Bus Rapid Transit Program Update

This report provides an update to the Transportation, Infrastructure and Innovation Subcommittee regarding progress on the City’s Bus Rapid Transit (BRT) program, including BRT corridor evaluation results and an upcoming Community Education and Engagement Plan.

THIS ITEM IS FOR INFORMATION AND DISCUSSION.

Summary
BRT is a high capacity transit service using specialized buses with features such as multiple doors for fast entry and exit, off-board fare payment, and level platform boarding making it easier for people of all abilities to easily access BRT routes. It can also utilize priority treatment at signalized intersections to increase speed and reliability, and may include dedicated bus lanes in some areas, where feasible, to facilitate faster trips. Phoenix’s Transportation 2050 (T2050) plan initially identified five potential BRT corridors: Bell Road, Thomas Road, Baseline Road, 24th Street, and 19th Avenue or 35th Avenue.

The primary elements of the Phoenix BRT Program are planning, community education and engagement, and capital development. Per previous direction from the Citizen’s Transportation Commission and City Council, the first effort of the Phoenix BRT Program is to reevaluate the BRT corridors identified in the T2050 Plan based on more recent data, and to also identify other potential corridors based on ridership potential and other various data points.

BRT Contracts
In October 2018, City Council authorized the Public Transit Department to enter into agreements with HDR Engineering, Inc. (‘Package A’) for transportation planning services in support of the BRT program, and with CK Group, Inc., AECOM Technical Services, Inc. and CA Group Arizona, Inc. (‘Package B’, collectively) to support planning efforts by providing corridor concepts for evaluation during the community engagement process.

HDR Engineering provides transportation planning and project management services,
which includes the overall development of the BRT implementation plan, Community Education and Engagement Plan, BRT planning and workshops, capital system development, development of a funding, finance and implementation strategy, and corridor programming and coordination as they work closely with the Package B teams.

The CK Group, AECOM, and CA Group will provide services for the development of initial corridor concepts for the community and HDR team to review and evaluate. Corridor concepts are street cross-sections showing how BRT could potentially operate within a specified corridor and any coordinated improvements related to such options.

In December 2019, all four consultant teams will participate in a BRT planning workshop, providing national BRT experience and engineering expertise and insight into the Phoenix BRT planning effort.

**BRT Corridor Evaluation**

The purpose of this effort is to evaluate transit propensity and performance since the BRT corridors were initially identified in 2015. The approach to conduct this analysis is as follows:

- Identify current transit propensity, including demographic and socioeconomic conditions.
- Identify current and historical transit performance, including ridership and other transit performance metrics.
- Analyze and overlay transit propensity and performance data to identify all potential BRT corridors.
- Run scenarios of potential BRT corridors using the Federal Transit Administration’s (FTA) Simplified Trips-on-Project Software (STOPS)
  - STOPS is a tool used by transit agencies to review ridership forecasts in the evaluation of proposed projects, such as BRT.
  - These details are then used by the transit agency in grant applications to the FTA that support the project.

**Attachment A** provides information regarding current transit propensity with demographic and socioeconomic data, which includes:

- Population
- Employment
- Minority population
- Low income households
- Persons under 18 years of age
- Person over 64 years of age
- Zero-car households
- Persons with disabilities
- Composite transit propensity of all demographic and socioeconomic categories listed above

Attachment B contains current and historical transit performance, including existing transit conditions for all City of Phoenix local bus routes between 2015-2019, such as:
- Existing transit network
- Average daily ridership
- Boardings per revenue mile
- Ridership by segment
- Composite ridership and transit propensity

Attachment C identifies potential BRT corridors and options, compares the cumulative data to the originally identified corridors, and illustrates the overall transit propensity in relation to the corridors:
- 35th Avenue - Metrocenter to Baseline Road
- 35th Avenue and Van Buren Street - Metrocenter to Van Buren Street, and Van Buren Street to Central Avenue
- 19th Avenue - Bell Road to Baseline Road
- 19th Ave and Van Buren Street - Cactus Road to Van Buren Street, and Van Buren Street to Central Avenue
- 16th Street - Glendale Avenue to Buckeye Road, and Buckeye Road to Sky Train West Ground Transportation Center
- 24th Street - Camelback Road to Baseline Road
- Glendale Avenue - 43rd Avenue to 16th Street
- Camelback Road - 59th Avenue to 44th Street
- Camelback Road and 24th Street - 59th Avenue to 24th Street, and 24th Street to Buckeye Road
- Indian School Road - 59th Avenue to 44th Street
- Thomas Road - 79th Avenue to 44th Street
- McDowell Road - 35th Avenue to 44th Street
- Van Buren Street - 35th Avenue to 44th Street

Staff will continue to analyze potential BRT corridors using the FTA STOPS model, with the results to be presented and discussed at upcoming BRT planning workshops.
Community Education and Engagement Plan
The Phoenix BRT Program requires a robust community education and engagement effort. The Community Education and Engagement Plan (CEEP) identifies strategies and activities to educate the community about the BRT program and engage them in developing the BRT program (Attachment D). The goals of the CEEP are to:

- Assess community knowledge of, and opinions about, BRT service.
- Directly link education and engagement activities to technical activities and decision-making.
- Provide continuous education.
- Actively seek community input.
- Provide meaningful, convenient opportunities to involve and inform community members about the study and create an understanding of how they can contribute to the process.
- Ensure that education and engagement opportunities consider and accommodate the needs of traditionally underserved populations. (e.g., low income, minority, non-English speaking, disabled).
- Coordinate with regional partners such as Maricopa Association of Governments and Valley Metro relative to opportunities to potentially identify regional BRT routes.
- Develop viable options that meet community needs by closely incorporating input into recommendations, and show the clear connections between community input and study results.

Concurrence/Previous Council Action
This item was presented for information and discussion to the Citizen’s Transportation Commission on Oct. 17, 2019.

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

Persons Under 18 Years of Age Density

[Map showing density of persons under 18 years of age in different areas of Phoenix, with color-coding for different density ranges: <1,050, 1,050–2,350, 2,351–4,300, 4,301–7,250, >7,250 persons per square mile.]

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