

Student Report

Designing and Analyzing a Transport Survey

Module: Transport Research and Analysis

Lab Title: Survey Design and Analysis

Due Date: One week from the date of assignment release

Contents

1	Define Your Survey Scope	2
2	Survey Design Using Google Forms	2
3	Data Collection Method	2
4	Data Cleaning and Visualization	3
5	Interpretation and Insight	5

Important Note for Students

Note: If any parts of this template display unusual formatting (e.g., red boxes in the Table of Contents), don't panic. These are due to hyperlink previews and do not affect the content. This report is fully functional when compiled with standard settings on Overleaf or with PDFLaTeX.

1 Define Your Survey Scope

Task:

- Describe a transport-related issue or research question.
- Justify why survey-based data collection is suitable.
- Identify the target audience.

Hint:

- *"How satisfied are university students with public transportation?"*
- *"What factors discourage urban residents from cycling to work?"*

[Your response here...]

2 Survey Design Using Google Forms

Task:

- Provide link to your survey.
- Include an introduction and at least 10 questions:
 - 2 multiple choice
 - 2 Likert scale (1-5)
 - 2 open-ended
 - 1 with skip logic

Hint: Group related questions logically and use clear language. Example skip logic: "Do you own a bike?" → If yes, follow-up question.

Link: <https://your-survey-link-here>

[Your description here...]

3 Data Collection Method

Task:

- Explain how you shared the form (e.g., WhatsApp, email).
- Mention sampling approach and challenges faced.

Hint: Be transparent: "Sent to 15 university peers via WhatsApp. Received 12 valid responses."

[Your response here...]

4 Data Cleaning and Visualization

Cleaning Steps

- Remove duplicates or incomplete entries.
- Note any assumptions or replacements.

Visualizations

- At least 2 charts from Google Sheets
- Pie, bar, or line graphs with titles

Hint: Use =COUNTIF or =AVERAGE in Sheets. Example chart: mode of transport usage pie chart.

Chart 1:

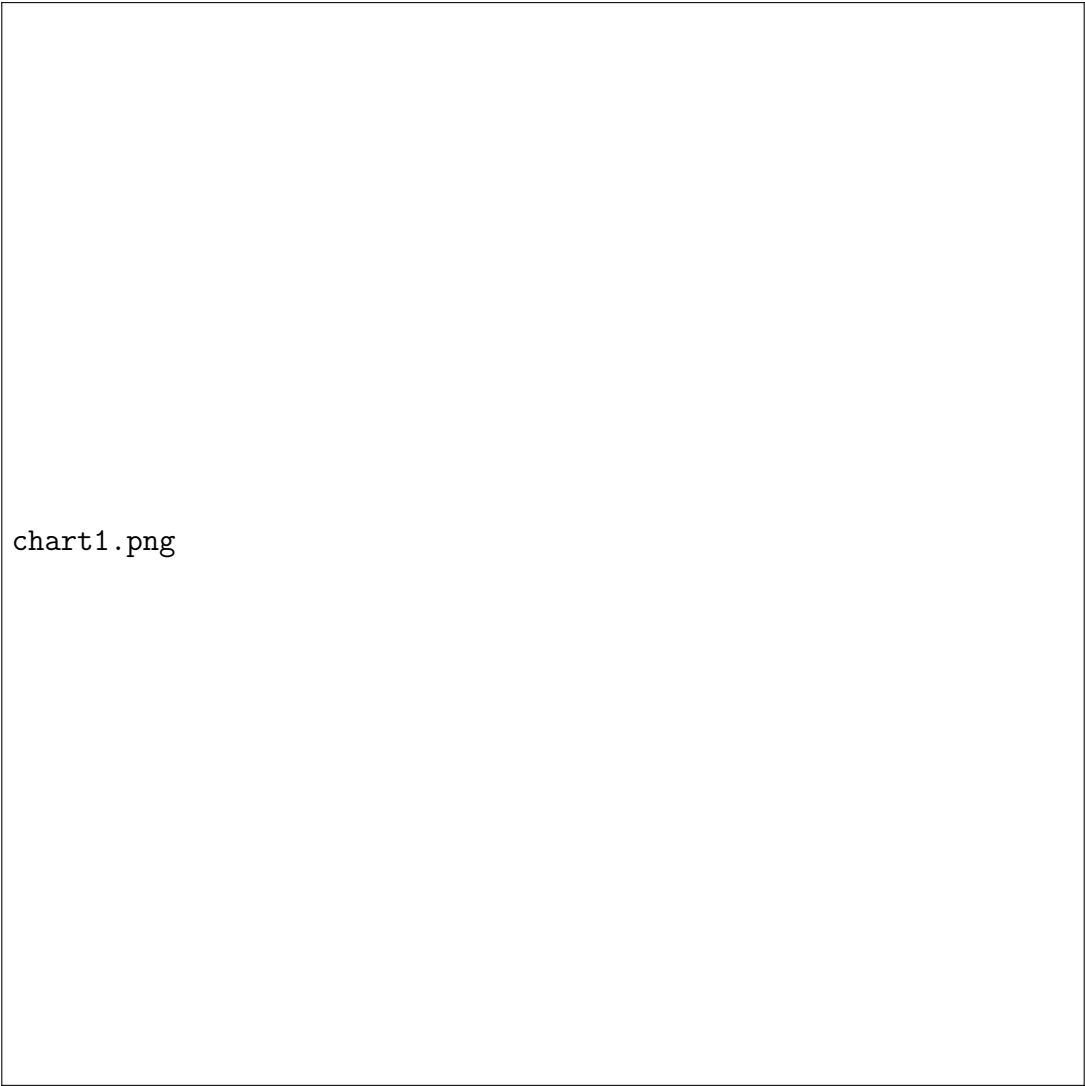
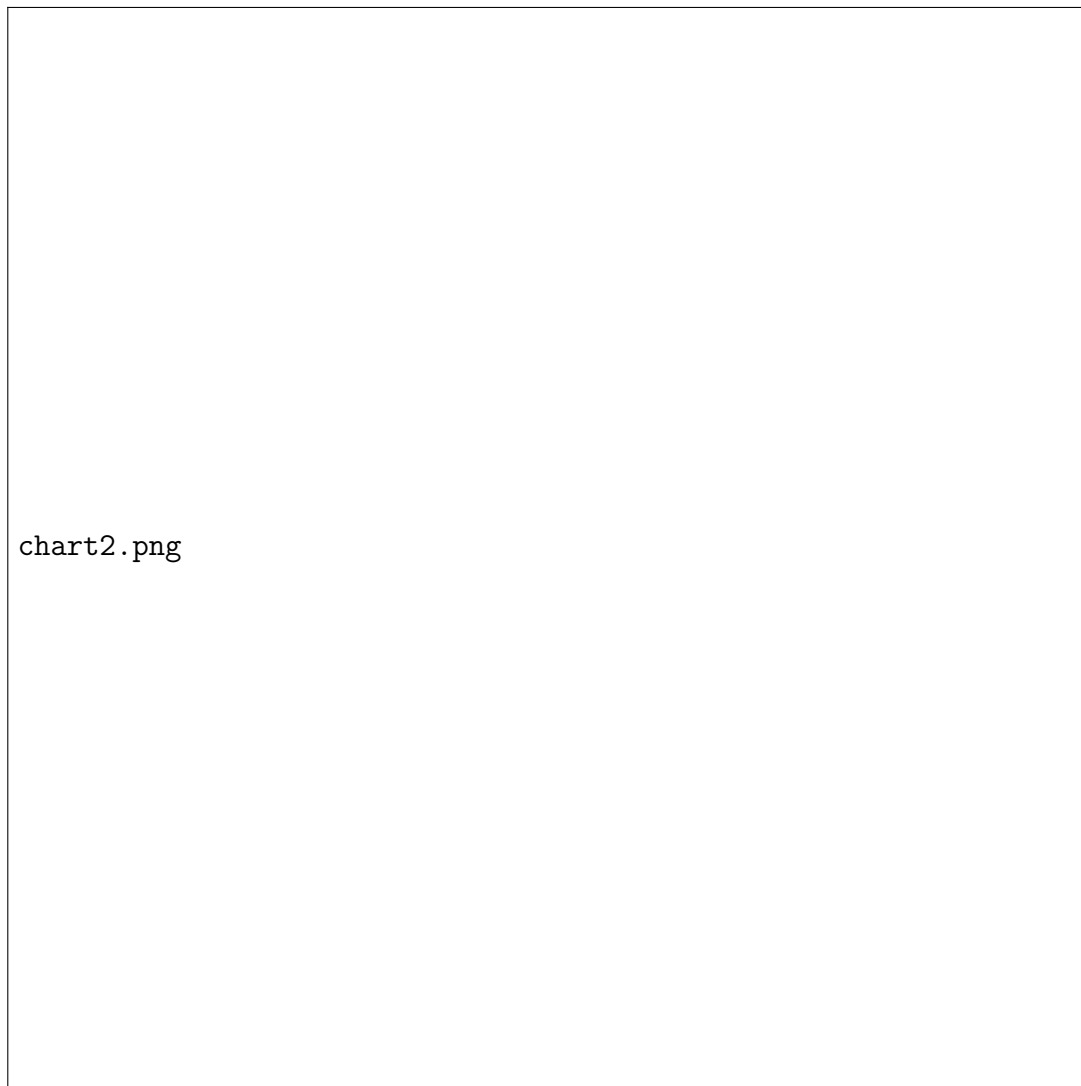


chart1.png

[Chart description...]

Chart 2:

[Chart description...]

5 Interpretation and Insight

Task:

- What trends did you observe?
- What do they suggest for transportation planning?
- Any survey limitations or ideas for improvement?

Hint: Example: "Majority use bus daily but rate reliability poorly. Suggests need for timetable redesign."

[Your response here...]

Grading Criteria

Component	Weight
Survey Scope	10%
Survey Design	30%
Data Collection	10%
Data Analysis	30%
Interpretation	20%

Ethical Statement

I confirm that informed consent was obtained from all survey participants. No personal identifiers were collected, and anonymity was preserved.