# OD Survey Summary Report

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#### 1 Introduction

This is a brief report on OD survey data. The Survey involves collecting Origin-Destination travel data from travelers to identify the travel patterns in the study area and the reasons for those patterns.

In this survey, a total of 6000 samples were collected. Here is a sample of the collected OD data:

Table 1: Sample OD Data

| sample_id | origin | destination | distance | time      | age   | purpose     | occupation  |
|-----------|--------|-------------|----------|-----------|-------|-------------|-------------|
| 1         | 83     | 16          | 93       | 4.478211  | 20-30 | Business    | Public Emp  |
| 2         | 47     | 94          | 446      | 17.033848 | < 20  | Business    | Public Emp  |
| 3         | 48     | 32          | 309      | 14.746945 | 20-30 | Work        | Public Emp  |
| 4         | 38     | 4           | 294      | 8.704360  | > 70  | Business    | Public Emp  |
| 5         | 75     | 86          | 414      | 12.080560 | > 70  | Educational | Private Emp |
| 6         | 19     | 86          | 168      | 5.402684  | 51-60 | Educational | Public Emp  |

#### 1.1 Major OD Pairs

Top two OD pairs in the study area are 19-11 and 17-40. A total of 15.83% are happening between 19-11 followed by 8.08% between 17-40.

Table 2: Major OD pairs of the study area

| OD Pair | Trips | Percentage(%) |
|---------|-------|---------------|
| 19-11   | 950   | 15.83         |
| 17-40   | 485   | 8.08          |
| 31-95   | 178   | 2.97          |
| 43-29   | 156   | 2.60          |
| 89-11   | 134   | 2.23          |
| 65-68   | 16    | 0.27          |
| 60-40   | 9     | 0.15          |
| 65-40   | 8     | 0.13          |
| 89-17   | 8     | 0.13          |
| 19-86   | 7     | 0.12          |

#### 1.2 Distance vs Time Plot

Regression model between Distance and Time has an  $R^2$  value of 0.52.

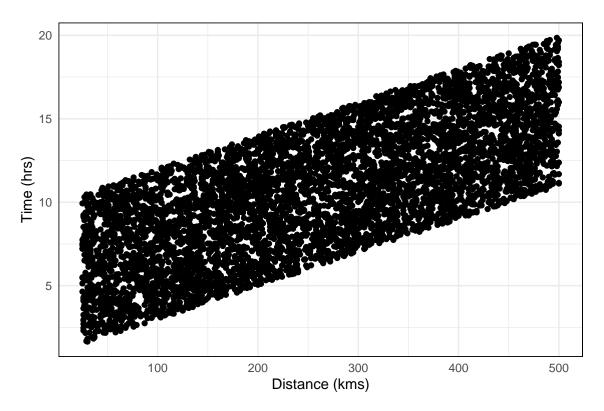


Figure 1: Distance vs Time

### 2 Summary Tables and Plots

This section contains summary Tables and Plots for the given three variables.

#### 2.1 Age

A total of 11.82% belong to <20 followed by >70 consisting of 12.1% of total samples.

Table 3: Classification of samples w.r.t Age

| Age   | No.of Samples | Percentage(%) |
|-------|---------------|---------------|
| <20   | 709           | 11.82         |
| > 70  | 726           | 12.10         |
| 20-30 | 770           | 12.83         |
| 31-40 | 1221          | 20.35         |
| 41-50 | 761           | 12.68         |
| 51-60 | 1054          | 17.57         |
| 61-70 | 759           | 12.65         |

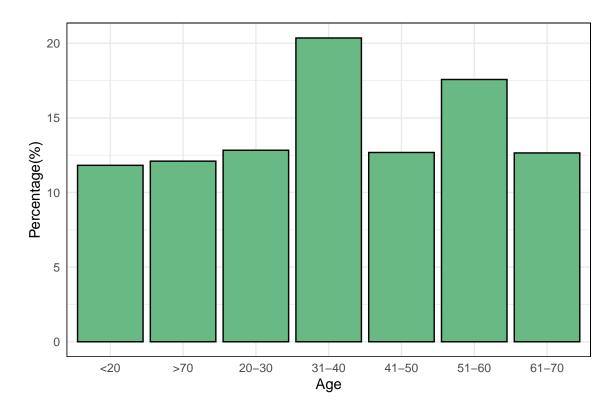


Figure 2: Variation of Age

#### 2.2 Occupation

A total of 33.02% belong to Business followed by Private Emp consisting of 29.83% of total samples.

Table 4: Classification of samples w.r.t Occupation

| Occupation  | No. of Samples | $\operatorname{Percentage}(\%)$ |
|-------------|----------------|---------------------------------|
| Business    | 1981           | 33.02                           |
| Private Emp | 1790           | 29.83                           |
| Public Emp  | 1729           | 28.82                           |
| Student     | 446            | 7.43                            |
| Unemployed  | 54             | 0.90                            |

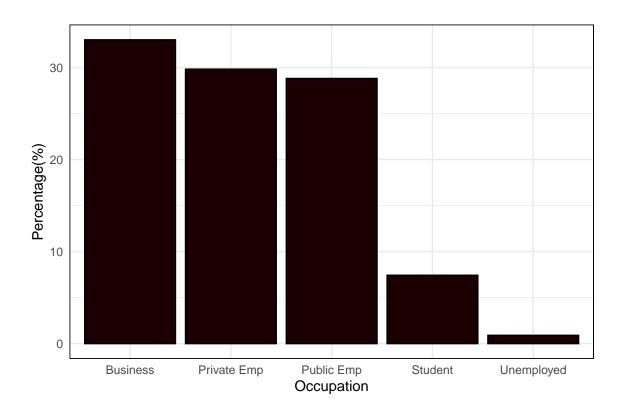


Figure 3: Variation of Occupation

#### 2.3 Purpose

A total of 43.82% belong to Business followed by Educational consisting of 13.88% of total samples.

Table 5: Classification of samples w.r.t Purpose

| Purpose     | No.of Samples | Percentage(%) |
|-------------|---------------|---------------|
| Business    | 2629          | 43.82         |
| Educational | 833           | 13.88         |
| Leisure     | 855           | 14.25         |
| Religious   | 871           | 14.52         |
| Work        | 812           | 13.53         |

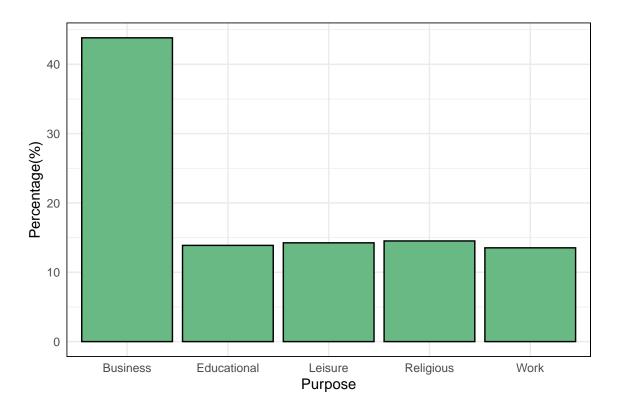


Figure 4: Variation of Purpose