# Data Analysis Project

## Data Analyst: (You)

## Client/Sponsor:

Delhi Metro rail Corporation(DMRC)

## Purpose:

The goal is to study the traffic congestion issues within the metro rails across the city. The project will identify 5 hotspot stations of traffic congestion in the city using traffic sensor data. After identifying the top 5 stations,the project will study the causes of congestion in each station and identify recommendations for reducing congestion at each hotspot. Each recommendation should include cost estimates as well as an estimate of how much congestion each will reduce. The final deliverable recommends the 3 most cost-effective recommendations for reducing traffic congestion, recommending the fixes that will do the most good for the least cost.

## Scope / Major Project Activities:

| Activity | Description |
| --- | --- |
| Data Collection | Collect Traffic Congestion sensor data from Delhi Metro Rail Corporation(DMRC) database |
| Identify Hotspots | Analyze data too identify 5 hotspot for congestion |
| Identify congestion cause | Study each hotspot to understand causes |
| Create congestion relief recommendations | Create recommendations for each congestion hotspot. Estimate costs for each recommendation and amount of congestion relief. |
| Deliver final report | Deliver final report and recommendations to Delhi Metro Rail Corporation(DMRC) |

## This project does not include:

* Any areas outside NCR(National Capital Region), as defined in the city charter
* Implementation of a solution or recommendation
* No data older than 3 years will be considered

## Deliverables:

| Deliverable | Description/ Details |
| --- | --- |
| Hotspot Stations | A data visualization of the mot congested stations |
| Recommendations along with estimates | A list of recommendation for each congested station along with cost estimated to improve it |
| Final Report | A final report detailing the list of 5 stations, including times, cases, recommendations, cost estimates and cost benefit analysis. |

## Schedule Overview / Major Milestones:

| Milestone | Expected Completion Date | Description/Details |
| --- | --- | --- |
| *Data review* | *01/01/25* | *Review all data sources* |
| *Data analysis* | *10/01/25* | *Initial analysis of data completed* |
| *Hotspot list* | *25/01/25* | *Hotspots identified* |
| *Recommendation list* | *15/02/25* | *List of recommendations* |
| *Final report* | *28/02/25* | *Final report detailing all work and findings.* |

## \*Estimated date for completion:

February 28, 2025