



Pilot Program Implementation Guide

May 2023



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Introduction

This guide provides a framework for Lane Transit District (LTD) and its partners to plan and implement effective pilot programs that can be used to test and evaluate new services, programs, and technologies. Drawing on industry best practices and LTD’s previous experience running pilot programs, the guide will help implement LTD’s Mobility Management Strategy (MMS).

Why Pilot?

The transportation industry has seen significant change and investment in new mobility services, programs, and technologies that have the potential to increase mobility, advance sustainability and equity outcomes, and create efficiencies in service delivery. Most of these initiatives are different from traditional transportation services and some are relatively unknown or untested. As a result, public agencies have found themselves asking how to test the effectiveness of these initiatives whilst maintaining customer satisfaction and practicing responsible governance.

The scale of a pilot is generally limited – this could be in terms of its coverage area, the number of vehicles available, its times of service, etc. Pilots are also intended to be temporary with an evaluation process to determine whether the program should be adapted and repiloted, permanently implemented, transferred to another agency or organization, or discontinued.

A pilot is a scaled deployment of a new program, service, or technology to test their performance towards a defined set of goals.

Examples could include piloting a microtransit system to determine if it increases ridership and decreases the cost to transport residents in low-density areas compared to fixed-route transit, or whether a shared micromobility system is an effective first- and last-mile connection to transit, or whether a carshare program allows better access to jobs and services for low-income, car-less individuals.

Pilots give decision-makers and the public a chance to see new programs, services, and technologies in action and to better understand their impacts. Many pilots are created to manage risks before committing to broader deployment that would require additional resources and be more difficult to reverse. They often involve a significant outreach process to understand public perception and gather feedback on program changes that may be necessary to address public concerns.¹

1 Zipper, D. (August 2020). Policy Brief – Urban Mobility Pilots. Harvard Kennedy School – Taubman Center for State and Local Government. Accessed from: <https://www.hks.harvard.edu/centers/taubman/publications/policy-briefs>

Connection to LTD's Mobility Management Strategy

LTD's Mobility Management Strategy includes a decision-making framework that will be used to establish the need for the pilot program and determine LTD's role in supporting new services, programs, and technologies that can further the organization's goals and improve mobility options in the region.

While implementing the Mobility Management Strategy, LTD will be working to deliver new programs and services that will help connect the community. For many new services a pilot program will be how LTD can test the initiative before committing to a full-scale program to ensure that it meets the community's needs. This guide should be used to plan, implement, and evaluate pilot programs and can also be shared with partners in the region to inform their pilot programs.

LTD's Experience with Pilot Programs

LTD has previous experience with pilot programs, but to date has never had any formal guidelines to ensure that pilots are implemented in a deliberate and consistent way. Successful pilots clearly articulate the goals of the program, outline the planning and implementation process, and create an evaluation process that can be used to decide whether to make the program permanent, adjust and continue the pilot, transfer the program to another agency or organization, or discontinue the program.

For more information on the Mobility Management Strategy and decision-making framework, visit www.ltd.org/mobility-management.



Míocar is an electric vehicle carsharing pilot program located at affordable housing complexes in the San Joaquin Valley. Source: <https://www.westerncity.com/article/new-clean-mobility-options-roll-out-arvin>

EmGo

In August 2019, LTD began a one-year electric mobility-on-demand pilot in Downtown Eugene called EmGo. LTD was a funder and technical advisor but implementation was through a partnership with the City of Eugene, Lane County, and the Lane Council of Governments (LCOG). The initial twelve-month pilot provided free service within the downtown area where customers could book trips between over 70 virtual stops using a third-party mobile application.

Status:

The service was suspended indefinitely in March 2020 due to the COVID pandemic and the pilot period concluded in August 2020. Based on low performance in a number of metrics including low ridership, high cost of service, low efficiency, and COVID-19 impacting vehicle load limits, staff recommended that the pilot project be discontinued.

Roles:

- **LTD:** funder, technical advisor.
- **LCOG:** manager, planner.
- **Lane County:** funder.
- **City of Eugene:** funder.
- **Ride Zero:** operator.

Lessons Learned:

This pilot was impeded by a few challenges including requiring the use of a mobile web-app, the large number of stops in a small service area, and the service competing with walking trips in a relatively small service area. These challenges resulted in low boardings per vehicle which meant a higher cost per rider.



LTD Connector – Cottage Grove

The LTD Connector is a mobility-on-demand service being piloted within Cottage Grove and connected to LTD's Route 98 to Eugene. It is owned and managed by LTD utilizing vehicles and technology procured from a third-party vendor, Via, and operated through a contract with South Lane Wheels.

The LTD Connector vans are equipped with 10 seats and two wheelchair bays and can be booked using a mobile app or through a phone call. The service runs Monday to Friday between 9:00 AM and 4:00 PM and costs \$1 per trip, that must be paid in cash.

Status:

LTD is in the process of evaluating the pilot project and determining next steps. LTD has secured funding to continue the pilot through at least July 2025.



Roles:

- **LTD:** owner and manager.
- **South Lane Wheels:** operator.
- **Via:** third-party technology vendor.

Lessons Learned:

This pilot is an example of testing a new mobility service that is similar to LTD's existing services but with a different combination of vehicles, technology, and third-party resources and expertise. The service provides useful intra-community mobility that fixed route service cannot provide due to route design or low frequencies. The mobility-on-demand service is more expensive than fixed route, but less expensive than traditional demand responsive services due to a combination of the efficiencies created by scheduling rides in real-time and the partnership delivery model. The service has also shown higher efficiency and productivity levels (pre-COVID) compared to microtransit services in peer communities.² The pilot also found that the service did not connect well to fixed route transit due to the variability in travel time on the route.

² Card, J. The LTD Connector: Evaluating the Effectiveness of Mobility-On-Demand in Cottage Grove, Oregon.



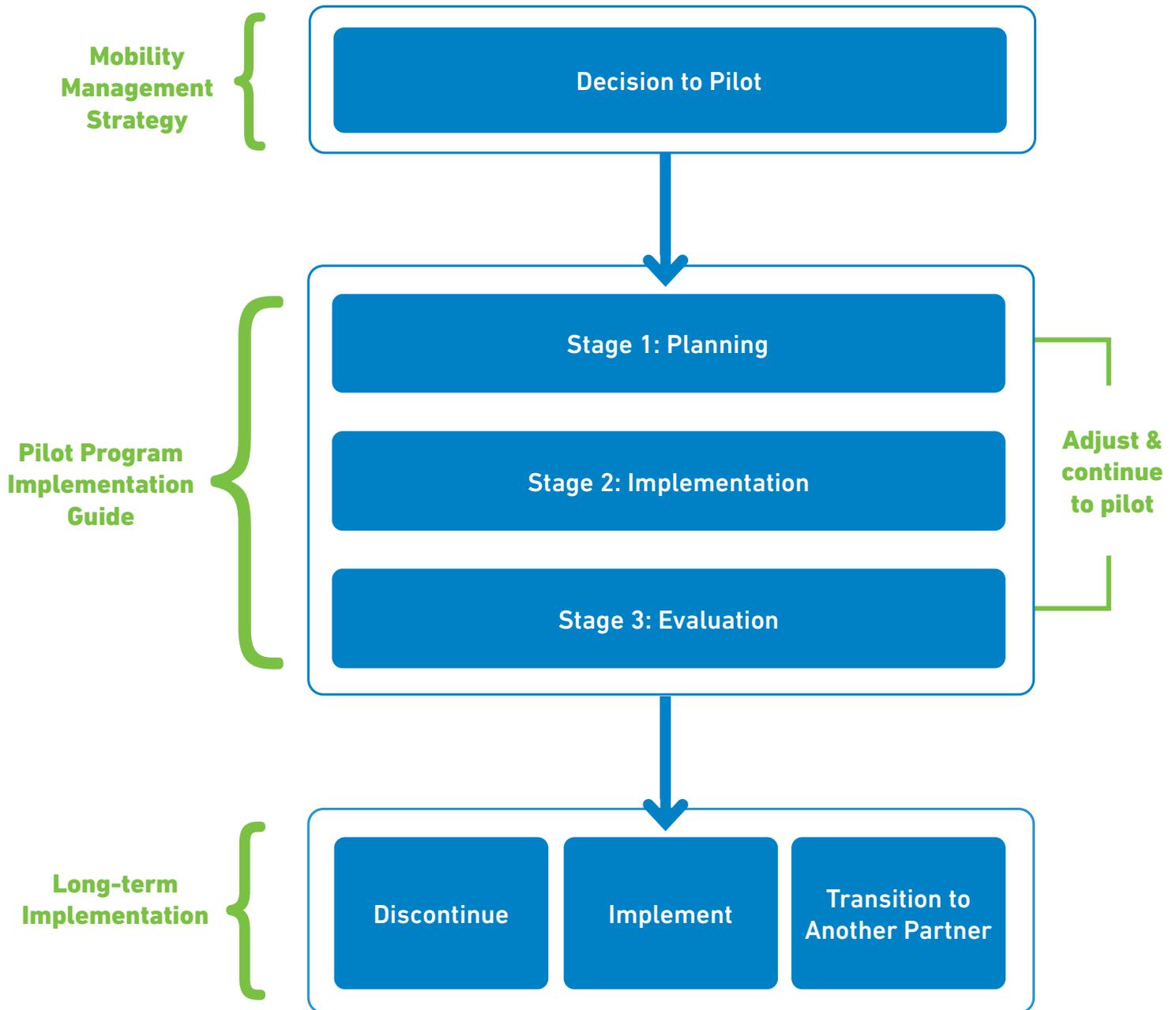


Pilot Program Process

The most effective pilot programs are those that follow a clear process starting with a planning stage to establish the goals of the pilot, a well-managed implementation plan, and a framework for evaluating the pilot and making decisions about its long-term future. It is also important to keep enough flexibility to adjust and refine the program as needed, especially in reaction to unexpected benefits or service issues.

This process is outlined in Figure 1 and this document describes each of these steps in more detail.

Figure 1: LTD's Pilot Process



Stage 1: Planning

The decision to pilot a mobility initiative should be made using the Mobility Management Strategy's decision-making framework. The planning stage should be used to establish goals for the program, better define the roles of LTD and its public, private, and non-profit partners, identify the resources needed for the pilot, and identify other actions needed for implementation.

Stage 1 activities include the following steps, many of which are related to one another and will need to occur concurrently.

Confirm Organizational Model and Roles

This step institutes the recommendations from the MMS decision-making framework and includes transferring responsibility for the pilot program to the LTD department identified as playing the Manager / Coordinator role and identifying a Project Manager to lead the development of the program and organize other departments and organizations in their roles.

- **Transition ownership and identify a project manager.** Based on the approved recommendations from the MMS decision-making framework, the pilot program should be transferred to the appropriate department within LTD that will manage / coordinate the program and identify a project manager that will lead the planning process on behalf of the organization.
- **Internal coordination.** The project manager should coordinate with key staff within the LTD departments identified as playing supporting roles in the pilot program. This will include introducing the project, identifying the project's needs, and working within the organization to build capacity, procure resources, coordinate on compliance and funding issues, etc.
- **Determine partnership agreement, contracting, and procurement needs.** The organizational model recommended for the pilot could include establishing partnerships with other public agencies, non-profit organizations, research institutes, etc. The project manager will need to work with LTD's Business Services department to identify the appropriate form of agreement to work with these partners as well as the process for procuring any new vendors, resources, or services for the pilot.

- **External coordination.** For pilots that rely on partnerships with external organizations, the LTD project manager will need to reach out to confirm the roles and responsibilities for all external partners and work with them to formalize any agreements that are required. The contracting and approval process can take significant time and planning for this early will streamline implementation. The LTD project manager should also consider establishing an advisory group that brings together and coordinate the different partners.

Establish a Funding Model

Funding for the pilot may have already been identified or may need to be identified. Some potential funding sources are listed below. An important consideration is ensuring the eligibility of different funding sources and making sure that funding is secured for both capital and operations.

The funding timeline should also be considered, especially whether funding would still be available if the pilot timeline slips or is extended, or whether the same funding source would be available for long-term implementation of the program. This step also includes determining reporting and compliance needs tied to the funding source. Common funding sources for mobility pilots include:

- **Grants:** LTD can apply for federal, state, and local grants to support a mobility pilot. There are often restrictions on how funds can be spent, e.g., some grants can only be spent on capital. Grants often require some level of local match funding that will need to be found by LTD or other external partners. Examples of federal grants that support mobility pilots are the [Enhancing Mobility Innovation](#) program and [FTA's Accelerating Innovative Mobility \(AIM\) Program](#). Additional resources can be found [here](#).
- **Partnerships:** Many mobility pilots are established through public-private partnerships where each of the parties brings resources to its implementation. These models vary in their levels of public and private sector funding. In some models, a public agency will fund the program and procure equipment and

operations through a contract with a third-party vendor(s). In other models, the public agency allows the use of their infrastructure in return for a private sector partner operating and taking on the financial risk of the service. Funding under these models could also include public agency subsidies, private sector sponsorship, street advertising, philanthropic contributions, and partnerships with power-utility companies (e.g., for electric or solar infrastructure).

- **Post-implementation revenue sources:**

Revenues from the pilot could include user fees and fees charged to private sector vendors for use of public infrastructure such the right-of-way, curb space, parking spaces, or air rights. Pilot programs that are administered through a permit should develop a fee schedule to recoup some or all of the cost to administer the program.

Establish Goals and an Evaluation Framework

Arguably the most important step in the planning process is determining the goals for the pilot program and how it will be measured.

- **Develop a hypothesis.** Pilots should seek to answer a specific set of questions and the hypothesis should be easy to understand and measurable. Decision-making bodies such as the Executive Team, Strategic Planning Committee (SPC), and the LTD Board of Directors should be briefed so they are well versed on the point of the pilot program and the question(s) that LTD plans to answer.
- **Determine pilot program goals and performance measures.** Identifying the goals of the pilot and the performance measures that will be used to evaluate the program upfront allows LTD and its partners to critically assess the effectiveness of the pilot during the evaluation stage. Performance measures should be selected to help measure the hypothesis or questions the pilot is intended to answer. Agencies have used mobility pilots to advance a variety of different goals and policy objectives and some examples are shown on Figure 2.

- **Establish the parameters of the pilot.** This includes determining the scale, size, and timeline for the pilot. These decisions should be undertaken through appropriate consultation with internal and external stakeholders. Pilot parameters should be communicated clearly to the public throughout all phases of the pilot.
- **Develop a pilot schedule.** Once the parameters of the pilot are confirmed, the project manager can build out the pilot program schedule to identify milestones for implementation, program launch, outreach, data collection, evaluation, reporting, and decision-making.
- **Create a data collection, monitoring, and evaluation plan.** The plan should identify the source of any data needed to calculate the identified performance measures as well as key milestones for data analysis, reporting, and evaluation. The data collection plan should identify a clear strategy for transfer and storage of data and put in place any data agreements needed for data sharing. Requesting sample data or a template of the format of the data is useful in planning out data analysis.
- **Protect user and agency data.** LTD should develop policies and strategies to maintain the security of identifiable data. Defining data sharing agreements to protect individual data privacy and considering cybersecurity strategies while releasing data to the public are some practices that could address data sharing issues.



Figure 2: Common New Mobility Pilot Programs and Project Goals³

GOALS	Micromobility	TNC Partnerships	Microtransit	Passenger AVs	AV Delivery
Facilitate first/last-mile connections	X	X	X		
Improve mobility equity and access	X	X	X	X	
Access the viability of new technology	X		X	X	X
Gauge public interest	X				
Achieve environmental or sustainability goal	X		X		
Increase transportation options	X		X		
Fill service gaps/provide occasional or specialty trips		X	X		
Identify potential use cases				X	X
Test the technology				X	X
Be innovative/part of the new economy				X	X
Evaluate and improve safety outcomes	X				
Operate as a replacement for fixed-route service, especially in rural or sparsely populated areas		X			
Increase transit ridership			X		
Learn how city processes, policies, and programs may need to be adapted or AVs				X	

Initiate an Outreach and Engagement Strategy

Building awareness and obtaining feedback from the public is critical to the success or failure of a pilot program.

- Prepare a public engagement strategy.** Pilots are often implemented on a quick timeline which can make meaningful community engagement challenging. A detailed engagement strategy should be developed in coordination with external partners and vendors to identify the primary audiences, key milestones, and techniques that will be used. Engagement should inform stakeholders and the public about the program and provide opportunities for feedback. It should be conducted through all stages of the pilot. It is essential that the engagement strategy collaborate with vulnerable and historically marginalized communities to build trust and transparency between LTD and the communities they serve.
- Develop a marketing and communication strategy.** Building awareness of the pilot program is critical to its success. The marketing and communication strategy needs to clearly message the objectives and potential benefits of the pilot, why LTD is trialing the program, how it will be measured, any changes to existing service, how to use the program, opportunities to engage and provide feedback on the program, and the process for deciding the long-term outcomes of the pilot – including how decisions will be made to return service if the pilot is discontinued.
- Establish a baseline.** Early outreach can include user and community surveys to collect information and set a baseline around existing travel behavior and opinions on the program.

³ Steckler, B. et. al. (2020). [Perfecting Policy with Pilots: New Mobility and AV Urban Delivery Pilot Project Assessment](#). University of Oregon – Urbanism Next Center.

Set-Up

This step includes putting in place any of the policies, regulations, contracts, and plans needed to launch the pilot.

- **Update policies and regulations.** Many new mobility initiatives do not fit neatly within existing policies and regulations. LTD and its partners should review and update any policies and regulations that are inconsistent with the pilot. This process may require coordination with external decision-making groups.
- **Establish expected service levels and compliance mechanisms.** Contracts should stipulate the expected service levels and identify the compliance mechanisms and any financial or other penalties that will be imposed if service levels are not met.
- **Undertake procurement.** The project manager should work with Business Services to draft and issue a permit, RFI, or RFP, review responses, select, and finalize contracts with vendors for any new resources or services needed for the pilot.
- **Develop an installation and maintenance plan.** Some pilots will require purchasing and maintaining equipment. Depending on the type of equipment, the LTD project manager may need to coordinate the site planning and approval process and work with vendors and partners to develop an installation schedule. LTD should also work with vendors to develop a maintenance schedule to ensure public safety and that equipment is maintained in a state of good repair.

Contingency Planning

Pilot program planning should consider all possible outcomes including long-term implementation and discontinuation of the pilot.

- **Plan for the end of the pilot.** Pilots are usually time limited and at the end may become a permanent program, transferred to another agency, or discontinued. It is important that the planning stage considers all possible outcomes and plans for the end of the pilot. For example, it should identify whether the funding sources used for the pilot are ongoing or whether new funding would be needed for a permanent program; or identifying whether equipment can be repurposed, transitioned, or sold if ownership of the pilot is transferred or if the pilot is discontinued.

An Example of Navigating Inconsistent Mobility Regulations

Shared micromobility vehicles are often inconsistently defined and regulated, leaving these services in a legal grey area.

State law may impact how shared micromobility services can be regulated or operated or it may defer to local regulations.

There can also be inconsistencies between local jurisdictions. In areas where multiple jurisdictions are close together, it is important to recognize that shared micromobility vehicles will migrate across boundaries. To ensure a seamless user experience, neighboring cities should discuss and decide when regulations and regulatory structures need to be coordinated and when they can differ.

Source: NACTO Shared Micromobility Guidelines

- **Develop an equity assessment.** This assessment should consider which populations will benefit from the pilot (and any potential long-term program) and which populations could be detrimentally impacted or harmed by impacts to service and what mitigations would be needed to offset these impacts. The assessment should also identify programs that make the pilot more accessible to historically marginalized communities. For example, many mobility programs offer income-based discounts to ensure that the program is more accessible to vulnerable populations. LTD can also advance equity by building it into the policy framework (e.g., including goals and performance measures), centering vulnerable and historically marginalized communities in the decision-making process, reporting and evaluating equity outcomes, and continuing to analyze equity at the end of the pilot and into any long-term program.

Stage 2: Implementation

The second stage is to implement and run the program. It is important during this stage to engage with vendors and operators to address any concerns and to engage with the public and provide regular updates to stakeholders and decision-makers on the progress of the pilot. Some of the operational considerations during this stage are to monitor program performance and enforce compliance as necessary. Key steps during this stage include:

- **Continue to engage the community and pilot users.** Engagement during the implementation stage can be in the form of focus groups and/or surveys that take the temperature of user experience and public perception of the pilot. It is also important to create a mechanism for the public to register concerns about the program. These can inform staff about the key issues and allow them to work with the vendor(s) to troubleshoot or correct problems. Community input is an important source of information about how well pilots are performing and should be collected for ongoing monitoring and the evaluation stage of the pilot.
- **Work with vendors to monitor the program and address concerns.** Regular check-in meetings with vendors and operators can help identify and address issues as they arise and foster a strong working relationship that can benefit both public and private sector partners.
- **Monitor and enforce compliance.** Compliance with pre-determined service levels should be monitored and enforced through incentives and penalties. Examples of service levels could include requiring a microtransit service to provide certain on-time performance or a shared micromobility program to address parking issues within a certain time period. It is important that monitoring and compliance reflect the levels that would be present in the long-term implementation of the program so that operators, partners, and the public can see and evaluate what the future program would look like. The implementation stage should use the data and information shared and collected by vendors to monitor and incentivize/penalize vendors based on their success in reaching the goals of the program.

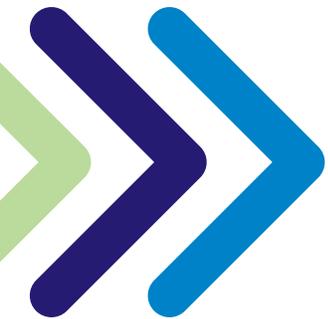
- **Manage program finances.** Part of regular reporting and check-in meetings should be monitoring the financial performance of the program. Financial management may require LTD staff to manage grant funding and compliance, ensure collection of permit and trip fees, and payment to vendors and contractors.
- **Coordinate with internal and external stakeholders.** An important role of the LTD project manager is to provide regular updates to internal decision-makers and external stakeholders. This could include updates to LTD's Board of Directors, the Strategic Planning Committee (SPC), and the Executive Team; as well as regular coordination and convening of an advisory committee or other groups to coordinate external stakeholders who have supporting roles in the program.



Stage 3: Evaluation

The evaluation stage is used to determine if the pilot program met the goals and objectives laid out in the planning stage and decide whether LTD should make the program permanent, adjust and continue the pilot, transfer the program to another agency or organization, or discontinue the program. This stage includes the following steps:

- **Collect program data.** The data needed for the evaluation will be defined in the planning stage and could include compiling vendor data, financial data, stakeholder feedback, and public input. This data needs to be collected, stored, and used within the terms included in any data privacy and usage agreements established during the planning stage.
- **Complete program evaluation.** This step includes calculating performance metrics and assessing them against the goals established in the planning stage. These should be summarized and reported out on a public facing website or final evaluation report.
- **Determine whether the pilot should move into expansion, modification, or termination.** The results of the evaluation should be presented to decision-makers to determine the long-term future of the program. This decision could include making the program permanent, adjusting and continuing the pilot, transferring the program to another agency or organization, or discontinuing the program.
- **Transition the program.** Depending on the outcome of the step above, there will be follow-up actions required to transition the program into a new format. This could include long-term planning and securing resources for a permanent program, updates to the planning assumptions for the continuation of a pilot program, actions to transfer assets and ownership to another agency or organization and define LTD's ongoing role, or actions to dispose of assets, terminate contracts, etc. if the program is discontinued. These actions require staff time and resources beyond the pilot period that should be accounted for in the planning stage.
- **Review and address equity impacts.** If the pilot program is to be discontinued, it is important that any impacts from changes in service are addressed and mitigated with at least a return to pre-pilot service levels.



Case Study 1: Oakland's Universal Basic Mobility Pilot

Status: Stage 3 – Evaluation

OakDOT conducted a 12-month pilot of a Universal Basic Mobility program that distributed 500 prepaid debit cards to residents with \$300 pre-loaded for mobility expenses. The funds could be used for public transportation, bikeshare, and e-scooters.

Stage 1: Planning

- Program goal was to “increase transit, walking, biking, and shared mobility trips while reducing single occupancy vehicle trips near the Bus Rapid Transit corridor”.
- Timeline, budget, and pilot details such as financial incentives and marketing methods were developed.
- Pre-program survey conducted to understand baseline travel patterns, demographic data, and qualification.

Stage 2: Implementation

- Flyer distributed through mailing lists and community partners to promote program.
- Participants received the first \$150 travel credit upon signing up and the second \$150 credit upon completing a mid-program survey.
- Outreach coordination with partners including AC Transit, Oakland libraries, ZEV Action Plan.
- Marketing and education campaign including tabling, community bike rides, and other events.

Stage 3: Evaluation

- Mode shift data analysis (see Figure 3).
- Aggregated, anonymous prepaid card spending data evaluation (see Table 2).
- Identified future funding (proposed setting aside a portion of the parking system revenues and saved expenditures to fund a long-term program).

GOAL: Increase transit, walking, biking, and shared mobility trips while reducing SOV trips near the BRT corridor

BUDGET: \$243K, including \$215K grant from ACTC

TIMELINE: Grant received in 2017, ended December 31, 2021, evaluation in March 2022

METHODS:

- Financial incentives
- Personalized marketing of alternatives
- Evaluation for long-term program

“This program is not just about shifting travel behavior and patterns, but also reducing financial barriers to accessing opportunities and providing relief and rewards to existing and potential transit and shared-mobility users who help our cities and regions meet their clean air goals.”

-OakDOT Transportation Planner

Source: <https://www.smartcitiesdive.com/news/universal-basic-mobility-program-in-oakland-california-provided-lessons-i/621673/>

PEER AGENCY PROGRAMS

Figure 3: Oakland Universal Basic Mobility Survey Results

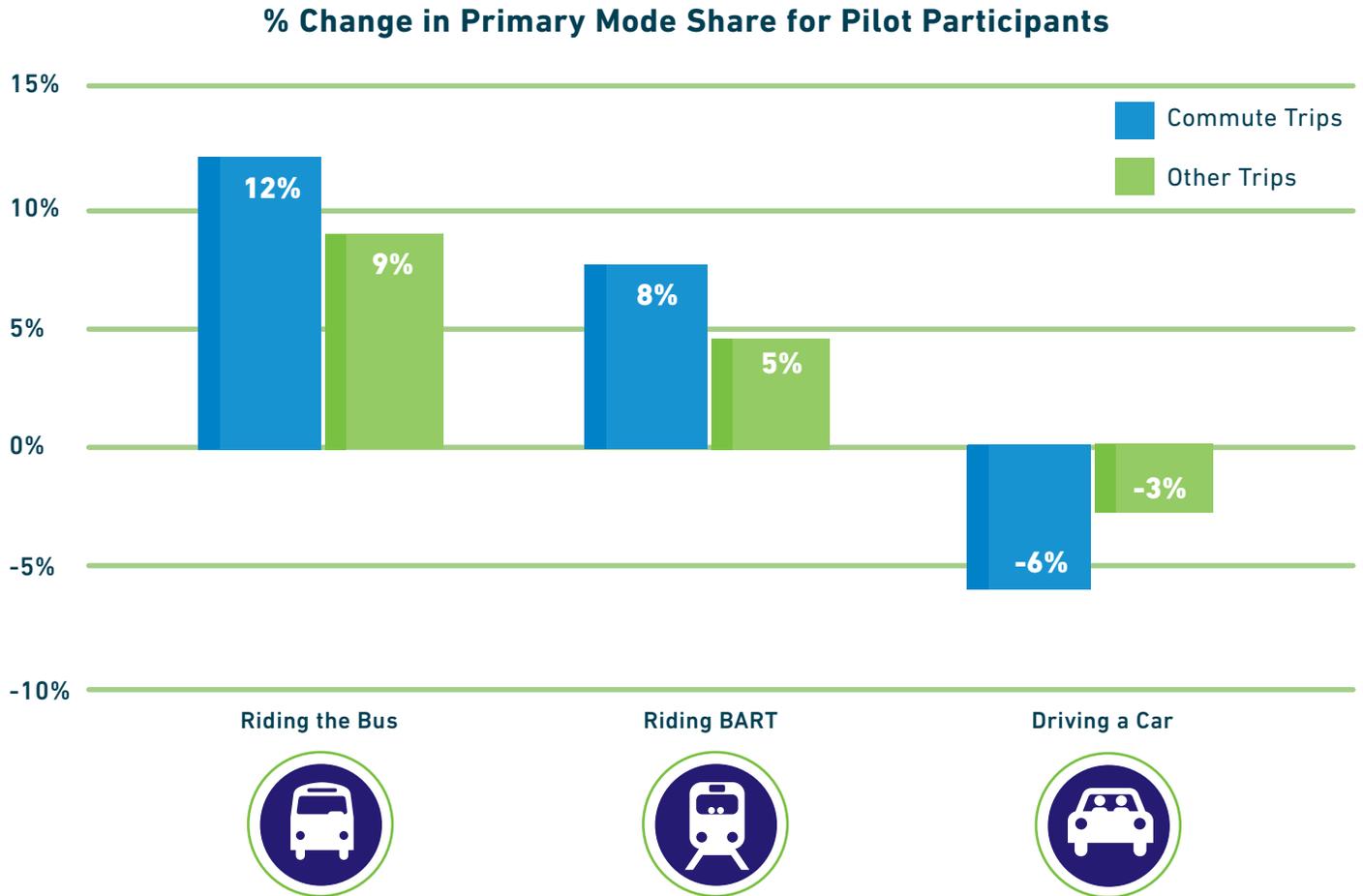


Table 1: Spending Breakdown by Service

Service	Amount	%
Clipper Card / BART	\$8,446	80.5%
AC Transit	\$986	9.4%
E-Scooter	\$702	6.7%
Bikeshare	\$207	2.0%
Other	\$150	1.4%
TOTAL	\$10,491	100%

Case Study 2: Santa Monica Shared Mobility Pilot Program

Status: Stage 2 – Implementation

The City of Santa Monica is overseeing a 21-month pilot program testing expanded shared mobility options. The pilot program allows four companies to operate various mobility devices including e-bikes, stand-up, and sit-down e-scooters in Santa Monica from July 2021 through September 2023.

This is Santa Monica's second mobility pilot and required each company to apply for operating permits as part of the City's updated Municipal Code and [Administrative Regulations](#).

Stage 1: Planning

- Started with learnings from the first pilot program, such as employing daily average fleet availability percentages across all City zones to prevent oversaturation of devices in sensitive and congested areas.
- Outlined program goals were to:
 - › Reduce emissions from short trips and enhance connections to transit.
 - › Ensure use of the public right-of-way benefits public mobility.
 - › Protect public health and safety.
 - › Continue to increase user awareness of safe and legal behaviors for operating micromobility devices.
 - › Prioritize reliability, affordability, safety, and sustainability.
- Additional program goals for the second version of the pilot program were to:
 - › Reduce sidewalk, pathway, and Americans with Disabilities Act (ADA) blockages.
 - › Create an enforceable framework for managing shared mobility services and ensuring operators are responsive to issues.
 - › Maintain flexibility and the opportunity to trial new devices and technologies as the industry continues to evolve.
- Determined program structure including pilot term, device types and system elements, scale of the program, fleet size caps, progressive penalty structure, and operating fees.
- Developed Administrative Regulations and an [application and selection process](#).
- Selection Committee comprised of City staff with at least one expert in shared mobility who was not a member of staff.



The first iteration of the City of Santa Monica's Shared Mobility Pilot proved the popularity of the program, but identified several issues that needed to be addressed. Source: City of Santa Monica

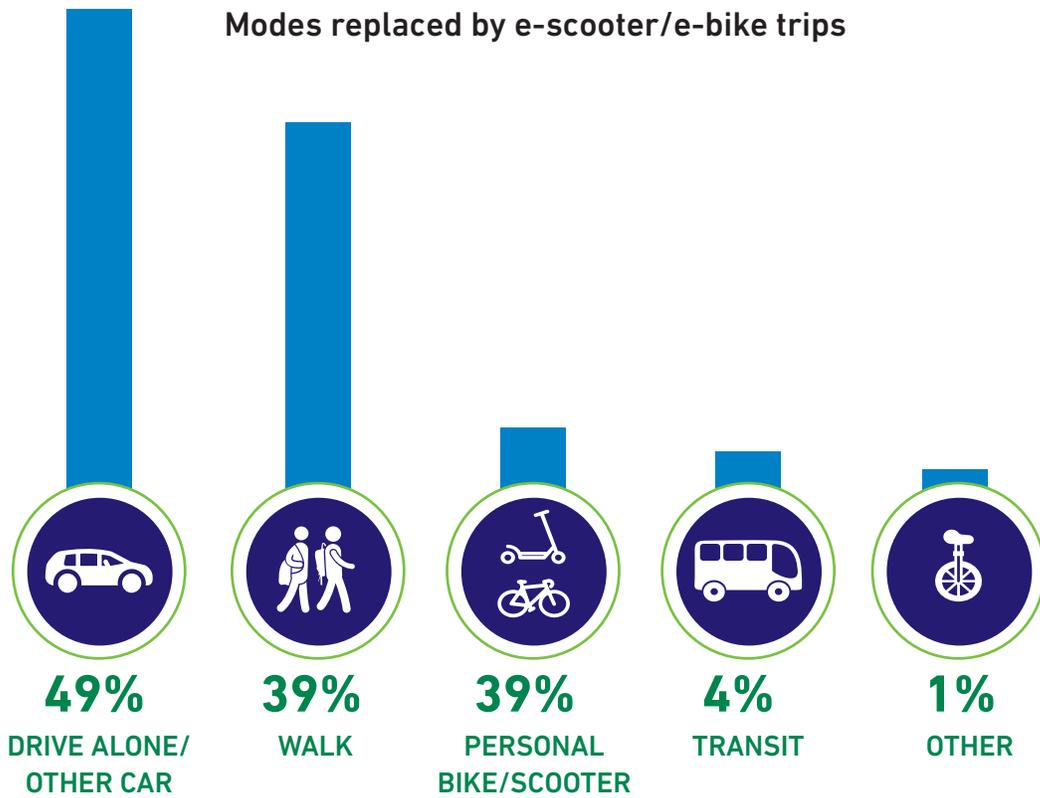
PEER AGENCY PROGRAMS

Stage 2: Implementation

- Performed interim program [evaluation](#) after 9 months of operations with recommendations such as working with operators to lower barriers to entry for low-income individuals.
- Worked with permitted service providers to ensure compliance with the program's Administrative Regulations.
- Worked with operators to address reported violations or to impound devices and issue citations.
- Developing the solicitation and negotiation process for the next phase of shared mobility to begin in 2023.



The City of Santa Monica installed parking zones and sidewalk medallions to encourage better parking behavior and reduce sidewalk riding conflicts. Source: City of Santa Monica



Almost half of trips made as part of the first mobility pilot replaced vehicle trips. Source: City of Santa Monica



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