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Universal Basic Mobility Pilots in Oakland and Los Angeles: Striking a Balance Between Accessibility and Sustainability

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16. Abstract

The Universal Basic Mobility (UBM) pilots in Oakland and Los Angeles, launched in 2021, were innovative initiatives to address transportation equity and access issues in historically underserved communities. These experimental programs examined the impact of providing flexible transportation benefits to low-income residents. However, the current program designs fall short of achieving accessibility and sustainability objectives. Instead, they serve as initial steps in exploring UBM as a potential transportation equity strategy. The report explores the motivation behind local agencies initiating UBM pilots despite existing transportation benefit initiatives, and provides insights from program practitioners on the challenges and opportunities in UBM implementation.

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About the Pacific Southwest Region University Transportation Center

The Pacific Southwest Region University Transportation Center (UTC) is the Region 9 University Transportation Center funded under the US Department of Transportation's University Transportation Centers Program. Established in 2016, the Pacific Southwest Region UTC (PSR) is led by the University of Southern California. It includes the following partners: California State University, Long Beach, Northern Arizona University, Pima Community College, University of California, Berkeley, University of California, Davis, University of California, Irvine, University of California, Los Angeles, University of Hawaii, and University of Nevada, Las Vegas.

The Pacific Southwest Region UTC conducts an integrated, multidisciplinary program of research, education, and technology transfer aimed at *improving the mobility of people and goods throughout the region.* The program is organized around four themes: 1) technology to address transportation problems and improve mobility; 2) improving mobility for vulnerable populations; 3) Improving resilience and protecting the environment; and 4) managing mobility in high-growth areas.

US Department of Transportation Disclaimer

Disclosure

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Universal Basic Mobility Pilots in Oakland and Los Angeles: Striking a Balance Between Accessibility and Sustainability

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Executive Summary

The Universal Basic Mobility (UBM) pilots in Oakland and Los Angeles, started in 2021, were touted as a novel approach to addressing transportation equity and access challenges within the historically underserved communities of East Oakland and South Los Angeles. Designed as an experimental initiative, these pilots aimed to explore the impact of providing flexible transportation benefit dollars through a debit card to low-income residents.

This report addresses two fundamental questions: What drove local agencies to initiate UBM pilot programs despite existing transportation benefit initiatives? What reflections do program practitioners offer regarding the opportunities and challenges in implementing Universal Basic Mobility programs?

The analysis comprises a document review and four practitioner interviews with program managers and researchers involved in the OakDOT and LA Metro pilots. Two main topics were explored to delineate the impacts and goals of subsidized transportation benefit programs: existing transportation benefit programs and Universal Basic Mobility pilot programs. A comparison was drawn between the Washington State Transportation Initiative (TI) TANF Transportation Grant program, and the Los Angeles Metro Low Income Fare is Easy reduced fare program with the Oakland and Los Angeles UBM pilots.

The practitioner interviews provided observations into pilot evaluation processes, implementation strategies, and challenges faced. Interviews were conducted with program managers and researchers, focusing on key pilot metrics, data analysis difficulties, administrative hurdles, automobile benefit flexibility, and future research opportunities. Connecting the groundwork laid by the document review and practitioner interviews, the key takeaways from the Universal Basic Mobility (UBM) pilots in Oakland and Los Angeles led to reflections on the program design and challenges such as:

1. Future Research Directions:
The UBM pilots at OakDOT and LA Metro serve as research, shedding light on the efficacy and challenges of implementing Universal Basic Mobility initiatives. Evaluations were conducted in partnership with research institutions like UC Davis and UCLA and designed to yield findings for program managers and transportation planning academic researchers. However, issues such as participant attrition in both pilots posed significant hurdles to program operations and data collection. The programs offer insights into the impacts of UBM on participant mobility, accessibility, and well-being, contributing to the small collection of academic research on the topic. Despite the limited research on UBM pilots, ongoing evaluations and planned comparative studies promise future research. The forthcoming comparison between LA Metro's UBM Mobility Wallet program and the Low-Income Fare is Easy (LIFE) program in 2025 could provide data on the cost-effectiveness and impact of UBM initiatives compared to traditional

transportation benefit programs. Further exploration of benefit flexibility and cost-benefit analyses will be crucial for informing the design and implementation of future UBM programs.

2. Program Administration Challenges:
Participant attrition emerged as a significant operational challenge for the OakDOT and LA Metro UBM pilots. While LA Metro managed to mitigate this issue by replacing unresponsive participants from a waitlist, OakDOT struggled due to limited staff capacity, capturing only 46% of available participants in the UC Davis study. These challenges underscore the need for robust strategies to maintain participant engagement or an investigation of the program design that leads to attrition. Both are necessary to ensure the integrity of program evaluations for future research. Additionally, administrative complexities, such as misclassifying benefits as income and the distribution of prepaid debit cards, posed significant hurdles for both pilot programs. LA Metro implemented the benefit as a general welfare exclusion under IRS guidance with board approval, which was later followed by OakDOT. Both pilots faced challenges with the roles and responsibilities of benefit debit card activation, replacement, and transaction dispute issues, highlighting the need for streamlined administrative processes and improved communication between program administrators, third-party vendors, and participants.

3. Flexibility in Benefit Usage and Ethical Considerations:
The inclusion of rideshare expenses in the LA Metro Mobility Wallet program sparked discussions around the ethical implications of limiting low-income participants solely to transit options. The OakDOT pilot was directed as a strategy to reduce single-occupancy vehicle usage and did not encourage the use of rideshare services for mobility. While the flexibility in benefit usage was seen as a positive aspect by the Los Angeles pilot, both pilot program managers raised concerns regarding program alignment with the clean transportation goals of the supporting grant fund and the potential impact on greenhouse gas emissions.

The UBM pilots in Oakland and Los Angeles offered an intriguing research avenue for transportation researchers and planners. They provided subsidies to low-income residents to alleviate transportation expenses during the pilot phase. Despite encountering implementation hurdles, the UBM pilots brought and will continue to bring information for policymakers and practitioners striving to balance low-income resident accessibility with sustainability goals. Ongoing evaluation and collaboration are imperative for understanding the efficacy and cost-benefit of UBM programs to cater more to the needs of low-income residents and planning professionals.

In summary, the current design of these programs falls short of fully addressing the dual objectives of accessibility and sustainability. Instead, they serve as initial steps in exploring UBM as a research opportunity to understand a potential transportation equity strategy.

Introduction

Interest and investment in Universal Basic Mobility programs have sprung up across cities in the United States as pilot programs operated by local governments and transit agencies. Universal Basic Mobility is a guiding principle to reduce the barriers to mobility for all of income, ability, race, gender, age, etc. Agencies have interpreted UBM like Universal Basic Income strategies and created programs to distribute money to low-income residents to spend solely on transportation.

Two cities, Oakland and Los Angeles, started their UBM pilot programs in 2021 and continue to operate their programs at the publishing of this research. The Oakland Department of Transportation Universal Basic Mobility Pilot and Los Angeles Metro Mobility Wallet Pilot referenced UBM to encourage sustainable transportation or greater accessibility, which resulted in the programmatic choice to distribute a flexible transportation benefit for spending to eligible low-income participants. This paper uses universal basic mobility and mobility wallets interchangeably to refer to the flexible transportation benefit. Both pilots took advantage of the experiment and brought collaborative opportunities to research the impacts on transportation insecurity, accessibility, mode shift, and more for low-income program participants and a control group. In the program's operation, practitioners described challenges in participant attrition in the case of Oakland and overwhelming participant spending on rideshare in the case of Los Angeles.

The document review of Universal Basic Mobility programs and alternative transportation benefit programs compares approaches meant to support low-income individuals with a subsidy but mutually support different goals such as job retention or reduced automobile use. In conjunction with the document review, Oakland and Los Angeles UBM pilot practitioner interviews led to an evaluation of the rationale, cost, and results of their respective programs, often calling on the other pilot as inspiration or a lesson learned. The interviews with both program managers revealed that their respective UBM pilots aimed to promote sustainability over participant accessibility with the intentional inclusion or exclusion of automobile cost benefits. The spirit of experimentation through the pilot is reinforced by the program managers's enthusiasm to compare the UBM pilot impacts to existing reduced fare programs and on the study of transportation insecurity.

The design of the OakDOT and Los Angeles UBM pilots in their current form is neither fully committed to addressing true accessibility or true sustainability through the program nor offers the agencies an opportunity to experiment with UBM as the early adopters of a new transportation equity strategy. The analysis centers around two questions: What encouraged local agencies to create subsidy programs like UBM pilot programs in Oakland and Los Angeles when transportation benefit programs already exist in both cities? What do program practitioners see as opportunities and challenges in implementing Universal Basic Mobility pilot programs?

Research Methods

I conducted a document review and four practitioner interviews with program managers and researchers who worked on the OakDOT and LA Metro pilots. The document review covered research on the burden of transportation costs on low-income individuals and on different transportation benefit programs, including UBM. Sources included academic journals and grey literature, such as program evaluation reports.

Document Review

The document review includes two main topics: existing transportation benefit programs and Universal Basic Mobility pilot programs. Two approaches are reviewed under existing transportation benefit programs: a low-income reduced fare program and a Temporary Assistance for Needy Families (TANF) transportation grant program. The selected low-income reduced fare program example is the Los Angeles Metro Low Income Fare is Easy (LIFE) program due to its slated evaluation compared to its LA Metro UBM Mobility Wallet counterpart by the UCLA and UC Davis Institute of Transportation Studies. Furthermore, reduced fare programs are a widespread strategy across transit agencies to assist low-income residents and encourage transit usage, as LA Metro's LIFE program operated for years before the LA Metro UBM pilot started. As an example of a TANF transportation grant program, the Washington State Transportation Initiative (TI) is part of the state welfare program to assist clients with job retention by providing transportation vouchers for gas, vehicle repairs, registration fees, and transit fees to eligible participants. TI was selected to compare the programmatic goal of reducing transportation costs for accessibility over sustainability. The existing transportation benefit programs juxtapose methods to assist low-income residents with transportation costs.

Under the topic of Universal Basic Mobility pilot programs, a single peer-reviewed research article on a previous UBM pilot is highlighted. Most of the documents on UBM is based on grey literature like programmatic reports on UBM pilots. The case study analysis of two ongoing UBM pilots, the LA Metro's Mobility Wallet pilot program and the OakDOT's UBM pilot programs, are some of the most extensive UBM pilot programs in the United States. The analysis reviews the transportation planning goals that led the agencies to consider a new pilot to provide government subsidies for transportation costs. Both programs have provided several quantitative and qualitative research reports on the outcomes and impacts of the distribution of UBM funds to participants. However, due to the lack of extensive published research, there is no substantial critique of the cost-benefit of UBM pilot programs.

Practitioner Interviews

Interviews with OakDOT and LA Metro pilot program managers and researchers provide additional understanding of implementation challenges. I interviewed four practitioners from the LA Metro Mobility Wallet and OakDOT UBM Pilot programs to understand the pilot evaluation process and the choices that led to the implementation strategy of the program. The interviews included one program manager and researcher from the Institute of Transportation

Studies, UC Davis, from both OakDOT UBM Pilot and LA Metro Mobility Wallet Pilot, for four interviews. A program manager from the OakDOT UBM Pilot, Angela Sanguinetti from UC Davis's Institute of Transportation Studies, Brian Harold from UC Davis's Institute of Transportation Studies, and Avital Shavit from the LA Metro Mobility Wallet Pilot were interviewed for the analysis.

The interviews were scheduled for one hour, and I followed a list of questions (below):

- What are the pilot metric goals or outcomes?
- What are the data analysis difficulties (i.e., sample size, data quality)?
- From the data of the various pilots across California, what stood out to you as the most promising impact of UBM programs?
- What has been one of the most significant administrative hurdles with distributing the transportation benefit?
- How did the program accommodate customer support for limited English speakers, technology-troubled, or unbanked/underbanked?
- What was the rationale for including or excluding ride-hailing as one of the options for participants?
- Are there any future opportunities in the field of UBM or Mobility Wallets that you find interesting?
- Is there a data point you want to capture in future studies relating to UBM?
- Any surprises from the data from the programs?

I also asked additional questions about program challenges and successes. The program manager interviews were conducted to assess trends in the concurrent programs, best practices, and vision for long-term implementation. I included questions for the researchers to discuss their participant evaluation instruments and the methodology for the evaluation.

Document Review: Existing Transportation Benefit Programs

The landscape of transportation benefit programs for low-income individuals is diverse, with various approaches to address mobility challenges and reduce financial burdens. This section describes existing programs such as the Washington State Transportation Initiative (TI) and the Low-Income Fare is Easy (LIFE) program by LA Metro. These programs offer insights into the effectiveness of different subsidy models, ranging from transportation support services to reduced-price fare programs. Examining these established initiatives aims to understand their impact on job retention, access to essential services, and overall transportation equity. Furthermore, I explore the rationale behind implementing these programs and their implications for future transportation strategies, including the UBM pilot projects. Through this review, I seek to contribute to the ongoing discourse surrounding transportation equity and sustainable mobility solutions.

Transportation Benefit Programs in Comparison to UBM

Government agencies have addressed the transportation cost burden for low-income people by implementing different subsidy programs. The rationale of comparing two other approaches, a reduced fare transit agency program, and a TANF grant transportation welfare benefit, is to better understand why agencies invest in new programmatic strategies like UBM when other models exist. Los Angeles Metro Low Income Fare is Easy (LIFE) was started in 2018 as a reduced fare program that mirrors many programs operated by transit providers in cities across the United States. The operators provide free or reduced fair service to eligible participants to encourage ridership for the agency. The Washington State Transportation Initiative (TI), which started in 2015, is a rare example, as few statewide welfare programs offer a transportation grant through the Temporary Assistance for Needy Families (TANF) program. However, this program was selected due to its transportation benefit flexibility to include gas, vehicle registration fees, and vehicle repair vouchers to assist participants in retaining jobs, which is not covered by either of the universal basic mobility pilot programs discussed here, but provides significant accessibility and spending flexibility by including automobile expenses (Grengs, 2012), (O'Regan & Quigley, 1998).

Temporary Assistance for Needy Families (TANF) Transportation Grant Program: Washington State Transportation Initiative (TI)

The Washington State Transportation Initiative (TI) was spearheaded by the state's Department of Social and Health Services and the Economic Services Administration (DSHS and ESA) in 2015. TI aims to alleviate barriers faced by WorkFirst Welfare clients living in transportation deserts (see Figure 1, below) by offering various services including gas cards, car repairs, licensing and fees assistance, public transportation vouchers, and mileage reimbursements in conjunction with state welfare resources. Through comprehensive evaluations conducted by the Washington State Department of Social and Health Services Research and Data Analysis Division, the impact of TI has been meticulously assessed. Washington State's approach to transportation support under welfare services is uncommon across other states. Receiving TANF funding and waiving requirements of the vehicle as an asset of over $1,000 in 1998 has proven difficult (Office of Unemployment Insurance, n.d.). States determine whether welfare eligibility is affected by the valuation of vehicles for public benefit eligibility. For example, California has allowed cars not to be considered for CalFresh eligibility ("Vehicles Do Not Count as a 'Resource' in the CalFresh Program" 2015). Several social welfare policy organizations have called for a repeal of the restriction as the costs do not reflect financial flexibility for low-income households ("States' Vehicle Asset Policies in the Food Stamp Program | Center on Budget and Policy Priorities" 2001). Expanding transportation support services under TI has yielded minor improvements in work participation and employment rates. TI operates as a benefit bundled in the welfare program operated by Washington State, which needs approval for each expense compared to a flexible spending amount like UBM used at the participant's discretion.

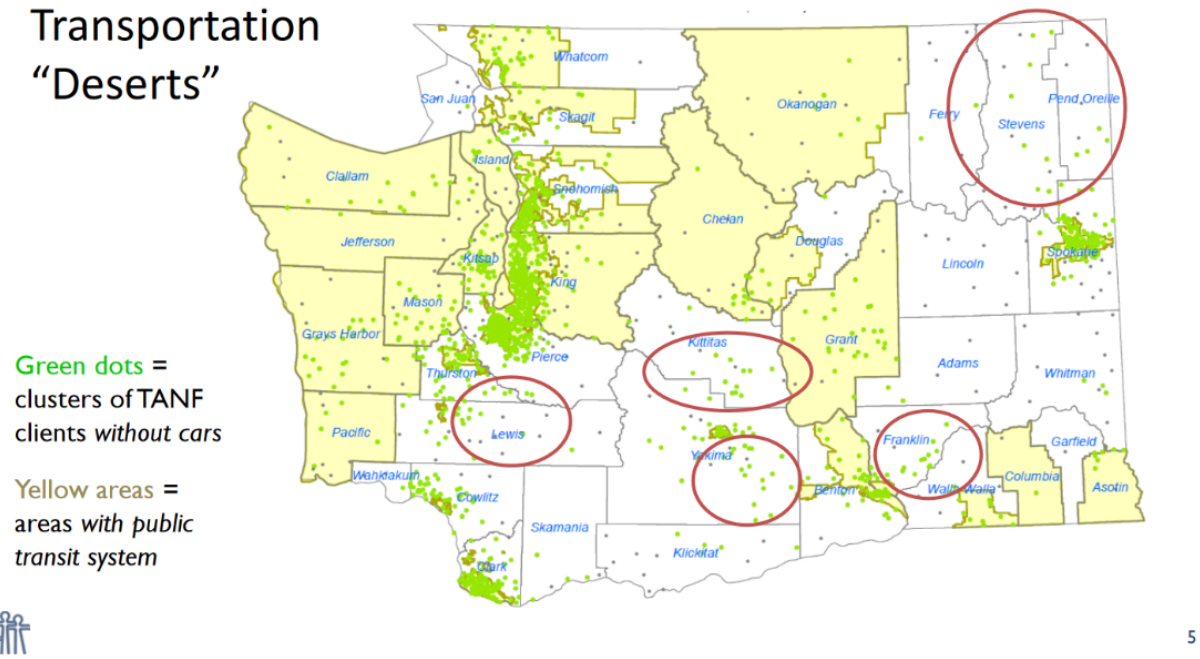


Figure 1: Washington State Transportation Initiative Transportation Deserts

In collaboration with the Economic Services Administration, the Washington State DSHS Research and Data Analysis Division has published reports evaluating the impact of expanding transportation support services for their WorkFirst clients. The study provided 23,500 vouchers for 6,275 clients, totaling $2 million, from January 2016 to June 2019. Car repairs were the most expensive service, followed by licensing and fees; gas cards comprised 82 percent of all vouchers issued and represented 46 percent of all program expenditures. Relative to rural Community Service Offices (CSOs), urban CSOs served more clients and spent more funds on TI-related services on average. By contrast, rural CSOs issued more vouchers on average per client and spent a higher percentage of total expenditures on gas cards and public transportation services relative to urban CSOs (Danielson, Sprague, et al., n.d.).

The expansion of transportation support services under the Transportation Initiative improved work participation and employment rates. For the offices that implemented the TI pilot, work participation rates improved by 1.44%, and employment rates increased by 1.34% in the post-period (Danielson, Lucenko, et al., n.d.). The improvement is slight and not sufficient to label the inclusion of transportation vouchers as the sole solution to job retention, but TI has stayed as a part of DSHS services.

Revealing the Debate on Automobile Costs in UBM Pilots

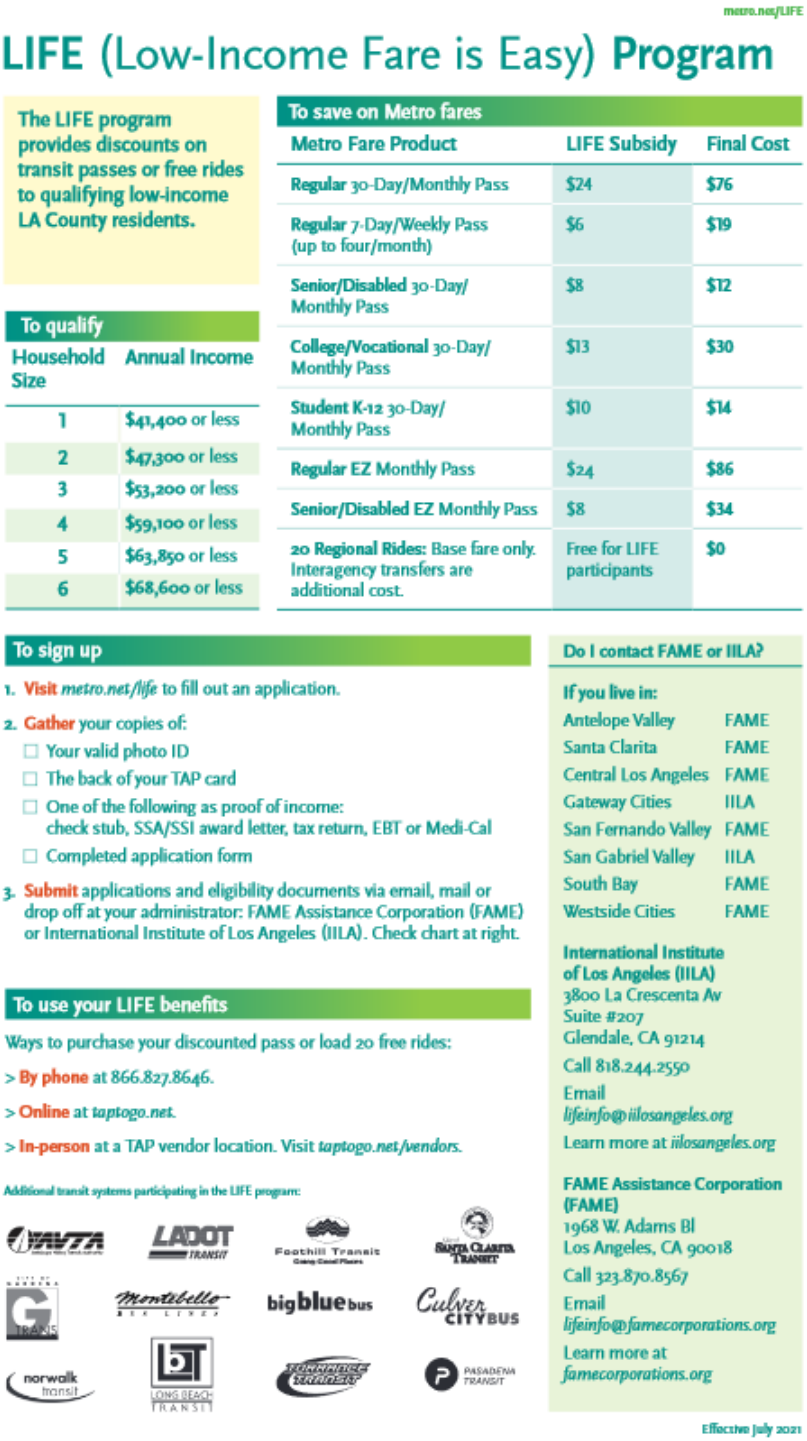
The TI vouchers support transportation needs beyond transit passes or ride share by covering personal vehicle expenses. Reliable transportation is an important factor in job retention for low-income workers, and access to automobiles often leads to greater job access compared to transit (Grengs, 2012), (O'Regan & Quigley, 1998). Meanwhile, the stated guiding principle of

UBM is to provide mobility for all people (ITS America 2023). Both UBM pilots include benefits for transit, micro-mobility, and car sharing, and the Los Angeles UBM pilot covers rideshare expenses, but there is a notable absence of benefits in both programs for low-income automobile users. In the interviews, there was concern from both program managers in Oakland and Los Angeles about the overwhelming use of UBM funds for automobile travel in the Los Angeles pilot. Oakland did not allow rideshare services, as it was counter to their program goal of reducing single occupancy vehicle trips and promoting transit along the AC Transit TEMPO BRT corridor ("City Pilots Universal Basic Mobility Benefit, Oakland, CA 2022," n.d.). The program manager said that using program funds for rideshare was a subsidy for rideshare companies. The Los Angeles program manager was more optimistic about the inclusion and use of rideshare, saying that it was an important data point to observe, and it supported better mobility options for participants to not "trap them on transit when it is a burden." However, the Los Angeles program manager also mentioned potentially enacting incentives in phase 2 of the program to move participants away from the nearly 84% of dollars for rideshare, as the initial funding of the Los Angeles Mobility Wallet pilot program was tied to a California Air Resources Board Sustainable Transportation Equity Project (STEP) Implementation Grant for the goal of increasing sustainable transportation options in South Los Angeles (California Air Resources Board 2023).

The tension between enhancing accessibility by incorporating automobile cost benefits and prioritizing the reduction of vehicle miles presents a valuable research opportunity for further exploration. Moving from examining the TI and its focus on job retention to analyzing the Low-Income Fare is Easy (LIFE) program by LA Metro, we now redirect our attention to another initiative dedicated to alleviating transportation cost burdens and promoting transit usage.

Low-Income Fare Programs by Transit Agencies: Metro LIFE Program

The Low-Income Fare is Easy (LIFE) program, which was launched in 2018 in Los Angeles, was a consolidation of the Reduced Rider Transit Program (RRTP) and the Income-Based Transit Program (INTP) low-income fare programs at LA Metro. The launch of LIFE was to simplify the eligibility processes, requiring verification only once per year, and the integration with the TAP card system, which replaced tokens with refillable cards, to enhance the customer experience for low-income riders. LA Metro is concurrently operating the LIFE and the Mobility Wallet program, slated for a comparative study by the UC Davis and UC Los Angeles Institute of Transportation Studies.



metro.net/LIFE

LIFE (Low-Income Fare is Easy) Program

The LIFE program provides discounts on transit passes or free rides to qualifying low-income LA County residents.

To qualify

Household Size	Annual Income
1	$41,400 or less
2	$47,300 or less
3	$53,200 or less
4	$59,100 or less
5	$63,850 or less
6	$68,600 or less

To save on Metro fares

Metro Fare Product	LIFE Subsidy	Final Cost
Regular 30-Day/Monthly Pass	$24	$76
Regular 7-Day/Weekly Pass (up to four/month)	$6	$19
Senior/Disabled 30-Day/ Monthly Pass	$8	$12
College/Vocational 30-Day/ Monthly Pass	$13	$30
Student K-12 30-Day/ Monthly Pass	$10	$14
Regular EZ Monthly Pass	$24	$86
Senior/Disabled EZ Monthly Pass	$8	$34
20 Regional Rides: Base fare only. Interagency transfers are additional cost.	Free for LIFE participants	$0

To sign up

1. **Visit** *metro.net/life* to fill out an application.
2. **Gather** your copies of:
   - ☐ Your valid photo ID
   - ☐ The back of your TAP card
   - ☐ One of the following as proof of income: check stub, SSA/SSI award letter, tax return, EBT or Medi-Cal
   - ☐ Completed application form
3. **Submit** applications and eligibility documents via email, mail or drop off at your administrator: FAME Assistance Corporation (FAME) or International Institute of Los Angeles (IILA). Check chart at right.

To use your LIFE benefits

Ways to purchase your discounted pass or load 20 free rides:

> **By phone** at 866.827.8646.

> **Online** at *taptogo.net*.

> **In-person** at a TAP vendor location. Visit *taptogo.net/vendors*.

Additional transit systems participating in the LIFE program:

Do I contact FAME or IILA?

If you live in:

Antelope Valley	FAME
Santa Clarita	FAME
Central Los Angeles	FAME
Gateway Cities	IILA
San Fernando Valley	FAME
San Gabriel Valley	IILA
South Bay	FAME
Westside Cities	FAME

International Institute of Los Angeles (IILA)
3800 La Crescenta Av
Suite #207
Glendale, CA 91214
Call 818.244.2550
Email
lifeinfo@iilosangeles.org
Learn more at *iilosangeles.org*

FAME Assistance Corporation (FAME)
1968 W. Adams Bl
Los Angeles, CA 90018
Call 323.870.8567
Email
lifeinfo@famecorporations.org
Learn more at
famecorporations.org

Effective July 2021

Figure 2: Los Angeles Metro LIFE Program Brochure

The Low-Income Fare is Easy (LIFE) Program provides reduced-price fares to qualified households. The head of household can apply and extend the program to the rest of the household. The first 90-day fare is free, and then participants receive 20 free rides each month and a reduced fare on transit passes. Figure 2 (above) shows a promotional flyer for the LIFE program. The program can be utilized on LA Metro and 13 regional transit agencies (Metro 2023). As of September 2023, the LIFE program has supported 17 million free or discounted rides since 2021 and has over 250,000 rider enrollments (Strategic Actions for a Just Economy and Alliance for Community Transit – Los Angeles 2023). However, of the various low-income subsidy fare programs offered by transit agencies across the United States, the LIFE program was the least generous subsidy (Darling et al. 2021). Metro has not published studies or testimonials from the LIFE program participants. However, research is planned to compare the experiences of 1,000 LA Metro's Mobility Wallet program participants and approximately 5,000 LIFE program participants from the same geographic area, shared Los Angeles transportation news Twitter numble (numble [@numble] 2024) Although participant enrollment has reached over 250,000, Metro has stated that 70% of its ridership, about 560,000 individuals, is eligible for the benefit. Non-profit organizations SAJE and ACT-LA conducted a bus rider survey with 113 riders, and while about 94% of the respondents were eligible for LIFE, only 20% had ever heard of the program.

Challenging the Mobility Wallet Pilot's Role in South LA's Sustainable Future

The Mobility Wallet pilot was proposed for a California Air Resources Board Sustainable Transportation Equity Project (STEP) grant to promote clean transportation instead of opting for alternatives such as providing free transit on LA Metro services to a larger population of South LA residents or expanding the outreach strategy of the LIFE program in South LA. The Mobility Wallet program received substantial funding of $4.5 Million for the first two phases through STEP and LADOT. As mentioned previously, many low-income LA Metro riders have not heard of the LIFE program, and it has the potential for expansion to reach more low-income residents (Strategic Actions for a Just Economy and Alliance for Community Transit – Los Angeles 2023). UBM as a low-income transportation subsidy strategy has little supporting research regarding outcomes or impacts as the first few pilots in the United States started planning the projects in 2019 (Sheth 2022). The most recent program results also do not align with the reduction of VMT for clean transportation as the program dollars went to more expensive rideshare trips, although more than half of card purchases were made for Metro Bus and Rail (Tu 2024).

Due to its outcomes related to VMT, the Mobility Wallet program in Los Angeles is out of place compared to the accompanying transportation sustainability strategies of the umbrella South LA UBM program. Compared to OakDOT, which limited rideshare use spending, the majority of fund usage was toward bus and train public transportation (Oakland Department of Transportation 2024) and met the goals of reducing single-occupancy vehicle usage (D'Agostino and Sanguinetti 2022). Through conversations, the Los Angeles program manager notes strong support from LA Metro and LADOT for the Mobility Wallet program due to its impact on transportation equity research and the scale of the program study. The implementation of a monthly payment vs two payments from Oakland is described as a more fruitful opportunity to

understand transportation insecurity. Due to the Mobility Wallet pilot VMT outcomes, the approach is not ideal for sustainability goals compared to investment in the existing LIFE reduced fare program. However, the Mobility Wallet pilot's lasting impact on transportation equity research and its association with LA Metro's identity as an innovative transit agency is revealed as the driving force for continued investment in the pilot.

Document Review: Universal Basic Mobility Benefit Pilot Programs

Universal Basic Mobility pulls inspiration from Universal Basic Income programs, which provide regular cash payments to residents for their discretionary use. Cities across the United States are piloting "universal basic mobility pilots" through the function of a monetary subsidy with flexible spending on transportation options, also referred to as a "mobility wallet." (*Bloomberg.Com,* 2021). The UBM pilots, through each agency, function independently and create their administrative systems to recruit applicants, randomly select eligible participants, distribute the benefit through a debit card, and evaluate the pilot.

The pilots in Oakland and Los Angeles collaborated with UC Davis's Institute of Transportation Studies to conduct an academic analysis of the impacts of mode shift, accessibility, and transpiration insecurity. The goals and metrics of each program were limited to the funding and capacity of each managing agency. As the UBM program space is still "experimental," there is no standardized process or guidance in the operation of the programs, and the program was executed at the discretion of the managing agency.

Research on UBM so far?

Research on UBM and mobility wallets is still preliminary, as the pilot programs in Los Angeles, Oakland, Bakersfield, and Pittsburgh are as recent as 2019 and ongoing. There is currently one peer-reviewed paper on Universal Basic Mobility and Mobility Wallets, Evaluation of a Transportation Incentive Program for Affordable Housing Residents by Tan et al (Tan et al., 2021). at the University of Portland on the effects of a transportation wallet program on access and mode shift. The outcomes were promising, and accompanying reports on the pilot program from Portland increased participants' use of new transportation modes and increased participant access to destinations. In a comparative report from UC Davis's Going Places: A Study of Universal Basic Mobility Pilot Programs (UC Davis Institute of Transportation Studies, 2023) , the more limited the scope of flexible spending, such as Bakersfield only providing funds to Spin micromobility scooters versus Oakland, providing funds to transit, bicycle share, and shared mobility the outcomes for reduced stress were more substantial. The report also noted outcomes of mode shift and increased mode use of both UBM pilot programs in Oakland and Bakersfield.

Due to the program's scale, the most comprehensive study on UBM is still in progress. However, small reports from the Los Angeles Mobility Wallet program that allows rideshare brought relief in utilizing rideshare for services outside peak transit time. The Los Angeles mobility wallet pilot is more like a traditional, universal basic income as it is a monthly payment

for a year compared to Portland and Oakland programs, which were one to two payments for participants. UBM is still a new movement in local and regional transportation agencies that is gaining momentum with multiple goals like increasing accessibility and incentivizing the public to leave their vehicles. There are published reports on mobility wallets or universal basic income pilot program outcomes; however, academic research is ongoing on the effects of the Oakland and Los Angeles UBM pilots (University of California Institute of Transportation Studies, n.d.; Beibei, Branstetter, and Mobility21 2022; Tan et al. 2021).

UBM differs from low-income fare or free transit programs in distributing a 'mobility wallet' to eligible participants. The mobility wallet allows recipients to flexibly spend a fixed monetary amount for their mobility needs for local public transit, regional transit, micro-mobility, rideshare, car-sharing, bike repairs, or even gas and car repairs. The purchase restrictions are defined by the individual agency running the UBM program; for example, Oakland does not allow rideshare expenses, but Los Angeles does. The transit agency often leads reduced or free transit programs to remove financial barriers to utilizing their services. However, it does not award money directly to eligible recipients for flexible spending on services outside the agency. Operators tout UBM programs as an opportunity to address transportation insecurity or accessibility better as they allow users to make transportation decisions based on their needs or desired form of transportation. The impacts of flexible transportation on accessibility and mode shift are still to be determined as more academic research is published.

Case Study Review of Universal Basic Mobility Programs

Oakland's UBM Program and Los Angeles' Mobility Wallet Program were designed to enhance transportation accessibility and promote clean transportation options or transit use within their respective communities. In the following analysis, I explore the rationale, structural frameworks, outcomes, impacts, and challenges encountered during implementing these initiatives. Through the examination, I aim to organize recent results of UBM programs to address participant accessibility needs and program goals.

Case Study Review of Oakland's Universal Basic Mobility Program

The Oakland Universal Basic Mobility (UBM) Program, a strategy to promote alternative transportation modes and reduce single-occupancy vehicle trips along the AC Transit Tempo Bus Rapid Transit (BRT) corridor, underscores the city's commitment to fostering sustainable mobility solutions. This section delves into the program's rationale, structural framework, outcomes, impacts, and encountered challenges, providing an analysis of its implementation in addressing transportation equity and access issues within the community of East Oakland.

Program Structure

The program selected participants in East Oakland from over 1,000 applicants and used random stratified sampling to select 500 recipients across different races/ethnicities in the area. The 500 recipients were provided with a prepaid card with two installments of $150 to utilize with approved merchants to purchase fares on public transit (rail, regional rail, buses, ferries), carshare, and micro-mobility (bikes and e-scooters). The program budget was $243k, including

a $215k grant from the Alameda County Transportation Commission (D'Agostino and Sanguinetti 2022).

Figure 3: OakDOT Universal Basic Mobility Program Promotional Fliers

Results

Most funds were spent on Bus and BART fares, 86%. Unfortunately, Clipper data cannot be disaggregated by mode or agency as it is a reloadable card for automated fare collection across 26 transit systems. East Oakland pilot participants reported driving a personal car and walking significantly less than the control group. Conversely, the participants reported using BART and shared e-scooters significantly more than the control group (D'Agostino & Sanguinetti, 2022). Approximately 40% of participants agreed that the funds changed how they traveled. The pilot program's success has allowed OakDOT to continue a second phase of the program in West Oakland. The pilot also allowed participants to purchase bicycles and bicycle supplies at local shops in addition to the fare for transit and micro-mobility.

Impact

OakDOT conducted several surveys throughout the Universal Mobility Pilot program. As a supporting staff member on the OakDOT UBM pilot, I supported the data cleaning analysis of the Post-Program Survey and the Mobility Wallet Survey for a research memorandum describing the first phase of the program, the East Oakland Universal Basic Mobility Pilot. The Mobility Survey was utilized for intake and participant selection of the experiment and control group for UC Davis's Institute of Transportation Studies survey. In the Post-Program Survey, it was observed that 25% of participants drove alone less after receiving the car, and 51% changed their travel behavior. The Pre- and Mid-Program Surveys indicated an increase in transit ridership and a reduction in driving as the primary mode of transportation. The Mobility Wallet Survey, used as the program intake form, shed light on affordability issues. It reveals that many respondents faced challenges affording their preferred transportation options, with varying percentages for different modes. Public transit, mainly buses, and BART, showed high percentages of affordability concerns. The survey also highlighted that 56% of Mobility Wallet Respondents used public transit as their primary mode of transportation, while 19% relied on a car. Most respondents had a household income lower than $40,000, with 83% identifying as People of Color and 83% responding in English.

Findings from the UC Davis Institute of Transportation Studies study on California Universal Basic Mobility Pilot programs showed a decrease in personal car usage compared to the control group. The UC Davis study utilized the Mobility Wallet Survey and the Mid-Program Survey in addition to qualitative interviews of selected participants. Participants reported increased usage of BART and shared e-scooters, indicating mode shifts. The survey found significant improvements in participants' ability to meet basic needs, maintain employment, nurture social relationships, engage in recreation or exercise, and save money. Economically, around one-third of Oakland participants noted that the mobility programs prevented them from borrowing money, with only a minority experiencing negative economic impacts. The Satisfaction with Life Scale revealed that Oakland pilot participants reported higher life satisfaction in the second survey, with an average score moving from 5.7 to 6.7 (D'Agostino and Sanguinetti 2022). Despite economic concerns from a few participants, overall, the findings suggest positive outcomes and improved quality of life for those involved in the mobility programs in Oakland.

Difficulties

The program's largest hurdle was the fund distribution. The prepaid debit cards were mailed directly to participants and must be activated. The technology and method required much more technical assistance from OakDOT staff and the prepaid debit card vendor than expected, resulting in a lower participation rate than 500 recipients. Many folks had moved, never responded, or let their cards expire. Purchasing prepaid cards was an internal administrative hurdle that required approvals from legal and finance departments to document the expenses for auditing purposes properly. The bureaucracy with the legal and finance departments caused significant delays in the pilot distribution of cards and reporting.

The Los Angeles Mobility Wallet Program is one part of the Universal Basic Mobility (UBM) Program, spearheaded by the Los Angeles Department of Transportation (LADOT) and the Los Angeles County Metropolitan Transportation Authority (LA Metro), aimed at improving transportation access and clean transportation options in South Los Angeles. The program was funded in 2021 by a California Air Resources Board Sustainable Transportation Equity Project (STEP) grant and investment from LADOT, totaling $4.5 million for program implementation (Planning and Programming Committee 2023). The program expanded EV services, local job training for EV facility maintenance, first-last mile pedestrian enhancement, and community outreach to remove barriers to clean transportation options. This section delves into the rationale, structure, results, impacts, and challenges encountered while implementing the Mobility Wallet program.

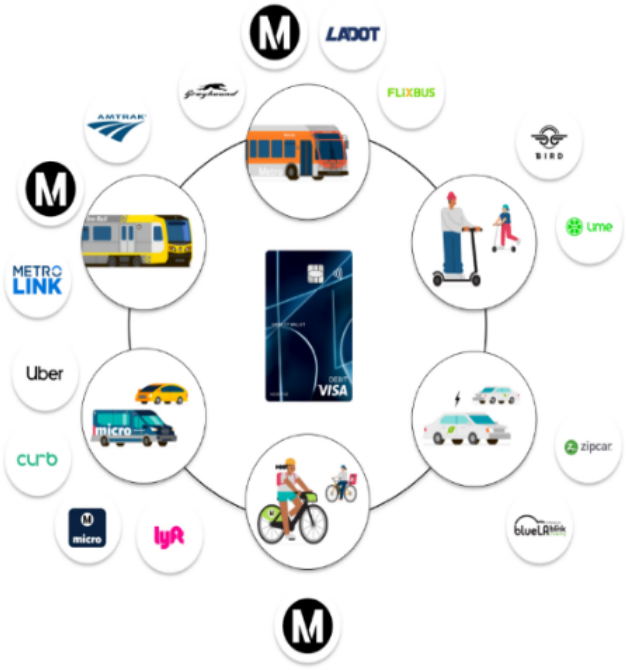


Figure 4: Los Angeles Metro UBM Pilot Services

Program Structure

The Los Angeles Department of Transportation (LADOT) and Los Angeles County Metropolitan Transportation Authority (LA Metro) are jointly running their own Mobility Wallet program under a larger Universal Basic Mobility initiative. The Mobility Wallet program provides a monthly stipend of $150 on a prepaid debit card for 12 months to each eligible participant. The mobility wallet served approximately 2,000 participants in the South LA area for one year, making Los Angeles' Mobility Wallet program the most extensive mobility wallet pilot run by a public agency. The program is differentiated by its inclusion of ride-hailing services in addition to transit, micro-transit, interregional rail, long-distance buses, shared scooters, bikes, bike shops, and electric car share. The monthly stipend is also rolled over if the costs are not spent

in the month. The first phase, $2.5 million funded by CARB and $2 million from LA Metro, was completed, and the second phase will open to another 1,000 South LA residents and 1,600 LA County residents. The Los Angeles program manager mentioned that the third phase may be potentially funded through the federal Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) program (Los Angeles Department of Transportation, n.d.; Tu 2024).

The Los Angeles program manager and researcher discussed participant selection through an open application for eligible low-income residents of selected South LA zip codes that match the South LA Transit Empowerment Zone district. Applicants who met income and resident eligibility were randomly selected to participate in the program, and the remaining applicants were placed on a waitlist and asked to be a part of the control. Throughout the program, attrition caused many applicants on the waitlist to be approved to participate. The Los Angeles researcher mentioned the difficulty of shifting participants from the control to the experiment group during the study period.

Results

Within the program's first six months, nearly 84% (~$502k) of trip purchases were made on ride-hailing services. However, Metro Bus and Rail made 60% of trip purchases. The commute took most of the Metro Bus and Rail spending, and ride-hail was mostly utilized early in the morning and later at night. The average cost of the ride-hail purchases was $20 for each ride. (Tu 2024). The large amount of spending on ride-hailing may also reflect Los Angeles's lack of safe transit options during off-peak times for South LA residents.

Impacts

The Mobility Wallet program has not published a study on its impact on users; plans are underway to compare the impacts of LA Metro's Mobility Wallet program and LIFE program participants from the same geographic area, shared by Los Angeles transportation news Twitter numble(numble [@numble], 2024).

Difficulties

The difficulties for LA Metro’s Mobility Wallet program are like those of OakDOT's, where the distribution of funds proved to require more administrative costs than anticipated. The troubleshooting of cards for spending and setting up the proper merchant codes for purchases was an obstacle. The attrition of pilot participants also caused the researchers to readjust their control population as the waitlisted applicants in the control group moved over to the experiment group.

Practitioner Interviews: UBM Pilot Program Trends

The implementation of Universal Basic Mobility (UBM) programs by OakDOT and the Los Angeles Metro revealed various operational challenges and strategic considerations. In this section, observations obtained from two program managers and two researchers connected to both pilots shed light on the challenges in executing both UBM pilots and provide information

on research findings from the pilots. In synthesizing perspectives from the interviews, key themes emerged, offering perspectives not only on program implementation and evaluation but also on conflicting interests against the guiding principle of UBM. The practitioner perspectives serve as a foundation for understanding the budding landscape of UBM and informing future research and policy endeavors in this evolving field.

UBM as A Research Opportunity

Both UBM pilot programs were planned with research evaluation as part of the implementation. As UBM is still understudied in transportation planning, the programs provided an opportunity to measure the impacts. OakDOT worked with the University of California, Davis: Institute of Transportation Studies, and LA Metro is working with the University of California, Los Angeles and the University of California, Davis: Institute of Transportation Studies. The program managers sought recognition from their respective agencies through the research and the impacts of the UBM pilots. Both program managers acknowledge the role of other UBM pilot nuances, such as payment frequency and the inclusion of rideshare, in understanding transportation equity and UBM impacts on participants. The UBM pilot researchers from UC Davis discussed their interest in the subject as it is still unexplored but will be a part of a new wave of UBM studies. Notably, the UC Davis researchers were more focused on the impacts of transportation insecurity on program participants than on the potential for mode shift or reduced VMT. The researchers shared their survey instruments, which mirror the University of Michigan's Transportation Security Index (Poverty Solutions at the University of Michigan, 2024). The UBM pilot researchers' focus on transportation security outcomes departs from the explicit grant goals of the Oakland and Los Angeles pilots, which are tied to reducing VMT.

Participant Attrition

In the interviews, the OakDOT and LA Metro UBM program managers and researchers mentioned attrition as a significant barrier to program operations. Almost one year after the start of OakDOT's UBM program, only 233 passes were activated out of 500 passes (D'Agostino and Sanguinetti 2022). The LA Metro program was able to replace participants who were unresponsive with individuals placed on a waitlist to keep as close to 1,000 participants as possible. Unfortunately, OakDOT was unable to replace unresponsive participants due to staff capacity. Therefore, the final sample size was closer to half of the anticipated sample size of 500.

Card Distribution and Activation Issues

Debit cards were utilized by both the OakDOT and LA Metro programs to distribute the transportation benefit. Both program managers used a third-party vendor to manage the cards. OakDOT's vendor offered a physical or digital card option, and LA Metro's vendor only offered a physical card option, but noted that a digital card will be considered for phase 2 of the UBM pilot program started in the winter of 2023, inspired by OakDOT's use of digital cards. In both pilots, mailing physical cards proved to be a hurdle. Many participants did not receive the physical card and needed to request a second card from the vendor. There was confusion about who was responsible for assisting participants with card issues like activation, replacements,

and transaction disputes, which were handled by the third-party card vendor, causing communication gaps. The OakDOT program manager said the participants who opted for a digital card were more comfortable trying new technology and required less assistance from the program staff or the third-party card vendor. The LA Metro program manager emphasized establishing a protocol for card issues for participants, UBM pilot staff, and the card vendor.

Administrative Hurdles for Distribution of Benefits Due to Audit Risk

The OakDOT program manager reported that an internal conflict caused significant delays in distributing cards due to the administrative classification of transportation benefits as income. If the benefit were considered income, the agencies would have been liable to provide a 1099 tax form to each participant. Both programs eventually received approval to qualify under the "general welfare exclusion" for the IRS (Bailey v. Comm'r of Internal Revenue, 88 T.C. 1293 1987). The policy and administrative miscommunication caused repeated work for staff and confusion among participants regarding the program's status. The LA Metro Mobility Wallet pilot received a board-approved item to classify the benefit payments not as income under a general welfare exclusion, setting a precedent followed by OakDOT.

Pilot End Dates are Unclear

The longevity of both UBM pilots is to be determined as the programs are funded by multi-year grants -- from the Alameda County Transportation Authority for OakDOT, and from the California Air Resources Board for LA Metro. Both program managers acknowledged that the pilots are an opportunity for a "proof of concept" to create enthusiasm, identify and address difficulties, and measure the impacts of a UBM program that a separate agency can take over in the long term. Neither of the pilots has a set sunset date; the OakDOT UBM pilot is planning for phase 2 starting the summer of 2024 in West Oakland, while LA Metro is expanding the Mobility Wallet pilot in phase 2 in the winter of 2023 to Los Angeles County and is seeking more funding to continue with UC Davis and UCLA ITS research. OakDOT is not pairing phase 2, with academic research, focusing instead on better distribution of funds.

Transit Expenses Yes, Automobile Expenses No

The most significant difference between the Oakland and Los Angeles pilots is the trend of low-income individuals transitioning to automobiles once it is financially available. The tension between providing better mobility and reducing greenhouse gases was mentioned by practitioners of both pilots. Studies have demonstrated that access to a vehicle opens more job opportunities and the potential to keep a job (Grengs, 2012), (O'Regan & Quigley, 1998). The LA Metro program manager emphasized the question: "How universal should universal basic mobility be?" Lower-income individuals tend to travel less by car, often producing fewer greenhouse gases due to budget constraints. Including a rideshare option was seen as a positive for the LA Metro researcher and the program manager. Another theme was whether the transportation benefit should be limited to transit, micro-mobility, and active transportation or whether it should allow gas vouchers, car repairs, and car purchases. OakDOT included bicycles and parts with approved local bike shops. The LA Metro evaluation will compare the impacts of the reduced fare program (LIFE) to the Mobility Wallet pilot in 2025.

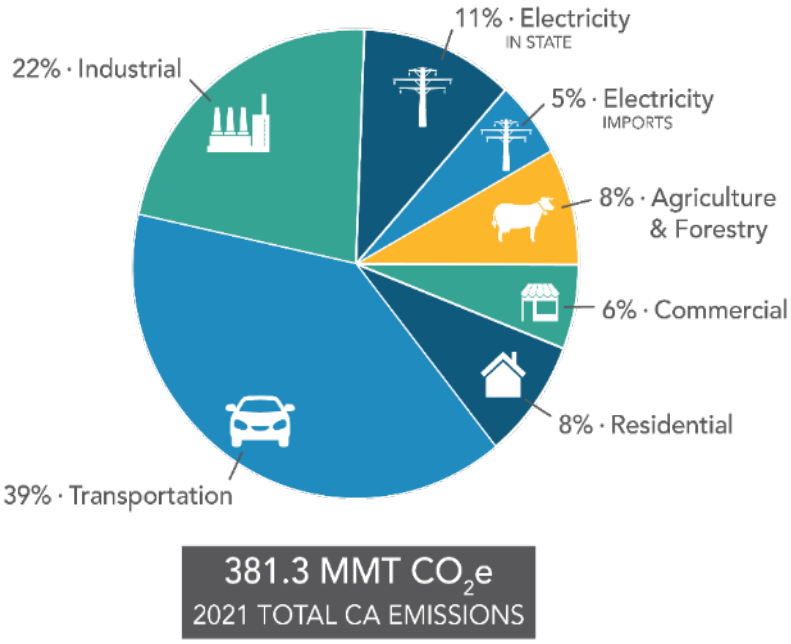


Figure 5: California Air Resources Board 2021 Total California Emissions Breakdown by Sector

Including automobile and gas benefits is considered a tough sell, as the LA Metro program manager noted the heavy use of rideshare expenses in their pilot and how it affects the vehicle miles traveled goals of their CARB funding. However, it is seen as a net positive in improving the overall well-being of pilot participants where public transit cannot meet their mobility needs. California has set the national standard in greenhouse gas emission reduction policies with the passage of Assembly Bill 32 in 2006. The transportation of people and goods accounts for 39% of the total GHG emissions within California, more than its next highest category of industry pollution at 21% (Figure 5; California Air Resources Board, 2023).

LA's Mobility Wallet pilot saw significant spending on automobile rideshare expenses, at 84%. The ethical dilemma of restricting low-income program participants solely to transit options while branding the program as a "Universal Basic Mobility" benefit was a consistent theme. In surveys for both pilots, participants expressed safety concerns regarding transit and noted the relief rideshare provides when transit is not the best choice (Tu 2024). However, the grant funding goals for both pilots were tied to clean transportation outcomes. The OakDOT program manager was not enthusiastic about including rideshare in the program, viewing it as a "subsidy for rideshare companies." Research for UBM pilots is still limited and has not considered the impacts of benefits flexibility or cost-benefit compared to other transportation benefit program models.

Concluding Takeaways from the UBM Pilots

The Universal Basic Mobility (UBM) pilots in Oakland and Los Angeles were promoted as an innovative approach to addressing transportation. Designed as experimental initiatives, these pilots aimed to explore the feasibility and impact of providing flexible mobility benefits to low-income residents. The document review and interviews led to five main takeaways:

1. Future Research Directions:
The UBM pilots at OakDOT and LA Metro serve as research, shedding light on the efficacy and challenges of implementing Universal Basic Mobility initiatives. Evaluations were conducted in partnership with research institutions like UC Davis and UCLA and designed to yield findings for program managers and transportation planning academic researchers. However, issues such as participant attrition in both pilots posed significant hurdles to program operations and data collection. The programs offer insights into the impacts of UBM on participant mobility, accessibility, and well-being, contributing to the small collection of academic research on the topic. Despite the limited research on UBM pilots, ongoing evaluations and planned comparative studies promise future research. The forthcoming comparison between LA Metro's Mobility Wallet program and the Low-Income Fare is Easy (LIFE) program in 2025 could provide data on the cost-effectiveness and impact of UBM initiatives compared to traditional transportation benefit programs. Further exploration of benefit flexibility and cost-benefit analyses will be crucial for informing the design and implementation of future UBM programs.

2. Program Administration Challenges:
Participant attrition emerged as a significant operational challenge for the OakDOT and LA Metro UBM pilots. While LA Metro managed to mitigate this issue by replacing unresponsive participants from a waitlist, OakDOT struggled due to limited staff capacity, capturing only 46% of available participants in the UC Davis study. These challenges underscore the need for robust strategies to maintain participant engagement or an investigation of the program design that leads to attrition. Both are necessary to ensure the integrity of program evaluations for future research. Additionally, administrative complexities, such as misclassifying benefits as income and the distribution of prepaid debit cards, posed significant hurdles for both pilot programs. LA Metro implemented the benefit as a general welfare exclusion under IRS guidance with board approval, which was later followed by OakDOT. Both pilots faced challenges with the roles and responsibilities of benefit debit card activation, replacement, and transaction dispute issues, highlighting the need for streamlined administrative processes and improved communication between program administrators, third-party vendors, and participants.

3. Flexibility in Benefit Usage and Ethical Considerations:
The inclusion of rideshare expenses in the LA Metro Mobility Wallet program sparked discussions around the ethical implications of limiting low-income participants solely to transit options. The OakDOT pilot was directed as a strategy to reduce single-occupancy vehicle usage and did not encourage using rideshare services for mobility. While the flexibility in benefit usage was seen as a positive aspect of the Los Angeles pilot, both pilot program managers

raised concerns regarding program alignment with the clean transportation goals of the supporting grant fund and the potential impact on greenhouse gas emissions.

In conclusion, the UBM pilots in Oakland and Los Angeles represent significant efforts toward research in transportation equity. While facing challenges in implementation, the pilots provided lessons for policymakers, practitioners, and researchers seeking to understand potential mobility solutions that balance participant accessibility and sustainability. Important policy decisions lie ahead for UBM programs, particularly in addressing participant attrition, improving card distribution, navigating administrative delays, and promoting transportation equity and sustainability. These lessons raise questions about inclusive mode design, as removing automobile benefits alongside transit and active transportation raises ethical and practical concerns that require more research. Continuing evaluation and collaboration are essential in refining and scaling UBM programs to serve better the diverse needs of low-income residents and planning practitioners if local agencies seek continued investment into UBM.

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