



Google Data Analytics Capstone Project

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Last updated: October 22, 2021

Google Data Analytics Capstone Project: Cyclistic Bike-Share Marketing Analysis



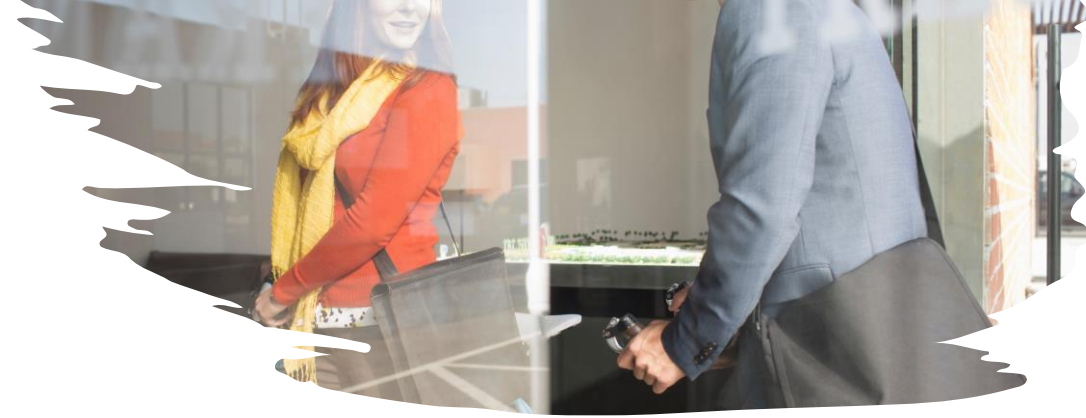
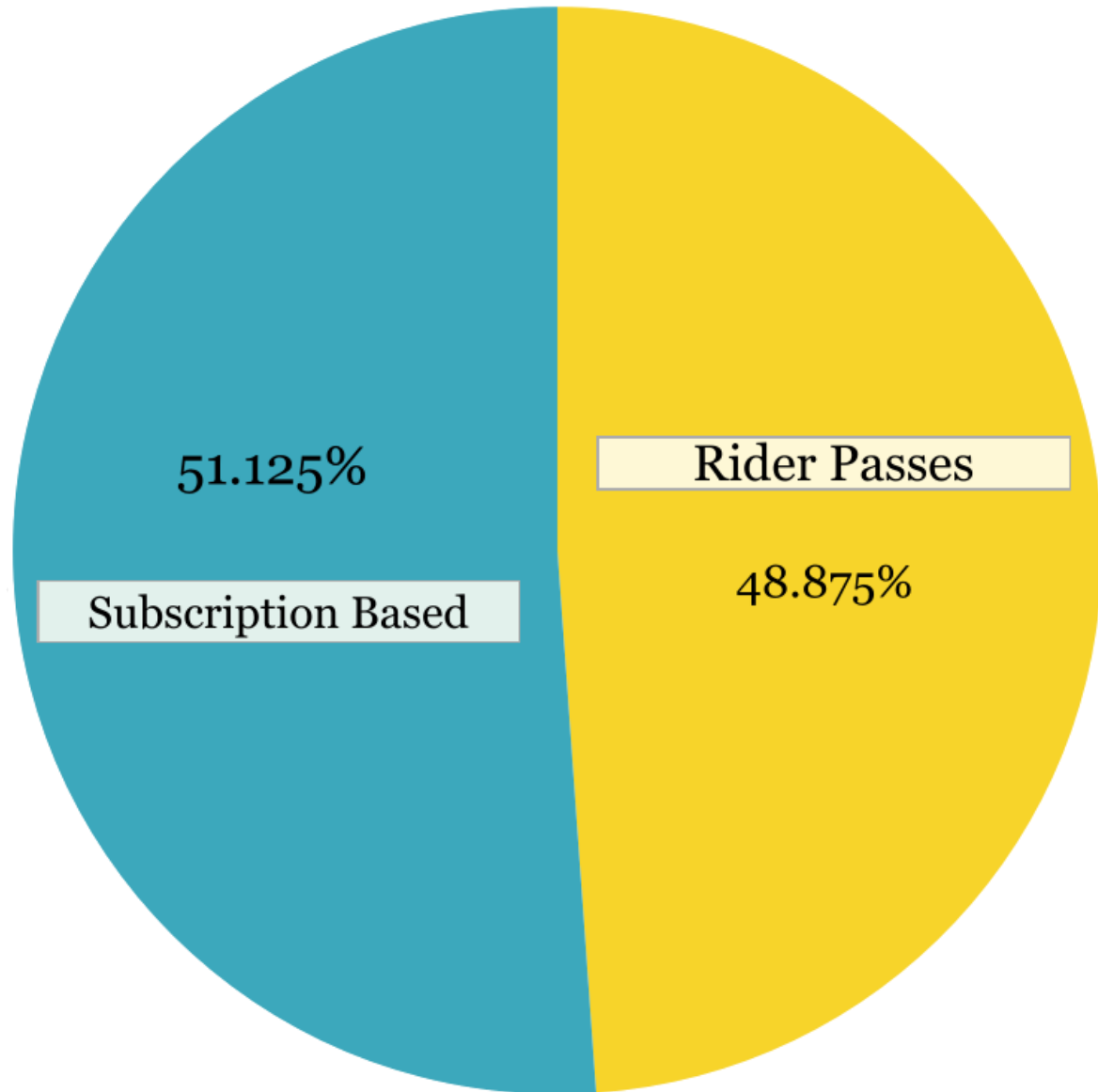
In 2016, Cyclistic launched a successful bike-share offering program. Since then, the program has grown to a fleet of 5,824 bicycles that are geo-tracked and locked into a network of 692 stations across Chicago. The bikes can be unlocked from one station and returned to any other station in the system anytime.

Business Task

This presentation reflects analysis from April to September 2021 and will help aide the director of marketing, Lily Moreno, and her team with converting casual riders into annual members.

Tools: Excel, Rstudio, Github, and Tableau

Cyclistic's Customer Total



There isn't much difference between the total of casual riders and annual members. Clearly, both rider types are actively using Cyclistics's offered programs.

Annual Members:

- Subscription Based

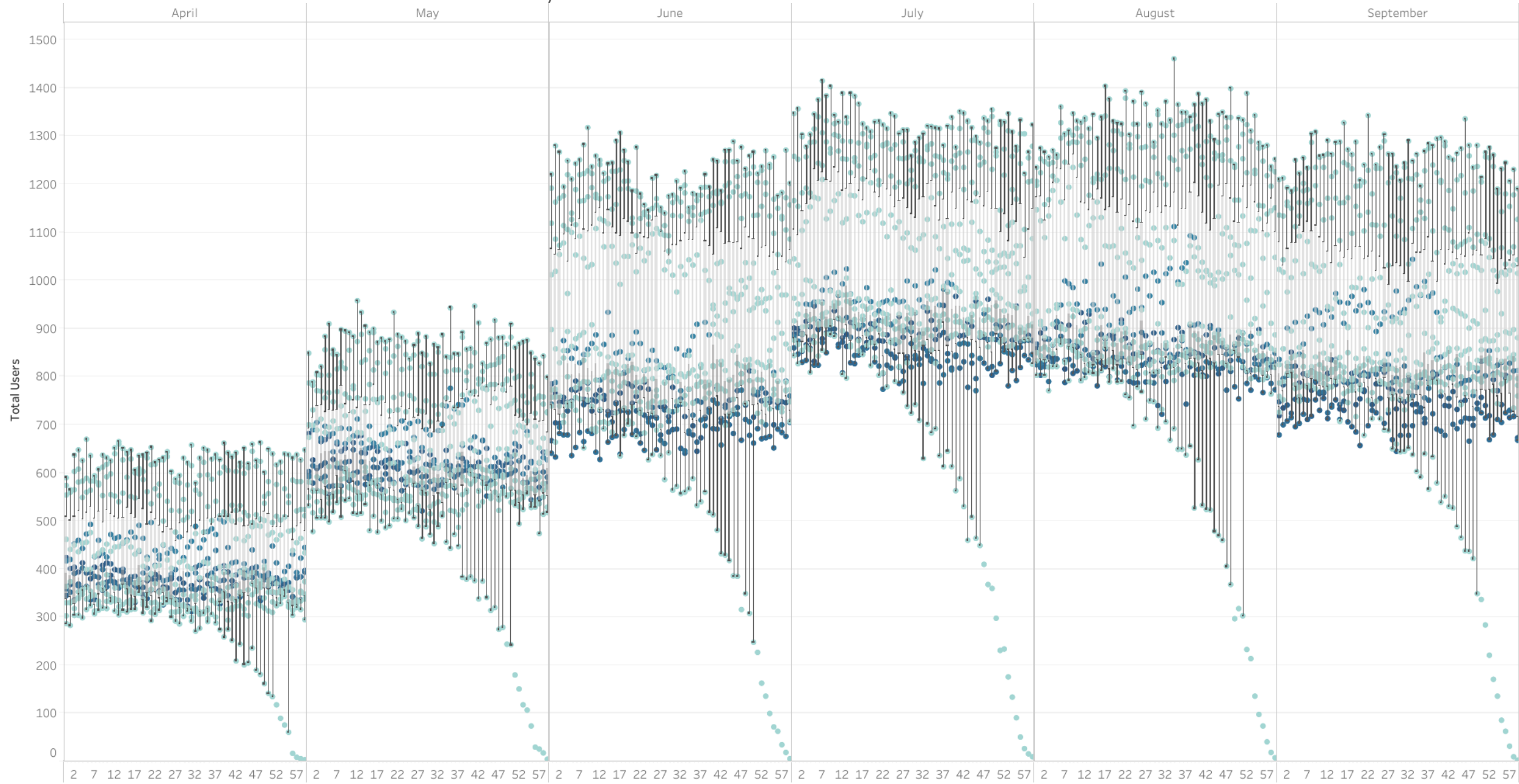
Casual Riders:

- Single-ride Passes
- Full-day Passes

Further analysis on the most purchased passes from casual riders is needed to see trends to why they purchase them.

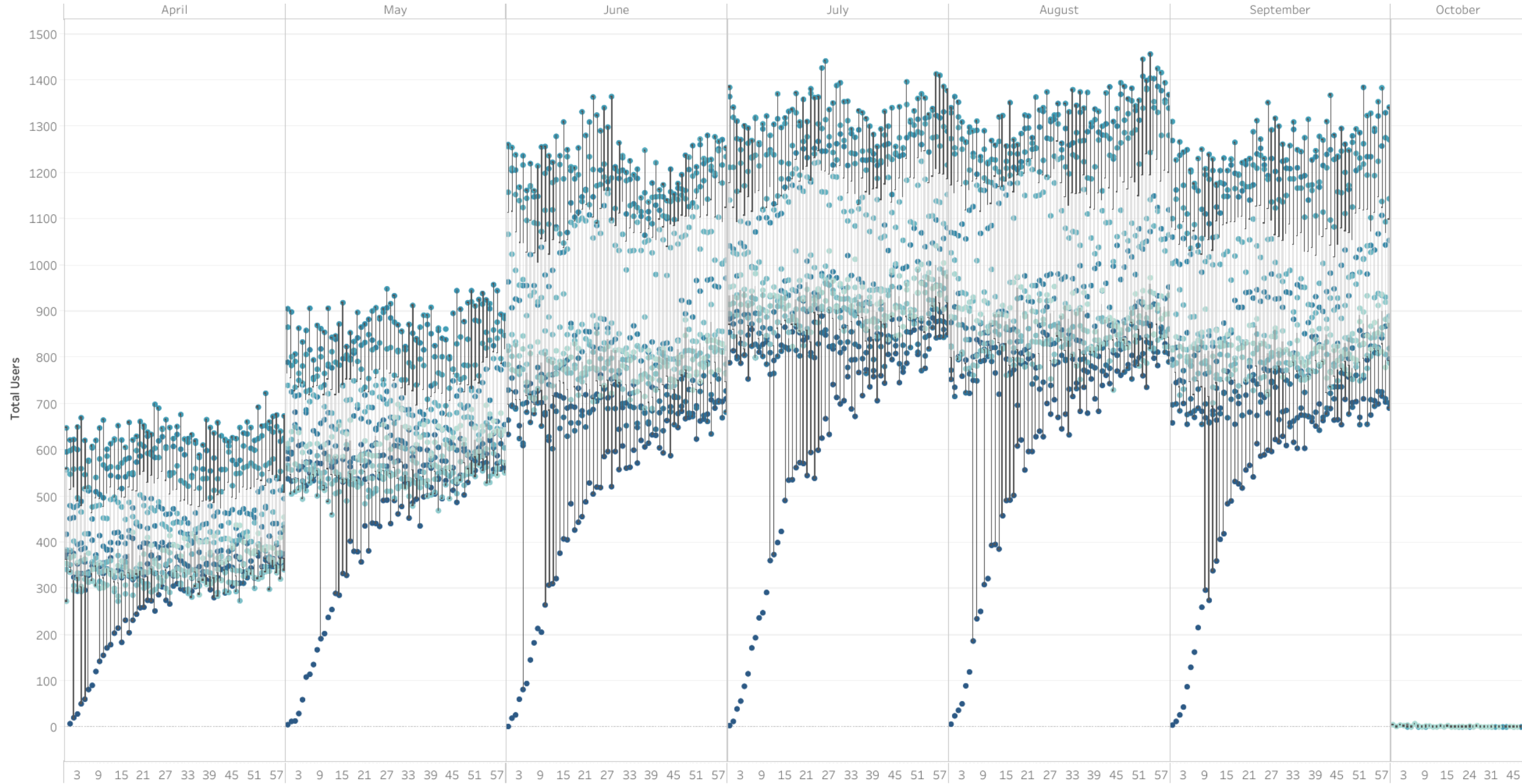
Monthly Pick-up Times

Here, we can see both rider types combined had the most activity during the months of July and August.
Times are broken down by combined minutes for that month.



Monthly Pick-up Times

For drop-offs, parts of June during the top of the hour to about half past, their activity is almost as busy as the months of July and August. October is practically flatline. Times are broken down by minutes combined for that month.



Busiest Day of the Week

Casual riders are riding their bikes the most during the weekend. While members have a steady flow of riding time during the entire week.



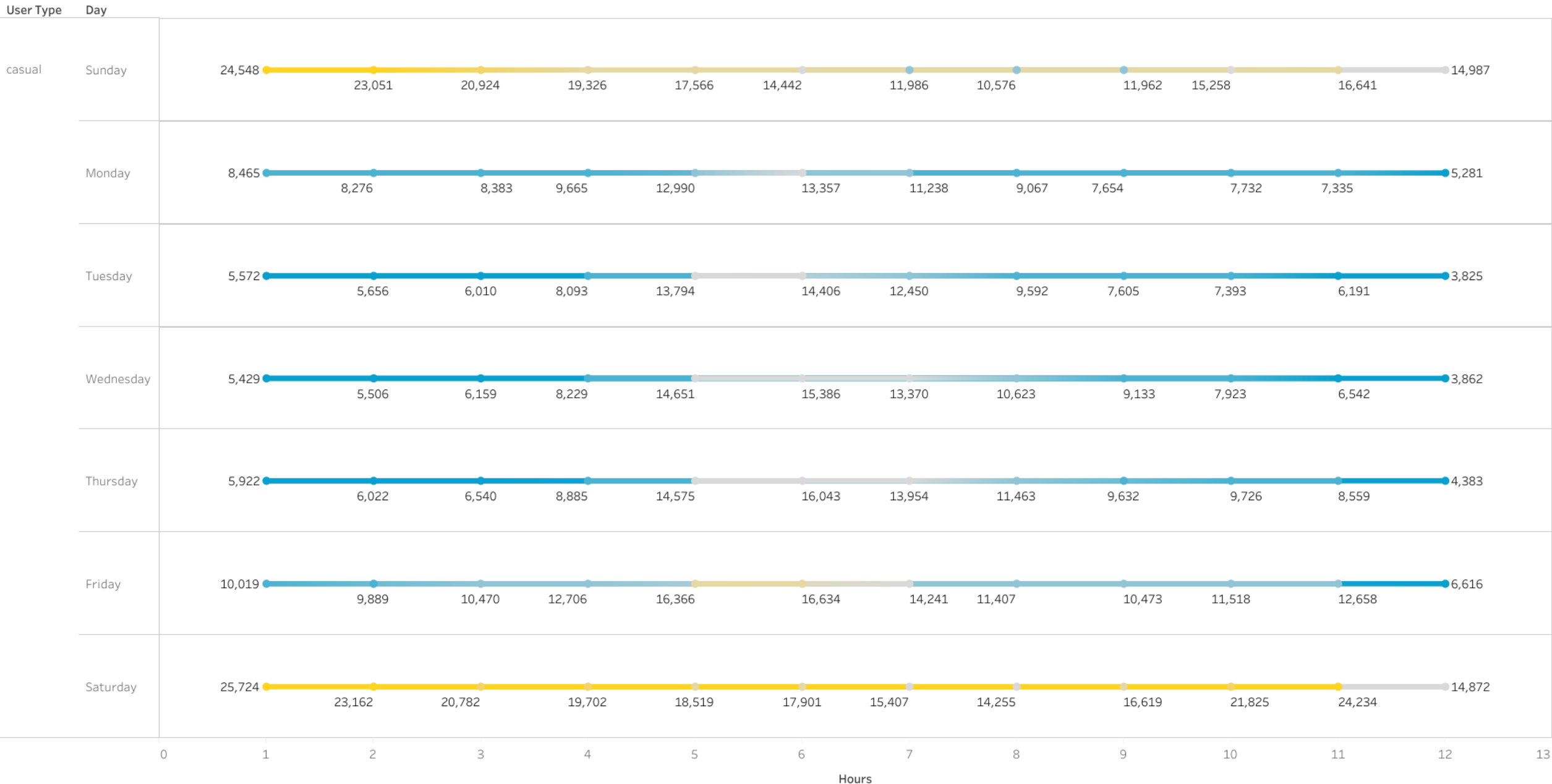
Total Rides / Rideable Types

Cyclistic offers two bike types, electric and classic, also known as their traditional bikes. Obviously, the classic bikes are the most used, which shouldn't be mistaken for the most liked. Their docked bikes are total amounts of unused bikes, and these figures are for the total of 6 months from April to September 2021.

User Type	Day	Rideable Type		
		classic bike	docked bike	electric bike
casual	Sunday	328,794,420	146,349,780	102,456,060
	Monday	161,446,320	73,559,160	68,297,580
	Tuesday	133,477,980	57,639,480	63,789,420
	Wednesday	137,885,100	52,509,660	61,580,940
	Thursday	146,604,720	53,984,460	64,399,320
	Friday	194,127,660	79,148,940	78,222,000
	Saturday	359,866,800	147,799,380	105,057,120
member	Sunday	163,991,040		41,305,800
	Monday	147,147,720		41,680,920
	Tuesday	155,691,840		46,123,440
	Wednesday	163,350,720		47,059,020
	Thursday	159,666,300		47,506,560
	Friday	154,412,520		47,929,800
	Saturday	174,690,660		45,830,640

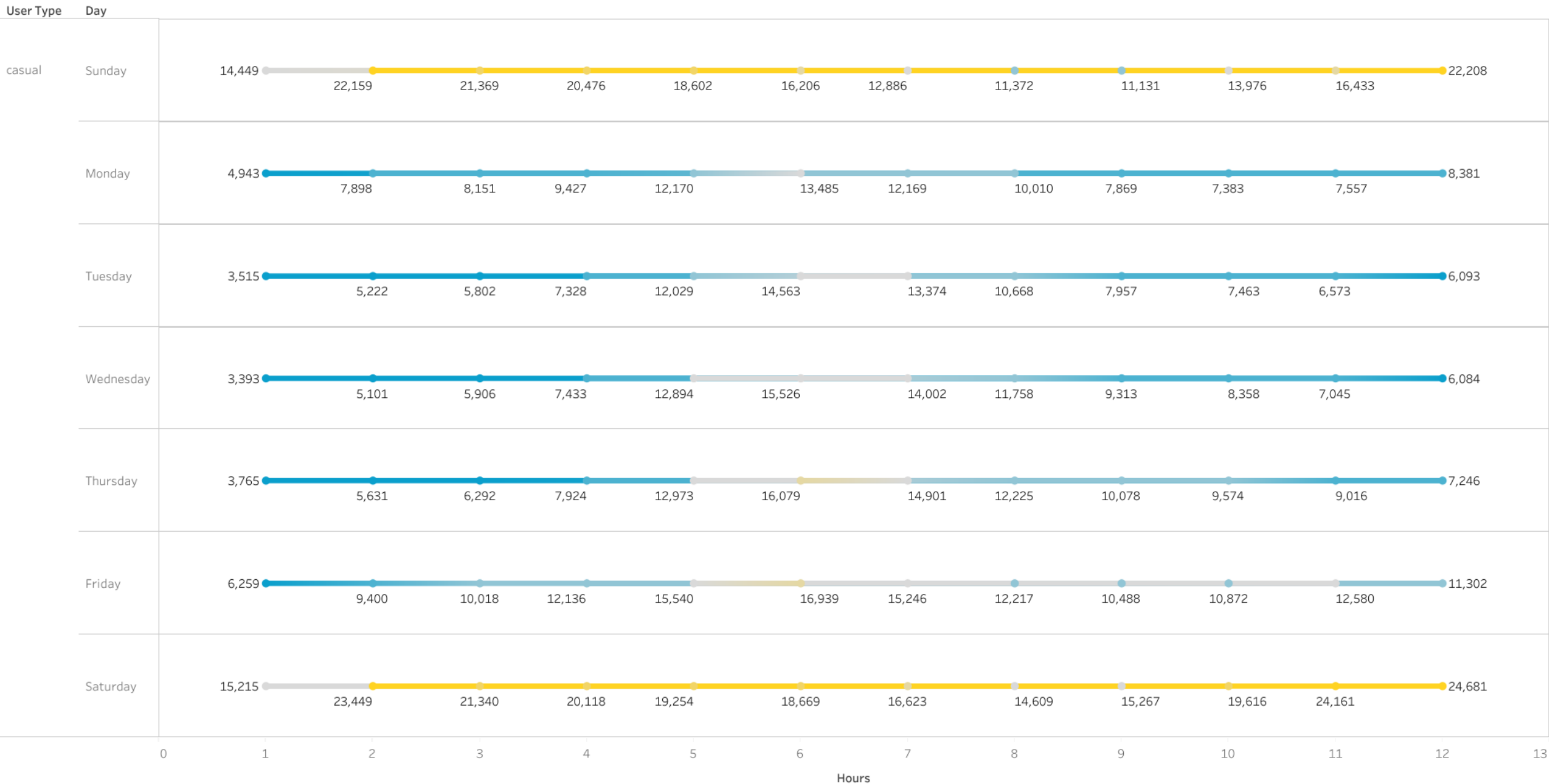
Casual Rider Pick-ups for Classic Bikes

The classic bike is the most selected bike for casual riders during pick-up. Majority of the transactions are done on the weekend during early hours of 1:00 am.



Casual Rider Drop-offs for Classic Bikes

Just to reiterate, the classic bike is the most selected bike for casual riders. Majority of the transactions are done on the weekend during early morning and on Saturdays during mid-morning hours from 10-11:00 am.



Rideable Types / Top 10 Stations

This shows their offered bikes and those unused for the top 10 stations. These stations show the total amounts picked-up and dropped-off by all users. Streeter Drive and Grand Avenue had the most activity for all 6 months.

Start Station Name	classic bike									
	Clark St & Armitage Ave	Clark St & Elm St	Clark St & Lincoln Ave	Lake Shore Dr & North Blvd	Michigan Ave & Oak St	Millennium Park	Streeter Dr & Grand Ave	Theater on the Lake	Wells St & Concord Ln	Wells St & Elm St
Streeter Dr & Grand Ave	296	251	388	1,080	1,504	1,624	6,197	1,492	230	115
Michigan Ave & Oak St	313	170	346	390	3,129	311	1,260	857	223	113
Theater on the Lake	216	124	199	304	853	151	1,239	1,980	167	90
Millennium Park	60	58	50	126	293	2,548	1,403	160	22	49
Clark St & Armitage Ave	1,078	374	346	191	234	55	320	176	647	283
Wells St & Concord Ln	527	510	399	110	148	58	143	107	845	663
Clark St & Lincoln Ave	344	319	858	152	229	44	318	147	327	299
Clark St & Elm St	327	919	307	201	168	77	144	89	513	166
Wells St & Elm St	219	160	328	154	112	44	94	63	803	783

Start Station Name	docked bike									
	Clark St & Armitage Ave	Clark St & Elm St	Clark St & Lincoln Ave	Lake Shore Dr & North Blvd	Michigan Ave & Oak St	Millennium Park	Streeter Dr & Grand Ave	Theater on the Lake	Wells St & Concord Ln	Wells St & Elm St
Streeter Dr & Grand Ave	103	42	113	261	593	837	3,076	450	42	17
Millennium Park	23	15	17	40	130	1,685	760	23	12	4
Michigan Ave & Oak St	65	7	58	82	1,522	122	458	193	10	3
Theater on the Lake	27	12	19	52	180	60	397	1,016	15	2
Clark St & Armitage Ave	241	17	46	28	68	23	89	27	13	23
Clark St & Lincoln Ave	37	21	242	21	40	13	94	19	22	7
Wells St & Concord Ln	16	8	23	18	24	10	29	6	103	3
Clark St & Elm St	9	100	29	11	24	7	13	11	13	6
Wells St & Elm St	9	7	11	6	8	3	11	5	9	66

Start Station Name	electric bike									
	Clark St & Armitage Ave	Clark St & Elm St	Clark St & Lincoln Ave	Lake Shore Dr & North Blvd	Michigan Ave & Oak St	Millennium Park	Streeter Dr & Grand Ave	Theater on the Lake	Wells St & Concord Ln	Wells St & Elm St
Streeter Dr & Grand Ave	62	27	83	126	283	340	1,274	181	67	19
Michigan Ave & Oak St	68	33	70	56	787	77	264	117	55	37
Millennium Park	22	21	19	26	76	571	274	33	8	10
Wells St & Concord Ln	87	91	73	17	33	19	35	25	249	131
Theater on the Lake	25	14	27	34	113	36	178	283	24	19
Clark St & Armitage Ave	249	66	61	19	56	11	60	21	103	70
Clark St & Lincoln Ave	71	94	203	20	40	12	60	30	47	57
Wells St & Elm St	60	18	77	42	30	11	21	9	190	171
Clark St & Elm St	82	205	95	30	32	9	34	20	81	19

Recommendations

◆ Create an **app**

- Sends **reminders** to switch to an annual subscriber
- Use geo-tracking between the **app** and the busiest **docking stations** to offer one week as an annual subscriber.

◆ Send **email and text** reminders that offer a **discount** for switching to the subscription plan.

◆ Create an awards program for referring current, even new, annual subscribers.

- Utilizes **word-of-mouth**
- Give current **subscribers** a chance to get **Cyclistic merchandise** (i.e. helmets, re-usable water bottles) for their referrals.

