

City of Calgary

# Bike Share Business Models

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# Executive Summary

## Mandate

Grant Thornton LLP (“Grant Thornton”) was retained by the City of Calgary (the “City”) to assist in selecting a business model(s) that would be suitable for its potential bike share program (the “Program”). The proposed Program consists of 40 stations, 400 bikes and 760 docking stations located throughout the Centre City.

The scope of our engagement was intended to analyse the various business models available for bike share programs and recommend which model or models would be suitable for the City. As part of this analysis we were requested to perform a detailed review of the financial forecasts and assumptions used as part of the Alta Planning + Design Feasibility Study. Our analysis did not constitute an audit or review in accordance with generally accepted auditing standards. Accordingly, we do not express an opinion of the financial or other data.

## Bike Sharing

Bike sharing systems provide members access to bikes for short-distance trips in an urban setting. The system consists of a network of bike stations (pay station, bikes and bikes docks) located at key locations throughout a selected geographical area. Members of the system usually have a ride free period (30 – 45 minutes) to encourage using the bikes for short-distance trips. After the free ride period additional fees are charged. User memberships may be as long as a year, or as short as a day depending how the system is being used and operated. Bike sharing provides an alternative for trips outside of walking distance and offers an extension of the transit system.

## Business Model Selection

Based on a detailed review of the selection of business models by other jurisdictions, a list of common priorities that influenced the selection of business models was developed. Based on discussions with City administration and the results of a pairwise analysis completed by some members of administration, we understand the key priorities in selecting a business model for the City of Calgary is low financial risk to taxpayers and having technical expertise in the operation of the bike share program. As a result we determined the following business models to be most appropriate:

- **Administrative non-profit** - Typically under this model, a non-profit organization is formed whose mission is to create the Program. Alternatively an existing non-profit organization may choose to create the Program. The non-profit organization will own the system and take on the administrative aspects but hire a private contractor to launch and operate the Program. The

non-profit organization may choose to undertake the marketing functions or hire a private contractor for this aspect.

- **Privately owned and operated** - Under a true privately owned and operated model the operator is responsible for providing all the funding for the system thereby eliminating the need for external funding for capital or operations. However, in practice most private operators are unwilling to assume all the financial risk and require some contribution of public funds. The private owner-operator is responsible for the all aspects of the Program.

### Financial Forecasts

The financial forecast prepared by Alta Planning + Design do not appear unreasonable. The capital and operating cost for the program are in line with other established bike share programs. The financial success of the Program is very dependent on the following assumptions:

- Appropriate infrastructure in place – The users of the system need to feel safe and comfortable riding bikes in the Centre City. It is important to have established bike lanes in place prior to the launch of the Program.
- Securing the sponsorship included in the forecast – While the sponsorship revenue appears reasonable when compared to other bike share programs, it is difficult to know with certainty what will be obtainable until the City begins to engage the private sector. Creating positive support for the Program should help to engage the private sector in sponsorship.
- Support from local partners – The more support you can have in the community prior to the launch of the Program the increased likelihood of the Program being successful. The critical local partners include the bicycle community, potential sponsors and local businesses.

### Summary of Recommendations

The privately owned and operated model provides the lowest financial risk however this is highly dependent on the willingness of a private owner-operator coming forward that is willing to take on the financial risk. Our recommendation is to conduct a request for proposal process to determine the willingness of either an established not-for profit organization or a private enterprise to assume the financial risk. Again, it should be noted that similar bike share programs to date have required the municipality to guarantee a loan for the program at minimum. To increase the likelihood of finding a suitable third party operator, the City should consider contributing a portion of the start-up capital, which is common among similar bike share programs.

Overall, the financial forecasts prepared by Alta Planning + Design do not appear unreasonable however, there are some critical assumptions included in the forecasts which could significantly affect the success of the Program. The most important assumptions include the infrastructure being in place for riders to feel safe and comfortable biking in the Centre City, securing presenting and station sponsorships and having the support of local partners.

# Scope of Review

In completing our work, we reviewed and relied on the following information, documents and data:

1. “Calgary Bike Share Feasibility Study” prepared by Alta Planning + Design dated November 14, 2011;
2. “Public Bikeshearing in North America: Early Operator and User Understanding” prepared by Mineta Transportation Institute (“MTI”) dated June 2012;
3. “Technical Guidance for Offset Project Developers – Specified Gas Emitters Regulation” prepared by the Government of Alberta dated February 2012;
4. “State of the Practice and Guide to Implementation – Getting Started with Bike Share” prepared by RJ Eldridge and Mauricio Hernandez, Toole Design Group, LLC dated April 26, 2012;
5. “City of Vancouver Public Bicycle Share System: Update and Next Steps” presented by Sadhu Johnston, Deputy City Manager to Vancouver City Council on June 13, 2012;
6. Various websites, media coverage and presentations of bike share programs throughout North America; and
7. Other publicly available information.

We have not audited nor verified the source of financial information provided, unless, as otherwise noted in our report.



# Business Model Selection

## Business Models

In choosing a business model the most important matters that need to be considered are who will own, administer and operate the system. Below is a summary of the possible business models for a bike share program.

**Table 1: Bike Share Business Models**

Model	Own	Administer	Operate	North American Examples <sup>1</sup>
<b>Operating non- profit</b>	Non-profit	Non-profit	Non-profit	Montreal Toronto Ottawa
<b>Administrative non-profit</b>	Non-profit	Non-profit	Private contractor	San Antonio
<b>Privately owned &amp; operated</b>	Private	Private	Private	Miami New York
<b>Publicly owned &amp; privately operated</b>	Government agency	Government agency	Private contractor	Washington DC Boston
<b>Publicity owned &amp; operated</b>	Government agency	Government agency	Government agency	No examples
<b>Street-furniture</b>	Private advertising	Private	Private	Mexico City
<b>Transit agency</b>	Transit authority	Transit authority	Transit authority	No examples

<sup>1</sup> Examples of United States bike share programs have been provided as Canadian examples do not exist for all business models. It should be noted that these models are often receive significant funding from federal and other government agencies that have not been available to Canadian bike share programs.

### Business Model Priorities

Based on a detailed review of the selection of business models by other jurisdictions, a list of common priorities that influenced the selection of business models was developed. To recommend the most appropriate business model for the City it was important to determine which of the priorities seemed to be most important to the City. These priorities are listed below along with impact on the selection of an appropriate business model.

**Flexible funding** – Provides access to wide range of funding options including grants, loans and sponsorship. Non-profit based models tend to have the highest access to funding as they often qualify for grants and are typically more successful at attracting sponsorships.

**Low financial risk** – The taxpayers will not be at financial risk from the bike share operation. A third party model either through a private corporation or a non-profit organization typically results in the lowest financial risk for the taxpayers.

**Operational control**– The City has control over how and where the system operates and it has input on how the operation grows. A City owned and operated business model would likely give the City the highest operational control, whereas a privately owned and operated model would result in the least amount of operational control.

**Low advertising** – Avoids the use of billboards, logos and other forms of advertising which may detract from the City's landscape. A City owned and operated model that is funded through the taxpayers would likely result in the least amount of street advertising.

**Technical expertise** – Launching the system and managing operations is provided by a proven expert in the area that operates under a set of performance standards. A private owner-operator model with a company specializing in bike share programs would likely result in the highest technical expertise. Other business models can still obtain a high level of technical expertise through hiring a company specializing in bike share programs for the operational portion of the business model.

**Profitability** – Operates to earn a profit therefore emphasis is placed on growing the profitable routes. If profitability is more important than geographical coverage this would tend to support a private owner-operator model. By hiring a for profit private company the focus is most likely to be on maximizing the profitable stations which may be at the expense of geographical coverage.

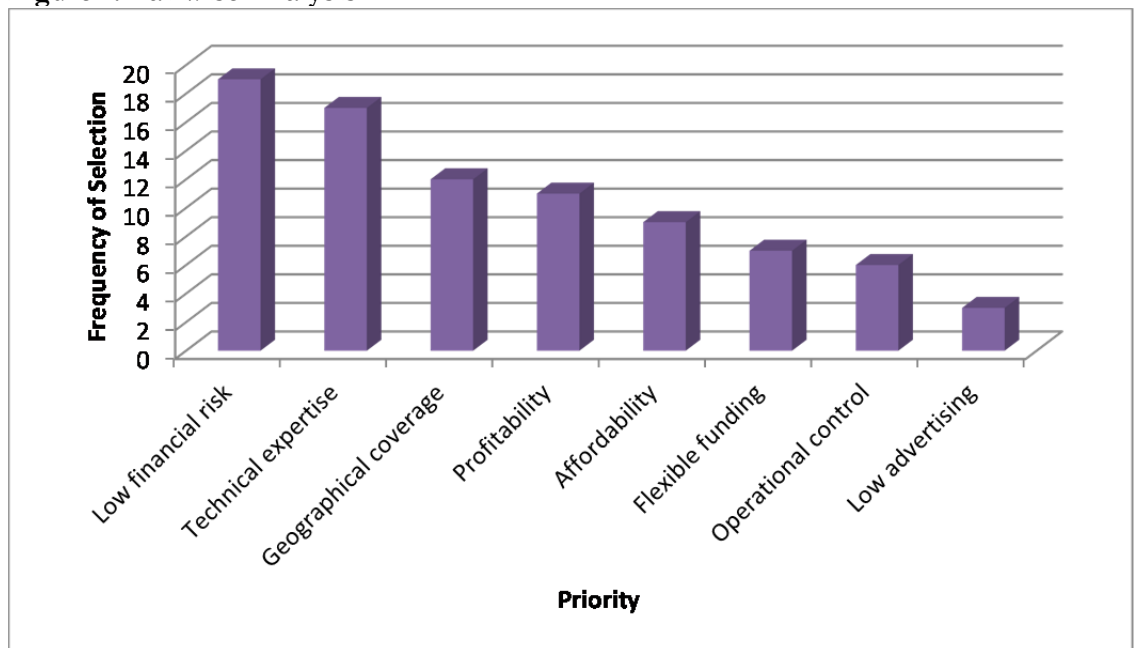
**Geographical coverage** – Operates to ensure geographic equity therefore a greater focus is placed on ensuring adequate service coverage in a designed geographically space. Improving geographical coverage may result in having to put stations in less profitable areas. If geographical coverage is a significant priority using a government agency in a publically owned program should be selected as that would result in the highest operational control.

**User Affordability** –Encourages access by all citizens regardless of their ability to pay for the service. This may be used in combination with other social or low income programs. If user affordability is a significant priority using a government agency in a publically owned program should be selected to maximize the operational control.

### Ranking of Priorities

In order to effectively evaluate alternative business models, these priorities need to be ranked in order of importance. Based on discussions with City administration we had a preliminary indication of the ranking, however, to assist in this analysis we had some members of administration complete a pairwise analysis based on their perceived importance of these priorities for the City. A pairwise analysis forces the choosing of one priority over another priority. The frequency that a priority is chosen determines its relative ranking. All pairwise analysis results were compiled to determine an overall ranking. The higher the ranking the higher the priority is in perceived importance. This analysis produced the following ranking:

**Figure 1: Pairwise Analysis**



Combined with our discussion with City administration this seemed to be a conceivable list of priorities in selecting a business model.

### Most Suitable Business Models

Based on our external scan of bike share programs, the result of the pairwise analysis and discussion with administration, two business models are most suitable options for the City. These models are:

- Administrative non-profit
- Privately owned and operated

The above models result in the lowest financial risk to the City while maximizing the technical expertise. As low advertising was not important we recommend maximizing the use of advertising through sponsorship in both structures to increase external revenue sources.



### Administrative Non-Profit

Typically under this model, a non-profit organization is formed whose mission is to create the Program. Alternatively an existing non-profit organization may choose to create the Program. An example of this structure is the Toronto Bixi program which is owned and operated by the Public Bike System Company (PBSC), the non-profit organization that owns and operates Montreal Bixi. The non-profit organization will own the system and take on the administrative aspects but hire a private contractor to launch and operate the Program. The non-profit organization may choose to undertake the marketing functions or hire a private contractor for this aspect. The strengths and weaknesses of an administrative non-profit structure are noted below.

#### Strengths

- Increased access to funding sources – Corporate sponsorships tend to be more successful under a non-profit model as some corporations are sensitive to sponsoring a for-profit entity. Bike share programs in Canada historically have not been successful at obtaining grants to support their programs; however, as green programs continue to evolve, a non-profit structure may provide increased opportunities in the future to receive grants.
- Potential for City to be included in governance structure – The Board for the non-profit organization should include representation from the City along with major sponsors and the private sector. This provides a great opportunity to strategically engage local partners and foster support for the Program.
- Minimal requirement of City resources – Under the non-profit model other than providing governance through positions on the Board there is no additional requirement of the City to be involved in the Program. To help the Program be successful, the City should politically support the Program through assisting with station siting, zoning and bylaws.

#### Weakness

- Difficult to secure sufficient funding on own – A newly formed non-profit organization may not be able to secure funding without financial backing from the City. At minimum, other cities have had to provide a loan guarantee.

### Privately Owned-Operated

Under a true privately owned and operated model the operator is responsible for providing all the funding for the system thereby eliminating the need for external funding for capital or operations. However, in practice most private operators are unwilling to assume all the financial risk and require some contribution of public funds. The private owner-operator is responsible for the all aspects of the Program. Below are some of the key strengths and weaknesses that City should consider.

#### Strengths

- Low financial risk to taxpayers – The private owner-operator accepts the financial risks therefore there is low financial risk to taxpayers.

- High technical expertise – When selecting the private owner-operator the City has the ability to select a provider that has demonstrated its ability to own and operate other bike share programs.
- Minimal requirement of City resources – Similar to the non-profit model, to help the Program be successful the City should politically support the initiative through assisting with station siting, zoning and bylaws.

#### Weaknesses

- Less control and transparency into operations – A privately owned-operated model can result in differences over the expansion of the system, pricing etc. This can be managed through careful selection of an operator that is interested in a more collaborative relationship with the City. Providing assistance in zoning, bylaws, communication, relationships etc. can go a long way to fostering this collaboration while limiting the strain on City resources.
- Difficulty finding a private vendor willing to take on the financial risk – Although the private vendor would technically be responsible for the financial risk it is unlikely the City will find a vendor that is willing to assume all of the financial risk. Areas high in tourism and year-round operations such as Miami Beach and Surfside Florida have been the most successful examples with no public funds; however, these bike share programs started in the profitable tourism areas and were less concerned with geographical coverage. The most recently formed privately owned-operated system in New York City is set to launch in 2013 and was done with no public funding but it secured a title sponsor (Citigroup Inc.) which provided \$41 million in capital. As previously discussed the City of Vancouver is in final negotiations with Alta Bicycle Share and will be contributing public funds of up to \$1.9 million a year for the next ten years under the proposed arrangement. These examples are for larger bike share systems; 10,000 bikes in New York City and 1,200 bikes in Vancouver.

#### Recommendation

Comparing the two most suitable alternatives, the private model would likely provide the lowest financial risk and the most technical expertise. However, this is highly dependent on a private owner-operator coming forward that is willing to take on the financial risk. Our recommendation is to take an approach similar to the City of Vancouver and conduct a request for proposal process to determine the willingness of either an established non-profit organization or a private vendor to assume the financial risk. Similar to providing public transit, the City should consider providing start-up capital or on-going capital support to increase the likelihood of starting a successful bike share program.

## Financial Forecasts

As part of the engagement we reviewed the forecasts prepared by Alta Planning + Design in its feasibility study. Alta Planning + Design through its sister company Alta Bicycle Share is very experienced and knowledgeable in the financial requirements around launching and operating a bike share program which enhances the reliability of the forecasts it prepared. Alta Bicycle Share launched the Capital Bikeshare program in Washington, DC & Arlington and the Hubway system in Boston as well as being selected to launch Chicago Bike Share and the preferred vendor to launch Vancouver Bike Share. Based on our review, the forecasts prepared by Alta Planning + Design appear reasonable but are very dependent on certain assumptions. These assumptions are a combination of those inherent in the Alta Planning + Design forecasts and the factors that contribute to a successful bike share program as developed through our review of the MTI report. We have clearly outlined those assumptions and resulting risk to the City in achieving the forecasted results.

### Revenue

Below is a summary of the revenue sources included in the Alta Planning + Design report.

**Table 2: Revenue Forecast**

Revenue Source	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Presenting Sponsorship	\$ 1,000,000					
Station Sponsorship	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000
User-Generated		\$ 650,000	\$ 800,000	\$ 900,000	\$ 900,000	\$ 900,000
<b>Total Revenue</b>	<b>\$ 1,400,000</b>	<b>\$ 1,050,000</b>	<b>\$ 1,200,000</b>	<b>\$ 1,300,000</b>	<b>\$ 1,300,000</b>	<b>\$ 1,300,000</b>

Given the City's desire to not use public funds it makes sense to maximize the use of sponsorship dollars. Historically, programs that have a title sponsor have generated the most significant sponsorship revenue. However, bike share programs in Canada have not been very successful in attracting the title level of sponsorship. Accordingly, the use of presenting and station sponsorships is the most likely way of maximizing sponsorship revenues. The Alta Planning + Design report also identified smaller streams of additional revenue that could be used if either sponsorship or user-generated revenue do not produce sufficient revenue which may help to reduce the financial risk.

- Presenting Sponsorship – The calculation of revenue is based on \$500 per bike (400 bikes) per year on a five year deal. In comparison, Montreal (5,050 bikes) and Toronto (1000 bikes) signed for approximately \$800 per bike per year. Denver (500 bikes) and Boston (600 bikes) signed three year sponsorship deals for \$450,000 and \$600,000 respectively, resulting in around

\$1 million over a six year period. Based on these comparisons, assuming \$1,000,000 does not appear unreasonable.

- Station Sponsorship – The calculation of revenue is based on selling station sponsorships at 60% of the stations at \$16,667. This is in line with what Boston was able to secure at the time of its bike share launch. Denver also offers a station sponsorship package with sponsors paying \$30,000 for one year or \$20,000 per year for three years. As bike share programs increase in popularity within a city it is easier to attract new sponsors making it possible to increase the station sponsorship throughout the five years.
- User-Generated –It is difficult to estimate how much user revenue will be generated in Calgary until the Program is actually launched therefore the results of comparable bike share programs are the best benchmark. Unfortunately many existing comparable bike share programs such as Toronto and Ottawa are still in their infancy stage and insufficient data exists to accurately use as a benchmark. Alta Planning + Design prepared a detailed regression analysis to perform demand forecasting based on the results of the Washington DC and Montreal bike share programs. These programs have more historical data to develop a potential profile for the user generated revenue. Montreal did significantly better than Washington DC in its first few years of operation. The forecast for Calgary is more in line with the Washington DC results (adjusted for the winter closure) which is a more conservative approach than aligning with the Montreal results. Overall the forecast for user generated revenue does not appear unreasonable provided the assumptions discussed later in the report are adequately addressed.
- Other potential revenue sources not included in the forecast include:
  - Sell advertising at the station – There is a potential to sell some billboard style advertising on the back side of the map frame to increase sponsorship revenue.
  - Carbon off-setting – We reviewed the calculation to determine the revenue from carbon off-setting and the likely revenue would be only be \$2,250 per year given current Alberta regulation. Since the potential revenue is quite low, this could also be used as potential incentive to help attract a presenting sponsor looking to invest in Green initiatives. As regulations continue to evolve in this area the potential exists for this to become a more lucrative source of revenue in the future.

#### Overall Cost Reasonability

In a presentation called, “Getting Started with Bike Share” prepared by Toole Design, they developed a range of costs to be considered when developing a bike share program. These costs are based on its interviews with various bike share providers.

**Table 3: Cost Comparison**

Costs	Toole Design Study Cost - Per Station	Alta Planning + Design Calgary's Forecast
Equipment and Installation	\$53,000 to \$58,000	\$61,000
Annual Operating	\$24,000 to \$28,000	\$27,000

Alta Planning + Design estimate of Calgary's operating cost appear to be in the range experienced by other bike share programs. The estimated cost for the Program's equipment and installation is slightly higher however not unreasonable when considering some of the other program's capital costs maybe slightly dated and Calgary has relatively high labour costs. In addition, Alta Planning + Design has included within the one-time launch costs of \$380,000 items such as hiring personal, website development and development of marketing materials which are less capital in nature. This may be inconsistent with other cities if they have only included their true capital equipment and installation costs.

#### Capital Costs

Below is a summary of the capital costs included in the Alta Planning + Design report.

**Table 4: Capital Cost Forecast**

Expense Item	Unit Cost	Units	Costs
19 dock, 10 bike solar stations, including kiosk and platforms	\$ 46,000	40	\$ 1,840,000
Site Planning and Permitting	\$ 2,000	40	\$ 80,000
Station Assembly	\$ 1,000	40	\$ 40,000
Station Deployment Vehicle Costs	\$ 750	40	\$ 30,000
Bike Assembly	\$ 30	400	\$ 12,000
Map Production	\$ 35	40	\$ 1,400
Bike Spare Parts	\$ 50	400	\$ 20,000
Station Spare Parts	\$ 800	40	\$ 32,000
On-Street Bike Maintenance Vehicles	\$ 3,000	1	\$ 3,000
General System Startup Costs			\$ 379,981
<b>Total</b>			<b>\$ 2,438,381</b>
<i>Per Station</i>			\$ 60,960

Overall the costs included for the capital and launch appear comprehensive. As previously discussed, the costs seem reasonable when compared to other bike share programs and this is an area where Alta Bicycle Share has significant experience.

- General System Start-Up Costs – This represents operational costs which are expected to occur during the launch period. These costs are in line with the operational costs discussed in the next section of this report and overall do not appear unreasonable. These costs would not be required for further expansion of the system therefore lowering the overall capital cost on future expansion.

#### Operational Costs

Below is a summary of the operational costs included in the Alta Planning + Design report.

**Table 5: Operational Cost Forecast**

Expense item	Annual Cost
Employee Expenses	\$ 621,250
Operating Facilities & Equipment	\$ 79,250
IT, Communications & Customer Care	\$ 156,720
Bike Share Launch & Upkeep Materials	\$ 95,700
Other Admin (Legal, Insurance, Travel)	\$ 40,000
Vendor Management Fee - 10%	\$ 99,292
<b>Total</b>	<b>\$ 1,092,212</b>
<i>Per Station</i>	<i>\$ 27,305</i>

- Employee Expenses – Alta Planning + Design estimates that eight full time equivalents are needed to operate the Program and three full time equivalents are needed to administer the Program. The report provided salary and benefit costs for each anticipated employee required. The number of employees required to run the operation do not appear unreasonable. Alta Planning + Design estimated salary costs for senior employees to be approximately \$60,000 which seems low for the Calgary market. However, Alta Planning + Design estimates the total assumed benefit cost for senior employees will be approximately \$90,000. This appears reasonable for Calgary given the operational component of the Program will only be up to eight months a year.
- Operating Facilities & Equipment – Alta Planning + Design forecasts that warehouse space can be obtained for approximately \$10 per square foot. We benchmarked the \$10 per square foot for warehouse space to current real estate listings and the estimate used appears reasonable. The forecast currently calls for one rebalancing vehicle. This may be sufficient however if the system experiences significant rebalancing issues it may be necessary to add an additional rebalancing vehicle.
- IT, Communications & Customer Care – Given the high degree of technology involved in operating the system it seems reasonable that these costs would form a significant portion of the operating expense. Again, this would be an area where Alta Bicycle Share would have significant experience.
- Bike Share Launch & Upkeep Materials – The majority of this cost is the marketing and promotion materials of \$60,000. It is our view that significant marketing and promotion will be needed to raise awareness of the Program which will be essential if the Program is to succeed. The forecasted annual expense for marketing and promotion does not appear unreasonable for a program of this nature.
- Vendor Management Fee – 10% - Given both of the proposed business models would require external operations management it is appropriate to include this expense in the forecast to provide for some compensation to the operator.
- Other Potential Costs Not Included –



- Credit card fees – Payment for the Program will require the use of a credit or debit card. These fees run on average 2 – 3 % of user-generated revenues. These costs may have been included as part of the customer service charge of \$2,000 per station however it would be important to confirm this is the case since they could total approximately \$20,000 per year.
- Interest expense - Depending on the final funding model it may be necessary to receive a loan for any capital shortfall. If this is the case, interest expense would need to be added to the forecast.

### Profit (Loss) of Bike Share Program

The forecasted revenues and costs result in the following bottom line:

**Table 6: Annual Profit (Loss) Forecast**

Revenue/Cost	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Revenues	\$ 1,400,000	\$ 1,050,000	\$ 1,200,000	\$ 1,300,000	\$ 1,300,000	\$ 1,300,000
Capital Costs	\$ (2,400,000)					
Operating Costs		\$ (1,100,000)	\$ (1,100,000)	\$ (1,100,000)	\$ (1,100,000)	\$ (1,100,000)
<b>Annual Cash Profit (Loss)</b>	<b>\$ (1,000,000)</b>	<b>\$ (50,000)</b>	<b>\$ 100,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>
<b>Cummulative Cash Profit (Loss)</b>	<b>\$ (1,000,000)</b>	<b>\$ (1,050,000)</b>	<b>\$ (950,000)</b>	<b>\$ (750,000)</b>	<b>\$ (550,000)</b>	<b>\$ (350,000)</b>

Overall it is important to note that the Program is not expected to be operationally self-sufficient and the forecast recognizes the need for external revenue to subsidize the Program. This is consistent with similar bike share programs which also require subsidization either through public funds or sponsorship dollars.

### Assumptions in Forecast

In any forecast there are certain assumptions that need to be made. If these assumptions do not occur the result of the forecast could change significantly. Based on the Alta Planning + Design Report and the review MTI Report the following are major assumptions that should be considered in a bike share forecast:

- Appropriate infrastructure in place – The users of the system need to feel safe and comfortable riding bikes in the Centre City. It is important to have established bike lanes in place prior to the launch of the Program.
- Securing the sponsorship included in the forecast – While the sponsorship revenue appears reasonable when compared to other bike share programs, it is difficult to know with certainty what will be obtainable until the City begins to engage the private sector. Creating positive support for the Program should help to engage the private sector in sponsorship.
- Support from local partners – The more support you can have in the community prior to the launch of the Program the increased likelihood of the Program being successful. The critical local partners include the bicycle community, potential sponsors and local businesses. Often media will seek out the opinions of these groups when reporting on the Program. Based on our

current review of media responses to the Program the bicycle community is open to bike share but wants the infrastructure issue addressed prior to supporting the Program.

- Sponsorship packages meet the City's bylaws – The sponsorship program includes certain street advertising at the stations and on the bikes. Sponsorship packages will need to be in compliance with any City bylaws or, if necessary, steps should be taken to request an exemption and/or amend the bylaws.
- No laws requiring helmets are implemented in Alberta – There is no indication that Alberta will implement any form of laws requiring helmets for adults. However, if the Alberta government passes a law to require adults to wear helmets when biking, the City would need to address this in the Program. The City of Vancouver is currently working on a solution which could be used by the City if required.
- Weather – The assumption in the forecast is that summer weather represents a typical year. The forecast assumes the Program will operate from the end of April until early November.
- Rebalancing – The bikes are appropriately rebalanced so they are available when demand exists. A bike share program's inability to address rebalancing issues can have a significant impact on the user-generated revenues as well as consumer's attitudes towards the program.
- Bike share program commences in the near future – If there is a delay between the preparation of the forecast and the launch of the Program it will be necessary to update the forecast to reflect the current market conditions.
- The forecast also assume no local or provincial sales taxes are applicable.
- No annual inflationary increases have been considered in either the user fees or the operational costs.

# Vancouver's Proposed Bike Share Program

In June 2012, the City of Vancouver selected the business model to be used in its bike share program. Given this was the most recently selected business model by a Canadian municipality we thought it would be useful to provide some details of its selection within our report.

Based on a report to council titled, "City of Vancouver Public Bicycle Share System: Update and Next Steps," the City of Vancouver is planning to implement a bike share program that has 1,500 bikes over 125 stations in the downtown and metro core area. The system will also include an integrated helmet system as the BC Motor Vehicle Act requires mandatory helmet usage. Vancouver selected a private owner-operator as the preferred vendor for its system however in its request for proposal it was open to this being a not-for-profit organization. In selecting a third party operator the City of Vancouver considered the following as its basis for selection which helped to mitigate the risks associated with a private business model:

1. **Business capacity** – Business capacity and expertise, strength of underlying partnerships.
2. **Business model** – Viability of business/financial model, including degree of reliance on public funding.
3. **Operational model** – Strength of the operational and system design.
4. **Ability to implement** – Ability to implement effectively and on schedule.

The City of Vancouver selected Alta Bicycle Share as the preferred system owner-operator (business operations and customer service) who is affiliated with Alta Planning + Design. Alta Bicycle Share will subcontract Bixi (Public Bike System Company) to be the infrastructure and system provider. Final contract negotiations are underway and the contract will be contingent on Alta Bicycle Share delivering an acceptable helmet system plan. Despite using a private operator there is still significant dependence on public funding and support in its model. The City of Vancouver will be responsible for the following under the proposed agreement:

1. **Contract management** - Contract negotiation and contract management.

2. **Funding** – Some up-front capital and some on-going funding, with estimated order-of-magnitude costs to the City of Vancouver of up to \$1.9 million per year for the next ten years in addition to some up-front capital costs.
3. **Regulatory** – Regulatory and policy support, for example, zoning and bylaw development.
4. **Enabling/supporting** – A key role in developing and stewarding local partner support. This will include participating in activities such as community support, station siting, communication and public relations.

In preparation for its bike share program the City of Vancouver did the following:

- **Separated bike lanes** – Since 2010, the City of Vancouver has created separate bike lanes (cycle tracks) along two key corridors downtown and have plans for additional corridors after the bike share program starts. Separated bikeways help to increase the comfort of cyclists and attract new cyclists to riding downtown.
- **Increased bike parking** – The City of Vancouver and private business installed additional bike racks throughout the target area for bike share.
- **Bike-friendly events** – The City of Vancouver encourages event planners to promote active transportation.

These improvement and events along with its bike share program are all in an effort to increase the overall volume of cycling trips in Vancouver, extend the reach of transit and walking trips and replace vehicle and transit trips which is all part of the City of Vancouver's Greenest City 2020 Action Plan.

## Summary of Recommendations

We understand the key priorities in selecting a business model for the City of Calgary is low financial risk to taxpayers and having technical expertise in the operation of the bike share program. As a result we recommend the following business models:

- Administrative non-profit
- Privately owned and operated

The privately owned and operated model provides the lowest financial risk however this is highly dependent on the willingness of a private owner-operator coming forward that is willing to take on the financial risk. Our recommendation is to conduct a request for proposal process to determine the willingness of either an established not-for profit organization or a private enterprise to assume the financial risk. Again, it should be noted that similar bike share programs to date have required the municipality to guarantee a loan for the program at minimum. To increase the likelihood of finding a suitable third party operator, the City should consider contributing a portion of the start-up capital, which is common among similar bike share programs.

Overall, the financial forecasts prepared by Alta Planning + Design do not appear unreasonable however, there are some critical assumptions included in the forecasts which could significantly affect the success of the Program. The most important assumptions include the infrastructure being in place for riders to feel safe and comfortable biking in the Centre City, securing presenting and station sponsorships and having the support of local partners.

## Restrictions & Limitations

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