Bike Share Programs

Bike map from http://www.bikesharingmap.com/
Pictures from thechicagolifestyle.com, wikipedia.org, www.insideindianabusiness.com, and cvilletomorrow.org
Purdue’s Bike Share Program - Zagster

www.twitter.com/zagster

www.connline.com
How it Works

Join
$25 annually

Enter Bike #

Unlock Bike and Ride

Return Bike to Rack

Membership Options

Yearly Membership

24 Hour Pass

Promotional Membership

MEMBERSHIP FEE
$25 billed annually

Trips under 3 hours are FREE (6 hours on weekends)

then pay $2/hour up to $10/ride

Pricing

MEMBERSHIP FEE
$25 billed annually

Rides shorter than 3 hours are FREE
(6 hours on weekends)
Bike Rack Locations

- 13 bike racks on campus
- Capacity ranges from 6-12 bikes
- Bikes secured with U-bolt, key for which is in lockbox on back of bike
The Quick Numbers

- 646 Users
- 77 Bikes
- 15K Rentals
- 22K hrs Total Duration
- 425 Most rentals by a user
- 1058 hrs Highest total duration by a user
Total rentals and duration for each bike

Bike #14 has highest rentals and duration
Hours of use by bike

Pareto chart

45 bikes
Rentals by User

User: c0733c43
425 rentals

User: 7db0a300
417 rentals

135 users had 1 rental
Rentals over the study period by top user

30 Oct
15 rentals
User on Oct 30, 2015

First rental at 03:51 AM!!
Checks back in for 8 sec
Checks back in for 19 sec
Checks back in for 15 sec

Not Riding  Riding
Users who check in and check out near the 3hr mark

- Rides that lasted 2.5 to 3.1 hrs
- Checked in and out within 5 mins

139 users or 21.5% of all users

9 users (1.39%) did this more than 50 times
Challenges in Implementation

GPS Fence
Unique bikes in use per day, out of 77

- Average: 28.1 (of days with use)
- Average: 22.9 (all days)

Peak usage: 52 bikes

Classes begin

Trial period

Official launch
Unique bikes rented per day and hour, out of 77
Unique bikes rented per day and hour, Aug

Classes begin
Unique bikes rented per day and hour, Sept

Family weekend

Best month of usage
Unique bikes rented per day and hour, Oct

Temperatures drop below 50
Unique bikes rented per day and hour, Nov

Temperatures in the 60’s F
Temperatures drop below 50 F
Snowstorm
Thanksgiving

Temperatures in the 60’s F
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Cumulative plot of rental duration

- 96.9% return before 3 hrs
- 97.6% return before 3:05
- 82.5% return by 2:45
- 27% return after 16 mins
- 11 rentals > 24 hours
  Max: 76 hours

Cumulative Charges

Daily Charges

Extra Charges

Cumulative

Family weekend
Average Bikes in Use by 15-min periods since Aug. 1

- **Peak use in late afternoon**
- **Similar usage Monday-Friday, less usage on weekends**
- **Bikes in use even overnight**
Cumulative Days Unused by Bike since Aug. 1

Bar only shown when bike is unused for at least 7 days

Bike ad4d85a2, up to 100 days
Bike 26f8bcc0, up to 69 days
Bike 1c5ded65, up to 81 days
Challenges in Implementation
Challenges in Implementation
Lessons Learned - Maintenance
Lessons Learned - Support

I cannot lock my bike
Troubleshooting
Mobile App
Using Zagster Bikes
About Zagster
Billing & Account Management

What do I do if I cannot lock my bike?

Evan 02/04/2016

1. Don’t panic
2. Refer to the troubleshooting tips below. Sometimes it simply takes another try.
3. If all else fails, please call 202-999-3924

*Whatever you do, please do not leave the bike unlocked.

Your email address *
Support Type *
Subject *
Issue Description *
Lessons Learned – Geo Fencing

GPS Fence
Future Research

• GPS data
  • Origin-destination study
  • Locate demand
  • Understand usage patterns

• Weather integration
  • Explain anomalies in usage

• User feedback surveys
Questions?

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