



Study Session Notice & Agenda

January 23, 2020

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

Jim Hillyard
Chief Administrative Officer
602-495-8234
jhillyard@valleymetro.org

ATTACHMENT

PowerPoint presentation

Driving the Future of Transportation

Valley Metro's Partnership With Waymo

CONNECT
COMMUNITIES

ENHANCE
LIVES

VALLEY METRO, PHX
AZ



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



Autonomous Vehicle (AV) Demo

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.



3



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?



4

Project Overview



July 2018
Partnership
Announcement

Explore solutions
using AV
technology to
connect travelers to
Valley Metro's
services

September
2018
Phase I Launch

Employee Phase

March 2019
Phase II
Planning

Lessons learned
and Phase II
Planning

August 2019
Phase II -
RideChoice
Launch



Research Study
with Waymo and
ASU begun

January 2020

Survey questions
Focus groups

5

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

6



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



Photo Source: CNET

*September 2018 – January 2020

7

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

9

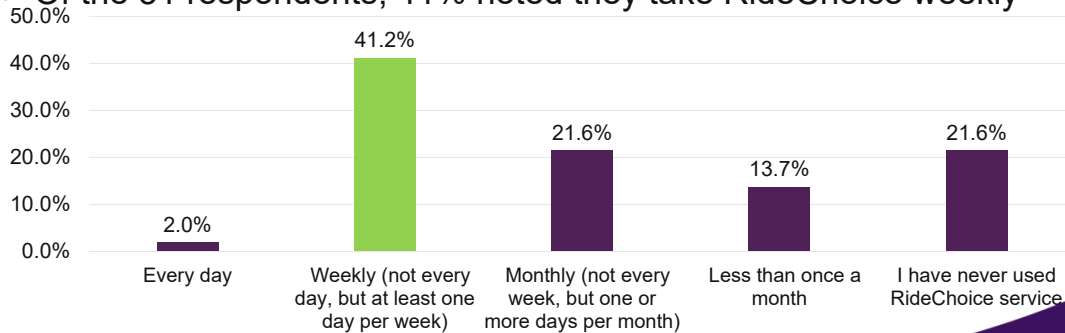
Pre-ride Survey Learnings





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



11

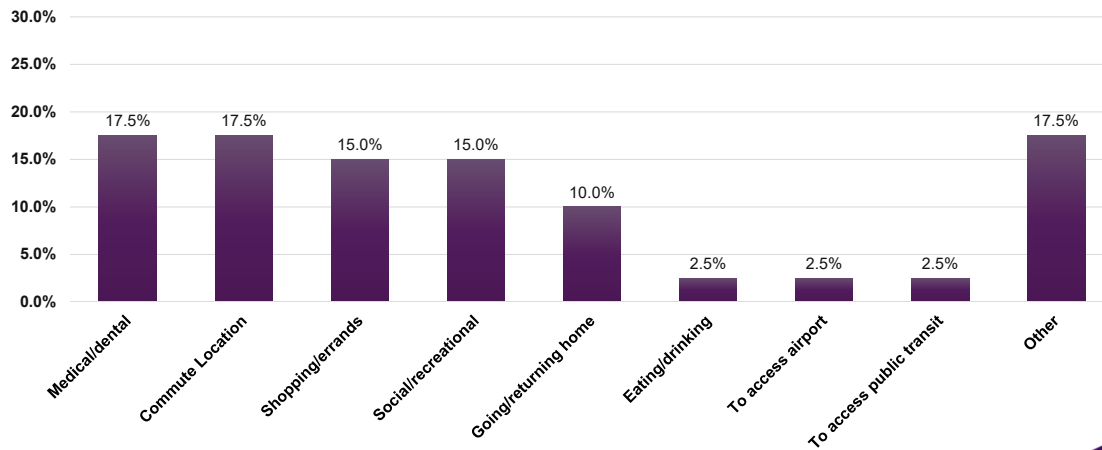


Pre-ride Survey Learnings (N=51)

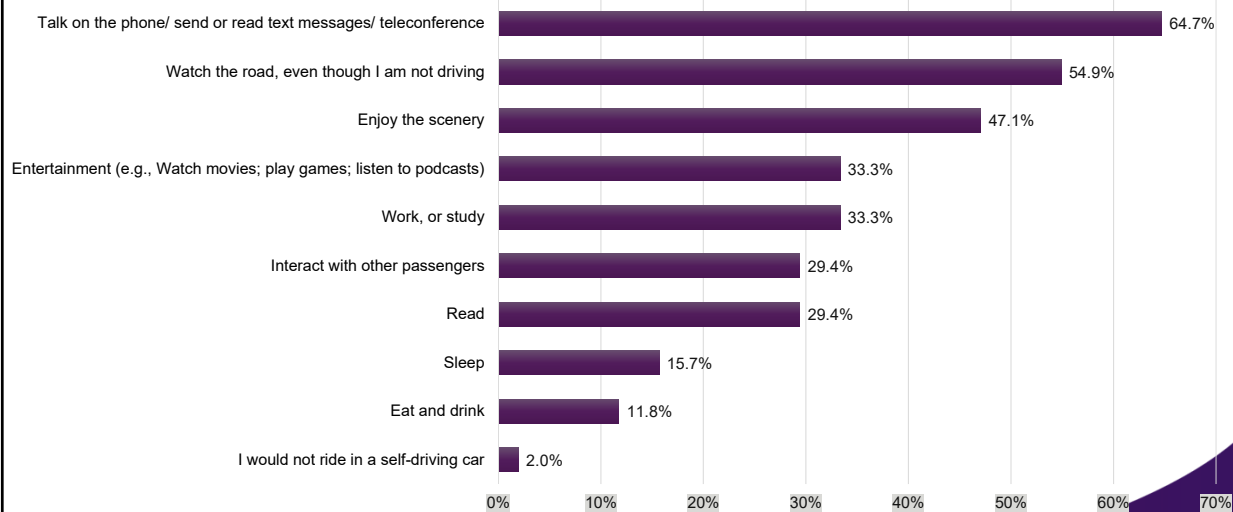
- 60% male/40% female
- 59% are willing to wait up to 10 minutes after contacting RideChoice to be picked up
- 49% would expect the ride to cost no more than a traditional RideChoice ride
- Participants stated they would use self driving cars 43% of the time

12

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





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

17

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?

19

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 ten¹ 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:

Excellent Rider Experience	Excellent System	Enhance Lives Through Regional Mobility	Maximize Efficiency & Engagement	Catalyze Economic Development
----------------------------	------------------	---	----------------------------------	-------------------------------

Strategic Issues

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

Excellent Rider Experience	Excellent System	Enhance Lives Through Regional Mobility	Maximize Efficiency & Member City Engagement	Catalyze Economic Development
Improve Customer Satisfaction Reduce Complaints Workforce Availability	South Central/Downtown Hub Construction NW & Cap/I-10 Planning Tempe Streetcar Operations System Safety & Security Operational Readiness: <ul style="list-style-type: none"> • OMC Expansion • State of Good Repair • Workforce Availability 	Expand community engagement Paratransit: one rule, one call, one fare	Improve communication with cities: <ul style="list-style-type: none"> • Overall • Budgeting & Forecasting 	Prop 400 Extension <ul style="list-style-type: none"> • Innovation

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

Jim Hillyard
 Chief Administrative Officer
 602-495-8234
jhillyard@valleymetro.org

ATTACHMENT

Powerpoint presentation

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 |
| <ul style="list-style-type: none"> • 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

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



FY 2016 – 2020 Strategic Plan

High-Level Goals and Outcomes

Increase customer focus	Advance performance-based operations	Grow transit ridership	Focus on economic development, regional competitiveness, and financial resources	Advance the value of Transit
<ul style="list-style-type: none"> • Net Promoter Score increased from 50% (2016) to 57% (2018). • Riders Reporting feeling “safe” of “very safe” increased from 73% (2016) to 81% (2019). • Reduced light rail incidents per boarding by 75% between FY 2018 and FY 2020. 	<p>Between FY 2016 and FY 2018:</p> <p><u>Operating cost</u></p> <ul style="list-style-type: none"> • Bus per revenue mile fell 2% • Rail per revenue mile increased 8% • Paratransit per revenue hour fell 13% <p><u>On-Time Performance</u></p> <ul style="list-style-type: none"> • Rail remained 93% • Paratransit fell 4% to 93%. 	<ul style="list-style-type: none"> • Added 5M bus revenue miles • Added 8 light rail track miles • Waymo Pilot <p>Nevertheless, a strong economy and low gas prices have reduced ridership. Between FY 2016 and FY 2019:</p> <ul style="list-style-type: none"> • Rail ridership is down 7% • Bus ridership is down 26% 	<ul style="list-style-type: none"> • 35,000 jobs created within ½ mile of the light rail since 2008. • 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. 	<ul style="list-style-type: none"> • Voters defeat Prop 105 37% to 63%. • In 2015, Phoenix voters approved T2050 by a 55% to 45%. • 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

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

FY 2021 Draft High-Level Goals

Excellent Rider Experience	Excellent System	Enhance Lives Through Regional Mobility	Maximize Efficiency & Member City Engagement	Catalyze Economic Development
----------------------------	------------------	---	--	-------------------------------



FY 2021 Draft

High-Level Goals and Strategic Issues

Excellent Rider Experience	Excellent System	Enhance Lives Through Regional Mobility	Maximize Efficiency & Member City Engagement	Catalyze Economic Development
Improve Customer Satisfaction Reduce Complaints Workforce Availability	South Central/ Downtown Hub Construction NW & Cap/I-10 Planning Tempe Streetcar Ops System Safety & Security Operational Readiness: <ul style="list-style-type: none"> • OMC Expansion • State of Good Repair • Workforce Availability 	Expand community engagement Paratransit: one rule, one call, one fare	Improve communication with cities: <ul style="list-style-type: none"> • Overall • Budgeting & Forecasting 	Prop 400 Extension • Innovation



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 |

7

Thank You

