



DoorDash has decided to launch a widget delivery program within two cities in a far away galaxy. The first city, Dashattan, is a densely populated metropolis, encompassing 22 square miles of land, housing 2 million residents and a population that swells to double that during the work day. The second city, Doorlanta, is a sprawling suburban region comprised of 134 square miles and housing a population of approximately 500 thousand residents. DoorDash has established operations for standard food delivery services in both cities over the course of the last five years, and as a result, there are already many delivery drivers (“Dashers”) in each market. Dashers have never delivered widgets in either city before this program.

Due to their physically large size and extreme sensitivity to temperature changes, widgets must be transported in special satchels that Dashers do not possess today. Because of the high value of widgets, widget producers (“Merchants”) and widget consumers (“Customers”) are also highly sensitive to any deliveries that go poorly.

The basic flow for a delivery is as follows:

- Dasher with a widget satchel arrives to the Merchant’s store
- Dasher picks up the widget and places it in the satchel
- Dasher transports the widget in the satchel to the Customer
- Dasher delivers widgets to Customer

You may assume that all Dashers earn more for each widget delivery they do versus a standard food delivery, given the operational difficulty involved in performing the widget deliveries. Additionally, you may also assume that widget demand is about 35% of total food delivery demand.

Given this information, please use the attached dataset for the two cities to present:

1. A process to select Dashers to perform widget deliveries in Dashattan and Doorlanta.
 - How do we decide which Dashers do these deliveries? Should the criteria be the same for both cities?
2. A plan to physically distribute widget satchels to Dashers in each city.
 - How do we get satchels into the hands of these specific Dashers? Should the process be the same for both cities?
3. A framework to measure success of the program in each city.
 - What are your metrics to measure delivery quality for each city? Should they be different or the same?
 - How do we measure success for DoorDash (i.e. profitability and margin)?
 - What do we measure to assess merchant success?
 - What do we measure to assess customer satisfaction?