

Bike Share System & User Responses to COVID-19

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Acknowledgements

- The authors appreciate contributions of J.D. Simpson, Executive Director of San Antonio Bike Share, who co-developed the survey instrument, disseminated the survey, and provided data on response rates.
- This research was supported in part by the United States National Science Foundation (NSF) under award number 2016717.



Research Aim

- Determine the current and future impacts of COVID - 19 on bike share systems by reviewing bike share system responses in major cities and the results of a survey disseminated by San Antonio Bike Share to its local users.

Methods

- System analysis** conducted regarding COVID-19 responses implemented by bike share entities in 11 major U.S. cities.
- Survey** distributed to San Antonio Bike Share members in May 2020 to quantify local system users’ understanding of the use and preferences during and after the COVID-19 pandemic, receiving 125 responses.

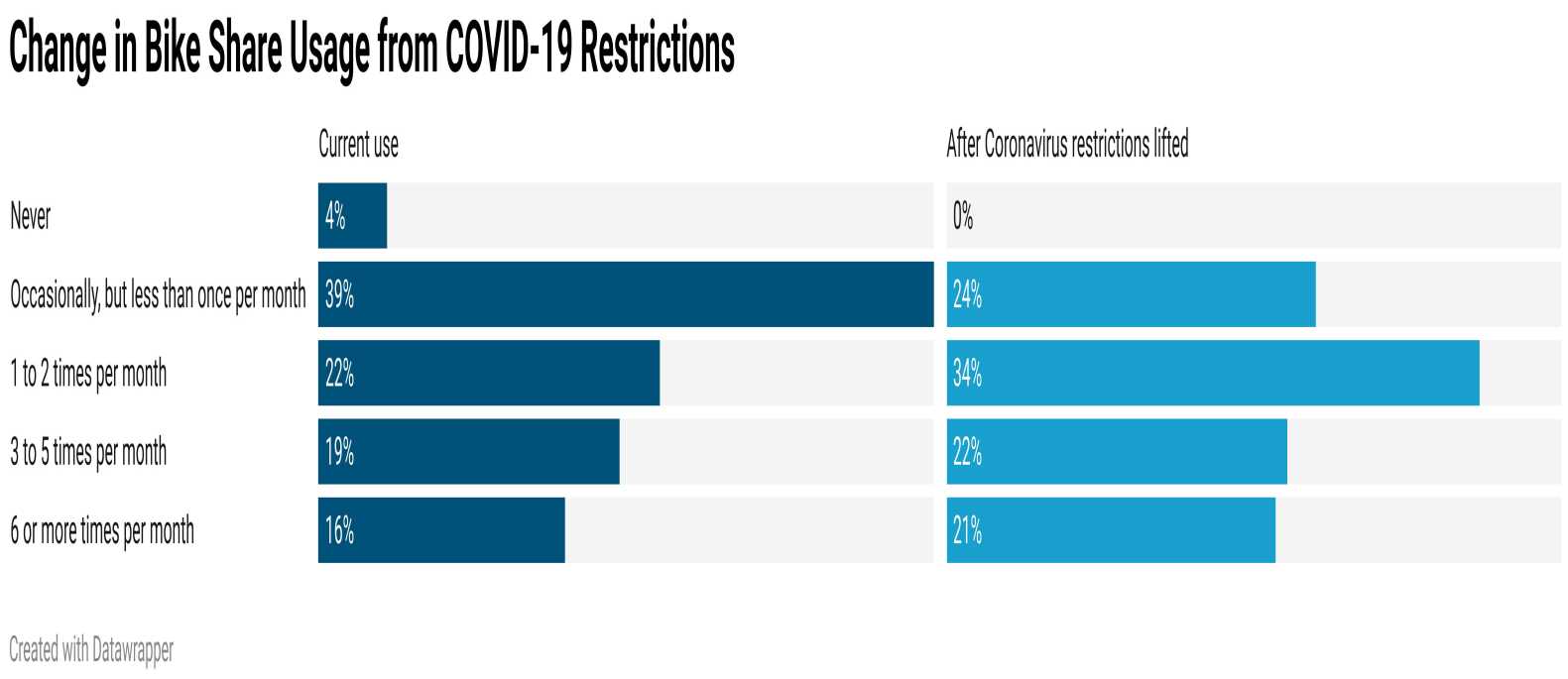
System-level Results

- 5 out of the 11 cities** examined directly posted their response to COVID-19
- 3 cities included CDC guidelines** for using bike shares and **2** had simply **mentioned** following CDC guidelines to improve user safety.
- Cities with high bicycling rates normally tended to decrease** bicycle miles traveled during the pandemic.
- Analysts with Streetlight Data show that **bicycling decreased less than car travel** in these locations (Grogan & Hise <https://www.streetlightdata.com/corona-bicycle-metrics/>).

City	Bike Share Entity	Posted Response	CDC Guidelines Present	Change in Bicycle Miles Traveled, May 2019 – May 2020
Boston, MA	BlueBikes	Direct Response	Yes	0% to -35%
Chicago, IL	Divvy	None	N/A	0% to -35%
New York City, NY	Citi Bike	Direct Response	Yes	0% to -35%
Philadelphia, PA	Indego	Link to City Response	No	0% to -35%
Portland, OR	Biketown	None	N/A	0% to -35%
Washington D.C.	Capital BikeShare	None	N/A	0% to -35%
Austin, TX	Austin BCycle	Direct Response	Mentioned	+ 1 to 19%
Los Angeles, CA	Metro Bike Share	None	N/A	+ 1% to 19%
Houston, TX	BCycle	Direct Response	Yes	+ 50% to 89%
Phoenix, AZ	Grid Bikes	None	N/A	+ 50% to 89%
San Antonio, TX	San Antonio Bike Share	Direct Response	Mentioned	+ 50% to 89%

Desktop System Analysis of Bike Share System Response to COVID-19 and Changes in Bicycling by Metro Area (Grogan, Hise 2020).

User Survey Results



Change in Bike Share Usage from COVID-19 Restrictions:
All categories received an increase in usage except “Never” or “Occasionally”

- 26.1%** of respondents reported that their **usage of San Antonio Bike Share had actually increased** during the COVID-19 pandemic.
- Lower-income** respondents (<\$30k annually) suggested practical issues such as “**Make prices more accessible** and provide **longer rent time**”.
- Higher-income** respondents (\$100k annually) tended to mention system-level improvements addressing **bicycle maintenance** and “**increase bike lanes**”.

Contributions for Micromobility

- Public communication is key for safe use in a pandemic.
- People unemployed by the pandemic may increase ridership the most.
- Survey results suggest post-pandemic bike sharing increases will be significant.
- More research on transportation policy and equity are needed.

New paper in *Transportation Interdisciplinary Perspectives* with Greg Griffin

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