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Transportation Equity Through Bikeshare



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Issue

Many cities are turning toward more sustainable modes of transportation as they adopt initiatives and policies to reduce greenhouse gas emissions and improve quality of life. Active transportation is at the center of this shift as city residents untether themselves from car travel and take up walking and cycling as alternatives.

One of the most effective alternatives to vehicular travel are bicycles, specifically electric bicycles. Cycling offers several mental and physical health benefits, and e-bikes dramatically reduce physical barriers to cycling through the addition of an electric motor that aids the user in propelling their bicycle.

Bikeshare programs have been active in North America for decades as an accessible option for those who do not want the costs and responsibilities associated with bicycle ownership. As the need for bikeshare funding increases, some cities are turning to alternative bicycle incentive programs (any program that incentivizes the increased adoption of bicycle use) to promote cycling modal share. Government bodies are capitalizing on the rising popularity of e-bikes and cycling in North America by designing and implementing these programs in the form of purchase subsidies, leasing and ride-to-own programs, and low-interest loans.

Methods

The researcher conducted a survey of the available research on bikeshare and created a report on the findings from various studies and analyses of bikeshare systems. Articles and reports included both qualitative and quantitative research on over 100 bikeshare systems worldwide.

Semi-structured interviews were also conducted with representatives of seven bicycle incentive programs in North America: five purchase subsidy programs, one lending library, and one free community pass for the local bikeshare program. The information gathered from interviews was used to form conclusions and create policy suggestions for future programming.

Findings

- Bikeshare systems are entering a post-COVID era that will determine their viability in the future. With the ebb and flow of private capital and bikeshare's reliance on for-profit models, these systems will need public funding if they are to become sustainable, reliable, and resilient arms of our public transit systems.
- There is currently a surge in the bicycle market, particularly for e-bikes, following the COVID-19 pandemic and the increased exposure it brought to active transportation among the general public. People

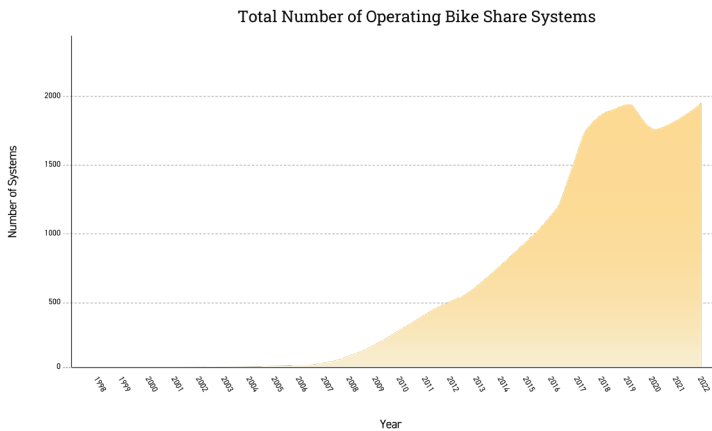


Figure 1. Bikeshare Systems in Operation: 1998-2022

are purchasing e-bikes at an enormous rate and local, regional and state governments are taking advantage of this radical shift toward more sustainable and accessible transportation through bicycle incentive programs.

- In order to have the greatest impact and encourage adoption of cycling, programs should be run in unison. The most popular and effective bicycle incentive programs (bikeshare, purchase subsidies, lending/leasing) work best when implemented simultaneously. Each program builds off the other to quickly and effectively increase the number of bicycles in public. Studies confirm that greater diversity in cycling and a greater number of bicycles on the street create a safer and more accessible environment for all cyclists, further encouraging bicycle use and fulfilling climate goals.

Conclusions

- Community-based organizations and local bike shops are invaluable resources for bicycle incentive programs because of their industry knowledge and experience. They also tend to have existing relationships within the community that incentive programs require to be successful.
- Funding is often the largest barrier that incentive programs face. Grants are the primary funding pathway for the programs researched for this report. Ideally, more cities will see the value in these programs and divert funding to them from other sources.
- Bikeshare programs have the potential to play an integral role in public transportation systems, and cities should divert more funding to maintain and increase access to bikeshare. Programs will continue to wrestle with access barriers as long as their funding structures rely primarily on private corporations.
- E-bikes come in an increasingly large variety of types and models. The e-bike market is still experiencing growing pains and there is a lack of proper regulation in North America, often causing difficulties for program organizers and confusion for participants. If e-bikes and cycling are to be a sustainable and resilient mode of transportation for the future, there must be clear regulation on safety and industry standards for manufacturers.



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