Usage Trends: Customers And Subscribers

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Case Study Intro

This presentation is intended as a demonstration of a data presentation to a marketing department within a company that offers a bike rental service. The service is offered as a year-long subscription ('Subscribers') and through single-trip rentals ('Customers'). The data is presented from the company's trip data with the intent of helping the marketing department determine how to convert Customers to Subscribers.

The Python scripts used to generate the visualizations and process the data are available at https://github.com/christiansencq.

The raw data is from: https://divvy-tripdata.s3.amazonaws.com/index.html

Which is under the license at https://www.divvybikes.com/data-license-agreement

How do subscribing users differ from 1-time customers?

Yearly 'Subscribers' vs Single-Ride 'Customers'

When do Subscribers and Customers take trips?

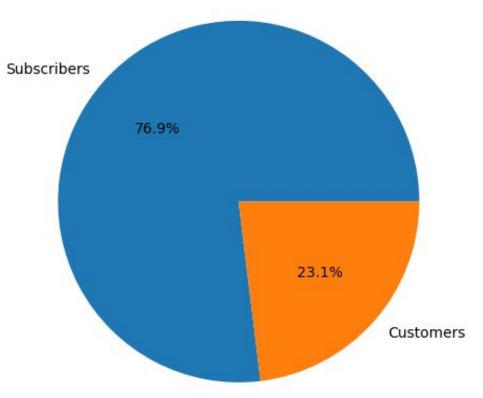
Why are Subscribers/Customers taking trips?

How can

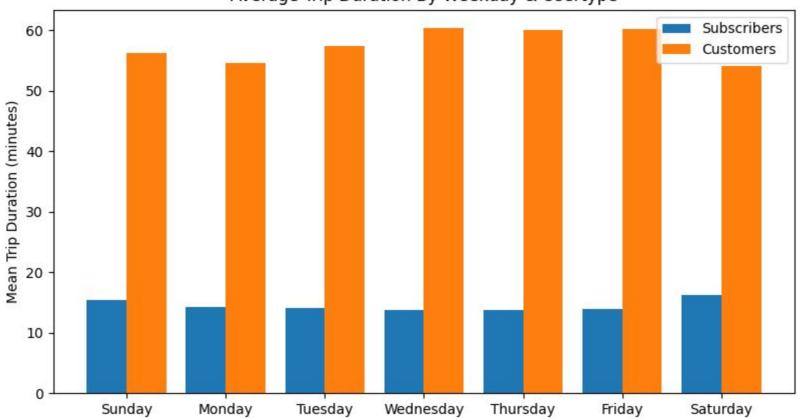
Our Data

- 2019 Calendar year
- Total Trips: 3,818,004
- Customer Trips: 880,637
- Subscriber Trips: 2,937,367

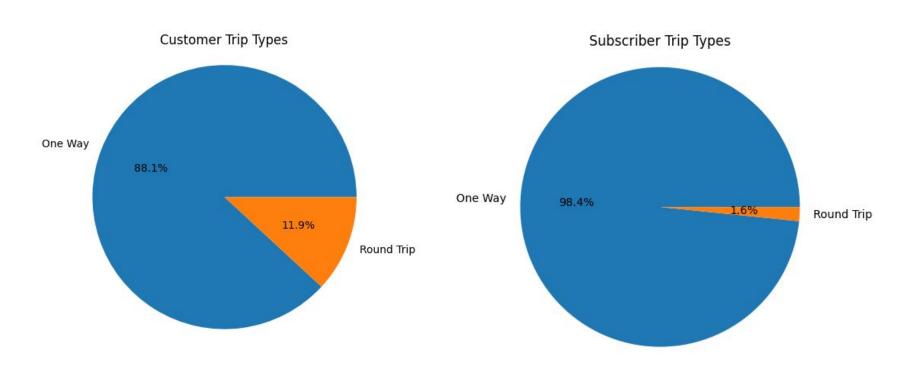




Average Trip Duration By Weekday & Usertype



Trip Types By Usertype



Customer Usage

Where are the customers who use the rentals for transportation (rather than exercise/fun)?

Ten Most Used Stations For One-Way Customers

Station Names	Trips
Streeter Dr & Grand Ave	44472
Lake Shore Dr & Monroe St	31186
Shedd Aquarium	18859
Millennium Park	18829
Lake Shore Dr & North Blvd	17125
Michigan Ave & Oak St	16398
Theater on the Lake	13038
Dusable Harbor	11019
Michigan Ave & Washington St	10822
Adler Planetarium	10505

Ten Most Used Stations For Round-Trip Customers

Station Names	Trips
Streeter Dr & Grand Ave	8632
Lake Shore Dr & Monroe St	8052
Michigan Ave & Oak St	4990
Millennium Park	2920
Montrose Harbor	2625
Theater on the Lake	1989
Lake Shore Dr & North Blvd	1827
Michigan Ave & 8th St	1799
Shedd Aquarium	1758
Dusable Harbor	1527

Subscriber Usage Note that

Ten Most Used Stations For Round-Trip Subscribers

Station Names	Trips
Streeter Dr & Grand Ave	642
Theater on the Lake	578
Lake Shore Dr & North Blvd	526
Lake Shore Dr & Monroe St	502
Burnham Harbor	497
Michigan Ave & Oak St	447
Loomis St & Lexington St	405
Wabash Ave & Grand Ave	403
Montrose Harbor	394
Adler Planetarium	384

Ten Most Used Stations For One-Way Subscribers

Station Names	Trips
Canal St & Adams St	50416
Clinton St & Madison St	45809
Clinton St & Washington Blvd	45252
Columbus Dr & Randolph St	31080
Franklin St & Monroe St	30624
Kingsbury St & Kinzie St	30451
Daley Center Plaza	30184
Canal St & Madison St	27023
Michigan Ave & Washington St	25338
LaSalle St & Jackson Blvd	22815

Recommendations

Direct marketing efforts toward customers who are using rentals for transportation/commuting.

Longer trips are typical of customers. Further data can be used to determine the nature of this time discrepancy (i.e. tourists, exercising, etc.)

Consider concentrating visibility around the geographic areas where customers are taking one-way trips, as they may be more likely to convert to subscribers.



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