

Tempe Green Team

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Introduction

- Main form of transportation in Tempe continues to be cars
- Dependence on cars creates challenges for the city:
 - Pollution, GHG emissions, social equity challenges, health concerns, longer commute times, intensified traffic congestion, and increased accident frequency/intensity
- How can we create a city that fosters the movement of people as opposed to cars?



The 20-Minute City

Seeking the 20-minute city

A 20-minute city is characterized by a vibrant mix of commercial and residential establishments within a



***1-mile walking distance,
4-mile bike ride or
20-minute transit ride.***

The 20-minute city premise is at the core of planning for traditional neighborhood design, transit-oriented development and complete streets. A few of the many benefits of the 20-minute city are reduced transportation costs, reduced greenhouse gas emissions, improved public health and improved access to residents' daily needs.

Tempe Transportation Master Plan Definition

Bus Route 48

Route 48: 48th Street/Rio Salado

Bus Info

- Bus service 7 days a week
 - Monday through Saturday: 5 am to 12:30 am
 - Route operates about every 30 minutes from 6 am to 9 am & from 3 pm to 6 pm
 - Sunday: 5 am to 10:30 pm
 - Route operates about every 30 minutes

Bus Fares

- \$2.00 for one ride
- Discount fares are available for certain groups
- Week and month-long passes
- Buses are wheelchair accessible and have racks for up to 3 bikes

Albuquerque

ABQ Rapid Transit (ART)

- Newly-developed additions to the city bus system
- 3 routes run through downtown ABQ and UNM campus
- Uses features like bus-only lanes, signal priority, and elevated platforms
- This system, although making bus transit more efficient, comes with a set of challenges
 - Bus-only lanes prevent left turns
 - Restricts traffic to two lanes

Fast Facts

- \$1 / ride
- 5-7 minute headways
- Station ticket kiosks



Singapore Case Study

Bus System

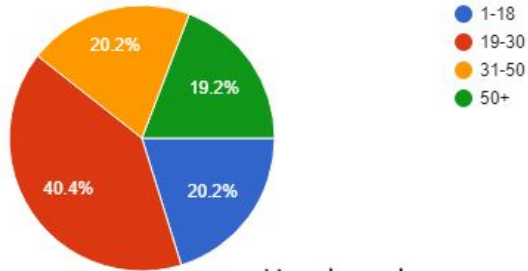
- Primary actor in mass transit system
- Two main bus companies running routes from 5:30 AM to midnight each day
 - Other companies run routes from midnight to 5:30 AM
- Buses in smaller living districts ferry people between the bus stops of the larger bus routes
- Premier bus service (“bus plus”) offers more comfort and shorter travel times for a higher price → comparable to Tempe’s Express routes
- While the bus system is very cost efficient, it does suffer from many of the same problems as the bus systems America (often running late, very crowded during peak hours, etc.)

Mass Rapid Transport System (MRT)

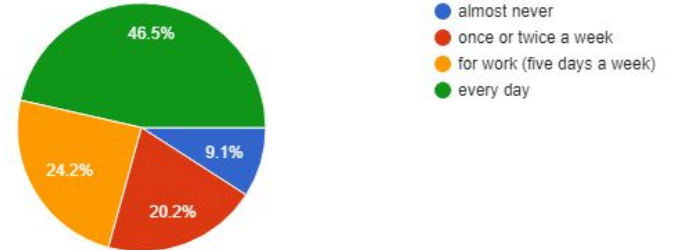
- Not as extensive as bus system
- The overall goal is to extend the MRT system to much more of the country to relieve some of the stress from the bus lines
- Light rapid transit system (LRT) → similar to Tempe’s light rail
 - MRT transports people between cities; LRT travels within the city

Research Findings

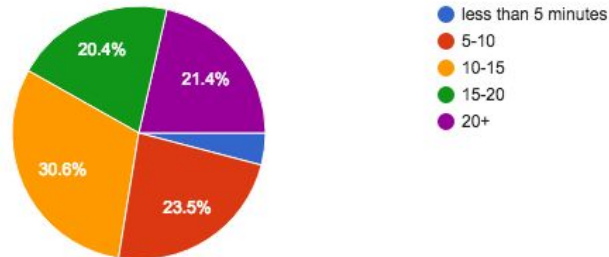
Age



How often do you use public transit?



How long do you usually wait for the bus?



Findings & Challenges

- Some riders feel uncomfortable, unsafe on buses
- Riders feel that they would benefit from a more reliable schedule, more frequent ride pick-ups, and shorter wait times
- Riders find it confusing that the bus operates at different times during various parts of the day
- Some riders are unsatisfied with the bus fares for the monthly rider membership
- Inconsistency with bus drivers
- Too much/irrelevant information at the stops makes it difficult to understand routes
- Riders feel that the online tracking system is not always accurate

Transition Strategies

1. Increase Ridership

- More comfortable
- Expand routes into more neighborhoods
- Provide incentives to employees of Tempe businesses
- Price differentials
- Refillable transit cards

2. Reduce congestion

- More buses for more frequent pick-ups
- Expanded routes
- Connect routes with light rail stops and other bus stops

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Thank You

