Arizona Avenue Alternatives Analysis

Chandler Transportation Commission
January 20, 2021
Study Purpose

- Improve local and regional connectivity
- Enhance mobility and grow transit ridership in Chandler
- Support Chandler economic development goals
- Lay groundwork for future regional transportation funding opportunities
By 2040, the AAAA study area is predicted to have...

- **23%** Increase in population
- **46%** Increase in employment
- **11%** Increase in travel time by car between downtown Chandler & downtown Mesa
- **280k** Daily one-way trips within the study area

Source: MAG Regional Travel Forecast Model, 2018
What is an Alternatives Analysis?

Technical Analysis

Evaluate Transit Types
Evaluate Route Options
Identify Potential Station Locations

Outcome
What type of transit and routes are best?

Public Input Throughout Process
*For the AAAA, instead of the Tier 1 Evaluation, the Chandler Transportation Master Plan 2019 Update was consulted to establish the initial list of corridors for the Tier 2 Evaluation.
Evaluation

Tier 2 Evaluation Criteria

- Ridership Potential
- Potential Costs
- Physical and Engineering Constraints
- Transportation Efficiencies
- Land Use and Economic Development
- Transit Access
High-capacity Transit Types

<table>
<thead>
<tr>
<th></th>
<th>Hybrid Light Rail/Streetcar</th>
<th>Bus Rapid Transit</th>
</tr>
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<tbody>
<tr>
<td>Speed</td>
<td>Moderate</td>
<td>Higher to Moderate</td>
</tr>
<tr>
<td>Traffic Lanes</td>
<td>Dedicated or Shared</td>
<td>Dedicated or Shared</td>
</tr>
<tr>
<td>Cost to Build</td>
<td>$$</td>
<td>$</td>
</tr>
<tr>
<td>Capacity</td>
<td>135 per car</td>
<td>80 per bus</td>
</tr>
<tr>
<td>Average Cost to Operate</td>
<td>$$$</td>
<td>$$</td>
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</tbody>
</table>

*Enhanced bus options may be incorporated by Chandler to support advancement of future high-capacity transit investments.*
Route Alternatives

- Arizona Ave Alternative
- Chandler Blvd Alternative
- Price Rd Alternative
Public Involvement

- Project webpage
- Online survey
- Email blasts (using study and relevant city databases)
- Social media (Valley Metro and city platforms)
- Public and stakeholder meetings/workshop
Public Involvement - Outreach

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tbody>
<tr>
<td>Public Meetings (3)</td>
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<tr>
<td>Stakeholder Workshop</td>
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<td>Stakeholder Workshop</td>
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<tr>
<td>Public Meeting</td>
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<tr>
<td>Chandler Transportation Commission Meeting</td>
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<td>Chandler Transportation Commission Meeting</td>
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* In conjunction with Chandler Transportation Master Plan outreach activities
Public Involvement - Survey

For long-term transit improvements, what transit mode(s) should the city prioritize?

Responses: 937

*From 2019 Chandler Transportation Master Plan online survey
Public Involvement - Survey

What are important destinations transit should serve?

Responses: 940

*From 2019 Chandler Transportation Master Plan online survey
Public Involvement - Comments

During the public involvement process, the public asked study questions related to the alternatives, funding, economy and future technological advances.

Public comments included:

- **I think the best way to make mass transit (light rail in particular) a viable option is by connecting routes to already existing ones.** The Chandler Boulevard and Price Road corridors are too disjointed and would be difficult to make these connections.

- **Arizona Avenue** is a great road to build a north/south transit system since it currently handles high-traffic volumes.

- My light rail concerns include **cost to build, business impacts** during construction, and **removal of vehicle traffic lanes**.
## Detailed Analysis Results

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<tbody>
<tr>
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<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<td>●</td>
<td>2</td>
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<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>1</td>
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<tr>
<td>Chandler Boulevard</td>
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<td>●</td>
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<td>●</td>
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<tr>
<td>Price Road</td>
<td>Rail</td>
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- ● High Performance
- ▲ Medium Performance
- △ Low Performance
Recommended Alternative

[Map of Chandler, Arizona, showing recommended alternative routes and stations. Legend includes symbols for Valley Metro Rail/Station, Proposed Fiesta District HCT, Arizona Ave HCT/Station, Possible Arizona Ave HCT Extension/Stations, and City Boundaries.]

15
Cross-Sections

Conceptual Rail in exclusive guideway

Conceptual BRT in exclusive guideway

Conceptual BRT in BAT lane
Station Area (Rail)

For illustrative purposes only, looking northwest along Arizona Ave at Pecos Rd
Station Area (BRT)

For illustrative purposes only, looking northwest along Arizona Ave at Pecos Rd

Pecos Rd/Arizona Ave Station Area Illustration
Future Scenario Planning

![Study Area Vehicle Type Evolution](image)

- **Standard**
- Type 1 – Enhanced safety and connectivity
- Type 2 – Automated on designated facilities
- Type 3 – Fully automated
Future Scenario Planning

Transit Riders

![Graph showing the projection of transit riders from 2020 to 2070 for different scenarios: Baseline, Scenario 1, Scenario 2, and Scenario 3. The graph indicates an upward trend with Scenario 3 showing the highest increase.]
Next Steps

• Coordination with other regional HCT projects

• Focus on ways to improve federal funding competitiveness:
  • Improve local transit routes that support the Arizona Ave corridor
  • Implement more transit-supportive land use policies

• Prepare for future regional funding opportunities
Questions and Comments?