

Development And Feasibility of Sustainable Transportation System For Palanpur City

Rohin Mansuri¹, Vrundani Vaidya², Shrinath Karli³

² HOD, Dept of Transportation Engineering

³ Assistant Professor

^{1, 2, 3} Hasmukh Goswami Collage of Engineering, Ahmedabad, Gujarat

Abstract- Public transportation is important key for urban area where increasing growth of population nowadays. Individual vehicle ridership increasing rapidly and it cause accidents, effect on road condition, traffic conjunction, noise and air pollution. The rural population is completely dependent on private transportation and creating public transport is can be vital role for rural bus service in the economic growth and development of country. it can keep basic needs like school, hospital. Post office, bank, other utilities etc. the scope of study includes the logical arrangement of various models used in urban transportation planning. Travel demand analysis are indicative of high travel demand towards commercial, industrial areas from various places. So, considering the average passage travel demand new routes suggested across the study area.

Keywords- Public Transportation, Traffic conjunction, Economy, Air pollution.

I. INTRODUCTION

Transportation system may be defined as consisting of the fixed facilities, the flow entities, and the control system that permits people and goods to overcome friction of geographical space efficiently in order to participate in a timely manner in some desired activity. It is a very awkward way of saying “To move from point A to point B”! This definition reveals the breadth of transportation engineering and delineates the purpose and scope of this introductory text. It identifies the functional components of a transportation system (i.e., the fixed facilities, the flow entities, and the control system) and encapsulates the fact that transportation provides the connectivity that facilitates other social interactions his Planning of city in such a way that while motorized vehicles rule the roads, pedestrians, cyclists, and users of public transport face an existential crisis. Emission reduction by improving fuel and vehicle.

During this time a city having a good population, industrial units, employment centers, business arcades, education centers, hospitals and other utilities can attract people.so developing public transportation can reduce all

traffic problems and generate safe, easy and comfortable transportation, and also increase mobility to non-drivers.

[1].“Scheduling and Routing of City Buses at Kuwait Public Transport Company.”

Authors: M. Savsar*, J. Alnaqi, M. Atash,

Published in: International Journal Of Applied Operational Research. In Introduction you can mention the introduction about your research (November 28, 2011)

This paper presents a model and related analysis for scheduling and routing of public buses in the state of Kuwait. First, current bus scheduling system was analyzed in order to identify related problems and potential areas for improvements and to investigate appropriate solution approaches. Necessary data were collected and estimated depending on data availability.

[2]. “Review of capacity Improvement strategies For Bus service”

Authors: Mukti Advani And Geetam tiwari

Published in: Indian Journal of Transportaort management. (October- December 2006)

This paper present Transportation demands in urban areas. This requires planning a system, which is affordable, reliable and efficient from users as well as operator perspective. these methodologies offer incremental improvements in bus system to meet the capacity requirements of different size cities.

[3]. “Optimization of public transportation demand: A case study of Bhopal”

Authors: Anuj Jaiswal, Dr Ashutosh Sharma

Publish in:(July 2012) International Journal of Scientific and Research Publications, Volume2, Issue 7, July 2012.

This paper present assessment of public transport demand for Bhopal and identifies the major factors for poor ridership with estimation of the probable shift of personal vehicle users to bus due to increase in its level of services. The

new approach is required to estimate the actual public transport demand.

Motivation

Public transportation is necessary for developing cities to reduce traffic conjunction, moving of peoples and goods. Public Transportation development in new city is developed by knowing frequency of trip, traffic condition, public interest, and faciality uses of public transportation.

As this exist city private transportation is increasingly day by day and it causes a uneven frequency of trip, it increase a cost of parking, damager, maintenance instead of using public transportation.

Problem Statement

The problem is reduction in private transportation cause a emission and increase fuel efficiency, and affecting the condition of road in city. Using public transportation saves money, increase mobility for non-drivers and safe transportation.

II. METHODOLOGY

- The public transportation system developed by survey of stated preference and reveled preference.
- In this survey to know about purpose of trip is considered.
- This survey also derives type of trip (home base trip, educational trip, shopping, work, social, recreational)
- Consider vehicle ownership foe knowing interest about public transportation
- This survey also derives which transportation service uses frequently. And also know about private transportation charges.
- Road inventory for development of public transportation is derives a width of road available to run bus easily.
- Road side interview gives a result among knowing public interest for new developing transportation system
- After successfully complete survey it gives desire line diagram for results of origin and destination.

III. ADVANTAGES DISADVANTAGES AND APPLICATIONS

ADVANTAGES

- The Sp and Rp survey can easily derives public interest towards transportation.
- Inventory gives adequate right of way for bus.

- It generates economy by using less amount of private vehicle
- It suggests optimal routes for provide basic facilities within accessible distance.
- It executes optimize route and transportation service.
- It reduces traffic congestion, air and nose pollution.
- It increases mobility for non-drivers.

DISADVANTAGES

- Initial investment of Public Transportation development cost is high.
- Sometimes it cannot generate good revenue in public holydays.
- Handling and maintenance cost are high.

APPLICATIONS

- Helpful for development of public transportation.
- This model use for transpiration demand.

VI. CONCLUSION

The project derives development of public transportation in Palanpur city .in which Palanpur city have high traffic volume, and daily increasing in private transportation every day, increasing accidents in which public transportation design for internal city bus transportation can consume all this problem.

It also generates revenue and employment in transportation sector

From stated preference and reviled preference survey optimal route design and it covey all stations among the city to travel.

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