

**Buckeye Transit Study** 

# **On-Demand Service Peer Review**

February 2024



### **Table of Contents**

#### PAGE

1	Introduction	
	Overview	1-1
	On-Demand Transportation	1-1
	Summary of Findings	1-3
2	National Experience	2-1
	Background	2-1
	National Microtransit Experience	2-4
3	Arizona Experience	3-1
	Introduction	3-1
	Service Design	3-1
	Contracting, Costs, and Funding	3-3
	Marketing and Implementation	3-6

#### Appendix A: Peer Review Case Studies

# **Table of Figures**

Figure 1	On-Demand Transit Models: Strengths and Weaknesses	1-2
Figure 2	Timeline to Implementation	1-6
Figure 3	Location of Peer Communities Operating On-Demand Services	2-2
Figure 4	Microtransit National Peer Comparison	2-10
Figure 5	Peer Review Summary: Arizona On-Demand Programs	3-9



# **1 INTRODUCTION**

### **OVERVIEW**

The City of Buckeye (COB) hired Nelson\Nygaard to prepare a transit study to examine and evaluate the need, feasibility, and opportunity for transit services in Buckeye. The study will identify and recommend transit strategies to address needs in the short and longer term.

The City of Buckeye seeks to identify recommendations that are grounded in best practices and take advantage of the lessons learned by other similarly sized and positioned communities. The COB is especially interested in the experience of communities in Maricopa County and Arizona, who have recently implemented on-demand transportation services. The COB also wanted to consider the experience learned from cities, towns, and transit agencies nationally.

This technical memo, the second in a series, reports on the findings from the peer review collected from cities and towns across Maricopa County, the State of Arizona, and the United States. The findings reflect a combination of research and interviews with local and regional cities, including Avondale, Casa Grande, Chandler, Goodyear, Lake Havasu City, Prescott Valley, Sun City, Surprise and Tolleson as well as transit agencies around the country. To the extent possible, Nelson\Nygaard worked to collect the same data across all peer communities.

### **ON-DEMAND TRANSPORTATION**

Offering travel choices, such as public transit, help communities by reducing reliance on private automobiles and creating options for community members unable to drive or without access to a private vehicle. Transit service—together with biking and walking—are also the least expensive way to travel and help reduce reliance on private automobiles. Other community benefits from a diversified transportation network include reduced pollution and congestion.

Fixed-route transit services, like rail and bus, with published schedules and set pick-up and drop-off points, work best in areas with dense development patterns and infrastructure that makes it safe to walk and bike, like sidewalks, crosswalks, and bike lanes. By serving accessible and dense areas, bus and rail services can operate frequently and for long hours of the day, creating a convenient service that is easy to use. In areas with fewer people, less dense development patterns and/or less well-developed pedestrian infrastructure, there is less demand for transit, which means bus and rail operate less frequently and can erode the convenience and effectiveness of service.

Recognizing that lower density communities—including suburban areas—want and need public transportation, transit professionals have experimented with different solutions, including local circulator routes, deviated fixed-routes and dial-a-ride services. The advent of ride-hailing services, like Uber and Lyft, offered new ideas for transit and some public transit



agencies began experimenting with on-demand, shared ride services. The idea being that with new technologies and algorithms, transit agencies could offer the convenience of ondemand service and still be cost-effective.

Over the past several years, two models for operating on-demand transportation as a public service have emerged:

- Direct partnership with ride hailing companies where riders book rides directly with Uber, Lyft and/or local taxicab companies and use coupons or codes to share the cost of the trip with a service sponsor (transit agency, local or regional government). Trips are almost always curb-to-curb. Sponsors set the program rules, but the service is controlled by the ride hailing companies. This means service quality, including attributes like vehicle availability, trip costs, response time, vehicle cleanliness, etc. are controlled by private companies.
- Microtransit, or mobility on-demand services, where riders book a ride with a transportation service using a mobile phone app, computer or by calling. Service may be curb-to-curb or require walking to a virtual stop. Sponsors (transit agencies, city, or regional governments) set program rules and control service quality, including vehicle availability, passenger fares, response time and vehicle cleanliness. However, because sponsors pay for vehicles to be on duty, service is available during set time periods only.

For the purposes of this technical memo, on-demand transportation includes both partnerships with ride hailing services and microtransit programs.

There are advantages and disadvantages associated with each of these service models and in terms of how they compare with fixed-route transit services; Nelson\Nygaard broadly summarized the relative strengths and weaknesses of each service time (see Figure 1). This technical memo explores these advantages and weaknesses together with lessons learned through case study data collect nationally and in Arizona.

	Fixed-Route Transit (including Circulators and Shuttles)	Dial-a-Ride	Microtransit	Partnerships with Ride Hailing Companies
Service Convenience (wait time, ease of use)	Medium	Low	Highest	High
Per Trip Costs	Lowest	Highest	High	Medium
Quality	Medium	Highest	High	Low

#### Figure 1 On-Demand Transit Models: Strengths and Weaknesses

Source: Nelson\Nygaard Consulting Associates



# **SUMMARY OF FINDINGS**

Information on the lessons learned through the peer review is in the following sections, with more detail included in Appendix A of this report. Taken together—and in summary—the key findings from the combined peer review include:

### **Service Goals**

Communities across the United States, and especially in Arizona, are increasingly using transit service models, like microtransit and ride-hailing to offer public transportation in areas that have been hard to serve. For transit agencies, hard to serve areas include corridors and areas where fixed route services are unproductive and provide connections to fixed route services, like park and ride lots, bus stops and train stations. Cities and towns are using on-demand services to provide local connections and access to nearby service centers.

- In Arizona, program sponsors were more likely to be cities and towns, who used ondemand service as a transportation solution when no other service was available, as opposed to replacing unproductive transit services.
- Chandler offers an exception to this finding. Chandler uses on-demand services to augment fixed route service and provide first mile/last mile access to regional bus routes.

Two cities in Arizona had long standing goals to start transit services in their communities and took advantage of COVID relief (CARES Act) funding to implement transit services. The CARES Act funding offered an opportunity to receive federal funds without a local match, which had been a key obstacle to starting service previously. These communities hoped that a pilot program would demonstrate the success and importance of operating transit.

### **Funding and Costs**

Experience suggests that ride hailing subsidies are less expensive as compared with microtransit service. As mentioned, this is because cities can limit how much they subsidize each trip, so costs are a function of demand, or how often people use the subsidy. Sponsors can manage demand by placing limits on how it is used.

- Most ride-hailing subsidies set a fare (say \$2.00) and a maximum subsidy amount (say \$15.00) and ask riders to pay the difference after the subsidy (amount over \$17.00). Fares can vary based on sponsor goals; some peers offer reduced fares based on rider demographics (i.e., age or income) and /or trip purposes (travel to school).
- Valley Metro's RideChoice program, for example, limits use of the program to 20 trips per month. Riders who need to take more, shorter distance trips can also negotiate a mileage-based limitation.



### Contracting

Ride-hailing services have simple contracts with service providers, such as Uber, Lyft, or local taxi companies. These contracts typically confirm how the subsidy will be administered, tracked, and reported. Program sponsors reported that they did not pay an administrative fee to the service providers.

Microtransit contracts are more involved. Findings suggest that on average, most peer agencies contract for at least part of their on-demand services. There are at two primary types of microtransit contracts:

- Turnkey contracts, where a private transportation service provider packages technology (apps, vehicle assignment algorithm and reporting software) and operations (drivers, supervision, vehicles, and vehicle maintenance). Program sponsors are responsible for managing the service delivery and contractor and marketing the service.
- **Technology only** contracts, where a private entity provides technology (apps, vehicle assignment algorithm and reporting software) and the program sponsor operates the service with their own drivers, vehicles, and mechanics. In this case program sponsors are also responsible for managing and marketing the service.

There are variations on each of these models, which were observed in the peer review. For example, the City of Prescott contracts with a technology provider and holds a separate contract with an operator. Other variations include how vehicles are treated; some sponsors own their vehicles; some maintain them, and others provide vehicle storage space.

Peers were empathetic about the importance of contracting with an experienced service provider and a well-established software provider. At least two of the Arizona peers reported changing service providers after starting with a smaller, start-up company.

There are at least two turnkey procurement paths that the City of Buckeye could use to contract for on-demand services:

- We Ride is a collaborative program that includes several of Buckeye's neighbors; the City could join this program, adopt the branding, and tailor program rules to start the service.
- **Valley Metro** is currently in the process of selecting a vendor for its West Valley services; as of March 2024, the contract was not yet final, but Valley Metro intends for it to support a variety of service models, including on-demand programs.

The quality and availability of data about on-demand services is very high, especially for microtransit services. Most of the vendors will provide a dashboard of performance metrics with current data on vehicle locations, ridership and ride sharing.



#### **Service Development and Management**

Experience suggests it can take between one and two years to get an on-demand program started (see Figure 2). Two factors that determine how long it takes to set up a project are:

- **Federal funds:** Using federal funding to support the program means the service will need to adhere to a list of federal certifications and requirements, which are daunting. Most services that used federal funds took at least 12 months to get started.
- The type of service: Setting up a ride-hailing subsidy is a shorter and simpler process that can be achieved in six months or less. This compares with a microtransit program, which depending on the funding source may require at least six and up to 18 months to get started.

Most sponsors assigned a staff person, typically a Transit Manager (or Transit Administrator) to set up and manage the program. Skill sets for a Transit Manager span transit service planning experience, procurement processes and rules, financial management and marketing.

Transit managers also rely on data produced by the trip booking software to manage and understand how their service/systems are working. In most cases, data is available "real time" so managers can track vehicles, understand key performance measures like ridesharing, wait times, wheelchair lift and bike rack use, etc.

Demands on the Transit Managers' time are significant in the early stages of project development, as the sponsor prepares funding, issues and RFP and starts the service. The early months are also intense because of the marketing and promotion required. As the service settles in, demands on staff start to lessen somewhat. In many cases, staff overseeing a mature program have other duties.



#### Figure 2 On-Demand Transit Service: Timeline to Implementation



Make sure people in the community know about the service and understand how to use it. The implementation plan may include setting up virtual bus stops and developing marketing materials.



### Marketing

**Marketing is a fundamental part of all on-demand transit programs.** The importance of marketing reflects the fact that in many cases, especially in Arizona, on-demand transit was a new transit program. This means that communities had to introduce a new service and program where there was not one previously and teach potential riders how to use it.

Program sponsors have effectively marketed their services and increased use of their programs. Some of the main marketing strategies included:

- Offering free fares for the first few months of the pilot.
- Branding vehicles with bright, colorful graphics that are easily identifiable.
- Media coverage, including social media and earned media to get the word out.
- Producing videos, posters, flyers, and branded giveaways (SWAG).
- Parking the vehicle outside destinations in the service area, like shopping centers, schools, medical facilities, libraries, etc. and telling people how to use the service.
- During the early days of the program, drivers take the vehicle to large employers and major destinations to drop off flyers and talk to patrons.

#### **Report Organization**

After this introductory section, the technical memo is organized into two chapters:

- Chapter 2 describes peer reviews collected nationally.
- Chapter 3 outlines experience with on-demand services in Arizona.

Profiles of the individual Arizona case studies are in Appendix A.



# **2 NATIONAL EXPERIENCE**

# BACKGROUND

As mentioned, the advent of ride-hailing services, like Uber and Lyft, offered new ideas for transit and some public transit agencies began experimenting with on-demand, shared ride services. The idea being that with new technologies and algorithms, transit agencies could offer the convenience of on-demand service and still be cost-effective.

Uber first started offering the ride-hailing company in 2009, while Lyft started in 2012. In both cases it took a few years for services to become more widespread, as ride hailing companies worked through regulatory hurdles; by 2014 both services were widely available in most American cites. Demonstrations that included shared ride and public transportation applications started after that, with the earliest pilot projects beginning in 2015.

The early versions of shared ride public transportation services (microtransit) struggled to attract enough riders and effectively group rides so that the cost of service was reasonable. One of the early demonstration projects in Kansas City, where the regional transit agency, Kansas City Area Transportation Authority (KCATA) infamously spent \$1.3 million to provide 1,480 rides resulting in a subsidy of more than \$1,000 per ride<sup>1</sup>. In part because these early pilots struggled to be cost effective, some transit agencies and cities started to look to direct subsidies with ride-hailing providers to offer service.

Despite early challenges, microtransit services started to gain traction in the post-pandemic environment. Adjustments in how the services were designed—combined with technological upgrades—led to some microtransit services showing increased ride sharing, stronger ridership, and more reasonable costs. Many Phase 2 on-demand pilots confirmed that riders liked the service. KCATA for example, conducted a second microtransit pilot in 2019; this project served over 12,800 rides with a subsidy of around \$20 per rider,

This section profiles a handful of cities and transit agencies with longer experience designing and implementing microtransit services with the goal of understanding how experience changes over time. Five communities were included in this analysis: two in Texas (Arlington On-Demand and San Antonio VIA), one in Florida (Pinellas County), one in Minnesota (SouthWest Transit) and one in California (Sunline) (see Figure 3). Summarized findings and more detail on each program can be found in the following section, along with a summary matrix of service elements (Figure 5).

<sup>1</sup> https://www.apta.com/kcata-and-microtransit/



#### Figure 3 Location of Peer Communities Operating On-Demand Services

Source: Nelson\Nygaard Consulting Associates



#### **Summary of Findings**

One of the key differences between the City of Buckeye and early adopters of ride-hailing subsidies and microtransit programs is that most—but not all—early pilots were started by transit agencies, rather than cities and towns. An important difference for transit agencies is their willingness—or need—to experiment due to challenges, such as declining ridership or productivity on some routes and/or acute driver shortages immediately after the pandemic. This perspective means that some agencies were shifting existing resources from one type of underperforming service to a new service model, rather than serving a new market of riders.

Another finding among cities and transit agencies profiled in this peer review is that the sponsors tend to be innovative agencies and organizations generally. Many of the program sponsors have piloted and/or are currently experimenting with other transportation technology, including automated vehicles and different fueling technology.



Despite these differences, there are several important findings and lessons for the City of Buckeye (see also Figure 4):

- In almost every case, on-demand services started as pilot programs. Service sponsors used their pilot to test and evaluate service models and signal to stakeholders and members of the public that the service is a test, which could be changed and/or discontinued.
- In almost every case, on-demand services were adjusted and refined during the pilot period. Adjustments included optimizing service areas to find the right balance of size, capturing a critical mass of riders, and providing access to important destinations.
- On-demand services that were clear about their goals and purpose and designed services around those goals were more likely to attract riders and manage costs. Most program sponsors were also willing and able to adjust their goals as they learned about how people were using their service.
- Microtransit services generally operate as "node-to-node" or virtual stop to virtual stop rather than curb-to-curb services. Asking riders to walk short distances to be picked up helps with ride sharing and managing costs. Ride hailing subsidies, on the other hand, almost always offer curb-to-curb service.
- Fares for microtransit services are relatively high compared with other transit fares. Some transit agencies charge double or even triple the fare of a fixed-route bus fare. Sponsors justify higher fares by higher levels of service.
- Service sponsors use fares to incentivize use of the service by certain riders (veterans, students), times of day (late morning) or destinations (connections to fixed route services). Likewise, some programs charge higher fares for premium services, like trips to the airport.
- Marketing and promotion are a constant theme across all programs. Program sponsors have successfully increased ridership and there is a collective emphasis on educating existing transit riders and finding ways to bring new people to the service.
- On-demand services are popular. The number of repeat riders is high and riders who use them give services high marks/ratings overall.
- Program sponsors have successfully attracted riders to their services.
  - Ride hailing subsidies pay on a per trip basis, so attracting more riders does not directly impact service productivity. Instead, additional riders demonstrate the value of their program.
  - For microtransit services, however, encouraging more people to use the service does increase ride sharing, optimizes the productivity of their vehicles and reduces the cost per trip.
  - On a per ride (or per trip) basis, microtransit costs are high. The most productive systems spend more than \$10 per trip and the range for successful programs were between \$25 and \$35 per trip.



Element	On-Demand (Microtransit)	Ride-Hailing Subsidies
Typical Program Start Up	Pilot / Demonstration	Pilot / Demonstration
Service Area	Travel is restricted to specific zone	Varies – service area / access more likely to be controlled through fares
Service Span (Days/Hours)	Limited to certain days and times. Typically, 12 – 14 hours on weekdays.	Available anytime
Program Administration	Adjust/refine during pilot	Adjust/refine during pilot
Service Design	Virtual stop (or node-to-node)	Door to door
Fares	Same or higher than bus fare	Base fare is same or higher than bus fare with up to amount. Riders are responsible for costs beyond the up to amount.
Incentives	Lower fares for certain groups, destinations, or time of day.	Sometimes lower fares for certain groups or destinations.
Marketing / Promotion	Critical to program success. Marketing is main driver of service cost-effectiveness by increasing ridership.	Critical to program success No bearing on cost-effectiveness because cost per trip is not impacted by increasing ridership.
Public Perception	Popular	Popular
Average Cost per Trip	\$25 - \$35	\$10 (depends on program rules)

Figure 4:	Summary	of National	Experience	with On-D	emand Program	IS
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Source: Nelson\Nygaard Consulting Associates

### NATIONAL MICROTRANSIT EXPERIENCE

As part of the Buckey Transit Study, the team profiled five examples of on-demand services (see Figure 5). These services were selected for a variety of reasons including that they have been operating service for multiple years, have similar operating characteristics as Buckeye (i.e., large service area and low population density) and/or are cities that have been noted or acknowledged as success in transit literature (see Figure 5):

- Arlington On-Demand, Arlington, Texas
- VIA Link, San Antonio, Texas
- PSTA Direct Connect, Pinellas County, Florida
- SouthWest Prime, SouthWest Transit, Eden Prairie, Minnesota
- SunRide, Palm Springs, California



### **Arlington On-Demand**

Arlington Texas is part of the Dallas metropolitan region, located between Dallas and Fort Worth. In the 2022 U.S. Census, there were nearly 400,000 people living in the city. The City of Arlington also provides local public transportation service through their Arlington On-Demand program, an on-demand microtransit service. In addition to the on-demand service, there is a Trinity Railway Express (TRE) station (CentrePoint/DFW Station) located just outside of the city borders. Riders can use this station to get to Fort Worth, Dallas and/or connect to the Dallas Fort Worth Airport.

Arlington's On-Demand service is one of the oldest and largest on-demand services in the country. In 2017, Arlington launched a pilot project with VIA to provide on-demand transit service. The pilot project was designed to evaluate new technology and see if it could help consolidate existing shuttles and services available in the city. The pilot project was funded with roughly \$1 million, using a combination of federal and local funds. In 2018, the pilot renewed the contract and started offering service city-wide. Riders can use it to travel anywhere within the city and to the CentrePoint TRE station.

Arlington's service is still operating in 2024. While the service is still fundamentally the same, some modifications and adjustments include:

- Arlington On-Demand has a larger fleet, which was expanded to maintain a reasonable response time.
- The service includes a smaller scale, shared ride Automated Vehicles (AV) service, which is available in a one-square mile of the city, inclusive of Arlington's downtown core and the University of Texas campus in Arlington.

Lessons and findings from Arlington's experience include:

- Arlington's microtransit service is curb-to-curb so riders must be able to walk one or two blocks to a nearby stop to use the service. Most riders are picked up in less than 15 minutes after they book their trip. Short pick-up times are an important indicator of how convenient and easy the service is to use, which encourages ridership.
- Microtransit demand has grown steadily each year the service became available; as of June 2023, Arlington's On-Demand service had provided 1.6 million rides.
- Fares are distance based, so short trips (less than 1.5 miles) cost \$3.00 and longer trips, over 6 miles, cost \$5.00. Travel to and from the TRE station costs a flat rate of \$3.00 regardless of the distance traveled.
- Arlington On-Demand offers weekly ride passes (up to 4 rides per day for \$25.00 a week) and monthly ride passes that allow up to 4 rides per day and cost \$80 per month. There are also free ride programs for students at the University of Texas Arlington and patients being discharged from the hospital.
- Arlington's microtransit and the AV pilot service both started in 2017, but at much different scales. The AV pilot included one vehicle, added a second in 2018 and by 2021 included a fleet of five AVs. This compares with the on-demand service, which



started with 16 vehicles, expanded to 28 in 2022 and by 2023 include a fleet of 65 vehicles. Microtranist covers an area of roughly 40 square miles.

 Arlington integrated microtransit and AV service into a single service branded as RAPID! (Rideshare, Automation and Payment Integration Demonstration).

### San Antonio VIA Link

San Antonio is one of the largest cities in Texas and the United States. The city has a population of roughly 1.5 million people and the metropolitan area includes 2.6 million. The regional transit service provider, VIA, has a large network of bus services with roughly 94 bus routes, including bus rapid transit (VIA Primo) downtown streetcar, express bus, frequent and local fixed-route bus service.

VIA's funding includes a countywide sales tax, plus additional sales revenues collected in the City of San Antonio. As a result, VIA serves a large and diverse geographic area, that includes dense urban neighborhoods and lower density suburban communities. As part of serving such a large and diverse area, VIA sought alternatives to low frequency, fixed route bus service and set out to pilot on-demand service. The microtransit service, branded as VIA Link, was piloted in a handful of areas that had low density development, bus routes carrying fewer than 15 people per hour and communities with limited access to transit hubs.

The pilot project started with one zone and has since been expanded to include four zones in the urbanized area. The microtransit service proved successful and has also been expanded to additional zones throughout the San Antonio. Notable service characteristics and findings from the peer review include:

- VIA Link started with a desire to serve communities with the understanding that fixed route bus service was not successful. The service grew slowly and used grant funds for pilot programs and services and built from that experience to update the service.
- The clear focus on specific types of communities and having a reference point of lower productivity fixed route bus service means VIA can measure the productivity of VIA Link against other service alternatives.
- The service design intentionally integrates on-demand zones with fixed route services. VIA Link takes people to/from transit stops and centers. Riders can transfer to/from fixed route bus service for free.
- VIA Link carries nearly 5 passengers per hour. The subsidy per ride is about \$7.00.
- Most people using the service are frequent riders; each rider takes an average of 15 rides per month.
- VIA has a turnkey contract with RideCo to operate the service. RideCo uses a variety
  of vendors to fulfill trip needs, including dedicated drivers and non-dedicated
  operators, like Lyft, Uber, and local cab companies. By relying on a combination of
  dedicated and non-dedicated transportation services, RideCo can ensure service is
  available during the promised time periods and manage costs.



### **PSTA Direct Connect**

Pinellas County is located on the west side of Florida and includes the cities of St. Petersburg and Clearwater. Its transit agency, Pinellas Suncoast Transit Authority (PSTA) was one of the first transit agencies to experiment with ride hailing services. PSTA started Direct Connect in 2015 with the goal of replacing under-performing, low frequency bus routes. It was designed as a first mile/last mile service and provided subsidies on Uber and taxi companies for people traveling to or from a set of identified (or "eligible") bus stops.

The first phase of the service-in 2016-supported travel from locations in a specified zone to a location inside a 400-foot radius of a bus stop. The project was complicated for riders to understand and use; in the first six months of the project, only 202 subsidies were issued. In 2017, the service was updated to increase the size of the pickup and drop-off locations. PSTA also spent more on marketing and rider information and used rider information to reshape the program multiple times. These efforts helped increase ridership and in 2018, the program was updated again, so that people could travel from anywhere in PSTA' service area if riders traveled to/from an eligible bus stop.

In 2024, PSTA Direct Connect remains part of the service network. People can use the service on Uber, Lyft or a local taxi company and receive a \$5.00 discount off their trip. Wheelchair users are eligible for \$25 off their trip.

Key lessons from PSTA's experience includes:

- Using pilots to test concepts, adjust and reorganize/restructure as needed. PSTA had the challenge of being one of the first agencies to experiment with this service model and they had the advantage of access to grant funds that allowed them to evaluate and revise concepts.
- PSTA's model transitioned from asking people to pay a fare and then covering the rest of the service cost to offering a flat subsidy for trips.
- PSTA worked with riders throughout the pilot phase, including able-bodied riders and people with disabilities and used this feedback to shape and modify the program.
- Marketing and outreach are critical to attracting riders and growing programs.

#### **SouthWest Prime**

SouthWest Transit (SWT) serves three suburban communities south and west of Minneapolis, Minnesota and provides a handful of commuter express bus routes to major destinations and employment centers (downtown Minneapolis, the University of Minnesota, Normandale Community College, and Best Buy Headquarters). SouthWest Transit started its on-demand microtranist (SW Prime) in 2015.

SW Prime is relevant to Buckeye because it serves one of the largest on-demand transit zones in the United States, covering an area almost 80 square miles. It uses a combination of virtual stops and curb-to-curb service, depending on the location and service types. SW Prime has adapted to changes in the market, including declining ridership during and after



the pandemic and then diversifying travel options to help manage demand. In 2024, SW Prime offers a variety of service types within the brand.

- SW Prime Essential lower cost (\$2.50 one-way) trips to select grocery stores and pharmacies in the SW Prime service area. This service is available between 9 AM and Noon, Mondays through Saturdays.
- SW Prime MD non-emergency medical transportation for people living in SouthWest's service area and traveling to medical facilities in a broader region. Fares are \$5.00 one-way, and a partnership with one of the regional medical facilities pays the cost of a one-way fare (half of a round trip).
- SW Prime Airport allows residents of select communities to book rides to the Minneapolis-St. Paul Airport. The cost of a one-way trip is \$10, or \$30 for between 3 and 5 riders.
- SW Prime Edge brings riders to regional shopping centers outside of SouthWest's service area, such as the Mall of America. One-way trips cost \$5.
- In 2023, SW Transit started offering a partnership with Lyft that let riders book trips directly with Lyft and receive up to \$10 off their trip. This program was started to help manage demand for SW Prime and maintain on-time performance.

SW Prime offers a handful of insights and lessons:

- SWT has been extremely adaptive and responsive to the market and rider needs. It
  offers a diversity of service types and offers different fare structures that allows
  older adults to pay lower fares outside of peak travel times (see SW Prime Essential),
  fare free service to disabled veterans and discounts for riders participating in other
  human and social service programs.
- SW Prime changed its technology provider in 2019 to increase flexibility, responsiveness and ride sharing. With the new technology, SW Prime uses a combination of virtual stops and curb-to-curb service.
- Nearly half (45%) of the riders use the service to get to/from work and 18% reported traveling for social reasons. Other trips are for medical purposes, transit connections and other purposes. Most of the riders (57%) have household incomes of less than \$50,000.

### SunRide

SunLine Transit Agency is the regional transportation provider in Coachella Valley/Greater Palm Spring Area. It serves nine cities in the region, which have a population of about 443,976 people and serves an area of 1,120 square miles. The population density is 396 people per square mile.

SunLine started a pilot microtransit service (SunRide) in two zones and its popularity led to the expansion of service to seven zones around the valley. The service is designed to connect riders to the fixed route network or for travel within the zone. The service is on-



demand, with an approximate wait time of 15 minutes between when the trip is booked, and the vehicle arrives. Riders must walk to a virtual stop to be picked up.

SunLine started SunRide for a variety of reasons, including improving access to their fixed route service, increasing ridership, alleviating driver shortages, and improving the productivity of the system overall. Ridership has grown steadily, increasing from 20 riders in the first month to 450 by the end of 2021. Costs have decreased with increased ridership but remained high by the end of 2022 (\$51.86 per rider).

SunLine views the SunRide as a success—ridership is growing, and users value the service. Their experience suggests the following:

- SunLine considers microtransit as an opportunity to replace poorly performing fixed route services and/or introduce transit to new markets.
- Microtransit zones are reviewed and evaluated frequently as SunLine works to maximize ridership and manage costs. SunLine also changed technology providers to optimize the service and increase ride sharing.
- Fares have increased over time—the pilot started out fare free, increased to \$2.00 for a one-way trip and then increased again to \$3.00 per one way trip. The fares include a free transfer to SunLine's fixed route services. An adult one-way bus fare is \$1.00.
- Marketing efforts are ongoing. SunLine uses a combination of traditional media, social media, and street teams to get the word out.



Buckeye Transit Study

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Figure 5 Microtransit National Peer Comparison

	Buckeye	Arlington Texas	San Antonio Texas (VIA)	Clearwater FL (Pinellas County)	SouthWest Transit Suburban Minneapolis	Palm Springs, CA
Population		394,602	1,472,909	961,739	118,599	443,976
Population Density	Lind	3,961	2,917	1,173	1,320.7	396
Service Name		Arlington On- Demand	VIA Link	PSTA Direct Connect	SW Prime	SunRide
Year Started		2017	2017	2016	2015	2021
Service Design		Citywide Stop to Stop	Travel limited to zones. Stop to Stop	Ride Hailing Subsidy First Mile/Last Mile	Curb-to-Curb.	Travel limited to zones. Stop to Stop
Days/Hours of Service		Weekdays 6 AM to 9 AM Saturdays 9 AM to 9 PM	Daily 5 AM to 10 PM	Daily 5 AM to 12 AM	Weekdays 5:30 AM to 7:00 PM Saturdays 6 AM to 5:30 PM	Weekdays 5:30 AM to 6:30 PM
Response time		12-15 minutes	12 minutes	10-15 minutes	15-30 minutes	15 minutes
Fares		\$3 to \$5 depending on distance	\$1.30 Free transfers to fixed route service	Offers discount of \$5 off trip costs (\$25 for wheelchair users)	\$5.00 for adults with discounts for some riders and times of the day	\$3.00
Fleet size		68 14 WAVs (plus 5 AV with 1 WAV)	13 2 WAVs	N/A	14	N/A
Operating Model		Turnkey	Turnkey	Subsidy	In house	In house
Technology		VIA	RideCo	Uber, Lyft, local taxi companies	Spare	RideCo

Source: US Census, Agency Websites, and online resources



# **3 ARIZONA EXPERIENCE**

### **INTRODUCTION**

In addition to evaluating national on-demand programs, the Nelson\Nygaard team examined on-demand services in Arizona. The team evaluated on-demand services in Arizona to capture similarities in operating environments, funding, and governance structures. The Arizona experience is notable because:

- 1. There has been a proliferation of on-demand service programs in Arizona generally and specifically in Maricopa County.
- 2. Most programs and services are initiated and managed by cities and towns. This is consistent with Arizona's governance structure, which can be characterized as a "home rule" state where more authority, autonomy and responsibility is given to cities and towns.
- 3. On-demand programs and services are popular. Riders like them and elected officials like them. If the City of Buckey wants to start a pilot program, they should be prepared to maintain the program for an extended length of time and likely will face pressure to expand the program.

Unlike the previous chapter that summarized peer data by each location, this chapter is organized topically and summarizes the experience of Arizona communities according to three aspects of service development:

- Service design includes an overview of service goals, desired markets, and the way the program is intended to work.
- Contracting, costs and funding provides insights into the financial aspects of the service, including how much the city or county pays to sponsor the program, the actual costs to deliver the service and where funding comes from.
- Marketing, operations, and implementation shares a description of how the service is implemented and operated as well as strategies used (if any) to increase ridership.

A final section summarizes key lessons learned. Details on the individual programs and services—and their implications for the City of Buckeye—are available in Appendix A.

### **SERVICE DESIGN**

As discussed, on-demand transit services include both ride-hailing subsidies and microtransit services. Communities implementing ride-hailing services had different service designs as compared with microtransit. These differences reflect the way services work—most ride-hailing programs, for example, are available all day every day, while microtransit services were designed to be available on specific days during certain times of the day. Despite differences, there are commonalities in the way on-demand services in Arizona are designed:



- In almost every case, cities started with a pilot project. By starting as a pilot, communities maintain flexibility to adapt and modify the service or potentially not continuing operating it.
- Both ride-hailing and microtransit programs were designed to serve a zone within (or subset of) the city's boundaries. Cities designated zones based on the need and demand for transportation services; they were also designed to be manageable and affordable.
- Some services, including Tolleson's ride hailing subsidy and the WeRide program allow for limited connections to destinations outside the sponsor's borders. In most cases, cities and towns allow travel outside of the municipal borders to reach important regional destinations like shopping centers, community colleges and medical facilities.

#### **Microtransit and Ride Hailing Subsidies**

Of the two main types of on-demand service, **more Arizona communities are implementing microtransit services than ride-hailing services**. Microtransit is more complicated to implement, and more expensive to operate than ride-hailing subsidies. Several communities still preferred this service model because:

- Several cities said that microtransit seems more like public transportation than ridehailing subsidies. It is a shared ride model and offers an alternative to driving alone, rather than single trips.
- Cities have limited control over ride hailing services, the most important of which is if drivers and vehicles will be available when riders need to travel. Cities offering subsidies, however, did not report problems with people trying to book trips or not being able to find a vehicle, even during times of peak demand.
- With ride-hailing subsidies, some service elements—like the price of the trip, quality
  of driver and accessibility of vehicle—are outside of a city's purview.

#### Curb-to-Curb vs. Virtual Stops

There are two distinct ways to offer on-demand service: curb-to-curb, and nearest intersection (or virtual stops). Most public transportation services, including on-demand services, do not advertise service as "door-to-door" because of liability issues associated with traveling on people's driveways. Curb-to-curb services pick riders up and drop off riders in front of their destination. This type of service is more convenient for riders because it is simpler and walking distances are shorter, but it also increases trip times, which reduces the productivity and efficiency of the service.

Most Arizona microtransit services are designed with the nearest intersection service model and use a system of "virtual stops," which are programmed into the software and let people know where to catch their ride. This service model helps increase ride sharing and creates a more efficient network by limiting how far vehicles travel to pick someone up or drop them off. In most cases, people walk less than ¼ of a mile to or from the virtual stop.



Several cities and towns said riders need to be taught how to use virtual stops, but once they understand the system are comfortable with it.

- Cities and towns that have a lot of master planned developments like virtual stops because serving the same area with door-to-door service can eat up valuable revenue time for a vehicle and driver.
- Another lesson learned for serving master planned developments is setting virtual stops at community mailboxes. Cities reported that the mailboxes are good pick up and drop off spots because people know where they are, they are used to walking to/from them, locations are safe and often lit. Community mailboxes also reduce conflicts with neighbors because microtransit vehicle are not stagged in front of anyone's driveway or property.

# **CONTRACTING, COSTS, AND FUNDING**

#### Contracting

As part of starting their services, Arizona cities and towns released Requests for Proposals (RFPs) (or Services) and received bids from private companies interested in providing the requested services. In general, the contracting models are different when contracting for ride hailing subsidies as compared to microtransit service. Ride-hailing programs generally offer a discount on a service already being provided, while microtransit contracts set up the terms and fees associated with operating and administering a service program.

Most of the cities and towns interviewed as part of this analysis were on the early side of implementing on-demand programs. This meant that they were writing contracts without many examples and considering different service options without the benefit of regional experience. At the time this report was written (2024), there are at least two ways that the City of Buckeye could use existing microtransit service contracts available through the WeRide program or Valley Metro, such as joining the WeRide consortium of communities or using the Valley Metro contract to procure services. It is also likely that Buckeye could contract with Uber and Lyft using Tolleson's contract.

#### **Ride-Hailing Contracts**

Ride-hailing subsidies offer discounts to use a service, which makes contracting simple and more about organizing a method to administer the discounts in a way that aligns with the city's goals. The City of Tolleson, for example, designed their program with a handful of rules, e.g., people can travel anywhere within the city plus some 40 locations outside the city and travel to/from city services is free; these rules are part of the service contract. Tolleson also noted that neither Uber nor Lyft charge an administrative fee for the program.

#### **Microtransit Contracts**

Microtransit contracts are typically organized in one of two ways:



- Turnkey contracts provide the full suite of services associated with microtransit, including consumer facing apps, software to assign trips, drivers, driver training and supervision, plus branding and marketing. Some cities include vehicles and vehicle maintenance in their contracts, while others include vehicles only (and maintenance the vehicles themselves) or vehicle maintenance only (and own the vehicles). Other cities provide fuel and vehicle storage. The turnkey model is more common among the peers interviewed for this study.
- Technology only contracts are when private companies provide the consumer facing app and software to assign trips and the rest of the operations (drivers, driver training and supervision, vehicles, vehicle maintenance, etc.) services are provided by city employees. This model is less common in Arizona and was only observed in Lake Havasu City.

There are advantages and disadvantages with each service model. Turnkey operations are faster to start up and easier to dismantle, while cities that operate service directly say city employees provide more quality control and responsiveness.

### **Service Costs**

Ride hailing services, as mentioned, are significantly less expensive to operate as compared with microtransit service. Costs are reimbursed based on trips taken, so the program sponsor only pays when the program is used. Costs are also controlled by limiting the amount of the subsidy to a specific amount, say \$10 or \$15 per ride. The City of Tolleson, which covers small geographic area of about six square miles plus connections to 40 destinations outside of the city, set a budget of approximately \$140,00 to \$165,000 for the service and expects to provide 10,000 riders.

Microtransit services are based on operating hours, so that sponsors pay for hours that vehicles are in service, or revenue vehicle hours. The number of hours of service are determined by the days of the week and hours of the day when the service is available. Costs are also influenced by the size of the microtransit zone (where people are allowed to travel) and the response time (the amount of time riders can expect to wait for a ride). If a program sponsor wants to serve a large area and offer short response times, then more vehicles must be deployed, which increases the revenue vehicle hours. Conversely, smaller areas and longer response times mean fewer vehicles can cover the area. The City of Surprise, for example, offers microtransit service on weekdays, in a zone that is nine square miles; people can expect a ride in about 20–30 minutes. Annual operating costs for this level of service are about \$700,000 and will provide about 17,000 trips.

#### **Managing Costs**

Most of the peers interviewed as part of this study had plans to expand and increase service, but in all cases, they were mindful of the cost of service. Given most of the Arizona examples are relatively new services, they were mostly interested in increasing ridership. Mindful of the costs of service, most could also identify strategies that they could use to manage costs:



- Limiting the availability of service, including by drawing smaller or more contained zones and limiting or controlling the days and hours service is available. While both strategies help manage costs, they also limit the usefulness of the service.
- Using fares and fare discounts to encourage use of the program by certain types of people, for certain types of trips and/or to increase use of the service at certain times of day. The peer agencies offer a range of different incentives and disincentives to encourage or discourage use of the program examples include:
  - Free fares for travel to/from city facilities (senior centers, libraries, courts, etc.).
  - Free fares for city employees traveling to/from work.
  - Discounts or free fares for youths, people aged 65 or more, veterans and/or people with disabilities.
  - Time of day discounts to encourage riders during slower times when the system has capacity.
  - Bulk discounts to organizations and institutions that purchase rides for their clients, like community colleges or human service organizations.

#### Funding

There are three primary sources of funding used to support on-demand services in Arizona: grants, federal (FTA) programs and local funds, including local sales tax revenues and/or general revenue funds.

- Grant programs are advantageous because the risk is absorbed by an external party
  that supports the project during a demonstration period. Among the peers, Chandler
  and Sun City used grant funding to start their on-demand program. More grant funds
  tend to be available to test new ideas or ways of providing service. For example, a
  service that operated with automated vehicle technology or electric vehicles is more
  likely to attract grant funds. Grant funds typically require local entities to provide
  funds to match the grant resources.
- Federal grants, typically available through the FTA, are available to support transit services in the Phoenix metropolitan area. There are rules and regulations associated with using FTA funds and while complicated, most cities and towns are willing to work through the requirements to access funding. In nearly every case, FTA programs require local entities to provide funds to match federal grants. Some of the major federal grant programs that <u>may</u> be available to the City of Buckeye include<sup>2</sup>:
  - Federal Transit Administration (FTA) Section 5307 Urbanized Area Formula Grant funds. The Avondale-Goodyear urbanized area was apportioned \$4.4 million in FY23. A portion of those funds could be made available to the City of Buckeye.

<sup>&</sup>lt;sup>2</sup> A full funding analysis will be prepared as part of this project after transit service options have been identified and prioritized.



- FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities provides funding to meet the transportation needs of older adults and people with disabilities.
- FTA Section 5339 Grants for Buses and Bus Facilities Program funds the purchase of vehicles to support transit services.
- FTA Mobility Access and Transportation Insecurity: Creating Links to Opportunity Research and Demonstration Programs is a competitive grant program to improve access to transportation, especially in areas that lack efficient and convenient options.
- Local sales taxes are available to support transportation investments in some communities and other cities use general funds to support their on-demand programs. Local funds are often used to match grant funds.

Fares do earn revenue that support service operations, but typically account for between 5% and 10% of service costs.

Some program sponsors are looking to partner with private employers and public organizations to help support services, often in exchange for free or discounted service.

# MARKETING AND IMPLEMENTATION

### Marketing

**Marketing is a fundamental part of all on-demand transit programs.** The importance of marketing reflects the fact that in many cases, especially in Arizona, on-demand transit started as a new transit program. This means that communities had to introduce a new service and program where there was not one previously and teach them how to use it.

Agencies and organizations leading on-demand transit programs have been able to market their services and increase use of the program. Some of the main marketing strategies included:

- Offering free fares for the first few months of the pilot.
- Branding vehicles with bright, colorful graphics that are easily identifiable.
- Media coverage, including social media and earned media to get the word out.
- Putting a big button on the vehicle that says "rides are only \$2.
- Producing videos, posters, flyers, and branded giveaways (SWAG).
- Parking the vehicle outside destinations in the service area, like shopping centers, schools, medical facilities, libraries, etc. and telling people how to use the service.
- During the early days of the program, drivers take the vehicle to large employers and major destinations to drop off flyers and talk to patrons.



#### **Implementation Details**

There was a fair amount of consistency in how services are designed from the rider's perspective:

- A rider books a trip—either using an app (mobile phone or computer) or by calling.
- Once a rider books a trip, the app or person on the phone will assign an estimated time of arrival (or pickup window) for each trip. Notifications are sent out 5 minutes before the pickup window. Vehicles can be tracked in the app.
- Drivers are told to wait between 3 and 5 minutes for the rider. After this window (3 to 5 minutes), if the rider does not show up, the vehicle will move on.
- A portion, or in some cases all vehicles are ADA accessible. No additional accessible transportation is offered.
- Drivers will help some riders with disabilities upon request. Assistance includes guiding customers with visual impairments and operating the vehicle ramp and secure wheelchairs or scooters.
- Marketing materials, technology (apps) and customer service/dispatchers are bilingual, at a minimum.
- Other types of assistance (unlocking a private residence, waiting with a customer at their destination, handing service animals or making unscheduled stops) is not permitted.
- Riders can book a seat in the vehicle as well as a space on the bike rack.
- Riders are permitted to bring grocery bags into the vehicle but are limited to the number of bags they can carry in a single trip. Drivers are not permitted to assist in carrying items on or off the vans.
- Riders are allowed to schedule "subscription" trips (recurring trips) for up to two weeks in advance.
- Riders can rate their drivers.

### **Timeline to Implementation**

Arizona cities and towns included in the peer review spent between 12 and 24 months getting a program up and running (see Figure 6). The longest part of the implementation timeframe is securing funds, especially federal funds. Joining an existing contract that may be available through WeRide or Valley Metro will shorten the timeframe somewhat by between three and six months (estimated).







The implementation plan may include setting up virtual bus stops and developing marketing materials.



Peer	Service Type/ Design	Implementation Timeframe	Monthly Ridership	Cost per Trip	Annual Costs	City Resources
Avondale: WeRide	Microtranist	18 months	5,388 (December 2023)	\$21.81	Year 1: \$800,000 Year 2: \$1,750,000	Transit Manager and marketing support
Casa Grande Casa Grande LINK	Microtransit	20 months	2,500 (January 2024)	\$24 - \$28	Year 1: \$1,000,000 Year 2: \$1,100,000	Transit Manager
Chandler: Chandler Flex	Microtransit Ride Hailing Subsidy	N/A	MT RH -	\$25.00 - \$30.00	MT Year 1: \$1.2 million RH - \$60,000/year	Transit Manager and Intern
Goodyear WeRide	Microtransit	18-20 months	3,219 (December 2023)	\$36.16	Year 1: \$813,465	Transit Manager and marketing support
Lake Havasu City	Microtransit	12 months	N/A	\$10.00	\$650,000	Service is provided in-house
Prescott Valley YavaLine	Microtransit	16 months	2,400 (December 2023)	\$44.89	Year 1: \$800,000 Year 2: \$1,000,000	Transit Manager (paid with grant funds)
Sun City	AV Microtransit Limited Service	Testing for 9 months	77 (December 2023)	N/A	N/A	Limited
Surprise WeRide	Microtransit	9 months	2,229 (December 2023)	\$33.44	Year 1: \$700,000 Year 2: \$700,000	Transit Manager and marketing support
Tolleson	Ride Hailing Subsidy	12 months	1,400 (January 2024)	\$15.00	Year 1: 106,000 Year 2: 250,000	Transit Manager

#### Figure 7 Peer Review Summary: Arizona On-Demand Programs

Source: Nelson\Nygaard Consulting Associates



# **APPENDIX A: ARIZONA CASE STUDIES**





# AVONDALE

#### Summary

Avondale initiated a microtransit pilot project in October 2022. The service, branded as WeRide, was started in the northern part of central Avondale. Designed to operate alongside Avondale's Zoom shuttle, WeRide's ridership growth eventually led to the discontinuation of Zoom service. Avondale subsequently expanded the WeRide zone to encompass areas north and south of I-10.

Ridership has grown steadily, especially after the services expanded to the south zone. This corresponds with a decrease in the cost per ride (See Figure 1). Currently, funding for Avondale's WeRide program comes from FTA grants and a portion of the city's halfcent sales tax allocated for infrastructure support.



Figure 1 WeRide (Avondale) Ridership and Cost per Trip (October 2022 – December 2023)

Source: Nelson\Nygaard adapted from City of Avondale data



#### Figure 2 Avondale WeRide

Service Characteristics	Avondale WeRide	
Service Name	WeRide	
Service Area	Avondale North Zone (started in October 2022) Avondale South Zone (started in October 2023)	
Service Type	On-demand microtransit uses virtual stops	
Response Time	se Time 20 minutes	
Service Hours	7 AM to 7 PM Weekdays only	
Eligibility	General Public	
Fare	Adult one way fare: \$2.00 Reduced fare: \$1.00 (people aged 60+, veterans and people with disabilities)	
	University Pass program with Estrella Mountain Community College, Franklin Pierce University and Ottawa University. People with a valid student ID ride for \$1.00	
	Children 5 year and under ride for free	
Fare Payment	Credit card (via a rider's WeRide account) Cash (exact change paid to driver when board the vehicle)	
Vehicle Types	Fully accessible Chrysler Voyagers and ProMasters	
Fleet Size	10	
Contract	RideCo: software, mobile app, and data tracking TransDev: operations (drivers, fuel, and vehicle maintenance)	
Annual Budget	Year 1: \$794,732(October 2022 – September 2023) Year 2: \$1,750,000 (budgeted, two zones) Operations, maintenance, technology, fuel, labor, and administration	
Ridership	Year 1: 15,424 (October 2022 to September 2023) Year 2: 66,852 (Estimated based on current trends and two zones)	
Cost per Rider	Year 1: \$51.53 Year 2: \$27.51 (Estimated)	



### **Service Overview**

A variety of factors encouraged Avondale to consider microtransit, including the Avondale Goodyear Transit Study and low ridership on their local circulator service, the Zoom.

Prior to starting the WeRide service, Avondale was served by a local circulator, operated by Valley Metro, and branded as "Zoom" which provided local connections throughout much of the city, including connections to Valley Metro services. Prior to COVID, the Zoom service carried about 20,000 riders per month, or about 240,000 riders per year.

When the WeRide pilot started, Avondale reduced the scope of Zoom service so that it would operate in the southern part of Avondale only. The southern part of the community was also where Zoom ridership was highest. The WeRide zone was implemented in the northern part of the city.

Following a year of successful microtransit experience, Avondale opted to discontinue Zoom service and expand the WeRide zone to include portions of Avondale north and south of I-10.

#### WeRide Partnership

Avondale partnered with Goodyear to offer a combined on-demand service named WeRide, with Avondale holding the contract. Each WeRide partner controls its individual service, within the shared developed operating guidelines.

- Each city has its own supervisor who provides daily reports.
- They also have their own dashboard that provides minute-by-minute updates.
- Monthly meetings are held to discuss service operations, performance metrics, and future initiatives.

A key aspect of the WeRide service is the use of virtual stops, requiring passengers to walk to designated locations. This approach reflects the community's character, with many master-planned communities featuring perimeter walls that pose challenges for fixed-route services to access residents. While door-to-door service would be ideal, it presents logistical difficulties. Virtual stops, situated primarily at mailboxes for pickups and ADA parking spaces near destinations for drop-offs, strike a balance between convenience and feasibility.

- Avondale believes they could potentially increase the number of passengers per vehicle hour by reducing the number of virtual stops and encouraging slightly longer walks. However, prioritizing rider comfort and safety in the Arizona heat outweighs potential efficiency gains.



#### Background

Avondale is a city in central Maricopa County, situated east of Buckeye and Goodyear, with a population of nearly 92,000. The city has a land area of 47.3 square miles and a population density of 1,889.6 people per square mile. Median household income is \$74,496<sup>1</sup>.

#### Service Development

The final month of Zoom service (October 2023) saw approximately 3,500 riders per month on weekdays. In November 2023, WeRide carried 5,800 riders in the same service area, representing a ridership increase of 60%. However, service differences existed between Zoom and WeRide's:

- Zoom operated on Saturdays and Sundays, WeRide currently does not.
- Zoom offered earlier and ended later (5:48 AM to 8:18 PM), especially on weekdays.
- Zoom provided 30-minute frequency for most of the day, with slightly more frequent service during peak periods.

WeRide ridership data suggests:

- Youth/students comprise about 24% of all riders.
- ADA rides account for around 9%.
- Older adults aged 60 years and above or Veterans make up 18% of riders.
- The remaining ridership (41%) is public.
- Most common destinations are EMCC, shopping (Walmart, Fry's Target, and Village Inn).

WeRide is fully accessible, but it's not an ADA service. Goodyear funds RideChoice service for residents and ADA Paratransit. Both services allow riders to call for a pickup at any time, they don't have to share a ride and can take up to 20 trips per month (with some eligible for additional trips). The fare is \$8 for the first 8 miles, and \$2.00 for each additional mile.

The City of Avondale continues to offer and pay for RideChoice service, billed by Valley Metro on a per-trip basis. Since launching WeRide, Avondale has observed a decrease in RideChoice costs. This is partly due to WeRide's lower fare (\$2 for a round trip for

<sup>&</sup>lt;sup>1</sup> U.S. Census, 2022.

individuals eligible for RideChoice) compared to RideChoice's \$6 fare for the same trip. For longer and out of zone trips, however, people must use RideChoice.

### **Noteworthy and Lessons Learned**

#### Elected officials are responding positively to WeRide.

#### Avondale stressed the importance of marketing to build ridership.

The data available through the software is valuable. Avondale valued the ability to watch and track ridership and adjust as needed. For example, during the first year, Avondale expanded the WeRide zone slightly to include Walmart, which led to a ridership boost.

For FTA funding, **Avondale is considered as an urbanized area (West Phoenix).** This means they are eligible for funding through the FTA 5307 Urbanized Area Formula Grants but must follow federal rules for spending on capital and operating expenditures. They aim to use the capital cost of contracting to get a higher matching amount.

**WeRide is satisfied with their contract with RideCo and TransDev.** This is because drivers are meeting federal certifications and requirements which can be challenging, especially for a start-up service. As there's no established checklist, and navigating permissible practices requires significant effort and education.

Vehicles were procured through the contract with TransDev. Avondale opted to exclude vehicle maintenance from the hourly cost due to its high initial price, choosing to pay for maintenance separately. The city expects that their maintenance costs will likely increase as vehicle warranties expired. The cost per hour of service will likely increase slightly as vehicle maintenance costs increase.

### **Service Details**

- Trips can be booked by using the app or calling a phone number.
- Service is not door-to-door.
- Riders are directed to "virtual stops" a short walk from their origin. When a rider books their trip, the app (or call center), they are directed to the stop location.
- Trips are booked within a 10-minute window and as the vehicle is closer to the pickup time, riders get a more precise ETA. Updates are sent by text and riders can track the vehicle in their app.
- Drivers will wait up to 2 minutes for riders before proceeding to the next pickup.
- Riders can bring one piece of luggage or up to 3 grocery bags that fit in the vehicle without obstructing another seat.
- Drivers undergo background checks, including drug and alcohol screening. Cameras are onboard for the safety of both drivers and passengers.



- Late cancellations (within 4 hours of pickup) and no-shows still incur a fare.
- Riders have the option to rate their drivers.



# **CASA GRANDE**

#### Summary

The City of Casa Grande started a microtransit pilot project, branded as Casa Grande LINK, in October 2023. After a few months of slow ridership, demand has increased steadily. After four months of service (in February 2024), LINK provided its 10,000<sup>th</sup> trip.

LINK is funded with federal COVID relief funding (CARES ACT), which is expected to last two and a half years, after which the city will transition to a combination of federal and local funds.

Service Characteristics	Casa Grande LINK
Service Name	Casa Grande LINK
Service Area	6 square miles
Population Density	484 people per square mile (2020)
Service Type	Microtransit with virtual stops
Response Time	Varies
Service Hours	Weekdays
	7 AM to 7 PM
Eligibility	No restrictions
Fare	Free through March 2024
Fare Payment	TBD
Vehicle Types	Varies
Fleet Size	4 – 3 in service plus one spare
Contract	Turnkey (RTW is operator, RideCo is software)
Annual Budget	\$1 million per year
Ridership	Hit 10,000 rides on February 13, 2024
Cost per Rider	\$24 - \$28 per trip (estimated)

#### Figure 1 Casa Grande LINK



#### **Service Overview**

Casa Grande started operating microtransit service in October 2023. The timeline for service development includes:

2019	Transit Development Plan that recommended fixed route options and an all-voucher alternative.
2021	Five-Year Transit Implementation Plan to create a strategy and approach for microtransit service.
2021	Use Five-Year Transit Implementation Plan to secure federal funds (CARES Act funding), prepare a Title VI plan and maneuver through federal process.
2022	City Council accepted the federal funds in January.
	Transit Manager hired in February.
2023	Issue RFP for Turnkey Microtransit Services in April.
	Service began operation in October.

While the City of Casa Grande, as an urbanized area, has been eligible for FTA Section 5307 Urban Formula Area Grants, prior to the LINK service they did not utilize these resources due to the requirement for local matching funds. However, during COVID, Casa Grande was eligible for \$2.4 million in COVID Relief funding for transit service. This funding is unique because it does not require local matching funds. The availability of these funds, combined with a recent transit plan recommending on-demand service, created an opportunity for Casa Grande to start the LINK service.

The city estimates that this funding is enough to operate the service for 2.5 years. After that, funding will transition to a combination of FTA Section 5307 and city general funds. The City of Casa Grande covers the Transit Manager's salary.

#### Background

The City of Casa Grande is located in Pinal County which has a population of 60,032, a median household income of \$64,535 and a population density of 484 people per square mile (U.S. Census 2022). It is served by Central Arizona Regional Transit (CART) for regional connections to Coolidge and Florence.

#### Service Design

The Casa Grande LINK service operates within a 6-square-mile zone encompassing downtown Casa Grande. The zone is focused on the areas with the most services, development, and highest population density. Additionally, the service extends to two



non-contiguous destinations: the Rec Center and Promenade Mall, catering to their importance by offering pickup and drop-off services.

Riders can use LINK to travel anywhere within the designated six-square-mile microtransit zone (Figure 2). This shared-ride service operates with virtual stops (corner-to-corner pickup and drop-off) and initially offered fare-free rides until April 2024, with a proposed fare of \$1.50 per one-way trip.





Program rules include:

- Trips can be booked online, through an app or by calling.
- Rides can be booked up to seven days in advance.
- The service is open to all users on a first-come, first-served basis.
- The app is available in Spanish and English.
- Vehicles are accessible and equipped with bike racks.



LINK utilizes a fleet of four vehicles in various sizes. The vehicles feature artwork and branding for easy identification, and the size variation allows for adapting capacity to meet demand fluctuations.

While LINK is accessible, utilization of bike racks and wheelchair lifts remains relatively low. Bike racks have been used 27 times (less than 1%) and the wheelchair lift has been used 467 times (5%).

Ridership has grown rapidly since launch, with LINK providing its 10,000<sup>th</sup> trip on February 13, 2024. In the first month, LINK carried 230 trips, reaching 5,000 by year-end. Service is already at or near capacity, exceeding expectations. Top destinations for riders are:

- Recovery Center
- Safeway both for shopping and a virtual stop for housing.
- Convenience Store as a virtual stop
- Downtown library and senior center
- Fry's Plaza
- Walmart
- Hospital and Medical Facility

While the service is still new, the city is noticing that Mondays, Thursdays, and Friday have more riders than Tuesdays and Wednesdays. Additionally, mornings experience the most activity, with peak hours between 10 AM to Noon and 2 PM to 5 PM.

#### **Noteworthy and Lessons Learned**

**Casa Grande issued an RFP for turnkey service in 2023, received four responses out of which two were non-responsive.** The remaining proposals from VIA and RTW/RideCo presented compelling options. Ultimately, the city selected RTW/RideCo, valuing their transit expertise and regulatory understanding.

**Casa Grande's contract with RTW/RideCo is a "turnkey contract",** where the city provides fuel and vehicle storage (vehicles are parked overnight within a city-owned lot). These services are easily managed by the city and offer cost savings. Additionally, storing vehicles on-site allows for closer monitoring.

**Casa Grande faced problems with booking cancellation**, possibly because there is no fare. The city collaborated with the software vendor to implement booking restrictions. Riders are now limited to four trips within a seven-day period, with additional bookings enabled upon completion of previous trips. This measure helps manage system capacity and reduce cancellations.



**LINK is experiencing capacity issues at certain times of the day**. Riders have been slow to learn that service is better/more reliable if they schedule trips in advance and/or book round trips instead of one-way.

**Next steps for the LINK will be charging a fare.** The City of Casa Grande, in collaboration with RideCo, is exploring fare implementation strategies, including cash and online payment options, as well as bulk purchase discounts. Simple fareboxes will be installed, and vouchers offered at a 15% discount to human service organizations supporting client rides. The city hopes to recover 20% of its costs through fares.

#### The Five-Year Implementation plan lays out a clear schedule for the next steps:

- Year 1: Start service with 6 months' fare free followed by 6 months with fares.
- Year 2: Add Saturday service.
- Year 3: Expand service area.
- Year 4: Add a vehicle.



# CHANDLER

#### **Overview**

The City of Chandler launched a microtransit pilot project, branded as Chandler Flex, in July 2022. The pilot was funded by a \$2 million grant awarded through a state funded "A for Arizona Transportation Modernization Grant".<sup>1</sup>. The microtransit service targeted an 18 square mile area including downtown Chandler and employment corridor on Price Road. It was also designed to support student transportation needs.

The City of Chandler contracted with VIA for turnkey operations, which means VIA provides software, vehicles, drivers, communication, and marketing. Chandler has been pleased with their contract and the support they have received from VIA.

Service Characteristics	Chandler Flex
Service Name	Chandler Flex
Service Area	18-mile zone, plus nearby schools
Population Density	4,226 people per square mile
Service Type	Curb-to-curb
Response Time	Same day and reservation service on weekdays
	Weekend service is reservation only
Service Hours	5:30 AM to 9 PM on weekdays
Eligibility	General Public
	For travel within the zone only
Fare	Adult one way fare: \$2.00
	Reduced fare: \$1.00 (people aged 60+, veterans and people with disabilities)
	Students ride for free
Fare Payment	Credit or debit only
Fleet Size	7 vehicles (5 deployed during peak and 3 during off peaks)

#### Figure 1 Chandler Flex Service Overview

<sup>&</sup>lt;sup>1</sup> Arizona Transportation Modernization Grants Program is a \$20 million initiative to modernize transportation options and improve access to reliable and safe transportation for K-12 students.



Contract	Turnkey contract with VIA
Annual Budget	About \$1.1 million
Ridership	50,957 since July 2022 (report in November 2023)
Cost per Rider	\$25.00 - \$30.00

### **Service Overview**

Chandler started the Chandler Flex service in July 2022 with two primary goals: providing school transportation for students participating in extra-curricular activities and replacing Route 96, a peak-hour service connecting riders to employment centers along Price Road.

The service has successfully attracted and served students, with approximately 40% of all trips taken by students traveling to and from school. Another 10-15% of trips are taken by young people for non-school purposes, while the remaining trips serve commuters, those transferring to bus lines, and shoppers. Notably, between 40% and 50% of all trips are shared rides.

While unable to eliminate Route 96 due to its role in supporting a vital employment corridor, Chandler recognizes the limitations of Flex service as it is not reliable enough to cut the bus service. Despite low ridership on Route 96, the City felt eliminating it would compromise access to work for some residents.

Chandler Flex currently operates within an 18-square-mile zone, with additional square miles designated for student-only access. The service's next steps involve geographic expansion to encompass a larger portion of the city.

Chandler Flex was funded with a \$2 million grant, which continues to support the service. However, the City has been funding a bus route that is transitioning to regional transit funding. Chandler will transfer those resources (about \$1.2 million per year) to support Chandler Flex. The city also uses Arizona lottery funding to support the service.

The cost per trip on Chandler Flex is between \$25.00 and \$30.00.

#### Background

Chandler is located south and east of Phoenix. It covers 65.3 square miles and has a population of nearly 281,000 people. The median household income was just under \$100,000 (U.S. Census 2022).

Chandler offers residents access to a variety of transportation services. In addition to Chandler Flex, residents can use:



- Seven Valley Metro bus services, including a combination of express and local bus routes that connect Chandler with Phoenix, Mesa, Tempe, Gilbert, and Scottsdale.
- ADA Paratransit provides door-to-door or curb-to-curb transportation for people with disabilities who are unable to use fixed route services (bus or rail) because of a disability. People must be certified to use the service.
- RideChoice service is also a door-to-door transportation service for people who are ADA certified. People can use RideChoice to travel anywhere in the Valley Metro service area at any time of day.
- First Mile Last Mile Program offers a 50% discount on Lyft rides for people beginning or ending their trip in Chandler south of Pecos Road and beginning or ending their trip ¼ mile from a designated Valley Metro bus stop. This program costs around \$50,000 a year; next year's budget will fund the program with \$60,000.

The City of Chandler also has a 460-space park and ride lot served by Local Bus Route 112 and Valley Metro Express bus service to Phoenix.

#### **Noteworthy and Lessons Learned**

**Chandler Flex has a fleet of seven vehicles, four of which are wheelchair accessible.** The remaining three lack wheelchair accessibility but have bike racks. Chandler recommends either equipping all vehicles with a bike rack or removing them entirely. The current process for requesting a bike-equipped vehicle is cumbersome and obtaining one proves difficult.

**Chandler's City Council strongly supports the service**, particularly its on-demand convenience and technological efficiency. However, concerns remain regarding the associated costs.

**Initially launched fare-free, Chandler Flex experienced its peak ridership in September 2022 during this period.** Students continue to ride for free, raising concerns about potential misuse as an alternative to school buses. To address this, a \$1.00 fare is planned to discourage microtransit use when school bus service is available.

**Operating within a specific subsection of the city presented minimal political complications for Chandler.** A targeted study identified this district as underserved by public transportation yet brimming with employment and activity centers. However, other areas of the city could also benefit from the service. Notably, Chandler elects council members at-large.

The City of Chandler acknowledges that Proposition 479, an upcoming ballot measure, restricts the use of regional funds to support up to 30% of the cost of circulators,



excluding microtransit. Several Valley cities believe this distinction is an oversight, as their advocacy for "circulators" encompassed both circulators and microtransit. Efforts to overturn this limitation are likely in the coming months.

While the region is moving away from jurisdictional equity to a performance-based funding system, some allocation based on established criteria will remain. This ensures Buckeye's continued eligibility for some funding.

Chandler expresses both appreciation for local branding and recognition of the effectiveness of the shared WeRide branding employed in the west valley. They value the regional marketing efforts and the resulting uniformity across the cities.



# GOODYEAR

#### Summary

Goodyear started the WeRide service as a pilot in November 2022, initially offering it fare-free. Fares were introduced in January 2023. Monthly ridership has grown steadily throughout the year, with the cost per rider decreasing in line with ridership growth (see Figure 1).

Goodyear funded the first year of service using a combination of FTA 5307 Urbanized Area Formula Grants and revenue saved from advertising. The second year (FY25) is budgeted at \$1.5 million, with one-third to one-half of the funding coming from FTA grants and the remaining portion from the City of Goodyear's general fund.

![](_page_44_Figure_6.jpeg)

Figure 1 WeRide (Goodyear) Ridership and Cost per Passenger (November 2022 – December 2023)

Source: Nelson\Nygaard based on data from the City of Goodyear

![](_page_45_Picture_0.jpeg)

#### Figure 2 WeRide Service

Service Characteristics	.Goodyear WeRide
Service Name	WeRide
Service Area	Highest Need Zone within City Goodyear
Service Type	On-demand microtransit uses virtual stops
Response Time	20 minutes
Service Hours	6 AM to 8 PM (upgrade from original schedule, 7 AM to 7 PM) Weekdays only
Eligibility	General Public
Fare	Adult one way fare: \$2.00
	Reduced fare: \$1.00 (people aged 60+, veterans and people with disabilities)
	University Pass program with Estrella Mountain Community College, Franklin Pierce University and Ottawa University. People with a valid student ID ride for \$1.00
	Children 5 and under ride for free
Fare Payment	Credit card (via a rider's WeRide account) Cash (exact change paid to driver when board the vehicle)
Vehicle Types	Fully accessible Crysler minivans
Fleet Size	7 (6 vehicles in operation plus one spare)
Contract	RideCo: software, mobile app, and data tracking
	TransDev: operations (drivers, fuel, and vehicle maintenance)
Annual Budget	<b>Operating \$813,465 (November 2022 - October 31, 2023)</b> (operations and maintenance, technology, fuel, labor, and administration)
Ridership	Year 1: 13,800 (November 2022 to October 2023)
	Year 2: 34,200 (estimated based on current trends)
Cost per Rider	Year 1: \$58.95
	Year 2: \$39.15 (estimated)

![](_page_46_Picture_1.jpeg)

### **Service Development**

The WeRide service began from a combination of factors, including the Avondale Goodyear Transit Study that started during the COVID-19 pandemic and was completed in 2021. This study helped capture the impact of the post-pandemic "new normal" and specifically identified zones where service was most needed and would attract the most riders. The City of Goodyear also had results from a citizen satisfaction survey that identified the importance of transit to residents and a Human Services Master Plan that confirmed the zone of need and opportunity.

Goodyear opted for on-demand service as traditional fixed routes were limited to northsouth or east-west travel, while data suggested their community needed more flexibility. Also, the pandemic's impact on travel patterns rendered investment in traditional commuter-oriented services less viable.

#### WeRide Partnership

Goodyear and Avondale are independent, contiguous, rectangular shaped cities in Maricopa County. These two cities joined forces to develop an on-demand microtransit service branded as WeRide. Each WeRide partner controls its individual service, within the shared developed operating guideline. The services share branding and convene monthly to discuss service operations, performance measures and future steps. Additionally, Avondale and Goodyear store their vehicles at the same location. Unique aspects of each city include:

- Control over service design (hours, days, service area).
- Supervisor that reports daily about the state of operations and what they are working on.
- Dashboards that provide minute by minute updates.

The two cities issued a joint procurement for turnkey solutions, receiving four bids from VIA, RideCo, and two smaller providers. VIA's bid was disqualified due to incomplete forms, and the smaller providers did not meet the required service level, leaving RideCo as the contract winner. Strong points of the contract include:

- The quality and supervision of drivers by TransDev.
- The quality of the data available and dashboard which provides real-time information on vehicle movements and performance data.

A key aspect of the WeRide service is the use of virtual stops, requiring passengers to walk to designated locations. This approach reflects the community's character, with many master-planned communities featuring perimeter walls that pose challenges for fixed-route services to access residents. While door-to-door service would be ideal, it presents logistical difficulties. Virtual stops, situated primarily at mailboxes for pickups

![](_page_47_Picture_0.jpeg)

and ADA parking spaces near destinations for drop-offs, strike a balance between convenience and feasibility.

Overtime, the service model has been adjusted:

- The original service concept allowed riders to travel within Avondale or within Goodyear and if riders wanted to travel from Goodyear to Avondale, they would need to transfer. For the most part, this is still the case. However, people who live along the McDowell Road corridor can use WeRide to travel to either Avondale or Goodyear.
- WeRide provides direct transportation to Estrella Mountain Community College (EMCC) in Avondale and Abrazo Hospital West Campus in Goodyear, regardless of the trip origin.
- Recognizing the challenges of dialysis treatment transcend other disabilities, WeRide allows dialysis patients to travel from Avondale or Goodyear to the Banner Estrella Medical Center in Phoenix, the DaVita Dialysis Center on West Encanto Blvd or the Avondale Resource Center.

#### Background

The City of Goodyear has a population of 105,406 and a land area of 191 square miles. Its population density is 498 people per square mile. The median household income is \$97,307.<sup>1</sup>.

People in Goodyear can access Valley Metro Express Routes from the Goodyear Park and Ride lot. There are also two local bus routes with regional connections (Route 3 Van Buren Street and Route 17 McDowell Road).

The City of Goodyear also funds RideChoice service and ADA Paratransit for residents. Both services allow riders to call for a pickup at any time. RideChoice offers more flexibility for riders, they don't have to share a ride and can take up to 20 trips per month (with some eligible for additional trips). The fare is \$8 for the first 8 miles, and \$2.00 for each additional mile.

#### Service Design

Goodyear initially operated the service from 7 AM to 7 PM, later expanding the hours to 6 AM to 8 PM to attract more workers, including part-time employees.

The service targeted individuals with limited car access, including those with only one vehicle or unreliable access to a second car. Previous studies and data indicated a latent demand for transit, suggesting that some residents, particularly those seeking

<sup>&</sup>lt;sup>1</sup> U.S. Census, 2022.

![](_page_48_Picture_0.jpeg)

employment, were staying home, or limiting their activities due to transportation limitations.

Ridership data suggests:

- Older adults make up about 15% of their riders and students, including college students, are another 10%.
- Most of the early morning rides (6 AM to 7 AM) are subscriptions trips, which suggests they are people going to/from work.
- In the afternoon, however, WeRide operates as an on-demand service. Trips are scheduled on the day they are taken.
- While ridership for dining and entertainment is not yet robust, the service sees potential for future investment in first mile/last-mile connections to regional transit routes.

Goodyear operates a fleet of six vehicles (Dodge RAM ProMaster cargo vans), with five in operation and one spare.

#### **Noteworthy and Lessons Learned**

**Elected officials are responding positively to WeRide.** According to staff, they are saying "more, more, more." The service was funded with federal grants and transportation funds earned through advertisements. Starting in FY25 (July 1, 2024), Goodyear will need to contribute general fund revenues to continue to offer the service.

**Goodyear only serves a portion of its community.** This has not been a problem, but City Council members are elected at large, so they aren't tied to specific districts.

**Goodyear is proud of ridership growth and decline of the cost per trip.** They said you can't do enough marketing, it's hard but rewarding. Their toolkit included:

- WeRide launched a free trial period from November 14th for four weeks but extended the fare free program by another free week through to the end of the year. This attracted a significant ridership base in 2023.
- Building a comprehensive FAQ and promoting it. Proving clear and concise information about how the ride works so riders aren't disappointed but ensures riders expectations.
- Prominently displaying the \$2 fare on vehicles effectively communicated affordability.
- Outreach efforts included visiting community centers, senior centers, childcare facilities, businesses, and major retailers to distribute flyers and discuss the service.

![](_page_49_Picture_1.jpeg)

- Additionally, participating in community events and offering SWAG further increased visibility.
- Securing a spot on the morning TV show proved highly effective.

**Goodyear has not been successful coordinating WeRide service with large distribution centers like Amazon, FedEx, and UPS**, primarily due to the complexities of scheduling around their shift work and navigating internal procedures. Scheduling WeRide services to meet their specific needs has proven difficult.

**Goodyear follows a proactive approach to addressing rider feedback.** For trips receiving 3 stars or below, they attempt to contact riders to understand their concerns which is usually linked to drivers' behavior. Leveraging in-vehicle cameras, they can investigate it and address any identified issues.

**Goodyear offers a discount for bulk purchases**: book \$25 worth of trips and receive 5 trips free. Avondale is considering opportunities for monthly passes.

**Educating riders about the shared-ride nature of the service has been challenging.** Some users express discomfort with sharing rides and worry about potential delays, despite the service's high on-time performance rate of 97%.

The virtual stop model is also a challenge. Goodyear likes it because it is still a transit service, not ADA. City staff did have to program all their own virtual bus stops. RideCo gave them directions, but they had to find it themselves. They ended up working with a map and mostly creating stops around community mailboxes. Community mailboxes are great because the majority are aware of the location, usually lit, vehicles don't block when they pick someone up and they don't impede anyone's privacy. Signage is not required at these locations.

**WeRide offers an attractive proposition for drivers.** The service has clear operational hours, well-defined boundaries, and established rules. The schedule ensures that drivers are not required to work weekends or holidays. Notably, two of the original drivers have transitioned into management roles.

#### **Service Details**

- Trips can be booked by using the app or calling a phone number.
- Service is not door-to-door.
- Riders are directed to "virtual stops" a short walk from their origin. When a rider books their trip, the app (or call center), they are directed to the stop location.
- Trips are booked within a 10-minute window and as the vehicle is closer to the pickup time, riders get a more precise ETA. Updates are sent by text and riders can track the vehicle in their app.

![](_page_50_Picture_1.jpeg)

- Drivers will wait up to 2 minutes for riders before proceeding to the next pickup.
- Riders can bring one piece of luggage or up to 3 grocery bags that fit in the vehicle without obstructing another seat.
- Drivers undergo background checks, including drug and alcohol screening. Cameras are onboard for the safety of both drivers and passengers.
- Late cancellations (within 4 hours of pickup) and no-shows still incur a fare.
- Riders have the option to rate their drivers.

![](_page_51_Picture_1.jpeg)

# LAKE HAVASU CITY

#### **Overview**

Lake Havasu City operates a combination of microtransit and paratransit services. They originally operated fixed routes, but after trying three different types of service, the city was unable to attract riders. The combination of microtransit and paratransit, however, is meeting their needs and is cost-effective.

Lake Havasu City funds transit through a combination of FTA 5307 funds, CARES Act funding and fares. When the CARES Act funds are spent, the City will utilize general funds to match the federal funds.

Service Characteristics	Lake Havasu City
Service Name	Lake Havasu City Transit (LHCT includes Direct & FLEX)
Service Area	Direct Service is organized around three zones. It does not include the entire municipal borders
Population Density	1,233 people per square mile
Service Type	Microtransit
Response Time	30 minutes
Service Hours	6:30 AM to 5 PM (Weekdays only)
Eligibility	General Public
Fare	Adult one way fare: \$3.25
Fare Payment	Credit card only
Vehicle Types	Fully accessible Crysler Voyagers and ProMasters
Fleet Size	11 vehicles
Contract	Operated in-house (city employed drivers, mechanics, etc.) Transitioning from Uber to VIA in 2024
Annual Budget	\$650,000
Ridership	TBD
Cost per Rider	\$10

#### Figure 1 Lake Havasu City Direct

![](_page_52_Picture_1.jpeg)

### **Service Development**

Lake Havasu explored different types of transit service, including fixed route service, before settling on microtransit. The city originally contracted with RouteMatch and Uber to provide the service and is switching to VIA in 2024. The city operates the service directly, owns the vehicles, and is responsible for drivers, dispatch, management /administration, and vehicle maintenance.

Lake Havasu City Transit (LHCT) operates two types of shared ride services:

- Direct is a microtransit option available to the general public operating between 6:30 AM and 5:00 PM. It is a curb-to-curb service with the fare of a one-way trip within a single zone is \$3.23 and across the zone is \$5.00.
- FLEX is a paratransit service for older adults, people with disabilities and veterans that operates with slightly reduced hours from 9:00 AM to 4:00 PM. Individuals for enhanced paratransit service must apply for eligibility. Like Direct, it offers curb-to-curb service with drivers providing additional assistance as needed.

LHCT is operated in-house with a team of 12 drivers, a transit manager, and a dispatcher. Vehicles are maintained as part of other city fleets. Attracting and retaining drivers hasn't been a significant challenge for the city. The driver wages are around \$17 per hour and most drivers are part time. Part-time work involves three six-hours shifts per week.

LHCT has employed limited marketing efforts. In the initial phase of the service, it garnered a strong following, and most people now learn about it through word-of-mouth or at a community event.

#### Background

Lake Havasu City is located approximately 200 miles northwest of Phoenix along the border of Arizona and California, near Lake Havasu. According to the 2022 U.S. Census, the city had a population of 52,000, spanning 46.34 square miles with a population density of 1,233 people per square mile. The median household income in 2022 was \$64,027.

#### **Noteworthy and Lessons Learned**

LHCT experienced frequent technology transitions due to tech company acquisitions. The agency has transitioned and started a new contract with VIA due to operators' stability and lower risk of future acquisition.

![](_page_53_Picture_1.jpeg)

It took LHCT nearly a year to launch the services of Direct. While they possessed prior experience operating transit, numerous systems, policies, and bureaucratic steps needed to be addressed.

LHCT is a direct recipient for FTA 5307 funds. The Arizona DOT does not support this program, but they do help distribute the funds.

LHCT's next step or goal is to combine paratransit and general public trips through shared dispatch and rides. This will expand service hours for paratransit riders while reducing overall service costs through increased shared trips.

The program, in partnership with the high school, provides transportation for low-income students who ride fare-free, with the school district covering the cost. Any student can use Direct service by paying the fare.

Overall, elected officials are strong supporters due to the high satisfaction among riders. Discontinuing established and utilized transit services is generally difficult.

![](_page_54_Picture_1.jpeg)

# **SUN CITY**

#### **Overview**

Two technology companies, May Mobility and VIA, are partnering with Sun City to offer autonomous (rider only) transit services to residents. The service, sponsored by AARP, is branded as the Valley wAVe service. Residents must register to use the service, which is called the Early Rider program.

While the autonomous transit project officially kicked off on December 18, 2023, testing and safety demonstrations started in April 2023. The test results led to all partners – May Mobility, VIA, and Sun City – to transition to autonomous transit services. Autonomous vehicles will pick people up at their door and take them to any destination within the 4.5-mile service area. As of February 2024, there are no fares associated with the service.

Service Characteristics	Sun City
Service Name	Early Rider program
Service Area	Sun City, AZ
Population Density	N/A
Service Type	Autonomous Microtransit
Response Time	N/A
Service Hours	4 PM to 6 PM
	Weekdays only
Eligibility	Registered riders only
Fare	Fare Free
Fare Payment	N/A
Vehicle Types	Toyota Sienna Minivans
Fleet Size	2 vehicles
Contract	No Drivers – VIA deployment, May Mobility vehicle technology
Annual Budget	-
Ridership	77 per month in 2023 (including driver)
Cost per Rider	-

![](_page_55_Picture_1.jpeg)

### **Service Development**

Sun City is a retirement community with a population of nearly 40,000 as per the 2020 census and about 75% are aged 65 or older. The median household income in 2022 was \$51,263. The city area is 14.4 square miles and the autonomous microtransit service is being deployed in a zone of about 4.5 square miles. Residents can use the service to travel to residential buildings, medical centers, and other key locations within this service area.

May Mobility provides autonomous vehicle technology, while VIA provides the user interface and vehicle deployments algorithms. May Mobility began testing in April 2023 with human drivers onboard, and by December 2023, the service transitioned to fully autonomous operation. For safety, each vehicle is monitored by a dedicated tele-assist operator at May Mobility.

Service details include:

- Riders must register to use the service and be at least 18 years old.
- Service is door-to-door, and all trips must begin or end within the zone.
- Trips can be scheduled through a mobile app or via a call center.
- The service operates weekdays from 4 PM to 6 PM.

#### **Noteworthy**

May Mobility is proposing a payment model where the city (or sponsor), rather through individual fares, would pay for the service. This approach is different from other autonomous (or robotaxi) services, which collect fares from individuals. It is also different from other public transportation service models where costs are shared between drivers and governmental entities.

With human drivers in 2023, May Mobility facilitated around 77 rides per month. While drivers previously assisted passengers with boarding and disembarking, the service remains accessible to people with disabilities without direct human aid. May Mobility offers instructional videos for wheelchair users on entering and exiting the vehicles and provides accessibility features like announcements and smartphone notifications for riders with visual or hearing impairments.

![](_page_56_Picture_1.jpeg)

# SURPRISE

#### **Overview**

The City of Surprise approved a two-year microtransit pilot project, funded with \$700,000 annually, to begin on July 1, 2023. Service commenced on April 1, 2023, after a few months of preparation. Funding is sourced from the local general fund.

The startup process was relatively straightforward, as Surprise was able to follow the WeRide Program and a previous transit study identified low-income areas. This helped shape the service zone, which is approximately 9 square miles.

Ridership on the program has been strong and has grown steadily since its launch. The initial five months (April-August) offered free rides, resulting in a slight dip in ridership in September 2023(see Figure 1). However, ridership growth has been steady.

![](_page_56_Figure_7.jpeg)

Figure 1 WeRide (Surprise) Ridership and Cost per Passenger (April 2023 – December 2023)

Source: Nelson\Nygaard based on data provided by the City of Surprise

![](_page_57_Picture_0.jpeg)

#### Figure 2 Surprise Microtransit Service Overview

Service Characteristics	Surprise
Service Name	WeRide
Service Area	Subset of City of Surprise 9-mile zone
Population Density	1,298 people per square mile
Service Type	Microtransit
Response Time	20 minutes
Service Hours	7 AM to 7 PM
	Weekdays only
Eligibility	General Public
Fare	Adult one way fare: \$2.00
	Reduced fare: \$1.00 (people aged 60+, veterans and people with disabilities)
	Children 5 and under ride for free
Fare Payment	Credit card (via a rider's WeRide account)
	Cash (exact change paid to driver when board the vehicle)
Vehicle Types	Fully accessible Crysler Voyagers and ProMasters
Fleet Size	TBD
Contract	RideCo: software, mobile app, and data tracking
	TransDev: operations (drivers, fuel, and vehicle maintenance)
Annual Budget	Year 1: \$700,000 (July 1, 2023 – June 30, 2024)
	Year 2: \$700,000
	Operations, maintenance, technology, fuel, labor, and administration
Ridership	Year 1: 17,756 (Partial year - April 2023 to December 2023)
Cost per Rider	Year 1: \$33.44 (average for 9 months)

![](_page_58_Picture_1.jpeg)

### **Service Overview**

Surprise offered the service free for five months as a strategy to build ridership and proved to be effective. While ridership dipped slightly in September, it began increasing again the following month.

Residents and elected officials are enthusiastic about the service and its future development. However, funding constraints currently limit expansion to additional areas and/or weekend service.

Major destinations for the service are:

- Grocery stores (Walmart, Safeway, Target)
- West Valley Housing Assistance
- Community Facilities (Senior Center, Library, and the School District)

#### WeRide Partnership

City of Surprise staff meets monthly with staff from Avondale and Goodyear to discuss challenges, strategies and to ensure service consistency. While the WeRide partners want flexibility to set up the service in a way that meets their needs, they also want a level of consistency for how the program works.

#### Background

Located west and north of Buckeye and north of Avondale and Goodyear, the City of Surprise has a population of 154,198 residents according to the U.S. Census (July 2022). The city covers 110 square miles, resulting in a population density of 1,298 people per square mile. The median income in Surprise is \$87,756 (U.S. Census 2022).

Prior to WeRide, Surprise had one express bus route (Route 571) funded by regional transit funds. This route operated on weekdays only, providing three inbound and three outbound trips per day. The City also sponsored ADA paratransit and RideChoice services (see Noteworthy).

Surprise offers residents aged 65 years (and old) and people with qualifying disabilities residing within the city limits access to both ADA paratransit and RideChoice services.

- The ADA service is available for medical and work trips only. It allows travel anywhere within the Valley Metro service area for a fare of \$4.00 per one-way trip. Surprise sponsors an average of 300 to 350 trips per month on this service. Demand has been relatively steady.
- The RideChoice program is available for any trip purpose and service is available 24 hours per day, 7 days per week. The fare is \$3.00 for the first 8 miles, with the riders' responsibility for any costs exceeding that distance. Most trips (99%) provided through this program are provided through Uber or Lyft.

![](_page_59_Picture_1.jpeg)

#### **Noteworthy and Lessons Learned**

**One of the challenges for the City of Surprise is that the city sponsors three services** (ADA, RideChoice and WeRide). Despite service overlap and strong advocacy for each program, discontinuing any of them would be challenging. The City of Surprise incentivizes switching to the more cost-effective WeRide service by offering it free to existing RideChoice users. So far, there is some progress with the intent.

Leveraging the existing WeRide program facilitated a smooth and efficient onboarding process for Surprise, allowing them to retain the virtual stop service model. The city has not received complaints about walking distances. Data suggests an average walk of less than 1/8 of a mile to stops, contributing to on-time performance and cost efficiency.

**Surprise benefited from the WeRide experience marketing and building ridership.** The partner communities could help Surprise strategize and plan the service launch. Surprise also benefited slightly from the fact that some people had heard of WeRide and know generally about the service.

One of the marketing strategies initiated by the City of Surprise was free WeRide service for city employees.

![](_page_60_Picture_1.jpeg)

# TOLLESON

#### **Overview**

In 2022, the City of Tolleson shifted from fixed route circulator service to offering subsidies for ride hailing service. Both Uber and Lyft participate in the program.

The City is pleased with the results of the program. In January 2023, they sponsored roughly 220 rides per month which increased to over 1,400 rides in January 2024. Annual ridership in 2023 was just over 7,500 rides.

Service Characteristics	City of Tolleson
Service Name	Tolleson Micro Transit
Service Area	Tolleson plus specific locations outside of the City
Population Density	1,258.7 people per square mile (U.S Census 2020)
Service Type	Uber/Lyft voucher program
Response Time	No guarantees
Service Hours	24 hours per day, 365 days per year
Eligibility	No restrictions
Fare	Rider pays first \$2.00. Tolleson pays next \$15.00, any costs that are more than \$17.00 are provided by the ride.
Fare Payment	Pay through the app
Vehicle Types	Varies
Fleet Size	N/A
Contract	Uber – year to year (Lyft – indefinite
Annual Budget	\$140,00 to \$165,000 (budgeted)
Ridership	7,500
Cost per Rider	\$15.00 (MAX)

![](_page_61_Picture_1.jpeg)

### **Service Overview**

Prior to the COVID pandemic, the City of Tolleson operated the Zoom Circulator service, connecting Avondale, Goodyear, and Tolleson between fixed-route bus stops every 30 minutes from 6 AM to 5:30 PM on weekdays and weekends. Ridership plummeted during COVID, coupled with rising costs, particularly in terms of the cost per passenger. As individual communities evaluated the effectiveness of the Zoom service, they also considered new service models.

The City of Tolleson issued an RFP for transit services in Winter 2022, considering microtransit or another ride sharing program. Based on the responses, they opted for the Uber/Lyft subsidy program, which launched in October 2022 and is funded entirely through local tax revenues. This shift in the service generated cost savings of nearly \$200,000 for the City of Tolleson, encompassing all expenses related to RideChoice and ADA paratransit.

The program grew slowly over time – ridership was stagnant between October 2022 to April 2023, but then started growing quickly. They provided over 7,500 rides in 2023, with ridership growing to slightly more than 1,400 rides in January 2024 alone. Data shows the service is used for commuting, medical appointments, hospital visits, community colleges (EMCC and West Mec), and shopping.

The cost of the service has been reasonable. Neither Uber nor Lyft charges an administrative or base fee for the program. The first-year cost around \$106,000 with a cost per trip of about \$9.73 for trips booked through Lyft and about \$7.00 for trips booked through Uber. The city is budgeting between \$140,000 and \$165,000 for FY 2025. Funding for the program is currently manageable, paid through local (general fund) revenues. If the costs increase significantly, the city intends to adjust fares, destinations, or other program rules.

#### Background

As compared with other West Valley cities, Tolleson has a smaller population of 7,258 (U.S Census 2023). According to the census data of 2020, the city covers a geographic area (5.73 square miles), resulting in a higher population density of 1,259 people per square mile. The median household income is \$47,875 (U.S Census 2022).

The City of Tolleson offers transit connections to Phoenix and the regional network through Valley Metro route 3 (Van Buren). Additionally, residents with qualifying disabilities can use ADA paratransit services and the Valley Metro RideChoice program.

#### Service Design

People must register for the program before requesting a ride directly through Uber or Lyft within city boundaries. Riders pay a \$2.00 fare. The City of Tolleson will subsidize

![](_page_62_Picture_1.jpeg)

the ride up to \$15.00 and riders are responsible for any charges exceeding \$17.00. The service is available 24 hours a day, every day of the year. Since the service operates within designated zone and specific locations, most riders typically do not need to pay more than the \$2.00 base fare.

Riders can use the service to travel anywhere within city boundaries and to up to 40 designated locations within the zone. City staff, incorporating feedback from stakeholders like human service agencies, determined these destinations, which include essential locations like grocery stores, doctors' offices, hospitals, and schools.

Program rules include:

- Riders must be 18-year-old to ride.
- There are no discounted fares, but the service offers free rides to and from specific city facilities, such as the senior center and library. About 25% of riders utilize this free program.
- There is no limit on the number of times an individual can use the service.
- The app is available in Spanish and English.

#### **Noteworthy and Lessons Learned**

**Marketing is crucial to the program's success.** City staff primarily utilize social media, website updates, city/event tabling, and collaboration with partner organizations for outreach. A significant challenge has been overcoming the public's perception that the program's benefits are too good to be true, including elected officials.

**Concerns about driver availability have proven unfounded.** Most riders experience wait times of five to six minutes, even during major events like the Super Bowl or NCAA basketball games. However, these events can occasionally lead to higher trip costs. Overall, data indicates a high level of rider satisfaction, ranging from 95% to 98%.

**The main challenge for the program is the lack of a cash payment option,** requiring riders to have electronic payment methods. City staff are exploring ways to implement cash acceptance. Additional concern is that the program's vehicles are not currently ADA accessible.

**The program is currently managed by a single individual who overlooks other responsibilities.** As demand grows, the program's manager is seeking additional support for fielding calls, responding to inquiries, and managing program operations effectively.

The City of Tolleson is considering incorporating cooperative language into its contracts with Uber and Lyft, facilitating participation from other jurisdictions in their program.

![](_page_63_Picture_1.jpeg)

# **PRESCOTT VALLEY**

#### **Overview**

The Town of Prescott Valley started a microtransit pilot project, branded as YavaLine or "YAV" in September 2022. People can use the service to travel anywhere in the town. Ridership has grown steadily, carrying nearly 800 people per week.

YavaLine is funded through CARES Act funds. After one year of experience, annual operating costs are about \$800,000 per year and the cost per trip is approximately \$22.25.

Service Characteristics	YavaLine
Service Name	YavaLine (or "YAV Connect")
Service Area	Entire Town of Prescott Valley (population 49,075)
Service Type	On-demand microtransit (door-to-door)
Response Time	Not more than 30 minutes
Service Hours	6 AM to 8 PM Weekdays only
Eligibility	General Public
Fare	Adult one way fare: \$2.00 Reduced fare: \$1.00 (riders aged 6 to 17 and people aged 60+) Children 5 and under ride for free
Fare Payment	Credit card (via a rider's YAV mobile account) Cash (exact change paid to driver when board the vehicle)
Vehicle Types	Accessible vans with bike racks
Fleet Size	4 vehicles
Contract	Town of Prescott owns the vehicles. VIA for software, driver app and backend dispatch and database New Horizons (local non-profit) for drivers, supervision, and maintenance

#### Figure 1 Prescott Valley YavaLine

![](_page_64_Picture_1.jpeg)

Annual Budget	<b>Operating \$810,051</b> (operations and maintenance, fuel, labor, and administration): <b>Capital \$770,647</b> (vehicles, software and required FTA plans)
Ridership	Year 1: 18,046 (September 2022 to September 2023) Year 2: 36,400 (estimated based on current trends)
Cost per Rider	Year 1: \$44.89 Year 2: \$22.25

### **Service Overview**

The Town of Prescott Valley and the nearby City of Prescott have a combined population of 95,021 (U.S. Census 202), making the region eligible for federal transit funding. This eligibility includes FTA Section 5307 Urbanized Area Formula Grants, which meant they were also eligible for COVID Relief funding. Notably, the COVID relief funding did not require local matching resources, presenting an opportunity for Prescott Valley to pilot microtransit.

Service development took several years:

2019	Transit Development Implementation Plan recommended on-demand solutions.
2020	Five-Year Transit Implementation Plan created a strategy for microtransit service.
2020	Town of Prescott Valley agreed to accept federal funds and operate a transit demonstration project.
2021	Town of Prescott hired Transit Manger in May.
2022	YavaLine started service in September.
2023	YavaLine switched software vendors in July.

The Town of Prescott started by hiring a transit manager in May 2021 and in September 2022, the YAV started operating service. The initial year focused on understanding, organizing followed by securing grants and funding, acquiring vehicles and technology, building an operational team, and developing marketing and information systems.

In its first month, the YAV carried around 200 riders per week. Ridership steadily increased to approximately 600 riders by the end of the first year (September 2024). By December 2023, the service was carrying nearly 800 riders weekly. This growth is attributed to increased awareness and the switch from Q-Line to VIA as the software vendor.

![](_page_65_Picture_0.jpeg)

As of January 2024, the service remains entirely funded by CARES Act funds. The first year's operating costs were around \$800,000, with a cost per trip of approximately \$22.25. Vehicles purchased in 2022 will require replacement in 2027 or 2028, depending on mileage.

#### Background

The Town of Prescott Valley is in central Yavapai County. It has a population of 48,075 and a land area of 40.5 miles; its population density is 1,156 people per square mile. Median household income is \$66,617<sup>1</sup>.

Together with the City of Prescott, the Prescott-Prescott Valley has a population of nearly 100,000 and is a federally designated urbanized area. Prior to YavaLine, the urbanized area did not have public transportation services. However, a rural operator, Yavapai Regional Transit (YRT) operates rural transit service, including connections between Chino Valley and Prescott and Prescott Valley.

#### **Service Design**

YavaLine operates weekdays from 6 AM to 8 PM and is a fully accessible service to the public. The Town of Prescott Valley owns the vehicles, while a local non-profit manages operations. VIA provides the technology platform (rider app, booking system, and trip assignment software).

Riders can book a trip by downloading the YAV Connect app and booking a ride on their smartphone, or they can call to schedule a ride. As mentioned, the software company VIA provides the booking platform. Instructions for booking are available online and through the Town of Prescott Valley website.

People use the service for various trips, including commuting, shopping, school, medical appointments, and visiting local parks. YavaLine also connects riders to the regional rural transit service (Yavapai Rural Transit). The most popular destinations include:

- Grocery stores (Robert's Market, Frys, Walmart Supercenter, and Safeway)
- The Yavapai Regional Medical Center East
- Yavapai College
- Local parks (Fain Park and Mountain Valley Park)

<sup>&</sup>lt;sup>1</sup> U.S. Census, 2022

![](_page_66_Picture_1.jpeg)

### **Noteworthy and Lessons Learned**

While the Town of Prescott Valley initially agreed to launch the service, their ongoing support has been limited. They are exploring transitioning the program's administration and "home" to a regional entity, potentially the Central Yavapai Metropolitan Planning Organization (CYMPO).

**One surprising outcome is that most human service agencies continue to provide their own transportation services.** This may change with YAV providing more service in the City of Prescott, but they anticipate greater ridership from veterans and older adults.

**YavaLine plans to expand the service to the City of Prescott in 2024.** There are also plans to offer weekend service. However, these expansions will deplete CARES Act funding faster than anticipated, necessitating the development of sustainable funding options in the region. While the region has allocations of FTA funding for capital investments (up to 80%) and service operations (up to 50%), some matching funds will be required. CYMPO is exploring governance and funding structures to ensure a transition from full federal funding to a shared model.

Obtaining <u>federal certifications and complying with requirements</u> proved challenging, particularly for a start-up service in a region lacking established peers and limited technical support. The absence of a clear roadmap necessitates significant effort and learning to navigate allowable practices. Notably, the Arizona Department of Transportation (ADOT) does not support transit services in urbanized areas.

**The role of Transit Manager requires a diverse and comprehensive skillset.** Ideally, the individual should have experience in transit service planning, knowledge of procurement processes and regulations, and financial management skills.

**Prescott Valley encountered a few challenges attracting vendors to the region.** Their initial procurement process yielded only one offer from Q-Line, which was ultimately rejected. The YAV was able to attract VIA to the region, which has successful offering including the quality of the technology, user-friendliness, and information sharing practices. Prescott Valley recommends using national, experienced vendors for software, such as RideCo, VIA and/or the Routing Company.

### **Service Details**

- All vehicles are ADA accessible. No additional accessible transportation is offered.
- All materials are in Spanish and dispatchers speak Spanish
- Once a rider books a trip, the YAV will assign an estimated time of arrival (or pickup window) for each trip. Notifications are sent out 5 minutes before the pickup window. Vehicles can be tracked in the app.

![](_page_67_Picture_1.jpeg)

- Drivers will wait up to 3 minutes for a driver. After 3 minutes, if the rider does not show up, the vehicle will move on.
- Drivers will help some riders with disabilities upon request. Assistance includes guiding customers with visual impairments and operating the vehicle ramp and secure wheelchairs or scooters.
- Other types of assistance (unlocking a private residence, waiting with a customer at their destination, handing service animals or making unscheduled stops) are not permitted.
- Riders can book a seat in the vehicle as well as a space on the bike rack.
- Riders are permitted to bring grocery bags into the vehicle but are limited to the number of bags in a single trip. Drivers are not permitted to assist in carrying items on or off the vans.
- YavaLine allows riders to schedule "subscription" trips (recurring trips) for up to two weeks in advance.
- Riders can rate their drivers.