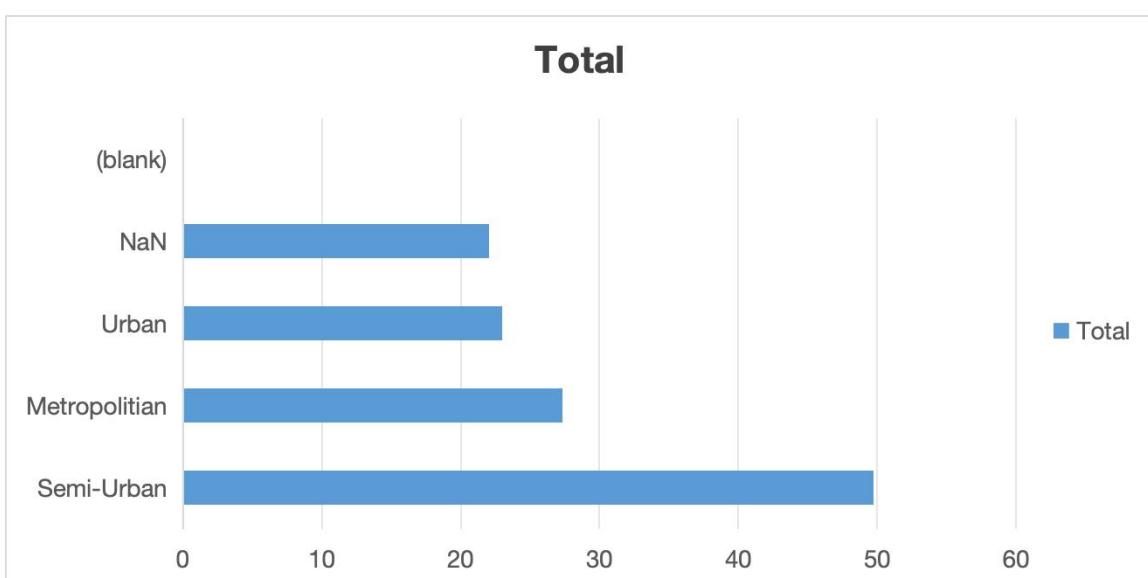
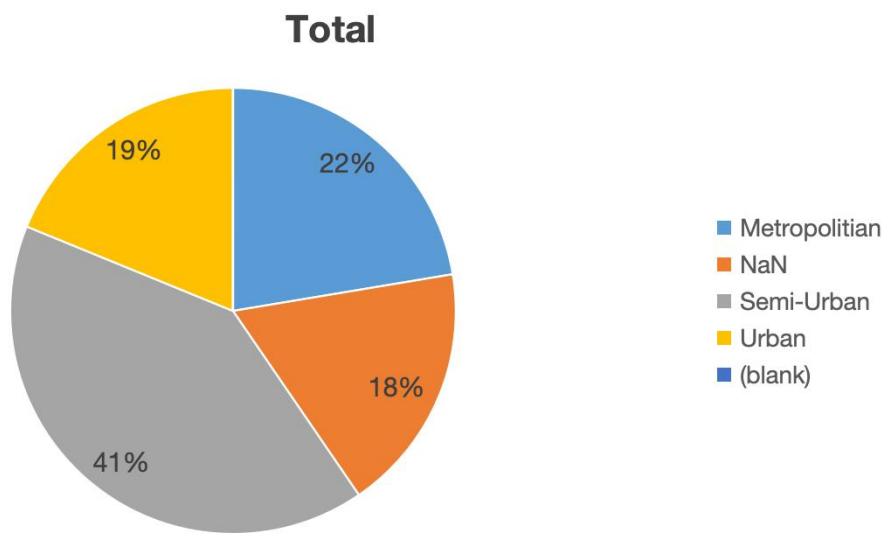


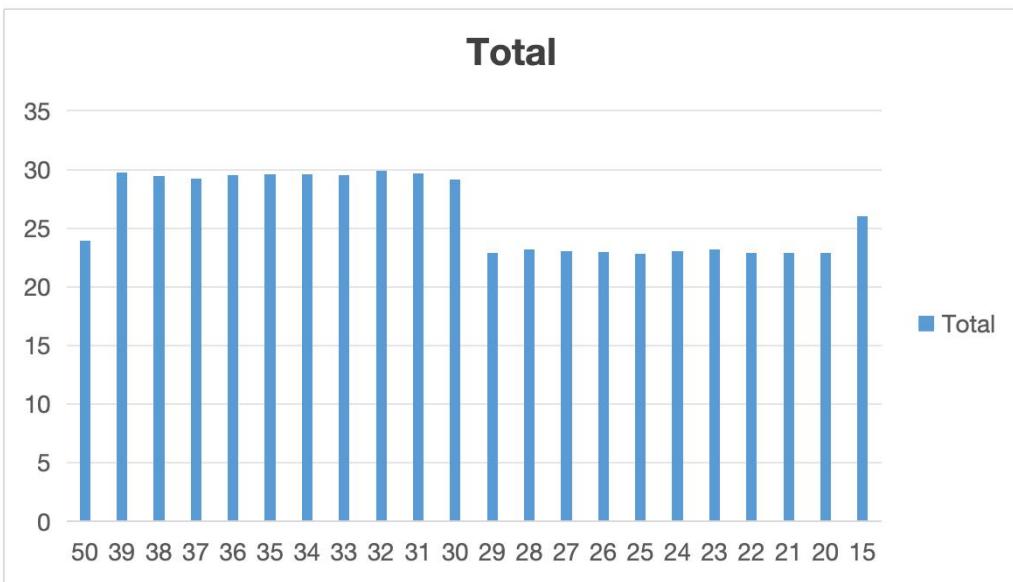
Project 2- Operational Performance Analysis-Key Questions

1. What is the typical (average and median) delivery time across all orders?
2. Which regions or operational categories perform worse than the overall average? The average delivery time per city, the fastest and the slowest time?
3. How do delivery times vary based on order characteristics (type of vehicles used in delivery)?
4. How age affects the delivery times?
5. What operational improvements could reduce recurring delays?

City	Average of Time_taken (min)
Metropolitan	27.31446006
NaN	22.05833333
Semi-Urban	49.73170732
Urban	22.98332182
(blank)	
Grand Total	26.29396279

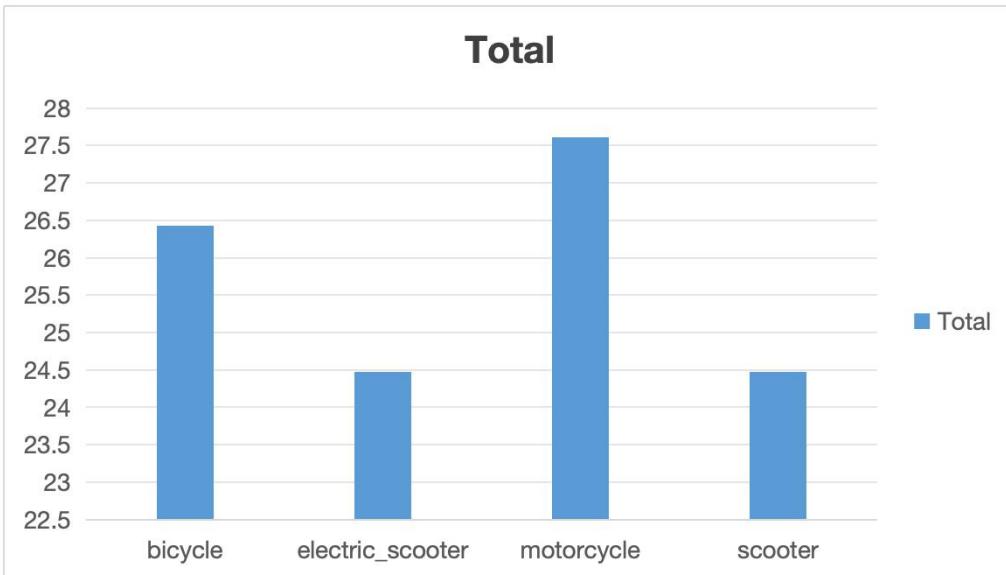


Delivery_person_Age	Average of Time_taken (min)
50	23.94339623
39	29.73973881
38	29.45175834
37	29.25067385
36	29.50088496
35	29.60725343
34	29.60554273
33	29.48993596
32	29.88596093
31	29.65990566
30	29.17070979
29	22.91693291
28	23.16659018
27	23.05302326
26	22.94812413
25	22.81922723
24	23.05972851
23	23.19606903
22	22.92798541
21	22.90849977
20	22.8988764
15	26

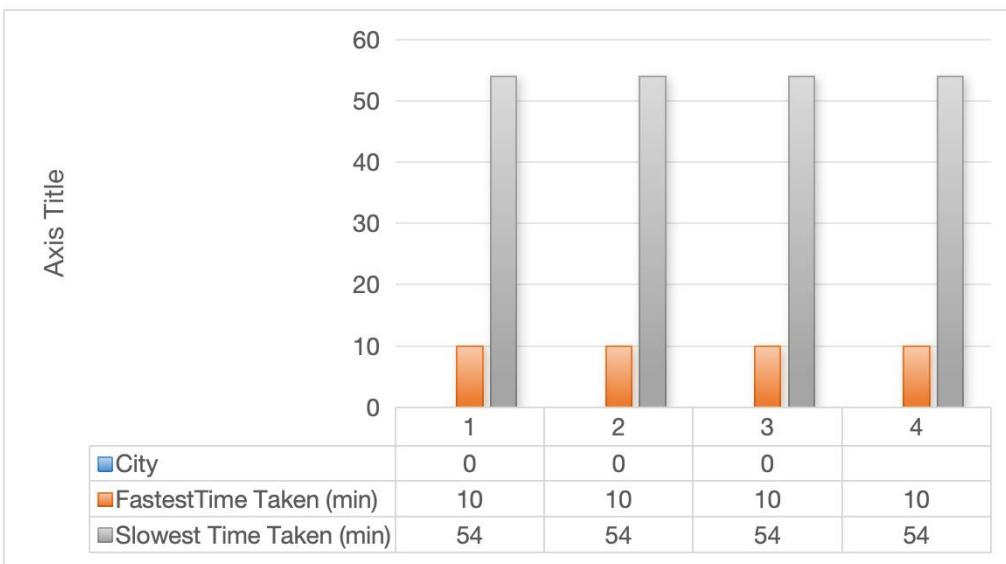


Type_of_vehicle	Average of Time_taken (min)
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bicycle	26.42647059
electric_scooter	24.47011012
motorcycle	27.60577396
scooter	24.47881883
Grand Total	26.29396279



City	FastestTime Taken (min)	Slowest Time Taken (min)
Metropolitan	10	54
Nan	10	54
Semi-Urban	10	54
	10	54



INSIGHTS	RECOMMENDATIONS
The type of area location affects the delivery time	
The type of vehicle used also affects the delivery time	
The age of the delivery person does not have any effect on the delivery time.	
The highest number of time it took to deliver per city is 54 mins while the fastest is 10 mins	The type of vehicle pushed into some areas should be looked into to increase delivery time especially during bad weathers and the vehicle conditions. Also there should be no age bias in recruiting delivery persons. All these can then be used to close the gaps between delivery periods as 54 mins wait for a road delivery is too much.