

# lyft vs Uber



## How to help Lyft increase market share



-- BY Xufei Li

# Background

Uber owns 68% market share while Lyft owns 32%

Uber & Lyft overall comparison 2018(nationwide):

	Uber	Lyft	
US rideshare bookings	\$22.39 billion (67.46%)	\$8.97 billion (32.32%)	
Annual revenue	\$9.29 billion	\$2.16 billion	
Trips	5.2 billion	619.4 million	
Customer loyalty	63%(Uber only)	27%(Lyft only)	%10 in between

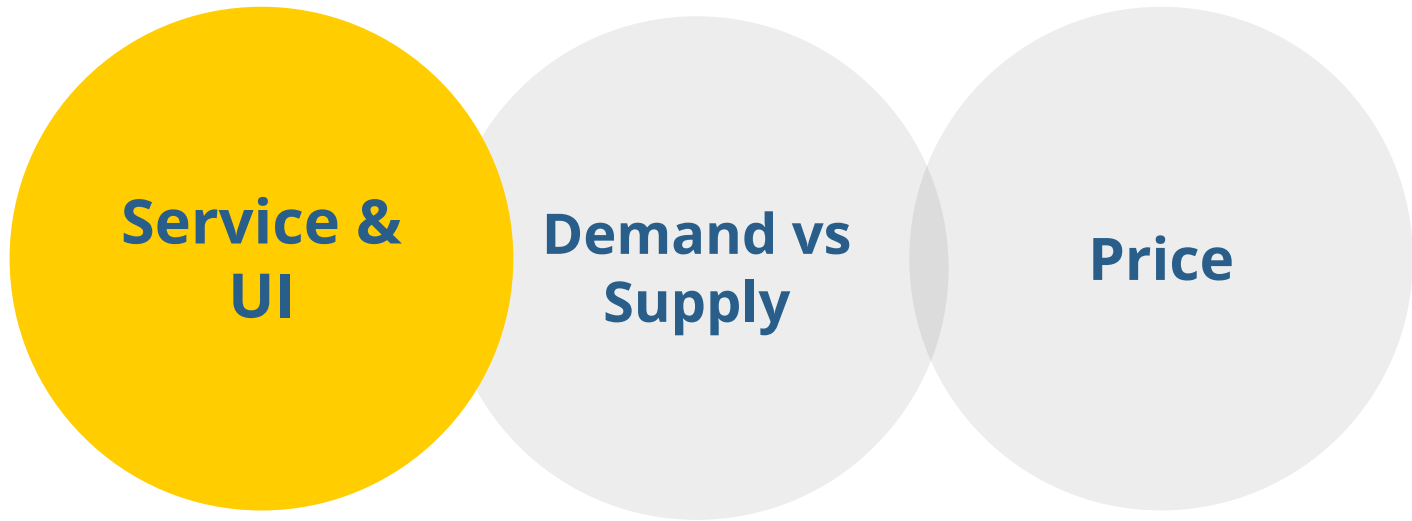
**Data source:**

<https://backlinko.com/uber-users>

<https://backlinko.com/lyft-users#lyft-riders>



## Why does Uber have more market share than Lyft?



**Improve Service & UI**



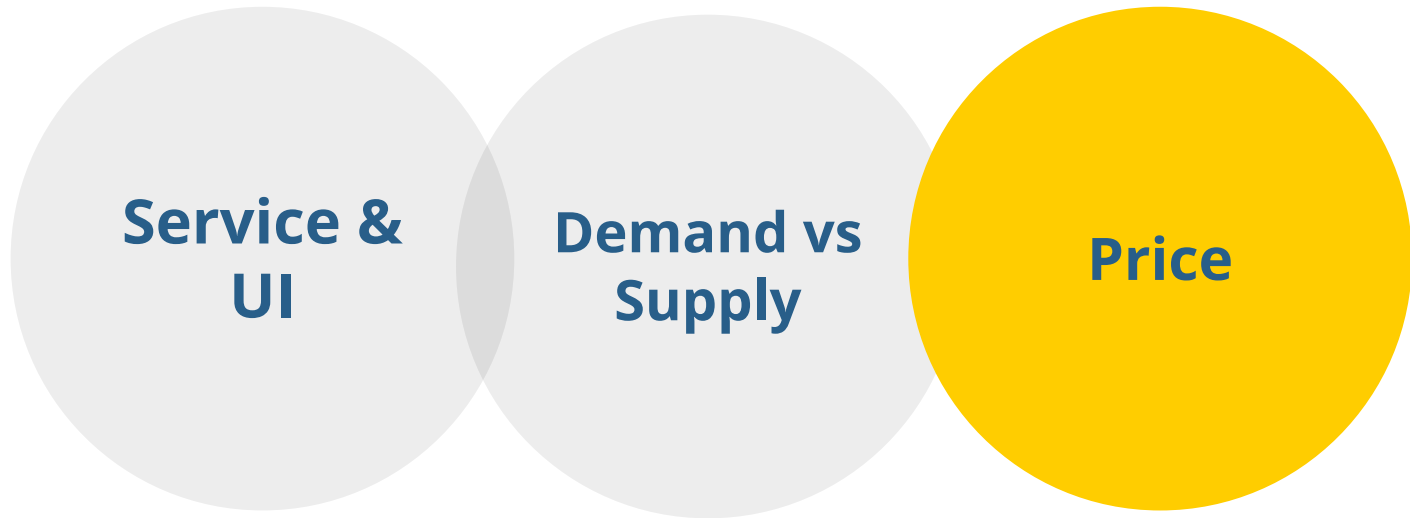
## Why does Uber have more market share than Lyft?



Increase driver amount



## Why does Uber have more market share than Lyft?



Adjust multiplier



## Scope & Design project

# 01

### Business Impact

Help Lyft increase market share

# 02

### DS Solution Path

- 2 regression model
- Identify if lyft overpriced

# 03

### Impact Hypothesis

- Price difference (if overpriced)
- Adjust “surge-multiplier”
- Greater market share

# 04

### Risk

Lower profit →  
Demotivated drivers

# 05

### Cost

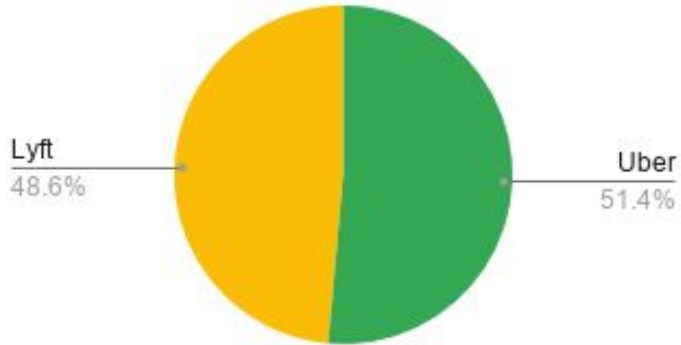
Not as much profit per ride  
→ loss in revenue



## Analysis in Excel

Data: Kaggle - Uber & Lyft Cab Price  
11/26/2018(Monday) - 31,587 rows

Total income - Uber vs. Lyft



- Average final price: (DIFF: **-\$2.86**)  
Uber \$15.33 vs. Lyft \$18.19
- Average distance: (DIFF: **0.021 mile**)  
2.198 miles vs 2.177 miles
- Average Unit price: (DIFF: **-\$1.38/mile**)  
Uber \$6.97 vs Lyft \$8.35



# Analysis in Excel

Comparison by pick up location

Revenue diff > \$3,000

(Uber - Lyft):

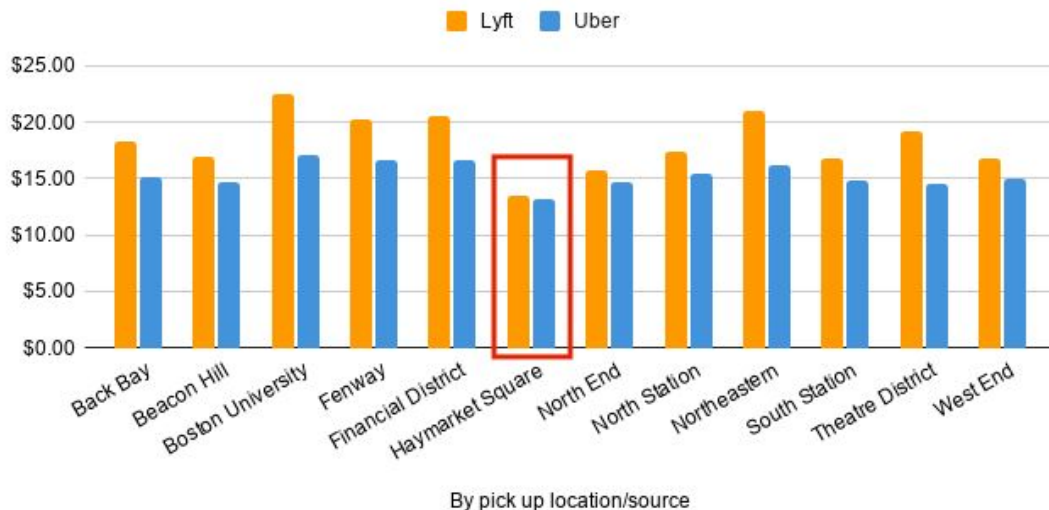
“Beacon Hill”

“Haymarket Square”

“South Station”

“West End”

AVERAGE of final\_price by Source - Uber vs. Lyft



“Haymarket Square”

Uber:

Counts: 1,451

Lyft:

Counts: 1,192





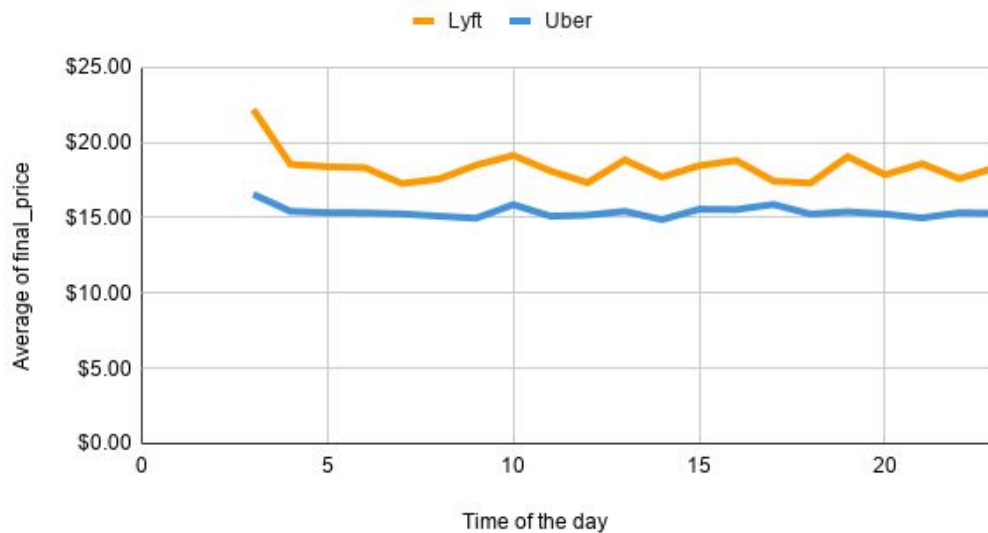
## Analysis in Excel

Comparison by time of the day

**Revenue diff > \$1,500:**

12pm, 14 pm, 18pm, 22pm,  
23pm

AVERAGE of final\_price by time of the day - Uber vs. Lyft



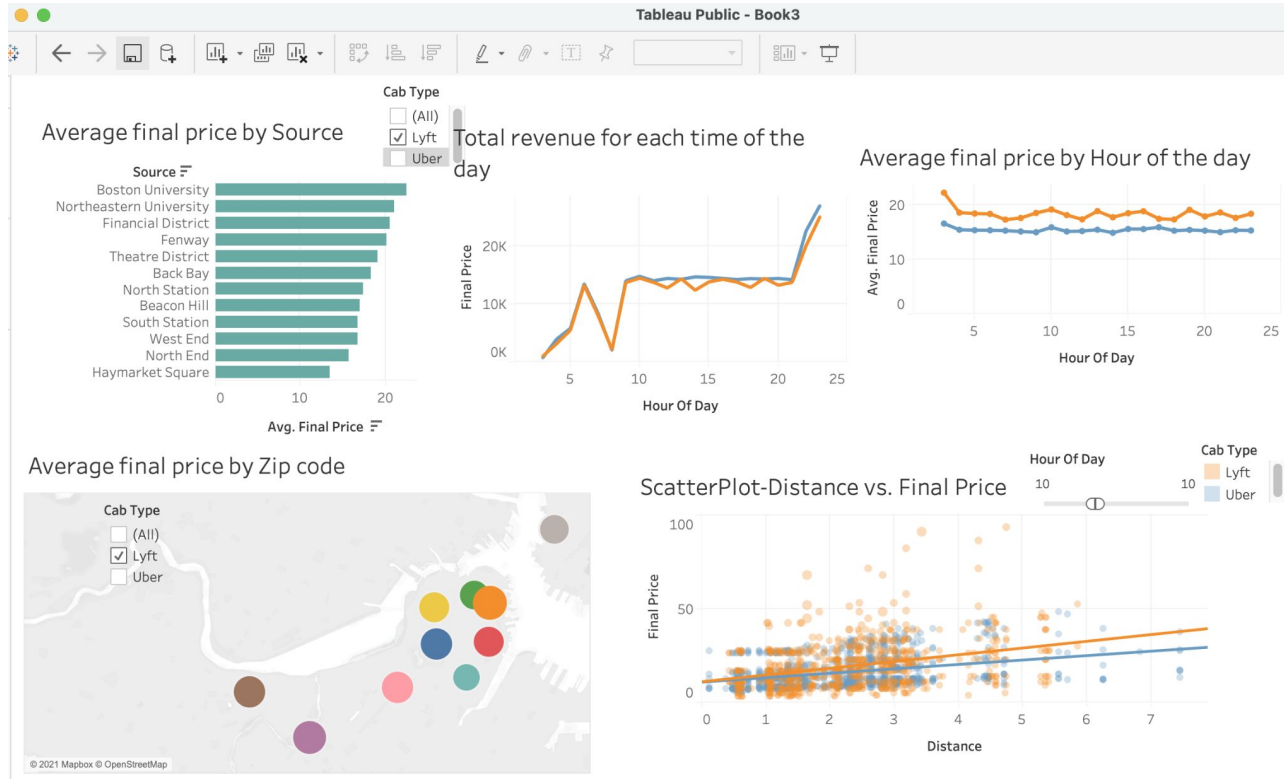


# Analysis in Tableau

“Beacon Hill”  
“Haymarket Square”  
“South Station”  
“West End”

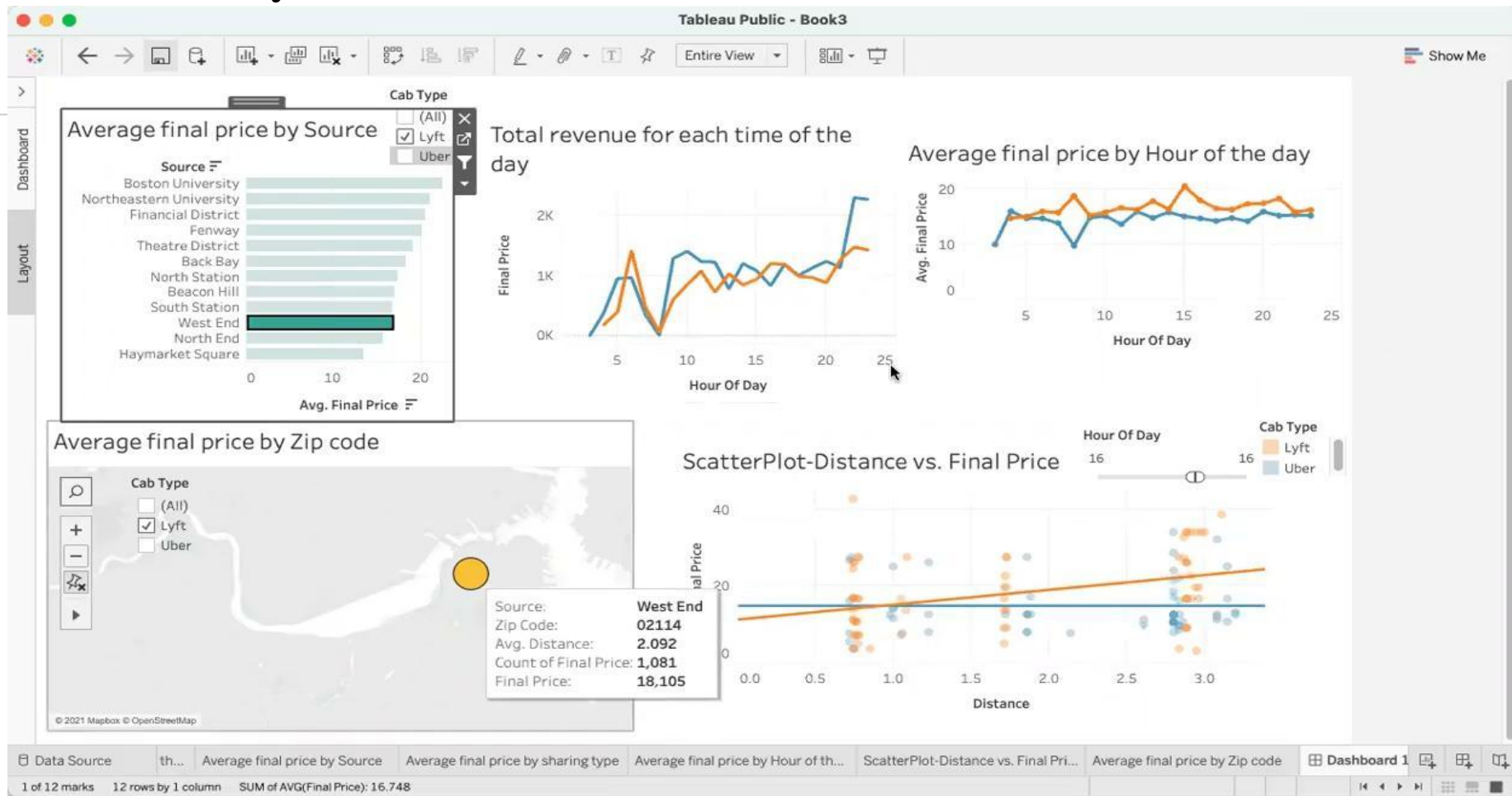


# Analysis in Tableau



# Analysis in Tableau

[Google Drive Link](#)



## Conclusion

- Price isn't a key factor
- Stimulate more drivers to work between 9:00-12:00 & 18:00-22:00 for our targeted locations  
(See Appendix 5 for more details)
- Attracts new drivers to join

“

# Future Work



We only used Monday's data, so for next step, I want to work on the entire dataset to find out if the same pattern happens everyday. If so, we can start to plan out how to bring in more drivers.





## Appendix 1 - Assumptions

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- **Assumption 1:**  
Lyft UI is good, almost no user complains about it. Demand & Price is main factor for the difference
- **Assumption 2:**  
We are assuming the Uber's missing values is "missing at random", price for Uber is right skewed, so I filled na with median of Uber's price
- **Assumption 3:**  
We are assuming there's no difference on distance between Uber & Lyft user for each locations



## Appendix 2 - Pivot Table(by source)

Pivot Table - Comparison by pick up location									
	<i>cab_type</i>	<i>Values</i>							
	Lyft			Uber					
<i>source</i>	AVERAGE of final_price	COUNTA of final_price	SUM of final_price	AVERAGE of final_price	COUNTA of final	SUM of final_price	AVG PRICE DIFF(Uber-Lyft)	COUNTS DIFF(Uber-Lyft)	SUM PRICE DIFF(Uber-Lyft)
Back Bay	\$18.31	1,229	\$22,503	\$15.15	1515	\$22,959	-\$3.16	286	\$455
Beacon Hill	\$16.95	1,105	\$18,729	\$14.72	1496	\$22,022	-\$2.23	391	\$3,293
Boston University	\$22.56	991	\$22,353	\$17.06	1407	\$24,007	-\$5.49	416	\$1,654
Fenway	\$20.17	1,143	\$23,052	\$16.61	1434	\$23,819	-\$3.56	291	\$766
Financial District	\$20.53	1,281	\$26,302	\$16.67	1458	\$24,303	-\$3.86	177	-\$2,000
Haymarket Square	\$13.45	1,192	\$16,028	\$13.22	1451	\$19,177	-\$0.23	259	\$3,149
North End	\$15.72	1,210	\$19,021	\$14.66	1425	\$20,893	-\$1.06	215	\$1,872
North Station	\$17.39	1,175	\$20,432	\$15.37	1424	\$21,889	-\$2.02	249	\$1,457
Northeastern University	\$21.02	1,171	\$24,617	\$16.19	1484	\$24,025	-\$4.83	313	-\$593
South Station	\$16.75	1,203	\$20,149	\$14.86	1577	\$23,438	-\$1.89	374	\$3,289
Theatre District	\$19.15	1,219	\$23,349	\$14.51	1443	\$20,945	-\$4.64	224	-\$2,404
West End	\$16.75	1,081	\$18,105	\$14.97	1473	\$22,049	-\$1.78	392	\$3,945





## Appendix 3 - Pivot Table(by time)

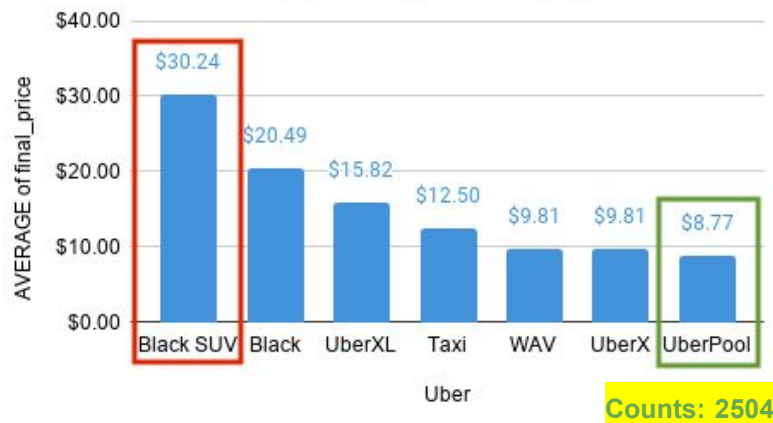
Pivot Table - Comparison by time of the day									
	cab_type	Values							
	Lyft			Uber					
hour_of_day	AVERAGE of final_price	COUNTA of final_price	SUM of final_price	AVERAGE of final_price	COUNTA of final_price	SUM of final_price	AVGPRICE DIFF(Uber-Lyft)	COUNT DIFF(Uber-Lyft)	SUM PRICE DIFF(Uber-Lyft)
3	\$22.21	43	\$955	\$16.56	41	\$679	-\$5.65	-2	-\$276
4	\$18.56	168	\$3,117	\$15.43	252	\$3,889	-\$3.12	84	\$771
5	\$18.39	296	\$5,444	\$15.34	376	\$5,768	-\$3.05	80	\$323
6	\$18.33	719	\$13,180	\$15.33	877	\$13,442	-\$3.00	158	\$262
7	\$17.28	461	\$7,966	\$15.26	547	\$8,346	-\$2.02	86	\$380
8	\$17.58	121	\$2,127	\$15.11	131	\$1,979	-\$2.47	10	-\$148
9	\$18.50	738	\$13,650	\$14.97	933	\$13,969	-\$3.52	195	\$319
10	\$19.14	753	\$14,416	\$15.88	927	\$14,717	-\$3.27	174	\$301
11	\$18.11	756	\$13,688	\$15.11	924	\$13,958	-\$3.00	168	\$270
12	\$17.33	734	\$12,719	\$15.18	946	\$14,358	-\$2.15	212	\$1,638
13	\$18.84	759	\$14,298	\$15.43	921	\$14,210	-\$3.41	162	-\$88
14	\$17.71	697	\$12,342	\$14.88	983	\$14,626	-\$2.83	286	\$2,284
15	\$18.46	746	\$13,768	\$15.57	934	\$14,540	-\$2.89	188	\$771
16	\$18.81	756	\$14,219	\$15.54	924	\$14,364	-\$3.26	168	\$144
17	\$17.44	788	\$13,743	\$15.89	892	\$14,171	-\$1.55	104	\$428
18	\$17.31	740	\$12,807	\$15.24	940	\$14,329	-\$2.06	200	\$1,522
19	\$19.07	754	\$14,378	\$15.40	926	\$14,258	-\$3.67	172	-\$120
20	\$17.86	739	\$13,198	\$15.25	941	\$14,352	-\$2.61	202	\$1,154
21	\$18.59	736	\$13,681	\$14.99	944	\$14,151	-\$3.60	208	\$471
22	\$17.60	1,135	\$19,974	\$15.33	1469	\$22,524	-\$2.27	334	\$2,550
23	\$18.35	1,361	\$24,974	\$15.29	1759	\$26,899	-\$3.06	398	\$1,925



## Appendix 4 -Analysis in Excel

By cab\_type & sharing\_type:

AVERAGE of final\_price by sharing type - Uber



Counts: 2487

AVERAGE of final\_price by sharing type - Lyft



Counts: 2337

- Lyft's most expensive sharing type is about \$4 more than Uber's most expensive type, Lyft Black XL has fewer rides, but around \$4,500 more in revenue.
- Lyft's cheapest sharing type is \$2.7 cheaper, UberPool has more rides and around \$8,000 more in revenue.



## Appendix 5 - Learnings From Tableau

### Beacon Hill

Lyft may need more drivers between  
16:00 to midnight

(16:00 - Uber **102** rides, Lyft **39** rides)

1

### Haymarket Square

Lyft may need more drivers  
14:00, 17:00, 19:00, 22:00

(22:00 - Uber **163** rides, Lyft **97**  
rides)

2

Lyft may need more drivers around  
14:00, 18:00, 22:00

(14:00 - Uber **104** rides, Lyft **63** rides)

3

### South Station

Lyft may need more drivers  
around 9:00-12:00, 22:00(22:00  
- Uber **149** rides, Lyft **93** rides)

4

### West End



## Appendix 6 - Lyft Driver Stats

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- The vast majority of Lyft drivers (95%) drive for less than 20 hours per week.
- 96% of Lyft drivers work or study alongside their job as a driver.
- 15% of Lyft drivers are business owners. A further 12% are students.
- More than half of Lyft drivers (51%) also use other ride sharing platforms. 38% work on delivery platforms.

**Source:** [Lyft](#).