



KINGMAN AREA REGIONAL TRANSIT

**SHORT AND LONG
RANGE TRANSIT PLAN**

**Short and Long Range Transit Plan
February 2022**



Contents

1. Study Overview	1
Introduction	1
Study Purpose	1
Study Area	1
Study Process	3
2. Market Analysis.....	4
Current Population	4
Transportation Generators.....	9
3. Existing Service Overview.....	11
Kingman Area Regional Transit (KART)	11
Route Profiles	13
Transit Fleet, Equipment, and Technology	22
System Performance	24
Financial Overview	25
4. Service Alternatives	27
Guiding Principles	27
Service Alternatives Development	28
Preferred Alternative Route Network	33
5. Community Engagement.....	35
Phase 1 Community Survey.....	35
Phase 2 Community Survey.....	43
6. Service and Operations Plan	49
Short-term Service plan	49
Long-Term Vision.....	64

7. Capital and Infrastructure Plan	68
Vehicle Fleet.....	68
Bus Stops.....	68
Facilities and Additional Infrastructure	75
Technology	77
8. Marketing Plan	79
Markets for Transit.....	79
Marketing Strategies.....	80
Summary of Recommendations	83
9. Financial Plan	84
Revenues Projections	84
Fare Structure.....	85
Operating and Capital Expenditures	86
Potential Additional Funding and Revenue Sources	87
10.Implementation Plan	89

1. STUDY OVERVIEW

INTRODUCTION

The City of Kingman initiated the Kingman Area Regional Transit (KART) *Short-Range and Long-Range Transit Plan* to identify what is working with KART system today, strategies to improve service, and to create a blueprint for addressing the region's unmet transportation needs of today and tomorrow. This report documents the analyses performed to identify, evaluate, and recommend transit service strategies for short-term implementation to enhance the KART system.

STUDY PURPOSE

The *Short-Range and Long-Range Transit Plan* will guide the development of the Kingman Area Regional Transit (KART) over the next five to ten years. Ultimately, the Plan will be a blueprint that will guide future transit planning, service operations, capital investment, and policy decisions. To create a blueprint for a sustainable, safe, innovative, and efficient transit service that improves the quality of life of residents, supports economic growth, and provides necessary local and regional transportation options, the Plan aims to:

- Review existing and historical system data to understand ridership and performance trends and to identify efficiencies, deficiencies, and operating effectiveness of current services.
- Evaluate the need for additional transit services to currently underserved areas.
- Understand the desires and expectations of the residents.
- Identify solutions and potential partnerships to support long-lasting, sustainable public transportation.
- Create an action plan for the operations, financial, marketing, and capital needs to guide implementation of recommendations.
- Develop a plan for short- and long-term public transportation improvements.

STUDY AREA

As illustrated in **Figure 1.1**, the *Short-Range and Long-Range Transit Plan* is focused on the City of Kingman city limits and key unincorporated portions of Mohave County, such as New Kingman-Butler. Located along the BNSF Railway Company railroad line, the City spurred from mining and railroad operations. Known as the "heart of the historic route 66," Kingman has the longest remaining preserved stretch of the historic Route 66. Today, Kingman is a thriving community that offers first-class medical facilities, regional shopping facilities, and numerous economic development sites. To provide regional access, this study will also analyze potential connection needs to neighboring communities, such as Valle Vista and Golden Valley, and transit agencies, such as Hualapai Transit and Bullhead Area Transit.

Figure 1.1. Study Area



Legend

- Interstate
- US and State Highways
- City of Kingman
- New Kingman-Butler CDP

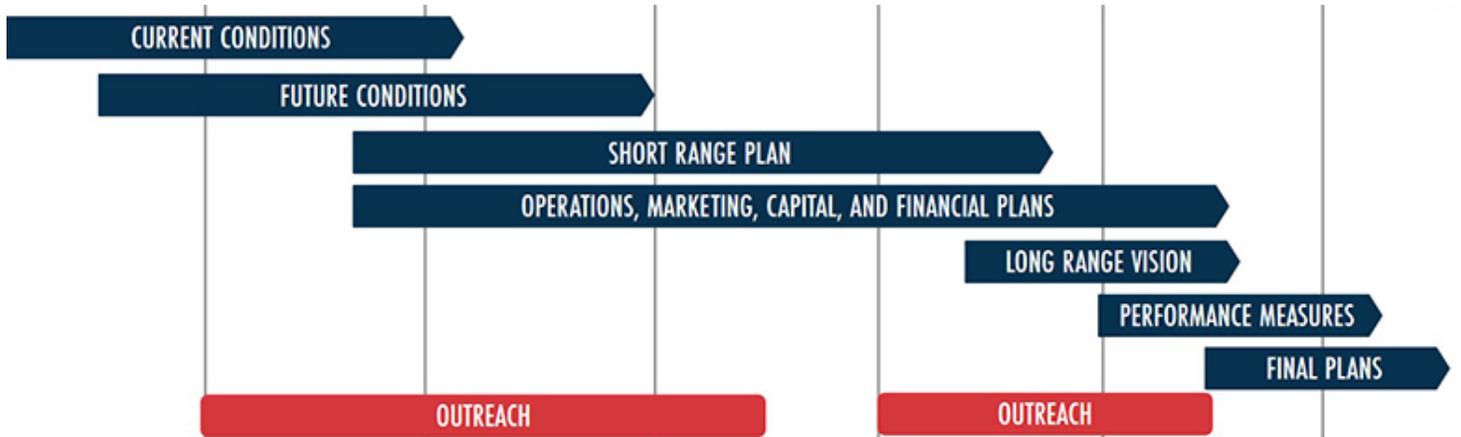
Sources: ADOT, US Census
Feet 0 8,000



STUDY PROCESS

This Plan is a multi-phased process that includes an existing conditions review, service evaluation, short range plan, and long-term vision. The first phase of the study focused on conducting a review of existing and future conditions, which have informed this document. **Figure 1.2** illustrates the process utilized for this study. This document focuses on quantifying transit service needs, identifying priority stop locations and travel destinations, evaluating transit service options, creating a hierarchy of bus stop designs, and recommending preferred transit service improvements.

Figure 1.2. Study Process



2. MARKET ANALYSIS

This chapter analyzes a series of factors that together affect the demand for transit in the Kingman area. The market for transit service is largely defined by:

- Socioeconomic characteristics, such as low income and zero-car households; youth and seniors; and people with disabilities; have a higher likelihood of using transit, and are therefore a critical part of market demand.
- Population and employment density is a strong indicator for transit demand. Larger numbers of people living and working in proximity leads to a stronger market for transit.
- The location of major landmarks and tourist destinations indicate where people desire to travel.

CURRENT POPULATION

Socioeconomic data is utilized to understand current and future transit demand within the Study Area. This information was used to identify areas with the greatest transit needs. The Arizona Office of Economic Opportunity estimates that the Greater Kingman Area has a population of 44,439. **Table 2.1** provides an overview of population and housing statistics for the Kingman area and the census designated places (CDP) of New Kingman-Butler, Golden Valley, and Valle Vista. As illustrated in the Table, Kingman and the New Kingman-Butler area have the highest number of residents and occupied housing units in the region.

Table 2.1. Community Overview

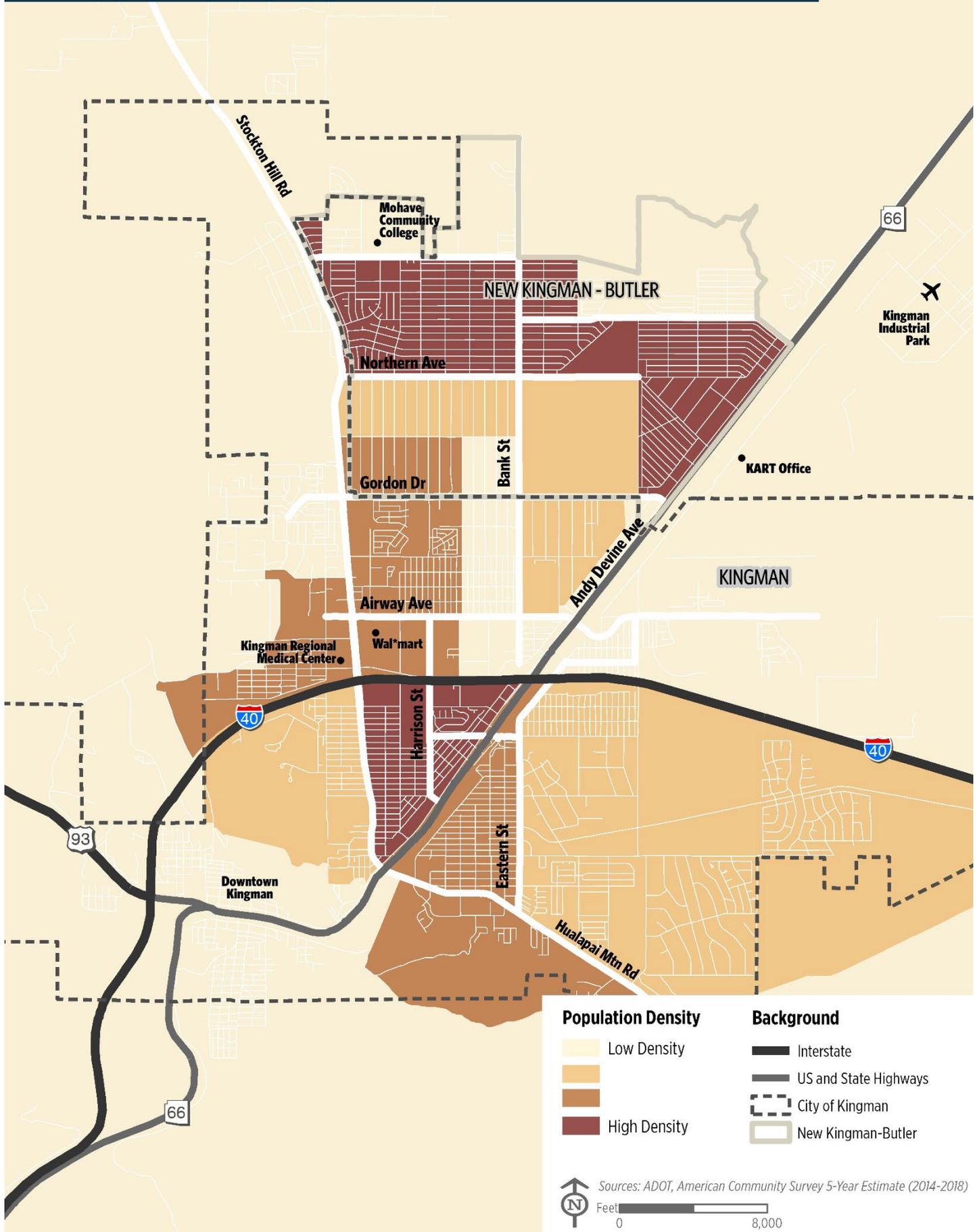
Demographic	Kingman	New Kingman-Butler CDP	Golden Valley CDP	Valle Vista CDP
Total Population	31,346	13,093	10,111	2,159
Housing Characteristics				
Total Housing Units	12,709	6,343	4,546	1,127
Occupied Housing Units	11,303	5,289	3,933	984
Vacant Housing Units	1,406	1,054	593	143
<i>% of Vacant Housing Units for Seasonal, Recreational, or Occasional Use</i>	<i>8.5%</i>	<i>15.6%</i>	<i>49.4%</i>	<i>29.3%</i>

Source: Arizona Office of Economic Opportunity, American Community Survey 5-Year Estimate (2014-2018)

POPULATION DENSITY

Population density is one of the most important factors when determining the success of a public transportation system, as the majority of trips (both transit or non-transit trips) originate or end at the home. **Figure 2.1** illustrates the distribution and density of population in the study area. Kingman’s population is most densely concentrated in two areas: west of Andy Devine Avenue near Mohave Community College and northeast of downtown Kingman near the Kingman Regional Medical Center and the Walmart. These aforementioned areas are surrounded by comparatively less dense areas that nonetheless have significant populations.

Figure 2.1. Population Density



TRANSIT DEPENDENT POPULATIONS

In addition to considering the overall population characteristics of an area, understanding specific demographic distributions and needs is vital to evaluating the feasibility of a transit system.

Transit riders are typically generalized into two categories:

- **Choice riders** have adequate resources and abilities to own, operate, and maintain a vehicle but choose to use transit. Choice riders are more likely to use public transportation for commuting or when transit offers an advantage over driving (i.e., roads are congested, high parking fees, passenger amenities, etc.)
- **Captive riders**, referred to as transit dependent riders, use public transportation because they lack access or resources to own or operate a vehicle. These riders use public transportation for most of their trips, including to get to work, medical appointments, shops, and social activities.

Choice riders can be located anywhere in a community, with the strongest market areas typically being areas with high population or employment density. Market areas for captive riders, however, is more complex as an understanding of population distributions and considerations for special concerns is needed. For example, older adults tend to travel during the daytime and require shorter walks to/from a bus stop. The following outlines six demographic groups typically associated with higher use of transit:

- **Youth** – individuals under 18 years old may have limited access to a vehicle or are unable to drive.
- **Older adults** – individuals aged 65 and older may become less comfortable driving as they age or are no longer physically able to drive.
- **Low-income individuals** – individuals who live within a set of income thresholds established by the US Census Bureau, which vary by family size and composition. Low-income households traditionally rely on public transportation as it is less expensive than owning and operating a vehicle.
- **Female led households** – female headed households are households led by a female-identifying person with no spouse present, with children under 18 years old present. Traditionally, this population group has a fixed income and generally have limited personal vehicle availability.
- **Zero car households** – persons residing in households without access to a vehicle traditionally rely on walking, biking, public transportation, or carpooling to meet their mobility needs.
- **Mobility limited** – persons with a disability often have difficulty operating a vehicle and require access to public transportation.

Table 2.2 provides a comparison of transit dependent riders within the study area.

Table 2.2. Overview of Transit Dependent Populations

Demographic	Kingman	New Kingman-Butler CDP	Golden Valley CDP	Valle Vista CDP
Total Population	31,346	13,093	10,111	2,159
18 Years and Younger	22.3%	19.9%	11.1%	12.9%
Age 65 and Older	24.0%	22.6%	35.6%	42.1%
Low-Income Individuals	17.5%	28.0%	24.1%	10.5%
Female Led Household	4.7%	3.7%	1.5%	3.4%
Zero Car Households	6.5%	6.6%	4.3%	0%
Mobility Limited Persons	22.3%	22.9%	36.9%	23.3%

Source: Arizona Office of Economic Opportunity, American Community Survey 5-Year Estimate (2014-2018)

COMPOSITE TRANSIT RELIANCE INDEX

Transit reliance combines key socioeconomic characteristics of transit dependent population groups into a single measure to estimate areas that might have a greater tendency to use public transportation as their primary method of transport. To understand areas within the Kingman area that may have the highest need for public transportation services, a transit reliance index was developed and mapped.

To create the index score, each Census block group was assigned a score between 1 to 5 based on the level of density of each transit dependent population group. For example, a block group with a high density of older adults will receive a score of 5, whereas, if the block group has a low density of youth it would receive a score of 1. After assigning each block group a score, the score for each characteristic is summed, resulting in a number from 6 to 30, called the “Transit Reliance Index.”

Table 2.3 outlines the index scoring system and each group’s breakpoint.

Table 2.3. Transit Reliance Scoring System

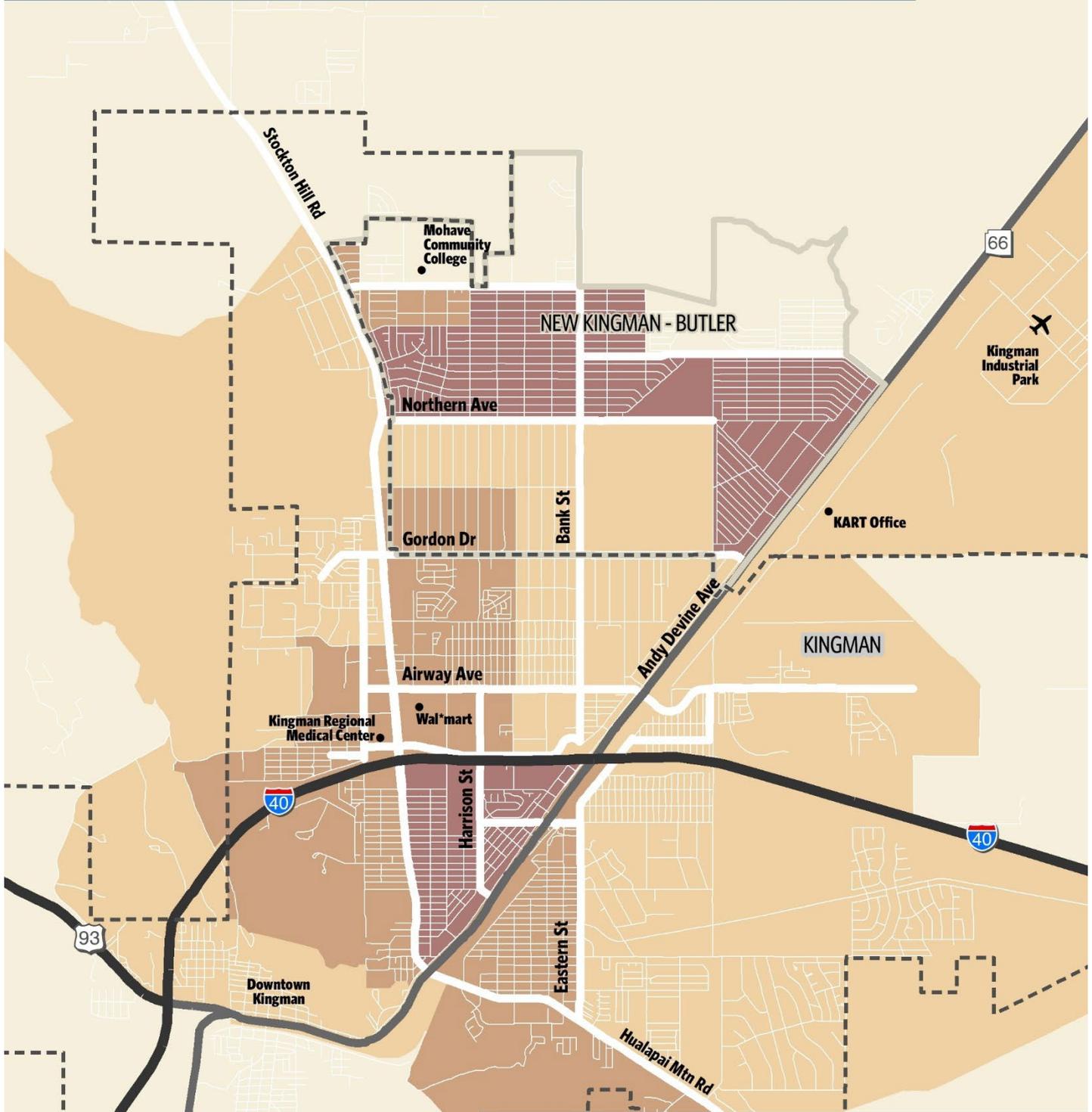
Score	Youth	Older Adults	Low-Income Individuals	Female Led Households	Zero Car Households	Mobility Limited Persons
1	< 22.74	< 21.66	< 18.46	< 13	< 1.99	< 25.32
2	22.75 – 91.44	21.67 – 95.96	18.47 – 62.96	.14 – 8.65	2 – 6.80	25.33 – 102.58
3	91.45 – 257.48	95.97 – 297.41	62.97 – 206.19	8.66 – 19.46	6.81 – 43.72	102.59 – 249.99
4	257.49 – 444.31	297.42 – 471.57	206.20 – 628.98	19.47 – 75.73	43.73 – 68.84	250 – 501.50
5	> 444.32	> 471.58	> 628.99	> 75.74	> 68.85	> 501.51

Scores for each factor are computed by sorting the values into quintiles. For example, Census block groups receiving a Youth score of 5 represent the top 20% of Youth densities in the study area.

Figure 2.2 illustrates the composite Transit Reliance Index for Kingman. Several trends illustrated in the figure include:

- Transit reliance tends to decrease moving outward from central Kingman.
- The areas near the Kingman Regional Medical Center and the Walmart have a high transit reliance, as these areas generally have high concentrations of all the transit reliance populations.
- The area west of Andy Devine Avenue near Mohave Community College has a heavy concentration of high transit reliance. This area has high concentrations of mobility limited persons, older adults, and persons residing below the poverty level.

Figure 2.2. Transit Reliance Index



Transit Reliance Index

- Low Reliance (Less than 10 Pts)
- Medium Reliance
- High Reliance (More than 20 Points)

Background

- Interstate
- US and State Highways
- City of Kingman
- New Kingman-Butler



Sources: ADOT, American Community Survey 5-Year Estimate (2014-2018)



TRANSPORTATION GENERATORS

Transportation generators are locations within a community that act as generators of transportation trips and are frequent destinations within a community. Understanding these destinations is critical in the evaluation of existing services and determining future transit needs.

MAJOR EMPLOYERS

The location and number of jobs is a strong indicator of transit demand, as traveling to and from work is a frequent trip type served by transit. Healthcare, manufacturing, consumer services, retail, tourism, and government are the primary drivers of the region's economy. Based on readily available data from the Arizona Council of Governments/Metropolitan Planning Organization Employer Database, there are approximately 17,086 employees within the City of Kingman. The top employers in the region include:

- Kingman Regional Medical Center - 1,250 employees
- City of Kingman - 394 employees
- Mohave County - 200 employees
- Walmart - 200 employees

In the same manner as population densities, employment densities provide a strong indication of underlying employment-based transit demand. **Figure 2.3** illustrates employment densities within the study region. Low density areas do not illustrate a lack of potential transit demand, but rather additional analysis and insight into trip attractions and generators are needed.

MAJOR ACTIVITY CENTERS

Major activity centers are catalysts in creating trips within communities. Areas of dense activity centers tend to have more people attempting to commute to them; therefore, it is important to provide transportation options to and from these areas. Within the study area, there are numerous key activity centers, including:

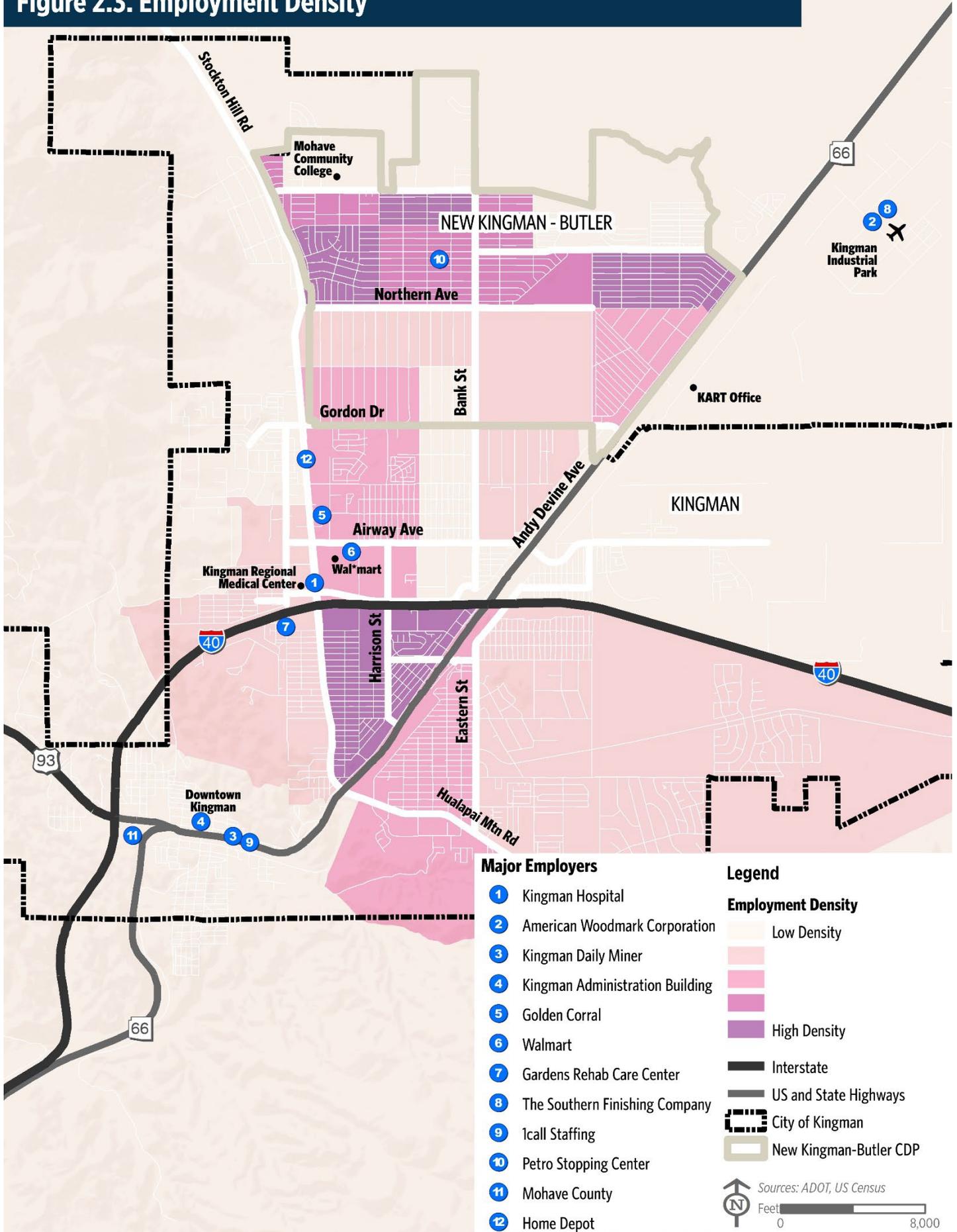
- Downtown Kingman District
- Centennial Park
- Government Buildings
- Senior Center
- Shopping Centers
- Libraries

SCHOOLS

While this study does not focus on providing services for elementary, middle, and high school students, providing services for residents to access educational opportunities at colleges is a critical element. Existing schools include:

- Mohave Community College (MCC)
- Kingman High School
- Lee Williams High School
- Kingman Middle School
- White Cliffs Middle School
- Cerbat Elementary School
- Desert Willow Elementary School
- Manzanita Elementary School
- Hualapai Elementary School
- Kingman Academy of Learning (KAOL)
- Private Educational Opportunities
- Daycare Facilities

Figure 2.3. Employment Density



3. EXISTING SERVICE OVERVIEW

The following sections review historical and current public transportation conditions within the study area in order to understand current transportation opportunities, challenges, and issues.

KINGMAN AREA REGIONAL TRANSIT (KART)

Since 2003, the KART has provided rural public transit service in Kingman and the Greater Kingman-Butler area. KART services are funded through the federal Section 5311 grant program, fare revenue, advertising revenue and the City of Kingman general fund. Today, KART offers four deviated fixed routes that connect residents to major activity centers such as the Kingman Regional Medical Center, Mohave Community College, shopping centers, parks and recreation centers, and social service agencies.



SYSTEM ROUTES

The KART system includes four routes: Blue, Red, Green, and Yellow. All routes are managed and operated by the City of Kingman. A system map can be found in **Figure 3.1**.



SYSTEM SPAN

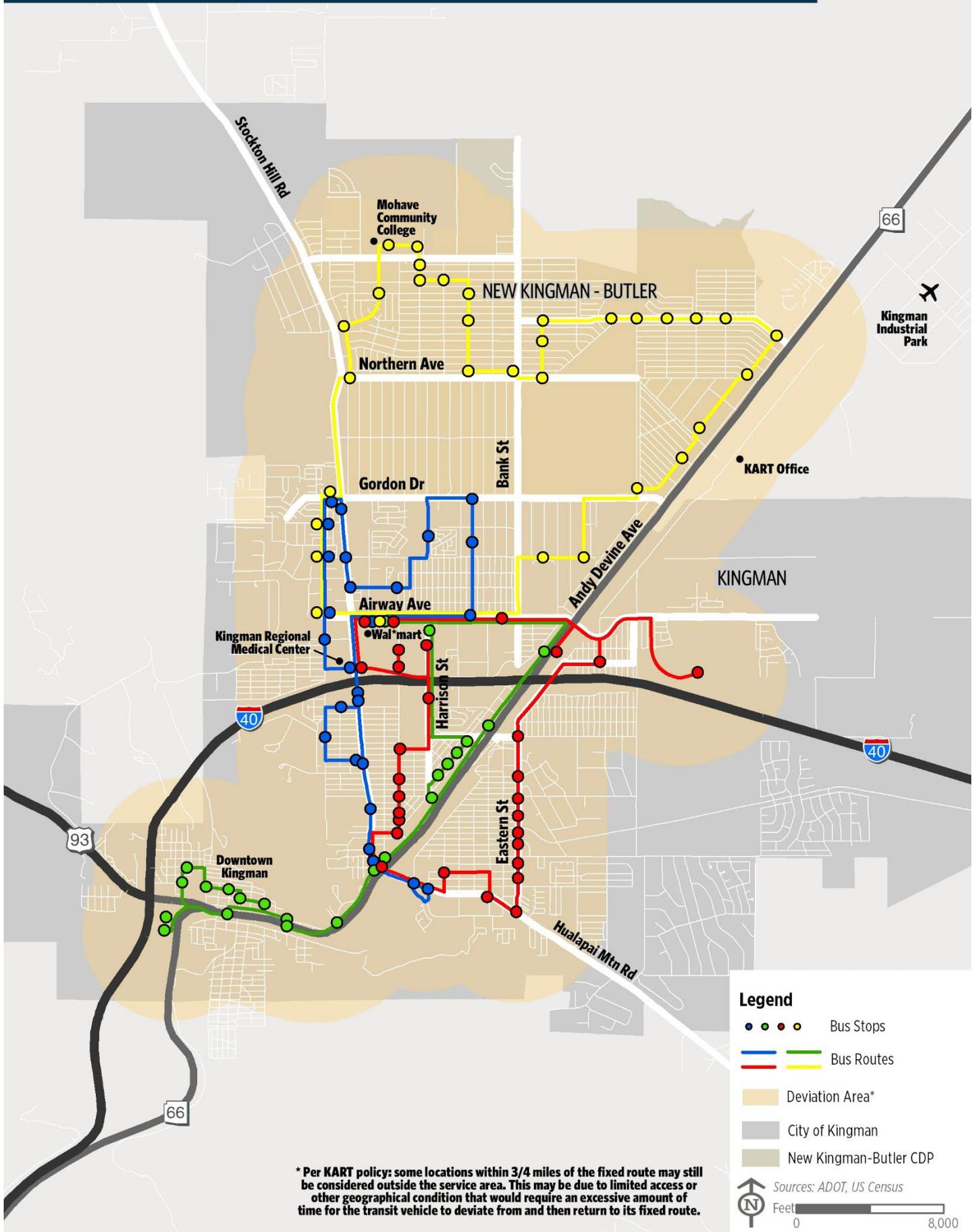
All routes run six days a week, Monday through Saturday, with the exception of City-observed holidays. Weekday routes run hourly, running from 6:00 am to 6:00 pm or 8:00 pm, depending on the route, and all routes operate between 9:00 am to 4:00 pm on Saturdays. Each route meets hourly at the transfer center located at Walmart, which acts as a transfer center for KART.

If scheduled in advance, buses will deviate up to 3/4th of a mile for boardings and alightings, as displayed in **Figure 3.1**. Fifteen minutes of leeway per hour is built into each route to allow time for deviations, traffic congestion and transit operator breaks. A summary table of service characteristics can be found in **Table 3.1**.

Table 3.1. System Characteristics by Route

Route	Service Hours	Headways	Route Mileage	Daily Runs
Red	Weekday: 6 AM – 6 PM Saturday: 9 AM – 4 PM	1 hour	13.0	12
Blue	Weekday: 6 AM – 6 PM Saturday: 9 AM – 4 PM	1 hour	14.0	12
Green	Weekday: 6 AM – 8 PM Saturday: 9 AM – 4 PM	1 hour	15.0	14
Yellow	Weekday: 6 AM – 8 PM Saturday: 9 AM – 4 PM	1 hour	15.0	14

Figure 3.1. Existing KART System Map



DEMAND-RESPONSE SERVICES

KART operates a program, called Curb-to-Curb, that is integrated with its fixed route services. This arrangement, known as a deviated fixed route, or a flex route, allows for deviations up to 3/4th of a mile from the designated route. Registered Curb-to-Curb clients call the dispatch office to schedule trips no later than 3:00 PM the day prior to service. Additionally, while aboard, passengers can request deviations directly with the driver; however, these deviations can only occur if time allows, which is why KART strongly encourages passengers to schedule in advance. As route deviations are generally scheduled in advance, deviation instructions are provided to each transit operator at the beginning of their shift. The bus leaves the route at the appropriate time to pick-up or drop-off passengers at their pre-scheduled destination and then returns to the route where it left off. Each route meets hourly at the transfer center located at Walmart. It is there that passengers, whether Curb-to-Curb or using the fixed route stops, will transfer to a different route when needed. The service coverage of the deviations for KART's flex routes are displayed in **Figure 3.1**.

FARE STRUCTURE

Table 3.2 details the fare structure currently offered by KART. There are multiple options for payment when riding KART, including purchasing tickets in advance or when boarding. Fares, a coupon, or a pass must be provided each time a passenger boards the bus, and for cash fares exact change is required, as drivers cannot make change.

Table 3.2. KART Fare Structure

Item	General Public	Seniors (60+) ⁴	Veterans ⁴	People with Disabilities ⁴	Children (under 10 years old) ⁵
One Way Fare	\$1.50	\$1.50	\$1.50	\$1.50	
Book of 30 coupons ¹	\$45.00	\$45.00	\$45.00	\$45.00	
Day Pass ²	\$5.00	\$5.00	\$5.00	\$5.00	Free
Monthly Pass ^{2, 3}	\$55.00	\$45.00	\$45.00	\$55.00	
Curb-to-Curb	\$6.00	\$3.00	\$6.00	\$3.00	

¹ Each coupon valid for one (1) one-way fare; ² Valid for unlimited rides on fixed-route services; ³ Valid within a given calendar month; ⁴ Must provide valid identification; ⁵ Must be accompanied by an adult

ROUTE PROFILES

The following section contains a summary of each route based on historic data and field observations. Ridership is measured in terms of average daily boardings, which refers to the number of times a passenger enters a vehicle. Route productivity is measured by dividing average daily boardings by the number of scheduled daily revenue hours, or the time in which all vehicles assigned to a route are in service for a particular level of service (i.e. weekday or Saturday).

CORONAVIRUS PANDEMIC RESPONSE

In response to social distancing measures related to the COVID-19 global pandemic, KART temporarily altered routes and schedules to limit the number of riders aboard buses. The Yellow and Green routes were changed to two buses running 30-minute schedules. KART limited occupancy to 10 people per vehicle (9 passengers with 1 driver). KART also modified its service hours to 9 AM – 4 PM, Monday through Saturday. Lastly, KART operated all four routes fare-free to provide service for essential workers and essential trips. The following route profiles reflect standard operating procedures until December 2019 to illustrate common practices and ridership.

Blue Route

The Blue Route travels in a one-way counterclockwise loop through central Kingman along Roosevelt Street, Morrow Avenue, Western Avenue, and Stockton Hill Road. The route begins and ends at the Walmart Transfer Center. Key destinations include the KOA Campground, Safeway, Kingman Regional Medical Center, Mohave Mental Health, and the U.S. Post Office.

ROUTE OVERVIEW

14
ROUTE LENGTH
(Miles)

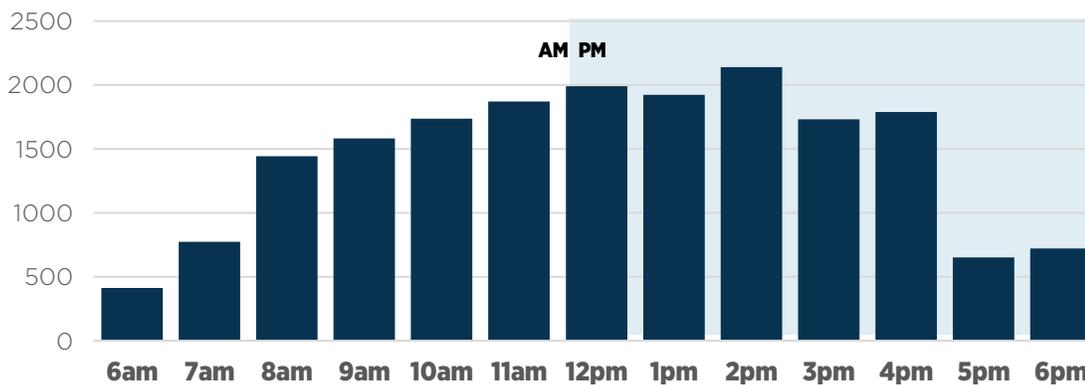
8
NUMBER OF
LEFT TURNS

25
NUMBER OF
STOPS

12
NUMBER OF
ROUTE TRIPS
PER DAY

ROUTE RIDERSHIP

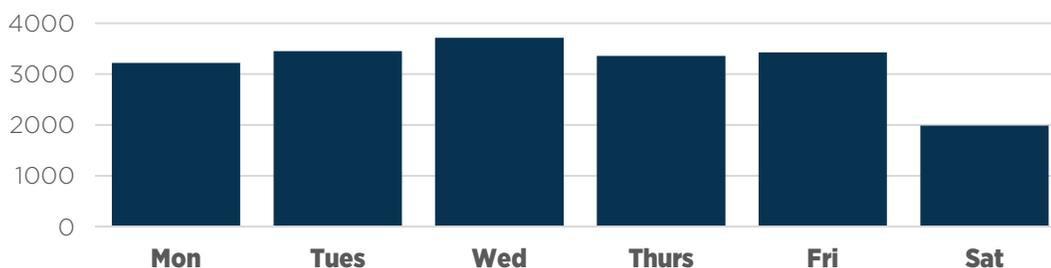
Total Boardings by Hour (2019)



16,650
ANNUAL
RIDERSHIP (2019)

75
AVERAGE
WEEKDAY
BOARDINGS (2019)

Total Boardings by Day (2019)



41
AVERAGE
SATURDAY
BOARDINGS (2019)

ROUTE ANALYSIS

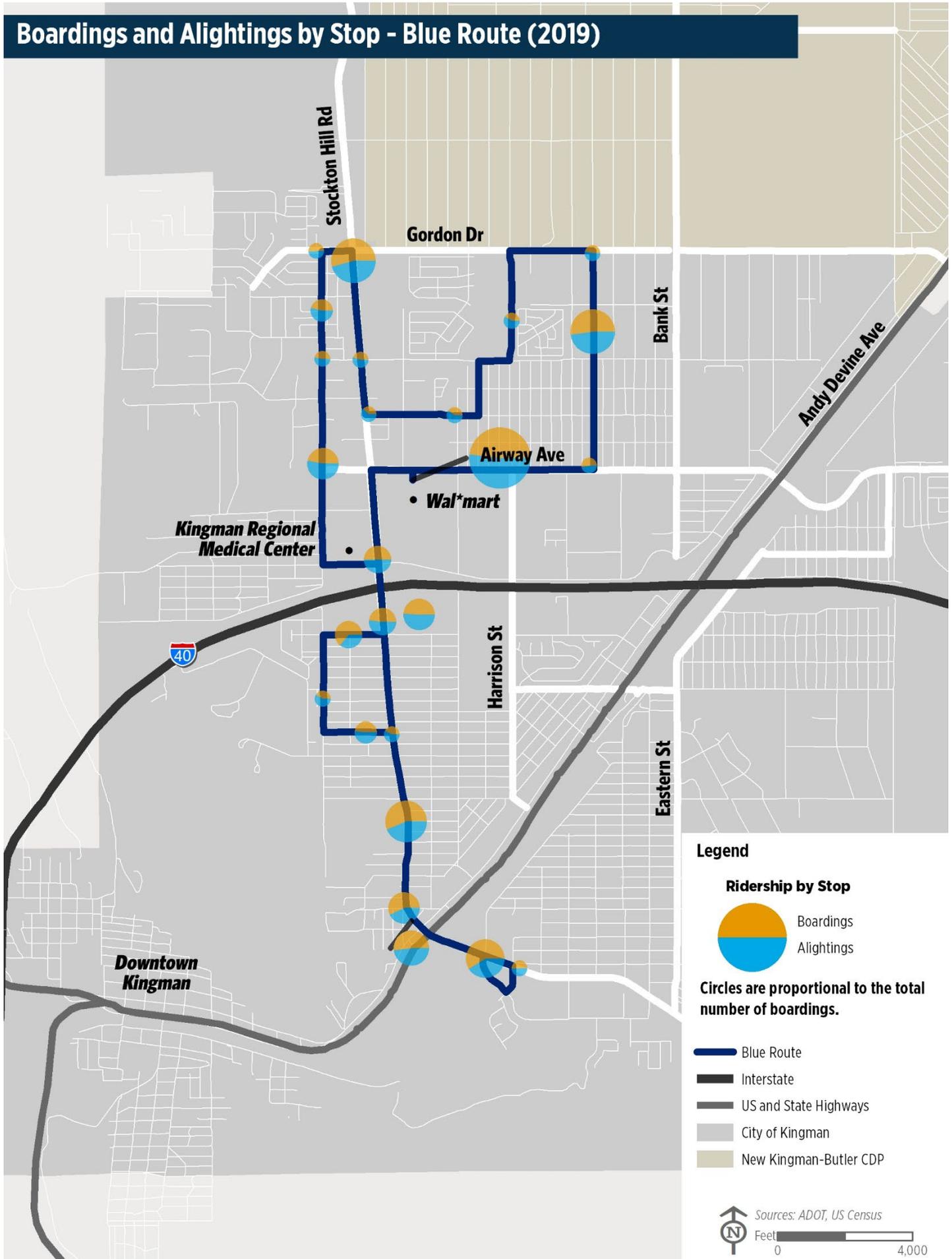
Strengths

- Schedule coordinates with green and red routes
- Provides direct access to services and business along Stockton Hill Road

Challenges

- High cost to operate per mile
- Significant number of left turns, that may create safety issues.
- Stockton Hill Road and Hospital area can be congested.
- Low ridership on Western Avenue

Boardings and Alightings by Stop - Blue Route (2019)



Red Route

The Red Route travels in a one-way clockwise loop through Kingman along Airway Avenue, Eastern Avenue, Hualapai Mountain Road, Fairgrounds Boulevard, Harrison Street, and Beverly Avenue. The route begins and ends at the Walmart Transfer Center. Key destinations include the Bashas' shopping complex, Mohave County Library, the US Post Office, and the Mohave County Fairgrounds.

ROUTE OVERVIEW

13
ROUTE LENGTH
(Miles)

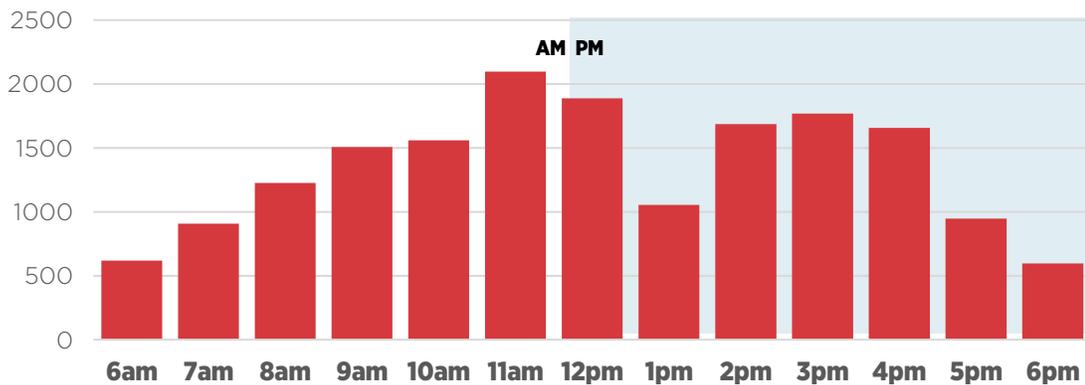
8
NUMBER OF
LEFT TURNS

30
NUMBER OF
STOPS

12
NUMBER OF
ROUTE TRIPS
PER DAY

ROUTE RIDERSHIP

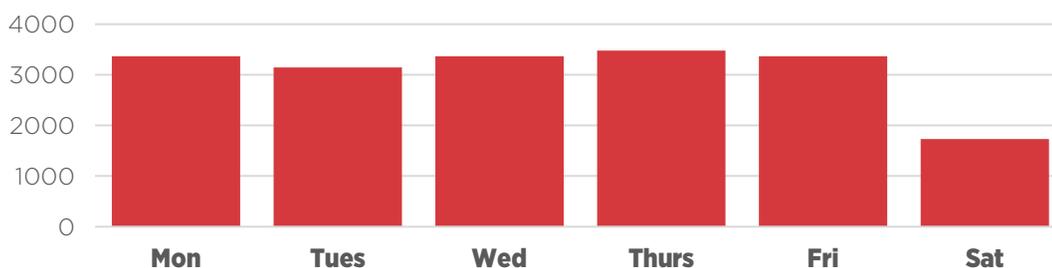
Total Boardings by Hour (2019)



18,275
ANNUAL
RIDERSHIP (2019)

73
AVERAGE
WEEKDAY
BOARDINGS (2019)

Total Boardings by Day (2019)

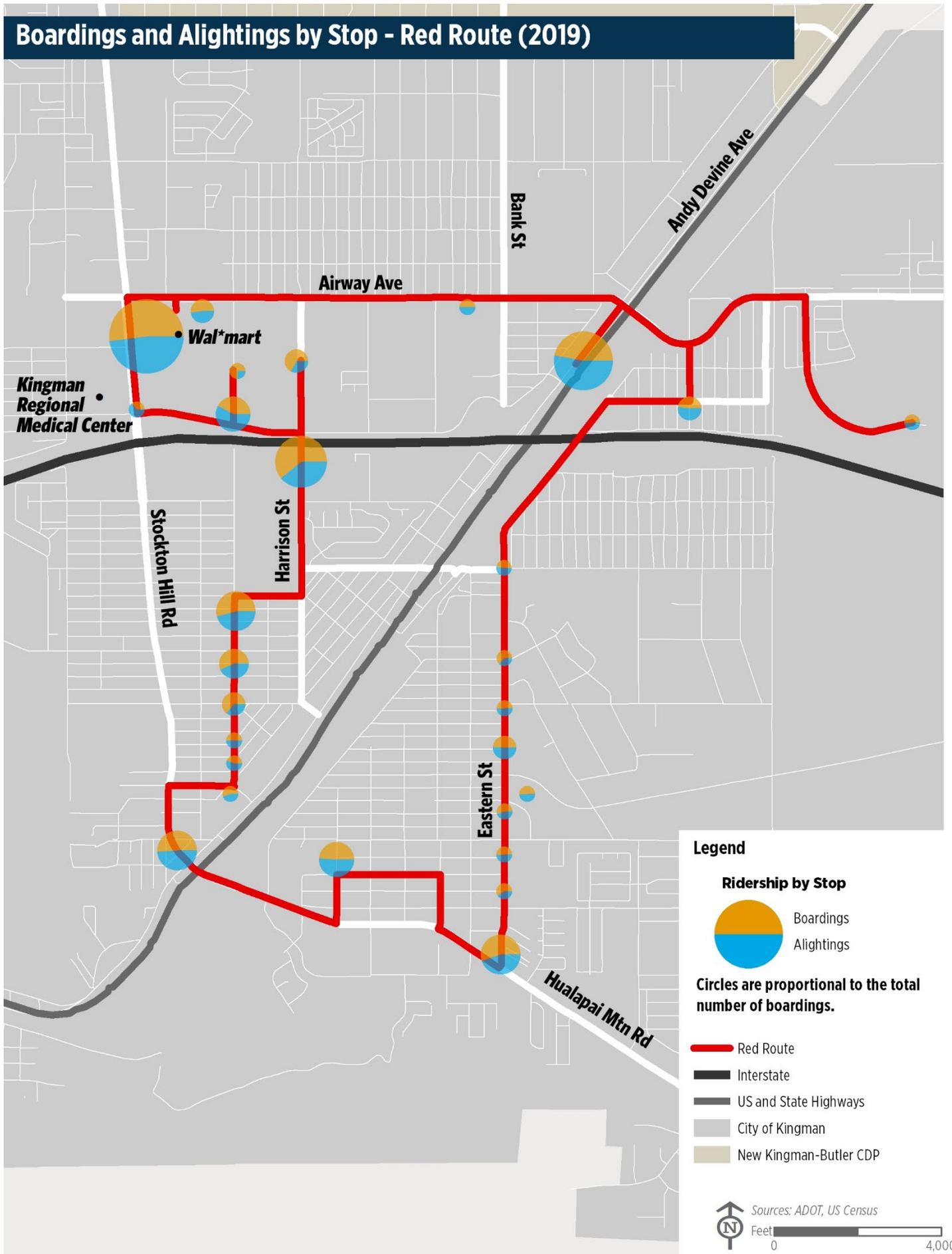


36
AVERAGE
SATURDAY
BOARDINGS (2019)

ROUTE ANALYSIS

- | | | | |
|------------------|---|-------------------|---|
| Strengths | <ul style="list-style-type: none"> • Schedule coordinates with green and blue routes at Walgreens/Post Office • Connects residents in central Kingman to Walgreens and other routes | Challenges | <ul style="list-style-type: none"> • Highest cost to operate per rider • Overlaps with Blue Route on Hualapai Mtn Road • High number of stops, with 2 stops per mile |
|------------------|---|-------------------|---|

Boardings and Alightings by Stop - Red Route (2019)



Green Route

The Green Route travels in a one-way clockwise loop that travels along Airway Avenue, Andy Devine Avenue, and through Downtown Kingman. Weekday service runs from 6:00 am to 8:00 pm. The route begins and ends at the Walmart Transfer Center. Key destinations includes downtown Kingman, Bashas' shopping complex, Walgreens, the US Post Office, and the Mohave County Administration Building.

ROUTE OVERVIEW

15
ROUTE LENGTH
(Miles)

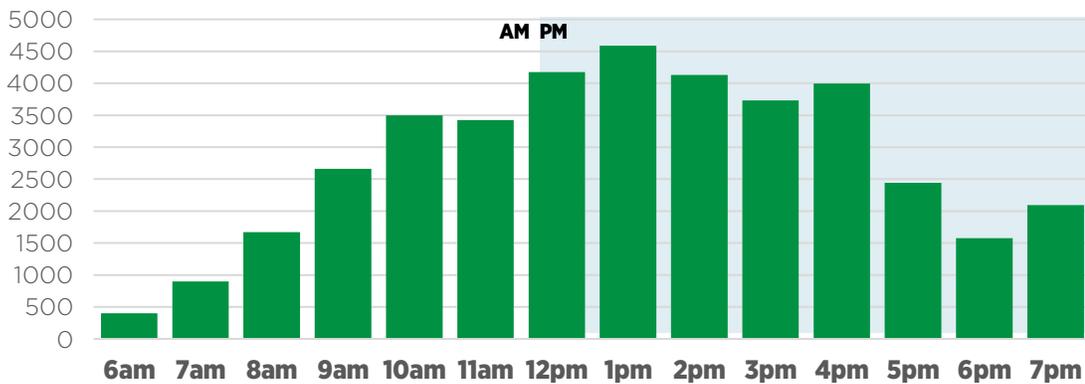
10
NUMBER OF
LEFT TURNS

23
NUMBER OF
STOPS

14
NUMBER OF
ROUTE TRIPS
PER DAY

ROUTE RIDERSHIP

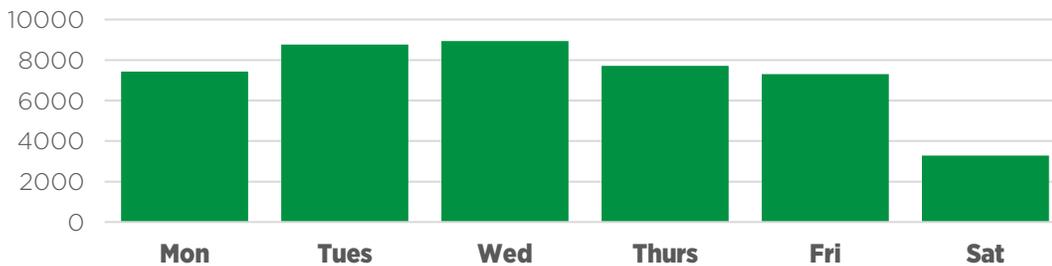
Total Boardings by Hour (2019)



41,560
ANNUAL
RIDERSHIP (2019)

175
AVERAGE
WEEKDAY
BOARDINGS (2019)

Total Boardings by Day (2019)



68
AVERAGE
SATURDAY
BOARDINGS (2019)

ROUTE ANALYSIS

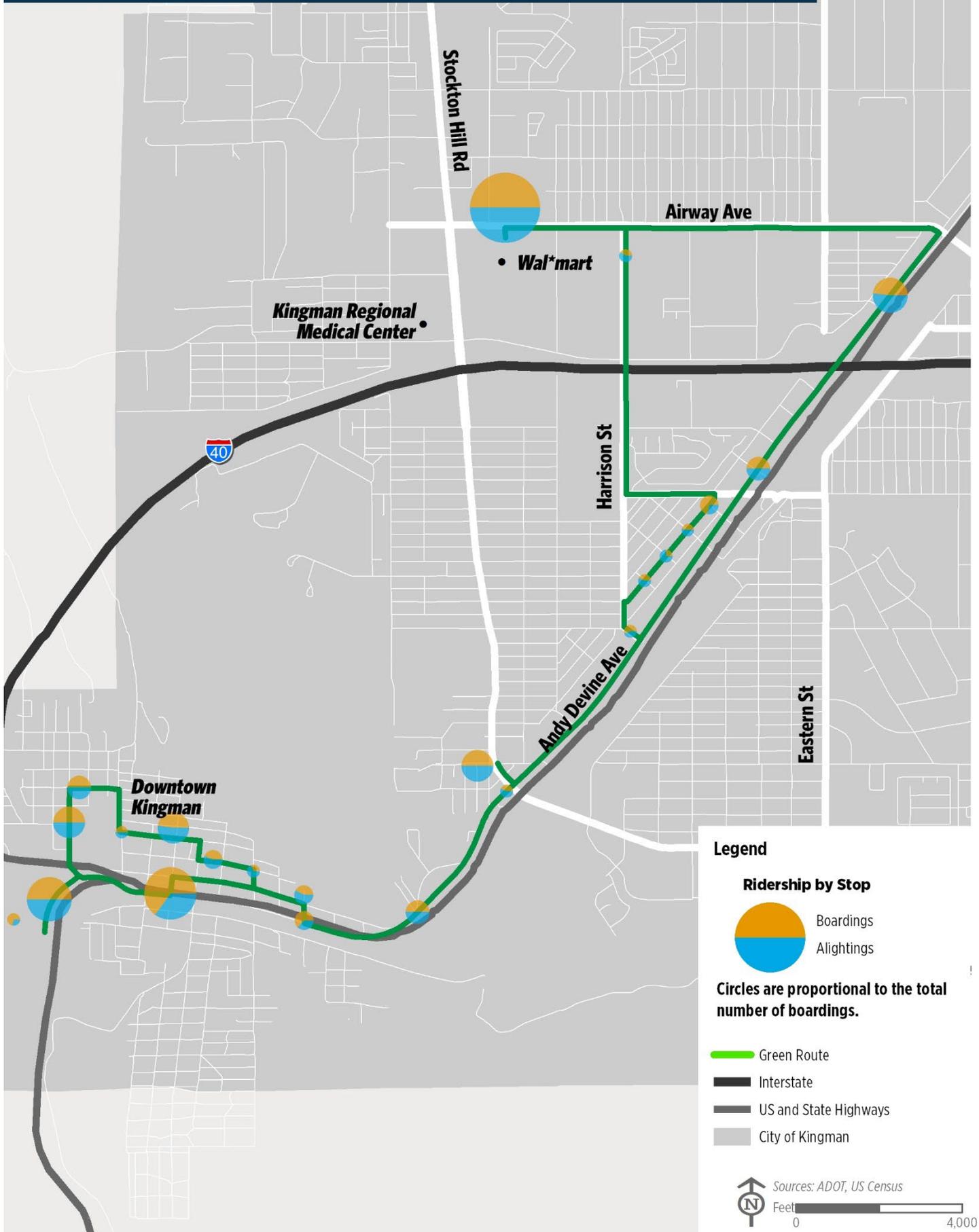
Strengths

- High ridership route that connects the transfer hub to downtown Kingman
- Schedule coordinates with red and blue routes at Walgreens/Post Office

Challenges

- Low ridership on Harrison Street and Ashfork Avenue
- Very high level of demand from High School students
- Service calls to the Mohave County jail can delay the system

Boardings and Alightings by Stop - Green Route (2019)



Yellow Route

The Yellow Route travels in a one-way counterclockwise loop through the New Kingman-Butler areas and Kingman along Airway Avenue, Thompson Avenue, Roosevelt Street, Stockton Hill Road, and Western Avenue. Weekday service runs from 6:00 am to 8:00 pm. The route begins and ends at the Walmart Transfer Center. Key destinations includes the Eagles Lodge, Mohave Mental Health, Food Bank, and Mohave Community College.

ROUTE OVERVIEW

15
ROUTE LENGTH
(Miles)

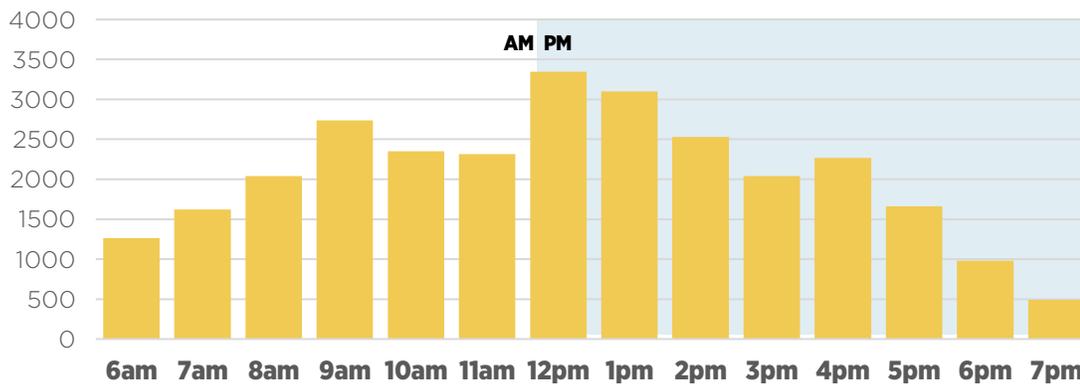
11
NUMBER OF
LEFT TURNS

32
NUMBER OF
STOPS

14
NUMBER OF
ROUTE TRIPS
PER DAY

ROUTE RIDERSHIP

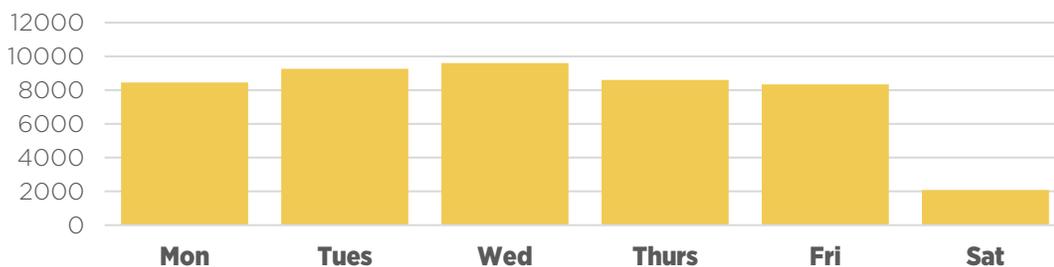
Total Boardings by Hour (2019)



42,997
ANNUAL
RIDERSHIP (2019)

192
AVERAGE
WEEKDAY
BOARDINGS (2019)

Total Boardings by Day (2019)



43
AVERAGE
SATURDAY
BOARDINGS (2019)

ROUTE ANALYSIS

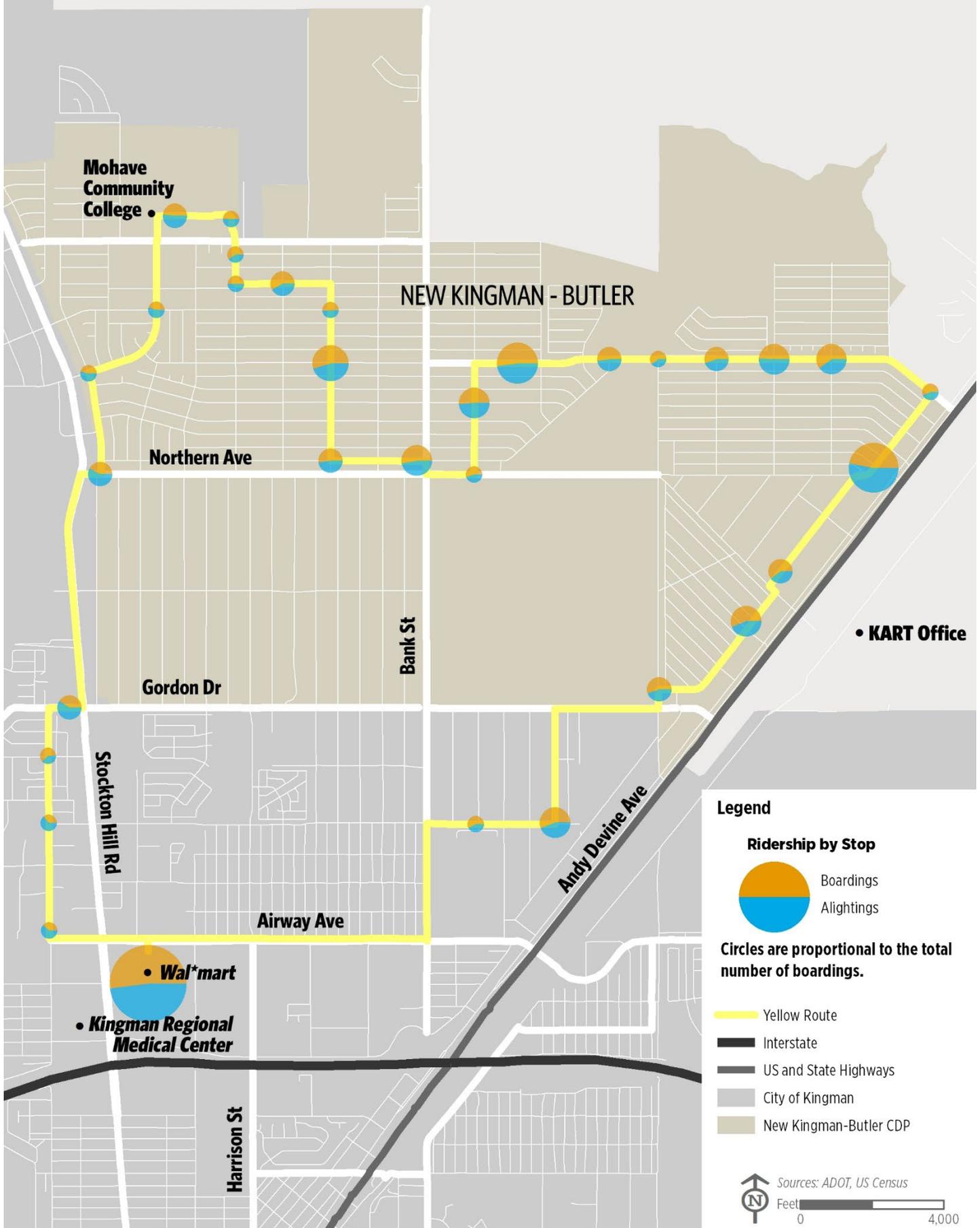
Strengths

- High ridership route that connects areas of high socioeconomic need to Walmart and other routes
- Only route to service Mohave Community College

Challenges

- Significant number of deviations along route, often 2 per hour
- High number of stops, with 2.1 stops per mile
- Limited sidewalk connections to stops

Boardings and Alightings by Stop - Yellow Route (2019)



TRANSIT FLEET, EQUIPMENT, AND TECHNOLOGY

This section will outline the capital evaluation of KART’s current system, including the existing fleet, equipment, and technologies.

CURRENT FLEET

KART currently maintains a fleet of 13 buses, with an 18% spare reserve. In their FY20-21 5311 Funding Application, KART was awarded funds for the replacement of two vehicles (which will be retained as spares) and the expansion of one vehicle addition to the fleet. The fleet expansion is intended to add a second bus to at least two routes (Yellow and Green) to reduce headway and ease congestion, with the goal of implementing these increased headways following the completion of this plan. Typically, there is one bus that services each route, however, as part of KART’s COVID-19 Pandemic Response, both the Yellow and Green Routes have one additional “shadow bus” that operated to encourage social distancing aboard the transit system. It is the stated intention of KART to retain the Arboc buses in the fleet as spares or to increase offered services.

The fleet is stored at the City of Kingman’s Public Works Maintenance Facility, where the City of Kingman performs all regularly scheduled preventative maintenance services, as outlined in the Vehicle Maintenance Plan. Daily inspections report all deficiencies, which are corrected in-house when possible, including the repair and maintenance of engine components, the electrical system, ramps and wheelchair lifts, video equipment, and bike racks, as well as any cosmetic repairs. The KART fleet is described further in **Table 3.3**. The Dodge Entervan is a support vehicle and is not used in daily operations.

Table 3.3. Current KART Fleet

Make	Model	Year	Fuel Type	Mileage	Seats	Wheelchair Positions	Lift	Condition	Retirement Year
ARBOC	Spirit of Mobility	2010	Gas	258,172	23	3	Ramp	Poor	2021
ARBOC	Spirit of Mobility	2010	Gas	301,643	23	3	Ramp	Poor	2022
ARBOC	Spirit of Mobility	2010	Gas	314,005	23	3	Ramp	Poor	2022
ARBOC	Spirit of Mobility	2013	Gas	181,921	23	3	Ramp	Fair	2023
ARBOC	Spirit of Freedom	2015	Gas	176,011	19	2	Ramp	Good	2025
ARBOC	Spirit of Freedom	2016	Gas	129,214	18	2	Ramp	Good	2026
ARBOC	Spirit of Freedom	2016	Gas	146,479	18	2	Ramp	Good	2026
ARBOC	Spirit of Freedom	2016	Gas	126,880	18	2	Ramp	Good	2026
ARBOC	Spirit of Freedom	2017	Gas	101,953	22	3	Ramp	Excellent	2027
ARBOC	Spirit of Freedom	2018	Gas	45,711	22	3	Ramp	Excellent	2028
ARBOC	Spirit of Freedom	2019	Gas	40,182	22	3	Ramp	Excellent	2029
ARBOC	Spirit of Freedom	2019	Gas	41,531	22	3	Ramp	Excellent	2029
Dodge	Braun Entervan	2020	Gas	1,570	6	2	Ramp	Excellent	2030

CURRENT TRANSIT CENTER LOCATION

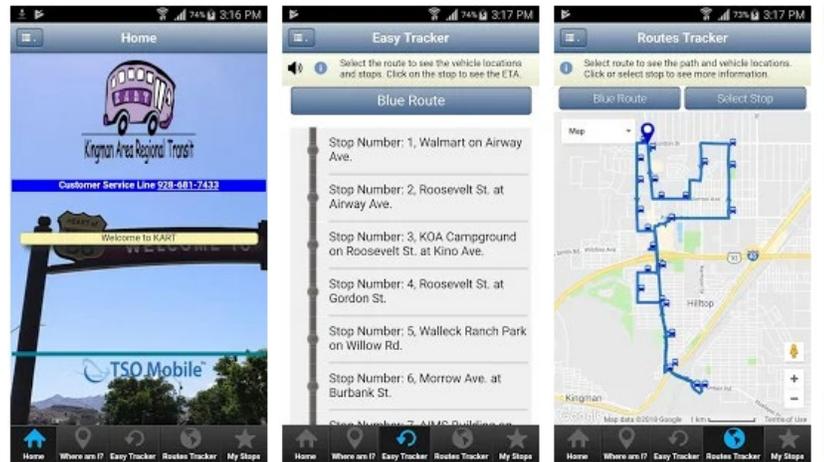
Located at 3396 Stockton Hill Road, the Walmart Supercenter currently serves as KART's transfer center. All four routes stop at this location, and there exists a bay for KART vehicles to park and board passengers. Currently, the KART system does not include any park and ride facilities. Future phases of this project will include a transit center site selection, which will potentially include a park and ride facility. Additional discussion on transit center needs can be found in Chapter 7.



CURRENT TRANSIT TECHNOLOGIES

Transit technologies encompass a wide range of functions and are constantly evolving to improve service. In its current system, KART operates:

- Automatic Passenger Counters (APCs), which provide crucial data that informs decision-making and resource allocation. With some computing, APC data can be used to provide crowding data, an information service that many transit providers are beginning to offer in response to the COVID-19 pandemic. In their funding request for FY21 - 22, KART included provisions for the monthly service fees associated with the APCs, as well as their camera system, mobile app, and GPS services. These technologies improve safety, rider convenience, and transit operations.
- Automatic Vehicle Locators (AVL), which provide KART with real-time coordinates of all active vehicles. KART currently displays this information via a smartphone application that allows riders to track real-time vehicle arrival information. TSO Mobile is the service providers for the KART application.
- TSO Mobile also provides KART with an interactive dispatching dashboard application that allows staff to track vehicles, monitor routes, manage work order, monitor passenger counters, and develop reports and analytics.



As the world has become increasingly interconnected, digital payment systems have emerged, improving the ease and speed of transactions in a variety of places. Electronic fare systems, whether integrated onto a card or using smart phone technology, can hasten the boarding and alighting process, which helps buses stay on schedule. Increasingly, digital payment systems are evolving to be 'contactless', meaning that the payment registration device can come within a few inches of the payment (whether card or phone) to complete the transaction. These contactless systems are an additional measure in successfully preventing the spread of germs but can also pose a challenge for people who may not access to a debit/credit card. Designing an electronic fare system that can accommodate cash, paper tickets, and digital payment forms is crucial in providing equitable service for all transit riders.

SYSTEM PERFORMANCE

To understand the performance of KART’s current system, service data was reviewed and summarized for the most recent data year, 2019. Historical data accessed through the Federal Transit Administration’s National Transit Database (FTA NTD) was also analyzed, however, the data submitted to the NTD is typically aggregated for reporting, and therefore does not contain a per route breakdown. For this reason, 2019 data was used as a “typical” year to reverse calculate each metric by route for the years 2014 – 2018. As such, data trends can appear relatively uniform. **Table 3.4** describes total system operations, and **Table 3.5** delineates key operational metrics, such as annual service miles, hours, ridership, and revenue for 2019.

Table 3.4. System Trips, Span, and Headways

Route	Number of Trips	Headways	Span
Weekday	52	1 Hour	6 AM – 8 PM or 6 AM – 6 PM
Saturday	28	1 Hour	9 AM – 4 PM

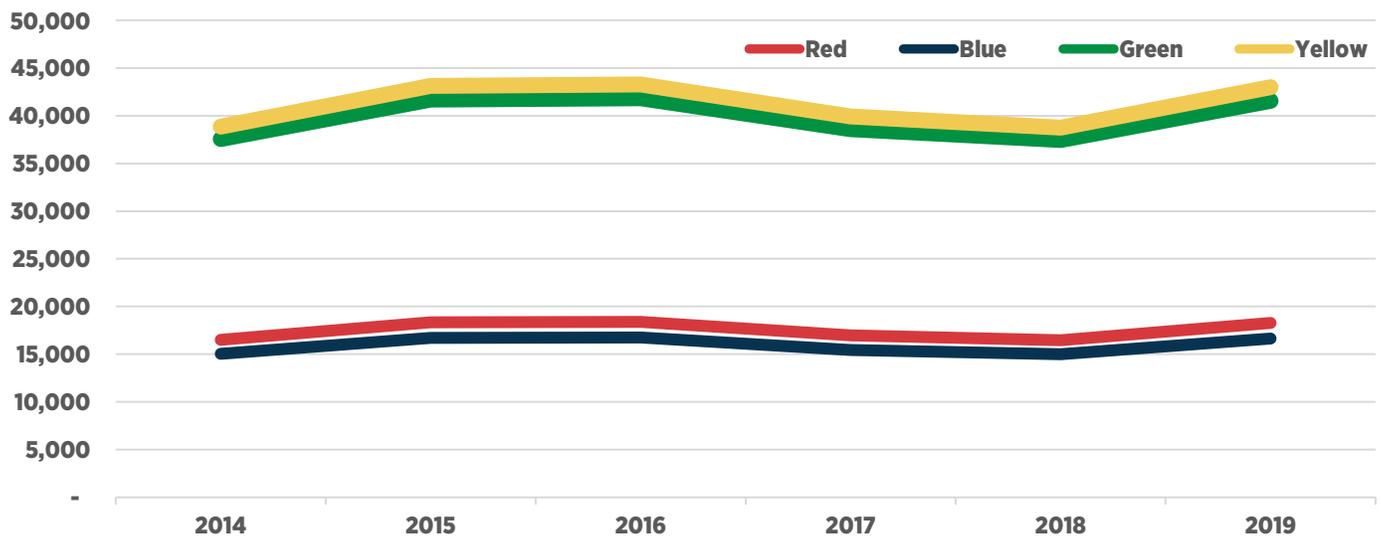
Table 3.5. Annual Service Miles, Service Hours, Ridership, and Revenue by Route (2019)

Route	Service Miles	Service Hours	Ridership	Revenue
Red	49,680	3,350	18,275	\$29,307
Blue	43,200	3,350	16,650	\$26,701
Green	54,180	4,850	41,560	\$66,647
Yellow	59,640	4,850	42,997	\$68,952

HISTORICAL ANNUAL RIDERSHIP

Figure 3.2 shows total annual ridership between 2014 – 2019, by route. The Yellow Route is consistently KART’s most populated route, with similar ridership levels on the Green Route. The Red and Blue Routes mirror one another in their annual ridership and are consistently lower than that of the Yellow and Green Routes.

Figure 3.2. Total Annual Boardings by Route (FY 2014 – FY 2019)



RIDERSHIP BY ROUTE

Figure 3.3 displays the percentages of total boardings by route on weekdays, while Figure 3.4 shows the percent of total boardings by route for Saturday service.

Figure 3.3. Percent of Total Boardings by Route (Weekday 2019)

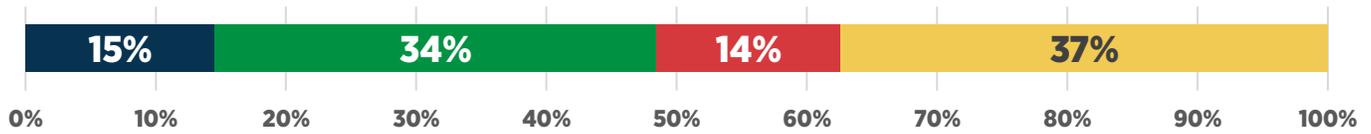
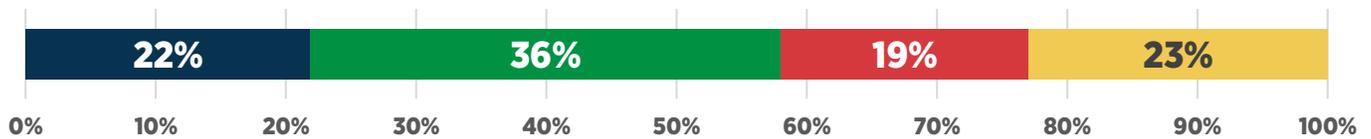


Figure 3.4. Percent of Total Boardings by Route (Saturday 2019)



FINANCIAL OVERVIEW

Kingman Area Regional Transit is housed in the City of Kingman’s Public Works Department, and annually included in the City’s budgeting process by means of the General Fund Account. The City of Kingman funds serve as the local match for the Federal Section 5311 Rural Transit Grant Program funds that KART has received since its inception in 2003. It’s important to note that City of Kingman’s General Fund supports not just the KART system, but a variety of City departments and divisions. With limited funds available, the City is often faced with the hard decisions on where to best allocate funds.

KART’s Yellow Route is the busiest of its current services and operates primarily in the unincorporated area of Mohave County known as New Kingman-Butler. Despite its popularity among residents, Mohave County does not provide any funding for KART’s service offerings. Table 3.6 delineates KART’s costs by route.

Table 3.6. Costs Summary by Route (2019)

Route	Cost per Service Hour	Cost per Service Mile	Cost per Ride
Red	\$60.69	\$4.48	\$11.41
Blue	\$59.56	\$5.05	\$12.29
Green	\$60.13	\$4.74	\$5.71
Yellow	\$60.94	\$4.37	\$5.60
System Total	\$60.35	\$4.64	\$7.46

COST ALLOCATIONS

Table 3.7 shows the annual cost allocations for KART by expense type based on 2019 National Transit Database (NTD) data. As shown for 2019, operations costs were highest, which includes items such as driver salaries and fuel costs. Capital, the second highest category, includes vehicle and equipment purchases.

Table 3.7. Cost Allocations by Expense Type

Cost Category	2019 Actual Cost
Administration	\$188,838
Operations	\$598,384
Capital	\$271,414
Planning/Maintenance	\$78,866
System Total Expenses	\$1,137,502
Fare Revenue	\$192,632

These costs can be further analyzed by route to understand the effect of each route on the overall system. As the Yellow Route is the most heavily utilized service, it requires the most administration effort, and therefore returns the highest administration costs. Table 3.8 summarizes these costs by route.

Table 3.8. Costs by Route

Route	Total Cost	Mileage Costs	Administration Cost
Red	\$202,464	\$19,112	\$44,144
Blue	\$199,276	\$16,619	\$43,449
Green	\$230,851	\$20,532	\$50,334
Yellow	\$233,497	\$22,602	\$50,911
System Total	\$866,088	\$78,866	\$188,838

REVENUE

In addition to the local and federal funds that KART receives to operate its system, fare revenues contribute an average of 22% towards KART's annual operations budget. Table 3.10 delineates fare revenues and farebox recovery by route for 2019. The farebox recovery ratio is calculated by dividing fare revenue by total costs per route. Figure 3.10 displays the historic farebox recovery ratio by route.

Table 3.10. Fare Revenue and Farebox Recovery Ratio by Route (2019)

Route	Fare Revenue	Farebox Recovery Ratio
Red	\$29,463	15%
Blue	\$26,844	13%
Green	\$67,004	29%
Yellow	\$69,321	30%
System Total	\$192,632	22%

4. SERVICE ALTERNATIVES

This section presents a range of service alternatives for KART's fixed route transit service. The alternatives were developed based on existing performance of the routes and feedback from the KART staff, drivers, passengers, and the public.

GUIDING PRINCIPLES

The recommendations discussed in this chapter are based on a variety of transit planning principles. These principles, described below, serve as the foundation for all service improvements. For people to use transit, service should be designed so that it is easy to understand. Most of the guidelines in this section are aimed at making service intuitive, logical, and easy to understand. Simplicity is a key value in creating a route network that people can navigate easily to make many kinds of trips.

- **Service should be simple.** First and foremost, for people to use transit, service should be designed so that it is easy to use and intuitive to understand. This applies not only to the routing and scheduling of service, but also to the information presented to customers at the stop and on passenger information materials.
- **Service should serve high-density areas and key stops in Kingman.** Routes should be designed to operate as directly as possible to minimize travel time for passengers while maintaining access to key activity centers and residential areas.
- **Service should operate at regular intervals.** Service headways are one of the most important determinants of ridership. More frequent service attracts more passengers assuming a market is present. In general, people can easily remember repeating patterns; therefore, routes should operate at regular (i.e., 15-, 30-, or 60-minute) frequencies to the extent possible.
- **Service should be well coordinated.** At major transfer locations, schedules should be coordinated to the greatest extent possible to minimize connection times. On corridors with multiple routes, schedules should be strategically staggered to avoid bus bunching and to maximize the over-all service frequency in the corridor.
- **Riding KART should be safe, comfortable, and convenient.** To be attractive to current and future customers, KART service should be perceived to be a comfortable travel option relative to other travel options. Transit comfortability can range from vehicle cleanliness to seating availability, condition of bus stops and waiting areas, simplified fare payment, and other amenities.
- **Recommendations must be realistic and cost-effective.** A plan is only as good as its ability to be implemented. Service enhancements and recommendations should be financially responsible and achievable to make recommendations a reality.

SERVICE ALTERNATIVES DEVELOPMENT

Taking into consideration likely demand as indicated from the transit demand and transit reliance models (Working Paper 1) and the broad range of public and stakeholder support, there is a strong desire and need for public transportation within the Kingman area.

KEY SERVICE LOCATIONS

Development of the transit service alternatives began with identifying key destinations, high- and low-ridership stops, and potential future stop locations. These key current and future stops include:

- Wal-Mart
- Kingman Regional Medical Center
- Mohave Mental Health
- Safeway shopping complex
- Bashas' shopping complex
- Food Bank
- Eagles Lodge
- U.S. Post Office
- Mohave Community College
- Mohave County Library
- Mohave County Administration Building
- Kingman Airpark (currently not served)

To maximize ridership potential, key destinations were analyzed for the potential to access multiple locations/routes. To improve efficiency, stops were then classified into two tiers:

- **Key/Timed Stops** are predetermined locations that have designated stop locations and pick-up/drop-off timed schedules. At a minimum, timed stops are designated by signage; however, additional infrastructure (i.e. benches, shelters, etc.) help to create a more inviting ridership experience.
- **Flag Stops/Zones** are areas along bus routes where passengers waiting at a safe and approved designated location can “flag” an approaching bus they wish to board. In these “Flag Zones”, passengers may also de-board by requesting the driver stop at any point in the Flag Zone. Flag Stops also provide a time point of reference for passengers who wish to hail the bus just beyond the station.

Over time, it is typical for stops to be revised based on ridership, both by adding or removing stops, or revising hours of service. Furthermore, local businesses can support the system through in-kind contribution by providing stop infrastructure, space, parking, etc. for use along the route.

SERVICE ALTERNATIVES

Selection of potential route alignments was guided by information from Working Paper 1: Existing and Future Conditions and from discussions with KART staff, the TAC, and members of the public. Results of the Transit Demand Model and Transit Propensity Index Model (from Working Paper 1) were also consulted to guide preliminary route development.

Alternative 1: Split Yellow Route into Two Separate Routes

Alternative 1 builds on the need to expand service to the Kingman Airpark and restructures existing routes to better serve high ridership stops. **Figure 4.1** illustrates Alternative 1 service alignments.

Alternative Overview

Alternative 1 service includes:

- **Split Yellow into Two Separate Routes.** Alternative divides the existing yellow route into two routes:
 - **Yellow Route:** counter-clockwise route that provides new service to the Kingman Industrial Airpark and the Kingman High School
 - **Orange route:** new route that travels clockwise through the New Kingman-Butler area

Splitting the existing yellow route into two separate routes and running them in opposite loops with appropriate transfer points helps minimize delays that can arise from on-demand deviations, provides opportunities to expand service to new locations, and helps improve route directness to areas with a high percentage of disadvantage population groups. The two routes offer seamless connections via a transfer at Wal-Mart or at the Food Bank.

- **Merge Red and Blue Route.** To allow for the Yellow and Orange Route split, a new red route is developed that merges high ridership stops on the Blue and Red route into one service. The modified Red Route is a clockwise route that provides service to the area south of Andy Devine Avenue, US Post Office, and the Kingman Regional Medical Center.
- **Minor modification to Green Route.** Green route is modified to re-route southbound service to Harrison Street and Fairgrounds Boulevard, removing low ridership stops along Kingman Avenue. The rerouting will incorporate high ridership stop from the existing Red Route and provide a transfer location at the Post Office.

Alternative Evaluation

- ✓ Maintains access to many key stops along the existing KART system.
- ✓ Service efficiencies on Green Route
- ✓ Key transfer sites provides bi-directional travel opportunities for passengers
- ✓ Improves access to area with high number of potentially transit reliant population
- ✓ Streamlines service to MCC by providing quicker service from Wal-Mart via the Orange Route
- ✓ Separate lines in the New Kingman-Butler area helps minimize delays caused by deviations
- ✓ Connects to new service areas, such as the High School and Airpark
- ✓ Does not require an additional bus
- ✗ Combined red and blue route is long and may not fit within 1-hour service frequency
- ✗ As development occurs, additional routes would need to be established to accommodate new stops
- ✗ Reduces access to Safeway shopping center on Stockton Hill Road

Figure 4.1. Service Alternative 1



Alternative 2: Express Route

Alternative 2 seeks to maintain and optimize existing transit services, while providing a new streamlined service to major activity centers within the city. **Figure 4.2** illustrates Alternative service alignments.

Alternative Overview

Alternative 2 service includes:

- **Introduces Express Route.** Alternative alters the existing Blue Route to create an express route to key activity centers in the Kingman area. The Express Route provides more direct service from Wal-Mart to MCC and Downtown Kingman. Service would operate with 60-minute headways and only includes limited access to key stops along the route.
- **Minor modification to Green Route.** Green route is modified to re-route southbound service to Harrison Street and Fairgrounds Boulevard, removing low ridership stops along Kingman Avenue. The rerouting will incorporate high ridership stop from the existing Red Route and provide a transfer locations between the Green and Red routes.
- **Minor modifications to Red Route.** Clockwise route that has minor modifications to improve service efficiencies. Modifications include, rerouting service around the Post Office and altering access to the medical center to on-call service.
- **Split Yellow into Two Separate Routes.** The existing yellow route is split into two routes:
 - **Yellow Route:** counter-clockwise route that provides new service to the Kingman Industrial Airpark and the Kingman High School
 - **Orange route:** new route that travels clockwise through the New Kingman-Bulter area

Splitting the existing yellow route into two separate routes helps minimize delays that can arise from on-demand deviations, provides opportunities to expand service to new locations, and helps improve route directness to areas with a high percentage of disadvantage population groups. The two routes offer seamless connections via a transfer at Wal-Mart or at the Food Bank.

Alternative Evaluation

- ✓ Maintains access to many key stops along the existing KART system.
- ✓ Service efficiencies on Green and Red routes
- ✓ Key transfer sites provides bi-directional travel opportunities for passengers
- ✓ Creates an express route to key destination along Stockton Hill Road, in Downtown Kingman, and to MCC
- ✓ Allows for service expansions to the Red Route when development occurs
- ✓ Does not require an additional bus
- ✗ Reduces access to residential areas north of Airway Avenue
- ✗ Will require additional routes or services to connect to Kingman Industrial Park

Figure 4.2. Service Alternative 2



PREFERRED ALTERNATIVE ROUTE NETWORK

Preliminary identified route alignments were evaluated and vetted from KART staff and TAC, before presenting concepts to the public. Based on feedback from the TAC and KART staff, initial alternatives were refined to reflect the greater needs of the community. Refined route alignments were then field tested to determine drive time, potential infrastructure needs, and to understand potential ridership constraints and opportunities. Based on all feedback received, a short-range preferred route network was developed.

As shown in **Figure 4.3**, the preferred alternative route network consists of five routes that each radiate from current KART hub at Wal-Mart. The preferred network includes:

- **Express Route.** Creates an Express Route to key activity centers in the Kingman area. Service would operate with 60-minute headways and only includes limited access to key stops along the route.
- **Green Route Modifications.** Green Route is re-routed southbound to Harrison Street and Fairgrounds Boulevard, removing low ridership stops along Kingman Avenue. The rerouting will incorporate high ridership stop from the existing Red Route and provide multiple transfer locations between the Green and Red routes.
- **Red Route Modifications.** Clockwise route that has minor modifications to improve service efficiencies. Modifications include, rerouting service around the Post Office and altering access to the medical center to on-call service.
- **Split Yellow into Two Separate Routes.** The existing yellow route is split into two routes:
 - **Yellow Route:** counter-clockwise route that provides new service to the Kingman Industrial Airpark and the Kingman High School
 - **Orange route:** travels clockwise through the New Kingman-Bulter area

Splitting the existing yellow route into two separate routes helps minimize delays that can arise from on-demand deviations, provides opportunities to expand service to new locations, and helps improve route directness to areas with a high percentage of disadvantage population groups. The two routes offer seamless connections via a transfer at Wal-Mart or at the Food Bank.

Key benefits of the route recommendations include:

- ✓ Four bi-directional routes that improve speed and directness
- ✓ One express route to streamline service between key activity centers along Stockton Hill Road, MCC, and Downtown Kingman
- ✓ Ability to have more frequent service
- ✓ Increased service coverage to accommodate commuters and new ridership areas
- ✓ Reduced travel time between most origins and destinations
- ✓ Multiple transfer stops provides bi-directional travel opportunities for passengers
- ✓ Key transfer sites provides bi-directional travel opportunities for passengers
- ✓ Allows for service expansions to the Red Route when development occurs

Figure 4.3. KART Preferred Service Network



5. COMMUNITY ENGAGEMENT

This plan incorporated a robust community outreach process to gather information on the public attitudes towards public transportation and how residents are traveling within the study area. Initial outreach focused on obtaining public input on:

- Where current transit riders are traveling to and from
- What transportation barriers there are within the study area
- What transit improvements the public would like to see
- How non KART riders feel about using public transportation
- Challenges and opportunities from key stakeholders

PHASE 1 COMMUNITY SURVEY

To gain insight in the transportation needs of residents and visitors in the study area, as well as their opinion of public transportation, a community survey was conducted. The survey was administered from September 7th, 2020 to October 31st, 2020.

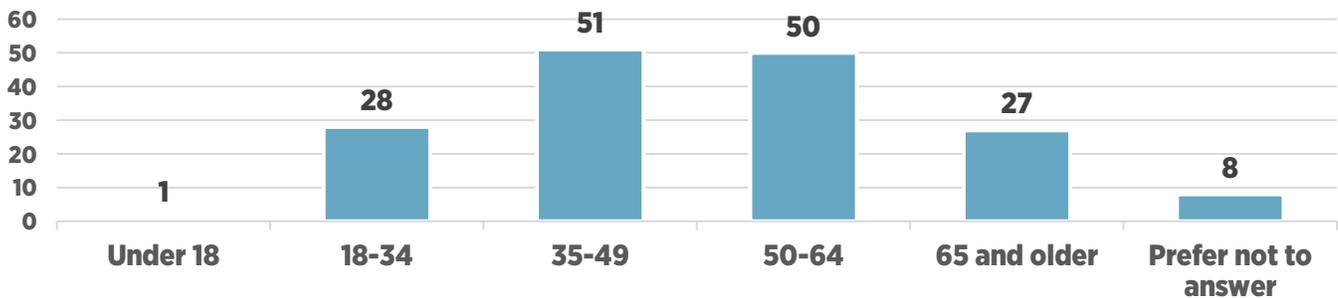
SUMMARY OF SURVEY RESULTS

In total, KART received 165 responses to the survey, 13 of which were paper copies completed on KART vehicles. Results presented henceforth represent the results of the 165 surveys received and represent a complete picture of the needs of residents in the study area.

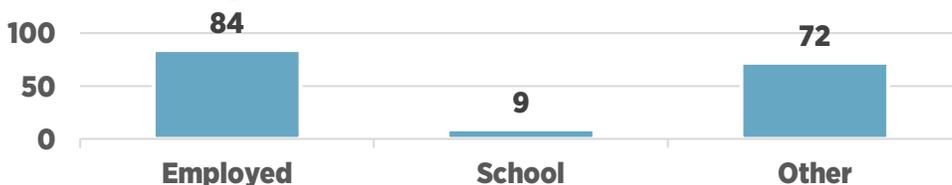
Characteristics of Survey Respondents

This section presents the key demographic findings for all 165 respondents. KART queried respondents about their age bracket, their home location, and their occupation. Over 60% of respondents were between the ages of 35 – 64 and 95% of respondents live in the City of Kingman or the New Kingman-Butler area. About half of respondents were employed and 4% are students. Many respondents who selected ‘Other’ for their occupation indicated that they were either retired or had a disability that prevented them from working.

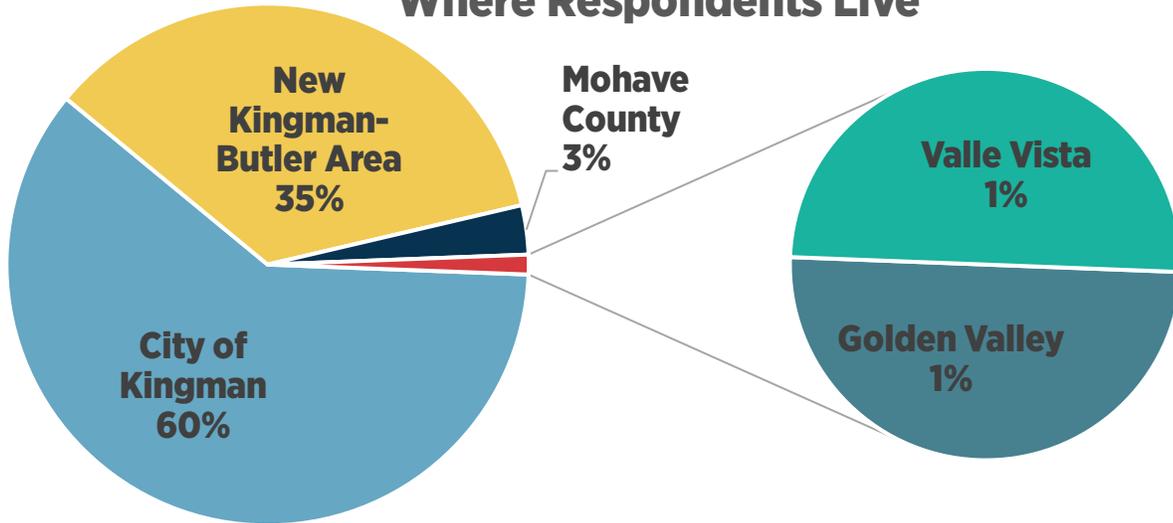
Age of Respondents (Total Responses)



Occupation of Respondents (Total Responses)



Where Respondents Live



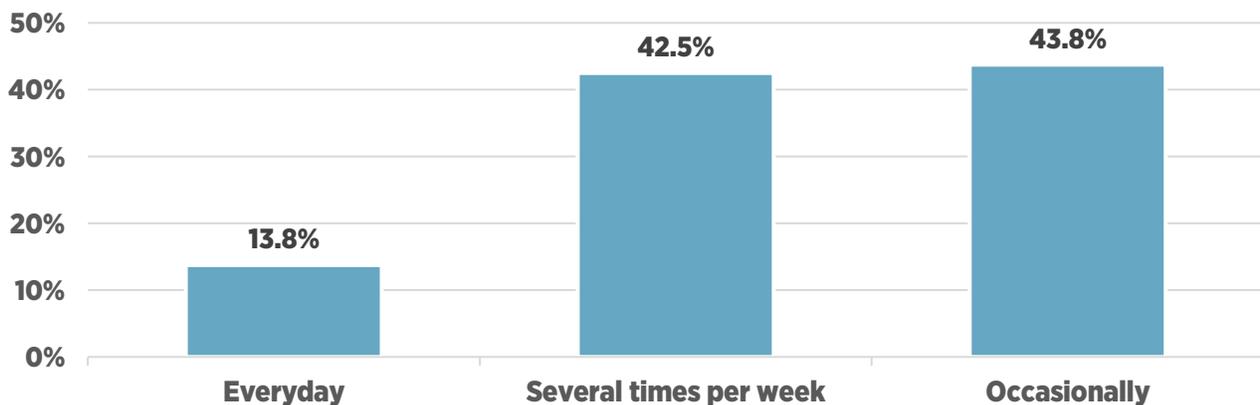
Of the 5% of respondents who identified as students, Mohave Community College and Northern Arizona University were the most commonly reported schools. Respondents indicated that common employers include:

- Home Depot
- Kingman Unified School District
- Kingman Regional Medical Center
- Mohave County
- Western Arizona Council of Governments
- Walmart
- US Census Bureau

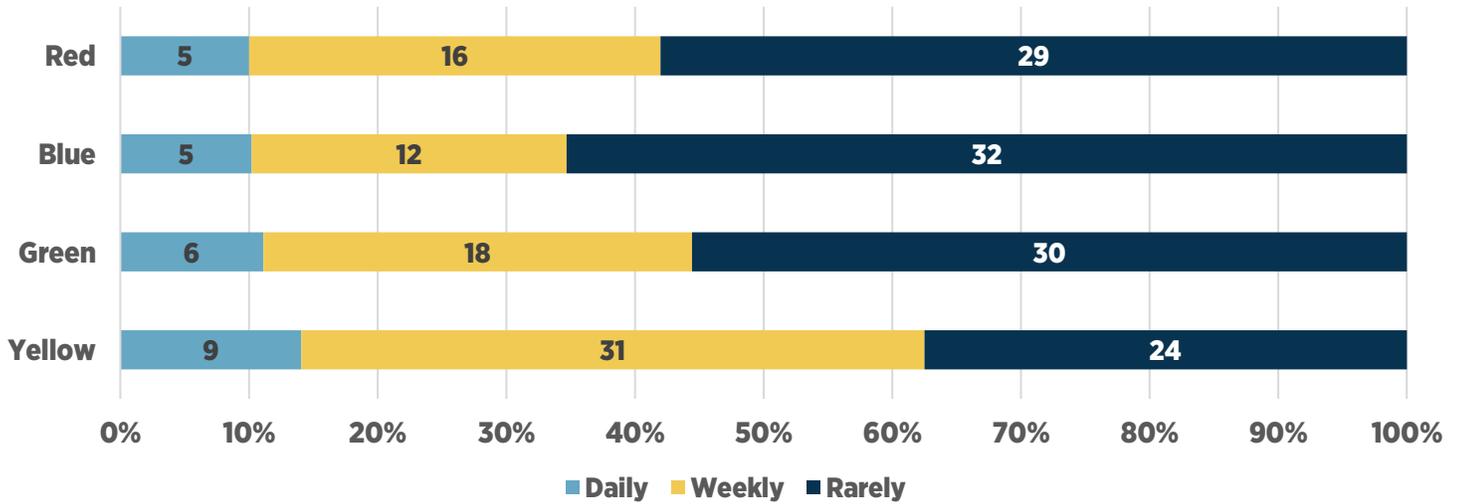
Current KART Riders – Survey Results

Of the 165 responses received, 80 were identified as KART riders, about 49%. The most frequented routes (with daily, weekly, and occasional riders) are the Yellow and Green Routes, which corresponds with ridership counts. Both the Red and Blue Routes were also well-represented among riders. Of the riders, 14% reported using KART services daily, while 42% and 44% reported riding KART several times per week or occasionally, respectively.

Current KART Riders - KART Ridership Frequency



Current KART Riders - Route Ridership Frequency



Origin-Destination of Current KART Riders

Riders indicated that common places their trips originate from include:

- Packard Avenue
- Andy Devine Avenue
- College Drive
- Diamond Street
- Eastern Street
- Roosevelt Street
- Thompson Avenue
- Somerset Village
- Walmart
- Fraternal Order of the Eagles (Patsy Drive)

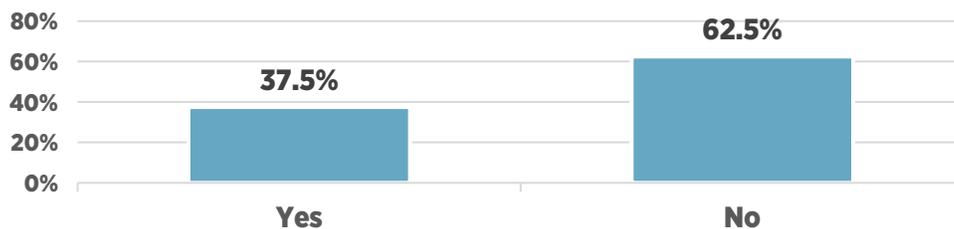
Riders reported that common destinations include:

- Walmart
- Downtown Kingman
- Mohave Mental Health Clinic
- Kingman Regional Medical Center
- Safeway
- Smith's Food & Drug
- Basha's
- Big Lots
- 99 Cent Store
- Mohave County Buildings
- Hualapai Mountain Road

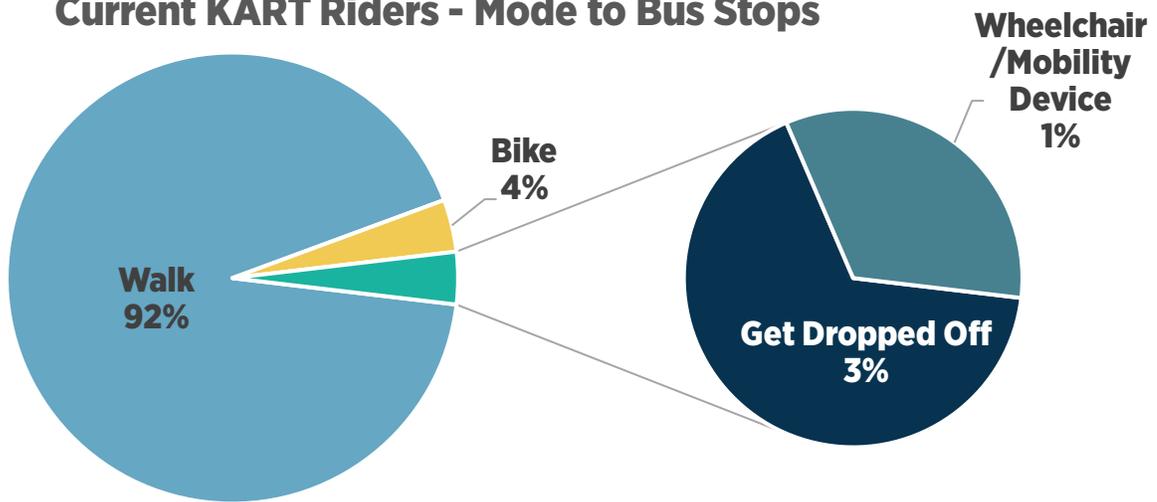
Travel Characteristics of Current KART Riders

KART riders reported that 63% lack access to a vehicle, and that 92% of riders walk as their primary mode to the bus stop.

Current KART Riders - Access to a Vehicle

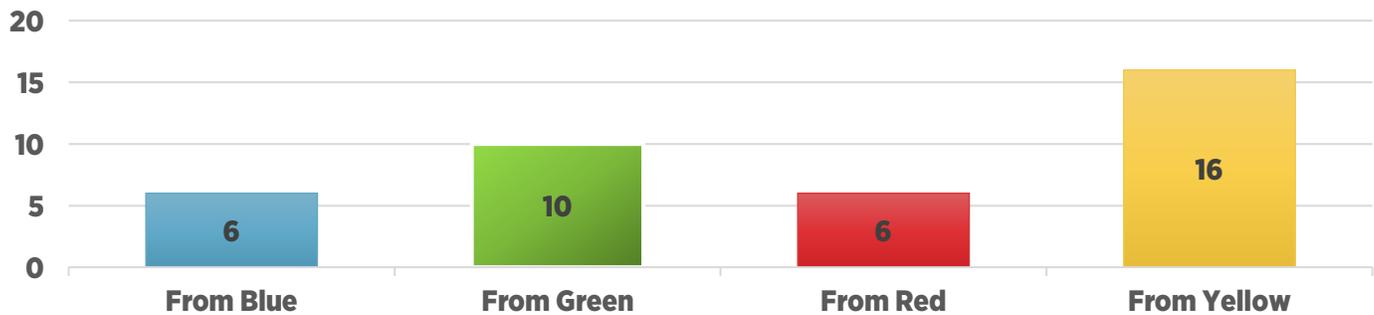


Current KART Riders - Mode to Bus Stops

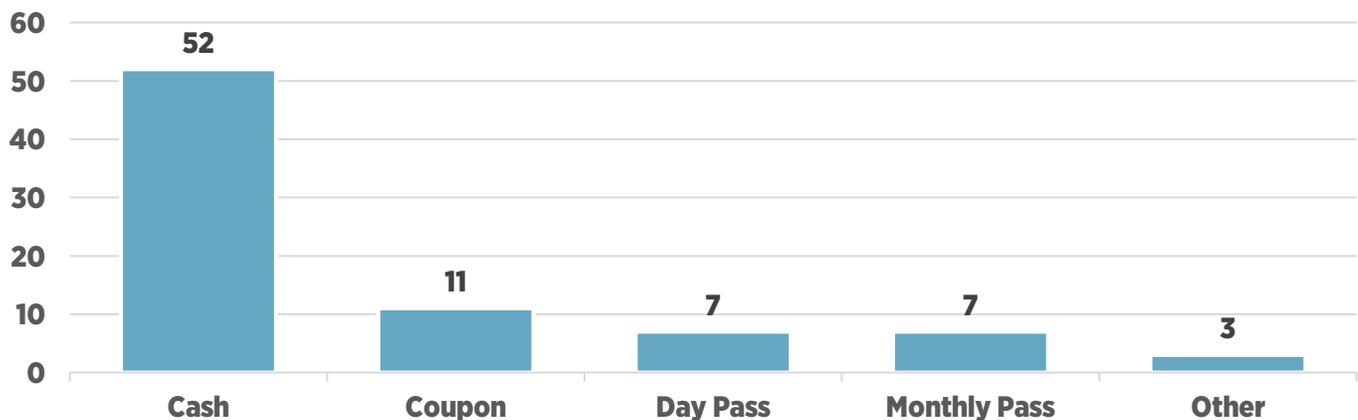


Riders were also asked to identify any transfers that they use while riding KART services as well as the fare type they most commonly use. Transfers are presented by the route from which the transfer originated, and, corresponding with ridership data, 42% of transfers originate from the Yellow Route, followed by 26% from the Green Route. Over one third of riders typically use cash to purchase their fares.

Current KART Riders - Transfers by Route (Total Responses)

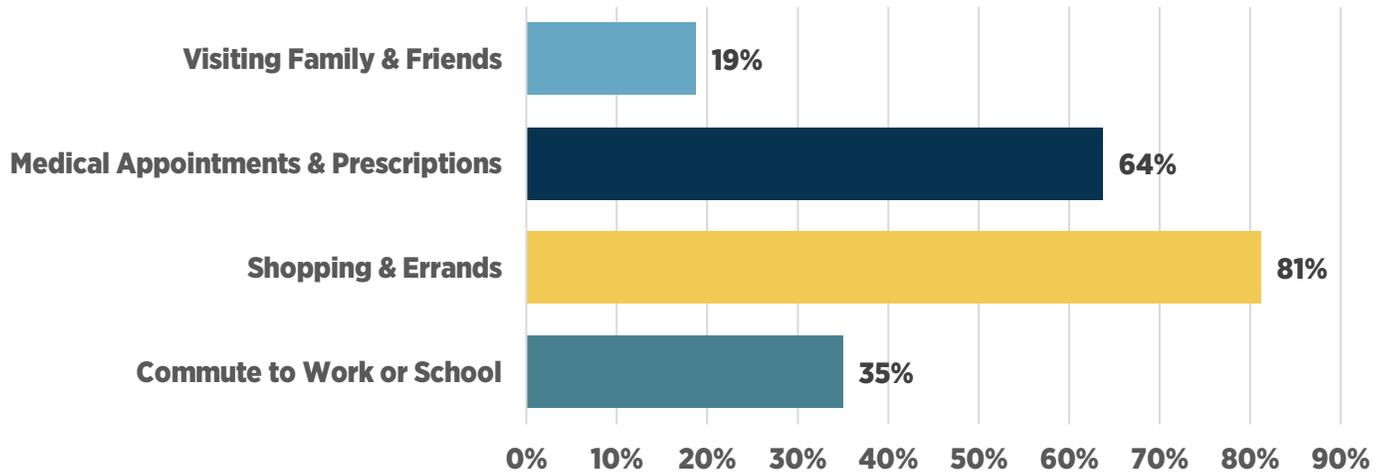


Current KART Riders - Fare Type (Total Responses)



KART riders were also asked to divulge the most common purposes for their transit trips. Respondents were able to select multiple options, and as such, 81% of riders indicated that shopping and errands are a primary trip purpose, in addition to 64% responding with medical appointments and prescription fulfillments accounting for many of their trips.

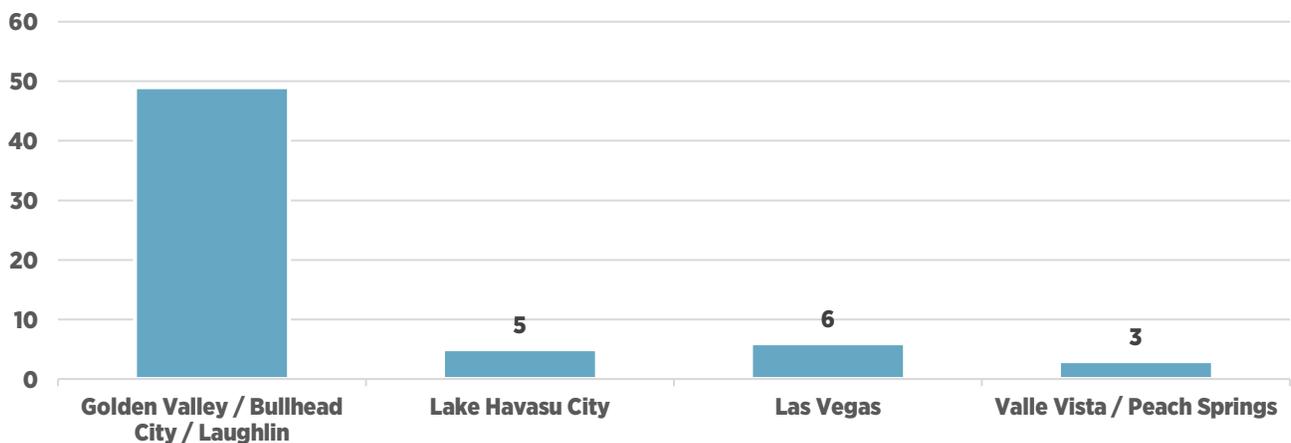
Current KART Riders - Primary Uses



Regional Destination Needs of Current KART Riders

Respondents were asked to identify locations to which they desire service. This query was divided into two parts: locations within the current service area and locations outside of the service area. Nearly 80% of KART riders indicated that they desired service to Bullhead City via Golden Valley.

Current KART Riders - Desired Destinations (Total Responses)



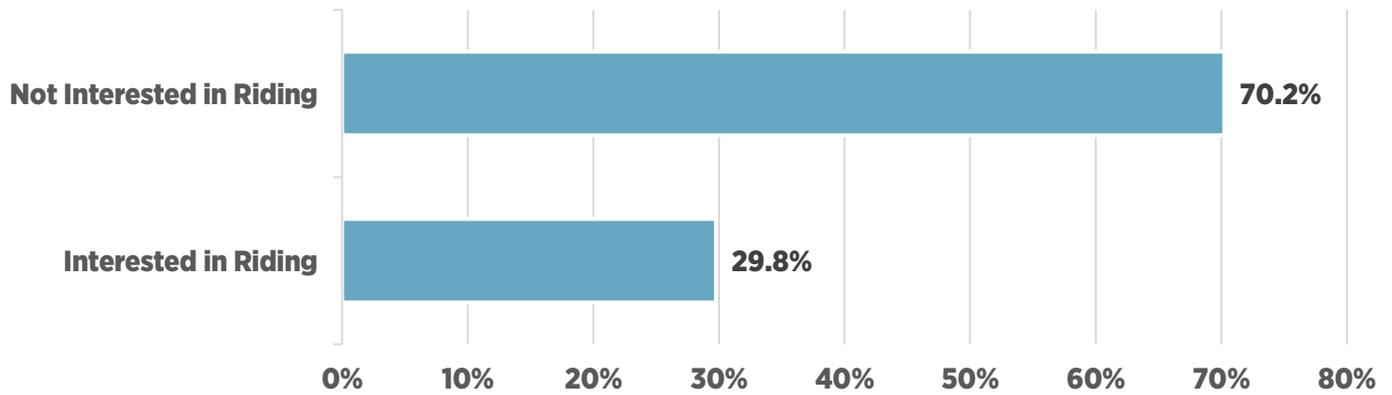
Additionally, desired locations within the current KART service area include:

- Kingman Airport
- Department of Economic Security
- Greyhound Station (Crazy Fred’s Truck Stop)
- Along Northern Avenue
- Department of Motor Vehicles
- Along Stockton Hill Road
- Hualapai Mountain
- Maverick

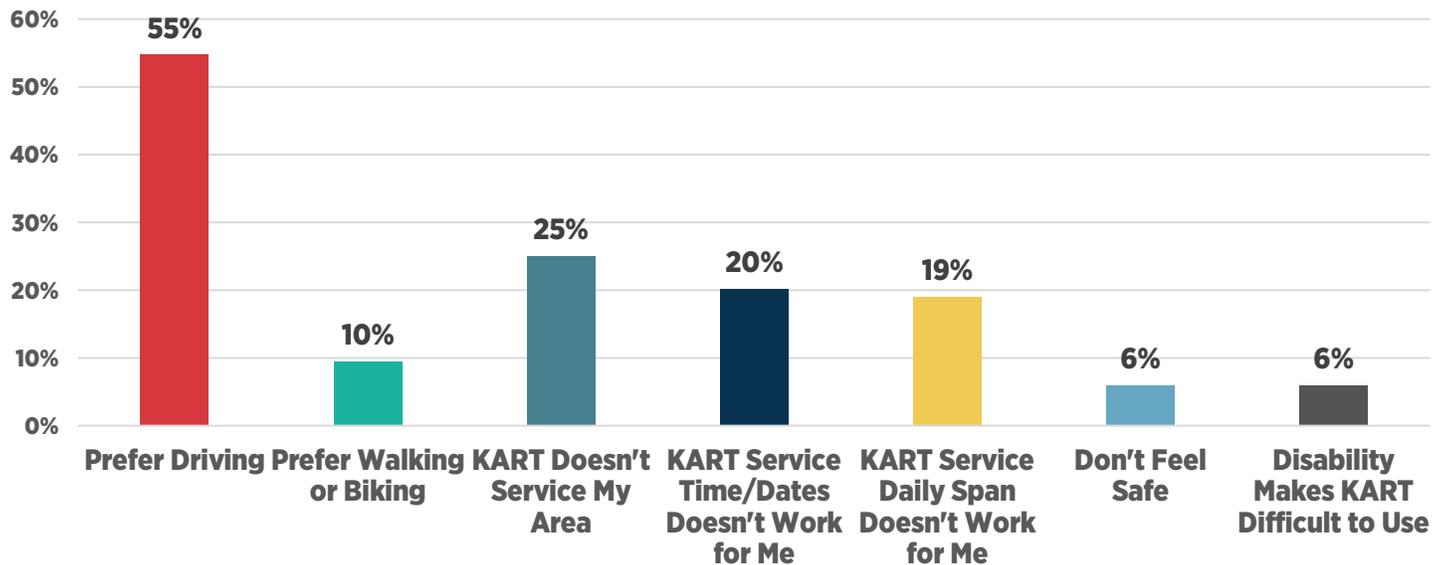
Non KART Riders - Survey Results

Of the 165 responses received, 84 were identified as non-riders, about 51%. However, when queried, approximately 30% indicated an interest in riding KART. Additionally, non-riders were asked to identify their primary reasons for not riding KART. While an unsurprising 55% indicated that driving is their preference, other common reasons included issues with KART's existing service area, service span, and service timings.

Non KART Riders - Interest in Riding KART



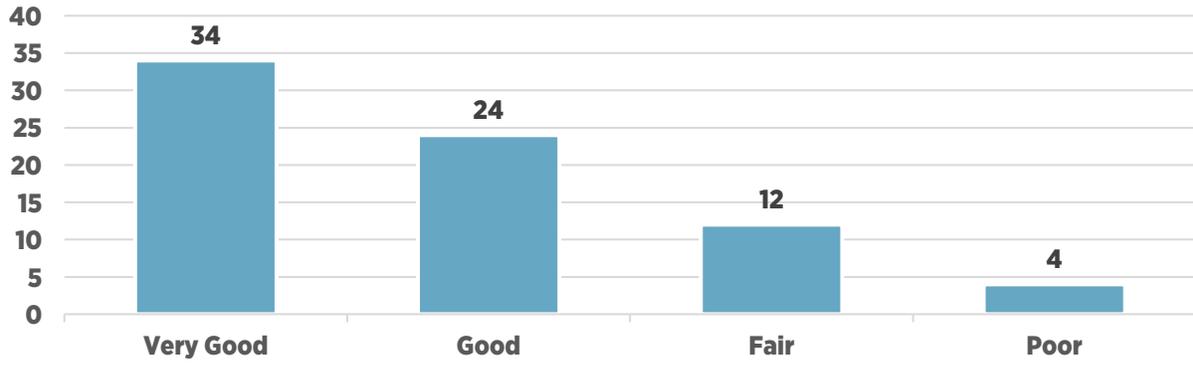
Non KART Riders - Reasons for Not Riding



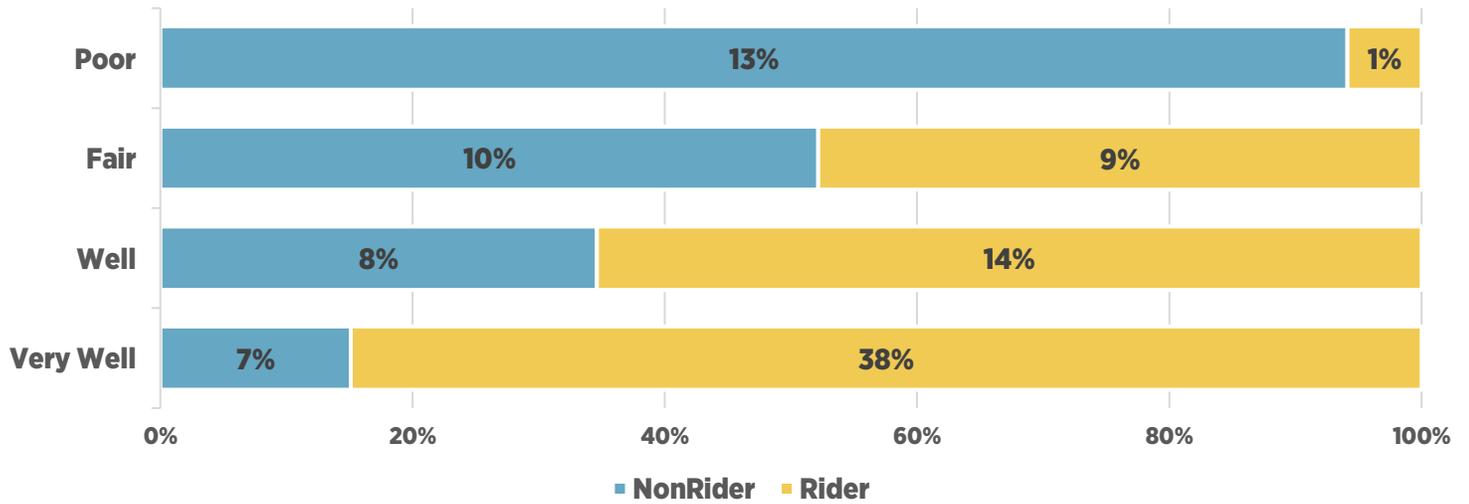
Service Quality and Understanding of the KART System

All 165 respondents were asked to indicate their rating of the quality of KART’s service, as well as their comprehension of those services. Seventy-nine percent of respondents indicated that KART’s service quality is Good or Very Good. Interestingly, riders exhibited better understanding of KART’s service in comparison to non-riders, with riders self-ranking their comprehension as ‘Well’ or ‘Very Well’ at higher rates than non-riders, who self-ranked their understanding of KART’s service as ‘Fair’ or ‘Poor’ at higher rates.

How Respondents Rate the KART System (Total Responses)



How Respondents Rate Their Comprehension of KART



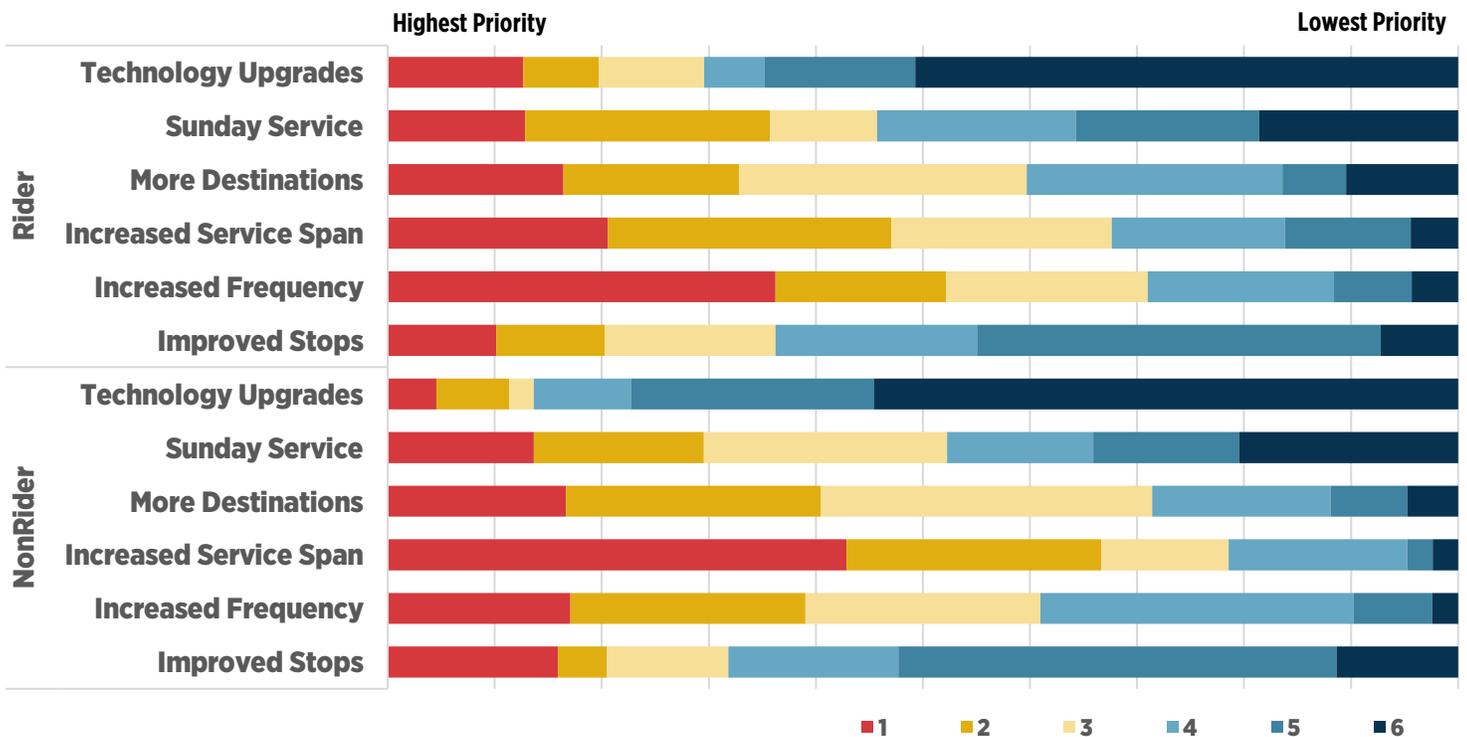
Improvement Priorities

Lastly, all respondents were asked to identify their priorities for KART improvements, ranking the following items 1 - 6, with 1 being the most important:

- Technology Upgrades
- Sunday Service
- More Destinations
- Increased Service Span
- Increased Frequency
- Improved Stops / Transit Center

The results are differentiated by riders and non-riders. The highest ranking priority for riders is increased frequency, while for non-riders an increased service span is the highest priority. The lowest ranking priorities are improved stops / transit center and technology upgrades for riders and non-riders, respectively.

Improvement Priorities of Respondents



PHASE 2 COMMUNITY SURVEY

To engage with a wide range of Kingman-area residents and gain their insights on preferred service modifications, an online and on-paper survey was designed and distributed between August 2nd – August 30th, 2021. The online survey was administered via Survey Monkey, and the on-paper survey was distributed onboard KART buses. The survey was advertised on Facebook, the KART website, and the City of Kingman website, as well as with paper flyers around the Kingman area. Respondents were able to enter a raffle to win one of two \$25 Amazon gift cards. In total, 192 survey responses were received, all of which were online responses.

SURVEY RESULTS

General feedback for KART service included:

"The bus is a wonderful asset to our community. I have seen many including the handicap who are riding it. The drivers are so kind and concern for our safety is their priority."

"Expansion is always necessary. It is nice to see KART is taking an active roll with it's patrons to establish a workable solution."

"Thank you KART for all you do for the community. You are definitely a huge help for those of us in need of transportation!!! Thanks again, we do appreciate it!!!"

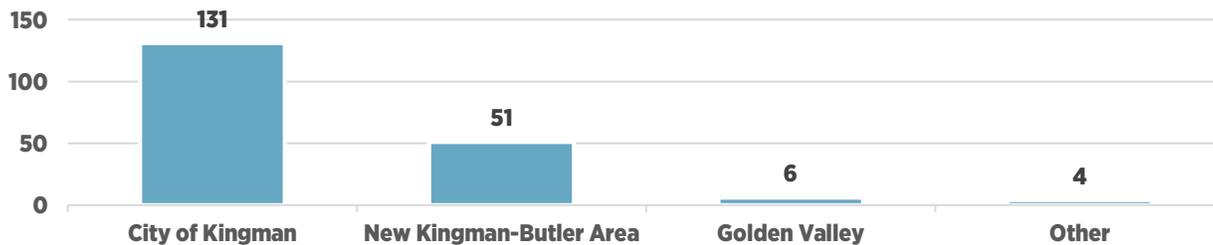
"Thank you for the bus routes. It helps many people in Kingman."

DEMOGRAPHICS

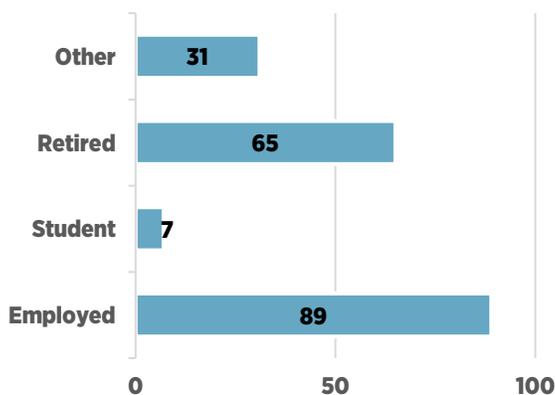
While most respondents live in the Kingman area, several respondents also reported living in unincorporated Mohave County and Lake Havasu City. The highest percentage of respondents are employed with a significant portion of retirees and students also responding Figure 2.

Respondents' ages spanned 18 – 65+, with the highest percentage of respondents reporting their age between 50-64 years old.

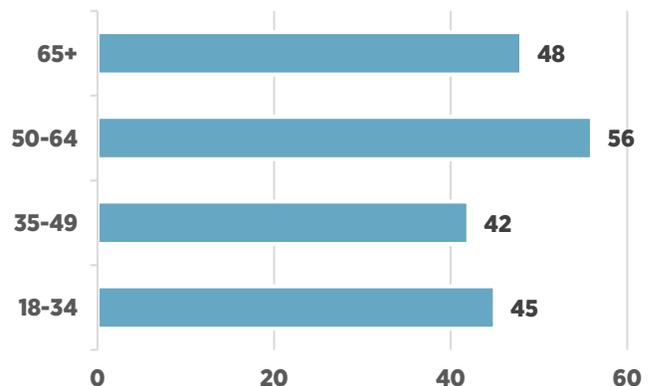
Home Location (Total Responses)



Occupation (Total Responses)



Age (Total Responses)



YELLOW ROUTE MODIFICATIONS

This section of the survey focused on proposed modifications and enhancements to the Yellow Route, as displayed on the right Survey results found:

- Respondents were asked if they would use the Yellow Route if it were modified as depicted. Only 7% of respondents prefer the current route, with a 68% reporting they would consider using either the Yellow Route, Orange Route or both routes.
- Respondents were asked which days of the week they'd prefer to use the Yellow or Orange Routes, to which they indicated that weekday trips on Monday - Friday were the most important (59%). However, 27% of respondents indicated that Saturday service is desirable.
- Additionally, respondents indicated that the Yellow and Orange Routes would likely be heavily utilized throughout the day.

In addition to this feedback, over 50 comments were received regarding the Yellow and Orange Routes, including:

- Need for a connection to the Industrial Park and the Airport
- Orange Route would reduce crowding on the Yellow Route
- Desire for more stops on both routes
- Desire for short headways on both routes

Specific comments included:

"Orange Route would be an amazing opportunity for people who desparately need more destinations covered by the bus"

"It's a wonderful solution to split the route - much more convenient for a busy and growing area such as Butler. Many people will benefit from this service."

"This would be absolutely helpful, especially for those of us who can't afford taxi fares. It would open up job options for us as well."

OPTION 1: CHANGES TO THE YELLOW ROUTE

Initial community outreach found a need for more transit service connecting the City of Kingman and the Kingman-Butler area. Please provide your input on the proposed transit service option below.



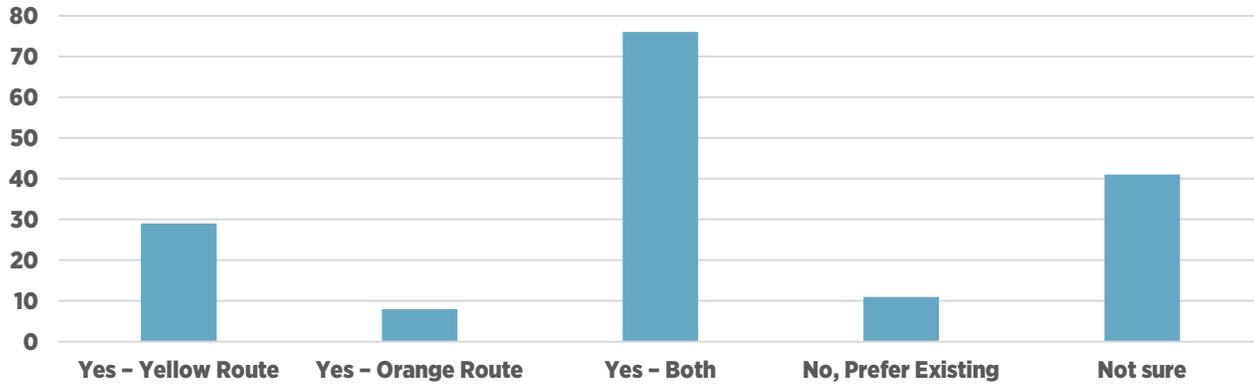
Maintain Yellow Route
The existing yellow route travels in a one-way counterclockwise loop through the New Kingman-Butler areas and Kingman along Airway Avenue, Thompson Avenue, Roosevelt Street, Stockton Hill Road, and Western Avenue



Split Yellow Route into Two Routes
Splits the existing yellow route into two service lines. The proposed yellow route runs counter-clockwise from Wal-Mart to Bashes, the Kingman Industrial Park, Kingman Food Bank, and the KOA Campground. The proposed orange route runs clockwise from Wal-Mart to Mohave Community College, Kingman Foodbank, and the Mohave County Development Services Building.

- 4) If the Yellow Route were split into two routes, displayed to the right, would you consider using it?
- | | |
|---|---|
| <input type="checkbox"/> Yes - I would use the proposed Yellow Route only | <input type="checkbox"/> Not sure |
| <input type="checkbox"/> Yes - I would use the proposed Orange Route only | <input type="checkbox"/> No, I prefer the existing yellow route |
| <input type="checkbox"/> Yes - I would use both the proposed Orange and Yellow Routes | |
- 5) If the Orange and Yellow Routes were available, which days would you use it? Monday to Friday Saturday
- 6) If the Orange and Yellow Routes were available, which times would you use it?
- | | | | | | |
|-------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> 6AM to 9AM | <input type="checkbox"/> 9AM to 12PM | <input type="checkbox"/> 12PM to 3PM | <input type="checkbox"/> 3PM to 6PM | <input type="checkbox"/> 6PM to 8PM | <input type="checkbox"/> None of the Above |
|-------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--|

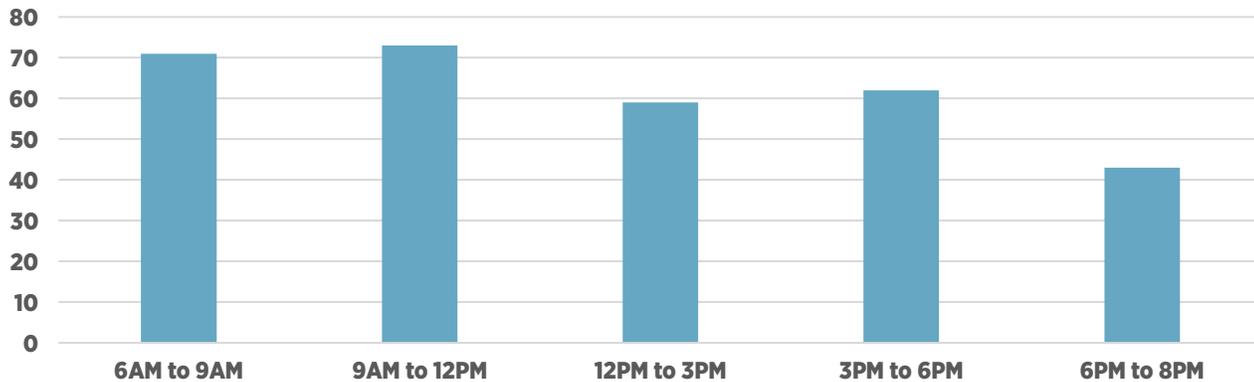
If the Yellow Route were split into two routes, displayed above in Orange and Yellow, would you consider using it?



If the proposed Orange and Yellow Routes were available, what days would you use them?



If the proposed Orange and Yellow Routes were available, what times would you use them?



EXPRESS ROUTE

Next, respondents were asked about the addition of an Express Route along Stockton Hill Rd, as displayed on the right. Survey results found:

- When asked if they'd consider using the route, 66% indicated they would, with an additional 24% responding they would maybe use it.
- 59% reported they would use the Express Route Monday - Friday, while 30% of respondents indicated they would use the service on Saturdays.
- About 50% of respondents indicated they would likely use the Express Route between 9AM - 12PM.

In addition to these responses, over 35 comments were received on the Express Route, including:

- More frequent stops would be preferable
- Extended service hours and Sunday service is desired
- No transfer points with proposed Yellow or Orange, which are desired

Specific comments included:

"This would definitely help both students and people working off of that route! Awesome idea!!"

"This is an excellent solution for everyone – businesses and customers will greatly benefit from this proposed service."

OPTION 2: PROPOSED BLUE EXPRESS ROUTE

Initial community outreach found a need for more transit service connecting Downtown Kingman and Mohave Community College. Please provide your input on the proposed transit service option.

7) If there was an Express Route along Stockton Hill Rd, displayed to the right, would you consider using it?

- Yes Maybe No

8) If an Express Route was available, which days would you use it?

- Monday to Friday Saturday

9) If an Express Route was available, which times would you use it?

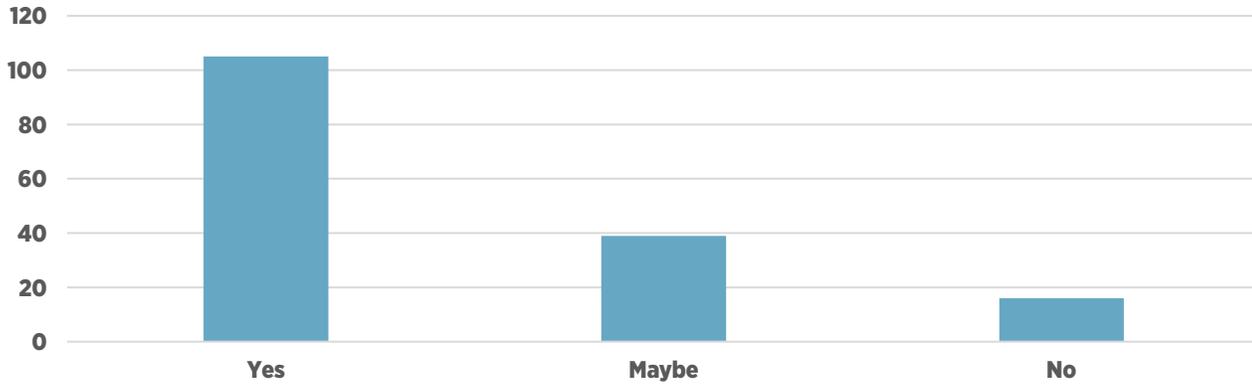
- 6AM to 9AM 3PM to 6PM
 9AM to 12PM 6PM to 8PM
 12PM to 3PM None of the Above



Proposed Blue Express Route

Express route that provides a direct connection from the Wal-Mart transit hub to key shopping, employment, and education centers in Kingman. To reduce travel times, the route has limited stops at Mohave Community College, Safeway, Kingman Regional Medical Center, the Post Office, and Downtown Kingman.

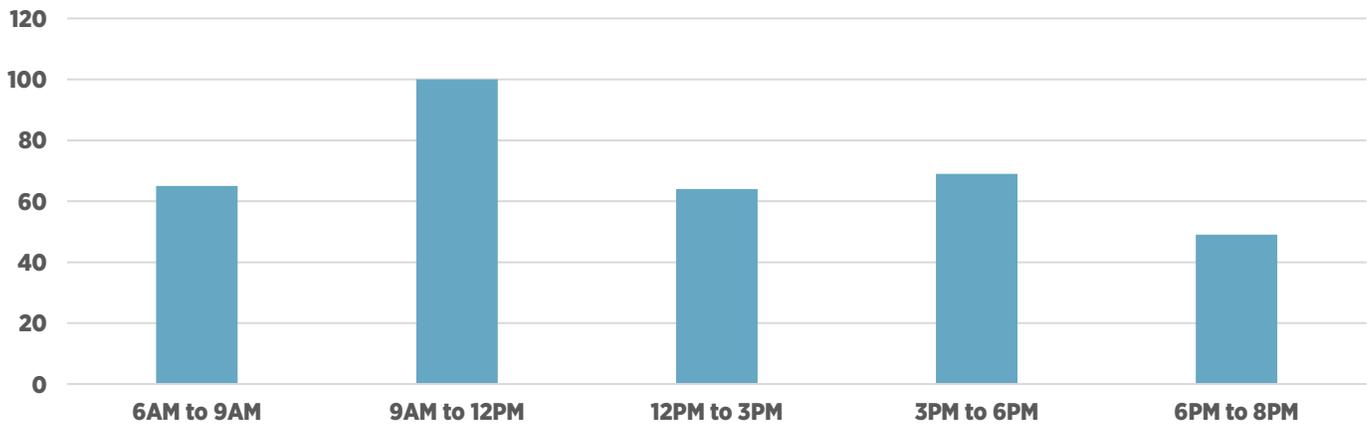
If there was an Express Route along Stockton Hill Rd, would you consider using it?



If an Express Route was available, which days would you use it?



If an Express Route was available, which times would you use it?



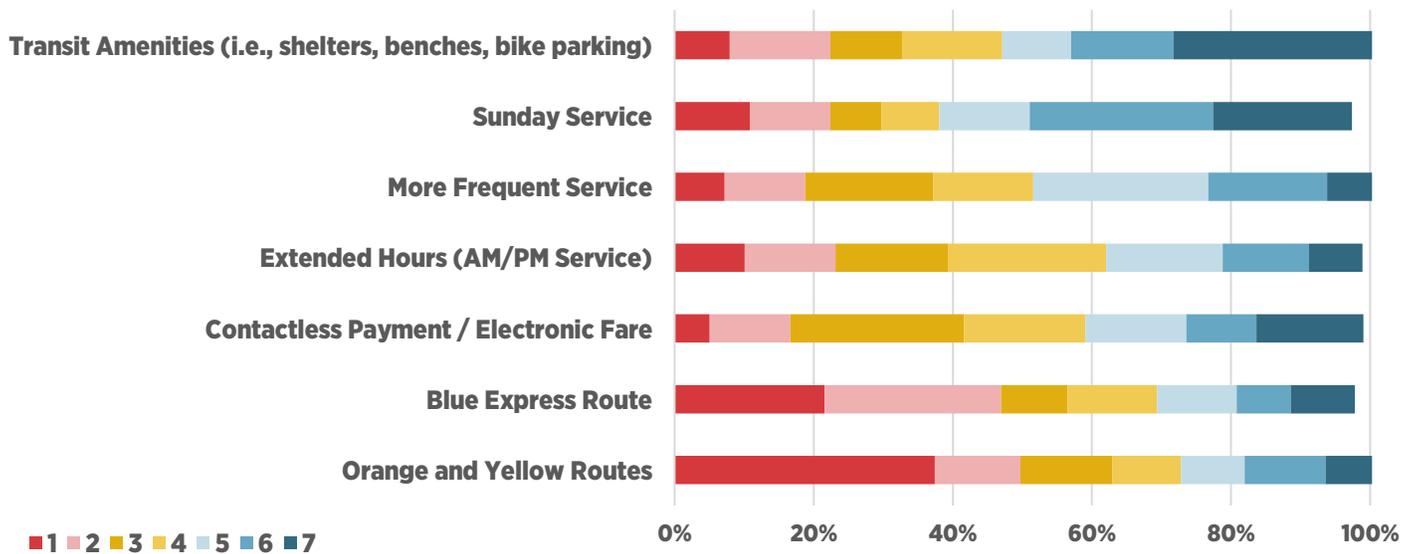
PRIORITIES

Finally, survey respondents were asked to rank their priorities of the following, with 1 being the highest priority:

- Orange and Yellow Routes
- Blue Express Routes
- Contactless Payment / Electronic Fare
- Extended Hours (AM/PM Service)
- More Frequent Service
- Sunday Service
- Transit Amenities (i.e. shelters, benches, bike parking)

Respondents prioritized the creation of the Orange and Yellow Routes the highest, followed closely by the creation of the Blue Express Route.

Ranked Service Priority (1 - 7 with 1 equal to highest priority)



Additionally, 50 comments were received by respondents offering further insights on their priorities. These include:

- “A shelter at Tivoli Heights would be wonderful”
- Increased ADA accessibility at stops
- Monthly passes
- Debit card readers for fare payment
- Shade at stops (preferably made with non-metallic materials)
- Google Maps Integration
- Bi-directional service on all routes
- Park and Ride Locations
- Connection with Greyhound Bus Service
- Connection with Golden Valley
- Connection with Lake Havasu City
- Connection with Laughlin
- Connection with Las Vegas/McCarren Airport

6. SERVICE AND OPERATIONS PLAN

The following Service and Operations Plan identifies a series of recommendations designed to enhance the performance, efficiency, effectiveness, and productivity of the KART system. This section presents a phased five-year transition plan to redesign existing transit services to better respond to the mobility expectations and preferences of Kingman area residents, employees, and visitors. This section focuses solely on the base recommendations themselves; related funding and capital elements will be presented in the subsequent Capital and Financial Plans. This section is divided into two phasing strategies to maximize funding and to ultimately bring the KART preferred service network to reality. Service recommendations are broken down into:

- **Short-Term Service Plan.** This section presents the preferred short-term KART service network, phasing, and service details.
- **Long-Term Vision.** The long-term vision provides a vision of what transit service could look like in Kingman based on potential service and routing enhancements and expansions.

SHORT-TERM SERVICE PLAN

The short-term service plan is phased in over a period of five years to maximize funding. Each phase represents a one-year term and the start and end dates of each phase coincide with the ADOT's 5311 funding application cycle.

- **Phase 1:** Year 2022 (October 1, 2021 to September 30, 2022)
- **Phase 2:** Year 2023 (October 1, 2022 to September 30, 2023)
- **Phase 3:** Year 2024 (October 1, 2023 to September 30, 2024)
- **Phase 4:** Year 2025 (October 1, 2024 to September 30, 2025)
- **Phase 5:** Year 2026 (October 1, 2025 to September 30, 2026)

Historically, the KART system has relied on 5311 funds, local funding, and fare revenues to operate the service. The implementation of the short-term priorities presented in this section are based on the assumption that similar funding sources and funding levels will continue to be available in the future years. Additional funding would be required for some service priorities. In the case that additional funding becomes available, service improvements planned for future years can be advanced. The Financial Plan section of this report discusses other potential funding sources and also presents strategies to generate additional revenues.

The following section first describes each recommended route in detail and then presents a summary of the recommended service by year.

Green Route

The Green Route is one of KART’s most efficient and widely used route. As illustrated in Figure 6.1, it traverses in a one-way clockwise loop that travels along Airway Avenue, Andy Devine Avenue, and through Downtown Kingman.

ROUTE OVERVIEW

The route begins and ends at the Walmart Transfer Center. Key destinations include downtown Kingman, Bashas’ shopping complex, Walgreens, the US Post Office, and the Mohave County Administration Building. Weekday service runs from 6:00 am to 8:00 pm and weekend service runs from 9:00 am to 4:00 pm. Total travel time for the route is approximately 50 minutes.

ROUTE RECOMMENDATIONS

- **Phase 1 (Year 2022):** Route alignment, stops, headways, and weekday and weekend service spans remain as it is today.
- **Phase 2-3 (Year 2023 to Year 2024):** A minor realignment of the route is recommended as illustrated in Figure 6.1. Other route elements remain the same.
- **Phase 4 -5 (Year 2025 to Year 2026):** A reduced 30-minute headway is recommended for weekdays which doubles the number of trips per weekday.
 - One additional vehicle, one additional full-time driver, and one additional part-time driver would be needed to accommodate the reduced headways.
 - It is recommended that the Green Route deviate during two runs each day to provide service to the Mohave County Jail. Close coordination with Jail staff is recommended to identify the best timings to stop at the jail facility.

Table 6.1 outlines the service details by year.

Table 6.1. Green Route - Recommended Service

Phase	Route Change Recommendations	Route Length (Miles)	Days	Headway	Service Span	Vehicles	Service Hours Per Year
Y2022	No change	15.0	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	
Y2023	Minor realignment of route. See Figure 6.1	15.0	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	
Y2024	Minor realignment of route. See Figure 6.1	15.0	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	
Y2025	Minor realignment of route. See Figure 6.1	15.0	Weekdays	30	6:00am-8:00pm	2	7,350
			Saturday	60	9:00am-4:00pm	1	
Y2026	Minor realignment of route. See Figure 6.1	15.0	Weekdays	30	6:00am-8:00pm	2	7,350
			Saturday	60	9:00am-4:00pm	1	

Figure 6.1. Green Route Alignment and Stops



Legend

- Key/Timed Stop
- Flag Stop
- Phase 1 (Y2022)
Existing Green Route
- Phase 2 - 5 (Y2023 - Y2026)
Modified Green Route
- Interstate
- US and State Highways
- City of Kingman
- New Kingman-Butler CDP

Sources: ADOT, US Census

0 2,000

Red Route

The Red Route travels in a one-way clockwise loop through Kingman along Airway Avenue, Eastern Street, Hualapai Mountain Road, Fairgrounds Boulevard, Harrison Street, and Beverly Avenue (Figure 6.2).

ROUTE OVERVIEW

The route begins and ends at the Walmart Transfer Center. Key destinations include the Bashas' shopping complex, Mohave County Library, the US Post Office, and the Mohave County Fairgrounds. Weekday service runs from 6:00 am to 6:00 pm and weekend service runs from 9:00 am to 4:00 pm. Total travel time for the route is approximately 45 minutes.

ROUTE RECOMMENDATIONS

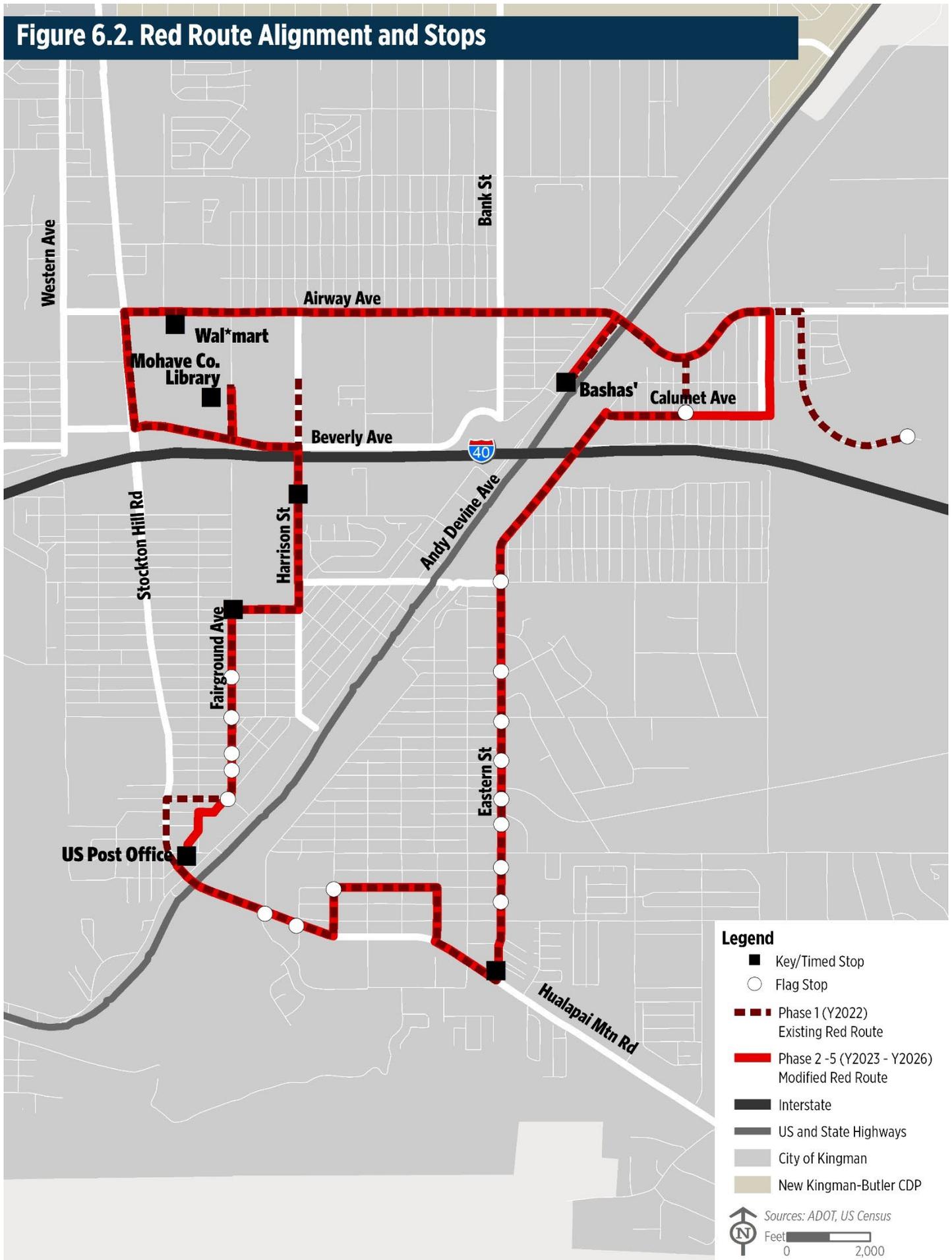
- **Phase 1 (Year 2022):** Route alignment, stops, headways, and weekday and weekend service spans remain as it is today.
- **Phase 2-5 (Year 2023 to Year 2026):** A minor realignment of the route is recommended as illustrated in Figure 6.2. Other route elements remain the same.

Table 6.2 outlines the service details by year.

Table 6.2. Red Route - Recommended Service

Phase	Route Change Recommendations	Route Length (Miles)	Days	Headway	Service Span	Vehicles	Service Hours Per Year
Y2022	No change	13.0	Weekdays	60	6:00am-6:00pm	1	3,350
			Saturday	60	9:00am-4:00pm	1	
Y2023	Minor realignment of route. See Figure 6.2	13.0	Weekdays	60	6:00am-6:00pm	1	3,350
			Saturday	60	9:00am-4:00pm	1	
Y2024	Minor realignment of route. See Figure 6.2	13.0	Weekdays	60	6:00am-6:00pm	1	3,350
			Saturday	60	9:00am-4:00pm	1	
Y2025	Minor realignment of route. See Figure 6.2	13.0	Weekdays	60	6:00am-6:00pm	1	3,350
			Saturday	60	9:00am-4:00pm	1	
Y2026	Minor realignment of route. See Figure 6.2	13.0	Weekdays	60	6:00am-6:00pm	1	3,350
			Saturday	60	9:00am-4:00pm	1	

Figure 6.2. Red Route Alignment and Stops



Legend

- Key/Timed Stop
- Flag Stop
- Phase 1 (Y2022)
Existing Red Route
- Phase 2 - 5 (Y2023 - Y2026)
Modified Red Route
- Interstate
- US and State Highways
- City of Kingman
- New Kingman-Butler CDP

Sources: ADOT, US Census

Feet
0 2,000

Blue Route

The Blue Route travels in a one-way counterclockwise loop through central Kingman along Roosevelt Street, Morrow Avenue, Western Avenue, and Stockton Hill Road (Figure 6.3).

ROUTE OVERVIEW

The route begins and ends at the Walmart Transfer Center. Key destinations include the KOA Campground, Safeway, Kingman Regional Medical Center, Mohave Mental Health, and the U.S. Post Office. Weekday service runs from 6:00 am to 6:00 pm and weekend service runs from 9:00 am to 4:00 pm. Total travel time for the route is approximately 45 minutes.

ROUTE RECOMMENDATIONS

- Phase 1 – 2 (Year 2022 to Year 2023):** Route alignment, stops, headways, and weekday and weekend service spans remain as it is today.
- Phase 3 (Year 2024):** During Year 2024, the Blue Route is recommended to operate at existing service levels and route alignment for only the first six months of the year. For the second half of the year, Blue Route service will cease operating. Most of Blue Route’s service area will be covered by the proposed six-month Express Route pilot and the realigned Green and Red routes.
- Phase 4-5 (Year 2025 to Year 2026):** If the Express Route pilot is successful, it is recommended that the Blue Route cease operations. As mentioned previously, most of Blue Route’s service area will be covered by the new Express Route and the realigned Green and Red routes.

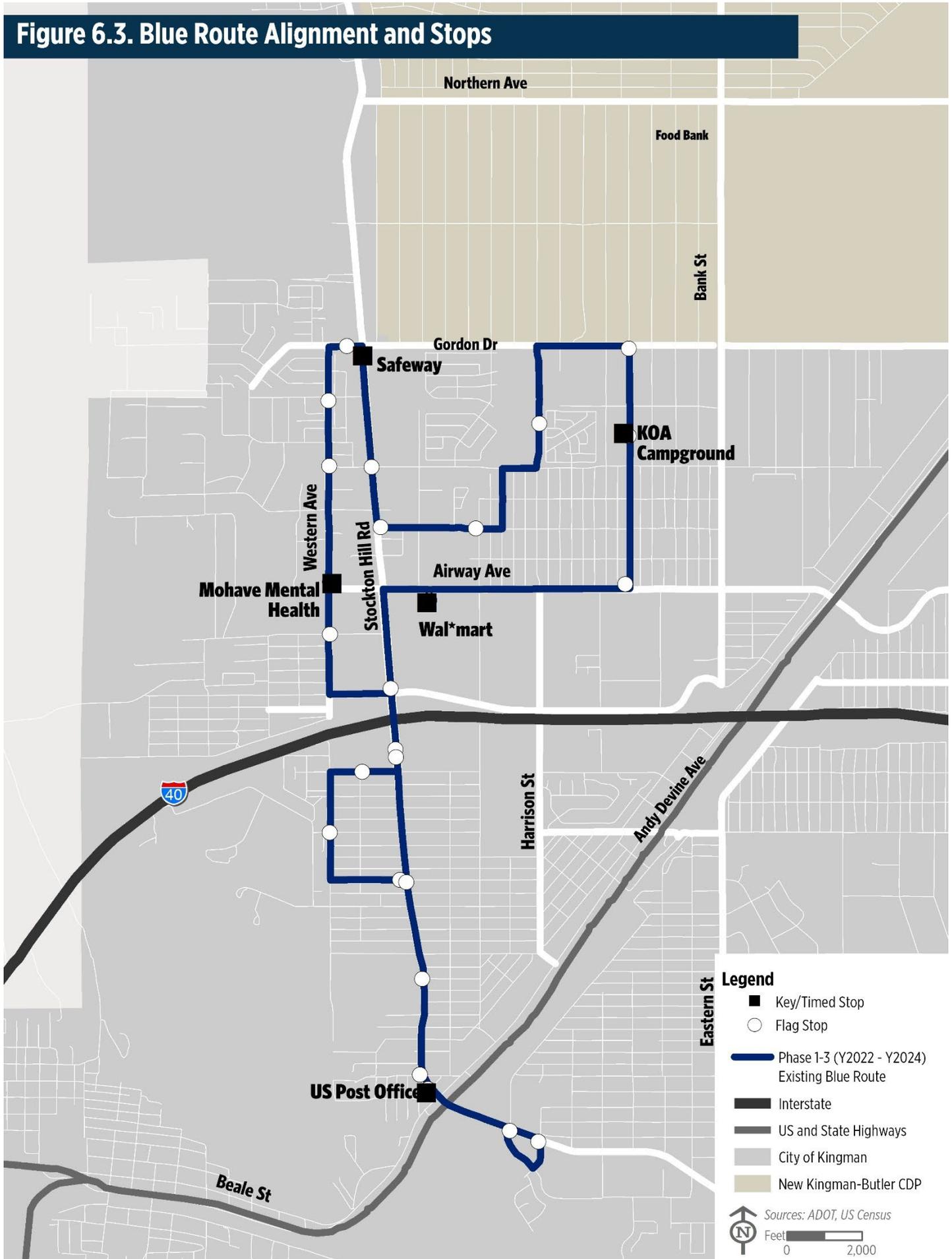
Table 6.3 outlines the service details by year.

Table 6.3. Blue Route - Recommended Service*

Phase	Route Change Recommendations	Route Length (Miles)	Days	Headway	Service Span	Vehicles	Service Hours Per Year
Y2022	No change	14.0	Weekdays	60	6:00am-6:00pm	1	3,350
			Saturday	60	9:00am-4:00pm	1	
Y2023	No change	14.0	Weekdays	60	6:00am-6:00pm	1	3,350
			Saturday	60	9:00am-4:00pm	1	
Y2024	Operates only for the first half of the year	14.0	Weekdays	60	6:00am-6:00pm	1	1,675
			Saturday	60	9:00am-4:00pm	1	
Y2025	Ceases to operate. Most of the blue route's service area will be covered by the new express route and realigned red and green routes						
Y2026	Ceases to operate. Most of the blue route's service area will be covered by the new express route and realigned red and green routes						

*Note: Major system changes to the KART system require on-going coordination with Kingman’s annual budget process and two-year grant cycles.

Figure 6.3. Blue Route Alignment and Stops



Yellow Route

The Yellow Route is one KART's busiest routes with a potential for even more usage. The Yellow Route currently travels in a one-way counterclockwise loop through the New Kingman-Butler areas and Kingman. The modified Yellow Route provides new service to the Kingman Industrial Airpark and the Kingman High School Airway Avenue, Thompson Avenue, Roosevelt Street, Stockton Hill Road, and Western Avenue (Figure 6.4).

ROUTE OVERVIEW

The route begins and ends at the Walmart Transfer Center. Key destinations include the Eagles Lodge, Mohave Mental Health, Food Bank, and Mohave Community College. Weekday service runs from 6:00 am to 8:00 pm and weekend service runs from 9:00 am to 4:00 pm. Total travel time for the route is approximately 50 minutes.

Route Recommendations

- **Phase 1 (Year 2022):** Route alignment, stops, headways, and weekday and weekend service spans remain as it is today.
- **Phase 2 (Year 2023):** For the first half of Year 2023, the Yellow Route is recommended to operate as it operates today. For the second half of the year, it is recommended to split the Yellow Route into two separate routes – Modified Yellow Route (Figure 6.4) and a new Orange Route (Figure 6.5). This split route configuration is recommended to operate as a six-month pilot.
- **Phase 3-5 (Year 2024 to Year 2026):** If the modified Yellow Route and the new Orange Route split configuration pilot is successful, the Yellow Route is recommended to operate along the revised alignment and at service levels detailed in Table 6.4. The modified Yellow Route starts at the Walmart Transfer Center and traverses a counter-clockwise loop along Airway Avenue, Andy Devine Avenue, Thompson Avenue, through the New Kingman-Butler area, and Roosevelt Street. Key destinations include the Food Bank, Eagles Lodge, Kingman Industrial Park, Bashas, and Walmart.

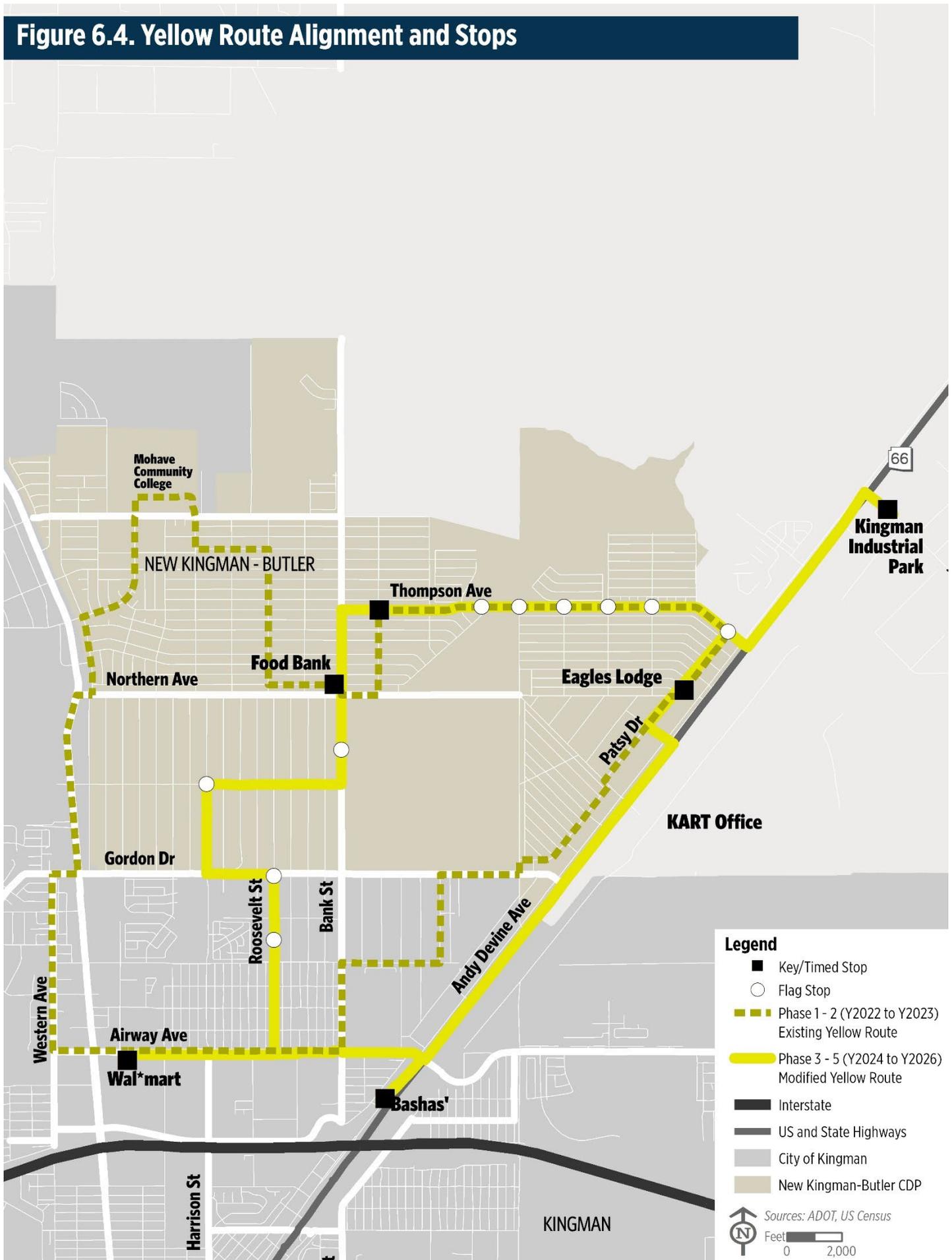
Table 6.4 outlines the service details by year.

Table 6.4. Yellow Route - Recommended Service*

Phase	Route Change Recommendations	Route Length (Miles)	Days	Headway	Service Span	Vehicles	Service Hours Per Year
Y2022	No change	15.0	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	
Y2023 - First Half of Year	Operates only for the first half of the year	15.0	Weekdays	60	6:00am-8:00pm	1	1,925
			Saturday	60	9:00am-4:00pm	1	
Y2023 - Second Half of Year	New route alignment. Operates as a 6-month pilot. See Figure 6.4	11.5	Weekdays	60	6:00am-8:00pm	1	1,925
			Saturday	60	9:00am-4:00pm	1	
Y2024	New route alignment, See Figure 6.4	11.5	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	
Y2025	New route alignment, See Figure 6.4	11.5	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	
Y2026	New route alignment, See Figure 6.4	11.5	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	

*Note: Major system changes to the KART system require on-going coordination with Kingman's annual budget process and two-year grant cycles.

Figure 6.4. Yellow Route Alignment and Stops



Legend

- Key/Timed Stop
- Flag Stop
- Phase 1 - 2 (Y2022 to Y2023)
Existing Yellow Route
- Phase 3 - 5 (Y2024 to Y2026)
Modified Yellow Route
- Interstate
- US and State Highways
- City of Kingman
- New Kingman-Butler CDP

Sources: ADOT, US Census
 Feet 0 2,000

Orange Route

As mentioned previously, the Orange Route is a new route recommendation. The route travels clockwise along Airway Avenue, Beverly Avenue, Western Avenue, Stockton Hill Road, New Kingman-Butler area, Diagonal Way, Eagle Rock Road, Rainbow Drive, and Airway Avenue (Figure 6.5).

ROUTE OVERVIEW

The route begins and ends at the Walmart Transfer Center. Key destinations include Kingman Regional Medical Center, Mohave Mental Health Clinic, Mohave Community College, Food Bank, and Walmart. Weekday service runs from 6:00 am to 8:00 pm and weekend service runs from 9:00 am to 4:00 pm. Total travel time for the route is approximately 50 minutes.

Route Recommendations

- **Phase 2 (Year 2023):** As mentioned in the previous section, for the second half of the year, it is recommended to split the original Yellow Route into two separate routes – Modified Yellow Route (Figure 6.4) and a new Orange Route (Figure 6.5). This split route configuration is recommended to operate as a six-month pilot.
- **Phase 2-5 (Year 2024 to Year 2026):** If the modified Yellow Route and the new Orange Route split configuration pilot is successful, the Orange Route is recommended to operate at service levels detailed in Table 6.5 and along the alignment illustrated in Figure 6.5.
 - One additional vehicle, one additional full-time driver, and one additional part-time driver would be needed to operate the Orange Route.

Table 6.5 outlines the service details by year.

Table 6.5. Orange Route - Recommended Service*

Phase	Route Change Recommendations	Route Length (Miles)	Days	Headway	Service Span	Vehicles	Service Hours Per Year
Y2023 - Second Half of Year	New route. Operates as a 6-month pilot. See Figure 6.5	12.0	Weekdays	60	6:00am-8:00pm	1	1,925
			Saturday	60	9:00am-4:00pm	1	
Y2024	New route, See Figure 6.5	12.0	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	
Y2025	New route, See Figure 6.5	12.0	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	
Y2026	New route, See Figure 6.5	12.0	Weekdays	60	6:00am-8:00pm	1	3,850
			Saturday	60	9:00am-4:00pm	1	

*Note: Major system changes to the KART system require on-going coordination with Kingman's annual budget process and two-year grant cycles.

Figure 6.5. Orange Route Alignment and Stops



Legend

- Key/Timed Stop
- Flag Stop
- Orange Route
- Interstate
- US and State Highways
- City of Kingman
- New Kingman-Butler CDP

Sources: ADOT, US Census

0 2,000 Feet

Express Route

A new Express Route is recommended connecting key activity centers in the Kingman area. The Express Route provides more direct service from Walmart to MCC and Downtown Kingman (Figure 6.6).

ROUTE OVERVIEW

As illustrated in Figure 6.6, it traverses along Airway Avenue, Stockton Hill Road, College Drive, back on Stockton Hill Road, Andy Devine Avenue, and Beale Street. The route begins and ends at the Walmart Transfer Center. Key destinations include Safeway, MCC, Walmart, Kingman Regional Medical Center, US Post Office, and downtown Kingman. Service runs from 6:00 am to 6:00 pm on weekdays only.

ROUTE RECOMMENDATIONS

- **Phase 3 (Year 2024):** During the second half of Year 2024, the Express Route is recommended to operate as a six-month pilot on weekdays only.
- **Year 2025 to Year 2026:** If the six-month pilot is successful, the Express Route is recommended to operate at service levels detailed in Table 6.6 and along the alignment illustrated in Figure 6.6.

Table 6.6 outlines the service details by year.

Table 6.6. Express Route - Recommended Service*

Phase	Route Change Recommendations	Route Length (Miles)	Days	Headway	Service Span	Vehicles	Service Hours Per Year
Y2024 - Second Half of Year	New route alignment. Operates as a 6-month pilot. See Figure 6.6	16.0	Weekdays	60	6:00am-6:00pm	1	1,925
			Saturday	-	-	-	
Y2025	New route alignment, See Figure 6.6	16.0	Weekdays	60	6:00am-6:00pm	1	3,000
			Saturday	-	-	-	
Y2026	New route alignment, See Figure 6.6	16.0	Weekdays	60	6:00am-6:00pm	1	3,000
			Saturday	-	-	-	

*Note: Major system changes to the KART system require on-going coordination with Kingman's annual budget process and two-year grant cycles.

Figure 6.6. Express Route Alignment and Stops



SUMMARY OF SERVICE RECOMMENDATIONS BY PHASE

Tables 6.7 to 6.11 summarize the service recommendations for each year and also include anticipated service hours per year and estimated cost to operate the service. *In comparison, KART's current operating costs are 866,088.* It's important to note that major system changes require on-going coordination with Kingman's annual budget process and two-year grant cycles.

Table 6.7. Year 2022 - Recommended Service

Route	Route Change Recommendations	Days	Headway	Service Span	Vehicles	Service Hours Per Year	Estimated Operating Cost
Green	No change	Weekdays	60	6:00am-8:00pm	1	3,850	\$254,000
		Saturday	60	9:00am-4:00pm	1		
Red	No change	Weekdays	60	6:00am-6:00pm	1	3,350	\$221,000
		Saturday	60	9:00am-4:00pm	1		
Blue	No change	Weekdays	60	6:00am-6:00pm	1	3,350	\$221,000
		Saturday	60	9:00am-4:00pm	1		
Yellow	No change	Weekdays	60	6:00am-8:00pm	1	3,850	\$254,000
		Saturday	60	9:00am-4:00pm	1		
Total						14,400	\$950,000

Table 6.8. Year 2023 - Recommended Service

Route	Route Change Recommendations	Days	Headway	Service Span	Vehicles	Service Hours Per Year	Estimated Operating Cost
Green	Minor realignment of route	Weekdays	60	6:00am-8:00pm	1	3,850	\$262,000
		Saturday	60	9:00am-4:00pm	1		
Red	Minor realignment of route	Weekdays	60	6:00am-6:00pm	1	3,350	\$228,000
		Saturday	60	9:00am-4:00pm	1		
Blue	No change	Weekdays	60	6:00am-6:00pm	1	3,350	\$228,000
		Saturday	60	9:00am-4:00pm	1		
Yellow	Operates only for the first half of the year	Weekdays	60	6:00am-8:00pm	1	1,925	\$131,000
		Saturday	60	9:00am-4:00pm	1		
Modified Yellow	New route alignment. Operates as a 6-month pilot for second half or the year	Weekdays	60	6:00am-8:00pm	1	1,925	\$131,000
		Saturday	60	9:00am-4:00pm	1		
Orange	New route. Operates as a 6-month pilot for second half or the year	Weekdays	60	6:00am-8:00pm	1	1,925	\$131,000
		Saturday	60	9:00am-4:00pm	1		
Total						16,325	\$1,111,000

Table 6.9. Year 2024 - Recommended Service

Route	Route Change Recommendations	Days	Headway	Service Span	Vehicles	Service Hours Per Year	Estimated Operating Cost
Green	Minor realignment of route	Weekdays	60	6:00am-8:00pm	1	3,850	\$270,000
		Saturday	60	9:00am-4:00pm	1		
Red	Minor realignment of route	Weekdays	60	6:00am-6:00pm	1	3,350	\$235,000
		Saturday	60	9:00am-4:00pm	1		
Blue	Operates only for the first half of the year	Weekdays	60	6:00am-6:00pm	1	1,675	\$118,000
		Saturday	60	9:00am-4:00pm	1		
Express	New route. Operates as a 6-month pilot for second half of the year	Weekdays	60	6:00am-6:00pm	1	1,500	\$105,000
		Saturday	-	-	-		
Yellow	New route alignment	Weekdays	60	6:00am-8:00pm	1	3,850	\$270,000
		Saturday	60	9:00am-4:00pm	1		
Orange	New route	Weekdays	60	6:00am-8:00pm	1	3,850	\$270,000
		Saturday	60	9:00am-4:00pm	1		
Total						18,075	\$1,268,000

Table 6.10. Year 2025 - Recommended Service

Route	Route Change Recommendations	Days	Headway	Service Span	Vehicles	Service Hours Per Year	Estimated Operating Cost
Green	Minor realignment of route	Weekdays	30	6:00am-8:00pm	2	7,350	\$530,000
		Saturday	60	9:00am-4:00pm	1		
Red	Minor realignment of route	Weekdays	60	6:00am-6:00pm	1	3,350	\$242,000
		Saturday	60	9:00am-4:00pm	1		
Express	New route	Weekdays	60	6:00am-6:00pm	1	3,000	\$217,000
		Saturday	-	-	-		
Yellow	New route alignment	Weekdays	60	6:00am-8:00pm	1	3,850	\$278,000
		Saturday	60	9:00am-4:00pm	1		
Orange	New route	Weekdays	60	6:00am-8:00pm	1	3,850	\$278,000
		Saturday	60	9:00am-4:00pm	1		
Total						21,400	\$1,545,000

Table 6.11. Year 2026 - Recommended Service

Route	Route Change Recommendations	Days	Headway	Service Span	Vehicles	Service Hours Per Year	Estimated Operating Cost
Green	Minor realignment of route	Weekdays	30	6:00am-8:00pm	2	7,350	\$546,000
		Saturday	60	9:00am-4:00pm	1		
Red	Minor realignment of route	Weekdays	60	6:00am-6:00pm	1	3,350	\$249,000
		Saturday	60	9:00am-4:00pm	1		
Express	New route	Weekdays	60	6:00am-6:00pm	1	3,000	\$223,000
		Saturday	-	-	-		
Yellow	New route alignment	Weekdays	60	6:00am-8:00pm	1	3,850	\$286,000
		Saturday	60	9:00am-4:00pm	1		
Orange	New route	Weekdays	60	6:00am-8:00pm	1	3,850	\$286,000
		Saturday	60	9:00am-4:00pm	1		
Total						21,400	\$1,590,000

LONG-TERM VISION

This section presents the long-term vision for the KART service. The vision includes service, routing, operations, and communication improvements. If additional funding becomes available, some of these long-term priorities may be advanced for implementation.

ROUTE ENHANCEMENTS

The following route enhancements could be considered to enhance or expand the KART service as the future needs and conditions change.

Yellow and Orange Routes

The modified Yellow Route (Figure 6.4) and the Orange Route (Figure 6.5) are recommended to operate at 60-minute headways from 6:00 am to 8:00 pm on weekdays and 9:00 am to 4:00 pm on Saturdays. If ridership numbers continue to increase, it is recommended to conduct a public survey to reassess the needs of users (stop locations, amenities, service frequency, etc.) and also evaluate ridership data. Based on the results, the following service enhancements may be considered.

- Reduce headways from 60-minutes to 30-minutes for Yellow and/or Orange Routes.
- Add limited hours Sunday service.

Extended Service Hours

As ridership demand warrants, KART should evaluate service modifications to provide additional service hours, including:

- Expanding Red and Express route service hours to 8:00 pm on weekdays to match additional route spans
- Adding shortened Sunday service hours on the Yellow, Orange, Red, and Green routes

Modify Routes to Provide Bidirectional Service

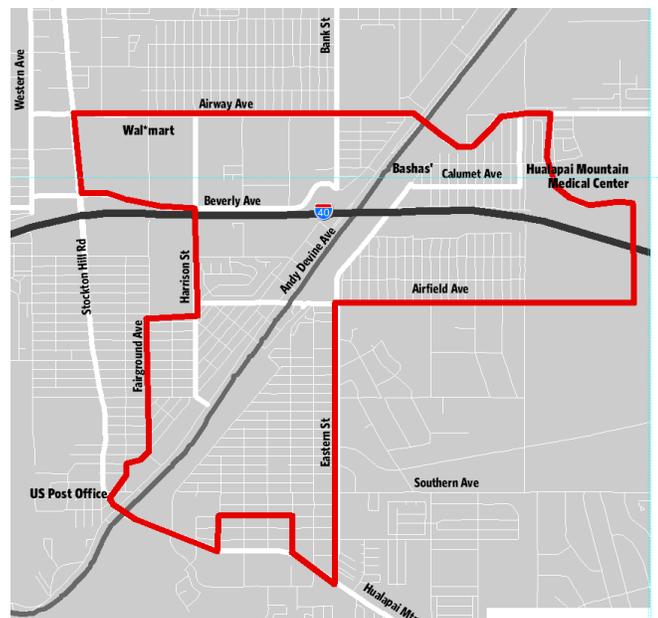
In general, transit riders are seeking a convenient, comfortable service that allows them to travel to destinations quickly and safely. Part of convenient and efficient travel is providing users with options. Currently, KART operates in one-way loops that can lead to long travel or wait times for riders. One recommendation would be for KART to evaluate creating bidirectional routes (two-way) service, which will increase service efficiencies and enable shorter, more convenient trips for passengers.

The bus routes would still operate to/from KART's Transit Hub but may require shifting service on local streets to collectors and arterials. The advantage of this approach is that it would be easier to understand and would provide faster and more direct service. The disadvantage, however, is that routes would operate on fewer streets meaning some riders would have to walk further to/from the bus stops. For example, service on Southern Avenue on the Red Route may need to be realigned to only providing service on Hualapai Mountain Road. Cost to operate would increase significantly as well.

Providing Service to Kingman Crossing

For KART to work now and into the future, understanding the transit demand and impacts of development on the KART system is imperative. The Kingman Crossing is planned to be a large scale commercial and residential development and is located in the vicinity of the Hualapai Mountain Hospital Campus. According to a report from 2017 Applied Economics says that when fully developed the Kingman Crossing Project has the potential to generate \$13.6 million in annual city sales and lodging taxes by 2035. A new traffic interchange is proposed on Interstate 40 at the Kingman Crossing development. The traffic interchange project is planned to be completed by Year 2024. This area could become a key regional activity center and KART service may be needed to serve this area once developed. Potential service modifications to KART to accommodate the development includes:

- Adjusting the Red Route to connect from Wal-Mart to the Kingman Regional Medical Center – south on to Airfield Avenue or Southern Avenue – east to Eastern Avenue. This adjustment may require removing service on Calumet Avenue or altering service from Fairgrounds Avenue to Stockton Hill Road to maintain 60-minute headways.
- Modifying the Red Route to focus service east of Andy Devine Avenue.



TRANSIT CENTER AND ROUTE SYSTEM REALIGNMENT AND OPTIMIZATION

During the development of this Plan, City of Kingman staff, KART drivers, stakeholder interviews, and community feedback highlighted the need for a transit center to provide safer, more efficient, and more comfortable services for KART riders and staff. While there is a planned location for a transit center, this plan recommends that KART proceed with completing a Transit Center Site Selection Report that evaluates potential sites to identify the preferred location. Once a preferred location is identified and the transit center is constructed, routes may need to be realigned to connect with the Transit Center. As part of realignment efforts, KART should look for ways to optimize service through route efficiencies.

EVALUATE MICRO-TRANSIT

Microtransit is an emerging approach to connect riders to mainline service by bridging the first mile, last mile gap. Microtransit can be a door-to-door service, like using a taxi or a ride-hailing service, or it can be point-to-point, which connects people to destinations such as employment centers, universities, or transit centers from other hubs. It can also offer first and last mile connections, meaning that the vehicle will operate from 'door-to-point' – this can be helpful for connecting people to traditional fixed route transit services. The benefits of microtransit include:

- You can instantly request a ride via a phone call, online website, or your smart phone
- Provides direct connections to the fixed-route transit system
- Expands public transportation to people and activity centers that aren't located along the fixed route.
- Has specific Pick-Up / Drop-Off zones
- Is data-driven, allowing City staff to adjust service as needed
- Using algorithms and trip data, the vehicle routing software optimizes each vehicles route to accommodate the most people with the shortest waiting times
- Vehicles are typically larger than a private sedan and smaller than a traditional public transit bus
- Allows for multiple payment and booking options, such as smartphone application, online website browser, or call-in phone service

It is recommended that KART explore opportunities to integrate microtransit technology to improve rider experience. The service could be a system-wide or a Home to Hub system that connects riders within designated zone to nearest fixed route hub located along transit routes.

REGIONAL CONNECTIONS

Working in connection with Western Arizona Council of Governments, Hualapai Indian Tribe, Bullhead City Area Transit, and Mohave County, KART should evaluate the potential need and feasibility for regional transit connections to Bullhead City and Lake Havasu City. Currently, WACOG is developing the Western Arizona Intercity Regional Transit Plan that will identify a preferred transit plan for such regional transit system. As part of the plan, the following partnership opportunities will be evaluated:

- Developing a series of transit center/park-and-ride facilities coupled with regional transit service to allow users to seamlessly travel between transit systems in Lake Havasu City, Bullhead City, and Kingman.
- Creating opportunities to connect with national transportation providers, such as Greyhound and Flixbus.
- Expanding vanpool opportunities between communities.

TRANSITIONING TO FTA 5307

Based on the 2020 United State Census, the Kingman region does not meet the 50,000 population threshold that would trigger the development of a Metropolitan Planning Organization.

The Arizona Commerce Authority's population projections indicate that the Greater Kingman Area is likely to have a population over 50,000 by 2035, which would trigger the federal thresholds for the creation of a Metropolitan Planning Organization. The creation of a Greater Kingman Area MPO would transition KART's funding from FTA 5311 to FTA 5307, which would ultimately require increased local match monies for transit services. To prepare KART and the City for this potential change, it's imperative that KART lead early and often discussions with City staff and elected officials to educate them on the potential change in funding structure.

Upon transitioning to 5307, the primary challenges for KART will be how the City handles a significant decrease in the annual allocation for federal dollars and new matching requirements. Working with ADOT and the City, a recommended path forward would include:

- Develop a transition plan that analyzes current revenues, expenditures, and local match to determine a road forward. The plan may consider service or operational modifications to address funding concerns.
- Gather community feedback and data on the transit demand and need to help build a case for maintaining the KART system.
- Identify reliable, sustainable, and adequate funding for continued transit operations to minimize the impact of transitioning to 5307.
- Seek partnerships with Mohave County and Hualapai Indian Tribe to help support KART.
- Continue developing strong relationships with the local business community to not only help to maintain current ridership but attract new riders by offering incentives to use the transit system.

7. CAPITAL AND INFRASTRUCTURE PLAN

Capital and infrastructure—like vehicles, bus stop shelters, and software—are necessary components of a transit system. Without them, transit cannot exist. The capital and infrastructure plan provides a programmatic approach to support KART’s transit operations with rider amenities and infrastructure that provides for the safe use and enjoyment of the transit system. This chapter summarizes capital needs required to maintain and expand bus service over the next five years, and flags longer-term needs for further analysis. This section includes four parts:

- **Vehicle Fleet.** This section estimates the vehicle needs associated with current service and the short-term priorities.
- **Bus stops.** This section provides guidance on bus stop design, and identifies places where additional stops are needed, or where existing stops require improvements.
- **Facilities and additional infrastructure improvements.** This section explains where new transit facilities, such as transfer centers and satellite baseyards, may be necessary to support the changes listed in the Fixed-Route Operations Plan.
- **Technology.** The technology section touches on technological infrastructure.

VEHICLE FLEET

As noted in Chapter 3, KART currently has 13 vehicles, one of which is used as a support vehicle and is not used in daily operations. Three of KART’s vehicles, the 2010 Arbocs, have reach their Expected Useful Life (EUL). In FY 2021, KART purchased two additional buses to replace the retiring vehicles. These new vehicles are anticipated to be received in late 2022 or early 2023 and will replace the three 2010 Arbocs, brining KART’s vehicle fleet to 11. **Table 7.1** summarizes vehicle fleet needs associated with existing service and the short-term priorities. **Figure 7.1** illustrates recommended bus stop design by stop location.

Table 7.1. Vehicle Fleet Needs

Funding Year	Vehicles Needed	Cost
Existing	• KART currently uses 12 vehicles for their fixed-route service.	N/A
Phase 1 (FY 2022)	• 2 vehicles acquired in 2021 will go into service, replacing the two vehicles that have exceeded their EUL.	N/A
Phase 2 (FY 2023)	• 1 additional vehicle to operate the new orange route. • 1 additional vehicle to replace bus that will reach its EUL.	\$330,000
Phase 3 (FY 2024)	• No additional vehicles required	N/A
Phase 4 (FY 2025)	• 1 additional vehicle to reduce headway on green route to 30-minutes.	\$175,000
Phase 5 (FY 2026)	• No additional vehicles required	N/A

BUS STOPS

New bus stops and stop improvements are important for the success of the Service and Operations Plan (Chapter 6). Bus stops that are well designed and conveniently located help to make transit useful and pleasant. For example, bus shelters provide cover from rain, and signalized crosswalks allow people to reach their stop safely. In places where no stops exist, additional stops can open up transit to new markets.

BUS STOP DESIGN GUIDELINES

Based upon inventory and analysis of existing bus stops and reviews with the KART Technical Advisory Committee and transit staff, eight stop design options are presented to provide KART a range of design options to address the varied conditions and needs of the transit system. The design options also reflect the need to update the branding for the system, including the bus stop signs. **Table 7.2** outlines recommended bus stops designs, full descriptions are available in the Appendix.

Table 7.2. Bus Stop Design Options

Description	Example
-------------	---------

1. New bus stop sign with schedule placard

Every bus stop in the KART system includes a bus stop sign and a schedule placard. The existing bus stop sign is dated and does not make a strong or noticeable impression. The small font size also makes the existing sign difficult to read. Therefore, a rebranded bus stop sign with a schedule placard is recommended. A schedule placard is important, so passengers are aware of the routes and the timing.



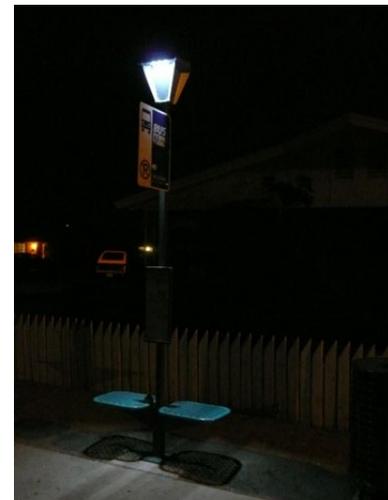
2. Simmeseat, new bus stop sign with schedule placard

The Simmeseat provides a unique solution for bus stops with limited space. This unique product has a couple of seats mounted to the sidewalk that offers flexible comfort for areas with limited right-of-way and integral bus stop sign placement. The options for the Simmeseat also include a version with solar lighting. A well illuminated bus stop area offers a sense of security for riders and makes it easier for bus drivers to spot passengers waiting at the stops. The simmeseat should be placed with a four-foot clear space to meet accessibility guidelines.



3. Simmeseat, new bus stop sign with schedule placard, and boarding pad

Similar to option 2, this Simmeseat option also includes an ADA recommended boarding pad. The American with Disabilities Act accessibility guidelines recommend an 8' x 5' loading and deboarding area. The ADA boarding pad allows for easier boarding and queueing of passengers. A 17' x 9'-2\"



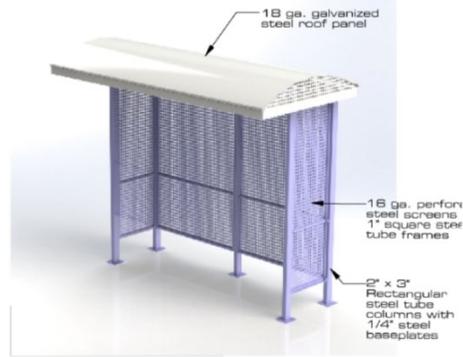
Simmeseat with solar lighting

Table 7.2. Bus Stop Design Options (Continued)

Description	Example
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4. Existing shelter, new bus stop sign with schedule placard, trash receptacle, and boarding pad

Option 4 provides for the continued use of the existing shelter to be accommodated. For existing shelters, an area with a width of 22' and a length of 10' can accommodate an ADA boarding pad and a trash receptacle for passengers to dispose of their waste to prevent littering. It also includes a new bus stop sign with placard schedule.



5. Small shelter, bus stop sign with schedule placard, trash receptacle, boarding pad and bike rack

The small shelters are placed on a 23'x 11' concrete pad that includes a new bus stop sign with a schedule, a trash receptacle, boarding pad and a bike rack. The bike rack offers the option for riders to securely park their bikes if they wish to not take it on the bus or out of the way of other riders. This design also accommodates solar panels and lighting. The roof and vertical panels provide good shade and visibility.



6. Large shelter, bus stop sign with schedule placard, trash receptacle, boarding pad and bike rack

The large shelter offers more room for passengers to be under the shaded area while waiting for the bus. This 26'x16' pad area offers space for a new bus stop sign with schedule placard, boarding area, a trash receptacle and a bike rack. The design also accommodates a solar panel and solar lighting.



7. Two small shelters, new bus stop sign with schedule placard, trash receptacle, boarding, and bike rack (dual route stop)

Option 7 facilitates timed transfers of two routes at a single stop. This option includes two small shelters (See Option 5) that include a new bus stop sign with a schedule placard, a trash receptacle, boarding area, and a bike rack. This option allows for passengers to change routes and provides a 5' wide distance between both buses. This option would require a 4' wide sidewalk providing access to and from each passenger shelter.

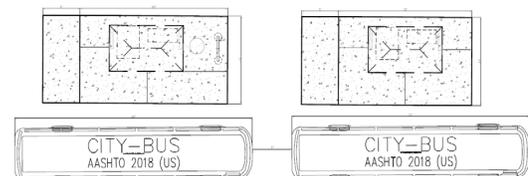
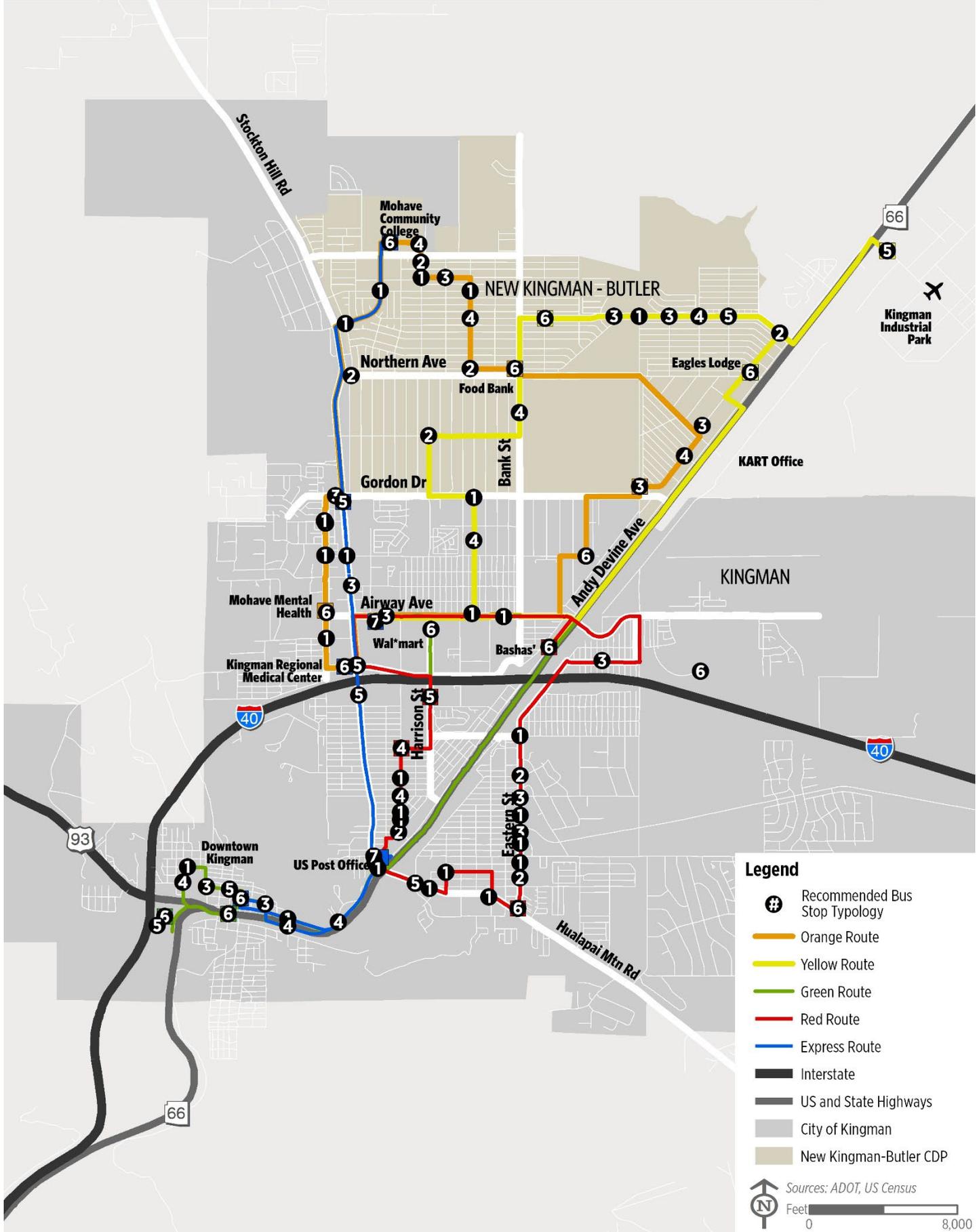


Figure 7.1. Recommended Bus Stop Typology



Bus Stop Spacing and Placement

The distance between stops is a key element in balancing transit access and service efficiency. More closely spaced stops provide customers with more convenient access as they are likely to experience a shorter walk to the nearest bus stop. However, fewer stops result in faster service. Since most riders want service that balances convenience and speed, the number and location of stops is a key component of determining that balance.

Bus stop placement involves a balance of customer safety, accessibility, and operations. All key stops should be fully accessible with a concrete landing and access to a sidewalk or pathway within the next five years. The initial step of determining placement of a new or relocated bus stop involves its proximity to the intersection. Bus stops are generally located at street intersections to maximize pedestrian accessibility from both sides of the street and provide connectivity to intersecting bus routes. The placement of each bus stop can be classified as one of the following:

- Near-side—immediately prior to an intersection
- Far-side—immediately after an intersection
- Mid-block—between two intersections

Far-side stops are typically ideal at signalized intersections and along high-volume arterial streets. Near-side stops are typically preferable along low-volume streets such as neighborhood collector streets to reduce the possibility of stopping twice at an intersection (stop sign and bus stop).

Street and Multimodal Infrastructure Improvements

The addition of landing pads, connecting sidewalks, and amenities such as seating and shelter enhance the customer experience and have the potential to increase ridership. Improving bicycle access to stops also increases catchment areas around transit stops and provides improved mobility. Opportunities for minimizing the cost of bus stop improvements include incorporating them into municipal or private projects construction projects that involve streets and sidewalks. **Figure 7.2** illustrates bus stop locations that currently do not have pedestrian sidewalk access that would benefit from multimodal improvements.

Bus Stop Amenities

Bus stops amenities enhance the customer experience by increasing comfort and perceived safety while reducing perceived waiting times. Along business corridors and in urban/suburban areas, it is more common to provide a shelter, bench, and trash receptacle, along with the bus sign and passenger waiting area. On local streets or in rural areas, bus stops may be simply a bus sign, designated curb space, or widened shoulder.

Adequate street lighting is also an important consideration for designing and locating bus stops. Where possible, transit stops should be located within 30 feet of an overhead light source. Given the abundance of sunlight in Kingman, KART should explore installing solar lighting at bus shelters and potentially at stops without shelters.



Existing bus stop sign

Figure 7.2. Sidewalk Improvement Needs at KART Stops



Table 7.3 summarizes recommended bus stop improvements associated with short-term priorities.

Table 7.3. Bus Stops Improvement Needs

Phase	Quantity	Stop Amenities	Unit Cost	Cost	Description	Total Cost Per Phase
Year 2022	5	New Bus Stop Sign and Schedule Placard	\$400	\$2,000	Install bus stop sign at existing stops that don't have a sign today. See example in Table 7.2, #1	\$2,000
Year 2023	15	New Bus Stop Sign and Schedule Placard	\$400	\$6,000	1) Install bus stop signs at any new stops along realigned Green and Red routes, as needed. See example in Table 7.2, #1 2) Install bus stop sign at existing stops that don't have a sign today. See example in Table 7.2, #1	\$6,000
Year 2024	5	New Bus Stop Sign and Schedule Placard	\$400	\$2,000	Install bus stop sign at existing stops that don't have a sign today. See example in Table 7.2, #1	\$52,000
	5	Install Simmeseat with Boarding Pad and Solar Lighting (with Solar)	\$4,000	\$20,000	Install bus stop sign/simmeseat at moderate to high usage stops. See example in Table 7.2, #3	
	2	Install Small Shelter with Boarding Pad, and Trash Receptacle	\$15,000	\$30,000	Install shelter at high usage stops. See example in Table 7.2, #5	
Year 2025	5	Install Simmeseat with Boarding Pad and Solar Lighting (with Solar)	\$4,000	\$20,000	Install bus stop sign/simmeseat at moderate to high usage stops. See example in Table 7.2, #3	\$50,000
	2	Install Small Shelter with Boarding Pad, and Trash Receptacle	\$15,000	\$30,000	Install shelter at high usage stops. See example in Table 7.2, #5	
Year 2026	5	Install Simmeseat with Boarding Pad and Solar Lighting (with Solar)	\$4,000	\$20,000	Install bus stop sign/simmeseat at moderate to high usage stops. See example in Table 7.2, #3	\$50,000
	2	Install Small Shelter with Boarding Pad, and Trash Receptacle	\$15,000	\$30,000	Install shelter at high usage stops. See example in Table 7.2, #5	

FACILITIES AND ADDITIONAL INFRASTRUCTURE

TRANSIT CENTER

Transit centers can be more than a site to make a transit connection and can be a community asset by accommodating non-transit purposes. Integrating non-transit purposes, such as public meeting space, can help gain community acceptance in the surrounding area. Through initial public outreach and system evaluation, it was clear that KART needs a transit center that can better provide safe and efficient service for its customers. Current operations at the transit center at the Walmart location are cramped and require difficult turning movements for the buses and wheelchair ramps to land in the drive lane. The need for a comfort station was also identified by current bus drivers.

PRELIMINARY TRANSIT CENTER LOCATION IDENTIFICATION

For this plan, the study team reviewed available land to determine the applicability of the site for a transit center. In total, eight sites were identified. **Table 7.4** outlines preliminary transit sites assessed as part of this Plan.

Table 7.4. Preliminary Identified Transit Center Locations

Description	Ownership	Access	Site Conditions
1. Wal-Mart Transit Center at Airway Avenue			
21.56 acres and is currently the Transfer Center and a part of the Walmart parking lot.	Wal-Mart Stores Inc.	The entrance on Airway Avenue is a signalized intersection.	The existing site is the current Transfer Center located in the Walmart parking lot. The site is near other commercial stores and restaurants. Access into the site is good, however onsite circulation is constrained for the four routes using the area every hour. Exiting the site is difficult as buses travel through the parking lot.
2. Kathryn Heidenreich Adult Center at Airway Avenue			
3.28 acres and is currently an adult center on Airway Avenue.	Mohave County	Outbound bus movements need to use the signalized intersection at Airway Avenue west of the property.	The existing site is currently the Kathryn Heidenreich Adult Center. The building is surrounded by surface parking and a drainage canal to the east.
3. Mohave County Undeveloped Parcel on Burbank Street			
24.37 acres parcel that is currently vacant undeveloped land	Mohave County	The intersection of Burbank Street and Airway Avenue would need to be signalized to allow turning movements for the buses.	The existing site is currently vacant. The site is nearby other public facilities and has good transportation access. The design of the site should consider a pedestrian bridge over the drainage canal connecting the commercial area to the transit center, library and adjacent park.
4. Existing KART Facility			
12.05 acres and is currently the home of KART	City of Kingman	This site would require a new traffic signal on Andy Devine to allow left turning buses to egress the site.	The existing site consists of facility buildings, parking and onsite storage uses.
5. Undeveloped Parcel on Harrison Street			
4.77 acres adjacent to the Kingman Academy of Learning Public Charter School	Privately Owned	The location near the charter school is likely introduce congestion to buses using this street during morning and afternoon pick-up and drop-off times.	The existing site is currently vacant.

Table 7.4. Preliminary Identified Transit Center Locations (Continued)

Description	Ownership	Access	Site Conditions
6. Glen Road and Airway Avenue			
3.05 acres and is currently a vacant undeveloped land	Privately Owned	There are four existing vehicular access points to the property. Three of the access points are along Airway Avenue and the fourth access point is on the east side of the property providing access to Van Nuys Road.	The existing site is currently vacant. The site has good transportation access with a signalized intersection at the southwest corner of the site.
7. Fairgrounds Boulevard and Andy Devine Avenue			
5.57 acres and is currently a vacant undeveloped land.	City of Kingman	This site would require a new traffic signal on Andy Devine.	The existing site is currently vacant. The site is nearby other facilities and has good transportation access. The property is an empty parcel without a paved sidewalk on the southwest side of the property.
8. Harrison Street and Beverly Avenue			
8.75 acres and is currently a vacant undeveloped land	Privately Owned	The intersection of Beverly Avenue and Harrison Street is signalized.	The existing site is currently vacant with the exceptions of two billboards which are located at the southwest and southeast corners of the lot.

PRELIMINARY SITE SCREENING

For each site identified, a preliminary evaluation was conducted to better understand the feasibility of a transit center at the site. **Table 7.5** summarizes the results of the evaluation. The evaluation criteria look at key items such as, site ownership, adjacency to the KART system, overall access, and multimodal connectivity. Green colored squares indicate desired attributes, orange indicate moderately desired attributes, and red indicates that this option is the least desirable of conditions. However, a red attribute does not eliminate a site from consideration. It's important to note that results of this analysis are preliminary and require additional review and analysis to determine if the site is feasible for a transit center.

Table 7.5. Initial Site Screening

Criteria	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8
Ownership	Private	County	County	City	Private	Private	City	Private
Condition	Built Out	Occupied	Vacant	Mixed	Vacant	Vacant	Vacant	Vacant
Space Available	Minimal	Shared	Yes	Shared	Yes	Yes	Yes	Yes
Route Adjacency	Four	Four	One	Two	One	Four	Two	One
Adjacent Land Use	Commercial	Commercial	Commercial	Industrial	Residential	Commercial	Park	Commercial
Vehicle Access	Good	Good	Fair	Good	Good	Good	Fair	Good
Ped/Bike	Good	Good	Fair	Poor	Fair	Good	Fair	Fair

Based upon this screening of the attributes, three sites are recommended for further evaluation in transit site selection study and environmental analysis. They are:

- Site 2 - Kathryn Heidenreich Adult Center at Airway Avenue
- Site 3 - Mohave County property east of the Walmart adjacent to the library
- Site 6 - Glen Road and Airway Avenue

TRANSIT CENTER DEVELOPMENT

In order to be eligible for grant funding from the Federal Transit Administration several steps are required to begin the development of a transit center. The first step is to conduct a Transit Center Site Selection and Environmental Analysis Study. Grant funding to conduct this study is available through the federal 5311 program. Grant funding is typically available to cover 80% of the costs for the initial study, facility design, and construction.

The Transit Center Site Selection and Environmental Analysis Study will ultimately:

1. Determine the type of structure that is desired for a new transit center,
2. Examine potential sites for the location of the desired structure,
3. Recommend sites that would be most suitable,
4. Obtain public feedback regarding the preliminary sites,
5. Conduct an environmental assessment to identify fatal flaws, and
6. Present funding options for the construction of a new KART transit center and the other uses to be included in the structure.

Following completion of the federally compliant site selection study, which includes identifying environmental justice impacts, potential mitigation and an inclusive public outreach process, the site must secure National Environmental Policy Act (NEPA) clearance from the Federal Transit Administration (FTA). Following NEPA clearance, the design can advance past the 30% design milestone and proceed into construction. In all, this process can be expected to take 4 to 5 years. Development and construction of a transit center potentially ranges in cost from under \$1,000,000 to several million dollars, depending on the size necessary to accommodate the system served, design features, and site acquisition. Thus, costs can vary widely depending on variables, such as: land costs, size of the facility, transportation modes served, surrounding land uses, level of amenities, access ramps, and parking.

TECHNOLOGY

This section explains four key technologies that KART should consider pursuing to improve the service efficiency, operations, and user experience.

GOOGLE TRANSIT INTEGRATION THROUGH GENERAL TRANSIT FEED SPECIFICATION (GTFS)

The General Transit Feed Specification (GTFS) is a common format for public transportation. It is part of the information infrastructure of most transit agencies and allows platforms like Google Maps to show transit information to users. This in turn allows users to plan transit trips from third-party applications and websites. KART should compile and make its GTFS data available as soon as possible.

ELECTRONIC, TOUCHLESS FARE SYSTEM

Electronic fares or “E-Fares” are gaining in popularity among summarily-size transit systems, particularly after the COVID pandemic. Unfortunately, electronic fare collection infrastructure is typically costly to implement. As such, a web- or smartphone-based payment system may be a relatively easy way to allow riders to pay for transit electronically, without needing expensive devices for reading farecards. Using a web- or smartphone-based pavement system allows residents to purchase tickets without going to a brick-and-mortar vendor, and purchase tickets online without worrying about farecards being mailed.

The simplest implementation of smartphone payment is to allow riders to use their phone as a “flash pass” that is visually validated by the bus operator when they board the bus. This strategy

does not require any additional hardware to be installed and can be implemented with few other hurdles. The primary drawback is that this method requires additional attention of the operator to validate fare media. Benefits of implementing an electronic touchless fare system includes:

- Provides user convenience by easily being able to purchase transit fare on their phone
- Provides a touchless system that avoids paper tickets
- Speeds rider boarding and avoids close contact between the bus driver and rider
- A fare application can incorporate transit system information such as a trip planner

It is recommended that KART conduct a survey of available technology to identify available systems, technologies, and identify supporting infrastructure to integrate a new fare payment system into existing operations. Following the identification of potential systems and system features, Kingman can draft a Request for Proposals to seek qualified vendors and costs for the new system. An example of electronic fare system infrastructure and cost estimates are provided in the Appendix.

MICROTRANSIT

Microtransit operates similar to Transportation Network Companies (TNCs) such as Uber and Lyft. Riders typically request service using a smartphone app. Microtransit can provide door-to-door or curb-to-curb trips within a specified service area. Rides are usually shared with others traveling in the same general direction. Microtransit works best for:

- Serving low-density areas.
- Completing the “first or last mile” of transit trips.
- Riders who prefer not to walk due to uncomfortable weather.
- Providing options for passengers who have limited mobility.

It is recommended that Kingman evaluate the potential for integrating an on-demand service. This on-demand service can be designed in many ways, including different service delivery models and zone designs, including:

- A ride-hail partnership model in which KART provides subsidized rides with ride-hailing companies like Lyft, Uber, or local taxis, with a hybrid hub- and zone-based design which provides trips within a specific geographic zone and to specific identified connection points outside the zone, focused on providing first mile/last mile connections.
- A microtransit turnkey model in which a dedicated transit service provider, like Via, is contracted to provide software, vehicles, and service operations within a specific geographic area, focused on providing community connections anywhere within the zone.

8. MARKETING PLAN

For people to be able to use transit, they must first know that it is there and be able to understand how to use it. A clear and concise Marketing Plan is key for attracting and educating riders about the KART system. Through the analysis of existing assets, underserved markets, and opportunities for improvement, four general goals were developed for marketing the KART system:

1. Build community awareness, a positive image, and support for the public transit system.
2. Utilize a variety of communication and outreach tools to educate the public about the benefits of public transit and to encourage ridership.
3. Offer a user-friendly and easy to understand network of transit services through simplified, yet comprehensive passenger information materials and signage.
4. Develop partnerships for ongoing and future support of the KART system.

MARKETS FOR TRANSIT

Six primary markets are identified as crucial to KART’s efforts to provide information about services, enhance informational tools, and attract new riders. The strategies presented in this plan address many of these markets and serve as a checklist to consider for future marketing efforts. These markets are as follows:



Existing KART Riders. The improvements recommended in this plan will enhance the service for people who depend on transit in Kingman and should encourage more use of the system. Although many existing riders are comfortable with the system and knowledgeable about how it works, even current riders have limited access to information about the system.



Commuters and Employers. Businesses and employees represent an important current and future market for the KART system. The implementation of routes to new business areas and with more efficient and direct routes to employment centers, increased options for commuting or traveling to a business are available. KART is encouraged to meet with major businesses to identify strategies to encourage transit usage, including potential employer-focused incentives.



Students. Young residents represent one of the most promising markets for fixed-route transit. When middle school, high school, and college aged students become comfortable with using KART, it helps to create lifelong transit riders that value the system and will provide support into the future.



Older Adults and People with Disabilities. Many of The KART’s current users are older adults and people with disabilities. Improvements in facilities, bus stop amenities, accessible stop locations and equipment, and passenger information can help better serve these markets.

MARKETING STRATEGIES

This section presents a preliminary marketing approach to educate and promote transit services in the Kingman area. The strategies are based on input from community and stakeholder outreach — as well as general best practices in transit marketing. These strategies include:

- Update KART brand
- Improve rider information
- Develop community support and awareness

FORMALIZE MARKETING ROLES AND RESPONSIBILITIES

Effectively managing a marketing plan requires a person dedicated to bringing marketing strategies to life. As the KART system matures, it is recommended that KART assign responsibility for oversight/management of marketing activities to a single individual or team. This individual would coordinate all marketing and information functions and ensure that all informational materials, outreach presentations, posters, and capital investments have a consistent look and feel and maintain a consistent marketing message. This individual would also be responsible for leading community and business outreach to develop partnership and increase awareness for the KART system.

REFRESH EXISTING KART BRAND

Branding is about creating an image for a product or service—attributes that an individual assigns to the product based on their feeling about the brand. While KART’s existing bus design is vibrant and eye catching, the current KART logo is subdued and outdated. Without a complete rebranding, KART could evaluate different approaches to refreshing and modernizing the transit agency logo. For example, a very simple update might modernize the KART bus from a curved bus to a design that better matches the existing bus. A more comprehensive change might consider different typefaces, the introduction of additional colors, selecting elements of the graphic as a representative icon, or eliminating the bus graphic. A couple of conceptual examples are shown below:



Rebranding Campaign

To build community enthusiasm and excitement, KART may consider a call to the public to help re-brand the system. Through a simple online poll, community members can help develop taglines, pick what logo they prefer, and provide ideas for new designs. The marketing campaign can coincide with route changes or with the development of the KART Transit Center.

RIDER INFORMATION

To make the KART system easy and comfortable for users, it's recommended that KART enhance visibility and awareness of the system through the development of informational materials, online resources, and signage.

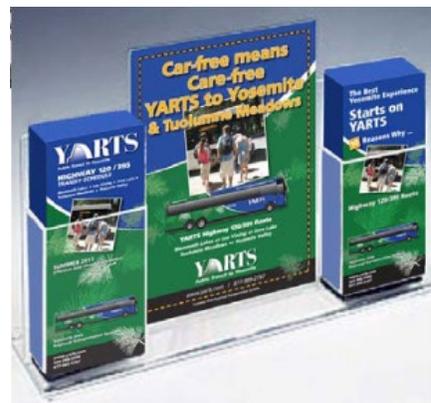
Ride Guides

The current passenger guide is a fantastic resource for users wanting to understand basic route and schedule information for the entire KART system in a single guide. While quite comprehensive, it is difficult for users to clearly see transfer locations between routes. As service routes improvements are implemented, it is recommended that KART's printed passenger guides be updated to clearly identify key stops, transfer locations, and flag stops. The Ride Guide should be available on buses, online, and at key activity centers throughout Kingman.

KART Informational Displays

At major stops, such as visitor centers, senior centers, schools, community service buildings, KART can develop user informational displays that provide attractive and valuable ridership information. These displays can be as simple as countertop display or a wall-mounted informational board. Examples of informational displays are illustrated on the right. Ideally, the displays can include:

- Rider Guide and system map that includes a "You are Here" designation to help orient riders
- Promote the website for additional information, including Google trip planning



Online Resources

The current website is quite comprehensive and well organized. There are a few additions; however, that could dramatically increase the usefulness of the site, including:

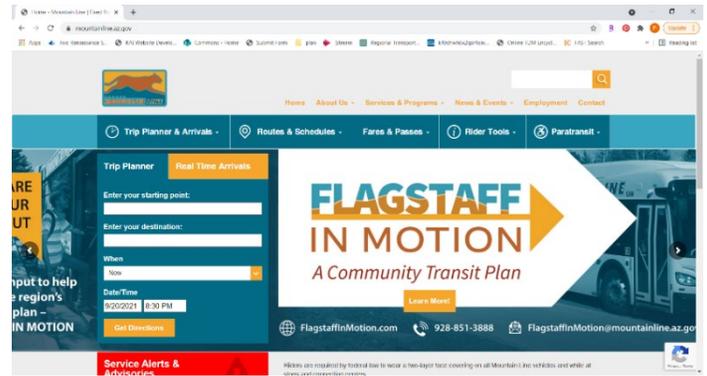
- Integrating the interactive map within the website, instead of having users open a new website frame.
- Incorporating trip planner capabilities that allows users to add "to" and "from" to show the closest stop, route, and travel time.
- Displaying individual routes and schedules that is compatible for computer and smartphone usage. These route maps can be annotated with specific bus stop location information.
- Fare information should be provided in the form of a fare chart or fare calculator.
- Complete Dial-a-Ride information should continue to be available on the website, presented in an easy-to-understand format for each area.
- An automated translation function such as Google Translator can be used to translate all html text into Spanish.



Example of informational displays

Google Transit

Getting driving directions is one of the most common uses of the internet. Virtually anyone with a computer knows how to use Google maps. Having a trip planner based on Google maps provides a way to plan transit trips that is familiar to potential users and overcomes the barrier of having to interpret schedules. In addition to a standalone website, KART should focus on implementing General Transit Feed Specifications (GTFS) data in order to be present on Google Maps, as well as other websites and apps.



Example Mountain Line Transit website with integrated Google Transit's trip planner

Social Media

Social media can be utilized to build awareness of the new system, promote service changes, and to hear from the community their issues and concerns. Developing “How to Use” videos via YouTube and social media outlets is an inexpensive means of educating the public on how to use the new service routes. If social media sites are created, the sites should be promoted on printed guides and bus boards. It is important that a staff member monitor these sites regularly, refresh content, and respond to comments and questions.

Bus Stops

Buses and bus stops are a transit system's most visible marketing tools. They are seen by thousands of people every day and can either be a highly effective awareness-building tool or essentially invisible. When someone is ready to try transit, bus signs lets them know exactly where to catch the bus and provide passenger information including route information and departure times. In conjunction with the rebranding, all bus stop signs should be replaced with a bolder flag sign that is consistent with the new look and that includes additional information. At a minimum, bus stops should include the system logo, universal bus symbol, phone number and website address as in the sample sign on the right. Additionally, the flag sign can be designed to include basic route information. Decals can be added to each sign to show the route(s) serving that stop and their destinations. If space is limited, a QR code can be included to navigate users to the KART website.



Example of bus stop signs

BUILDING COMMUNITY SUPPORT AND AWARENESS

Community Organizations

Many organizations serve as gatekeepers for potential transit riders. These gatekeepers include social service agencies, schools and colleges, youth programs, support organizations for the disabled and medical services. These businesses and agencies, and particularly their front-line employees, are often charged with identifying transportation options for getting their clients to programs, appointments, training, classes, interviews, and jobs. As a result, they have the potential to serve as “salespeople” for public transit. While, KART currently has a network of these connections, it is recommended that KART continue building relationships and providing opportunities to coordinate, including:

- Developing an excel database of organization contacts and e-mail distribution list to easily disseminate important travel updates and information.

- Providing travel training for social service agency on how to use the transit system.
- Conduct outreach presentations to educate organization and their clients on the KART system. These presentations could be held in conjunction with regular meetings (i.e., coordination meetings, lunch, etc.).
- Provide opportunities to integrate community organization in KART events and pilot programs.

Focus on Employers

Building partnerships with employers can be a valuable tool, and many transit agencies work with employers to involve them in the transit outreach process, promoting services via message boards, subsidizing pass sales for employees, etc. It is recommended that the KART system create a marketing and advertisement standards that can allow businesses to financially support the KART system through purchasing:

1. Employee or client tickets;
2. On-bus displays (either inside or outside vehicles) or at bus shelters advertisements; or
3. Rider guide advertisements.

Print Advertisements

The most critical advertising opportunities include (1) any public meetings that would be required prior to the implementation of the recommended service changes, (2) the rollout of service changes, and (3) any service changes implemented at a later date.

SUMMARY OF RECOMMENDATIONS

Table 8.1 outlines a summary of marketing recommendations.

Table 8.1. Marketing Recommendations

Recommendation	What It Is?
Formalize Marketing Role	<ul style="list-style-type: none"> • Dedicate an individual for leading business and community outreach and overseeing branding and marketing strategies.
Refresh KART Brand	<ul style="list-style-type: none"> • Modernize the existing KART logo. As service improvements are implemented, the new KART logo should be integrated.
Provide Greater Rider Information	<ul style="list-style-type: none"> • Update the existing Rider Guide to illustrate new routes, highlighting key and transfer stops. The Rider Guide should be hosted online, available on-board buses, and at information displays at key activity centers in Kingman. • Update KART website to incorporate trip planning tools, fare information, information about the KART app, and easy-to-under route and schedule information. • Implement General Transit Feed Specifications (GTFS) data in order to be present on Google Maps, as well as other websites and apps. • Use social media to quickly disseminate travel alerts and to educate the public on how to use the KART system. • As capital improvements are developed, integrate the rebranded KART logo to create more user-friendly, vibrant bus stop signage. At stops with adequate space, include a system map and schedules for all routes
Build Community Support and Awareness	<ul style="list-style-type: none"> • Develop partnerships with local organizations and schools to promote and educate the public about KART. • Conduct business outreach to financially support KART through ticket purchases, in-kind donations, or purchasing on-board or print advertisements.

9. FINANCIAL PLAN

This chapter presents the financial plan for the recommended five-year short-term service plan. The Plan includes four parts:

- **Revenue Projections.** This section presents the anticipated revenue projections by the type of funding source.
- **Proposed Fare Structure.** This section presents the recommended fare structure details by phase.
- **Operating and Capital Expenditures.** This section summarizes the operating and capital expenditures needed to implement the short-range transit plan.
- **Potential Additional Funding Sources.** This section outlines some funding sources that KART can pursue in addition to the traditional funding streams.

REVENUES PROJECTIONS

Historically, the KART system has relied on 5311 funds, local funding, and fare revenues to operate the transit service. With the assumption that similar funding sources and funding levels will continue to be available in the future, Table 9.1 presents an estimate of revenue projections for each phase of the short-term plan. Based on discussions with ADOT and KART staff, a 6% year-over-year escalation from current operating funding levels was assumed for the 5311 grant program. For local operating funds, a 3% year-over-year escalation from current levels was assumed. The fare structure presented in the next section recommends increasing some fares in Year 2024 and Year 2026. Fare revenue estimates for each phase are based on these increases.

Capital needs vary significantly each year. In the past years, KART has done an excellent job anticipating and planning for capital purchases. It has been successful in obtaining funds needed for most capital purchases including new vehicles. Future year capital revenues presented in **Table 9.1** were determined based on the capital needs outlined in Chapter 8 and the assumption that KART will continue to have success in obtaining needed capital funds by continuing to plan ahead.

Table 9.1. Revenue Projections

Phase	Federal Assistance	Local Funds	Fare Revenues	Total
Operations				
Year 2022	\$477,000	\$231,000	\$180,000	\$888,000
Year 2023	\$506,000	\$238,000	\$180,000	\$924,000
Year 2024	\$537,000	\$246,000	\$186,000	\$969,000
Year 2025	\$570,000	\$254,000	\$186,000	\$1,010,000
Year 2026	\$605,000	\$262,000	\$192,000	\$1,059,000
Capital				
Year 2022	\$1,600	\$400		\$2,000
Year 2023	\$301,800	\$34,200		\$336,000
Year 2024	\$41,600	\$10,400		\$52,000
Year 2025	\$197,500	\$27,500		\$225,000
Year 2026	\$40,000	\$10,000		\$50,000
Total Revenue Projections				
Year 2022	\$478,600	\$231,400	\$180,000	\$890,000
Year 2023	\$807,800	\$272,200	\$180,000	\$1,260,000
Year 2024	\$578,600	\$256,400	\$186,000	\$1,021,000
Year 2025	\$767,500	\$281,500	\$186,000	\$1,235,000
Year 2026	\$645,000	\$272,000	\$192,000	\$1,109,000

FARE STRUCTURE

KART's current fares and fare structure are comparable to agencies of similar size and characteristics. For most rural transit providers, farebox revenues account for a very minor portion of the cost to operating the transit service. KART, however, has an excellent farebox recovery ratio of 20-22% and those revenues account for a significant portion of the operating costs. KART's reasonable fares have remained the same over the past few years and is one of the key factors for its high ridership numbers.

Fare increases may have a negative impact on overall ridership numbers and fare revenues. Hence, only a measured increase in fares is proposed in Phase 3 and Phase 5 for some fare types. The increase amounts to approximately 3% increase from the previous phase. The fare changes are structured in such a way that the fares for monthly and bulk pass categories are kept low in comparison to the single-use passes. This strategy is meant to encourage riders to purchase passes in bulk which results in higher revenues for KART, lower cost for riders, and ensures dependable and higher ridership levels, which all contribute towards a sustainable transit system. Fare value in the red font in **Table 9.2** indicate an increase in fare from the previous year.

Table 9.2. Proposed Fare Structure

Item	Current Fare	Phase 3 (Year 2024)	Phase 5 (Year 2026)
General Public			
One Way Fare	\$1.50	\$1.75	\$2.00
Book of 30 coupons ¹	\$45.00	\$45.00	\$50.00
Day Pass ²	\$5.00	\$5.50	\$6.50
Monthly Pass ^{2, 3}	\$55.00	\$55.00	\$60.00
Curb-to-Curb	\$6.00	\$7.00	\$8.00
Seniors (60+) ⁴			
One Way Fare	\$1.50	\$1.50	\$1.50
Book of 30 coupons ¹	\$45.00	\$45.00	\$45.00
Day Pass ²	\$5.00	\$5.00	\$5.50
Monthly Pass ^{2, 3}	\$45.00	\$45.00	\$50.00
Curb-to-Curb	\$3.00	\$3.50	\$4.00
Veterans ⁴			
One Way Fare	\$1.50	\$1.50	\$1.50
Book of 30 coupons ¹	\$45.00	\$45.00	\$45.00
Day Pass ²	\$5.00	\$5.00	\$5.50
Monthly Pass ^{2, 3}	\$45.00	\$45.00	\$50.00
Curb-to-Curb	\$6.00	\$7.00	\$8.00
People with Disabilities ⁴			
One Way Fare	\$1.50	\$1.50	\$1.50
Book of 30 coupons ¹	\$45.00	\$45.00	\$45.00
Day Pass ²	\$5.00	\$5.00	\$5.50
Monthly Pass ^{2, 3}	\$45.00	\$45.00	\$50.00
Curb-to-Curb	\$3.00	\$3.50	\$4.00
Children (under 10 years old) ⁵			
One Way Fare			
Book of 30 coupons ¹			
Day Pass ²			
Monthly Pass ^{2, 3}			
Curb-to-Curb			

¹ Each coupon valid for one (1) one-way fare; ² Valid for unlimited rides on fixed-route services; ³ Valid within a given calendar month; ⁴ Must provide valid identification; ⁵ Must be accompanied by an adult

OPERATING AND CAPITAL EXPENDITURES

Table 9.3 summarizes the anticipated operating and capital costs needed to operate the transit system for each phase of the short-range transit plan. Costs were primarily derived based on historical operating costs. Table 9.3 also breaks down the costs by cost type and also estimates the local match needed for each phase. Capital costs were estimated based on the needs identified in Chapter 8. A comparison of Table 9.3 and Table 9.1 indicates that additional funding would be needed to implement the short-range transit plan. The next section identifies additional funding avenues that KART could consider to fill the funding gap. The costs in Table 9.3 represent the funds needed to operate the service plan recommendations developed based on public and City staff. The need for local match funds is expected to increase year-over-year to meet the future transit needs. The new transportation bill includes more funding for transit than previous years also includes several additional opportunities for grant funding. If KART plans ahead as it has done in the past, local funding gap needs could be filled with these additional funding sources.

Table 9.3. Estimate of Operating and Capital Expenditures

Phase	Cost Type	Overall Cost	Potential Revenue Source		
			Local Match	Federal Assistance	Fare Revenues
Year 2022	Administration	\$218,500	\$43,700	\$174,800	\$0
	Operations	\$655,500	\$199,710	\$275,790	\$180,000
	Preventative Maintenance	\$76,000	\$15,200	\$60,800	\$0
	Capital (Bus Stop Improvements)	\$2,000	\$400	\$1,600	\$0
	Total	\$952,000	\$259,010	\$512,990	\$180,000
Year 2023	Administration	\$255,530	\$51,106	\$204,424	\$0
	Operations	\$766,590	\$239,648	\$330,942	\$196,000
	Preventative Maintenance	\$88,880	\$17,776	\$71,104	\$0
	Planning	\$150,000	\$30,000	\$120,000	\$0
	Capital (Vehicles)	\$330,000	\$33,000	\$297,000	\$0
	Capital (Bus Stop Improvements)	\$6,000	\$1,200	\$4,800	\$0
Total	\$1,597,000	\$372,730	\$1,028,270	\$196,000	
Year 2024	Administration	\$291,640	\$58,328	\$233,312	\$0
	Operations	\$874,920	\$275,486	\$380,434	\$219,000
	Preventative Maintenance	\$101,440	\$20,288	\$81,152	\$0
	Planning	\$0	\$0	\$0	\$0
	Capital (Bus Stop Improvements)	\$52,000	\$10,400	\$41,600	\$0
	Total	\$1,320,000	\$364,502	\$736,498	\$219,000
Year 2025	Administration	\$355,350	\$71,070	\$284,280	\$0
	Operations	\$1,066,050	\$340,641	\$470,409	\$255,000
	Preventative Maintenance	\$123,600	\$24,720	\$98,880	\$0
	Planning	\$0	\$0	\$0	\$0
	Capital (Vehicles)	\$175,000	\$17,500	\$157,500	\$0
	Capital (Bus Stop Improvements)	\$50,000	\$10,000	\$40,000	\$0
Total	\$1,770,000	\$463,931	\$1,051,069	\$255,000	
Year 2026	Administration	\$365,700	\$73,140	\$292,560	\$0
	Operations	\$1,097,100	\$353,682	\$488,418	\$255,000
	Preventative Maintenance	\$127,200	\$25,440	\$101,760	\$0
	Planning	\$0	\$0	\$0	\$0
	Capital (Bus Stop Improvements)	\$50,000	\$10,000	\$40,000	\$0
	Total	\$1,640,000	\$462,262	\$922,738	\$255,000

POTENTIAL ADDITIONAL FUNDING AND REVENUE SOURCES

Public transit systems are often funded through a combination of programs and revenue sources, such as state grants, passenger fares, advertisement revenues and local contributions; however, most systems typically rely on federal grants to help cover a significant portion of a system capital costs. A summary of relevant local, state and federal funds is provided below.

- **FTA Bus and Bus Facilities (Section 5339)** funding program provides funding for facility construction, renovation, and vehicles. Eligible capital projects include the acquisition of buses for fleet and service expansion, bus maintenance and administrative facilities, transfer facilities, bus malls, transportation centers, intermodal terminals, park-and-ride stations, acquisition of replacement vehicles, bus rebuilds, passenger amenities such as passenger shelters and bus stop signs, accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers, and shop and garage equipment. These funds can also be transferred by the state to supplement urban and rural formula grant programs. Program funding is 80% federally funded and requires a 20% non-federal match. City of Kingman is eligible to apply for this funding and the money could be used for capital purchases, such as buses, to support transit implementation.
- **Infrastructure Investment and Jobs Act:** On July 28, 2021, United States President Joe Biden announced a \$550 billion transportation bill that direct \$550 billion in new spending over five years to modernize roads, bridges and transit systems while expanding high-speed internet systems and the nation's network of electric vehicle charging stations. The legislation includes \$39 billion of new investment to modernize transit and improve accessibility for the elderly and people with disabilities. That is in addition to continuing the existing transit programs for five years as part of surface transportation reauthorization. In total, the new investments and reauthorization provide \$89.9 billion in guaranteed funding for public transit over the next five years. The bill includes:
 - \$1.75 billion dedicated funding for repairing and upgrading aging infrastructure, modernize bus and rail fleets
 - \$8 billion for Capital Investment Grants to bring transit service to new communities.
 - \$5.75 billion to replace thousands of transit vehicles, including buses, with clean, zero emission vehicles, of which 5 percent is dedicated to training the transit workforce to maintain and operate these vehicles.
- **Local Funding Sources:** Potential city-based funding resources include the General Fund, which could provide opportunities for prioritization and allocation of funds to transit projects. The City also currently imposes a transaction privilege (sales) tax on certain business activities, such as hotels, vacation rentals restaurants, bar, retail, and special events. The transaction privilege sales tax may be used for almost any purpose and are paid by residents and visitors making purchases. Depending on the amount of usage by tourists, the City may consider using these funds to help support the transit system.

Nearly 40% of the survey respondents live in unincorporated Mohave County, a clear indication that KART service is utilized by a significant number of County residents. The City should continue conversations with Mohave County to find various ways the County can assist the City meet the local match needs.
- **Community Partnership Opportunities:** A range of funding opportunities exist to contribute the City's local match portion of federal funding requirements. City portions of the local match can include in-kind funds such as utilizing City facilities for storage, maintenance yard usage, staff time to address transit-related activities, and volunteer drivers' time. Examples of potential partnerships include:
 - Marketing and promotional arrangements with the Convention and Visitors Bureau, Chamber of Commerce, local businesses, and hotels to support public awareness of the new service.

- Relationships with local schools, employers, the Hualapai Indian Tribe, and other organizations to coordinate service schedules.
- Agreements with local car dealerships and businesses to help fund vehicles. Cash contributions from local organizations and businesses. In-kind advertising is a great way to promote services locally through a mutually beneficial arrangement with a local business or organization. Example best practices for partnerships include:
 - Exchanging Services: Southern Nevada Transit Coalition trades ad space on their vehicles for the radio station in exchange for radio spots. They also offer ads inside their vehicles to major employers in the area, in return for displaying their brochures at their facility (i.e. at hotel check-in and concierge) or providing cash or in-kind donations.
 - Supporting a Free Day: Durango, Colorado works with local businesses to sponsor a Fare Free Day. The cost to the sponsor is more than the agency's normal fare revenue for the day, and Durango Transit keeps the difference. They do around 20 Free Fare days a year.

10. IMPLEMENTATION PLAN

This section lays out the implementation plan for the recommended service, operational, capital, and marketing changes specified in previous chapters. Implementing the Plan is easier said than done. The timeline below helps to frame phasing for different parts of the plan. It is intended as a rough guideline only. Actual implementation will depend on available resources and opportunities. **Table 10.1** outlines the recommended timeline for implementing the Short and Long-Range Transit Plan.

Table 10.1. Recommended Implementation Timeline

Category	Recommended Action
Phase 1: Year 2022 (October 1, 2021 to September 30, 2022)	
Service and Operations	<ul style="list-style-type: none"> • All Routes: route alignment, stops, headways, and weekday and weekend service spans remain as it is today • February 2022 - complete ADOT FTA Section 5311 Grant application for funding for next 2 years
Capital	<ul style="list-style-type: none"> • 2 vehicles acquired in 2021 will go into service, replacing the two vehicles that have exceeded their EUL • Coordinate with current providers to obtain GTFS data to integrate the KART system into Google Maps • Begin researching potential electronic, touchless fare systems • Coordinate with existing KART App provider to address known issues with the App
Marketing	<ul style="list-style-type: none"> • Formalize the position or duties of business outreach and marketing to a member of the KART staff • Increase social media presence by disseminating travel alerts and to educate the public on how to use the KART system. • Begin business and community organization outreach to begin creating mutually beneficial partnerships
Phase 2: Year 2023 (October 1, 2022 to September 30, 2023)	
Service and Operations	<ul style="list-style-type: none"> • Green Route: implement minor route adjustments (Figure 6.1) • Red Route: implement minor route adjustments (Figure 6.2) • Blue Route: maintain current route alignment and service • Yellow Route: maintain current existing route for 6-months before transitioning into a pilot program that splits the route • Modified Yellow Route Pilot: perform a pilot program of new Yellow Route alignment. Coordinate with Kingman Industrial Park to identify preferred stop location. (Figure 6.4) • Orange Route Pilot: perform a pilot program of new Orange Route alignment (Figure 6.5)
Capital	<ul style="list-style-type: none"> • One additional vehicle needed to operate new Orange Route • One additional vehicle needed to replace bus that will reach it's EUL • October 2022 - submit application to ADOT to complete a Transit Center Site Selection and Environmental Analysis Study • Based on research findings conducted in Phase 1, draft an RFP to seek qualified vendors and integrate system

Table 10.1. Recommended Implementation Timeline (Continued)

Category	Recommended Action
Phase 2: Year 2023 (October 1, 2022 to September 30, 2023)- continued	
Marketing	<ul style="list-style-type: none"> • Conduct a public outreach rebranding campaign. • Update KART website to include information about the Yellow and Orange Route Pilot program. • Update KART website to include an interactive Google Maps Trip Planner, fare purchasing information, and the new KART brand. • Develop temporary displays and handouts of the Yellow and Orange Route Pilot Programs and Transfer Stops begin routes. • Conduct an educational outreach campaign with existing Yellow Route riders to teach them about the pilot programs. • Use social media to quickly disseminate travel alerts and to educate the public on how to use the KART system. • Conduct business outreach to financially support KART through ticket purchases, in-kind donations, or purchasing on-board or print advertisements.
Phase 3: Year 2024 (October 1, 2023 to September 30, 2024)	
Service and Operations	<ul style="list-style-type: none"> • Green Route: Maintain route changes implemented in Phase 2. • Red Route: Maintain route changes implemented in Phase 2. • Blue Route: operate at existing service levels and route. alignment for only the first six months of the year. • Express Route Pilot: perform a pilot program of new Express Route alignment (Figure 6.5). • Yellow Route: If the Modified Yellow Route pilot is successful, modify route, stops, and schedule based on findings from the pilot. • Orange Route: If the Orange Route pilot is successful, modify route, stops, and schedule based on findings from the pilot.
Capital	<ul style="list-style-type: none"> • No additional vehicles required
Marketing	<ul style="list-style-type: none"> • Update KART website to include information about the Express Route Pilot program. • Conduct business outreach to financially support KART through ticket purchases, in-kind donations, or purchasing on-board or print advertisements. • Use social media to quickly disseminate travel alerts and to educate the public on how to use the KART system. • Participate in special events (i.e., free ride days during Kingman 66 Fest or Oktoberfest) to help introduce non-riders to the KART system.

Table 10.1. Recommended Implementation Timeline (Continued)

Category	Recommended Action
Phase 4: Year 2025 (October 1, 2024 to September 30, 2025)	
Service and Operations	<ul style="list-style-type: none"> • Green Route: Reduce headway to 30-minutes during weekdays. • Red Route: Maintain route changes implemented in Phase 2. • Blue Route: If the Express Route pilot is successful, Blue Route ceases operations. • Yellow Route: Maintain route changes implemented in Phase 3. • Orange Route: Maintain route changes implemented in Phase 3. • Express Route: If the Express Route pilot is successful, modify route, stops, and schedule based on findings from the pilot.
Capital	<ul style="list-style-type: none"> • 1 additional vehicle to reduce headway on Green Route to 30-minutes.
Marketing	<ul style="list-style-type: none"> • Update the existing Rider Guide to illustrate new routes, schedules, and key and transfer stops. • Update KART website to include new route information, fare purchasing information, Dial-a-Ride information, and Spanish translation. • Conduct business outreach to financially support KART through ticket purchases, in-kind donations, or purchasing on-board or print advertisements. • Participate in special events (i.e., free ride days during Kingman 66 Fest or Oktoberfest) to help introduce non-riders to the KART system.
Phase 5: Year 2026 (October 1, 2025 to September 30, 2026)	
Service and Operations	<ul style="list-style-type: none"> • Green Route: Maintain route changes implemented in Phase 4. • Red Route: Maintain route changes implemented in Phase 2. • Yellow Route: Maintain route changes implemented in Phase 3. • Orange Route: Maintain route changes implemented in Phase 3. • Express Route: Maintain route changes implemented in Phase 4.
Capital	<ul style="list-style-type: none"> • No additional vehicles required
Marketing	<ul style="list-style-type: none"> • Conduct business outreach to financially support KART through ticket purchases, in-kind donations, or purchasing on-board or print advertisements. • Use social media to quickly disseminate travel alerts and to educate the public on how to use the KART system. • Participate in special events (i.e., free ride days during Kingman 66 Fest or Oktoberfest) to help introduce non-riders to the KART system.