

EXPANDING BUS CONNECTIVITY ON THE HMT COLONY - NUALS ROUTE IN ERNAKULAM



Gokul K Sunoj & Meghna Santosh

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**REPORT
ON
EXPANDING BUS CONNECTIVITY ON
THE HMT COLONY - NUALS ROUTE IN
ERNAKULAM**

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1. Introduction

A robust intercity transportation network is essential for any city, offering wide connectivity, frequent services, accessibility and affordability. It plays a crucial role in promoting equitable regional development, facilitating trade, and supporting education. Particularly for vulnerable populations, reliable and affordable public transportation is vital for accessing essential services.

City transportation planning is imperative to assess the demand for new bus routes, gather data on public transport usage, and devise sustainable transport solutions. However, despite Kerala's significant fleet of public transport buses, their underutilization persists due to issues like poor planning, scheduling, reliability, and comfort, as highlighted in the 2017 report "Road and Road Transport" by the Kerala State Planning Board's Working Group.

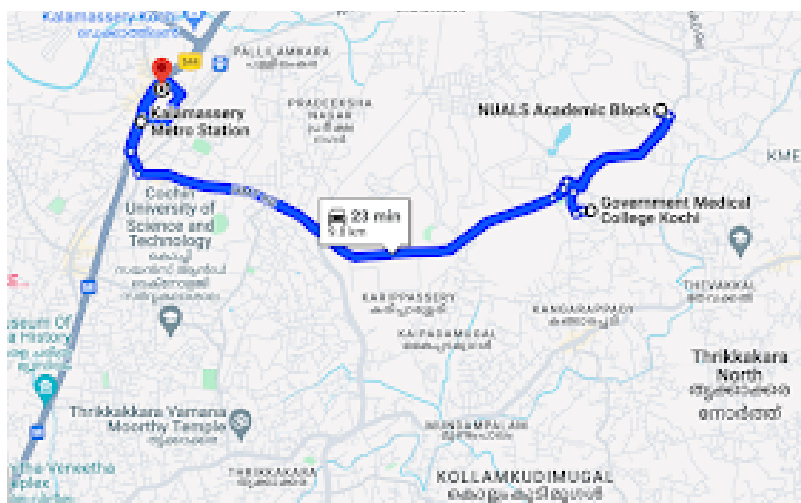
This issue is particularly evident on key routes in Kochi, such as the HMT Colony to Aluva route passing through the NAD area. This route serves important landmarks including the Government Medical College, Ernakulam, the KINFRA Industrial Park, and educational institutions like the National University of Advanced Legal Studies and the Xavier Institute of Management.

Despite being a hub of industrial and educational activities, the number of buses that ply along the route remains insufficient. Recognising these challenges, we embarked on a study to assess bus connectivity to Ernakulam Medical College in Kochi, Kerala. The inadequacy of bus connectivity along the HMT Colony - Kalamassery route has profound consequences, adversely affecting access to both affordable medical care and legal and medical education.

2. Context of the Study

The HMT Colony in North Kalamassery hosts significant institutions, including the Ernakulam Medical College and the Cochin Cancer Research Centre. Moreover, the National University of Advanced Legal Studies (NUALS), Kochi, and the Government Nursing College, Ernakulam, are also situated along this route, spanning approximately 5 kilometres from the HMT Bus Stop to NUALS. Unfortunately, this route suffers from a severe lack of connectivity, leaving students, faculty, and patients struggling to access essential medical care and education.

Fig. 1: Depicts the Distance between Key Institutions in the Area



Source: Author

According to records obtained from Ernakulam Medical College, the average outpatient count for July 2023 was approximately 976 patients. With this number expected to rise in the coming years, the demand for transportation to the hospital is increasing accordingly.

Patients, staff, and faculty have expressed concerns about the high transportation costs, as they have to resort to auto-rickshaws or personal vehicles to reach the area due to the inadequate bus services, thereby costing them more than regularly affordable. While a few buses ply along the route every 30 to 60 minutes, the buses have not been officially granted permission to proceed beyond the Government Medical College to the NUALS campus stop. Further, the bus connectivity to the area in the early morning hours, at night and during weekends is abysmal.

The poor connectivity to this area poses some serious challenges to individuals who reside here and those seeking to access it from outside. The residents of HMT Colony report long waiting times and high costs of alternative transportation. The poor connectivity also poses a major challenge to patients seeking affordable health care and healthcare workers who treat patients. This also means that law students, medical students and nursing students find it hard to access and exit this area, seriously hampering the medical and legal training of the future doctors and lawyers of the state.

However, it is important to mention that while the study was being conducted, a positive action was witnessed. Kerala Metro Rail Limited (KMRL) started a metro feeder service from Kalamassery to Medical College with an arrival frequency of 30–40 minutes, providing last-mile connectivity for metro users.

3. Methodology

Multiple types of evidence were collected, analysed and integrated to better understand the demand for bus transportation on the Kompara - Manalimukku - Medical College Route.

Phase 1: Preliminary Ground Assessment

- **Initial Site Visits:** Conducted initial visits to the route, including stops at Kompara, Manalimukku, and the Medical College, to observe current bus service patterns, passenger flow, and potential bottlenecks or challenges in service delivery.
- **Key Destination Identification:** Major institutions were identified on the route.
- **Stakeholder Identification:** Identified key stakeholders relevant to the bus transportation ecosystem along the route, including but not limited to transportation officials, bus associations, and representatives from the medical college.

Phase 2: Data Collection

- **Medical College Traffic Analysis:** The daily inpatient and outpatient statistics from the Government Medical College were collected for the entire month of July 2023.
- **Permit Analysis:** Engaged with the Road Transportation Office to obtain a comprehensive list of buses that have been granted permits to operate along the specified route. This step was crucial for understanding the existing transportation infrastructure and regulatory environment.

Phase 3: Stakeholder Engagement

- **Interviews:** Interviewed a wide array of stakeholders, including road transportation officers, representatives from bus associations, medical college authorities, bus owners, and other relevant entities.
- **Surveys:** Conducted a dual-mode survey and gathered suggestions for improving bus service on the route. A total of 110 responses were collected, ensuring a broad representation of commuter perspectives.

Phase 4: Data Analysis and Integration

- Combined insights from quantitative and qualitative data to come to a better understanding of the current state of bus transportation on the route.

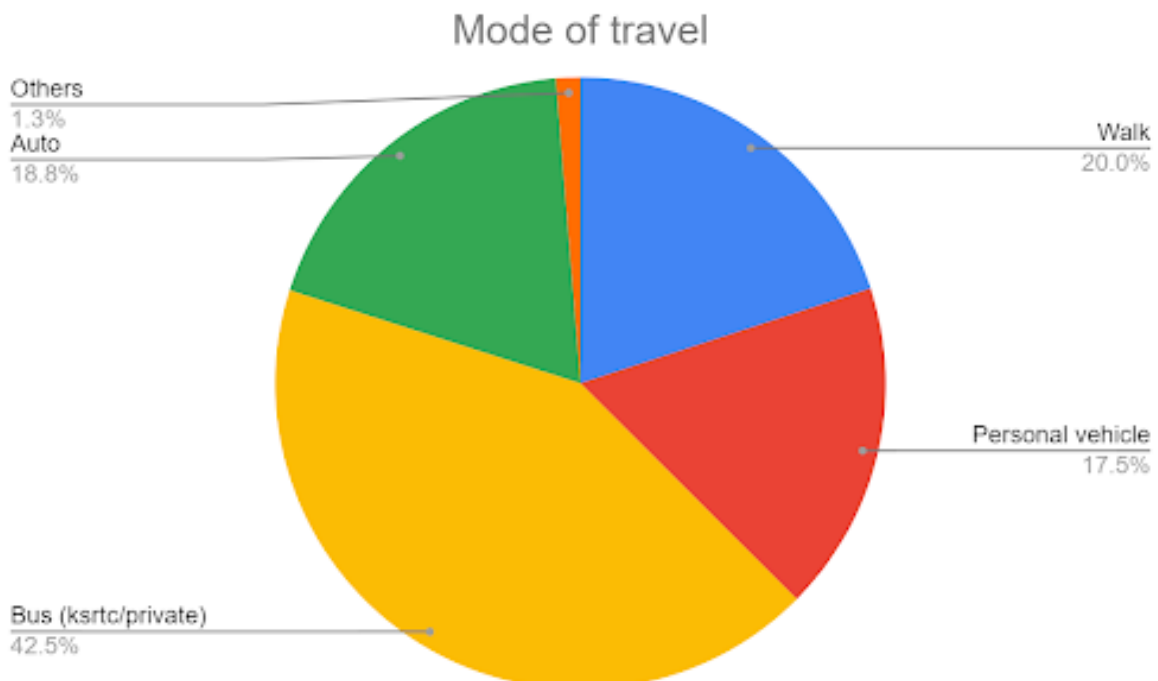
4. Key Issues and Findings

On a close analysis of the daily outpatient count of the Government Medical College for July 2023, it was revealed that the college averaged 1,019 patients per day, reaching a peak of 1,425 patients on the busiest day of the month.

Similarly, the average number of inpatient admissions for July was recorded to be 443, with a peak of 500 patients daily. Additionally, the average outpatient count for the same period stood at 976 patients. These numbers are only slated to rise in the coming years, especially with Kerala's ageing population and increasing demand for healthcare services.

According to the insights from the survey, 82% said that they visit the medical college daily, and 9% said that they visit the hospital weekly. As per the survey, 42.5% utilised bus services to reach the medical college, while 18.8% made use of auto-rickshaw services (refer to Fig. 2).

Fig. 2: Breakdown of Transportation Modes Utilised



Source: Author

Some of the key challenges we were able to ascertain are as follows:

Low frequency of buses: All respondents stated that they are required to wait at least 30-60 minutes to access bus services. An analysis of the bus permit list we secured from the RTO also indicated a low frequency of buses, as only 11 buses were authorised to operate on the route.

Table 1: Frequency of buses to Medical College Ernakulam on a day

Bus No/Route	Bus Arrival	Time Gap
KL 25 A 9018	7:02	-
KL 07 BJ 3339	7:51	49 minutes
KL 07 CC 0602	8:21	30 minutes
KL 36 E 9394	9:17	96 minutes
KL 07 BJ 3339	10: 17	1 hour
KL 07 CC 0602	11:33	1 hour 16 minutes
KL 36 E 9394	14:28	2 hours 95 minutes
KL 07 BJ 3339	15:13	85 minutes
KL 07 CC 0602	15:15	2 minutes
KL 25 A 9018	17:25	2 hours 1 minute
KL 36 E 9394	19:58	2 hours 33 minutes
KL 07 BW 1035	20:34	76 minutes
KL 07 BJ 3339	20:44	10 minutes

Source: RTO

- **Poor connectivity:** Respondents reported that they had great difficulty accessing bus services to and from the hospital. Some respondents specifically mentioned that there are no direct buses to and from key locations during the evening hours. This is also a major challenge for individuals who reside in HMT Colony and surrounding areas, as they find it hard to access their places of work, education and even basic provisions.
- **Lack of buses during specific days and time periods:** The staff, faculty and patients surveyed mentioned that there was absolutely no connectivity to the area early in the morning and after 6 p.m. in the evening, causing immense hardship for those posted on night shifts. It was also found that there is minimal bus connectivity to the area during weekends and public holidays, when most faculty and students leave the premises to head home or further into the city. They are compelled to pay exorbitant auto fees/ fuel prices to access and leave the area.
- **Bureaucratic hurdles:** In our interaction with bus owner associations, it became clear that the RTO was hesitant to grant permits to bus owners seeking to ply buses in the route. This concern of stakeholders was also reflected in the low number of bus permits (11 buses) granted. It was also mentioned that even when permits were granted, they were not extended permits enabling buses to ply till NUALS. The buses were granted permits to go only to Ernakulam Medical College. No concrete reason for the same was provided to us or came to our attention during our research. An extension of the bus routes until NUALS gates and beyond to the Kompara region will enhance the accessibility of metro service to the HMT Colony region and further.
- **Expensive alternative modes of transport:** More than 18% of those surveyed made use of auto services to access the area. These respondents emphasised the high expenses they incurred as a result. They mentioned that it costs them around Rs 150 from the HMT (bus stop nearest bus stop) to reach Ernakulam Medical College (approximately 4.1 km distance) since the demand is higher than the supply of public transport. The worries of costs are cascading realities for frequent visitors to the hospital - such as, patients undergoing dialysis and those seeking treatment at the Cancer Centre - who emphasised how they had to use auto service to come to the hospital routinely for treatment. The costly nature of auto services was also reiterated by many students and staff who frequently travel to the hospital. Many hinted at the prevalence of an auto lobby that caused auto prices to remain so high.
- **Absence of population-responsive transport systems:** It was clear from our assessment that there is a notably weak flow of vital information between departments that plan transportation facilities and institutions that are population clusters - requiring critical transport infrastructure. Though microscopic in scope and scale of assessment - our inquiry displays a classic case of severed conversations in transport planning that must, in the first instance, be remedied as institutional priorities and not left open as gaping lacunae, necessitating public intervention.
- **Lack of institutional facilitation:** There is no accessible public information pathway that disseminates details on how the civic population can suggest route modifications. This is true for addition of new routes and modifications to existing permits. The lack of a nodal officer designated to serve as a contact point for all permit-holders, KSRTC,

KMRL, and private and public bus associations is a key problem and poses considerable roadblocks. A similar yet website-centric solution was made via a 2013 Circular¹ by the GoI Ministry of Road Transport and Highways, where, for the implementation of the Central Secretariat Manual of Office Procedures, nodal officers were designated to respond to queries, along with a Quick Response Mechanism pathway setup.

5. Recommendations

The recommendations hereunder are separated into two categories:

1. Area-Specific
2. Macro/To-scale Recommendations

While the former aspires to combat the issues at the Govt. Medical College and NUALS, Kalamassery directly, the latter attempts for a systemic model to improve public transport outreach to all similar blindspots in the city.

Area Specific Recommendations

- **More permits must be granted to bus owners and the permits granted must be extended till HMT Colony-NUALS:** The current rate of buses granted permits by the RTO is inadequate to cater to the demand of the region. A memorandum is to be submitted to the collector calling for increased bus permit grants along with an extension of permits till NUALS. The existing water metro feeder services can also be extended to NUALS to provide better connectivity. It is also necessary to ensure that buses that have already been granted permits are plying those routes.

- **Alternatively, shared auto-rickshaw permits can be explored for first/last mile-connectivity:** While sharing/pooling is a default pattern for students acquainted with each other (from both NUALS and the Medical College), a well regulated sharedautorickshaw service with a demarcated public information system adjacent to designated autorickshaw stands (with both shared and hired autorickshaws) can help commuters visiting the Medical College premises opt for an affordable service to reach their destination or to access other public transport services.

- **Ensure that buses are plying the route at night, weekends and holidays:** The Government Medical College in particular needs to be accessible to the public and staff at all times. Therefore, it is vital that buses ply the route on all days and even at night. A large number of staff and students work night shifts, and they reported their inability to leave at night. Patients and their families also need these services at night to exit the area. The concerned area is largely deserted at night, making travel further risky for female patients, staff and students. The need for safe and affordable public transportation becomes even more vital under these conditions.

- **Conduct a large scale demand study to incentivize bus owners to operate on the route:** While our sample and study therefrom showed a significant need for connectivity, a larger scale of data collection and demand study will better reflect the genuine needs of the people for affordable transportation.

¹ Circular No: 1-34016/ 03/ 2013-IT, Quick%20Response%20Mechanism.pdf

<https://morth.nic.in/sites/default/files/establishment/IT-2013.08.21->

Macro/To-scale Recommendations

- **Establish an app for the flow of information between civic interests and transport-service providers**, along with an aspirational directive to keep abreast of population clusters such as hospitals, educational institutions, commercial parks, etc. Encourage civic feedback loops for transport facilities to periodically update, upgrade and modify travel routes, shuttle-times and associated permits.

6. Actionable Directions From the Stakeholder Interactions

In our efforts to address existing issues, we engaged with the District Transport Commissioner's Office at the Civil Station, Kakkanad. We initiated this interaction by drafting a Request Letter (see Annex 1) and subsequently received a comprehensive compilation of all bus permits assigned to the relevant routes.

While the raw data initially provided limited insight into resolving the issue, discussions with stakeholders on the ground, including representatives from the Bus Owners Association, revealed a notable absence of permits for certain routes, particularly the stretch between the Medical College and the University, in recent years. However, these stakeholders expressed a keen willingness to operate buses on these routes should permits be made available. Addressing this will necessitate a thorough assessment followed by appropriate intervention, for which we were directed to submit an official memorandum to the District Collector of Ernakulam.

7. Conclusion

The current state of bus connectivity is heavily inadequate on the target route, hindering access to primary health care and worsening health outcomes. There is a need to act swiftly to boost access to the area so that the most vulnerable can access the care they need and do not slip within the cracks.

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