



Bus Rapid Transit Program Analysis, Outreach and Initial Corridor Recommendation

This report provides the Transportation, Infrastructure and Planning Subcommittee a summary of the community engagement process held between February and December 2020 regarding the analysis conducted to develop recommendations for establishing Phoenix’s Bus Rapid Transit program. This report also requests the subcommittee recommend City Council approval of an initial Bus Rapid Transit corridor along 35th Avenue and Van Buren Street.

THIS ITEM IS FOR DISCUSSION AND POSSIBLE ACTION.

Summary

In 2015, Phoenix voters approved Proposition 104, creating the 35-year street and transit plan known as Transportation 2050 (T2050) which identified Bus Rapid Transit (BRT) as a key component to continue expanding the City’s high-capacity transit network. BRT is a high-capacity bus service that focuses on improved speed, reliability, convenience and the overall transit experience. There are common recurring elements found in successful BRT systems, such as: advanced fare collection; enhanced stations; dedicated lanes; custom buses; transit spot improvements; and unique branding.

In 2019, Phoenix BRT Program staff were tasked by Phoenix’s Citizens Transportation Commission (CTC) and City Council with reevaluating the BRT corridors as originally outlined in the T2050 plan. The reevaluation was sought as the result of the passage of time since the development of the T2050 plan, whereby Phoenix has experienced significant changes in residential and commercial developments, population growth and density, in addition to ongoing regional efforts to identify additional BRT corridors that may travel through Phoenix. The analysis considered various elements of transit propensity (population, employment, low-income households, minority populations, persons with disabilities, zero-automobile households, persons under 18 and over 64 years in age), historical transit performance and ridership forecasting models utilizing the Federal Transit Administration’s scenario-planning software. Using these data points and processes, six potential BRT corridors were identified and are shown below:

- Camelback Road/24th Street;

- Indian School Road/24th Street;
- Thomas Road/44th Street;
- McDowell Road/44th Street;
- 35th Avenue/Van Buren Street; and
- 19th Avenue/Van Buren Street.

The six corridors above were further evaluated to develop potential BRT network options. The network analysis used industry best practices of two-mile spacing between corridors, good connections to light rail and frequent local bus service, intersection with other BRT corridors, and end points with highly used origins and destinations. Based on this analysis, four potential BRT network scenarios are shown below:

- Camelback Road/24th Street, Thomas Road/44th Street and 35th Avenue/Van Buren Street;
- Camelback Road/24th Street, Thomas Road/44th Street and 19th Avenue/Van Buren Street;
- Indian School Road/24th Street, McDowell Road/44th Street and 35th Avenue/Van Buren Street; and
- Indian School Road/24th Street, McDowell Road/44th Street and 19th Avenue/Van Buren Street.

The Phoenix BRT Program facilitated multiple BRT workshops, including an in-depth technical workshop with multiple City departments, Valley Metro, Maricopa Association of Governments, Arizona Department of Transportation and the established program consultant teams. Two executive workshops were also held for CTC and Councilmembers. The purpose of the workshops was to review the six potential corridors based on the results of the transit technical analysis and to obtain input on the four potential BRT network scenarios.

The results of this data-driven process revealed Camelback Road/24th Street, Thomas Road/44th Street and 35th Avenue/Van Buren Street as the most productive corridors with the highest demand and need.

After the workshops, the focus transitioned to community education, engagement and input which is described under Public Outreach.

Regional Efforts

In addition to the Phoenix BRT Program, MAG is conducting a Regional Bus Rapid Transit Feasibility Study to document the potential for the implementation of BRT within the MAG region. Phoenix has been an integral part of this collaboration along

with six other member cities: Glendale, Tempe, Scottsdale, Mesa, Chandler, and Gilbert.

Through this study, MAG has identified potential BRT corridors which were evaluated based on quantitative and qualitative criteria. These corridors were identified for further study for a proposed new regional BRT program (**Attachment A**).

Concurrence/Previous Council Action

The Citizens Transportation Commission recommended approval of the initial Bus Rapid Transit corridor of 35th Avenue/Van Buren Street on May 27, 2021, by a vote of 10-0.

Public Outreach

Community Education and Engagement

From February to December 2020, the Phoenix BRT program launched an education and engagement campaign to provide continuous opportunities for the community to learn about the program and provide input on the six potential corridors and four potential networks. To best reach the community, BRT program staff employed both traditional in-person and virtual outreach methods and provided all materials in both English and Spanish. As a result of the COVID-19 pandemic, outreach efforts shifted to virtual platforms in March 2020. Below is a list of outreach tools and materials used to engage and educate the public and solicit feedback:

- Transit analysis maps;
- Social media;
- Program webpage (www.phoenix.gov/brt);
- Project fact sheet;
- Frequently Asked Questions;
- “BRT 101” videos;
- Online meeting webpage;
- In-person/virtual meetings with all 15 City of Phoenix Village Planning Committees;
- In-person/virtual meetings with community groups;
- News releases and television programs;
- Live virtual public meetings; and
- Shape Your BRT survey.

Survey Results

The Phoenix BRT program developed the Shape your BRT survey to garner community input on potential BRT elements, the six potential BRT corridors, and the four potential BRT network scenarios.

Based on the survey results, respondents' most preferred BRT foundation network aligns with the technical analysis results and community feedback received during the community education and engagement efforts: Camelback Road/24th Street, Thomas Road/44th Street and 35th Avenue/Van Buren Street.

Community Engagement Summary

The Community Engagement Summary can be found in **Attachment B**. Highlights include:

- 474 survey responses;
- 26 in-person or virtual meetings;
- Connected with over 1,200 community members;
- Responded to nearly 600 questions and comments;
- 4,581 BRT webpage views;
- BRT 101 video views (1,040 English and 92 Spanish);
- 766 online meeting webpage views;
- Online meeting video views: 300 English and 89 Spanish;
- Residents' input shows that the selected corridors are preferred because BRT could serve more transit riders; take riders to key locations; closer to home, school, or work; and may reduce commute times;
- Top themes for network modification suggestions were to extend networks further west, extend networks further north and south, and to limit overlap with light rail; and
- Key final comment themes are support for dedicated lanes, extending networks north, south, east, and west; and provide connections to surrounding/outlying areas and avoid overlapping services on 19th Avenue.

Location

Along 35th Avenue and Van Buren Street.

Council Districts: 1, 4, 5 and 7

Recommendation

The Public Transit Department requests the Transportation, Infrastructure, and Planning Subcommittee recommend City Council approval of an initial BRT corridor: 35th Avenue/Van Buren Street (**Attachment C**).

While the Camelback Road/24th Street and Thomas Road/44th Street corridors were also identified as most preferred during the technical analysis and the community education and engagement efforts, there is ongoing analysis of future high capacity transit planning in west Phoenix that may affect these corridors and the overall future BRT network. It is recommended that a final decision on these east-west BRT

corridors be deferred until there is further resolution on high capacity transit corridors in west Phoenix.

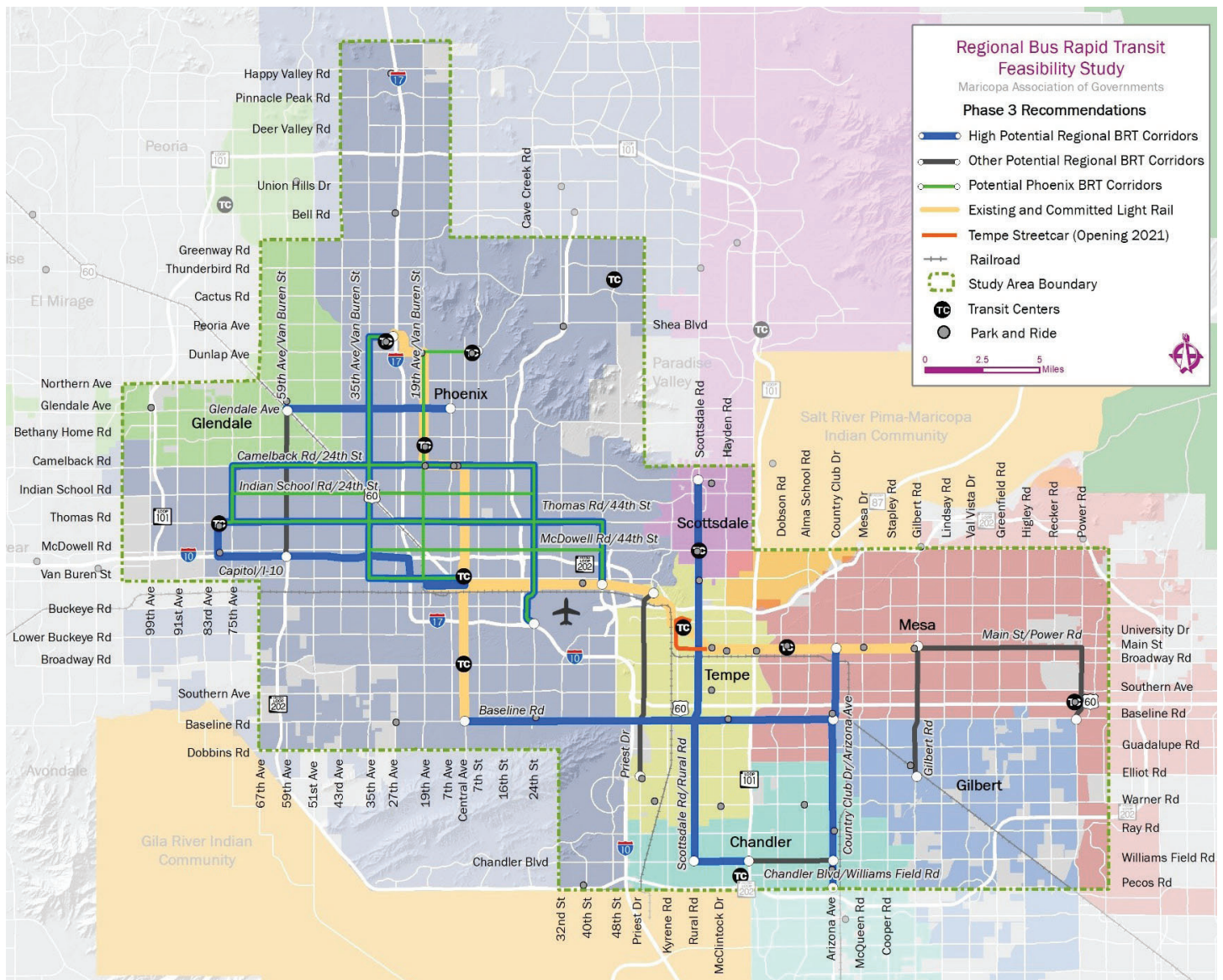
Upon approval of the initial BRT corridor, the next steps in the process for the 35th Avenue/Van Buren Street corridor include:

- Refining a BRT program schedule, including the phasing and implementation for the initial BRT corridor and future BRT network;
- Beginning corridor planning (operations and capital) and development of conceptual alternatives;
- Establishing corridor-specific outreach tools and techniques; and
- Identifying a funding plan and potential partners, including working to identify available grants.

Responsible Department

This item is submitted by Deputy City Manager Mario Paniagua and the Public Transit Department.

MAG BRT Corridors



Rank	Corridor Name
1	35th Avenue/Van Buren Street (COP)
2	Camelback Road/24th Street (COP)
3	Thomas Road/44th Street (COP)
4	Scottsdale Road/Rural Road
5	Capitol/I-10
6	Country Club Drive/Arizona Avenue
7	Glendale Avenue
8	Baseline Road

BRT Community Engagement Summary

Phoenix **BRT**
City of Phoenix Bus Rapid Transit Program

Phoenix Bus Rapid Transit Program

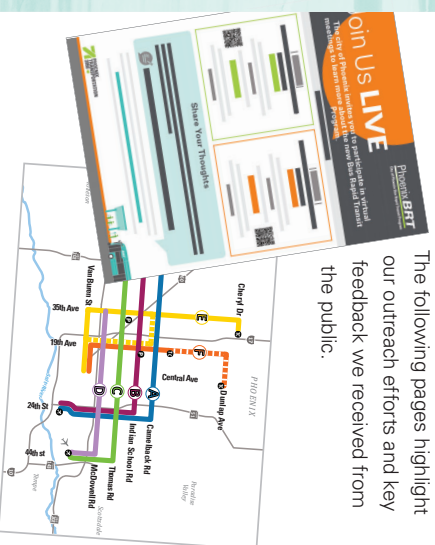
Community Engagement Summary
February 2020 – December 2020

Executive Summary

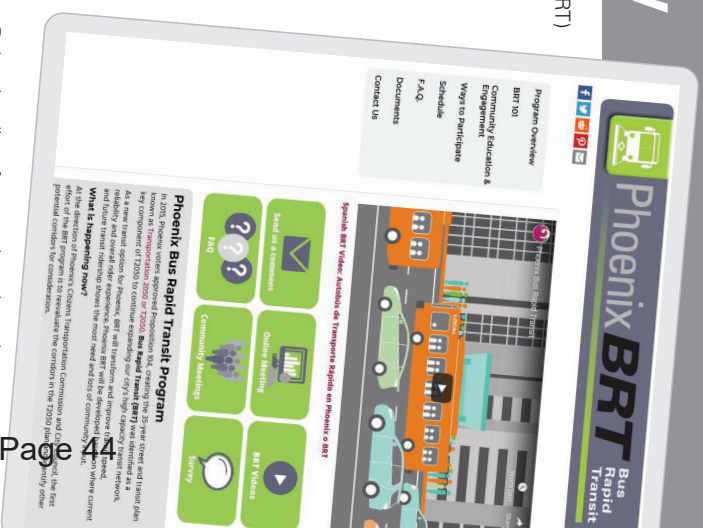
In February 2020, the Phoenix Bus Rapid Transit (BRT) team launched the community outreach campaign to educate and engage the public on the Program. The outreach campaign focused on educating the public on the elements and characteristics of BRT, the transit analysis completed on potential BRT corridors, and the six potential corridors and four potential network scenarios that were identified through the analysis. To best reach our community, the team employed both traditional and virtual outreach methods, and developed all materials (printed and digital) in both English and Spanish.

Between February and December 2020*, the team successfully connected with **over 1,200 people** from community leaders and elected officials to neighborhood associations and transit riders. Through our interactions, we **received nearly 600 questions and comments**, which will be used in conjunction with our transit analysis to develop corridor recommendations for the BRT Program.

The following pages highlight our outreach efforts and key feedback we received from the public.



*Due to public health and safety concerns caused by COVID-19, outreach efforts shifted to virtual platforms in March, 2020.



Below is a list of outreach tools and materials used to engage and educate the public and solicit feedback:

- Transit analysis maps
- Project fact sheet
- Frequently asked questions
- BRT 101 video
- Program webpage
- Online meeting webpage
- Social media
- Live virtual public meetings
- In-person/virtual meetings with community groups
- In-person/virtual meetings with the City of Phoenix Village Planning Committees
- *Shape Your BRT* survey

- 1 Executive Summary
- 2 Phoenix BRT Program Webpage
- 3 Online Meeting Webpage
- 4 Social Media Engagement
- 6 Live Virtual Public Meetings
- 7 Phoenix Community Groups/Organizations
- 8 Village Planning Committees (VPC)
- 10 *Shape Your BRT* Survey
- 19 Appendix – Phoenix Bus Rapid Transit Survey

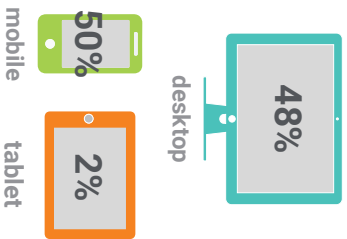
Phoenix BRT Program Webpage

On February 27, 2020, the Phoenix BRT team launched the program webpage at Phoenix.gov/BRT. Designed to educate and engage the public, the webpage provides an educational video, a fact sheet, transit analysis maps, frequently asked questions, and general project information.

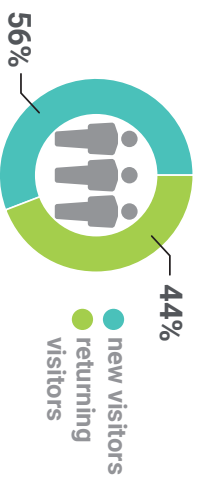


By the numbers...

Access by device



Site visitors



Location of visitors



BRT 101
video views
English 1,040
Spanish 92

2

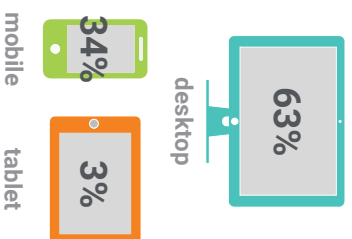
Online Meeting Webpage

On July 21, 2020, the Phoenix BRT team opened an online meeting at meetphoenixbrrt.com, to provide information on the Phoenix BRT Program and to solicit input on the six potential BRT corridors and the four network scenarios.



By the numbers...

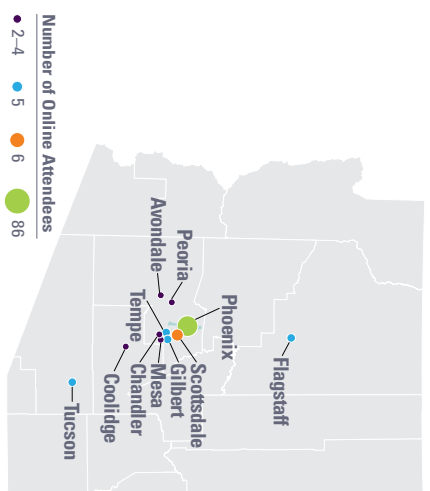
Access by device



Site visitors



Location of visitors

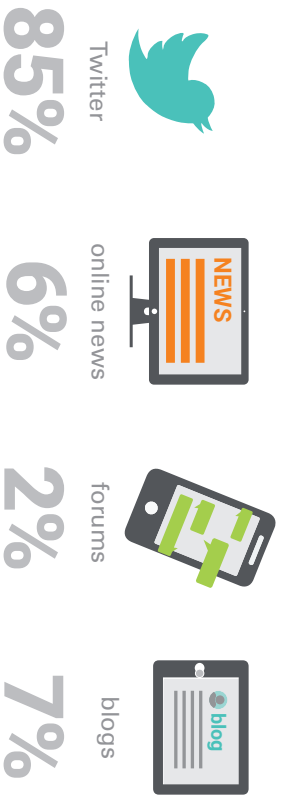


Online meeting
video views
English 300
Spanish 89

3

Social Media Engagement

Community conversations by platform



Who is the audience?



Community engagement on Twitter



What are they saying?

Top online hashtags:



Conversation sentiment



Top online themes



Live Virtual Public Meetings

The Phoenix BRT team held two live virtual meetings, one in English on November 10, 2020, and one in Spanish on November 17, 2020.

Notifications

- ▶ Meeting flyer
- ▶ Media advisory
- ▶ Library newsletter
- ▶ PHXConnect newsletter
- ▶ Nextdoor
- ▶ Social media
- ▶ Websites
- ▶ Electronic mail



media advisory

13 people attended
November 10, 2020 (English)



3 people attended
November 17, 2020 (Spanish)



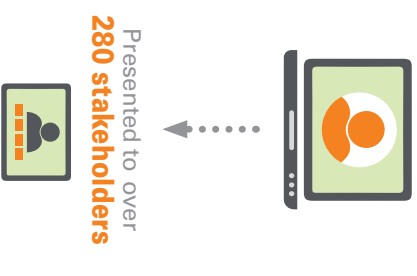
Key Question Topics

- BRT options in South Phoenix
- Regional BRT efforts
- BRT elements/ characteristics
- RAPID vs. Express vs. local bus service
- Impacts of BRT

Phoenix Community Groups/ Organizations

The Phoenix BRT team . . .

Met in-person or virtually with **9 community groups and organizations**



Answered over **40 questions**



Community Groups/Organizations Meetings*



*In place of an in-person or virtual meeting, the American Planning Association of Arizona requested a brief summary of BRT to be included in their digital newsletter.

Village Planning Committees (VPC)

The Phoenix BRT team . . .

Met in-person or virtually with **15 VPCs**



Presented to over 400 community/committee members and staff



Answered **over 70 questions**



Six key topics from comments and questions asked at the VPC meetings:

Dedicated lanes



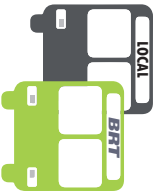
Ridership



Cost/funding



Local bus and BRT



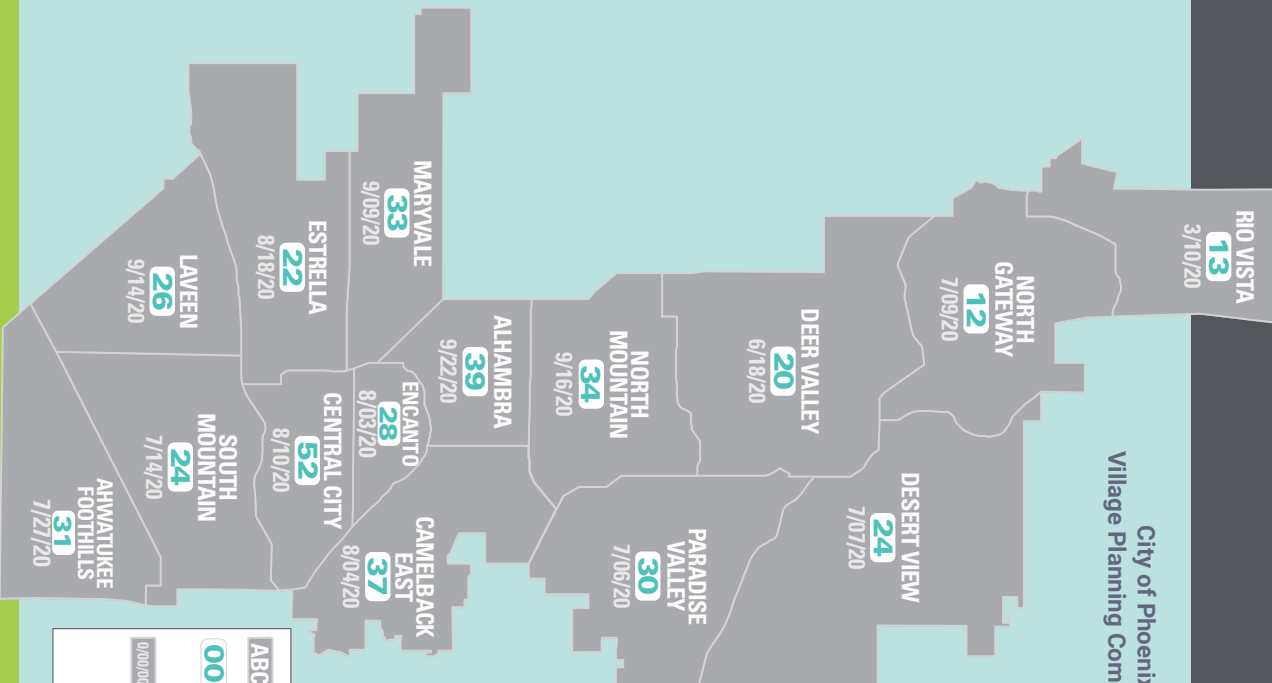
Community engagement



BRT options in South and North Phoenix



City of Phoenix
Village Planning Committees



ABC VPC name/
boundary

00 Number
of meeting
attendees

0/00/00 Date of
meeting

▲ north

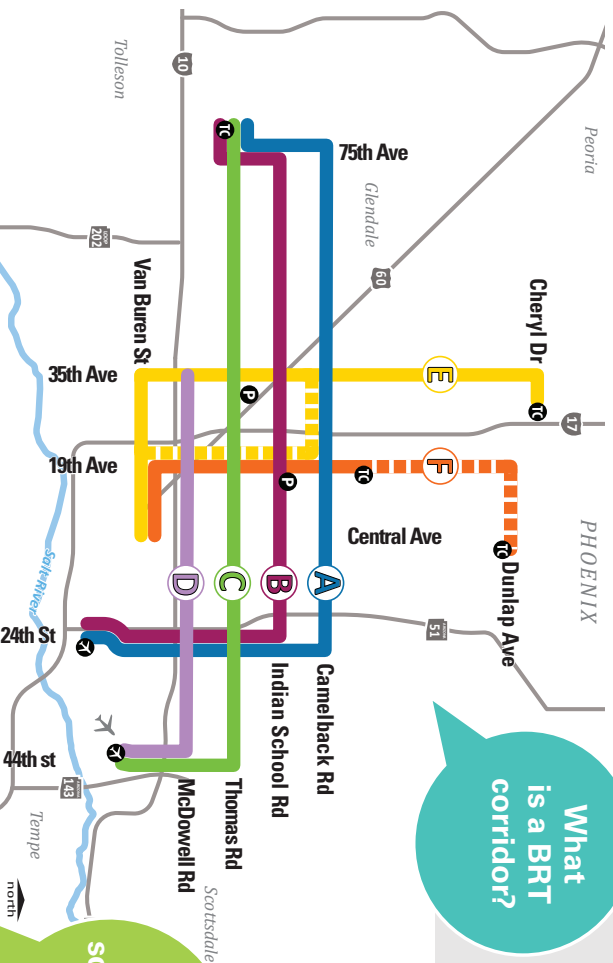
Shape Your BRT Survey

In June 2020, the Phoenix BRT team launched the **Shape your BRT survey**. The purpose of this survey was to obtain input on the six potential BRT corridors and the four potential network scenarios. The Shape Your BRT survey included 13 BRT-related questions and three demographic questions. The survey results can be found on the following pages and a copy of the survey can be found at the end of this document.

The map shown at the right highlights the **six potential BRT corridors**, and the maps at the bottom of the page highlight the **four potential network scenarios** using the identified corridors from the analysis.

These maps were used throughout the survey and can be referenced while reviewing survey results.

Potential BRT Corridors



What is a BRT corridor?

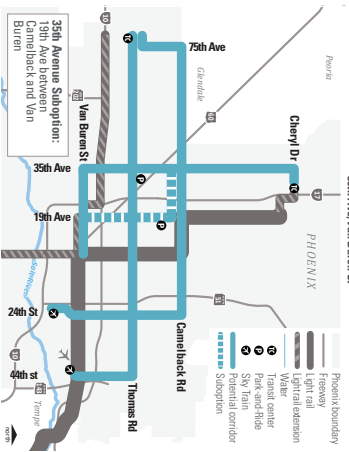
A corridor can be two or more streets coupled together; for example, Corridor A is made up of portions of Camelback Road, 24th Street and 75th Avenue.

How does a network scenario differ from a corridor?

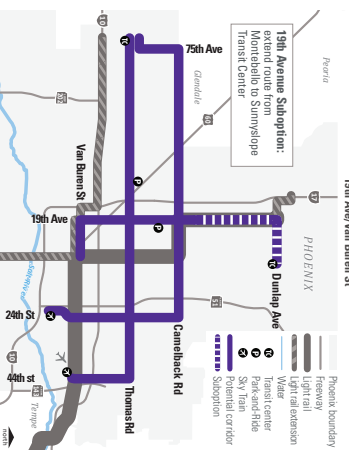
A network scenario includes different combinations of both north-south and east-west corridors to create a full network of BRT service.

Potential BRT Network Scenarios

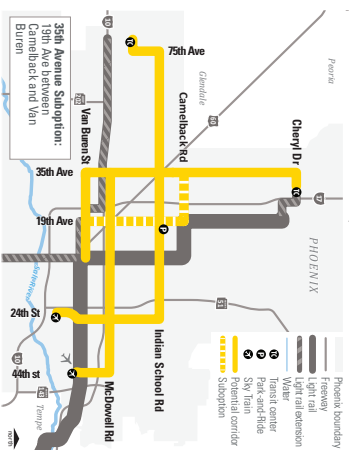
Blue Network Scenario



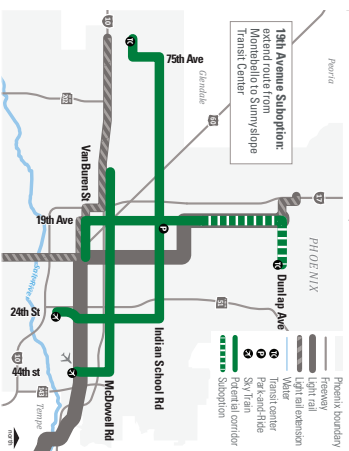
Purple Network Scenario



Yellow Network Scenario



Green Network Scenario

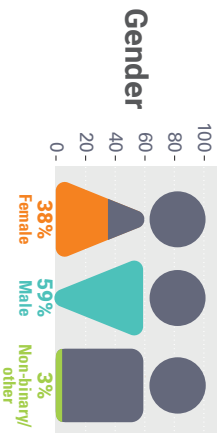
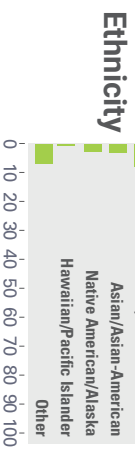
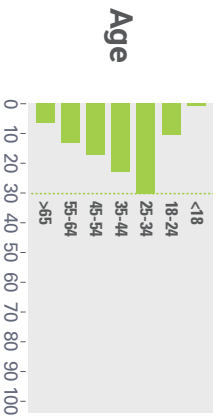


Shape Your BRT Survey

Who Participated?

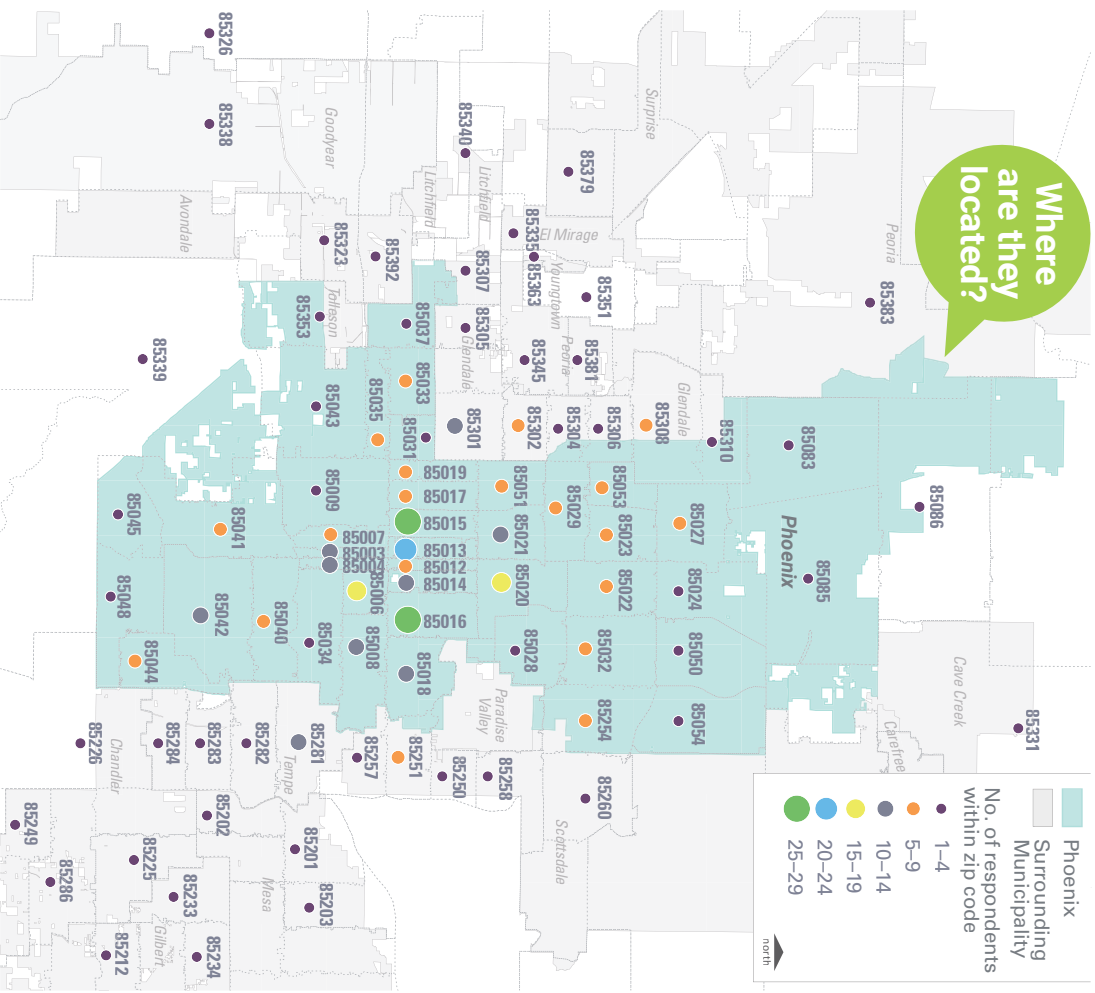
Respondents

474



Responses by Zip Code

Where are they located?

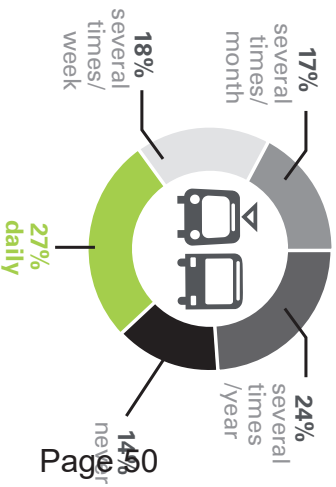


What did we hear?

Public Transit Use

27%

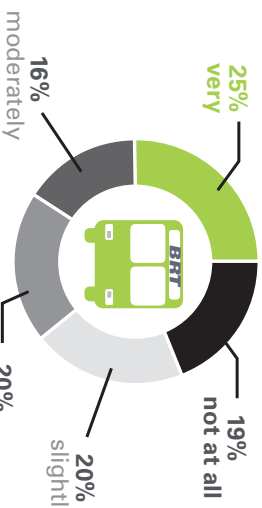
of participants use transit daily



Familiarity with BRT

25% of respondents are very familiar with BRT

19% are not at all familiar

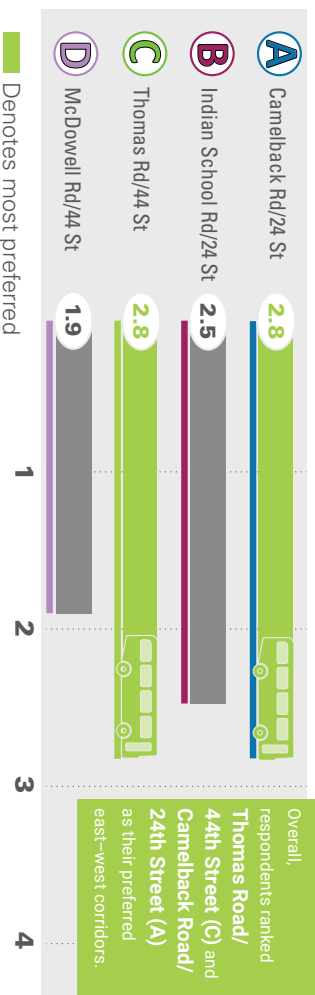


Shape Your BRT Survey

Preferred East–West Corridors for BRT

(as shown on pages 10–11)

Respondents ranked each corridor between 1 and 4, with 1 being the most preferred and 4 being the least preferred. Below are the average scores for each.



Overall, respondents ranked Thomas Road/44th Street (C) and Camelback Road/24th Street (A) as their preferred east–west corridors.

Why are corridors A & C preferred?



Top Themes for Corridor Modification Suggestions

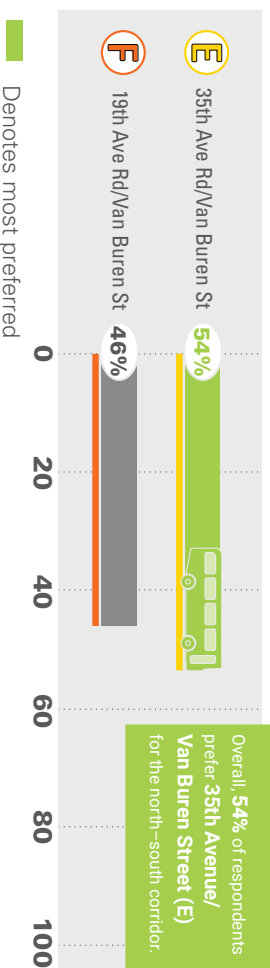
(open ended question on survey)



Preferred North–South Corridors for BRT

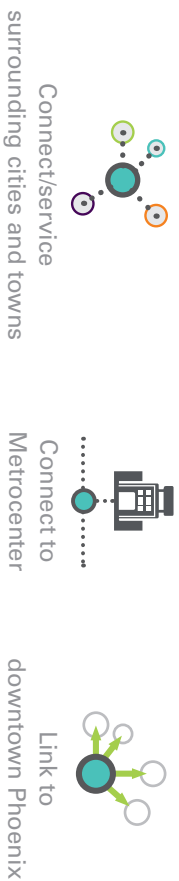
(as shown on pages 10–11)

Respondents selected their preferred corridor; below is the percent preferred.



Overall, 54% of respondents prefer 35th Avenue/Van Buren Street (E) for the north–south corridor.

Why is corridor E preferred?



Shape Your BRT Survey

Preferred BRT Network

(as shown on pages 10–11)

Respondents ranked the four network scenarios between 1 and 4, with 1 being the most preferred and 4 being the least preferred. Below are the average scores for each scenario.



Denotes most preferred

Overall, respondents ranked the **Blue Network Scenario** (Camelback Road/24th Street, Thomas Road/44th Street, 35th Avenue/Van Buren Street) as their **most preferred network**.



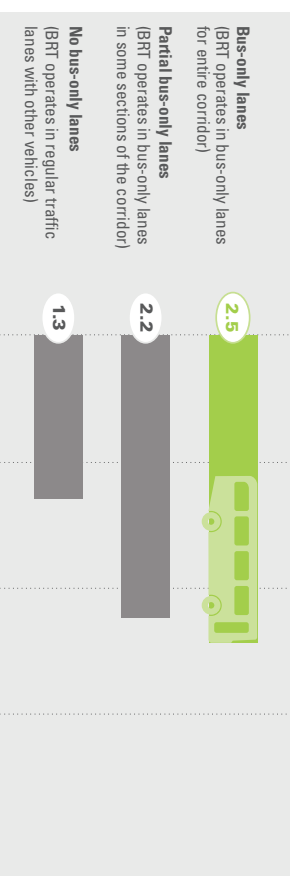
Top Themes for Network Modification Suggestions

(open ended question on survey)



Lane Preference for BRT

Respondents ranked the lane configuration options between 1 and 3, with 1 being the most preferred and 3 being the least preferred. Below are the average scores for each scenario.



Denotes most preferred

Key BRT Service Aspects

Respondents ranked the importance of the following service aspects between 1 and 4, with 1 being the most preferred and 4 being the least preferred.

Below are average scores for each.



Key Final Comment Themes

(open ended question on survey)



Appendix

Phoenix Bus Rapid Transit Survey



Bus Rapid Transit, or BRT, is a high capacity bus service that provides a fast, reliable, and convenient transit experience . . . and this new transit option is coming to Phoenix!
 BRT, approved by Phoenix voters in 2015, is being developed now and we need **your input** on where to add BRT in Phoenix.
Let's get started!

Now, let's get your input on where BRT corridors should be established. Potential corridors were identified using demographic and socioeconomic data, and current transit and forecasted (future) ridership.

4. Potential East–West BRT Corridors (A, B, C, D)

Take a look at the Potential East–West BRT Corridors map (right) and rank the potential east–west corridors from 1 to 4, with 1 being most preferred and 4 being least preferred:

- Camelback Rd/24th St (A)**
- Indian School Rd/24th St (B)**
- Thomas Rd/44th St (C)**
- McDowell Rd/44th St (D)**

5. Why do you like your most preferred east–west corridor? Select all that apply.

- Close to my home/work/school
- Serves more transit riders
- Takes me to key destinations
- Could reduce my daily commute time
- Other (please specify) _____

6. Potential North–South BRT Corridors (E, F)

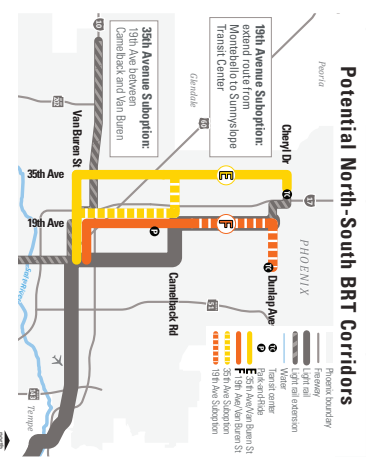
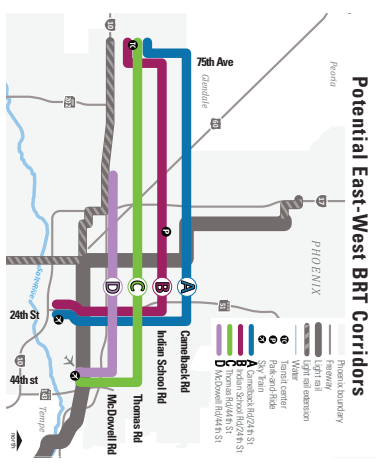
Take a look at the Potential North–South BRT Corridors map (right) and select the preferred north–south corridor:

- 35th Ave/Van Buren St (E)**
- 19th Ave/Van Buren St (F)**

7. Why do you like your preferred north–south corridors? Select all that apply.

- Close to my home/work/school
- Serves more transit riders
- Takes me to key destinations
- Could reduce my daily commute time
- Other (please specify) _____

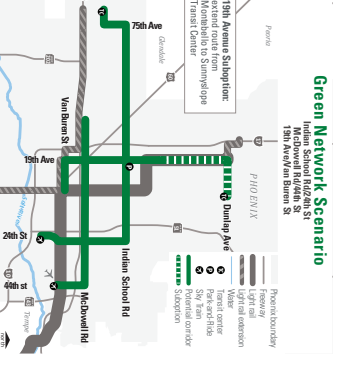
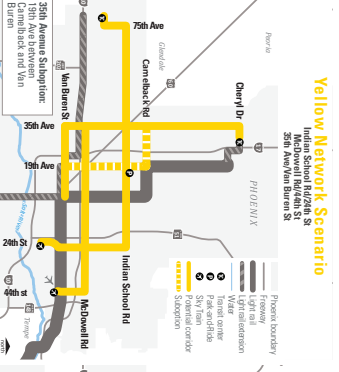
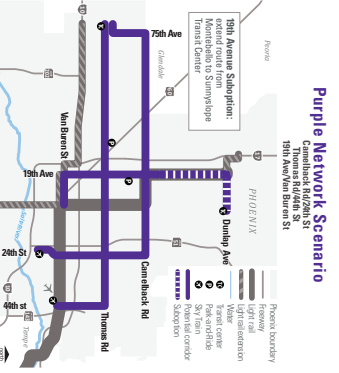
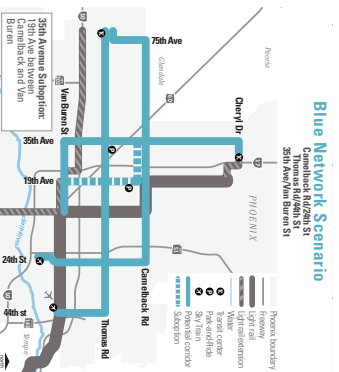
8. If you have suggested modifications to any of the six potential corridors (A, B, C, D, E, F - reference maps from questions 4 and 6), please provide your ideas in the space below.



Phoenix Bus Rapid Transit Survey—Shape your BRT!

9. Potential Network Scenarios

Ultimately, our goal is to identify the BRT foundation network, which will consist of three corridors. Taking into consideration spacing between corridors, good connections to light rail and local bus service, and access to key destinations, below are four potential network scenarios. Rank the following from 1 to 4, with 1 being most preferred and 4 being the least preferred:



BRT Foundation Network Scenarios

11. Bus-only Lanes

Bus-only lanes substantially improve transit speed and reliability but may reduce the current number of auto lanes. Thinking about the use of bus-only lanes along potential corridors, rank the following from 1 to 3, with 1 being most preferred and 3 being least preferred:

- ___ Bus-only lanes (BRT operates in bus-only lanes for entire corridor)
- ___ Partial bus-only lanes (BRT operates in bus-only lanes in some sections of the corridor)
- ___ No bus-only lanes (BRT operates in regular traffic lanes with other vehicles)

12. BRT Service

As a potential rider of BRT, what would be most important to you? Rank the following from 1 to 4, with 1 being most important and 4 being least important:

- ___ Transit speed and reliability: getting to my destination on time and as quickly as possible
- ___ Minimal impacts: avoiding impacts to current auto travel lanes
- ___ Limited or no transfers: transit rider avoids transfers between buses
- ___ Amenities: enhanced stations, custom buses, mobile fare payment

13. Please provide any additional thoughts or comments about the Phoenix Bus Rapid Transit Program.

The following demographic questions are optional.

14. What is your age?

- | | |
|-----------------------------------|--------------------------------|
| <input type="checkbox"/> Under 18 | <input type="checkbox"/> 45-54 |
| <input type="checkbox"/> 18-24 | <input type="checkbox"/> 55-64 |
| <input type="checkbox"/> 25-34 | <input type="checkbox"/> 65+ |
| <input type="checkbox"/> 35-44 | |

15. Specify your ethnicity:

- White
- Hispanic or Latinx
- Black or African American
- Asian or Asian American
- Native American or Alaska Native
- Native Hawaiian or other Pacific Islander
- Other

16. What is your gender?

- Female
- Male
- Non-binary or other

10. If you have suggested modifications to any of the four potential network scenarios (Blue, Purple, Yellow, Green—reference map from question 9), please provide your ideas in the space below.



Phoenix **BRT**

City of Phoenix Bus Rapid Transit Program

Phoenix.gov/BRT
Page 56

Initial BRT Corridor

35th Ave/Van Buren

