

NYC GREEN CAB DATA ANALYSIS AND RECOMMENDATION

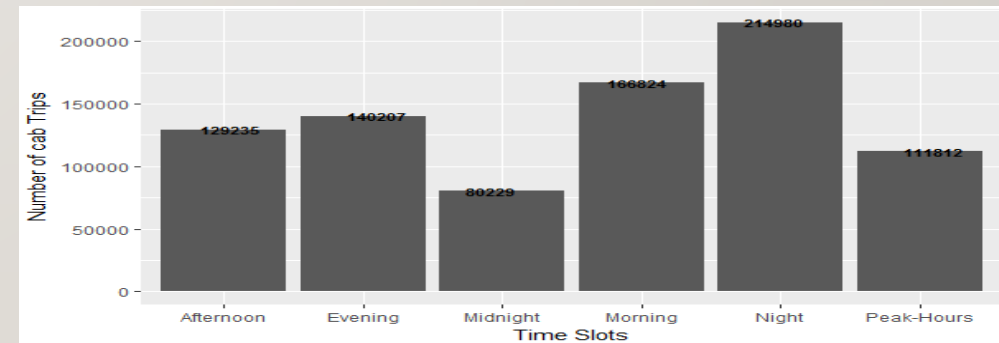
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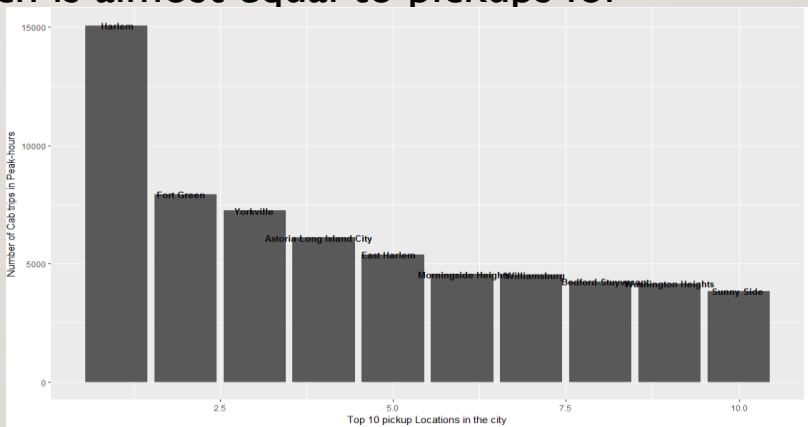
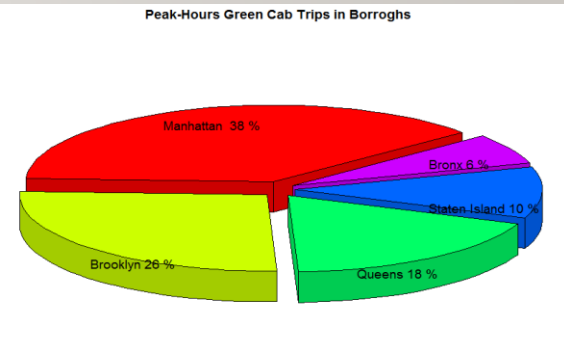
RECOMMENDATION BASED ON TIME SLOTS

- The day has been divided into following time slots :
 - Morning (4AM - 7AM, 11AM-12PM), Peak Hours(7AM-11AM), Noon(12PM-4 PM), Evening(4PM-7PM), Night(7PM-12AM) and Midnight(12-4 AM)
- The chart below shows the number of pickups for each slot over the duration of 1st Feb to 14th Feb.
- Key insights :
 - Highest number of pickups during the night slot duration of 7PM-12AM while lowest no of pickups from 12AM-4AM midnight
 - Morning hours mark second highest taxi pickup while afternoon, evening and peak hours have more or less same no of taxi pickups.



PEAK-HOUR (7AM TO 11AM) INSIGHTS

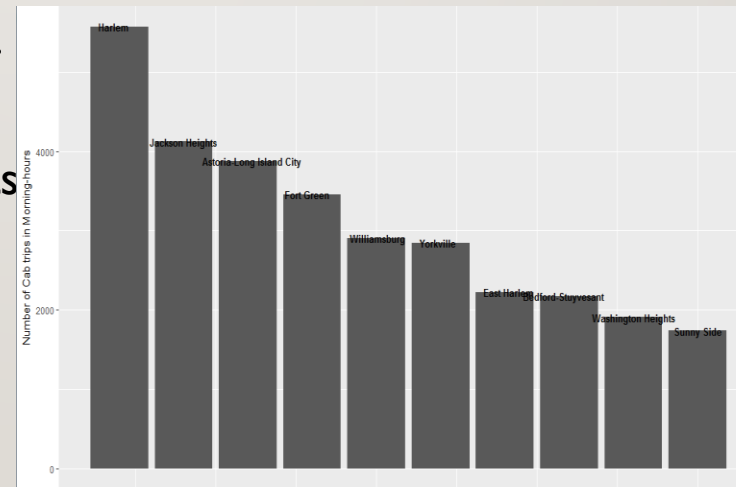
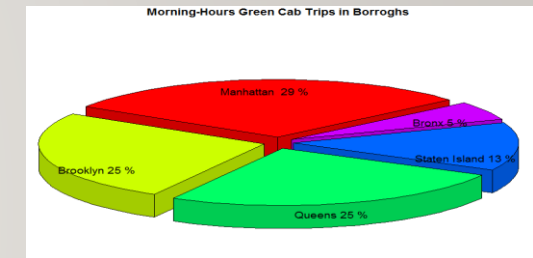
- The pie chart depicts distribution of taxi pickups for the boroughs.
 - Manhattan marks the highest no of taxi pickup which is greater than taxi pickups for Queen, Bronx and Staten Island combined.
- Bar hart shows top 10 areas based on no of pickups.
 - Harlem calls for most taxi pickups which is almost equal to pickups for second and third area combined.



	LOCATIONS	PEAK-HOUR PICK-UP COUNT
1	Harlem	15075
2	Fort Green	7934
3	Yorkville	7248
4	Astoria-Long Island City	6113
5	East Harlem	5384
6	Morningside Heights	4562
7	Williamsburg	4539
8	Bedford-Stuyvesant	4256
9	Washington Heights	4165
10	Sunny Side	3842

MORNING TIME (4AM-12PM EXCLUDING PEAK HOURS)

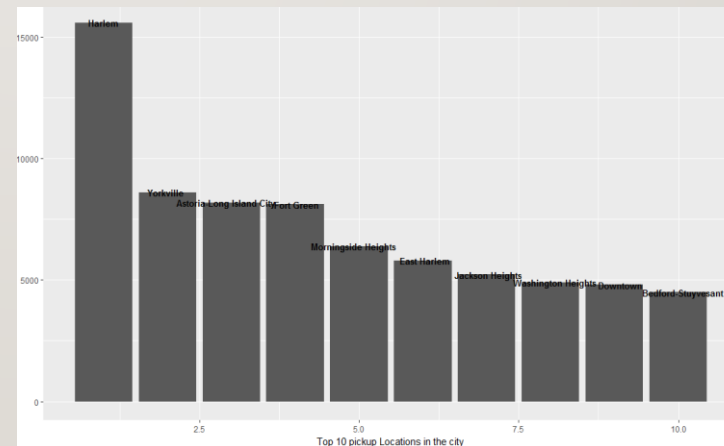
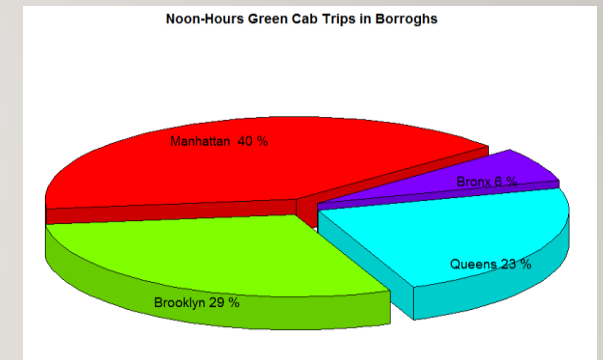
- The pie chart depicts distribution of taxi pickups for the boroughs.
 - Manhattan marks the highest no of taxi pickup while Brooklyn and Queen have almost same no of taxi pickups at 2nd and 3rd position.
 - Bronx marks the lowest no of taxi pickups
- Bar chart areas based on no of pickups.
 - Harlem has most taxi pickups which is close to no of pickup at Jackson Heights



	LOCATIONS	MORNING-HOUR PICKUPCOUNT
1	Harlem	5574
2	Jackson Heights	4122
3	Astoria-Long Island City	3877
4	Fort Green	3455
5	Williamsburg	2907
6	Yorkville	2843
7	East Harlem	2226
8	Bedford-Stuyvesant	2173
9	Washington Heights	1909
10	Sunny Side	1735

NOON TIME (12PM-4:00 PM) INSIGHTS

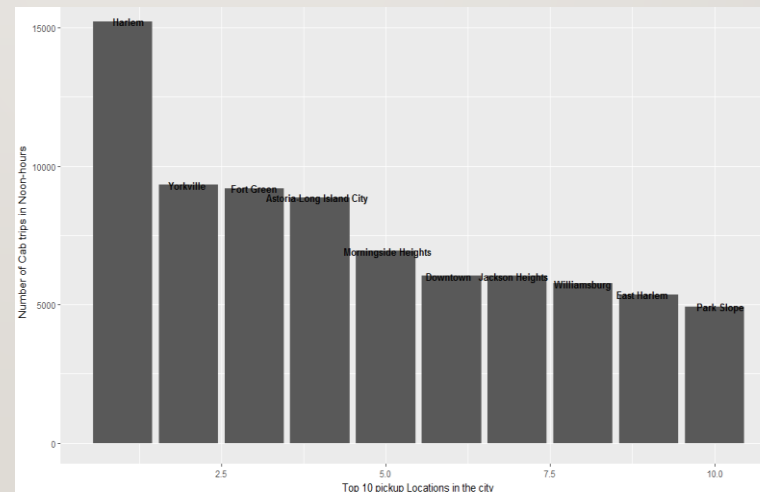
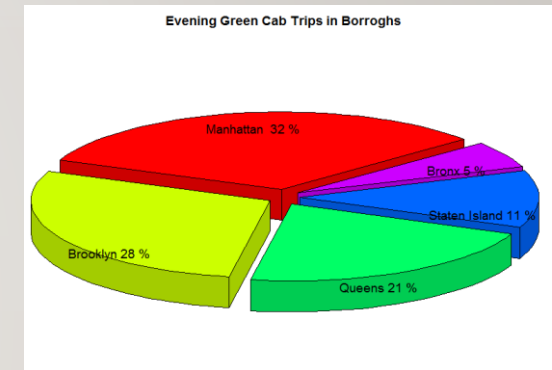
- The pie chart depicts distribution of taxi pickups for the boroughs.
 - Manhattan marks the highest no of taxi pickup while Brooklyn and Queen have almost same no of taxi pickups at 2nd and 3rd position
- Bar Graph shows top 10 areas based on no of pickups.
 - Harlem has most taxi pickups which is almost double the no of pickup at Yorkville.



	LOCATIONS	NOON-HOUR PICKUPCOUNT
1	Harlem	15591
2	Yorkville	8604
3	Astoria-Long Island City	8177
4	Fort Green	8113
5	Morningside Heights	6384
6	East Harlem	5800
7	Jackson Heights	5227
8	Washington Heights	4897
9	Downtown	4805
10	Bedford-Stuyvesant	4492

EVENING TIME (4PM - 7PM) INSIGHTS

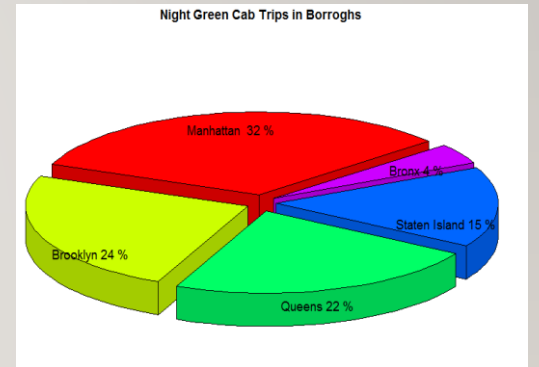
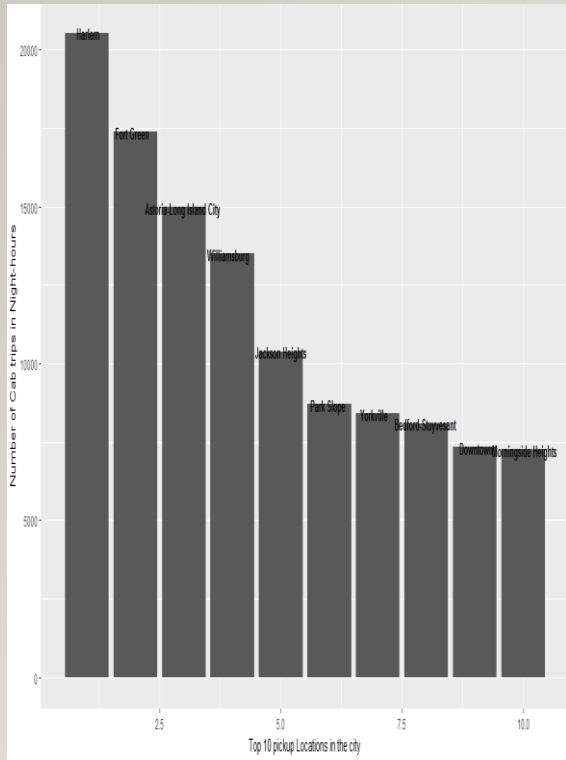
- Manhattan has highest number of pickups at evening time and Bronx has the lowest.
- Harlem is the area with highest no of taxi pickup followed by Yorkville and Fort Green.
- No of pickup at Harlem is almost three times more than that at the Park Slope



	LOCATIONS	EVENING-HOUR PICKUPCOUNT
1	Harlem	15235
2	Yorkville	9324
3	Fort Green	9199
4	Astoria-Long Island City	8869
5	Morningside Heights	6937
6	Downtown	6033
7	Jackson Heights	6033
8	Williamsburg	5760
9	East Harlem	5368
10	Park Slope	4933

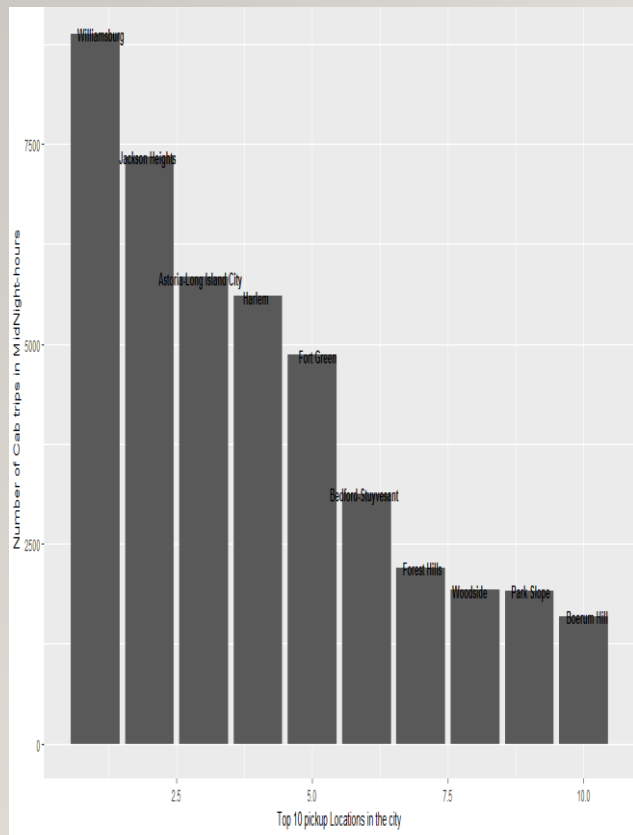
NIGHT TIME (7PM -12 AM) INSIGHTS

- Harlem still has the highest number of pickups during the night time.
- Fort Green comes second, followed by Astoria.

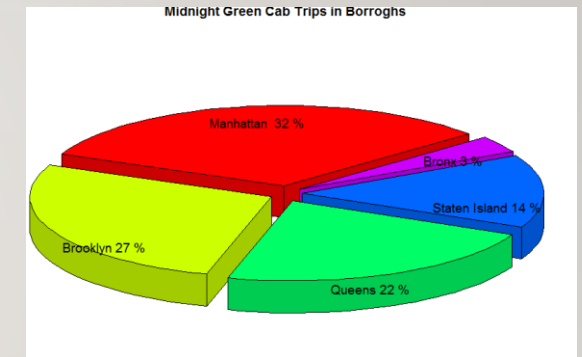


	LOCATIONS	NIGHT-HOUR PICKUPCOUNT
1	Harlem	20538
2	Fort Green	17369
3	Astoria-Long Island City	14978
4	Williamsburg	13502
5	Jackson Heights	10364
6	Park Slope	8698
7	Yorkville	8402
8	Bedford-Stuyvesant	8087
9	Downtown	7331
10	Morningside Heights	7252

MIDNIGHT (12 AM TO 4AM) INSIGHTS



- At Midnight time maximum taxi pickups are at Williamsburg.
- Harlem which sees maximum pickup during other times of the day is at fourth position during these times.
- Boerum Hills and Woodside find place in top 10 for the first time.

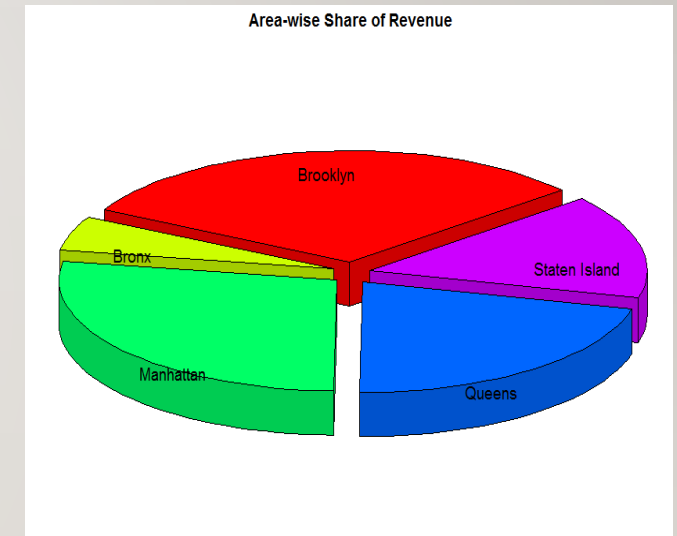


	LOCATIONS	MIDNIGHT PICKUPCOUNT
1	Williamsburg	8882
2	Jackson Heights	7346
3	Astoria-Long Island City	5839
4	Harlem	5597
5	Fort Green	4861
6	Bedford-Stuyvesant	3130
7	Forest Hills	2199
8	Woodside	1925
9	Park Slope	1912
10	Boerum Hill	1595

FARE AND TIP AMOUNTS IN BURROUGHS

- The chart shows borough wise share in total revenue.
- Manhattan despite of marking maximum no of pickups during most of the time of the day comes at second position.
- Brooklyn comes at first.This could mean that driving in Brooklyn is more beneficial financially compared to Manhattan.
- Bronx has smallest share in total revenue which is consistent with its lowest pick up rate .

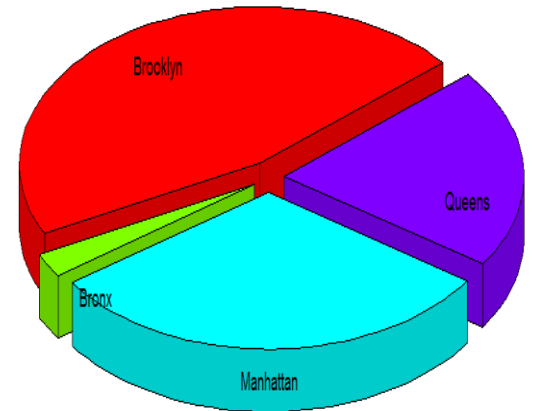
	Borrough Name	Total Revenue	% Total Revenue
1	Brooklyn	2646664.2	32
2	Bronx	432900.3	6
3	Manhattan	2345839.7	28
4	Queens	1802416.0	22



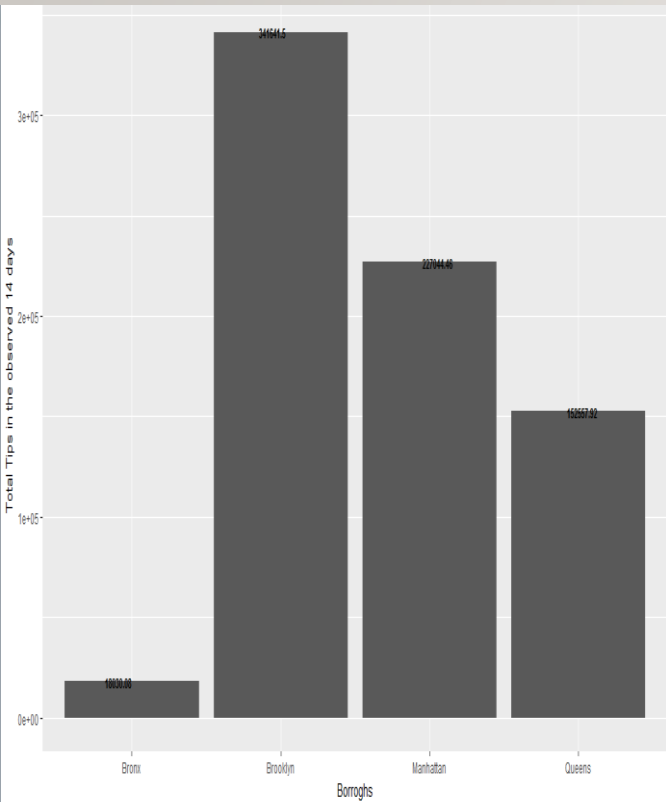
TIPS INSIGHTS

- Brooklyn receives maximum tips followed by Manhattan
- Bronx receives least amount of tips.

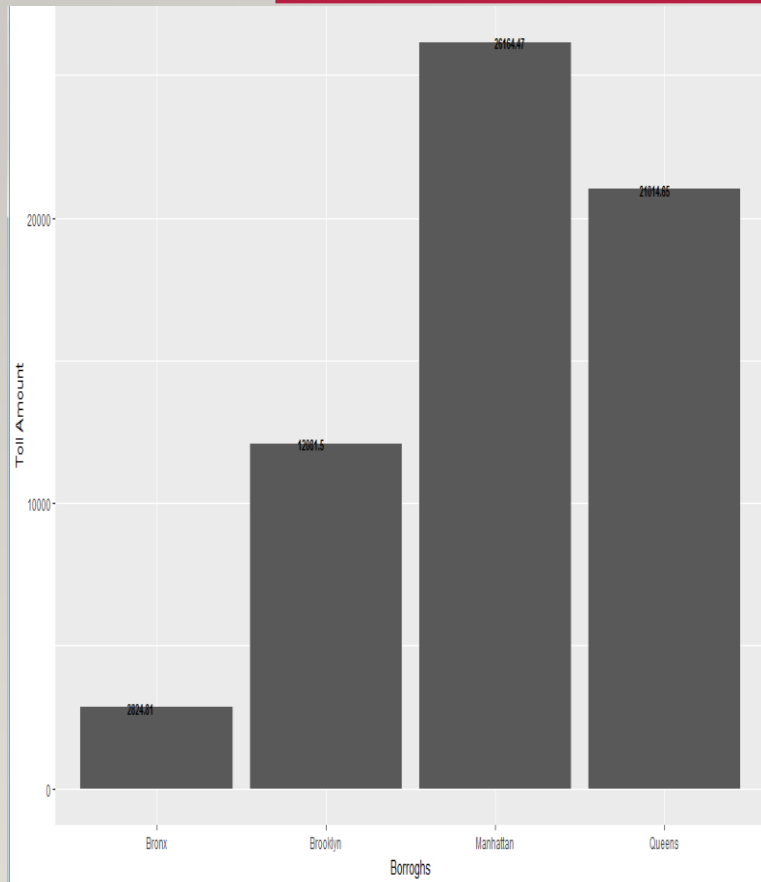
Area-wise Share of Tips



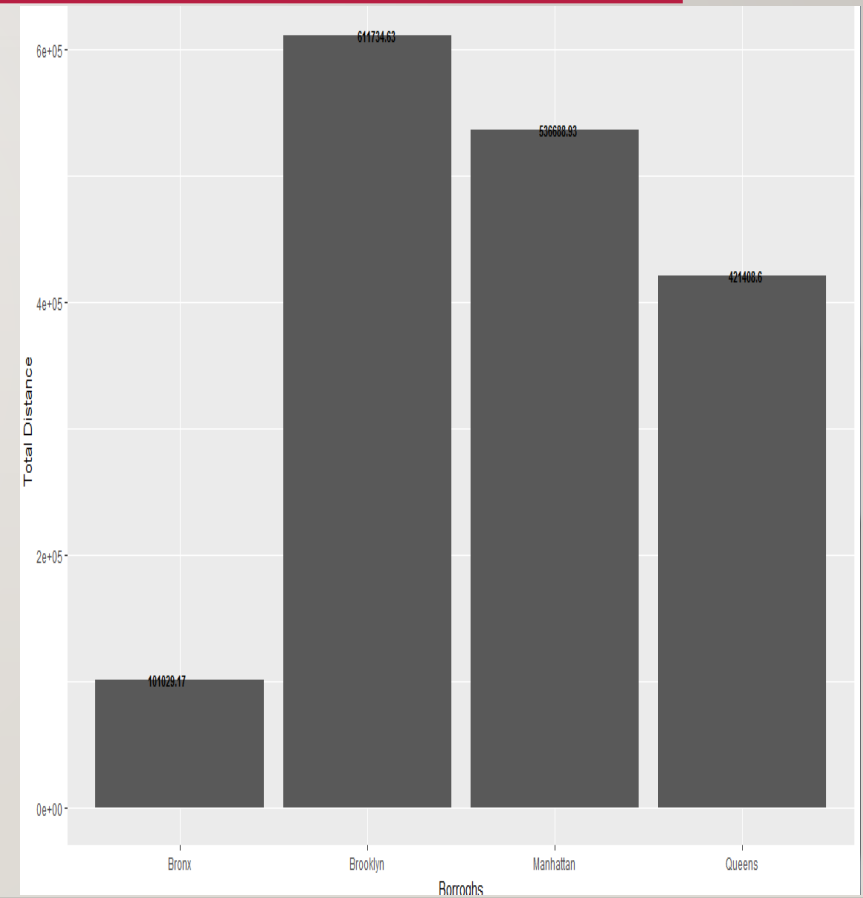
	Borough Name	Total Revenue	% Total Tip
1	Brooklyn	341641.50	39
2	Bronx	18030.08	3
3	Manhattan	227044.46	26
4	Queens	152557.92	18



TOTAL DISTANCE AND TOTAL TOLL AMOUNT



- Total toll amount is more in Manhattan.
- Total distance travelled is most in Brooklyn.



WEATHER VS GREEN CABS

	DATE	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW
1	2016-02-01	59	44	52 'F	19	13	0	0.01	0.0
2	2016-02-02	50	38	44 'F	11	21	0	0	0.0
3	2016-02-03	59	42	51 'F	18	14	0	0.73	0.0
4	2016-02-04	59	44	52 'F	18	13	0	T	0.0
5	2016-02-05	44	31	38 'F	4	27	0	0.53	2.5
6	2016-02-07	40	30	35 'F	1	30	0	0	0.0
7	2016-02-07	47	33	40 'F	6	25	0	0	0.0
8	2016-02-08	39	28	34 'F	0	31	0	0.05	0.1
9	2016-02-09	36	27	32 'F	-2	33	0 0	0	0.0
10	2016-02-10	39	31	35 'F	1	30	0	0.01	0.0
11	2016-02-11	31	18	25 'F	-9	40	0	0	0.0
12	2016-02-12	27	15	21 'F	-14	44	0	0	0.0
13	2016-02-13	22	6	14 'F	-21	51	0	0	0.0
14	2016-02-14	15	-1	7 'F	-28	58	0	0	0.0

- The weather data was taken from w2.weather.gov.
- As it shows weather doesn't affect the daily New-Yorker much if its not in the extreme range.
- February 13th had the highest number of pickup even though average temperatures were 14°F.

