CONNECT

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> **Executive Summary**

Connecting Low-Income People to Opportunities with Shared Mobility





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Introduction

In the last decade, shared mobility services have taken off across the United States as a complement to local public transit and an alternative to private car ownership.

These services, which include car-share, bike-share and ride-share, maximize the use of vehicles by sharing them among multiple users, encourage more transport options, and aim to reduce transportation costs for users.

As these models have developed, advocates, policymakers and shared mobility operators have explored how the emerging field can more directly benefit low-income individuals, who often face longer and more costly travel times, through pilot programs, research, and other strategies. However, current usage of shared mobility systems among low-income communities remains lower than usage by the general population.

This report is a survey of existing shared mobility strategies and their attempt to expand services to low-income individuals. It is our hope that the findings can inform operators, government agencies, funders, non-profit organizations and others as they try to tap into the potential of shared mobility strategies to improve the lives of low-income individuals.

This document is the Executive Summary of a longer report and is intended to highlight the specific findings and recommendations that resulted from the research. Please see the full paper for more detailed information on shared mobility typologies, the specific barriers that challenge low-income usage of shared mobility, and the strategies currently being tested to address them. Also see the related case studies for further information on 9 different shared mobility programs.

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Findings

This report found that:

Different shared mobility types address different trip needs.
Though linked together by concepts of shared use, efficiency,
and third party ownership, each type of shared mobility presents
different opportunities and addresses different needs. In general, regular daily
trips (such as access to employment or education) require the reliable access
and direct routes of bike-share and ride-share programs, whereas special

purpose trips (such as doctor's appointments or errands) require the flexible routes of bike- or car-share. The distance of a trip and whether a potential user needs to carry materials or packages can also influence which shared mobility type is most appropriate.

Shared mobility is best used as a complement to local mass transit. The advantages of shared mobility suggest that it can help improve the ability of low-income people to travel across geographies by filling the gaps in both traditional mass transit coverage and in the transport network as a whole. Still, shared mobility systems are low-volume transportation alternatives that cannot ultimately compete with the efficiency of high-volume mass transit such as heavy rail and Bus Rapid Transit. While increased investment in mass rapid transit, paired with careful land use planning, holds the best promise for sustainable growth of transportation networks, shared mobility can extend the reach of public transit and provide alternate routes.

"Shared mobility can be used to provide direct access from origin to destination or to address 'last-mile' problems."

In particular, shared mobility can be used to provide direct access from origin



Residents of the Washington D.C. Metro Area have access to Capital Bikeshare, a regional bike-sharing program.

to destination or to address "last mile" problems—i.e., the potentially long distance from a transit station to a final destination. Shared mobility systems can also offer new routes, both providing connections between less common destinations and bringing new transit options to underserved areas (King, 2014).

There is no silver bullet for solving the transportation needs of low-income communities through shared mobility. The reasons why

low-income communities aren't participating in shared mobility

systems are complex and systemic. Accordingly, no single program will be enough to facilitate greater usage by low-income people of shared mobility. Indeed, efforts to ensure low-income individuals benefit from shared mobility systems have been more successful when addressing at least three barriers, such as Boston's Hubway efforts (see Appendix A of the full paper for more detail). Systems that attempted singular solutions, such as offering subsidies without adequate station siting or community outreach, saw little increase in

No Silver Bullet: Efforts need to look at the entire system that shapes low-income participation in shared mobility in order to address multiple intervention points.

low-income participation through their programs. Efforts need to look at the entire system that shapes low-income participation in shared mobility in order to address multiple intervention points.

Core strategies for improving access to shared mobility are similar across shared mobility system types. Though bike-share, car-share, and ride-share programs have diverse uses and structures, the core strategies used to reduce the barriers faced by low income communities can be adopted by any system, regardless of type. Different actors, such as the government, operators, and intermediaries, can initiate and drive these strategies. However, given the nascent nature of the sharing economy, these strategies are still being tested for effectiveness. These core strategies include:

- Targeted siting in low-income neighborhoods, which also requires clear demand from potential users (or efforts to overcome barriers to usage) and incentives for system operators to locate there in the first place.
- Logistical fixes to address procedural steps that present challenges to lowincome individuals attempting to use a shared mobility system.
- Lower costs through discounts or subsidies, which can decrease the
 financial barriers low-income residents face in participating in shared
 mobility systems. Options for lowering costs include reducing or
 eliminating membership fees, reducing usage fees, and waiving overtime
 fees.
- Improved access to financial services through partnerships with local credit unions or banks can also help many low-income individuals meet the requirements to participate in shared mobility systems.

 Outreach programs such as partnerships with community based organizations, assistance in multiple languages and promotional materials that speak to the concerns of target communities can all help promote comfort with and interest in shared mobility systems.

The market for shared mobility transportation is nascent and developing. Since shared mobility is largely a recent innovation, the market for shared mobility services is still emergent, as is the understanding of the regulatory environment. The field is still figuring out how to serve this market, with for-profit and non-profit models steadily emerging to meet the new demand. Yet these business models remain unproven and the market still faces a lot of potential changes. Given this reality, service providers are unlikely to target low-income communities until the market develops further, when operators have a better understanding of sustainable business models and when governments have a better understanding of what regulations and incentives can improve low-income communities' access to shared mobility.

The government has multiple levers of influence and can play multiple roles in bringing shared mobility services to low-income communities.

• A critical player in overcoming both user- and operator-related barriers is government. With its significant formal authority, government can play an important role in guiding and steering the expansion of shared mobility across metropolitan areas. Through both regulation and funding, government can incentivize or simply require for-profit and non-profit organizations to make efforts to serve low-income communities. Within government, different departments may also play different roles influencing the inclusivity of shared mobility systems. As planners, entities such as the transportation or planning departments can identify, suggest, or require locations for station siting. As service providers, public health, social service and transportation departments can act as brokers that connect low-income residents with existing support programs to facilitate participation in shared mobility systems.

Intermediaries have the opportunity to connect users to new opportunities within the shared mobility space. Another important player in overcoming barriers, especially for users, will be third party brokers who help bridge the barriers that keep low-income communities from accessing shared mobility services. Potential intermediaries often have pre-existing relationships with low-income communities and can include advocacy groups, community organizations and even city departments. These intermediaries can identify specific barriers, help devise solutions to overcome them, and advise on messaging and outreach mechanisms (Philadelphia Bicycle Share Strategic Business Plan, 2013). They may also provide new avenues for financial support by tapping into non-transit funds, such as health or community focused grants.

"Government can play an important role in guiding and steering the expansion of shared mobility across metropolitain areas."

Recommendations

This paper concludes with the following 5 recommendations:

Launch pilot projects based on research of the actual transportation needs faced by low-income communities.

• Academic research has in large part focused on access to jobs as the biggest transportation issue facing low-income communities. Less research exists on low-income communities' need to access other essential services and goods that are also important to household well-being and may have long-term implications on moving out of poverty, including access to education, child care and health care. Until we better understand the actual access and mobility needs of these communities, we won't know how far shared mobility can go in improving their ability to access to jobs, affordable housing, health care and other essential services.

Further research should also inform the development of pilot programs which can then be evaluated against a baseline understanding of low-income mobility needs. Testing different approaches and evaluating



There are approximately 150 Capital Bikeshare locations around the Washington D.C. Metro Area.

them against such a baseline can help align resources and efforts around promising models.

Research shared mobility business models, especially those with cross-sector partnerships, to understand how best to reach low-income communities. A better understanding of shared mobility business models can help identify the value proposition for for-profit companies to serve low-income communities and what subsidy or incentive

is needed. A partnership approach with a mix of public, non-profit and for-profit sectors appears to hold the most promise. The public and non-profit sectors are important for structuring shared mobility business models since they can increase demand through reducing user barriers, identifying alternative revenue sources, and providing incentives to operators. If the public sector also takes an active role in guiding, requiring, and facilitating low-income shared mobility initiatives, this could help enable the for-profit private sector to scale-up successful programs without losing considerations for low-income individuals.

Incorporate shared mobility into long term transportation planning.

• Cultivate ride-share programs to guide growth of local mass transit.

Minibus and vanpool ride-share systems, such as NYC's Dollar Vans, are reliable indicators of unmet travel demand. To guide future growth of mass transit, these ride-share systems should be monitored and evaluated.

Use ride-share to connect low-income communities to jobs

Minibus and vanpool ride-share systems have proven to be effective at addressing spatial mismatch issues between low-income workers and their jobs. These systems also have promising models with flexibility to scale as needed since they can operate in low-density areas and along routes where public transit is not a competitor. Ride-share programs between low-income communities and employment centers are a promising strategy to further support and explore.

Explore options for public transit and shared mobility system integration

If public transit stations can also be access points for shared mobility systems, then the reach of both systems can be expanded. Shared mobility systems should also explore integrating fare payment such as with smart cards that enable access across mass transit services. Information sharing between systems, including route and ridership data, could also increase the efficiency of both systems.

Focus on comprehensive, collaborative approaches to barrier reduction. Since multiple interlaced barriers exist that keep lowincome individuals from participating in shared mobility systems, only comprehensive strategies that address several barriers have the potential to succeed at a larger scale. While station siting and physical access are preconditions for system use, costs considerations are also paramount, and outreach is a key component of encouraging usage among those standing to benefit the most from shared mobility's advantages. Failing to address multiple issues limits the impact of well-intentioned efforts. If done correctly, improving access for low-income communities has the potential to increase a system's usage, buoy its public image, and support regional equity.

"A partnership approach with a mix of public, non-profit and for-profit sectors appears to hold the most promise."

Cultivate intermediaries to increase demand for services by addressing barriers. Intermediaries can amplify the results of efforts to reduce barriers. By playing a connector role between users and shared mobility support programs, intermediaries can serve as hubs for shared mobility knowledge and action. They can also potentially conduct user needs assessments since they are often closer to the community. To better leverage existing programs, intermediaries should more actively coordinate their services, including targeted outreach, with system operators.

The Connectors: Intermediaries can serve as hubs for shared mobility knowledge and action.

Conclusion

Shared mobility systems, covering a range of types and uses, are exciting new players in urban transportation and offer a host of new transit options for individuals.

Although initial steps have been taken to open these systems to low-income users, these systems have not as of yet seen high usage by low-income populations. The best way forward for maximizing the potential of shared mobility strategies to benefit low-income individuals is to understand their current travel needs and patterns, streamline and expand successful strategies, and encourage new opportunities to reduce barriers.

Still, shared mobility is only one piece of the greater transportation and mobility system that shapes how low-income people traverse cities and regions. To enduringly improve how low-income communities physically access jobs, housing and other essentials at a larger scale, we need to advocate for better aligned land use and transportation planning, such as

"The best way forward for maximizing the potential of shared mobility strategies to benefit low-income individuals is to understand their current travel needs and patterns..."

how equitable transit-oriented development efforts are currently doing in regions across the country.

We are excited about the promise of integrating shared mobility with transportation and with trends we see of practitioners collaborating across disciplines. We believe that further exploring the recommendations in this brief will help ensure the benefits of shared mobility services are available to low-income residents, enabling them to better access jobs and essential services.

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About Living Cities

Living Cities harnesses the collective power of 22 of the world's largest foundations and financial institutions to develop and scale new approaches for creating opportunities for low-income people and improving the cities where they live. Its investments, research, networks, and convenings catalyze fresh thinking and combine support for innovative, local approaches with real-time sharing of learning to accelerate adoption in more places.

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About ITDP

The Institute for Transportation and Development Policy works with cities worldwide to bring about transport solutions that cut greenhouse gas emissions, reduce poverty, and improve the quality of urban life. Cities throughout the world, primarily in developing countries, engage ITDP to provide technical advice on improving their transport systems. ITDP uses its know-how to influence policy and raise awareness globally of the role sustainable transport plays in tackling green house gas emissions, poverty and social inequality. This combination of pragmatic delivery with influencing policy and public attitudes defines our approach. Most recently, ITDP has been instrumental in designing and building the best bus rapid transit systems in the world.

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