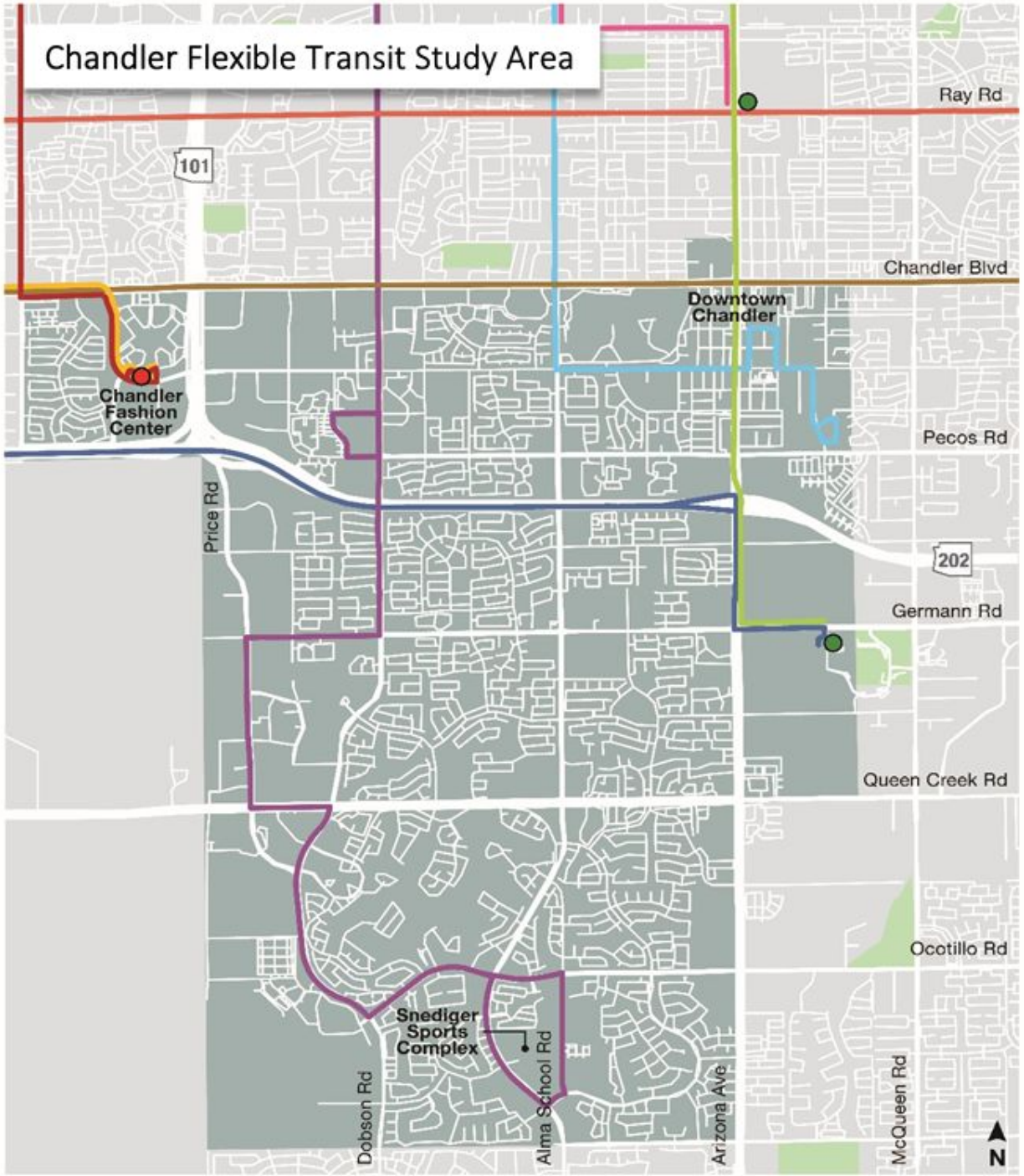
Price Road Flexible Transit Study

VALLEY METRO

Flexible Transit Study Area Coverage



LEGEND

Valley Metro Bus Routes

- Scottsdale Rd/Rural (72)
- Chandler Blvd/Williams Field Rd (156)
- Chandler Express 1 (541)
- Chandler Express 2 (542)
- Country Club/Arizona Ave (112)
- Dobson (96)
- Hayden/McClintock (81)
- Ray Road (140)
- Alma School (104)

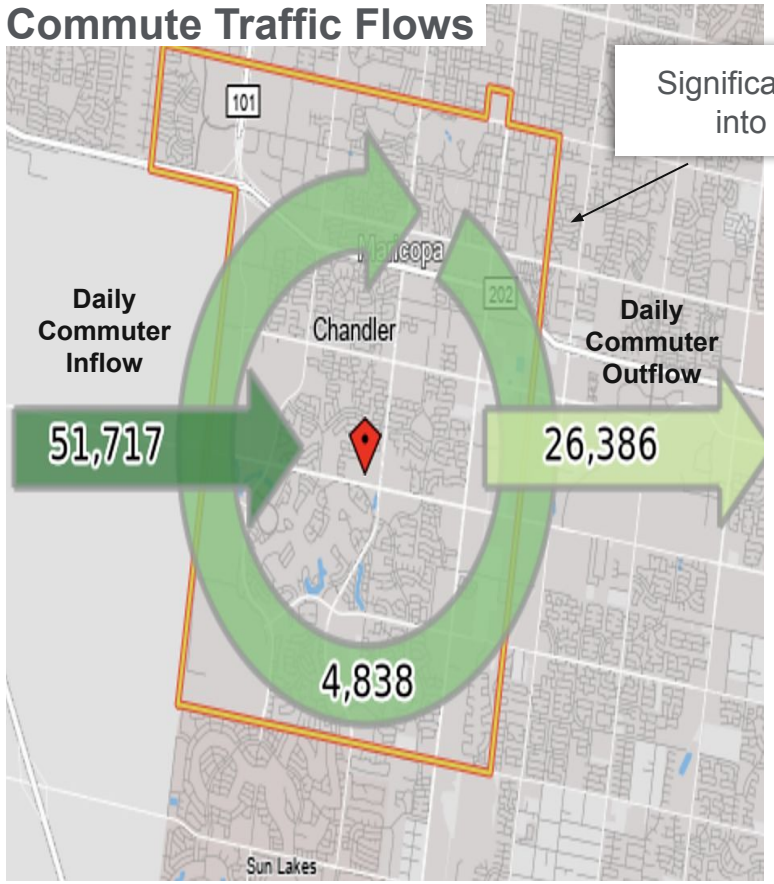
- Transit Center
- Park-and-Ride
- Flexible Transit Study Area

Commuter & Transit Traffic

The proposed zone covers key employment centers:

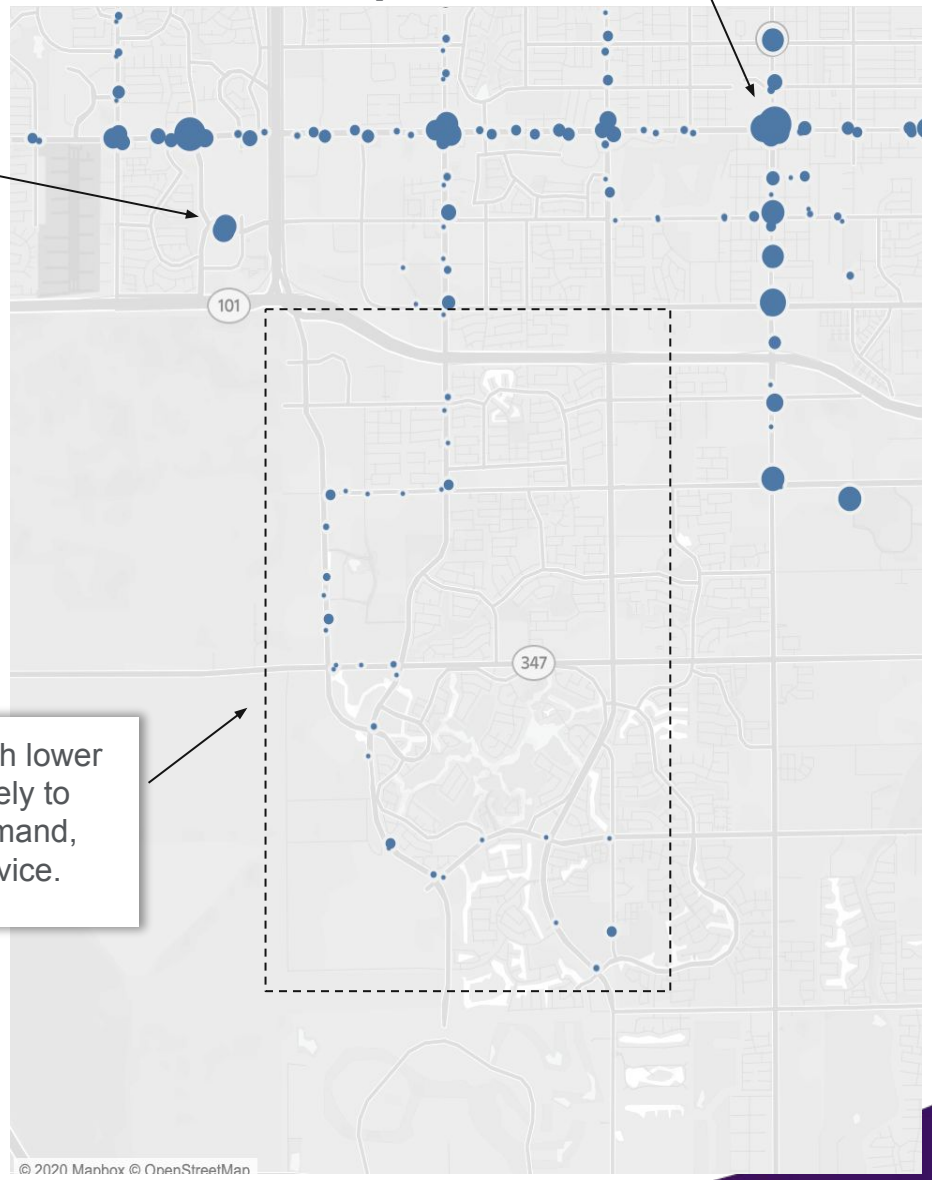
- Intel, Wells Fargo, and Paypal campuses
- Chandler Fashion Center
- Downtown Chandler

Commute Traffic Flows



Significant commuter inflow into the study area.

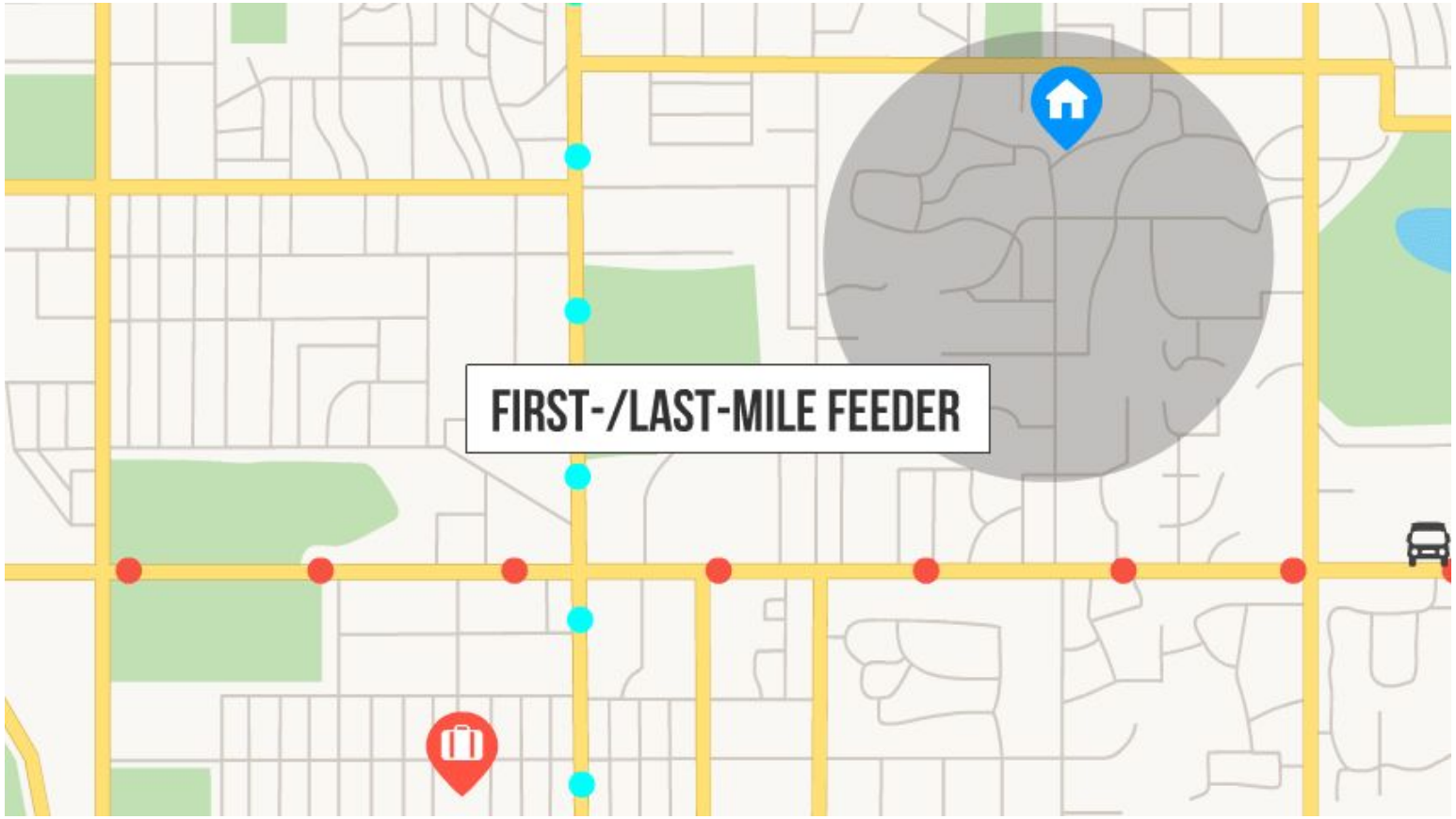
Transit Ridership



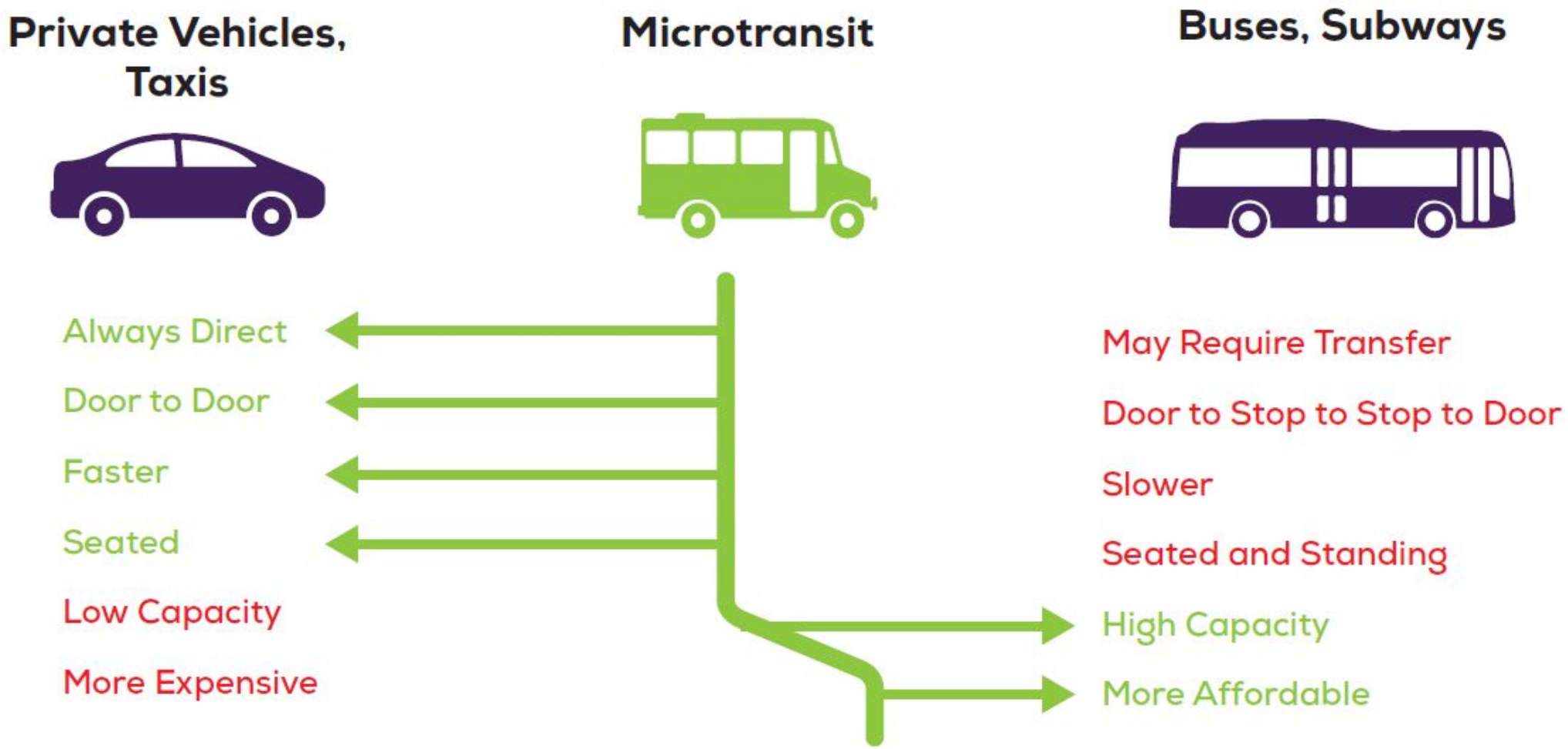
Business corridor with lower transit ridership likely to benefit from on-demand, flexibly routed service.

Circle size reflects relative rider demand volume

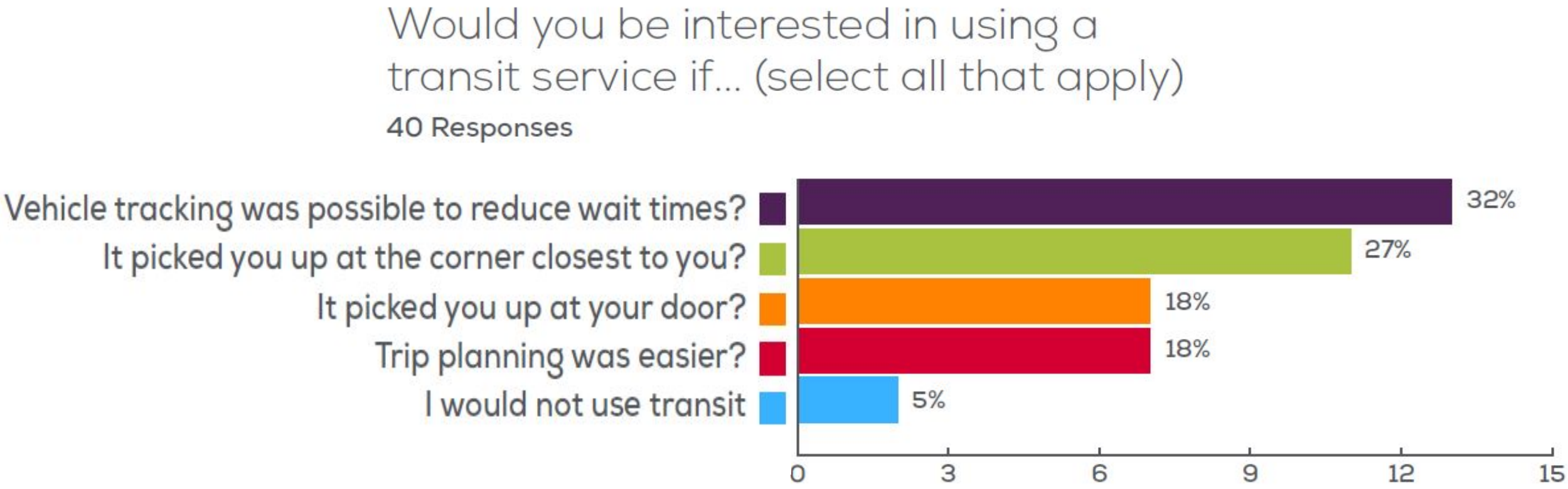
What is Microtransit?



What is Microtransit?



Public Input – Service Feature Interest

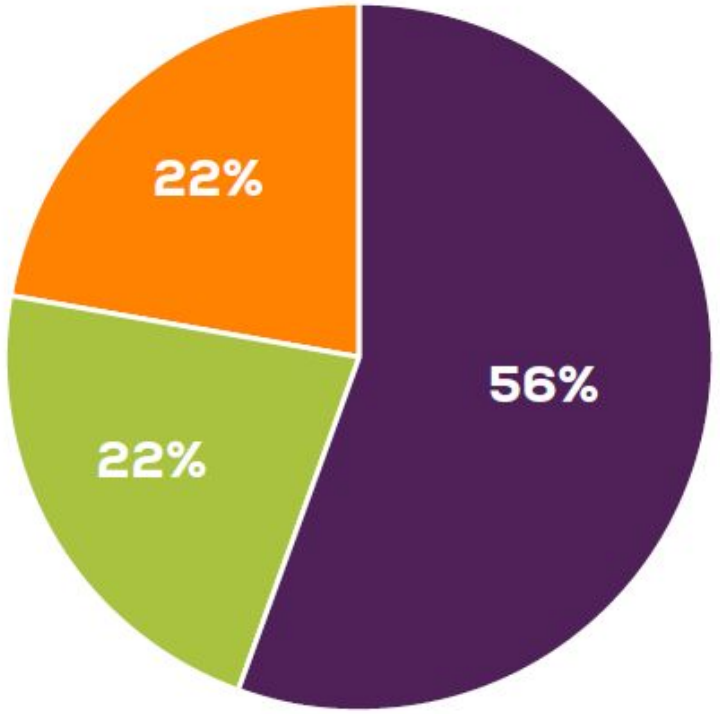


Public Input – Wait Time Preference

When using a ride hailing service, what is the highest wait time you would consider acceptable?

18 Responses

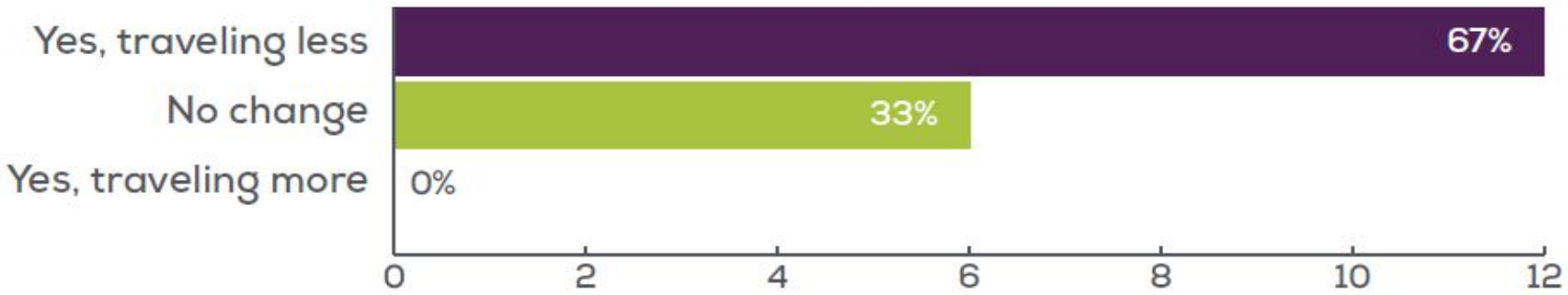
- 10 to 15 minutes
- 15 to 20 minutes
- 20 to 30 minutes
- 30 to 40 minutes
- 40 to 50 minutes



Public Input – COVID Travel Impact

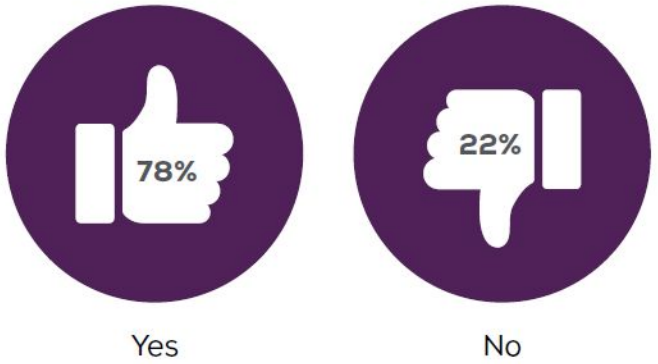
Have you transitioned to teleworking due to COVID-19?

18 Responses



By the end of 2021, would you feel comfortable sharing a ride with one or two individuals in a 10-to-15 passenger vehicle?

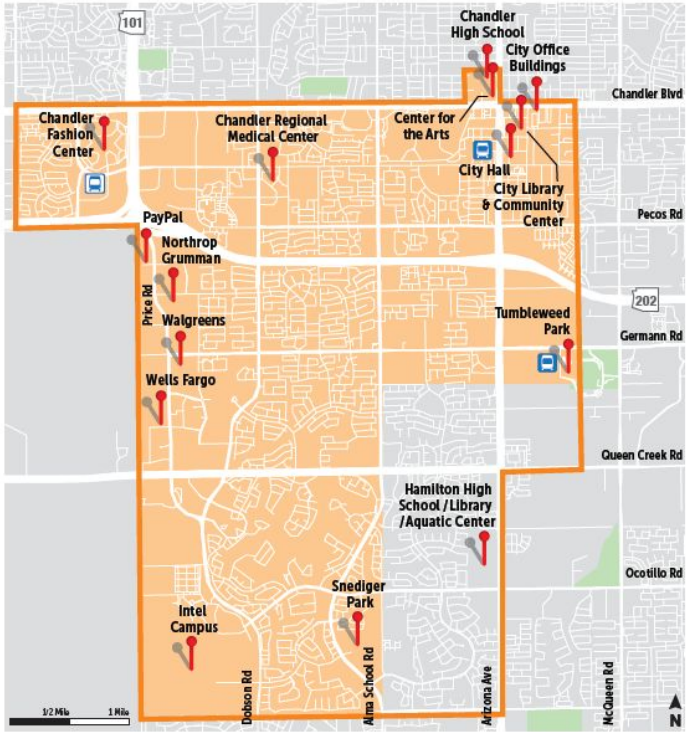
18 Responses



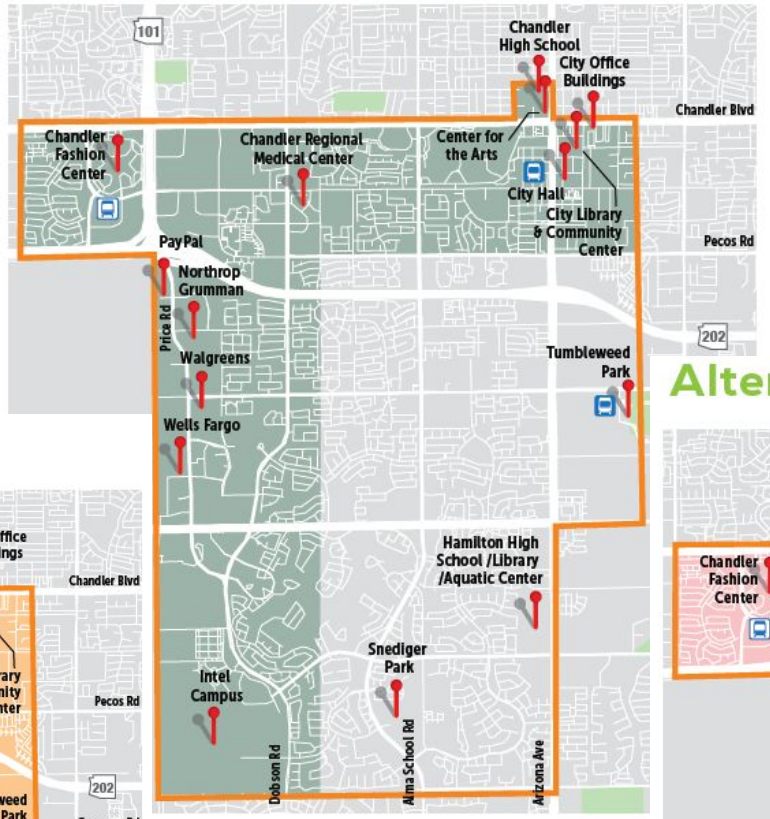
Alternatives Analysis

Alternative Zone 1

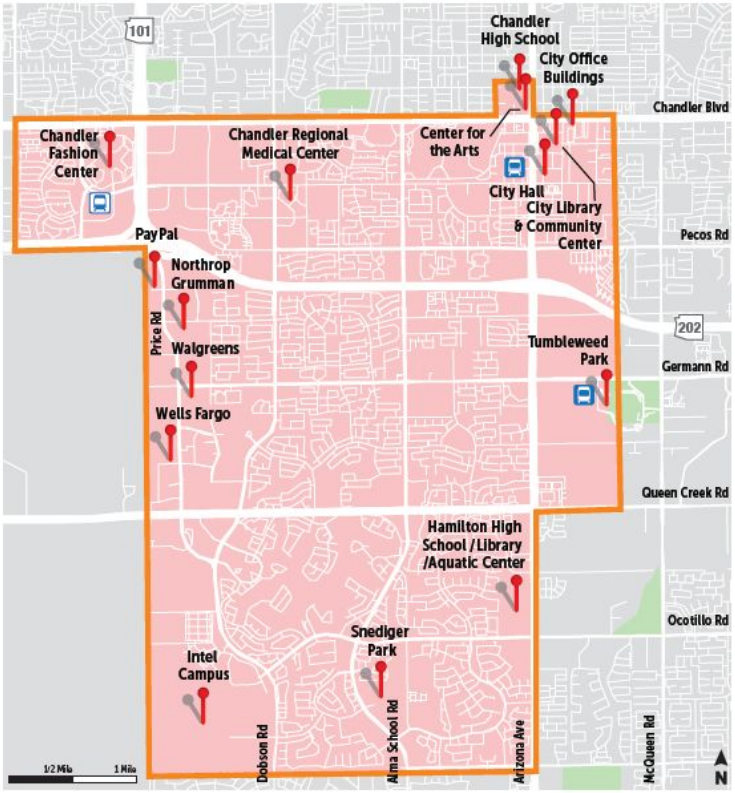
Alternative Zone 2



Alternative Zone 3

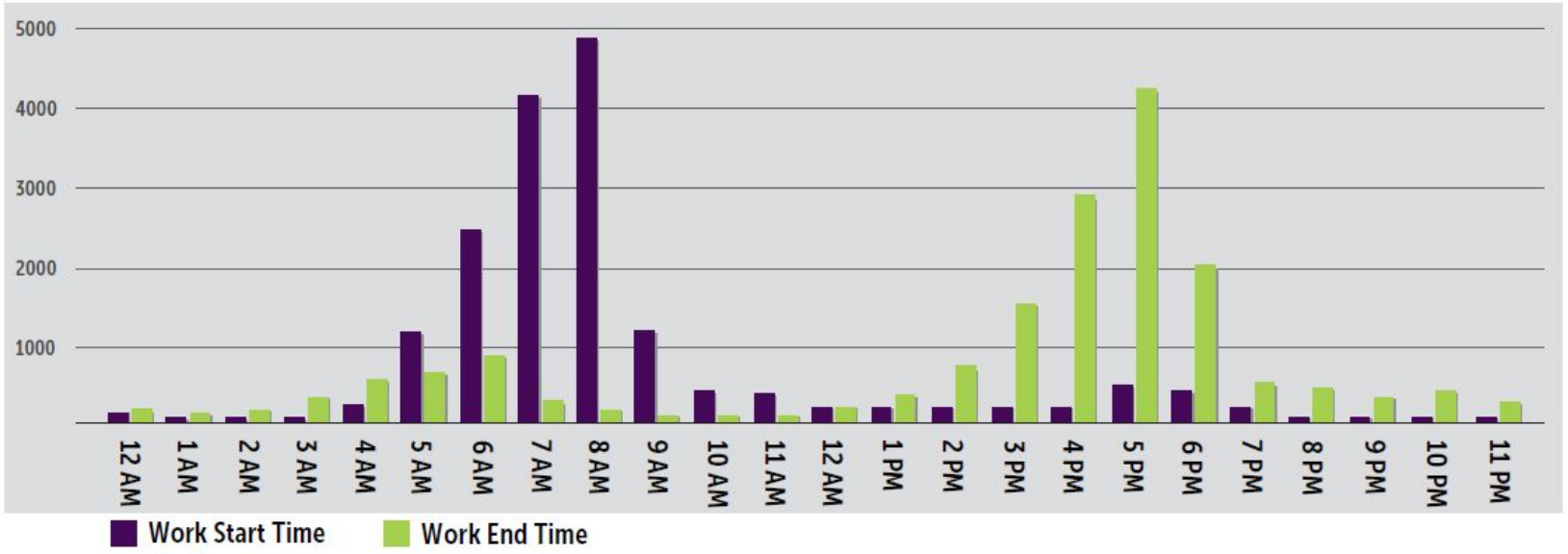


Alternative Zone 4



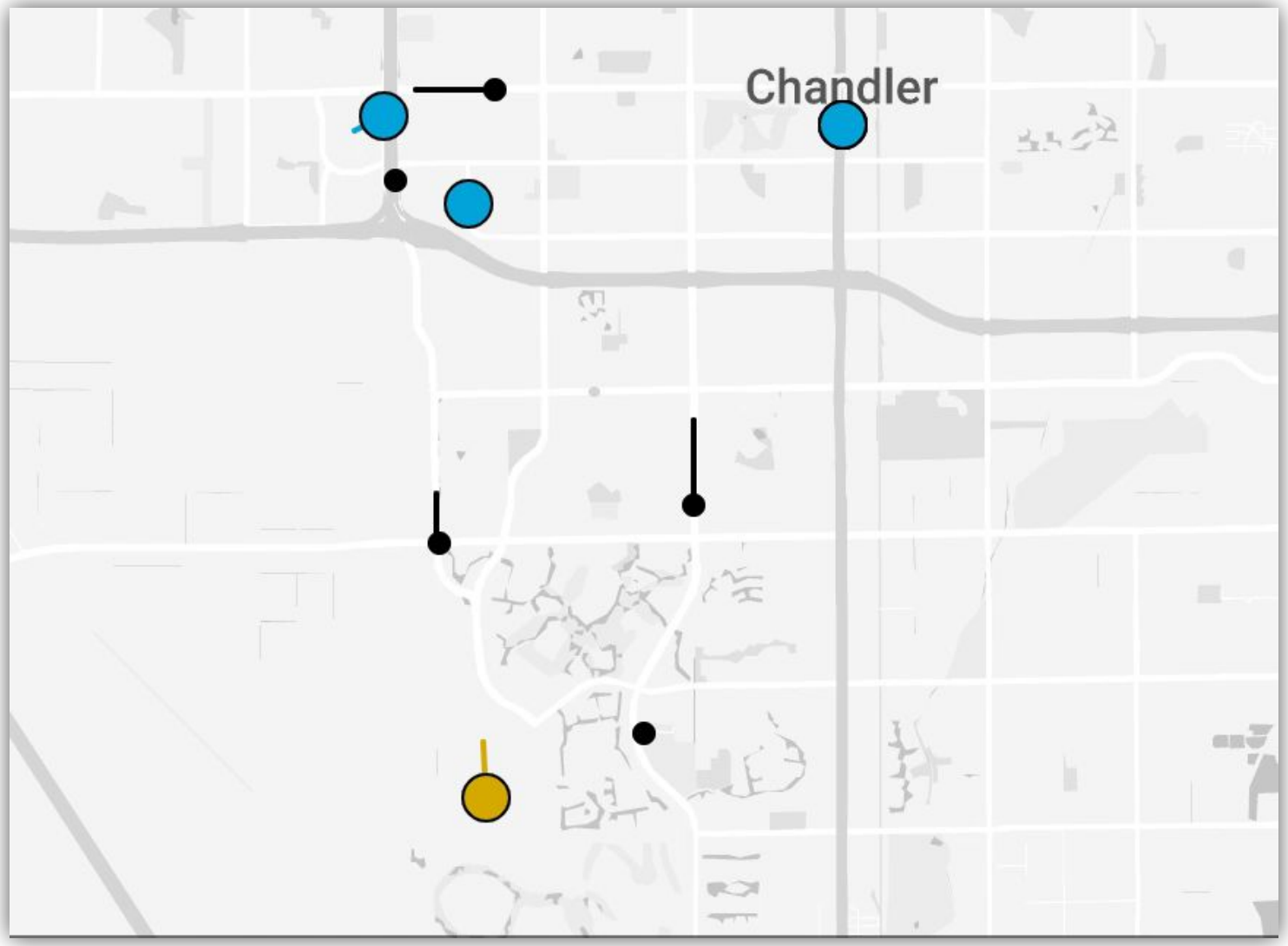
Travel Demand Analysis & Cost Estimation

Figure 7. Study Area Employee Start & End Work Hour (2019)



Source: Trip Reduction Program 2019

Travel Demand Analysis & Cost Estimation



Source: Via

Travel Demand Analysis & Cost Estimation

	Proposal A Low Demand	Proposal B Medium Demand	Proposal C High Demand
Total Number of Vehicle Hours	**~14,100**	**~17,600**	**~21,200**
Days / Week of Operations	6	6	6
Avg. Service Hours / Day	14	14	14
Duration of Deployment (Months)	12	12	12
Non-WAV Vehicles in Fleet	3	4	4
Wheelchair Accessible Vehicles (Included in Price)	1	1	2
Total Vehicles in Fleet	**4**	**5**	**6**
Fixed Upfront Costs	$16k	$17k	$29k
Ongoing Operational (Non-Upfront) Costs	$0.77M	$0.90M	$1.04M
Total Cost (Excl. Expected Fare Revenue Collected)	**$0.85M**	**$1.00M**	**$1.17M**
Expected Fare Revenue Collected	-$66k	-$83k	-$99k
Total Cost (Net of Expected Fare Revenue Collected)	**$0.79M**	**$0.92M**	**$1.07M**
Fully Loaded Cost / Vehicle Hour (Excl. Upfront Costs, Net of Expected Fare Revenue Collected)	**$54.60**	**$51.15**	**$49.26**

Source: Via

Travel Demand Analysis & Cost Estimation

Cost Estimate Summary Table		
	TaaS Cost	**SaaS Cost**
Est. Annual Vehicle Hours	17,600	17,600
Peak In-Service Vehicles	5	5
Upfront Cost	$17,000	$450,000 - $550,000*
Gross Annual Cost	$1,000,000	$800,000 - $850,000
Gross Cost per Hour	$56.81	$45.45 - $48.30
**Includes fleet purchase of 4 passenger vans and 2 cutaway buses*		

Source: Via

SmaRT Ride | Sacramento, CA

Cutaway Van

Ford GoRide | Detroit, Mi

Passenger Van

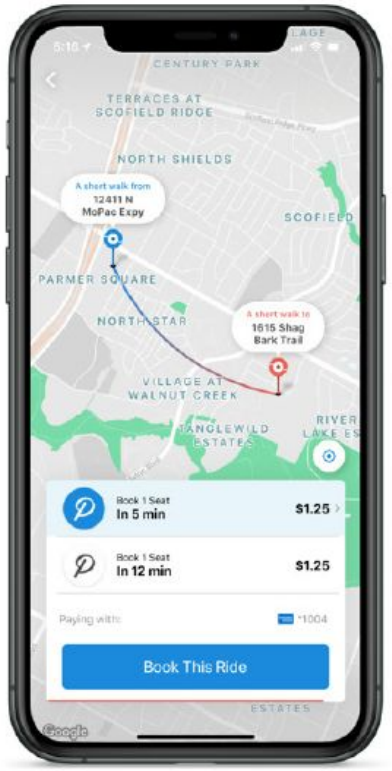
Van

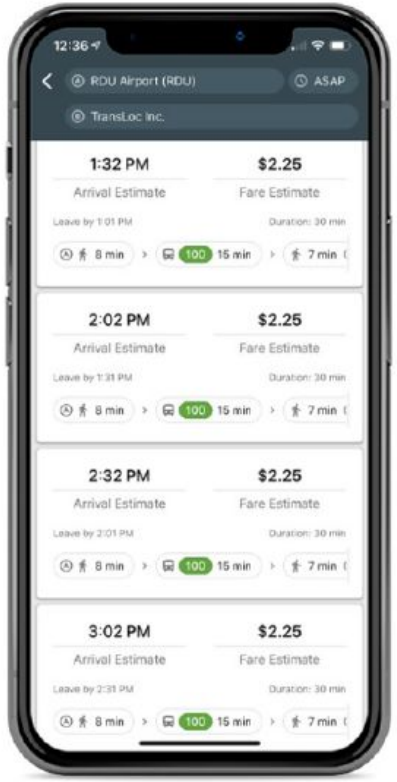
Van

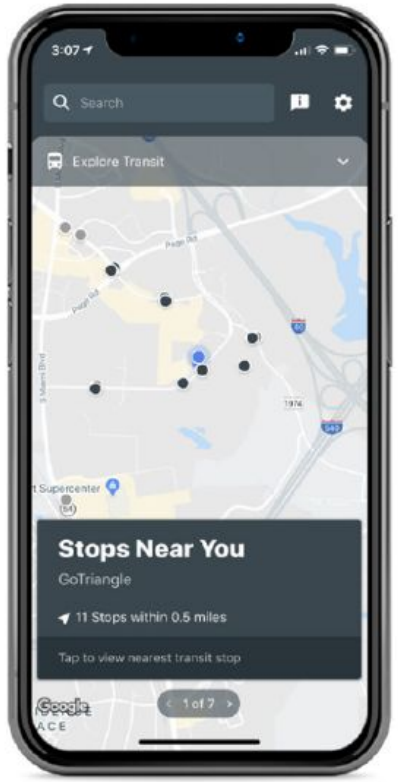
Vehicle Types and Tradeoffs

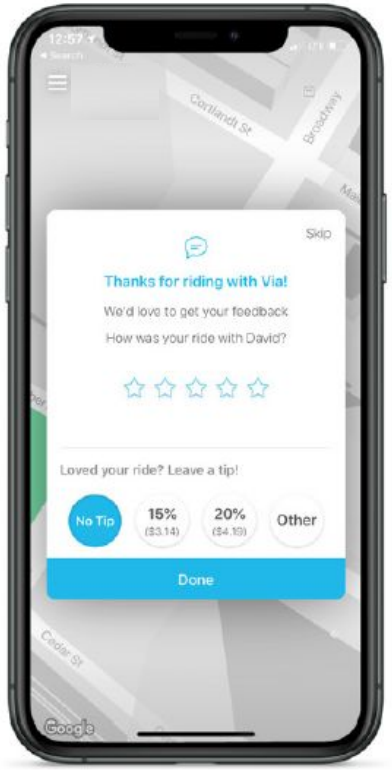
Vehicle Design and Branding

There’s an app for that…



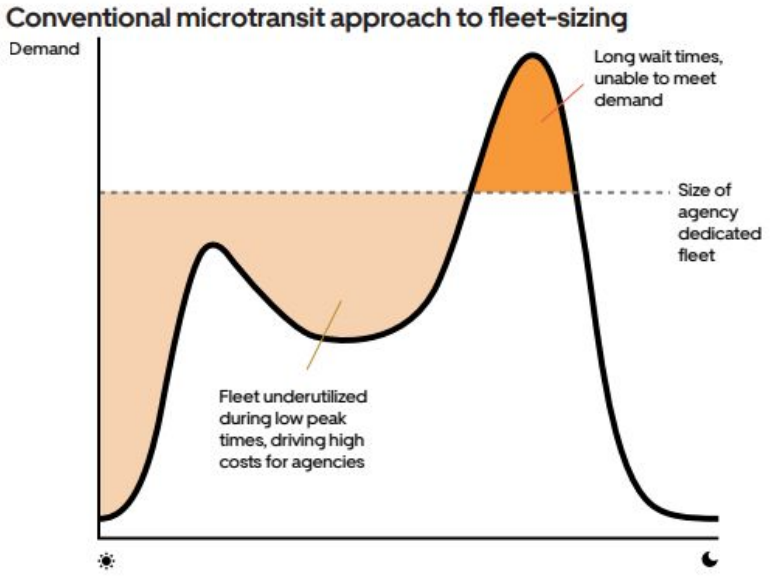




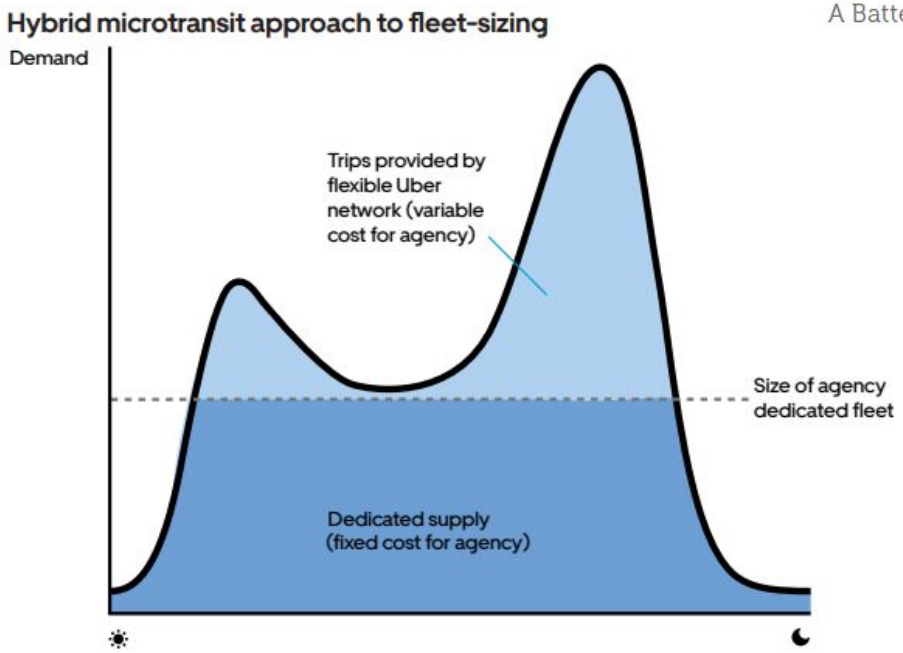


Planning Tools and Performance Measures

RECOMMENDED PLANNING TOOLS	
Weekday Average Boardings	Peak & Average Load Factor
Boardings By Time Of Day	Wait Time Reliability
Service Connectivity	Transfer Frequency
Recommended Performance Measure	Recommended Thresholds
Wait Times	Average: 10 -15 Minutes Max Acceptable: 20 minutes
Riders Per Hour	Weekday: 20 Rides /hour Weekend: 15 Rides /hour
Gross Cost Per Passenger	Weekday: $10 - $12 /boarding Weekend: $15 - $18 /boarding



A Battery Electric Passenger Van Being Plugged in to Charge



Advancing Efficiency With Technology

Study Options & Recommendations for Service

Service Aspect	Options Explored	Recommendation
Span	Day Type: • Weekday vs. Weekend Service Time: • Peak hour service • All day service • Late night service	Day Type: • Weekdays and Saturdays Service Time: • 15-hour span • 5AM-8PM • Weekdays and Saturdays
Fleet	Vehicles: • Cutaway/Minibus • Passenger van • Mini van Fleet Size: • 4-8 vehicles • Rideshare integration	Vehicles: • Passenger Vans • Cutaway Buses Fleet Size: • 5 vehicles at peak, inc. 2 cutaways • 1-2 vehicles pre- and post-peak • Seek potential rideshare partnership for hybrid fleet
Service Zone	• Full study area • L-shaped zones in eastern and northern portions of study area • East of Alma School Road	• Full 18 square-mile coverage zone
Smartphone App Integration	Potential App Features: • Real-time tracking • Touchless fare payment • Transit information & trip planning • Personal use reports • Customer feedback	• Implement App with the functions noted • Integrate with regional Valley Metro App
Fee Structure	• Match local bus fare ($2/trip) • Small boarding fare ($0.50-$1) • Free fare • Transit transfer incentives	• Piloted/initiated with small fare • Free for students

Thank You!

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axaevier@valleymetro.org

Follow the study online at *https://www.valleymetro.org/project/price-road-flexible-transit-study*