

New York City TLC Project Preliminary Data Summary

Executive summary report

Commission Prepared by **Automatidata**

OVERVIEW

Automatidata has been contracted by the New York City TLC to build a regression model that can forecast taxi fares based on the distance of the trip. Currently, a preliminary examination of the data has been conducted to provide descriptions of important variables and guarantee that valuable insights can be derived.

PROJECT STATUS

- The dataset has been analyzed to identify any anomalies.
- Trip distance and total amount for a taxicab ride were identified as the most useful variables for developing a predictive model.
- Paved the way for further exploration opportunities, including EDA, visualizations, and modeling.
- Potential correlations between the two selected variables have been explored.

NEXT STEPS

- Begin by performing a thorough exploratory analysis of the data.
- Clean and reformat the data as required.
- Identify any outliers and decide on the appropriate action to take, such as removing them or further investigation.
- Utilize descriptive statistics, including summaries and tables, to gain a better understanding of the data, particularly the necessary variables.
- Lastly, develop and test a regression model.

KEY INSIGHTS

- Key variables in the dataset were identified for creating a regression model to anticipate taxicab ride fares (trip_distance and fare_amount.)
- Unusual values were found, such as low trip_distance with high fare_amounts.
- Instances of trip_distance = 0 with fare amounts, negative values, and extremely high maximum values were also present in the data.

| trip_distance | fare_amount |
|---------------|-------------|
| 2.60 | 999.99 |
| 0.00 | 450.00 |
| 33.92 | 200.01 |
| 0.00 | 175.00 |
| 0.00 | 200.00 |
| 32.72 | 107.00 |
| 25.50 | 140.00 |
| 7.30 | 152.00 |
| 0.00 | 120.00 |
| 33.96 | 150.00 |
| 12.50 | 120.00 |
| 31.95 | 131.00 |