St. Louis Bike Share Feasibility Study

Executive Summary

Is St. Louis ready for bike share?
Across the nation, more than thirty cities such as Washington, DC; Kansas City; Indianapolis; Denver; and Chicago have implemented public bike sharing programs. Great Rivers Greenway, with many public and non-profit partners, has completed a feasibility and implementation study conducted by Alta Planning + Design to evaluate whether or not a bicycle sharing system is financially and operationally feasible in St. Louis.

What is a bike share system?
A bike share system is a network of shared bicycles available for short-term use - usually 30 to 45 minutes. As a membership-based or daily pass program, riders check out a bicycle from a network of stations, which are usually placed within a ¼-mile to ½-mile radius of each other. They ride to a station nearest their destination, and then safely dock the bicycle for someone else to use. The major difference between bike sharing and bike rental is trip duration. Bike rental programs are typically designed for longer recreational rides, while bike sharing programs emphasize shorter errands or trips from point A to point B and the last mile of a commute. Bike share programs also aim to increase transportation options by helping people move quickly about their neighborhood or connect with the larger community without using a car.

What are the benefits it could bring to St. Louis?
Even a medium-sized bike share system (300-800 bikes) can bring significant benefits to the City and communities in St. Louis County. In mid-sized cities like Minneapolis, up to 25% of users reported using bike share instead of driving their car or taking a taxi. Another benefit is public health as the thousands of trips taken every month help to burn millions of calories with active transportation. Finally, bike share is good for business. In other cities, businesses located next to bike share stations in other cities report improved sales, especially eating and drinking establishments.

Who would own and operate a bike share system in St. Louis?
Based on the results of the feasibility study, the recommended model for a bike share system in the St. Louis region is a non-profit ownership with operations performed by the non-profit or contracted out to a private bike share operations company. Bike share ownership is a better fit for a non-profit 501(c)3, whose Board would be comprised of key political, corporate, institutional and community leaders and organizations. This model offers involvement of numerous stakeholders, neutral governance, the ability to raise sponsorships and donations, and the ability to reinvest profits in expansion over time and operational improvements. Comparable examples are Pronto Cycle Share in Seattle, Nice Ride Minnesota in Minneapolis/St. Paul, and San Antonio B-Cycle.
Stakeholder and Public Feedback Results

Residents of the region and organizational stakeholders have provided substantial input and feedback through various sources, including: the Technical Advisory Committee (public agency planners); the Citizen and Business Advisory committee (residents and business representatives); the project website; two focus groups; and two surveys. Through the surveys, more than 1,400 people shared their thoughts about potential bike share system goals, station locations, usage patterns and barriers.

St. Louis residents view all bike share goals as important.

The highest priorities for Bike Share Program Goals as identified by survey respondents are:

1. Enhance the public transit network
2. Use bike share to leverage more bike infrastructure
3. Increase physical activity to benefit public health
4. Improve St. Louis’s image to attract new residents and businesses
5. Increase number/safety of cyclists on streets
6. Promote travel to landmarks, parks, trails and shopping districts
7. Improve air quality and reduce motor vehicle traffic
8. Increase access to job opportunities and education
9. Serve visitors and tourists to maximize revenue
10. Expand mobility options for low-income neighborhoods

How would St. Louis residents use bike share?

Through the bike share survey, over 1,000 St. Louis residents gave feedback on how a bike share system in St. Louis would be used. 63% are likely to use bike share, and most of these respondents anticipate using the system on a weekly basis.

Residents indicated that the top three ways that they would use bike share are:

1) Traveling to entertainment
2) Traveling to special events
3) Running errands

Based on survey results, the top three barriers to using bike share are:

1) Certain places require a car due to distance
2) Lack of bike infrastructure in certain areas
3) Weather concerns
Proposed Service Area and Phasing Strategy

Defining the bike share service area, station density, and phasing considers a number of factors including 1) the level of demand, 2) system equity, and 3) community input. The overall framework for this analysis is the understanding that the desired bike share program is one large enough to provide an additional transit option for a significant portion of St. Louis and portions of St. Louis County (compared with other cities where bike share systems serve the downtown area only). Analysis maps that present relative demand, the need for equity, and the community’s desired station locations are all factored into the recommended phasing plan below.
System Cost and Revenue Estimates

The major costs associated with a bike share system are start-up costs (including launch and capital costs) and operating costs. Launch costs are mostly one-time costs that include hiring employees, procuring a storage warehouse, purchasing bike and station assembly tools, site planning, permitting, bike and station assembly, station installation, website development, communications and IT set-up, and pre-launch marketing. Capital costs cover the purchase of stations, kiosks, bikes, and docks. Capital costs vary depending on the equipment selected (high cost range for steel plate/dock-based stations vs. low cost range for bike-rack based stations with smart-locking bikes). Operating costs include station maintenance, bike maintenance, rebalancing (moving bikes from full to empty stations), customer service, and direct expenses such as operations facility maintenance, spare parts purchases, software upkeep, communications and IT, insurance, and membership database management.

Potential revenues include user-generated trip and membership fees as well as grant funding, private foundation contributions and donations, advertising and/or sponsorship, and other sources. Some systems record a high-enough demand such that user revenues cover the cost to operate the system (e.g. in Washington, DC and Chicago). While this is not possible in every city, user-generated revenues will likely provide a significant level of income (40-50% of operating costs) in St. Louis.

The five year financial forecast for low and high equipment costs includes 540 bicycles for Phase I in the first two years and 810 bicycles for Phases I and II in years 3-5.

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<th>2</th>
<th>3</th>
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<tr>
<td># of bikes</td>
<td>540</td>
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<td>COSTS</td>
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<td>operating costs</td>
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<td>TOTAL COST</td>
<td>$2.7–4.2 million</td>
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<td>$3.2–4.0 million</td>
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<td>REVENUE PROJECTIONS</td>
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<td>user generated revenue</td>
<td>$0</td>
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<td>$0.8 million</td>
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<td>SPONSORSHIPS, DONATIONS, ADVERTISING, AND OTHER REVENUE NEEDED</td>
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<td>$2.7-4.2 million</td>
<td>$0.8 million</td>
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TOTAL COST (5 year cumulative): $12.4-14.7 million
TOTAL USER GENERATED REVENUE (5 year cumulative): $4.0 million
TOTAL FUNDING NEEDED (5 year cumulative): $8.4-10.7 million