

# [Increase in private car usage construction essay](https://assignbuster.com/increase-in-private-car-usage-construction-essay/)

This paper shows the public attitude towards new urban transport system. This study was actually taken out when the project was being under construction. Random sampling was done to the people who commute mostly by their own car. People were asked different questions by surveying questionnaire to find travel attitudes. SPSS was used to find results. Most people were not willing to switch from their own car to new urban transport system. By results it was found that current public transport in Lahore is uncomfortable, unsecure, and not reliable. By assuring that new system will be reliable, comfortable and suits you in every respect, most people were still unwilling to switch from car because they don’t have trust on govt. To conclude, new system has drawbacks and people attitudes are not eco- friendly.

## INTRODUCTION

Increase in private car usage in developing countries is causing numerous problems. Many big cities of developing world are facing issues like congestion, air pollution etc. Public transport and sustainable modes of travelling are considered to be solution. (Goodwin, 1996; Greene and Wegener, 1997).

Lahore is the second populated city of Pakistan. Its population is more than 9 million and about 13. 5 million daily people travel in 2006. (Transport Department1, 2012).

Population is increasing, private car trend and related problems are exacerbating. In city, public transport is very poorly managed, traffic jams has increased the commuting distance. Lahore Transport Company buses are good but these are in very few routes. Mostly mini-buses which are very poor in condition are major transportation mode.

By the last 15 years, increase in population and private vehicles has deteriorated air quality. Vehicle registration has increased from 56 to 116 per 1000 inhabitants. Cars have been increasing 10-15% annually. (Transport Department2, 2012)

There were 2129990 total registered vehicles up to June 2009. (Punjab Development Statics, 2010)

Public transport is often considered a sustainable mode for transportation. There should be policy measures to increase public transport usage. For that, public transport systems have to be improved by understanding the travel behavior and consumer needs. ( Beirao and Cabral, 2007 )

## Rapid Transit System

To cope with traffic problems and such issues JICA done a detailed study in Lahore on transportation system. The study plan was for 20 years, two main corridors were identified:

## Ferozepur Road Corridor 28. 7 Km

## Multan Road Corridor 12. 4 Km

Ferozpur Road corridor is also called Green Line, which extends from Hamza Town to Shahdara. It goes along Ferozpur Road, Fatima Jinnah Road, The Mall, Lower Mall, Ravi Road and ends on Shahdara through River Ravi.

The journey from Hamza Town to Shahdra Station will take about 45 minutes by a regular speed of 33 Km/hr. It is assessed that 380, 000 commuters will travel per day in 2015 rising to around 666, 000 by 2025. The expected cost of Green Line is 2. 4 billion US$, and an EIRR of over 13%.

Orange Line is second important line 27 Km long from South west of Lahore at Ali Town to Dera Guran in the North east. It runs along Raiwind Road to Thokar Niazbeg, Multan Road, Lake Road, Macleod Road, GT Raod and ends on east of Ring Road & GT Road interchange.

The Patronage of this line is projected to be about 330, 000 commuters per day in the opening year 2018, going up to 495, 000 by 2025. The expected cost is 2. 0 billion US$ and EIRR is 10%.

Bus Rapid Transit (BRT) project also stimulated private sector attention in city transport system. Govt. of Punjab and Lahore Transport Company would make sure investment friendly environment to the private sector to practice protected, comfortable, reliable and inexpensive public transport.

Feasibility, design, manufacture, process and maintenance of BRT will be on BOT basis. There’ll be electronic fare system and fare will be decided by LTC which can vary with the time. Standards of safety and speed will be sustained.

It will save vehicle operational and maintenance cost. Travel time and congestion will decrease resulting in reduced number of road accidents. Economic activities will upturn. By the presence of smoother and safer intra city travel system people will tend to switch from private car to new urban transport system. Thus this will be fuel efficient and sustainable mode. Project implementation is based on Public Private Partnership (PPP) which will resolve finance problem and project will complete in certain time.

Private party will be responsible for whole implementation of project.

BRT system will take up in the central defined lanes. This will prevent from traffic queues, pedestrians, illegal parked automobiles etc. Passengers will pay on bus stop entering, and every platform of station will be elevated to the height of bus floor. Bus lanes must be maintained by regulatory signing and separated from rest of the traffic by physical barriers. Additional force will be hired to prevent infringement into bus lanes and fines will be charged for illegal entry. Bus way requires two lanes in each course, and one lane will be 10 feet wide in each course.

(Transport Department1, 2012 & Transport Department2, 2012)

## METHODOLOGY

## Data Source:

Random sampling was done along the proposed Green Line where project work had been started. It was about long. I did survey in Punjab Secretariat, Govt. College University, Punjab University (old campus), Choburji, 32 Chowk, Urdu Bazar.

I selected those people who travel by their private car mostly. I acquired the information by asking questions so that i tried to get relevant and accurate answer. There were 100 questionnaires that I filled by people. Before it I run pilot testing to correct mistakes in our questionnaire.

For all the statistical analysis, Statistical Package for Social Sciences (SPSS) was used. Then the analytical techniques like frequencies, cross tables, correlations, and regression was done and interpreted the results.

## VARIABLES:

The variables that I used in questionnaire were age, income, education, marital status, gender, family size, commuting distance, time spend on road, usage of public transport, reliability of public transport, reason for using private car, air pollution by car usage, road congestion on road, reliance on new urban transport, willingness to switch from car, reason for not willing.

## Contingent Evaluation Method:

I used CVM method to find willingness to switch from car usage to new urban transport system. CVM is used to find willingness to pay and willingness to accept for some betterment in the system. The method enables us to establish the value of those goods and services that are not exchanged in markets hence prices are not associated with them.

## Results:

## Correlations

What is your education?

Will you switch to new transport system?

What is your education?

Pearson Correlation

1

. 077

Sig. (2-tailed)

. 444

N

100

100

Will you switch to new transport system?

Pearson Correlation

. 077

1

Sig. (2-tailed)

. 444

N

100

100

As the value is . 077 near to zero it means there’s a weak relation between education and willingness to switch. More the education means that there’s less willingness to switch from private car usage to public transport. People were not willing to switch either they have highly educated or not. This shows the selfish and non-friendly behavior to environment.

## Correlations

What is your income?

Will you switch to new transport system?

What is your income?

Pearson Correlation

1

. 059

Sig. (2-tailed)

. 562

N

100

100

Will you switch to new transport system?

Pearson Correlation

. 059

1

Sig. (2-tailed)

. 562

N

100

100

Correlation value is . 059 for income, showing also weak relation between income and willingness to switch. More the income person is less likely to switch from car usage to public transport.

## Regression:

The value of regression should be from 0 to 1. The low values education, income and other factors show that the people attitudes are not determined by these factors. They don’t care of environment.

R- SQUARE:

## Model Summary

Model

R

R Square

Adjusted R Square

Std. Error of the Estimate

1

. 121a

. 015

-. 016

1. 018

2

. 199b

. 040

-. 022

1. 021

3

. 214c

. 046

-. 050

1. 035

a. Predictors: (Constant), what is your gender? What is your income? What is your age?

b. Predictors: (Constant), what is your gender? What is your income? What is your age? What type of is your job? What is your education? What is your commuting distance?

c. Predictors: (Constant), what is your gender? What is your income? What is your age? What type of is your job? What is your education? What is your commuting distance? Road congestion increased time spends, comfort and reliability of public transport, new urban transport system is reliable

## T-value

## Coefficientsa

Model

Unstandardized Coefficients

Standardized Coefficients

T

Sig.

B

Std. Error

Beta

1

(Constant)

1. 204

. 454

2. 652

. 009

What is your age?

. 015

. 136

. 014

. 113

. 911

What is your income?

. 064

. 153

. 050

. 417

. 677

What is your gender?

. 212

. 204

. 106

1. 041

. 301

2

(Constant)

. 702

. 671

1. 047

. 298

What is your age?

. 009

. 138

. 008

. 063

. 950

What is your income?

. 054

. 158

. 043

. 342

. 733

What is your gender?

. 196

. 205

. 097

. 955

. 342

What is your education?

. 094

. 176

. 056

. 537

. 593

What type of is your job?

. 148

. 106

. 143

1. 391

. 168

What is your commuting distance?

. 012

. 178

. 007

. 065

. 948

3

(Constant)

1. 153

. 916

1. 260

. 211

What is your age?

. 011

. 140

. 010

. 077

. 939

What is your income?

. 050

. 163

. 040

. 308

. 759

What is your gender?

. 178

. 209

. 089

. 851

. 397

What is your education?

. 087

. 182

. 051

. 481

. 632

What type of is your job?

. 151

. 108

. 146

1. 401

. 165

What is your commuting distance?

. 020

. 181

. 011

. 108

. 914

comfort and reliability of public transport

-. 118

. 198

-. 063

-. 595

. 553

new urban transport system is reliable

-. 028

. 127

-. 024

-. 218

. 828

road congestion increased time spend

-. 045

. 107

-. 044

-. 419

. 677

a. Dependent Variable: will you switch to new transport system?

## Conclusion and Discussion:

Road congestion and air pollution is one of the major problems caused by increasing trend of private car usage. Public transport is often considered an effective and environment friendly way of travelling. Rapid transit project in Lahore seems to be effective but people using private car are not willing to switch to this.

Most people don’t have trust on current government, they dislike this project. Some say that this project would not be completed because this government was going to end sooner.

And they didn’t believe that it’d have security, more comfort, and better management.

And many people had the problem that this rapid transit route is specified and their homes were far away. So, if they wanted to travel by mass transit then they had to cover long distance to join it.

Some people say that they had to done different tasks in whole day so the timing of rapid transit would not suit them.

Only, very less people were agreed on switching to rapid transit because they suffer mostly by traffic jams and can’t afford any damage to their car.

These all are behaviors of people and they don’t depend totally on education, income, marital status, gender, commuting distance etc.

By doing all work I concluded that the behavior would all different when the project was completed and bus was started to travel. Mini-buses, vans, and open rickshaws would almost washout. Because these all are in very bad conditions and person only used that due to absence of alternative.

So, I think there’s no need to tell the people right things but change the situation and conditions so that their attitude becomes environmental friendly. As effective policy making and its implementation can do this.