

**AMENITIES FOR THE WELFARE OF BUS  
PASSENGERS  
IN CHANDANATHOPPE JUNCTION**

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**INTRODUCTION**

In this research, I am trying to study about the amenities or facilities provided for the welfare of bus passengers in a rural- suburban locality, specifically Chandanathoppe. Chandanathoppe is a suburban area located in the Kollam district, Kerala. It comes under Kollam municipal corporation, Kilikkollur zone. The majority of the residents of Chandanathoppe are depending on the public transport system. Students of different educational institutions locating in Chandanathoppe is also depending on the Public transport system to a great extent. The well being of the passengers would ensure the enrichment of public transport system and the importance of rural transport to economic and social development is obvious.

The National Highway 744, which is passing through Chandanathoppe junction links Madhurai (Tamil nadu) with Kollam city. Previously it was National Highway 208. Other main towns on the NH, near to Chandanathoppe are Kottarakkara & Punalur. The Traffic volume of the NH is very high. Presence of a railway level cross near to the junction also creates traffic jams in the respective area. Lack of bus

waiting shelters, proper parking areas, traffic signals, footpaths etc also makes the passengers & pedestrians very unsafe in Chandanathoppe.



(fig1: Old signage of NH, which is still not replaced)

So, the purpose of study is to answer the questions like, are the bus passengers satisfied with the current situation? If not, what are the difficulties faced by them? The study also intends to look at what could be done to improve the welfare of passengers in Chandanathoppe junction? The difficulties facing by the passengers may affect the traffic in many ways. The research will go through that and to figure out, how could the panchayat or responsible officials can involve in making a change in the current situation?

**METHODOLOGY**

I prefer survey method for this study, which include both interviewing the individuals and using the questionnaire as a survey tool. My research would be more quantitative as

compared to other modes of research. Chandanathoppe is vast area with more than 300 households (approx.), 2 to 3 educational institutes (approx.) & Bus services are also very high i.e, above 10 buses in an hour. Hence, it is impossible to do a complete survey interviewing every individual. So the first step in research is to select a random sample from the study area.

It should include;

1. Students & other passengers
2. Shop keepers
3. Workers in the bus
4. Households nearby

### THE JUNCTION

Chandanathoppe junction is one of the main junctions in NH 744. Approximately more than 2000 vehicles pass through this junction in one day. More than 200 buses have service in this route. This includes interstate buses and local private buses. Chandanathoppe also has a railway station, which's level cross is located on one of the local road that is connected to the main road. The main educational institutions running in Chandanathoppe is ITI and UHRD. Other major industries in this locality includes Vijayalaxmi cashew company, saw mill etc.



(fig 2: The cashew company located near Chandanathoppe junction)

The bus passengers are provided very less facilities in Chanthanathoppe junction. There was a bus waiting shelter towards the Kottarakkara route till 2010. The private buses discarded the bus stops in their racing and eventually the waiting shelter is forgotten by the passengers. They scattered in the sideways of the road and the bus shelter was occupied by the anti social people, who create problems to the other people around. Later the local people and shop keepers damaged the bus waiting shelter to get rid from the anti social elements. One of the latest resources allotted to the junction is a high mass light which was planted before 6 months.

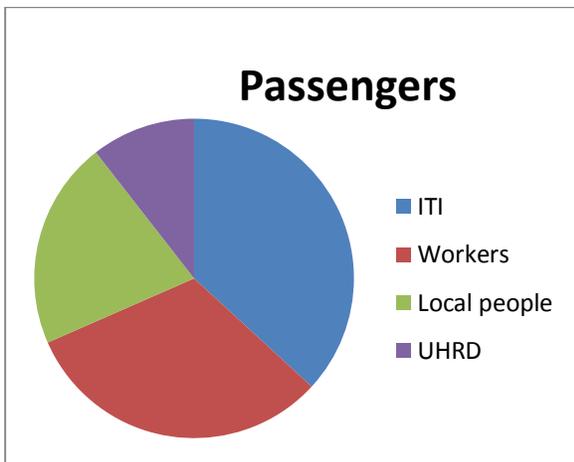
### WHAT IS THE CURRENT SITUATION?

After the background study & literature review, I prepared a questionnaire consists 13 questions enquiring about the current situation of the Chandanathoppe junction. I personally interviewed more than 70 people including students and other passengers, shop keepers, bus drivers, auto drivers & local people. Out of them

50% of people were actually ready to fill the questionnaire. Remaining people were also responsive in the sense; they shared their opinions and experiences which helped me a lot in the study. The finding of my survey is as follows;

4 (a): The passengers

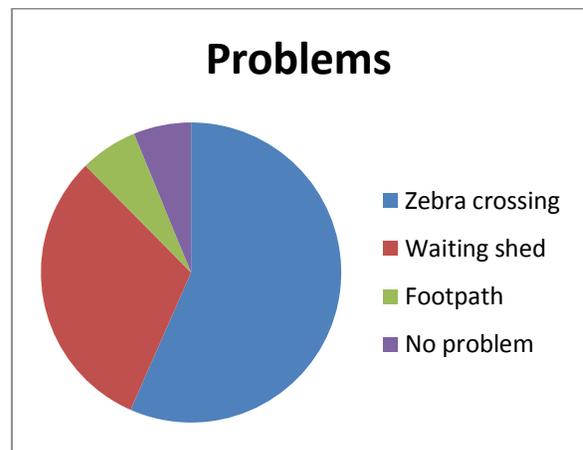
As I mentioned in previous chapters, Chanthanathoppe junction is a very busy junction, and a lot of people are depending on the public vehicles to travel. The students from the ITI Chandanathoppe (35%) & workers of the Vijayalaxmi cashew company (35%) are the majority of bus passengers from this junction. Remaining is from the nearby UHRD (10%) and local people (20%)



When I enquired about their opinion about the current facilities of Chandanathoppe, more people voted for the satisfactory -70%, only a few voted for good -10% and 20% of people were telling that the condition of junction is very bad.

I tried to study the problems facing by the passengers on the basis of age and sex. Out of my 24 samples of passengers, 11 were women and 13 were men. 12 out of 24 samples were students. Regardless the age and sex, one of the main problems facing by the passengers is ineffective zebra crossing.

Response of the passengers can be simplified into the following chart;



56.6% of people face difficulty in crossing the road. Students are the majority who raised the problem of zebra crossing. According to them, having a traffic police or traffic signal in the junction could solve this issue. The ineffective zebra crossing is a result of private vehicle's attitude, mostly the two wheelers who refuses to stop for the pedestrians to cross the road.

31% of people finds problem with the absence of a waiting shelter. More than 50% of women from the age group of 18-30 & 30-60 told that having a bus waiting shelter would improve the comfort level of the passengers. The problem with the absence of shelter is effecting mostly in

monsoon season. The drainage near the bus stop will get flooded in the monsoon and it causes discomfort for the bus passengers and other pedestrians. Even though there are more than 100 private buses & other KSRTCs having service in this route, waiting shelter would not trouble the passengers a lot, but it is an important necessity of the passengers.

6.2% of people voted for footpath & the same number of people (6.2%) voted for 'no problem'. One of the main problems with the absence of footpath is that, the road sides are filled with dust and when the vehicles are passing through the junction, it creates the atmosphere dusty & dirty. The pedestrians including the passengers have no proposed way to walk through the sideways of road. So obviously they would walk through the road and met with accidents. There is also an auto stand near the bus stop which is also creating a mess in the junction.

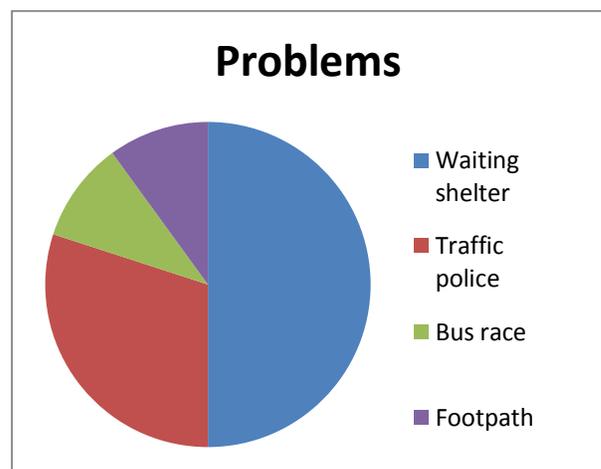
The 6.2% who voted for good condition of the junction is occasional passengers. Easy getting of private buses satisfies them.

#### 4 (b) The Bus drivers & Auto drivers

The route through Chandanathoppe junction connects Kollam city with Madhurai in Tamil nadu. More than 200 buses, including the private buses and KSRTCs are having service in this route. There is also an auto stand with more than 10 autorikshaws servicing in the locality. In the study of welfare of passengers, the comments

and opinions of bus drivers are very important. I talked to more than 6 bus employees of various private buses and around 5 auto drivers in Chandanathoppe stand. When I enquired about the problems of bus passengers and traffic blocks due to the lack of amenities to the bus employees, they were blaming the auto stand and level cross near the junction. Similarly when I enquired the same questions to the auto drivers, they were blaming the private buses.

Response of the Bus drivers & auto drivers can be explained with the help of following chart;



The 50% of the Bus drivers and auto drivers pointed that absence of bus shelter is a main discomfort of bus passengers. In the beginning of the survey, I came to understand that the buses are not stopping in the assigned bus stop but in the middle of junction. The reply of bus employees to this question was, they are running for the collection and they try to stop for all passengers. In fact the passengers are scattered in the junction in a confidence that the buses would stop anywhere they wanted. So it's a

problem with both the bus employees and passengers. This careless attitude of both classes is troubling the entire junction. Building a bus shelter will minimize this problem, in the opinion of auto drivers.



(fig 3: The bus stopping in the middle of the road to unload the passenger- can also see a 2 wheeler violating the rules and driving in wrong side)

In the opinion of Auto drivers, placing a traffic police in the junction would eliminate the problem of zebra crossing and it will avoid the traffic blocks to a great extent. Bus drivers also support the need for a traffic police and signal.

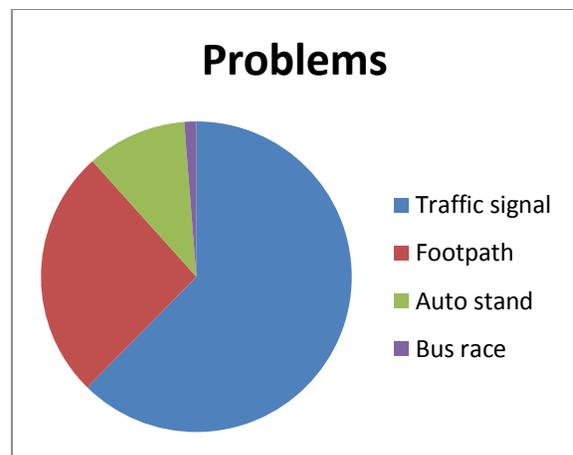
Auto drivers objected that the bus races are causing a lot of problems to the passengers and pedestrians in the junction. These races are one of the reasons for the elimination of bus stop. When a bus, stops in the assigned stop, other bus behind the respective bus would stop in front of this bus and gradually the bus stop is forgotten.

10% of people find the lack of footpath is causing problems to passengers in the junction.

The reason is mentioned above. That is, flooding of drainage in the monsoon season.

#### 4 (c): The shopkeepers

The both sides of the national highway in Chandanathoppe is occupied by the small and large shops. More than 50 shops are running in Chandanathoppe junction. The passengers use front extension of these shops as a temporary shelter while waiting for the bus. I surveyed 5 shop keepers in the heart of junction and their views on the amenities provided to the passengers are explained in following chart;



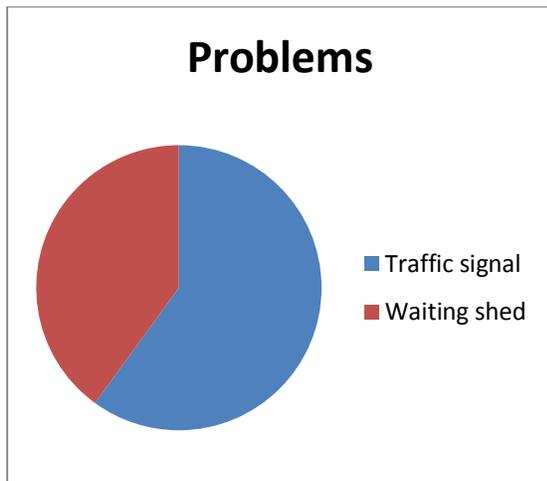
60% of shopkeepers pointed out the problems with heavy traffic and crossing the road. In their opinion, the service of a policeman and traffic signal would improve the safety and well being of the bus passengers. Dusty atmosphere and drainage problem is in the concern of shop keepers also. 25% of them complained about the width of the road and absence of footpath.

Auto stand is again a problem for shop keepers too. 10% of shop keepers advocated that the auto

stand is creating traffic problems in the junction and they are preventing the building of bus shelter in Chandanathoppe junction. Bus race is another problem pointed out by 5% of shopkeepers.

4 (d): The households

Majority of the local people in Chandanathoppe is depending on the public vehicles. More than 45 families, out of 75 families in ITI ward (approx.) are living in poor economic condition. Only 25% of households in Chandanathoppe area, including ITI ward are having private vehicles. The survey among these households in random gives the following result;



The two main problems raised by the households are the absence of traffic signal and absence of bus shelter. Approximately 60% of households pointed out the problem with traffic signal and the rest (40%) found bus shelter as an issue. Since Chandanathoppe junction is located near

railway level cross, the railway gate closing times are creating heavy rush in the junction. Same time, absence of traffic signals and police are giving an advantage to both the private and public vehicles to discard the zebra crossing. It is affecting the pedestrians in big scale.

From the survey conducted in Chandanathoppe among the students, workers, shop keepers, bus employees, auto drivers and households of various age groups, I came to understand a lot about the questions like; what are the main problems of the bus passengers?, What is the current situation of the junction? and suggestions of these people for the betterment of their Chandanathoppe junction.

#### HOW THE PROBLEMS OF PASSENGERS EFFECTS THE OTHER SERVICES

Currently the amenities provided for the bus passengers in Chandanathoppe junction are just satisfactory from my findings. The ineffective zebra crossing is the major problem that is highlighting among all the survey samples irrespective of age group and sex. The absence of traffic signals and traffic police is mentioned as the main reasons for this issue. The ineffective zebra crossing is resulting in increasing accidents in the junction. It is said that, there are more than 2 accidents happening in the junction in every month. It is not a small account. Mostly the pedestrians including bus passengers are involved in these accidents. Other reasons for these accidents are absence of

footpath and careless driving of the private buses. Private buses used to stop wherever a passenger shows his hands, without caring if the bus is stopped in sideways or on the road. This sudden break of the buses is unpredictable by the other vehicles behind and they will hit the buses.



(fig 4: traffic block due to closing of railway gate)

Apart from the accidents, the problems or unsafe atmosphere of passengers are frequent traffic blocks. The absence of traffic signal is again the main reason for frequent traffic blocks in Chandanathoppe junction. From the background study and survey, I came to know that the railway level cross can also mention in the scenario of traffic blocks. There are 8 trains passing through the Chandanathoppe railway station. For these 8 trains, the railway gate is closed for 16 times a day. Each time the railway gate is opening creates a rush of vehicles to the main road that is to the junction. Presence of a traffic signal alone would not alone solve this

problem because; the people are refusing to follow the rules, unless someone is pushing them to follow. But presence of a traffic police would help to reduce the traffic blocks.

## CONCLUSION

*“If a proper rural transport system had been provided, it would have functioned as a catalyst, facilitator and efficient instrument for accelerating rural development and bringing about social equity. But Rural transport is now far behind requirements, and therefore, is unable to play this vital role. The system should focus on the quality of the roads and welfare of the passengers to overcome the respective issue”*

[1]

The study about the amenities provided for the welfare of bus passengers in Chandanathoppe junction revealed the difficulties facing by a common man in daily life. The attitude of a man driving any vehicle without respecting the rights of a pedestrian is causing the huge problem in our highways. For the safety of the passengers, we have zebra crossing in every junctions including Chandanathoppe junction. But the scenario is same here. From the survey, we can say that almost 70% of all random samples were complaining difficulty in crossing the road. They suggest placing a traffic signal and a traffic police to control these violations and to protect the rights of pedestrians. The other problems are like to have a footpath to avoid the dusty atmosphere in the junction. It affects all the

sections of people in the respective junction. The buses are not stopped in the assigned bus stop is another major problem which could be solved by the traffic police as suggested by the people who participated in the survey. The absence of a bus shelter is not a big problem for the passengers as compared to other problems. It is because of the more bus services in the route. They don't have to wait for a long time for the buses. But still, having a bus stop will be helpful for the aged passengers.

The other different suggestions from the survey are like placing of a camera in the junction to identify the violation of traffic rules by vehicles and pedestrians. Some people advocated for building a fly over to avoid the traffic blocks causing by the railway level cross.

Since Chandanathoppe is a very busy junction, there is also a scope of having Bus bay. "A bus bay (or turnout) is a specially constructed area separated from the travel lanes and off the normal section of a roadway that provides for the pick up and discharge of passengers. This design allows through traffic to flow freely without the obstruction of stopped buses. Bus bays are provided primarily on high-volume or high-speed roadways, such as suburban arterial roads."

According to TRANSIT COOPERATIVE RESEARCH PROGRAM – REPORT 19, "Bus bays should be considered at a location when the following factors are present:

- *Traffic in the curb lane exceeds 250 vehicles during the peak hour,*
- *Traffic speed is greater than 40 mph,*
- *Bus volumes are 10 or more per peak hour on the roadway,*
- *Passenger volumes exceed 20 to 40 boardings an hour,*
- *Average peak-period dwell time exceeds 30 seconds per bus,*
- *Buses are expected to layover at the end of a trip,*
- *Potential for auto/bus conflicts warrants separation of transit and passenger vehicles,*
- *History of repeated traffic and/or pedestrian accidents at stop location,*
- *Right-of-way width is adequate to construct the bay without adversely affecting sidewalk pedestrian movement,*
- *Sight distances (i.e., hills, curves) prevent traffic from stopping safely behind a stopped bus,*
- *A right-turn lane is used by buses as a queue jumper lane,*
- *Appropriate bus signal priority treatment exists at an intersection,*
- *Bus parking in the curb lane is prohibited, and*

• *Improvements, such as widening, are planned for a major roadway. (This provides the opportunity to include the bus bay as part of the reconstruction, resulting in a better-designed and less-costly bus bay.)”<sup>[2]</sup>*

The Chandanathoppe junction satisfies most of these factors in order to have a bus bay. But lack of space is a serious issue. People would not sacrifice their shops to welcome the new amenities.

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