

*The Economics of Land Use*



## Draft Report

# City of Santa Monica Bicycle Sharing Analysis

Prepared for:

The City of Santa Monica

Prepared by:

Economic & Planning Systems, Inc.

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*Economic & Planning Systems, Inc.  
2295 Gateway Oaks Drive, Suite 250  
Sacramento, CA 95833-4210  
916 649 8010 tel  
916 649 2070 fax*

*Berkeley  
Denver  
Los Angeles  
Sacramento*

**[www.epsys.com](http://www.epsys.com)**

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# 1. EXECUTIVE SUMMARY

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This report presents research and analysis by Economic & Planning Systems, Inc. (EPS) as a subconsultant to Fehr & Peers for the Santa Monica Bicycle Sharing Study. EPS has explored sources of funding for capital and operating expenses, estimated the costs of operations based on case studies, prepared illustrative cash flows of user revenues compared to operating costs, and explored best practices in securing sponsorships for bike sharing systems.

## Project Overview and Summary of Findings

- The City of Santa Monica (City) has received grant pledges totaling \$2.1 million from Metro (\$1,543,000) and the Southern California Air Quality Management District [SCAQMD] (\$500,000). In combination with some local funding and in-kind staffing from the City, those grants are anticipated to fund up to 35 bike sharing stations and 350 bicycles, but are intended primarily for capital costs. Based on other bike share systems' capital costs, the funding available to Santa Monica should be more than adequate for the 350-bike system.
- Numerous business models have been implemented by bike sharing systems throughout the world. In the United States, the most common is one in which a nonprofit organization operates the bike sharing system using revenues from user (rider) fees, sponsorships and advertising, governmental grants, and private donations.
- Santa Monica's SCAQMD grant application indicates that the City itself, rather than a nonprofit organization, expects to acquire and own the equipment, while contracting with a qualified operator to run the program day-to-day. This approach is similar to the one used in Washington DC, Boston, and Chattanooga, TN, and expected to be used in New York City and Chicago.
- The SCAQMD grant application reveals an expectation that user fees, sponsorships, and advertising revenues are expected to fully cover the costs of Santa Monica's bike share operations. This result has been achieved by some bike share programs, such as Nice Ride Minnesota and Denver B-cycle, while others have had to attract government funding to support operations.
- Based on operating costs observed in other American bike share systems, EPS projects that Santa Monica's 350-bike system will cost roughly \$840,000 per year to operate, including costs incurred by the owners and operators of the system which may be some combination of the City, a nonprofit, and an operating company such as Alta, B-cycle or Bixi.
- Based on user fees achieved in other American bike share systems, EPS projects that Santa Monica's system will generate between \$226,000 and \$387,000 per year from riders under the "baseline" ridership model prepared by Fehr & Peers. These figures represent 27 to 46 percent of the expected annual operating costs, within range but slightly lower than the average that has been achieved by bike share systems in Denver, Boulder, Minneapolis, and Arlington, Virginia.

- The projected annual operating deficit is estimated to be roughly \$453,000 to \$614,000 per year, and would require some combination of sponsorships or advertising revenue, governmental grants, and private donations to close the funding gap.
- Other systems have pursued sponsorship funding in a variety of ways, ranging from in-kind advertising “swaps” to advertising on bikes and equipment to full-scaled naming rights for the entire bike share program. Systems similar in scale to Santa Monica’s have had success with attracting sponsors in initial years of operation, but securing long-term commitments may prove challenging. Santa Monica is fortunate to have identified potential supporters for the bike share program, and should continue to explore numerous sponsorship opportunities, including reaching out to the city’s major employers and the region’s major healthcare providers.

## 2. CASE STUDIES ON BIKE SHARING SYSTEM ECONOMICS

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This section of the report presents case studies from several American bike sharing systems, highlighting such items as their capital and operating costs, operating revenues, funding sources, and sponsorship programs. This information is later incorporated into EPS's projections of Santa Monica bike share cash flow and funding needs, as well as recommended approaches to securing sponsorships to support operations. Note that many bike sharing systems do not publish specific financial information regarding their costs and revenues; as such, EPS has relied on a combination of some published materials and interviews with system representatives to gain the following information.

More than 450 bike share programs have been implemented worldwide and a variety of business models have been employed. The business model is distinct from the operating system. Operating systems such as Bixi, Alta Bike Share, Inc., and B-cycle provide an operating framework and can be adopted and used regardless of the business model. Depending on the contract with the operating system, the operator of the program may or may not be affiliated with the operating system.

Key findings from these case studies and related research include the following:

- **The most popular business model in the United States is the nonprofit model.** The nonprofit model is operated by a nonprofit that is created especially to run the bike share program or by an existing nonprofit that absorbs management of the program into its existing mission. The nonprofit model may rely on grant money or private donations to fund start-up costs. Operating costs typically come from membership and user fees, as well as continued support from foundations, local businesses, and private donations. In some cases, contributions from the jurisdictions in which the program is being operated have also been required. It does not appear there are any bike share models where the revenue from membership and usage fees entirely covers the operating costs, but there are several programs for which the operating gap is fully filled or even exceeded by revenues from sponsors.
- **Other bike share business models also have been implemented and offer unique advantages and disadvantages.** Some programs are operated as joint ventures between public agencies and advertising firms, others are operated by local or regional transportation agencies, and still others are operated by universities or private companies. Publicly owned systems operated by a bike share contractor such as Alta or B-cycle are increasingly common, especially for larger cities such as Boston, Washington DC, and the proposed systems in Chicago and New York.
- **It does not appear there are any programs operating under these business models that are financially self-sufficient from user fees alone.** By way of example, DecoBike in Miami launched the first truly for-profit bike share venture in 2011 with a business model proposing complete self-sufficiency from user revenue. However, since its launch, DecoBike has asked the City of Miami to allow advertisements on their kiosks. As of August 2012, the City of Miami had not agreed to the request but appeared to be leaning toward allowing

DecoBike to advertise. The Bike Nation system proposed for Los Angeles, Long Beach, and Anaheim also intends to be financially self-sufficient, using advertising revenues to defray capital and operating expenses.

- **Most bike share systems in the United States rely upon funding derived from sponsorships and advertising.** The Mineta Transportation Institute reported in *Public Bikesharing Operations in North America* that 89 percent of operators (out of the 19 public bike sharing programs interviewed in the United States.) utilized sponsorship as a prominent revenue source.<sup>1</sup> Not only do most operations rely upon sponsorship, it often represents a large proportion of total operating revenue. For example, in Boulder B-cycle's first year of operation (2011), sponsorship comprised 64 percent of total operating revenue. Similarly, Denver B-cycle's sponsorships made up 49 percent of total operating revenue in 2011.
- **The most common sponsorship model involves the receipt of financial support in exchange for the sponsors' logo on bikeshare equipment (stations and bikes).** Specific locations on the bikes and stations are best suited for advertisements and operators usually provide guides for how best to utilize the surface area of equipment.<sup>2</sup> Prices, contract lengths and other parameters regarding equipment sponsorship vary depending on the program. In addition to standard fees for advertising space, bike shares utilize an array of strategies that may involve membership discounts or the selection of station locations.
- **Though financial information is not available for all systems, key indicators for selected case study programs include the following:**

Item		DC / Arlington	Boulder	Denver	Minneapolis	Average
Capital Costs	Per Bike	N/A	\$4,773	\$4,074	\$4,892	\$4,580
	Per Station	\$32,993	\$35,000	\$40,740	\$44,496	\$38,307
Operating Costs/ 12 Months (2011/ 2012)	Per Bike	\$2,248	N/A	\$2,645	\$1,250	\$2,047
	Per Station	\$15,683	N/A	\$26,447	\$10,788	\$17,639
Operating Revenues (2011)	% from Riders	59%	36%	46%	55%	49%
	% from Sponsors	5%	64%	49%	36%	39%

<sup>1</sup> Mineta Transportation Institute published the study in June 2012.

<sup>2</sup> For example, B-cycle provides recommendations and diagrams showing where logos/ads can be placed on bikes and stations.

The case studies below summarize the systems' capital and operating model, initial strategies for recruiting sponsors, creative agreements that current programs have implemented to increase revenue and ridership, and effective PR and marketing strategies involving sponsorship and partnership, as well as highlighting difficulties recently launched programs have faced regarding sponsorship.

### **Boulder's B-Cycle Program<sup>3</sup>**

#### ***Capital and Operating Model***

Boulder's B-cycle was launched on May 20, 2011, and currently maintains 110 bikes throughout 15 stations. The majority of Boulder B-cycle's docking stations are located around the heavily trafficked, commercial district surrounding Pearl Street, which is northwest of the University of Colorado at Boulder campus. The Boulder program is operated by a nonprofit organization with a combination of paid and volunteer staff.

In 2011, Boulder's B-cycle had 1,170 annual members and had sold more than 6,000 24-hour access passes. The League of American Bicyclists ranks Boulder as "platinum" on their Bicycle Friendly Community Ranking, which is the highest ranking in the country, because of their 300+ miles of bike lanes, routes, designated shoulders and paths, as well as topography.

Capital expenditures (initial fleet of bikes, stations) totaled approximately \$525,000 and were funded primarily by grants (\$446,250), including \$250,000 through an Energy Efficiency and Conservation Block Grant (EECBG), funds from the City of Boulder, and gifts from individuals (amounting to approximately \$100,000) and local businesses and residents (\$78,750). These capital expenditures equated to \$4,773 per bike and \$35,000 per station.

In the first year of operations, operational expenditures on stations, bikes, and B-cards were funded through sponsorships (64 percent), as well as membership and usage fees (36 percent).<sup>4</sup> This self-sufficiency was anticipated as part of the initial business plan. As noted below, the second year of operations (2012) has seen lower sponsorship revenues, and Boulder B-cycle is pursuing local government funding to fill operating deficits for the next few years.

#### ***Sponsorship Program***

Before capital purchases, staff and members of the board tapped into individual and corporate connections for initial donation and sponsorship support. These connections were seen as the "low hanging fruit." According to Boulder bike share representatives, raising initial funds was much easier than expected in the first year of operation (2011).

In addition, one sponsor approached Boulder B-cycle to commission an art project involving fenders for 50 bicycles at \$1,000 per bike (\$50,000 contribution). The project commissioned local artists to design pieces that could be transposed onto the fenders of bicycles that would

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<sup>3</sup> Information received from Bob Koenig of Boulder B-cycle as well as online research by EPS.

<sup>4</sup> Information compiled from several sources, including personal interview with Bob Koenig of Boulder B-cycle, August 2012; US Department of Energy; and the 2011 Boulder B-cycle Annual Report.



remain for one year. The original works were also auctioned off with proceeds going to Boulder B-cycle.

After the initial fund-raising phase, a part-time staff member devoted to finding individual grants applied to organizations ranging from Patagonia to the Gates Foundation, with significant success. Despite fund raising success in 2011, the second year of Boulder's operation resulted in a loss of three station sponsors (\$10,000 each) and several corporate and foundation grants, as well as a significant reduction in donations. Boulder B-cycle has been forced to ask the City of Boulder for funding over the next two to three years, despite initial expectations that the program would be relatively self-sufficient.

Lacking a title sponsor has made revenue consistency a difficult challenge. Although Boulder has targeted healthcare providers in an attempt to secure a title sponsor, they have so far been unsuccessful.

Boulder B-cycle Direct Sponsorship Opportunities:

- Baskets: \$1,000 per bike per year
- Badges: \$2,000 per 10 bikes per year
- Station: \$10,000 per station per year

Other Sponsorship/Partnership Opportunities:

- Station Host: In exchange for financial support, Boulder B-cycle will place a station outside a select business or neighborhood, provide reduced membership and other incentives. Companies such as Google and research campuses such as the University Corporation for Atmospheric Research (UCAR) have elected this option thus far. In addition, Whole Foods is being actively pursued.
- Corporate Membership: Discounted bulk memberships in exchange for hosting a membership drive at participating businesses.
- Corporate Contribution: Donation, gift-in-kind, event support or any other partnership opportunities envisioned.

## **Washington DC's Capital Bikeshare<sup>5</sup>**

### ***Capital and Operating Model***

Currently the largest bike share program in the United States, with more than 1,670 bikes dispersed across 175 stations, Capital Bikeshare also is perhaps the most successful. When the program launched in 2010, stations were initially located primarily throughout the District of Columbia (DC)'s Northwest quadrant. Capital Bikeshare has since expanded into Arlington, Virginia, as well as in the Northeast, Southeast, and Southwest quadrants of DC. Capital

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<sup>5</sup> Information received from online research conducted by EPS.

Bikeshare is operated by Alta Bicycle Share, operates year-round, and has exceeded 200,000 members.<sup>6</sup>

Capital Bikeshare is operated on the publicly owned/privately operated model, in which a city will contract with a private operator such as Alta Bike Share or B-cycle to provide management of ongoing operations. Public entities are usually charged with funding the initial capital investment (stations and bikes) and administering the program before contracting with a private operator. Public entities have used a variety of fund-raising techniques for capital costs, including taxation, advertising, sponsorships, and Federal and state grants. While the number of active programs using this model is limited at the time of this report, New York City and Chicago are both set to launch programs using this business model within the next year.

A large part of Capital Bikeshare's success has stemmed from investment in bike infrastructure, such as bike lanes, in conjunction with station construction. In addition, Washington, DC, enjoys enormous numbers of tourists each year, many of whom come to sightsee on the National Mall and nearby Tidal Basin. Because parking has long been in short supply in the area, Capital Bikeshare has been able to educate visitors of the convenience of the system and therefore has seen membership from non-residents grow dramatically.

Capital Bikeshare's initial capital costs were largely covered by Federal grants such as one from the U.S. Department of Transportation's Federal Highway Administration under their Congestion Mitigation and Air Quality (CMAQ) fund. To start the Arlington program, funding was received from the Virginia Department of Rail and Public Transportation, Arlington County, transportation funding, and sponsorships by the Crystal City Business Improvement District (BID) and the Potomac Yard Transportation Management Association. In 2013, Capital Bikeshare has plans to expand the Arlington portion of the system by 42 stations for a cost of \$32,993 per station.

Due to Capital Bikeshare's multi-jurisdictional service area, sponsorship of all kinds is handled by three different government-sponsored transportation organizations (goDCgo in Washington, DC, Arlington Transportation Partners in Arlington, Virginia, and Local Motion in Alexandria, Virginia). The Arlington portion was reviewed in an FY12 Summary Report by Arlington County's Department of Environmental Services, and was shown to have incurred \$643,000 in operating costs for 286 bikes at 41 stations, or the equivalent of \$2,248 per bike or \$15,683 per station. User fees comprised the great majority of operating revenues for the Arlington portion, at 59 percent of total operating expenses. Sponsorships yielded only \$32,000 in Arlington in FY12, or 5 percent of total system costs. This figure is very low compared to other bike share systems, because Arlington County prohibits advertising in public spaces, thus limiting the appeal to potential sponsors. The remaining 36 percent of operating costs are funded through the Arlington County government. Note that these figures reflect Arlington County's portion of the system; equivalent information for other portions of the system was not readily available at the time of this publication.

### ***Sponsorship Program***

For the Capital Bikeshare system overall, sponsorship is broken into three "partnership" categories:

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<sup>6</sup> Capital Bikeshare Web site ([capitalbikeshare.com](http://capitalbikeshare.com)).

- **Corporate Partnership:** Becoming a corporate partner provides subsidized employee memberships and/or the “purchasing of a station,” which may involve exclusive advertising on a specific station location. Corporate sponsorships are broken into levels of contribution that dictate sponsorship and membership agreements.
- **Hotel Partnership:** Hotel partnerships involve the purchasing of 24-hour memberships in bulk quantities at a discounted price. Capital Bikeshare (CaBi) provides helmets, brochures and bike maps with hotel partnership purchases.
- **Community Partnership:** In exchange for publicity in CaBi’s monthly newsletter and on their website, local businesses provide discounts to CaBi members (e.g., 25 percent off falafel) as well as contribute to CaBi.

Other Sponsorship Opportunities:

- CaBi also enjoys direct sponsorship from community or business organizations such as Business Improvement Districts (BIDs) and community groups that advocate transit options.

## **Denver’s B-Cycle Program<sup>7</sup>**

### ***Capital and Operating Model***

Denver’s B-cycle is operated by Denver Bike Sharing, a nonprofit founded to promote health, quality of life, and preservation of the environment. The program was launched on April 22, 2010, and at the end of 2011, consisted of 52 stations and 732 bicycles. The initial seed money for the project came from the host committee of the Democratic National Convention, which donated \$1 million from a budget surplus to create a large-scale bicycle sharing company. This year, Denver Bike Sharing plans to spend an additional \$1.1 million on 27 new stations with 270 bikes, equating to \$40,740 per station or \$4,074 per bike.

In 2011, Denver Bike Sharing sold 2,675 annual memberships and 42,320 short-term memberships (e.g., 24-hour, 7-day, or 30-day passes). The League of American Bicyclists ranks Denver as “silver” on their Bicycle Friendly Community Ranking primarily because of Denver’s limited biking infrastructure.

According to the Denver Bike Sharing 2011 Annual Report, Denver B-cycle operated 520 bikes at 52 stations over 217 days in 2011. The B-cycle system incurred \$1.034 million in operating costs (excluding depreciation), equating to \$19,885 per station or \$1,989 per bike. The annualized equivalent figures would be \$26,447 per station or \$2,645 per bike.

In 2011, the program received roughly \$608,000 from sponsorships by over 30 different organizations, representing 49 percent of the total operating resources for the program. This figures slightly exceeded the amount gained through memberships (29 percent) and user charges (17 percent) combined, with small additional amounts attributed to in-kind gifts and donor contributions. Sponsorship dollars are only used for operations as capital costs are covered entirely by a combination of Federal and State grants, including an Energy Efficiency and

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<sup>7</sup> Information received from James Waddell of Denver Bike Share as well as online research by EPS.

Conservation Block Grant (EECBG), Transportation Community Preservation Program (TCPP) grant revenue, as well as funds from Colorado's Vehicle Registration Tax and FASTER Program.<sup>8</sup>

### ***Sponsorship Program***

Sponsorships are generally identified through staff and board connections as well as through targeting green-minded businesses (usually by attending green conferences, business association meetings, etc.). Denver's largest sponsor is healthcare provider Kaiser Permanente, which serves as the "title sponsor" for the program (e.g., "Denver B-cycle presented by Kaiser Permanente").

There have not been any reported issues with sponsorship exclusivity, as multiple sponsors are invited to participate. However, certain sponsorship categories have been excluded from B-cycle, such as medical marijuana, due to the calculated potential conflict with Kaiser's messaging regarding public health.

### Denver B-cycle Direct Sponsorship Opportunities:<sup>9</sup>

- Title Sponsorship: Denver B-cycle enjoys title sponsorship from Kaiser Permanente, who reportedly is less concerned with advertising space on stations and bikes than the public benefits that bike share provides. In exchange for title sponsorship, the Kaiser logo is presented on all stations (though this is not exclusive as other sponsors can have logos on stations) but zero bikes in the system.
- Baskets: \$1,500 per bike per year
- Station: \$30,000 per station per year; \$20,000 per station per year (for 3 years)

### Other Sponsorship/Partnership Opportunities:

- Station Host: In exchange for financial support, Denver B-cycle will place a station outside a select business or neighborhood, provide reduced membership and other incentives. Three stations are currently being hosted by local businesses.
- Advertising Partnerships: Denver B-cycle partners with the local transportation authority, the Colorado Rockies, a local billboard company, among others, trading advertising space on bikes and stations in exchange for advertising space in buses, trains, stadiums, etc.
- In-Kind Advertising Partnerships: In exchange for advertising space on bikes and stations, B-cycle receives in-kind gifts from companies such as Cliff Bar, local breweries and even law services from local law firms. In-kind partnership advertising takes up approximately 30 percent of potential bike advertising space.

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<sup>8</sup> "Denver Launches First Large-scale Citywide Bicycle Sharing Program in the U.S.," Denver B-cycle Web site ([denver.bcycle.com](http://denver.bcycle.com)), April 22, 2010.

<sup>9</sup> However, it should be noted that all sponsorship agreements fluctuate based upon quantity and timeline of purchases.

- Event Participation: Denver B-cycle participates in a number of events ranging from the Orange Ride<sup>10</sup> to marathons to various festivals. In exchange for publicity, B-cycle provides bikes, volunteers and staff for a wide range of Denver events.<sup>11</sup>
- Wells Fargo Wednesdays: Every Wednesday for a certain amount of time, B-cycle partnered with Wells Fargo Bank, providing free rides at select stations with Wells Fargo advertising. In exchange, Wells Fargo contributed funds in excess of the determined lost revenue attributable to free rentals.

## Minneapolis' "Nice Ride" Program

### *Capital and Operating Model*

Nice Ride Minnesota was launched on August 3, 2010, as a nonprofit operation, and now consists of 146 stations and more than 1,300 bicycles. The program stretches across Minneapolis and St. Paul and is operated and overseen by Nice Ride Minnesota. The League of American Bicyclists ranks Minneapolis/St. Paul "gold" on their Bicycle Friendly Community Ranking, primarily because of the impressive investment Minneapolis and St. Paul have made in bike lanes since the inception of the program.<sup>12</sup> The program has attracted more than 4,000 annual members and more than 35,000 casual members.

According to Nice Ride's 2011 and 2012 (Year-to-Date) Financial Reports, the system has received \$6.5 million in capital funding for the initial phase and its continuing expansion to 146 stations with 1,328 bikes. These figures equate to \$44,496 per station or \$4,892 per bike for capital costs. While the largest single source of capital funds has been the Federal Highway Administration's Nonmotorized Transportation Pilot Program (\$2.8 million), the sponsorship of Blue Cross Blue Shield ranked second at \$2.3 million. A variety of smaller public and private sources comprise the remainder of the capital funding, including funds from the Minneapolis Convention Center (\$250,000), and the Central Corridor Funders Collaborative (\$250,000 for stations near light rail stations) and smaller amounts from area colleges.

Nice Ride operates on an April-to-November schedule representing eight months of the calendar year. In its 2012 operating season, Nice Ride expects operating costs \$1,050,000 for a system of 1260 bikes, equating to \$1,250 per bike or \$10,788 per station per year. These per-unit cost figures are well below what other systems report, which the Executive Director of Nice Ride attributes to lower salaries and rents and a significant donation of professional services.<sup>13</sup>

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<sup>10</sup> The Orange Ride involves the Mayor of Denver leading a bicycle ride to Mile High Stadium for a Broncos game. Carrying the game ball, the Mayor rides a B-cycle onto the field to present the ball to the referees.

<sup>11</sup> Nonprofit bike share programs are constantly challenged by the number of events in which they are asked to participate. Event marketing success is difficult to quantify and requires a large amount of staff or volunteer support.

<sup>12</sup> Report to the U.S. Congress on the Outcomes of the Nonmotorized Transportation Pilot Program SAFETEA - LU Section 1807, Federal Highway Administration, April 2012.

<sup>13</sup> EPS communication with Nice Ride Minnesota's Executive Director on October 25, 2012.

On an ongoing basis, Nice Ride has no public funding for operations, relying instead on memberships and user fees and station sponsorships. In 2011, Nice Ride generated 55 percent of its operating costs through members' fees and 36 percent through sponsorships, with the remaining 9 percent covered with small grants and miscellaneous funds. Through its entire 2.5 years of operations, sponsorship revenues have summed to roughly \$875,000, enough to cover 49 percent of the system's operating costs. Subscriptions and fees have actually exceeded this amount, and have generated \$1.15 million, covering 64 percent of operating costs. As such, Nice Ride has generated an operating surplus in its first 2.5 years of operations.

### ***Sponsorship Program***

Nice Ride Minnesota has a title sponsor (BlueCross BlueShield) in addition to a number of other corporate, governmental, and institutional contributors including Target Corporation, the Saint Paul Foundation, McNally College of Music and the University of St. Thomas.

Potential benefits of sponsorship include advertisements on bikes, kiosks, the Nice Ride website as well as the placement of logos on maps and other printed materials. In 2011 and 2012, there are 29 different sponsors of station, including national brands like Target Corporation and Aveda (cosmetics) to local law firms, health food stores and restaurants, area colleges and a local bike shop.

### **Spartanburg's B-Cycle Program<sup>14</sup>**

#### ***Capital and Operating Model***

Spartanburg, South Carolina's, B-cycle bike sharing program is operated by the Partners for Active Living. The program was launched on July 7, 2011, and now includes 4 docking stations and 28 bikes and operates year-round. The League of American Bicyclists ranks Spartanburg as "bronze" on their Bicycle Friendly Community Ranking because of a limited bicycle infrastructure and density, though the program has enjoyed significant success with its 100 annual members and 450 casual members.

The program is funded through the Mary Black Foundation (a local grantmaking organization founded to improve the health and wellness of Spartanburg, South Carolina, residents), the JM Smith Foundation (part of a local, private healthcare and technology company), as well as the City of Spartanburg. Funding from the Mary Black Foundation has included \$35,000 in 2011 to support installation of two B-cycle stations.<sup>15</sup>

### ***Sponsorship Program***

Sponsors who provide funding for capital expenditures of a certain size are given advertising space on stations. Smaller donations provide advertising on individuals bicycles, and smaller yet provide stickers than can be put on bicycles for a shorter amount of time. The City of Spartanburg allows all advertising on capital equipment but requires bike share to vet all new ads with the City in advance of posting.

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<sup>14</sup> Information received from Laura Ringo of Spartanburg B-cycle.

<sup>15</sup> Mary Black Foundation Web site ([maryblackfoundation.org](http://maryblackfoundation.org)), Grant History.

For larger sponsorships, logos and names are painted on bikes and/or stations for one to two years. Sponsors will have the opportunity to renew when a given sponsorship agreement ends. For smaller contributions, sponsors' logos are limited to stickers, and the sponsorships contract is shorter due to the size of the contribution as well as the physical wear and tear for the stickers.

There are issues in some cities over advertising in public spaces—in Spartanburg, the Planning Director must approve any advertising on stations after bike share provides information on where ads are to be placed.

Sponsorship and advertising are synonymous for Spartanburg, though certain supporters are less interested in having their logos appear on equipment than others. This may vary with bike share programs where bike share programs are seen as strategic locations for advertising as well as a cause a specific sponsor wishes to support.

## **Des Moines' B-Cycle Program**

### ***Capital and Operating Model***

Des Moines' B-cycle, launched in 2010, is still considered a pilot program because it includes only 5 stations and 22 bikes. Des Moines is considered a very bicycle-friendly city and includes nearly 200 trails leading in and out of downtown.<sup>16</sup> The Des Moines program is operated by a nonprofit organization with a volunteer staff.

Capital costs for Des Moines' B-cycle are \$30,000 to \$35,000 per station (depending on whether they are solar, alternating current [AC], or solar/AC combined). Currently, of the 5 stations in Des Moines, two are solar, one is solar/AC combined, and two are AC-only. The total capital cost for Des Moines' B-cycle's initial four-station system was approximately \$120,000, and was funded by numerous sources with the largest single contributor giving only \$20,000.<sup>17</sup>

### ***Sponsorship Program***

In addition to user revenue, Des Moines receives sponsorship funds for each docking station or "hub" from nearby businesses. In addition to hub-specific sponsors, Des Moines' B-cycle has received support from Nationwide, Wellmark, Principal Financial Group, Prairie Meadows, Des Moines Area Regional Transportation Authority (DART), the Polk County Health Department, the City of Des Moines Department of Parks and Recreation, Drive Time Des Moines (a commuter club), and the Greater Des Moines Convention and Visitors Bureau.<sup>18</sup>

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<sup>16</sup> "B-Cycle Program Rolls into Downtown Des Moines," The Greater Des Moines Partnership, September 8, 2010.

<sup>17</sup> Forte, Gabriel, Amogh Garg, Indrajeet Ghatge, David Hanna, Kandy Hricik, Cleveland Bike Share: The Potential and Possibility, Case Western Reserve University Weatherhead School of Management—MBA Practicum in Sustainable Value and Social Entrepreneurship (ORBH 430B), Spring 2012.

<sup>18</sup> Des Moines' B-cycle Web site ([desmoines.bicycle.com](http://desmoines.bicycle.com)).

Recent funding from the Downtown Community Alliance expanded the system from its initial 4 stations and 18 bikes to its present 5 stations and 22 bikes.<sup>19</sup> Eventually, Des Moines hopes to have 100 bicycles available throughout the city at between 12 and 14 kiosks.<sup>20</sup> Carl Voss, Des Moines' B-cycle volunteer Director, indicated that the minimum number of bikes for a feasible program is 35 to 50 bikes, but that growth will be difficult because of resource constraints. However, because of the program's reliance on part-time volunteer workers, opportunities to raise community support and seek grants, donors, and sponsorship remain limited.<sup>21</sup>

### **Chattanooga's Bicycle Transit System**

Bike Chattanooga, which is owned by the City of Chattanooga and operated by Alta Bicycle Share, currently consists of 300 bikes and 28 docking stations. The program connects downtown Chattanooga from the North Shore to the South Side, linking attractions and meeting places such as the Convention Center, Hunter Museum of Art, and the Tennessee Aquarium.

Bike Chattanooga, a Bicycle Transit System, is a City of Chattanooga project that is managed by a subdivision in Chattanooga Parks and Recreation: Outdoor Chattanooga. Capital costs for the program were funded through a \$2 million Federal Transit Administration (FTA) CMAQ grant that was awarded to the City of Chattanooga in partnership with Chattanooga Area Regional Transportation Authority (CARTA).

Ongoing operational funding stems from a combination of public and private funds, including the City of Chattanooga, Outdoor Chattanooga and the City of Chattanooga Parks and Recreation Department, CARTA, the Active Living and Transportation Network, the Chattanooga-Hamilton County Regional Planning Agency, as well as BlueCross BlueShield of Tennessee, the Chattanooga History Center, Gaining Ground's Local Food Program, and the Tennessee Aquarium.

### **Los Angeles Area Bike Nation**

#### ***Proposed Business Model***

The Bike Nation program that has received approval to operate in Los Angeles, Anaheim, and Long Beach, is based upon an "advertising" business plan similar to those in many European bike share programs, including Paris' Velib program. First Pacific Holdings owns Bike Nation as well as Media Nation, a creative services agency, and Media Nation Outdoor, which manages outdoor advertising campaigns. Funding is from an array of private investors and underwritten by First Pacific Holdings. In exchange for the rights to sell advertising space on bikes and station areas, Bike Nation will operate the bike share program, providing member services as well as maintenance of the equipment.

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<sup>19</sup> Ibid.

<sup>20</sup> "Des Moines Officials Introduce Bike-Sharing Program," Des Moines Register, September 9, 2010.

<sup>21</sup> Forte, Gabriel, Amogh Garg, Indrajeet Ghatge, David Hanna, Kandy Hricik, Cleveland Bike Share: The Potential and Possibility, Case Western Reserve University Weatherhead School of Management—MBA Practicum in Sustainable Value and Social Entrepreneurship (ORBH 430B), Spring 2012.



Bike Nation intends for the system to be profitable and thus far expects to be given no public dollars for capital or operational costs. However, Bike Nation is working with public agencies and is on LA Metro's Bicycle Roundtable, which is helping with the county effort to coordinate bike sharing programs around the county. The hope is that station placement and improved bicycle infrastructure will result.

Bike Nation boasts new technology such as *Active Real Time GPS*, active load balancing operation platforms that help ensure that there will be a bike available and an open dock when needed, as well as chainless bikes and airless tires, which should help reduce the need for on-road service. The kiosks are modular, portable, wirelessly connected and solar powered so that monitoring and load balancing is easily managed.

### ***Proposed Locations***

Last month, the Orange County-based company unveiled the first of 10 kiosks and 100 specially constructed bikes at a community event in Anaheim, with plans to install up to 40 kiosks and 400 bikes as demand warrants. The City of Anaheim will contribute nothing except land for five station locations on public property.

Long Beach, California, announced a proposed 250-station and 2,500-bike system with initial installations expected to begin in February 2013 in downtown.

The largest program will be in Los Angeles, which will include 4,000 bikes across 400 stations located in Downtown Los Angeles, Hollywood, Westwood and Venice Beach early next year. Bike Nation is committing \$16 million for the initial launch and is committing to operate the program for a minimum of 10 years.<sup>22</sup>

### ***Proposed Pricing***

The usage fees for the bicycle share system are incentivized for turnover and trips of less than 30 minutes in duration with a single 24-hour membership priced at \$6, with discounts for three-day (\$12), weekly (\$25), monthly (\$35), yearly (\$75) and yearly student/senior rentals (\$60).

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<sup>22</sup> Information on Bike Nation compiled from the company's website, [bikenationusa.com](http://bikenationusa.com), as well as publications from the Los Angeles Times and the OC Register.

### 3. CASH FLOW ESTIMATES

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This chapter presents estimates of one-time capital and ongoing operational expenses and potential revenues to fund a bicycle sharing program in the City. The cash flow model is based on monthly ridership projections prepared by Fehr & Peers (Base Scenario: Scenario 1) and includes sensitivity scenarios in which demand is both lower (Scenario 1A) and higher (Scenario 1B) than estimated in the Base Scenario.

The cash flow model is based on a proposed system of 35 stations, with 20 docks and 10 bicycles per station (a total of 350 bicycles). A network of this scope is estimated to generate approximately 7,400 bike share trips each month under the Base Scenario. Such usage levels would mean that each bike is ridden on average less than once per day, which is typical of most bike share programs in the United States. By contrast, highly utilized systems such as Washington DC's Capital Bikeshare have generated annual ridership in excess of three trips per bike per day. Though every system is different and ridership depends on myriad factors ranging from population density to tourism activity to weather conditions, EPS believes these Fehr & Peers estimates reasonably represent potential usage in the envisioned service area.

The cash flow model also incorporates a number of assumptions based on case study research of other bicycle sharing programs currently in operation as described in detail in this chapter. It is anticipated that this preliminary cash flow model will be used as a basis for further evaluation as the City continues to explore the feasibility of a bicycle sharing program in the City.

#### **Bike Sharing Program Expenditures**

The following section describes initial capital and ongoing operations and maintenance expenditures estimated for a potential bike share program in the City. The expenditures described in this chapter remain constant for the Base Scenario and sensitivity scenarios.

##### **Initial Capital Expenditures**

As shown in the case studies provided in **Chapter 2**, programs such as Boulder and Denver B-cycle and Minnesota's Nice Ride, which utilize stations of comparable size to those assumed for Santa Monica, showed capital costs of between \$35,000 and \$45,000 per station.<sup>23</sup> In combination with City funding, the capital grants received by Santa Monica for the bike sharing program sum to \$1.715 million for bikes and docking stations, which would equate to \$4,900 per bike or \$49,000 per station.<sup>24</sup> Overall, this sum appears reasonable but relatively conservative, compared to the costs seen in similar bike share programs, which averaged roughly \$4,600 per bike and \$38,000 per station.

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<sup>23</sup> Capital costs for Denver B-cycle cited in Denver Bike Sharing Annual Report 2011. Nice Ride's capital cost information can be found on their website, niceride.org, in a published response to questions from the community about the program.

<sup>24</sup> See page 16 of Santa Monica's successful proposal for \$500,000 in funding from the South Coast Air Quality Management District, dated July 10, 2012.

The City has actually indicated that \$2.609 million total may be used for equipment purchases of all kinds, which would be nearly \$7,500 per bike—well above the capital expenditures reported by similar systems, but providing an allowance for start-up costs, software and user interface technology, etc. that may or may not be fully captured in the figures reported by other systems. Overall, the City has secured \$2.859 million in total funding from Metro (\$1,543,000), the South Coast Air Quality Management District (\$500,000), and the City's own funding and in-kind services (\$816,000), which EPS believes should be adequate for capital and start-up costs for the 350-bike system.

### **Ongoing Operating and Maintenance (O&M) Expenditures**

The bike sharing program will require ongoing operational expenses including equipment maintenance and replacement (because of loss, vandalism, theft, or unusual damage); bicycle rebalancing; program administration (e.g., membership maintenance, program promotion); marketing; security and access management; and liability insurance.

In this preliminary cash flow model, the annual operating costs are assumed to be \$2,400 per bicycle annually (\$200 per bicycle per month) or \$840,000 annually in aggregate, assuming all the operating efficiencies of a full program. These ongoing operating costs per bicycle are within the range but about 20 percent higher than the average of annualized figures for the Nice Ride Minnesota, Denver B-cycle, and Capital Bikeshare (Arlington County) bike sharing programs, which provide the most comprehensive detail of operating expenses reviewed by EPS (see case studies in the previous chapter of this report). The annual operating cost includes a contingency amount for replacement of bikes resulting from theft, vandalism, and normal wear-and-tear. The \$2,400 per year estimate includes the following annual expenditures for the owners and/or operators of the systems (which may include the City, a nonprofit, and/or the bike share company such as B-cycle or Alta, depending on the business model):

#### ***Operational Costs***

- Program Administration Salaries and Benefits
- Insurance
- Internet and Phone Service
- Office Lease and Furniture
- Postage and Printing for New Subscriber Packages and Annual Mailing
- On-Going Promotions Annual Budget
- Software License and Back-End Operation
- Customer Service Help Desk
- Credit Card Processing Fees
- Wireless Communication between Locking Stations
- Hosting Services
- System Operating Cards
- Misc. Supplies and Expenses

#### ***Maintenance Costs***

- Full-Time Bike Mechanics
- Electronics Technician(s)
- Contractor Overhead, if applicable
- Bicycle Parts

- Locking Station Batteries
- Other Locking Station Parts
- Communications (Cellular)
- Vehicle Maintenance

***Replacement Because of Theft and Major Vandalism (Requiring Replacement)***

- Bicycle Theft and Major Vandalism Replacements
- Locking Station Replacements

## **Bike Sharing Membership Revenues**

The following section describes potential revenues generated under the Base Scenario of 7,372 riders per month and two sensitivity scenarios in which demand is both lower (Scenario 1A) and higher (Scenario 1B) than estimated in the Base Scenario. To bracket potential revenues generated by program users, Scenario 1A assumes 3,337 trips per month (4,035 fewer trips than the Base Scenario), while Scenario 1B assumes 16,287 trips per month (8,915 additional trips relative to the Base Scenario). The monthly ridership projections for the Base Scenario and sensitivity scenarios were estimated by Fehr & Peers, and provided to EPS for this analysis.

Bicycle sharing program users pay for a daily pass, or can subscribe for a longer term (e.g., per month, per semester, per year). As shown in **Table 1**, other select bike share programs in the United States charge \$5 or \$6 for a one-day pass, \$30 to \$75 for an annual membership, and about \$3 for use above and beyond the first half-hour of use. To calculate estimated revenue from extended use fees, EPS obtained trip time data provided by Capital Bikeshare. From this data, EPS projects the percentage of rides (both by daily and annual members) that can be expected to incur extended user fees beyond the initial membership fee. Capital Bikeshare, though far larger than the proposed Santa Monica program, provides a close comparison to Santa Monica because of its large number of tourist users. As shown in **Table 2**, approximately \$0.75 in extended use charges can be expected for every trip taken.

In this analysis, EPS has assumed the following pricing scenario based on programs of similar scope to the potential Santa Monica program:<sup>25</sup>

- Daily membership: \$6.
- Annual membership: \$75 (the fee proposed by Bike Nation for the planned system in Los Angeles, Anaheim, and Long Beach).

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<sup>25</sup> For the purposes of this study, EPS chose not to calculate weekly or monthly membership options because of those pricing brackets relative insignificance to the overall revenue of a bike share program. For example, for DC's Capital Bikeshare, monthly members maintain approximately 1% of the total membership.

**Table 1**  
**Santa Monica Bicycle Sharing Analysis**  
**Bicycle Sharing Program Membership Fees**

Program	City	State	Membership Options [1]				Extended Usage Fee [1]
			Daily	Weekly	Monthly	Annual	
<b>Boulder B-cycle</b>	Boulder	CO	\$5	\$15	-	\$40	First hour is free; \$4 every 30 min. thereafter
<b>Broward B-cycle</b>	Broward (County)	FL	\$5	\$25	-	\$45	\$.50 first 30 min; \$3 every 30 min. thereafter
<b>Bike Chattanooga</b>	Chattanooga	TN	\$6	-	-	\$75	1st hour is free; \$5 every 30 min thereafter
<b>Denver Bike Share</b>	Denver	CO	\$6	\$20	\$30	\$65	No fee first 30 min; \$1 30-60min; \$4 every 30 min thereafter
<b>Des Moines B-cycle</b>	Des Moines	IA	\$5	-	\$30	\$50	1st hour is free; \$1.25 each additional 30 min
<b>Nice Ride Minnesota</b>	Minneapolis/St. Paul	MN	\$5	-	\$30	\$60	First 30 min. free; \$1.50 30-60 min; \$4.50 60-90 min; \$6 every 30 min thereafter
<b>Omaha B-cycle</b>	Omaha	NE	\$5	-	\$32	\$64	First hour free; \$1.34 each additional 30 min.
<b>Spartanburg B-cycle</b>	Spartanburg	SC	\$5	-	\$15	\$30	First hour is free; \$1 each additional 30 min.
<b>Average</b>			<b>\$5</b>	<b>\$20</b>	<b>\$27</b>	<b>\$54</b>	

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Source: Bike share program operators and websites; EPS.

"fees"

[1] Membership and extended usage fees current as of August 2012.

**Table 2**  
**Santa Monica Bicycle Sharing Analysis**  
**Extended Use Cost per Trip Estimate**

Item	Percent of Trips by Time Interval [1]	Estimated Cost per Time Interval [2]	Average Extended Usage Cost per Trip [3]
<b>Usage Time</b>			
0-30 Minutes	91.1%	\$0.00	\$0.00
30-60 Minutes (Annual Members) [4]	1.2%	\$1.00	\$0.01
30-60 Minutes	3.5%	\$2.00	\$0.07
60-90 Minutes	1.8%	\$6.00	\$0.11
90-120 Minutes	1.2%	\$14.00	\$0.16
120-150 Minutes	0.5%	\$22.00	\$0.11
150-180 Minutes	0.4%	\$30.00	\$0.13
180-210 Minutes	0.1%	\$38.00	\$0.05
210-240 Minutes	0.1%	\$46.00	\$0.06
240+ Minutes [5]	0.1%	\$54.00	\$0.05
<b>Total</b>	<b>100.0%</b>	<b>NA</b>	<b>\$0.75</b>

"ext\_use"

Source: Capital Bikeshare; EPS.

- [1] Percentages based on system data available from Capital Bikeshare's website (capitalbikeshare.com). These percentages represent the allocation of total trips (by all membership types) by time interval between August 2011 and July 2012. Although the majority of trips are within the first 30 minute time interval, roughly 9 percent of all trips accrue additional usage fees. In comparison, Nice Ride Minnesota members incur charges on 11 percent of all trips (2011 data) and Boulder B-cycle members incur charges on 17 percent of all trips (2011 data). This analysis uses Capital Bikeshare figures as a more conservative estimate of potential extended usage charges.
- [2] For the purpose of this analysis, EPS assumes that membership fees will cover the initial 30 minutes of usage and an additional charge will be incurred for every subsequent 30-minute interval.
- [3] Calculated as a weighted average of all extended usage fees by time interval. It is assumed that the majority of trips extending beyond the first 30 minutes will be incurred by daily members, with a negligible number of trips extending beyond the first 30 minutes incurred by annual members.
- [4] The extended usage fee varies for annual and daily members. A majority of the trips in the proposed bike share program are assumed to be taken by annual members and of these trips, nearly 99% are assumed to be within the no-cost first 30 minute interval. The remaining trips by annual users are assumed to be within the 30-60 minute interval.
- [5] Because of data limitations, all trips lasting longer than 4 hours (240 minutes) are grouped into a single time interval. As a conservative estimate, EPS assumes all trips longer than 4 hours will be incur a \$54 charge. In actuality, each additional

- Extended usage fee: For daily users, \$2 for the first 30 minutes beyond the first half-hour (the first half-hour is included in membership costs); \$6 for the following 30 minutes; and \$8 for each subsequent half-hour.<sup>26 27</sup> For annual users, \$1 for the first 30 minutes beyond the first half-hour; \$5 for the following 30 minutes; \$11 for the next 30 minutes; and \$8 for each subsequent half-hour. Refer to **Table 2** for an illustration of the extended usage fee by user and by time interval, based on Washington DC's Capital Bikeshare program which yielded an average of \$0.75 user fees per trip.

Fehr & Peers has estimated the number of rides that would be generated each month by a system of 35 stations with 350 bikes in and around Santa Monica. Most bike share programs identify all riders as "members," even if they only purchase a one-day pass. On **Table 3**, EPS converts those rides into the number of "members" using the Santa Monica system each year by calculating and applying the average number of rides per member per year from the most current information available from seven other American bike share programs. As shown, the average is 8.1 rides per member per year, which would translate to roughly 11,000 members per year riding the bike share in Santa Monica under the base scenario.

The Federal Highway Administration's study by Toole Design Group differentiates "annual members" (those purchasing a year-long membership) from "casual members" (everyone else)<sup>28</sup>. As shown on **Table 4**, most American bike share systems have many more casual members than annual members, and EPS has calculated the average proportions for eight programs and applied those averages to our projections for Santa Monica. As shown, we anticipate that 88 percent of all riders would be casual members while only 12 percent would be annual members. These proportions would yield roughly 9,600 "casual" members in Santa Monica per year, versus fewer than 1,400 "annual" members.

## Net Cash Flow

### Base Scenario: Scenario 1

As shown in **Table 5**, based on the pricing structure described above, the Base Scenario generates approximately \$226,000 annually in membership and user fee revenue, or about 27 percent of estimated annual O&M expenditures of \$840,000, leaving approximately \$614,000 annually required from other funding sources, such as sponsorships, advertising, gifts in kind (private or corporate donations), grant funding or other sources. This estimated percentage of

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<sup>26</sup> Many bike share programs allow users to take a bike for up to one-half hour at no additional charge beyond the cost of their daily, monthly, or annual pass. To discourage users from keeping the bikes all day rather than leaving them in circulation for other users, most programs charge a small fee after the bike has been out for a certain length of time.

<sup>27</sup> Because of data limitations, all trips lasting longer than 4 hours are grouped into a single time interval (4 – 24+ hours). As a conservative estimate, EPS assumes all trips longer than 4 hours will incur a \$54 charge. In actuality, each additional 30 minute interval beyond 4 hours and 30 minutes would incur an additional \$8 charge.

<sup>28</sup> "Bike Sharing in the United States: State of the Practice and Guide to Implementation," Prepared by Toole Design Group and the Pedestrian and Bicycle Information Center for USDOT Federal Highway Administration, September 2012 (<http://www.bicyclinginfo.org/promote/bikeshareintheus.pdf>)

**Table 3**  
**Santa Monica Bicycle Sharing Analysis**  
**Estimated Membership of Proposed Bicycle Sharing Program**

Program	City, State	Trips per Month [1]	Trips per Year [2]	Total Members [3]	Annual Trips per Member
<i>Formula</i>		<i>a</i>	<i>b = a * 12</i>	<i>c = b / d</i>	<i>d</i>
<b>Proposed Bicycle Sharing Program</b>	<b>Santa Monica, CA</b>				
Base Scenario 1		7,372	88,464	10,939	8.1
Sensitivity Scenario 1A		3,337	40,044	4,952	8.1
Sensitivity Scenario 1B		16,287	195,444	24,168	8.1
<b>Case Studies [4]</b>					
Capital Bikeshare	Washington DC/Arlington, VA	97,700	1,171,600	124,800	9.4
Nice Ride	Minneapolis, MN/St. Paul, MN	25,900	310,900	39,000	8.0
The Hubway	Boston, MA	15,200	182,500	33,600	5.4
Denver B-cycle	Denver, CO	22,800	273,100	43,300	6.3
San Antonio B-cycle	San Antonio, TX	3,900	47,200	3,800	12.4
Boulder B-cycle	Boulder, CO	2,100	25,000	4,000	6.3
Spartanburg B-cycle	Spartanburg, SC	300	3,700	550	6.7
<b>Weighted Average</b>					<b>8.1</b>

"membership"

Source: Fehr & Peers; Toole Design Group; EPS.

- [1] For the proposed bicycle sharing program, Base Scenario and sensitivity scenario trips per month (monthly ridership projections) were estimated by Fehr & Peers.
- [2] Assumes 365 days of operation. Figure is based on daily ridership totals converted to monthly totals as 4 case studies are seasonal and 2 year-round programs had not been in operation for an entire year when this data was collected. Annual trips for the proposed program in Santa Monica are based on monthly ridership projections multiplied by 12 months.
- [3] Membership figures for case studies are based on research by the Toole Design Group. Membership figures for the proposed bicycle sharing program are calculated using an annual trip per member ratio of 8.1:1 (for example: trips per year (88,464)/8.1 = total members (10,939)). That is, the ratio assumes every member (within all membership types) will take 8.1 trips per year. As shown in the case study data, a 8.1:1 ratio is the weighted average of annual trips per member for other bicycle sharing programs.
- [4] Case study trip and membership data is based on research by the Toole Design Group (2012)



**Table 4**  
**Santa Monica Bicycle Sharing Analysis**  
**Daily and Annual Membership Estimates**

Program	City, State	Bicycle Sharing Program Membership			Percentage of Total Membership	
		Total [1]	Casual Members [2]	Annual Members	Casual	Annual
<b>Proposed Bicycle Sharing Program [3]</b>	<b>Santa Monica, CA</b>					
Base Scenario 1		10,939	9,578	1,361	88%	12%
Sensitivity Scenario 1A		4,952	4,336	616	88%	12%
Sensitivity Scenario 1B		24,168	21,162	3,007	88%	12%
<b>Case Studies [4]</b>						
Capital Bikeshare	Washington DC/Arlington, VA	124,800	105,644	19,200	85%	15%
Nice Ride	Minneapolis, MN/St. Paul, MN	39,000	35,000	4,000	90%	10%
The Hubway	Boston, MA	33,600	30,000	3,600	89%	11%
Denver B-cycle	Denver, CO	43,300	40,600	2,659	94%	6%
San Antonio B-cycle	San Antonio, TX	3,800	2,800	1,000	74%	26%
Boulder B-cycle	Boulder, CO	7,500	6,200	1,171	83%	16%
Spartanburg B-cycle	Spartanburg, SC	1,200	1,074	127	90%	11%
Des Moines B-cycle	Des Moines, IA	2,300	2251	30	98%	1%
<b>Weighted Average</b>					<b>88%</b>	<b>12%</b>

"breakdown"

Source: Toole Design Group; EPS.

[1] Total members, as shown in Table 3.

[2] Casual membership is defined as any membership option other than annual (e.g., daily, weekly, monthly, etc.). Based on case study research, multiple-day, weekly, and monthly memberships represent an insignificant percentage of total membership revenue for U.S. bike share programs. As such, this analysis groups all non-annual memberships into one category.

[3] Assumed membership breakdown based upon case studies of currently operating U.S. bike share programs.

[4] EPS uses the listed case studies in order to verify that the percentage of annual membership of total membership is a reasonable assumption. As shown, the ratio is within the range exhibited by the case studies.

**Table 5**  
**Santa Monica Bicycle Sharing Analysis**  
**Illustrative Cash Flow Model**

Item	Annual Operations & Maintenance [1]		
	Base Scenario	Sensitivity Scenarios	
	Scenario 1:	Scenario 1A:	Scenario 1B:
Trips/Month [2]	7,372 Trips/Month	3,337 Trips/Month	16,287 Trips/Month
Members/Year [3]	10,939 Members/Year	4,952 Members/Year	24,168 Members/Year
<b>Annual Expenditures</b>			
<b>Operating &amp; Maint. (O&amp;M) Costs [5]</b>			
Annual O&M Cost per Bike	\$2,400	\$2,400	\$2,400
<b>Total O&amp;M Costs</b>	<b>\$840,000</b>	<b>\$840,000</b>	<b>\$840,000</b>
<b>Annual Revenues</b>			
<b>Membership/User Fees</b>			
<b>Daily Subscriptions</b>			
Daily Subscribers/Year [6]	9,578	4,336	21,162
Price/Day	\$6	\$6	\$6
Annual Total	\$57,471	\$26,015	\$126,970
<b>Annual Subscriptions</b>			
Annual Subscribers/Year [6]	1,361	616	3,007
Price/Year	\$75	\$75	\$75
Annual Total	\$102,074	\$46,205	\$225,512
<b>Extended Usage Fees</b>			
Avg Fee per Trip [7]	\$0.75	\$0.75	\$0.75
Annual Trips [8]	88,464	40,044	195,444
Annual Total	\$66,116	\$29,928	\$146,070
<b>Total Membership/User Fees</b>	<b>\$225,660</b>	<b>\$102,147</b>	<b>\$498,551</b>
<b>Other Sources [9]</b>			
Advertising/Sponsorships	TBD	TBD	TBD
Gifts in Kind	TBD	TBD	TBD
Grants	TBD	TBD	TBD
<b>Total Other Sources</b>			
<b>Total Revenues</b>	<b>\$225,660</b>	<b>\$102,147</b>	<b>\$498,551</b>
<b>Net Cash Flow</b>	<b>(\$614,340)</b>	<b>(\$737,853)</b>	<b>(\$341,449)</b>
<b>Revenue as % of O&amp;M Costs</b>	<b>27%</b>	<b>12%</b>	<b>59%</b>

"cash\_flow"

Source: Fehr & Peers; EPS.

[1] Assumes the operating efficiencies of a full program.

[2] Base Scenario ridership estimated by Fehr & Peers. Sensitivity scenarios bracket potential revenues by assuming 4,035 fewer trips (Scenario 1A) and 2,800 additional trips (Scenario 1B) relative to the Base Scenario.

[3] The estimated number of members per year relative to monthly ridership projections is calculated in Table 3.

[4] Assumes zero site acquisition costs. The \$60,000 per station estimate for start-up costs includes the following capital costs: bicycles; locking stations; membership cards (RFID cards that subscribers would "swipe" at a station to check out a bike); software; user-interface technology; maintenance equipment; storage racks; and traffic barriers. The estimate also includes the following non-capital costs: development of system map and map racks; marketing, legal, and accounting services.

[5] Cost estimate based on the Nice Ride Minnesota Business Plan, which estimates an annual operations and maintenance

[6] Assumes daily subscriptions are 88% and annual subscriptions are 12% of total membership. Refer to Table 4 for more

[7] Extended usage fee per trip based on a pricing model described Table 2.

[8] The extended usage fee was applied to the monthly ridership projections (trips) multiplied by 12.

[9] Based on case study research, all bike share programs require supplemental funding from other sources of revenue.

Specific amounts from other sources cannot be determined at this time but they will likely comprise some combination of the revenues listed. Other sources of revenue may also be available. However, it should be noted that under the current assumptions, Scenario 1B would not need supplemental funding from other sources of revenue.

revenues from member fees is somewhat lower than that seen with some of the most successful bike share programs in the country. For example, Denver B-cycle stated in its 2011 Annual Report that user fees produce 46 percent of their total revenue, and, in their 2011 Annual Report, Boulder B-cycle cited that 36 percent of total operating costs were covered by user fees. Arlington County's portion of the Washington DC bike share program generated fully 59 percent of its operating costs through user fees, buoyed perhaps by the extensive tourism market and associated high revenues per trip from daily users.

As a sensitivity test, EPS has also calculated Santa Monica's membership revenues based on the per-bike financial performance of other bike share programs. **Table 5** yields membership and user fee revenues of only \$645 per bike per year. By comparison, the Arlington system generated \$1,325 per bike per year (\$379,000 / 286 bikes), Denver generated the equivalent of \$1,443 per bike per 12 months (\$563,047 / 520 bikes for 9 months), and Nice Ride MN generated the equivalent of \$546 per bike per year (\$436,673 / 1,200 bikes for 8 months). The average of these three systems—even with Minnesota's low figure—is \$1,105 per bike per year. At this level of performance, Santa Monica's system would generate \$386,750 per year, or 46 percent of the total projected operating costs.

In sum, EPS estimates that the Santa Monica bike share will cost \$840,000 per year to operate, and will generate between \$226,000 and \$387,000 per year from actual riders under the base scenario of ridership prepared by Fehr & Peers. This level of performance would leave \$453,000 to \$614,000 of operating costs to be subsidized by other funding sources, which may be comprised of sponsorships, philanthropic grants, or local public-sector funding matches.

### **Sensitivity Scenarios: Scenario 1A and 1B<sup>29</sup>**

To bracket potential revenues generated by program users, Scenario 1A assumes 3,337 trips per month (4,035 fewer trips than the Base Scenario), while Scenario 1B assumes 16,287 trips per month (8,915 additional trips relative to the Base Scenario). As shown in **Table 5**, the sensitivity scenarios generate a range of \$102,000 (Scenario 1A) to \$499,000 (Scenario 1B) in annual membership and user fee revenue, or about 12 percent to 59 percent of annual operating expenditures of \$840,000. Under Scenario 1A, an additional \$738,000 in annual revenues from other sources would be required; Scenario 1B would require an additional \$341,000 in annual revenues from other sources.

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<sup>29</sup> The sensitivity test conducted for Scenario 1 based on other systems' annual rider revenues per bike was not conducted for Scenarios 1A and 1B, as these are intended to reflect "worst case" and "best case" scenarios, respectively, and applying a fixed revenue per bike would yield the same result in all scenarios.

## 4. POTENTIAL OPERATING FUNDING APPROACHES AND SOURCES

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As illustrated by the case studies, there are myriad resources available for bike share systems' capital costs, ranging from Federal and state grant monies to sponsorships by area business, institutions and foundations. At present, the City has identified and secured over \$2.8 million for the capital and start-up funding for the bike share program. As noted in the previous chapter, this sum should be more than adequate for a program of the scale being considered (350 bikes in 35 stations). **Appendix A** presents information on potential capital funding sources from federal and state programs.

Of greater concern is the potential need for operating subsidies, for which far fewer existing funding programs are applicable. Most of the bike share systems presented in the case studies rely primarily upon fees from riders and sponsorships for their ongoing operating costs. In this chapter, EPS explores the sponsorship opportunities for Santa Monica's bike share program, and identifies some other potential public revenue sources to fill budget gaps as may occur.

### **Sponsorship Best Practices**

The most common sponsorship model involves the receipt of financial support in exchange for the sponsors' logo on bikeshare equipment (stations and bikes) and publicity materials (website, newsletter, advertisements, etc.). Prices, contract lengths and other parameters regarding equipment sponsorship vary depending on the program. In addition to standard fees for advertising space, bike shares utilize an array of strategies that may involve membership discounts or the selection of station locations.

#### **Title Sponsors**

Many of the larger bike sharing systems have secured "title sponsors" who receive frequent and conspicuous recognition for their contributions to the system. For New York City's upcoming program, CitiBank is the title sponsor, and the system will be called "CitiBike." Boston's system is referred to as the New Balance Hubway, in recognition of that athletic apparel manufacturer's title sponsorship support. Minnesota's Nice Ride and Denver B-cycle system are both title sponsored by health care systems (Blue Cross Blue Shield and Kaiser Permanente, respectively). Logos for these groups typically are prominent on the systems' bike and station equipment, websites, and marketing materials, although some variation does exist. For example, Kaiser Permanente logos are present on Denver bike share stations, but not on the bikes themselves.

In Santa Monica, opportunities for title sponsorship may be strongest for the major employers in the City, including the following identified by the Chamber of Commerce as the City's largest:

1. Santa Monica College
2. The City of Santa Monica
3. Santa Monica-UCLA Hospital
4. Santa Monica-Malibu Unified School District
5. Saint John's Health Center
6. MTV Networks

7. RAND Corporation
8. Activision Blizzard Inc.
9. ET Whitehall (Shutters on the Beach and Casa del Mar)
10. Universal Music Group
11. Yahoo!
12. Rubin Postaer & Associates
13. Ascent Media Group and Loews
14. Lionsgate Entertainment
15. Edmunds.com

In addition, healthcare providers have proven to be very strong supporters of other bike share programs throughout the country, including Nice Ride Minnesota, Broward B-cycle in Florida, Bike Chattanooga in Tennessee, and Omaha B-cycle in Nebraska. Not only have healthcare providers been willing to support capital costs, but have committed to support ongoing operational budgets and system expansion. Healthcare providers that operate in California such as Kaiser Permanente and BlueCross BlueShield have already contributed to both the capital and operational costs of bike share programs in cities such as Denver, Omaha, and Minneapolis and may be willing to contribute to a City of Santa Monica bike share program. There are three major healthcare providers in the Greater Los Angeles Area: Kaiser Permanente, Health Net, and Blue Shield. Kaiser is the largest provider in Los Angeles County with 1.5 million subscribers (2009).<sup>30</sup>

### Station Sponsors

Denver and Boulder's B-cycle systems invite organizations to become a Station Host: in exchange for financial support, B-cycle will place a station outside a select business or neighborhood, provide reduced membership and other incentives. Companies such as Google and research campuses such as the University Corporation for Atmospheric Research (UCAR) have elected this option thus far in Boulder, and Whole Foods is being actively pursued. Though prices are negotiable, Boulder aims for \$10,000 per station per year for these sponsorships, while Denver hopes for \$30,000 per station per year, or \$20,000 per year with a three-year commitment.

Nice Ride Minnesota has a similar station sponsorship opportunity. In 2011 and 2012, there are 29 different sponsors of stations, including national brands like Target Corporation and Aveda (cosmetics) to local law firms, health food stores and restaurants, area colleges and a local bike shop.

In Santa Monica, a number of businesses have expressed interest in supporting stations through donations of funds and/or property. According to the City's SCAQMD grant application, these businesses include:

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<sup>30</sup> Information gathered from research conducted by Michael R. Cousineau, Dr. PhD, in *Health and Health Care Access in Los Angeles County* published by the University of Southern California Keck School of Medicine in 2009.

- 18th Street Arts Center
- The Ambrose Hotel
- Bike Attack
- Cars.com/LA Car Guy
- Community Corps of Santa Monica (Nonprofit Housing Provider)
- Coopportunity (Santa Monica based food co-op)
- Father's Office Restaurant
- Helen's Cycles
- The Phelps Group
- Rawvolution Restaurant
- Santa Monica Convention and Visitors Bureau
- Santa Monica Motors
- Universal Music Group
- Whole Foods Grocery Stores
- Yahoo Center and Arboretum Courtyard (major employment complex)
- Yogaworks
- Yogitoes

### Other Sponsorships

A number of smaller advertising opportunities exist in many bike share systems. **Figure 1** illustrates the locations promoted by B-cycle as being appropriate for sponsorship logos and advertisements, and range from small strips on the handlebars to larger poster panels at stations. Specific pricing examples for logo placement include the following:

- Baskets: \$1,000 per bike per year in Boulder, \$1,500 in Denver
- Badges (stickers): \$2,000 per 10 bikes per year in Boulder

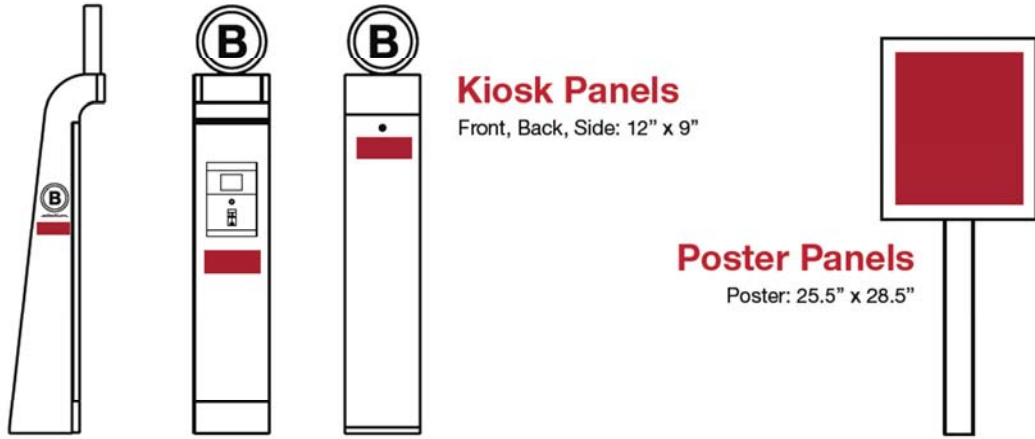
In addition to these advertising opportunities on the bike share equipment, sponsorships and partnerships may include the following:

- Advertising Partnerships: Denver B-cycle partners with the local transportation authority, the Colorado Rockies, a local billboard company, among others, trading advertising space on bikes and stations in exchange for advertising space in buses, trains, stadiums, etc.
- In-Kind Advertising Partnerships: In exchange for advertising space on bikes and stations, Denver B-cycle receives in-kind gifts from companies such as Cliff Bar, local breweries and even law services from local law firms. In-kind partnership advertising takes up approximately 30 percent of potential bike advertising space.
- Hotel Partnership: Hotel partnerships involve the purchasing of 24-hour memberships in bulk quantities at a discounted price. Capital Bikeshare provides helmets, brochures and bike maps with hotel partnership purchases.
- Community Partnership: In exchange for publicity in Capital Bikeshare's monthly newsletter and on their website, local businesses provide discounts to members (e.g., 25 percent off falafel) as well as contribute to Capital Bikeshare. Capital Bikeshare also enjoys direct sponsorship from community or business organizations such as Business Improvement Districts (BIDs) and community groups that advocate transit options.



Figure 1.

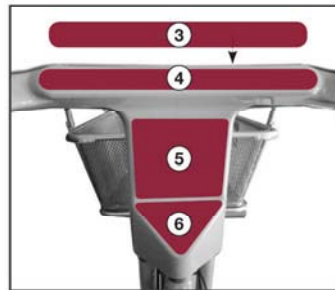
# Sponsorship and Advertising Opportunities



## BIKE PANELS

- ① Baskets (2)
- ② Wheel Guard (2)\*
- ③ Handlebars (top)
- ④ Handlebars (face)
- ⑤ Throat
- ⑥ Shroud (triangle)

\* reserved for Title Sponsor



## KIOSK PANELS (4)

Front, Back & Side (2) locations

## POSTER PANELS (2)

Map: sponsor logo placement

Poster: reserved for Title Sponsor



- Event Participation: Denver B-cycle participates in a number of events ranging from the Orange Ride<sup>31</sup> to marathons to various festivals. In exchange for publicity, B-cycle provides bikes, volunteers and staff for a wide range of Denver events.<sup>32</sup>

## Other Potential Operating Revenue Sources

In addition to user fees and sponsorship opportunities as described above, the Santa Monica bike share system may be able to utilize one or more of the following revenue sources to support ongoing operations.

### CMAQ Grants

The Federal Transit Administration offers Congestion Mitigation and Air Quality (CMAQ) grants that have typically been used as capital funding for bike share systems. However, Boston's New Balance Hubway system has indicated an expectation that a portion of its CMAQ grant will be used to fund operations costs in initial years, according to research conducted in Arlington County's *Capital Bikeshare Transit Development Plan* (2012).

### Local Government Funding

Local governments may have funds available through their General Fund or dedicated fund sources to support the operation of programs of special merit. For instance, Boston's Hubway has received a \$450,000 grant from the Boston Public Health Commission. The Arlington Virginia portion of the Capital Bikeshare program receives 36 percent of its operations funding from the Arlington County government, including \$200,000 annually from local vehicle decal (vehicle registration) fees.

Other systems have been established with the expectation that parking revenues would supplement the bike share operations. Montreal's *BIXI* system was originally developed by the city's parking authority. It is operated by PBSC Solutions, and currently consists of 5,120 bikes, 411 stations and has approximately 40,000 members. Despite rapid expansion in membership, *BIXI* revenue in 2011 was far below projections, forcing PBSC to ask for additional loans from the City.<sup>33</sup>

The City of Barcelona's bike share system, *Bicing*, is managed and maintained by Clear Channel and Barcelona's city council. The 400-station, 6,000-bicycle system is primarily funded through parking revenue obtained by the "green area" car parking system introduced in 2005. The system designated certain areas of the City for resident parking only, where residents have the

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<sup>31</sup> The Orange Ride involves the Mayor of Denver leading a bicycle ride to Mile High Stadium for a Broncos game. Carrying the game ball, the Mayor rides a B-cycle onto the field to present the ball to the referees.

<sup>32</sup> Nonprofit bike share programs are constantly challenged by the number of events in which they are asked to participate. Event marketing success is difficult to quantify and requires a large amount of staff or volunteer support.

<sup>33</sup> CBCNews article published September 21, 2012 describing financial difficulties facing PBSC.



option to pay an annual fee to keep a designated parking space. Revenue from the “green area” provided funding for the initial capital expenses for *Bicing*, and continues to pay for ongoing operational costs along with sponsorship, membership and user fees.

### **Universities**

Colleges in the initial service area include Santa Monica College, the University of Santa Monica, UCLA Medical Center, the Art Institute of California Los Angeles, and Argosy University. These institutions may be willing to participate in the Program as partners or sponsors by ensuring a minimum number of subscriptions, facilitating sign ups, by providing space(s) for a bike-lock station, and/or by providing an annual Program subsidy. In exchange, the universities would benefit through healthier students, community service publicity, and reduced demand for on-site parking.

### **Bike Retailers/Vendors**

As shown on **Table 6**, there are 14 bike rental locations and 16 bike retailers in the City. Each could be approached regarding potential partnerships, particularly with respect to providing repairs and maintenance to a bicycle sharing program’s fleet. In exchange the bike shops would be providing a community benefit and would receive no-cost publicity. Other options include providing small discounts for bike share members at select bicycle shops, both encouraging local patronage and providing an economic benefit to members. This membership discount has been utilized in Washington, DC through Capital Bikeshare with great success.

### **Private Real Estate Developers**

Private real estate developers may be willing to participate in a bicycle sharing program by providing bike sharing facilities and/or equipment in exchange for parking reductions, which can improve the financial feasibility of their developments. In addition, developers are seeking ways to promote themselves as environmentally friendly and “green”. Though exchanges for reduced parking may not as attractive an offer in The City, partnering with a bike share program would certainly give positive publicity and may help with other certifications, such as LEED, which can improve the marketability of new development. The City is already instituting a program under which developers of projects with development agreements may be required to provide space and/or equipment for bike share. In certain cases, pledges of financial support for operations may be preferable to these capital contributions.

### **Private Foundations and Individual Contributions**

Regionally-based private foundations have shown a willingness to invest in bike share programs. These include endowed, nonprofit institutions that allocate mission-based funds for issues such as public health, social justice, equity, or transportation (e.g., Mary Black Foundation). Foundations set up by private businesses (e.g., JM Smith Foundation, Principal Foundation) usually give funds to support their local communities.

**Table 6**  
**Santa Monica Bicycle Sharing Analysis**  
**City of Santa Monica Bicycle Rental and Retail Shops**

Store	Address	Telephone	Rental Rates [1]	
			Per Hour	Per Day
<b>Bicycle Rental Shops</b>				
Sea Mist Rentals	1925 Main Street	(310) 395-7076	\$7	\$18
Spokes N Stuff	1700 Ocean Avenue	(310) 395-4748	\$6-\$18	\$15-\$50
Blazzing Saddles	320 Santa Monica Pier	(310) 393-9778	\$10-\$16	\$30-\$40
Santa Monica Bike Rental	712 Pacific Street	(310) 980-2873	\$20	\$50
Helen's Cycles	1619 Ocean Front Walk	(310) 395-7076	N/A	\$65
Bicycle Ambulance	2212 Lincoln Blvd	(310) 395-5026	N/A	\$20-\$35
Santa Monica Bike Center	1555 2nd St	(310) 656-8500	\$10-\$17 [3]	\$30-\$55
Perry's Café and Rentals	1200 Palisades Beach Rd	(310) 696-8644	\$10-\$19	\$30-\$45
Perry's Café and Rentals	2600 Ocean Front Walk	(310) 584-9306	\$10-\$19	\$30-\$45
Perry's Café and Rentals	930 Pacific Coast Highway	(310) 260-1114	\$10-\$19	\$30-\$45
Perry's Café and Rentals	2400 Ocean Front Walk	(310) 452-7609	\$10-\$19	\$30-\$45
West LA Bikes	10401 Wilshire Blvd	(800) 396-7478	N/A	\$40
Downtown LA Bicycle	700 Wilshire Blvd	(310) 576-9900	\$15-\$19	\$30-\$45
<b>Specialty Bicycle Rental Shops</b>				
Pedal or Not (Electric Bike Tours)	1515 7th Street	(310) 917-1111	\$20 [2]	N/A
iZip (electric rental)	2083 Main Street	(310) 310-8846	\$10	\$45-\$60
<b>Bicycle Retail Shops</b>				
West LA Bikes	10401 Wilshire Blvd	(800) 396-7478		
Helen's Cycles	1619 Ocean Front Walk	(310) 395-7076		
Performance Bike	501 Broadway Street	(310) 451-9977		
Downtown LA Bicycle	700 Wilshire Blvd	(310) 576-9900		
Bicycle Ambulance	2212 Lincoln Blvd	(310) 395-5026		
Cynergy Bicycles	2300 Santa Monica Blvd	(310) 857-1500		
The Bicycle Workshop	1638 Ocean Park Blvd	(310) 450-3180		
Bike Effect	910 Broadway	(310) 393-4348		
Bike Attack	2400 Main St	(310) 581-8014		
Predator Cycling	2834 Colorado Ave	(310) 829-6464		
Nate Loyal	2501 Broadway	(310) 927-6283		
Veloworx	3106 Lincoln Blvd	(310) 584-9797		
Zone 3 Multisport	3216 Santa Monica Blvd	(310) 828-0313		
Triathlon Lab	3328 Pico Blvd	(310) 581-6100		
Pedal or Not	1515 7th Street	(310) 917-1111		
Rack Solid	3127 Lincoln Blvd	(310) 450-6027		

"shops"

Source: Primary Internet research conducted by EPS.

[1] Rental rates current as of October 2012.



## APPENDIX A: Potential Capital Funding Sources

## APPENDIX A: POTENTIAL CAPITAL FUNDING SOURCES

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The City has already identified and secured substantial funding for the capital investment required for the bike share program. Still, the information below may be of use in consideration of future expansions of the system. The funding sources below are topically relevant but have not necessarily been previously used to fund bike share programs. In this sense, in some instances, they are untested sources and the nexus between the focus of the funding source and the bike share program may need to be articulated and approved before grant approval. These federal and state funding sources also have been summarized in tabular format as shown in **Table A**.

### Federal Sources

- **Moving Ahead for Progress in the 21<sup>st</sup> Century.** On July 6, 2012, the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) was signed into law. MAP-21 governs the funding of Federal surface transportation programs for fiscal years (FY) 2013 and 2014 and is the first long-term highway authorization enacted since the Safe, Accountable, Flexible, and Effective Transportation Equity Act—Legacy for Users (SAFETEA-LU) was enacted in 2005. Specific Federal funding programs under MAP-21 that could likely fund the capital costs of a bicycle sharing program include the programs described below.
  - **Transportation Alternatives (TA).** MAP-21 establishes a new program, Transportation Alternatives (TA), to provide funding for a variety of alternative transportation projects including bicycle and pedestrian projects that were previously eligible through separately funded programs under SAFETEA-LU. At approximately \$800 million per year, the TA program represents 2 percent of total MAP-21-authorized funding. Specific TA programs that may fund the capital costs of a bicycle sharing program include: transportation alternatives (formerly called the Transportation Enhancement [TE] program) and the Safe Routes to School program.<sup>34</sup>

Fifty percent of TA funds will be distributed to geographical areas based on population. The remaining TA funds will be eligible to local governments, school districts, tribal governments, and public lands agencies through a competitive grant application process. However, a state DOT can redirect any or all of these remaining TA funds from local agencies to fund any other highway program. Further, in a state of emergency, a state DOT can transfer all TA funding towards the rebuilding of damaged transportation infrastructure.<sup>35</sup>

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<sup>34</sup> MAP-21 refers to the overall funding program and the eligible uses under the former TE program by the same name: transportation alternatives.

<sup>35</sup> "Moving Ahead for Progress in the 21st Century Act (MAP-21): A Summary of Highway Provisions." U.S. Department of Transportation, Federal Highway Administration, Office of Policy and Governmental Affairs, July 17, 2012.

**Table A**  
**Santa Monica Bicycle Sharing Analysis**  
**Potential Federal and State Funding Sources**

Item	Acronym	Application Deadline	Agency	Program Funds Avail.	Matching Requirement	Eligible Applicants	Eligible Activities		Comments
							Capital	O&M	
<b>Federal Sources</b>									
Transportation Alternatives Program	TA	DOT	\$809 million (FY 2012-13)	20% local match (subject to a sliding scale)	State and local governments; transportation/transit authorities	X			TA funds will be available for a variety of alternative transportation projects including the construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation such as sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure. States are allowed flexibility in transferring a portion, and in some cases, all, of TA funding to other transportation projects.
Surface Transportation Program	STP	DOT	\$10 billion (FY 2012-13)	20% local match (subject to a sliding scale)	State and local governments; transportation/transit authorities	X			STP funds may be used by States and localities for projects to preserve or improve conditions and performance on any Federal-aid highway, bridge projects on any public road, facilities for nonmotorized transportation, transit capital projects, and public bus terminals and facilities.
<b>State Sources</b>									
Bicycle Transportation Account	BTA	NA	Caltrans	\$7.2 million	NA	Local agencies	X		Provides state funds for city and county projects that improve safety and convenience for bicycle commuters.
Transportation Development Act: Local Transportation Funds	TLF	NA	DOT	NA	NA	Local agencies	X		Local Transportation Funds (LTF) are derived from a ¼ cent of the general sales tax collected statewide. The State Board of Equalization, based on sales tax collected in each county, returns the general sales tax revenues to each county's LTF.
Transportation Development Act: State Transit Assistance Funds	STA	NA	DOT	NA	NA	Local agencies	X		State Transit Assistance (STA) funds are derived from the statewide sales tax on gasoline and diesel fuel. The State Controller's office allocates the tax revenue, by formula, to planning agencies and other selected agencies.
State Transportation Improvement Program: Interregional Transportation Improvement Program	STIP (ITIP)	NA	Caltrans	\$6.4 million (target for Ventura Co. thru 2016-17)	None	Local agencies	X		The 2012 STIP (developed biennially) covers a five year programming period (2012-17); ITIP represents 25% of total STIP funding.
State Transportation Improvement Program: Regional Transportation Improvement Plan	STIP (RTIP)	NA	Caltrans	\$19.3 million (target for Ventura Co. thru 2016-17)	None	Local agencies	X		The 2012 STIP (developed biennially) covers a five year programming period (2012-17); RTIP represents 75% of total STIP funding.
Regional Surface Transportation Program	RSTP	6-Jan	DOT	\$320 million (76% must be spent in 11 urbanized areas of greater than 200,000)	20% local match	Local agencies	X		Funds may be used to cover capital costs for transit projects eligible for assistance under the Federal Transit Act and publicly owned intracity or intercity bus terminals and facilities.
State Safe Routes to School Program	SR2S	30-Mar	Caltrans	\$24.25 million	10% minimum	Cities and Counties	X		Safe Routes to School (SR2S) funds may be used to improve infrastructure (must be located in the vicinity of a school), and support programs that promote walking and bicycling through education/encouragement programs aimed at children, parents, and the community.

**State Sources Continued**

A-2

**Table A  
Santa Monica Bicycle Sharing Analysis  
Potential Federal and State Funding Sources**

Item	Acronym	Application Deadline	Agency	Program Funds Avail.	Matching Requirement	Eligible Applicants	Eligible Activities		Comments
							Capital	O&M	
Environmental Enhancement and Mitigation Program	EEM	4-Jan	Caltrans	\$10 million	None	Local agencies and Non-profit organizations	X		Projects are generally limited to \$350,000 each. Projects must directly or indirectly relate the environmental impact of the modification of an existing or new Transportation Facility.
Proposition 84 Urban Greening Project Grants	UGP	NA	CA Strategic Growth Council	\$25 million	None	city, county, special district, or nonprofit organization, or joint powers authorities	X		UGS Funds may be used in large-scale greening projects. Bike infrastructure would be eligible in combination with other efforts.
Transportation Planning Grant Program	TPG	30-Mar	Caltrans	\$10 million	10% local match	MPOs, regional transportation planning agencies, cities and counties, transit agencies, and Native American tribal governments	X		Funds may be use to improve mobility by innovatively addressing problems or deficiencies in the transportation system.
Coastal Conservancy	NA	NA	Coastal Conservancy	NA	NA	Government agencies and non-profits	X		Funds may be used to improve access to coastal areas and may include transportation infrastructure projects.

"fund\_summ"

Source: Various funding source online resources; EPS.

A-3

- **Surface Transportation Program (STP).** The Surface Transportation Program (STP) will provide an annual average of \$10 billion in flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Fifty percent of STP funds will be distributed to geographical areas based on population, with the remainder to be used in any area of a particular state.<sup>36</sup>

## State Sources

- **Bicycle Transportation Account.** Grants are available through the State Bicycle Transportation Account (BTA). BTA provides state funds for city and county projects that improve the safety and convenience of bicycle commuters. Eligible projects include new bikeways that serve major transportation corridors, secure bicycle parking, bicycle-carrying facilities on transit vehicles, and installation of traffic control devices, planning, bikeway improvements, maintenance, and hazard eliminations.

Streets and Highways Code (SHC) Section 2106 stipulates the annual BTA funding level in the approved State budget, with awards announced after enactment. Per SHC 891.4(b), funds are allocated to cities and counties on a matching basis that requires the applicant to furnish a minimum of 10 percent of the total project cost. No applicant shall receive more than 25 percent of the total amount transferred to the BTA in a single fiscal year.

- **Transportation Development Act (TDA).** Article 3 (SB 821) TDA Article 3 funds-also known as the Local Transportation Fund (LTF)-are used by cities for the planning and construction of bicycle and pedestrian facilities. The Transportation Development Act (TDA) provides two major sources of funding for public transportation: the **Local Transportation Fund (LTF)** and the **State Transit Assistance fund (STA)**. These funds can be used for the development and support of public transportation needs that exist in California and are allocated to areas of each county based on population, taxable sales, and transit performance. Transportation Development Act funds are derived from a ¼ cent general sales tax collected by the State.
- **Local Transportation Funds** can be used for the following purposes: planning, pedestrian and bicycle facilities, rail passenger service, public transit, special group transportation service, local streets and roads, and administration.
- **Regional Surface Transportation Program (RSTP).** The Regional Surface Transportation Program (RSTP) was established by the State of California to utilize Federal Surface Transportation Program funds for a wide variety of transportation projects. The State allows regional transportation agencies to exchange these Federal funds for state funds to maximize the ability of local public works departments to use the funds on a wide variety of projects including street and road maintenance. The exchanged funds are distributed on a fair share and competitive basis. The RSTP can provide funding for capital costs for transit projects and

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<sup>36</sup> Ibid.

bicycle transportation and pedestrian walkways on any public roads in accordance with Section 217 of Title 23, United States Code (U.S.C.).

- **State Safe Routes to School Program (SR2S).** The State Safe Routes to School program (SR2S) is separate from the Federal Safe Routes to School Program. This program, initiated in 2000, is meant to improve school commute routes by improving safety to bicycle and pedestrian travel through bikeways, sidewalks, intersection improvements, traffic calming, and ongoing programs. Safe Routes to School could be utilized to improve bicycle infrastructure in conjunction with launching a bike share program in Santa Monica.
- **Environmental Enhancement and Mitigation Program.** Environmental Enhancement and Mitigation Program (EEM) funds are allocated to projects that offset environmental impacts of modified or new public transportation facilities, including streets, mass transit guideways, park-n-ride facilities, transit stations, tree planting to mitigate the effects of vehicular emissions, off-road trails, and the acquisition or development of roadside recreational facilities. The EEM Program offers a total of \$10 million each year for grants to local, state, and Federal governmental agencies and to nonprofit organizations.
- **Coastal Conservancy.** This grant program, administered through the California Coastal Conservancy, funds the acquisition, planning, design, or construction of projects that increase or preserve coastal access. These grants may be used for trail or bike planning and construction that improve or maintain coastal access.