

A Bicycle Sharing Program For the UNM Campus

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Introduction

Bike Share Systems

LoboCycle is a bike sharing program which allows students, faculty, and staff to share a system of bicycles located in strategic locations across campus by paying a small yearly fee. Users are allowed to check out a bicycle from a series of bike ports around campus, use it for up to three hours and return it to any bike port on campus. This allows many users to rent and return a bike from any number of designated locations for short one-way trips. Unlike bike rental, a bike share system operates "rentals" from kiosk to kiosk, keeping each bike in continuous circulation. Bike sharing complements other forms of transportation, is a vital piece of the sustainable transportation puzzle, and promotes exercise in a fun and innovative way.

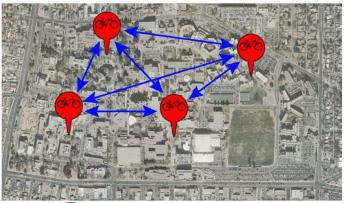
The UNM Bike share program would join a select few Universities and cities around the world who have implemented their own bike sharing systems. UNM would join universities like University of California Irvine, Washington State University, Kent State, and a few others and become a leader in promoting alternative transportation. These programs have just begun, but are showing lots of promise at each university. There are several companies who sell bike sharing equipment including Bixi and The Collegiate Bicycle Company. Both companies have a market tested product at universities and in cities, and choosing between the two will come down to costs, aesthetics, and amenities.

LoboCycle Bike Share System Implementation

Implementation

UNM's LoboCycle can model its system after the proven success of other universities. Initially the system should begin with 32 bicycles and four ports located around the Central Campus. LoboCycle system will be run by a main server with software that releases and returns each bike, recognizes each user via a Lobocard, and tracks each bike via RFID technology. Upon purchase of an annual pass, UNM students, faculty and staff's Lobocards will become the access card needed to rent a bike. Users should be required to sign a liability form and take an online safety course. The software can track a user in real-time, detailing the check-in and check-out history and send the users messages reminding them to return the bike within the allotted time period. The user will receive a message detailing the completed transaction once the bike is returned safely. The automated aspect of the system ensures accountability by tracking the bike; thus, a better chance it will not be lost, stolen, or severely damaged. University of California Irvine has had their system over a year, and there has not been one theft of a bicycle to date.

Bicycle Kiosk Sharing System – Initial Phase





Bicycle Kiosk Location

Bicycle Movement between Kiosks

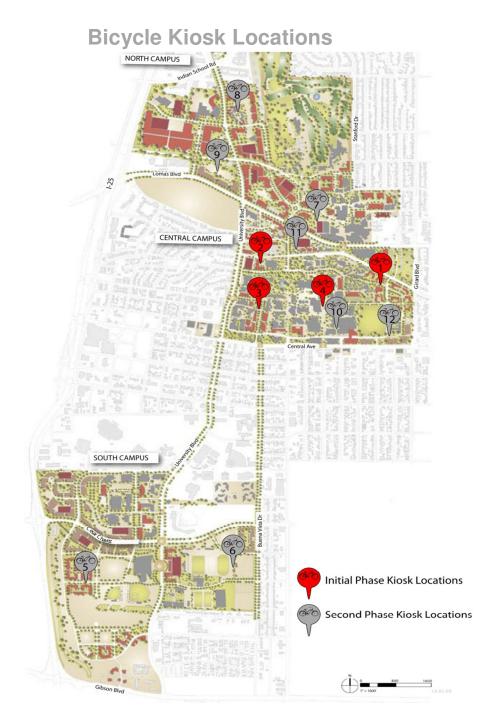
Sustainability Benefits

UNM has a dedication to sustainability, and LoboCycle can be a key component to reducing UNM's carbon footprint. LoboCycle can help reduce SOV usage with its implementation and successful adoption by the UNM campus community. Biking is great exercise for the campus community, and best of all it is non-polluting! This system has the potential to reduce SOV usage considerably for the growing number of students who live on campus, and reduce demand on the shuttle system.

Almost a pound of tailpipe emissions will be saved for every mile a member rides a bike instead of driving. Bike sharing allows faculty, students, and staff an alternative to driving when making short-distance trips during the work and school day, as well as addressing important issues such as health and environmental sustainability, the future of transportation, and promoting community building on campus.

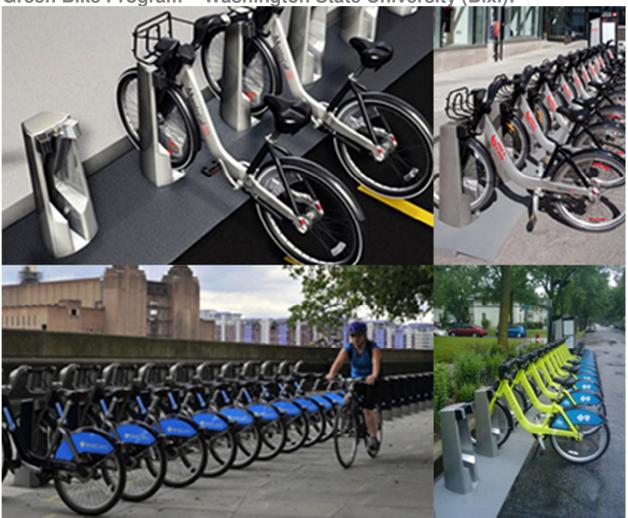
Locations

LoboCycle will be located initially on Central Campus with the ports being strategically placed around campus. The largest portion of bicycles will be located around the dormitories to engage the students living in the dorms. The other kiosks will be located in areas of highest pedestrian traffic. For example, the student union building, Zimmerman Library, and the Anderson School of Business are a few of the highest visited buildings around campus. With the success of the first phase, and if students are adopting LoboCycle into their transportation options for getting around campus, it will become necessary to expand the program to North and South Campus, Nob Hill, downtown, and other communities.



Bicycle Share Kiosk Companies

Green Bike Program – Washington State University (Bixi):



Public Bike Systems - Bixi

Bixi is a bicycle share company from Montreal, Canada, which was launched in 2009. They are the winners of multiple awards for their design of the bicycles and kiosks. They are located in 9 cities and at Washington State University with over 28,000 bicycles dispersed between the 10 locations.

Bixi has a unique product compared to The Collegiate Bicycle Company, by their bicycle and kiosk design. Bixi has a completely portable bicycle kiosk system. The kiosks are solar-powered, completely wireless, and can be moved from one location to another relatively easy. Other systems require the kiosks to be hardwired to the electrical grid, making them very difficult to move and sometimes require excavation to take place.

The Bixi system makes installation very easy, and keeps installation costs to a minimum.

The Bixi system have been designed for heavy urban use as a public bike system, not put together from components from other systems, which is very advantageous in terms of reliability, durability and optimal functioning. It is run by a time-tested software system that has proven to be extremely reliable.

The Bike

The Bixi bike was designed to be used in heavy urban areas, so therefore was designed to withstand strong abuse. The Bixi Company gives the bikes a five year warranty due to their confidence in the design.

Some highlights of the Bixi Bikes:



Frame

- Aluminum frame light, strong, durable
- One-piece handlebar covers and protects all components
- All cables and derailleur covered for better protection
- Chain protector integrated into bike structure
 - o Protects chain
 - Prevents riders clothing from getting wedged in the chain
 - o Protects riders against dirt, grease and debris
 - o Increases structural integrity of entire frame

Other Features

- · Active lighting front and back, always on
- Front and rear internal brakes for greater safety
- Adjustable seat positioning standardized through entire fleet of bikes
- Suitable for wide range of riders
- Low center of gravity for greater stability
- Tires made for the urban jungle

The Station

The station includes bikes, bike docks and pay stations, all with a seamless look and seamless integration into the technical platform and requires no excavation to install. It is based on technical platforms that can accommodate bikes, bike docks and pay stations. There are generally 4 bike docks per technical platform. The platforms are modular (Plug and Play), portable, and energy self-sufficient. Because of this, they require no excavation or any other preparatory work. A single bike station is approximately the size of a parking spot, and can be set up within a matter of minutes. A functioning bike station of virtually any size and configuration can be created anywhere in a matter of hours.

Technical platforms are dropped off and plugged together. Modular bike docks (which house the bikes) are placed in the technical platforms. Bikes are placed in the bike docks. A solar-powered pay station is installed in one of the technical platforms. The system is now ready for service.

The system is equally easy and quick to dismantle. All components can be easily transported to other locations, with no impact whatsoever on the environment or the station's urban surroundings.

Technical platform



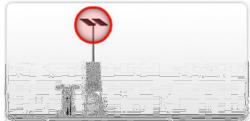
- Base and electronic hub for bike dock and pay station
- Same base for pay station or bike dock
- "Drop and Go" platform completely portable, infinitely expandable
- Uniform "Plug and Play" module
- Easy to install, repair and remove
- No construction or excavation no damage to the area where they are placed

Bike dock



- Uniform "Plug and Play" module fits easily into technical platform
- Easy to remove, replace and repair
- Virtually no downtime
- Simple and easy-to-use interface
- RFID wireless real-time connection payment can be made by subscribers with BIXI key directly at bike dock
- Front-end protector that also serves as antitheft mechanism

Pay Station



- Uniform "Plug and Play" module fits easily into technical platform
- Easy to remove, replace and repair Solar panels power entire station virtually unlimited number of bike docks
- Virtually no downtime
- Touch screen
- Printer

Customer Friendly

- Consult Web site to find station nearest them and their destination
- Find out in real time number of bikes and parking spots currently available at any station
- Rent bike at any station of their choosing
- Return bike to any station of their choosing
- Choose bike they wish to rent not have one assigned by system
- Notify system at bike dock of any damaged or defective bike and choose another quickly and easily

Management Friendly

The system runs on a more advanced version of the time-tested software that runs Montreal's award-winning parking operations, which boast an in-service rate of 99.7%

Through proprietary, time-tested software, managers can determine in real time:

- Number of bike docks and bikes at any location
- Functional status of any bike
- Status of solar panels and electronics anywhere in system
- Traffic and usage patterns of stations and bikes
- Order virtually immediate redeployment of stations, bike docks and bikes
- Locate in real time every station throughout network
- Locate in real time any given bike

Contact Information:

Kevin Grant Business Development Manager Bixi – Public Bike System Company 2113, 32^e Avenue, Lachine (Qc) H8T 3J1

T: +1 (514) 789 2494 x 2024

M: +1 (514) 515 7042

W: www.publicbikesystem.com

ZOTWheels – University of California at Irvine



The Collegiate Bicycle Company

Ecotrip Automated Bike Share Stations

Ecotrip is The Collegiate Bicycle Company's bike sharing kiosk system based out of San Diego, California. Ecotrip is located on the campus of University of California at Irvine, and has been a huge success. The system is basically the same as Bixi, with a few differences. The system has the option of being hardwired to the electrical grid or being outfitted with solar panels, but it still requires it to be hardwired. The kiosks hold anywhere from 8 to 32 custom UNM bicycles, which would be painted cherry and silver and include the UNM logo. The bicycles can be 1, 3, 5, or 7 speed which improves the customer's satisfaction.

The Bike Share Station

The technology for the Ecotrip automated bike rental station was developed as a partnership between The Collegiate Bicycle Company, Central Specialties Limited, Miles Data Technologies, and The University of California Irvine. The catalyst was a request from UCI to these partners to develop an automated bike share program for the UCI campus and transportation department. Significant investment and approximately 2

years of research and development led to the deployment of four bike stations on the UCI campus in the fall of 2009 – the first program of its kind on a U.S. college campus. The stations allow users to swipe a card, choose and eject a bicycle, ride, and then drop the bike off at any station location. The system processes a transaction, identifies the user with the specific bike ejected, communicates with the user via text message and email, charges based on a customizable time-charge, and collects data and usage reports. Administrators can monitor all aspects of the system remotely.

Specifications:

- Automatically lock and release bicycles
- Each station will accept bikes from any other station in the network
- Process credit card transactions
- Process membership cards or student IDs
- Charge users an hourly rental rate or customizable time-charge
- Charge members a membership fee
- Charge users a penalty fee for unreturned bike
- Send user an email or text message receipt confirming rental
- Send user an email or text message receipt confirming return or
- penalty
- Track all bikes and stations in real time via RFID (radio frequency) technology
- Create reports such as: total releases and returns per day, per station; average length of rental per time frame; overdue bike status; display current station port status; manage users, bikes, locations; transactions; etc. Send and communicate repair tickets to management/maintenance team
- Communicate wirelessly via Wi-Fi or cellular technology
- Hardwire power or solar power option
- All stainless steel and polycarbonate plastic materials
- Modular for easy installation, expansion or relocation
- User-friendly, durable, and theft-resistant bicycles with 1, 3, or 7 speed models available
- The stations' functionality is flexible and can be designed to accommodate a membership based bike share service, a single-point time-charge automated rental station, or a combination of the two.

Contact Information:

Johnathan Sobin The Collegiate Bicycle Company 4655 Cass Street, Suite 403 San Diego, CA 92109 Phone: 858-272-2476

www.CollegeBikes.com

Funding

LoboCycle has a few options for funding for the system. Washington State University has subsidized the costs of the system through parking permit revenues, and given the system to the students for free. The system is limited to students who do not purchase a parking permit. The most attractive option for UNM would be to increase parking permit prices to pay for this system. This would require an increase of \$15 per permit to pay for the initial phase. This would reinforce the University and Parking and Transportation Systems dedication to sustainability and alternative transportation. The free bike sharing system would ensure its success and adoption by the student body. However, it will probably be undersupplied for the entire university, so it will require a cap on the number of student subscribers per bicycle. If the program is funded through parking permits, it will be able to grow at a much quicker rate compared to the other options.

The second option would be to increase student fees. It would require a very minimal increase of \$6.00 per person, but with the recent tuition increase this might not be an attractive option at this time.

Another option would be for it to be self-funded via annual memberships. The annual membership is remarkably low at \$50 per user. The membership fee will allow unlimited three hour bike usage throughout the year. The only other fee that may be incurred by a user is a \$200 charge for a lost, stolen, or severely damaged bike.

Another way to fund the system would be to sell advertising space on the bikes, ports, and nearby benches. The good thing about funding it via advertising, would be the ability to offer the bikes at a discount or even free to students. Potential advertisers are UNM, UNM athletic department, and outside private companies.

Costs

The two companies which were analyzed for this report carry very similar costs. The two companies were analyzed on identical assumptions to portray the benefits to each program.

The assumptions were:

- 1. There would be a growing number of subscribers to the system to eventually make the project profitable.
- 2. The startup would consist of 32 bicycles with four strategically located kiosks.
- After the initial test year, the system would add 16 bicycles and one kiosk per year till the system reached equilibrium in terms of supply and demand and financial expectations for the University.
- 4. The Bixi system is solar powered, and requires no backup hardwiring. This saves money in the long run, and has many other benefits.
- 5. The Collegiate Bicycle System is hard-wired always, with an expensive option of adding solar panels.
- 6. Both systems assume the identical number of employees, and maintenance costs.
- 7. Both systems assume the same number of users will be added to the system, generating identical levels of revenue.

Both systems assume the identical phasing implementation for the entire system.

Bicycle Share Kiosk Companies – A Side by Side Comparison

	Bixi Bicycle Share			The Collegiate Bicycle Company
	•	Advantage indica	ited by	√
Price per Bicycle - Bike and Kiosk Included	\$3,700	✓		\$3,950
Freight - Price per Kiosk	\$500			\$500
Hardware Costs	\$100 per month per kiosk	✓		10% of Bicycle Cost(\$3,950 per bike) first year, 5% of bicycle every year afterwards
Maintenance	\$100 per month year per bike			\$100 per month year per bike
Management	Manager + One Staff member (8 hours per day) \$53,360 per year			Manager + One Staff member (8 hours per day) \$53,360 per year
Replacement costs	Bicycle warrantied for 5 years, after 5th year replace 15% of fleet per year	✓		Average lifetime is 3-5 years, so after fourth year replace 25% of fleet per year
Solar Powered	Yes - No Hardwiring required	✓		No - Option to add it at \$2,500 to \$5,000 dollars per kiosk
Installation Fee	No - System is Plug and Play - Can be setup very quickly	✓		Yes - Hardwiring required and Excavation may be required
Number of Ports Per Kiosk	4-unlimited	✓		8-16
Monthly Electrical Costs	No - Solar Powered	✓		Yes - System is hardwired to electrical grid
Customized Bicycles	No - One speed, generic modern bicycles		\checkmark	Yes - UNM colors + Logo and available in 1,3,5 or 7 speed.
Bicycle Light	Yes - Always On	✓		No - But it is an option with costs
Unisex	Yes			Yes
Location	Montreal, Canada		\checkmark	San Diego, California
System Awards	"Time's" Best Inventions of 2008, 2009 Edison Gold Winner Award	✓		
Financing Available	Yes	✓		No
Companies Involved	One- Bixi maintains System from Bikes to Hardware	✓		Three-The Collegiate Bicycle Company(Bicycles), Central Specialities Limited(Kiosks, Miles Data Technology(software)
Total Systems operating	Ten - 9 major cities, 1 University - Over 28,000 Bicycles	✓		One- University of California Irvine

Financials

Bixi Pro-Forma A - Optimistic

Pro-Forma Income Statement

Bixi Bike Share

For Fall 2011 - Fall 2018 (all numbers in \$000)

(all numbers in \$000)
For an Initial Startup of 32 bikes, grand total 144 @2018

REVENUE	Notes	Additional Info	2011	2012	2013	2014	2015	2016	2017	2018
Number of users	Estimate - Real numbers expected to vary		1,000	2,000	2,500	3,250	4,000	4,750	5,500	6,000
\$50 per user -Max 100 users per b	ke									
initially 75 at full saturation			\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Net Sales			\$50,000	\$100,000	\$125,000	\$162,500	\$200,000	\$237,500	\$275,000	\$300,000

Sunk Costs														
Total per Bike Costs w/ port inc	cluded Vary based on number of ports to a Bicycle				ľ					1	1		,	ľ
	\$3400-\$4000			\$3,700	\$	3,700	\$3,700		\$3,700	\$3,700	0	\$3,700	\$3,700	\$3,700
Number of Bicycles	One time Cost			32		16	16		16	16	6	16	16	16
Total costs for Bicycles	One time cost			\$118,400	\$5	9,200	\$59,200		\$59,200	\$59,200	0	\$59,200	\$59,200	\$59,200
Freight	Prices ranges from \$250-750 per station -		1										•	
	One time Cost		\$	2,000.00	\$ 5	00.00	\$ 500.00	\$	500.00	\$ 500.00	0 \$	500.00	\$ 500.00	\$ 500.00
Hardware Costs	\$100/month per kiosk - Continual Cost per	4 kiosks @ startup - 1						1			7		•	
	kiosk	additional kiosk each year	\$	4,800.00	\$ 6,0	00.00	\$ 7,200.00	\$ 8	3,400.00	\$ 9,600.00	0 \$	10,800.00	\$ 12,000.00	\$ 13,200.00
Total Sunk costs				\$128,932	\$6	9,416	\$70,616		\$71,816	\$73,016	6	\$74,216	\$75,416	\$76,616

OPERATING EXPENSES														
Maintenance	Maintenance Fee \$100 per bike per year		\$ 3,200.00	\$	4,800.00	\$ 6,400.0	0 \$	8,000.00	\$ 9,600	.00 \$	11,200.00	\$	12,800.00	\$ 14,400.00
Management	Salaries and wages	*See Notes Below	\$53,360		\$53,360	\$53,36	0	\$53,360	\$53,	360	\$53,360		\$53,360	\$53,360
Replacement Costs	Bicycle Replacement Per year - 15% of Flee	t Bikes carry 5 year warranty-								ľ		ſ		ſ
	every year after initial 5 years	so no replacement fee till										İ		ł
		year 5	0		0	(0		\$ 8,640	.00 \$	10,080.00	\$	11,520.00	\$ 12,960.00
Total Operating Expense			\$ 56,560.00	\$ 5	8,160.00	\$ 59,760.0	0 \$	61,360.00	\$ 71,600	.00 \$	74,640.00	\$	77,680.00	\$ 80,720.00

Total Expenses									
Total Yearly Expense	Sunk costs + Operating expense	\$185,492	\$127,576	\$130,376	\$133,176	\$144,616	\$148,856	\$153,096	\$157,336
Net Income Before Taxes		(\$135,492)	(\$27,576)	(\$5,376)	\$29,324	\$55,384	\$88,644	\$121,904	\$142,664
Taxes	Taxes on income								
Net Income After Taxes		(\$135,492)	(\$27,576)	(\$5,376)	\$29,324	\$55,384	\$88,644	\$121,904	\$142,664
Balance from previous year			(\$135,492)	(\$163,068)	(\$168,444)	(\$139,120)	(\$83,736)	\$4,908	\$126,812
NET INCOME (LOSS)		(\$135,492)	(\$163,068)	(\$168,444)	(\$139,120)	(\$83,736)	\$4,908	\$126,812	\$269,476

System Management	Year Round	
Staff	1 person @ \$8, hours per day	\$ 23,360.00
System Manager	1 person salary - 30k	\$ 30,000.00
		\$ 53,360.00

Bixi Pro-Forma B - Pessimistic

Pro-Forma Income Statement

Bixi Bike Share

For Fall 2011 - Fall 2018

(all numbers in \$000)

For an Initial Startup of 32 bikes, grand total 144 @2018

REVENUE	Notes	Additional Info		2011		2012		2013	2014		2015	2016	201	7 2018
Number of users	Estimate - Real numbers expected to vary			300		700		1,500	2,500		3,250	4,000	4,750	5,500
\$50 per user -Max 100 users per bike														
initially 75 at full saturation				\$50		\$50		\$50	\$50		\$50	\$50	\$50	
Net Sales				\$15,000		\$35,000	\$7	5,000	\$125,000	\$1	62,500	\$200,000	\$237,500	\$275,000
Sunk Costs														
Total per Bike Costs w/ port included	Vary based on number of ports to a Bicycle		ľ		<u> </u>			r			ľ		<u> </u>	7
Total per anno occió in per moneco	\$3400-\$4000			\$3,700		\$3,700	\$	3,700	\$3,700		\$3,700	\$3,700	\$3,70	\$3,700
Number of Bicycles	One time Cost			32		16		16	16		16	16	10	16
Total costs for Bicycles	One time cost			\$118,400		\$59,200	\$5	9,200	\$59,200	\$	59,200	\$59,200	\$59,200	\$59,200
Freight	Prices ranges from \$250-750 per station -				ſ			ľ						
	One time Cost		\$	2,000.00	\$	500.00	\$ 5	00.00	\$ 500.00	\$	500.00	\$ 500.00	\$ 500.00	\$ 500.00
Hardware Costs	\$100/month per kiosk - Continual Cost per	4 kiosks @ startup - 1						ľ						
	kiosk	additional kiosk each year	\$	4,800.00	\$	6,000.00		00.00			,600.00		,	
Total Sunk costs				\$128,932		\$69,416	\$7	0,616	\$71,816	\$	73,016	\$74,216	\$75,410	\$76,616
OPERATING EXPENSES														
Maintenance	Maintenance Fee \$100 per bike per year		\$	3,200.00	\$	4,800.00	\$ 6,4	00.00	\$ 8,000.00	\$ 9,	,600.00	\$ 11,200.00	\$ 12,800.00	\$ 14,400.00
Management	Salaries and wages	*See Notes Below		\$53,360		\$53,360	\$5	3,360	\$53,360	\$	53,360	\$53,360	\$53,360	\$53,360
Replacement Costs	Bicycle Replacement Per year - 15% of Fleet													
	every year after initial 5 years	no replacement fee till year 5		0		0		0			,640.00		, , , , , ,	\$ 12,960.00
Total Operating Expense			\$	56,560.00	\$	58,160.00	\$ 59,7	60.00	\$ 61,360.00	\$ 71,	,600.00	\$ 74,640.00	\$ 77,680.00	\$ 80,720.00
Total Expenses														
Total Yearly Expense	Sunk costs + Operating expense		1	\$185,492		\$127,576	\$13	0,376	\$133,176	\$1	44,616	\$148,856	\$153,096	\$157,336
Net Income Before Taxes				(\$170,492)		(\$92,576)	(\$5	5,376)	(\$8,176)	\$	17,884	\$51,144	\$84,40	\$117,664
Taxes	Taxes on income													
Net Income After Taxes	· · · · · · · · · · · · · · · · · · ·	·		(\$170,492)		(\$92,576)		5,376)	(\$8,176)		17,884	\$51,144	\$84,40	
Balance from previous year						(\$170,492)		3,068)	(\$318,444)		326,620)	(\$308,736)		, v. , ,
NET INCOME (LOSS)			(\$170,492)	(5	\$263,068)	(\$318	,444)	(\$326,620)	(\$30	8,736)	(\$257,592)	(\$173,188) (\$55,524)

System Management	Year Round	
Staff	1 person @ \$8, hours per day	\$ 23,360.00
System Manager	1 person salary - 30k	\$ 30,000.00
		\$ 53,360.00

Ecotrip Pro-Forma A - Optimistic

Pro-Forma Income Statement

Ecotrip Automated Bike Share For Fall 2011 - Fall 2018

(all numbers in \$000)
For an Initial Startup of 32 bikes, grand total 144 @2018

1. St. all and College St.										
REVENUE	Notes	Additional Info	2011	2012	2013	2014	2015	2016	2017	2018
Number of users	Estimate - Real numbers expected to vary		1,000	2,000	2,500	3,250	4,000	4,750	5,500	6,000
\$50 per user	Max 100 users per bike initially, 75 at full saturation		\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Net Sales			\$50,000	\$100,000	\$125,000	\$162,500	\$200,000	\$237,500	\$275,000	\$300,000
Sunk Costs										
Bike Ports with bicycle included	Vary based on size \$3,350 average for port, \$600		ľ				r			
1	average for bicycle		\$3,950	\$3,950	\$3,950	\$3,950	\$3,950	\$3,950	\$3,950	\$3,950
Number of Bicycles			32	16	16	16	16	16	16	16
Total costs for Bicycles			\$126,400	\$63,200	\$63,200	\$63,200	\$63,200	\$63,200	\$63,200	\$63,200
Port Installation	Prices ranges from \$750-1000 per station		\$3,500	\$875	\$875	\$875	\$875	\$875	\$875	\$875
Freight	Prices ranges from \$250-750 per station		2,000	500	500	500	500	500	500	500
Hardware Costs	10% of Hardware first year, 5% second year		12,640	9,480	12,640		18,960	22,120	25,280	28,440
Total Sunk costs			\$148,522	\$78,021	\$81,181	\$84,341	\$87,501	\$90,661	\$93,821	\$96,981
OPERATING EXPENSES										
Maintenance	Maintenance Fee \$100 per bike per year		\$ 3,200.00	\$ 4,800.00	\$ 6,400.00	\$ 8,000.00	\$ 9,600.00	\$ 11,200.00	\$ 12,800.00 \$	14,400.00
Management	Salaries and wages	*See Notes Below	\$53,360	\$53,360	\$53,360	\$53,360	\$53,360	\$53,360	\$53,360	\$53,360
Replacement Costs	Bicycle Replacement Per year - 25% of Fleet every	Average bicycle lifetime								
	year after initial 4 years	is 3-5 years	0	0	0	12,000	14,400	16,800	19,200	21,600
Total Operating Expense			\$ 56,560.00	\$ 58,160.00	\$ 59,760.00	\$ 73,360.00	\$ 77,360.00	\$ 81,360.00	\$ 85,360.00 \$	89,360.00
Total Expenses										
Total Yearly Expense			\$205,082	\$136,181	\$140,941	\$157,701	\$164,861	\$172,021	\$179,181	\$186,341
Net Income Before Taxes			(\$155,082)	(\$36,181)	(\$15,941)	\$4,799	\$35,139	\$65,479	\$95,819	\$113,659
Taxes	Taxes on income						, ,			
Net Income After Taxes			(\$155,082)	(\$36,181)	(\$15,941)	\$4,799	\$35,139	\$65,479	\$95,819	\$113,659
Balance from previous year				(\$155,082)	(\$191,263)	(\$207,204)	(\$202,405)	(\$167,266)	(\$101,787)	(\$5,968)
NET INCOME (LOSS)			(\$155,082)	(\$191,263)	(\$207,204)	(\$202,405)	(\$167,266)	(\$101,787)	(\$5,968)	\$107,691
System Management	Year Round									
Staff	1 person @ \$8, 8 hours per day	\$ 23,360.00								
System Manager	1 person salary - 30k	\$ 30,000.00								
-,		\$ 53,360.00								
		Ψ 33,300.00								

Ecotrip Pro-Forma B - Pessimistic

Pro-Forma Income Statement

Ecotrip Automated Bike Share

For Fall 2011 - Fall 2018 (all numbers in \$000)

For an Initial Startup of 32 bikes, grand total 144 @2018

REVENUE	Notes	Additional Info	2011	2012	2013	2014	2015	2016	2017	2018
Number of users	Estimate - Real numbers expected to vary		300	700	1,500	2,500	3,250	4,000	4,750	5,500
\$50 per user	Max 100 users per bike initially, 75 at full									
	saturation		\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Net Sales			\$15,000	\$35,000	\$75,000	\$125,000	\$162,500	\$200,000	\$237,500	\$275,000
Sunk Costs										
Bike Ports with bicycle included	Vary based on size \$3,350 average for port,								ľ	
	\$600 average for bicycle		\$3,950	\$3,950	\$3,950	\$3,950	\$3,950	\$3,950	\$3,950	\$3,950
Number of Bicycles			32	16	16	16	16	16	16	16
Total costs for Bicycles			\$126,400	\$63,200	\$63,200	\$63,200	\$63,200	\$63,200	\$63,200	\$63,200
Port Installation	Prices ranges from \$750-1000 per station	One Time Cost	\$3,500	\$875	\$875	\$875	\$875	\$875	\$875	\$875
Freight	Prices ranges from \$250-750 per station	One Time Cost	2,000	500	500	500	500	500	500	500
Hardware Costs	10% of Hardware first year, 5% second year	Cumulative Cost	12,640	9,480	12,640	15,800	18,960	22,120	25,280	28,440
Total Sunk costs			\$148,522	\$78,021	\$81,181	\$84,341	\$87,501	\$90,661	\$93,821	\$96,981
OPERATING EXPENSES										
Maintenance	Maintenance Fee \$100 per bike per year		\$ 3,200.00	\$ 4,800.00	\$ 6,400.00	\$ 8,000.00	\$ 9,600.00	\$ 11,200.00 \$	12,800.00	\$ 14,400.00
Management	Salaries and wages	*See Notes Below	\$53,360	\$53,360	\$53,360	\$53,360	\$53,360	\$53,360	\$53,360	\$53,360
Replacement Costs	Bicycle Replacement Per year - 25% of Fleet	4 years is expected average								
	every year after initial 4 years	lifetime per bicycle	0	0	0	12,000	14,400	16,800	19,200	21,600
Total Operating Expense			\$53,360	\$53,360	\$53,360	\$65,360	\$67,760	\$70,160	\$72,560	\$74,960
Total Expenses										
Total Yearly Expense			\$201,882	\$131,381	\$134,541	\$149,701	\$155,261	\$160,821	\$166,381	\$171,941
Net Income Before Taxes			(\$186,882)	(\$96,381)	(\$59,541)	(\$24,701)	\$7,239	\$39,179	\$71,119	\$103,059
Taxes	Taxes on income						•	•	•	
Net Income After Taxes			(\$186,882)	(\$96,381)	(\$59,541)	(\$24,701)	\$7,239	\$39,179	\$71,119	\$103,059
Balance from previous year				(\$186,882)	(\$283,263)	(\$342,804)	(\$367,505)	(\$360,266)	(\$321,087)	(\$249,968)
NET INCOME (LOSS)			(\$186,882)	(\$283,263)	(\$342,804)	(\$367,505)	(\$360,266)	(\$321,087)	(\$249,968)	(\$146,909)

System Management	Year Round	
Staff	1 person @ \$8, hours per day	\$ 23,360.00
System Manager	1 person salary - 30k	\$ 30,000.00
		\$ 53,360.00

Additional Names

- 1. TrackPack
- 2. PawTracks
- 3. LoboPackWheels
- 4. LoboTracks
- 5. WoofTracks
- 6. WoofPacks
- 7. LoboCycle
- 8. LoboBikes
- 9. LoboWheels
- 10. WoofWheels
- 11. UNMWheels
- 12. LoboSycles
- 13. **P**eople
 - **A**nd
 - **W**heel
 - **S**olutions
- 14. **L**obos
 - **O**n
 - **B**icycles
 - **O**ptimizing
 - **S**ustainability
- 15. **L**obos
 - **O**n
 - **B**icycles
 - **O**bliterating
 - **S**ov's