

Bike Share System Usage Detailed Analysis

SoBi, Hamilton’s bike share system, was launched on March 20th, 2015, following a winter testing period from January 16th to March 20th of the same year. Since then, the system has been widely embraced as an integral and exciting part of Hamilton’s transportation system and cultural landscape. The new system utilizes smart-bike technology developed by Social Bicycles, and the innovative design gives users greater flexibility than traditional dock based systems. Hamilton’s bike share system spans across approximately 35 square kilometers with 750 bikes at 115 hubs. The system is largely used for commuting by Hamilton residents, and is an excellent solution for first/last kilometer connectivity to transit. As outlined in Appendix “D” of this report PW16086a, an analysis of SoBi user annual survey results are consistent with last year’s survey results; highlights of this survey include the fact that 45% of SoBi users use a car as their primary mode; 48% cycled once per month or less before using SoBi; 44% report that their driving has decreased since using SoBi; 25% report replacing their automobile trips with SoBi trips; and there are nearly as many female members as male members compared to the typical Hamilton cycling population which tends to be 70% male and 30% female.

Active Users	Annual Users	1,500
	Monthly Users	850
	Pay-as-you-go	10,100
		12,400
Trips	2015	220,000
	2016	316,000
		536,000
Distance Travelled (Km)	2015	445,920
	2016	632,800
		1,078,720
Emissions Reduced (Kg CO ₂ e)	2015	110,830
	2016	157,277
		268,107
Calories Burned	2015	11,083,353
	2016	15,728,223
		26,811,576

Table 1 - SoBi Usage Statistics (2015-2016)

Since the launch of the bike share system, ridership uptake has been quite successful and the system has over 12,400 active users as of December 2016, which is an increase over the 7,500 active users in 2015. These users have collectively travelled over 559,326 trips (220,000 in 2015 and 317,000 in 2016) for a total of 1.2 Million Kilometers.

Of these members, over 1,500 are annual members, 850 are monthly users and 10,100 are pay-as-you-go users. A total of nearly 14,000 people have used the program since start-up and they have collectively reduced 268,107 Kg of greenhouse gas emissions compared to driving an automobile, they have burned 26.8 Million Calories and saved \$403,057 (as compared to driving).

A grant from the Federation of Canadian Municipalities, the Hamilton Community Foundation and the Urban Renewal section of the City’s Economic Development

department (as outlined in PW16086) made the full launch of the Everyone Rides Initiative (ERI) Pilot possible for 2017 – 2019. The ERI aims to remove barriers to the bike share system for people with low incomes in underserved neighbourhoods. A successful pre-pilot involved a Union Gas grant of \$25,000 and allowed SoBi Hamilton to partner with local social service agencies to distribute 125 subsidised memberships to people living below the low income cut off. The full pilot program, which will take place from 2017 to 2019, involves the provision of additional subsidized memberships, enhanced educational workshops on how to use the system, group neighbourhood rides, outreach to neighbourhood groups and training for cycling safely with confidence. It also involves the installation of new infrastructure in underserved neighbourhoods and the use of community-based social marketing to raise awareness for bike sharing amongst residents in these areas who may not be aware of the benefits. Public engagement for the installation of up to 15 new stations between Sherman Avenue and Ottawa Street and 75 new bikes is currently underway. These new stations will launch in May 2017.

The business plan targets set out in the Bike Share Functional Analysis, which can be found in Appendix “A” of report PW13015 presented to General Issues Committee on February 25, 2013 were exceeded in year one (2015) operations are were also exceeded in year two (2016). The following tables demonstrate this by first showing the targets as outlined in the Functional Analysis and then below the two additional tables show the actual operating statistics for 2015 and 2016.

Table 2a - Year 1 and Year 2 ridership targets as outlined in the Functional Analysis found in Appendix “A” of report PW13015 presented to GIC on February 25, 2013

Year 1 Targets (2015)			Year 2 Targets (2016)		
Membership Type	Passes Sold	Revenue	Membership Type	Passes Sold	Revenue
\$ 79.00 Annual	1,500	\$ 118,500.00	\$ 81.37 Annual	3000	\$ 244,110.00
\$ 5.00 Day Pass	4,000	\$ 20,000	\$ 5.15 Day Pass	4000	\$ 20,600
\$ 12.00 3 Day Pass	500	\$ 6,000	\$ 12.36 3 Day Pass	750	\$ 9,270
\$ 29.00 Monthly	100	\$ 2,900	\$ 29.87 Monthly	150	\$ 4,480
\$ 2.00 Overages	6,500	\$ 13,000	\$ 2.06 Overages	11000	\$ 22,660
		\$ 160,400			\$ 301,120

Table 3b - Year 1 and Year 2 Ridership Actuals and Gross Revenues for the 2015 and 2016 operating years

2015 Actuals (Jan 1 - Dec 31)			2016 Actuals (Jan 1 - Sept 30)*		
Membership Type	Passes Sold	Revenue	Membership Type	Passes Sold	Revenue
\$71 -\$149 Annual**	909	\$ 69,916	\$71 -\$149 Annual**	1500	\$ 106,236
\$15/month Monthly**	730*	\$ 87,443	\$15/month Monthly**	829*	\$ 116,795
\$4/hr Pay-as-you-go**	5,718	\$ 81,802	\$4/hr Pay-as-you-go**	10,100	\$ 109,180
Total		\$ 239,163	Total		\$ 332,213

* Monthly memberships equal to the number of active monthly memberships on September 30th of the given year; however, there have been a total of 2,707 unique monthly users since launch

** Actual membership types in Table 3b differ from those in Table 2a because the SoBi system uses different membership categories than the traditional bike share systems that the original functional analysis was based on.