Joint Study Session Agenda
Valley Metro RPTA and Valley Metro Rail
Thursday, January 30, 2020
10:15 a.m.
Conference Room 10A
101 N. 1st Avenue, 10th Floor

Study sessions provide a less formal setting for the Boards of Directors to discuss specific topics, at length, with each other and Valley Metro staff members. Work study sessions provide an opportunity for staff to receive direction from the Boards and for the public to observe the discussions.

1. Valley Metro Autonomous Vehicle Pilot Demonstration Project with Waymo

In late 2016, Valley Metro was selected as one of eleven recipients of the Federal Transit Administration’s MOD Sandbox Project which included an Autonomous Vehicle (AV) Pilot Demonstration Project. The project goal is to obtain a greater understanding of rider’s attitudes and awareness of AV technology and to explore mobility solutions that use self-driving technology to better connect travelers with Valley Metro’s services.

2. Presentation of the FY 2021 Strategic Plan Draft Goals and Strategic Issues

In 2015, the Valley Metro Boards approved a strategic plan for the period FY 2016 – 2020. In late 2019, Valley Metro Staff began work to update the strategic plan to address the years beyond the FY 2020. The uncertainty created by the Proposition 105 initiative made it impractical to begin planning until after the August 2019 election. As a result of this compression in the planning period, Valley Metro has focused the update on FY 2021 and will subsequently work on plan for the period FY 2022 – 2025. This presentation presents and seeks feedback on the draft FY 2021 Valley Metro Strategic Plan.

Qualified sign language interpreters are available with 72 hours notice. Materials in alternative formats (large print, audiocassette, or computer diskette) are available upon request. For further information, please call Valley Metro at 602-262-7433 or TTY at 602-251-2039. To attend this meeting via teleconference, contact the receptionist at 602-262-7433 for the dial-in-information. The supporting information for this agenda can be found on our web site at www.valleymetro.org.
Study Session Background

DATE
January 23, 2020

STUDY SESSION ITEM 1

SUBJECT
Valley Metro Autonomous Vehicle Pilot Demonstration Project with Waymo

BACKGROUND | DISCUSSION

The U.S. Federal Transit Administration (FTA) has led the Mobility on Demand (MOD) Sandbox Program aimed to explore how new technologies can be incorporated to complement and support the traditional functions of public transit.

In late 2016, Valley Metro was selected as one of eleven recipients of the Federal Transit Administration’s MOD Sandbox Project which included an Autonomous Vehicle (AV) Pilot Demonstration Project. The project goal is to obtain a greater understanding of rider’s attitudes and awareness of AV technology and to explore mobility solutions that use self-driving technology to better connect travelers with Valley Metro’s services.

To begin, in Phase 1 of the AV MOD experiment, Valley Metro employees, who lived in the Waymo service area, were recruited to participate as test subjects. This Phase was critical to ensuring that the service configuration and experimental protocols were in place and in order. Following this initial test phase during which any potential barriers to entry were identified, the AV Pilot Demonstration project would continue onto Phase 2.

In September 2019, Phase 2 of the AV project commenced. Waymo began offering ambulatory RideChoice customers the option to hail “on-demand” AV trips through the AV service provider’s app for rides that begin and end within the AV service provider’s operational boundaries. Pre-pilot survey data was collected from participants in September 2019, a survey for participants during the pilot is in development and a post-pilot survey will be administered in April.

CONTACTS
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Chief Administrative Officer
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ATTACHMENT
PowerPoint presentation
Driving the Future of Transportation

Valley Metro’s Partnership With Waymo

FTA Mobility on Demand (MOD) Sandbox

• Demonstration program to explore MOD models

• Empower transit agencies to explore innovative business models and partnerships to deliver high-quality, seamless and equitable mobility options

• Inform the USDOT and communities on how to approach MOD and structure future MOD policies, and support FTA grantees
A key goal of this study is to obtain insights about the potential behavioral impacts of AV MOD services and the perceptions and attitudes of users (and non-users) towards such new technologies and services.

What Do We Want to Learn?

Data and Information Collection Plan
Conduct research to learn how new types of service delivery integrating on-demand, self-driving cars to find out if they can:

- Improve safety?
- Influence customer experience?
- Increase mobility and connectivity?
Project Overview

- July 2018 Partnership Announcement
- Employee Phase
  - Explore solutions using AV technology to connect travelers to Valley Metro’s services
  - September 2018 Phase I Launch
  - Lessons learned and Phase II Planning
  - March 2019 Phase II Planning
  - August 2019 Phase II - RideChoice Launch
  - January 2020 Survey questions Focus groups

Phase I – Employees

- **Scope**
  - Collect data in preparation for Phase II
    - Presurvey
    - Ad hoc surveys
  - Make the service available to employees within the Waymo service area
  - Provide a flexible environment
  - Document any lessons learned
  - Refine goals and hypotheses

Photo Source: CNET
Phase I – Employee Learnings

- Average Trip Star Rating – 4.7*
- 72% of trips rated at 5 stars*
- How was Waymo used?
- Willingness to pay
- Attitudes toward self-driving cars – more positive

*September 2018 – January 2020

Phase I Pilot Experience
Phase II Project Overview

• ASU administered online surveys
• Recruitment conducted by Valley Metro and Waymo
  • 72 people submitted an Interest Form
  • Participants meeting the criteria were selected to participate
  • 51 submitted a pre-survey
  • 29 riding consistently
• Since mid-September, over *885 RideChoice rides taken

*as of 1/16/20

Pre-ride Survey Learnings
Pre-ride Survey Learnings

- 92% purchased a smartphone (current tech within the past 4 years)
- 8.6% used Waymo for trips prior to this pilot
- 67% traveled alone
- Of the 51 respondents, 41% noted they take RideChoice weekly

Pre-ride Survey Learnings (N=51)

- 60% male/40% female
- 59% are willing to wait up to 10 minutes after contacting RideChoice to be picked up
- 49% would expect the ride to cost no more than a traditional RideChoice ride
- Participants stated they would use self driving cars 43% of the time
Pre-ride Survey: What was the primary purpose of this trip? (N=40)

Pre-ride survey: How would spend your time riding in a self-driving car with no human operator/driver? (N=51)
Pre-ride Survey: Importance Statements

Top Four importance statements for features related to potential use of on-demand, self-driving car service

- Having a high quality, comfortable, and smooth ride, where the vehicle operates on the roadways safely without incident
- Having a mobile app to book, track and pay for rides
- Being picked-up and dropped off as close to the door as possible
- Having to wait only a short time (less than 5 minutes for my ride to arrive)
Initial Project Learnings

- Of the 51 onboarded, 19 have not taken a ride (completed pre-survey but haven't taken a ride). Reasons why they have not ridden include:
  - Didn’t use RideChoice that frequently
  - Close to the edge of Waymo territory and can’t get picked up in front of home
  - Use of the app; difference between calling and using the app
  - Destination may not be in the service area

Next Steps
Next Steps

- Interim/during and Post Surveys
- Focus Groups
- Project expected to end in March
- White Paper to be drafted second quarter of 2020
- Partnership ends June 30, 2020; what’s next?

Thank You
Study Session Background

DATE
January 23, 2020

STUDY SESSION ITEM 2

SUBJECT
Presentation of the FY 2021 Strategic Plan Draft Goals and Strategic Issues

BACKGROUND | DISCUSSION
In 2015, the Valley Metro Boards approved a strategic plan for the period FY 2016 – 2020. In late 2019, Valley Metro Staff began work to update the strategic plan to address the years beyond the FY 2020. The uncertainty created by the Proposition 105 initiative made it impractical to begin planning until after the August 2019 election. As a result of this compression in the planning period, Valley Metro has focused the update on FY 2021 and will subsequently work on plan for the period FY 2022 – 2025. This presentation presents and seeks feedback on the draft FY 2021 Valley Metro Strategic Plan.

The Planning Process
Valley Metro used a combination of internal planning workshops and city stakeholder meetings to develop the draft FY 2021 Strategic Plan. The internal workshops began in late July and focused assessing the organization’s aspirations, risks, and capabilities. In August, Valley Metro began meetings with cities to understand their strategic priorities in order to identify common themes for incorporation into the plan. To date, meeting have occurred with ten cities/jurisdictions.

This process produced change in two primary areas: updates to Valley Metro’s high-level goals and the identification of strategic issues for focus FY 2021.

High-Level Goals
The FY 2016 – FY 2020 Strategic Plan’s vision was Valley Metro is a leader in connecting communities and building a vibrant, sustainable region. It then defined this vision in five high-level goals:

| Increase customer focus | Advance performance-based operations | Grow transit ridership | Focus on economic development, regional competitiveness, and financial resources | Advance the value of Transit |

In FY 2018, Valley Metro refined its core purpose to Connecting Communities and Enhancing Lives. Similarly, the FY 2021 planning process found that, while the concepts embodied in the FY 2016 – 2020 high-level goals remain relevant, they could
be made clearer, more concise, and better aligned with Valley Metro’s work. As a result, Valley Metro proposes updating the goals to:

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**Strategic Issues**
The FY 2021 planning process identified several issues for focus in during FY 2021:

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**Next Steps**
Valley Metro seeks the Boards’ feedback on the FY 2021 goals and strategic issues. Feedback will be incorporated and the goals and strategic issues will be presented in February for approval. Once approved, Valley Metro will establish work teams, including city staff where appropriate, to address each issue and will present periodic updates to the Boards.

Future strategic plans are anticipated to retain the high-level goals while updating the strategic issues to be focused on.

**CONTACTS**
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**ATTACHMENT**
Powerpoint presentation

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1 Meetings have been held with Gilbert, Glendale, Goodyear, Maricopa Association of Governments, Mesa, Peoria, Phoenix, Queen Creek, Tempe, and Wickenburg
FY 2021 Draft Strategic Plan

Board Study Session

FY 2021 Planning Process

1. Valley Metro Internal Workshops 
   7/19 – 10/19

2. Meetings with Cities 
   8/19 – 12/19
   - Met with Gilbert, Glendale, Goodyear, MAG, Mesa, Peoria, Phoenix, Queen Creek, Tempe, and Wickenburg
   - Shared Revised High-Level Goals and preliminary common themes with TMC/RMC 10/19

3. Board Feedback on Draft FY 2021 Plan 
   Today

4. Incorporate Feedback 
   1/20

5. Board Approval of Goals and Strategic Issues 
   2/20?

6. Establish Work Teams on Strategic Issues 
   Spring 2020

7. Update TMC/RMC & Boards on progress 
   On-Going
### FY 2016 – 2020 Strategic Plan

#### High-Level Goals

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#### FY 2016 – 2020 Strategic Plan

#### High-Level Goals and Outcomes

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<td>• Net Promoter Score increased from 50% (2016) to 57% (2018).</td>
<td>• Between FY 2016 and FY 2018: Operating cost:</td>
<td>• Added 5M bus revenue miles</td>
<td>• 35,000 jobs created within ½ mile of the light rail since 2018.</td>
<td>• Voters defeat Prop 105 37% to 63%.</td>
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<td>• Riders Reporting feeling “safe” of “very safe” increased from 73% (2016) to 81% (2019).</td>
<td>• Bus per revenue mile fell 2%</td>
<td>• Added 6 light rail track miles</td>
<td>• 5.5 million square feet of new educational facilities constructed along the light rail line since 2008.</td>
<td>In 2015, Phoenix voters approved T2050 by a 55% to 45%.</td>
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<td>• Reduced light rail incidents per boarding by 75% between FY 2018 and FY 2020.</td>
<td>• Rail per revenue mile increased 8%</td>
<td>• Waymo Pilot Nevertheless, a strong economy and low gas prices have reduced ridership. Between FY 2016 and FY 2019:</td>
<td>• 25,000 new residential units along the light rail alignment including more than 2,200 affordable units.</td>
<td>MAG’s 2019 Transportation Values and Priorities study found a strong majority of Maricopa County Residents support increase rail and bus funding.</td>
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<td>• Paratransit per revenue hour fell 13%</td>
<td>• Rail remained 93%</td>
<td>• Bus ridership is down 26%</td>
<td>• Voters defeat Prop 105 37% to 63%.</td>
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<td>• On-Time Performance</td>
<td>• Paratransit fell 4% to 93%.</td>
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• Between FY 2016 and FY 2018: Operating cost:
  - Bus per revenue mile fell 2%  
  - Rail per revenue mile increased 8%  
  - Paratransit per revenue hour fell 13%  

Strong economy and low gas prices have reduced ridership. Between FY 2016 and FY 2019:
  - Rail remained 93%  
  - Rail ridership is down 7%  
  - Bus ridership is down 26%  

• 35,000 jobs created within ½ mile of the light rail since 2018.  
• 5.5 million square feet of new educational facilities constructed along the light rail line since 2008.  
• 25,000 new residential units along the light rail alignment including more than 2,200 affordable units.  

• 2015, Phoenix voters approved T2050 by a 55% to 45%.  
• 2019, MAG’s 2019 Transportation Values and Priorities study found a strong majority of Maricopa County Residents support increase rail and bus funding.
**Goal Updates**

**FY 2016-2020 High-Level Goals**

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**FY 2021 Draft High-Level Goals**

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**FY 2021 Draft**

**High-Level Goals and Strategic Issues**

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FY 2021 Next Steps

1. Incorporate Feedback 1/20
2. Board Approval of Goals and Strategic Issues 2/20?
3. Establish Work Teams on Strategic Issues Spring 2020
4. Update TMC/RMC & Boards on progress On-Going

Thank You