

Service Design Analysis & Ten-Year Plan for the Pomona Valley Transportation Authority

Volume II: SERVICE DESIGN TOPICS AND RECOMMENDED PHASED STRATEGIC APPROACH

June 2019

Prepared by A-M-M-A TRANSIT PLANNING

## In Collaboration with







This page left intentionally blank.



# Service Design Analysis & Ten-Year Plan for the Pomona Valley Transportation Authority VOLUME II: SERVICE DESIGN TOPICS AND RECOMMENDED PHASED STRATEGIC APPROACH

### TABLE OF CONTENTS

EXECUTIVE SUMMARY	IV
Establishing a Mobility Direction Defining a Phased Strategic Approach Moving Forward	IV V VI
I. INTRODUCTION AND THE PVTA ORGANIZATION	1
II. STRATEGIC PRINCIPLES TO GUIDE PVTA	3
III. MARKET PRIORITIES AND OPPORTUNITIES	4
Substantially Transit-Dependent Riders Use PVTA Now Youth May Be Somewhat Underserved Seniors' and Persons' with Disabilities Trip Needs Continue but Are Changing Interest in Local, Semi-Scheduled Services for Several Markets New Opportunity for Improved Regional Connections and First-Mile/Last-Mile Services	4 6 7 8 9
IV. MARKET-ORIENTED SERVICE APPROACHES	10
Overview Service Approaches for Meeting PVTA Market Needs Service Approach Descriptions	10 10 11
V. FACTORS INFLUENCING THE POMONA VALLEY'S TRANSPORTATION ECOSYSTEM	15
Overview Public Transportation Use in the Four-City Area Significant Deficiencies of PVTA's Existing Service Communicating About PVTA and Other Public Transit Services Ride-Hailing and Transportation Network Companies (TNCs) as a Service Approach — Opportunities and	
THE OPPORTUNITY OF MAAS TO PUT THE CUSTOMER FIRST — MOBILITY-AS-A-SERVICE Coming Zero-Emission Bus Requirements	
VI. INSTITUTIONAL STRUCTURES TO ADDRESS SERVICE DELIVERY	25
Overview Criteria for Assessing Potential Service Models Identification and Assessment of Current and Prospective PVTA Service Models Implications for PVTA, Summary and Institutional Recommendations	25 25 26 32
VII. A PHASED STRATEGIC ACTION PLAN FOR PVTA	





Overview	34
A Phased Action Plan	34
Phase Zero — Improve Existing PVTA Service Reliability	39
Phase One — Enhance the Status Quo Within Existing Resources; Plan for Expanded Services	41
Phase Two — Expand Local and Regional Travel Choices, as Resources Allow, to Improve Riders' Connectivity and	)
TRAVEL EXPERIENCE	53
Phase Three — Move PVTA to a Fully Functional MaaS Environment, Supporting Four-City Regional Services to	
Multiple Markets	60
VIII. MOVING FORWARD	65
APPENDICES	67
	<b>C</b> 7
APPENDIX A: IVIARCH ZU19 PVTA POLICY WORKSHOP,	
Invitees, Participants and Summary Notes	67

### **Figures and Tables**

FIGURE 1, GUIDING PRINCIPLES FROM THE MARCH 2019 POLICY WORKSHOP	3
FIGURE 2, PVTA RIDER SURVEY RESPONDENTS' INCOME, AGE AND MOBILITY DEVICE USE	4
FIGURE 3, RIDERS' PRIMARY REASONS FOR RIDING PVTA SERVICE	5
FIGURE 4, RATING OF THE IMPORTANCE OF PVTA SERVICE FEATURES BY AGE GROUP	6
FIGURE 5, WHAT PVTA SERVICES HAVE YOU USED IN THE PAST	8
FIGURE 6, PUBLIC TRANSIT BOARDINGS OF 2.6 MILLION PASSENGERS, TRIPS WITHIN PVTA FOUR-CITY AREA, FY 17/18	15
FIGURE 7, PVTA NEW PASSENGER GUIDE SYSTEM MAP	17
FIGURE 8, NEW PVTA WEBSITE HOMEPAGE	17
Figure 9, Google Transit and Transit App	18
FIGURE 10, 211RIDE	18
FIGURE 11, MODEL 1	27
FIGURE 12, MODEL 2	29
FIGURE 13, MODEL 3	30
Figure 14, Model 4	31
FIGURE 15, EUGENE, OREGON, RIDESOURCE SHOPPER SHUTTLE	42
FIGURE 16, ONE-STEP-OVER-THE-LINE ZONE-BASED FARE STRUCTURE	45
FIGURE 17, EXAMPLE OF A DIRECT MAILER	49
FIGURE 18, PVTA TRIP PLANNER RESPONSE EXAMPLE, CURRENTLY MISSING FARE INFORMATION	50

TABLE 1, PVTA CURRENT AND FUTURE SERVICE APPROACHES IN RELATION TO MARKET NEEDS	11
TABLE 2, ASSESSMENT OF CURRENT AND ALTERNATIVE SERVICE DELIVERY MODELS	32
TABLE 3, PVTA'S PHASED STRATEGIC ACTION PLAN, FY2020 - FY2030	34
TABLE 4, ANALYSIS OF PVTA DEDICATED VEHICLE REQUIREMENTS, MAY 2018 OPERATIONS DATA	47
TABLE 5, POLICY WORKSHOP INVITEES AND ATTENDEES	67





# Service Design Analysis & Ten-Year Plan for the Pomona Valley Transportation Authority: VOLUME II — SERVICE DESIGN TOPICS AND RECOMMENDED PHASED STRATEGIC APPROACH EXECUTIVE SUMMARY

## **Establishing a Mobility Direction**

The Pomona Valley of the cities of Pomona, Claremont, San Dimas and La Verne "as a place," has its own transportation ecosystem of which the Pomona Valley Transportation Authority (PVTA) has been a key player since 1977. Of more than 2.6 million transit boardings during FY 2017/2018, the Authority provided 8% of these trips to populations that fulfill its charter to serve older adults, persons with disabilities and persons of low income. The 1984 inclusion of general public riders in PVTA's mission statement gives authority to the current-day considerations to expand the envelope of both markets and services.

PVTA provides critical transportation choices to its "traditional" markets, revealed in surveys and by stakeholders. Seven out of 10 trips taken by surveyed riders were for health and medical purposes. PVTA's ridership is dominated by older adults, with 70% age 65 and older and three in 10 age 80 and older. Youth riders too are an important market for some PVTA services, although they weren't well-

#### Figure E-1, Guiding Principles from the March 2019 Policy Workshop

### STRATEGIC PRINCIPLES FOR THE POMONA VALLEY TRANSPORTATION AUTHORITY Serving the Pomona Valley "as a Place"

- To prioritize and continue to provide quality service to *traditional markets* within the Pomona Valley of seniors, persons with disabilities, youth and transit-dependent general public persons while pursuing *expansion to other target markets* within available resources.
- 2. To develop *seamless travel* across the Pomona Valley with consistent service levels and fares.
- 3. To establish *convenient connections* with regional transit services to facilitate longer distance travel to and from the Pomona Valley.
- 4. To embrace the "*Mobility as a Service*" approach for the Pomona Valley subregion that will enhance the customer experience by facilitating integrated, multimodal trip planning, trip transactions and trip payment.
- 5. To work in *partnership* with Pomona Valley's four cities and regional transit providers to coordinate service planning, address infrastructure requirements and pursue competitive grant opportunities.
- 6. To pilot new *service approaches* to provide riders with experiences that are *user-friendly, reliable and cost-effective services*.





represented in the recent rider survey. Forty percent of those surveyed report use of mobility aides and one-half of the ridership report household income levels below \$25,000 and significant car ownership and driving limitations. PVTA's current suite of services provides a critical mobility safety net to these current users, a majority indicating that its door-to-door service was the most appreciated. At the same time, there are new markets emerging that hold promise as potential PVTA services.

To define PVTA's place in an evolving transportation ecosystem, the Authority undertook this study, the **SERVICE DESIGN ANALYSIS AND TEN-YEAR PLAN FOR THE POMONA VALLEY TRANSPORTATION AUTHORITY** to craft a strategic way forward. Beginning in the summer of 2018, the consultant team undertook a series of key stakeholder interviews, conducted a survey of riders and performed various demographic and other analyses to identify the issues and opportunities facing the Authority. The bulk of that work was presented in **VOLUME I: PVTA EXISTING CONDITIONS.** 

During the spring of 2019, building from key findings of that work effort, the Authority convened a workshop with its policy makers, facilitated by the consultant team. This three-hour workshop engaged elected officials and members of the Authority's Technical Advisory Committee, as well as representatives from Foothill Transit, the Gold Line and the City of Monrovia in considering PVTA's future. The workshop outcome was the six *Strategic Principles* set forth in Figure E-1. These were used to guide the recommendations of this VOLUME II: SERVICE DESIGN TOPICS AND RECOMMENDED PHASED STRATEGIC APPROACH FOR POMONA VALLEY TRANSPORTATION AUTHORITY

## **Defining a Phased Strategic Approach**

The **PVTA Strategic Principles** are operationalized through four phases and 30 strategies that also address findings presented in this study's **VOLUME I: PVTA EXISTING CONDITIONS.** Four general activity areas organize the strategies: 1) Market-Based Activities; 2) Regionalism Policies; 3) Institutional Structures; and 4) Mobility as a Service. The strategies are summarized in each of the four phases in TABLE E-1, PVTA'S PHASED STRATEGIC ACTION PLAN, 2020 – 2030.

### Phase Zero — Improve Existing PVTA Service Reliability

Phase Zero recognizes the need to address the service reliability and service quality problems of PVTA services that have presented in recent years. Working from activities PVTA staff already have underway, this phase involves *three strategies* in institutional areas, including around information, technology and contracting structures. Its timeframe is the immediate six to eight months.

# Phase One — Enhance the Status Quo Within Existing Resources, Plan for Expanded Services

Phase One identifies enhancements to PVTA services that can be introduced soon — that is over the next one to three years — within existing Authority budgets and is described through **10 strategies**. These enhancements will address some of the market needs and opportunities documented by the study process. Leveraging developing information technologies is critical to positioning PVTA to address new market needs, including planning for an expanded service footprint to serve travelers in new ways.





### Phase Two — Expand Local and Regional Travel Choices, as Resources Allow, to Improve Riders' Connectivity and Travel Experience

Phase Two assumes additional funding will be identified by PVTA and its four-city partners by which to pilot and implement new service approaches. This phase considers *nine strategies* in market and technology arenas by which PVTA can improve traveler choice and the travel experience while promoting connectivity between modes. A number of pilot services, including new service approaches, are envisioned to test markets and develop PVTA's responses to specific market needs over five years.

# Phase Three — Move PVTA to a Fully Functional MaaS Environment, Supporting Four-City Regional Services to Multiple Markets

The final phase of PVTA's phased strategic approach of *eight strategies* secures a strong mobility-as-aservice (MaaS) foundation, incorporating expanded service approaches and the technology to communicate these to multiple market groups. Central to this phase of the 2025 to 2030 is the coming of the Gold Line and required compliance with the INNOVATIVE CLEAN TRANSIT REGULATION, promulgated by the California Air Resources Board. Obtaining additional funding is critical both to responding to these and to expanding PVTA's suite of services in ways that complement its regional transit partners and serve riders and potential riders. PVTA can establish itself as a customer-centric mobility service, an anchoring public transportation provider in the Pomona Valley's transportation ecosystem.

PVTA's operational reality is influenced by the continued proliferation of cell phones, already outnumbering desktop computers, which are powerful information devices held in riders' hands that will only become more so. Enhanced by the internet, where all is increasingly connected, this will power PVTA as a multimodal transportation provider. While an unknown dimension of the transportation ecosystem is the role autonomous vehicles will play in public transportation, this phased strategic plan places PVTA in the strongest position to respond effectively, even as it implements policy and operational changes to serve Gold Line riders and comply with zero-emission bus rules.

## **Moving Forward**

To move forward this **PHASED STRATEGIC ACTION PLAN**, **2020 – 2030**, activity must occur in four arenas:

**First,** PVTA staff must continue their immediate activities, highlighted in Phase Zero, to set up the organization and its multi-year contracts for the greatest degree of flexibility to consider, test and mature new service approaches. These activities lay the groundwork for the substantive next steps.

**Secondly,** the Authority's governing body and the PVTA administration must initiate careful discussion of the strategies presented in this document. Each of these strategies is built up from findings about the current and projected service environment. Working from the six **Strategic Principles**, the PVTA board members and partner cities must decide individually and collectively which strategies they are *interested in and willing* to actually pursue and to jointly seek funding, in relation to:





- Markets traditional and new markets;
- Regionalism in terms of topics of service area, trip types, branding and fares;
- Institutional Structures of contracting, zero-emissions vehicle requirements and technology;
- Mobility as a Service of establishing the PVTA organization as a multimodal mobility agency that addresses the needs of Pomona Valley travelers.

**Thirdly**, this Plan envisions greater discourse between PVTA and its large regional transportation partners, specifically Foothill Transit, the Gold Line administrators and to a lesser extent, with Omnitrans. The PVTA organization holds considerable operational knowledge and expertise in the kind of flexible, on-demand transportation that can be the critical link to improve the convenience of these regional transportation services for the rider and the potential rider, helping Pomona Valley travelers consider using public transit for some of their trips, sometimes, both locally and across the region.

**Finally**, seeking funding for expanded and new initiatives will be for PVTA and all of its partners as the Authority moves forward to realize a vision of a larger role in meeting Pomona Valley mobility goals.

### **Strategies for a Strategic Action Plan**

Responsive to PVTA's Strategic Principles and addressing the existing conditions findings documented in VOLUME I: PVTA EXISTING CONDITIONS, a multi-faceted direction is supported. Following is the phased strategic action plan, a compilation of 30 defined strategies that provide the road map by which the Authority can address market needs, develop regional policies, create regional structure and implement MaaS initiatives.





#### Table E-1, PVTA's Phased Strategic Action Plan, FY2020 - FY2030

Phase Zero – Address the Reliability of Existing Services								
	FUNCTIONAL CATEGORY	Strategy	IMPLEMENTATION TIMELINE	IMPLEMENTATION RESPONSIBILITY				
	0.1 Customer Information	<ul> <li>PVTA <i>Mobility Manager Program</i> continues to "grow" its role in customer registration, customer service, market-based outreach.</li> <li>Establish Mobility Managers' "<i>boots-on-the-ground" functions</i> to gather specific intelligence about markets' trip needs and promote developing pilots.</li> </ul>	6 months	Internal PVTA staff				
Institutional	0.2 Technology Platforms	<ul> <li>PVTA staff continue to research <i>software platforms' functionality</i> and transit provider experiences and references to identify those attributes and track record that best resonate with PVTA.</li> </ul>	Completed by Fall 2019	Internal PVTA staff				
Structures	0.3 Contracting Structures	<ul> <li>PVTA staff continue to <i>explore operations structures</i> for upcoming Fall 2019 procurement to provide for flexibility and support in use of dedicated vehicles, including part-time drivers, and use of supplemental providers.</li> </ul>	Completed by Fall 2019	Internal PVTA staff				
		• Secure new operations contract that assures PVTA flexibility to: 1) evolve its service approach and technology requirements; 2) to consider "lease-to-buy" scheduling and dispatch software platform; 3) to modify up or down the volumes of dedicated vehicle capacity within identified parameters.	Completed by early 2020	PVTA staff and Board of Directors				
Phase 1 – E	nhance the Sta	atus Quo Within Existing Resources; Plan for Expanded Servi	ces					
Market-	FUNCTIONAL CATEGORY	Strategy	IMPLEMENTATION TIMELINE	IMPLEMENTATION RESPONSIBILITY				
Based Activities	1.1 Youth Markets	<ul> <li>Increase <i>access to after-school programs</i> at City of Pomona parks and library; South Pomona Boys &amp; Girls Club.</li> <li>Increase <i>youth group trip capacity</i> for City of Claremont youth.</li> <li>Assess <i>youth-related transportation potential</i> for City of La Verne's new teen center and City of San Dimas youth activities.</li> </ul>	Initiated during school year 19/20	PVTA staff with city partners				
	1.2 Neighborhood Local Travelers for Shopper	<ul> <li>Review <i>existing Rio Rancho/WinCo shuttle service</i> to improve timing, neighborhood(s) served and other factors to restructure as necessary.</li> <li>Promote <i>restructured shoppers' shuttle</i> and identify other Pomona area grocery</li> </ul>						
	Shuttles	<ul> <li>stores feasible for shuttle service.</li> <li>Assess semi-scheduled shopper shuttles opportunities elsewhere in PVTA service area, particularly for popular stores at or near city boundaries.</li> <li>Implement and market pilot(s) within existing resources; evaluate responses.</li> </ul>	by mid-FY 19/20	city partners				





Phase 1 continued, Enhance the Status Quo							
	FUNCTIONAL CATEGORY	Strategy	IMPLEMENTATION TIMELINE	IMPLEMENTATION RESPONSIBILITY			
Regionalism	1.4 Regionalism Within Four Cities: Trips and Fares Structures	<ul> <li>Initiate "regional" dialogue with PVTA partners about:         <ul> <li>4-city wide trip-making by market group</li> <li>Common service branding</li> <li>Approach to fare payment, common fare structure and charge-backs to 4-city partners</li> <li>Integrated fare structure that recognizes the different funding levels among the 4-city partners</li> </ul> </li> </ul>	Ongoing	PVTA staff with city partners			
	1.5 Regionalism Within Four Cities: Fare Payment	• Conduct fare payment research and monitoring of <i>fare payment media as vendor</i> , e.g., Token Transit and American Eagle fare payment technologies to enable smart-phone fare payment without TAP infrastructure expense.	Ongoing	PVTA staff with regional public transit partners			
	1.6 Operations Contracts	<ul> <li>Establish a phased "mix" of dedicated and nondedicated vehicle types – anticipating trip volumes by provider type.</li> </ul>		Internal PVTA Staff			
Institutional Structures		Initial six months of new contract; then quarterly	PVTA staff and PVTA Board				
	1.7 Zero Electric Bus (ZEB) Requirements	<ul> <li>Actively <i>research and monitor ZEB developments</i> to identify smaller transit provider implications and effective strategies.</li> <li>Assess <i>driver and maintenance ZEB implications of</i> types to incorporate into contractor requirements.</li> <li>Explore <i>partnership opportunities</i> with 4-city partners and Foothill Transit to facilitate ZEB compliance, including yard and facility location(s): for example, areas near Casa Colina [Garey and Bonita]; Fairplex or Brackett Field Airport area; City of Claremont possibilities.</li> <li>Assess <i>benefits and costs of vehicle options</i>: mixed vehicle fleets, smaller vehicles below GVW ZEB requirements; larger, traditional cut-aways for group loads.</li> <li>Pilot ZEB <i>operations</i>, as opportunity presents.</li> </ul>	Ongoing, in preparation for 2026 Plan Completion	PVTA with city partners, with regional public transit partners			
Mobility as a Service	1.8 Customer- Facing Technologies – Existing	<ul> <li>Promote "open trip planning" on PVTA website.</li> <li>Develop targeted marketing of expanded group services (youth and shopper shuttles) for communication through 4-City partners and directly to target markets.</li> <li>Modify existing www.PVTrans.org new trip planner to return passenger fare information (range of fares) for each PVTA service found in "trip discover" searches.</li> <li>Modify existing www.PVTrans.org to promote Google Transit/the Transit App to PVTA users to help them connect with fixed-route Ensure Los Angeles one-call/one-click platform www.211Ride.org reflects all PVTA services and brings back accurate information in "trip discovery"</li> </ul>		Internal PVTA with appropriate partners			





Mobility as a Service	1.9 Customer- Facing Technologies – MaaS 1.10 Technical Resource re: New Mobility	<ul> <li>Research incorporating <i>MaaS platform capabilities</i> into trip dispatch and scheduling software review, to identify customer-facing elements/functions in addition to operations elements/functions.</li> <li>Track customer-facing elements/functions in developing MaaS platforms to identify those of greatest potential for PVTA's 4-city region.</li> <li>Actively monitor regional trip-making <i>"new mobility" choices</i> to be a technical resource to PVTA partners on shared-use policies for scooters and bike-share and monitoring ride-share match software to aid local employers.</li> </ul>	Ongoing during FY 19/20 and FY 20/21 Ongoing	Internal PVTA
Phase 2 – E	xpand Local ar	/TA Riders' C	onnectivity	
and Travel	Experience			, second s
	- FUNCTIONAL CATEGORY	Strategy		
Market- Based Activities	2.1 Youth Markets	<ul> <li>Coordinate with Foothill Transit to define and <i>develop school tripper pilots</i> to complement school bell times, possibly replacing some Foothill Transit services.</li> <li>Identify potential funding sources to support PVTA school trippers.</li> <li>For CLASP pass holders (Claremont Colleges), <i>pilot weekend CLASP connections</i> to Foothill Transit's Silver Streak into Los Angeles as well as for other college students at community colleges and universities in the 4-city region.</li> </ul>	Initiate planning during FY 20/21	PVTA staff with Foothill Transit, with Claremont Colleges' consortia
	2.2 Four-Citywide Regional Travelers	• Define, develop and operate <i>region-wide 4-city trip-making for all user groups</i> , within available resources, without eroding services to traditional sub-markets.	Initiate planning during FY 20/21	Internal PVTA staff
	2.3 Commuters	<ul> <li>First-mile/last-mile services for commuters:         <ul> <li>Define and develop piloted services to connect local travelers with regional, high-quality/high-frequency public transit services</li> <li>Collector options for Silver Streak</li> <li>Connect Metrolink riders to three stations</li> </ul> </li> <li>Commence planning for Gold Line first-mile/last-mile connectivity.</li> </ul>	Initiate planning during FY 20/21	PVTA staff with Foothill Transit, coordinating with Gold Line planners
	2.4 Service Approaches for Regional Trip- Making	<ul> <li>Expand <i>PVTA service area-wide capabilities,</i> recommending sustainable levels of expansion to the PVTA Board of Directors.</li> <li>Define capacity and limitations for <i>One-Step-Over-the-Line</i> trips.</li> <li><i>Coordinate fares</i> around potentially increased 4-four city trip-making.</li> </ul>	Initiate planning during FY 20/21	PVTA internal with PVTA Board.
Regionalism		<ul> <li>Develop operations' plans to <i>pilot first-mile/last-mile</i> applications serving three Metrolink stations and/or Silver Streak stops, including:         <ul> <li>Checkpoint service in selected neighborhoods oriented to regional service</li> <li>User-side subsidy consumer-choice voucher or coupon-based provided by TNCs and local taxi companies</li> </ul> </li> <li>Market and promote <i>increased connectivity to long-distance regional providers</i>.</li> </ul>	Initiate planning during FY 20/21	PVTA with Foothill Transit, coordinating with Gold Line planners





Phase 2, continued – Expand Local and Regional Travel Choices as Resources Allow									
		Strategy							
Institutional	2.5 Contract Structures	<ul> <li>Mature contract structures that recognize dedicated vehicle operations and supplemental providers in cost-effective relationship.</li> <li>PVTA to pursue ownership of trip scheduling software – potentially with brokerage functionality, within an expanded service area and an expanded service provider mix.</li> <li>Ascertain and seek to address integration and interoperability issues between customer focing MaaS and the operations and scheduling software.</li> </ul>	Two to three years	RESPONSIBILITY					
Structures	2.6 Contract Structure: Medi-Cal Provider	<ul> <li>Research opportunities for PVTA to <i>secure MediCal funding</i> for provided eligible trips to MediCal eligible person on PVTA roles.</li> <li><i>Pursue MediCal vendor eligibility</i> to procure those funds.</li> </ul>	Initiate research within a year; likely a year to secure status	Internal PVTA					
	2.7 MaaS Customer-Facing Technology: Policies	<ul> <li>Support and <i>promote area-wide services and policies</i> whereever possible, including implementing unified fare structure(s), branding and regional "look" as appropriate</li> <li><i>Research and procure MaaS software</i> that readily communicates individuals' fare to riders, handles multiple fare types but informs the rider of his/her fare and has the capability to report out fares received to city partners.</li> </ul>	Ongoing, within two or three years as the technology allows	PVTA in partnership with cities and possibly with area transit providers					
	2.8 MaaS Customer-Facing Technologies: Software Platform	<ul> <li>From Phase I research, <i>integrate MaaS functions</i> within existing/expanded PVTA networks through contracting, leasing or purchasing mechanisms.</li> <li>Pilot <i>trip transaction/trip booking capabilities</i> from MaaS platforms.</li> <li>Pilot <i>trip payment by customer capabilities</i> from MaaS-type platforms.</li> </ul>	Ongoing, within two years	Internal PVTA with Board policy direction					
	2.9 ZEB Facility	<ul> <li>Pursue and establish <i>partnership-based approach</i> to ZEB compliance.</li> <li><i>Develop ZEB Plan</i>, addressing early comprehensive capital planning for both PVTA facility access and for vehicle procurement.</li> <li>Undertake <i>vehicle capital planning</i> to ensure most cost-efficient compliance with ZEB rules, timing procurement of ZEBs to coordinate with facility development and funding availability.</li> </ul>	Ongoing over five years	Ongoing toward preparation of 2026 ZEB Plan					





Market-	FUNCTIONAL CATEGORY	IMPLEMENTATION TIMELINE	IMPLEMENTATION RESPONSIBILITY	
	3.1 Traditional Markets	• <b>Prioritize traditional markets</b> of seniors, persons with disabilities and youth within existing funding or for expanded services with new funding.		
Based	3.2 Low-income Local Travelers	• Support expanded general public local services with new funding,	Continuing	PVTA staff with Board direction and
Activities	3.3 Commuters	<ul> <li>Expand <i>first-mile/last-mile connections</i> with new funding.</li> <li>Support <i>Gold Line first-mile/last-mile</i> connections.</li> <li>Attract new and hold existing riders, <i>"some trips, some times."</i></li> </ul>		Support
	3.4 Service Approaches	<ul> <li>Provide a <i>seamless rider experience</i>, from requesting a trip, moving immediately to securing and paying for the trip, through a MaaS platform owned or leased by the PVTA organization.</li> <li>Expand area-wide service mix, with targeted markets by service</li> </ul>	Continuing	PVTA staff with Board direction and support
Regionalism		• Support and expand <i>regional connections</i> , within the four cities and to regional services, to the greatest extent possible.	Upon agreement with four cities and regional partners	PVTA staff with regional partners and Board support
	3.5 Maturing Pilots Into Ongoing Services	<ul> <li>Expand service for <i>successful pilots</i>, with determination of "success" in advance of implementation, with monitoring and annual/biennial evaluation:         <ul> <li>Local circulation, including school bell time-focused trippers</li> <li>Purpose-specific shuttles</li> <li>First-mile, last-mile services</li> </ul> </li> <li>Become a resource to partner cities on other <i>shared mobility services</i>.</li> </ul>	Continuing, with regular monitoring and assessment of continued success	PVTA staff with regional partners and Board support
Institutional Structures	3.6 Service Contracts	<ul> <li>Ensure that <i>contract service term(s) and scope</i> are appropriate to and aligned with other policy and operations decisions taken.</li> <li>Identify <i>contract requirements to be modified</i> in procurement of FY 2020 with an annual review of contract terms to better align with changing conditions.</li> </ul>	Annual review of contract terms	PVTA staff with Board direction and support
	3.7 ZEB Program	• Establish <b>ZEB program parameters</b> , as set forth in 2026 ZEB program description; monitor experience and modify as indicated.	Going forward from 2026	PVTA staff with Board direction and support
Mobility as a Service	3.8 Information and Customer- Facing Technology	<ul> <li>Establish an <i>implemented MaaS platform</i> by which riders and prospective riders can easily compare, plan, pay for and track trips.</li> <li>Ensure <i>scheduling and dispatch software</i> is well-integrated with MaaS platform.</li> <li>Ensure <i>fare payment option(s)</i> integrate smoothly with MaaS platform.</li> </ul>	Continuing	PVTA internal staff in partnership with four cities







This page left intentionally blank.





# Service Design Analysis & Ten-Year Plan for the Pomona Valley Transportation Authority: VOLUME II — SERVICE DESIGN TOPICS AND RECOMMENDED PHASED STRATEGIC APPROACH

## I. INTRODUCTION AND THE PVTA ORGANIZATION

A policy makers' workshop for the Pomona Valley Transportation Authority (PVTA) was held on March 13, 2019, involving elected officials and staff of each of PVTA's cities in a facilitated discussion of current PVTA policies and strategic opportunities for the coming decade. Workshop participants discussed market priorities and provided input to PVTA staff and the consultant team in the form of preliminary **"principles."** This Volume II elaborates upon the strategic direction envisioned by these PVTA principles and presents an Action Plan that establishes a path forward for the organization and its partners. The Strategic Action Plan, presented in Chapter VII, builds upon the findings of VOLUME I: PVTA EXISTING CONDITIONS and recognizes shifting external conditions that will impact PVTA in the immediate and more distant future.

This document is organized around key questions and issues that the PVTA organization must strategically consider. Central to these is the fundamental question:

# What is the role and advantages of the PVTA joint powers organization (JPA), a four-city authority, as opposed to not having a PVTA entity?

Organized in 1977, the opening resolution of this public agency joint powers authority indicates it was formed in response to:

"...mutual interest in deciding upon and implementing public transportation to the transit dependent persons in the Pomona Valley, including **handicapped and seniors**" (1977);

Amended to include a specific reference to the "general public" (1984).

### **Considering PVTA's Benefits**

At the March 2019 workshop and ongoing during this study process, a discussion has been undertaken of the basic value and import of an organization that was established more than 40 years ago. A review of benefits of the PVTA organization and its services is considered here along with three dimensions of: 1) Customer-Focused benefits; 2) Administrative and Organizational benefits; and 3) Funding benefits.

### **Consumer-Focused Benefits**

 For the customer, integrated planning across the four-city region allows individuals to make city-to-city trips and ensures that customers receive efficient, city-to-city trips through consistent regional policies and services;





- For the rider with specialized travel concerns or needs, providing alternatives to the inter-city, regional bus and train service addresses important mobility needs; and
- Customers experience coordinated, consistent services where consolidated management enables coordination of services between partner cities and region-wide.

### Administrative and Organizational Benefits:

- Shared staffing reduces overall administrative cost to individual cities;
- A joint powers authority enables cities to share specialized management staff required by public transit that receives local, state and federal funds;
- A joint powers authority enables joint procurement of contract management at competitive rates; and
- A consolidated fleet makes more efficient use of capital resources. For example, Claremont's FTA 5307 vehicles are needed only a few hours a day for Group Service and can be used for Get About the balance of the day. This allows Claremont to forgo contributing to the Get About fleet replacement fund. Serving multiple programs with a single vehicle enables PVTA's contract operations to build full shifts, instead of pulling a vehicle out for two hours and then returning it to base, which is significantly more expensive.

### Funding Benefits:

- Funding opportunities within Los Angeles County exist where there is a formally Coordinated approach to local transportation;
- Local Los Angeles County funding that comes to the individual cities can be leveraged to enable the provision of more trips through a coordinated, multi-city approach;
- Only multi-city community transit operators qualify for MTA's Subregional Paratransit Incentive funding. PVTA will receive \$845,000 in these funds in FY 2020; and
- Federal funding opportunities exist, e.g., FTA Section 5310, that specifically calls-out the import of coordinated, multi-agency services. PVTA is the 5310 recipient for 18 of Get About's fleet of 26, as well as federal funds in support of Ready Now, One Step Over the Line and Mobility Management.

Among stakeholders interviewed and by PVTA riders, clear appreciation and support was consistently expressed. PVTA services are highly valued by the community members who use them, with surveyed customers rating all five PVTA services between *above average* and *excellent* on the rider's survey.





## **II. STRATEGIC PRINCIPLES TO GUIDE PVTA**

# What principles can guide the PVTA organization and its services for near, mid-term and long-range operations and planning?

### Considering the Pomona Valley "as a Place"

This four-city subregion is home to a quarter-of-a-million people and continues to be a region of growth. Increasing by 5% by 2020, it is estimated that an additional 35,000 persons will be living within the Pomona Valley cities of Claremont, San Dimas, La Verne and Pomona by 2035, according to Southern California Association of Governments (SCAG) estimates. The then 297,000 persons will be 15% above most recent American Community Survey population estimates for the Pomona Valley. Comparable household growth rates are projected by SCAG, while employment opportunities grow more slowly with perhaps 5,000 jobs added between 2008 and 2020 and another 5,000 by 2035, respectively.

In considering this region, the March 2019 policy makers' workshop had a sometimes spirited discussion about the markets PVTA does serve and new markets that it could serve. Discussions were held of the importance of regional trip-making to PVTA constituents as well as local trips, within communities. Strategies to make it easier for both existing and new riders were considered and the value of the four-city collaboration was explored, both for existing services and for possible new and piloted services. This workshop content was distilled into a set of six principles to provide PVTA with guidance and strategic direction. These principles commence with the concept that this four-city region is "a place" within which and from which people travel. Figure 1 presents these PVTA Guiding Principles.

#### Figure 1, Guiding Principles from the March 2019 Policy Workshop

### STRATEGIC PRINCIPLES FOR THE POMONA VALLEY TRANSPORTATION AUTHORITY Serving the Pomona Valley "as a Place"

- 1. To prioritize and continue to provide quality service to *traditional markets* within the Pomona Valley of seniors, persons with disabilities, youth and transit-dependent general public persons while pursuing *expansion to other target markets* within available resources.
- 2. To develop *seamless travel* across the Pomona Valley with consistent service levels and fares.
- 3. To establish *convenient connections* with regional transit services to facilitate longer distance travel to and from the Pomona Valley.
- 4. To embrace the "*Mobility as a Service*" approach for the Pomona Valley subregion that will enhance the customer experience by facilitating integrated, multimodal trip planning, trip transactions and trip payment.
- 5. To work in *partnership* with Pomona Valley's four cities and regional transit providers to coordinate service planning, address infrastructure requirements and pursue competitive grant opportunities.
- 6. To pilot *new service approaches* to provide riders with experiences that are *user-friendly, reliable and cost-effective services*.

Appendix A identifies the March 2019 workshop participants and presents summary workshop notes.





## **III. MARKET PRIORITIES AND OPPORTUNITIES**

# What are the markets PVTA should serve and how should we prioritize service to these markets?

### Substantially Transit-Dependent Riders Use PVTA Now

Part of this study process — and central to the March 2019 workshop — was to consider whom PVTA is now serving and who they should be serving in the near term and over the next decade. The coming of the Gold Line to the Pomona Valley has broadened the conversation, presenting an opportunity for PVTA to move beyond its "traditional" markets.

### Lower Income, Advanced Age and Mobility Limitations

The rider-survey conducted during this study process brought back solid information about PVTA's existing markets with 443 individuals responding, affirming their clear transit dependency and the more limited mobility choices available to many.<sup>1</sup> PVTA's *ridership is poorer*, *older and faces more mobility challenges or personal auto limitations* than the general population of the Pomona Valley (Figure 2).

Half of the survey respondents reported income levels below \$25,000. A one-person household with an annual income of \$21,000 is considered within 150% of the 2019 federal poverty-level guidelines.

The rider survey respondents were predominated by women, with 67% being female. And this group was primarily seniors, with 70% over age 65 and more than three in 10 respondents over age 80. Unfortunately, youth responded only minimally to the survey, just 3% of the total and exclusively in Claremont. More than a quarter of these



PVTA users were working ages, between 18 and 64, with 10% of them reporting that they hold full- or part-time jobs.

<sup>&</sup>lt;sup>1</sup> A mail-back survey was mailed with a pre-paid return envelope to the almost 5,000 registered PVTA users PVTA registrants. A 9% response rate was achieved, lower than PVTA surveys of years past but higher than many current surveys achieve.





Not surprisingly, more than four in 10 surveyed PVTA riders report that they use some type of mobility device, including wheelchairs, walkers and other mobility. This relatively high use of mobility aids adds to the import of PVTA's door-to-door service.

Among these PVTA riders, six in 10 do not own a car while close to half do not have a valid driver's license. Among the adults under age 65, 70% reported they do not own a car. Among adults over age 65, while almost six in 10 apparently have a valid drivers' license, as current PVTA riders they are likely to be driving less and seeking alternatives more often. Both groups' lack of access to a car or limited night-time or distance driving are important predictors to need for transportation support.

### **Using PVTA Services for Specific Reasons and Purposes**

Responding to "why do you ride PVTA services," the majority reported reasons involved with their access to or costs of a personal automobile, using PVTA because they *do not drive* (52%), they *don't have access to a car* (27%), it's *less expensive than driving* (23%) or to *avoid driving at night* (16%).

A significant proportion use PVTA services because the *service comes to the door* (37%) or because of *where they can travel* (23%) (Figure 3).

In terms of trip purposes, *healthcare trips* 



Figure 3, Riders' Primary Reasons for Riding PVTA Service

were the reason an impressive three out of four (71%) use PVTA services. **Shopping** was the second most common reason to use a PVTA service for four out of 10 (41%). Just 5% of persons reported making *work trips* using PVTA.

### **PVTA Service Elements Important to Three Age Groups**

An important dimension of why many riders use PVTA services is the fact that this demand response service goes to the door. When asked to rate the importance of various service elements, all three age groups rated equally highly the aspect of *being picked up and dropped off right at the door* (Figure 4).







Figure 4, Rating of the Importance of PVTA Service Features by Age Group

**On-time performance** and **interactions with dispatchers and drivers** followed in the ratings, and for this group of young adults and oldest adults, the ability to make a same-day reservation rated last in importance. Notably, this ridership group was predominated by persons who do not have a job and for whom their time-sensitive trips were largely healthcare appointments, usually made in advance as healthcare was the top-ranked trip purpose for three out of four riders.

Clearly, based upon these survey respondents, PVTA is reaching those for whom its services were intended. These are its traditional markets of seniors and persons with disabilities whose trip needs can be well-served by an advance reservation, curb-to-curb service. The survey shows these traditional ridership groups spread proportionally across the four-city region, although Pomona was more likely to be home both to working-age, poorer adults and to seniors over age 65.

### Youth May Be Somewhat Underserved

Less clear is PVTA's reach into the youth market. The rider survey brought back too small of a sample to make definitive statements. PVTA's group trip ridership, which is targeted in Claremont and in Pomona to after-school activities, averaged about 16 one-way trips per day in Pomona and 50 one-way trips per day in Claremont FY17/18.<sup>2</sup>

From the on-board survey less information about this groups' needs and concerns emerged, although more was heard from key stakeholders during the outreach efforts.

<sup>&</sup>lt;sup>2</sup> Claremont has a different funding base than do PVTA's other three cities. It is eligible for federal funds as the result of actions taken during the 1970s; it is therefore able to provide a greater quantity of service.





The Pomona Parks and Recreation after-school program administrators described expanded group trip capacity as an important need. Pomona staff indicates, and PVTA's contractor confirms, that there is little room for new trips between the 3 p.m.-to-5 p.m. time period when after-school program demand peaks, particularly for its La Casita Youth Center activities based out of Palomares Park. This need is greater during the winter months with fewer daylight hours and some concern about youth walking home. For City of La Verne, city staff are interested in support to its new teen center at Las Flores Park.

Claremont school-aged youth are served by PVTA's group transportation program, which provides trips to or from its Youth Activity Center (YAC). City staff requested restoration of trips to adjacent Montclair and to CalPoly, where youth previously traveled, but can no longer under current PVTA policy.

# Seniors' and Persons' with Disabilities Trip Needs Continue but Are Changing

### **Reduced Demand to Congregate Sites**

Stakeholders report — and the average daily ridership confirms — that the traditional senior center "lunch bunch" is declining. Some neighborhoods still have significant, advance reservation group trips, for example, the Pomona senior centers. However, these are shrinking in proportion to PVTA's daily vehicle tour structure. The lifestyle of the younger seniors sees them more involved in local activities and, when they travel, they are going to an array of destinations, rather than the many-to-one pattern of travel to community centers that has typified past years.

### **Increased Use of Mobility Devices**

PVTA's contractor reports an increase in trips provided to persons in wheelchairs, i.e., almost 31,000 in FY 17/18. This represents a 40% increase over five years, up from 22,000 trips in FY 13/14. The proportion of trips provided to persons in wheelchairs also has increased significantly, from 10% in FY 13/14 to 16% in FY 17/18. Trips that involve deploying lifts and securing the mobility devices that passengers use all translate to more time. This impacts the system productivity, while providing important trips to these riders.

Indirectly related to provision of trips to persons in wheelchairs, in the rider survey, somewhat more than one in 10 riders indicates they use PVTA service because its \$1 fare for a majority of trips is less expensive than ACCESS fares, distance-based from \$2.75 to \$3.50. PVTA provides an important back up to Los Angeles County's Americans with Disabilities Act complementary paratransit service, which provides trips across the county.

### More Evening Service and More Special Event Services

Stakeholders report value in developing and promoting transportation to evening events — such as concerts in the parks, community meetings and more. Agency staff in Claremont, La Verne and Pomona affirmed that seniors who are decreasing driving at night and persons with disabilities seeking a broader social experience will benefit from evening demand response services, particularly when tied to a city-sponsored community event.





#### PVTA Service Design Analysis and Ten-Year Plan Vol. II: Service Design and Recommended Strategic Approach

### **PVTA Services as a Safety Net**

Four in 10 survey respondents indicated that they had not used PVTA services within the past month, and, yet, they were sufficiently engaged with its services to complete and return the rider survey (Figure 5). This suggests, as has been seen in other communities, that PVTA's community-level services represent a safety net for many people. That was borne out in interviews with senior facilities managers who reported that while seniors do have some other

Get About 38% Claremont Dial-a-Ride 17% Get About Ready Now 8% San Dimas Dial-a-Cab 7% Get About One Step Over the Line 5% I am not sure which service I used. 5% but did ride I haven't used PVTA services in past 39% month 0% 10% 20% 30% 40% 50%

transportation resources, PVTA provides an important additional option for some. Whether because a family member cannot transport them or they need to get to a medical appointment in an adjacent town, PVTA service becomes a good alternative.

# Interest in Local, Semi-Scheduled Services for Several Markets

### **Rio Rancho Shopper Shuttle**

City of Pomona stakeholders saw value in PVTA's ability to travel directly between homes and destinations for grocery shuttle services, much as its Rio Rancho Shopper Shuttle has provided local connections to a WinCo Foods and Walmart shopping in southeast Pomona. The service has not been widely promoted and opportunity to grow ridership on promoted, regularly scheduled shopping runs was of interest. City of Public Works staff commented on the numbers of grocery carts in neighborhoods that are often at distances from large grocery stores, suggesting that shoppers without access to a car walked home with their groceries. Promoting a Shopper Shuttle by neighborhood by day-of-the-week could provide home-to-store service and was of interest to those with knowledge of lower-income households without access to a car.

### **City of La Verne Teen Center, Claremont YAC and Pomona After-School Programs**

Group trip services have been a long-time staple of the Get About program although there is some indication of a decline in use of the services as currently configured. At the same time, cities' staff express concern about how to support youth who do not drive in getting to after-school enrichment programs and sports activities. There may be some opportunity to reinvigorate a PVTA role on behalf of the four cities' youth around activities or facilities on some sort of semi-scheduled basis. For example, developing PVTA semi-scheduled services between the region's middle schools and youth-focused facilities could be successful, if developed in concert with the school districts and youth coordinators, and promoted effectively to youth.



Figure 5, What PVTA Services Have You Used in the Past



### **School Trippers**

Foothill Transit planners expressed interest in the flexibility of PVTA services to respond to changes in school bell times. Seasonal and weekly bell time variations are almost impossible for this large regional transit provider to serve. The potential exists for a PVTA service that better meets transport needs of middle school and high school youth, possibly for those Foothill routes in Pomona where low service frequencies exist, e.g., Foothill Route #195 with hourly service frequencies.

# New Opportunity for Improved Regional Connections and First-Mile/Last-Mile Services

At almost every stakeholder interview, there was an expressed desire for PVTA to develop services that connect residents with the coming Gold Line. Commutes from the region into Pasadena and along the 210 corridor are significant and have been served, to some extent, by Foothill Transit. Ridership into Pasadena on Foothill Route #187 dropped off dramatically immediately upon the opening of the extended Gold Line to Azusa and Citrus College. Foothill Transit expects to make further route modifications when the Gold Line's first-phase extension to Pomona is complete, but there is concern about drive-alone trips to these new stations for two reasons:

- City planners are worried about parking capacity. "Last station" demand for parking has been significant, reported at over-capacity in the early months of opening, and San Dimas particularly is concerned about new Gold Line riders coming up the I-57 from the south and quickly contributing to over-full parking.
- Lower-income residents who do not drive but live at some distance from the Pomona phase Gold Line stations will have difficulty accessing the new commuter service. Pomona neighborhoods south of downtown may be assisted by good first-mile/last-mile services to the Gold Line North Pomona station.





## **IV. MARKET-ORIENTED SERVICE APPROACHES**

### Overview

# With existing and new markets in mind, what are the service approaches by which PVTA can meet identified markets' mobility needs?

This section describes service approaches that should be considered by PVTA to provide new or improved transportation to meet identified travel markets and needs. The operational characteristics of these approaches are described as a precursor to developing strategic recommendations for the Authority. Some of these service approaches are currently operated by PVTA; others would be new.

### Service Approaches for Meeting PVTA Market Needs

### **Embracing Existing and New Service Approaches**

Over its history, the PVTA has built a suite of transportation services that are targeted to its various markets and travel needs. It is crucial to consider how these modes of service delivery might need to change in response to additional market needs now and within the next 10 years.

Existing PVTA services are largely defined by their ridership groups and service areas. Historically, PVTA services were advance reservation, including PVTA's oldest program *Get About*, which provides advance reservation \$1 trips to seniors and persons with disabilities across the four-city region. Additionally, the *Claremont Dial-a-Ride* and *San Dimas Cab* each provide on-demand service to the general public with no advance reservation at fares between \$2.50, \$4 and \$6. These serve more limited areas, generally within their respective cities, with some exceptions and La Verne residents are eligible to ride San Dimas Dial-a-Cab.

PVTA introduced two new services in recent years under the Get About umbrella: one, an on-demand service, *Ready Now*, which provides same-day service across the four cities and to a few adjacent destinations, is available for \$4.50 per trip. The second new service is *One Step Over the Line* that is only for persons with disabilities traveling beyond the four-city region for medical purposes and charges fares between \$2.50 and \$12, depending upon the distance. This service is advance reservation only. Finally, *Group Trip* programs are semi-scheduled serving youth and seniors traveling to congregate sites in Pomona or Claremont, provided on an advance-reservation basis.

New service approaches can allow the Authority to more effectively serve new markets, including for example, expanded services to low-income persons or new first-mile/last-mile services for commuters. In considering the markets to be served and appropriate service approaches, key differentiating dimensions include whether or not a service is:

- Advance reservation, curb-to-curb;
- On-demand, no reservation, curb-to-curb; or
- Semi-scheduled service to bus stops or otherwise identified locations.





Table 1 considers these dimensions, presenting existing service approaches and the market or submarkets most appropriately served by each. *Market Groups* are identified in the top half (rows 1-4). The X's identify which markets can use each service type. The bottom half (rows 5-8) identifies *Provider Type*, suggesting which type of provider is best suited to a particular service approach. The X's identify which type of provider is best suited to provide each service.

SERVICE APPROACHES	Ad	vance Reser	vation	On-Demar	nd Services	Semi-Scheduler Scheduled Servi		ed/ ices
1. MARKETS –	Within Service Area	One Step Over the Line/ Healthcare Trips	Group Trips/ Pomona & Claremont	Dial-a-Cab/ Dial-a-Ride/ Ready Now	Check Point Services Metrolink/ Foothill/ Gold Line	Defined destination Youth Specialized Shuttle	Shopper Specialized Shuttle	School Tripper Services
Seniors/Persons with Disabilities	х	х	х	х			х	
Youth			х			х		х
Low Income		х			х	Х	х	
First-Mile/Last-Mile travelers					х			
2. PROVIDER TYPE –								
Dedicated Accessible Fleet	Х	Х	Х		Х	Х	Х	Х
Supplemental Provider, under contract		х		х	х	Х		х
Uber/Lyft/TNC customer- choice/user-side subsidy				X	х			
On-Demand First-Mile/ Last-Mile Applications		х			х			

### Table 1, PVTA Current and Future Service Approaches in Relation to Market Needs

### **Service Approach Descriptions**

As noted, PVTA already employs a mix of service approaches that are paired with a range of eligibility options to reflect the market groups. Both existing and potential new approaches begin to frame the recommended directions that PVTA could employ, going forward. The operational specifics of these service approaches will be relevant to understanding the study recommendations. Key operational features are described here for: 1) advance reservation, 2) on-demand services and 3) scheduled and semi-scheduled services, as listed in Table 1.





### **Advance Reservation**

#### Advance Reservation for Local Trips

Riders are required to call in advance to make a trip request for most PVTA services, using the consolidated PVTA reservation number (909-596-7664). When a rider calls the reservation number, they are greeted with a member to select the appropriate service. The call is then seamlessly routed to the corresponding contractor. *Get About* trip requests must be made at least one day ahead and not more than seven days in advance. For Get About's extended service, *One Step Over the Line*, trip reservation requests must be made at least 24 hours in advance. For *Pomona Group Trip* and *Claremont Group Trip*, requests for six or more persons must be made 72 hours in advance of when the trip is needed. Trip requests for both Pomona and Claremont also go through the PVTA reservation line. Group trips must generally travel between a single point of origin and a single destination, although there are some exceptions to that requirement.

For any of these trips, the trip will be provided within a 40-minute window, with "on-time service" defined as the vehicle arriving within a window of 5 minutes before to 15 minutes after the promised pick-up time.

#### **Advance Reservation for Adjacent Area Trips**

To travel to PVTA-specified health-related destinations that are outside of PVTA's four cities, individual riders are required to call 24 hours in advance to place a trip request using the **One Step Over the Line service**.

Group travel to a common destination outside the PVTA service area is available on both the **Pomona Group Trip** and **Claremont Group Trip programs.** The destination must be no more than 45-minutes distant. Riders may be picked up on the out-bound trip and delivered home on the return trip to multiple destinations so long as all the trips can be served within a 45-minute period. The riders' coordinator must book these group trips no later than 72 hours in advance of the desired travel day and time.

### **On-Demand**

### **Existing PVTA On-Demand Services**

As noted, PVTA initiated the **Ready Now** service for booking an immediate, on-demand request within the Get About program. The **Ready Now** service was established for registered Get About riders, persons who are seniors, age 60+ and persons with disabilities. Riders call the PVTA reservation number (909-596-7664) and their trip is booked for pick-up generally within 45 minutes of the request. **Ready Now** trips are dispatched by Network Paratransit, the supplemental taxi provider.

The longstanding *Claremont Dial-a-Ride* and *San Dimas Dial-a-Cab* programs are also on-demand services. Riders call the Claremont reservation number (909-623-0183) to request a ride, which is generally provided within 45 minutes of the request. San Dimas residents request on-demand service for pick-ups within 45 minutes by calling its reservation number (909-622-4435).





#### **Dedicated Vehicle Provider (Vans)**

The existing advance-reservation services of Get About and the One Step Over the Line have been largely, but not exclusively, provided by *PVTA's dedicated vehicle fleet*, operated under contract by First Transit. First Transit creates daily schedules of about 17 vehicles in peak service, plus about eight back-up vehicles, all owned by either the Authority or the City of Claremont. The PVTA organization pays its dedicated provider on a fixed- and variable-rate structure driven by vehicle revenue hours, under its contract with the provider.

#### **Supplemental Provider (Taxis)**

PVTA holds a contract with Network Paratransit, as the primary provider of taxi trips for Claremont Dial-a-Ride and for San Dimas Dial-a-Cab. In its role as supplemental provider, Network Paratransit provides trips that are dispatched through the First Transit dispatcher, PVTA's dedicated vehicle provider. Network Paratransit holds an agreement with PVTA as the primary provider of the Claremont and San Dimas services and as the supplemental provider for Get About services, which include the Ready Now and One Step Over the Line services. The PVTA organization pays its supplemental provider(s) on a trip-provided basis under its contract with the provider.

### User Side Subsidy

In this service approach, not currently in use in the PVTA service area, the rider makes the decision about *which provider to call* and uses a fare media provided by the public agency to discount the trip through a subsidy that reduces the trip price paid by the rider. Traditionally, most user side subsidy programs were served by taxi companies. Customers used a coupon book to "purchase" trips at a discounted price. With the advent of Transportation Network Companies (TNCs), such as Uber and Lyft, the user side subsidy model has evolved to embrace TNC's technology components. In the TNC user side subsidy approach, eligible riders would be provided with a "code" that is then provided to Uber or Lyft when a ride to taken. The trip is thereby discounted to the rider with the public agency subsequently being billed by the TNC. The public agency would pay for these services on the basis of trips provided, under an agreement — but not a contract — with the respective TNC.

This approach has been extremely successful in neighboring Monrovia, where its use has been so popular that serious budget deficits have developed. Managing the popularity of this service approach is a key operational requirement.

### Semi-Scheduled and Scheduled Services

### Tripper Service, Semi-Scheduled Service

This service approach is not currently provided by PVTA and is within the fixed-route, scheduled service arena, rather than being a demand responsive or on-demand service. While open to the general public, tripper services are usually oriented toward a school or other high-volume destinations with predictable, if also changing, travel times.

School-oriented tripper service is characterized by a schedule that is readily changed to accommodate changing bell times and school minimum days. It might only operate during periods when schools are in session. This service is provided by dedicated vehicles, under a contract arrangement with an operator,





and reflects certain on-time standards related to the scheduled service. There is likely some sort of published schedule, but this changes with some frequency, based upon the school site schedule and calendar. Tripper services generally require a solid level of coordination with the primary trip generators, e.g., the schools, that they serve.

If under contract for provision of this service with its dedicated service provider, PVTA would pay for provision of these services by its dedicated provider on a fixed and variable, revenue hour basis.

### <u>Checkpoint Service — With Dedicated Vehicle</u>

A checkpoint service can be a hybrid of a fixed-route and demand response services dependent on service design. Checkpoint service provides an alternative to fixed-route service by limiting stops to major destinations or "checkpoints" versus traditional fixed-route service in which bus stops are spaced at incremental distances (e.g., every 0.2 or 0.25 miles). By judiciously selecting stops, each stop can have a scheduled arrival time, allowing passengers to better predict when a vehicle can pick up or drop off passengers. In addition, vehicle speed is improved by limiting the number of stops and passenger pick-ups/drop-offs.

Checkpoint service may include route deviations to allow persons living beyond the "checkpoint" route to access transit services. As long as sufficient time is provided during a vehicle run, vehicles can deviate and pick up passengers outside of the checkpoint route. Agencies need to be mindful that multiple deviations can affect scheduled arrival times at checkpoint locations. This can be determined once service is implemented in which operations staff, coach operators and dispatch carefully monitor on-time performance to ensure that vehicles run on-schedule. Moreover, agencies can limit route deviations through advance reservation as a method of constraining deviations and maintaining on-time performance.

Application of checkpoint service is beneficial in areas with multiple destinations spread throughout suburban areas. The PVTA service area with several distinct municipalities offer an opportunity to explore the viability of checkpoint service traveling to major destinations throughout the region.

#### Shuttle Services — With Dedicated Vehicle

Shuttle services are designed to provide a direct, shared transportation service to specific origin/destination locations. An example of a shuttle service could be from a commuter rail station to a specific employment center. Unlike checkpoint service, shuttle service is limited to one or two major destinations. Any more than two stops at both the pick-up and drop-off locations will increase travel time and negate the benefits of shuttle service.

Shuttle service can only work in areas where passengers congregate at a major location and travel to one or two locations. School-age children traveling to a youth community center is one example of a service that can be valuable in the PVTA service area. Moreover, specialized shuttle service to grocery stores can be helpful for those that have limited access to a vehicle or ability to drive to grocery stores. A shuttle service design for persons with limited resources can be beneficial toward eradicating food deserts and provide healthy alternatives for populations that need access to nutritious food. Shuttles can pick up/drop off at designated locations and travel to major supermarkets.





# V. FACTORS INFLUENCING THE POMONA VALLEY'S TRANSPORTATION ECOSYSTEM

What are the influences — known at this time — that must be considered in shaping PVTA's future and the transportation ecosystem of which it is a part?

### Overview

This chapter explores factors that impact PVTA's current and future services. These include:

- Existing public transportation available to travelers in the PVTA four-city area;
- Communication about current PVTA services and other public transit;
- Deficiencies with current PVTA services;
- Transportation network companies as a future PVTA service approach; and
- Mobility as a Service (MaaS) as a compelling opportunity to put customers first.

## Public Transportation Use in the Four-City Area Significant

This study process estimated that during FY 17/18, there were approximately 2.6 million passenger

boardings on a considerable array of public transportation services (Figure 6).

- Foothill Transit served eight out of 10 of those trips, with its mix of 18 local and three commuter express or limited-stop services that touch at least one of PVTA's four cities.
- Metrolink stops at three stations within the PVTA service area, providing a combined 25 weekday trains westbound into Los Angeles Union Station and 25 trains eastbound and serving one in 10 public transit trips during FY 17/18.



- PVTA services of almost 200,000 passenger trips represents 8% of public transit trips taken, a not insignificant proportion of the total.
- ACCESS provides a modest 2% of trips, boardings only, within the four-city area to persons who are substantially disabled and unable to use fixed-route public transportation.

This level of trip-making translates to a respectable 10.3 trips per capita, transit trips per annum for the more than 253,000 residents of the PVTA four cities.



Figure 6, Public Transit Boardings of 2.6 Million Passengers, Trips Within PVTA Four-City Area, FY 17/18



## **Deficiencies of PVTA's Existing Service**

# What are the concerns and service deficiencies of the current service mix that must be addressed?

- Unreliable supplemental services with longer waits and declining service quality;
- Substandard productivity and on-time performance on dedicated services;
- Limited dispatching software functionality is contributing to late pick-ups, long travel times and low productivity;
- Declining ridership on the traditional Get About Van service while the cost per passenger is significantly increasing;
- So many individualized services can confuse users; it is difficult to communicate and compare; and
- Varying fares and varying services can be difficult to communicate, confuse customers and can be difficult to contrast with other options.

The menu of services that PVTA offers is designed to meet the individualized needs of a range of passengers in its service area. The utilization of contracted taxi-based service to offset traditional van services gives PVTA a lower-cost option for trips that are harder to serve or longer in distance, but taxi trips can be less reliable in terms of on-time performance and customer satisfaction. While the taxi-based service design gives PVTA more flexibility, it limits scheduling control where taxi vehicles are subject to availability and are not dedicated only to Get About passengers.

Dedicated van service is having difficulty effectively managing its demand during the peak hours of service, experiencing on-board travel times in excess of 30 minutes and several afternoon periods of late pick-up times beyond the 15-minute window. Riders are experiencing long ride times to travel short distances where average trip speeds are only 6 miles per hour and less than that during peak periods. Limited scheduling software capabilities deprived of real-time or same-day vehicle assignment adjustments constrain PVTA's ability to effectively manage demand with its own vehicles or make better estimates on the need to shed additional less-productive trips to the taxi-based services.

While a higher proportion of PVTA's trips are being served on lower-cost taxi-based services than in previous years, the cost per trip on the dedicated van service has increased by 60% since FY 13/14. Ridership on the Get About Van service has declined each year while Get About Cab, One Step Over the Line and Ready Now taxi services are growing. PVTA must continue to find the appropriate balance of dedicated van to taxi-based service. This can mean maximizing dedicated vehicle capacity or removing vehicles from service to reduce vehicle service hours when possible to mitigate rising service costs when serving fewer passenger trips.

The current mix of Get About services is complicated for riders to understand and makes it difficult for the user to know what to expect in terms of vehicle type, pick-up time reliability and sometimes the cost of the desired trip. PVTA should explore designing a more uniform Get About program with predictable accommodations and pricing to improve the customer experience and provide an opportunity to create a more consistent fare structure, allowing PVTA to recover the appropriate fare for each trip, considering trip length and travel time.





# Communicating About PVTA and Other Public Transit Services

# What can existing PVTA information resources do to improve the customer's discovery of what is available? What are the limitations of current information tools?

### **Customer and Market Information-Related Needs**

PVTA operates a complex array of demand response services, customized to meet the needs of specific target groups and the desires of its member communities. The service array grew over time, rather than being "designed" as a whole. Hence, the fares, hours and policies vary from service to service and

can be challenging to navigate. For example, the cost for a similar trip can vary widely depending on the age or ability of the riders, where they live and whether they make an advance reservation.

Over the past few years, PVTA has greatly enhanced its passenger information tools to make the services easier to understand and choose between.

New Passenger Guides

(Figure 7) were developed for





all services in 2017. These included an overview guide/map, which allowed passengers to see which services served specific areas or destinations and to compare prices for those services. It

also included individual guides for Get About/Ready Now, Claremont Dial-a-Ride and San Dimas Dial-a-Cab, each with service area maps. Spanish versions are available.

- PVTA's new Website www.pvtrans.org was launched in 2019 (Figure 8). The website includes a Trip Planner, which allows the user to easily see what services are available for a given trip (factoring in their age or disability). The Trip Planner returns information about hours of operation and how to schedule a ride. The website also provides detailed information for each PVTA programs, including printable guides and online registration forms.
- The one shortcoming of the website is that fare information can take several clicks to find.









When a user finds the appropriate services using the Trip Planner, they then have to click on each service to see the fare. Providing fare information at the Trip Planner level would significantly ease the process of choosing between services.

For trips that go beyond PVTA's services, users can access two other important information sources:

 Google Transit and the Transit App (Figure 9) provide trip planning and real-time information for Foothills Transit, Metrolink and other
 Figure 9, Google Transit and Transit App

for Foothills Transit, Metrolink and other fixed-route services in the region. These tools allow travelers to easily plan trips to or from the Pomona Valley using the entire regional network of bus and rail services. They can be used on a computer, tablet or smartphone. They, however, are limited to fixed-route providers and do not return information about PVTA or other demand response services.

The 211Ride.org trip planning, trip identification tool (Figure 10), developed by Cambridge Systematics, allows users to access information about the full array of transportation services within the

region — including demand response and human service transportation. A trip plan through 211ride.org will return fixed-route, demand response, human service and private transportation services based on



Figure 10, 211Ride



specific criteria, including age, disability status and user preference.

All of these online tools can provide information in other languages and for persons with sight impairments.

### **Institutional Arrangements**

The various information technology tools and related strategies by which to communicate about and promote PVTA services are likely to include:





- Developing targeted marketing of expanded group services (e.g., shopper and youth services) for communications through PVTA city partners and directly with target markets;
- Modifying existing PVTrans.org new trip planner to bring back passenger fare (range of fares) for each service type that comes up;
- Ensuring Los Angeles 211Ride (Cambridge Systematics One Click) reflects all PVTA services and brings back accurate information in "trip discovery";
- Promoting Google Transit and the Transit App possibly adjacent to the PVTA Trip Planner to help riders connect with existing fixed-route services; and
- Incorporating MaaS platform research into trip dispatch and scheduling software research and exploration — customer-facing elements/functions in addition to service delivery elements/function.

### **Implications for PVTA**

Through its recent efforts to make its services easier for customers to understand and use, PVTA has taken the first steps in an evolution toward a MaaS-Mobility as a Service philosophy.

# Ride-Hailing and Transportation Network Companies (TNCs) as a Service Approach — Opportunities and Limitations

This popular new service approach offers new opportunities to PVTA but also has some significant limitations that are important to consider.

### **Expansion of This Service Mode**

Over the past six years, transportation network companies (TNCs) have completely changed the local landscape of for-hire transportation services. Taxi companies have lost a substantial portion of their market to the TNCs — and the advent of the latter also has increased the total number of privately paid on-demand trips — as a result of the TNCs' superior ease of engagement, higher quality of service and lower prices to the customer when compared to taxi service.

Of course, the lower prices reflect a business model in which TNCs do not currently generate enough revenues from customer payments to cover the full costs of service. Large sums of venture funding (many billions of dollars over the past several years) have made it possible for Uber and Lyft to finance the still substantial difference between their revenues and costs to continue operations. Whether the TNCs can ever become profitable in their current form is not easy to predict. However, they are clearly staking their long-time financial viability on the advent of autonomous vehicles (AVs) in the next 5 to 10 years, and they seemingly have sufficient financing to maintain operations until AVs are introduced on a significant scale. *Consequently, it is highly likely that TNCs will still be a major element of the local transportation market in the Pomona Valley 10 years from now.* 

### **TNCs and Public Transit Providers**

Events during the past 2 years have made it very clear that the TNCs want to work with public agencies to provide subsidized local transportation services using their standard customer business model. There are now numerous examples throughout the United States of TNC-based services in which the local





public transit authority provides eligible customers with user-side subsidies to enable them to use TNC services (and in some cases, taxis as well) at public transportation-level fares, with the transit authority paying for the difference.

The typical user-side subsidy arrangement by which TNCs and public transit providers collaborate is one in which qualifying users are provided with a "coupon" number that they enter into the Uber or Lyft app when they want to make a trip. The price that customers pay for that trip is the one established by the transit authority, not the actual price of the regular, unsubsidized ride on the TNC's service. There are usually upper limits on how much of a subsidy the transit authority will pay — for example, \$6 per trip. Thus, if the fare for the user is \$2 and the TNC's price for the trip is \$9 in such a hypothetical situation, the customer will be actually charged \$3, with the additional \$1 reflecting the fact that their trip cost exceeded the \$6 subsidy limit by that amount.

It bears emphasizing that in these types of schemes to date, the customer deals directly with the TNC to obtain a trip, which means they must register as a customer with the TNC and provide them with an acceptable payment mechanism, typically a credit or debit card. At least one of the TNCs, Lyft, also has created the ability for customers to use a call center to make their trip bookings via telephone, so the use of a smartphone app is not the only mechanism for engaging the TNC service.

### Local Experience with Transit and TNC Partnerships

In nearby Monrovia, the city has established a TNC-based on-demand service using Lyft that has proven highly successful in generating ridership within the community, mostly for access to the local Gold Line station. A key reason for this outcome is the very low fares that users have to pay (as little as \$.50 per trip) and the relatively short trips (most 2 miles or less). However, the success in attracting riders for what is essentially a very cheap taxi — or shared ride taxi — service has pushed the cost to the City of Monrovia well above its original expectations, at a level exceeding \$2 million, and it is likely that riders will soon have to pay higher fares. Nonetheless, the Monrovia experience to date does illustrate that subsidized TNC services can be a viable means of providing at least some type of local transportation to a community at a reasonable cost by taking advantage of the TNC price structure.

It is an open question — and an important one — as to whether the costs to consumers of TNC services will increase significantly in the near future, as financial market pressures to stem Uber's and Lyft's operating losses may result in significant price increases. If that does, in fact, occur, the current customer price advantage of TNCs compared to taxis will be reduced. At the same time, it is probable that even at similar price levels for taxis and TNCs, many consumers will prefer the latter due to its typically higher quality of service and greater responsiveness.

### **Deterrents and Unintended Consequences**

One deterrent to using TNCs is that, to date, neither Uber nor Lyft has been willing to function as public transportation "contractors." That is, rather than transit customers booking their trips on a TNC via an intermediary, such as Get About or a MaaS platform associated with a public transportation entity like PVTA, they are required to become customers of the TNC directly and use their app to book their trip. There may be an option to use an agent booking service that provides access to the TNC — such as Lyft's Concierge service — but the TNC model for customer access is primarily self-service.





In addition, there is no direct linkage to the public transportation system except for the coupon code that the trip maker enters when booking the trip that enables them to get a reduced price for the trip. For all practical purposes, the public transport authority is not "in the loop" on this transaction: their role is reduced to providing a predetermined amount of subsidy for the trip and determining any eligibility restrictions (e.g., geographic area, age of customers, time of day when subsidized service is available).

The disadvantage to the public transport authority of this *TNC-centric scheme* is that over time the connection between the subsidized TNC service and the public transportation program may be weakened and even lost in the minds of customers. The public transportation service just becomes a Lyft or Uber service, not on-demand public transportation, particularly if there is no requirement for sharing trips with others. For public transport agencies needing as much public support as possible in order to continue to justify the use of local funds for transit subsidies, this can be a major problem. In contrast, with a local dial-a-ride service, such as Get About, there is an obvious connection between that service and the public transportation system.

Another impediment to using TNCs is their difficulty in providing guarantees that wheelchair-accessible vehicles will be available to all trips that require them. The TNCs' own drivers rarely have vehicles that are wheelchair accessible, meaning that either they or the public transit authority must arrange for such vehicles to be available as needed. In the Monrovia example, the city has retained its own demand response service for provision of trips requiring lifts to board passengers in wheelchairs. This is an important reason to be skeptical that a TNC-based service could totally replace the capacity of a dedicated vehicle service like Get About.

### **Implications for PVTA**

PVTA needs to be prepared for the possibility that local taxi services in the Pomona Valley may become even more financially vulnerable than they are currently, or in a worst-case scenario, could largely disappear. While the latter is unlikely, it is not beyond the realm of possibility. The problems that the Claremont taxi operator confronts could become the norm throughout the Pomona Valley region.

Any serious degradation in taxi industry capabilities will have a substantial negative impact on the current Get About service approach — in which increasing portions of the trips are provided via the local taxi company — and on the San Dimas Dial-a-Taxi operation, which, of course, is wholly provided by a taxi operator.

At the same time, for the reasons explained previously, it is simply not the case that one or more TNCs can be "plugged in" to these PVTA-organized and -funded services to take up the slack for any serious loss of taxi company capabilities. The different business model of the TNCs means that their participation in either Get About or the other PVTA-funded demand responsive services will move the focus of these services in a different direction. They would increasingly take the form of a *private-sector transportation operation in which the public sector's primary role is to subsidize individual trips.* And, in this scenario, it will be the public sector that ensures that service is available to all residents irrespective of their mobility circumstances — with particular emphasis on making sure that those using wheelchairs are able to obtain accessible transportation.





This would mean that "public" transportation in the PVTA service area would have a rather different character than is currently the case. While presumably the Foothill Transit bus services would continue to be similar to those today, the services funded by PVTA would increasingly be delivered by private firms — primarily the TNCs — via user-side subsidy mechanisms. PVTA's role as a direct service provider would be substantially reduced. While this may seem like an undesirable outcome, it is clear that the trend has been in this direction over the past few years. If the TNCs do come to have a major role in service provision, it is very likely that this trend will be accelerated.

# The Opportunity of MaaS to Put the Customer First — Mobility-as-a-Service

# Increasing transit use and getting new users to PVTA services require continuously assuring a customer orientation. New technology platforms are helping to make that easier.

A way in which to ensure the transit customers' point-of-view is to borrow from the European-initiated innovation of **Mobility-as-a-Service** (MaaS). This views transportation as a "customer service" by which to better meet travelers' needs, rather than simply putting buses and trains out there for travelers' use. The MaaS concept best characterizes the customer focus that this study's authors believe will increase the use of PVTA services and alternate-mode transportation in the Pomona Valley. The MaaS orientation is distinguished from traditional public transportation approaches that puts service on the street and expects travelers to find and adapt to service structures and requirements. Instead, MaaS *supports access to transportation through technology to match the right service with a traveler's particular trip need*. It also thinks more in terms of trip origins and destinations, rather than just publicly provided "systems." In other words, how do travelers get to and from "the system"? This requires agencies to think about the proverbial "first-mile/last-mile" dilemma, access to and from the system, and not just what happens on the system itself.

A key benefit of thinking in MaaS terms is that it forces planners and policy makers to confront the reality of the holistic nature of people's trip making. The primary reason for the automobile's overwhelming dominance as a travel mode in most settings is that it addresses all aspects of a person's trip making, including the many trips that are "chained" — that is, have more than one destination between the beginning of the trip and the ultimate destination of the person. For public transportation services, the great difficulty in providing a high quality of service from a trip maker's origin to ultimate destination is a large disincentive to use, except for those who have no real alternatives. And even for those in the latter status, the recent advent of TNC services — typically less costly than taxis and often much more convenient and easily engaged — has resulted in some switching of trips from public transportation to these privately provided — albeit more expensive — services.

MaaS incorporates the ability to purchase multiple transport modes through a single-payment mechanism, in addition to providing trip-making information on the system components. Adapting the MaaS concept of "servicing" the traveler's needs in the Pomona Valley leads to consideration of smaller and larger network components by which to better "serve" the customer. Central among these are its information elements. In turn, this attracts new users, while retaining existing ones.




#### **Implications for PVTA**

Adapting MaaS concepts to this region will take time and will require coordination across multiple agencies, including — in addition to PVTA — Foothill Transit, Metrolink, Access Services and Omnitrans in San Bernardino County. Travelers, however, do not care so much about whether they are crossing a city or county boundary as much as they care about getting to their destination as quickly and efficiently as possible. In the long run, the customer focus must extend beyond jurisdictional boundaries.

### **Coming Zero-Emission Bus Requirements**

<u>Tracking and planning for PVTA response to the Innovative Clean Transit regulation</u> <u>must begin now for PVTA to have an affordable and implementable plan for going</u> <u>forward with this zero-emission fueling of its fleet.</u>

#### **Overview of Requirements**

Pursuant to a new California Air Resources Board (CARB) Clean Air regulation adopted in December 2018, 25% of all new buses exceeding 14,000 pounds gross vehicle weight ordered by the Authority will have to be zero-emission buses (ZEB) beginning in 2026 and 100% will have to be ZEBs beginning in 2029. Based on current technology, these zero- emission buses may either be a battery electric bus or fuel cell electric bus.

#### **Implications for PVTA**

The requirement to purchase zero-emission electric buses will have a number of important implications for the Authority extending well beyond simply changing the energy source for powering the vehicle.

#### Funding ZEB Purchases

While the availability of cutaway ZEB similar to the current PVTA buses is limited, this issue should be resolved before 2026 due to market demand for these vehicles. The cost of ZEB buses, however, will be significantly higher than similar gasoline-fueled buses, possibly costing from two to three times the nearly \$90,000 cost of a Class C cutaway in 2019 dollars. This per-vehicle cost of \$180,000 to \$270,000 will present a challenge in funding the timely replacement of the Authority's fleet.

To a presently unknown extent, some new funding can be expected to cover the additional cost of the ZEB vehicles over that of, in PVTA's case, gasoline-fueled buses, though the amount and competition for such funds is yet to be seen. Complicating the planning of vehicle acquisition and replacement are questions about vehicle range and operating capabilities, which may require the acquisition of more than a single ZEB to replace each conventionally powered bus.

#### **Facility Acquisition and Development**

The requirement to purchase and operate ZEBs will necessitate a change to PVTA's existing practice of requiring its management contractor to provide an operating facility due to the electric-charging infrastructure that must be purchased and installed to support zero-emission buses. Due to the investment in charging infrastructure, it will no longer be financially feasible to potentially change





operating and maintenance facilities every five to seven years when the management contract is up for reprocurement. Instead, PVTA should begin discussions with its constituent cities around facility requirements and development of a dedicated operating and maintenance facility that would meet the Authority's operational needs for the foreseeable future. As discussed below in terms of vehicle acquisition, such a dedicated facility would need to be occupied before serious planning could begin for acquisition of the first zero-emission bus.

#### **Contract Management**

The addition of zero-emission vehicles to the PVTA fleet and eventual conversion of the fleet will have significant impacts on the training, operations and maintenance requirements placed on the management contractor. These new requirements will come into effect sometime after 2026 with the receipt of the Authority's first zero-emission vehicle. Based on the term of the current management contract, these requirements should be added to the next RFP and Scope of Work.

#### **Planning for ZEB Implementation**

The experience of transit systems that are already operating ZEB electric buses has shown that a comprehensive and long-range plan for implementing and operating electric buses is needed before infrastructure improvements and bus acquisition is initiated. The Innovative Clean Transit (ICT) regulation requires transit agencies to submit to CARB a ZEB Rollout Plan approved by the transit agency's governing body. Submittal of the ZEB Rollout Plan is dependent on the size of the transit operator. In the case of PVTA, the agency will need to submit this plan by July 1, 2023.

The purpose of the plan is to illustrate how the agency will transition to zero-emission buses by 2040. These plans are nonbinding and can be amended as more information becomes available with newer ZEB technologies, real-world experience of ZEB fleets and funding availability. This plan must address a range of issues that go well beyond the simple acquisition of a new bus, including, but not limited to, revenue vehicle transition plan, operating conditions, the type of ZEB technologies the agency will deploy, facility requirements, electric service requirements, utility planning and identification of funding sources. Details of the ZEB Rollout Plan are found under Article 4.3, Innovative Clean Transit Rule under Title 13 of the California Code of Regulations. To ensure that these and other factors are properly identified and taken into consideration, it is recommended that the Authority undertake a thoughtful and comprehensive planning process for the implementation of the new ZEB requirements before purchasing any electric buses or identifying an operating facility for the PVTA system.





## VI. INSTITUTIONAL STRUCTURES TO ADDRESS SERVICE DELIVERY

How can PVTA address the near-term problem of service reliability, in anticipation of moving forward with strategic phases envisioned by PVTA's "Principles"?

### Overview

For more than 30 years, the Pomona Valley Transportation Authority (PVTA) has provided focused transportation services to the Pomona Valley cities of Claremont, La Verne, Pomona and San Dimas through a contracted service model involving the operation of dedicated paratransit vehicles by one contractor and a second contract with a local taxicab operator for supplemental and on-call taxi services. As discussed elsewhere in this report, the performance of these services has declined in recent years, calling into question the continued reliance on this two-contract model.

This section presents and discusses a set of factors or criteria against which to consider potential service models and then examines the present PVTA service model, as well as two alternate models against these criteria. The objective of this section is to provide the Authority with a framework for assessing its current service model and through which to consider transitioning to a new contracting model.

## **Criteria for Assessing Potential Service Models**

Among paratransit and, particularly, specialized transportation systems in the United States, there exists a range of service delivery models presently in use to manage and operate such services. Experience across the country has demonstrated that particular models function more or less effectively in different locations depending on a variety of factors, including the management capabilities of the sponsor organization, the availability of qualified management firms and transportation providers, the nature and volume of trip demand, the size and character of the area to be served, and others.

In addition to service- and market-based criteria, other factors to be considered in assessing potential service models should be their fit with the present and, possibly, future goals of the sponsoring agency and the adaptability of a particular model to future changes, such as technology and service delivery modes and strategies.

The following factors are suggested as important in the organizational design of the PVTA. It should be noted that these factors are not necessarily listed in any order of importance or priority.

#### Factor 1: Adaptability to Future Changes

The contracted management and operation of community and specialized transportation services have a history of more than 60 years by some measures and, during that time, have seen a variety of organizational forms ranging from a single turn-key contractor with full responsibility for all aspects of service delivery to the advent of the "broker" model with a central trip reservation/scheduling function





and multiple service providers differentiated by trip type, coverage area, rider preference and the character of service provided, among other factors.

The selection of a service delivery model can hinder or promote the adoption and development of delivery strategies by creating the organizational climate for experimentation and new opportunities. In other words, change and innovation are easier with some models rather than others, thus, an agency's existing model can affect its ability to change or develop to accommodate and benefit from change.

#### Factor 2: Accommodates Expected Provider Competition

A major factor in the success of a contract-based service model is the presence of sufficient qualified firms to conduct an open, competitive procurement, which will achieve both competition around price and competition around qualifications and experience of the prospective contractors. By the contract structure and procurement involved, individual service models will be more or less effective depending on the number and quality of competitors, which may be anticipated.

#### Factor 3: Matches Nature and Volume of Trip Demand

The character of trip demand — that is, for local paratransit trips, after-school group trips, subscription, work and other on-demand trips — as well as the volume of trips to be served affect the selection of delivery model by determining the degree to which segments of trip demand can be efficiently and cost-effectively managed and operated as separate services or whether a range of services will be met through a highly flexible single provider. From the standpoint of sheer size, some paratransit programs may be too large to be operated as a single system while other programs are too small to be effectively treated as separate operational units.

#### Factor 4: Potential Impact on Service Quality

How services are organized can have definite implications for the quality of services delivered to riders, from whether the system and its policies/procedures are easy to communicate and enforce to how trip requests must be made.

## Identification and Assessment of Current and Prospective PVTA Service Models

The following section applies the factors identified above to the current PVTA service model and to two alternative service models that could be used to manage and operate a range of transportation services in the Pomona Valley. For each model, the described criteria are scored using a 5-point scale to summarize the "favorability" of a model toward each factor: a rating of "1," indicating that the model is unfavorable to that factor, "3," indicating a neutral rating, and "5," indicating a highly favorable rating. The ratings for each model are indicated within its discussion and summarized in Table 2.

#### **Assumptions Underlying Prospective Service Models**

Before identifying and assessing what are seen as possible alternate models to that presently used by the Authority, it needs to be recognized that other models have been eliminated from consideration on the basis of two fundamental assumptions.





<u>Assumption 1: Contracted Versus In-House Operations.</u> The Authority has always contracted for management and operation of its sponsored transportation services rather than staffing and operating such services using its own employees. Given the present reluctance of public agencies to increase public employees and the rapidity of change seen in the transportation sector, all service models being considered assume that service operations — that is, the actual operation of vehicles — will be done through contracted entities or purchase of services from existing providers.

Assumption 2: Contained Service Area. The size and nature of the area to be served can affect the selection of service models in that some function more effectively in smaller, cohesive areas while others allow subregional service units or duplication to cover larger areas with distinct travel patterns. It has been assumed that the Authority's principal service will be the four-city area with modest subregional travel into adjacent areas to achieve connections with regional transportation resources and to accommodate short trips to targeted destinations.

### Model 1: Multiple Contractor Model (Current PVTA Service Model)

As noted above, PVTA has long operated under a multiple-contractor service model in which one contract involved the operation of dedicated paratransit vehicles by one management firm and a second contract engaged a local taxicab operator to provide supplemental and on-call taxi services. Figure 11 depicts the current PVTA multiple contractor model.

This model requires the Authority to administer two or more competitive procurements and manage two or more contracts on a continuing basis. Additionally, this model inherently contains the potential for some level of friction between the contractors over responsibility for service quality issues.

#### Assessment of Model 1:

#### Factor 1: Adaptability to Future Changes: Rating = 3

Direct contracting by the Authority for supplemental and additional service provision facilitates the incorporation of new service initiatives and strategies to the extent that any new services would not require modification of existing contract service levels more than allowed Figure 11, Model 1

Model 1: Multiple Contractor Model --Single Dedicated Provider with Non-Dedicated Supplemental Provider(s), Direct Agency Contracts



by the terms of the agreements. Otherwise, institution of new service strategies would be delayed until the expiration of existing agreements.





#### Factor 2: Accommodates Expected Provider Competition: Rating = 2

Competition for the dedicated paratransit contract has been and is expected to continue to be healthy, with an expectation of three to four qualified proposals. However, given the present state of the taxicab businesses in the San Gabriel Valley/San Bernardino County area and of the taxicab industry in general, reliance on taxicab-based firms as the providers of supplemental transportation services is questionable and could result in single-bid situations. This would give the Authority little choice in the procurement and reduced influence over contractor performance.

#### Factor 3: Matches Nature and Volume of Trip Demand: Rating = 4

The single dedicated paratransit contractor is expected to continue to be more than adequate to handle the level and nature of trip demand within the four-city area, including a modest level of regional trip making into adjacent cities. Similarly, a single supplemental service provider would be sufficient if issues of reliability were resolved.

#### Factor 4: Potential Impact on Service Quality: Rating = 3

This model involves the potential for some confusion among riders to the extent that requests for some on-demand trips may go directly to the supplemental contractor rather than to the principal reservation function operated by the dedicated paratransit contractor. Since this is the current PVTA service model, we can assume that existing users have become used to this arrangement; however, new transit riders could be confused and discouraged by the need to figure out the trip request process.

## Model 2: Single Contract Model, Single Dedicated Provider with Non-Dedicated Supplemental Service Provider(s)

This second model, shown in Figure 12, involves a single contract for management and operation of the Authority's dedicated paratransit vehicles and provision of supplemental and on-demand services through one or more subcontractors. Under this model, the Authority would have a single contract relationship — with the Dedicated Paratransit Provider — and that provider would establish contract relationships with one or more supplemental service providers.

The best local example of this model in operation is the Orange County Transportation Authority's (OCTA) Access Paratransit program, where this model has been used with good success since 2006. Among the advantages that OCTA sees in this approach are that they must monitor and manage only a single contract relationship and administer only a single procurement. This produces savings in staff positions and administration. Additionally, this model places all responsibility for service delivery and performance on the single primary contractor, thus eliminating any finger-pointing at the Authority level.

#### **Assessment of Model 2:**

#### Factor 1: Adaptability to Future Changes: Rating = 2

This model could somewhat limit the Authority's ability to implement new services and/or service strategies within the single contract by the "cardinal change" limitations inherent in federal procurement regulations and the common contract provision, allowing only a certain adjustment of





service levels. Implementation of new services <u>outside</u> this primary contract, however, would be feasible, but would increase the Authority's contract management and procurement requirements.

Integration of the reservation, scheduling and dispatch function within the Dedicated Provider contract could also limit development of innovative service delivery strategies under the existing contract terms.

#### Factor 2: Accommodates Expected Provider Competition: Rating = 5

Currently, the competitive market is good for qualified transit and paratransit management firms. However, the same cannot be said for taxi-based service providers in the PVTA area. This model would benefit from healthy competition for the single dedicated provider contract while allowing those providers to negotiate for suitable supplemental service subcontractors — even with the same firm or firms if multiple qualified firms are not present in the market.

#### Factor 3: Matches Nature and Volume of Trip Demand: Rating = 4

Under the existing design and policies of the Authority's transportation program, it is anticipated that Model 2 will more than adequately meet the levels of trip demand that are projected. Specific inclusion of subcontracted supplemental service providers allows for efficient provision of low-demand, off-peak trips as well as on-call, non-dedicated trip capacity for service protection.

#### Factor 4: Potential Impact on Service Quality: Rating = 4

This model has the benefit of a single reservation function to handle all trip requests, thereby eliminating any possible confusion among riders and simplifying the user experience. Additionally, the single Dedicated Provider focuses responsibility for and control over service delivery and performance, increasing the likelihood that service standards will be met.

#### Model 3: In-House Brokerage with Multiple Service Providers

The third model, shown in Figure 13, would create a brokerage function within the PVTA organization, which would receive requests for trips and transportation inquiries and then either transfer the caller to the appropriate service provider or take the reservation and transfer the trip data to the appropriate provider for scheduling and trip delivery.

The Authority would contract with whatever service providers it deems necessary to provide its transportation services, most likely continuing the present arrangement with a dedicated paratransit provider and a supplemental non-dedicated service provider.

#### Assessment of Model 3:

[Because model 3 is quite similar organizationally to model 1, some of the assessments are the same.]



#### Model 2: Single Contract, Single Dedicated Provider with Supplemental Provider







#### Factor 1: Adaptability to Future Changes: Rating = 3

As with model 1, direct contracting by the Authority for supplemental and additional service provision facilitates the incorporation of new service initiatives and strategies to the extent that any new services would not require modification of existing contract service levels more than allowed by the terms of the agreements. Otherwise, institution of new service strategies would be delayed until the expiration of existing agreements.

#### Factor 2: Accommodates Expected Provider Competition: Rating = 2

Competition for the dedicated paratransit contract has been — and is expected to continue to be — healthy, with an expectation of three to four qualified proposals. However, given the present state of the taxicab businesses in the San Gabriel Valley/San Bernardino County area and of the taxicab industry in general, reliance on taxicab-based firms as the providers of supplemental transportation services is questionable and could result in single-bid Figure 13, Model 3 Model 3: In-House Brokerage With Multiple Service Providers



situations. This would give the Authority little choice in the procurement and reduced influence over contractor performance.

#### Factor 3: Matches Nature and Volume of Trip Demand: Rating = 4

Institution of a broker function within the Authority organization would increase its direct control and involvement in the delivery of its transportation services, allowing it to, over time, better tailor its service contracts to achieve its service goals and meet local trip needs.

#### Factor 4: Potential Impact on Service Quality: Rating = 5

This model holds the potential for significant improvements in service quality and contractor performance because of the Authority's direct involvement in trip reservations and service delivery and direct contracting for all service providers. A downside to this model is the additional overhead and administrative cost of the broker element itself.

#### Model 4: Brokerage with Multiple Service Providers

The brokerage model depicted in Figure 14 would be the most "hands-off" organizational option for the delivery of paratransit services, placing virtually all contracting, monitoring and oversight responsibilities with the broker entity and minimizing the role of the Authority.



## Vol. II: Service Design and Recommended Strategic Approach



The broker entity would receive all trip reservations, assign them to a service provider, monitor and report on all services delivered, process all provider invoices, and contract for all service and supplemental service providers. It should be noted that, although the assignment of functions can vary between situations, this organizational concept places the major responsibilities on the broker rather than the sponsor agency.

It should be clarified that, where the figure shows two circles labeled "Paratransit Contractor" and "Service Provider(s)," in practice the broker could enter into any number of service delivery contracts, differing in the type of service to be provided, type of vehicle, level of service, etc. The broker would be contracted by the Authority to operate within a specified budget to deliver prescribed levels of service and satisfy defined service standards. Within those parameters, with oversight by the Authority, the broker would have significant latitude to arrange for various service providers to meet trips demand.

#### **Assessment of Model 4:**

#### Factor 1: Adaptability to Future Changes: Rating = 4

The capability of this model to accommodate future changes will depend largely on the foresight and abilities of the broker entity. If change is anticipated, the terms and requirements in the provider subcontracts entered into by the broker could facilitate innovation in local transportation services



PVTA Service Design Analysis and Ten-Year Plan

Figure 14, Model 4

and allow the piloting of new service strategies during the terms of such contracts. Additionally, as a private or private not-for-profit entity, the broker is able to quickly respond to new opportunities and negotiate changes in an expedited basis.

#### Factor 2: Accommodates Expected Provider Competition: Rating = 5

As a private or private not-for-profit entity, the broker is able to negotiate and enter into subcontracts with whatever providers are available in the market with limited requirements for open competition or to document comparable pricing.

#### Factor 3: Matches Nature and Volume of Trip Demand: Rating = 4

The broker model provides maximum flexibility to tailor service supply and providers to the nature and volume of trip demand, contingent upon the expertise and capabilities of the broker.





#### Factor 4: Potential Impact on Service Quality: Rating = 3

As noted above, the quality of transportation services delivered under a brokerage model is heavily contingent upon the skills and experience of the broker. One downside to this model is the additional operating cost that attaches to the broker element itself. With sufficient trip volume, well-negotiated subcontracts and effective trip management, among other factors, per-trip costs under a brokerage model can be lower than other models. If these factors are less than positive, a brokerage can cost more with little benefit.

# Implications for PVTA, Summary and Institutional Recommendations

Table 2 summarizes assessments of the four service delivery models presented in the preceding pages. In presenting these assessments, we need to emphasize that the ratings of each model are highly subjective and subject to significant variation based on how each model is implemented and the experience of the firms that are available as contractors and subcontractors. Perhaps most important are the factors that are presented as consideration as the Authority reviews its present and future organization. How an institutional model facilitates or hinders future development of the Authority's service program and its sensitivity to the competitive environment should be significant determinants of any change in PVTA's organization.

	Model Ratings					
Model Identifier	Factor 1: Adaptability to Future Changes	Factor 2: Accommodates Expected Provider Competition	Factor 3: Matches Nature and Volume of Trip Demand	Factor 4: Potential Impact on Service Quality	Total Points by Model	
1: Single Regional Provider with Non- Dedicated Supplemental Service Provider(s) and Direct Agency Contracts	3	2	4	3	12	
2: Single Contract Model, Single Dedicated Provider with Non- dedicated Supplemental Service Provider(s)	2	5	4	4	15	
<b>3:</b> In-House Brokerage with Multiple Service Providers	3	2	4	5	14	
4: Brokerage with Multiple Service Providers	4	5	4	3	16	

#### Table 2, Assessment of Current and Alternative Service Delivery Models

Rating/Evaluation Scale: 1= Strongly Unfavorable; 3= Neutral; 5= Strongly Favorable



32



While not making a specific recommendation among the presented models, we believe that the Authority has the ability to approach this decision in a stepwise manner and craft an effective approach that works effectively for its constituent cities and transit riders.

One major consideration in modifying the Authority's organizational model must be the availability of qualified private transportation providers in relation to the envisioned roles. While the present limited number of taxicab providers has been noted, similarly there are few private firms or private not-for-profit entities with experience in fulfilling the brokerage role described in Model 4. As other transit service organizations move to more encompassing transportation roles, demand for contracted broker models will result in more firms with experience in this specialized area and increased competition.





## **VII. A PHASED STRATEGIC ACTION PLAN FOR PVTA**

<u>This presents an action plan by which to realize the Strategic Principles set forth by</u> <u>PVTA policy makers and to chart a course for the Authority in the near-term and over</u> <u>the next decade.</u>

### Overview

This chapter presents the construct for a strategic way forward for PVTA, both in the near term and over the next decade to operationalize its policy makers' principles. The Action Plan articulates strategies by which to address policy, regulatory and operational matters over four time frames:

- Phase Zero Immediate: Currently Ongoing
- This is the currently ongoing phase, describing activities that PVTA staff now have underway to address near-term service deficiencies and to improve service reliability. It recognizes activities of import over the next six to eight months, heading into early FY 2019/2020.
- Phase One Enhance the Status Quo with Short-Term Planning but No New Resources
   This phase introduces some immediate enhancements, within the existing PVTA funding
   envelope, and establishes the planning for subsequent expanded activities. No new funding is
   anticipated and much of this activity will probably unfold over the next one to three years,
   through FY 2022/2023.
- Phase Two Expand Service with Varying Levels of New Resources

This phase introduces various new services in the mid-term to the extent that additional resources can be identified, establishing pilots by which PVTA can test both new service delivery concepts and market approaches. Central to Phase Two will be the ability to secure additional funding, with PVTA's partner cities and its regional partners, to support activities unfolding over the next five years, through FY 2025.

 Phase Three — Envision a Fully Functional MaaS Environment, Supporting Four-City Regional Services to Multiple Markets

With a larger funding base and a strong mobility-as-a-service foundation, its supporting technology and an expanded suite of services, PVTA can establish itself as a customer-centric mobility service for the four-city area residents and for commuters into and leaving the region. The varying levels of additional funding that can be realized will shape the unfolding picture over the full 10-year horizon, through FY 2030.

## A Phased Action Plan

The *Strategic Principles* developed at PVTA's March 2019 Policy Workshop frame the 30 strategies presented here, addressing the findings presented in this study's VOLUME I: PVTA EXISTING CONDITIONS. Four general activity areas organize the: 1) Market-Based Activities; 2) Regionalism; 3) Institutional Structures; and 4) Mobility as a Service, summarized following in **TABLE 3**, **PVTA's PHASED STRATEGIC ACTION PLAN, 2020–2030** and further described in subsequent narratives.





#### Table 3, PVTA's Phased Strategic Action Plan, FY2020 - FY2030

Phase Zero – Address the Reliability of Existing Services							
	FUNCTIONAL CATEGORY	Strategy	IMPLEMENTATION TIMELINE	IMPLEMENTATION RESPONSIBILITY			
Institutional Structures	0.1 Customer Information	<ul> <li>PVTA <i>Mobility Manager Program</i> continues to "grow" its role in customer registration, customer service, market-based outreach.</li> <li>Establish Mobility Managers' "<i>boots-on-the-ground" functions</i> to gather specific intelligence about markets' trip needs and promote developing pilots.</li> </ul>	6 months	Internal PVTA staff			
	0.2 Technology Platforms	• PVTA staff continue to research <i>software platforms' functionality</i> and transit provider experiences and references to identify those attributes and track record that best resonate with PVTA.	Completed by Fall 2019	Internal PVTA staff			
	0.3 Contracting Structures	<ul> <li>PVTA staff continue to <i>explore operations structures</i> for upcoming Fall 2019 procurement to provide for flexibility and support in use of dedicated vehicles, including part-time drivers, and use of supplemental providers.</li> </ul>	Completed by Fall 2019	Internal PVTA staff			
		• Secure new operations contract that assures PVTA flexibility to: 1) evolve its service approach and technology requirements; 2) to consider "lease-to-buy" scheduling and dispatch software platform; 3) to modify up or down the volumes of dedicated vehicle capacity within identified parameters.	Completed by early 2020	PVTA staff and Board of Directors			
Phase 1 – E	nhance the Sta	atus Quo Within Existing Resources; Plan for Expanded Servi	ces				
Market-	FUNCTIONAL CATEGORY	Strategy	IMPLEMENTATION TIMELINE	IMPLEMENTATION RESPONSIBILITY			
Based Activities	1.1 Youth Markets	<ul> <li>Increase <i>access to after-school programs</i> at City of Pomona parks and library; South Pomona Boys &amp; Girls Club.</li> <li>Increase <i>youth group trip capacity</i> for City of Claremont youth.</li> <li>Assess <i>youth-related transportation potential</i> for City of La Verne's new teen center and City of San Dimas youth activities.</li> </ul>	Initiated during school year 19/20	PVTA staff with City partners			
	1.2 Neighborhood Local Travelers for Shopper Shuttles	<ul> <li>Review <i>existing Rio Rancho/WinCo shuttle service</i> to improve timing, neighborhood(s) served and other factors to restructure, as necessary.</li> <li>Promote <i>restructured shoppers' shuttle</i> and identify other Pomona area grocery stores feasible for shuttle service.</li> <li><i>Assess semi-scheduled shopper shuttles opportunities</i> elsewhere in PVTA service area, particularly for popular stores at or near city boundaries.</li> <li><i>Implement and market pilot(s)</i> within existing resources; evaluate responses.</li> </ul>	Pilot(s) initiated by mid FY 19/20	PVTA staff with City partners			
	1.3 Commuters, Local Time- Sensitive Travelers	<ul> <li>Assess semi-fixed route service opportunities supporting regional public transportation partners — Foothill Transit, Omnitrans, Gold Line; explore these "market opportunities" to identify new synergies with regional providers.</li> <li>Actively explore potential new synergies with Foothill Transit.</li> </ul>	Ongoing	PVTA staff with regional transit providers			





Phase 1 continued, Enhance the Status Quo						
	FUNCTIONAL CATEGORY	Strategy	IMPLEMENTATION TIMELINE	IMPLEMENTATION RESPONSIBILITY		
Regionalism	1.4 Regionalism Within Four Cities: Trips and Fares Structures	<ul> <li>Initiate "regional" dialogue with PVTA partners about:         <ul> <li>4-city wide trip-making by market group</li> <li>Common service branding</li> <li>Approach to fare payment, common fare structure and charge-backs to 4-city partners</li> <li>Integrated fare structure that recognizes the different funding levels among the 4-city partners</li> </ul> </li> </ul>	Ongoing	PVTA staff with City partners		
	1.5 Regionalism Within Four Cities: Fare Payment	• Conduct fare payment research and monitoring of <i>fare payment media as vendor</i> , e.g., Token Transit and American Eagle fare payment technologies to enable smart-phone fare payment without TAP infrastructure expense.	Ongoing	PVTA staff with regional public transit partners		
	1.6 Operations Contracts	<ul> <li>Establish a phased "mix" of dedicated and non-dedicated vehicle types — anticipating trip volumes by provider type.</li> </ul>		Internal PVTA Staff		
Institutional Structures		<ul> <li>Monitor and <i>evaluate new contract arrangements</i> to report on service reliability and service cost-effectiveness concerns.</li> </ul>	Initial six months of new contract; then quarterly	PVTA staff and PVTA Board		
	1.7 Zero Electric Bus (ZEB) Requirements	<ul> <li>Electric</li> <li>Actively <i>research and monitor ZEB developments</i> to identify smaller transit provider implications and effective strategies.</li> <li>Assess <i>driver and maintenance ZEB implications</i> types to incorporate into contractor requirements.</li> </ul>				
		<ul> <li>Explore <i>partnership opportunities</i> with 4-city partners and Foothill Transit to facilitate ZEB compliance, including yard and facility location(s): for example, areas near Casa Colina [Gare &amp; Bonita]; Fairplex or Brackett Field Airport area; City of Claremont possibilities.</li> <li>Assess <i>benefits and costs of vehicle options</i>: mixed vehicle fleets, smaller vehicles below GVW ZEB requirements; larger, traditional cut-aways for group loads.</li> </ul>	Ongoing, in preparation for 2026 Plan Completion	PVTA with City partners, with regional public transit partners		
	1.8 Customer-	Prior ZEB Operations, as opportunity presents.     Promote "open trip planning" on PVTA website.				
Mobility as a Service	Facing Technologies —Existing	<ul> <li>Develop targeted marketing of expanded group services (youth and shopper shuttles) for communication through 4-City partners and directly to target markets.</li> <li>Modify existing www.PVTrans.org new trip planner to return passenger fare information (range of fares) for each PVTA service found in "trip discover" searches.</li> <li>Modify existing www.PVTrans.org to promote Google Transit/the Transit App to PVTA users to help them connect with fixed-route Ensure Los Angeles one-call/ one-click platform www.211Ride.org reflects all PVTA services and brings back accurate information in "trip discover"</li> </ul>	Ongoing, these activities completed during FY 19/20	Internal PVTA with appropriate partners		





Mobility as a Service	1.9 Customer- Facing Technologies – MaaS 1.10 Technical Resource re: New Mobility	<ul> <li>Research incorporating <i>MaaS platform capabilities</i> into trip dispatch and scheduling software review, to identify customer-facing elements/functions in addition to operations elements/ functions.</li> <li>Track customer-facing elements/functions in developing MaaS platforms to identify those of greatest potential for PVTA's 4-city region.</li> <li>Actively monitor regional trip-making <i>"new mobility" choices</i> to be a technical resource to PVTA partners on shared-use policies for scooters and bike-share and monitoring ride share match software to aid local employers.</li> </ul>	Ongoing during FY 19/20 and FY 20/21 Ongoing	Internal PVTA
Phase 2 – F	xpand Local ar	ad Regional Travel Choices as Resources Allow to Improve P	/TA Riders' Co	
and Travel	Experience	in Regional Travel choices as Resources Allow to improve t		Juncetivity
	- Functional Category	Strategy	IMPLEMENTATION TIMELINE	IMPLEMENTATION RESPONSIBILITY
Market- Based Activities	2.1 Youth Markets	<ul> <li>Coordinate with Foothill Transit to define and <i>develop school tripper pilots</i> to complement school bell times, possibly replacing some Foothill Transit services.</li> <li>Identify potential funding sources to support PVTA school trippers.</li> <li>For CLASP pass holders (Claremont Colleges), <i>pilot weekend CLASP connections</i> to Foothill Transit's Silver Streak into Los Angeles as well as for other college students at community colleges and universities in the 4-city region.</li> </ul>	Initiate planning during FY 20/21	PVTA staff with Foothill Transit, with Claremont Colleges' consortia
	2.2 Four-Citywide Regional Travelers	• Define, develop and operate <i>region-wide 4-city trip-making for all user groups</i> , within available resources, without eroding services to traditional sub-markets.	Initiate planning during FY 20/21	Internal PVTA staff
	2.3 Commuters	<ul> <li>First-mile/last-mile services for commuters:         <ul> <li>Define and develop piloted services to connect local travelers with regional, high quality/ high frequency public transit services:</li> <li>Collector options for Silver Streak</li> <li>Connect Metrolink riders to three stations</li> </ul> </li> <li>Commence planning for Gold Line first-mile/last-mile connectivity</li> </ul>	Initiate planning during FY 20/21	PVTA staff with Foothill Transit, coordinating with Gold Line planners
	2.4 Service Approaches for Regional Trip- Making	<ul> <li>Expand <i>PVTA service area-wide capabilities,</i> recommending sustainable levels of expansion to the PVTA Board of Directors.</li> <li>Define capacity and limitations for <i>One-Step-Over-the-Line</i> trips.</li> <li><i>Coordinate fares</i> around potentially increased 4-four city trip-making.</li> </ul>	Initiate planning during FY 20/21	PVTA internal with PVTA Board
Regionalism		<ul> <li>Develop operations' plans to <i>pilot first-mile/last-mile</i> applications serving three Metrolink stations and/or Silver Streak stops, including:         <ul> <li>Checkpoint service in selected neighborhoods oriented to regional service</li> <li>User-side subsidy consumer-choice voucher or coupon-based provided by TNCs and local taxi companies</li> </ul> </li> <li>Market and promote <i>increased connectivity to long-distance regional providers</i>.</li> </ul>	Initiate planning during FY 20/21	PVTA with Foothill Transit, coordinating with Gold Line planners





Phase 2, continued – Expand Local and Regional Travel Choices as Resources Allow							
		STRATEGY	IMPLEMENTATION	IMPLEMENTATION			
	FUNCTIONAL CATEGORY		TIMELINE	RESPONSIBILITY			
	2.5 Contract	<ul> <li>Mature contract structures that recognize dedicated vehicle operations and</li> </ul>					
	Structures	supplemental providers in cost-effective relationship.		Internal PVTA			
		• PVTA to <i>pursue ownership of trip scheduling software</i> — potentially with brokerage	Two to three years				
		functionality, within an expanded service area and an expanded service provider mix.					
		• Ascertain and seek to address integration and inter-operability issues between					
Institutional		customer-facing MaaS and the operations and scheduling software.					
Structures	2.6 Contract	• Research opportunities for PVTA to secure MediCal funding for provided eligible trips	Initiate research				
	Structure:	to MediCal-eligible persons on PVTA roles.	within a year;	Internal PVTA			
	Medi-Cal Provider	• Pursue MediCal vendor eligibility to procure those funds.	likely a year to				
	2.7 MaaS	• Support and promote area-wide services and policies whereever possible, including	Ongoing, within	PVTA in			
	Customer-Facing	implementing unified fare structure(s), branding and regional "look" as appropriate	two or three years	partnership with			
	Technology:	• Research and procure MaaS software that readily communicates individuals' fare to	as the technology	cities and possibly			
	Policies	riders, handles multiple fare types but informs the rider of his/her fare and has the	allows	with area transit			
		capability to report out fares received to city partners.		providers			
	2.8 MaaS	• From Phase I research, integrate MaaS functions within existing/expanded PVTA					
	Customer-Facing	networks through contracting, leasing or purchasing mechanisms.	Ongoing, within	Internal PVTA with			
	Technologies:	<ul> <li>Pilot trip transaction/ trip booking capabilities from MaaS platforms.</li> </ul>	two years	Board policy			
	Software Platform	<ul> <li>Pilot trip payment by customer capabilities from MaaS-type platforms.</li> </ul>		direction			
	2.9 ZEB Facility	• Pursue and establish <i>partnership-based approach</i> to ZEB compliance.					
		• Develop ZEB Plan, addressing early comprehensive capital planning for both PVTA		Ongoing toward			
		facility access and for vehicle procurement.	Ongoing over five	preparation of			
		• Undertake vehicle capital planning to ensure most cost-efficient compliance with	years	2026 ZEB Plan			
		ZEB rules, timing procurement of ZEBs to coordinate with facility development and					
		funding availability.					





Phase 3 – N	Nove PVTA to	a Fully Functional MaaS Environment, Supporting 4-City Reg	ional Services	s to Multiple
Markets				
	FUNCTIONAL CATEGORY	Strategy	TIMELINE	RESPONSIBILITY
Market-	3.1 Traditional Markets	• <b>Prioritize traditional markets</b> of seniors, persons with disabilities and youth within existing funding or for expanded services with new funding.		
Based Activition	3.2 Low-income Local Travelers	• Support <i>expanded general public local services</i> with new funding,	Continuing	PVTA staff with Board direction and support
Activities	3.3 Commuters	<ul> <li>Expand <i>first-mile/last-mile connections</i> with new funding.</li> <li>Support <i>Gold Line first-mile/last-mile</i> connections.</li> <li>Attract new and hold existing riders, <i>"some trips, some times."</i></li> </ul>		Support
	3.4 Service Approaches	<ul> <li>Provide a <i>seamless rider experience</i>, from requesting a trip, moving immediately to securing and paying for the trip, through a MaaS platform owned or leased by the PVTA organization.</li> <li>Expand area-wide service mix, with targeted markets by service</li> </ul>	Continuing	PVTA staff with Board direction and support
Regionalism		Support and expand <i>regional connections</i> , within the four cities and to regional services, to the greatest extent possible.	Upon agreement with 4-cities and regional partners	PVTA staff with regional partners and Board support
	3.5 Maturing Pilots Into Ongoing Services	<ul> <li>Expand service for <i>successful pilots</i>, with determination of "success" in advance of implementation, with monitoring and annual/biennial evaluation:         <ul> <li>Local circulation, including school bell time-focused trippers</li> <li>Purpose-specific shuttles</li> <li>First-mile, last-mile services</li> </ul> </li> <li>Become a resource to partner cities on other <i>shared mobility services</i>.</li> </ul>	Continuing, with regular monitoring and assessment of continued success	PVTA staff with regional partners and Board support
Institutional Structures	3.6 Service Contracts	<ul> <li>Ensure that <i>contract service term(s) and scope</i> are appropriate to and aligned with other policy and operations decisions taken.</li> <li>Identify <i>contract requirements to be modified</i> in procurement of FY 2020 with an annual review of contract terms to better align with changing conditions.</li> </ul>	Annual review of contract terms	PVTA staff with Board direction and support
	3.7 ZEB Program	• Establish <b>ZEB program parameters</b> , as set forth in 2026 ZEB program description; monitor experience and modify as indicated.	Going forward from 2026	PVTA staff with Board direction and support
Mobility as	3.8 Information and Customer-	• Establish an <i>implemented MaaS platform</i> by which riders and prospective riders can easily compare, plan, pay for and track trips.	Continuing	PVTA internal staff in partnership

Ensure *scheduling and dispatch software* is well-integrated with MaaS platform.

Ensure *fare payment option(s)* integrate smoothly with MaaS platform.



a Service

Facing Technology

٠

٠

with 4 cities



## Phase Zero — Improve Existing PVTA Service Reliability

#### **Purpose**

This phase recognizes ongoing, current PVTA staff activities to address the service reliability and service quality problems of PVTA services that have presented in recent years. It involves strategies in institutional areas, including around information, technology and contracting structures.

#### **PVTA Strategic Principles Addressed**

This early phase is focused on a single principle, although that indirectly impacts each of the other four:

Principle #1 – "to prioritize and provide quality services to traditional PVTA markets..."

#### **Strategy Rationale and Descriptions**

#### <u>Strategy 0.1 — Institutional Structures: Customer Information</u>

<u>Rationale:</u> PVTA, as with most public transit providers, has seen some decline in utilization. The 196,000 trips provided in FY 17/18 was an 11.5% decline from an FY 13/14 peak of almost 222,000 trips. However, there was an encouraging 3.5% rise in boardings between FY 16/17 and FY 17/18, largely in response to PVTA's popular premium services. At the same time, there is region-wide population growth among the four cities of 23% projected between 2008 and 2020, with the strongest growth in the City of Pomona, among youth and working-aged adults and among the senior populations in Claremont, San Dimas and La Verne. This points to the importance of broad-based and creative public information strategies to continue to present PVTA's mobility choices.

<u>Description</u>: PVTA now has two mobility management positions, taken in-house during FY 17/18 to manage the rider registration functions that had been provided by Community Senior Services. PVTA is now playing a larger role in customer information and trip monitoring functions, working closely with PVTA's contracted operations. As such, PVTA's Mobility Managers are encouraged to "grow" their roles in customer service and market-based outreach to, in turn, encourage growth of PVTA's traditional ridership base of seniors, persons with disabilities and transit-dependent persons. Using these mobility managers as "boots on the ground," it is envisioned that they can participate in an array of community-based activities within the four cities to promote PVTA services, for example:

- Holding information sessions at senior centers, senior residential facilities and at seniororiented community activities;
- Identifying youth activity stakeholders from which to learn specifics about youth travel needs

   locations and timing; and
- Participating in city fairs and farmers' market events to promote general public transportation in Claremont, San Dimas and La Verne, with Get About transportation across the four cities.

#### Strategy 0.2 — Institutional Structures: Technology Platforms

<u>Rationale</u>: PVTA's contractor, First Transit, has been working with a trip-scheduling platform called Simpli, a product of TripSpark, to manage the booking, scheduling and dispatching of Get About trips. Simpli is rudimentary and not very powerful, compared to numerous other scheduling and dispatch





systems currently available to demand response programs. Coupled with declining ridership, Simpli's effectiveness is measured in a declining productivity, of 2.93 passengers per hour in May 2019, a level far below historically high productivity levels. Moving to a more powerful trip-scheduling engine, coupled with contractor (and PVTA) staff trained in its ongoing use, is one of the goals of the upcoming procurement cycle.

<u>Description</u>: PVTA staff are continuing to research and deeply explore the functionality of a number of demand response schedule software platforms, including Ecolane, Route Match and TripSpark to name a few. There is a proliferation of these scheduling platforms and the new features that companies are bringing online as they seek to straddle both advance reservation and on-demand trip scheduling. PVTA staff are developing a "literacy" with current features and are encouraged to continue to check references by interviewing existing customers on their experiences. PVTA staff are encouraged to identify the specific functionality that they believe could best serve the PVTA service environment, to identify these software attributes and include them in the forthcoming Fall 2019 operations procurement, anticipating that a procurement offering may present a lease-to-buy option to the Authority.

#### <u>Strategy 0.3 — Institutional Structures: Contracting Structures</u>

<u>Rationale</u>: Chapter IV of this report presented potential service models by which to organize PVTA service delivery. This discussion was prompted, in part, by the operational difficulties the Authority has confronted as the taxi and transportation industries move through this period of disruption and change. Four models were assessed against factors of adaptability to change, potential levels of provider competition and the potential impact on service quality. We make no recommendation as to which model is right for PVTA, instead weighing their different strengths and limitations.

<u>Description</u>: PVTA will be making an immediate decision in the context of its forthcoming Fall 2019 procurement, perhaps between Model 1-Multiple Contractors (the current service delivery model) and Model 2–Single Dedicated Provider with Non-Dedicated Supplemental Service Provider. At this time, what is best for PVTA is likely the ability to modify its structure within the term of this new contract, e.g., potentially expanding the number of non-dedicated supplemental providers managed by a single dedicated provider.

PVTA will want to anticipate areas in which contractor expertise and capability will be important. These may include, but are not limited to:

- Management of capacity of its dedicated fleet to increase or decrease capacity as identified needs emerge (e.g., more youth after-school transport) or as markets shift (e.g., the decline in seniors' group-trip making).
- Evidence of the ability to effectively work operations with non-dedicated, supplemental providers that can augment a dedicated fleet.
- Evidence of ability to support managing a coordinated fleet of dedicated and non-dedicated vehicles, including the ability to associate a "fund source" with each trip to appropriately bill in a four-city environment with differing subsidy expectations.
- Contractor's demonstrated facility in using powerful demand response trip scheduling software.





PVTA will want to think carefully about the contract term of this procurement, either through the term itself or other contractual mechanisms, to ensure flexibility to accommodate the three-to-five-year structural changes in the service mix that this Strategic Approach envisions.

## Phase One — Enhance the Status Quo Within Existing Resources; Plan for Expanded Services

#### Purpose

This phase recognizes those enhancements that can be introduced soon — that is over the next one to three years — within existing Authority budgets. Such enhancements will address some of the market needs and opportunities documented in the study process. Leveraging developing information technologies is critical to positioning PVTA for a broader role, which includes planning for an expanded service footprint to serve the four cities in new ways.

#### **PVTA Strategic Principles Addressed**

Four principles largely structure the work of this phase:

Principle #1 — "pursuing expansion to other [new] target markets within existing resources";

Principle #2 — planning for "seamless travel throughout the Pomona Valley";

Principle #4 — exploring "Mobility as a Service' approaches to enhance the customer experience";

Principle #5 — strengthening "partnerships of Pomona Valley's four cities and its regional transit providers."

#### **Strategy Rationale and Description**

#### Strategy 1.1 — Market-Based: Youth Markets

<u>Rationale:</u> Outreach contacts in each of PVTA's four cities identified youth as a market where further mobility opportunities exist. Of most immediacy was Pomona, which has both the youngest median age, the largest raw number of youth at almost 40,000 under age 18 and 26% of its total population. Enrichment and after-school activities are important to these youth, towards building strong and confident adults, particularly as high proportions of Pomona households are within 150% of federal poverty guidelines. The youth presence in the other three cities is significant, albeit in smaller numbers. City-sponsored activities, including youth center and youth activity programs, were a focus for transportation opportunities.

<u>Description</u>: Growing the capacity for after-school transportation will be an important objective of this effort. At present, it is difficult for the current contractor to add capacity, though various youthoriented programs, particularly but not exclusively in Pomona, have young people who need to travel between sites. The difficulty, of course, is that a large group of travelers are all moving within a small window of time, with considerably less trip-making in the off-peak periods.





PVTA's Mobility Managers should develop an organized outreach effort to key youth activity stakeholders in each city, starting with city programs. These will include the City of Pomona's parks and recreation department, its libraries and the South Pomona Boys & Girls Club. In Claremont, both the school district and the Youth Activity Center have been important historical stakeholders. In the City of La Verne, its new teen center is a likely focus of need while San Dimas youth activity and mobility needs will need to be researched.

PVTA staff should seek to build and expand upon existing semi-scheduled tours, probably requiring its contractor to make regular changes to these as academic and seasonal calendars require. PVTA Mobility Managers will want to develop a "hierarchy of needs" to quickly identify those group trips of many-to-one or one-to-many that can be efficiently served within existing resources and those that must wait for additional resources to address subsequently. Staff should move aggressively forward in addressing those needs that are feasible to meet within existing resources.

#### <u>Strategy 1.2 — Market-Based: Neighborhood, Local Travelers for Shopper Shuttles</u>

Rationale: Currently four out of 10 (41%) surveyed PVTA riders use its services for shopping trips. Outreach in Pomona particularly expressed need for a reinvigorated Rio Rancho Shuttle, possibly serving WinCo Foods, to connect travelers from adjacent and other Pomona neighborhoods with larger discount grocery shopping opportunities. Public Works staff description of a predictable volume of grocery carts they must collect about the city points to the potential value — and efficiency of shopper shuttles (Figure 15).

City of Pomona policy makers and staff were uncertain about local mobility needs but were acutely aware of the numerous zero vehicle households or where the single vehicle was in use for one wage earner with others still needing transport assistance during the day. There may be other kinds of shuttle-based services within neighborhoods that can be identified with some boots-on-the ground reconnaissance of PVTA's Mobility Managers.



<u>Description</u>: In order to reinvigorate the Rio Rancho Shopper Shuttle, PVTA staff and Mobility Managers should reconnect with community-based stakeholders, particularly in Pomona where this application holds the greatest promise. Elements should include:

 Identifying a trusted messenger — Staff should seek a local champion, or trusted messenger, who can spread the word about a new shuttle service.



#### Figure 15, Eugene, Oregon, RideSource Shopper Shuttle



- Designing a pilot Service could be structured to meet at central pick-up locations, such as the senior center, church parking lot or other community-based organizations, and then, after shopping, delivering passengers directly to their homes.
- Determining a fare With much of Get About service costing just \$1, it may be that this service should be priced at \$0.75 or even less, if that is feasible. The goal of attracting new riders should be paramount.
- Testing the schedule Some experimentation with timing could be explored to determine what can work best both for passengers and for vehicle operations.
- Promoting the Shopper Shuttle Even with a developing schedule, planning for its bilingual promotion should commence even as the service design planning commences.
- Monitor and evaluate PVTA staff, in concert with vehicle operations staff, should monitor all aspects of the reinvigorated shopper shuttle to determine where changes should be introduced and what are the elements of a strong shopper shuttle pilot, towards future expansion of this service.

Staff are encouraged to use the intelligence of this pilot shopper shuttle experience to identify other areas within the four-city service area where such Shopper Shuttle applications could be successful, including in the other three cities.

#### <u>Strategy 1.3 — Market-Based: Commuters and Local Time-Sensitive Travelers</u>

<u>Rationale:</u> Foothill Transit has high-quality, regional Commuter Express and Sliver Streak routes providing 15-minute service frequencies during peak travel times. It is actively planning additional fast, regional services, currently at fares of between \$2.50 and \$5 that are well below the now discounted Metrolink fares. But these services will less and less often travel into local neighborhoods, instead serving corridors of travel as efficiently as possible.

The Gold Line extension to San Dimas, La Verne and Pomona is planned for 2026. Omnitrans' West Valley Connector along Holt Boulevard is planned for some subsequent time period, which is currently not yet known.

Connecting neighborhood-level travelers with these regional services, including the areas' three Metrolink stations, is an important potential opportunity for PVTA, drawing upon the array of service approaches explored in Chapter IV. Such approaches include first-mile/last-mile services and localized shuttles or semi-scheduled, point deviation public transportation services.

At present, just one in 10 (10%) surveyed PVTA riders use to get to or from work. As largely a demand response, advance-reservation service can make it a less desirable mode for time-sensitive work trips.

<u>Description</u>: Phase I activities supporting the commute markets and other time-sensitive trips are those of "discovery." No new funding is anticipated, so it is unlikely that new service can be introduced, but this is an important intelligence-gathering phase to identify "synergies."

PVTA staff should seek regular communications with Foothill Transit, to understand at the route and neighborhood level, those service changes that may impact local travelers as a result of the planned 2020 Foothill Transit Comprehensive Operational Analysis. Understanding changes to the local route structure may suggest opportunities for PVTA supplemental services to those losing fixed-route service.





In concert with the process of designing changes to the Foothill Transit regional network that have local impacts, PVTA may consider partnering with Foothill Transit planners to conduct a thorough outreach of Pomona neighborhood, specifically to better define these needs. Again, city staff described the difficulty of knowing the nature and extent of Pomona residents' mobility needs. A joint community outreach effort between PVTA and Foothill Transit could develop a richer qualitative and quantitative understanding of these needs around which effective services could be designed.

PVTA staff also should regularly track Gold Line planning in terms of parking spaces, service span and frequencies and timing of its introduction. Omnitrans' West Valley Connector is not yet fully funded, so its implementation dates are farther out, but at least annual checking-in on this service is important.

#### Strategy 1.4 — Regionalism: Trips and Fare Structures

<u>Rationale:</u> This strategy addresses issues of geography, of brand and of fares.

*Regionalism* – *Geography* — From a geography viewpoint, some PVTA riders indicated that they would like to be able to use PVTA services "without being subject to my living location." If a passenger is not 60 or older, where they can travel depends upon where they live. Currently, eligibility for some services depends upon in which of the four cities you live. It is important to note that Get About users — persons over age 60 or who have a disability — can currently travel anywhere within the four cities on Get About. And there are destinations adjacent to the four cities that PVTA serves, including Montclair Plaza and Montclair Transit, and multiple medical facilities that dot the periphery of PVTA's service area, which some PVTA riders can access and some cannot. Get About users can take the bus to the APU/Citrus College Gold Line Station.

But there are additional destinations riders have identified as desirable, including Duarte-City of Hope medical appointments, West Covina Transit Center, some Diamond Bar addresses, some Glendora addresses not now served, among other locations. Almost two in 10 (19%) want to travel to places that cannot currently travel on PVTA, and 16% of surveyed PVTA riders indicate they would like to travel across all four cities and currently cannot.

*Regionalism* – *Brand* — In the best of circumstances, public transportation can be confusing to most new riders and many existing riders, as well. When that service is provided by a multitude of agencies, as in the Pomona Valley, that potential for confusion is multiplied. And when, even a single agency operating within a limited geographic area is branded as half a dozen different services, it can be difficult even for the veteran transit rider.

As a result of the way that PVTA services have evolved to serve specific market niches, they are branded as many different things — Get About, Ready Now, One Step Over the Line, San Dimas Dial-a-Cab, Claremont Dial-a-Ride and Group Trip Program.

As PVTA considers a more regional approach to providing services within the four-city region, it should also consider a more regional approach to branding.

*Regionalism – Fare Types —* Because the services are different, in terms of eligibility, service area and even trip purpose, the fares are necessarily different. This can contribute to customer confusion and adds a layer of complexity to trip planning. When a new or potential rider cannot readily determine how much the trip will cost, it can dissuade them from taking the trip.





<u>Description</u>: Phase I activities involve: 1) reviewing possible trips and their related fares outside of the existing service area and then 2) concerted discussions with the four-city partners as to what is affordable and 3) consideration of a common brand, even as the four cities retain their individualized look, possibly service elements.

*Defining Demand for Regional Trips and Fiscal Ability to Provide* — Get About's One Step Over the Line has been very popular, with its ridership steadily increasing. PVTA staff should entertain discussions with city partners about interest and willingness for their residents to travel across the four-city area, notably for general public riders in Claremont and San Dimas to travel farther afield or existing Get About users to travel farther. Trips beyond each city's existing service boundaries become a budget issue for the partner city as expanded service areas cost more where distance equals money, both in terms of more miles traveled and possibly requiring more dedicated vehicles.

*Discussions with Cities about Common Branding* — This is an opportunity to consider a common brand, over and above Claremont Dial-a-Ride, San Dimas Dial-a-Cab, Get About and the varying dedicated vehicles and taxi "looks" of the current PVTA family of services. These differences have evolved for both policy and operational reasons; however, they often confuse rather than clarify. If there is interest in pursuing a more regionalized service approach, this becomes an opportunity to also consider a common brand.

A single umbrella brand, with a common look and feel, could be established for all PVTA services. Under this umbrella brand, differentiated services could continue to be offered. However, this would ease the cognitive burden for riders in that they would know it's all part of PVTA (or whatever the regional brand is called).

*Discussions with Cities Regarding Fares* — Interrelated with the service area is the cost to the rider for this longer trip, coupled with the fact that the base fares differ by market, by service area and by

service type. PVTA's fare structures do currently reflect distance considerations; for example, fares to the *APU/Citrus College Station* are \$2 on Get About (twice the usual \$1 fare) and on Ready Now is \$4.50; for Claremont Dial-a-Ride to the *Montclair Transit Center,* it is \$4 for the general public and \$2.50 for seniors and persons with disabilities; for One Step Over the Line, its zone-based fare structure ranges from \$2.50 to \$12 per oneway trip (Figure 16).



Different fare structures become easier to address — that is, less confusing to the customer — when the trip planning tool can bring back fare-by-trip information. As of this writing, this is not available on PVTA's website. While a near-term solution to this is being developed, planning could commence to introduce fare-related, information innovations explored in Phase Two.





#### Strategy 1.5 — Regionalism: Fare Payment

<u>Rationale</u>: Using one's smartphone for purchases is becoming increasingly common, as an additional mechanism for fare payment, over and above cash and as an alternative to the TAP card, the physical fare payment card used by Metro and other Los Angeles public transit operators. Neighboring Omnitrans and Riverside Transit Agency are both using Token Transit and Foothill Transit is planning for the introduction of American Eagle fare payment <u>—</u> both smartphone-enabled fare payment apps.

PVTA's riders are in transition around smartphones. While surveyed riders indicate that 84% have a cell phone, just 35% have smartphones with data plans and another 6% with a smartphone but with no data plan and reliant upon Wi-Fi. Although 100% of surveyed youth, a very small group in this sample, report they had smartphones with data and 47% of adults between the ages of 18 to 64 reported smartphones with data, only 30% of older adults responding to the survey report use of a smartphone with data.

<u>Description</u>: Clearly, moving to smartphone payment is not a highest priority enhancement to PVTA services, but it should be maintained on PVTA's agenda and incorporated into planning for the Authority's future. PVTA staff should monitor this and, importantly, ensure that interoperability with fare payment technology is possible when making other technology-related decisions.

At present, smartphone vendors, such as Token Transit and American Eagle, are not equipped to support the variety of fare types that PVTA's family of services represent. That said, innovations around GTFS-Flex and the ability to perform trip planning for demand response and on-demand trips means that fare payment tools will grow. An important feature of these fare payment apps is that they are "vendors" who take a few cents off each fare to pay for the service. That is the extent of the associated costs. There is no expensive infrastructure to maintain, as there is with the TAP card, where machines must be installed to reload and add value to these fare cards, in addition to providing (and sometimes replacing) the cards themselves.

#### <u>Strategy 1.6 — Institutional Structures: Operations Contract — Phased Mix of Dedicated and Non-</u> <u>Dedicated Vehicle Types by Anticipated Trip Volumes by Vehicle Type</u>

<u>Rationale:</u> Based on an analysis of FY 2018 Get About data, it appears that a maximum of 15 dedicated vehicles in revenue service would be adequate to serve current Get About trip volumes. With a 20% spare ratio, this would mean that a total fleet size of 18 mini-bus or van type vehicles would be sufficient. Determining the ratio of dedicated vehicles to taxi trips in future configurations will need to be a dimension of future operations contracts, defining the quantity of vehicles and potential volume of revenue hours for which to procure dedicated vehicle operations.

<u>Description</u>: It is recommended that PVTA continue its current approach to Get About service in which it has two providers, one for dedicated vehicle operations and another with a taxi company with sufficient resources to provide as much as 25% of the Get About rides. The dedicated vehicle service should be restricted in size as the trends of the past several years indicate that using taxis on a significant scale is cost-effective, although it could potentially be more so.

#### Calculating Peak Dedicated Vehicles Needed

This strategy presents a structure by which to propose contracted volumes, building from current PVTA experience. Detailed trip data on Get About Van trips from May 2018 provides information on trips by





time-of-day and Get About's current capacity to serve trips using dedicated vehicles. As Table 4 shows, the most trips served in any hour during this month was 68, and there were less than 5 hours with more than 60 trips. The maximum number of wheelchair trips never exceeded 13 in a single hour. Get About is capable of achieving vehicle productivities of 4.5 trips per vehicle service hour during at least peak hours based on recent operating data, although actual productivity is typically lower. In addition, the ratio of available vehicles to the number of wheelchair trips exceeds 1.0 except for a single hour during this month.

Using a very conservative approach that is premised on current operations being representative of Get About's performance potential, Table 4 shows how many vehicles would be deployed by hour. This is also based on realistic vehicle deployment and driver shift schedules. (The vehicle deployment pattern also reflects the requirement for driver lunch breaks.) The **Trip Index** and **Vehicle Index** columns in Table 4 show the *number of trips per hour* and the *number of vehicles in-service per hour*, relative to the maximum hour of the day (1300 in both cases). The **Vehicle Index** always exceeds the **Trip Index**, indicating that there should not be any shortage of vehicles during other hours of the day.

	Hour of Day	May 2018 Trips	Max. Hourly Trips	Max. Hourly WC Trips	Vehicles Needed	Implied Vehicle Productivity	Trip Index	Vehicle Index
0600		32	4	1	2	2.00	0.03	0.13
0700		491	27	10	9	3.00	0.42	0.60
0800		654	34	9	11	3.09	0.56	0.73
0900		1110	61	4	15	4.07	0.94	1.00
1000		803	47	8	12	3.92	0.68	0.80
1100		507	30	5	9	3.33	0.43	0.60
1200		899	55	6	12	4.58	0.76	0.80
1300		1178	68	13	15	4.53	1.00	1.00
1400		427	25	6	10	2.50	0.36	0.67
1500		487	30	6	8	3.75	0.41	0.53
1600		190	15	4	6	2.50	0.16	0.40
1700		116	10	2	4	2.50	0.10	0.27
1800		27	6	1	3	2.00	0.02	0.20
	Totals	6921	412	75		3.55		

It is likely that the recommended fleet size of 15 vehicles in maximum revenue service can accommodate a relatively significant increase in trip demand, on the order of 10% to 25%, particularly if the additional demand responsive trips do not occur during Get About's current peak hours of 9:00 a.m. and 1 p.m.. It bears noting that these are not typical peak hours for a demand-response transit (DRT) service. An increase in demand of even 100 trips per day could potentially be handled if it occurred mostly during what would be peak hours for other demand responsive transportation systems, namely 8:00 a.m. and 3:00 p.m. through 4:00 p.m.

#### Estimating Supplemental Taxi Trips Needed

With a fleet size of 15 maximum vehicles in service, all other trips would need to be handled by Get About Cab. Using the May 2018 data as a benchmark, this represents approximately 110 trips per day;





this level of trips is being accommodated by the taxi company. Moreover, more than 25% of those trips are being made by persons in wheelchairs, or about 30 taxi trips per day, an increase of about 50% over the past 5 years. Hence, it appears that the **capacity of the taxi company is not an issue** for Get About and that it can continue to rely on taxis for a significant number of its trips.

This is particularly important because taxi trips are longer than Get About Van trips — 5 miles for taxi trips and 3 miles for Van trips, respectively — yet cost slightly less. In addition, taxi trips are much less costly per mile than Van trips — more than 40% less expensive. Hence, it makes sense to continue to assign the longer trips to the taxi company and to use it for trips that don't fit easily onto a vehicle tour, as the taxi trip will probably be less expensive for Get About than scheduling the passenger onto a Van vehicle tour.

Given that the number of trips carried by Get About Taxi have increased from about 75 per day to about 110 per day over the past 5 years, it would seem that there is an opportunity to continue to place longer trips onto the taxis. By doing so, the costs of the dedicated vehicle service can be minimized and those vehicles can focus on shorter trips, which are more easily scheduled in a productive manner. In addition, given the ability of the taxi company to accommodate an additional 35 trips per day during the past 5 years, it seems realistic to believe that Get About can continue to incrementally increase the use of the taxi company, which means that it can keep dedicated vehicle operations to the absolute minimum level needed.

#### Adding in Other Service Modes

As PVTA considers operation of additional service modes, such an expanded shuttle network or school tripper service, it may become necessary to augment the number of available dedicated vehicles, beyond what can be anticipated for demand responsive service. Where these new or expanded services are operated off-peak, during the hours when peak demand does <u>not</u> present, the analysis of Table 4 suggests that existing vehicle capacity should not be a problem. Where new or expanded services are contemplated for peak periods, these may require additional, dedicated vehicles.

#### Strategy 1.7 — Institutional Structures: Zero-Emission Bus (ZEB) Requirements

<u>Rationale:</u> As noted, the Authority is not required to begin the purchase of zero-emission buses (ZEB) until 2026 and needs to acquire and develop an operating facility prior to acquiring such ZEBs. Additionally, the experience of other agencies with ZEBs strongly advises the development of a thorough Zero-Emission Bus Plan prior to initiating their implementation.

<u>Description</u>: It is proposed that the Authority use Phase 1 for the development of a comprehensive Zero-Emission Bus Plan that builds on the experience of similar transit agencies with ZEB acquisition and operations. This ZEB plan should extend through the complete replacement of the applicable PVTA fleet with ZEBs and address the capital replacement implications of those vehicles at the end of their useful lives. Using outside technical assistance as necessary, the ZEB Plan should address, at a minimum, the following topics:

- Long-term PVTA facility requirements for operations and maintenance;
- Partnership opportunities for facility acquisition and development;
- ZEB charging and electrical service requirements;
- Dedicated vehicle numbers and capacity requirements;





- Phasing of facility development and ZEB acquisition;
- Funding sources, requirements and availability; and
- Funding plan for facility and ZEB acquisition.

#### Strategy 1.8 — MaaS: Existing Customer-Facing Technologies

<u>Rationale:</u> While there are many real barriers to using public transit, the most damaging are often lack of awareness and knowledge among potential users. PVTA has recently taken critical steps to address these issues, but there is more that can be done in the near term.

<u>Description</u>: Following are four communications strategies to build awareness for and promote PVTA services during this initial phase. These are low-cost/no-cost efforts that will leverage existing information tools and platforms.

#### Implement Targeted Marketing Efforts to Support the Expansion of Services for Youth and Low-Income Shoppers Discussed in Strategies 1.1 and 1.2. Figure 17, Example of a Direct Mailer

Once it is determined, through outreach to youth programs and stakeholders, which **after-school youth services** will be offered, these gatekeepers should be provided with marketing tools to promote utilization of the services. Tools should include:

- Posters for placement at schools, libraries and facilities for after-school programs which are being served.
- Targeted flyers with specific information about the service to a particular program — for distribution to students and parents. (For example, rather than creating a single generic flyer that promotes afterschool transportation, create a version for each program that provides specifics about pick-up locations, schedule, fares and how to sign up.)
- Short articles for inclusion in program newsletters and on sponsor websites.
- Ongoing outreach meetings with gatekeepers should ensure that they know exactly how the service works and actively promote it to their participants.



As PVTA works to revitalize the **Rio Rancho Shopper Shuttle**, targeted marketing will be a critical element of the effort. The objective should be to reach low-income households in the served neighborhoods with specific information about the shuttle services. Options for accomplishing this include:

 Direct mail postcards (utilizing USPS Every Door Direct Mail service) to households along the shuttle route. This is a low-cost medium for reaching a geographically targeted audience with highly customized information. The illustration in Figure 17 is an example of such a mailing





(actual size: 8 ½ X 11), which can combine an eye-catching message with specific route and schedule info.

- The direct mail postcards could double as flyers for distribution by neighborhood leaders or social service agencies working within the area.
- Posters (with information similar to the postcards) should be displayed at destination along the shuttle route, including WinCo and any neighborhood facilities such as libraries.

#### Enhance the PVTrans.org Trip Planner to Include Fare Information in its Search Results.

The trip planner on the new PVTrans.org website greatly eases the users' task in finding their way to transit service that can meet their needs. However, it could do a better job of helping them differentiate between those services to select the most advantageous.

PVTA's services are differentiated by four factors eligibility, service area, reservation requirement and fare. The trip planner very efficiently addresses eligibility and service area. It addresses reservation requirements by specifying Reservation Based or On-Demand — though it could be more explicit (e.g., prior day reservation required).

The one shortcoming of the trip planner is that it does not return the fare, an important differentiating factor, for each option. Currently, the user must go to the program page for each service and manually compare the fare charts. Figure 18 shows the trip results for a search from Claremont McKenna College to Pilgrim Place, with fare information added here. Three services can provide the trip but at very different prices as shown in the red boxes. Having the fare as part of the search result would allow users to immediately select the "best choice" based on their priorities.

#### Ensure that Los Angeles 211Ride (Cambridge Systematics One Click) Reflects All PVTA Services and Brings Back Accurate Information in "Trip Discovery"



Figure 18, PVTA Trip Planner Response Example,

#### Get About

Reservation-based transportation for seniors (60+) and persons with disabilities. To schedule a ride, call 909-596-5964 HOURS OF OPERATION Weekdays: 6:00am - 7:30pm

Saturday: 8:30am - 5:00pm Sunday: 7:30am - 5:00pm

#### **Ready Now**

On-demand transportation for seniors (60+) and persons with disabilities.

To schedule a ride, call 909-770-8038

HOURS OF OPERATION Weekdays: 6:00am - 7:30pm Saturday: 8:30am - 5:00pm Sunday: 7:30am - 5:00pm

#### **Claremont Dial-a-Ride**

On-demand transportation for everyone in Claremont. Registration required.

To schedule a ride, call 909-623-0183

HOURS OF OPERATION Weekdays: 6:00am - 10:00pm Saturday: 6:00am - 6:00pm

\$1.50

\$4.50

\$1.00

Los Angeles 211Ride is an online trip planner that individuals throughout Los Angeles County can use to obtain information about both public transportation and social services transportation options, including demand response services. It allows users to plan travel throughout the county and inclusion is at no cost to the transportation providers. PVTA services can easily be incorporated into this trip planner. However, it is incumbent on PVTA to ensure that up-to-date information is provided and to





test the system to ensure that it is accurately including PVTA services in relevant search results. The 211Ride service is co-managed by the Los Angeles County 2-1-1 Information and Referral Center, where transportation information can also be obtained through a live call taker, simply by dialing 2-1-1 from any touchtone phone and asking for transportation assistance.

#### Promote Google Transit and the Transit App for Fixed Route Trip Planning

In addition to PVTA, the Pomona Valley is served by a network of fixed-route transit operated by Foothills Transit, Omnitrans and Metrolink. These services offer PVTA customers options both for traveling within the valley and for traveling to destinations in neighboring cities and counties.

Google Maps and the Transit App are two very user-friendly apps that allow riders to plan fixed-route transit trips across the region and across transit providers. We believe that PVTA has a role in promoting these apps to facilitate transit trips that are beyond its own service boundaries. Three possibilities for incorporating a fixed-route trip planner into PVTA's website include:

- A link from the Homepage possibly under the MORE item on the navigation bar,
- Integrate a Google Transit trip planner into the Transportation Options page, and
- If a trip plan request includes a location outside the PVTA service area, return not just a link to the Transportation Options page, but a Google Transit trip planner.

#### Encourage One or More MaaS Providers to Implement Their Application in the Pomona Valley Region

Currently a thriving market exists for MaaS applications in metropolitan areas. Transit App is implemented in dozens of American cities, including in the Los Angeles area, which brings back multi-modal information, including fare information. PVTA could work with Foothill Transit and/or Omnitrans to try to attract a MaaS provider to the San Bernardino Valley and/or the San Gabriel Valley areas and extend the coverage to the Pomona Valley, including, for example, promotion of the Transit App. This could represent a first step toward a PVTA-oriented MaaS capability.

#### Strategy 1.9 — MaaS: Planning for Future MaaS Applications

<u>Rationale:</u> MaaS is still very much a work-in-progress, although all MaaS applications include trip planning, fare payment information, and usually linkages to other services and the ability to engage them. For PVTA, MaaS offers — in addition to its core functions — the potential for building a set of tailored and targeted services — which has always been its primary objective in providing a public service to the four-city region. Presenting the complexity of that to the public, both existing and potential riders, is the challenge that good MaaS applications embrace.

<u>Description</u>: In planning for how to take advantage of MaaS applications, PVTA needs to consider the following topics and related functional areas of any MaaS platform, carefully considering these areas as staff conduct research on MaaS platforms:

- Services
- Customer segments
- Funding sources
- Payment systems

An appropriate MaaS platform will enable PVTA to provide specific types of services to specific customer segments that are subsidized by specific funding programs — governmental and otherwise





(e.g., private employers) and that consumers can pay for via specific mechanisms. All of the details are encapsulated within a white-labeled — or customer segment branded — MaaS application.

For example, a large employer that is 1.5 miles from a commuter rail station that is served by a PVTA organized DRT/Flex service for first-mile/last-mile access could provide subsidies to its employees who use the public transportation services (and subsidize both the commuter rail and first-mile/last-mile services separately) and also provide carpooling financial incentives using the same MaaS platform. This would actually be the PVTA MaaS system, but it would have the appearance of being the employer's platform too based on a click on a user interface that would only be present — the button to click — for a user who registered as an employee of the company.

The same MaaS platform could be used by the general public to engage the demand response or ondemand services and pay for tickets to use it, but the person who is registered for Get About would see a different fare than would a member of the general public. During the off-peak period, when demand for the service is low, the local senior center could make an arrangement with PVTA to buy service at a discount for its clients, while paying some amount to subsidize the service. The senior center's clients would pay the much reduced fare and funds the senior center pays to PVTA will enable a better level of off-peak service than otherwise available. Of course, none of this happens without planning and leadership by PVTA, but all is completely within the capabilities of existing MaaS frameworks.

#### <u>Strategy 1.10 — MaaS: PVTA Technical Resource for New Mobility Choices</u>

<u>Rationale:</u> New mobility options are emerging all the time. During this study period, dockless electric scooters arrived in both Pomona and Claremont although the Claremont Traffic and Transportation Commission suspended use of the scooters to develop policy on liability and scooter collection matters. As of this writing, there are four Zipcar locations in Claremont, focused around the Claremont Colleges, but none in the other Pomona Valley cities. Bike share, car share, scooters and ride share innovations are all in play and pose challenges to those attempting to stay current on their evolution.

<u>Description:</u> PVTA staff should monitor, at a modest level, the development of these additional mobility innovations. It isn't clear at this time that it is appropriate for PVTA to take up any of these new mobility choices, but tracking their evolution and reporting on that to city staff at PVTA Board and Transit Advisory Committee (TAC) meetings, is an appropriate role for PVTA as a mobility agency. A few minutes of reporting on items of interest, including the development of city policies around the Los Angeles basin in regulating these fast-changing services, will likely be of value to the four cities' elected officials and staff. PVTA staff should monitor local and national policy of these new mobility choices through participation in LA Metro committees and in selected state or national conferences, including for example, CalACT and the Shared-Use Mobility conferences.





## Phase Two — Expand Local and Regional Travel Choices, as Resources Allow, to Improve Riders' Connectivity and Travel Experience

#### Purpose

Phase Two assumes that PVTA and its four-city partners will identify additional funding by which to pilot and implement the service approaches considered. This Phase considers both market and technology arenas in which PVTA can expand in order to improve traveler choice and the travel experience and to promote connectivity between modes. A number of pilot services, including new service approaches, are envisioned to test the markets and PVTA's responses to specific market needs.

#### **PVTA Strategic Principles Addressed**

This phase embraces all six guiding principles, varying elements of each:

Principle #1 — serving traditional markets and expanding to other target markets

Principle #2 — establishing seamless travel and consistent service levels and fares

Principle #3 — establishing convenient connections

Principle #4 — integrating services in a MaaS approach

Principle #5 — establishing strong partnerships to secure and broaden the funding base

Principle #6 — pursuing new service approaches providing user-friendly, reliable, cost-effective services

#### **Strategies Rationale and Description**

#### Strategy 2.1 — Market-Based Activities: Youth Tripper Services/Secondary and College Students

<u>Rationale:</u> As Foothill Transit refines its own service planning toward more and faster corridor service, it is anticipated that it will pull back from some of the local routes of which it provides a considerable number in the Pomona Valley. Foothill Transit staff have already indicated that PVTA could play a role, within its demand response and specialized services mandate or even with scheduled and semi-scheduled services. PVTA could provide some modest levels of supplemental or even replacement transportation services in some Pomona Valley neighborhoods.

<u>Description</u>: Specifically, *school tripper service pilots* are an option for PVTA, providing a semischeduled service designed to match school bell times and the varying weekly and monthly calendars of public secondary schools. PVTA staff should work in conjunction with Foothill Transit to develop a *tripper service pilot*, providing home-to-school service on a schedule that can fluctuate with changing school schedules. Initiating such a pilot in one or two Pomona neighborhoods is most advisable, working in collaboration with the school district as well.

With regard to the *Claremont Colleges, Cal Poly Pomona, the University of La Verne* and *Mt. San Antonio College*, there may be opportunity to connect students to the Sliver Streak — particularly on





weekends — by developing a coordinated service and fare policy response around Metro's College/ Vocational Students' TAP card program.

#### <u>Strategy 2.2 — Market-Based Activities: 4-Citywide Regional Travelers</u>

<u>Rationale</u>: This strategy will move forward the activities of Strategy 1.4 and 1.5 as appropriate to PVTA partner cities' interest and willingness supporting the principle of seamless travel within the four-city region.

<u>Description</u>: Supporting preceding work efforts, this strategy will address trip-making, branding and fare payment topics on which PVTA partner cities wish to proceed. PVTA staff should strive to address the practical barriers to area-wide travel rather than service-specific travel, while maintaining a focus on the mobility needs of its various markets. This may include developing new policy, establishing new operations practice and otherwise addressing branding and fare matters to serve regional-trip making, building upon the discussions initiated in Strategies 1.4 and 1.5.

#### Strategy 2.3 — Market-Based Activities: Commuters

<u>Rationale:</u> The Pomona Valley's four cities are home to more than 100,000 jobs, according to SCAG's Adopted Growth Forecast, with an expectation of growth. Another 5,000 jobs are expected over the coming decade. And most importantly, the Gold Line service extends to Pomona by 2026. Developing a potential PVTA role in serving the commuter market is an important objective, both for the employees who commute into the four-city region and the thousands of commuters who daily leave the Pomona Valley.

<u>Description:</u> Planning for commuter needs in the near term can build from the experience of an initial pilot or two designed to improve connectivity to the regional fixed-route network or to Metrolink stations. Developing and piloting services to provide *a first-mile/last-mile connection* to Foothill's Silver Streak or to the three Metrolink stations hold promise. PVTA should work with Foothill Transit to identify one or more particular neighborhoods of interest and the specific opportunities of sufficient "potential" demand for connecting residents with available high-quality regional services. Creating an *initial first-mile/last-mile pilot* will help to support more robust responses for the coming Gold Line and local connections to it. Any commuter-oriented pilot of that is developed for implementation must ensure sufficient attention to its marketing and promotion, so that it doesn't become invisible, even at its outset.

#### Strategy 2.4 — Regionalism: Service Approaches for Regional Trip-Making

<u>Rationale</u>: Surveyed PVTA riders reported that "making trips I cannot now make" was an important enhancement that, in part, reflects the fact that where riders live within the four-city region determines where they can travel.

<u>Description</u>: Building upon Phase 1 discussions of regional trip-making — and importantly supported by additional resources that can be identified — PVTA should expand its services area-wide, exploring and developing service capabilities that could include the following:





#### One Step Over the Line

PVTA staff will want to determine strategies for defining capacity and the expansion of capacity as well as stated limitations on trips for eligible persons with disabilities and older adults who make One Step Over the Line trips. Continuing attention to the destinations served is necessary, potentially expanding or modifying these as demand presents and the structure and experience of specialty healthcare services evolves. PVTA staff should explicitly monitor, at least semi-annually, both the trip destinations served and the trip requests that cannot be served in order to recommend policy changes.

#### Considering San Dimas Dial-a-Cab Program Changes

PVTA staff, along with city partners of San Dimas and La Verne, may want to consider the conversion of San Dimas Dial-a-Cab to the Get About Ready Now program in order to promote regional trip-making and to contribute to a simpler service structure that still meets rider needs. Reviewing eligibility, defining capacity, its limits and the fare structure will all be important aspects of this conversion, driven by available funding.

#### Develop Pilot First-mile/Last-mile Applications

PVTA staff, with its four-city partners and regional transportation operator partners, will want to develop funding applications, to LA Metro and other sources, to pilot first-mile/last-mile service approaches around identified neighborhoods that can potentially produce demand.

Examples of a first-mile/last-mile service oriented to regional connections to regional bus and rail are developing around the country. The gold standard is Denver RT's FlexRide serving the region's light-rail stations where these demand response services expand and contract as the demand changes (Figure 19). These are dedicated vehicles, generally one or two operating in the immediate vicinity of the station, providing smartphone-enabled on-demand trips.

Other models exist, including services provided by dedicated vehicles in a checkpoint mode for a particular neighborhood. Or a service may be structured as a user side subsidy that is consumer-driven, as in Monrovia where the GoMonrovia program provides a "coupon code" to eligible riders who can then place their trip request to Uber and Lyft for a discounted trip within the geographically bounded service areas. Establishing the parameters and limits on









these services will be critical, as has been seen in Monrovia, as they can become very popular and quickly outstrip available public funding resources.

#### Exploring Other On-Demand Models

With attention to PVTA's traditional markets of seniors and persons with disabilities, it may be that a different first-mile/last-mile or on-demand service option could be inclusive of both able-bodied commuters and those with greater frailty and mobility limitations. The company UZURV <u>https://uzurv.com</u> provides on-demand "adaptive specialized transportation" that picks up passengers at their door and transports them directly to their destination. These services are provided in Phoenix and Nashville, among other places, and ensure that trips are provided by certified, drug-tested drivers.

The UZURV company describes its offering as:

"We are a technology platform where organizations book rides for their communities in advance or on-demand. We are a network of passionate, certified drivers who affordably deliver specialized transportation that helps people live their lives."

These are among the options that PVTA, with its stakeholder partners, can pursue both in terms of securing new, additional funding and in operating new service approaches.

#### <u>Strategy 2.5 — Institutional Structures: Contract Structures</u>

<u>Rationale:</u> At the outset of this 10-year timeframe, PVTA will be entering into a new operations contract as highlighted in Phase Zero. Given changing operations, funding and regulatory environments, PVTA may at the two- to three-year marker, need to make some mid-course corrections in terms of its contract structures and contractual expectations.

<u>Description</u>: There are two contractual topics that the Authority may consider during this phase.

#### Scheduling and Dispatch Software

PVTA will be entering into a 2019/2020 contract that incorporates trip scheduling and dispatching functions and may have undertaken a lease-to-buy arrangement. During this Phase Two, it may become clearer the software direction that PVTA wishes to pursue in terms of Authority ownership or leasing. The advantages of establishing Authority responsibility for the software, of directly managing the relationship with the software provider, is to ensure consistency over contractors and so PVTA Mobility Managers can grow their knowledge and ease-of-use in the software.

#### Impact of Expanded Service Modes

There may be contract implications, or operator implications, for an expanded service or new service that PVTA may take on in Phase Two or projected for Phase Three. For example, the provision of scheduled fixed-route and semi-scheduled services may increase the number of revenue hours, such that PVTA has to undertake a new procurement. It may be that the number of providers will increase and a different structure becomes advisable, from among those presented in Chapter VI, for example, different trip broker models.





PVTA staff will want to ensure that there is opportunity for and mechanisms to review contract terms and structures and to make changes in a timely fashion that will benefit the overall PVTA family of services.

#### Strategy 2.6 — Institutional Structures: Medi-Cal Fare Revenue

<u>Rationale:</u> Seven in 10 trips (71%) taken by surveyed PVTA riders in early 2019 were healthcare trips. And more than half (53%) reported household incomes of less than \$25,000. Some of these individuals and some of these trips are eligible for Medi-Cal reimbursement. In other parts of the country, Medi-Cal, or Medicaid as it is known elsewhere, is an important funder of such trips provided by public transportation programs. It is potentially a resource to PVTA for funding some portion of its traditional markets where there is overlap with Medi-Cal eligibility.

<u>Description</u>: In the State of Oregon, many public transportation providers hold contracts with the State Oregon healthcare agency and receive Medicaid reimbursement for eligible trips; for example, in the case of Lane Transit District their RideSource program 64% of their almost half-million demand responsive trips provided annually are reimbursed as Medicaid trips by the Oregon Health Plan. Closer to home, Ride-On, serving San Luis Obispo County, received somewhat under \$1 million for almost 20,000 Medi-Cal/MediCaid trips provided during FY 17/18. San Diego County's MST secured vendored relationships with three of five health maintenance organizations providing Medi-Cal services in San Diego County and is now receiving reimbursement for trips assigned to its demand responsive services.

Riverside Transit Agency has secured vendor authority and bills Medi-Cal for eligible demand responsive trips provided to its ADA-certified riders.

Securing Medi-Cal vendor status is a complicated process that requires patience and time. It involves navigating the California Department of Health and Human Services Agency and developing



a relationship with its Los Angeles County Medi-Cal provider, the LA Care Health Plan. Guidance on this process should be sought from San Luis Obispo County's Ride-On Executive Director who has successfully expanded his funding base through the Medi-Cal program. Notably, this is a funding source that can support some of the longer-distance, more expensive trips that some current riders wish to make. Again, it becomes a resource for some riders, for some trips — but not all trips, by any means. But where it can subsidize eligible trips, that means that PVTA funds can go to provide other trips that might not otherwise be provided.

#### Strategy 2.7 — Institutional Structures: MaaS Customer-Facing Technology-Policies

<u>Rationale:</u> MaaS applications by their nature are focused on services in an area that are relevant to particular trips by consumers, not to specific services. Moreover, they are essentially regional in their scope and application; municipal and/or county boundaries are only relevant as they affect where services can go and what the fares for those services are.

A MaaS application that is white-labeled for PVTA would encompass whatever geographic area is desired, including portions of eastern Los Angeles County west of the Pomona Valley and western San




Bernardino County, if appropriate. The services in these other areas that come into the Pomona Valley or are relevant to residents of the Pomona Valley will be included in the MaaS application, with appropriate information about fare payments and potentially even the ability to purchase fare media via the MaaS app.

<u>Description</u>: It will be the responsibility of the Authority to develop the necessary arrangements with these other public transportation entities — and any other transportation service providers relevant to customers, such as TNCs, bike share companies and car share companies — that will make all of the services accessible from a trip planning and service engagement perspective, including fare payment if feasible. This will require PVTA to work closely with all relevant public agencies that impact service delivery — municipal governments and transit authorities, for example — and private service providers, such as bike share and electric scooter companies, so that their technology systems, including fare payment mechanism, can be integrated with the MaaS platform used by PVTA.

#### Strategy 2.8 — Institutional Structures: MaaS Customer-Facing Technology-Software Platforms

<u>Rationale:</u> While there are numerous MaaS applications implemented in Europe and the USA, with few exceptions they are not currently able to engage demand responsive services of a public transportation nature. This is largely due to the lack of any integration between the DRT technology systems and the MaaS application. Developing pilot opportunities are a useful mechanism by which to test MaaS experience in the Pomona Valley and will certainly be of benefit to DRT services elsewhere.

<u>Description:</u> An obvious pilot project opportunity with MaaS for PVTA would be to enable the integration into these platforms of one or more of the demand responsive services sponsored by PVTA. The development of GTFS-Flex, through the FTA's Mobility on Demand Sandbox project with the State of Vermont, may help to facilitate this.

Of course, PVTA would first need to have a MaaS application in place — either a white-labeled one with the PVTA branding or a branded one such as Transit



### MOBILITY ON DEMAND

App or Moovel — before any integration project could be initiated. If this is to be feasible, it will be necessary for whatever technology system that PVTA acquires for Get About and potentially the Claremont and San Dimas demand response services to be architected in such a way that integration with a MaaS application is feasible. At a minimum, this requires the DRT technology system to have "open" APIs (by which is meant that they have interfaces into the system that other applications can use and that they have documentation about how they work) and preferably the software vendor has some history of doing technology integrations. In fact, PVTA should make these a requirement for any DRT technology system going forward, to ensure that there will be platform interoperability with developing MaaS applications, either through open-source architecture or with the assurance of an appropriate data bridge.

The same pilot project would also be the appropriate vehicle to conduct operational tests of electronic fare payment capabilities of the MaaS application. DRT services, particularly if they may be delivered in





part by contractors or in vehicles where it is not feasible or cost-effective to install fare collection equipment, lend themselves well to e-payment approaches.

Finally, a pilot project of this nature would — almost by definition — provide a test bed for determining integration issues between the customer-facing MaaS application and the operations scheduling and dispatch software of the DRT service. In the situation where the MaaS application is the front end to the DRT service — and not the native DRT booking application — then there must be close integration of the two software platforms at all key customer interaction points, such as notification of the customer that the vehicle is arriving in a few minutes and displaying its position on a map. Such functionality must be enabled via the MaaS application for a satisfactory user experience. Again, the Vermont FTA Mobility on Demand Sandbox project may offer some insight as it seeks to develop GTFS-Flex and is integrating the Cambridge Systematics One-Call, One-Click information platform with Ecolane's demand response scheduling and dispatching platform.

#### Strategy 2.9 Institutional Structures: ZEB Program Compliance

<u>Rationale</u>: The Phase Two period — through Year Five — of this plan would encompass the early implementation of the Zero-Emission Bus Plan developed under Phase One.

Description: As described above, the ZEB Plan will define the Authority's facility and vehicle requirements for adoption of zero-emission buses in compliance with State of California requirements and an implementation timeline and process for how the requirements will be met. It is expected that implementation of the ZEB Plan will be initiated within the 5-year horizon of Phase Two, particularly with the identification and initial development of an appropriate facility.



An early aspect of this process will involve discussions among the four PVTA partner cities and Foothill Transit regarding opportunities for shared use of existing city or Foothill facilities or the dedication and development of existing city property as a stand-alone PVTA operating facility. Such a discussion must consider the long-term fleet requirements of the Authority as the electrical infrastructure costs will be substantial.

Once a suitable property is identified, arrangement of funding, site planning, approval of plans, procurement of a contractor, construction and occupation will require a period of two to three years, or possibly more. This long lead-time before the facility can be operational argues for aggressive development of the ZEB Plan as well as its implementation once completed.





## Phase Three — Move PVTA to a Fully Functional MaaS Environment, Supporting Four-City Regional Services to Multiple Markets

### Purpose

The final phase of PVTA's phased strategic approach of eight strategies establishes a strong mobility-asa-service foundation, incorporating expanded service approaches and the technology to communicate these to multiple market groups. Securing additional funding is critical to expanding PVTA's suite of services in ways that complement its regional transit partners and serve riders and potential riders. PVTA can establish itself as a customer-centric mobility service, an anchoring public transportation provider in the Pomona Valley's transportation ecosystem. This is influenced by the continued proliferation of cell phones, (already outnumbering desktop computers) which are a powerful information device held in riders' hands that will only become more so. Enhanced by the "internet of things," where all is increasingly connected, this will power PVTA as a multimodal transportation provider. While an unknown dimension of the transportation ecosystem is the role autonomous vehicles will play in public transportation, this phased strategic plan places PVTA in the strongest position to respond effectively.

### **PVTA Strategic Principles Addressed**

All five principles remain relevant and continued through activities of the preceding phases, although this phase particularly focuses on:

Principle #4 — embracing Mobility-as-a-Service in a fully integrated multimodal platform

Principle #5 — strong partnerships to coordinate, address infrastructure and secure funding

### **Strategies' Goals and Descriptions**

#### Strategy 3.1 — Market-Based Activities: Traditional Markets

<u>Goal and Purpose Statement</u>: PVTA and its Board of Directors will want to ensure the continued attention to these traditional markets of older adults, persons with disabilities and persons of low-income, as stated in its organizing charter. While expansion to new markets, including general public



commuters can addresses real mobility needs, it is important that PVTA's original mission not get lost.

<u>Discussion</u>: PVTA's current older adult ridership is reporting just over 30% smartphone penetration. While that number will grow as younger populations age-in, nonetheless, the "touch" of a dispatcher is likely to remain an important component of the PVTA family of services. Call-taking staffing may be reduced in number, as app-based trip ordering increases. But problem solving and the handling of inevitable day-of-service issues ensures that this function will remain necessary within the PVTA





operations structure. Similarly, PVTA's Mobility Managers' roles will evolve to accommodate the needs of the Authority's service mix. It is expected that this kind of person-to-person outreach will always be important, putting a face on the PVTA organization for the rider and prospective rider.

#### Strategy 3.2 — Market-Based Activities: Low-Income Travelers

<u>Goal and Purpose Statement:</u> Expanding local travelers' mobility choices of expanded general public local service will be supported with new funding. As regional services themselves evolve over the next decade, PVTA is well-positioned to play a larger role in local, neighborhood-level transportation that connects riders to key destinations.

<u>Discussion</u>: PVTA has a broader suite of services and ability to provide local transportation than do the larger, regional carriers with their 40-foot buses, single-service-type modalities and limited flexibility. PVTA service approaches can embrace scheduled and semi-scheduled services, including shuttles, checkpoint and deviated fixed-route service approaches. PVTA can use these to build an improved mobility network that is focused on low-income neighborhoods. New funding, and partnerships to secure these additional funds, will be central to constructing this next tier of local transportation services.

#### Strategy 3.3 — Market-Based Activities: Commuters

<u>Goal and Purpose Statement</u>: With the advent of the Gold Line to the Pomona Valley in 2026, PVTA will play a central role in establishing first-mile/last-mile services, supported by new funding. PVTA's size and organizational flexibility to develop pilots and test new service approaches will ensure that effective first-mile/last-mile services will be developed to serve regional travelers in the Pomona Valley.

<u>Discussion</u>: As PVTA seeks to serve commuter markets, it will become ever-more important to couple every new service element with effective marketing and promotion that is specifically targeted to the markets of interest. Supported by new funding to provide effective and responsive first-mile/last-mile service approaches, PVTA must build upon its recent forays into improved customer information and ensure that all avenues of communication with riders and prospective riders are used.

Authority experimentation is to be encouraged in developing service approaches that will effectively attract new and hold existing riders for "some trips, some times" as prescribed by the SCAG/UCLA report "Falling Transit Ridership," which sees as a critical new market the potential riders who occasionally make trips.

#### Strategy 3.4 — Regionalism: Evolving Service Approaches

<u>Goal and Purpose Statement:</u> PVTA will work toward providing a seamless rider experience for the Pomona Valley traveler, from simply requesting a trip (not requesting a "service"), to moving immediately through to securing and then paying for the trip — through a Maas platform, owned or leased by the PVTA organization.



Southern California

#### Michael Manville Brian D. Taylor Evolyn Bliannenberg Prepared for the Southern California Association of Covernments Samay 2018





<u>Discussion:</u> Providing that seamless experience will involve: 1) expanding PVTA's service area so that more services are four-city wide service, and 2) expanding the service mix with service approaches targeted to specific markets. These service expansions, both service area and service mix, will be driven by the willingness and ability of PVTA's partner cities and the regional providers, specifically Foothill Transit, to collaborate around innovative funding strategies and secure new funding.

#### Strategy 3.5 — Maturing Pilots into Ongoing Services

<u>Purpose and Need Statement:</u> In order to build upon Phase Two pilots and expand successful pilots, PVTA will need tools to determine "success" in advance of implementation, as an objective means of measuring and reporting on service experience.

<u>Discussion</u>: Assuming that pilots are utilized to test new market approaches and are rigorously coupled with strong marketing and promotional campaigns, PVTA and its Board of Directors must also ensure that a meaningful evaluation of experimental services are made and reported. This evaluation process will guide the development of future services, as well as to help secure additional funding through a meaningful reporting of what works and what does not. PVTA staff will want to develop performance measures appropriate to the pilots implemented and then provide regular reporting, with recognition in advance by both staff and the PVTA Board that not all experiments in service will succeed.

#### <u>Strategy 3.6 — Institutional Structures: Service Contracts</u>

<u>Purpose and Need Statement:</u> PVTA by the mid-period of this 10-year timeframe will have a clearer understanding of its operational and service contract needs and can structure these accordingly.

<u>Discussion</u>: As noted during the Phase Zero timeframe, the contractor term and scope appropriate to early policy and service decisions taken will have been established for the Fall 2019 procurement. Reframing of these decisions, in the context of implementation of later phase strategies, will be important and can only be determined as the full scope of implementing PVTA's strategic plan unfolds.

As PVTA administrators have been through multiple procurements, *operations procurement* issues will be relatively easy to address, potentially following the procurement structures and models laid out in Chapter VI of this document. *Technology procurement* issues will be less clear, specifically their content and structure, as PVTA staff have less experience here. Towards that end, exposing staff in as many ways possible to the operational and functional detail of demand response scheduling and dispatching platforms, of on-demand scheduling platforms and of MaaS platforms will place the Authority in the best possible position to navigate technology's rapidly changing, fast-paced world.

New strategies for technology procurement should be actively explored and potentially embraced. Where there are "software-as-a-service" models, for leasing rather than ownership — and these can be capitalized rather than reflected as ongoing operations expense — this approach may best recognize the speed of change in software development. The concept of software as a "vendor" relationship is another strategy of merit for reducing upfront expenditures, as Token Transit has developed with Omnitrans and Riverside Transit Agency, among other agencies.





#### Strategy 3.7 — ZEB Program Compliance

<u>Goal and Purpose Statement:</u> Phase Three will see the procurement and operational implementation of zero-emission buses and the phaseout of the Authority's larger gasoline-powered vehicles.

<u>Discussion:</u> Beginning in 2026, 25% of the Authority's vehicle purchases over 14,000



pounds GVW will be required to be zero-emission buses, increasing to 100% in 2029. Thus, at the end of Phase Three, by 2030, all new larger Authority vehicles being purchased will be ZEB. While the phasing of ZEB procurement should be defined in the ZEB Plan, it is quite likely that the Authority will be receiving its first zero-emission buses late in Phase Three or perhaps even later. This phasing will need to be closely coordinated as it will involve the operation of both conventionally fueled and ZEB fleet for some years, having implications for vehicle maintenance, operator training, storage and servicing, and the management contract, among others.

#### Strategy 3.8 — Mobility as a Service: Information and Customer-Facing Technology

<u>Goal</u>: The complexities of trip planning, reservation making, fare payment and figuring out the logistics of transit often make using a car or getting a ride seem like the easier choice. The goal of MaaS is to combine all of these functions in a simple, user-friendly platform that eliminates these barriers, allows the consumer to make an easy and informed choice among their transportation options, and then books and/or pays for that service with the same interface.

<u>Description:</u> MaaS systems are in use in a variety of European markets, including Helsinki and Paris. Whim (shown in Figure 20), SkedGo (which powered GoLA) and Masabi are a few of the current platforms for MaaS. Figure 20, Example of a MaaS Platform User Screen

whim

<u>PVTA will consider</u> MaaS platforms currently in use that include trip planners that return information about all available modes and allow PVTA consumers to make an informed choice. They allow for booking of on-demand services, car shares and bike shares. They include fare payment for transit and other services — either as a subscription or on a pay as you go basis. And they take the customer through the entire trip planning/making process in a single, customer-focused interface.







The MaaS functionality that PVTA staff will want to ensure going forward includes:

- 1. Information technology translated to an implemented MaaS platform by which riders and prospective riders can readily compare, plan, transact and pay for trips.
- 2. Ensure that scheduling and dispatch software is well-integrated with the MaaS platform.
- 3. Ensure that fare payment option(s) (TAP, Token Transit, other) are well-integrated with MaaS platform.

The back-end of MaaS applications, providing agencies with information about customer trip requests and choices riders consider, will provide useful information to PVTA and its partners, guiding PVTA staff and its Board of Directors in making continuing innovative decisions to aid PVTA current and potential riders, the Authority, its partner cities and regional transportation providers.





# **VIII. MOVING FORWARD**

To move forward with this **PHASED STRATEGIC ACTION PLAN**, **2020** – **2030**, the PVTA organization and its partner must build upon its new Strategic Principles:

Figure 21, PVTA Strategic Principles

	STRATEGIC PRINCIPLES FOR THE POMONA VALLEY TRANSPORTATION AUTHORITY			
Serving the Pomona Valley "as a Place"				
1.	To prioritize and continue to provide quality service to <i>traditional markets</i> within the Pomona Valley of seniors, persons with disabilities, youth and transit-dependent general public persons while pursuing <i>expansion to other target markets</i> within available resources.			
2.	To address <i>seamless travel</i> across the Pomona Valley with consistent service levels and fares.			
3.	To establish <i>convenient connections</i> with regional transit services to facilitate longer distance travel to and from the Pomona Valley.			
4.	To embrace the " <i>Mobility as a Service</i> " approach for the Pomona Valley subregion that will enhance the customer experience by facilitating integrated, multimodal trip planning, trip transactions and trip payment.			
5.	To work in <i>partnership</i> with Pomona Valley's four cities and regional transit providers to coordinate service planning, address infrastructure requirements and pursue competitive grant opportunities.			
5.	To pilot <i>new service approaches</i> to provide riders with experiences that are <i>user-friendly,</i> <i>reliable and cost-effective services</i> .			

To do so, activity must occur in four arenas:

**First**, PVTA staff must continue their immediate activities, highlighted in Phase Zero, to set up the organization and its multi-year contracts for the greatest degree of flexibility to consider, test and mature new service approaches. These activities lay the groundwork for the substantive next steps.

**Secondly,** the Authority's governing body and the PVTA administration must initiate careful discussion of the strategies presented in this document. Each of these strategies is built up from findings about the current and projected service environment. Working from the six Strategic Principles, the PVTA board members and partner cities must decide individually and collectively which strategies they are *interested and willing* to actually pursue and to jointly seek funding for, in relation to:

- Markets traditional and new markets;
- **Regionalism** in terms of topics of service area, trip types, branding and fares;
- Institutional Structures of contracting, zero-emissions vehicle requirements and technology;
- Mobility as a Service of establishing the PVTA organization as a multimodal mobility agency that addresses the needs of Pomona Valley travelers.





**Thirdly**, this Plan envisions greater discourse between PVTA and its large regional transportation partners, specifically Foothill Transit, the Gold Line administrators and to a lesser extent with Omnitrans. The PVTA organization holds considerable operational knowledge and expertise in the kind of flexible, on-demand transportation that can be the critical link to improve the convenience of these regional transportation services for the rider and the potential rider, helping Pomona Valley travelers consider using public transit for some of their trips, sometimes, both locally and across the region.

**Finally**, seeking funding for expanded and new initiatives will be vital for PVTA and all of its partners as it moves forward to realize a vision of a larger role in meeting Pomona Valley mobility goals.





# **APPENDICES**

## Appendix A: March 2019 PVTA Policy Workshop,

## **Invitees, Participants and Summary Notes**

March 2019 Policy Workshop				
Name	Title	City/Agency	Attended	
Corey Calaycay	Mayor	Claremont	x	
Ed Reece	Council Member	Claremont		
Claudia Huerta	Public Works	Pomona	х	
Jizelle Campos	Public Works	Pomona	х	
Tim Sandoval	Mayor	Pomona	х	
Robert Torres	Council Member	Pomona		
Nora Garcia	Council Member	Pomona		
Victor Preciado	Council Member	Pomona		
Lily Perez	Public Works	Pomona	х	
Charlie Rosales	Council Member	La Verne	х	
Bill Aguirre	Director of Community Services	La Verne	х	
Emmett Badar	Council Member	San Dimas		
Ken Duran	City Manager	San Dimas		
Chris Paulson	Assistant City Manager	Claremont		
Cari Dillman	Management Analyst	Claremont	х	
Jeremy Swan	Community Service Director	Claremont	х	
Brittany Mello	Assistant to the City Manager	Monrovia	х	
Joseph Raquel	Planning Director	Foothill Transit	х	
Dorin Barnes	Station Coordinator	Foothill Transit		
Chris Burner	Chief Project Officer	Foothill Gold Line Construction Authority		
Tanya Patsaouras	Station Coordinator	Foothill Gold Line Construction Authority		
Heather Menninger	Consultant	AMMA Transit Planning	x	
Valerie Mackintosh	Consultant	AMMA Transit Planning	x	
Roy Glauthier	Consultant	AMMA Transit Planning	х	
Dennis Brooks	Consultant	AMMA Transit Planning	x	
Selena Barlow	Consultant	Transit Marketing	х	
Roger Teal	Consultant	Demand Trans	х	
George Sparks	Administrator	PVTA	Х	
Nicole Carranza	Sr. Program Manager	Ρντα	Х	
Erika Cardenas	Mobility Manager	Ρντα	Х	
Diana Mendez	Mobility Manager	PVTA	Х	

Table 5, Policy Workshop Invitees and Attendees





### Stakeholder Workshop Input to PVTA Guiding Principles

#### INFRASTRUCTURE

- Fare payment mechanism
  - Linked to regionalism: fare payment needs to be convenient, easy and consistent throughout the region.
- Partner with Foothill Transit and/or cities for facilities and other infrastructure, especially related to Zero-Emission Vehicles.
- Coordinate with Claremont's existing fleet around purchase of, maintenance and charging of electric vehicles and training of staff around electric vehicle maintenance.
- Purchase smaller vehicles to minimize the number of vehicles that need to be replaced by Zero-Emission Vehicles.
- Should we create an electric vehicle facility at each city or consolidate one facility under PVTA?
  What is most cost-effective?
- Should all PVTA services be separated by city or consolidated under PVTA?
  - What is most cost-effective?

#### REGIONALISM

- Winning grants: There is strength and a better competitive edge in representing a larger population and region.
- How can we better partner with Foothill transit and with the cities?
- Fare Payment
  - Paying fares should be easy and consistent across the region.
  - Institute the TAP card?
  - Payment via smartphone?
- Crossing county lines should be easy and convenient.
  - Look at how public travels and access services
  - People come from the four cities and San Bernardino County to services in Pomona.

#### MARKETS

- Baby boomers
- Millennials
  - Many are choosing not to drive.
  - Should this group be our focus? Are they interested in PVTA?
- People who tried transit once and didn't have a good experience.
  - People want easy, step-by-step directions.
- Core, traditional markets
  - People with disabilities
  - Low-income individuals
  - Older adults
  - Focus on this group.
- Middle and high school students
  - Transporting students after school to parks and other opportunities; to summer programs.
  - Foothill transit struggles to meet changing bell schedules.





- TNCs are not always an option; there are safety concerns with youth and TNCs.
- Consider surveying the community
  - We need to know what is and isn't working for residents.
  - What do school districts need?
- University students

#### SERVICE APPROACHES

- Consider new models?
- Need to pursue coordinated connectivity
  - Regional fare
  - Pick-up and drop-off areas at stations to facilitate first-/last-mile options
- Convenience and efficiency
  - o Fewer transfers
  - o Faster trips
- Easy, reliable information
  - App that allows tracking a vehicle (like TNC app)
  - o Trip planning
- Explore TNC subsidy program
  - $\circ$   $\;$  Basic PVTA subsidy as base that cities can augment/customize.
  - TNCs riders must be over 18 to use/order a trip. If under 18, an adult must ride along with the child.
- Implement shuttle service to trains
  - Such as from North La Verne to Gold Line
- Hybrid examples to consider:
  - El Monte's Via partnership
  - o Go Denver
    - Serving before and after school trips in one zone
- Don't focus on bike and scooter share
- Need to understand the benefits of collaboration with cities.
  - Cities have control over customization and fare structure—do they want to give up sovereignty?
- Need 3-year, 5-year, and 10-year planning
- Be wary of over-customization
  - $\circ$   $\;$   $\;$  Understand what PVTA does and do it well.
- Create one Dial-a-Ride for whole service area
  - Consolidated under PVTA
    - Same branding
    - No city boundaries

