WELCOME

We will begin in a few moments

SCAG/AECOM/Arellano Associates

January 19, 2021

www.scag.ca.gov
• To discuss and prioritize key strategies
• To discuss the draft implementation guide
Welcome and Meeting Purpose (Priscilla Freduah-Agyemang, SCAG, Project Manager)

Project Update (David DeRosa, AECOM, Associate VP; Victor Xie, AECOM, Transportation Planner)
- Summary of October Advisory Group Meeting
  - Key Opportunities and Challenges
  - Goals and Objectives
- Technology Vendor Overview & Preliminary Findings
- Key Strategies
- Implementation Guide

Discussion Groups in Breakout Rooms
(you will be assigned a breakout room and a moderator)
- Key Strategies
- Implementation Guide

Report Outs

Wrap-Up and Next Steps (David DeRosa, Priscilla Freduah-Agyemang)

Adjourn
Today’s session is been recorded for internal purposes only

Please use the chat box to ask any questions as the presentations proceed. Use “raise hand” during the stopping points for Q&A and comments, and during the breakout rooms

Use the virtual “raise hand” during the stopping points for Q&A and comments, and during the breakout rooms

Phone users: use *9 to unmute to participate in the meeting
Recap: October Advisory Group Meeting

- Opportunities and Challenges
- Goals and Objectives
October Meeting Recap – what we heard from you

Key Challenges

• **Infrastructure**: Infrastructure development such as mobility hubs and payment infrastructure, varies widely across the SCAG region which makes it difficult to provide uniform mobility alternatives.

• **Data and Technology**: Data sharing between private mobility providers and public agencies is yet to be mandated and regulated to encourage information sharing, optimizing decision making, and protecting user privacy at the same time.

• **Management and Operation**: Lack of interoperability and coordination among vendors.

• **Governance**: Lack of regulation creates a market where only technology vendors benefit.

Key Opportunities

• **Infrastructure**: Payment infrastructure needs to be improved for both implementation and equity purposes.

• **Governance**: Formulate new regulations regarding data sharing agreements between agencies and private partners.
October Meeting Recap – what we heard from you

Key Challenges

- **Finance:** Most of the projects have been funded through single revenue source such as federal grants or formula funds.
- **Equity and Public Engagement:**
  - Barriers exist to access new technologies for different population groups.
  - Hard to balance all of the needs from different communities at the early stage of MaaS.

Key Opportunities

- **Finance:** Private funding needs to be explored.
- **Institutional Practices:** Creation of the advisory group from this effort presents the opportunity to establish an on-going dedicated forum to discuss MaaS implementation in the SCAG region.
- **Equity and Public Engagement:** MaaS could improve equity if the access to payment can be expanded, and social service partners can be integrated into the payment structure/system.
October Meeting Recap – what we heard from you

- Goals and Objectives
  A. Establish key performance indicators (KPIs) to compare against baseline data
     ▪ Mode shift (Percentage of SOV trips that shifted to other modes)
     ▪ VMT (Total annual VMT change)
     ▪ Reduce GHG emissions (Annual total GHG reduction)
     ▪ Accessibility (Coverage ratio of transit service)
  B. Pursue policies and strategies (e.g., transportation and land use) that facilitate the widespread implementation and adoption of more sustainable transportation modes
  C. Generate more revenue and/or funding sources to enhance transit
  D. Remove payment barriers for unbanked/underbanked populations
  E. Facilitate greater regional collaboration and cooperation
  F. Identify pilot projects that are inclusive and affordable to disadvantaged communities, including but not limited to seniors, disabled, low-income, and minority populations with community-based outreach programs
Vendor Survey Overview

Overview:

- **Survey Purpose:** SCAG surveyed MaaS vendors to understand what implications vendor technologies could have on the final recommendations of the white paper. The final report will be publicly available and include key findings from the survey.

- **Number of Vendors:** Reached out to 17, survey was sent to 15 vendors, and 13 survey responses were received.

- **Survey Period:** 11/29/2021–12/21/2021

<table>
<thead>
<tr>
<th>Vendor Name</th>
<th>Headquarters</th>
<th>Current US Operations</th>
<th>Response from the vendor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tier 1 – Vendors with Proven MaaS Implementation</strong></td>
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<tr>
<td>Moovit*</td>
<td>Ness Ziona, Israel</td>
<td>Y</td>
<td>Received</td>
</tr>
<tr>
<td>Moovel*</td>
<td>Portland, U.S.</td>
<td>Y</td>
<td>Received</td>
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<tr>
<td>Masabi*</td>
<td>London, United Kingdom</td>
<td>Y</td>
<td>No response</td>
</tr>
<tr>
<td>Transit App*</td>
<td>Montreal, Canada</td>
<td>Y</td>
<td>Received</td>
</tr>
<tr>
<td>Cubic Transportation (Umo)*</td>
<td>San Diego, U.S.</td>
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</tr>
<tr>
<td>MaaS Global (Whim)</td>
<td>Helsinki, Finland</td>
<td>N</td>
<td>Not interested in participating</td>
</tr>
<tr>
<td>UbiGo*</td>
<td>Stockholm, Sweden</td>
<td>N</td>
<td>Received</td>
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<td>Fluidtime*</td>
<td>Vienna, Austria</td>
<td>N</td>
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<td>Axon Vibe*</td>
<td>Norfolk, United Kingdom</td>
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<td>Sydney, Australia</td>
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<td>Trafi*</td>
<td>London, United Kingdom</td>
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<td>Received</td>
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<td>Mobilleo*</td>
<td>Leeds, United Kingdom</td>
<td>N</td>
<td>Received</td>
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<tr>
<td>Zoox</td>
<td>Foster City, CA</td>
<td>N</td>
<td>Not interested in participating</td>
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<tr>
<td><strong>Tier 2 – Main business is either On-Demand Transit or Paratransit Modernization</strong></td>
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<tr>
<td>Via*</td>
<td>New York, U.S.</td>
<td>Y</td>
<td>Received</td>
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<tr>
<td>Spare Labs*</td>
<td>Vancouver, Canada</td>
<td>Y</td>
<td>Received</td>
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<tr>
<td>Transdev (Cityway)*</td>
<td>Issy-les-Moulineaux, France</td>
<td>Y</td>
<td>Received</td>
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<tr>
<td>RideCo*</td>
<td>Toronto, Canada</td>
<td>Y</td>
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* Vendors that agreed to provide feedback and have received the survey
Vendor Survey Preliminary Findings

- **Infrastructure**: Infrastructure investments, especially on transit, are necessary for multimodal transportation facilities, an integrated mobile payment system, and a well-connected cellular network. Open-loop payment systems are highly recommended.

- **Data and Technology**: Several vendors recommended creating data sharing agreements. Most vendors had robust cybersecurity systems and policies to prevent user data breach. An open API is key for many vendors to conduct multi-modal integration. The biggest challenge is data standardization and difficulty following the amount of data privacy regulations.

- **Management and Operation**: Public stakeholders are preferred to help coordinate agreements between project partners. Vendor roles vary case-by-case. The vendor selection and role they play should be based on the pilot needs. Product training to project partners as well as on-going maintenance and support of their platforms can be expected from vendors.
• **Governance**: Vendors identified that policies requiring mobility operators to participate in MaaS, fare standardization policies, and defining an employment classification for on-demand drivers can help facilitate implementation.

• **Finance**: Vendors had mixed opinions on the roles public and private sectors should play in financing MaaS. Most systems the vendors have worked with were funded either privately or through public grants.

• **Institutional Practices**: Many vendors emphasized the importance of having a designated lead entity with dedicated staff.

• **Equity and Engagement**: Vendors have a wide array of options to help address equity concerns from their users and make their platform as inclusive as possible. Most vendors have the capability to offer discounts to qualifying populations.
Draft Strategies for Discussion In Breakout Groups

Equity and Public Engagement:
1. Dedicated sessions discussing MaaS in regional public forums. Continuing direct public engagement to ensure MaaS investments support community needs and regional equity goals.
2. Create account–based subscription model with individual account that can be shared with friends and family. Discounts and subsidies can be applied for disadvantaged community families.

Data and Technology:
1. Encourage and provide incentives for cities and local transit agencies within the SCAG region to leverage Cal–ITP’s support and start open–loop payment demonstrations. Test shared product systems and post–payment solutions.
2. Take advantage of the State’s Leveraged Procurement Agreements for both equipment and bank processing services as a group.
3. Make the implementation guide developed from this study available and/or create individual toolkits of this study for public transit providers.
Draft Strategies for Discussion In Breakout Groups

Governance:
1. Create policy incentives for other transportation providers to have an open API ready for data sharing and system integration.
2. Promote infrastructure standards such as mobility hubs and curb space for future integration across the region.
3. Promote data standardization and secured data sharing. Build on existing standards and principles such as GTFS, GBFS, and the Mobility Data Interoperability Principles.

Institution:
1. Leverage the Advisory Group from this study to establish a dedicated entity to understand shared roles and responsibilities, leadership, and management for a future MaaS system.
2. Launch county-led regulations and policies to encourage fare policy integration at the regional level.
Draft Strategies for Discussion In Breakout Groups

Infrastructure:
1. Develop mobility hubs throughout the SCAG region.
2. Develop associated payment and digital infrastructure.

Management and Operation:
1. Leverage a comprehensive technology vendor product catalog to be developed by State or SCAG to determine and tailor the management structure and meet the local pilot needs.

Finance:
1. Any form of funding should be explored, including agreements with private investors or local retail sponsoring campaigns in exchange for in-app promotions.
Performance Metrics:

1. Develop performance metrics to monitor pilot progress.
   1. Mode shift (Percentage of SOV that shifted to other modes)
   2. VMT (Total annual VMT change)
   3. Reduce GHG emissions (Annual total GHG reduction)
   4. Accessibility (Coverage ratio of transit service)
   5. Percentage of trips utilizing a mobility hub
   6. Percentage of service hours generated by private mobility providers
   7. Percentage of open-loop payment user vs. cash users
   8. Percentage of unbanked/underbanked registered users
Draft Implementation Guide for Discussion In Breakout Groups

- **Item 1 – Timeline/Schedule**
  - Continue building needed infrastructure for transit (ongoing)
  - **Short-term (Next two years)**
    - Form an entity to facilitate MaaS implementation
    - Select cities to launch MaaS pilots in collaboration with Cal-ITP and test open-loop payment
  - **Medium-term (Next five years)**
    - Finalize data sharing standards and MaaS infrastructure standards
    - Build scalable MaaS pilot models for other cities in the SCAG region
    - Start launching county-wide pilots and identify dedicated funding resources
    - Draft regional integrated fare policies and determine transfer policies and opportunities for revenue sharing
  - **Long-term (Next ten years)**
    - Accomplish significant mode shift from SOVs to multi-modal trips
    - Start launching inter-County MaaS pilots.

Phase 1 (2022-2023): Proof of Concept Pilot Led by Cities or Other Local Jurisdictions

Phase 2 (2024-2029): County-Wide Pilot Led by CTC

Phase 3 (2030-2040): Inter-County Pilot Led by Coalition
Item 2 – Checklist for Agencies (those starting implementation)
- Mobility hubs that can accommodate multi-modal trip planning and making
- Data reporting and sharing standards
- Product catalog of technology vendors
- P3 toolbox to facilitate partnerships
- Capability or support to launch open-loop payment systems
- Staffing plan to enable technology-oriented in-house monitoring and review of outsourced work conducted by technology vendors or consultants

Item 3 – Measures for agencies (those which have started implementation)
- Mode shift (Percentage of SOV shift to other modes)
- VMT (Total annual VMT change)
- Reduced GHG emissions (Annual total GHG reduction)
- Accessibility (Coverage ratio of transit service)
- Percentage of trips utilizing a mobility hub
- Percentage of service hours generated by private mobility providers
- Percentage of open-loop payment user vs. cash users
- Percentage of unbanked/underbanked registered users
Discussion Groups

You will now be automatically assigned to one of two breakout groups.

Topics to discuss in your groups:

1. Select a person from your group to report-out
2. Strategies
3. Implementation Guide
Discussion groups to present feedback on:
(5 minutes per breakout group)

1. Strategies
2. Implementation Guide
Final Meeting

- March 2022
- Draft Final Report
Thank You
MaaS Definition per past meetings:

MaaS integrates transportation services into a single mobility platform that provides competitive alternatives over private vehicles, to promote universal basic mobility, encourage mode shift, and foster sustainable travel choices.