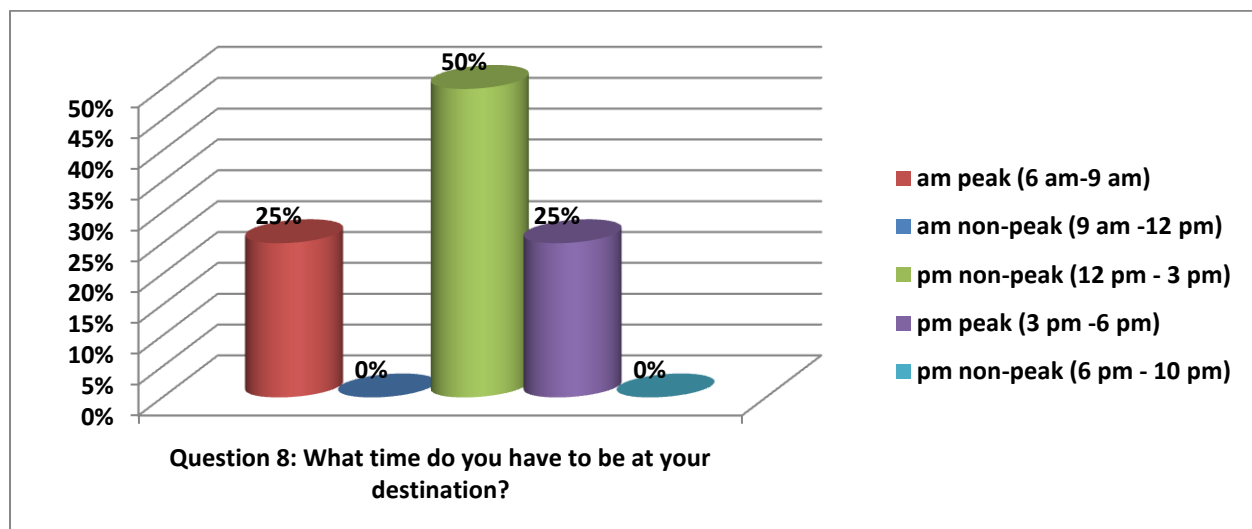
Picked up in a car	1	17%
Walk	4	67%
Drive	0	0%
Bicycle	1	17%
Wheelchair	0	0%
Transfer to another bus	0	0%
Other	0	0%
Total	6	100%



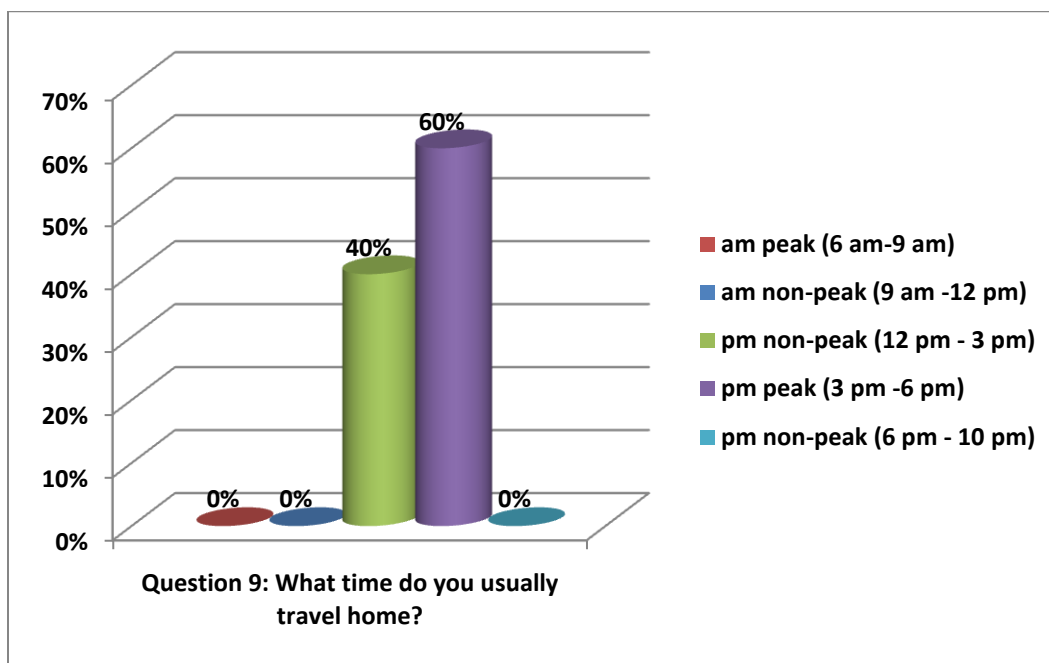
Question 7: How will you make your return trip?		
Bus	1	25%
Drive my car	0	0%
Walk	1	25%
Bicycle	0	0%
Going one way only	1	25%
Ride with someone	1	25%
Total	4	100%



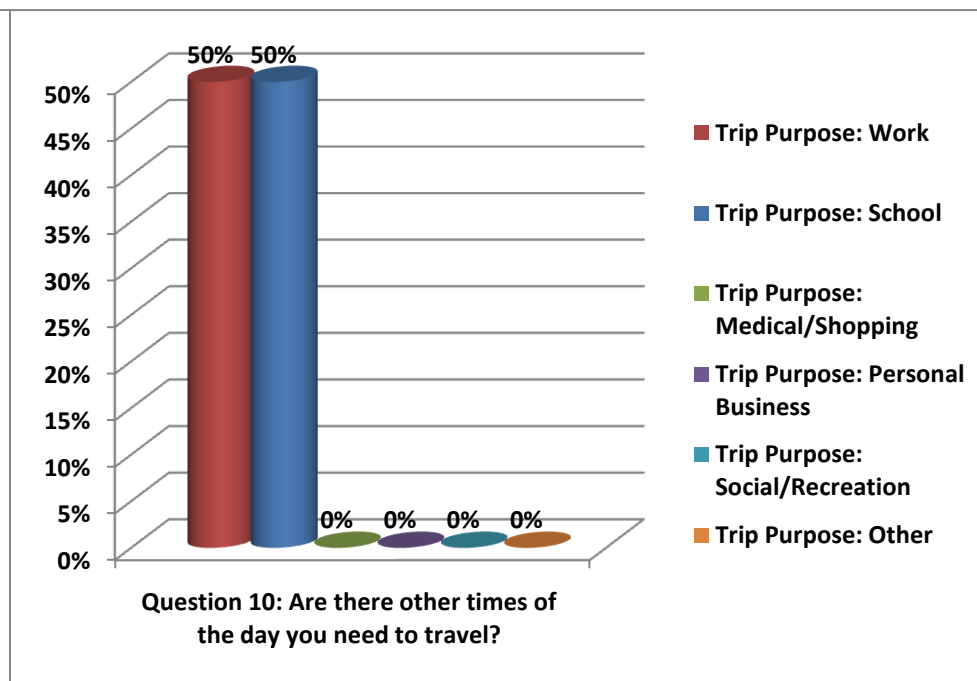
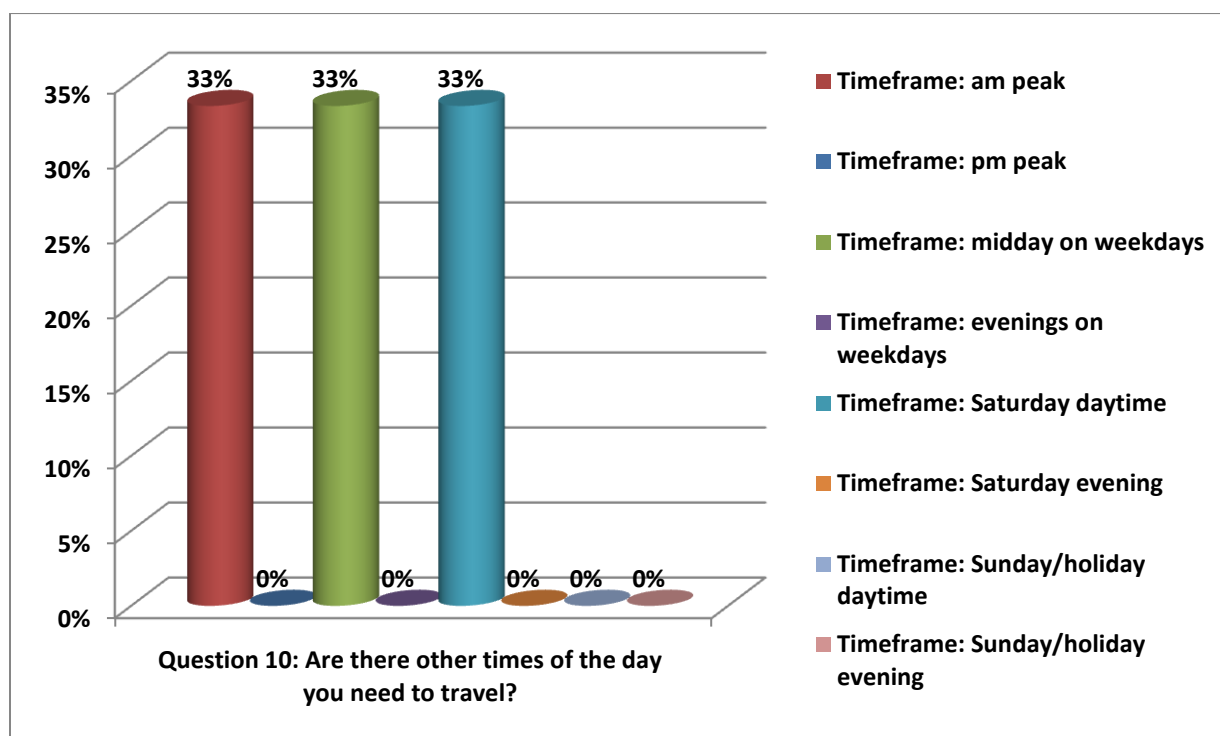
Question 8: What time do you have to be at your destination?		
am peak (6 am-9 am)	1	25%
am non-peak (9 am -12 pm)	0	0%
pm non-peak (12 pm - 3 pm)	2	50%
pm peak (3 pm -6 pm)	1	25%
pm non-peak (6 pm - 10 pm)	0	0%
Total	4	100%



Question 9: What time do you usually travel home?		
am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	0	0%
pm non-peak (12 pm - 3 pm)	2	40%
pm peak (3 pm -6 pm)	3	60%
pm non-peak (6 pm - 10 pm)	0	0%
Total	5	100%

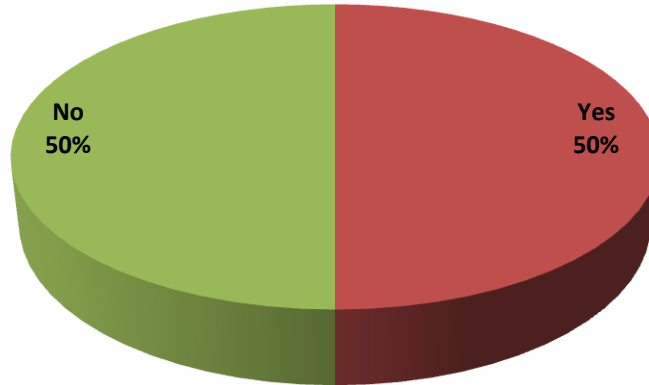


Question 10: Are there other times of the day you need to travel?					
Timeframe			Trip Purpose		
Timeframe: am peak	1	33%	Trip Purpose: Work	1	1
Timeframe: pm peak	0	0%	Trip Purpose: School	1	0
Timeframe: midday on weekdays	1	33%	Trip Purpose: Medical/Shopping	0	1
Timeframe: evenings on weekdays	0	0%	Trip Purpose: Personal Business	0	0
Timeframe: Saturday daytime	1	33%	Trip Purpose: Social/Recreation	0	1
Timeframe: Saturday evening	0	0%	Trip Purpose: Other	0	0
Timeframe: Sunday/holiday daytime	0	0%			0
Timeframe: Sunday/holiday evening	0	0%			0
Total	3	100%	Total	2	3



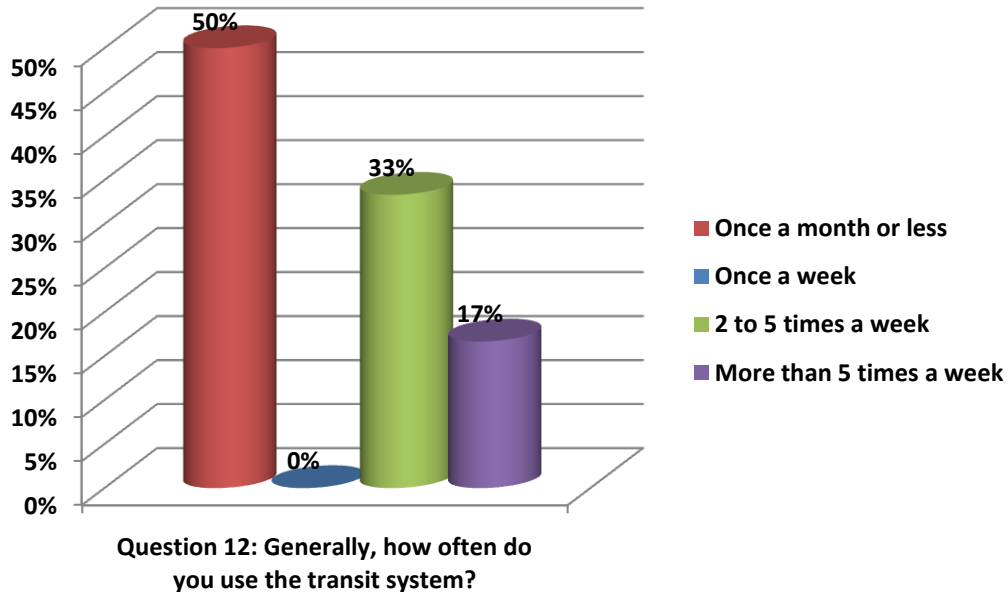
Question 11: Is this a regular commute trip for work, school, or medical treatment?		
Yes	3	50%
No	3	50%
Total	6	100%

Question 11: Is this a regular commute trip for work, school, or medical treatment?



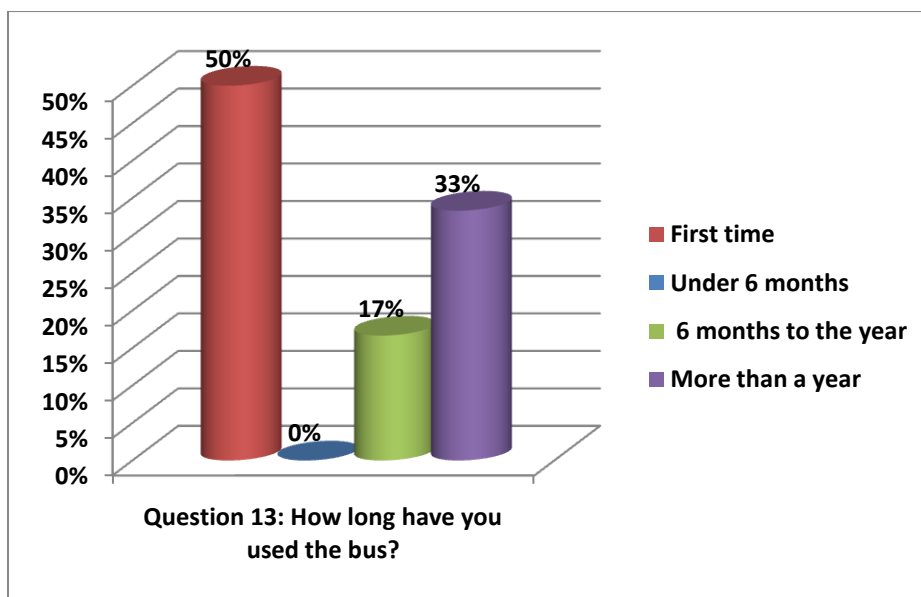
Question 12: Generally, how often do you use the transit system?

Once a month or less	3	50%
Once a week	0	0%
2 to 5 times a week	2	33%
More than 5 times a week	1	17%
Total	6	100%

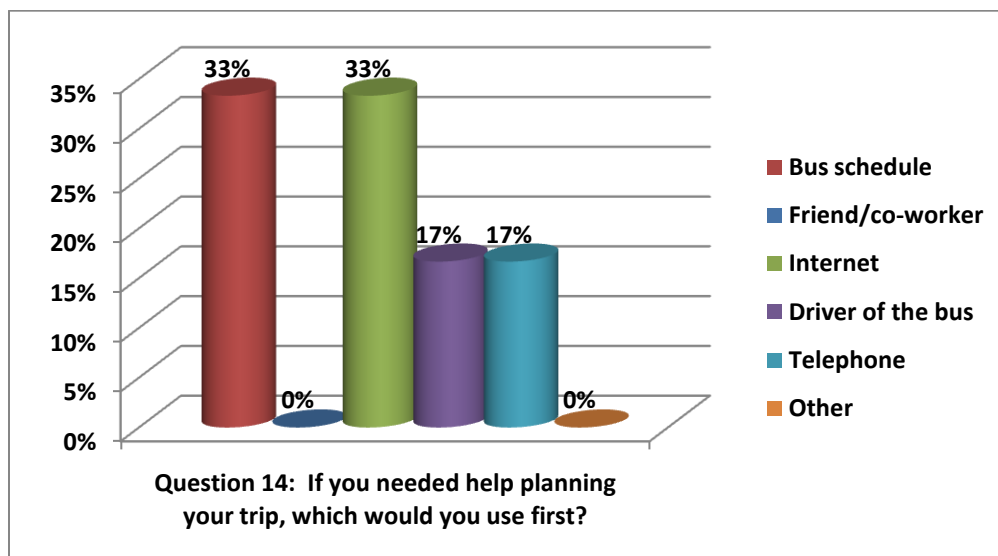


Question 13: How long have you used the bus?

First time	3	50%
Under 6 months	0	0%
6 months to the year	1	17%
More than a year	2	33%
Total	6	100%

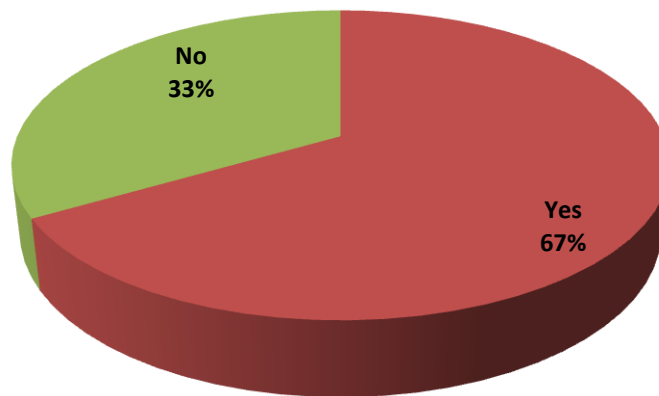


Question 14: If you needed help planning your trip, which would you use first?		
Bus schedule	2	33%
Friend/co-worker	0	0%
Internet	2	33%
Driver of the bus	1	17%
Telephone	1	17%
Other	0	0%
Total	6	100%



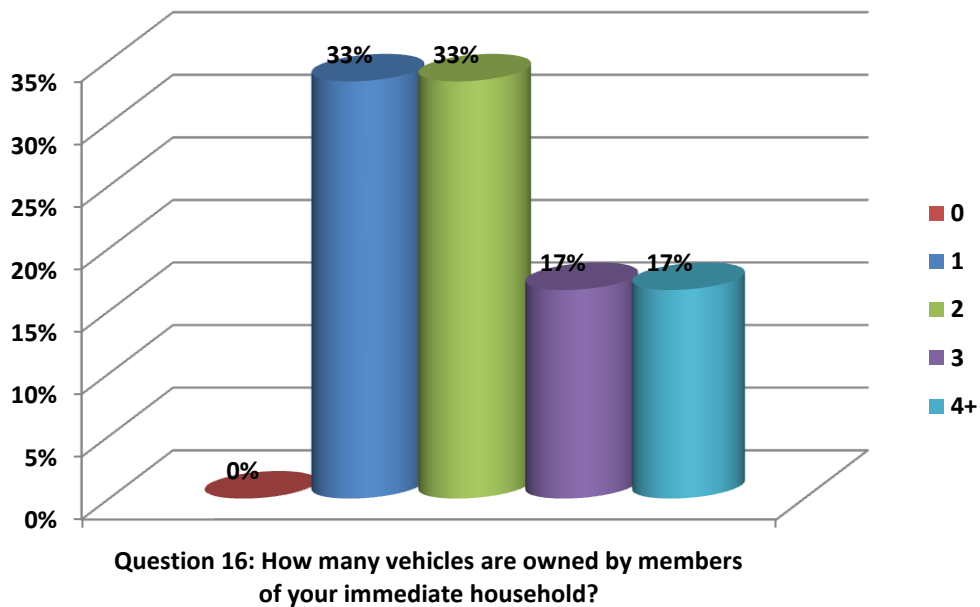
Question 15: Do you have a driver's license?		
Yes	4	67%
No	2	33%
Total	6	100%

Question 15: Do you have a driver's license?



Question 16: How many vehicles are owned by members of your immediate household?

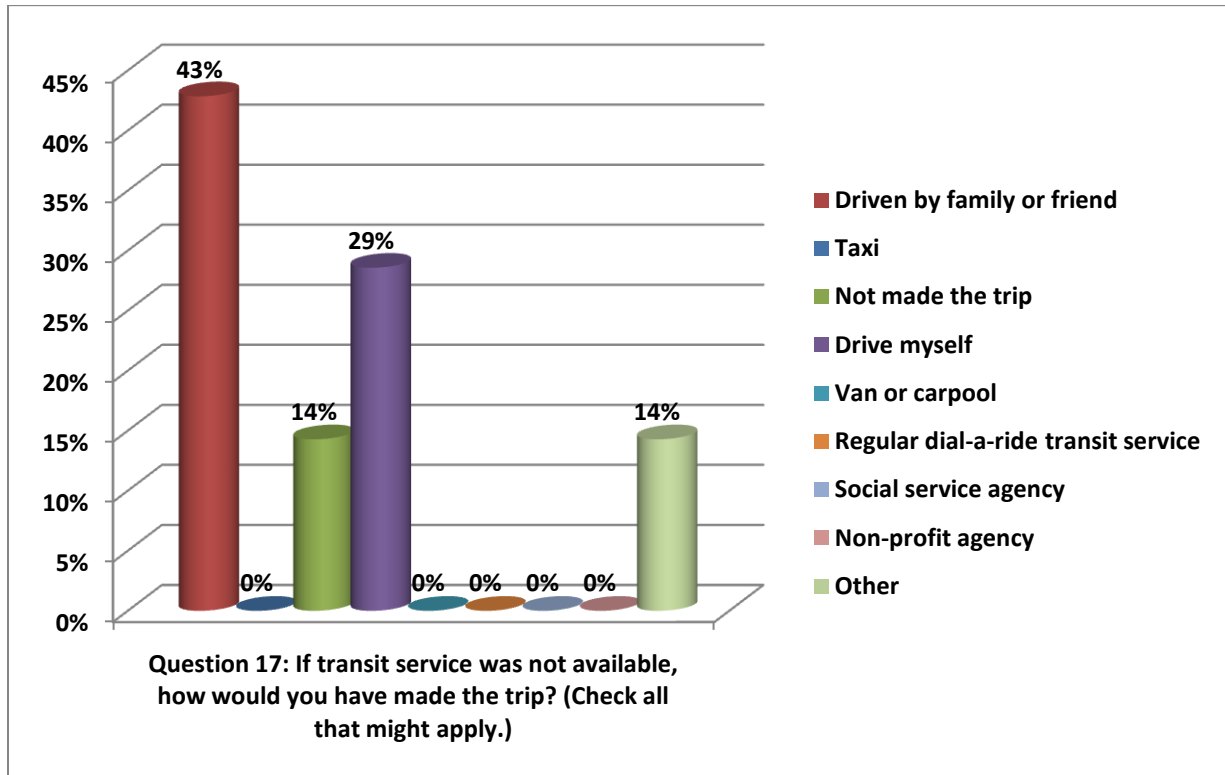
0	0	0%
1	2	33%
2	2	33%
3	1	17%
4+	1	17%
Total	6	100%



Question 17: If transit service was not available, how would you have made the trip? (Check all that might apply.)

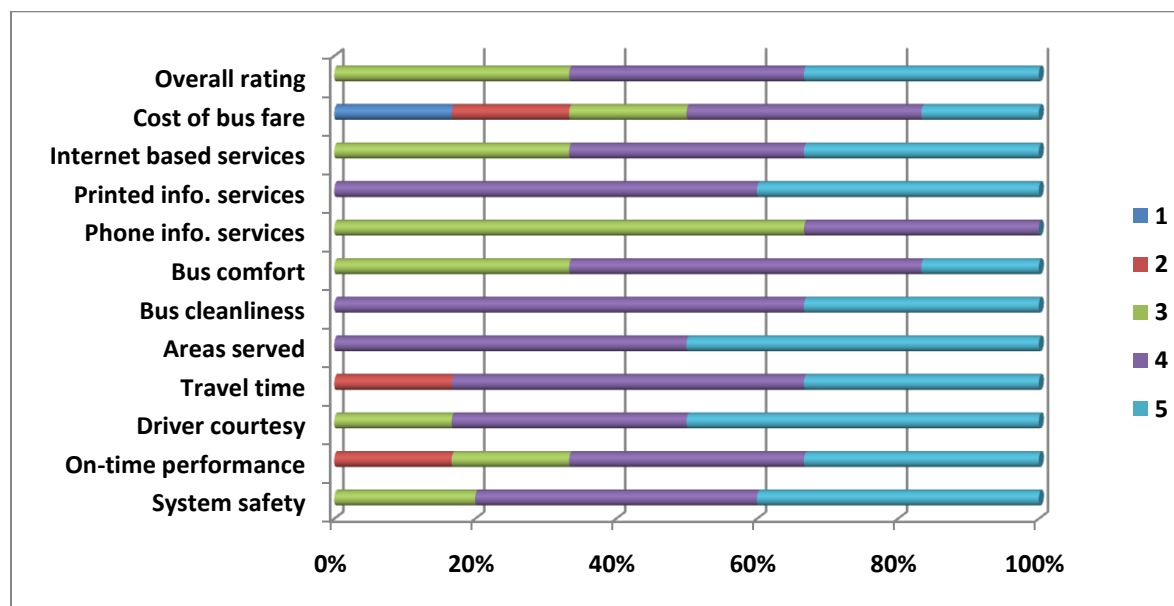
Driven by family or friend	3	43%
Taxi	0	0%
Not made the trip	1	14%

Drive myself	2	29%
Van or carpool	0	0%
Regular dial-a-ride transit service	0	0%
Social service agency	0	0%
Non-profit agency	0	0%
Other	1	14%
Total	7	100%

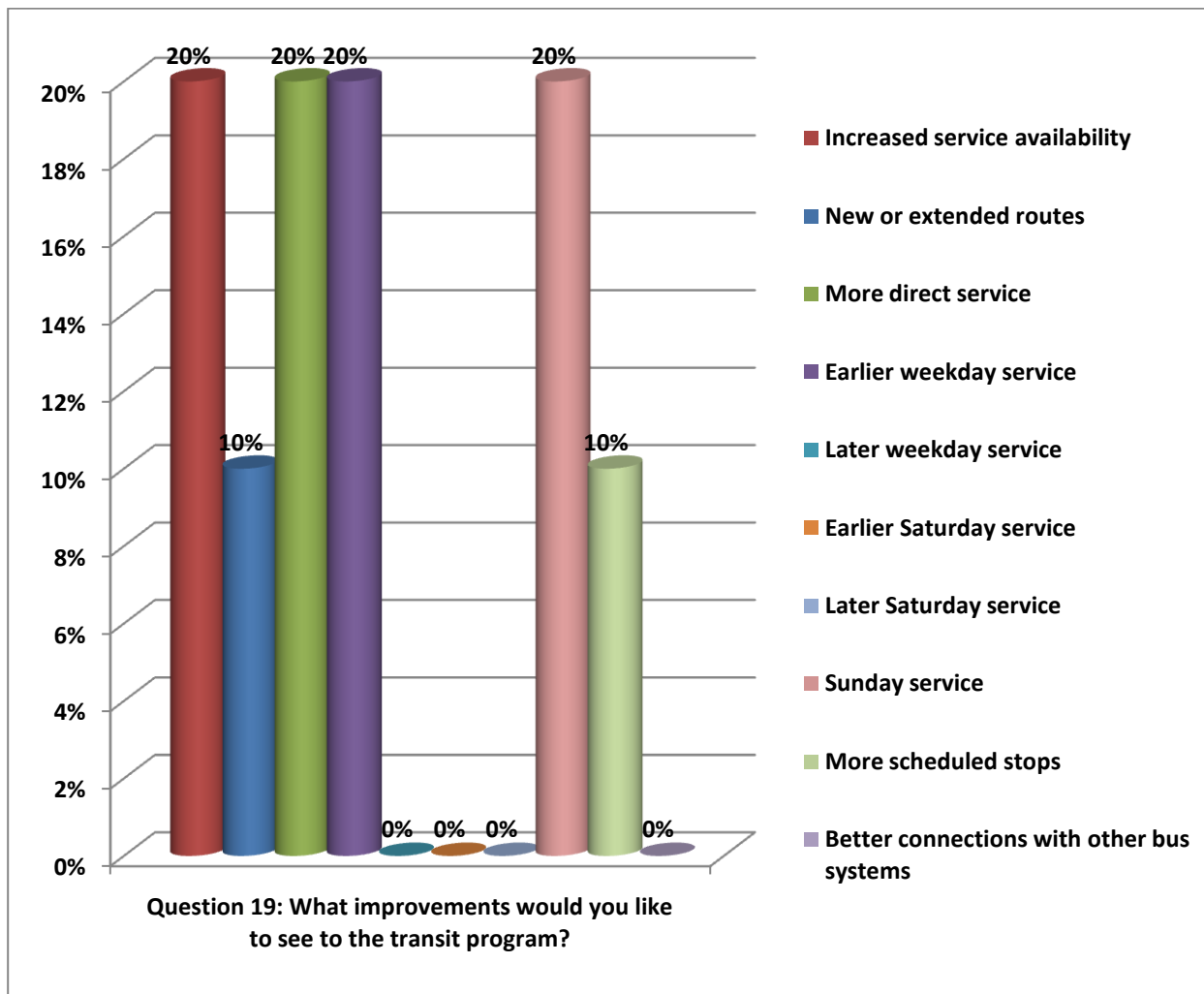


Question 18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest.

	System safety	On-time performance	Driver courtesy	Travel time	Areas served	Bus cleanliness	Bus comfort	Phone info. services	Printed info. services	Internet based services	Cost of bus fare	Overall rating
1	0	0	0	0	0	0	0	0	0	0	1	0
2	0	1	0	1	0	0	0	0	0	0	1	0
3	1	1	1	0	0	0	2	2	0	1	1	2
4	2	2	2	3	3	4	3	1	3	1	2	2
5	2	2	3	2	3	2	1	0	2	1	1	2
Total	5	6	6	6	6	6	6	3	5	3	6	6

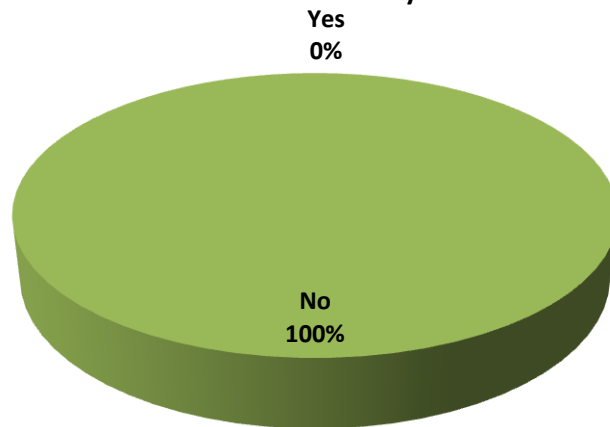


Question 19: What improvements would you like to see to the transit program?		
Increased service availability	2	20%
New or extended routes	1	10%
More direct service	2	20%
Earlier weekday service	2	20%
Later weekday service	0	0%
Earlier Saturday service	0	0%
Later Saturday service	0	0%
Sunday service	2	20%
More scheduled stops	1	10%
Better connections with other bus systems	0	0%
Total	10	100%



Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?		
Yes	0	0%
No	5	100%
Total	5	100%

Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?

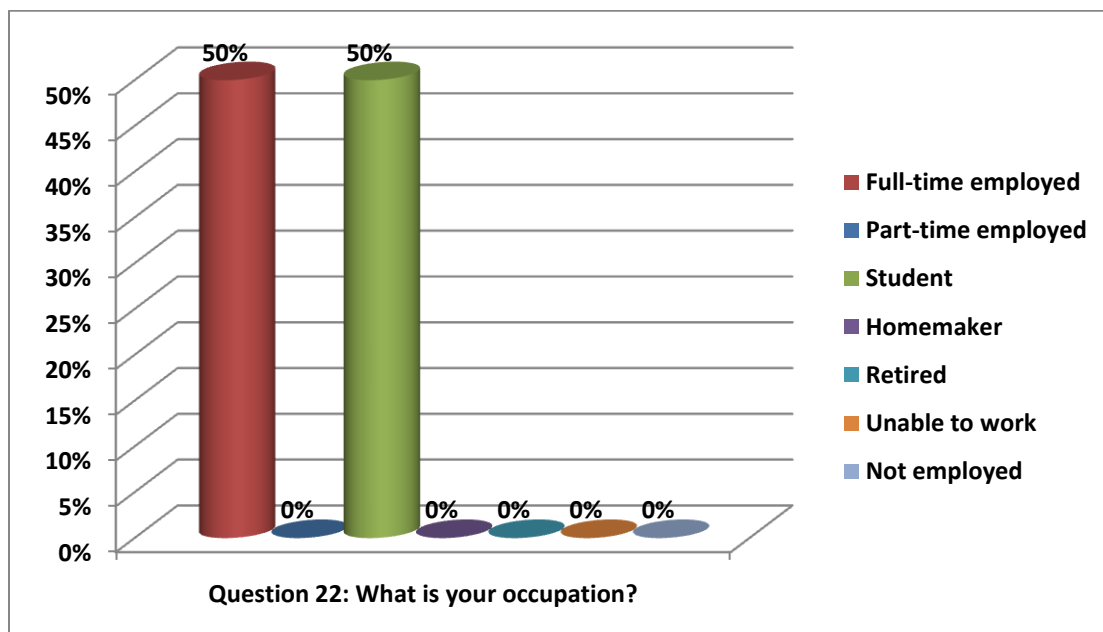


Question 21: If Yes, what is your affiliation?

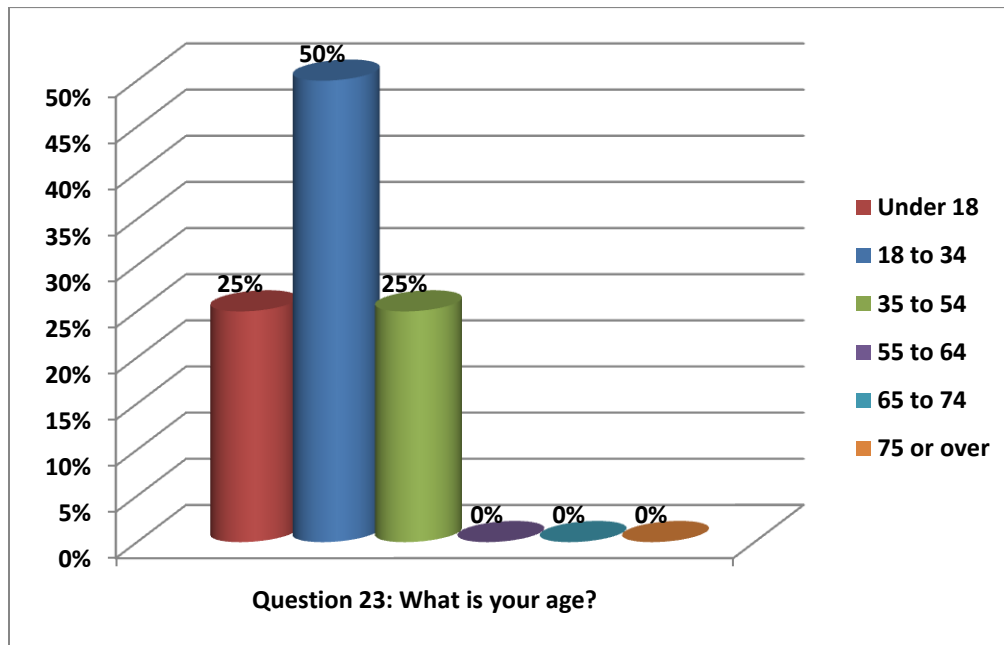
Not Applicable (See responses to Question 20 above)

Question 22: What is your occupation?

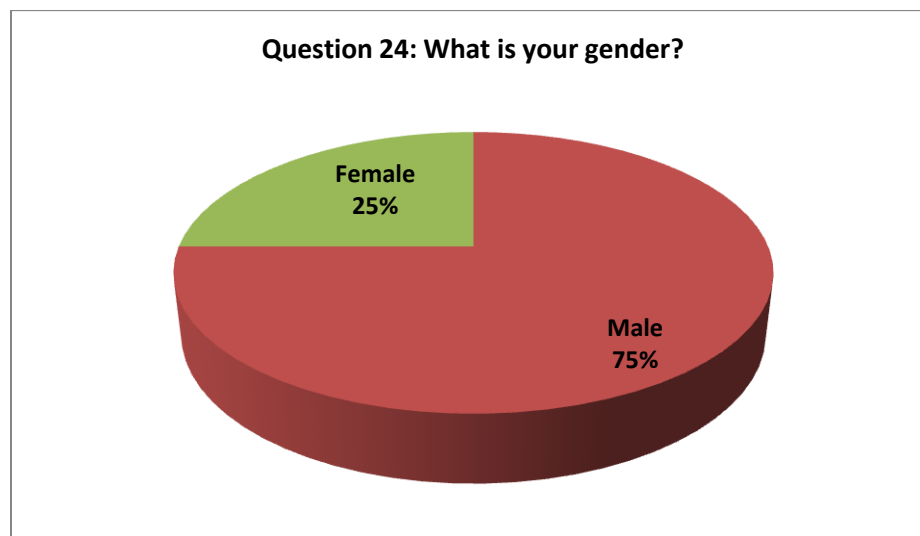
Full-time employed	2	50%
Part-time employed	0	0%
Student	2	50%
Homemaker	0	0%
Retired	0	0%
Unable to work	0	0%
Not employed	0	0%
Total	4	100%



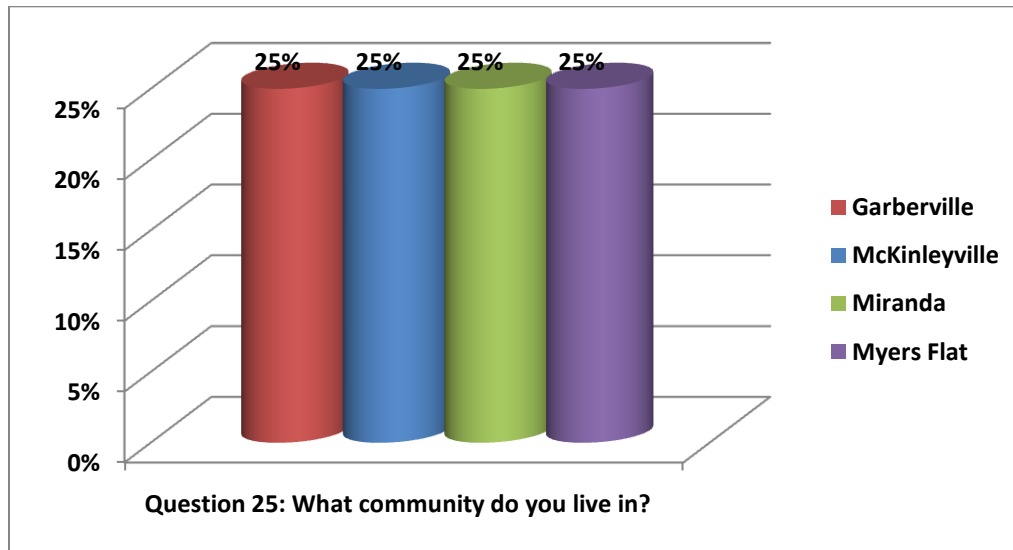
Question 23: What is your age?		
Under 18	1	25%
18 to 34	2	50%
35 to 54	1	25%
55 to 64	0	0%
65 to 74	0	0%
75 or over	0	0%
Total	4	100%



Question 24: What is your gender?		
Male	3	75%
Female	1	25%
Total	4	100%

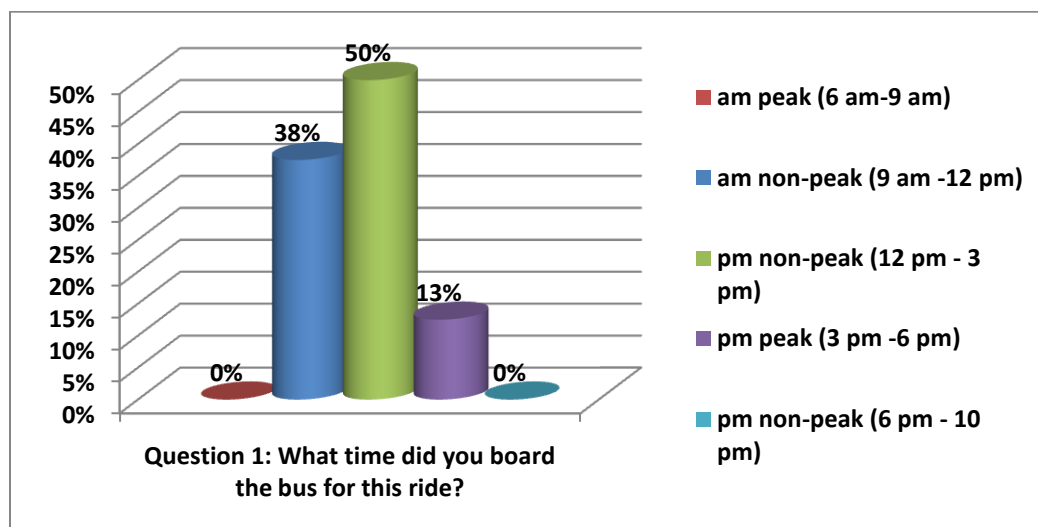


Question 25: What community do you live in?		
Garberville	1	25%
McKinleyville	1	25%
Miranda	1	25%
Myers Flat	1	25%
Total	4	100%

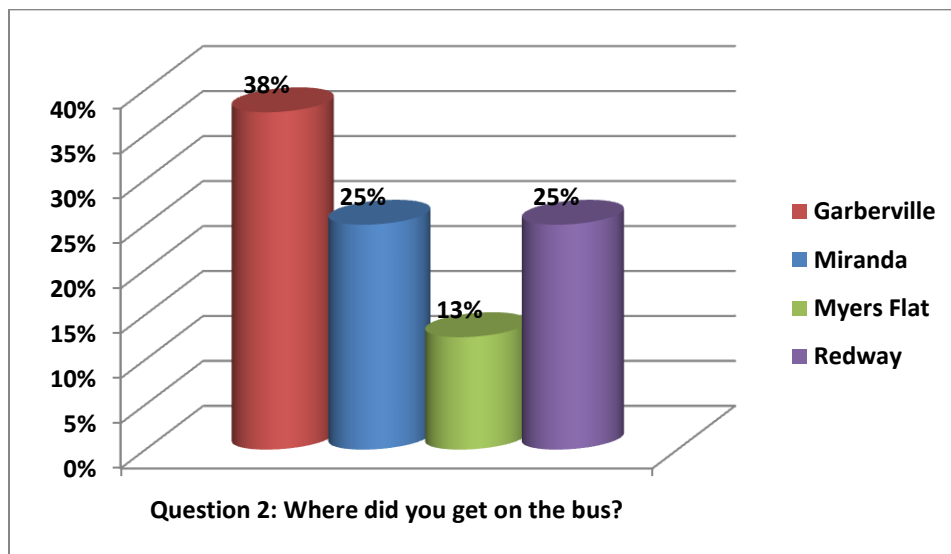


C.4 Redwood Transit System Southern Humboldt-Local Service Survey

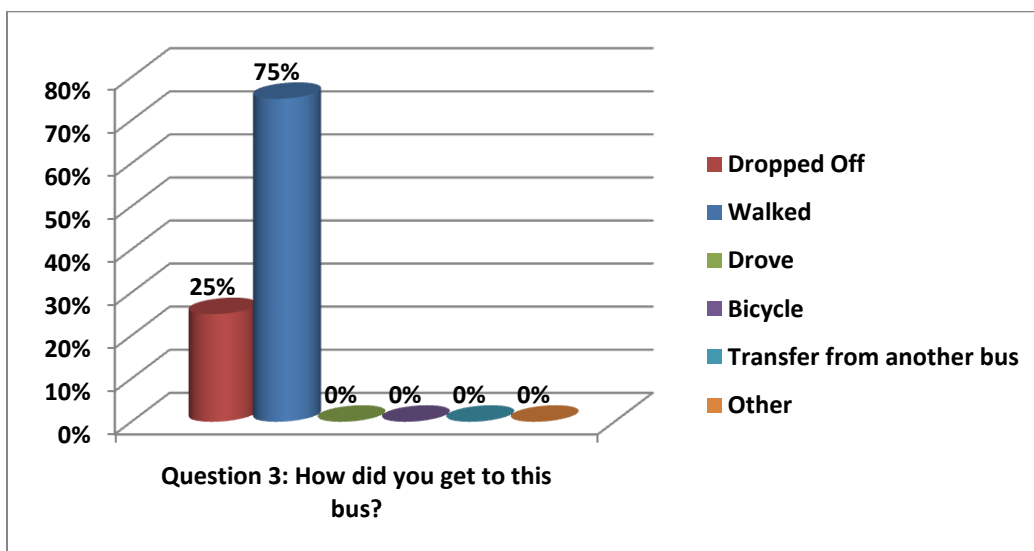
Question 1: What time did you board the bus for this ride?		
am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	3	38%
pm non-peak (12 pm - 3 pm)	4	50%
pm peak (3 pm -6 pm)	1	13%
pm non-peak (6 pm - 10 pm)	0	0%
Total	8	100%



Question 2: Where did you get on the bus?		
Garberville	3	38%
Miranda	2	25%
Myers Flat	1	13%
Redway	2	25%
Total	8	100%

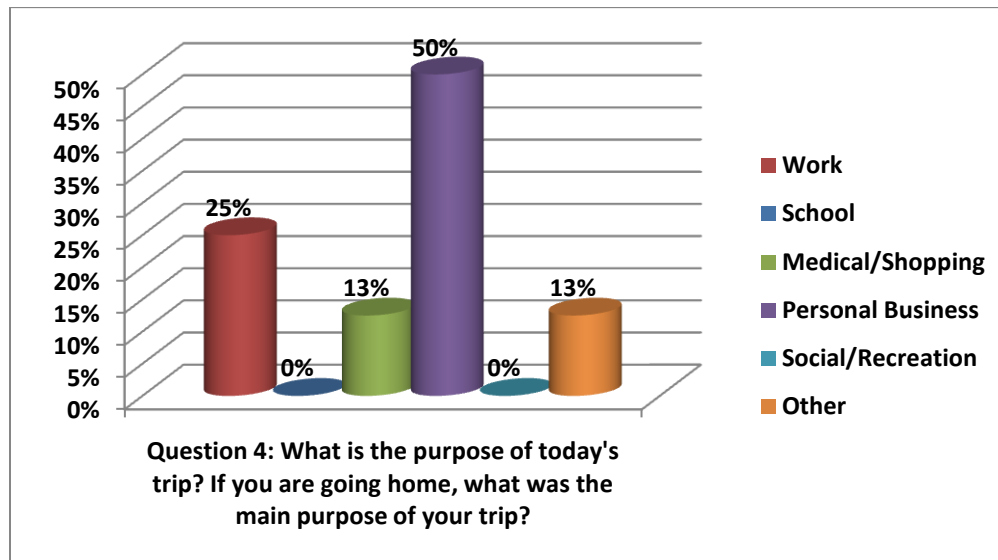


Question 3: How did you get to this bus?		
Dropped Off	2	25%
Walked	6	75%
Drove	0	0%
Bicycle	0	0%
Transfer from another bus	0	0%
Other	0	0%
Total	8	100%



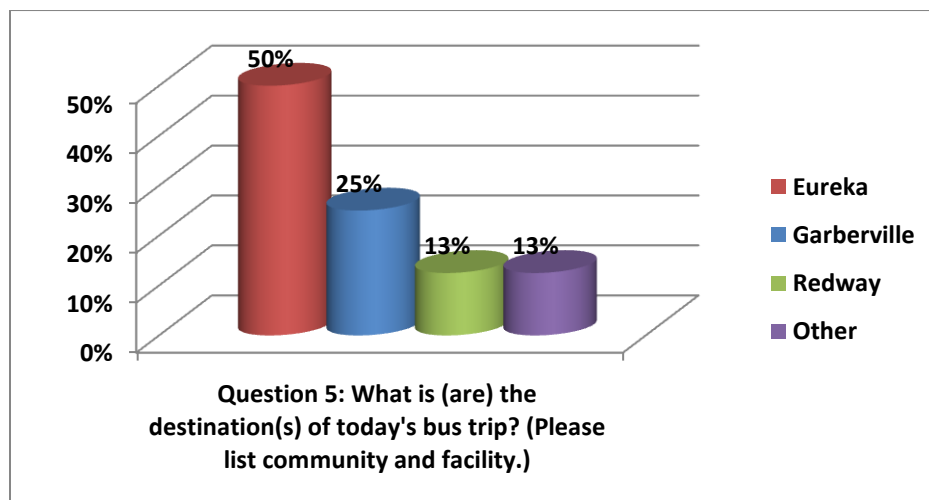
Question 4: What is the purpose of today's trip? If you are going home, what was the main purpose of your trip?

Work	2	25%
School	0	0%
Medical/Shopping	1	13%
Personal Business	4	50%
Social/Recreation	0	0%
Other	1	13%
Total	8	100%

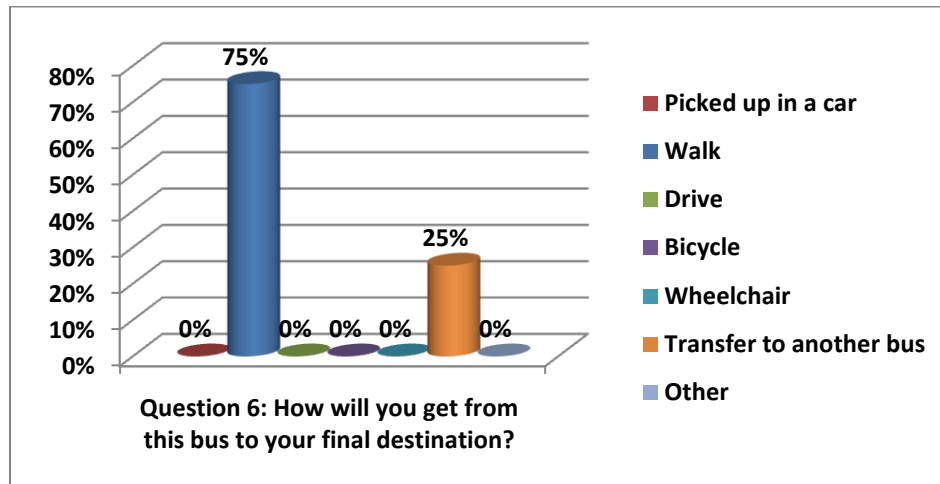


Question 5: What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

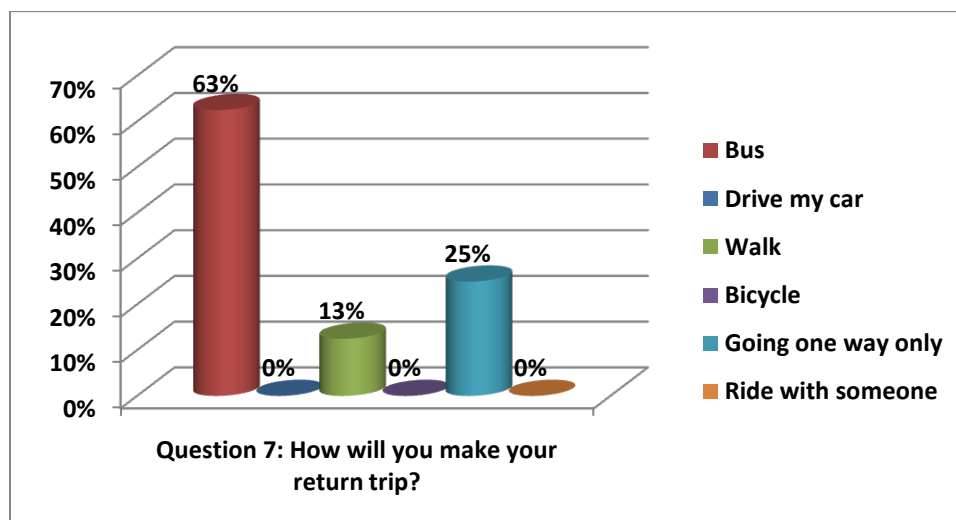
Eureka	4	50%
Garberville	2	25%
Redway	1	13%
Other	1	13%
Total	8	100%



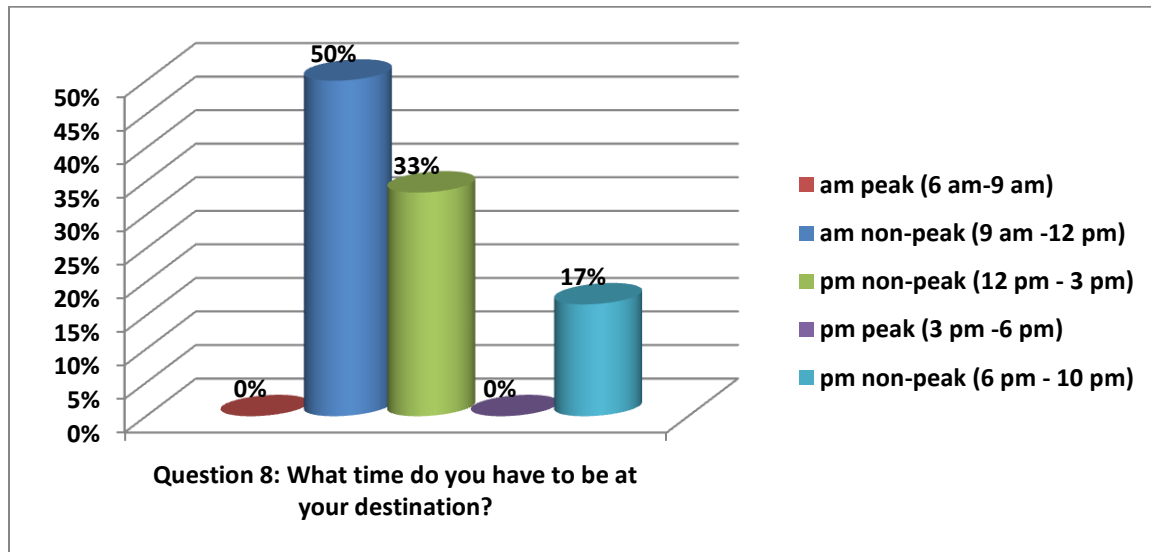
Question 6: How will you get from this bus to your final destination?		
Picked up in a car	0	0%
Walk	6	75%
Drive	0	0%
Bicycle	0	0%
Wheelchair	0	0%
Transfer to another bus	2	25%
Other	0	0%
Total	8	100%



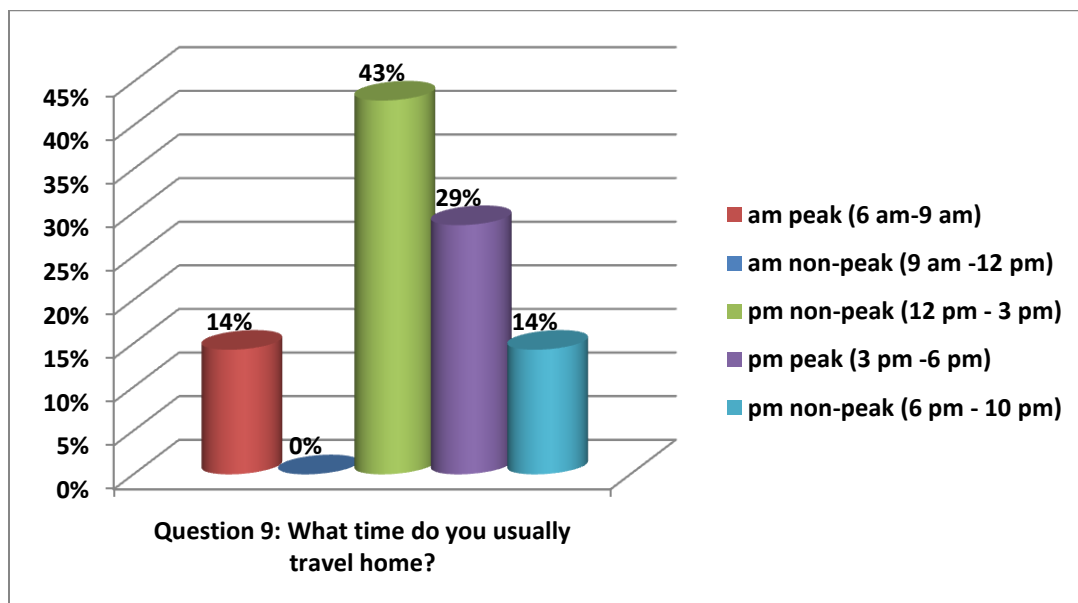
Question 7: How will you make your return trip?		
Bus	5	63%
Drive my car	0	0%
Walk	1	13%
Bicycle	0	0%
Going one way only	2	25%
Ride with someone	0	0%
Total	8	100%



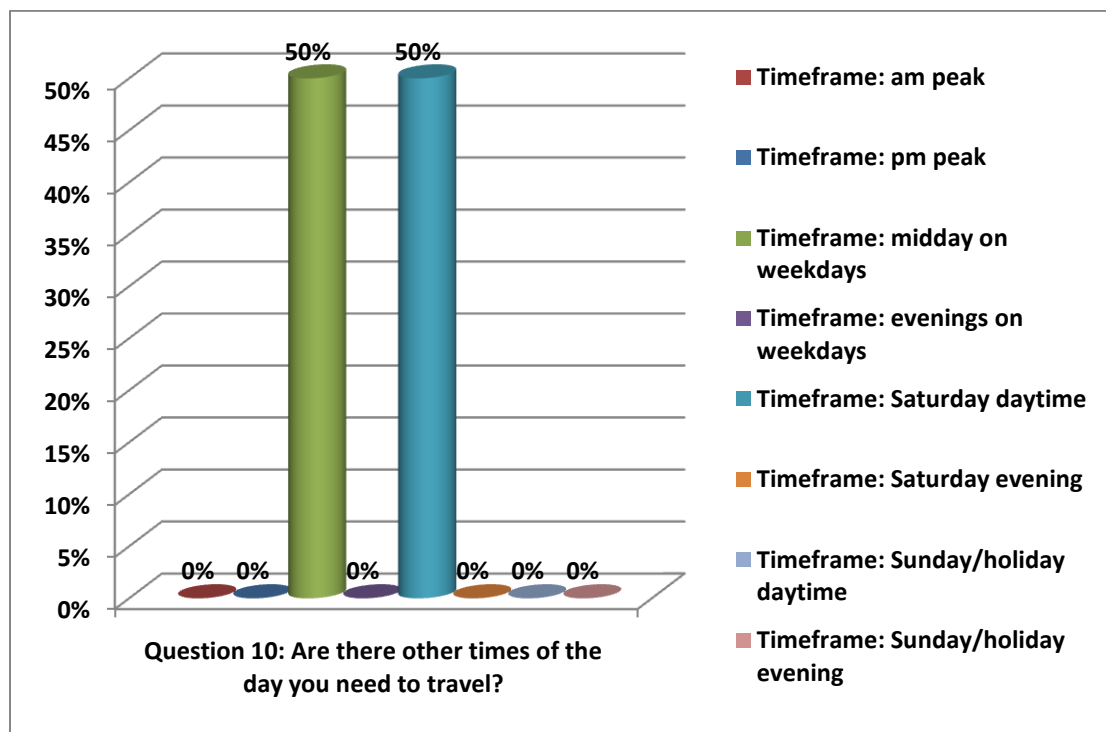
Question 8: What time do you have to be at your destination?		
am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	3	50%
pm non-peak (12 pm - 3 pm)	2	33%
pm peak (3 pm -6 pm)	0	0%
pm non-peak (6 pm - 10 pm)	1	17%
Total	6	100%

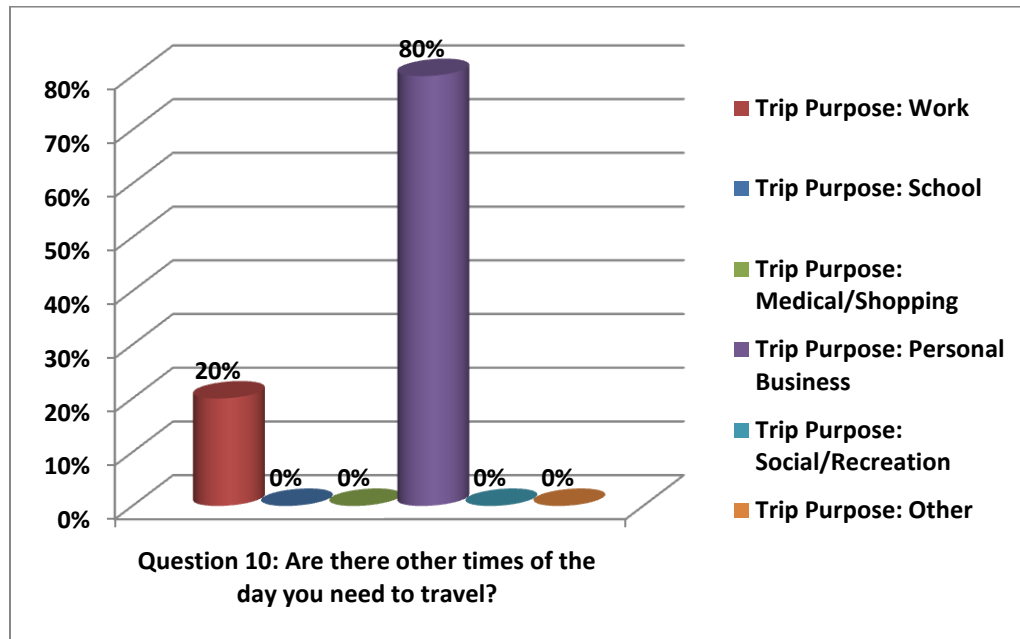


Question 9: What time do you usually travel home?		
am peak (6 am-9 am)	1	14%
am non-peak (9 am -12 pm)	0	0%
pm non-peak (12 pm - 3 pm)	3	43%
pm peak (3 pm -6 pm)	2	29%
pm non-peak (6 pm - 10 pm)	1	14%
Total	7	100%

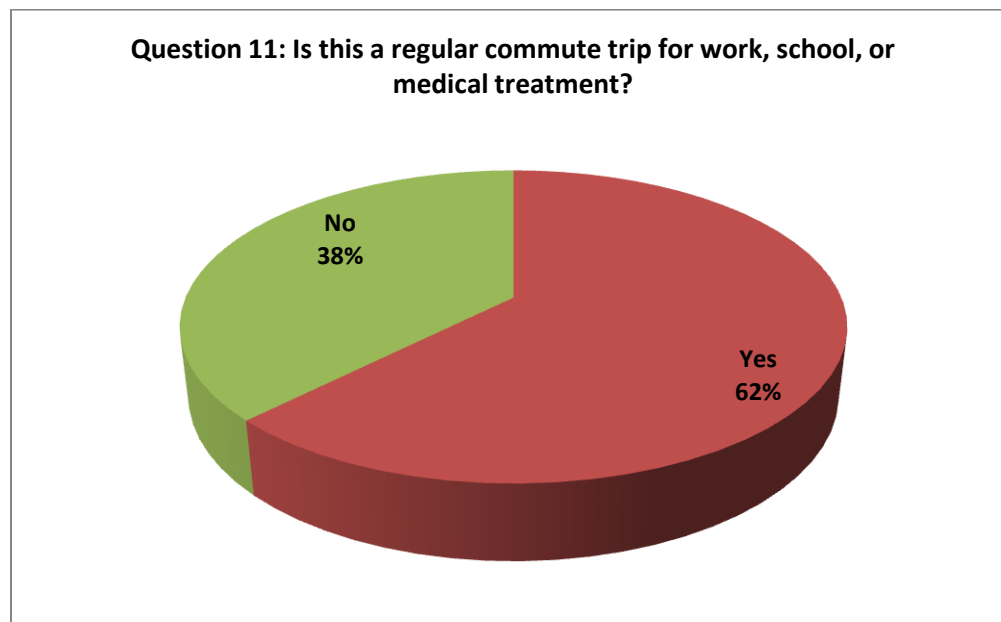


Question 10: Are there other times of the day you need to travel?					
Timeframe			Trip Purpose		
Timeframe: am peak	0	0%	Trip Purpose: Work	1	20%
Timeframe: pm peak	0	0%	Trip Purpose: School	0	0%
Timeframe: midday on weekdays	3	50%	Trip Purpose: Medical/Shopping	0	0%
Timeframe: evenings on weekdays	0	0%	Trip Purpose: Personal Business	4	80%
Timeframe: Saturday daytime	3	50%	Trip Purpose: Social/Recreation	0	0%
Timeframe: Saturday evening	0	0%	Trip Purpose: Other	0	0%
Timeframe: Sunday/holiday daytime	0	0%			
Timeframe: Sunday/holiday evening	0	0%			
Total	6	100%	Total	5	100%

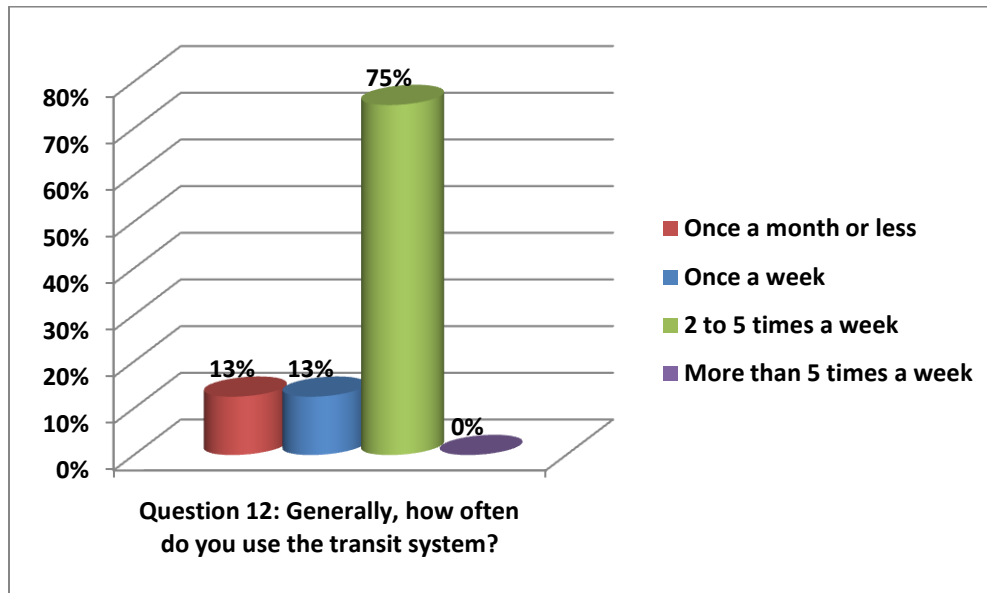




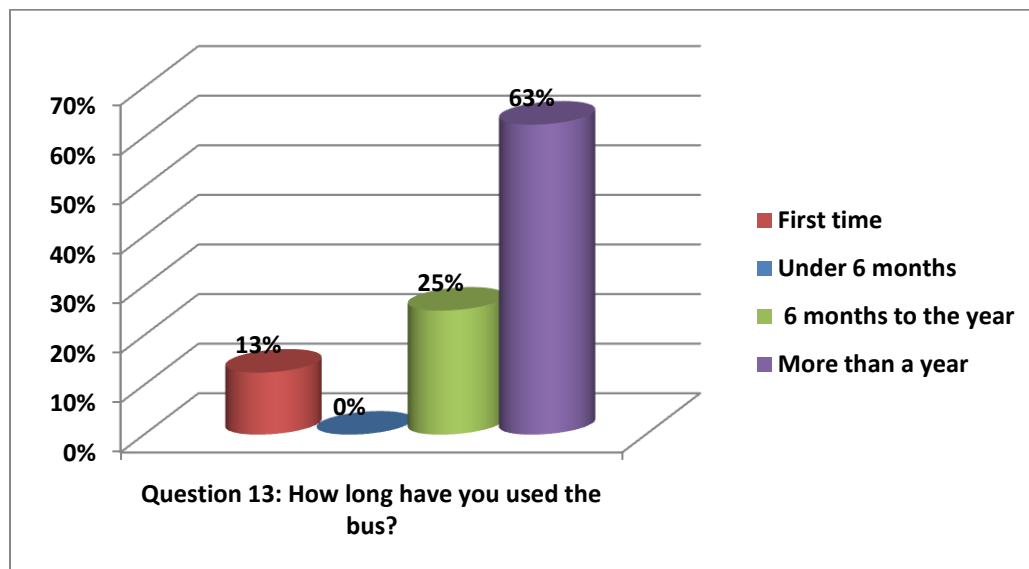
Question 11: Is this a regular commute trip for work, school, or medical treatment?		
Yes	5	62%
No	3	38%
Total	8	100%



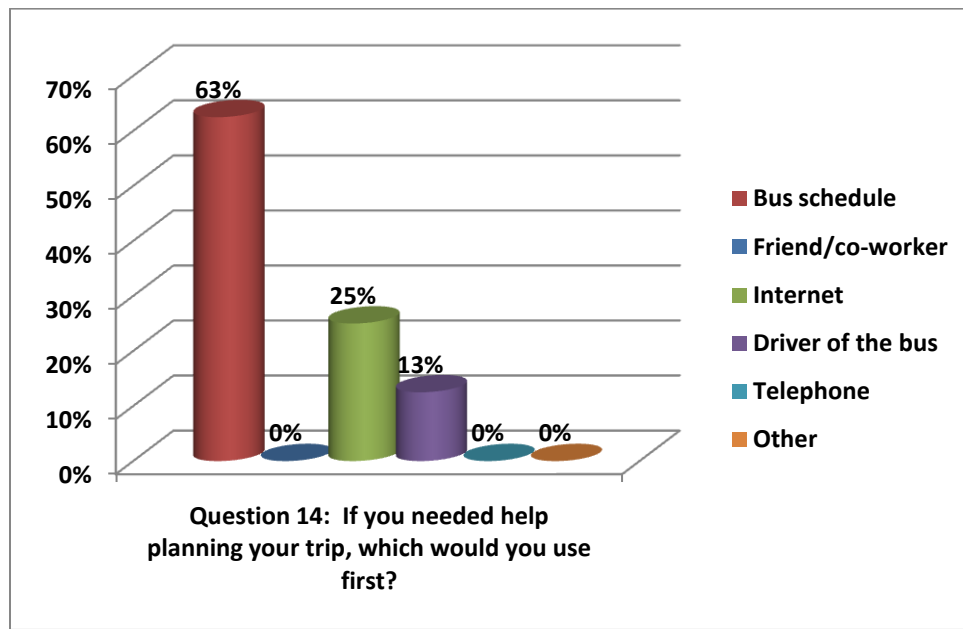
Question 12: Generally, how often do you use the transit system?		
Once a month or less	1	13%
Once a week	1	13%
2 to 5 times a week	6	75%
More than 5 times a week	0	0%
Total	8	100%



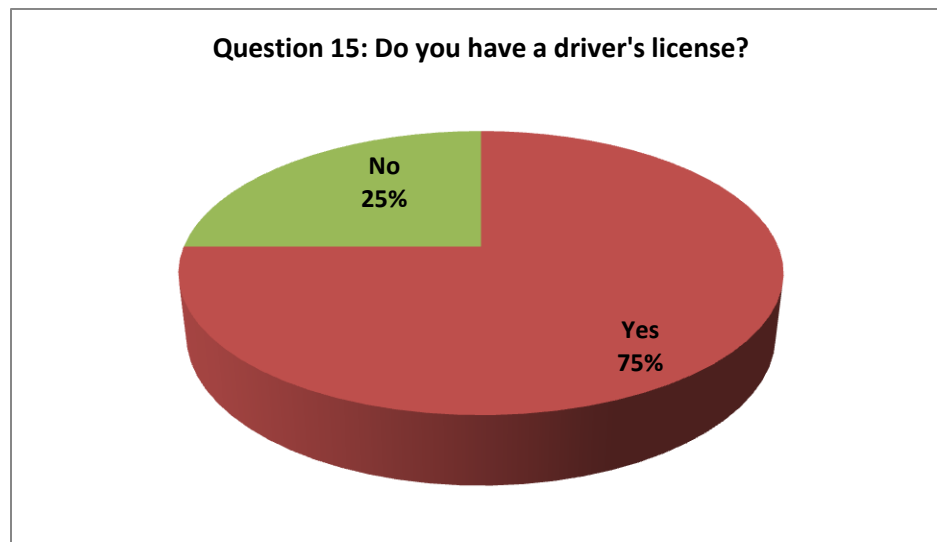
Question 13: How long have you used the bus?		
First time	1	13%
Under 6 months	0	0%
6 months to the year	2	25%
More than a year	5	63%
Total	8	100%



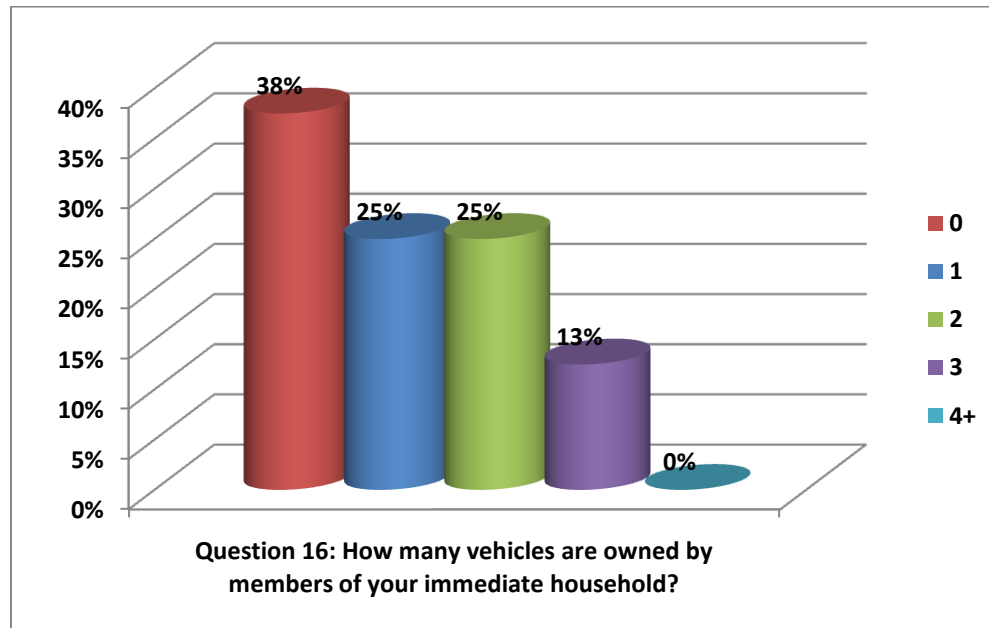
Question 14: If you needed help planning your trip, which would you use first?		
Bus schedule	5	63%
Friend/co-worker	0	0%
Internet	2	25%
Driver of the bus	1	13%
Telephone	0	0%
Other	0	0%
Total	8	100%



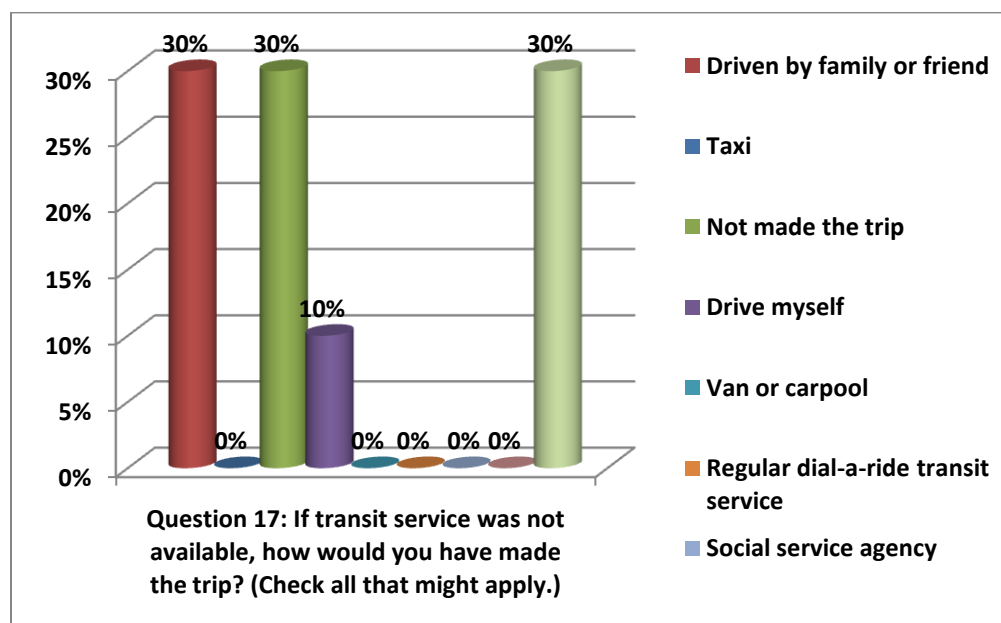
Question 15: Do you have a driver's license?		
Yes	6	75%
No	2	25%
Total	8	100%



Question 16: How many vehicles are owned by members of your immediate household?		
0	3	38%
1	2	25%
2	2	25%
3	1	13%
4+	0	0%
Total	8	100%

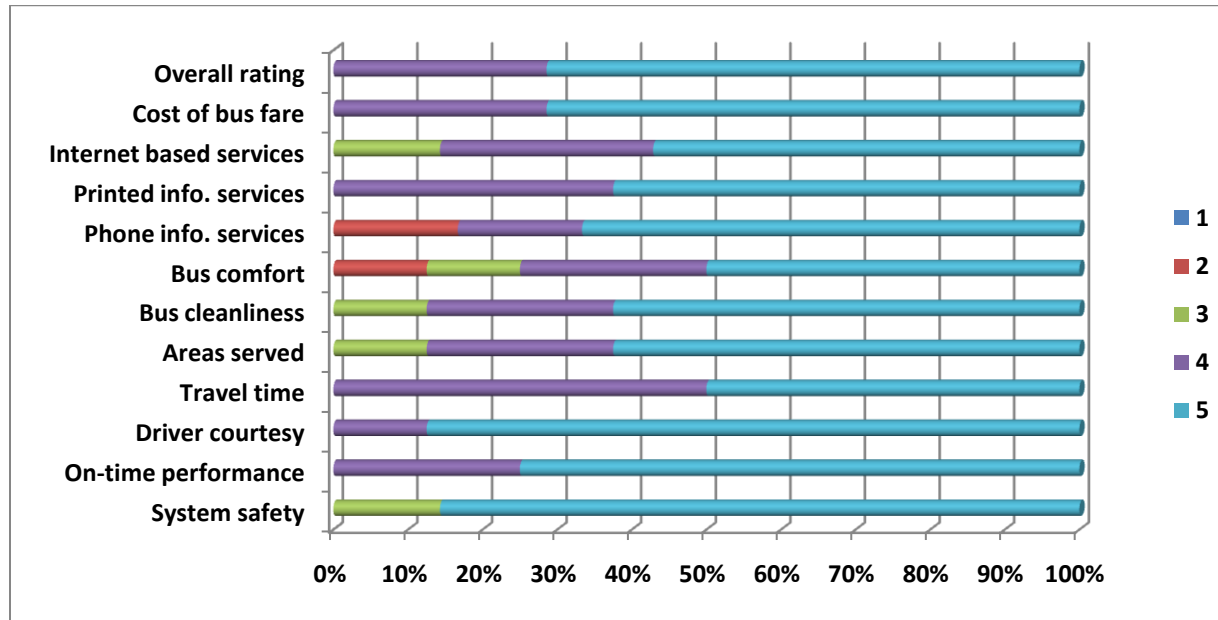


Question 17: If transit service was not available, how would you have made the trip? (Check all that might apply.)		
Driven by family or friend	3	30%
Taxi	0	0%
Not made the trip	3	30%
Drive myself	1	10%
Van or carpool	0	0%
Regular dial-a-ride transit service	0	0%
Social service agency	0	0%
Non-profit agency	0	0%
Other	3	30%
Total	10	100%

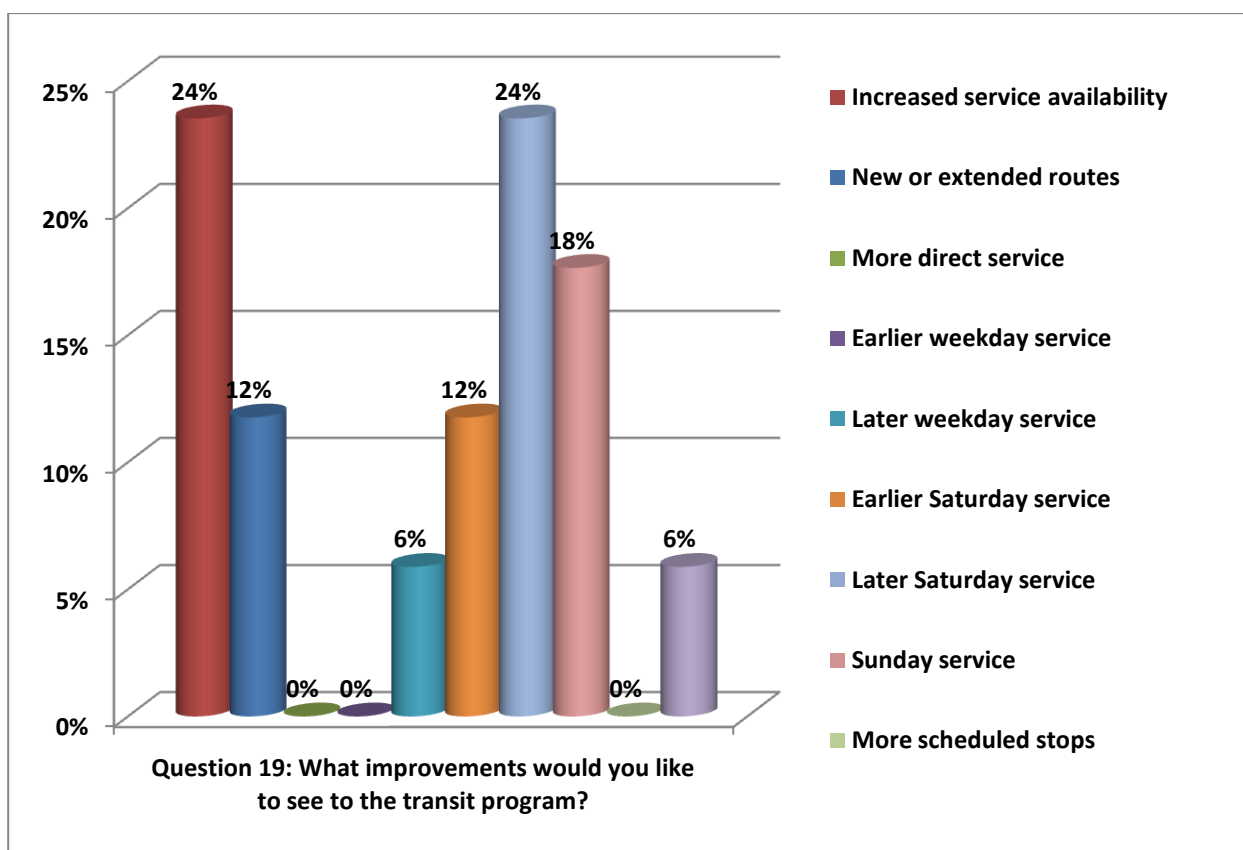


Question 18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest.

	System safety	On-time performance	Driver courtesy	Travel time	Areas served	Bus cleanliness	Bus comfort	Phone info. services	Printed info. services	Internet based services	Cost of bus fare	Overall rating
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	1	1	0	0	0	0
3	1	0	0	0	1	1	1	0	0	1	0	0
4	0	2	1	4	2	2	2	1	3	2	2	2
5	6	6	7	4	5	5	4	4	5	4	5	5
Total	7	8	8	8	8	8	8	6	8	7	7	7

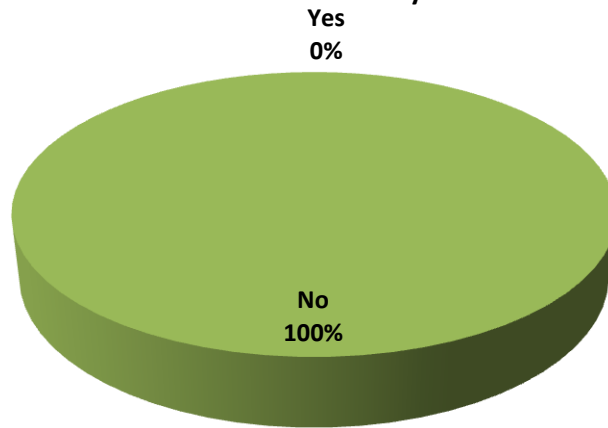


Question 19: What improvements would you like to see to the transit program?		
Increased service availability	4	24%
New or extended routes	2	12%
More direct service	0	0%
Earlier weekday service	0	0%
Later weekday service	1	6%
Earlier Saturday service	2	12%
Later Saturday service	4	24%
Sunday service	3	18%
More scheduled stops	0	0%
Better connections with other bus systems	1	6%
Total	17	100%



Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?		
Yes	0	0%
No	8	100%
Total	8	100%

**Question 20: Are you affiliated with Humboldt State's
Univesral "Jack Pass" System?**

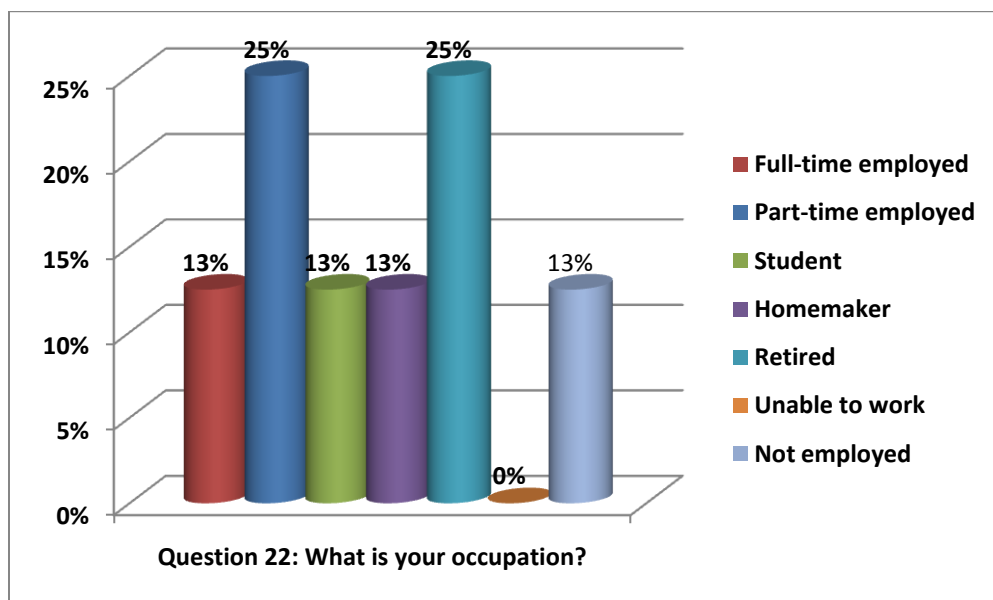


Question 21: If Yes, what is your affiliation?

Not Applicable (See responses to Question 20 above)

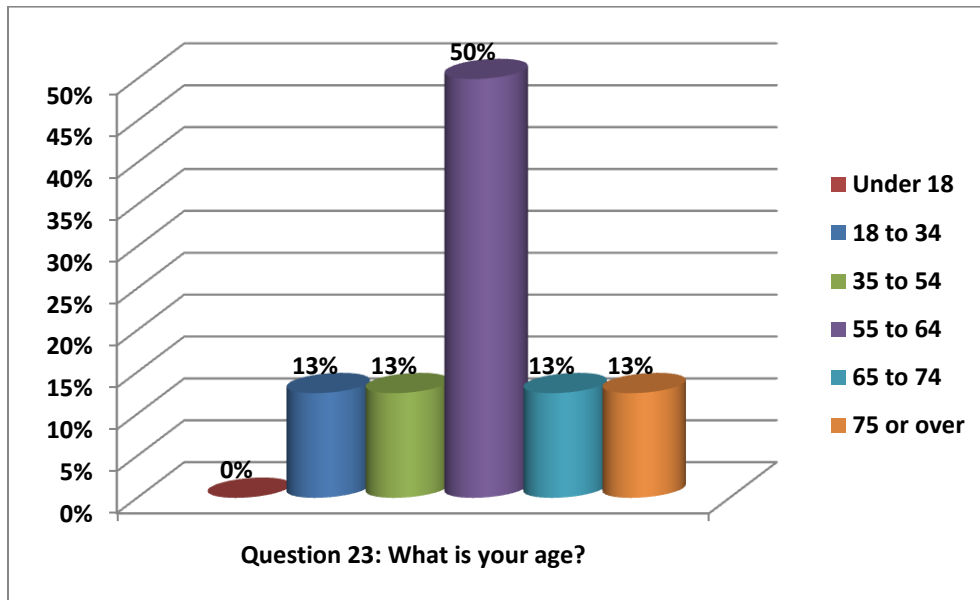
Question 22: What is your occupation?

Full-time employed	1	13%
Part-time employed	2	25%
Student	1	13%
Homemaker	1	13%
Retired	2	25%
Unable to work	0	0%
Not employed	1	13%
Total	8	100%



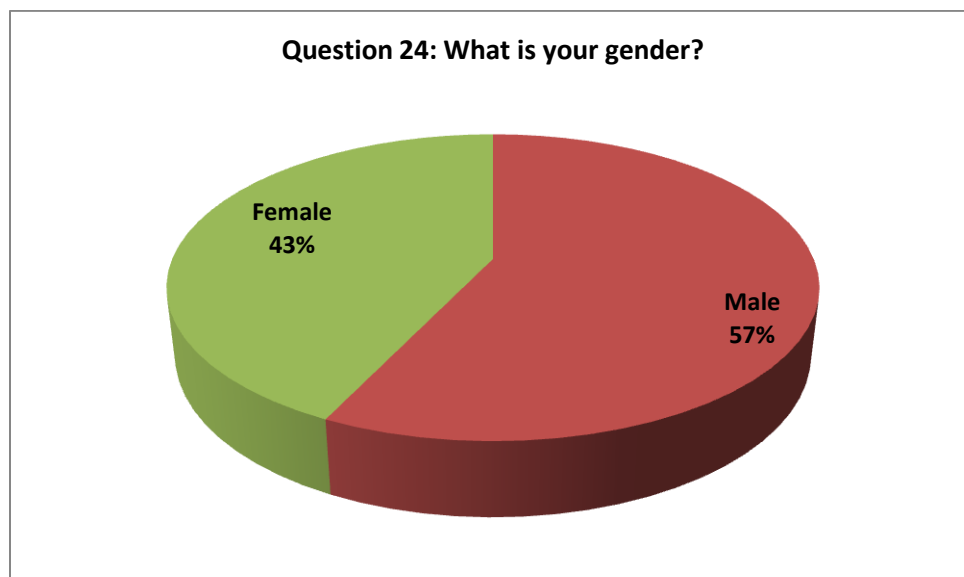
Question 23: What is your age?

Under 18	0	0%
18 to 34	1	13%
35 to 54	1	13%
55 to 64	4	50%
65 to 74	1	13%
75 or over	1	13%
Total	8	100%

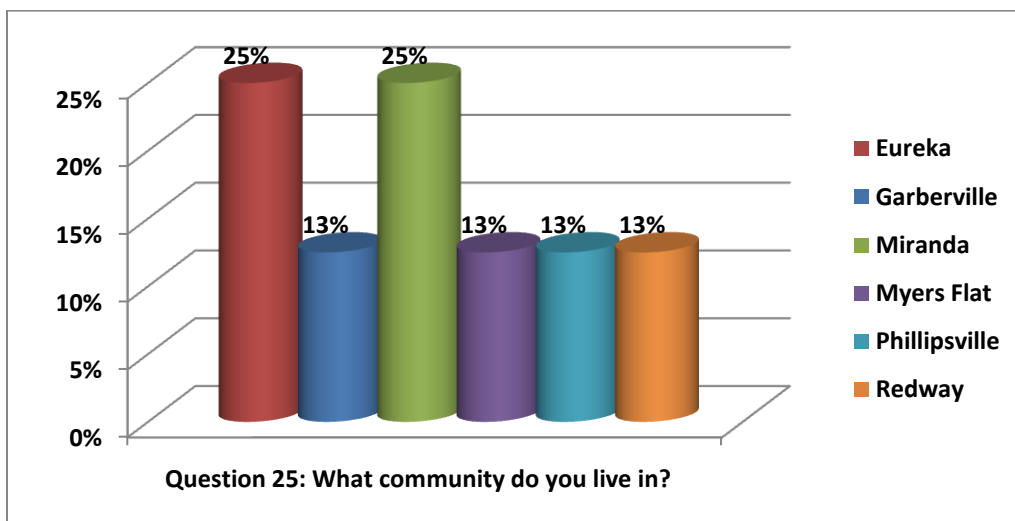


Question 24: What is your gender?

Male	4	57%
Female	3	43%
Total	7	100%

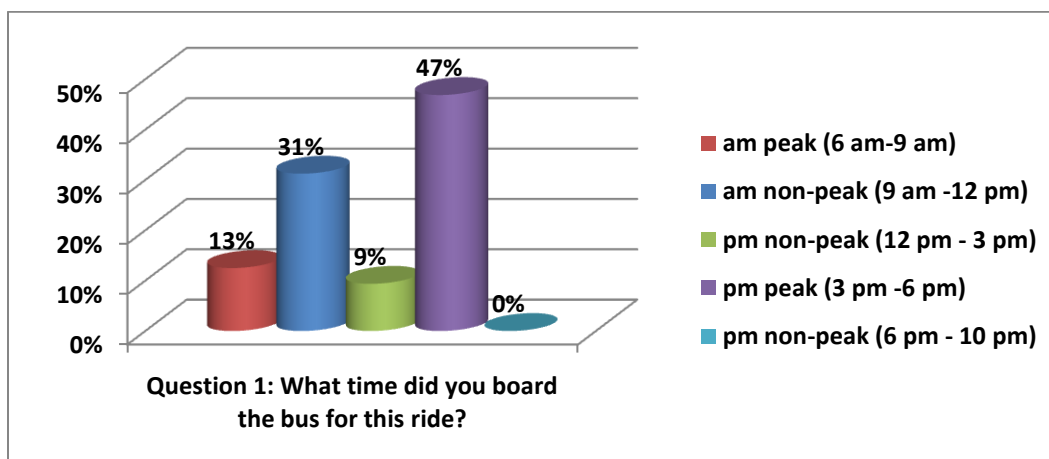


Question 25: What community do you live in?		
Eureka	2	25%
Garberville	1	13%
Miranda	2	25%
Myers Flat	1	13%
Phillipsville	1	13%
Redway	1	13%
Total	8	100%



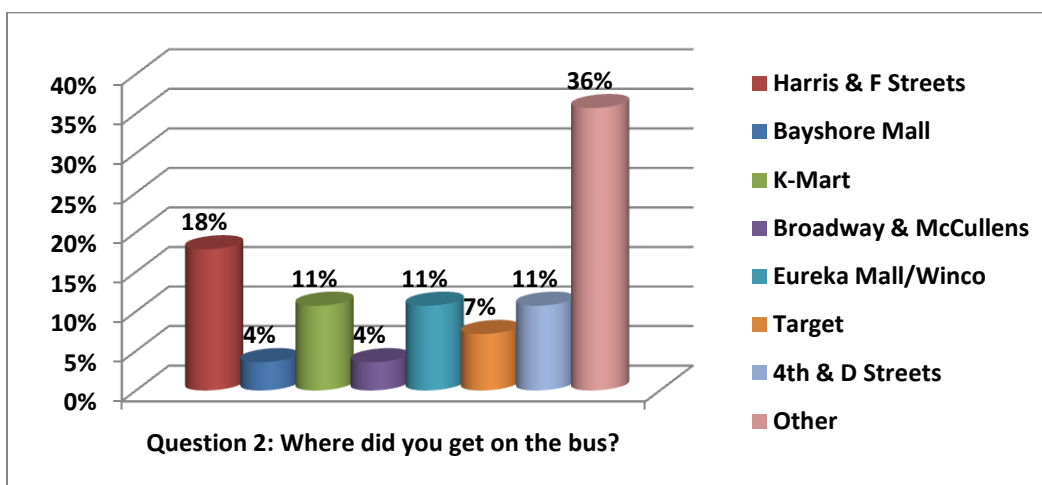
C.5 Eureka Transit Service Survey

Question 1: What time did you board the bus for this ride?		
am peak (6 am-9 am)	4	13%
am non-peak (9 am -12 pm)	10	31%
pm non-peak (12 pm - 3 pm)	3	9%
pm peak (3 pm -6 pm)	15	47%
pm non-peak (6 pm - 10 pm)	0	0%
Total	32	100%



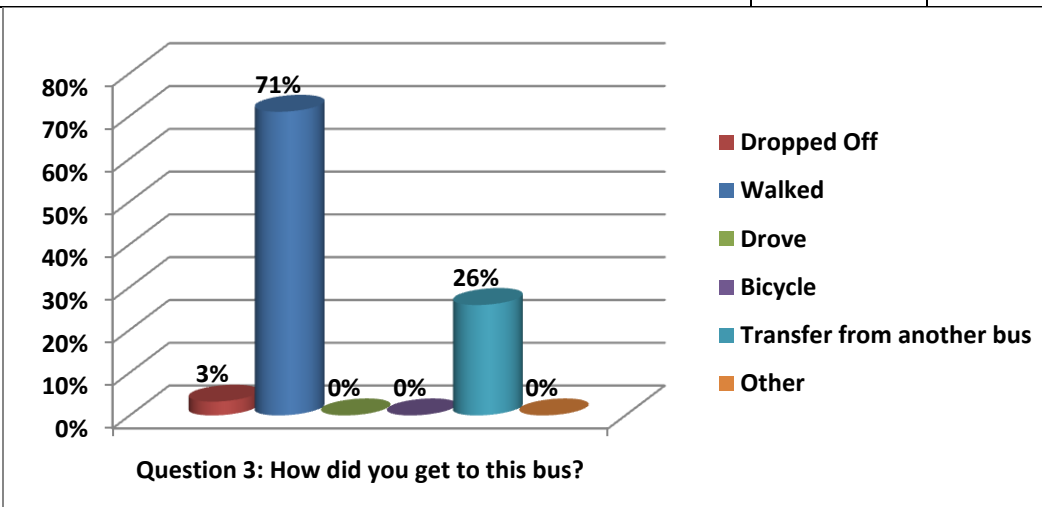
Question 2: Where did you get on the bus?

Harris & F Streets	5	18%
Bayshore Mall	1	4%
K-Mart	3	11%
Broadway & McCullens	1	4%
Eureka Mall/Winco	3	11%
Target	2	7%
4th & D Streets	3	11%
Other	10	36%
Total	28	100%



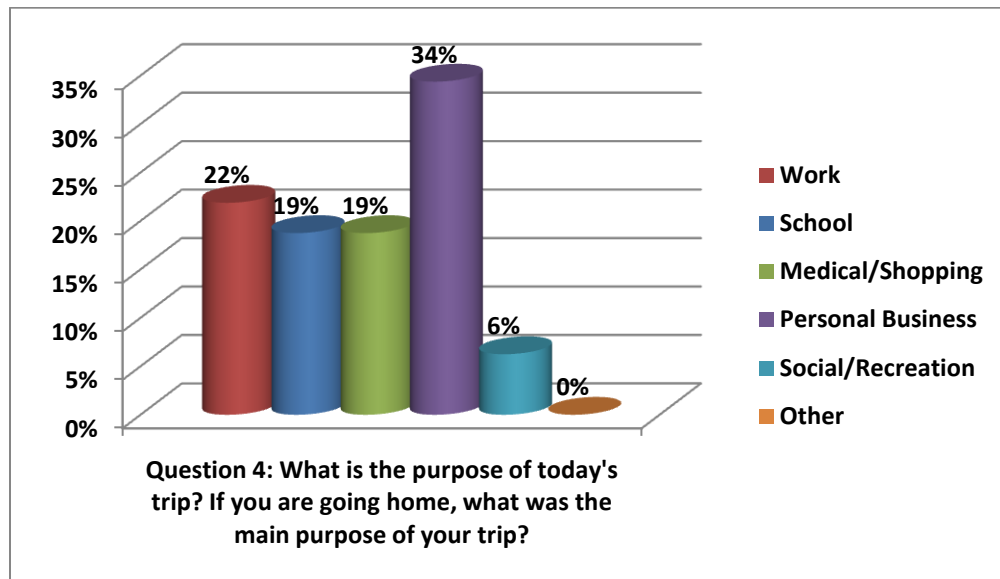
Question 3: How did you get to this bus?

Dropped Off	1	3%
Walked	22	71%
Drove	0	0%
Bicycle	0	0%
Transfer from another bus	8	26%
Other	0	0%
Total	31	100%



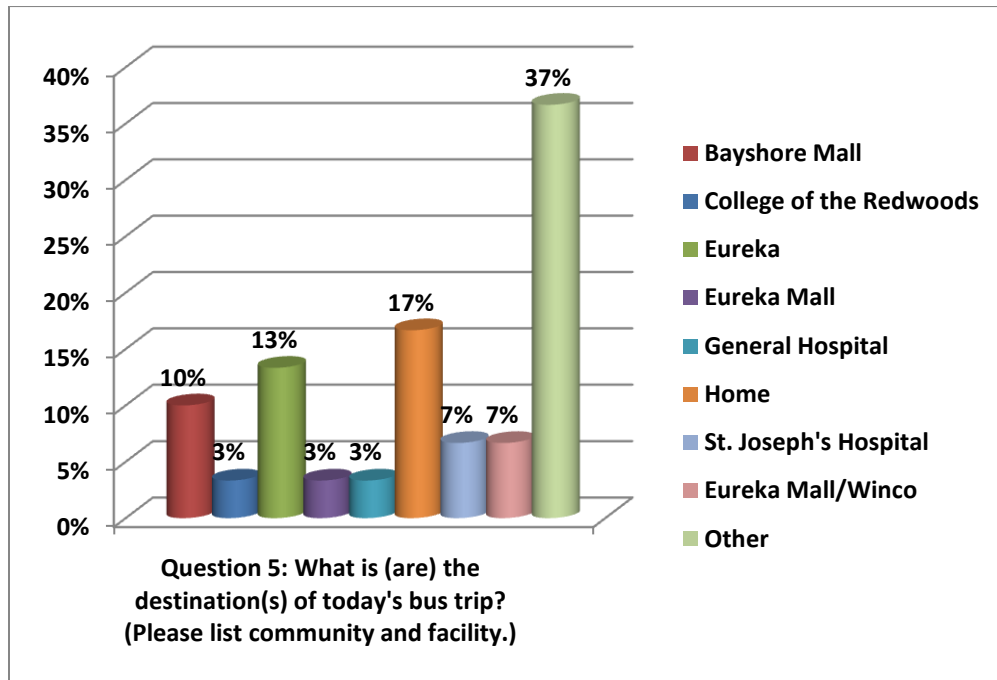
Question 4: What is the purpose of today's trip? If you are going home, what was the main purpose of your trip?

Work	7	22%
School	6	19%
Medical/Shopping	6	19%
Personal Business	11	34%
Social/Recreation	2	6%
Other	0	0%
Total	32	100%

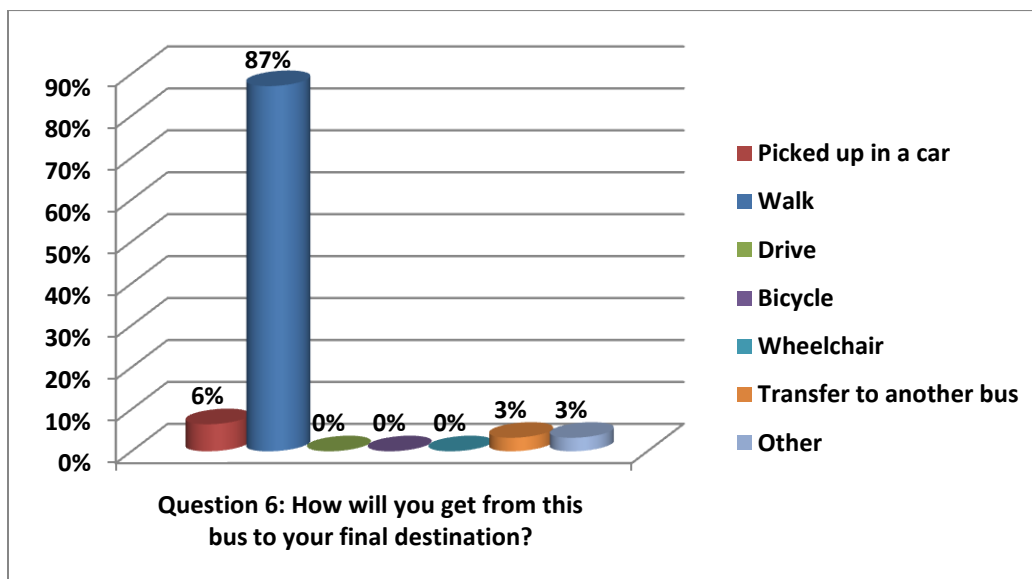


Question 5: What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

Bayshore Mall	3	10%
College of the Redwoods	1	3%
Eureka	4	13%
Eureka Mall	1	3%
General Hospital	1	3%
Home	5	17%
St. Joseph's Hospital	2	7%
Eureka Mall/Winco	2	7%
Other	11	37%
Total	30	100%

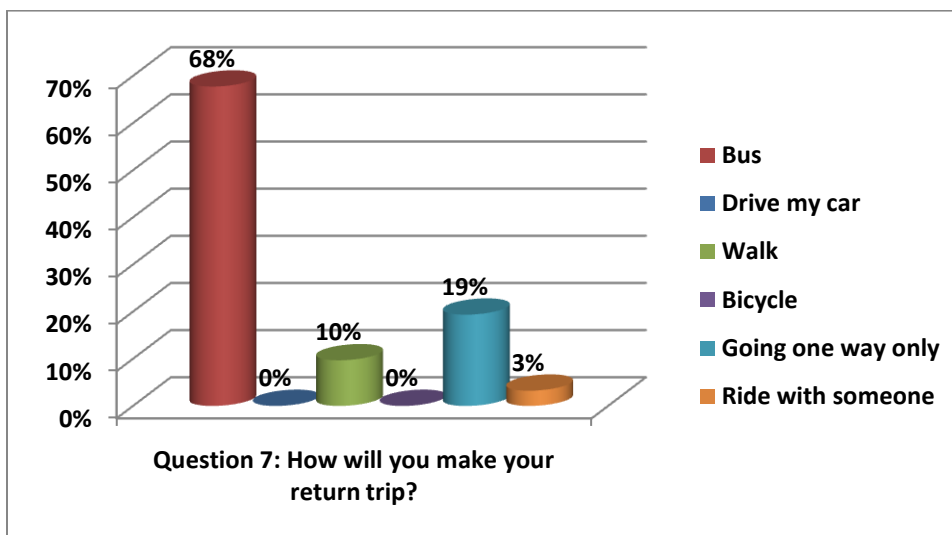


Question 6: How will you get from this bus to your final destination?		
Picked up in a car	2	6%
Walk	27	87%
Drive	0	0%
Bicycle	0	0%
Wheelchair	0	0%
Transfer to another bus	1	3%
Other	1	3%
Total	31	100%

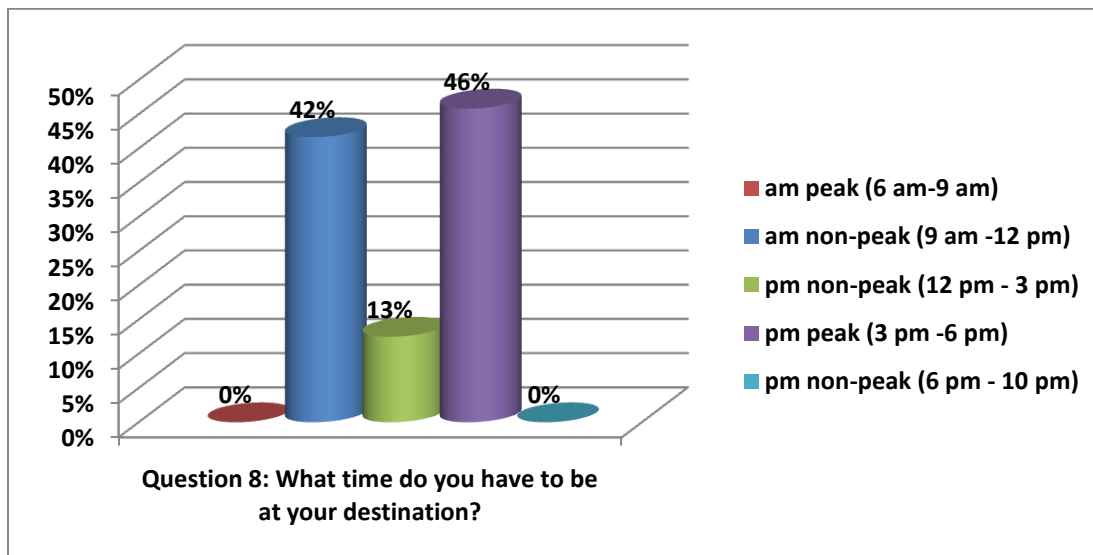


Question 7: How will you make your return trip?

Bus	21	68%
Drive my car	0	0%
Walk	3	10%
Bicycle	0	0%
Going one way only	6	19%
Ride with someone	1	3%
Total	31	100%

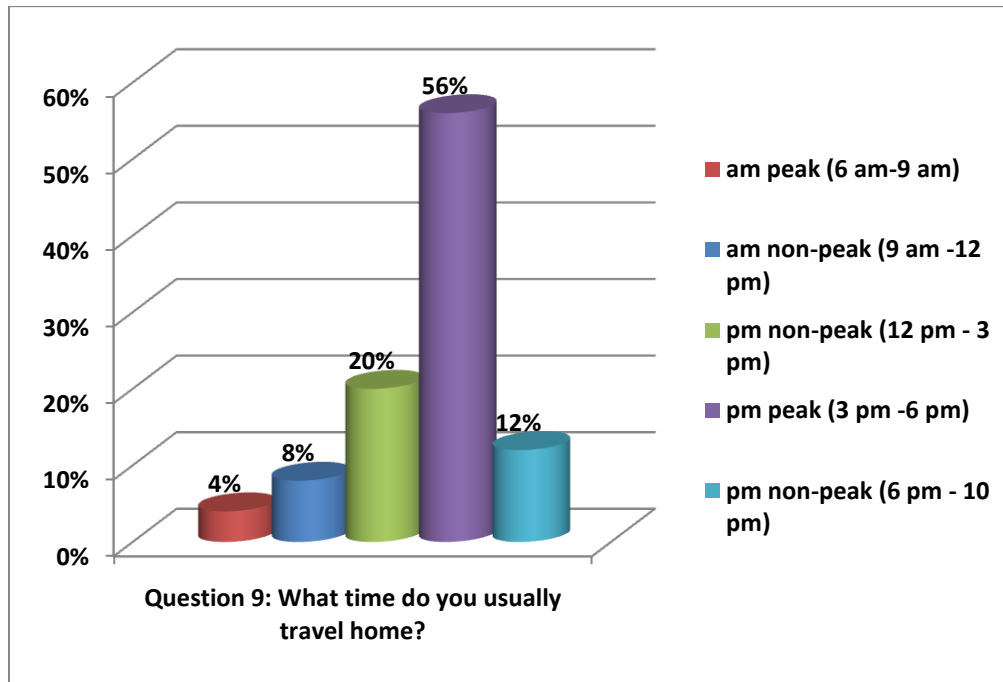

Question 8: What time do you have to be at your destination?

am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	10	42%
pm non-peak (12 pm - 3 pm)	3	13%
pm peak (3 pm -6 pm)	11	46%
pm non-peak (6 pm - 10 pm)	0	0%
Total	24	100%

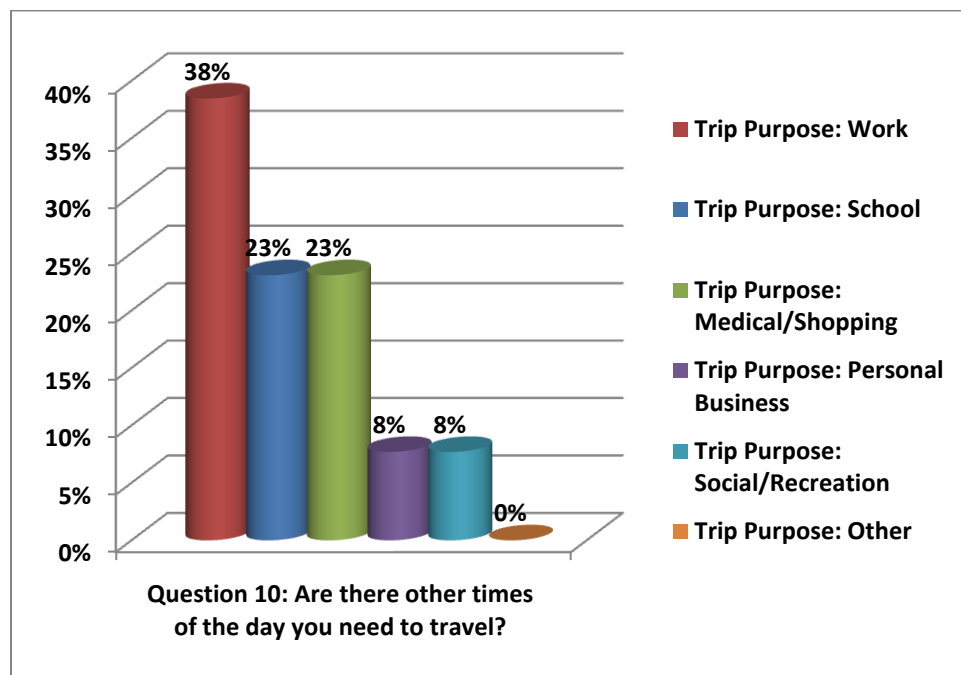
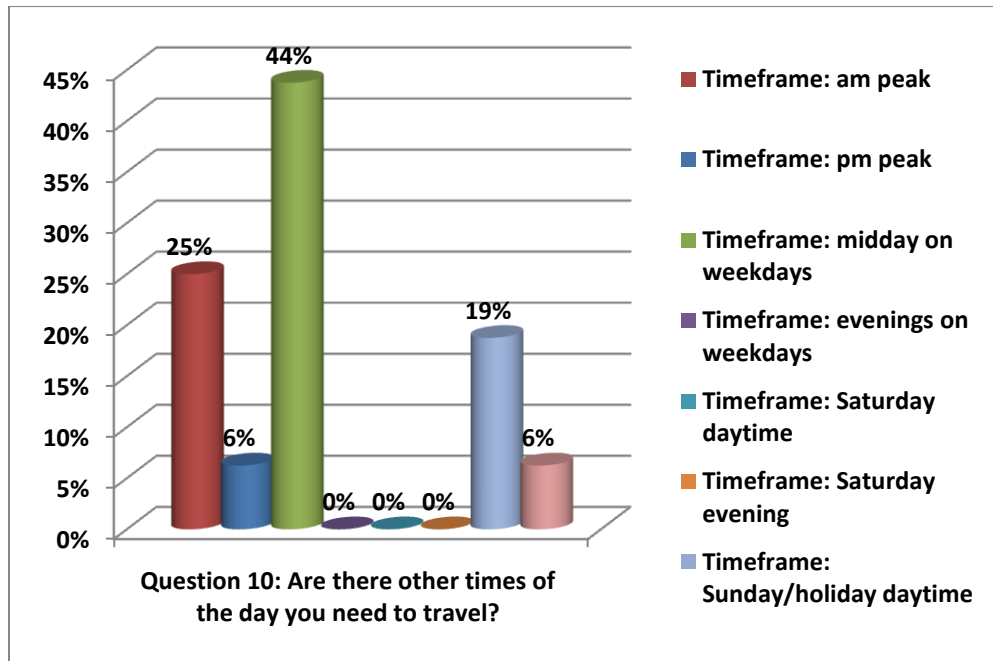


Question 9: What time do you usually travel home?

am peak (6 am-9 am)	1	4%
am non-peak (9 am -12 pm)	2	8%
pm non-peak (12 pm - 3 pm)	5	20%
pm peak (3 pm -6 pm)	14	56%
pm non-peak (6 pm - 10 pm)	3	12%
Total	25	100%

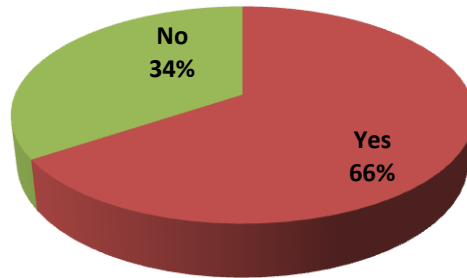

Question 10: Are there other times of the day you need to travel?

Timeframe			Trip Purpose		
Timeframe: am peak	4	25%	Trip Purpose: Work	5	38%
Timeframe: pm peak	1	6%	Trip Purpose: School	3	23%
Timeframe: midday on weekdays	7	44%	Trip Purpose: Medical/Shopping	3	23%
Timeframe: evenings on weekdays	0	0%	Trip Purpose: Personal Business	1	8%
Timeframe: Saturday daytime	0	0%	Trip Purpose: Social/Recreation	1	8%
Timeframe: Saturday evening	0	0%	Trip Purpose: Other	0	0%
Timeframe: Sunday/holiday daytime	3	19%			
Timeframe: Sunday/holiday evening	1	6%			
Total	16	100%	Total	13	100%



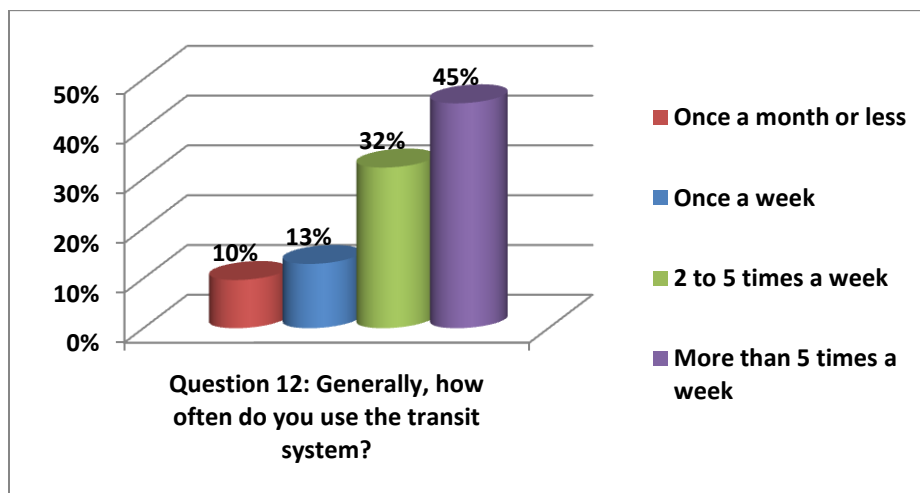
Question 11: Is this a regular commute trip for work, school, or medical treatment?		
Yes	21	66%
No	11	34%
Total	32	100%

Question 11: Is this a regular commute trip for work, school, or medical treatment?



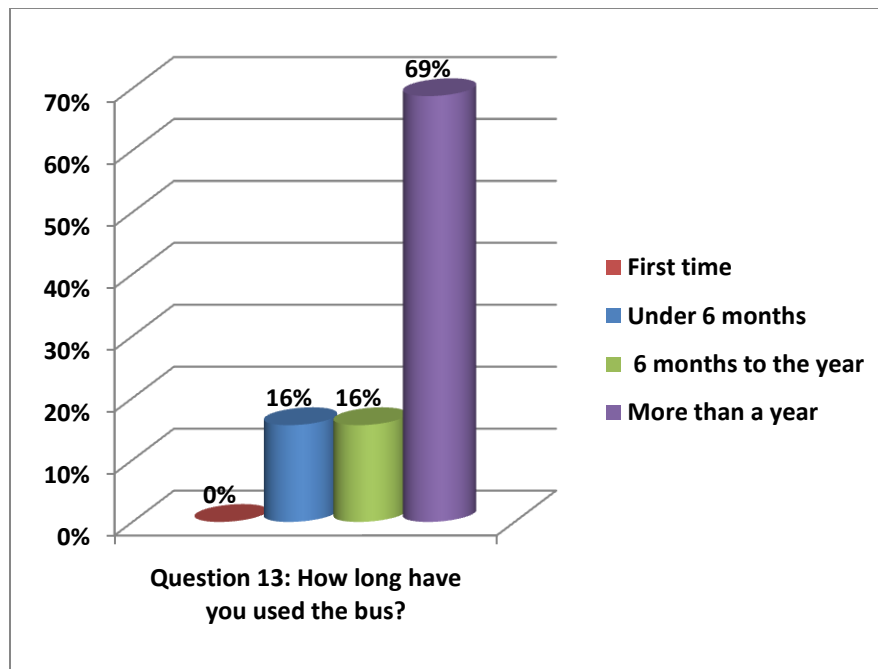
Question 12: Generally, how often do you use the transit system?

Once a month or less	3	10%
Once a week	4	13%
2 to 5 times a week	10	32%
More than 5 times a week	14	45%
Total	31	100%

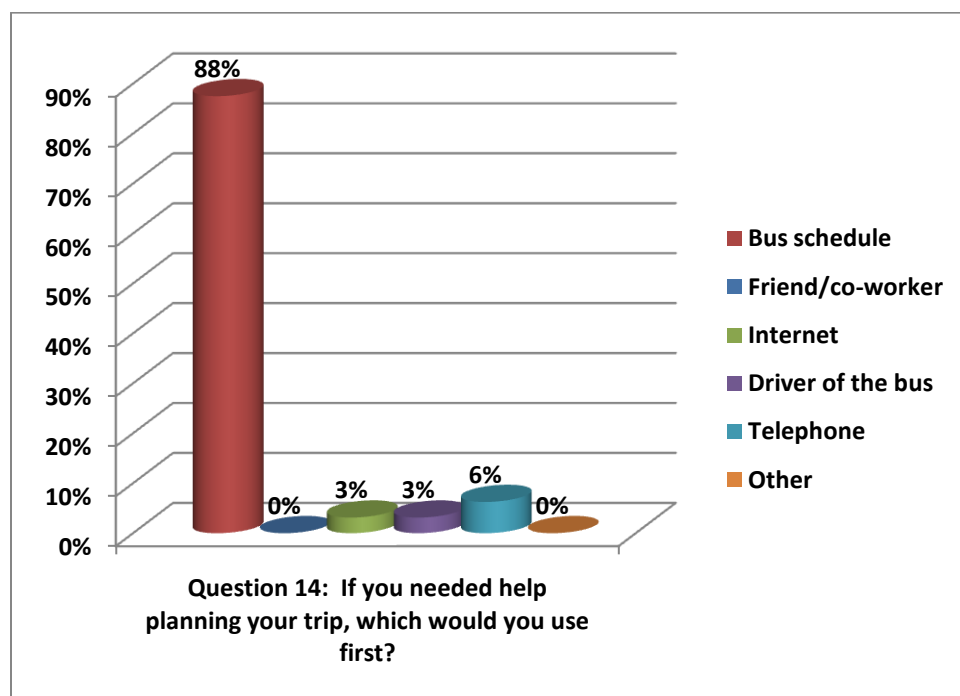


Question 13: How long have you used the bus?

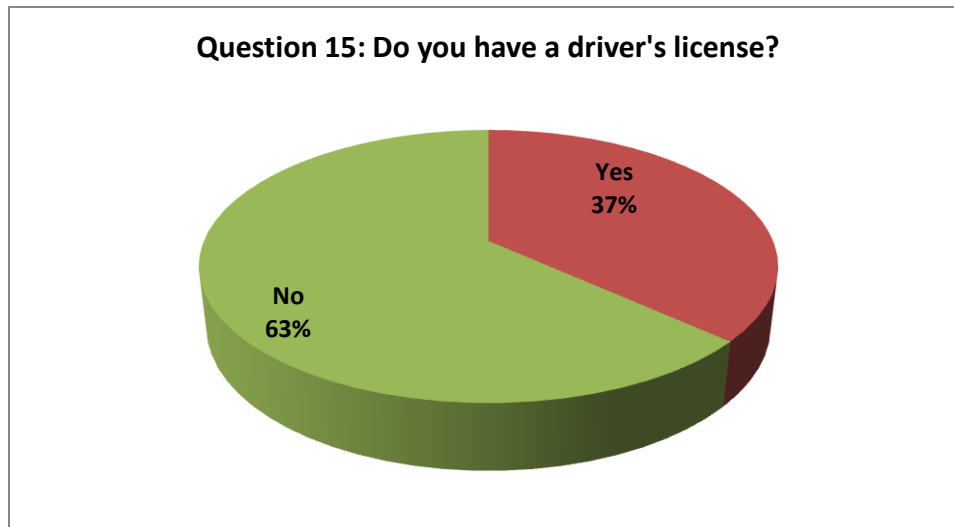
First time	0	0%
Under 6 months	5	16%
6 months to the year	5	16%
More than a year	22	69%
Total	32	100%



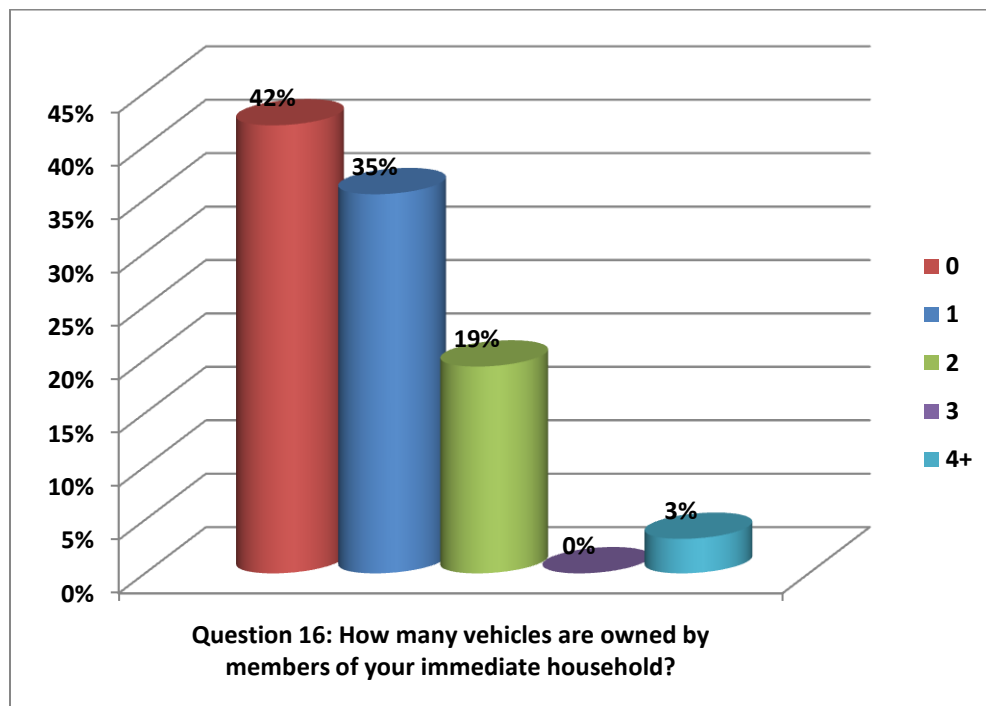
Question 14: If you needed help planning your trip, which would you use first?		
Bus schedule	28	88%
Friend/co-worker	0	0%
Internet	1	3%
Driver of the bus	1	3%
Telephone	2	6%
Other	0	0%
Total	32	100%



Question 15: Do you have a driver's license?		
Yes	11	37%
No	19	63%
Total	30	100%

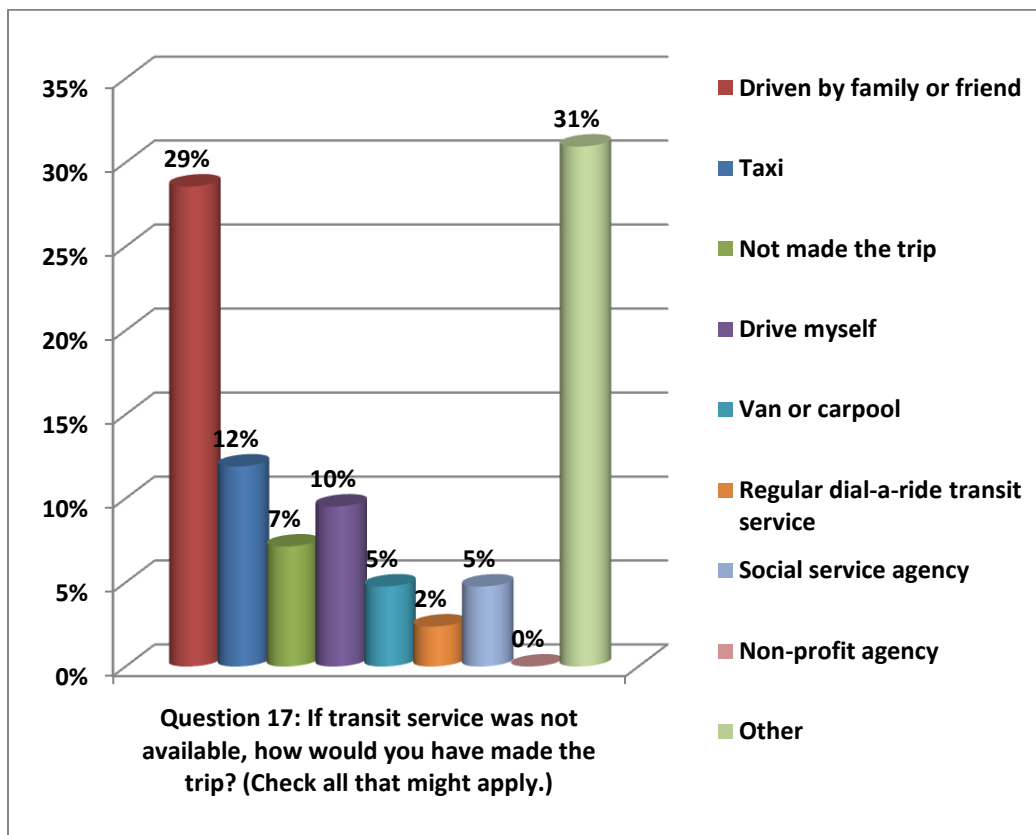


Question 16: How many vehicles are owned by members of your immediate household?		
0	13	42%
1	11	35%
2	6	19%
3	0	0%
4+	1	3%
Total	31	100%



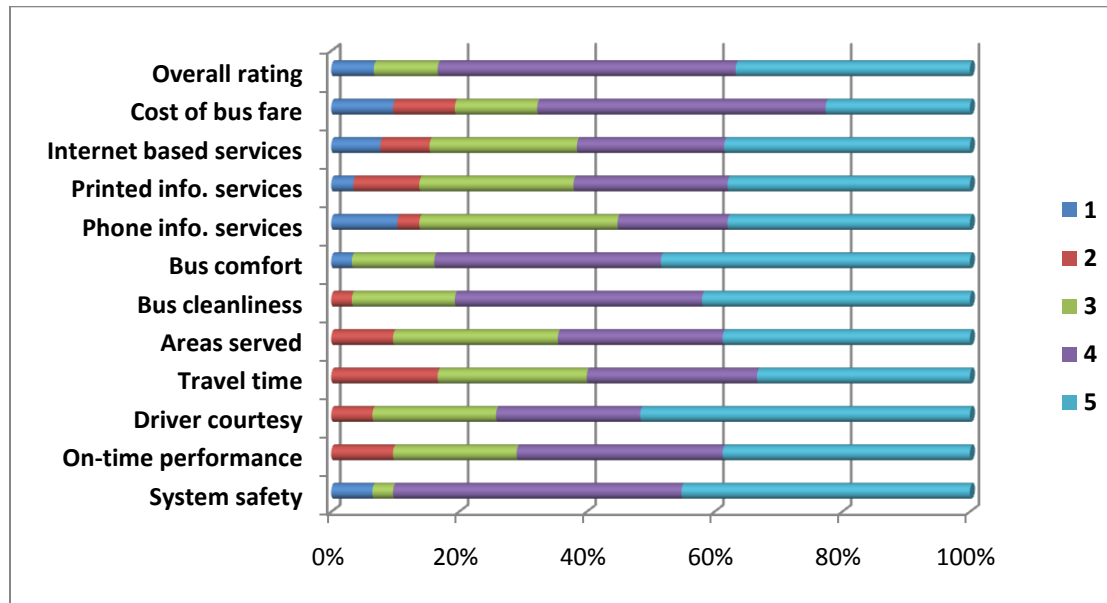
Question 17: If transit service was not available, how would you have made the trip? (Check all that might apply.)

Driven by family or friend	12	29%
Taxi	5	12%
Not made the trip	3	7%
Drive myself	4	10%
Van or carpool	2	5%
Regular dial-a-ride transit service	1	2%
Social service agency	2	5%
Non-profit agency	0	0%
Other	13	31%
Total	42	100%

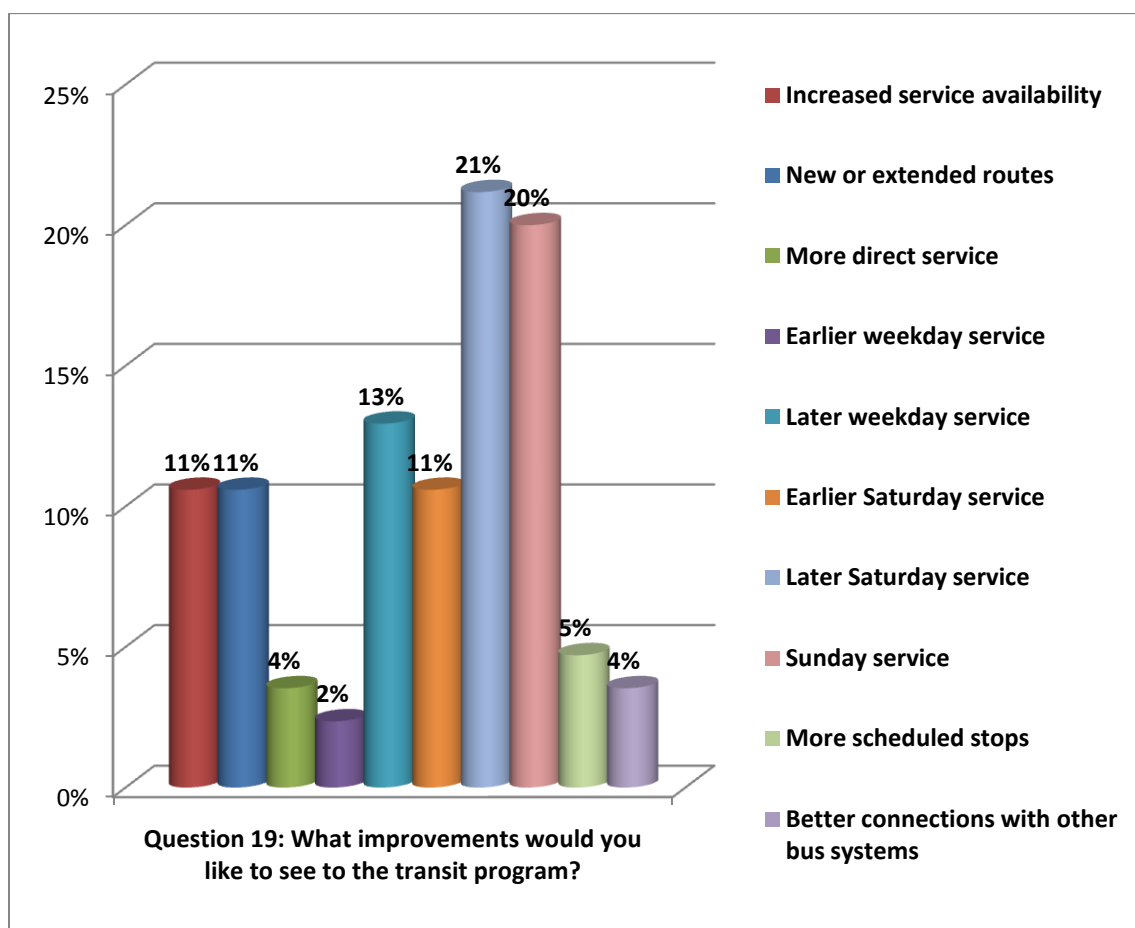


Question 18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest.

	System safety	On-time performance	Driver courtesy	Travel time	Areas served	Bus cleanliness	Bus comfort	Phone info. services	Printed info. services	Internet based services	Cost of bus fare	Overall rating
1	2	0	0	0	0	0	1	3	1	2	3	2
2	0	3	2	5	3	1	0	1	3	2	3	0
3	1	6	6	7	8	5	4	9	7	6	4	3
4	14	10	7	8	8	12	11	5	7	6	14	14
5	14	12	16	10	12	13	15	11	11	10	7	11
Total	31	31	31	30	31	31	31	29	29	26	31	30

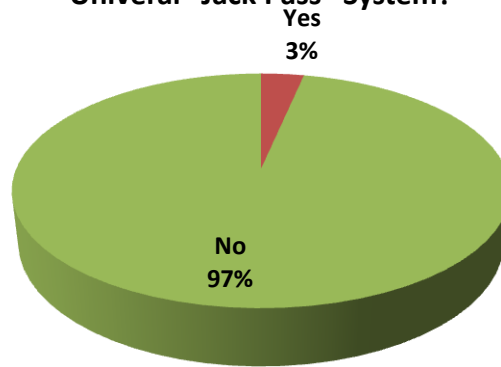


Question 19: What improvements would you like to see to the transit program?		
Increased service availability	9	11%
New or extended routes	9	11%
More direct service	3	4%
Earlier weekday service	2	2%
Later weekday service	11	13%
Earlier Saturday service	9	11%
Later Saturday service	18	21%
Sunday service	17	20%
More scheduled stops	4	5%
Better connections with other bus systems	3	4%
Total	85	100%



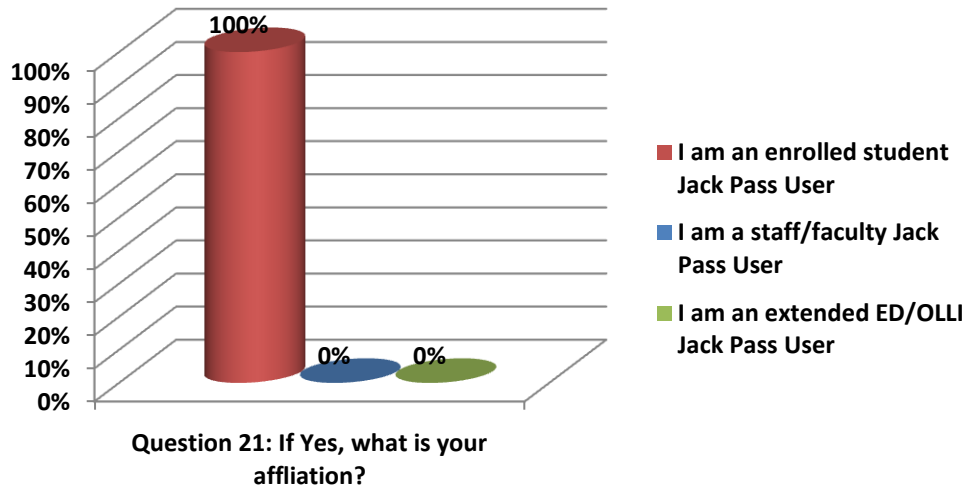
Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?		
Yes	1	3%
No	29	97%
Total	30	100%

Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?



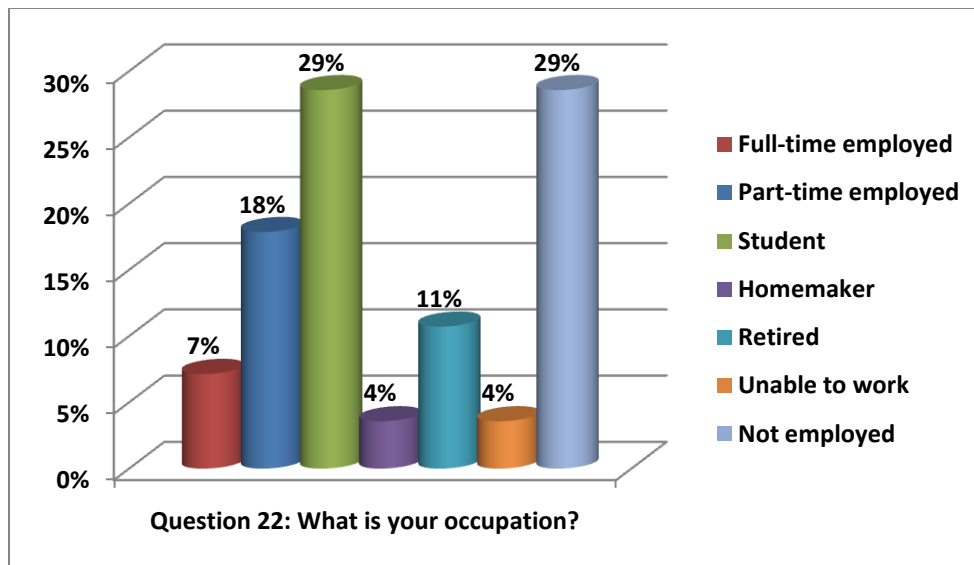
Question 21: If Yes, what is your affiliation?

I am an enrolled student Jack Pass User	1	100%
I am a staff/faculty Jack Pass User	0	0%
I am an extended ED/OLLI Jack Pass User	0	0%
Total	1	100%

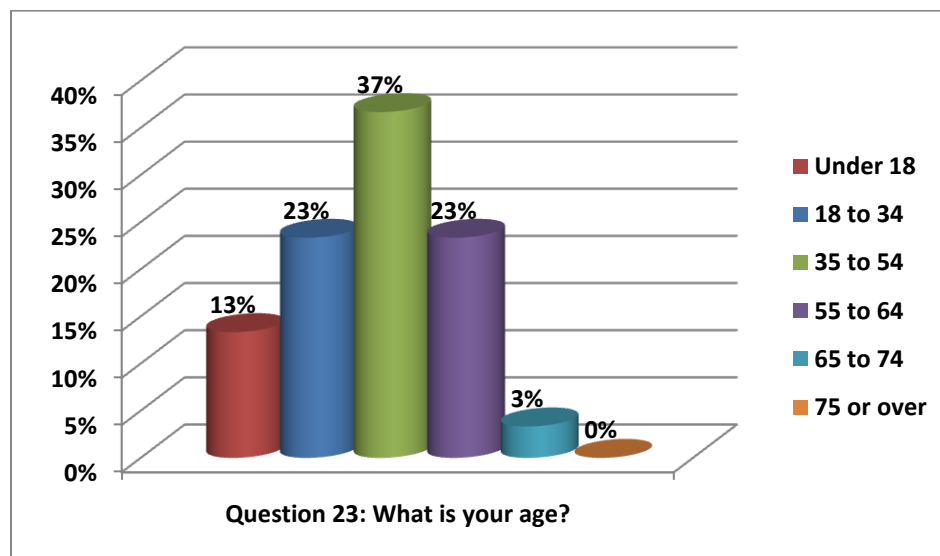


Question 22: What is your occupation?

Full-time employed	2	7%
Part-time employed	5	18%
Student	8	29%
Homemaker	1	4%
Retired	3	11%
Unable to work	1	4%
Not employed	8	29%
Total	28	100%

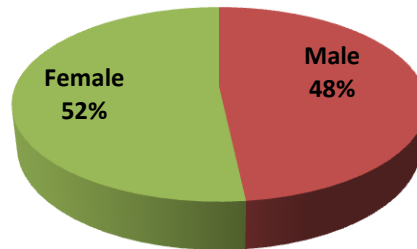


Question 23: What is your age?		
Under 18	4	13%
18 to 34	7	23%
35 to 54	11	37%
55 to 64	7	23%
65 to 74	1	3%
75 or over	0	0%
Total	30	100%



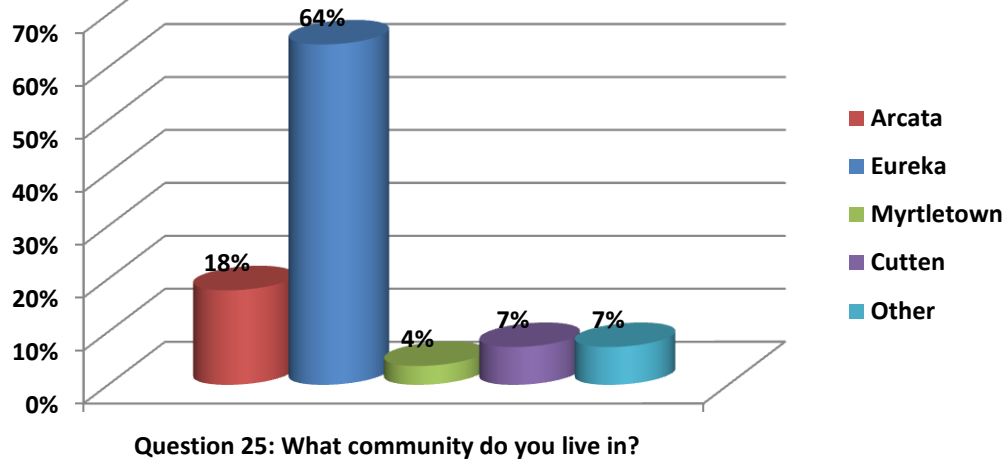
Question 24: What is your gender?		
Male	14	48%
Female	15	52%
Total	29	100%

Question 24: What is your gender?



Question 25: What community do you live in?

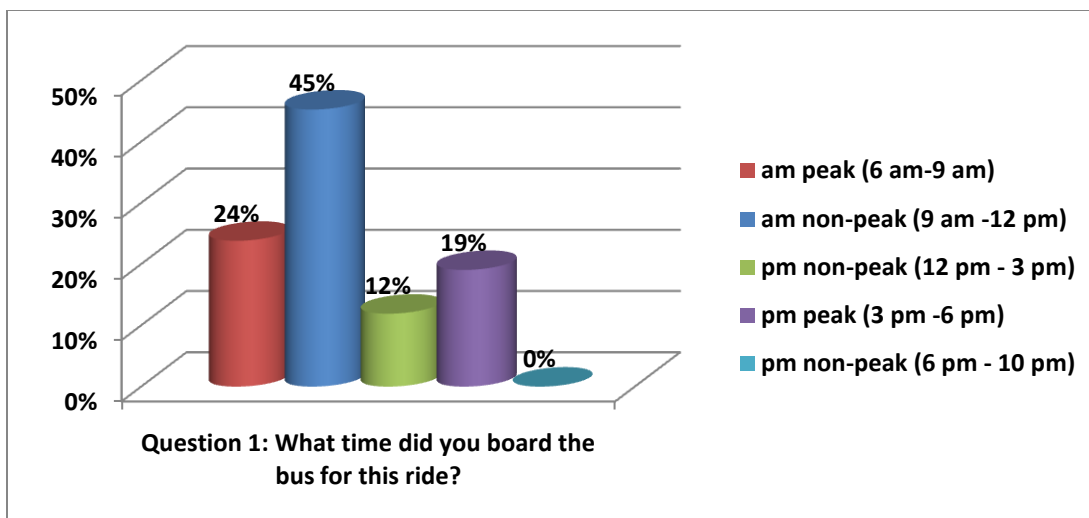
Arcata	5	18%
Eureka	18	64%
Myrtle town	1	4%
Cutten	2	7%
Other	2	7%
Total	28	100%



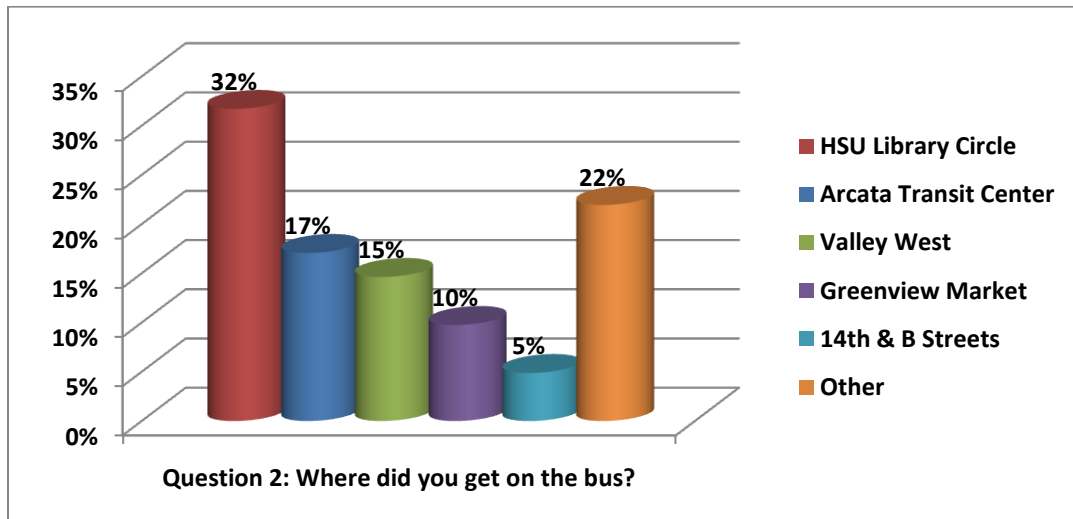
C.6 Arcata & Mad River Transit System Service Survey

Question 1: What time did you board the bus for this ride?

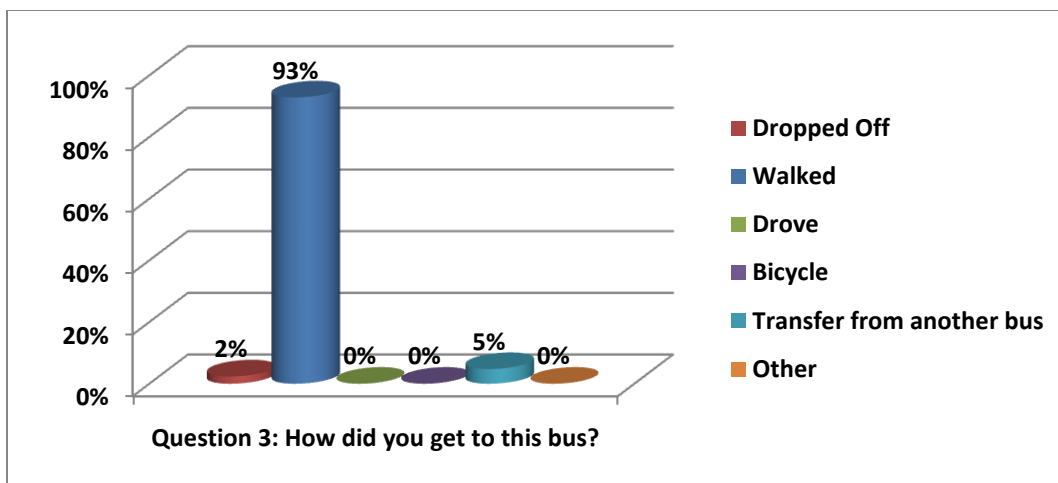
am peak (6 am-9 am)	10	24%
am non-peak (9 am -12 pm)	19	45%
pm non-peak (12 pm - 3 pm)	5	12%
pm peak (3 pm -6 pm)	8	19%
pm non-peak (6 pm - 10 pm)	0	0%
Total	42	100%



Question 2: Where did you get on the bus?		
HSU Library Circle	13	32%
Arcata Transit Center	7	17%
Valley West	6	15%
Greenview Market	4	10%
14th & B Streets	2	5%
Other	9	22%
Total	41	100%

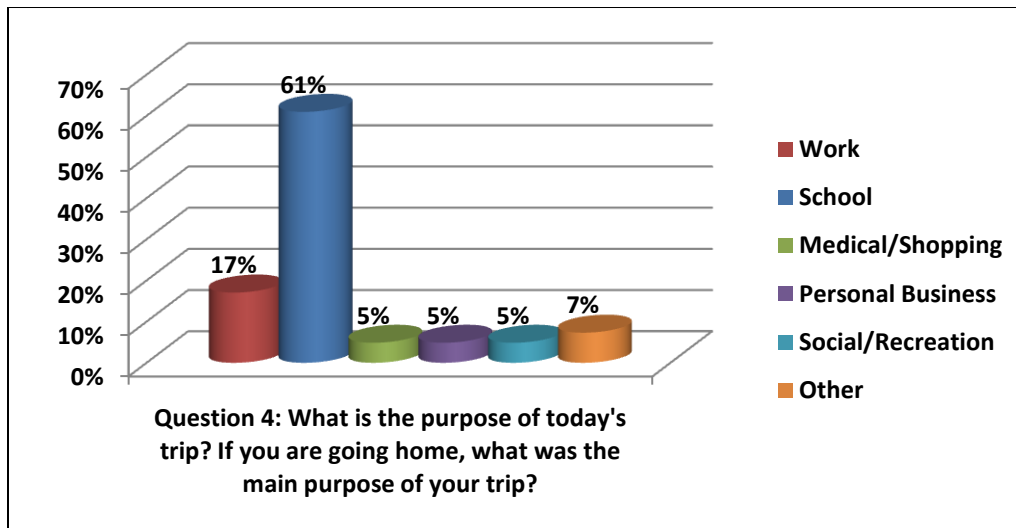


Question 3: How did you get to this bus?		
Dropped Off	1	2%
Walked	39	93%
Drove	0	0%
Bicycle	0	0%
Transfer from another bus	2	5%
Other	0	0%
Total	42	100%



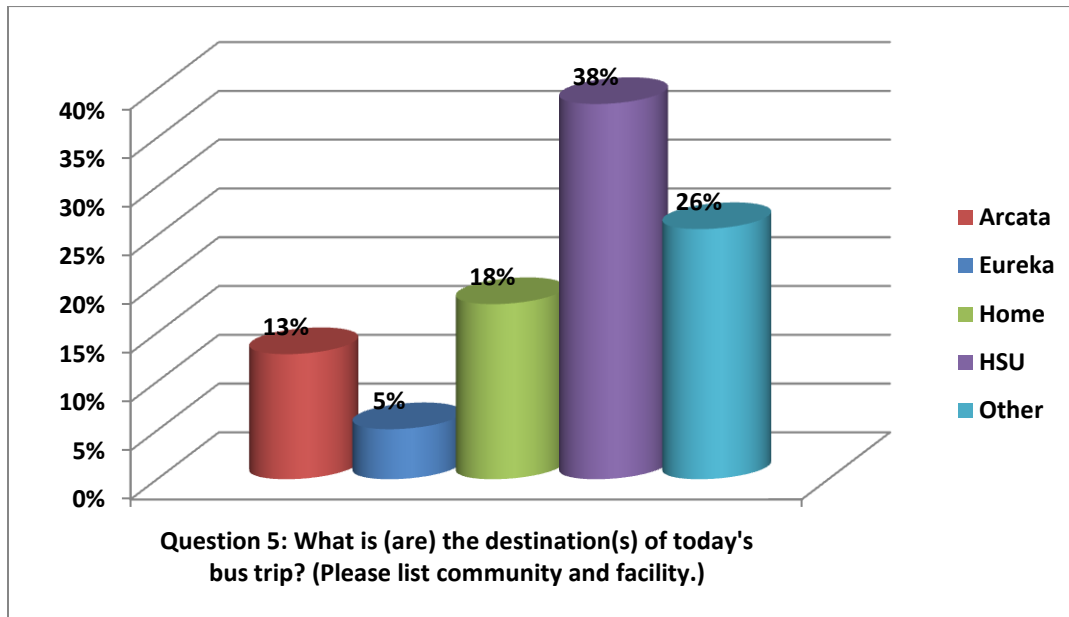
Question 4: What is the purpose of today's trip? If you are going home, what was the main purpose of your trip?

Work	7	17%
School	25	61%
Medical/Shopping	2	5%
Personal Business	2	5%
Social/Recreation	2	5%
Other	3	7%
Total	41	100%

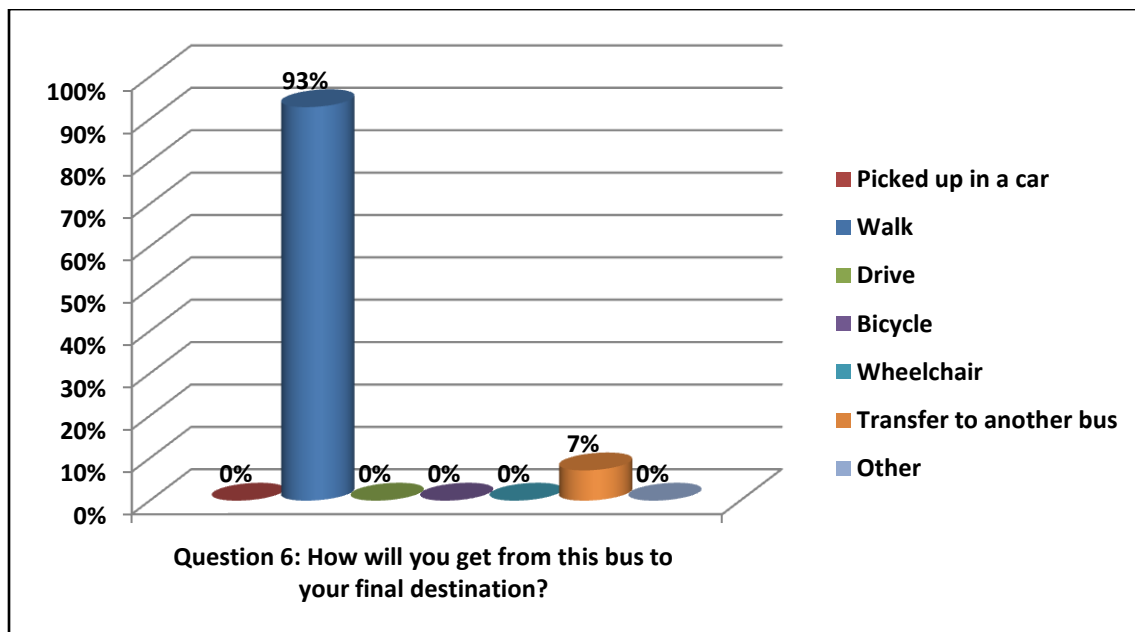


Question 5: What is (are) the destination(s) of today's bus trip? (Please list community and facility.)

Arcata	5	13%
Eureka	2	5%
Home	7	18%
HSU	15	38%
Other	10	26%
Total	39	100%

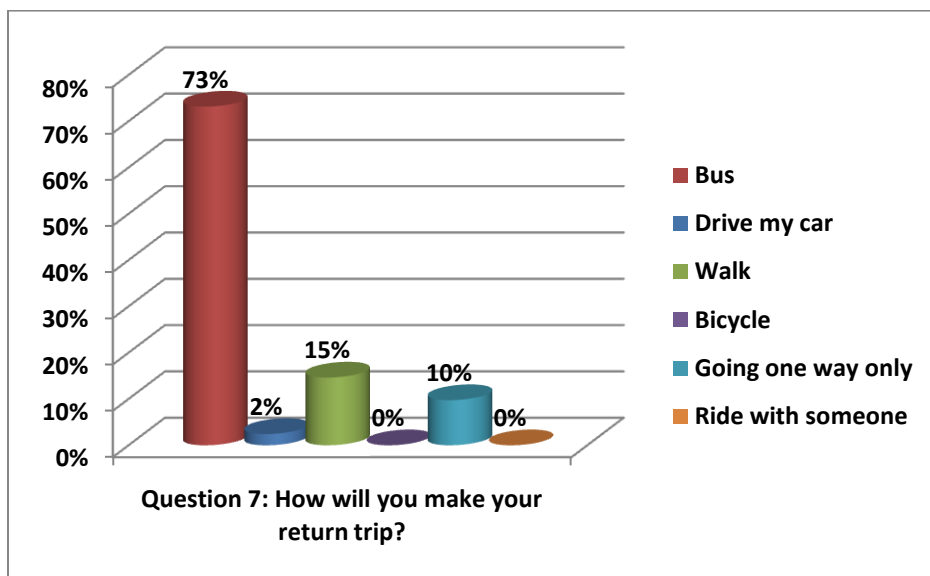


Question 6: How will you get from this bus to your final destination?		
Picked up in a car	0	0%
Walk	39	93%
Drive	0	0%
Bicycle	0	0%
Wheelchair	0	0%
Transfer to another bus	3	7%
Other	0	0%
Total	42	100%

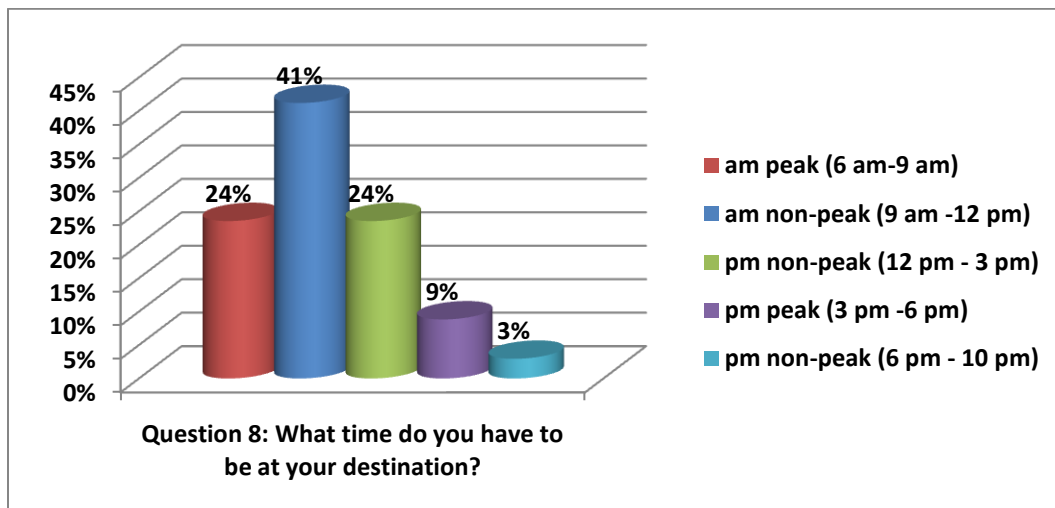


Question 7: How will you make your return trip?

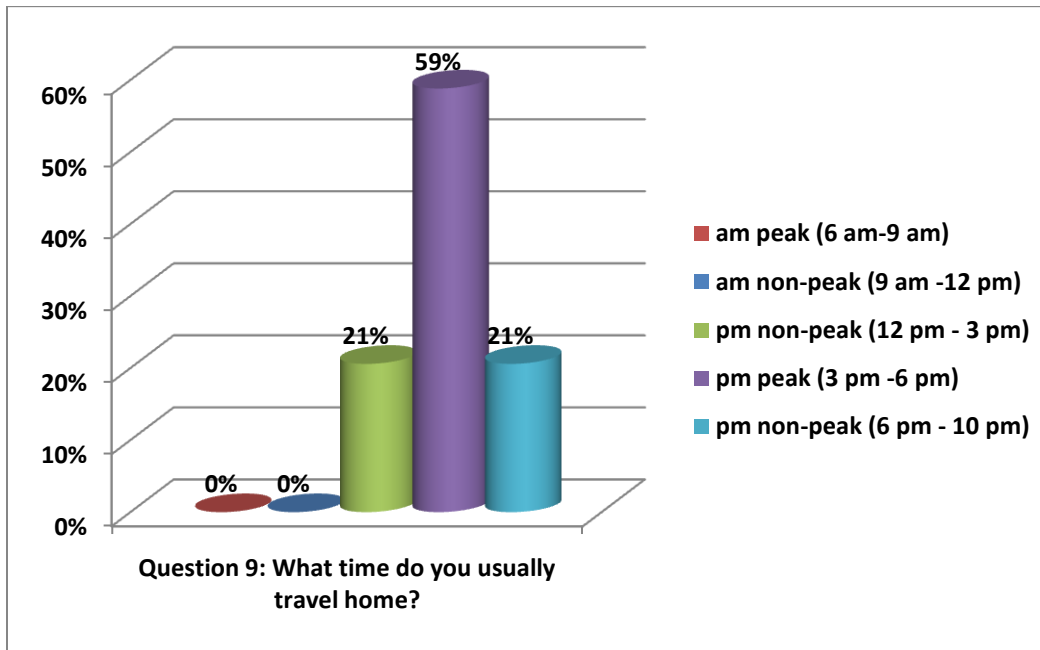
Bus	30	73%
Drive my car	1	2%
Walk	6	15%
Bicycle	0	0%
Going one way only	4	10%
Ride with someone	0	0%
Total	41	100%


Question 8: What time do you have to be at your destination?

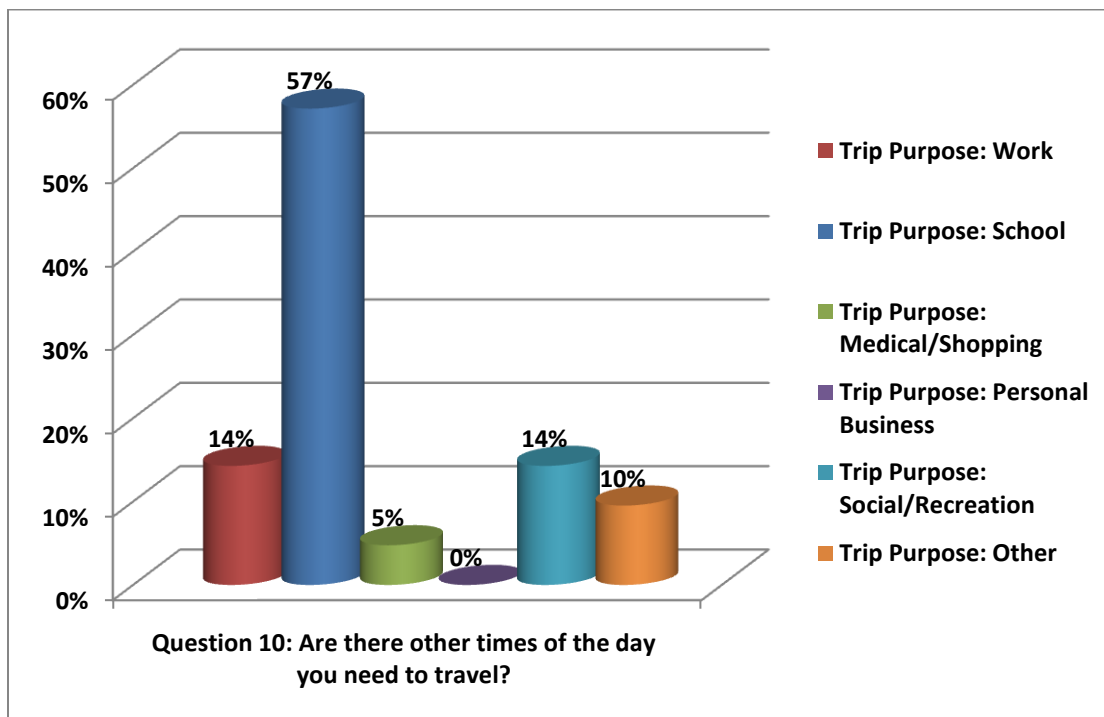
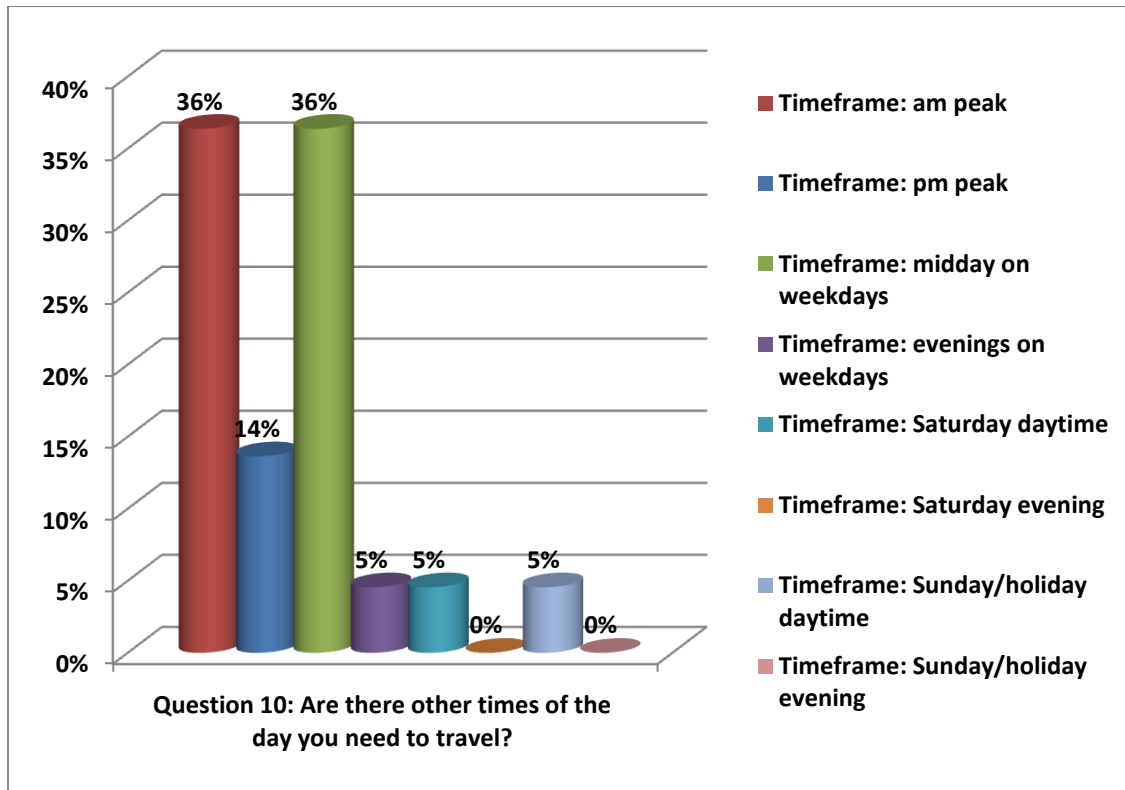
am peak (6 am-9 am)	8	24%
am non-peak (9 am -12 pm)	14	41%
pm non-peak (12 pm - 3 pm)	8	24%
pm peak (3 pm -6 pm)	3	9%
pm non-peak (6 pm - 10 pm)	1	3%
Total	34	100%



Question 9: What time do you usually travel home?		
am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	0	0%
pm non-peak (12 pm - 3 pm)	7	21%
pm peak (3 pm -6 pm)	20	59%
pm non-peak (6 pm - 10 pm)	7	21%
Total	34	100%

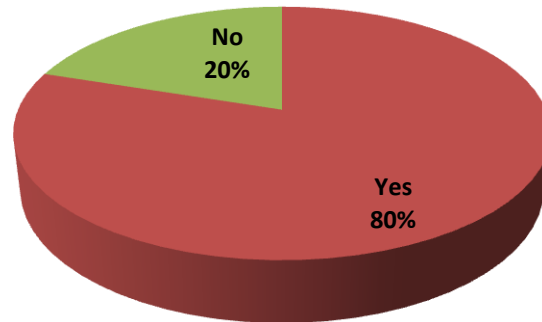


Question 10: Are there other times of the day you need to travel?					
Timeframe			Trip Purpose		
Timeframe: am peak	8	36%	Trip Purpose: Work	3	14%
Timeframe: pm peak	3	14%	Trip Purpose: School	12	57%
Timeframe: midday on weekdays	8	36%	Trip Purpose: Medical/Shopping	1	5%
Timeframe: evenings on weekdays	1	5%	Trip Purpose: Personal Business	0	0%
Timeframe: Saturday daytime	1	5%	Trip Purpose: Social/Recreation	3	14%
Timeframe: Saturday evening	0	0%	Trip Purpose: Other	2	10%
Timeframe: Sunday/holiday daytime	1	5%			
Timeframe: Sunday/holiday evening	0	0%			
Total	22	100%	Total	21	100%



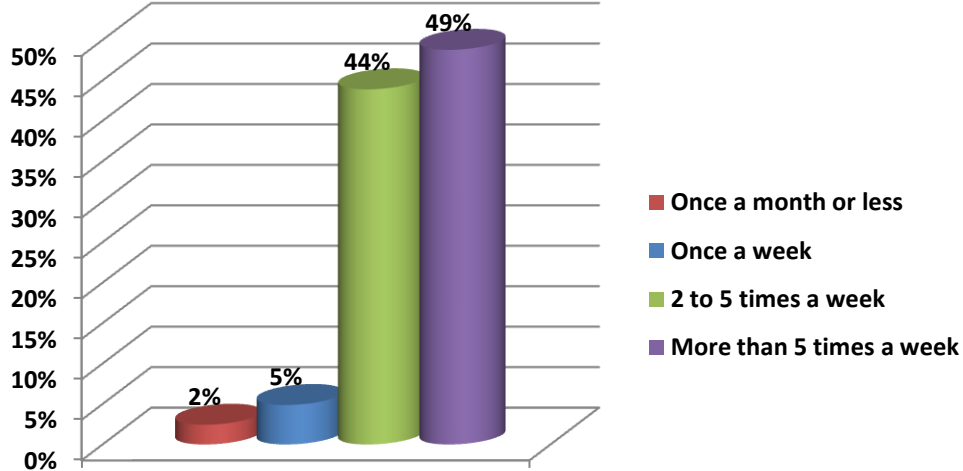
Question 11: Is this a regular commute trip for work, school, or medical treatment?		
Yes	32	80%
No	8	20%
Total	40	100%

Question 11: Is this a regular commute trip for work, school, or medical treatment?



Question 12: Generally, how often do you use the transit system?

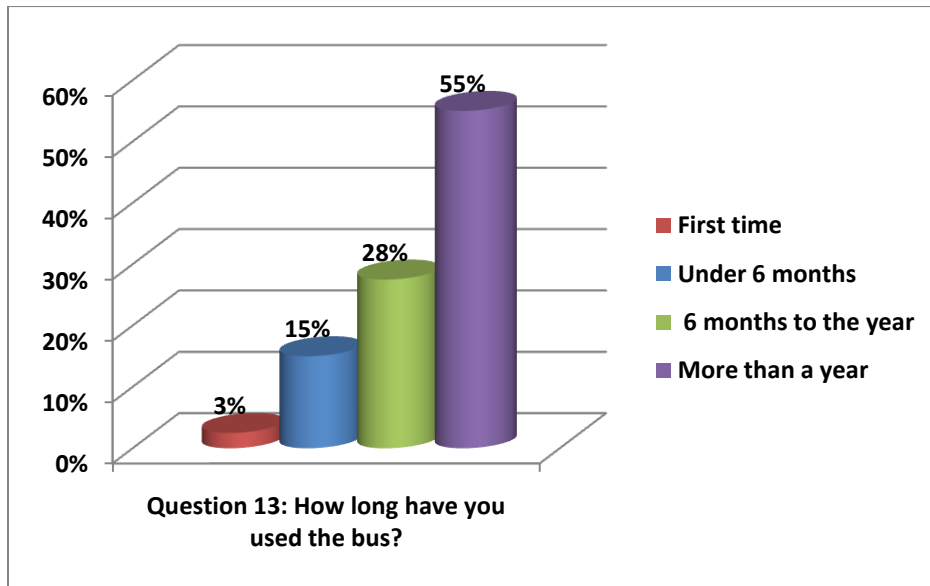
Once a month or less	1	2%
Once a week	2	5%
2 to 5 times a week	18	44%
More than 5 times a week	20	49%
Total	41	100%



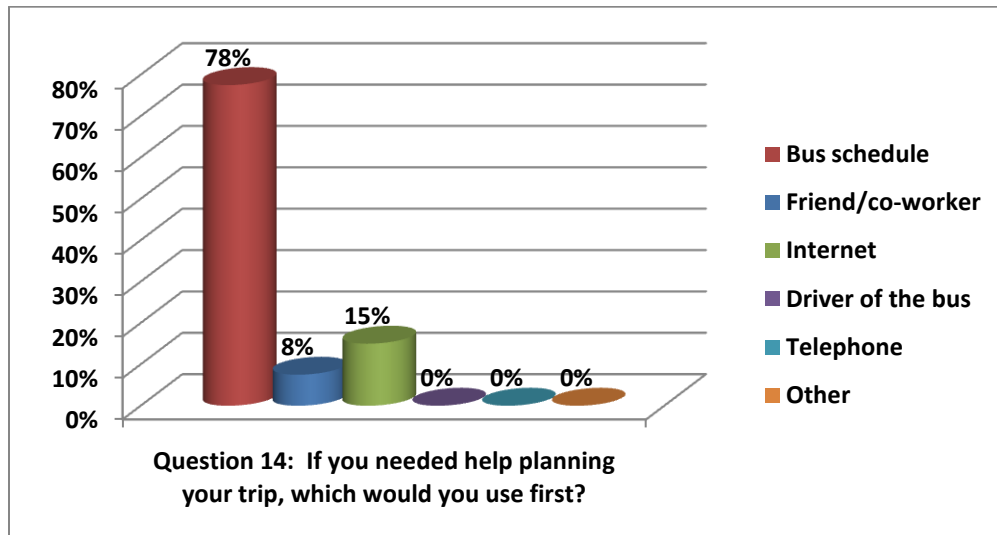
Question 12: Generally, how often do you use the transit system?

Question 13: How long have you used the bus?

First time	1	3%
Under 6 months	6	15%
6 months to the year	11	28%
More than a year	22	55%
Total	40	100%

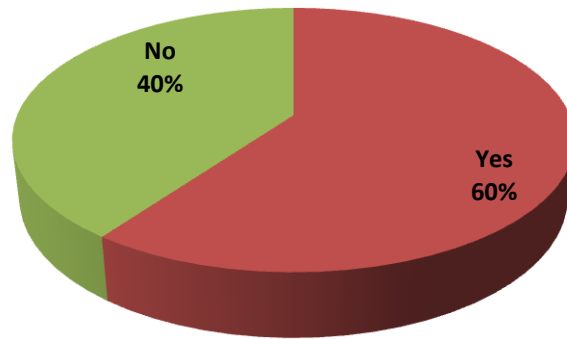


Question 14: If you needed help planning your trip, which would you use first?		
Bus schedule	31	78%
Friend/co-worker	3	8%
Internet	6	15%
Driver of the bus	0	0%
Telephone	0	0%
Other	0	0%
Total	40	100%



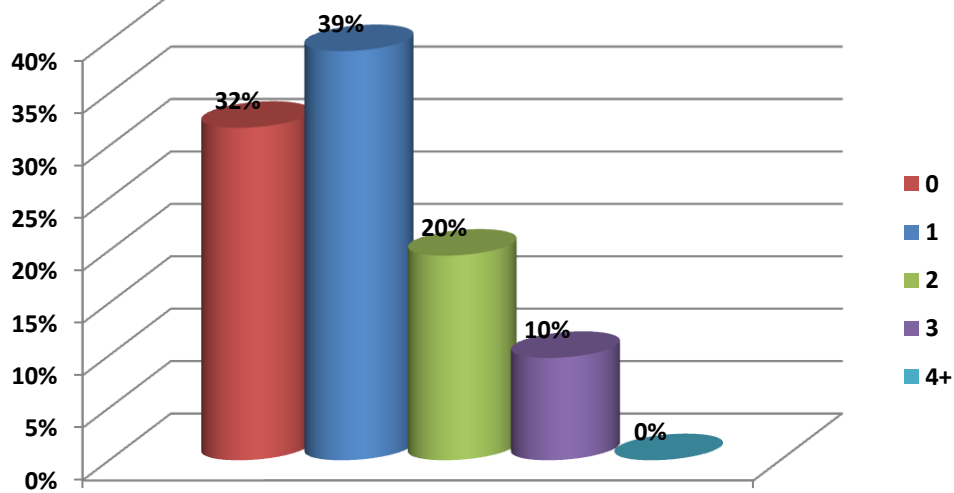
Question 15: Do you have a driver's license?		
Yes	24	60%
No	16	40%
Total	40	100%

Question 15: Do you have a driver's license?



Question 16: How many vehicles are owned by members of your immediate household?

0	13	32%
1	16	39%
2	8	20%
3	4	10%
4+	0	0%
Total	41	100%

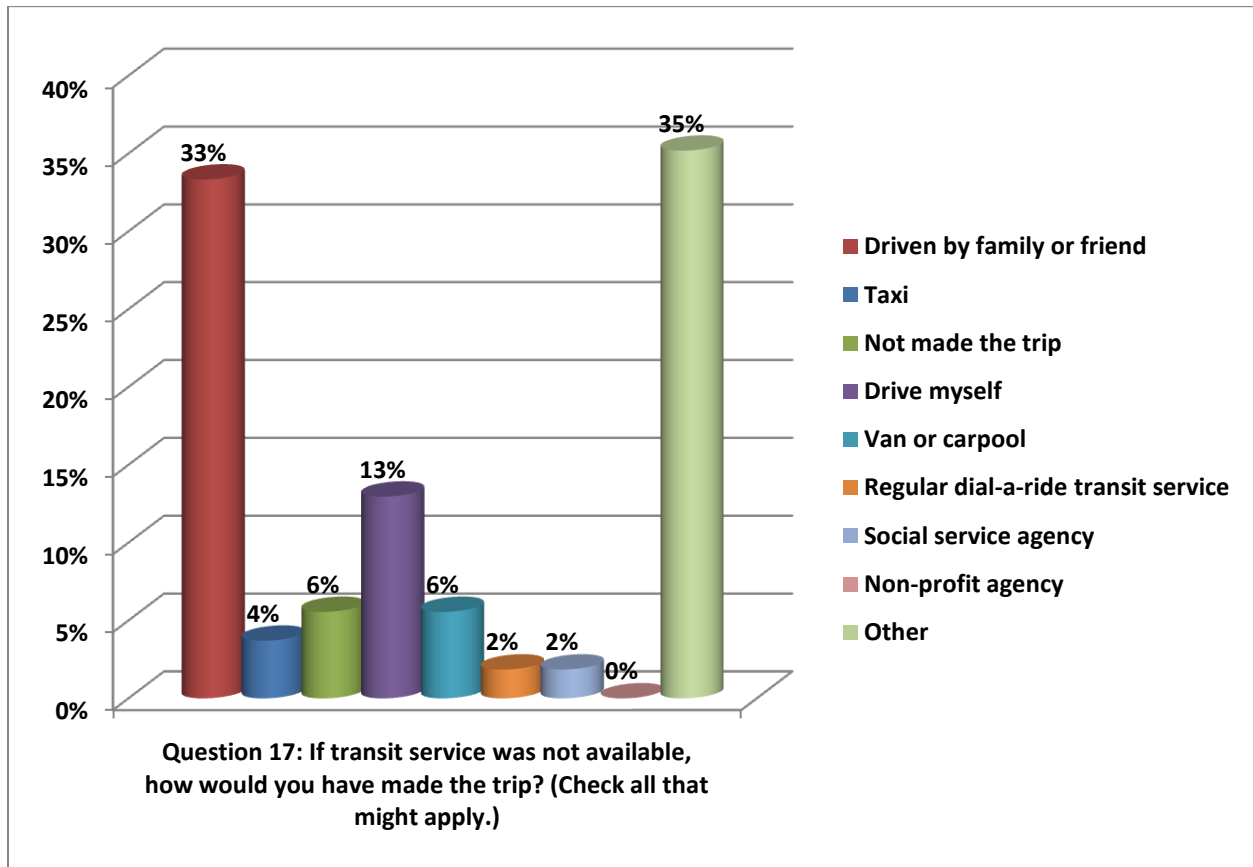


Question 16: How many vehicles are owned by members of your immediate household?

Question 17: If transit service was not available, how would you have made the trip? (Check all that might apply.)

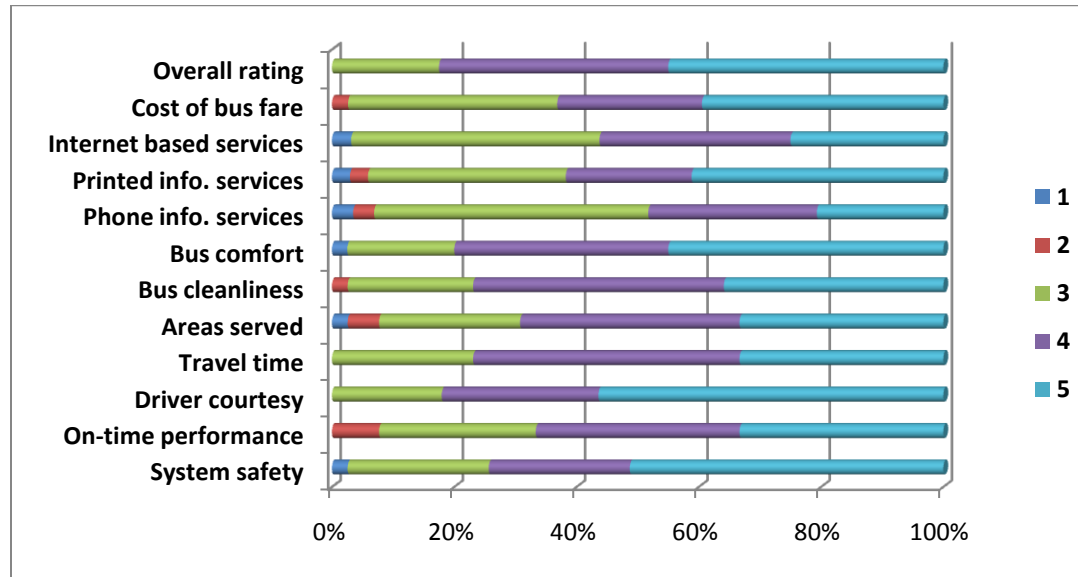
Driven by family or friend	18	33%
Taxi	2	4%
Not made the trip	3	6%

Drive myself	7	13%
Van or carpool	3	6%
Regular dial-a-ride transit service	1	2%
Social service agency	1	2%
Non-profit agency	0	0%
Other	19	35%
Total	54	100%

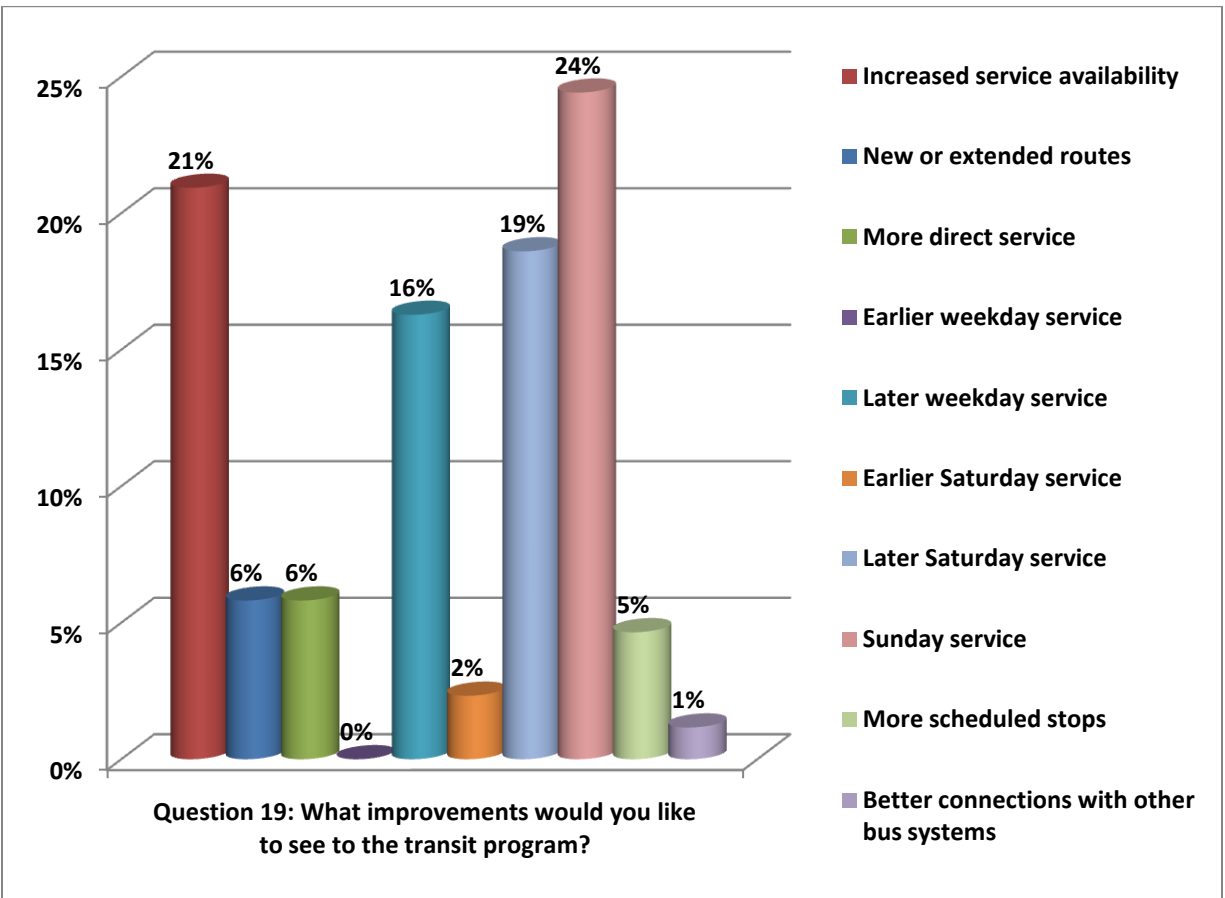


Question 18. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest.

	System safety	On-time performance	Driver courtesy	Travel time	Areas served	Bus cleanliness	Bus comfort	Phone info. services	Printed info. services	Internet based services	Cost of bus fare	Overall rating
1	1	0	0	0	1	0	1	1	1	1	0	0
2	0	3	0	0	2	1	0	1	1	0	1	0
3	9	10	7	9	9	8	7	13	11	13	13	7
4	9	13	10	17	14	16	14	8	7	10	9	15
5	20	13	22	13	13	14	18	6	14	8	15	18
Total	39	39	39	39	39	39	40	29	34	32	38	40

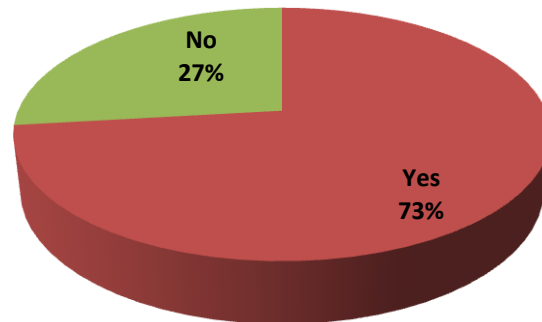


Question 19: What improvements would you like to see to the transit program?		
Increased service availability	18	21%
New or extended routes	5	6%
More direct service	5	6%
Earlier weekday service	0	0%
Later weekday service	14	16%
Earlier Saturday service	2	2%
Later Saturday service	16	19%
Sunday service	21	24%
More scheduled stops	4	5%
Better connections with other bus systems	1	1%
Total	86	100%



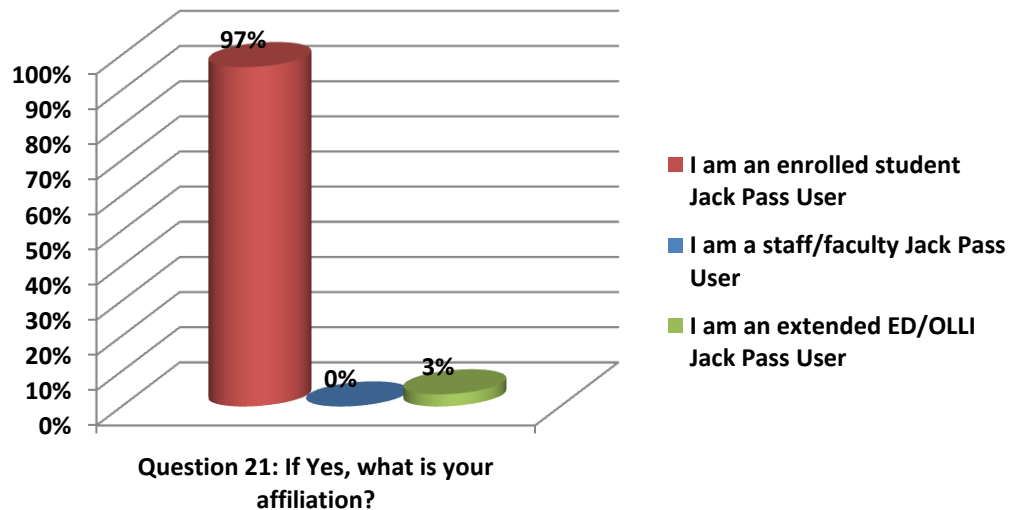
Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?		
Yes	30	73%
No	11	27%
Total	41	100%

Question 20: Are you affiliated with Humboldt State's Universal "Jack Pass" System?



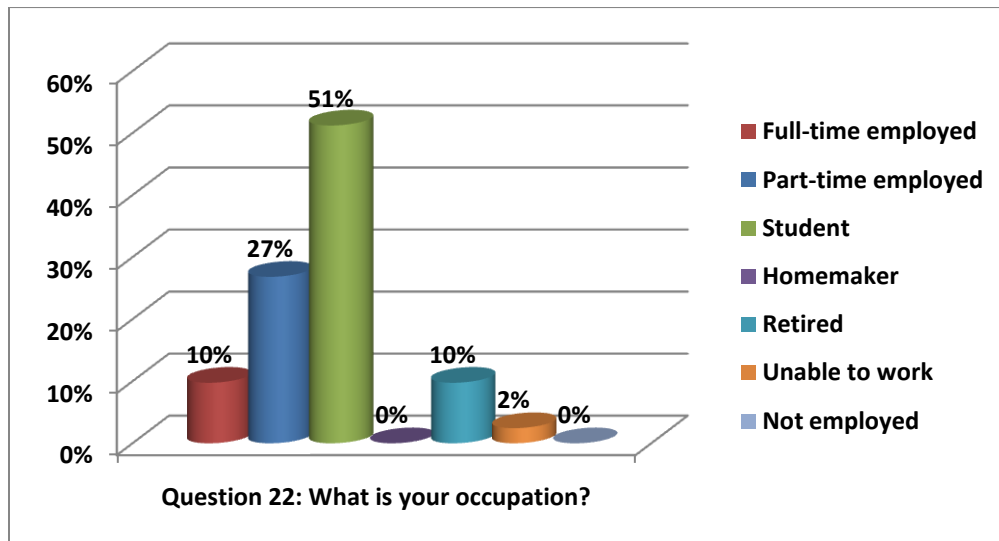
Question 21: If Yes, what is your affiliation?

I am an enrolled student Jack Pass User	28	97%
I am a staff/faculty Jack Pass User	0	0%
I am an extended ED/OLLI Jack Pass User	1	3%
Total	29	100%

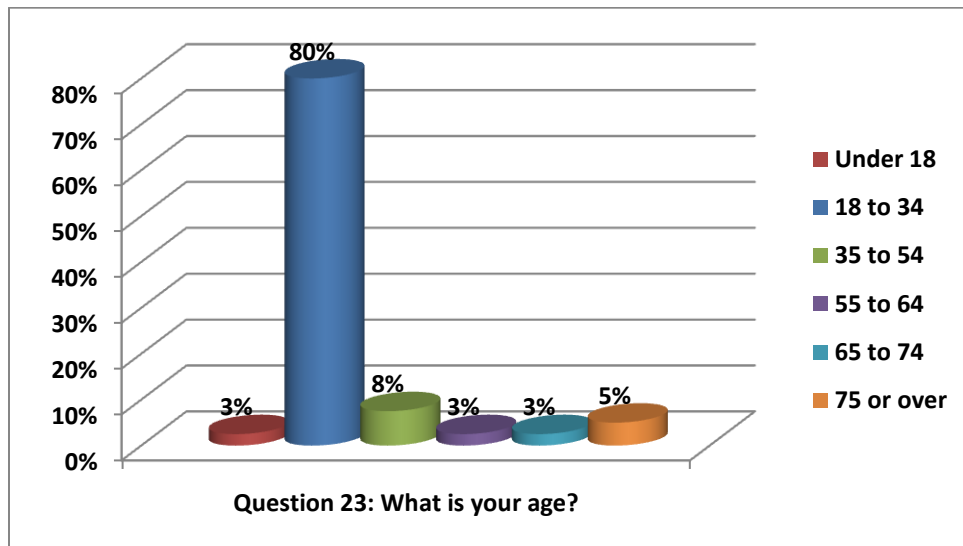


Question 22: What is your occupation?

Full-time employed	4	10%
Part-time employed	11	27%
Student	21	51%
Homemaker	0	0%
Retired	4	10%
Unable to work	1	2%
Not employed	0	0%
Total	41	100%

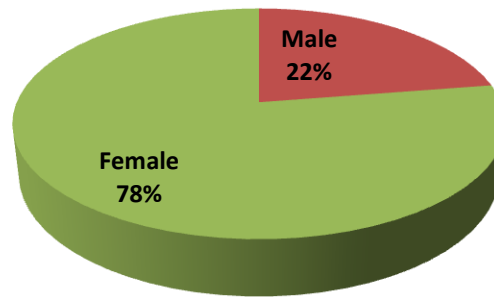


Question 23: What is your age?		
Under 18	1	3%
18 to 34	32	80%
35 to 54	3	8%
55 to 64	1	3%
65 to 74	1	3%
75 or over	2	5%
Total	40	100%



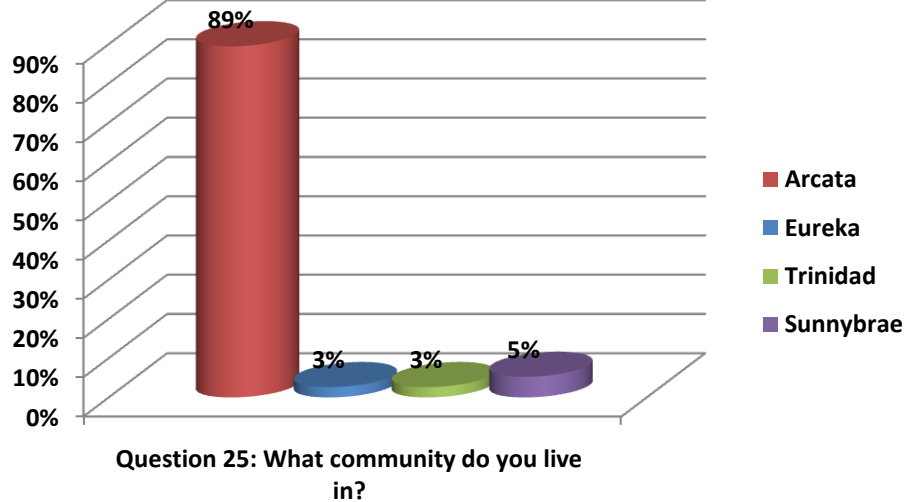
Question 24: What is your gender?		
Male	9	22%
Female	31	78%
Total	40	100%

Question 24: What is your gender?



Question 25: What community do you live in?

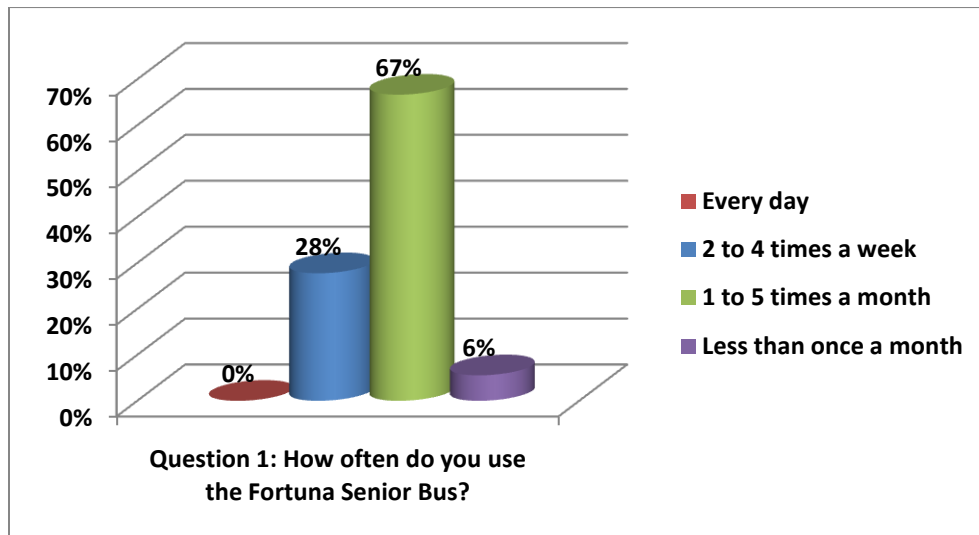
Arcata	34	89%
Eureka	1	3%
Trinidad	1	3%
Sunny Brae	2	5%
Total	38	100%



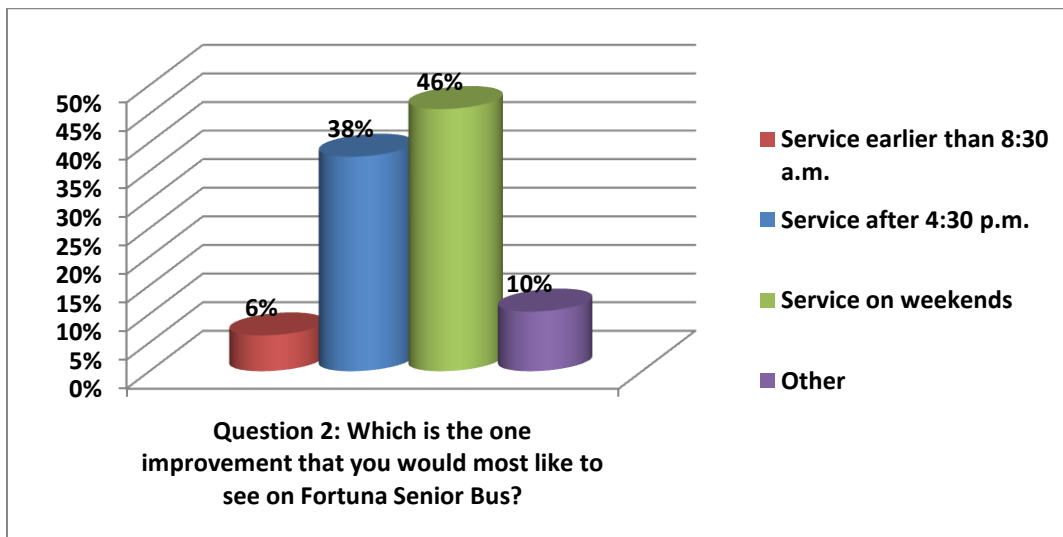
C.7 Fortuna Senior Transit Bus Service Survey

Question 1: How often do you use the Fortuna Senior Bus?

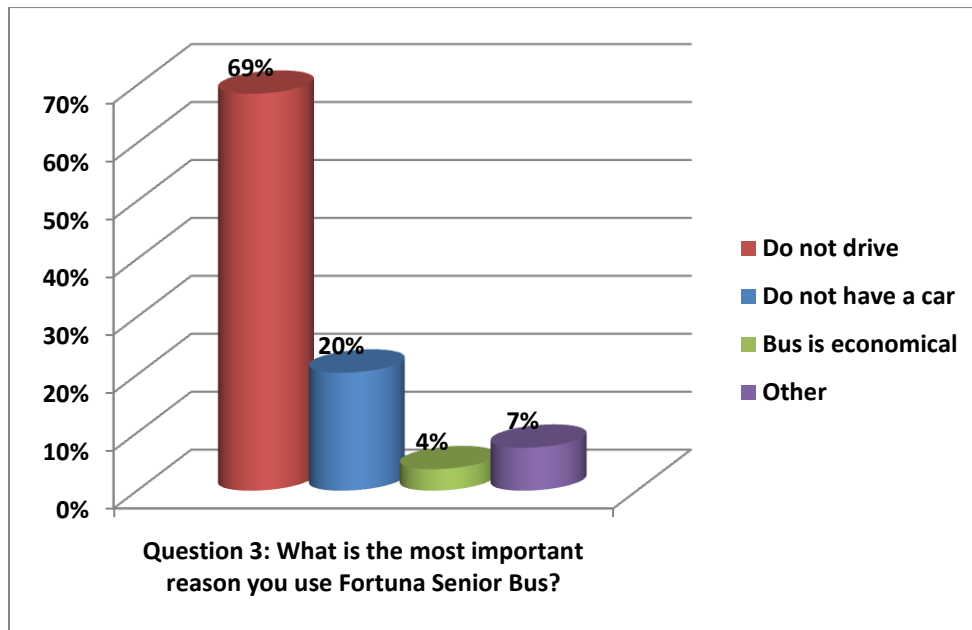
Every day	0	0%
2 to 4 times a week	15	28%
1 to 5 times a month	36	67%
Less than once a month	3	6%
Total	54	100%



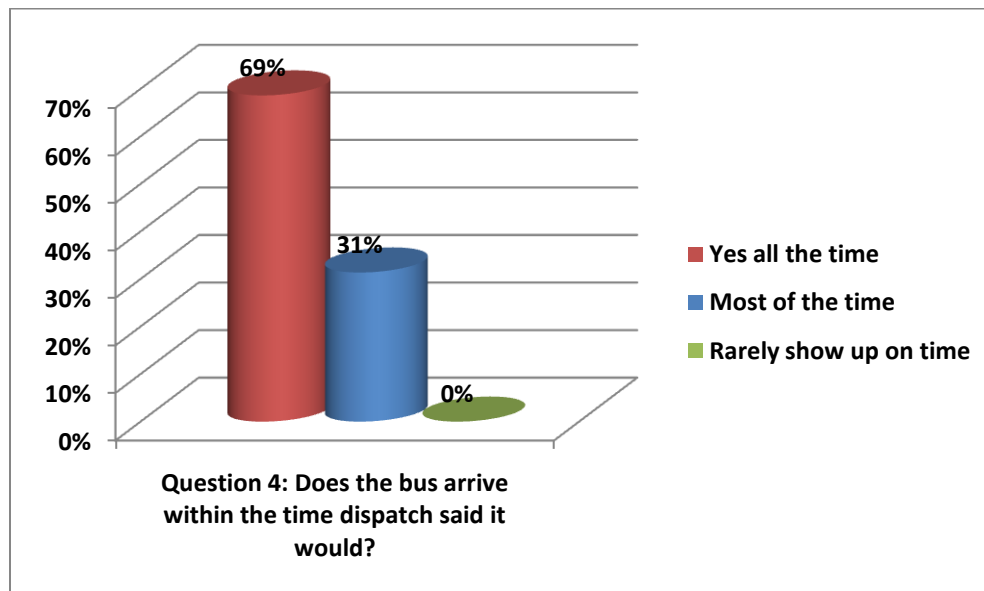
Question 2: Which is the one improvement that you would most like to see on Fortuna Senior Bus?		
Service earlier than 8:30 a.m.	3	6%
Service after 4:30 p.m.	18	38%
Service on weekends	22	46%
Other	5	10%
Total	48	100%



Question 3: What is the most important reason you use Fortuna Senior Bus?		
Do not drive	37	69%
Do not have a car	11	20%
Bus is economical	2	4%
Other	4	7%
Total	54	100%

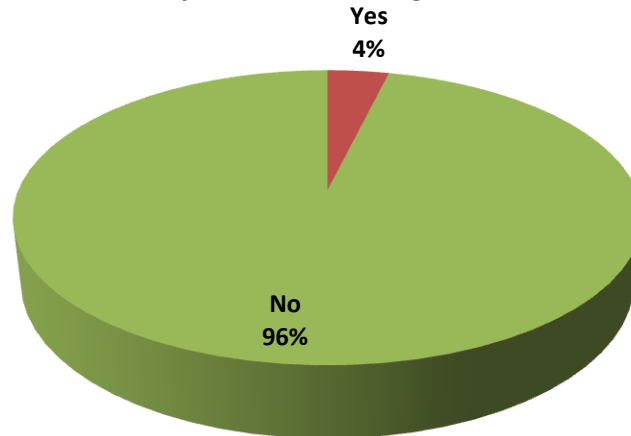


Question 4: Does the bus arrive within the time dispatch said it would?		
Yes all the time	35	69%
Most of the time	16	31%
Rarely show up on time	0	0%
Total	51	100%



Question 5: Do you use the Bus to go to the Lunch site?		
Yes	2	4%
No	51	96%
Total	53	100%

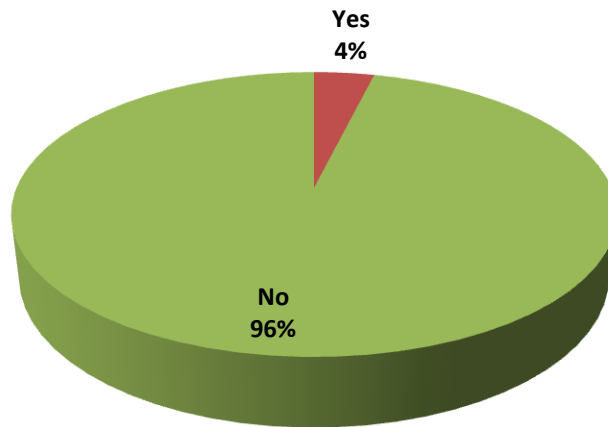
Question 5: Do you use the Bus to go to the Lunch site?



Question 6: Are fare rates preventing you from riding the Bus?

Yes	2	4%
No	50	96%
Total	52	100%

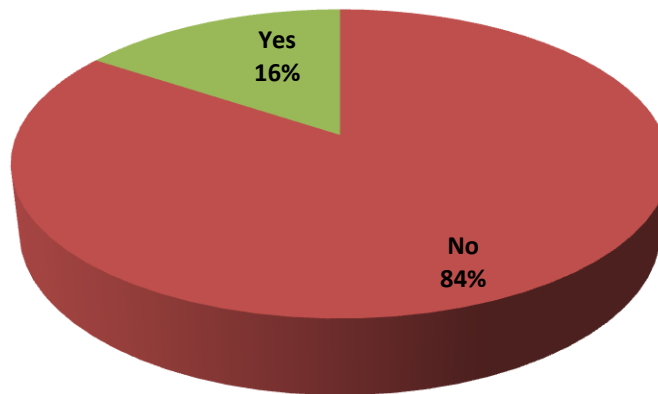
Question 6: Are fare rates preventing you from riding the Bus?



Question 7: Have you ever been denied service?

No	43	84%
Yes	8	16%
Total	51	100%

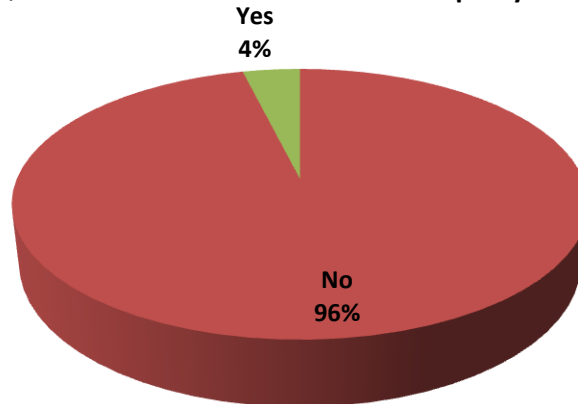
Question 7: Have you ever been denied service?



Question 8: Has the bus ever failed to pick you up?

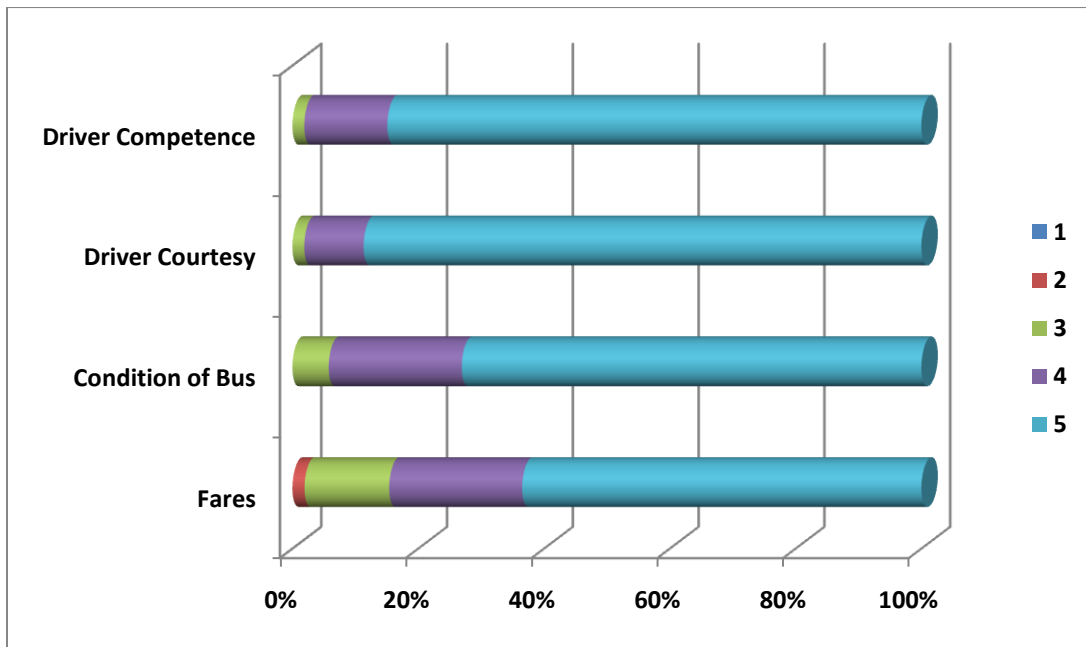
No	50	96%
Yes	2	4%
Total	52	100%

Question 8: Has the bus ever failed to pick you up?



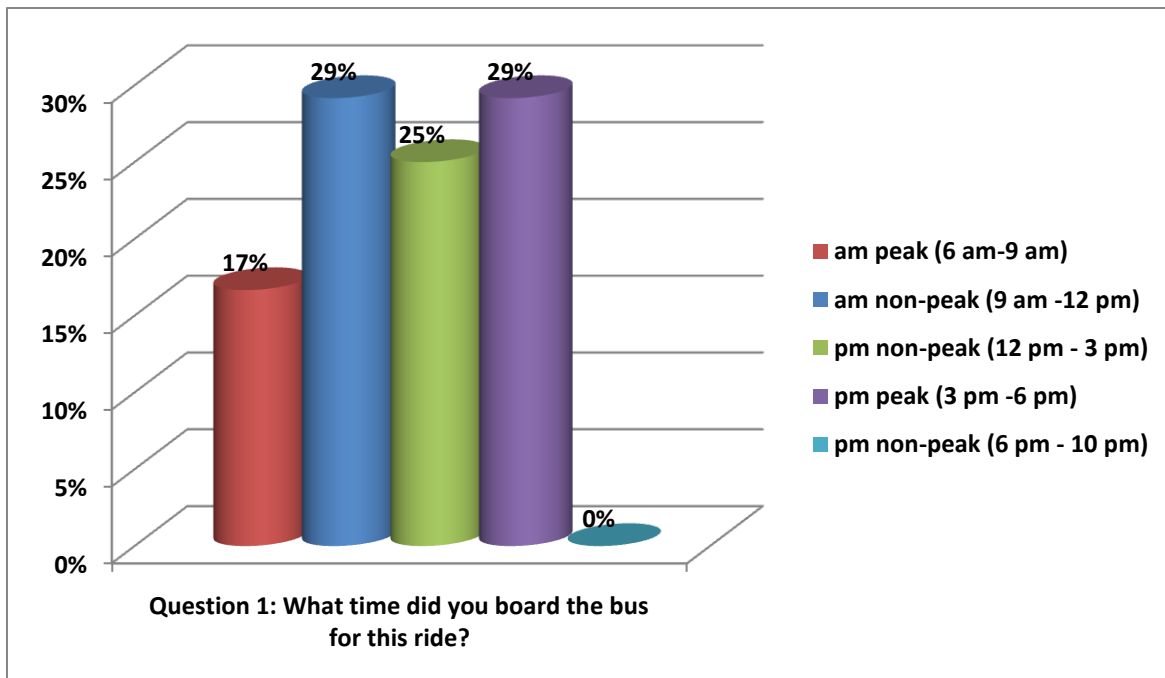
Question 9. Tell us how you would rate the Senior Bus: 1 being Poor; 2 being Needs Improvement; 3 being Neutral; 4 being Above Average; and 5 being excellent.

	Fares	Condition of Bus	Driver Courtesy	Driver Competence
1	0	0	0	0
2	1	0	0	0
3	7	3	1	1
4	11	11	5	7
5	33	38	47	45
Total	52	52	53	53

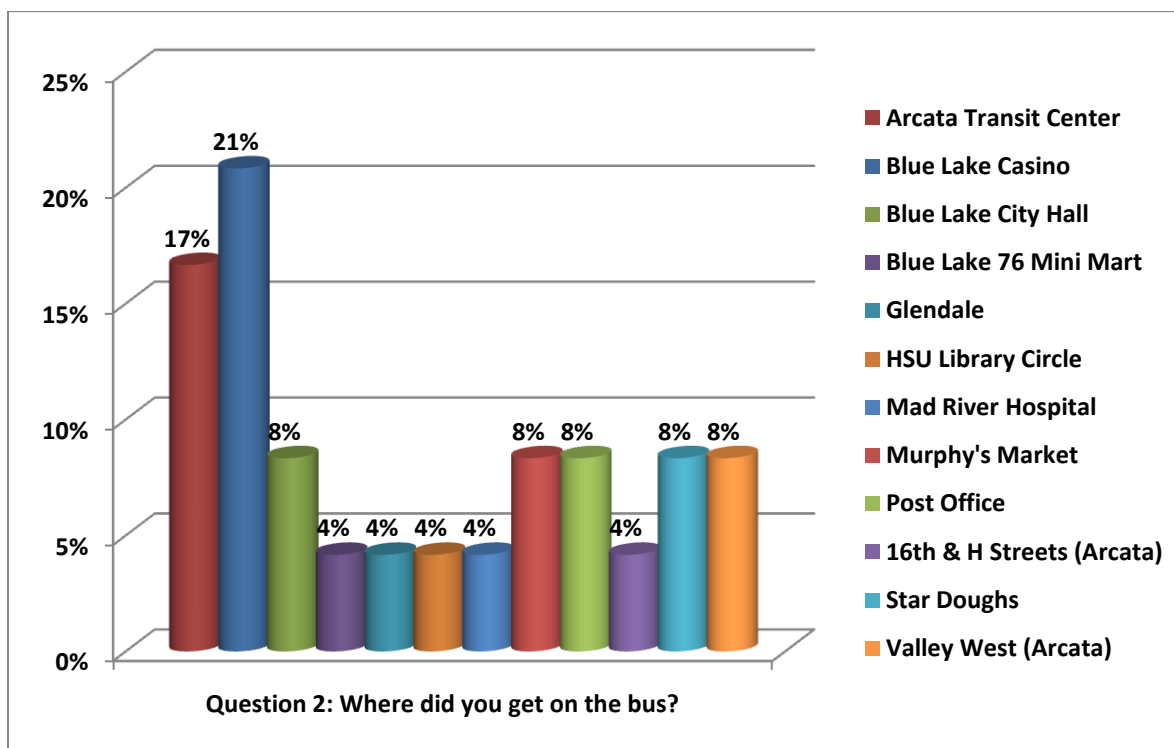


C.8 Blue Lake Rancheria Transit Service Survey

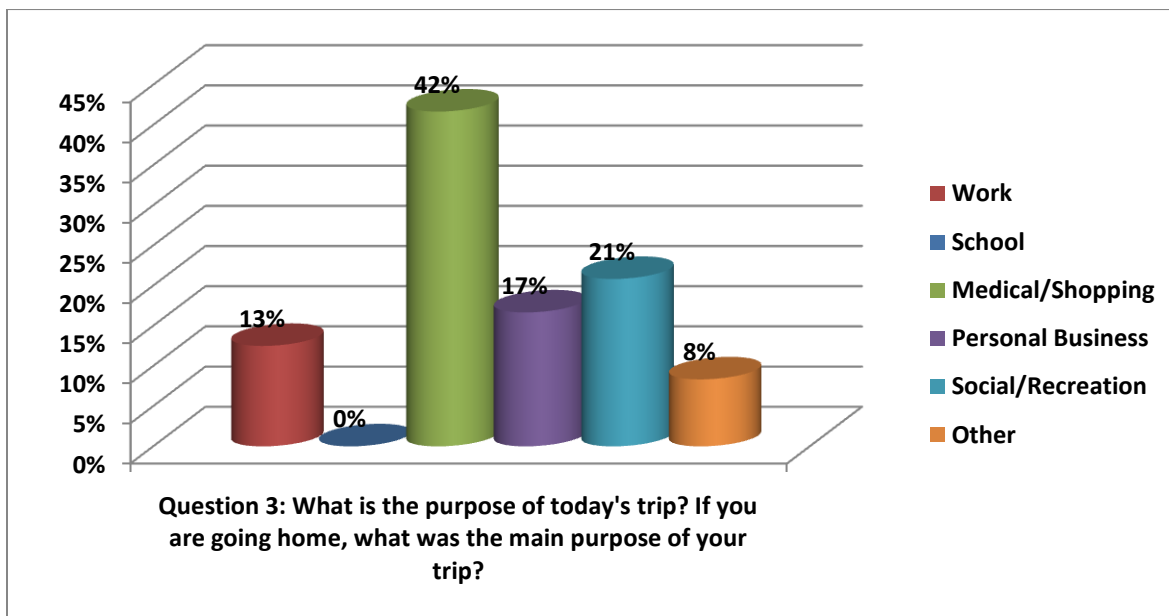
Question 1: What time did you board the bus for this ride?		
am peak (6 am-9 am)	4	17%
am non-peak (9 am -12 pm)	7	29%
pm non-peak (12 pm - 3 pm)	6	25%
pm peak (3 pm -6 pm)	7	29%
pm non-peak (6 pm - 10 pm)	0	0%
Total	24	100%



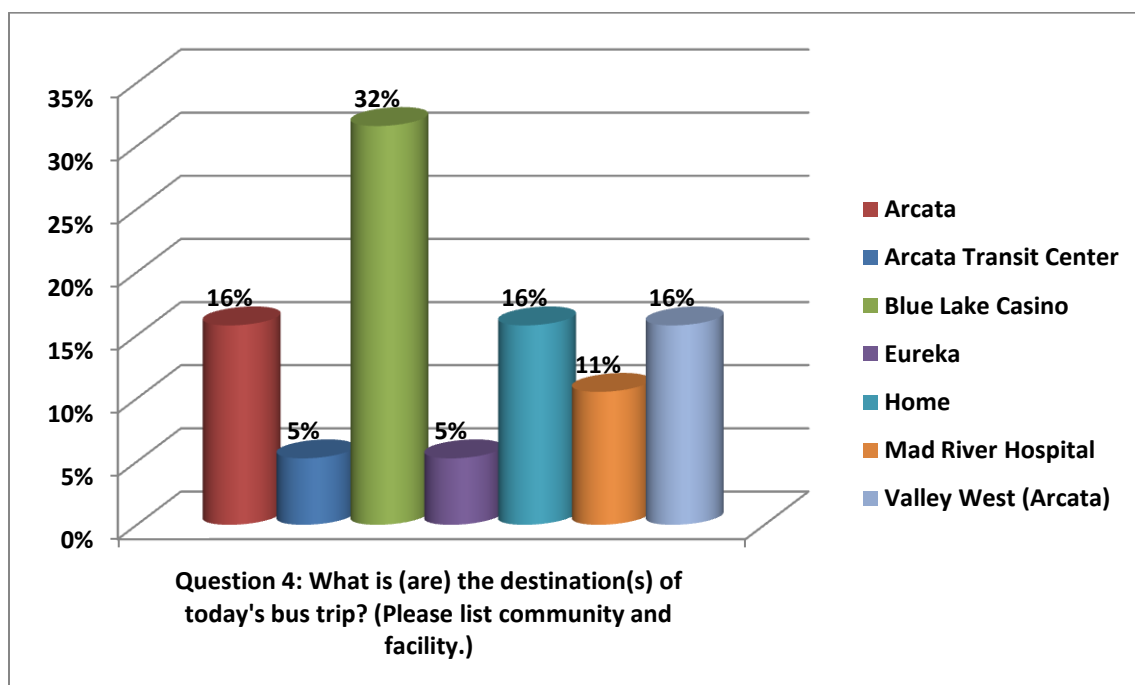
Question 2: Where did you get on the bus?		
Arcata Transit Center	4	17%
Blue Lake Casino	5	21%
Blue Lake City Hall	2	8%
Blue Lake 76 Mini Mart	1	4%
Glendale	1	4%
HSU Library Circle	1	4%
Mad River Hospital	1	4%
Murphy's Market	2	8%
Post Office	2	8%
16th & H Streets (Arcata)	1	4%
Star Doughs	2	8%
Valley West (Arcata)	2	8%
Total	24	100%



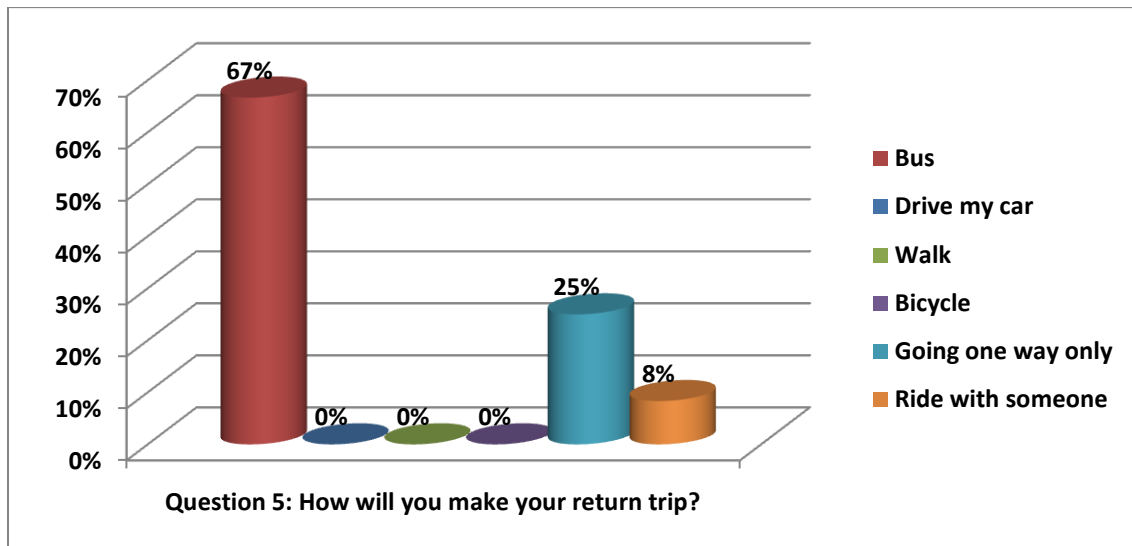
Question 3: What is the purpose of today's trip? If you are going home, what was the main purpose of your trip?		
Work	3	13%
School	0	0%
Medical/Shopping	10	42%
Personal Business	4	17%
Social/Recreation	5	21%
Other	2	8%
Total	24	100%



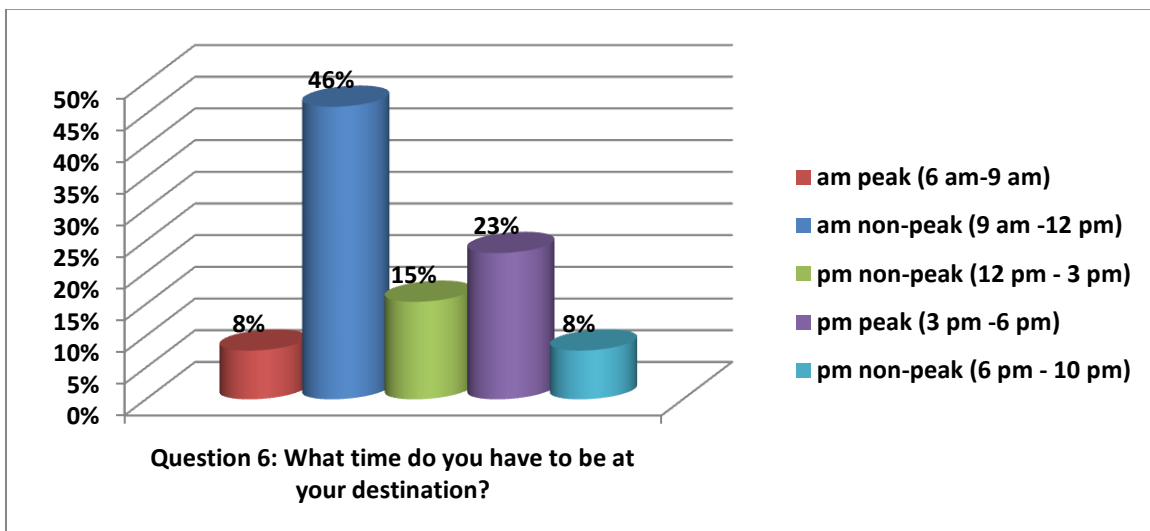
Question 4: What is (are) the destination(s) of today's bus trip? (Please list community and facility.)		
Arcata	3	16%
Arcata Transit Center	1	5%
Blue Lake Casino	6	32%
Eureka	1	5%
Home	3	16%
Mad River Hospital	2	11%
Valley West (Arcata)	3	16%
Total	19	100%



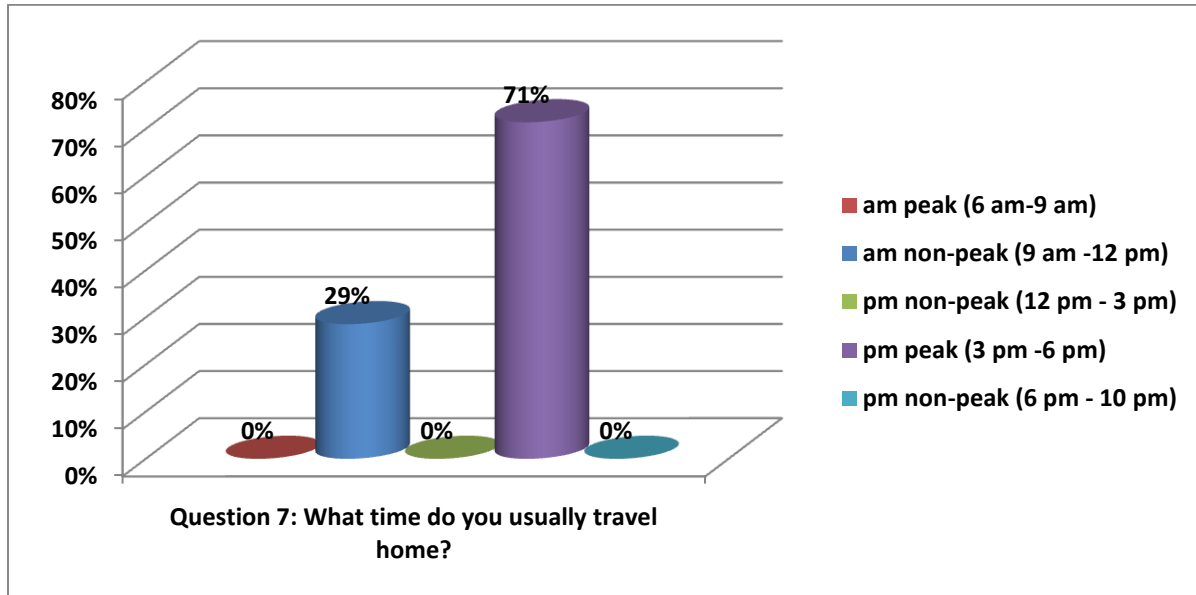
Question 5: How will you make your return trip?		
Bus	16	67%
Drive my car	0	0%
Walk	0	0%
Bicycle	0	0%
Going one way only	6	25%
Ride with someone	2	8%
Total	24	100%



Question 6: What time do you have to be at your destination?		
am peak (6 am-9 am)	1	8%
am non-peak (9 am -12 pm)	6	46%
pm non-peak (12 pm - 3 pm)	2	15%
pm peak (3 pm -6 pm)	3	23%
pm non-peak (6 pm - 10 pm)	1	8%
Total	13	100%

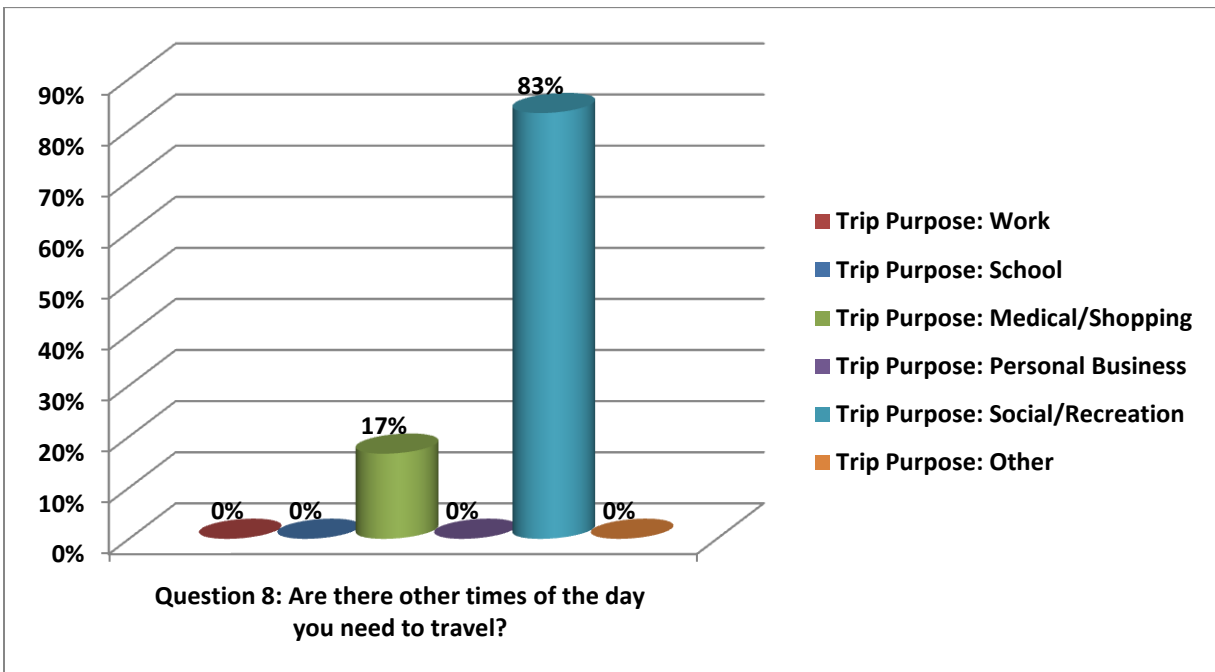
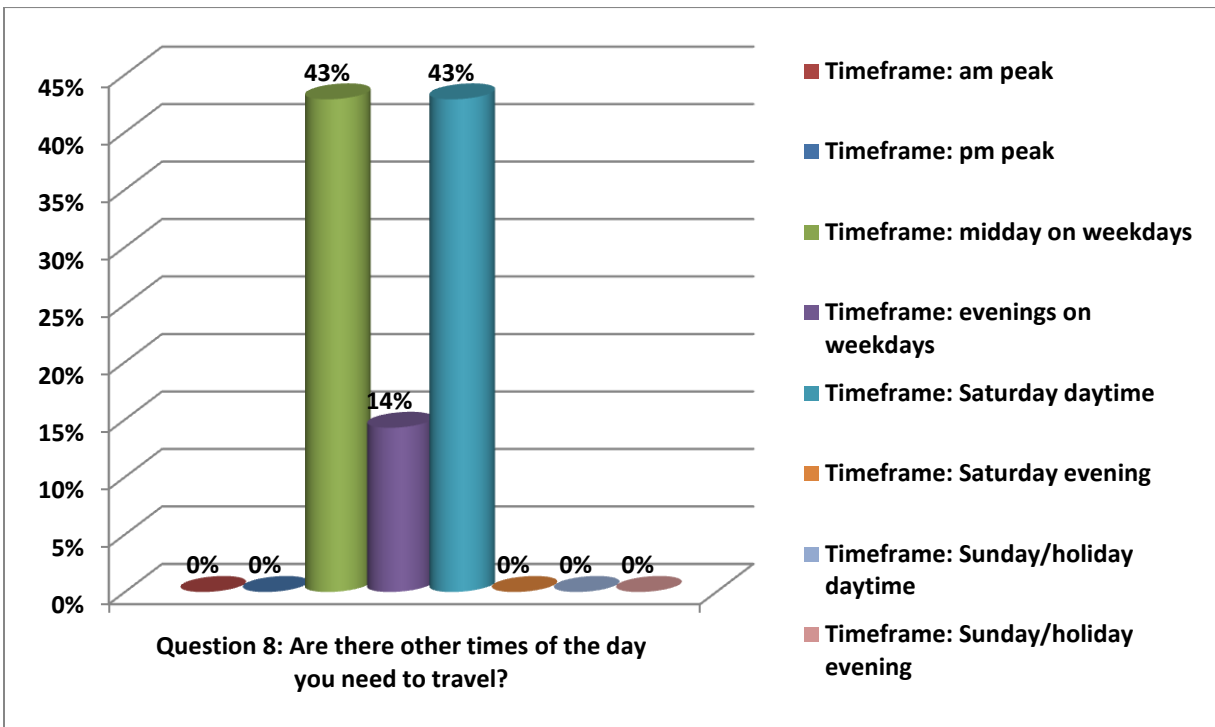


Question 7: What time do you usually travel home?		
am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	2	29%
pm non-peak (12 pm - 3 pm)	0	0%
pm peak (3 pm -6 pm)	5	71%
pm non-peak (6 pm - 10 pm)	0	0%
Total	7	100%



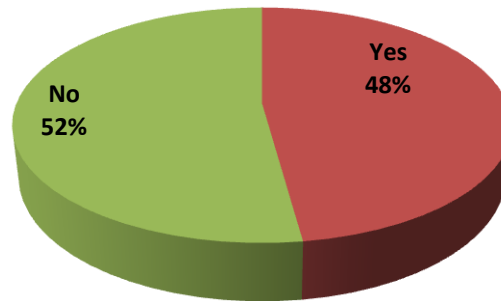
Question 8: Are there other times of the day you need to travel?		
Timeframe		
Timeframe: am peak	0	0%
Timeframe: pm peak	0	0%
Timeframe: midday on weekdays	3	43%
Timeframe: evenings on weekdays	1	14%
Timeframe: Saturday daytime	3	43%
Timeframe: Saturday evening	0	0%
Timeframe: Sunday/holiday daytime	0	0%
Timeframe: Sunday/holiday evening	0	0%
Total	7	100%

Trip Purpose		
Trip Purpose: Work	0	0%
Trip Purpose: School	0	0%
Trip Purpose: Medical/Shopping	1	17%
Trip Purpose: Personal Business	0	0%
Trip Purpose: Social/Recreation	5	83%
Trip Purpose: Other	0	0%
Total	6	100%

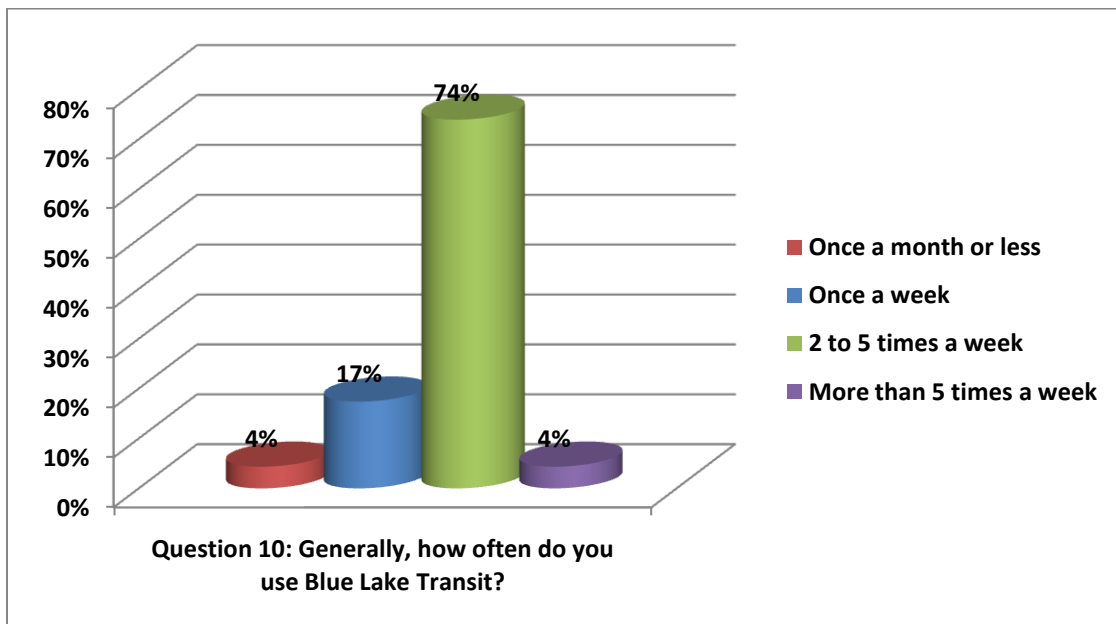


Question 9: Is this a regular commute trip for work, school, or medical treatment?	
Yes	11
No	12
Total	23

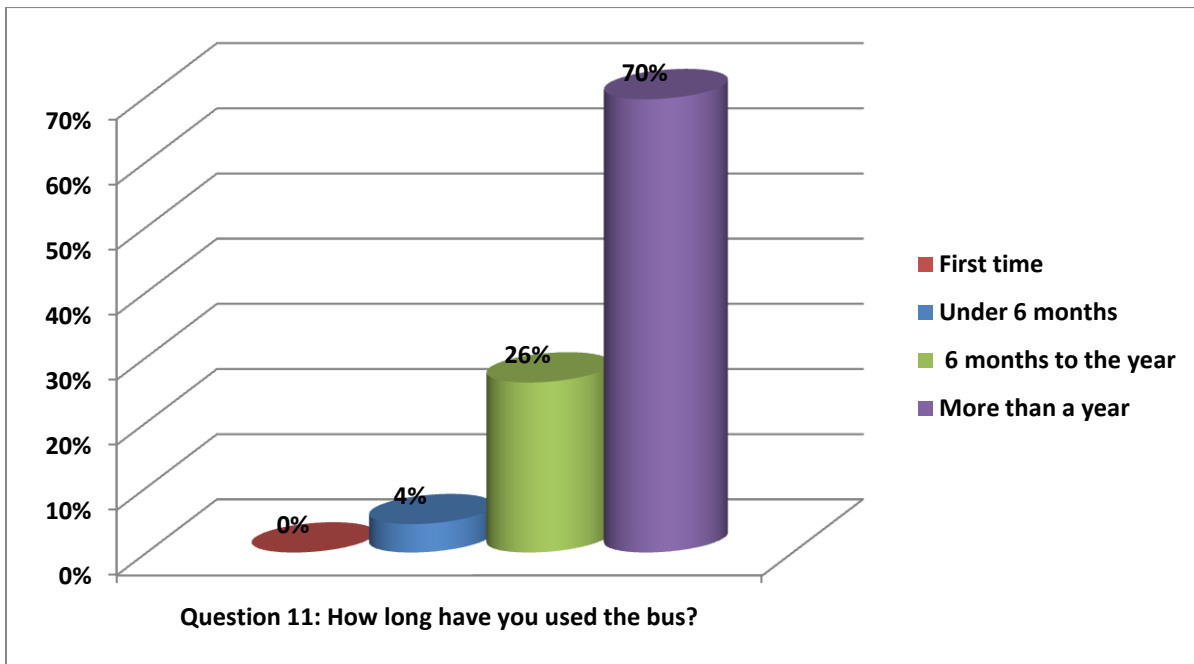
Question 9: Is this a regular commute trip for work, school, or medical treatment?



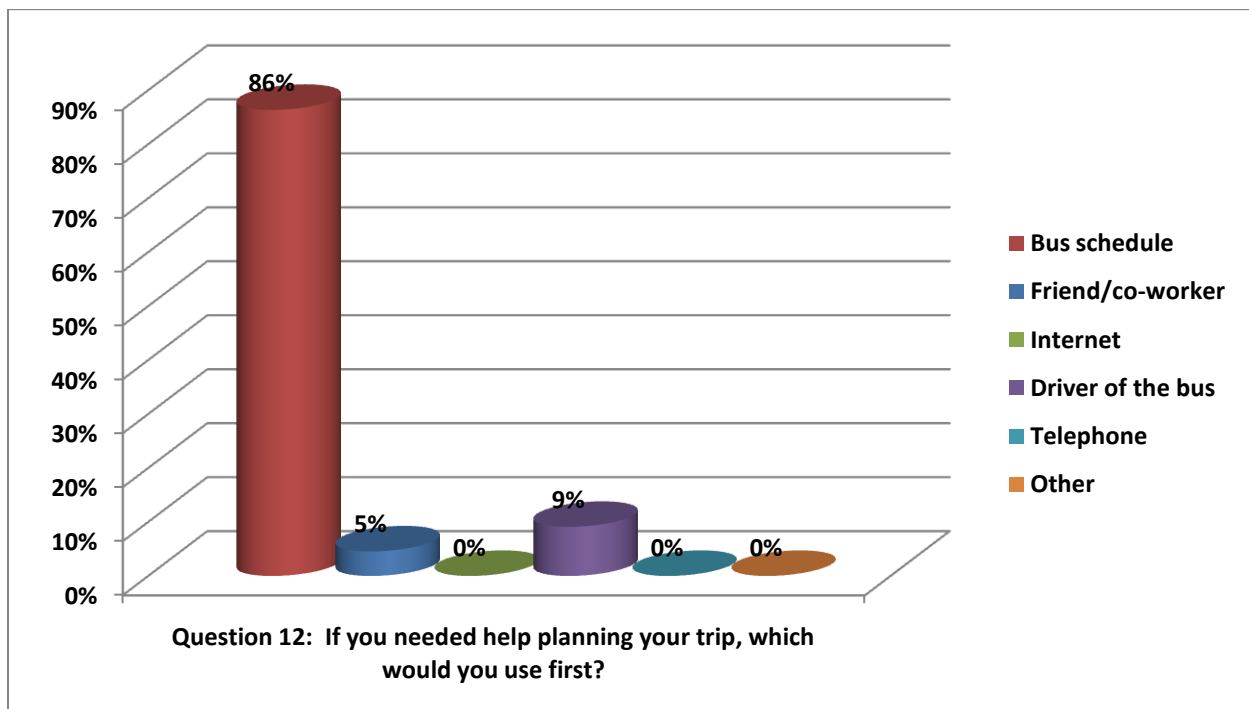
Question 10: Generally, how often do you use Blue Lake Transit?		
Once a month or less	1	4%
Once a week	4	17%
2 to 5 times a week	17	74%
More than 5 times a week	1	4%
Total	23	100%



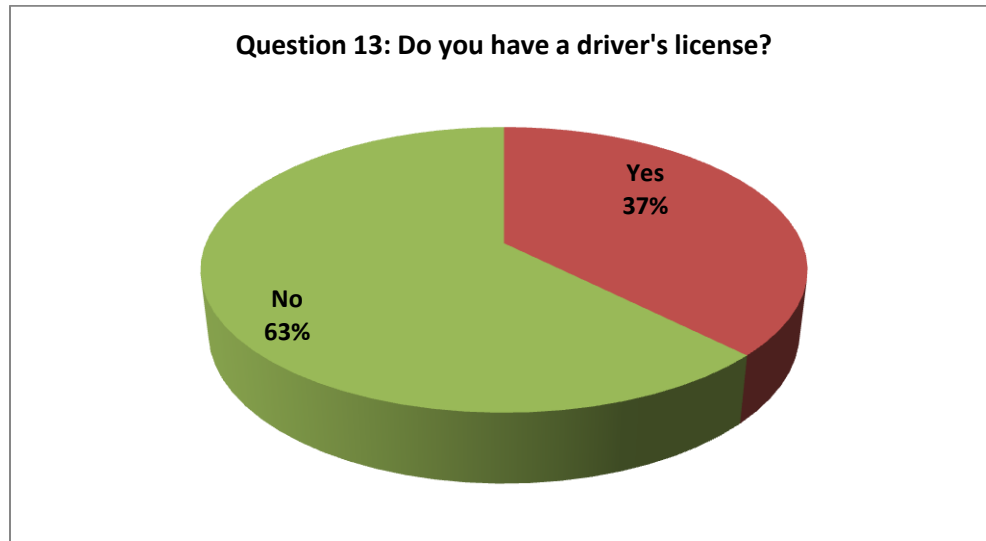
Question 11: How long have you used the bus?		
First time	0	0%
Under 6 months	1	4%
6 months to the year	6	26%
More than a year	16	70%
Total	23	100%



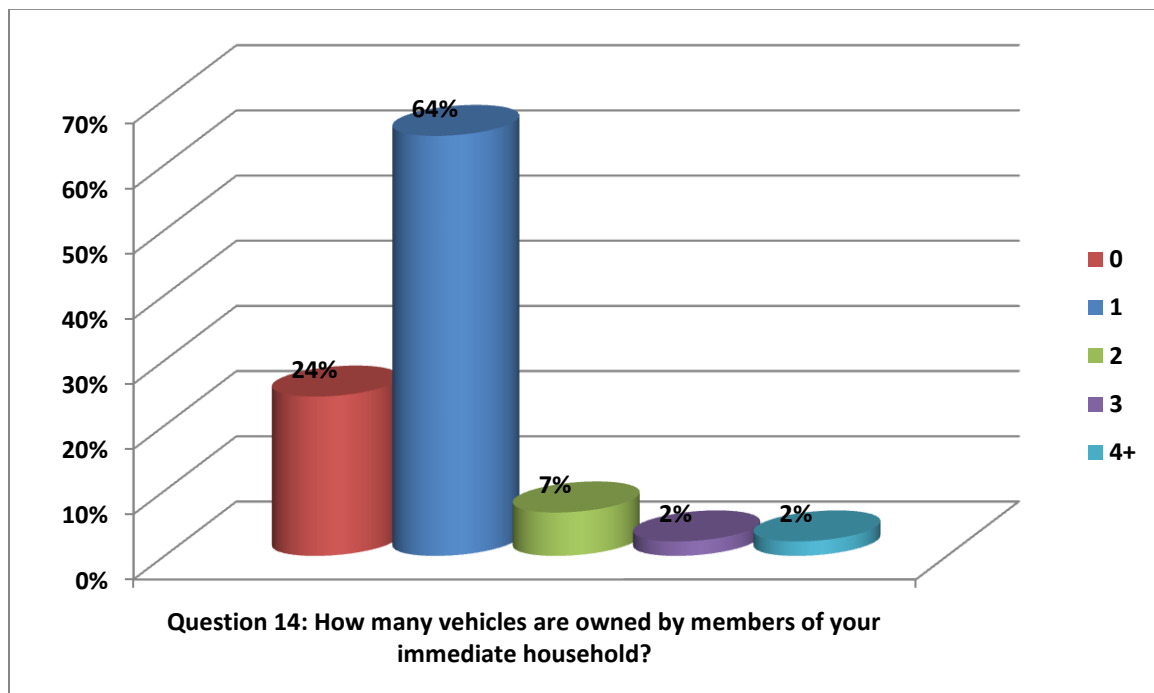
Question 12: If you needed help planning your trip, which would you use first?		
Bus schedule	19	86%
Friend/co-worker	1	5%
Internet	0	0%
Driver of the bus	2	9%
Telephone	0	0%
Other	0	0%
Total	22	100%



Question 13: Do you have a driver's license?	
Yes	9
No	15
Total	24

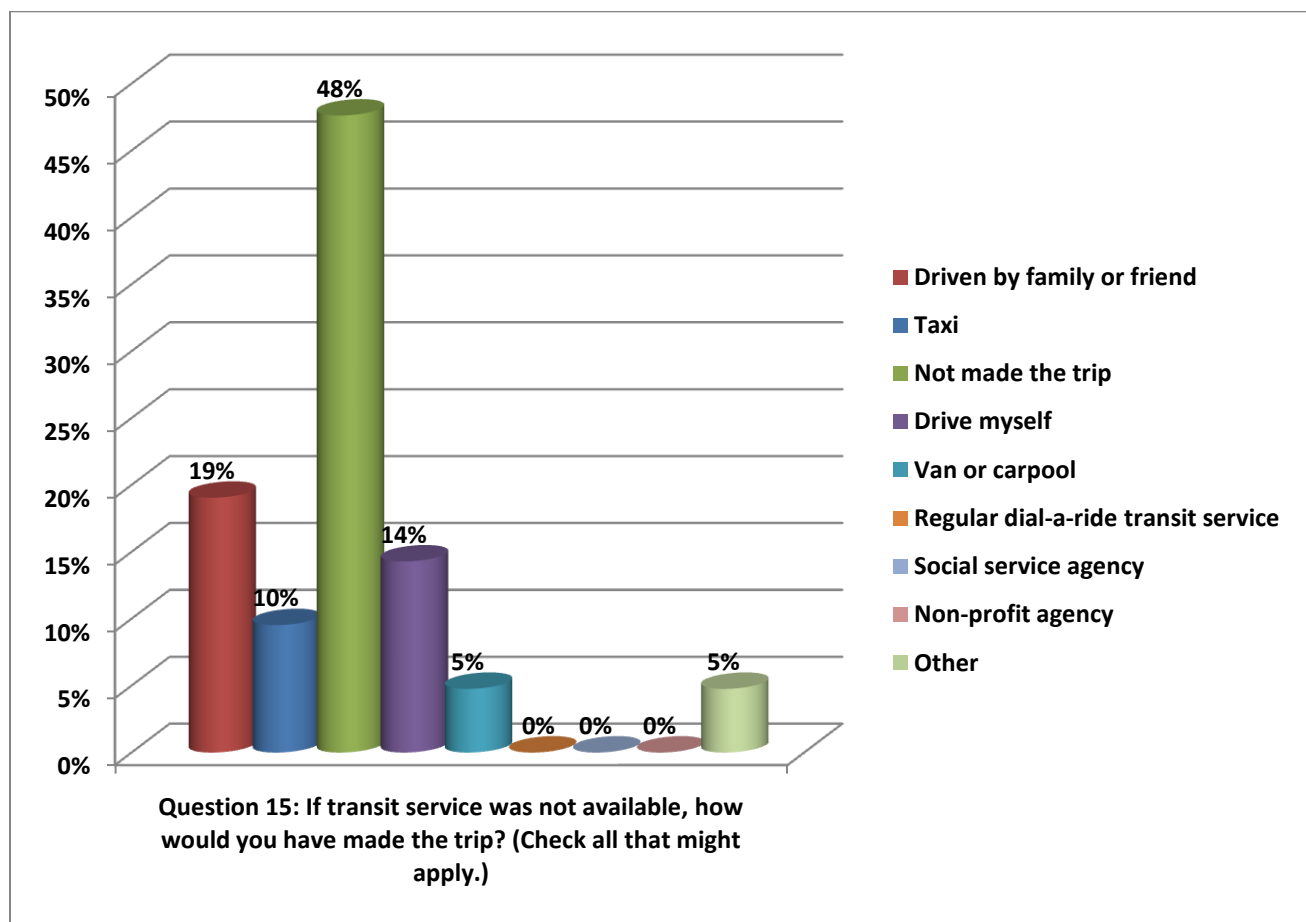


Question 14: How many vehicles are owned by members of your immediate household?		
0	11	24%
1	29	64%
2	3	7%
3	1	2%
4+	1	2%
Total	45	100%

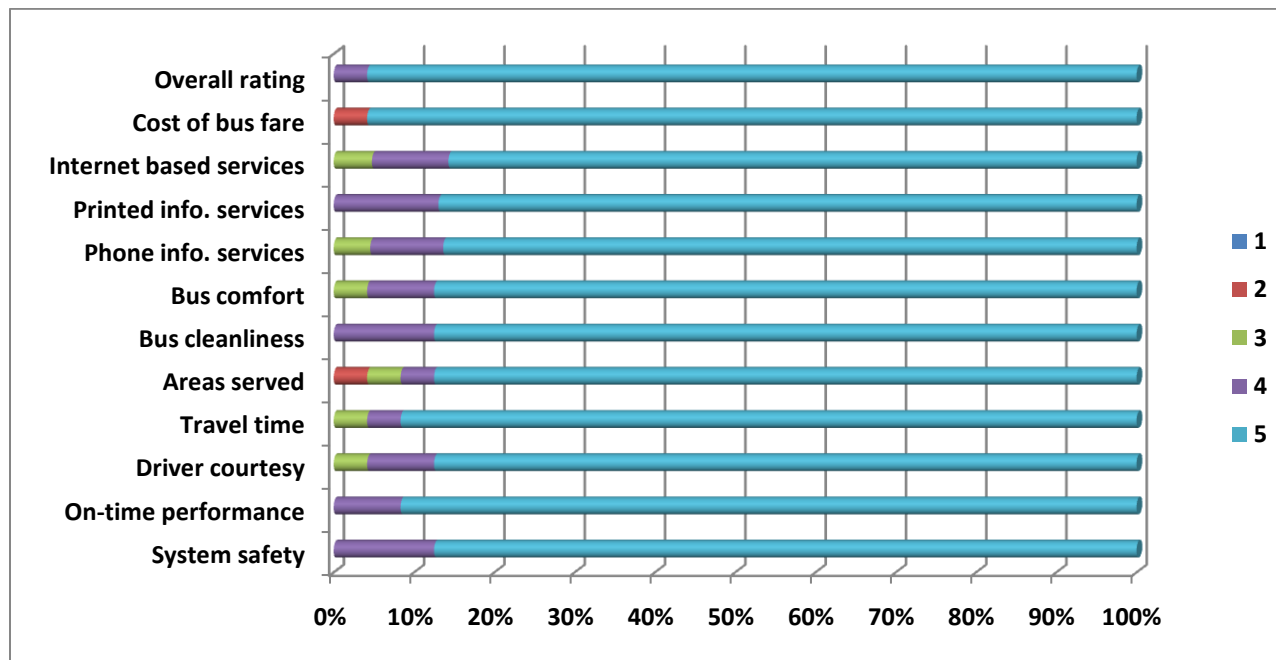


Question 15: If transit service was not available, how would you have made the trip? (Check all that might apply.)

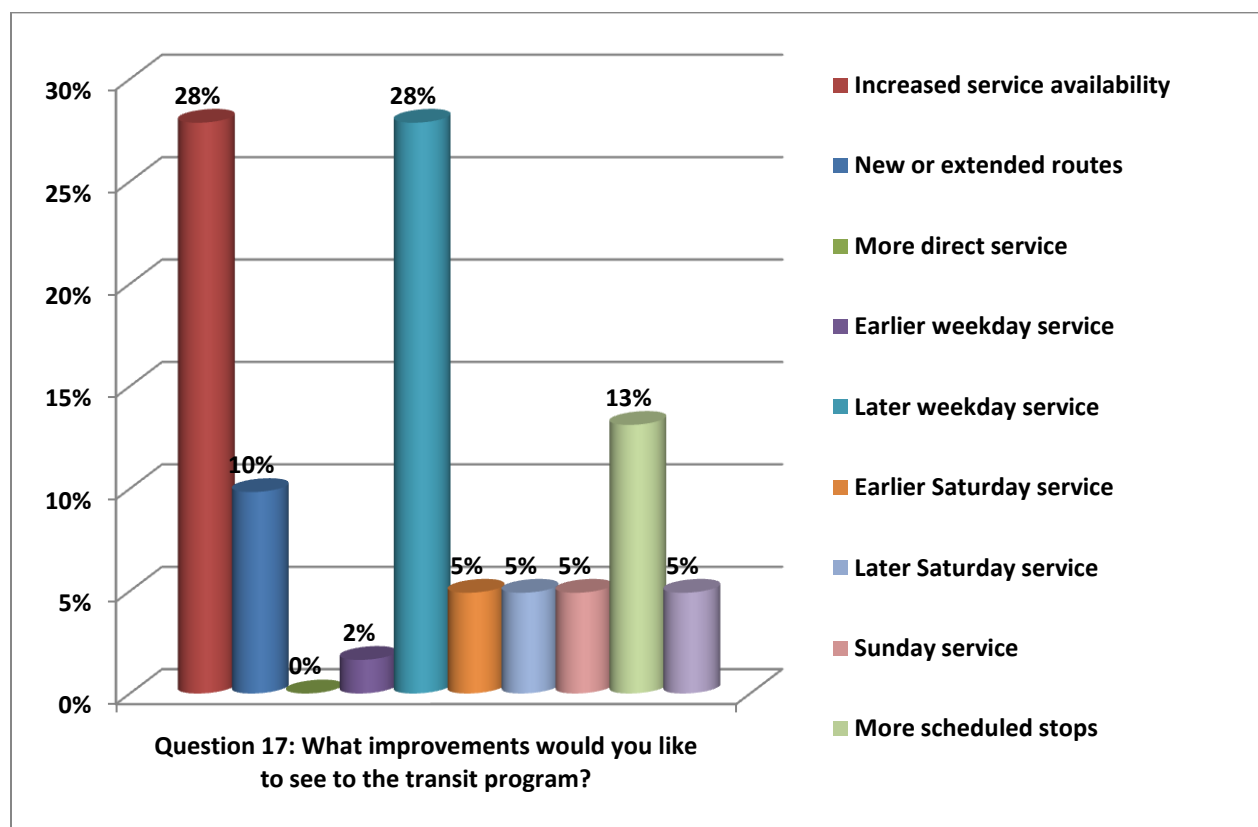
Driven by family or friend	4	19%
Taxi	2	10%
Not made the trip	10	48%
Drive myself	3	14%
Van or carpool	1	5%
Regular dial-a-ride transit service	0	0%
Social service agency	0	0%
Non-profit agency	0	0%
Other	1	5%
Total	21	100%



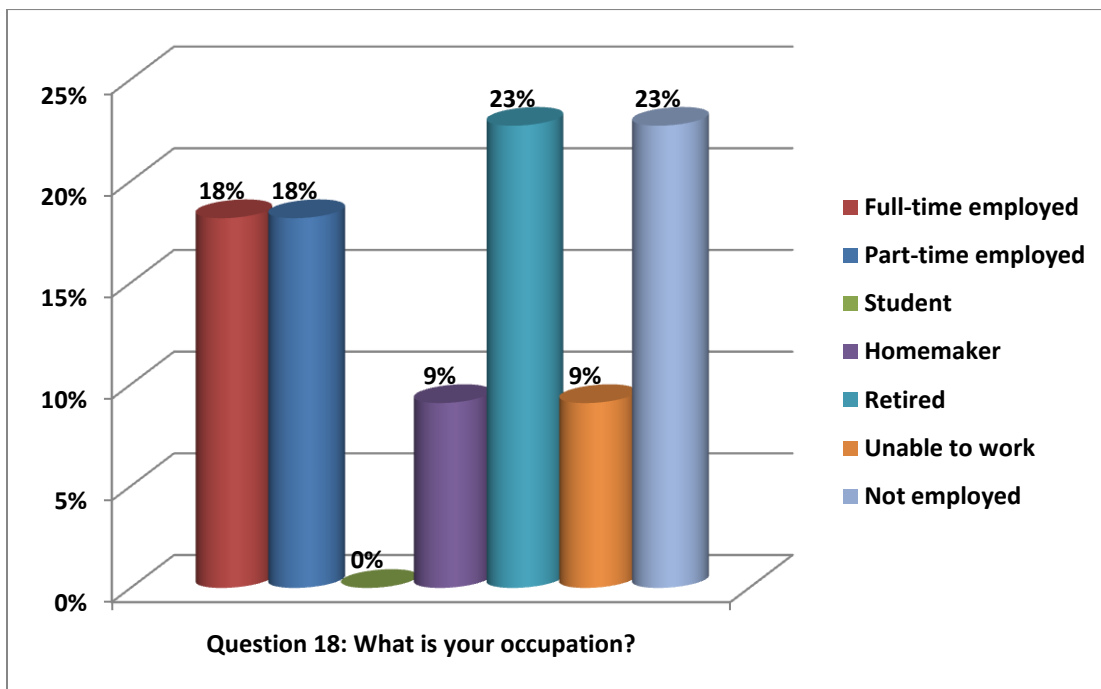
Question 16. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest.												
	System safety	On-time performance	Driver courtesy	Travel time	Areas served	Bus cleanliness	Bus comfort	Phone info. services	Printed info. services	Internet based services	Cost of bus fare	Overall rating
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	1	0	0	0	0	0	1	0
3	0	0	1	1	1	0	1	1	0	1	0	0
4	3	2	2	1	1	3	2	2	3	2	0	1
5	21	22	21	22	21	21	21	19	20	18	23	23
Total	24	24	24	24	24	24	24	22	23	21	24	24



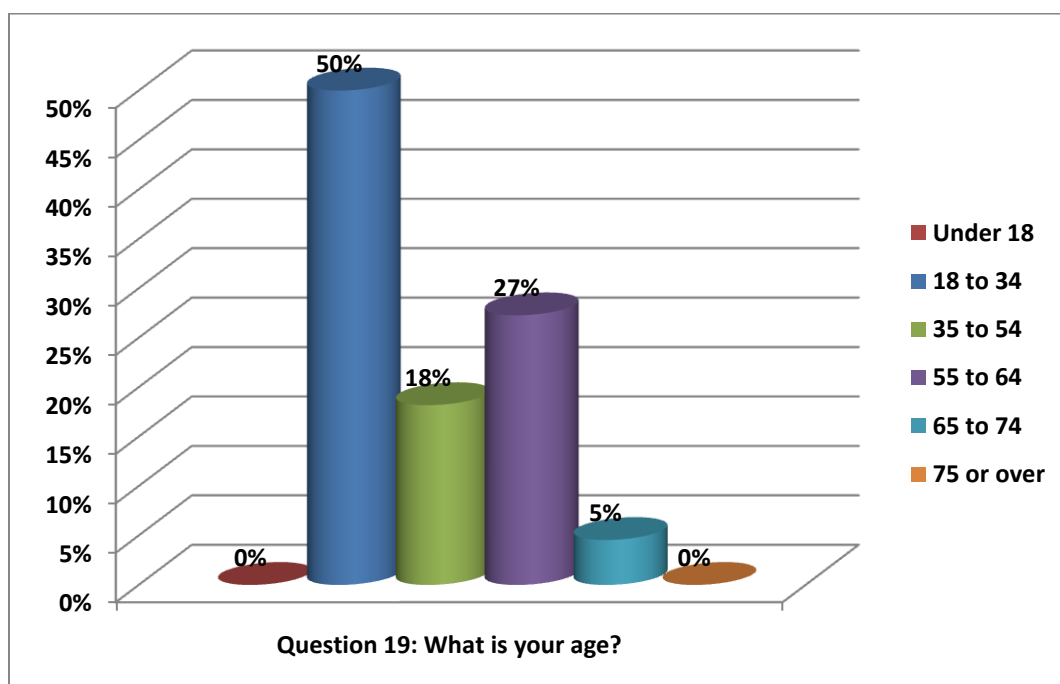
Question 17: What improvements would you like to see to the transit program?		
Increased service availability	17	28%
New or extended routes	6	10%
More direct service	0	0%
Earlier weekday service	1	2%
Later weekday service	17	28%
Earlier Saturday service	3	5%
Later Saturday service	3	5%
Sunday service	3	5%
More scheduled stops	8	13%
Better connections with other bus systems	3	5%
Total	61	100%



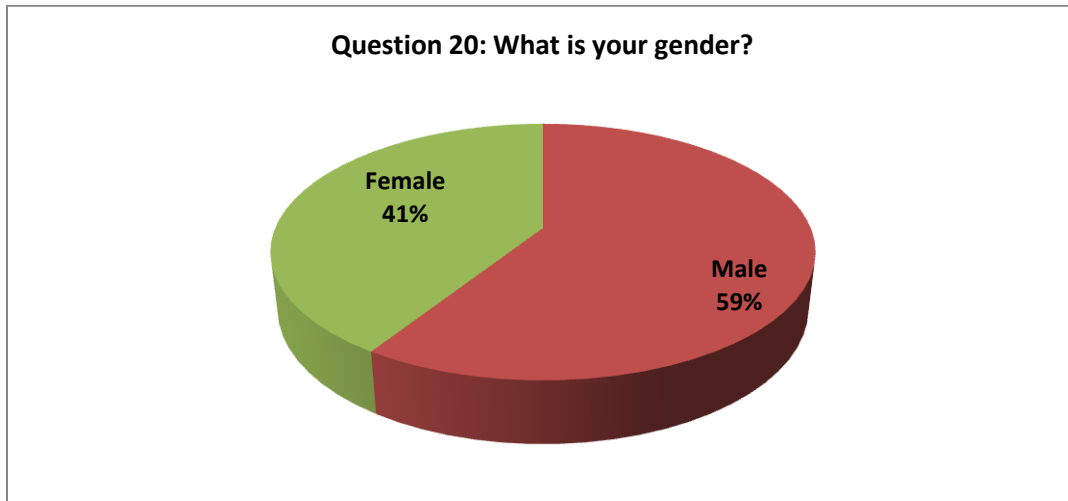
Question 18: What is your occupation?		
Full-time employed	4	18%
Part-time employed	4	18%
Student	0	0%
Homemaker	2	9%
Retired	5	23%
Unable to work	2	9%
Not employed	5	23%
Total	22	100%



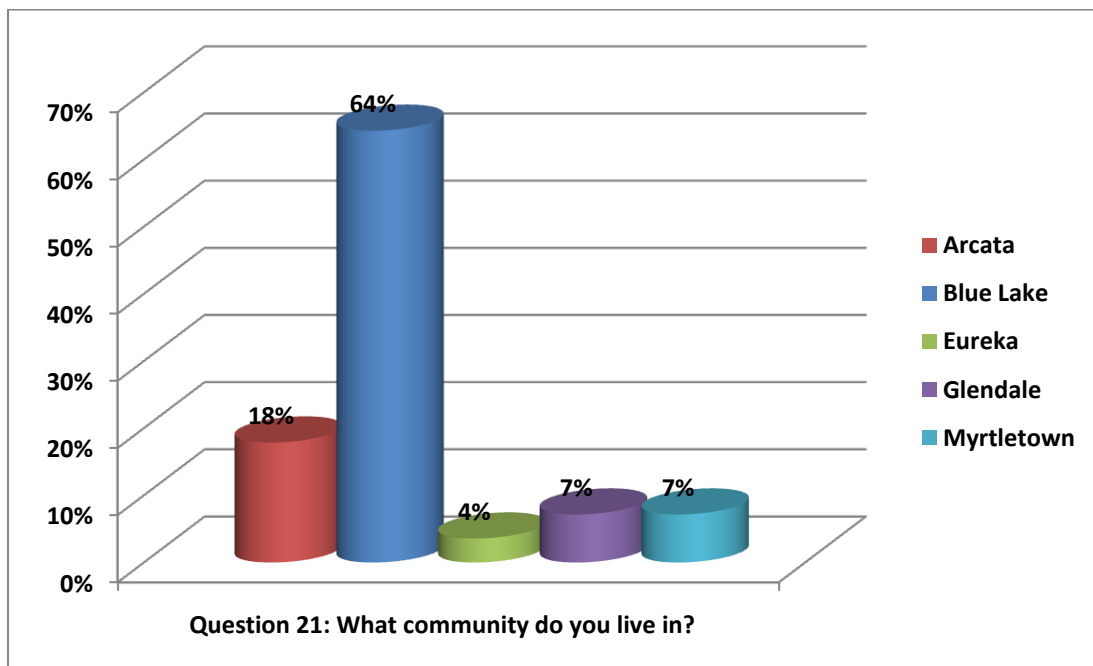
Question 19: What is your age?		
Under 18	0	0%
18 to 34	11	50%
35 to 54	4	18%
55 to 64	6	27%
65 to 74	1	5%
75 or over	0	0%
Total	22	100%



Question 20: What is your gender?	
Male	13
Female	9
Total	22

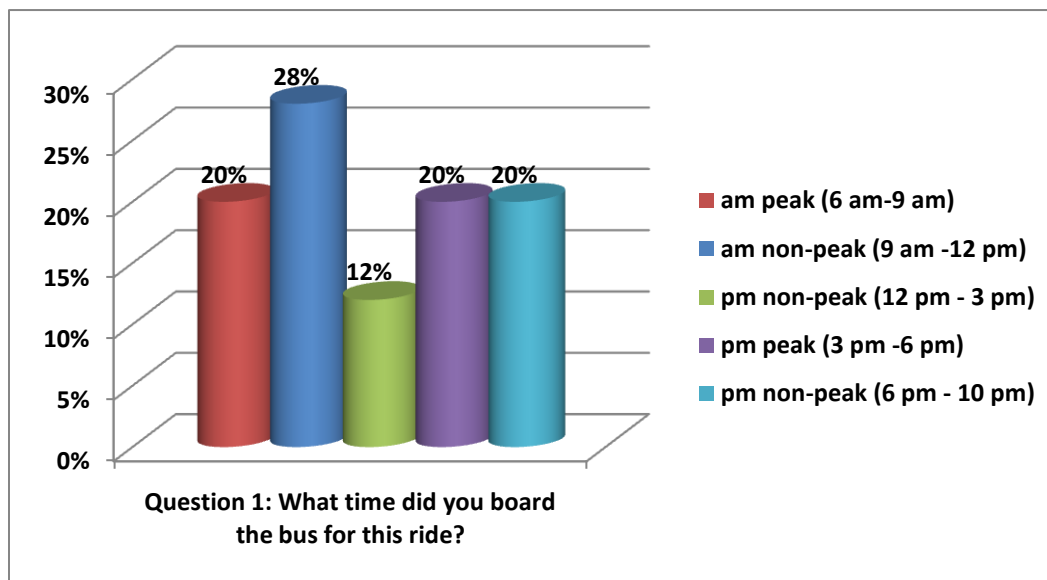


Question 21: What community do you live in?		
Arcata	5	18%
Blue Lake	18	64%
Eureka	1	4%
Glendale	2	7%
Myrtletown	2	7%
Total	28	100%

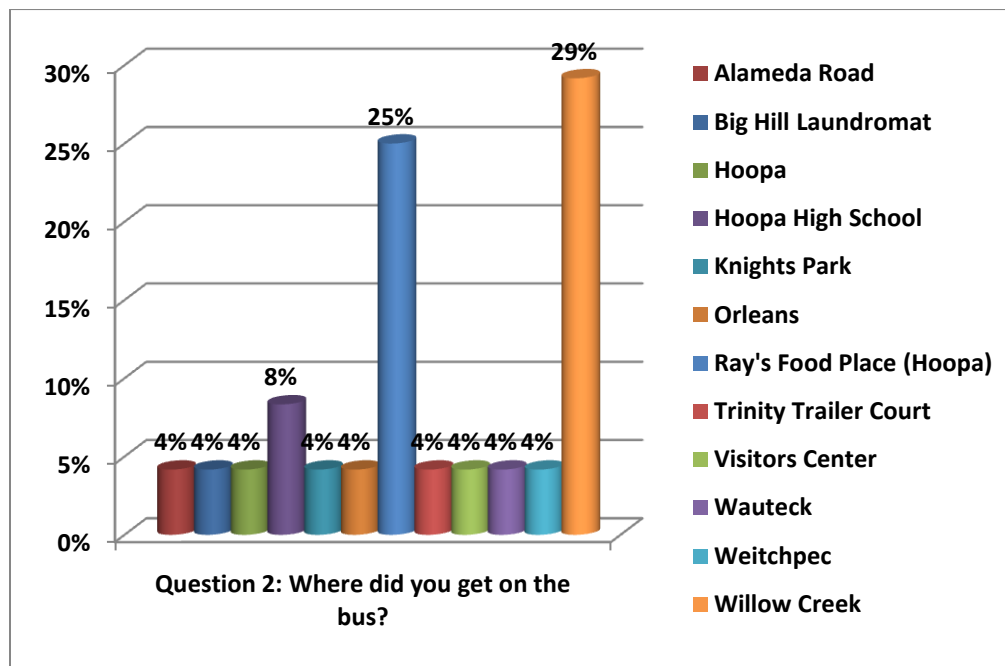


C.9 K/T Net Transit Service Survey

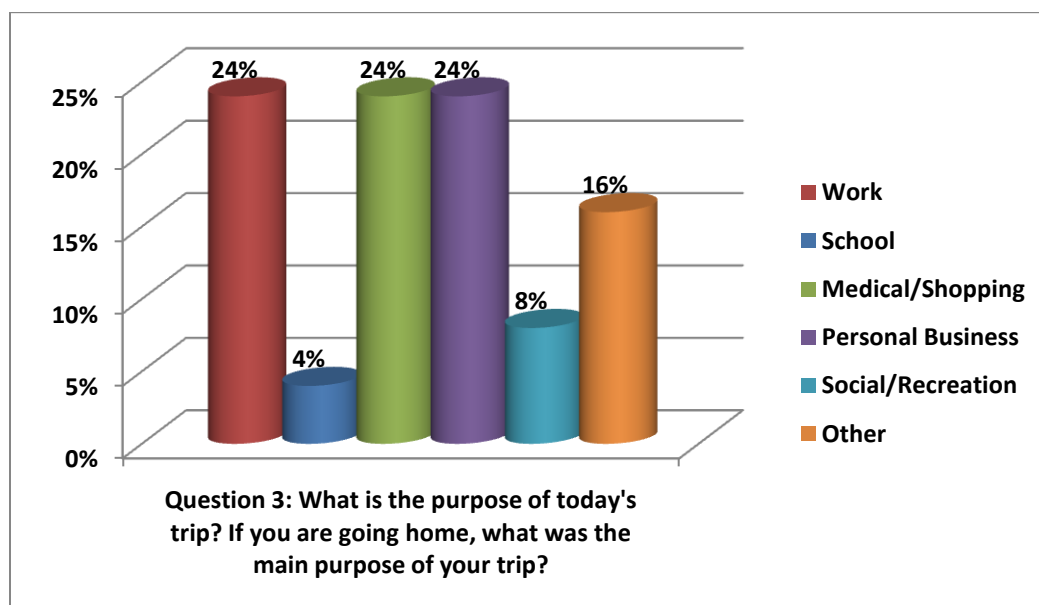
Question 1: What time did you board the bus for this ride?		
am peak (6 am-9 am)	5	20%
am non-peak (9 am -12 pm)	7	28%
pm non-peak (12 pm - 3 pm)	3	12%
pm peak (3 pm -6 pm)	5	20%
pm non-peak (6 pm - 10 pm)	5	20%
Total	25	100%



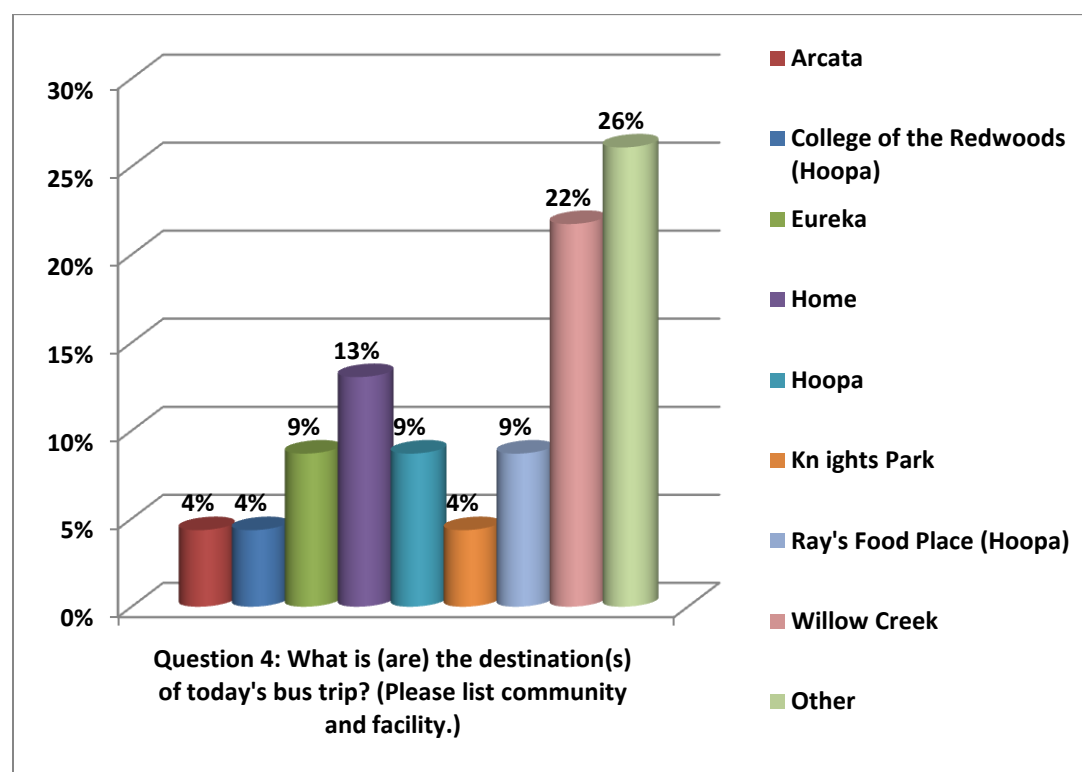
Question 2: Where did you get on the bus?		
Alameda Road	1	4%
Big Hill Laundromat	1	4%
Hoopa	1	4%
Hoopa High School	2	8%
Knights Park	1	4%
Orleans	1	4%
Ray's Food Place (Hoopa)	6	25%
Trinity Trailer Court	1	4%
Visitors Center	1	4%
Wauteck	1	4%
Weitchpec	1	4%
Willow Creek	7	29%
Total	24	100%



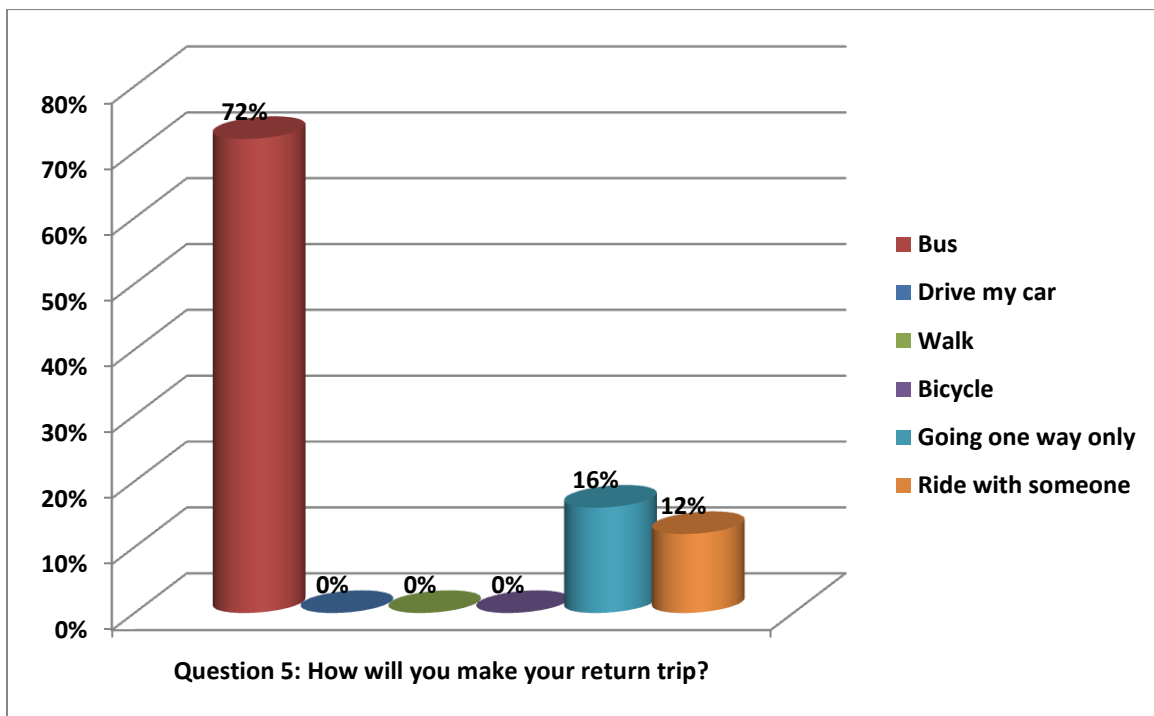
Question 3: What is the purpose of today's trip? If you are going home, what was the main purpose of your trip?		
Work	6	24%
School	1	4%
Medical/Shopping	6	24%
Personal Business	6	24%
Social/Recreation	2	8%
Other	4	16%
Total	25	100%



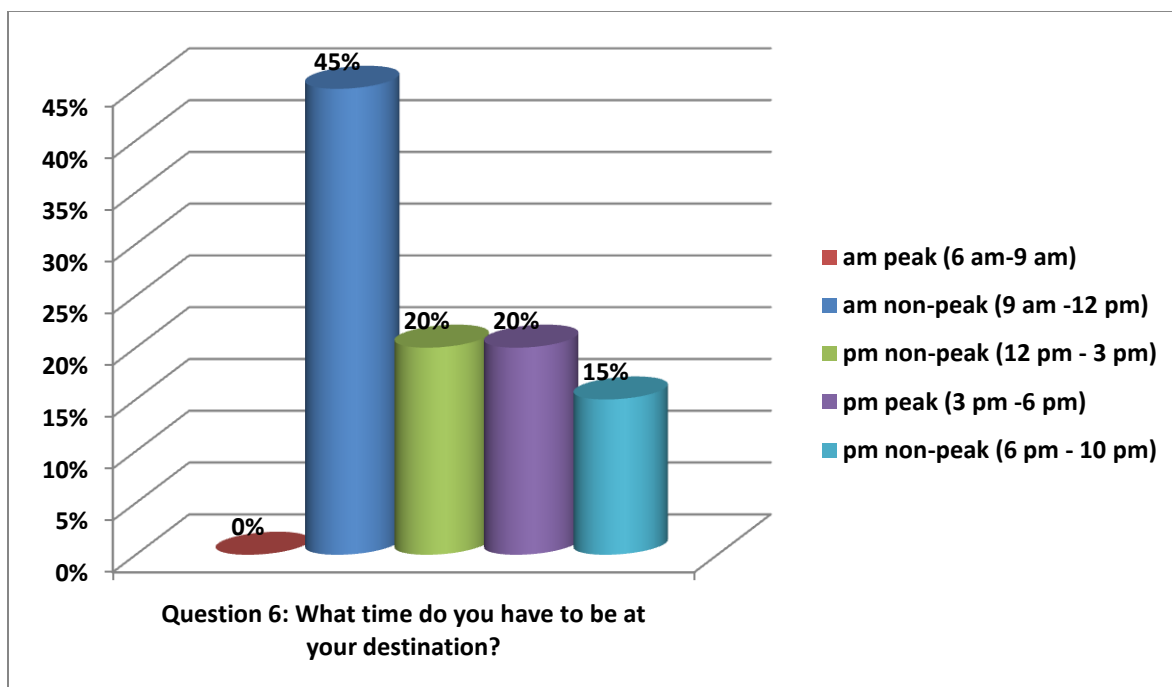
Question 4: What is (are) the destination(s) of today's bus trip? (Please list community and facility.)		
Arcata	1	4%
College of the Redwoods (Hoopa)	1	4%
Eureka	2	9%
Home	3	13%
Hoopa	2	9%
Knights Park	1	4%
Ray's Food Place (Hoopa)	2	9%
Willow Creek	5	22%
Other	6	26%
Total	23	100%



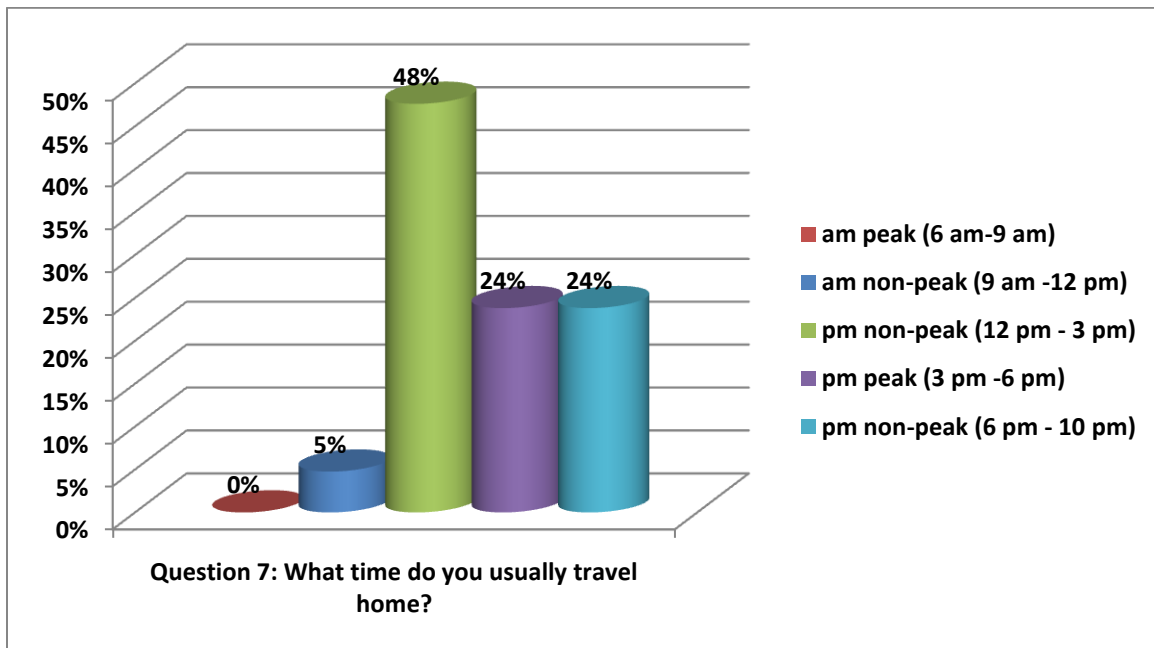
Question 5: How will you make your return trip?		
Bus	18	72%
Drive my car	0	0%
Walk	0	0%
Bicycle	0	0%
Going one way only	4	16%
Ride with someone	3	12%
Total	25	100%



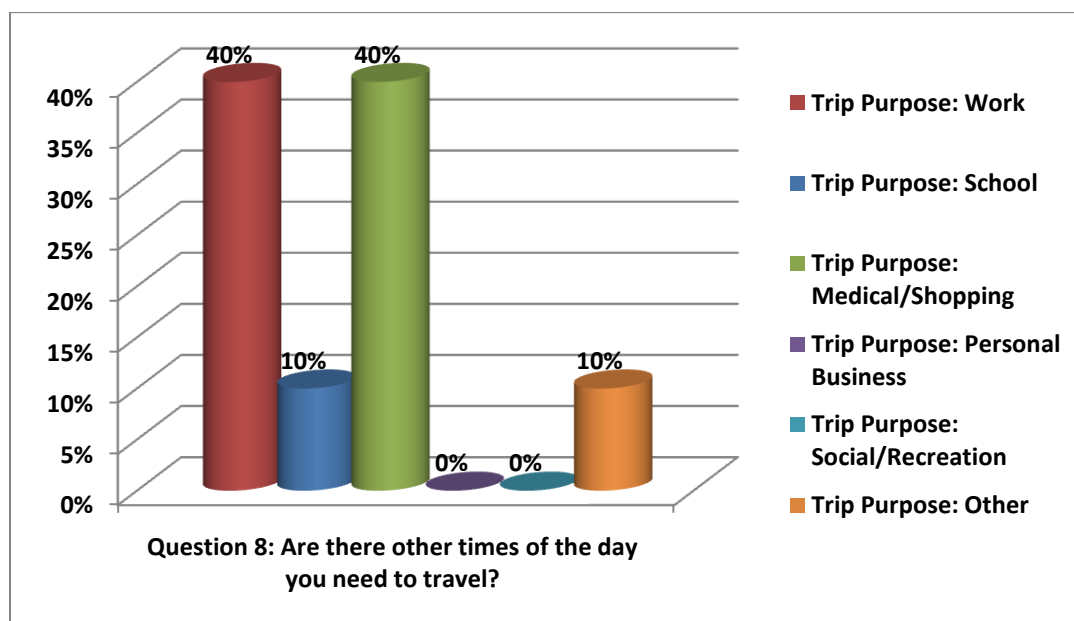
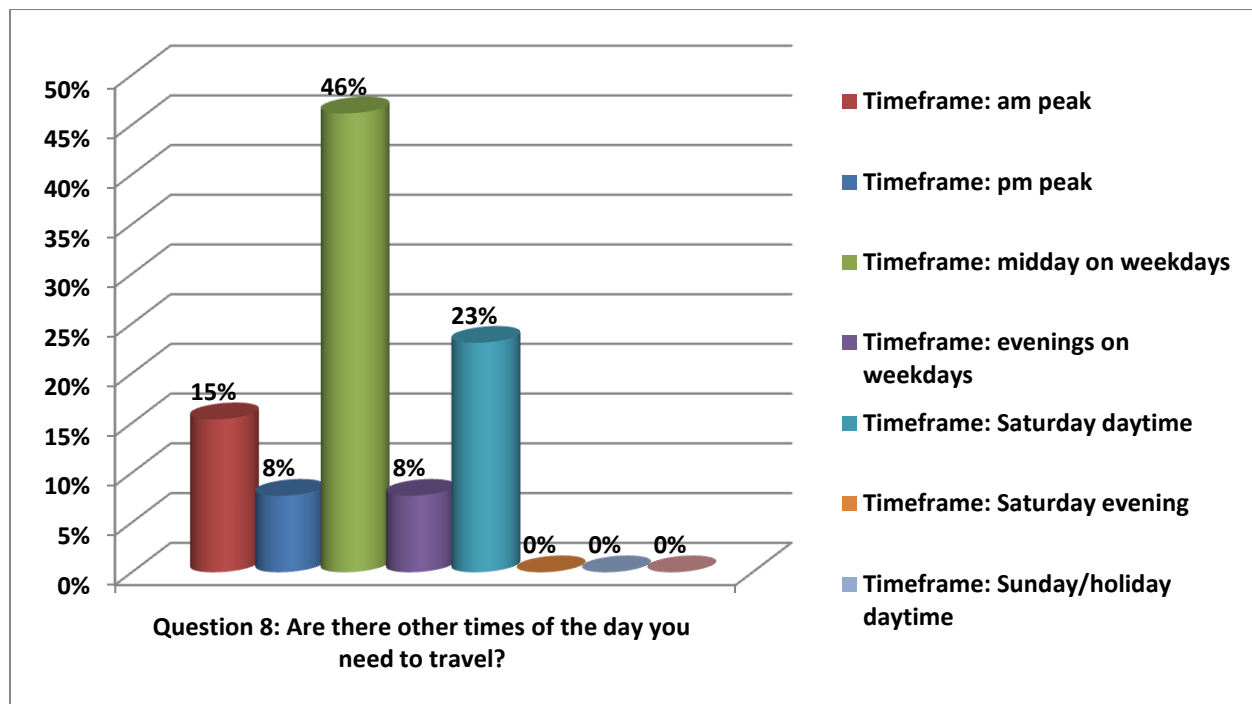
Question 6: What time do you have to be at your destination?		
am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	9	45%
pm non-peak (12 pm - 3 pm)	4	20%
pm peak (3 pm -6 pm)	4	20%
pm non-peak (6 pm - 10 pm)	3	15%
Total	20	100%



Question 7: What time do you usually travel home?		
am peak (6 am-9 am)	0	0%
am non-peak (9 am -12 pm)	1	5%
pm non-peak (12 pm - 3 pm)	10	48%
pm peak (3 pm -6 pm)	5	24%
pm non-peak (6 pm - 10 pm)	5	24%
Total	21	100%

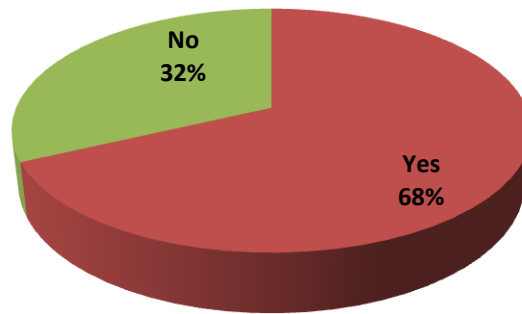


Trip Purpose		
Trip Purpose: Work	4	40%
Trip Purpose: School	1	10%
Trip Purpose: Medical/Shopping	4	40%
Trip Purpose: Personal Business	0	0%
Trip Purpose: Social/Recreation	0	0%
Trip Purpose: Other	1	10%
Total	10	100%



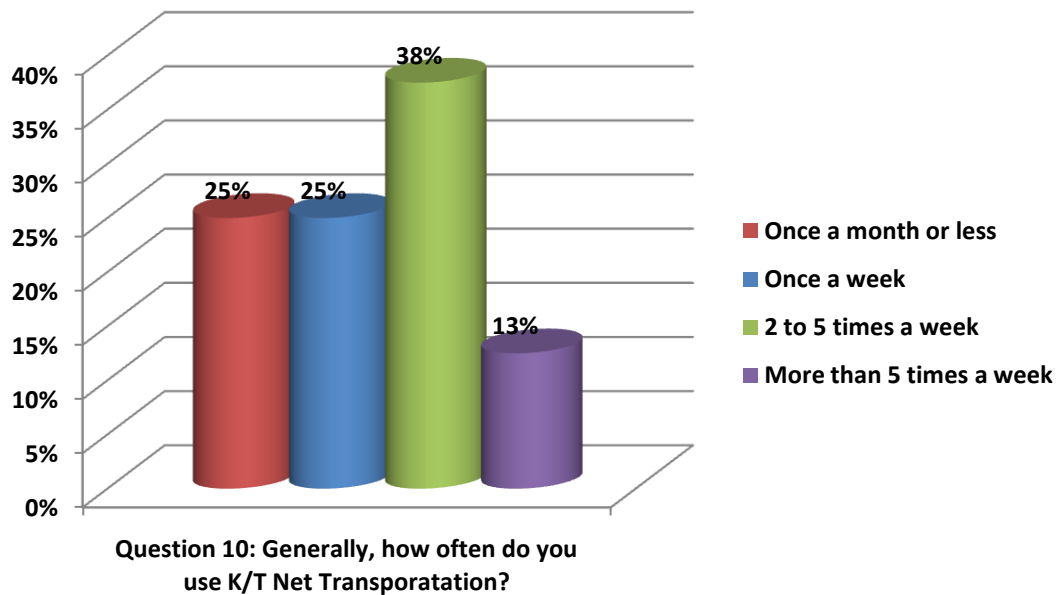
Question 9: Is this a regular commute trip for work, school, or medical treatment?		
Yes	17	68%
No	8	32%
Total	25	100%

Question 9: Is this a regular commute trip for work, school, or medical treatment?



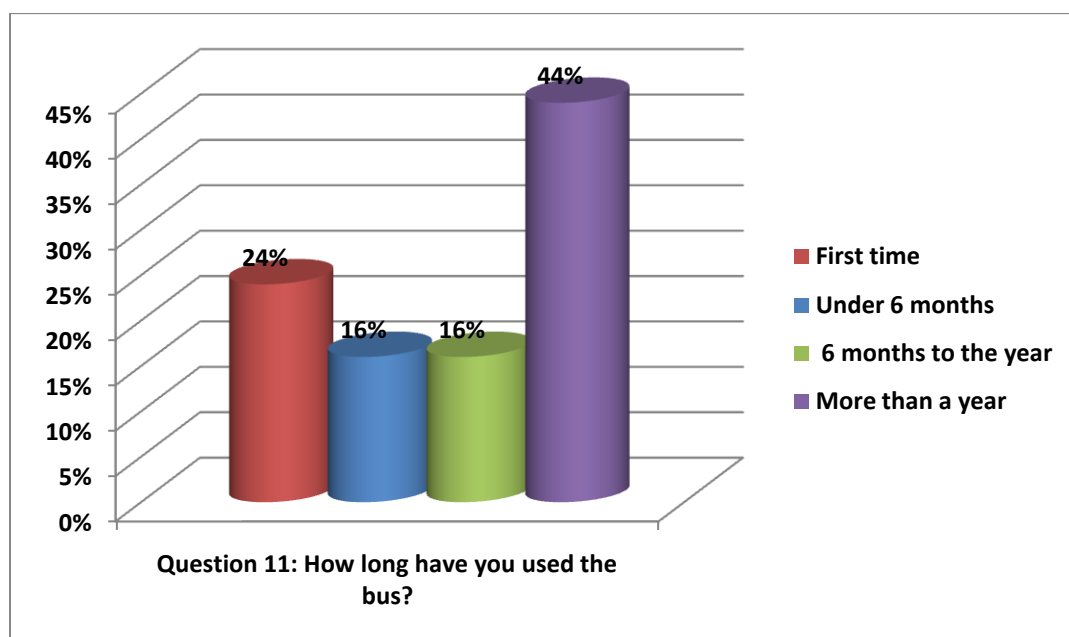
Question 10: Generally, how often do you use K/T Net Transportation?

Once a month or less	6	25%
Once a week	6	25%
2 to 5 times a week	9	38%
More than 5 times a week	3	13%
Total	24	100%

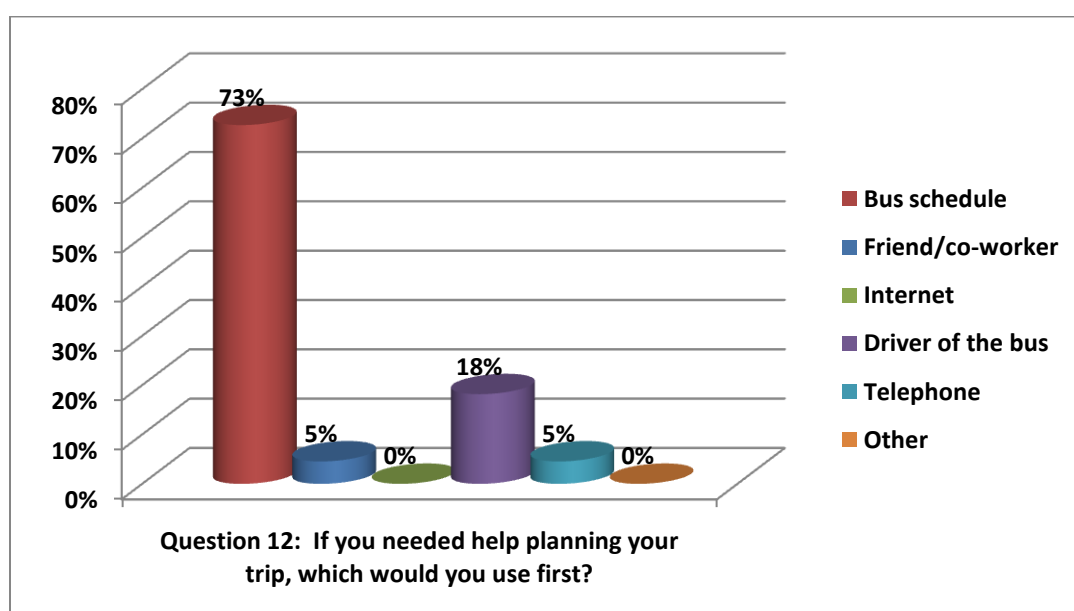


Question 11: How long have you used the bus?

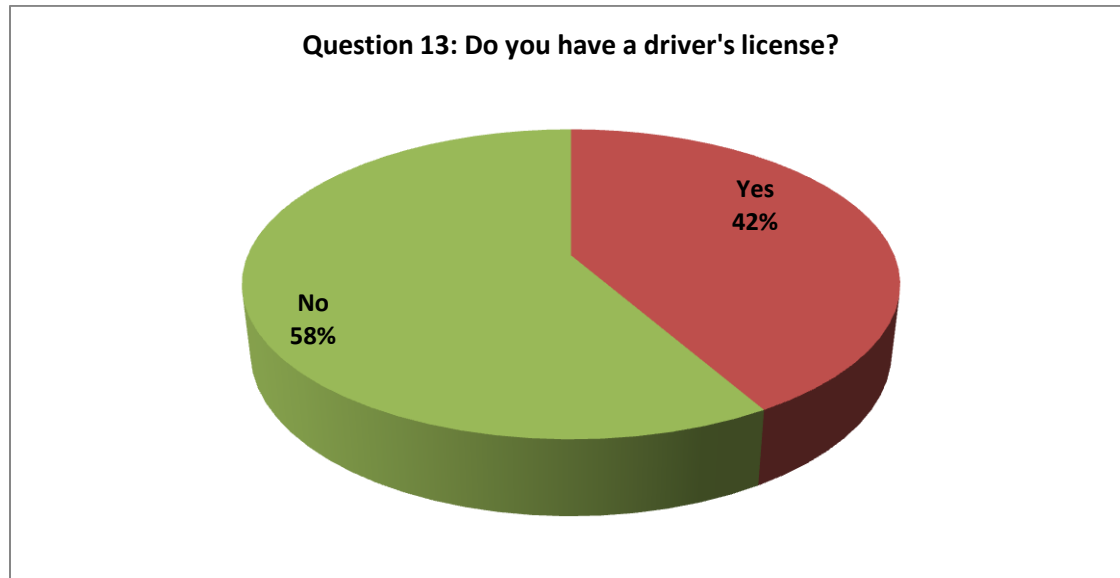
First time	6	24%
Under 6 months	4	16%
6 months to the year	4	16%
More than a year	11	44%
Total	25	100%



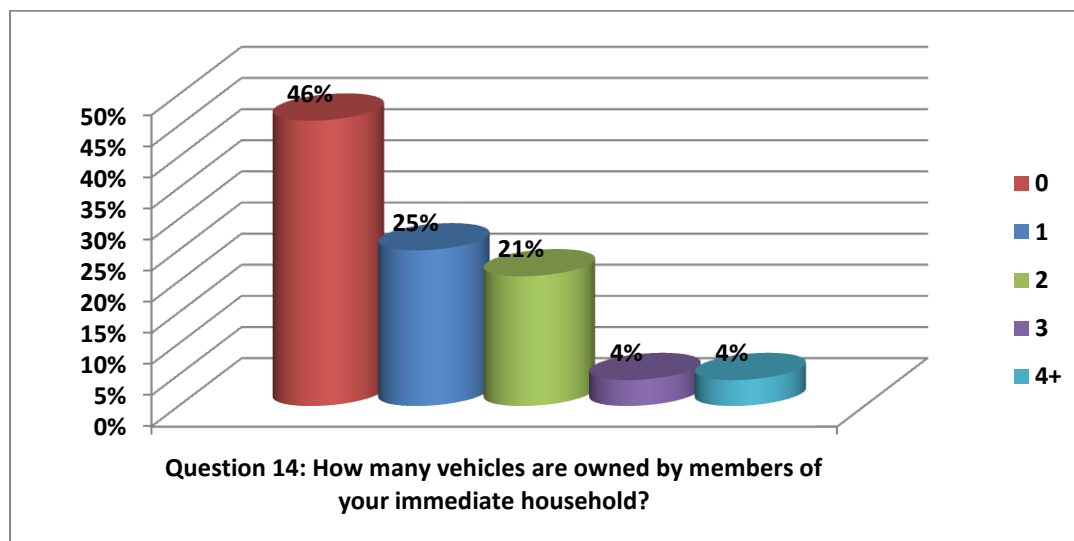
Question 12: If you needed help planning your trip, which would you use first?		
Bus schedule	16	73%
Friend/co-worker	1	5%
Internet	0	0%
Driver of the bus	4	18%
Telephone	1	5%
Other	0	0%
Total	22	100%



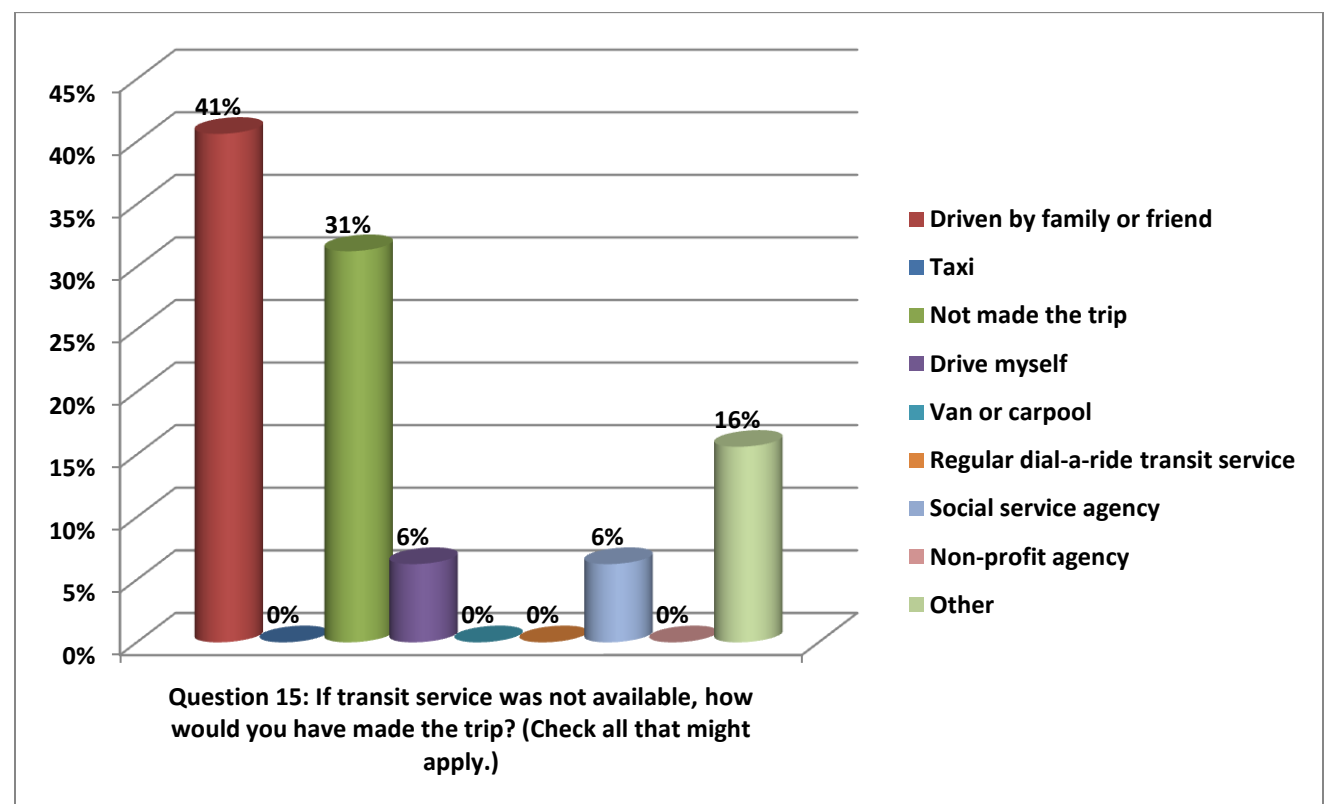
Question 13: Do you have a driver's license?		
Yes	10	42%
No	14	58%
Total	24	100%



Question 14: How many vehicles are owned by members of your immediate household?		
0	11	46%
1	6	25%
2	5	21%
3	1	4%
4+	1	4%
Total	24	100%

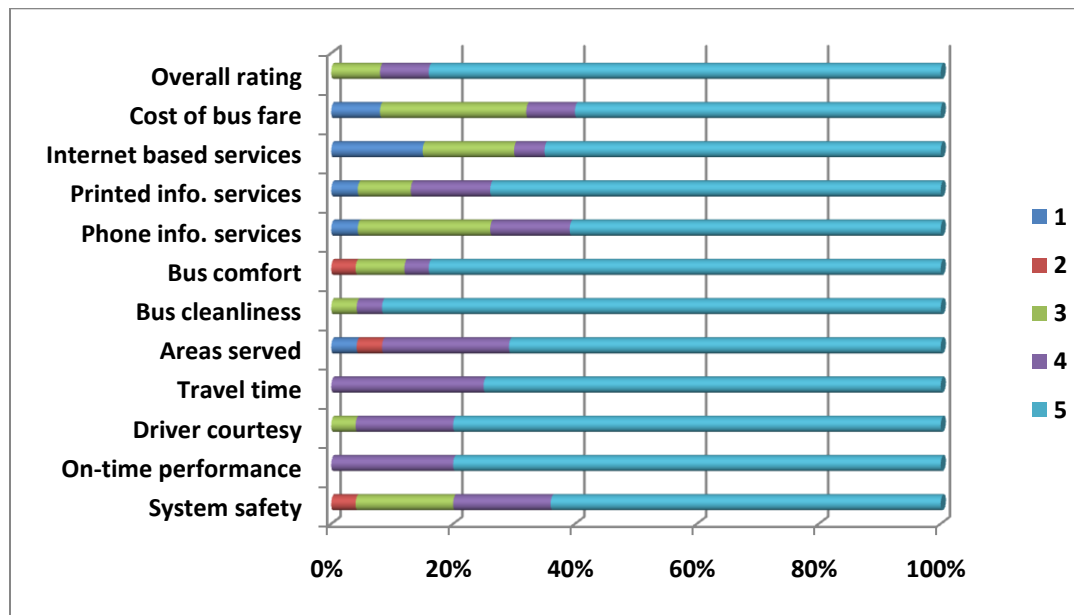


Question 15: If transit service was not available, how would you have made the trip? (Check all that might apply.)		
Driven by family or friend	13	41%
Taxi	0	0%
Not made the trip	10	31%
Drive myself	2	6%
Van or carpool	0	0%
Regular dial-a-ride transit service	0	0%
Social service agency	2	6%
Non-profit agency	0	0%
Other	5	16%
Total	32	100%

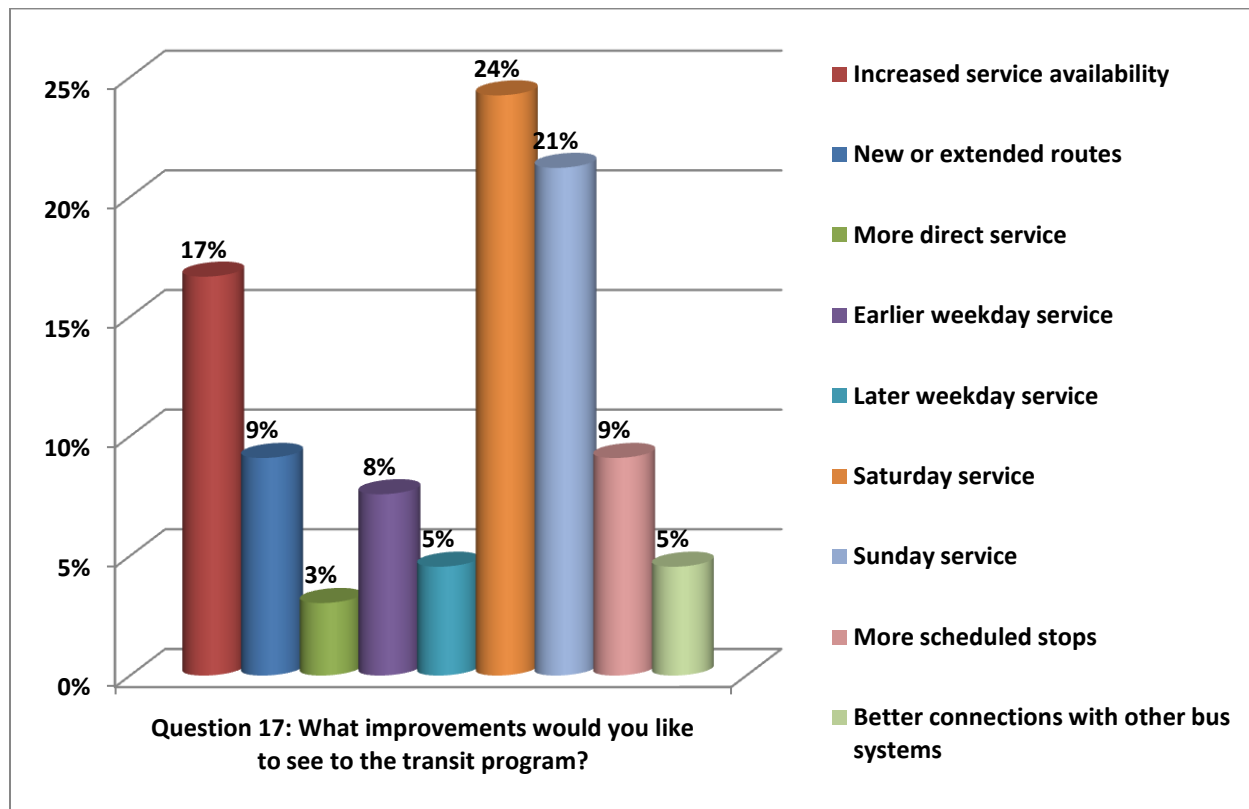


Question 16. Please indicate your opinion of the bus service using the list below: 1 being the lowest and 5 the highest.

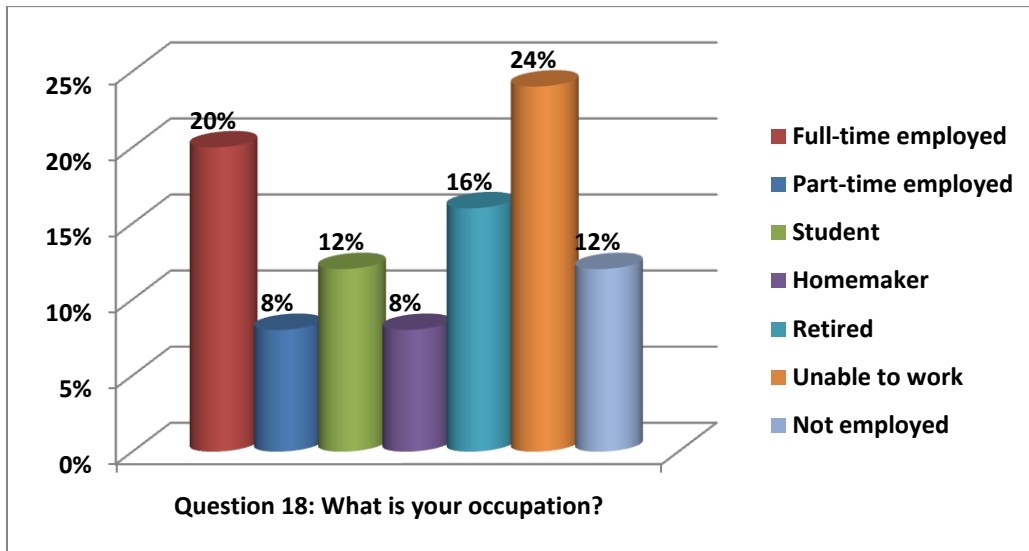
	System safety	On-time performance	Driver courtesy	Travel time	Areas served	Bus cleanliness	Bus comfort	Phone info. services	Printed info. services	Internet based services	Cost of bus fare	Overall rating
1	0	0	0	0	1	0	0	1	1	3	2	0
2	1	0	0	0	1	0	1	0	0	0	0	0
3	4	0	1	0	0	1	2	5	2	3	6	2
4	4	5	4	6	5	1	1	3	3	1	2	2
5	16	20	20	18	17	22	21	14	17	13	15	21
Total	25	25	25	24	24	24	25	23	23	20	25	25



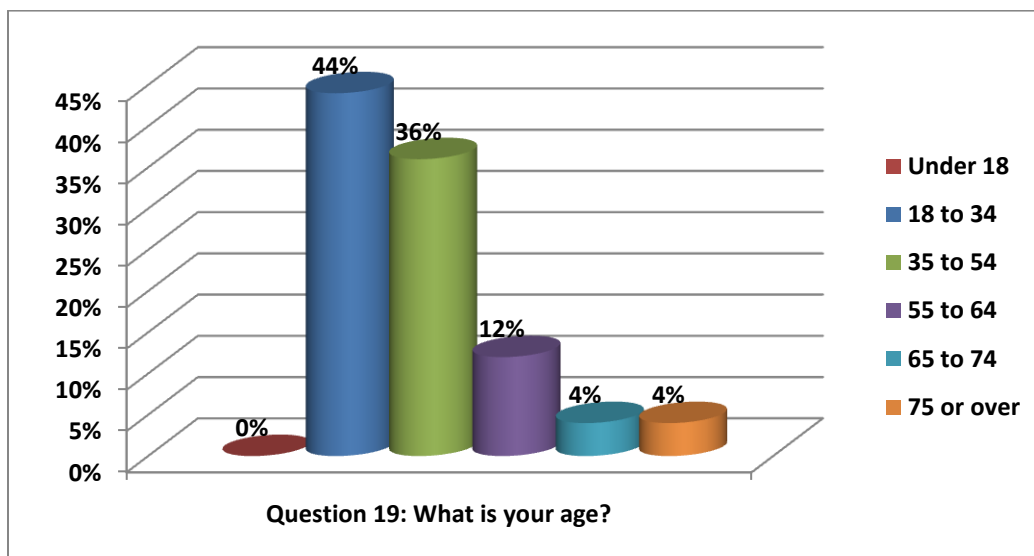
Question 17: What improvements would you like to see to the transit program?		
Increased service availability	11	17%
New or extended routes	6	9%
More direct service	2	3%
Earlier weekday service	5	8%
Later weekday service	3	5%
Saturday service	16	24%
Sunday service	14	21%
More scheduled stops	6	9%
Better connections with other bus systems	3	5%
Total	66	100%



Question 18: What is your occupation?		
Full-time employed	5	20%
Part-time employed	2	8%
Student	3	12%
Homemaker	2	8%
Retired	4	16%
Unable to work	6	24%
Not employed	3	12%
Total	25	100%

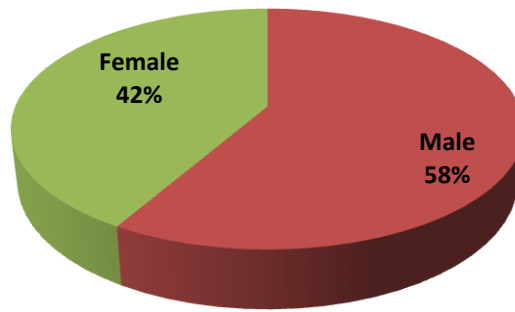


Question 19: What is your age?		
Under 18	0	0%
18 to 34	11	44%
35 to 54	9	36%
55 to 64	3	12%
65 to 74	1	4%
75 or over	1	4%
Total	25	100%



Question 20: What is your gender?		
Male	14	58%
Female	10	42%
Total	24	100%

Question 20: What is your gender?



Question 21: What community do you live in?		
Arcata	1	4%
BIA Campus	1	4%
Eureka	1	4%
Hoopa	12	50%
McKinleyville	1	4%
Orleans	1	4%
Pecwan	1	4%
Salyer	1	4%
Wauteck	1	4%
Weitchpec	2	8%
Willow Creek	2	8%
Total	24	100%

