

Bike Share System & User Responses to COVID-19

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San Antonio Bike Share implemented a 7-point response to COVID-19. Photo SA Bike Share <https://sanantonio.bcycle.com/top-nav-pages/contact/covid-19-update>

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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.

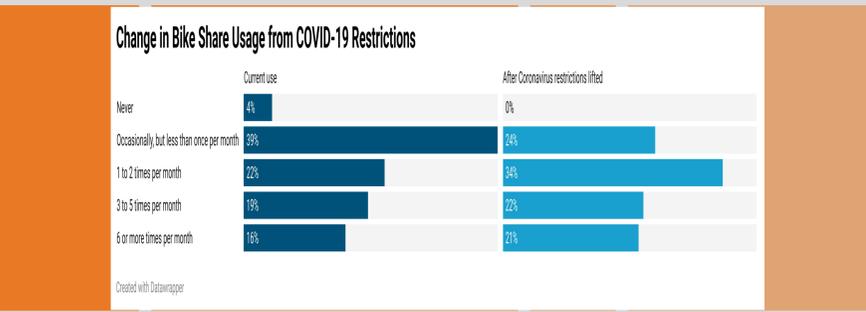
System-level Results

- 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

