What is an Alternatives Analysis?

- Evaluates High Capacity Transit (HCT) preferred corridors to meet future transportation needs
- Incorporates public outreach
- Defines a Locally Preferred Alternative (LPA)
  - Route
  - Station locations
  - Street configuration options
Study Area
Purpose

• Connect local and regional activity centers
• Support local transportation, economic development and land use planning goals
• Build toward greater regional connectivity with existing and future HCT projects in Mesa, Tempe and Phoenix
Need

• Enhance connectivity in areas with high-use bus routes and projected population growth
• Serve public facilities, residential areas and employment/retail centers
• Enhance the mobility of transit-dependent populations
• Assist with travel demand in the study area and between regional destinations
Schedule

LATE 2018
ALTERNATIVES ANALYSIS
STUDY BEGINS

EARLY to MID 2019
DEFINE PURPOSE
AND NEED

MID TO LATE 2019
IDENTIFY ALTERNATIVES

EARLY TO MID 2020
EVALUATE ALTERNATIVES

LATE 2020
DEFINE PREFERRED
ALTERNATIVE
Process

Identify Alternatives
Identify alternatives that meet the Purpose and Need of the Project

Tier 1 Evaluation
Qualitative, mode-neutral, analysis

Tier 2 Evaluation
Quantitative, mode-specific, analysis

Locally Preferred Alternative
Detailed description of the final alternative

Fewer alignment options, but more detailed analysis over time


## Evaluation

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridership potential</td>
<td>Population served, existing ridership</td>
</tr>
<tr>
<td>Land use and economic development potential</td>
<td>Plans, policies, land use</td>
</tr>
<tr>
<td>Physical and engineering constraints</td>
<td>Right-of-way, crossings</td>
</tr>
<tr>
<td>Transportation network integrity and functionality</td>
<td>Connectivity, traffic impact</td>
</tr>
<tr>
<td>Potential costs</td>
<td>Relative capital and operating cost</td>
</tr>
</tbody>
</table>

*Criteria may be updated, expanded or modified throughout the process*
• Fiesta District Alternatives Analysis example (Mesa)
• Five criteria were given higher weighting
  1. Low-income population
  2. Zero-car households
  3. Major areas served
  4. Existing transit ridership
  5. Redevelopment opportunities

• Focused on Ridership Potential and Economic Development
High Capacity Transit Types

<table>
<thead>
<tr>
<th></th>
<th>Light Rail</th>
<th>Streetcar</th>
<th>Bus Rapid Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Speed</strong></td>
<td>Higher</td>
<td>Moderate</td>
<td>Higher to Moderate</td>
</tr>
<tr>
<td><strong>Traffic Lanes</strong></td>
<td>Dedicated</td>
<td>Dedicated or shared</td>
<td>Dedicated or shared</td>
</tr>
<tr>
<td><strong>Cost to Build</strong></td>
<td>$$$</td>
<td>$$</td>
<td>$</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>175 per car</td>
<td>135 per car</td>
<td>80 per bus</td>
</tr>
<tr>
<td><strong>Average Cost to Operate</strong></td>
<td>$</td>
<td>$$$</td>
<td>$$</td>
</tr>
</tbody>
</table>

*In addition to the HCT alternatives listed in the table, interim local bus enhancements that support a future HCT investment will also be analyzed.*
Public Outreach

<table>
<thead>
<tr>
<th>Date</th>
<th>Outreach Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 2018-present</td>
<td>Project webpage</td>
</tr>
<tr>
<td>As needed</td>
<td>E-notifications</td>
</tr>
<tr>
<td>As needed</td>
<td>City social media</td>
</tr>
<tr>
<td>As needed</td>
<td>Stakeholder meetings</td>
</tr>
<tr>
<td>Jan. 2019</td>
<td>Public meetings (3)</td>
</tr>
<tr>
<td>Mar. 2019</td>
<td>Stakeholder workshop</td>
</tr>
<tr>
<td>Jan.– Apr. 2019</td>
<td>Online survey</td>
</tr>
<tr>
<td>Oct. 2019</td>
<td>Stakeholder workshop</td>
</tr>
<tr>
<td>Oct. 2019</td>
<td>Public meeting</td>
</tr>
<tr>
<td>Jul. 2020</td>
<td>Chandler Transportation Commission meeting</td>
</tr>
<tr>
<td>Nov. 2020</td>
<td>Chandler Transportation Commission meeting</td>
</tr>
</tbody>
</table>

Teamed with Chandler Transportation Master Plan efforts
Arizona Avenue Alternative
Chandler Boulevard Alternative
Price Road Alternative
Alternatives Analysis

Next Steps

• Continue more detailed evaluation of the various HCT route alternatives
• Continue evaluation of the transit types
• Recommend corridor for future regional funding and assessment (late 2020)
Questions and Comments?
Thank You