# Micro-Transit for Improving Access for Behavioral Health in Tucson's Low-Income Neighborhoods

**December 2023** 

## **Prepared for:**



Prepared by:

HEALTHY COMMUNITIES AND WELLNESS ALLIANCE





# A Critical Health Challenge

## Transportation is a social determinant of health

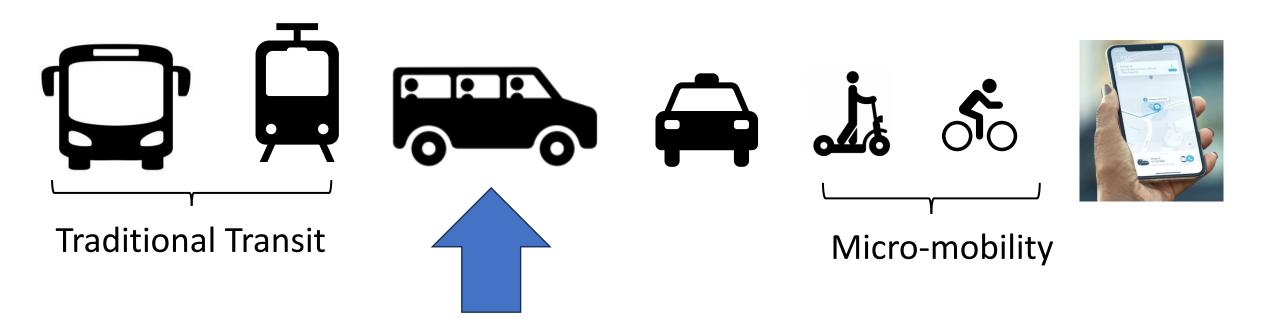
Employment
Healthcare
Education & Training
Job Interviews
Food & Nutrition

Childcare
Social Connection
Recreation
Spiritual
Wellness Services

## The Problem We Want to Solve

- Low-income, older adults, youth, mobility-constrained, low-density neighborhoods don't have good transportation access.
- 10% of households in Tucson do not have access to a car.
- **Public transportation has limitations**: Fixed route buses and streetcars are options but may be difficult to navigate and not time efficient.
- Taxis, Uber, and Lyft are **expensive** for people with low incomes.

## The Transportation Spectrum



"Micro-transit" can provide reliable, on-demand, all-electric, point-to-point rides to destinations at no or minimal cost to eligible residents.

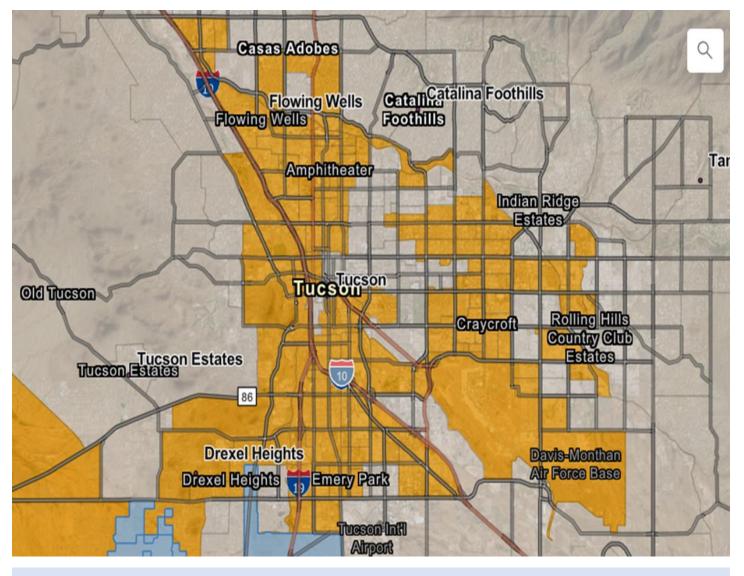
# Transportation Disadvantaged

Tucson poverty rate is 54.69% higher than the Arizona average.

Estimated 19.8% of 514,386 people live in poverty or 101,765 people.

Low-income neighborhoods in Tucson include:

- Amphi
- South Tucson
- Barrio Hollywood
- Flowing Wells
- Alvernon/Grant Area
- Pascua Yaqui Reservation
- South Park Avenue
- El Rio Acres



Many low-income neighborhoods have limited public transportation coverage.

## **Examples of Travel Times to Essential Destinations**

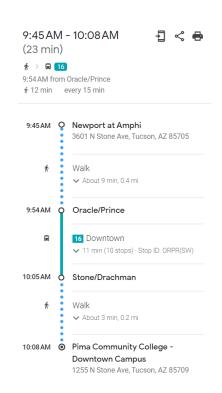
#### Medical

- Drive—17 min
- Transit—44 min

#### 9:55 AM O Newport at Amphi 3601 N Stone Ave, Tucson, AZ 85705 Walk ➤ About 1 min, 217 ft 9:56 AM Prince/Stone 17 17 Houghton ✓ 17 min (17 stops) · Stop ID: PRST(SW) 10:13 AM Country Club at Grant Walk ✓ About 3 min **Grant/Country Club** 9 Udall Station ✓ 12 min (11 stops) · Stop ID: GRCC(SE) 10:35 AM Grant/Beverly Walk ✓ About 4 min, 0.2 mi 10:39 AM O Tucson Medical Center 5301 F Grant Rd. Tucson, AZ 85712

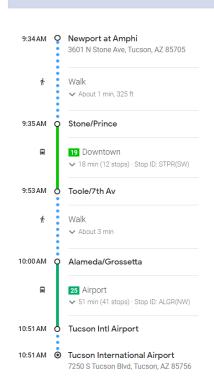
#### Education

- Drive-6 min
- Transit—23 min



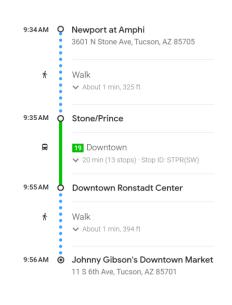
#### Work

- Drive—21 min
- Transit—I-hour 17 min



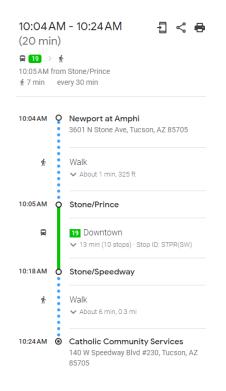
#### Grocery

- Drive- 11 min
- Transit—22 min



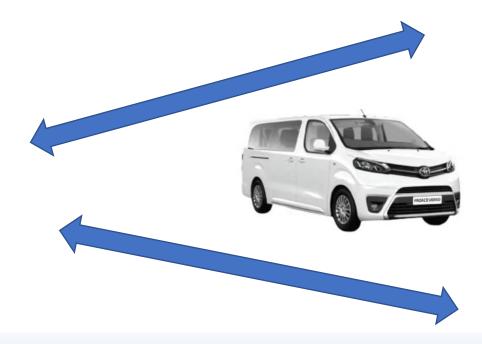
#### Church

- Drive—6 min
- Transit—20 min

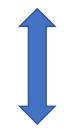


# **Proposed Solution: All Electric Micro-Transit**







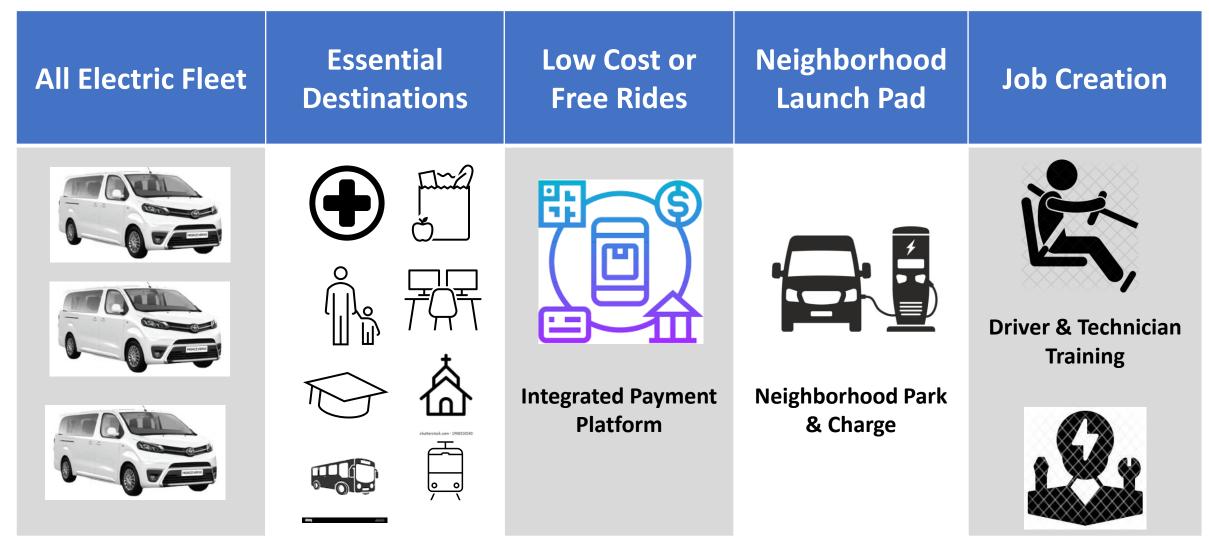


On-demand transit where routing algorithms use real-time, onthe-ground information to group passengers into shared rides.

Empowers bus and rail transit with flexible solutions.



## **Features of Service Model**



## **Electric Micro-Transit: Current Success Stories**

## Porterville, California



## Richmond, California





## Failures have also happened in the past, and causes are understood

- Inappropriate vehicles, too large or too small
- Dispatching and fleet management did not work well
- Lack of customer awareness/low demand
- Cost per customer ride was too high

## A Sustainable Business Model

## **Revenue Generation**

- Discounted farecard or app based on income, disability status, and age
- Subsidies from transit, health, and social service agencies
- Financial incentives from employers
- Sponsorships from destinations
- Advertising on vehicles and web portal
- Grants from government and foundations

## **Expense Categories**

- Labor
- Training
- Capital
- Marketing
- Software
- Electric
- Fundraising
- Other

# VIC Strong and Growing Arizona Partnerships



## City of Chandler - Turnkey

- · Limited fixed route network with declining ridership created barriers for public access to transit options
- Implemented an on-demand service to provide transit access for students and to increase ridership through a first mile-last mile solution



### City of Glendale - Software

- · Legacy dial-a-ride system saw declining ridership and quality of service as it was managing services across multiple providers
- Transitioned Glendale's existing transit options into one commingled service under Via's software



## Sun City - AV

- Leveraging AVs to expand access to safe, reliable and equitable on-demand transportation to Sun City, a community designed for adults 55 and older
- First on-demand public transit service using AVs in Arizona.

# Summary

- Improve behavioral health by providing access to essential destinations and improvement in life opportunities.
- 100% coverage to eligible residents for free point-to-point rides.
- Increase equity by closing mobility gaps for low-income populations.
- Multi financing channels from destination payments, insurance reimbursements, public subsidies, sponsorships, and social programs.
- Electric vans that reduce emissions and the need for cars and parking.
- Job creation—EV charging, training, drovers and maintenance personnel based in low-income neighborhoods.

# **Deeply Experienced Project Team**

## **Conrad Plimpton & Egils Milbergs**

Healthy Communities and Wellness Alliance

www.azflourishing.org

# HEALTHY COMMUNITIES AND WELLNESS ALLIANCE

## **Garrett Brinker**

VIA Transportation

https://ridewithvia.com/



## John Niles & Steve Marshall

Center for Advanced Transportation and Energy Solutions (CATES)

http://cates.solutions



# Questions?

# **Next Steps**

### **CUSTOMER SEGMENTS**

- **Customers Defined**
- **Transportation Needs**
- **Destinations Identified**
- Rider Eligibility & App
- **Accessibility Features**
- **Linguistic Needs**

#### LAUNCH PLAN

- **Neighborhood Basing**
- **Financial Plan**
- **Start-up Funding**
- **Destination Sponsors**
- **Community Support**
- **Regulatory Compliance**

### **TECHNOLOGY SOURCING**

- **EV Acquisition**
- **EV Chargers**
- **Integrated Payments System**
- **Ordering/Dispatching**
- **Technical Support**
- **Customer Call Center**

### **OPERATIONS PHASE**

- **Branding/Marketing**
- **Driver Training/On-Boarding**
- **Vehicle Maintenance**
- **Software Support**
- **Customer Support 24/7**
- **Data Reporting**

## **GROWTH PHASE**







- **Sponsors**
- **Scaling up Service Area**
- **Transition to AVs**





A key partner for this service with extensive planning and operational experience deploying micro-transit solutions in multiple jurisdictions.

