



Google Data Analytics Professional Certificate
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Objectives

1. Identify key differences in Cyclistic usage for casual users compared to members
2. Utilize differences to determine marketing strategies to convert casual users to members
3. Determine how digital media can influence casual riders to convert to members

Data

- First-party data collected from Cyclistic riders over the last 12 months
- Data transformation, cleaning and processing completed with RStudio
- Data Manipulation steps include
 - Ride length calculated
 - Date and time separated into individual components
- Data meeting the following criteria were removed prior to analysis
 - All rides with a duration less than 0 removed
 - All rides that started at HQ QR station

Rides Per Month by Rider Type

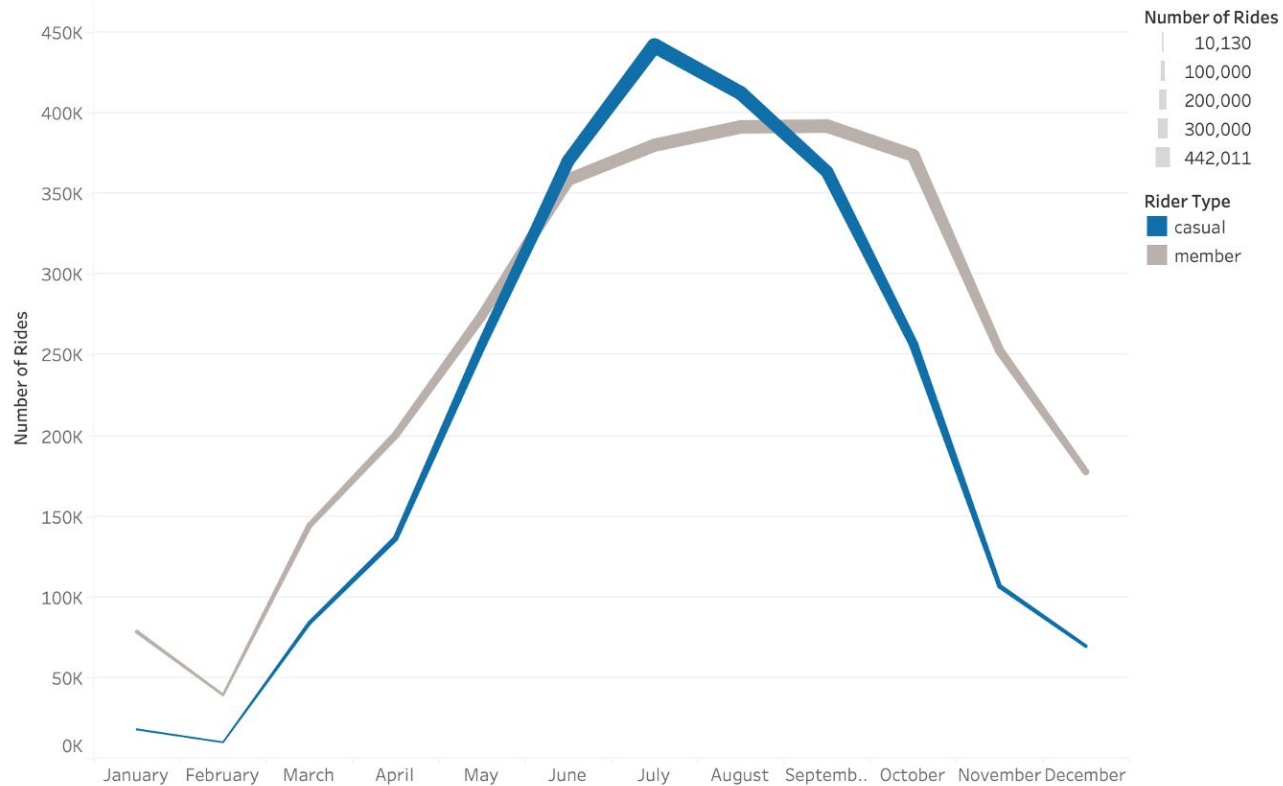
Month of St..	Rider Type		Grand Total
	casual	member	
January	18,117	78,711	96,828
February	10,130	39,488	49,618
March	84,028	144,456	228,484
April	136,590	200,602	337,192
May	256,888	274,691	531,579
June	370,636	358,893	729,529
July	442,011	380,317	822,328
August	412,608	391,637	804,245
September	363,840	392,200	756,040
October	257,203	373,953	631,156
November	106,884	253,008	359,892
December	69,729	177,790	247,519
Grand Total	2,528,664	3,065,746	5,594,410

Rides Per Weekday by Rider Type

Weekday of..	Rider Type		Grand Total
	casual	member	
Sunday	481,048	376,086	857,134
Monday	286,340	416,181	702,521
Tuesday	274,357	465,474	739,831
Wednesday	278,910	477,117	756,027
Thursday	286,038	451,490	737,528
Friday	364,037	446,384	810,421
Saturday	557,934	433,014	990,948
Grand Total	2,528,664	3,065,746	5,594,410

Members take more rides than Casual riders

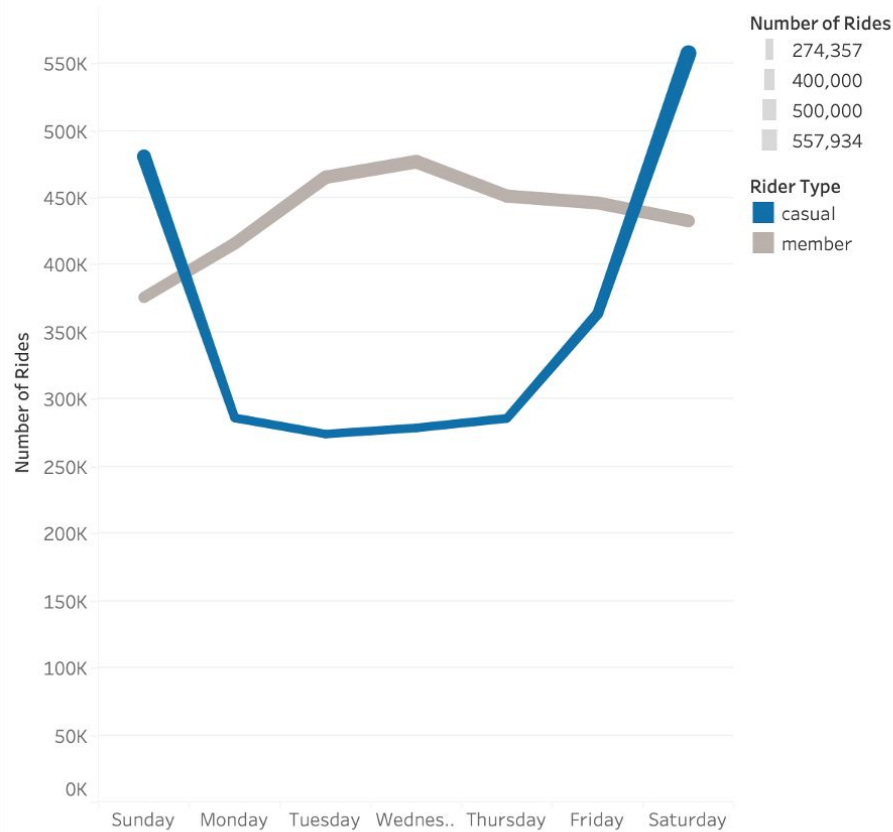
Number of Rides by Month and Rider Type



Casual riders take more rides than Members in Summer Months

All riders take more rides in Summer and Fall

Number of Rides by Weekday and Rider Type



Casual riders take more rides than Members on weekends

Average Ride Duration Per Month by Rider Type

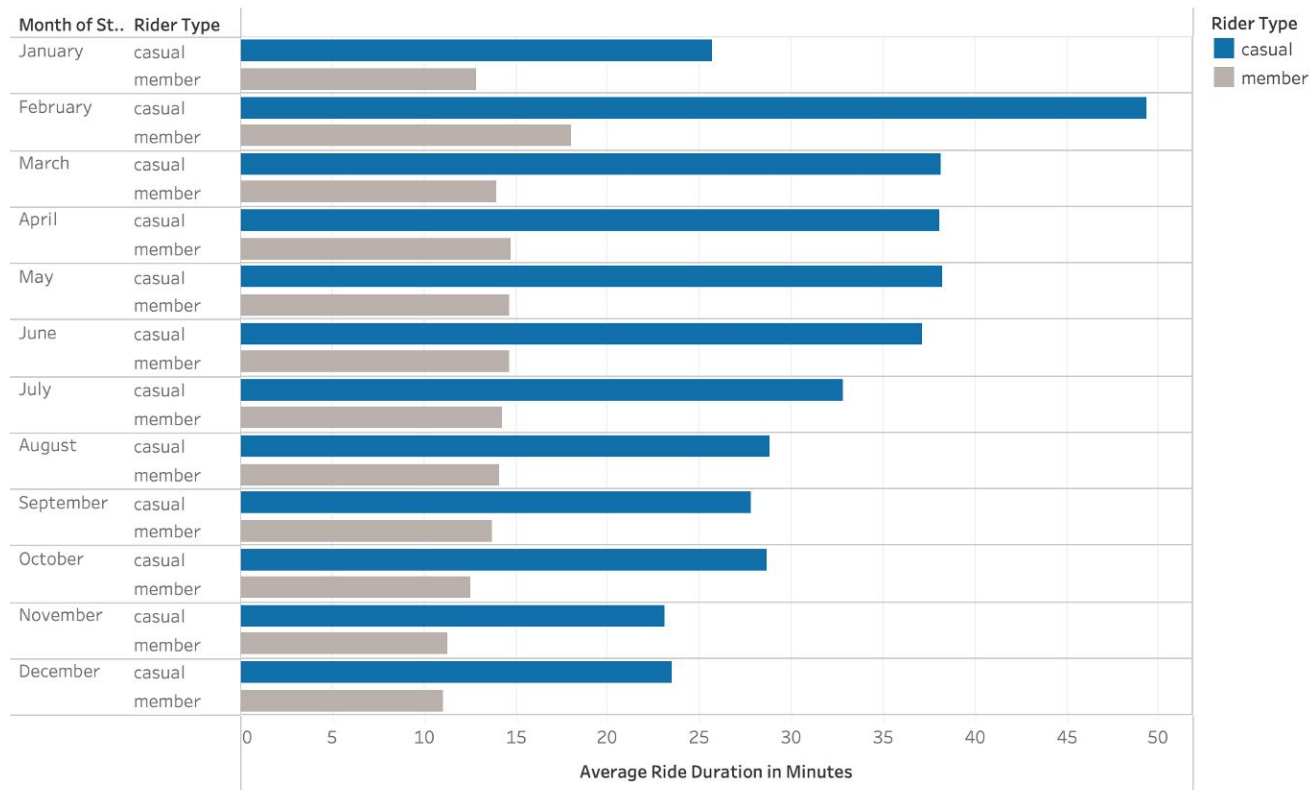
Month of St..	casual	member	Grand Total
January	25.68	12.87	15.27
February	49.38	18.02	24.42
March	38.16	13.97	22.87
April	38.03	14.69	24.14
May	38.24	14.64	26.04
June	37.13	14.68	26.08
July	32.79	14.24	24.21
August	28.79	14.10	21.64
September	27.82	13.74	20.51
October	28.68	12.50	19.09
November	23.14	11.31	14.82
December	23.50	11.01	14.52
Grand Total	32.01	13.63	21.94

Average Ride Duration by Weekday and Rider Type

Weekday of..	casual	member	Grand Total
Sunday	37.57	15.66	27.96
Monday	31.88	13.25	20.84
Tuesday	27.98	12.79	18.42
Wednesday	27.66	12.82	18.30
Thursday	27.71	12.78	18.57
Friday	30.35	13.33	20.97
Saturday	34.71	15.27	26.21
Grand Total	32.01	13.63	21.94

Casual riders take longer rides than Members

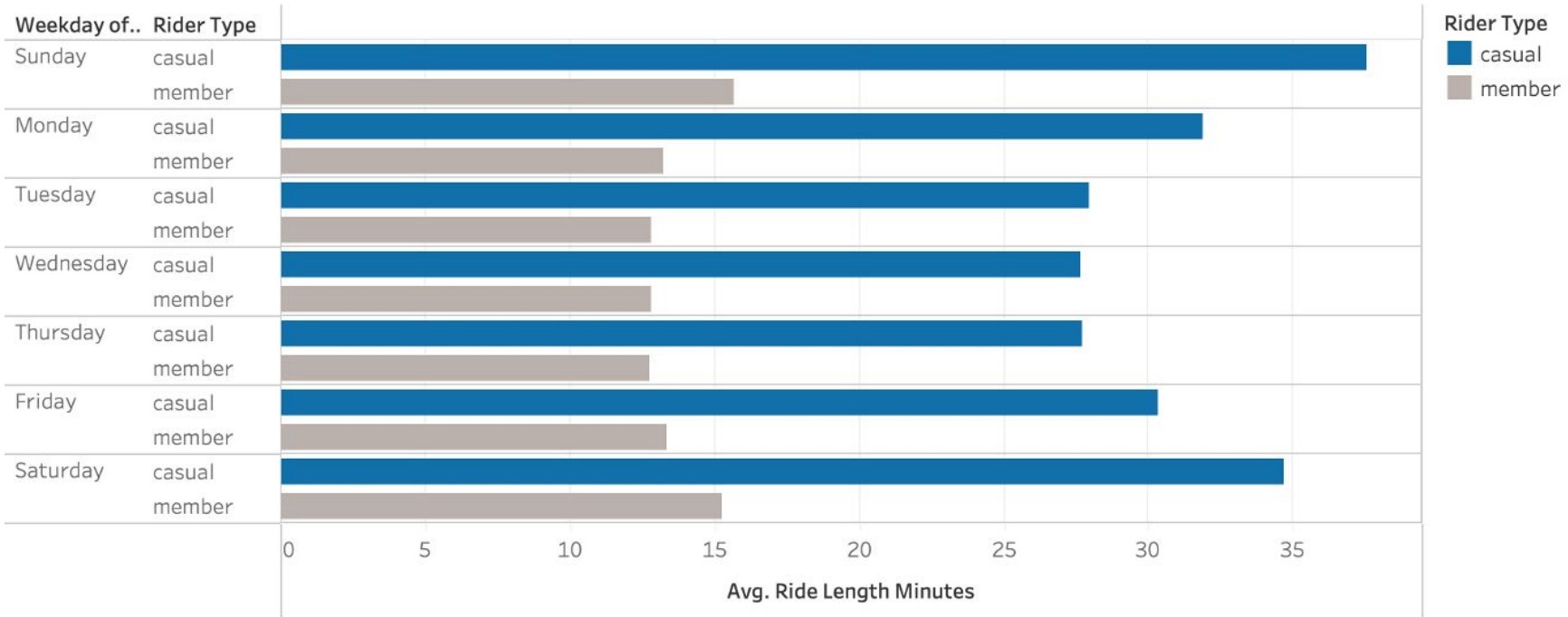
Average Ride Duration by Month and Rider Type



Casual riders take longer rides than Members across months

Casual riders take longer rides in Winter and Spring

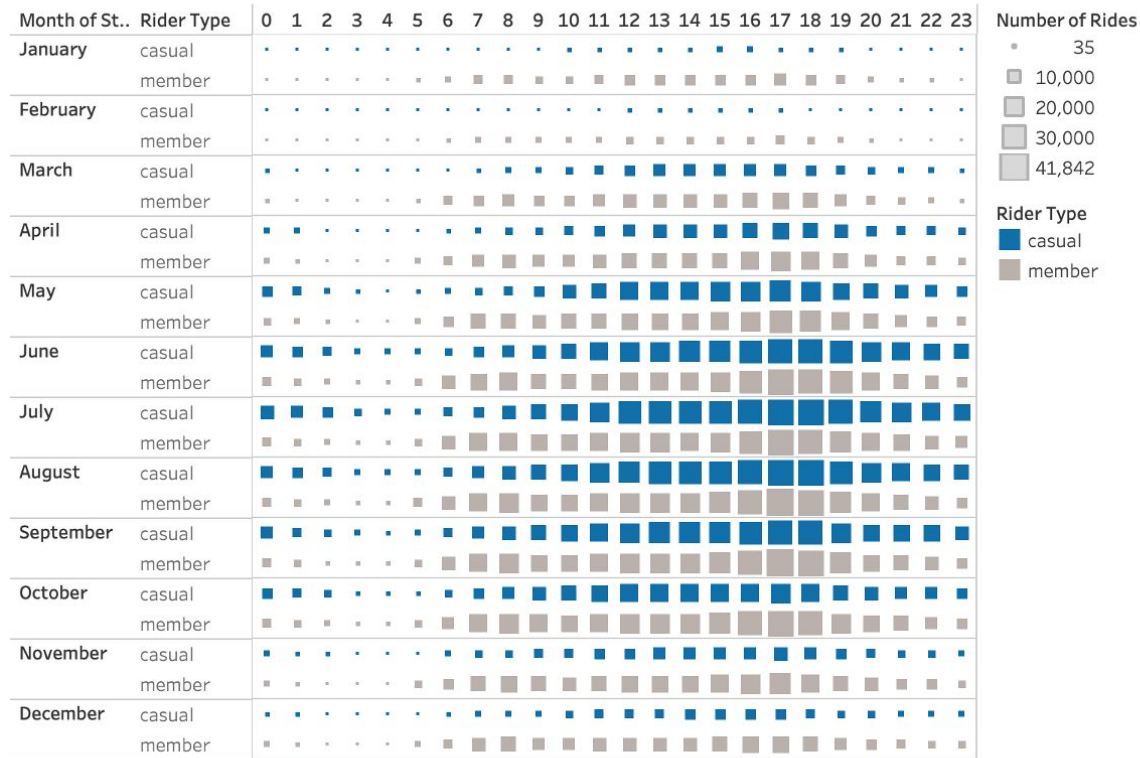
Average Ride Duration by Weekday and Rider Type



Casual riders take longer rides than Members across weekdays

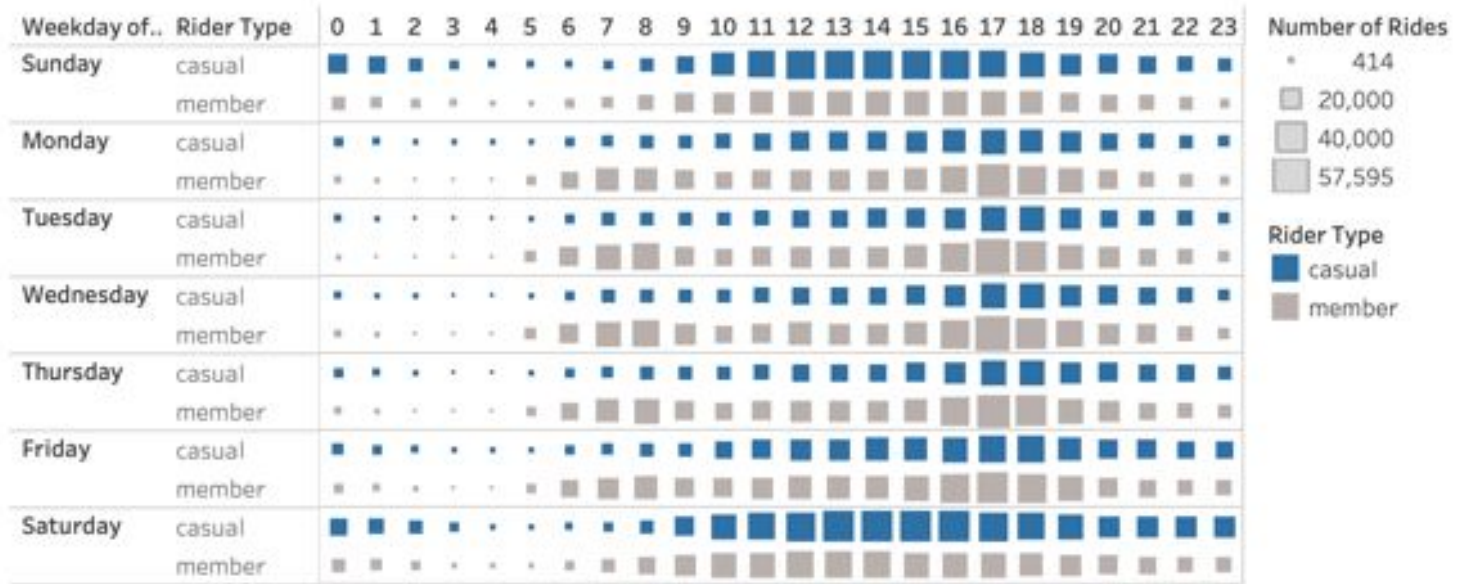
Casual riders take longer rides on the weekends

Busiest Time of Day by Month and Rider Type



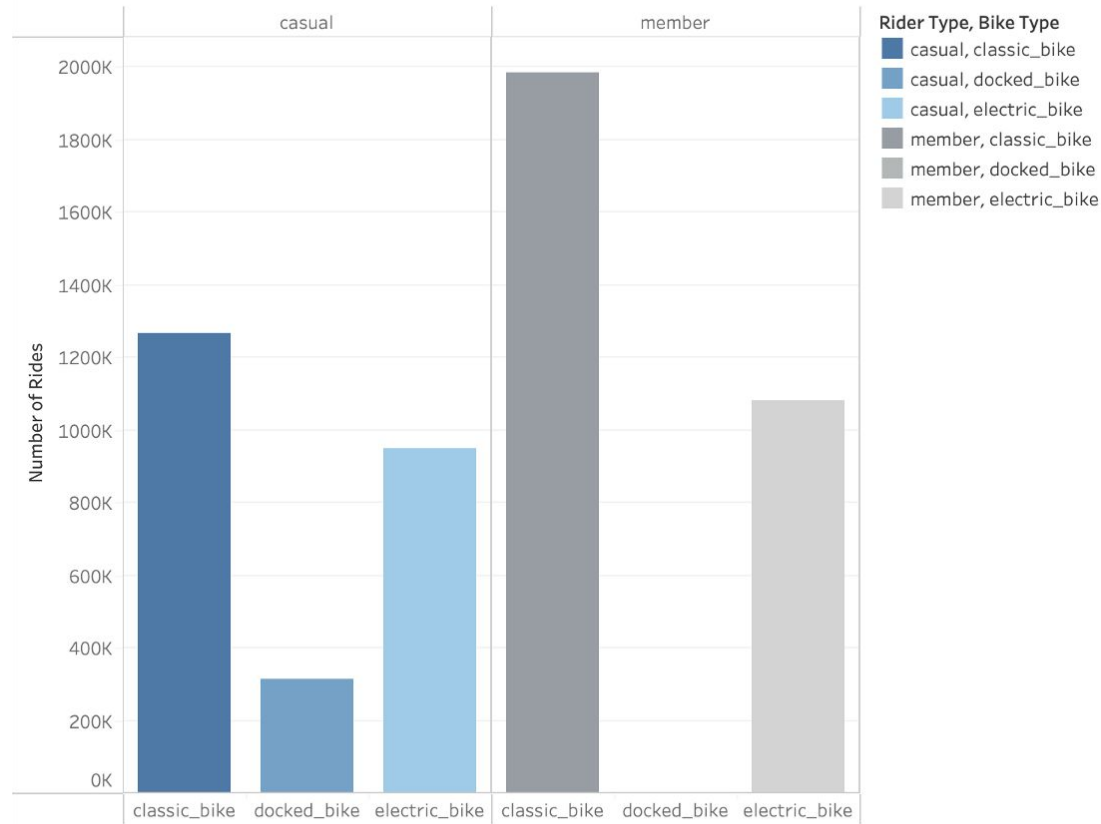
Casual members use the service more during the summer months and later in the day

Busiest Time of Day by Weekday and Rider Type



Casual riders use the service more frequently in the evenings during the week

Type of Bike Used by Rider Type



Members use classic bikes more than electric bikes

Casual users use classic bikes and electric bikes

Key Differences Among Users

- Casual Riders take longer rides than Members
- Casual Riders take fewer rides than Members during the week
- Casual Riders take less rides than Members in non-Summer months

Recommendations

- Create an incentive for casual riders during the week
 - Offer a duration based membership
- Create an incentive for casual riders in non-Summer months
- Develop digital media campaign to demonstrate how biking helps
 - Riders - improves health, reduces time in traffic
 - Planet - helps environment by reducing CO2 emissions