

# UIUC Pilot Bike Sharing Program SSC Proposal – Additional Information

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# Project Proposal

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The UIUC pilot bike share program is a two-year pilot study from iSEE for a 50 bike fleet. It will be featuring a new innovative approach to bike sharing through smart locks. This project is in collaboration with CUMTD, City of Urbana, City of Champaign, and CUPHD (CU Bike Share Task Force) in creating a bike share program on campus that can be scalable into the community.

## Project Description

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The UIUC Pilot Bike Share program is a proposal for a two year pilot bike share program. This pilot program will be a 50 bike fleet with the use of smart locks. The smart locks currently being explored is through a company called BitLock. BitLock offers a keyless bike lock for a low cost bike sharing system. Smart locks offer options to use any type of bike for the system to address the multipurpose needs of participants. BitLocks offer the flexibility of not needing a docking station, being affordable, having an easy check out system, different branding opportunities, and customizable membership plans.

## Project Outline

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### Program Costs

Below is a 50 bike plan overlooking initial costs and yearly costs of the program

<b>PROGRAM COSTS FOR TWO YEAR PILOT PROGRAM - ESTIMATES</b>	
<b>NUMBER OF BIKES</b>	25-200
<b>NUMBER OF PLANS</b>	3 – First plan free, \$100/month per additional plans
<b>ONE-TIME ACTIVATION FEE</b>	\$500
<b>50 BITLOCKS</b>	\$98.50/lock
<b>STRIPE (TRANSACTION FEE)</b>	2.9% + \$0.30 per charge
<b>PAYMENT PROCESSING FEE</b>	6.5%
<b>SUBSCRIPTION FEE</b>	\$15/bike/month or \$150/bike/year
<b>NUMBER OF BIKES</b>	50
<b>BIKES</b>	\$400/bike
<b>MONTHLY TUNE UP</b>	\$35/bike
<b>ANNUAL TUNE UP</b>	\$420/bike

## PROGRAM COSTS FOR TWO YEAR PILOT PROGRAM

		Set Up Cost	Yearly Costs
<b>NUMBER OF BIKES</b>	50		
<b>NUMBER OF PLANS</b>	2 (1 for anyone with an university ID, anyone who is visiting and would like to use the system)	\$1200	\$1200
<b>ONE-TIME ACTIVATION FEE</b>		\$500	
<b>50 BITLOCKS</b>		\$4925	
<b>STRIPE (TRANSACTION FEE)</b>	2,500 Check Outs*	\$822.50	\$822.50
<b>PAYMENT PROCESSING FEE</b>	2,500 Check Outs*	\$162.50	\$162.50
<b>SUBSCRIPTION FEE</b>		\$7500	\$7500
<b>NUMBER OF BIKES</b>	50		
<b>BIKES</b>	\$400/bike	\$20,000	
<b>ANNUAL TUNE UP**</b>	\$420/bike	\$21,000	\$21000
<b>TOTAL</b>		\$56,110	\$30,685

\*2,500 Check Outs – this is a guess that at least each bike will have been checked out 50 times over a one year period

\*\*Annual Tune Up - include bare minimum tune ups for the bikes – does not include any external costs

## Total Costs

Operation Costs:

Active/Sustainable Transportation Coordinator or Student Intern through iSEE – This will not be asked from SSC

2-year Pilot Program Costs: \$56,110 + 30,685 = \$86,795

## Operations

Neutral Cycle will be contracted to provide the initial bikes and maintenance of the bicycles.

The pilot program will be run by the Sustainable/Active Transportation coordinator that F&S and the Transportation SWATeam have been advocating to hire. Otherwise, iSEE will recruit a student intern to run the program.

## SSC Proposal Request

The Step I proposal asks SSC to grant \$80,000 for a pilot bike share program. However, through changes and modifications, iSEE asks to be granted \$86,795 for a two-year pilot program. A two-year pilot program would allow for time for the program to grow and to develop a system that is best for our campus.

# Pricing

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\$20 Annual memberships  
Unlimited 2 hour trips - no additional charges

\$5 24-Hour Pass  
Unlimited 1 hour trips - no additional

## ANNUAL MEMBERSHIP OVERTIME FEES

0-2 HOURS	INCLUDED
2-3 HOURS	\$1.00
3-4 HOURS	\$3.00
4-8 HOURS	\$5.00
8-24 HOURS	\$10.00

## 24-HOUR PASS OVERTIME FEES

0-1 HOURS	INCLUDED
1-2 HOURS	\$2.00
2-4 HOURS	\$4.00
4-8 HOURS	\$10.00
8-24 HOURS	\$20.00

# Education Plan

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An education plan will be proposed to have students who wish to participate in the pilot program to have the option to waive the annual membership fee if completing an online bike safety quiz. League of Illinois Bicyclists (<http://www.bikesafetyquiz.com/>) offers a robust quiz with three different levels that will be used for this promotion.

# Additional Information

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## Student Advisory Committee

A student advisory committee will be established to give continued input of developing the best bike sharing program for our campus. This student advisory committee will be comprised of students of various backgrounds to gain the best representation of students on campus. iSEE will ask for SSC's input in choosing student representatives.

## Liability Waiver

iSEE is working with legal in developing a liability waiver that participants will need to agree to before being allowed to use the system. Such a waiver exists from the Sustainability LLC program and should be an easy process to develop one for the pilot bike share program.

## Marketing Ideas

Marketing ideas are to design bicycles with a space for being able to change out branding to put in different sponsorships attached to each of the bicycles. The sponsorship space would allow for different companies to contribute to the system to showcase those who are involved with purchasing the bicycles.

## **Future Goals**

The future of the pilot bike share program is to develop a bike share system that is compatible to our campus needs. Possible ideas of how to extend the program beyond the pilot period is to create a self-sustaining bike share program through user fees. If the bike share program is popular than there will be potential for expansion of the system. We will be continuing to evaluate the progress of the system and asking SSC for feedback throughout the pilot program.

## **What kind of bikes will be offered by Neutral Cycle?**

A bike of similar design and specs to a *Torker T-300*



## **BitLock Fleet Management Resource**

BitLock as broken down step by step instructions of how to use their Fleet Management Software:

[https://www.youtube.com/playlist?list=PL8mQlyOFbUrlmqbDpGXWnPAIT\\_igw0a8](https://www.youtube.com/playlist?list=PL8mQlyOFbUrlmqbDpGXWnPAIT_igw0a8)

# BitLock Break Down

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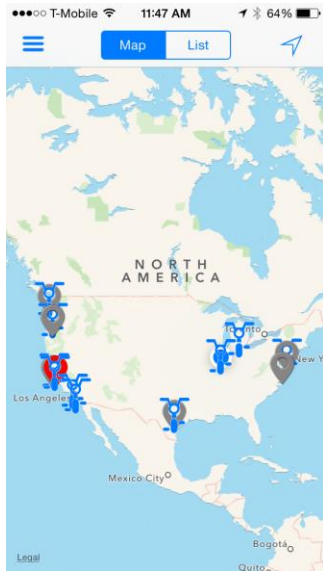
## Meet BitLock



BitLock works by clicking on a button shown below that is on the base of the lock. Either square or circle button can be turned on to activate the lock

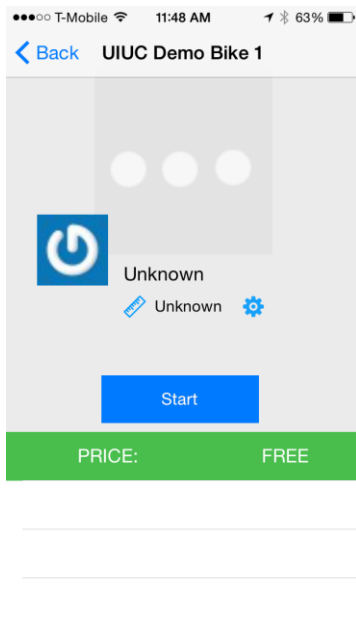


## BitLock Search Map



Once activating the BitLock a map will show up with the location of the nearest BitLock to you. This is an overview of the BitLocks available throughout the USA.

## Session Menu



Sessions can begin and end through a simple click of a button once the lock is detected.



## BitLock Unlocked



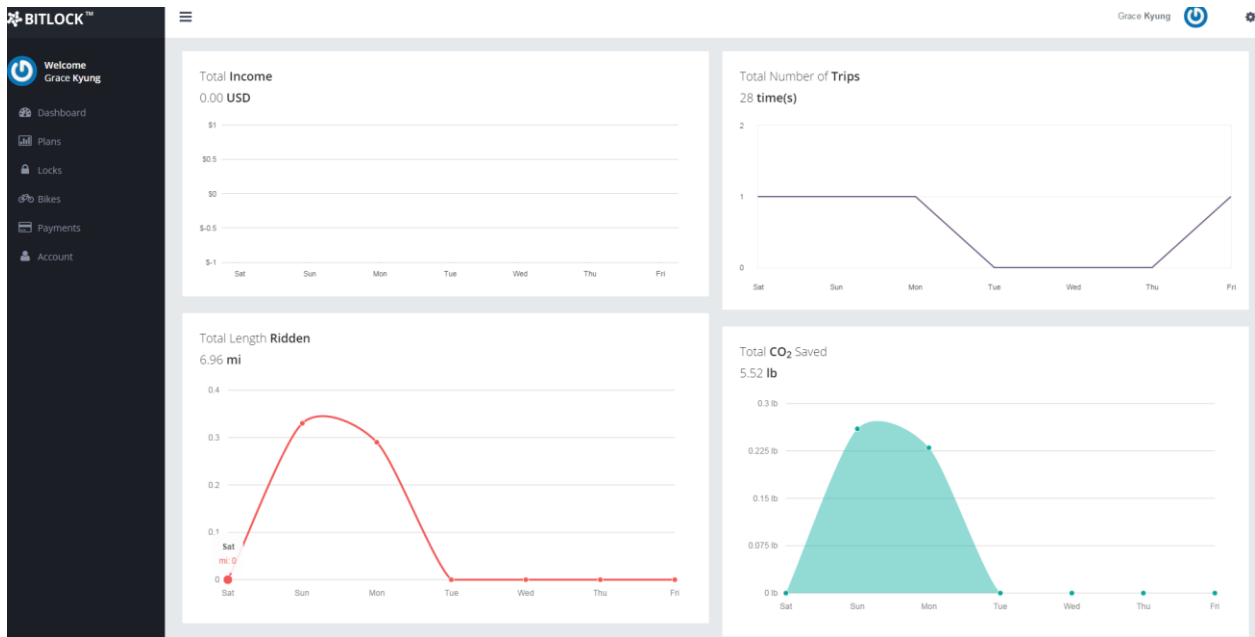
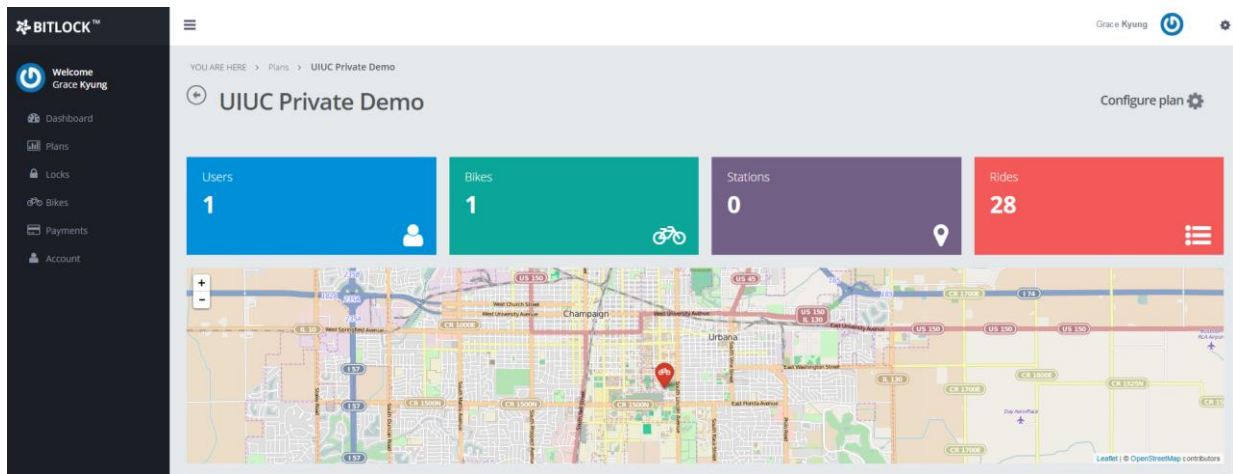
## BitLock Fleet Management Software

### BitLock Dashboard

The screenshot shows the BitLock Dashboard interface. On the left is a dark sidebar with navigation options: Welcome Grace Kyung, Dashboard, Plans, Locks, dPo Bikes, Payments, and Account. The main content area is titled 'Your Plans' and contains a table with the following data:

	PLAN NAME	DESCRIPTION	USERS	BIKES	RIDES	TYPE	STATUS	LATEST ACTIVITY
<input type="checkbox"/>	UIUC Private Demo		1	1	28	requires approval	Published	2015-03-27T16:48:12.217952
<input type="checkbox"/>	UIUC Testing		0	0	0	requires approval	Unpublished	No activity found

BitLock Dashboard allows you to select which plan you would like to view. Each plan can be customized and tailored in the type of pricing and membership.



Each plan shows the number of users, bikes, stations, and rides within the system. Also, the plans show the total income, number of trips, length ridden, and CO<sub>2</sub> saved.

YOU ARE HERE > Plans > UIUC Private Demo > Rides

**UIUC Private Demo's Rides**

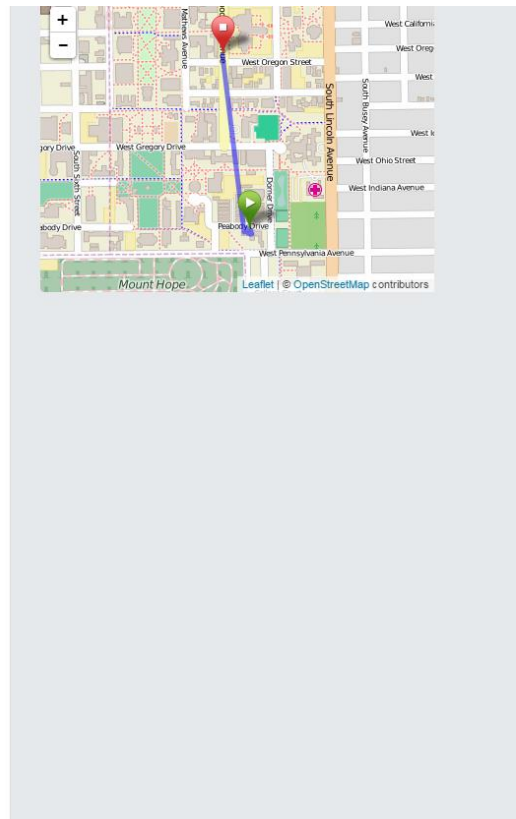
Stop Session | Search in sessions...

RIDE ID	USER	LOCK	PICKUP DATE/TIME	RETURN DATE/TIME	PICKUP LOCATION	RETURN LOCATION	DURATION (HH:MM:SS)	PAID (\$)	RETURN CONDITION	DISTANCE TRAVELED (MI)
1004	Grace Kyung	UIUC Demo Lock	03-20-2015 02:19:27 PM	03-20-2015 02:21:02 PM	[-88.24662555017345, 40.13397730890674]	[-88.24672328316443, 40.13398112267268]	00:01:35	0.00	good	0.27
982	Grace Kyung	UIUC Demo Lock	03-18-2015 05:10:26 PM	03-18-2015 05:14:37 PM	[-88.2229970489519, 40.1017828798295]	[-88.22266261101535, 40.10147199504087]	00:04:10	0.00	good	0.32
1005	Grace Kyung	UIUC Demo Lock	03-20-2015 02:22:48 PM	03-20-2015 02:24:49 PM	[-88.24672328316443, 40.13398112267268]	[-88.24672328316443, 40.13398112267268]	00:02:01	0.00	good	0.00

Rides can be shown to learn how users are using the bikes and popular locations.

User	Grace Kyung
Bike	2184
Start Date/Time	03-18-2015 11:29:46 AM
End Date/Time	03-18-2015 11:44:19 AM
Start Location	[-88.2227547281312, 40.10138926565656]
End Location	[-88.2238966786193, 40.10723786432306]
Amount Paid (\$)	0.00
Duration (hh:mm:ss)	00:14:32
Return Condition	good
Distance Traveled	0.82 mi

Return Photo



Each ride can be evaluated in more detail to see chosen route and the end image users take to show the lock is properly locked and bicycle has no damage.