

# Transportation And Land Use

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**Abstract - The transportation and land use gaining attention from last decade. In this paper we see the correlation between the land use and transportation. Day by day traffic is increasing very rapidly. So, pressure is built up on construction authority. The land is limited, we cannot expand it and traffic is increasing. So, our main motto in this paper is to reduce congestion and effectively use of the land with better coordination with land management committee and construction authority. Traffic is increasing day by day and with the same pace the environmental pollution is increasing rapidly. So, in this paper we discuss the remedies to mitigate the causes of environmental pollution. In the paper we discuss the problems which is facing during the transportation and land use policy is implemented on ground. Than later on we will be find out the solutions of those problems which is face during construction work. In this paper we will discuss the role and duties of the transportation planner. The paper also makes a relationship between the land value and distance from main location. The paper shows the structure of the committee which gives detail about the technical committee and planning committee.**

**Keywords - Transportation, Land Use, Environment, Congestion, Planning, Public Transport**

## INRODUCTION

Traffic congestion is an important factor become everywhere. Because traffic increasing due to many factors such as financial,location,shifting locationetc.

land and transportation both are interlinked with each other.so we cannot think about transportation without land. So, the main purpose is that how we can use land efficiently

So that can make a better transportation which is good from traffic point of view,economic point of view, environmental point of view .so the main motive is that we use land properly so that it gives a better and safe transportation which is congestion free. Because transportation and land use are fixed in each other. So, in this paper we will be see the importance, problems and solutions of the transportation and land use. As we know that everyday construction project is increasing so we can usually see many construction projectis continue. So, these construction project requires land.

Traffic is increasing day by dayso they require more space. Everyone is in hurry, we wantthat our home to destination time should be minimum. So, for reducing this home to destination time there should be better transportation facility and for better facility there should be better use of the land so that we can provide congested free transport. so here main motto is that better use of the land and better land use policy.

So, in this paper we will find out the connection between land and transportation so that we can improve our transportation system in economically,environmentally,congestion free,safe and less time consumable.

## OBJECTIVE OF TRANSPORTATION AND LAND USE

The objective of the transportation and land use planning are as:

- i. The main motto of the land use and transportation is to effective utilisation of the land.
- ii. The main objective to reduce the congestion problem.
- iii. To promote public transportation.
- iv. Establish all the facilities at minimum distance.
- v. Makes a better coordination between all the organisation.
- vi. Use the resources efficiently.

## TRANSPORTATION PLANNING

Transportation Planning as defined that the managing, operatingand network system is designed to facilitate the movement of persons and goods from one place another place by the mean of roads, rails, air and water transportation. So, in transportation there is so much use of vehicles for movement of goods and persons then there is environmental pollution surely. So, there is special care should be taken to minimize the pollution.

## MEANING OF LAND USE PALNNING

The meaning of land use planning is that planning of town, regional, regional and designing of that area. In this paper the meaning of land use is that process in which managing change in built and environmental for the betterment of the society.In land use planning we include all the factors such as social, economic, cultural and environmental factors.

Our main focus should not only on transportation but also on land use pattern, so that we will find out the pattern of the trip.

Our main focus should be on the density, location, etc so that we will reduce the length of the journey, reduce the distance of the office. This is possible due to establish the office,school,market, hospital near the residential area.

- I. **PUBLIC TRANSPORT:**Public transportation should better so that people use more public vehicle instead of their personal vehicles. It will reduce expenditure, environment, etc.
- II. **LAND USE MIX:** Land use mix is defining is that the office, market,school hospital should be near the residential area.Because people have less journey time and they do not use vehicle.They reach their desired location by pedestrian or by cycle.

So, in the above paragraph it is given that we have to use proper use of the land so that The journey time should be less and people use more public transport or cycle.

### ROLE OF TRANSPORTATION PLANNER

- i. Use of transportation to improve community sustainability
- ii. Emphasis on long term development
- iii. Focus on environment protection
- iv. Educate parties

### PROBLEMS

There are many problems in land use and transportation Some of them are given below: -

- i. Land Acquisition Problem
  - ii. Environmental protection
  - iii. Losing of public space
  - iv. Increasing price of land
  - v. Loosing fertile land
- **LAND ACQUISITION:** In development of transportation and infrastructure there is the main problem is that acquiring of land. We often see the many protest by farmers. The main reason of these protest is that the farmer loss their land and they will be landless. So, they protest for their land and it cause many difficulties in development.
  - **ENVIRONMENT PROBLEM:**When roads,buildings and other construction is formed than the main problem is caring and Protection of the nature. So, it should consider during the construction and follow the guidelines strictly. Because we cannot compromise withthe nature.
  - **LOSING PUBLIC SPACE:** Due to infrastructure development rapid it may be the cause of losing public space. Because the space is limited and construction work is growing rapidly.Construction work is growing day by day and it is Reducing public space.
  - **PRICE OF LAND:** Price of land means that when construction project is planned then land acquisition is required so, fertile land price is high. So, price of land high for land acquisition and it will increase the overall cost of the project.
  - **LOOSING FERTILE LAND:** Loosing fertile land means that for construction of the project, the land is acquired. Construction project use the fertile land and the fertile land will be used. So, for construction project we have to use barren land as much as possible.

### SOLUTIONS

The solution for the land use and transportation are given as

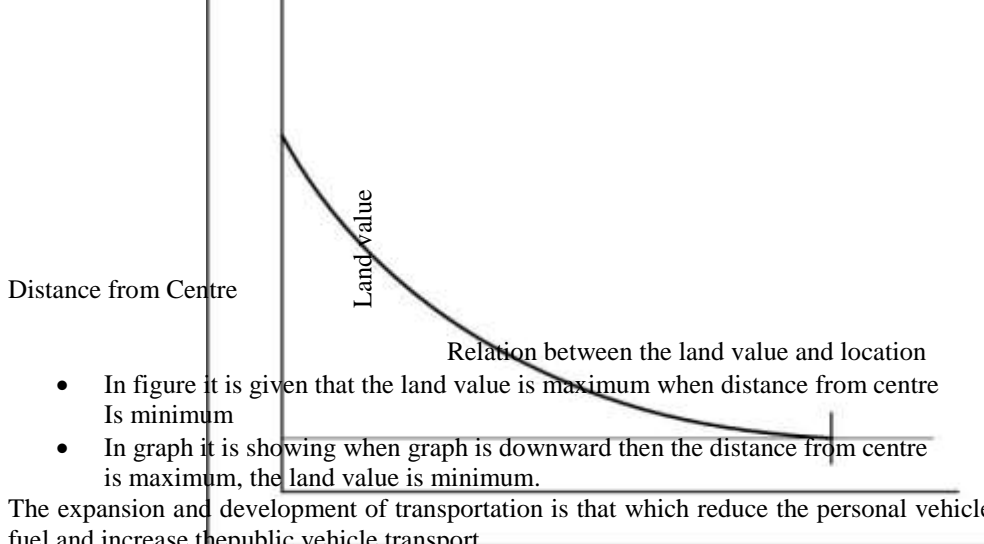
- i. Use Maximum Public Transport
  - ii. Managing Private Car User
  - iii. Use Barren Land
  - iv. Use Green Mode of Transport
  - v. Strict Law for Environment Protection
- **Use Maximum Public Transport:**Use maximum public transport for land use and transportation. We have to avoid personal vehicles for our journey so that we consume less money that will be beneficial for environment as well as saving money. Publictransport is a better solution for fuel saving as well as nature. So, authorities should focus on improving public transport.
  - **Managing Private Car User:** Reducing congestion problem, authority shouldmanage private car user. Authority should promote public vehicles and campaigning the public transport. People should aware about the environment and help in reducing the congestion
  - **Use Barren Land:** Developer and authorities should use barren land for the construction project. Because barren land is waste and there is no fertility and it will be help in saving

fertile land.

- Use Green Mode Transport: Green mode of transport is defined that which does not consume fuel or any other energy and which does not pollute our environment. So, green mode of transport is that which does not create congestion and any other problem in transportation system. So, authority should promote green mode of transport. Example: The example of green mode of transport is cycling, pedestrian, etc.
- Strict Laws: Strict law should be made for environment protection and better transportation system. These laws should be strictly implemented and proper amendment should be taken in these laws from time to time.

### CORRELATION BETWEEN LAND USE AND TRANSPORT

The relation between land use and transport is that it shows that how we use land. In the given figure is that the land value is high when the distance from centre is minimum. As the distance from the centre is maximum then the land value is minimum.



### STRUCTURE OF COMMITTEE

The structure of a committee is defined as that how a committee works for proper planning of land and transportation. In structure of a committee the following are the parts of that structure:

- i. City Planning Committee
  - ii. Technical Service Committee
- CITY PLANNING COMMITTEE: City planning committee is defined as that which makes the proper planning of the whole project in a systematic way. So, that we make a better structure which strong, aesthetic, durable. Planning committee is established so that we can utilise the resources very efficiently and wastage of the material is less. So, planning committee should be established due to which we perform the task efficiently and effectively. In planning committee there are sub-parts of the planning committee, one of them is the environmental committee. So, environmental committee is that which is installed for the protection of the nature and greenery. Environmental committee main work is to follow the laws for environment and take care of nature and take strict action against them who break the laws. So, these committee should work efficiently and effectively.
  - TECHNICAL SERVICE COMMITTEE: Technical service committee is defined as that that committee which deals with the availability of the instruments, machinery and other parts. So, technical committee also deals with the rectification of the technical errors in the machinery and spare parts. Technical committee have main aim is that work should not stop at any cost because work should be completed before the deadline and it should be qualitatively. Technical committee also deals with the property management because in construction project the first task is that land should be available and the duty of this task is property management committee. City planning committee and technical service committee is the part of the structure committee.

### CONCLUSION

The paper conclusion is that here are many barriers which create problems in integration of land use and transportation. In this paper, the coordination between the various agencies is not good. Each organisation has different objectives so these objectives create problems and these problems create barriers in the integration of land use and transportation. In this paper we see that there are many problems such as land acquisition, environment pollution, etc. So, we try to solve these problems or barriers to some extent such as encouraging public transport, reducing pollution, etc. The paper also shows the relationship between land value and distance from centre. The main aim of the paper to make the transportation smooth and time reducing. So, there is better coordination between the authorities which improve the transportation system. The public should encourage to use public vehicles and reduce pollution.

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