

# Construction of Flyover Bridge (Grade Separator) at Powai Naka on Mahabaleshwar Satara Rahimatpur Road SH- 140

Gaurav Shivdas<sup>1</sup>

<sup>1</sup>MBA final Year Student of construction Management, Department of Project and construction management, MIT Art Design and Technology University, Pune, Maharashtra, India.

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**Abstract** – With the competition in the construction market is fiercely increasing, profit margin of construction enterprises is getting smaller and smaller and cost control of construction projects become more and more important. The control of construction project cost becomes one of the cores in project management. Construction project management is a systematic, comprehensive, dynamic subject, requiring construction project manager to regularize and standardize the organization, goal, quality, safety, and cost of construction project. In this paper, in order to achieve the project cost control effectively and create greater economic benefits, construction project management content, measures and cost control measures were studied.

## 1. INTRODUCTION

On account of phenomenal growth of vehicle population on both highways and town areas, there is increasing demand to eliminate traffic bottlenecks at road intersections by providing Grade separated structures for safe passage of pedestrians and vehicles. Such structures segregate traffic moving in different directions.

Grade separation is the name given to a method of aligning a junction of two or more surface transport axes at different heights so that they will not disrupt the traffic flow on other transit routes when they cross each other.

The grade separator in Satara consists of a mixture of roads, footpaths, overpass and tunnels. This project will benefit traffic to move freely, with fewer interruptions and at higher overall speeds. In addition, less trouble between traffic movements reducing the risk of accidents.

## 2. METHODOLOGY

We have studied some research Paper, Books related to Project management and infrastructure development.

### 2.1 Aim:

To describe the spatial development around Big Infrastructure project and assess the factors encouraging and restricting the development.

### 2.2 Objectives:

- To study the spatial Impact of Big Infrastructure project on the surrounding area in terms of the change in urban form, etc.
- To assess the change in traffic movement.

- To come up with development guidelines around the large infrastructure projects.

### 2.3 Scope:

In keeping time and resource limitations of the study and also focus on actual analysis attempted, the scope of the study is limited in the following ways:

- The geographical study area is confined to an area around Powai Naka (Satara) in keeping with surrounding area of Shivaji Circle.
- The study with its primary surveys has been limited to infrastructure development of Satara in traffic congested area.

## 3. DATA FINDINGS & PRESENTATION

### 3.1 Occupation:

From the survey carried out at Powai Naka and adjacent area and considering the occupation as its 1<sup>st</sup> criteria the classification of population can be done in the following ways:

30% are doing Business; 20% are govt. servants; 30% of them are IT workers & the rest of them work in service sector.

From the survey carried out in the area considering the Housing as its 3<sup>rd</sup> criteria the classification of population can be done in the following ways:

Majority of people i.e. 90% own the Vehicles and only 10% of the population use public transport.

## 4. TOTAL MONTHLY TIME EXPENDITURE

Divided in categories of time spent in minutes.

### 4.1 Monthly expenditure in Minutes in 2016 (averagely per day)

Table1: Monthly time expenditure in minutes in average of per day.

	Jan-2016	April-16	July-16	Oct-16
Time spent by single vehicle in minutes at the stretch	11 min/day	14 min/day	9 min/day	11 min/day

Survey data indicating the total monthly expenditure in minutes of Satara population spent in the quarterly months of January, April, July, October 2016.

**4.2 Monthly expenditure in minutes In 2017 averagely per day.**

Table2: Monthly time expenditure in minutes in average of per day.

	Jan-2017	April-17	July-17	Oct-17
Time spent by single vehicle in minutes at the stretch	13	18	11	14

Survey data indicating the total monthly expenditure in minutes of Satara population spending in the quarterly months of January, April, July, October 2017.

**4.3 Monthly expenditure in Minutes In 2016 (averagely per day)**

Table3: Monthly expenditure in Rs. In 2016 (Rent)

	Jan-2018	April-18	July-18	Oct-18
Time spent by single vehicle in minutes at the stretch	20	18	11	17

Survey data indicating the total monthly expenditure in Minutes. Of Satara population in the quarterly months of January, April, July, October 2008.

**5. TRAVEL PURPOSE:**

Table5: Percentage wise distribution of travel generation in different categories.

Trip Purpose	Working	Education	Shopping	Other
Year 2016	47	20	11	22
Year 2018	12	53	15	20

As educational institutes grew the student’s population constituted only 20% of the trip generated population on year 2016 which will come up to 53% in year 2018.

Due to infrastructural enhancement we will be able to see the other category population constitutes 22% of the travel generated. Though it is the speculated value.

**5. CONCLUSIONS**

The conclusions which emerge from the study area as follows:

Research in the field of land use transport interactions is relatively in its formative stage in the country as compared to the state-of the art abroad. Desktop studies carried out aboard on transport impacts on land values and land use patterns demonstrate a definite interrelation amongst each other.

Accessibility is a major dependent variable in the land price mechanism. As the accessibility of an area increases, and values too tend to rise.

In my study, though the planning is done considering every aspects, some or the other problem keeps on arising. The human resource is the most unreliable and unpredictable resource on the site.

Change in land use pattern leads to pressure on infrastructure facilities Pressure on Infrastructure will be increases in those areas. Local bodies will give more infrastructure facilities.

**REFERENCES**

- [1] <http://www.vsez.gov.in/website/default.asp>
- [2] Jeffrey M. Stupak, “Economic Impact of Infrastructure Investment”, Analyst in Macroeconomic Policy.
- [3] “Assessing the Impact of Infrastructure on Economic Growth and Global Competitiveness”, Tatyana Palei.
- [4] “The Impacts of Infrastructure in Development: A Selective Survey”, Yasuyuki Sawada.

**AUTHOR**



Mr Gaurav Balkrishna Shivdas. Student of MBA in Project construction Management, MIT Art Design & Technology University, Pune.