HARVARD Kennedy School
Government Performance Lab

Shifting Gears: Using Results-Driven Contracting to Improve Metro-Boston's Bike Share Procurement

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I.   Executive Summary

Public-private partnerships often require complicated contracts stipulating how each party is paid and how stakeholders share responsibilities and risks. Setting up effective agreements often requires iteration, with parties reflecting on the lessons learned at the end of a contract and seeking to incorporate these lessons into future agreements. As part of Bloomberg Philanthropies' What Works Cities initiative, the Harvard Kennedy School Government Performance Lab (GPL) provided pro-bono technical assistance to the Boston Transportation Department for its procurement of a bike share system operator.

Hubway, the bike share system that operates in the participating municipalities (PMs) of Boston, Brookline, Cambridge, and Somerville with the coordination of the Metropolitan Area Planning Council (MAPC), needed to procure an operator before the PMs' current contracts expire in April 2017. The stakeholders leveraged this procurement to address the system's greatest challenges: inconsistent bike and dock availability and a need for private capital to both expand to new neighborhoods and increase the density of stations in areas Hubway already serves.

This policy brief explores how the Request for Proposals (RFP) released in August 2016 by the MAPC on behalf of the PMs sought to align Hubway's performance monitoring, operations, and financing structures toward achieving these goals.[1] Section II provides background on Hubway and the development of the RFP. Section III explains how the MAPC and the PMs plan to use new metrics to improve the system's performance monitoring. Section IV discusses efforts to enhance operations and meet user needs by increasing bike and dock availability and granting the operator greater flexibility. Section V describes how establishing a strategic revenue sharing agreement between the

PMs and the operator can incentivize all parties to improve system performance. Key lessons from Section V include the following:

- Sharing revenue between the PMs and the operator can reduce transaction costs and simplify accounting requirements that have created challenges under the current contracts' complex financial agreements.
- Distributing each specific revenue stream—such as user fees or station sponsorships—to either the PMs or the operator based on the connection between that stream and the party's programmatic responsibilities can improve performance.
- Providing financial incentives for a contractor to reach revenue targets, which can be achieved only by maintaining user satisfaction, can serve a similar function as traditional performance indicators.

Section VI reflects on the broader lessons of the Hubway procurement for government transportation and public works projects.[2]

II.   Background

In the summer of 2016, the Metropolitan Area Planning Council released a Request for Proposals (RFP) for a new operator of the metro-Boston bike share system, Hubway, on behalf of the participating municipalities of Brookline, Boston, Cambridge, and Somerville. The PMs' existing operations contracts, which expire in April 2017, are held by Motivate, a private company that manages bike share systems in over a dozen cities in the U.S., Canada, and Australia. Boston and its partners seek to meet two principal goals through this procurement: 1) improve the experience of bike share users—current Hubway members frequently encounter stations that are

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empty, preventing them from picking up a bike, or full, preventing them from dropping off a bike; and 2) maintain the current system's state of good repair and expand the network of stations without significant public expense. Expansion can improve bike and dock availability in areas that are already served, boost total ridership, and increase access for low-income and minority communities.

As part of Bloomberg Philanthropies' What Works Cities initiative, the GPL helped metro-Boston adopt results-driven contracting strategies for its bike share procurement to achieve the PMs' objectives.[3] We interviewed experts and practitioners from across the country to learn about best practices, provided analyses and recommendations to Boston, MAPC, and the other PMs to guide the RFP's development, and drafted key sections of the RFP.[4]

III.   Improving measurement of outcomes will help Boston track progress toward goals

Under Boston and Somerville's existing contracts with the operator,[5] individual Hubway stations are evaluated on whether they are "normal"—meaning at least one dock and one bike are available—for at least 85 percent of the "operational hours" each month.[6] However, this approach to tracking performance has not worked well for three main reasons: 1) the operator consistently fails to meet the 85 percent requirement for certain high-traffic stations, indicating that a universal performance target may be unattainable for popular stations;[7] 2) a metric that weights all stations equally does not capture that more users have a negative experience when highly trafficked stations have no bikes or docks available; and 3) the 6 AM to 10 PM "operational hours," during which performance is monitored each day, do not focus on the specific times when poor bike and dock availability affects the most users. To address these challenges, the RFP allowed for the adoption of a cluster-based "normalness" metric and key performance indicator (KPI) targets that vary by station site and time.

To better capture the user experience, bike share systems can use a "cluster-based" approach to measuring bike and dock availability. Using a cluster metric, a full or empty station would be considered *not* normal only if immediately neighboring stations did not offer the needed bike or dock.[8] This assumes that cyclists do not mind walking or riding to a nearby station if two stations are sufficiently close. (A

cluster-based system could still allow geographically isolated stations to be evaluated as individual stations.[9])

In addition to using cluster-based KPIs, the participating municipalities wanted to modify performance targets based on station site. The current KPI requires *all* stations to be normal most of the time. Under this KPI, an operator might have the incentive to rush one of the four rebalancing vehicles—capable of carrying 30 bikes—to service a little-trafficked station instead of rebalancing more heavily-trafficked areas. Stricter normalness KPIs for the most frequented stations will prevent this by encouraging the operator to focus its limited resources on rebalancing stations that serve the most users.

The PMs also sought to vary KPI targets by timing. Current contracts define success by whether stations meet the 85 percent normalness requirement across

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Participating municipalities want to maintain influence over Hubway's operations

Bike share systems in the U.S. are usually structured in one of two ways: 1) a private company or a non-profit organization owns and runs the system with little government involvement after launch; or 2) the government owns the equipment and pays a private company or non-profit organization to operate it. While Hubway currently falls under category two, some PMs have considered switching to category one.

Boston personnel described how they view the bike share system as being based on four "pillars": equipment, operations, marketing, and fundraising/sponsorships. Each requires varying amounts of government capital, staff time, and expertise. Contracting out system management by privatizing a bike share system reduces the government's responsibility while increasing both the operator's risk and potential rewards. However, maintaining ownership of public equipment and Hubway's status as a public transportation system is also valuable to the PMs.

To fully understand their options, the PMs requested that RFP respondents indicate the feasibility of allowing the different PMs to use either the public-private or private model at their individual discretion.[10]

all operational hours—6 AM to 10 PM seven days a week. This obscures the operator's failures to rebalance bikes and docks during times of high demand. The new RFP thus requests that respondents propose distinct KPIs for weekday rush hours, less busy weekday hours, weekends, and nighttime.

These three measurement changes together grant the PMs flexibility in system design. For example, host municipalities could designate specific, high-density areas and evaluate only stations in that area using a cluster-based approach. Alternatively, they could apply the cluster-based measurement in these areas only during periods of higher usage when expecting the operator to maintain available bikes and docks at every station might be unrealistic. Key considerations in adopting such a measurement system include that: 1) it would add complexity to the existing management software; and 2) it might provide ambiguous direction to the operator about how to prioritize rebalancing.

IV. Improving system operations is critical for achieving Boston's goals

Poorly designed metrics are not the only reason bike share stations cannot meet user demand. Inconsistent station density across the Hubway service area means that users have inadequate access to bikes and docks. In addition, the operator's lack of flexibility prevents it from strategically deploying its resources to meet user needs. This section describes how the participating municipalities and the Metropolitan Area Planning Council are using this procurement to confront these challenges.

A. Increasing bicycle and dock availability will enhance the user experience

According to the City of Boston's staff, Hubway's principal struggle is ensuring bike and dock availability, particularly at highly-trafficked stations. This is a common challenge across bike share systems. Since bike share is still a novel mode of transportation, cities are still trying to figure out the best way to increase bike and dock availability.

Research suggests that achieving consistent, high density across all areas served by a bike share system is the best way to increase ridership and may help maintain normal stations.[11] However, a municipality's ability to increase network density rests in large part on its ability to pay for new stations, the complexity of local site permitting processes, and support from neighbors of potential station locations. When the operator has such little control over station density, holding it fully accountable for the user experience is not only unfair, but also unlikely to improve bike and dock availability.

B. Providing the operator flexibility to troubleshoot and experiment can lead to better outcomes

For many government contracts, granting a service provider flexibility to experiment with how to improve the user experience is crucial to success. As an example, providing a mechanism to modify the pricing and structure of some Hubway membership options could allow for: 1) demand-based discounts that encourage users to rebalance bikes, reducing dependence on expensive rebalancing vehicles or valet services; 2) promotions that increase ridership; and 3) the creation of new membership tiers based on user demand, such as single ride passes for tourists, without reentering contract negotiations.[12]

Throughout the RFP development process, the PMs and the MAPC discussed how greater operator flexibility could be incorporated into the system. In areas where prescription was not needed or where the PMs and MAPC were unsure as to how to meet their goals, the released RFP explains what the parties hope to achieve, specifies any hard requirements that do exist, and explicitly seeks input from respondents. For example, the RFP provides suggested price ranges for corporate, annual, monthly, and low-income memberships while allowing flexible pricing for other customers.[13]

Where the operator's incentives to maximize revenue might not align with the PMs' goals, PMs included requirements and oversight measures in the RFP. For example, the PMs set goals for marketing and multilingual customer support to increase the diversity of members.

C. Key stakeholders need a coordinated decision-making process

Because the project has many stakeholders and the RFP anticipates greater flexibility for the operator, there will be a need for quick, collaborative decision-making during the contract term. As they have done for the current contracts, the PMs and MAPC plan to develop decision-making processes in a Memorandum of Agreement. Such a structure should

ease compliance with essential contractual requirements, as well as facilitate regular, joint monitoring of real-time performance data to enable swift troubleshooting when unanticipated challenges arise.

V. Improving the financing structure can align operator and municipality incentives

While the participating municipalities each have their own contracts with the operator, complicated bookkeeping requirements prevent the financing structure from meeting any of the parties' needs. This section describes these difficulties and how a strategic revenue sharing agreement can simplify financial processes, promote strong operator performance, and benefit users.

A. Hubway's current financing system is both complex and unenforceable

Hubway's complicated financing structure is typical of public-private partnership bike share systems. Currently, one PM shares profits with the operator while the others pay the operator a fixed monthly fee for each functioning dock within their borders, as well as specific fees for other services needed during the contract term, such as installing or moving a station. The complex process of calculating costs and disbursing funds from different revenue sources has lacked transparency and has been laborious for the operator. Furthermore, the operator claims that the operations and maintenance fees it receives are insufficient to pay for the additional rebalancing services needed to improve bike and dock availability.

Under the current contracts, the PMs have the right to levy penalties on the operator for not meeting KPIs, but they have not done so. Fines exist for not maintaining dock and bike availability at all stations at least 85 percent of the time, but most of the penalties target untimely reporting or failure to sustain docks' and bikes' functionality or cleanliness. Contracts mandate a $1,000 penalty per individual infraction for each *day* of continued failure. Boston has not levied these charges for four reasons: 1) given the operator's current difficulty sharing funds with the PMs, adding another set of financial transactions would further complicate disbursement; 2) the fines would be extremely large relative to Hubway's total revenues, jeopardizing the operator's financial health; 3) it is difficult to determine the exact number of violations; and 4) fines are unlikely to improve the

operator's performance due to misalignment between KPIs and the user experience.[14]

With the existing financial agreements and unexercised fines as the only recourse for enforcement of bike and dock availability requirements, PMs cannot incentivize the operator to improve performance and the user experience.

B. Revenue sharing encourages all stakeholders to focus on performance goals

The new revenue sharing agreement proposed in the RFP has the potential to remedy the current financing structure's limitations and improve performance in several ways.

While the RFP states that the PMs are open to alternative proposals, it includes a template identifying four revenue streams—a title sponsorship, which could give a single company branding rights akin to New York City's Citi Bike; secondary sponsorships, which fund specific elements of the system, such as single stations; member fees; and casual user fees—and proposes that each be split differently between the PMs and the operator so as to meet specific needs and align incentives toward system goals (see Table 1). The four identified revenue streams differ on two dimensions: 1) the extent to which PMs or the operator control the factors that determine the amount of revenue raised; and 2) whether PMs or the operator need the revenue stream to accomplish related tasks. For example, the contract could be structured so that the operator receives the majority of user revenue. As the operator makes more bikes and docks available and functional, membership will likely grow. This could create a cycle of positive feedback in which the operator increases its revenue, invests in rebalancing vans and other methods of maintaining member satisfaction, and receives even more revenue from the greater number of members.

The RFP proposes that after each revenue stream reaches a threshold, the distribution of the stream between the PMs and the operator would shift so that the operator's share increases. For example, the RFP suggests that the majority of the title sponsorship revenue should accrue to municipalities to meet their expansion and maintenance needs.[15] However, after a threshold for title sponsorship revenue is met—which could be set at the cost of the PMs' planned system expansion—the distribution of that revenue could

alter so that a larger share of every additional dollar raised goes to the operator. This would incentivize the operator to secure the largest possible title sponsorship while ensuring that the PMs' financial needs are met. Appendix 1 contains an illustrative revenue sharing agreement, including possible thresholds and a corresponding payment schedule.

The new revenue sharing structure carries other benefits as well. It will clarify the PMs' and operator's incentives so that the parties can better understand each other's interests and develop a trusting working relationship. It also streamlines accounting and reduces transaction costs by establishing a simple formula for sharing revenue.

C. Revenue targets may serve a similar function as traditional performance metrics

Given that the PMs seek to drive better performance through the contract's financial structure, they also considered partially or exclusively tying operator payment directly to traditional performance targets.[16] However, there are three advantages to using revenue targets, as opposed to KPI targets, to determine payment:

1. *Revenue sharing provides greater certainty compared to traditional KPIs:* When using revenue-sharing thresholds, the PMs and the

operator make fewer assumptions—they only need to approximate all parties' capital needs and the expected amount of fundraising. The alternative of structuring revenue sharing around KPIs would require the PMs and the operator to *also* estimate baseline performance and reasonable targets. Given that the PMs plan to switch to new KPIs and significantly expand the system, it would be difficult to calibrate new, untested performance requirements so that they are within the operator's reach but also incentivize improvement. Making at least a portion of payment dependent on new KPIs thus might have one of two unintended effects: 1) if KPIs were easy to meet, the operator would receive a greater share of revenue for little additional effort; or 2) if KPIs were too onerous, the operator would lose out on revenue despite its good faith efforts to meet performance goals. Tying the level of payment to untested KPIs could also worsen performance if the operator did not receive the resources needed to address performance challenges.

2. *Raising revenue is critical to success, as measured by traditional KPIs, and should be encouraged:* While an expanded system, increased equity of access, and bike and dock availability are the PMs' ultimate goals, revenue raised is an important means to those ends and should be considered a KPI in its own right. If

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Table 1. Structuring revenue sharing to align interests of the operator, PMs, and users

This table is a slightly modified version of one that was included in the recent bike share RFP. It indicates to potential bidders how revenue sharing can align stakeholders' interests toward achieving system goals.

Goals	How to meet goals with revenue sharing
Meet the PMs' need at the beginning of a contract to invest in new equipment to expand the system to new areas, and to increase station density in already served areas.	Distribute the majority of title sponsorship funds to PMs until they have received sufficient resources to cover the costs of their planned expansions.
Meet the PMs' need to continue receiving funds for the duration of the contract to pay for replacement of equipment.	After PMs receive sufficient funds to cover expansion costs, ensure they continue receiving enough funds to cover expected replacement of equipment.
Encourage the vendor to assume responsibility for maximizing user happiness.	Distribute the majority of casual user and member revenue to the vendor.
Meet the vendor's need to invest in capacity to operate an expanded system at the beginning of any planned system expansion.	Distribute a sufficient portion of title sponsorship funds to the vendor so that it may build operational capacity.

payment to the operator were instead tied to traditional KPIs, the operator would have no extra incentive to meet fundraising targets. As a result, PMs might not receive the capital necessary for their planned expansions or equipment replacement. Revenue sharing thus reduces the risk that the operator fails to raise the funds needed for all parties to fulfill their respective responsibilities.

3. *User revenue can serve as a partial proxy for traditional KPIs:* Sharing user revenues incentivizes strong performance even without basing payment on KPIs. By setting thresholds for user revenues, the PMs effectively create a minimum level of performance that the operator will attempt to achieve in pursuit of profits. This is because a positive user experience can lead to increased membership and, in turn, user fees. Sharing user fees can thus capture some elements of user satisfaction in a simpler and more holistic manner than untested KPIs that target presumed drivers of ridership, such as bike and dock availability.

Note that using revenue sharing does not imply that monitoring of traditional KPIs will be unnecessary. It is possible than an operator seeking revenue maximization might pour all its resources into rebalancing densely populated areas while neglecting other areas or other system needs, such as equipment maintenance. As discussed in Section IV.C, it is critical that the parties regularly review performance data, flag shortcomings, and problem-solve to continuously improve the user experience.

VI.   Lessons for other public works and transportation contracts

The metro-Boston bike share procurement holds broader lessons for how public works and transportation contracts can benefit from results-driven contracting strategies. The participating municipalities and the Metropolitan Area Planning Council modeled how government officials should identify a program's goals—in this case, to improve the user experience, expand the system, boost ridership, and increase equity of access and use—and strategically structure related RFPs, contracts, and revenue streams to align incentives appropriately.

The PMs and MAPC carefully considered which metrics would best capture performance and should be monitored in real time, enabling stakeholders to swiftly flag and troubleshoot problems during the course of the contract. The PMs intend to allocate each revenue stream based on three considerations: 1) which party's performance will most influence the size of that stream; 2) the amount of funds each party needs to fulfill its respective programmatic obligations; and 3) when each party needs funds to fulfill those obligations. This structure will focus stakeholders on their essential duties and reduce the risk that revenue comes in below projections, which would in turn compromise performance. Well-defined and collaborative decision-making processes, which the PMs and MAPC will establish once an operator has been selected, are also important when multiple stakeholders control disparate elements that are necessary for a project's success.

Finally, for complex public-private partnerships to succeed, an iterative approach to contracting and continuous evaluation of performance is critical. Stakeholders will need to monitor whether the strategies employed in this latest bike share procurement are in fact effective in achieving their goals.

Appendix 1: Example of revenue sharing structure for a bike share RFP

The following is sample language that could be used to describe a revenue sharing agreement in a bike share RFP. The GPL fictionalized the numbers describing revenue thresholds and the distribution of different funding streams. However, the hypothetical distribution percentages and thresholds below are meant to align with the goals stated in Table 1 of this policy brief. For example, the $6 million threshold for the title sponsorship would be appropriate for a system where the participating municipalities determined that they needed 70 percent of $6 million to cover the cost of their planned system expansions. For the Hubway RFP, the PMs and the Metropolitan Area Planning Council did not specify dollar amounts, but included a template that allowed respondents to propose their own distribution percentages and revenue thresholds.

CONTRACT TERMS	Title sponsorship	Member and casual user fees	Secondary sponsorships*
Amount to operator before threshold	30%	65%	60%
Amount to municipalities before threshold	70%	35%	40%
Threshold for revenue split	$ 6,000,000	$ 3,500,000	$ 2,000,000
Amount to operator after threshold	65%	85%	75%
Amount to municipalities after threshold	35%	15%	25%
*Secondary sponsorships are used to buy individual stations. Dollar amounts and revenue split percentages refer to the amount in excess of capital costs of sponsored stations.			

While the revenue sources identified below share funds between the operator and the PMs from the first dollar raised, they also have thresholds that, after being reached, trigger a new revenue sharing arrangement for any additional funds raised. The proposed percentages and thresholds factor in historical revenues and the PMs' identified goals. They are structured so that each party will receive funds in the necessary amount and at the appropriate time to meet the programmatic goals for which it is responsible. For example, PMs' planned system expansion and the operator's increased management capacity will require upfront funding, and the large title sponsorship should thus be raised at the beginning of the contract. On the other hand, user fees and secondary sponsorships, which can fund new individual stations and a portion of anticipated operations and maintenance costs, can be collected gradually over time. The proposed split of user fees is intended to drive the operator to maximize the number of users by making investments that meet their needs.

Each PM and the operator must estimate the amount of cash inflow they would receive under the proposed revenue sharing model and ensure that it can cover the outflows needed to meet their respective responsibilities. To provide a concrete example, the following table shows how the above arrangement would distribute revenue based on illustrative revenue flows. After each revenue stream's threshold is reached during or at the end of year two of the hypothetical contract, the operator receives a larger portion of all additional funds collected.

PAYMENT SCHEDULE	2017	2018	2019	2020	2021	Total
Title sponsorship	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$15,000,000
Amount to operator	$ 900,000	$ 900,000	$1,950,000	$1,950,000	$1,950,000	$ 7,650,000
Amount to municipalities	$2,100,000	$2,100,000	$1,050,000	$1,050,000	$1,050,000	$ 7,350,000
User fees	$1,500,000	$2,000,000	$2,500,000	$2,500,000	$3,000,000	$11,500,000
Amount to operator	$ 975,000	$1,300,000	$2,125,000	$2,125,000	$2,550,000	$ 9,075,000
Amount to municipalities	$ 525,000	$ 700,000	$ 375,000	$ 375,000	$ 450,000	$ 2,425,000
Secondary sponsorships	$1,000,000	$2,000,000	$2,000,000	$2,000,000	$1,000,000	$ 8,000,000
Amount to operator	$ 600,000	$1,350,000	$1,500,000	$1,500,000	$ 750,000	$ 5,700,000
Amount to municipalities	$ 400,000	$ 650,000	$ 500,000	$ 500,000	$ 250,000	$ 2,300,000
TOTAL REVENUES	2017	2018	2019	2020	2021	Total
Operator	$2,475,000	$3,550,000	$5,575,000	$5,575,000	$5,250,000	$22,425,000
Municipalities	$3,025,000	$3,450,000	$1,925,000	$1,925,000	$1,750,000	$12,075,000

Appendix 2: Recommended KPIs

While advising the participating municipalities and the Metropolitan Area Planning Council during the RFP planning process, the GPL produced a set of recommendations for KPIs to 1) measure the user experience, 2) monitor expansion efforts, and 3) track progress on equity-related goals. The following is a slightly modified version of those recommendations and considerations, some of which were discussed earlier in this policy brief.

Metric	Options for Defining Metric	Purpose and Considerations
Goal 1: User experience		
"Normalness" (i.e. at least one bike and one dock are available)	- system-wide* - by individual stations* - by neighborhood - hybrid approach: by cluster in high-density or high-traffic areas and by individual stations otherwise	When setting targets, the City could consider different rebalancing standards for stations during peak hours based on their traffic levels.
Density and station locations	- average distance between neighboring stations in a given area (neighborhood, sub-neighborhood, municipality) - average number of stations per square mile - number of stations in specific areas - contiguity of all service areas to at least one other service area	This is a process metric reflecting progress toward the target outcome of achieving regular bike and dock availability.
Demand met	- number of bike trips originating or ending at each highly-trafficked station - number of bike trips as a percentage of total desired trips	Total number of app searches for bike availability could be a proxy for total desired trips. Another (more complex) option is modeling ridership demand based on several factors, such as employment, population densities, presence of comfortable biking routes, proximity to large institutions, or tourist density.
Goal 2: Growth		
Ridership	- total number of trips* - trips per bicycle* - number of trips of specific lengths of time* - number of trips of specific distances* - number of trips by user type*	
Membership by type	- number of annual members* - number of annual low-income members* - number of monthly members* - number of memberships bought with a corporate sponsor subsidy* - number of casual memberships purchased with a zip code outside of the system footprint* - number of memberships bought for each specific promotion*	

Goal 3: Equity		
Expansion to communities of concern[17] (COCs)	- percentage of total new stations built in COCs - percentage of all stations in COCs	This metric tracks Boston's high priority goal of expanding into COCs.
Uniformity of density across all areas served by Hubway, including new expansion neighborhoods	- average distance between neighboring stations in a given area - average number of stations per square mile - number of stations in specific areas	Each of these metrics could be compared between COCs and non-COCs, and also between each COC and its neighboring non-COCs.
Ridership in COCs	- total number of trips originating and ending in COCs - number of memberships sold or provided to qualifying low-income individuals	This can help measure the success of outreach and marketing to users in COCs.

* Indicates that metro-Boston already tracks the metric under the existing contract.

[1] The GPL provided technical assistance throughout the RFP development process. At the time of publication, contract negotiations with the selected vendor were ongoing. As a result, the terms of the final contract may differ from the contents of the RFP described in this brief.

[2] For government officials interested in improving existing bike share systems or setting up new ones, guides to designing successful systems include the National Association of City Transportation Officials' "Bike Share Station Siting Guide" (http://nacto.org/2016/04/21/nacto-releases-new-guidance-bike-share-station-placement/), TransitCenter's "Private Mobility, Public Interest" (http://transitcenter.org/publications/private-mobility-public-interest/), and the Institute for Transportation and Development Policy's "The Bike Share Planning Guide" (https://www.itdp.org/who-we-are/for-the-press/the-bike-share-planning-guide/).

[3] Results-driven contracting strategies include identifying the goals of the procurement and designing the procurement process and contract structure to incentivize contractors to meet these goals, setting up systems to measure performance against contractual outcome targets, and, in collaboration with the operator, using performance data to improve outcomes during the course of the contract. For more information, please see the GPL's *Overview of Results-Driven Contracting* (http://govlab.hks.harvard.edu/files/siblab/files/results-driven_contracting_an_overview_0.pdf).

[4] Research conducted by the GPL included interviews with: Michael Replogle, Deputy Commissioner for Policy, New York City Department of Transportation; Andrew Burdess, Senior Counsel, Special Projects, New York City Office of the General Counsel; John Frost, Executive Director of Bike Share, New York City Department of Transportation; Kevin Mulder, Active Transportation Director, Metropolitan Transportation Commission (Bay Area); Doug Johnson, Principal, Transportation and Land Use Development, Metropolitan Transportation Commission; Emily Snyder, Urban Mobility Manager, Denver Public Works Transportation and Mobility; James Davies, Operations Director and General Counsel, Bublr Bikes (Milwaukee); Kara Oberg, Program Coordinator, Berkeley Public Works; Kate Fillin-Yeh, Bike Share Initiative Director, National Association of City Transportation Officials; and Noah Kazis, former reporter, StreetsBlog NYC. In addition, the GPL reviewed articles on many American bike share systems; bike share contracts for the Bay Area, Chicago, Portland, and Denver; the Bay Area's Coordination Agreement; and RFPs from Memphis, Baltimore, Philadelphia, Milwaukee, Phoenix, and Portland.

[5] Motivate operates in Brookline and Cambridge under contracts that were signed six years ago. Contracts for Boston and Somerville were signed three years ago. All four contract expire in April 2017.

[6] The operator is also required to achieve a reduction in the average length of weekday outages system-wide, but the timeframe over which this would be measured was not specified in the existing contracts.

[7] The contractually obligated penalties for not meeting this benchmark, which are currently not enforced, are discussed in Section V.A of this brief.

[8] In its response to the December 2015 Request for Information MAPC released for this procurement, Motivate proposed that the current 85 percent metric be applied to a fully cluster-based system.

[9] Current KPIs permit individual stations up to 144 minutes of continuous outage as long as they are normal for 85 percent of all operating hours. A cluster-based system could permit shorter outages.

[10] The released RFP requests the inclusion of a process for transferring vendor-owned equipment should any new operations contract(s) not be renewed after the five-year term. It also acknowledges that any revenue sharing arrangement between the operator and the PMs, discussed in Section V of this brief, may change depending on whether the PMs or the operator own a host municipality's equipment.

[11] This argument is also supported by a recent study published by the National Association of City Transportation Officials (http://nacto.org/wp-content/uploads/2015/04/NACTO_Walkable-Station-Spacing-Is-Key-For-Bike-Share.pdf).

[12] Experimenting with new promotions or pricing structures is not explicitly allowed under current contracts.

[13] Representatives of the Bay Area's Metropolitan Transportation Commission (MTC) similarly told the GPL that they wanted control over pricing for full-price and low-income annual memberships because those tiers serve Bay Area residents. This allows the MTC to make sure its equity goals for residents are met while enabling Motivate, also the Bay Area's bike share owner and operator, to develop other membership options to maximize ridership and revenue raised from tourists and other infrequent users.

[14] Other cities have taken different approaches to penalizing their providers for poor performance. New York City's service level agreement assesses small monetary penalties for not meeting KPIs. These fees are deposited into an escrow account, which the City co-manages with the operator, and the funds are reinvested in maintaining and expanding the bike share system. The City has final say on all spending decisions. In the Bay Area, the MTC levies some very small fees for not meeting certain KPIs, such as charging $1 for each minute that a cluster outage occurs beyond 10 consecutive minutes during peak hours. Denver has no KPIs or incentives to promote good performance since it does not have an operations contract with its non-profit provider.

[15] This could benefit the operator as well since a larger and well-maintained fleet of bikes may increase user revenue.

[16] This approach could be implemented in one of two ways: 1) using binary KPI targets, which would lead to either no payment or a fixed payment if the target were met or exceeded; or 2) using a sliding scale, under which progressively larger payments or portions of revenue would go to the operator after meeting set KPI milestones.

[17] "Communities of concern" refers to a collection of different groups that could be considered vulnerable or disadvantaged.