

# CPMM 4 : Data Analysis and Report Preparation

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# Objectives

1. To discuss on the format of the quarterly report
2. To highlight the key performance indicators for data analysis

# Quarterly Report

- A quarterly report will be developed after data aggregation.
  - Mar09 to Jun09 : Report 1
  - Jul09 to Sep09 : Report 2
  - Oct09 to Dec09 : Report 3
  - Jan10 to Feb09 : Report 4



# Data Analysis

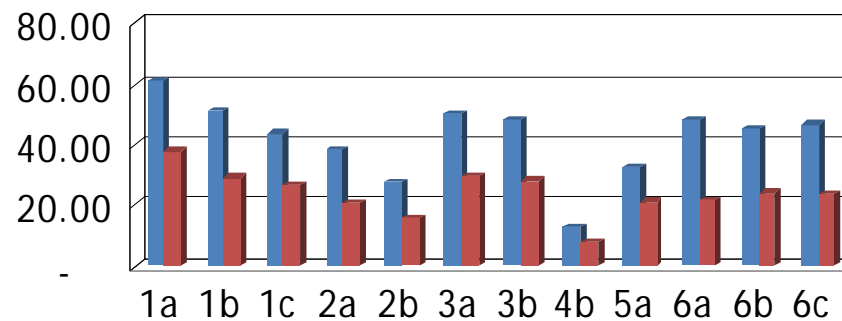
- By time periods
- By Corridors
- By Mode of Transport (Roads/Rail)

# Key Performance Indicators (KPI)

- 8 pairs of KPIs were developed
- Represents a wholistic view of the transport's economy, effectiveness and reliability in each corridor

# 1a) Average Speed : Road

Average Speed

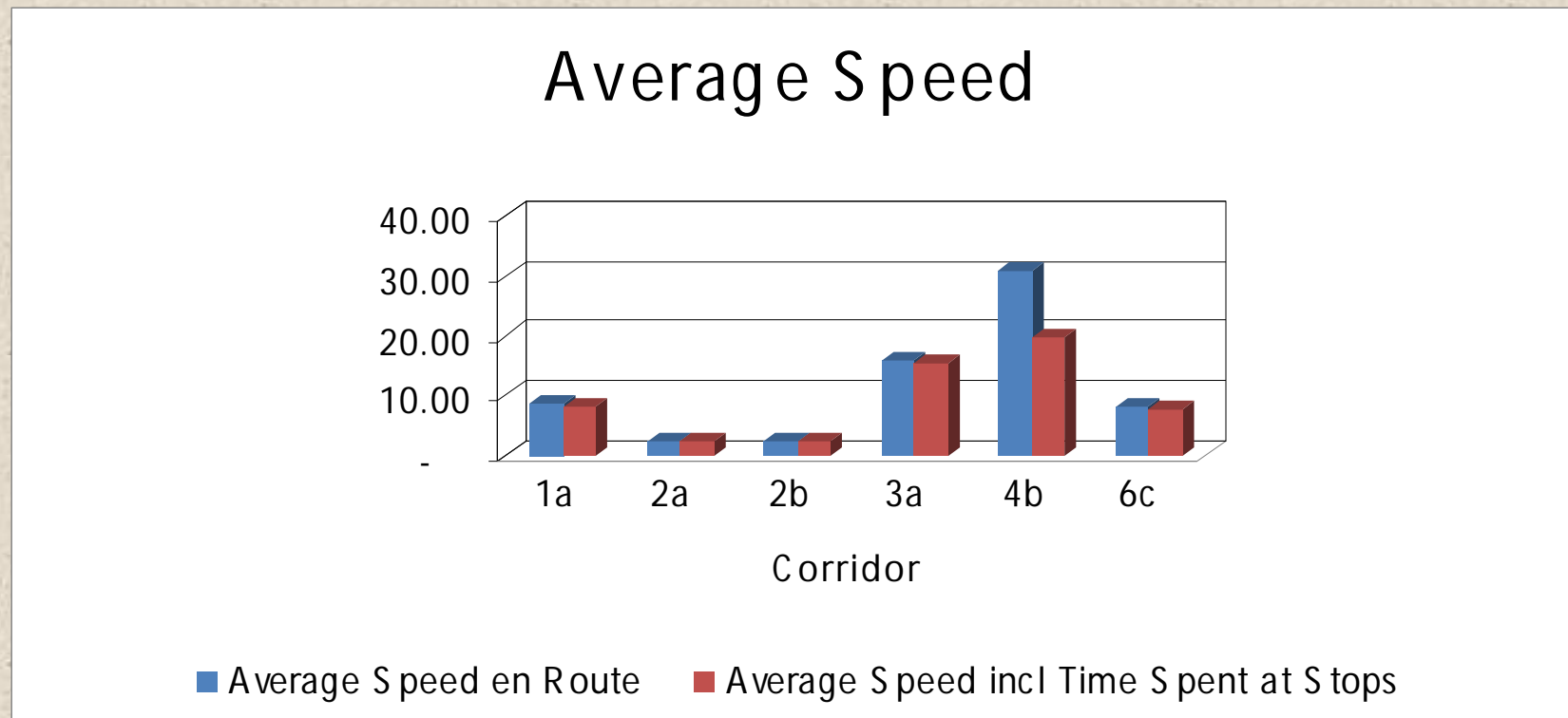


Corridor

■ Average Speed en Route ■ Average Speed inc Time Spent on S tops

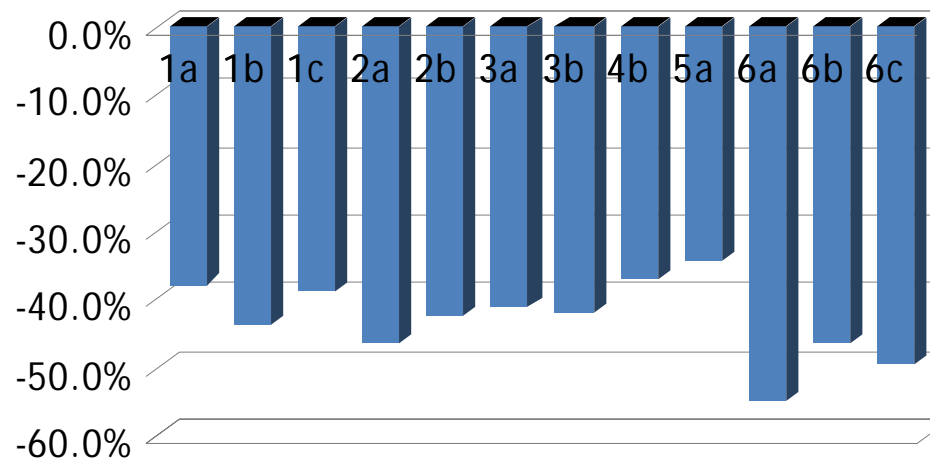


# 1b) Average Speed : Rail



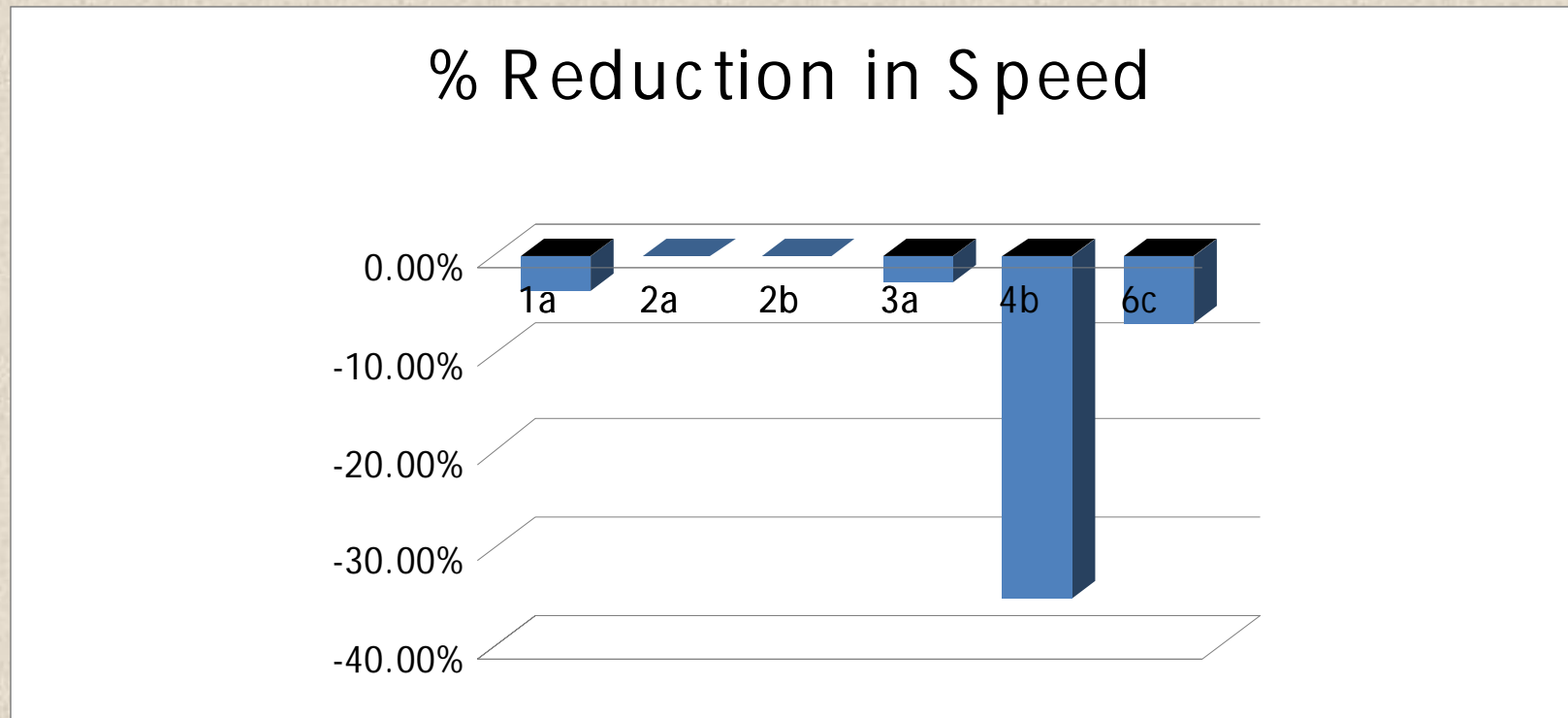
## 2a) Reduction in Speed : Road

% Reduction in Speed



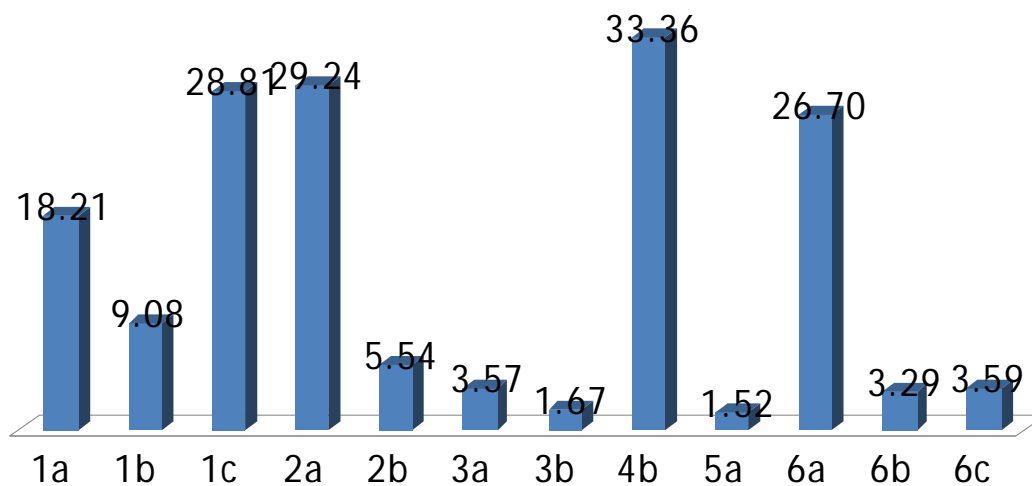


## 2b) Reduction in Speed : Rail



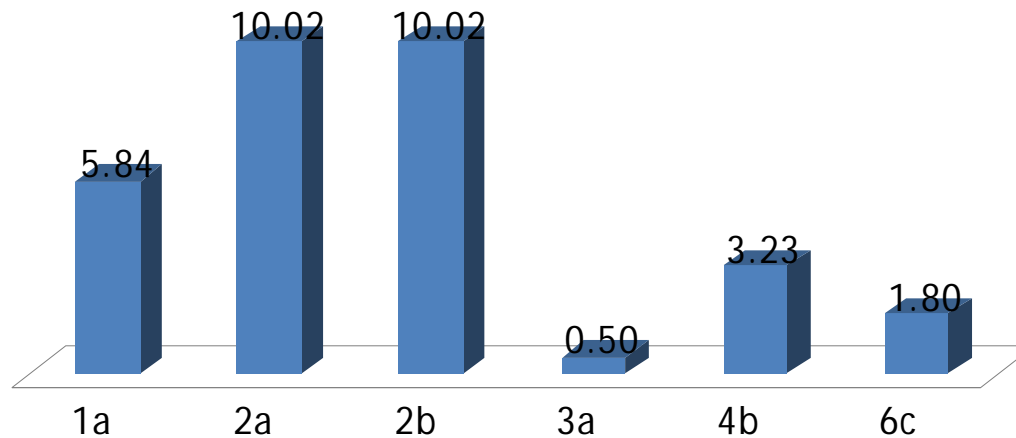
## 3a) Average Cost / km (Road)

Average Cost per Kilometer



## 3b) Average Cost / km (Rail)

Average Cost per Kilometer





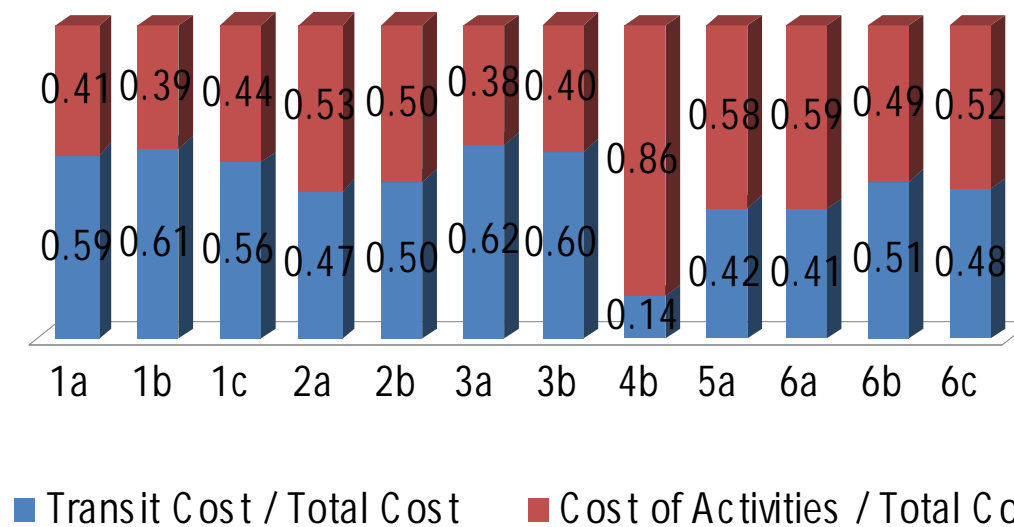
# Cost Efficiency

- A comparison of two ratios
  - Ratio 1 : Transit / Total Cost
  - Ratio 2 : Stop / Total Cost
  - Then derive ratio 1 / ratio 2

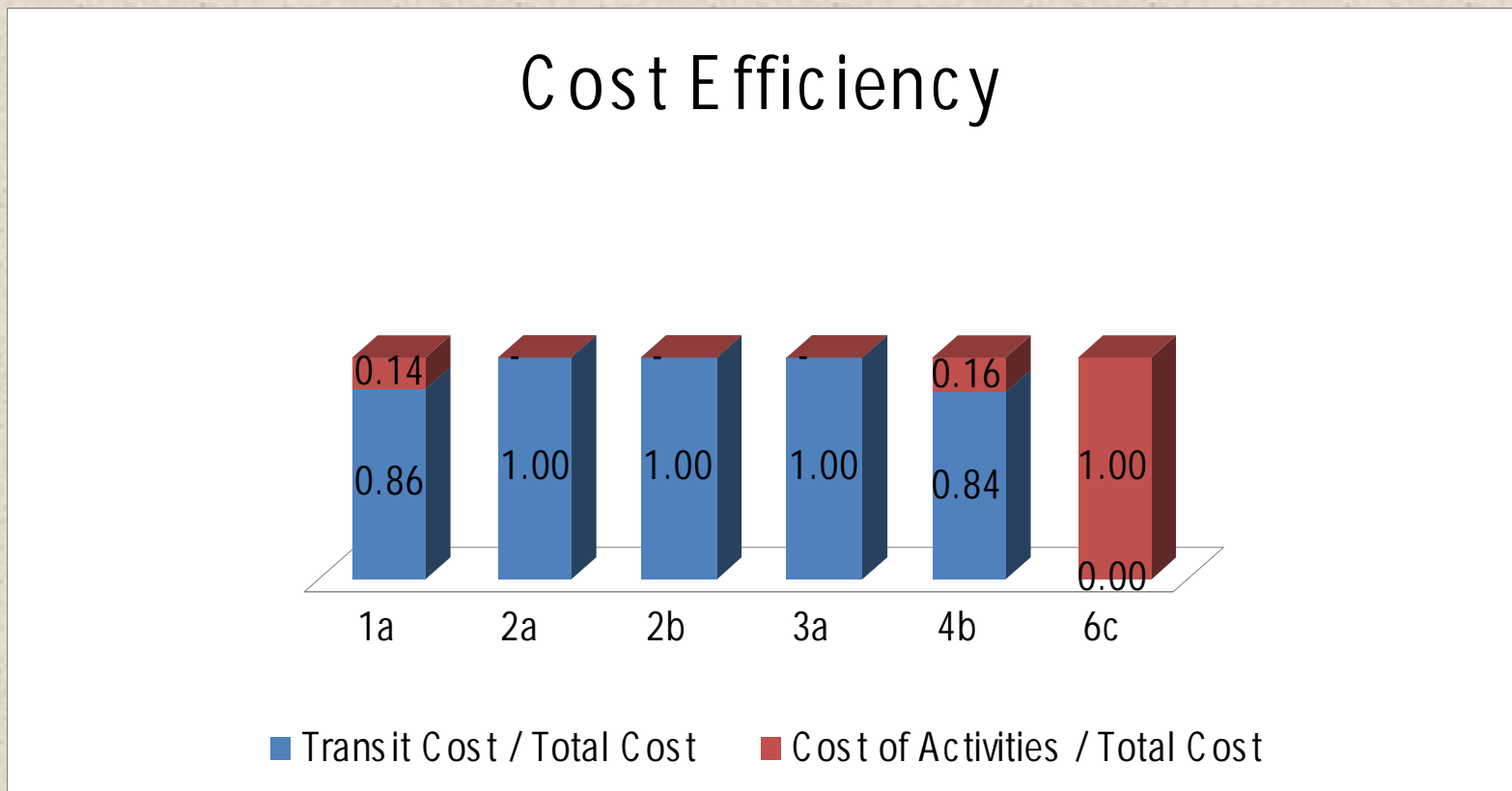
We like to see that ratio 1 is higher than ratio 2

## 4a) Cost Efficiency (Road)

Cost Efficiency



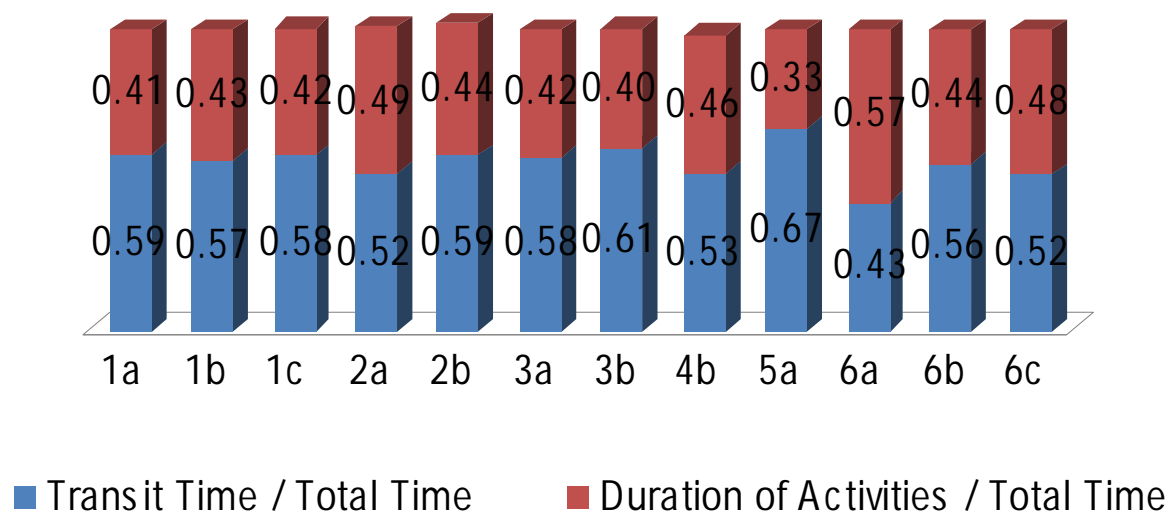
## 4b) Cost Efficiency (Rail)



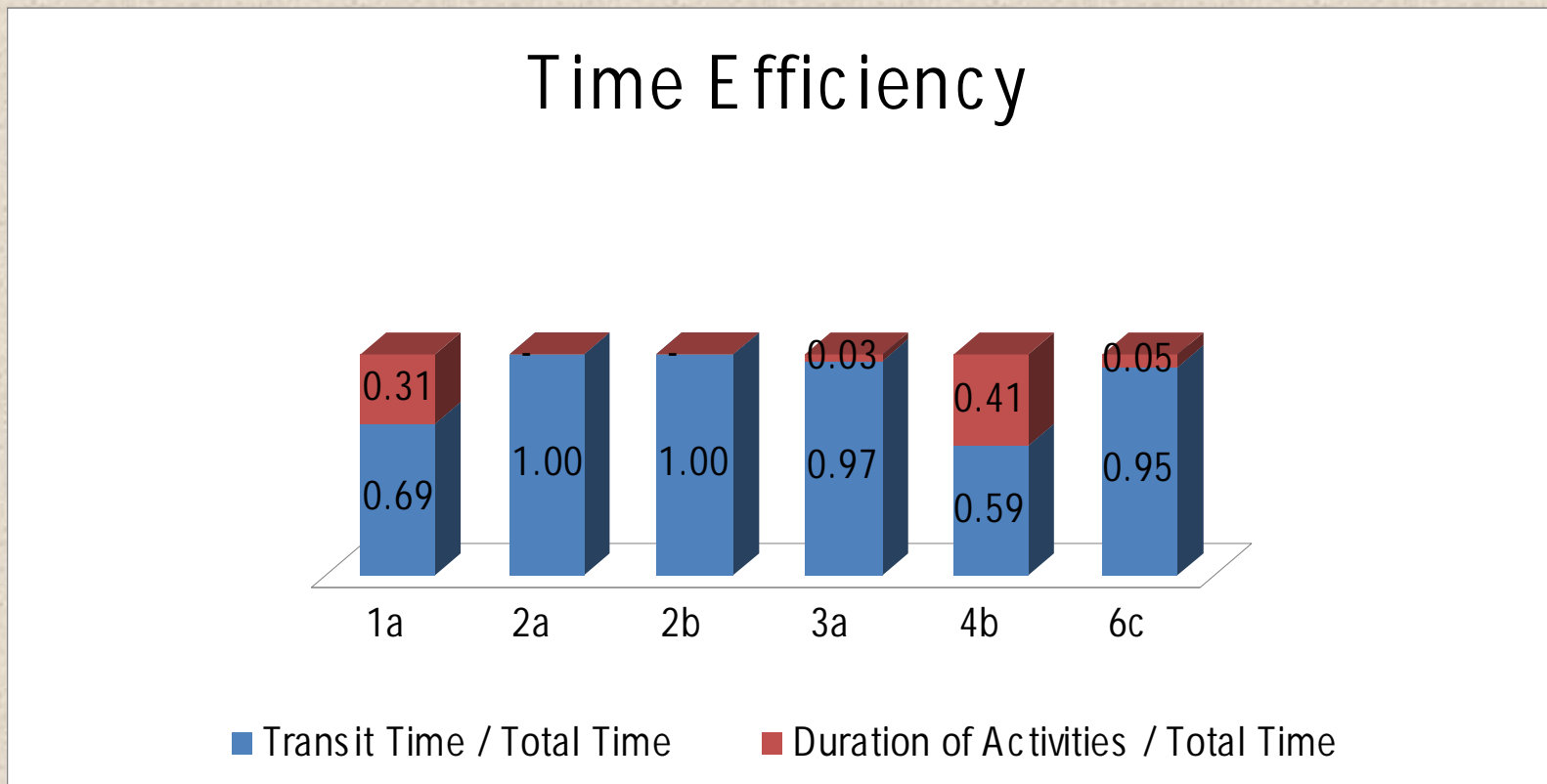


# 5a) Time Efficiency (Road)

Time Efficiency



## 5b) Time Efficiency (Rail)



# Transport Reliability

- To measure how confident of arriving on time
- If the transport time is reliable, the expected time will be near to a historical average
- If the transport time is not reliable, then the expected time will happen in a wide range of values!

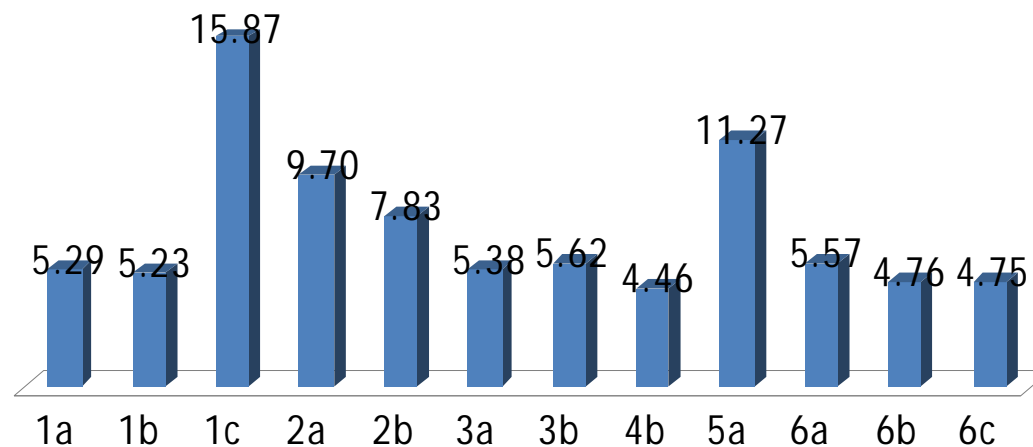


# Transport Reliability

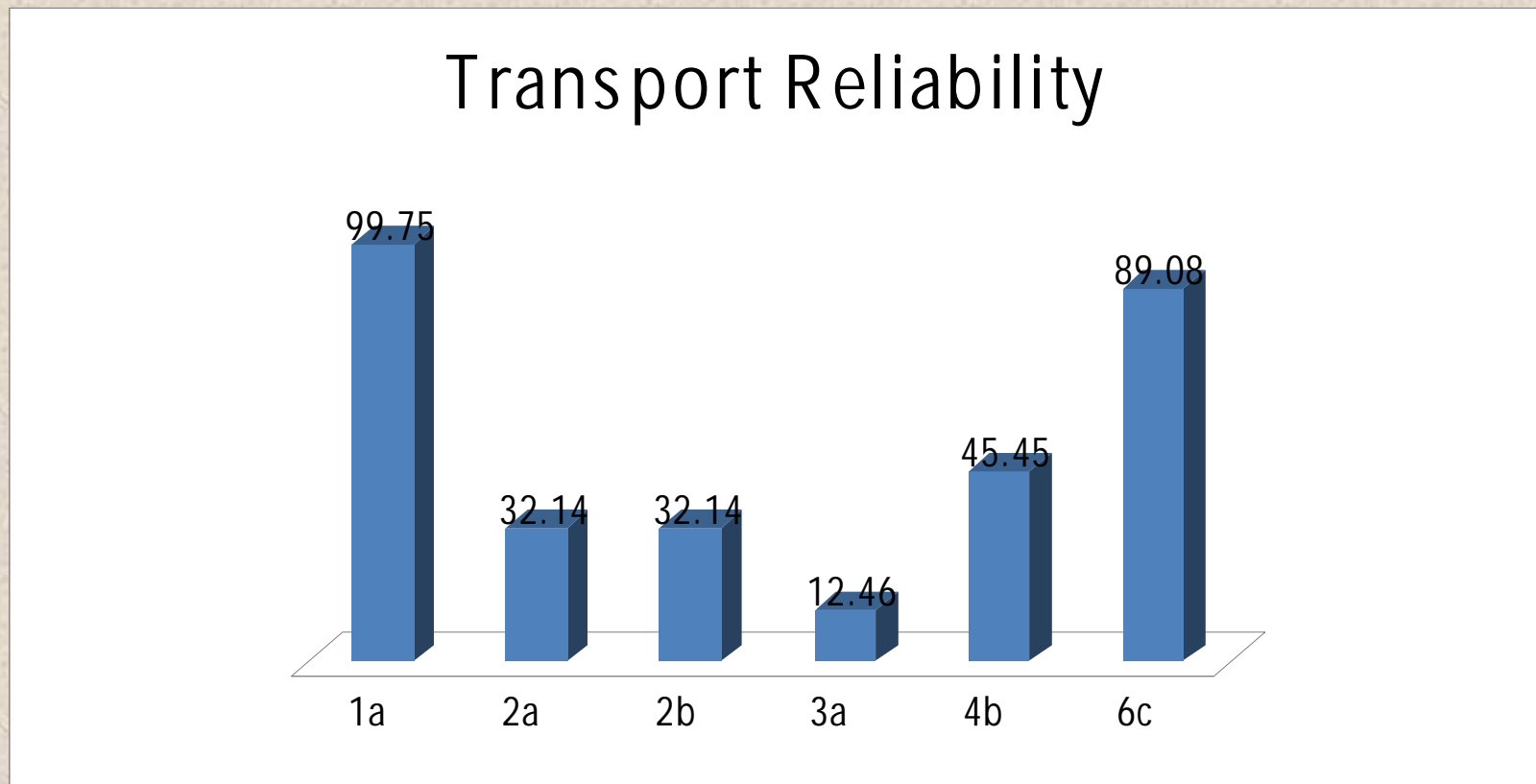
- To measure transport reliability, the statistical standard deviation of the total time is used.
- The higher the value, the more unreliable is the transport's time

## 6a) Transport Reliability (Road)

Transport Reliability

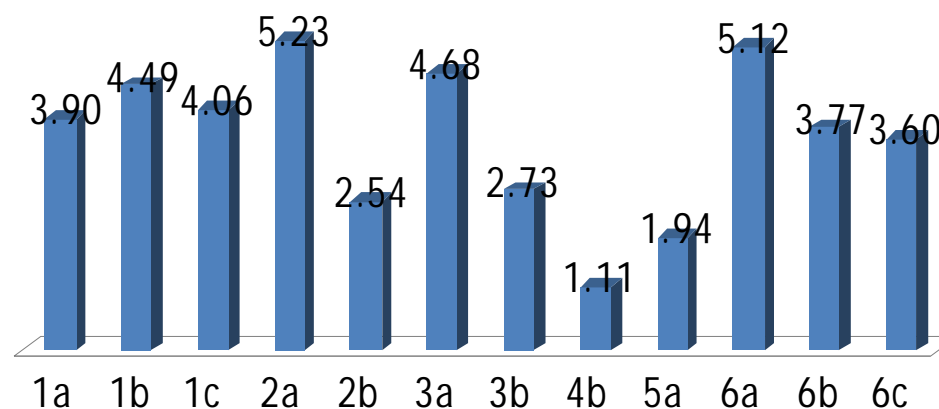


## 6b) Transport Reliability (Rail)



## 7a) Average Duration at BCP (Road)

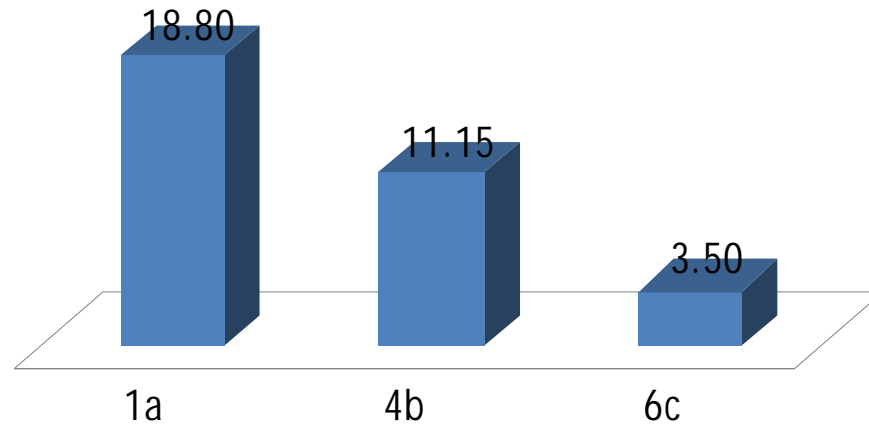
Average Duration of Activities at BCPs (hours)





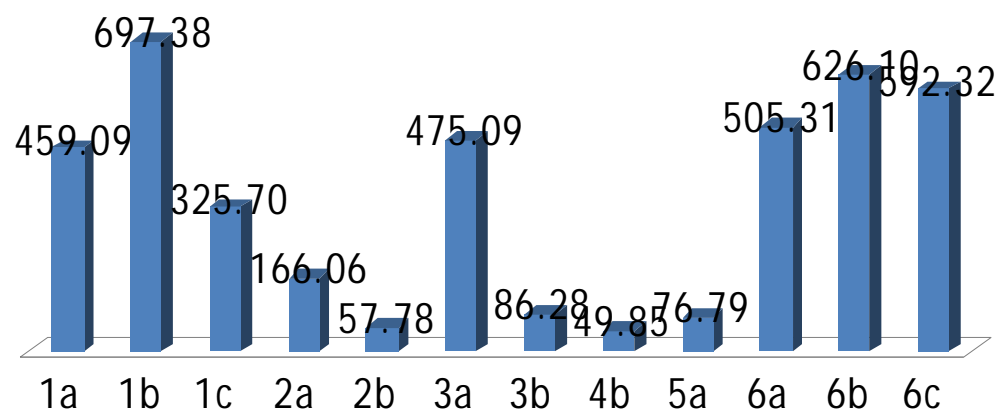
## 7b) Average Duration at BCP (Rail)

Average Duration of Activities at BCPs (hours)



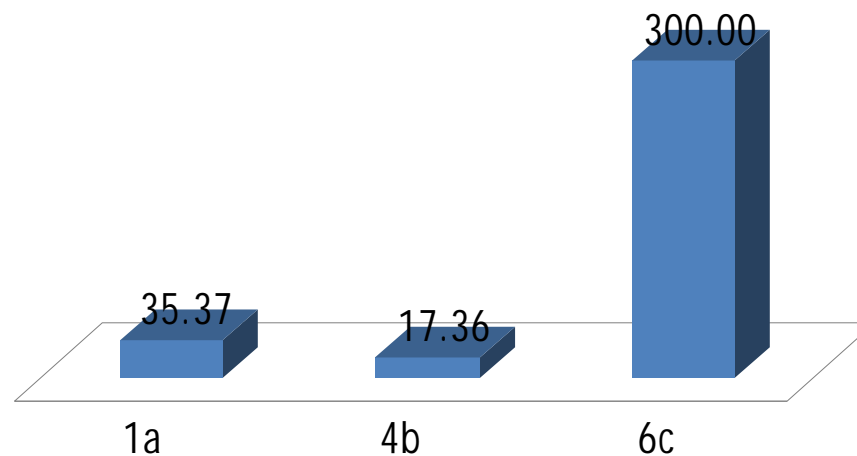
## 8a) Average Cost of BCP (Road)

Average Cost of Activities at BCPs  
(US \$)



## 8b) Average Cost of BCP (Rail)

Average Cost of Activities at BCPs  
(US \$)



# Summary

- Your data are very crucial to the completeness and accuracy of the data analysis!
- The outcomes will be used for prioritizing action plans, investment proposals and national policies on trade and transport!