

# An Exploration of Inclusion Gaps:

An Assessment of the Transport Sector

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The Centre for Poverty Analysis

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# Executive Summary

The main objective of this study is to understand and evaluate the availability of transport to access basic services such as health and education.

The study is a follow-up analysis which entailed exploring budgetary allocation for transport and health sectors in Sri Lanka.

Prior to data analysis of the follow up study, a consultation was conducted with industry experts including academics, researchers, trade unions as well as representatives from National Transport Commission (NTC) in order to identify sources of data for the proposed study.

Main sources of data included published reports and data from Sri Lanka Transport Bus (SLTB), National Transport Commission (NTC), Department of Railways, Ministry of Transport and Highways, Ceylon Petroleum Corporation (CEYPETCO), Central Bank of Sri Lanka (CBSL) and Department of Census and Statistics (DCS). Analysis of descriptive statistics using these data sources are presented in this study. In addition to these data sources, Key Person Interviews (KPIs) and Focus Group Discussions (FGDs) were used to enrich the study.

A primary limitation of this study is the restrictions encountered when accessing data freely. For example, data on number of bus halts (physical bus stops) per route would enrich the analysis which then could be used to assess access through network analysis. Furthermore, data on Willingness to Pay (WTP) for both passengers who use public transportation as well as personal vehicles would give insights on whether policy makers could increase their revenues as well as improve public transportation for higher costs and better services. In addition, the study is limited to non-platform-based modes of transportation restricting exploring access through three-wheelers and other modes of transportation on ride-hailing digital platforms.

Access to transportation can be gauged through two variables; through distance/time and cost. Evidently, HIES (2019) reports individuals from Colombo as having the highest expenditure for transport while the lowest is for districts such as Nuwara Eliya and Mullaitivu. Expenditure on transport for schooling is highest for districts; Gampaha, Colombo, Matara and Kegalle. Data for time to reach a secondary school is highest for students in Nuwara Eliya which is nearly half an hour while it takes about 15 to 20 minutes in general. Shortest time taken to reach a hospital is recorded for districts such as Ampara and Kurunegala and longest for Nuwara Eliya, Mannar, Kilinochchi, Trincomalee and Monaragala.

The KPIs reveal that use of PPPs as a means of financing the transport sector in the country is discouraged given that the capital invested on local projects does not have a trickledown effect as expected in other countries.

- Identify priority areas to increase accessibility
- Declare some roads as agricultural routes
- Awareness sessions on gendered passenger safety
- Universal design for PWDs and limited mobility
- Explore the willingness to pay for transport services
- Share land ownership in a manner that is conducive for infrastructure development
- Allocation of budgets to Pradeshiya Sabha needs to be context specific
- Regulation and monitoring of private transport
- Consolidated and freely accessible data
- Enabling discussion on country specific transport policy

# Introduction

In the vibrant tapestry of Sri Lanka's landscape, transportation plays a vital role in weaving together the threads of accessibility, connectivity, and progress. As the island nation continues to evolve, understanding the dynamics of its transport system is paramount to enhancing the lives of its diverse population. This study attempts to highlight some of the significant aspects of transport and health amidst the economic crisis we are facing today. The first phase of this study revealed that the transport sector's shortcomings mainly stemmed from the fact that it had not had a policy upgrade since 1992. In the absence of an upgraded policy framework, service provision of this sector was found to be inequitable. The main findings of the initial report illustrated the absence of universal design in both infrastructure and fleets purchased for transport provision, leaving out a faction of society and their concerns on accessing transport. Secondly, gendered passenger safety also emerged from the data examined and this was identified to be a result of the limited capacity of fleets (trains and buses) available which results in a compromising of one's personal space and safety. Although harassment on public transport was identified to be a common occurrence, action against such incidents was identified to be difficult due to personal, societal, cultural reasons as well as poor responsiveness by responsible authorities. Lastly, it was revealed that many rural areas of the country lack adequate transport services due to the 'uneconomical' status of routes. This had resulted in poor connectivity between places and had led to an increase in use of private transport. Increased

reliance on private transport also meant a large sum of one's earnings being spent on transport monthly.

The first phase of the study relied on industry experts, academics, and policymakers in studying equity in policies in the transport sector and budgetary allocations for them. Such data resulted in more of a macro and general look at prevalent issues in the sector. This phase of the study looks into the nuances of available data sets and drills down to all levels (district, provincial, etc.) possible focusing specifically on physical access to education and health. In addition, this phase has also conducted consultations with relevant communities to study the state of service provision at the ground level. More details of this are explained in the following section.

## Budgetary Review

The budgetary review for the transport sector in 2023 reveals several key insights.

Firstly, the budget for 2023 had allocated Rs. 87 billion for land transport while Rs. 305 billion for roads and infrastructure development (Treasury, 2023)

Majority of these development activities are often funded by international organizations like the World Bank, Asian Development Bank, and EXIM. When examining significant investments in the transport sector (2021-2023), the Ministry of Transport has prioritised road development. Maintenance and enhancement of railway services also received substantial funding in all three years.

# Methodology

## Research questions:

1. How accessible are basic services such as education and healthcare through public transport?
  - a. How accessible is suva seriya, sisu seriya, gemi seriya across urban, rural and estate sectors?
  - b. What is the availability of public transport in terms of routes, fleet and scheduled trips in selected areas of study? How are these reflected in the services access by the Upcountry Tamil community?
2. How accessible is public transport (both services and infrastructure) for persons with disabilities and persons with limited mobility? How does the public transport sector of Sri Lanka account for gendered passenger safety?<sup>1</sup>
  - a. How is the state of gendered passenger safety and accessibility for PWDs in the estate sector?
3. What are the bottlenecks that are encountered for PPPs?

## Data Collection and Data Analysis:

### Quantitative methods:

Research question (1) is explored via data gathered through existing published secondary data. However, the analysis of access to various sectors was quite restrictive given the barriers we faced in reaching out to respective authorities such as the Sri Lanka Transport Board (SLTB) and Plantation Human Development Trust (PHDT). Hence, the quantitative analysis comprises only what had already been published (Reports published by the Ministry of Transport, the Central Bank, and National Transport Commission).

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<sup>1</sup>Research questions (2) and (3) in the methodology section and concept note are combined as one question when writing in this paper.

Furthermore, in order to identify data sources and map them, the WFD and the Economic Inclusion Working Group (EIWG) organized an FGD with industry experts in academia in order to map and identify existing data during the early stages of the study. While their insights were useful, main bodies such as SLTB, NTC were responsive but were reluctant to disseminate data which was not published on their websites.

While a perception survey was designed to gather data for the (2) research question, given the low number of responses, primary data analysis was unsuccessful. Hence, the analysis is restricted to qualitative data.

For the research question (3), analysis of the existing literature was the main source of data identified, complemented by one Key Person Interview (KPI) with an industry expert and academic to understand whether PPPs are feasible for Sri Lanka.

### Qualitative methods:

The qualitative data collection component included field visits to the Estate sector of the country. The communities residing in the visited areas are referred to as Upcountry Tamil community (Malaiyaha Tamil) in the report in keeping with their self-identification; however, Estate sector and Estate areas will be used when referring to the geographic area and locations where these communities live and work. The research team conducted nine community consultations in the form of FGDs in four tea estates; they are namely, the Batallagalla estate in Hatton, Gordon estate in Nuwara Eliya, Spring Valley in Badulla, and Uduwara estate in Hali Ela (Badulla). These FGDs included the categories of the elderly, young mothers, men working in and around the estates, and the youth. In addition to these community consultations, the team also conducted four consultations with government officials and community-based organisation in Kandy. One FGD was also conducted with

healthcare providers at the Madulkele divisional hospital, and another one with midwives and Divisional Secretariat workers in Panvila (see Appendix B for a full list of the consulted persons). The data was collected through semi-structured interviews and discussions and was anonymised. This data was analysed using a thematic analysis approach and the derived findings were then read against equitable service provision.

The rest of the report is structured as follows. First, take a look at the macro-economy and how prices have influenced transportation in the country. Then the study looks at the accessibility of health and transport sectors across the districts given the lack of access to segregated data on urban, rural and estate sectors. The study then explores gendered access to transportation and for people with disabilities (PWDs) and limited mobility. This is followed up with a brief literature analysis of PPPs using available literature on PPPs. Lastly, the report will include a case study of the Upcountry Tamil community's access to and use of transport services. This case study is presented separately for the sake of clarity and flow in the report.

### The impact of Inflation on transportation

Inflation is one of the key indicators that reflects prices in the macroeconomy. The Department of Census and Statistics (DCS) publishes two types of inflation data<sup>2</sup> : core inflation which excludes volatile components such as energy and transport, and inflation rates which includes these components. Figure 1 below represents

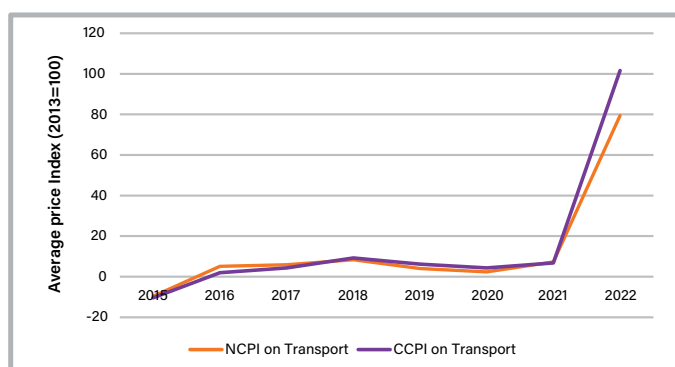


Figure 1 Annual Average Price Index of Transport (2013=100)  
Source Economic and Social Statistics Reports, Central Bank (2017-2022)

how inflation had changed since 2015 up to 2022 specifically within the transport sector

Both the National Consumer Price Index (NCPI) and Colombo Consumer Price Index (CCPI) exhibited a consistent upward trend, indicating an increase in the overall price level of goods and services related to the transport sector. It is important to consider that these inflationary trends were influenced by various factors, including the impact of the COVID-19 pandemic and the 2022 economic crisis, as well as oil shortages. In the early years, from 2015 to 2017, inflation in the transport sector was relatively stable, with moderate increases in both the NCPI and CCPI. However, from 2018 onwards, inflation rates started to escalate more rapidly, coinciding with the onset of the economic crisis in 2019.

In 2020, the Covid-19 pandemic had a significant impact on the global economy, leading to reduced economic activity, travel restrictions, and disruptions in supply chains, including the transport sector. This resulted in a relatively lower increase in inflation within the transport sector compared to the previous years. As the world started to recover from the effects of the pandemic, inflation rates saw a notable rise again, reaching their highest levels since 2015. This could be attributed to the pent-up demand, increased energy prices, and other economic factors that influenced the transport sector. The inflation on the transport sector surged drastically, with the NCPI and CCPI reaching unprecedented levels of 229.6 and 252.3, respectively in 2022. The 2022 economic crisis and oil shortage could have contributed to this sharp increase in inflation, leading to soaring transportation costs and impacting the overall cost of living for the public.

<sup>2</sup> Inflation statistics are calculated by the Department of Census and Statistics in Sri Lanka which comprises of various baskets such as food, energy, transportation. The data extracted here are specifically for transportation published by the DCS

## How accessible are basic services through public transportation in Sri Lanka?

### Overview of the public transportation in Sri Lanka

With respect to transport, data from various sources such as National Transport Commission (NTC) and the Central Bank of Sri Lanka (CBSL) reveals data on modal share of transportation (the mode of transportation presented as a percentage) in their respective reports. The modal share extracted from the NTC reveals that 70% of the modal share is between motor cars, three wheels and buses for the year of 2020. The share of trains as a mode of transportation is less than 2% according to the most recent NTC reports (2020).

Comparatively, the CBSL also captures data on vehicles operated except for railways by province. Out of the total vehicles, nearly 70% of the

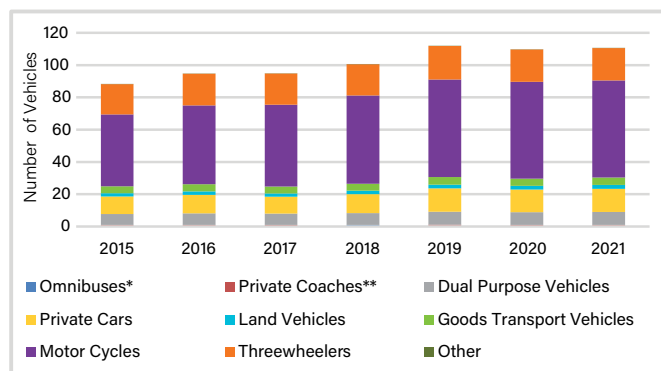


Figure 2 Vehicles per province  
Source Economic and Social Statistics Reports, Central Bank (2015-2022)

vehicles<sup>3</sup> in general are either motorcycles, three-wheelers or private cars from the year 2015-2020 (Figure 2). Interestingly, omnibuses which are defined as buses (either SLTB or private) with route permits are less than 1% across the years. Out of the 1% of omnibuses that operates in the

<sup>3</sup> Land vehicles are tractors and hand tractors

nine provinces, irrespective of their ownership, 41% of the total share of omnibuses for the year 2020 is from Western Province while the second and third highest at 13% and 9% each are recorded from Central Province and Southern and North Western Provinces. The lowest share of omnibuses is recorded in the Eastern Province.

### State Buses and Railways provision

#### State buses (Sri Lanka Transport Board - SLTB)

The Gami Seriya rural bus service, initiated in 2005, aimed to enhance accessibility for rural communities and fulfil their daily needs. This project aims to provide a reliable and affordable passenger transport services for individuals who lack adequate transportation options. By identifying uneconomical routes and providing funds to service providers operating these routes, especially during off-peak hours, the project ensures essential services are available to the public despite economic challenges.

Despite efforts to address transportation gaps, the project's expansion over the years (2015-2021) suggests a mixed picture. The data shows a growth in the number of buses introduced in various provinces; for instance, the North Western and Eastern regions saw an increase from 1 to 4 and 6 to 9 routes, respectively. This expansion indicates an effort to extend the service's reach to underserved areas.

However, over more than 15 years, the improvements in the Gemi Seriya Project appear to be quite insignificant, with a noticeable decline in the number of buses. From 2015 to 2018, the total count of Gemi Seriya buses dropped from 21 to 7, only to slightly rebound to 13 by 2021.

It's important to note that the service is notably absent in certain provinces, such as Northern, Southern, North Central, Sabaragamuwa, and Uva. These data identify that investments by the SLTB should be concentrated more in such areas to ensure that commuters from these districts are



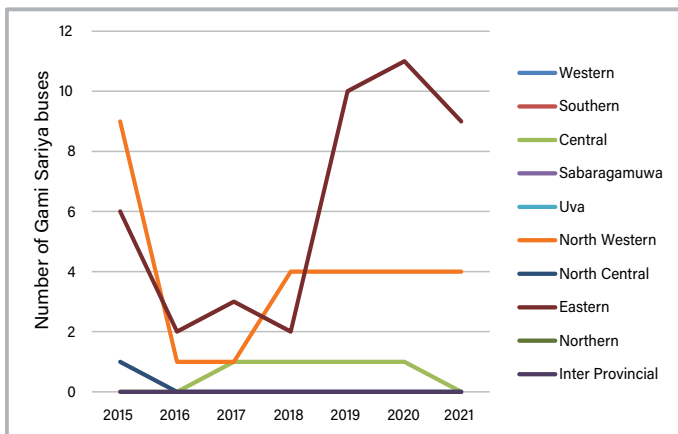


Figure 3 Gemi seriya buses operating  
Source: Annual Statistical Reports of National Transport Commission (2015-2021)

not restricted to access services due to lack of connectivity between cities and rural areas.

The Figure 4 reveals distinct patterns in the availability of Nisi Seriya buses (buses that identify specific routes to provide transportation during night time) across different provinces during this period.

Notably, the service saw a significant presence in the Western Province, with a consistent number of 62 buses available from 2020 to 2021. In the Southern Province, the service gradually expanded from 26 buses in 2015 to 40 buses in 2021, indicating a consistent growth trajectory.

The Central Province experienced a notable surge in availability, particularly in 2021, with 64 buses, compared to the initial count of 20 buses in 2015.

The Sabaragamuwa Province demonstrated a varying trend, with a peak of 11 buses in 2019 before reducing to 8 buses in 2021.

The Uva Province also showcased growth, with 12 buses available in 2021, compared to 7 buses in 2015. The North Western Province exhibited fluctuations, with 21 buses available in 2021 after experiencing a dip in 2018.

Similarly, the North Central Province maintained a relatively stable presence, fluctuating between 3 and 11 buses over the years.

One of the most noteworthy trends appears in the Eastern Province, where availability surged dramatically from 2019 to 2020, with the number of buses rising from 1 to 37. This trend indicates a significant expansion effort in that province, although the number decreased to 3 buses in 2021.

Despite these regional fluctuations, the overall trend in the total number of Nisi Seriya buses indicates growth over the years, increasing from 134 buses in 2015 to 226 buses in 2021.

To assess the initiative's effectiveness, it's crucial to consider its objectives. The primary objective of the "Nisi Seriya" initiative is to provide reliable and convenient late-night public bus services in urban and suburban areas.

By closely monitoring their operations, the initiative intends to encourage both public and private bus operators to maintain consistent and high-quality service standards during night time hours.

Ultimately, the goal is to enhance accessibility, convenience, and safety for passengers traveling during late-night hours while promoting the growth and efficiency of the public transportation system. The expansion of the service across provinces suggests progress in this direction.

In conclusion, the analysis of Nisi Seriya Service buses highlights a mixed scenario of growth and fluctuations across provinces.

While the service has expanded its reach over time, regional variations and the need for sustained efforts to bridge transportation gaps call for continuous evaluation and strategic enhancements.

Evaluating the initiative's alignment with its objectives and its actual impact on the communities it serves will provide a comprehensive understanding of its success and areas for improvement.

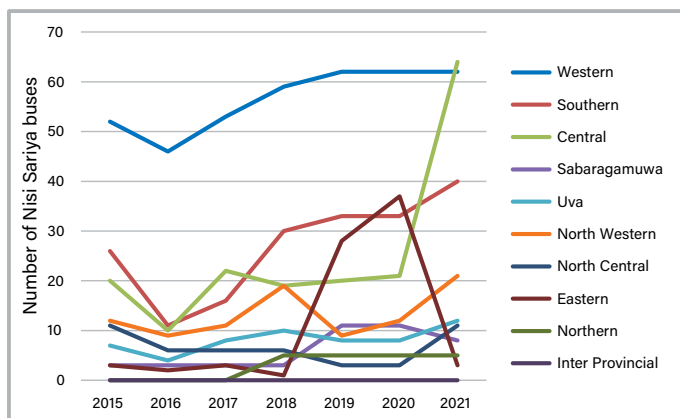


Figure 4 Nisi Səriya bus operations  
Source: Annual Statistical Reports of National Transport Commission (2015-2021)

### Railways (Sri Lanka Railway Authority)

According to the data captured by the Ministry of Transport and the National Transport Commission, the Main Line consists of 46 main stations and 22 halts (with a total length of 291 kilometres) while the Northern Line, consists of 2 main stations and 24 halts (with a total length of 41 kilometres). This ratio of stations to length is indicative of a well-distributed station network along the Northern Line, which plays a pivotal role in ensuring accessibility to the northern region. The stability in the number of stations implies a relatively consistent level of accessibility even when the total length of the line changes. The Coastal Line maintains 36 main stations while other railway lines such as Batticaloa and Trincomalee consists of a few main stations depending on the total length of the respective line (for more information please refer appendix A)

The Main Line and the Northern Line, despite variations in total length, manage to maintain stable station networks. This consistency plays a pivotal role in ensuring uninterrupted accessibility. However, the Coastal Line's variations in halts may necessitate closer attention to guarantee equitable accessibility along its entire length (see appendix A for more information). Railway lines with fluctuating station and halt numbers should be continuously monitored to address potential disparities in accessibility.

## Cost Analysis on Transportation

### Diesel Prices Fluctuations

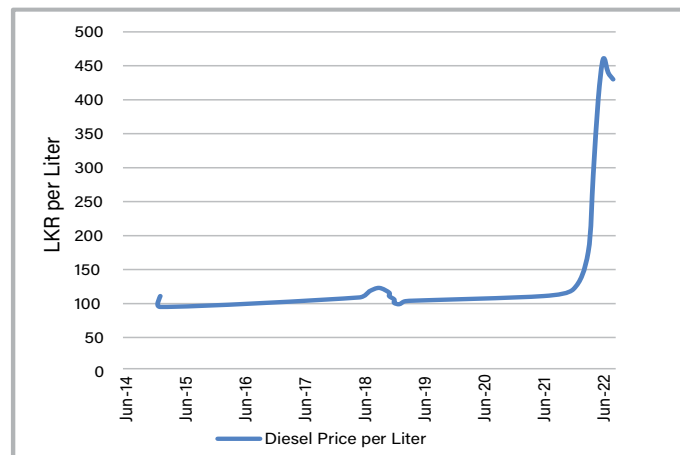


Figure 5 Diesel price per litre (2014-2022)  
Source: Annual Statistical Reports of National Transport Commission and Ceylon Petroleum Corporation (2014-2022)

Analysing the diesel price increase in Sri Lanka over the years reveals a significant escalation in fuel costs, with particular attention to the challenging period in 2021 and 2022 when the country faced an acute oil shortage amidst its economic crisis.

Between June 2014 and May 2015, the diesel price per liter remained relatively stable, hovering around 95 to 121 Sri Lankan Rupees. However, in June 2016, the price dropped to 95 Rupees and remained at this level until December 2017. This stability in diesel prices can be attributed to various factors, including government subsidies and global oil price fluctuations.

The price fluctuations started in May 2018 which forced the government to increase the fuel prices. Subsequently, the fuel prices kept increasing throughout the year; specifically in September and November 2018.

Starting in January, the price surged to 176 Rupees per liter, reflecting the early stages of the oil crisis in Sri Lanka. This crisis intensified in April 2022 when the price skyrocketed to an unprecedented 289 Rupees per liter, causing significant economic challenges and public outcry. By June 2022, the situation worsened further as the price reached

an astonishing 420 Rupees per liter. The year 2023 began with a diesel price of 405 Rupees per liter, indicating the persistence of the oil shortage crisis and its severe impact on the Sri Lankan economy. However, it should be noted that these price fluctuations may have been influenced by the introduction in fuel price formula in 2018 and reintroduction in May, 2022.

In conclusion, the analysis of diesel price trends in Sri Lanka demonstrates a notable increase in fuel costs over the years, with a particularly steep and concerning surge in 2022. The oil shortage crisis in 2021 and 2022 exacerbated the situation, causing economic hardships and public discontent. It is crucial for Sri Lanka to address the root causes of this crisis, such as its economic challenges and oil supply issues, to ensure the stability, affordability as well as sustainable utilising of essential fuels like diesel in the future.

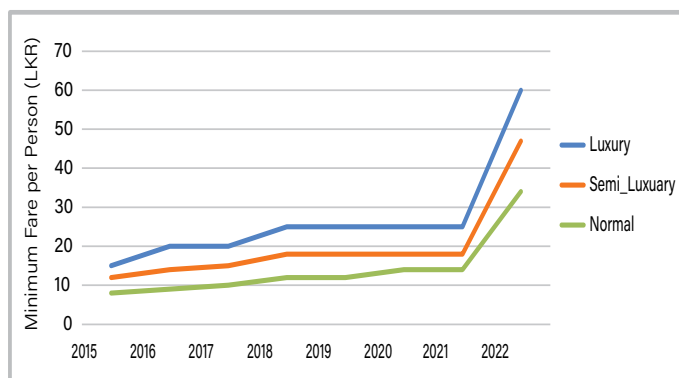


Figure 6 Bus fares of services (2015-2022)  
Source: Annual Statistical Reports of National Transport Commission (2015-2022)

The analysis of bus fare data reveals distinct patterns for different bus types over the years. For luxury buses, the minimum fare gradually increased from LKR 15 units in 2015 to LKR 25 in 2019, and then it remained constant at LKR 25 from 2020 to 2022. However, there was a notable spike in 2022, with the minimum fare jumping

<sup>4</sup> As of 6th of October 1 Euro is equivalent to 340 LKR (Source: Central Bank of Sri Lanka)

to LKR 60. Similarly, the minimum fare for semi-luxury buses showed a gradual increase, reaching LKR 15 in 2017 and then remaining constant at LKR 18 from 2018 to 2022, with a slight increase to LKR 47 in 2022. As for normal buses, the minimum fare consistently increased from 8 units in 2015 to LKR 12 in 2019, and then it further increased to LKR 34 in 2022 with the economic crisis.

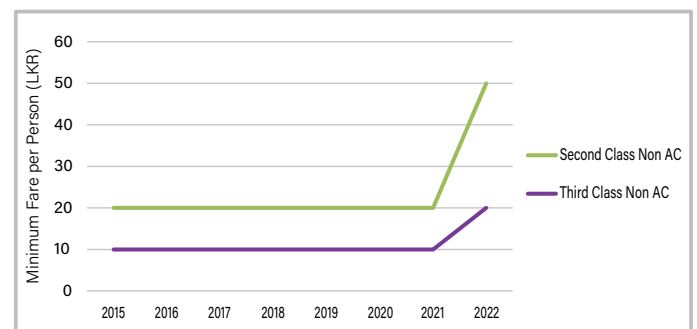


Figure 7 Train fares (2015-2022)  
Source: Annual Statistical Reports of National Transport Commission and Department of Railways

Figure 7 presents the railway fare for different classes over the years from 2015 to 2022. There are three classes: First Class with AC, Second Class Non-AC, and Third Class Non-AC.

In 2015, the fares for all classes were relatively low, with First Class with AC at LKR 40, and Second Class Non-AC and Third Class Non-AC both at LKR 20. However, in 2016, there was a significant increase in the First Class with AC fare, jumping from LKR 40 to LKR 1000. This substantial increase may be attributed to various factors, such as changes in operating costs, upgrades in facilities, or adjustments in pricing policies.

From 2017 to 2022, the fares for First Class with AC remained stable at LKR 800, while the fares for Second Class Non-AC and Third Class Non-AC remained constant at LKR 20. The consistent fares during these years suggest that the railway authorities aimed to maintain fare stability for the economy and second-class passengers.

In 2022, there is a slight increase in the Third Class Non-AC fare, going from LKR 10 to LKR 20. However, there is no data available for the First Class with AC fare in 2022, making it difficult to assess whether there were any changes in that category during that year.

The data indicates that there have been significant fare adjustments in the First Class with AC fare in the past, while the fares for the other classes have remained mostly constant over the years. The fare increases may have been implemented to cope with inflation, rising operational costs, or to fund infrastructure upgrades and improvements.

Overall, it is essential for the railway authorities to strike a balance between fare adjustments and ensuring accessibility and affordability for passengers. Periodic fare reviews should consider the economic conditions, public needs, and the sustainability of the railway system to provide efficient and convenient transportation services for the public.

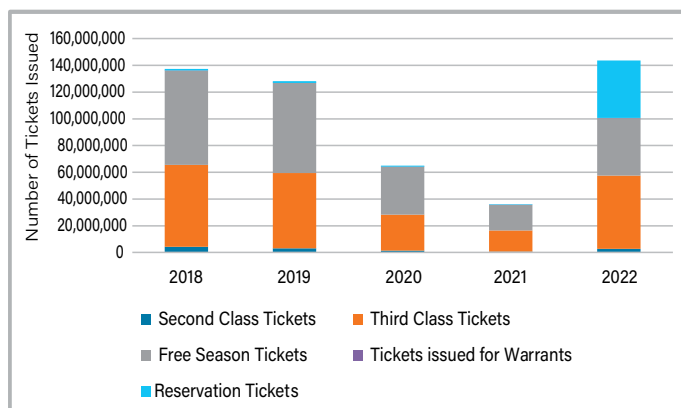


Figure 8 Issuance of rail tickets  
Source: Ministry of Transport and Highways (2017-2022)

Figure 8 illustrates the issuance of rail tickets, with data sourced from the Ministry of Transport's Railway statistics. A noticeable trend emerges from the graph: there has been a consistent rise in the issuance of reservation tickets. Both third-class and second-class tickets have witnessed an increase in numbers. However, it's worth noting that the issuance of season tickets experienced a decline in 2022 compared to preceding years.

This data reveals intriguing insights into the utilisation of rail transportation. Despite fare increases, rail travel remains a popular choice among commuters. The rising costs associated with private vehicle ownership may play a role in this preference for rail transport. In summary, Figure 9 demonstrates a growing demand for rail travel, particularly in terms of reservation, third-class, and second-class tickets. This trend suggests that the convenience and affordability of rail transportation continue to attract passengers, even as fares rise. Additionally, the impact of escalating private vehicle expenses on commuter choices becomes evident in this data.

### Per Person Expenditure on transport

The analysis of average per-person transport expenditures, drawn from the Household Income

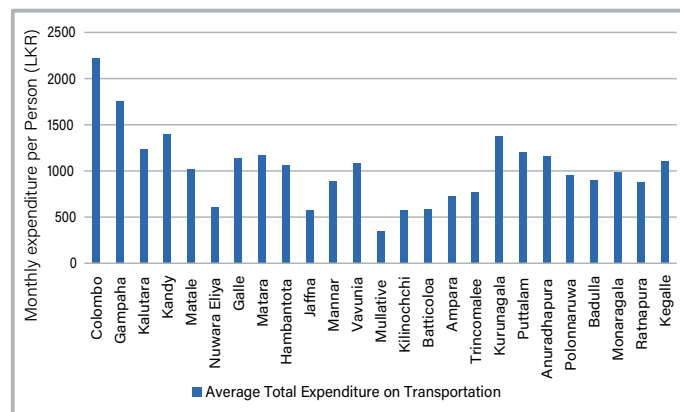


Figure 9 Monthly expenditure on transport per person (2019)  
Source: Household Income and Expenditure Survey (2019)

and Expenditure Survey 2019, reveals distinct spending patterns across various districts. The graph visually depicts these expenditure trends. Notably, urban and semi-urban districts such as Colombo, Gampaha, and Kandy demonstrate higher transportation expenses. Colombo, for instance, exhibits a substantial expenditure of approximately Rs. 2,222 per person, followed closely by Gampaha with Rs. 1,760. In contrast, the remaining districts show lower averages, generally below Rs. 1,400 per person.

Considering districts with estate regions, Kandy and Matale portray relatively higher expenses, reaching Rs. 1,402 and Rs. 1,019, respectively, in 2019. Similarly, regions like Southern, Northwestern, and Anuradhapura indicate expenditures exceeding Rs. 1,000 per person for transportation. Notably, within the Northern Province, Vavuniya records the highest transportation expenses at Rs. 1,086, while Mullaitivu stands at a markedly lower Rs. 353. The interplay between transportation demand and spatial factors such as district or whether the individual is from a rural/estate or urban sector can significantly impact these variations.

### Access to education and health

Access to basic services can be analysed through various components such as cost, distance and time available in a particular region.

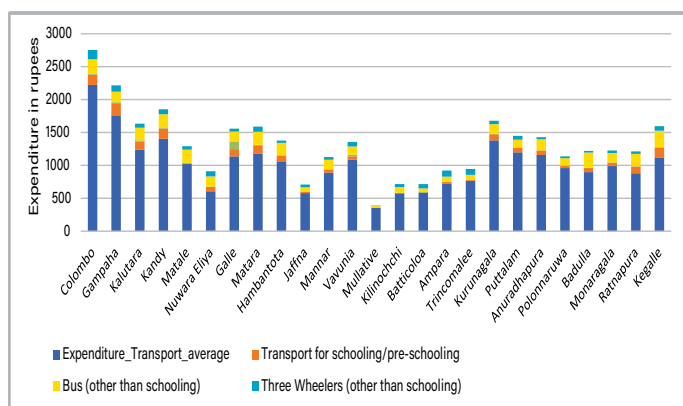


Figure 10 Expenditure per month on various modes of transportation  
Source: Household Income and Expenditure Survey (2019)

Figure 10 presents monthly expenditure on transportation according to respective districts. The highest expenditure across all transportation is reported from Colombo, Gampaha, Kurunegala and Kegalle while the lowest expenditure is reported from Nuwara Eliya, Mullativu, Jaffna and Kilinochchi. Expenditure on transport for schooling is recorded highest in Gampaha, Colombo, Matara and Kegalle.

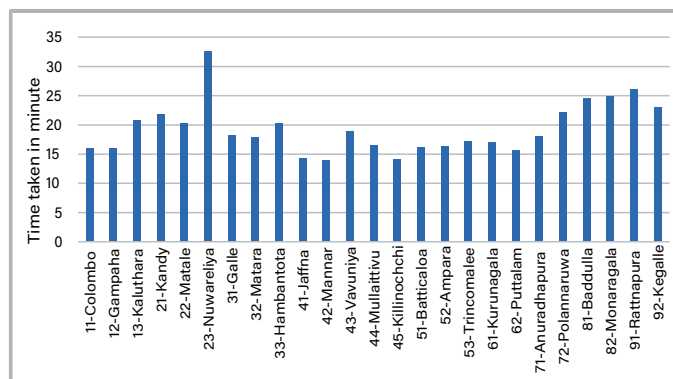


Figure 11 Time taken to reach a secondary school by district  
Source: Household Income and Expenditure Survey (2019)

Figure 11 sets out number of minutes taken to reach a secondary school by district. The data reveals that students in the Nuwara Eliya district take nearly half an hour to reach a secondary school while students in other districts takes less than 25 minutes to reach a school. The data which represents the distance to a secondary school by each district also coincides with the time taken to reach a secondary school where the distance to a secondary school by each district is highest for Nuwara Eliya and lowest for districts Jaffna, Mannar, Ampara and Gampaha (Refer appendix 1)

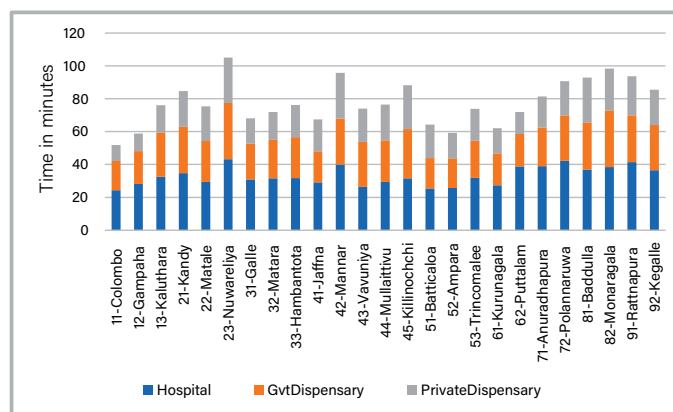


Figure 12 Time taken to reach a hospital or a dispensary  
Source: Household Income and Expenditure Survey (2019)

Figure 12 presents time taken to reach a healthcare institution by district. Colombo district records the lowest time taken to reach a hospital along with districts such as Ampara and Kurunegala. The longest time taken to reach a hospital is reported in Nuwara Eliya, Mannar, Kilinochchi, Trincomalee and Monaragala.

## PPPs as a means of financing transport in Sri Lanka

Public-Private Partnerships (PPPs) have emerged as a crucial mechanism for infrastructure development and service delivery worldwide (ADB, 2020). In the Sri Lankan context, PPPs have gained significant attention and have been employed across various sectors, reflecting the nation's commitment to fostering economic growth and improving public services. This literature review explores the evolution, challenges, and achievements of PPPs in Sri Lanka, shedding light on Sri Lanka's experiences and the broader implications for effective PPP implementation.

According to the World Economic Forum, Private Public Partnership (PPP) involves long-term contractual agreements between public authorities and private sector companies. PPP aims to finance, design, implement, and operate public sector facilities and services.

Sri Lanka has laid down a favorable legal and regulatory framework to foster Public-Private Partnerships (PPPs). The PPP Act of 2019 and the establishment of the PPP Unit within the Ministry of Finance have been instrumental in shaping PPP initiatives within the nation (Ministry of Finance, Sri Lanka, 2019).

In the realm of transportation infrastructure PPPs, the Queen Elizabeth Quay of Colombo Harbor (QEQ) project stands out as a success story (Herath, 2009). This case study identified critical success factors that contributed to the QEQ project's positive outcomes, including competent private sector providers, measurable output and outcome specifications, a well-developed legal, regulatory, fiscal, and economic framework, sufficient time for PPP planning and procurement, compatibility of project goals, credibility, transparency, appropriate PPP structure, consideration of existing infrastructure, careful project selection, and manageable interfaces with

other projects or existing contracts (Herath, 2009). Interestingly, factors such as avoiding delays, conducting feasibility studies, political stability, and environmental impact statements were found to be non-critical for the success of the QEQ project (Herath, 2009). This highlights the need for a nuanced approach when evaluating the determinants of success in PPPs, as specific project contexts may influence the significance of various factors. Overall, these findings underscore the multifaceted nature of PPP implementation in Sri Lanka, requiring targeted improvements and a better understanding of the intricacies involved in public-private collaborations.

In accordance with Kelegama's observation in 1999, Sri Lanka's history with (PPPs) has been marked by challenges and setbacks. The country embarked on ambitious PPP projects without establishing a robust legal and regulatory framework beforehand.

In light of these barriers, it is imperative for Sri Lanka to consider adopting institutional measures and approaches followed by countries like India, Pakistan, South Africa, and the USA, where PPPs are promoted as efficient financing mechanisms for infrastructure projects (Dabarera, G.K.M. et al., 2019). Addressing these multifaceted barriers is crucial to unlock the potential benefits of PPPs in Sri Lanka's infrastructure development.

Feasibility of PPPs from existing case studies as well as Key Person Interviews (KPIs) indicate that PPPs in Sri Lanka have often failed to produce expected results in the transport sector as well as in the health sector. For example, Yatanwala and Jayasena (2008) highlight that the Colombo-Katunayake Expressway was unsuccessful through two risks that the project had to face: political risk and the traffic risk such as users' willingness to pay and revenue generation. In one of the most recent studies, Kim et al. (2019) raise some of the key challenges in implementing PPPs in the transport sector in Sri Lanka such as implementation delays, a complex

transaction process which is identified as having multiple layers within the existing system, lack of transparency and the existing red tape which the study finds as “insufficient” or “inadequately robust.”

The study further explains crucial elements such as increased transparency, streamlined decision making, political stability and public awareness as some of the key improvements that need to be made (Kim et al., 2019). In addition, a KPI revealed the importance of making government run services more efficient in terms of providing services and operating.

## Transport for the Upcountry Tamil Population

### Availability of services

According to community members in the Central province, bus services in and around the estates are scheduled to run at certain times and they are commonly referred to as timed-bus or time-bus. Although schedules are provided and agreed upon, according to respondents, oftentimes these buses cannot be relied on. Due to the small number of fleets available in the area, buses are scheduled sparsely throughout the day. Routes are connected through multiple buses and connectivity and access to certain places depends on the efficiency and punctuality of these timed-buses. This punctuality, however, cannot always be expected;

“Since the roads are damaged, buses frequently break down, and this would happen after two to three rides ;

“Scheduled time of the buses only focuses on school children; it does not consider those who are service providers”;

“...apart from these two buses, there is a bus across ‘Pitiyegedara.’ However, the availability of the bus on everyday basis cannot be guaranteed” (FGD, Panvila, 2023)

The conversations with respondents further revealed that there is a lack of SLTB buses operating in their areas. Not all the communities interviewed had Sisu Seriya services and even the ones who received the service were facing many obstacles in accessing it. One of the main difficulties in using this service is the poor infrastructure in and around the estates. Even the infrastructure within estates is poorly maintained and this affects the time children take to reach the main road where the Sisu Seriya bus would be.

“The rural roads are not in good condition – the roads within the estate. Sisu Seriya only comes here [near the main entrance to the estate]. We have to take kids from upper side to here. The Sisu Seriya bus comes inside the estate, but they can’t go beyond that since the road is damaged. We have to bring kids to the entrance using another vehicle or carrying them down on our shoulders”

(FGD, Gordon Estate, 2023)

An interesting finding from the community consultations was the respondents never having heard of the Gemi Seriya service, pointing to the poor implementation of the service. Not only does this data show how people’s productivity would have to revolve around an unreliable bus service, but it also shows poor planning, implementation, and dissemination of services intended to make services more efficient and equitable.

### Transport costs for Upcountry Tamil communities in accessing healthcare and education

The poor operational status of public transport incurs a large cost on these individuals as the three-wheelers in these areas are not metered or regulated, allowing three-wheeler drivers to decide the price for the distance covered. Such private transport is mostly relied up on in the absence of efficient, reliable public transport service provision. In Battalagalla (Hatton), an elderly patient would spend up to LKR1,600.00

on transport to reach the nearest government hospital to attend clinics monthly (FGD, Battalagalla, 2023). In Gordon Estate, an average patient would spend up to about LKR4,000.00 to LKR5,000.00 per trip to reach the Nuwara Eliya hospital for their needs, and if the divisional hospital is to be reached, it would be around LKR50.00 (FGD, Gordon Estate, 2023). In Spring Valley, an average patient would spend up to about LKR2,000.00 per trip to reach the Badulla hospital (FGD, Spring Valley, 2023). Lastly, in Uduwara, an average patient would spend somewhere between LKR100.00 to LKR1,900.00 to reach the Badulla hospital (FGD, Uduwara, 2023).

In terms of access to education, it was revealed that, for residents of Gordon Estate, even for public transport it would cost around LKR600.00 per month to purchase a season ticket per child. Respondents from the state estate also revealed that the average monthly income of residents of the area would be around LKR12,000.00; an indication of the mismatch between how much is earned and how much is paid for transport (for students) which is supposed to be subsidised and affordable (FGD, Gordon Estate, 2023). Respondents from Spring Valley revealed that they would spend LKR5,000.00 per child monthly as they would have to send them to school on a shared three-wheeler due to the unavailability of public transport (FGD, Spring valley, 2023). Further conversations with CBOs working in the area also revealed that due to high transport costs related to access to education, some families would opt to send one child to school if there are multiple children in the family, so that their expenses would not be too much (FGD, Kandy, 2023).

These costs are mainly incurred as a result of unreliable and poor services provided by the state, for the communities would not have had a reason to rely on private transport had the state not done a poor job at scheduling buses at convenient times for individuals living in and around the

estates, and keep the bus routes functional at all times. This is exacerbated by the state's poor response to unregulated and unmonitored private transport costs; the three-wheelers do not have meters and they charge per trip based on the situation and opportunities presented (FGD, Madulkele, 2023). These exuberant fares are normalised in these areas largely due to inaction by the state apparatus.

Overall, the data in relation to transport costs, as explained above, before this case study, highlights the sensitivity of the transport sector to external shocks, such as economic crises and oil shortages, which can significantly impact inflation rates. Policymakers and stakeholders in the transport industry need to carefully monitor and manage these inflationary pressures to ensure sustainable and affordable transportation services for the public. Same trends could also be observed in and around the Estate sector as well. For instance, during community consultations with the Upcountry Tamil communities, it was revealed that inflation during the politico-economic crisis led to a state in which bus fares (private buses) were no longer regulated or monitored, resulting in service providers charging fares double the normal amount (FGD, Gordon Estate, 2023) Additionally, effective policies to manage and mitigate the effects of external shocks are crucial to maintaining stability and resilience in the transport sector and the broader economy

### **Access to basic services for the Upcountry Tamil community**

The poor operation of transport services and infrastructure inadvertently also affects individuals' access to other services, and out of the many services, health and education were found to be the most affected amongst the Upcountry Tamil Population. Since timed-buses cannot be relied upon, due to their irregular operation times, many opt to take private transport when



going to the hospital or their monthly or weekly clinic visits. The ability to find a bus to reach the hospital at a specific time is also difficult given that buses operate at their own schedules. Poor operational status of transport not only affects the public when accessing healthcare services but also healthcare providers' access to the communities, for they too have to rely on public transport. Service provision to estate sector is timed according to both the availability of buses and how long it takes to travel from the bus halt to the estate itself; whilst bus services are available on main roads, healthcare providers, such as midwives, have to walk on foot for about 5-6km in order to reach community members as there are no other modes of transport available, unless one could afford to spend thousands of rupees on a three-wheeler ride. Below are information relayed by midwives on their transport use when accessing their designated field(s);

"I come from Katugastota. I leave home at 6:00 a.m. I reach the field at around 9:00 a.m. When I go back home, I leave at least around 3:00 p.m. to catch the bus. I have to walk 5km (for 45 minutes) in the morning and again in the evening (to reach the field) when going back home

"I have to walk 5km to 6km. to reach the village. To estates and villages such as Bambaragala, Knuckles, and Daulagala, I have to go on foot"

"I have to walk 6km to reach the field in Hathale. Three-wheelers cannot go on that road. There are too many rocks on that road. Their 'upper division' road is the most difficult one to travel through"

(FGD, Panvila, 2023)

Even when Sisu Seriya services are available and parents buy their children a season ticket, the lack of SLTB buses and delays would lead students to rely on private buses, leading no savings on expenses on transport services. Although timed-buses are available, missing one bus in the morning would mean missing an entire school day, and missing one bus in the afternoon would

mean going back home late in the evening or night; "SLTB buses are not available during school hours. Many students couldn't attend school as they missed the bus. Sometimes our children have to wait until 4:30PM to get a bus to return home. It increases numbers in school dropouts" (FGD, Gordon Estate, 2023). Some areas do not even have access to public transport. The majority of primary schools exist in the vicinity and can be reached by foot (although not ideal); however, once students have to transition into their secondary schools which are usually placed far away from estates, the difficulty in catching a bus and spending on a three-wheeler would lead them to drop out of school. In the absence of an alternative, some parents do opt to send their children to school on three-wheelers on a shared basis; "some send their children by three wheeler with 3 other children to the school. It is also like a shared auto system" (FGD, Battalagalla, 2023).

In speaking of labour, many youth have opted to work outside of estates due to issues in wages. Whilst a lot have migrated to urban areas, especially Colombo, others have chosen to work at vegetable farms due to higher wages. However, as for the access to health and education, access to employment too is affected by poor transport services available. As vegetable farms are situated away from tea estates, no bus routes are found to reach the said farms, leaving the workers to reach the farms on foot. One of the examples provided by respondents mentioned how male workers go on foot for about two hours to reach their workplace (with a break in between) and since the walk to the farm is considered to be difficult, only men have decided to take up on the work. Due to care responsibilities, women would stay at home or would work at the tea estates for a much lower pay (FGD, Gordon Estate, 2023).

Poor transport service provision not only reduces access to other basic services, but it also affects the quality of services accessed by individuals. The difficulties one would have to face when

providing services, especially healthcare, due to inefficiencies in transport services, would also then deter healthcare providers from working in such places, further reducing the quality of and the number of services provided. As illustrated here, reduced access to services and employment also has gendered implications; one of the main ways in which this affects girls and women is by increasing their share of unpaid care responsibilities at home, due to safety reasons as well as men being outside for longer due to shortcomings of transport services. As the commute to work on foot is considered to be dangerous for women (distance and the route), they tend to stay at home or work at the estates. As men take longer to finish their commute to and from work, care responsibilities would more or less fall completely on the women of the household. School dropouts due to inefficient public transport may also take a gendered dimension in more girls dropping out than boys; this has mainly to do with safety concerns where girls would have to walk long distances to reach their school through isolated routes. This would have a detrimental effect on these students' futures where their childhood youth would be wasted on unpaid care work at home while gradually either being incorporated into the estate labour force or out-migration into urban areas for other work.

### **Infrastructure of estate transport**

The infrastructure leading to the tea estates are in poor conditions and this is especially the case for roads inside the estates. Although the main roads are paved with asphalt, roads leading to estates and roads within the estates are either just gravel or dirt roads. Whilst some parts of the estate roads are paved with concrete, due to poor maintenance and incomplete status of them, the condition of roads get even worse, especially during the rainy season. As mentioned earlier, this poor condition of infrastructure hinders access to health services, education, and even employment.

There are also some estates with roads on where three-wheelers or other vehicles cannot go due to the how damaged the roads are. According to the respondents, only specific vehicles which they have modified with elevated bodies and roads can go such roads; "in Alakolawatte, a normal vehicle cannot be driven. People drive vehicles that they have modified (they have increased the height of the tyres of the vehicles). They don't have an allocation for road development" (FGD, Panvila, 2023).

Midwives, who usually travel from household to household in checking after pregnant mothers of new mothers, find it difficult to do so due to the poor condition of the roads in estates. Furthermore, according to the midwives interviewed, poor infrastructure also affects pregnancies in the area, forcing them to keep close watch of pregnant mothers; since finding transport at the right time, especially during an emergency, can be difficult, pregnant mothers who are close to their delivery are directed to hospitals days in advance by the midwives. They also reported of incidents where pregnant mothers had almost lost their babies while coming on three-wheelers on damaged roads, and it was also mentioned that travelling on such roads is extremely difficult for pregnant mothers especially when having contraction pains; "since the roads are difficult, pregnant mothers are instructed to go to hospital earlier. It is difficult for mothers who are about to give birth to go to Madulkele hospital, given the road condition" (FGD, Panvila, 2023).

According to the interviews conducted with officers at the Panavila Divisional Secretariat and the Institute for Social Development (ISD), one of the main obstacles in developing the infrastructure in the area is the convoluted nature of land ownership of both roads and the estates; whilst some of the land is under the Land Reform Commission, the roads which connect estates are under the Pradeshiya Sabha control, and the

roads within the estates are under the estate management's control, and this shared ownership makes fund allocation and development of the infrastructure difficult (KPI, 2023). Although the Act No. 30 of 2018 makes provisions for the Pradeshiya Sabha to coordinate with the estate management and develop roads for communities living in the estates, many Pradeshiya Sabha present taxation as an issue in developing infrastructure (FGD, Panvila, 2023). Even though the Pradeshiya Sabha claim that Upcountry Tamil communities (referred to as Indian Tamil or Estate Tamil in government records) do not pay direct taxes and hence the Pradeshiya Sabha cannot allocate funds, estate management continues to pay their taxes, raising the question as to how such taxes are utilised for the public's welfare.

An interesting finding in relation to the state of infrastructure surrounding these communities is how the community members themselves would use their own funds to repair the roads and pave some parts of it with concrete in the absence of any help provided by the estate management or the local government.

### **Gendered passenger safety and transport for persons with disabilities (PWDs) or limited mobility**

The respondents did not have much to say about persons with disabilities or limited mobility accessing public transport in their communities<sup>5</sup>. The difficulties such individuals face were, however, mentioned in passing by some respondents and all the responses were more or less the same in saying how both bus drivers and conductors would either not allow PWDs or persons with limited mobility to get on to buses or would not stop for them to get on, leaving such passengers to rely on private transport (FGD, Gordon Estate, 2023). Equitable service provision does not seem to be a priority for service providers in the areas the research team visited, and it is reflected in their denial of

service provision for PWDs. Whatever that was mentioned about PWDs was limited to those with a physical disability or impairment. The community members could not speak of other forms of disabilities and how that would affect access to transport services.

Many of the respondents, men and women<sup>6</sup> alike, mentioned some incidents of gendered passenger safety concerns and harassment. Many of the reported incidents were initiated by drunk male passengers, and the majority of respondents claimed that they do not seek help immediately due to embarrassment or helplessness. Once they do seek help, the conductor or the driver would escort the perpetrators out of the bus.

Apart from the earlier mentioned findings on access to transport services amongst the Upcountry Tamil population in visited areas, some other concerns also emerged from the community consultations. Some of the concerns raised by the community members touched on discriminatory practices by transport service providers; respondents revealed that some conductors or bus drivers would not allow them to use bus services in the area, and this was also extended to students trying to go to school in the morning. According to them, this is sometimes done under the pretext of not wanting to make the bus too crowded. However, denial of entrance on to buses were reported as a frequent occurrence by some respondents

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<sup>5</sup> PWDs did not join the consultations with the Upcountry Tamil community. Perhaps this could have been due to the fact that the consultations took place with no accessibility support, or perhaps due to the difficulties in getting around the estate as a PWDs.

<sup>6</sup> No other gender identities were mentioned during data collection

## Conclusions

In conclusion, two important insights are revealed through data analysis and primary data collection. The first is, in spite of the economic downturn, the cost of accessing basic services has increased over time. The most recent Household Income and Expenditure Survey (HIES) in 2019 reveals that there exist significant differences in expenditures on accessing basic services between districts. The second is, primary data as well as data extracted from NTC and Ministry of Transport reveals that the connectivity and transportation networks are quite different in other provinces in comparison to the Western Province (Figure 4).

While the data from a survey by the UNFPA (United Nations Population Fund) reveals, gendered passenger safety is often ignored or overlooked. The survey reveals that 96% of the respondents in a representative sample of 2500 had stated that they had faced some form of harassment in public transportation. In addition to available literature on gendered passenger safety, primary data also reveals that the causal factor may be due to crowded buses which hints that passengers would be safer if the transportation services met the demand of the commuters. With respect to PWDs accessing transportation, the

literature on transport does not provide sufficient data to identify prominent questions such as how many of the total population attempts to access public transportation and how these issues can be addressed. However, from one of the consultations the EIWG conducted for transport with industry experts including academics and heads of trade unions revealed that low-floored buses and trains are quite useful in enabling the differently abled to access public transportation.

Moreover, Sri Lanka has benefitted from PPPs within the transport sector. However, it is in purview that PPPs and its impact are overemphasized from the Key Person Interview (KPI) as well as case studies such as Yatanwala and Jayasena (2008) on Katunayake Express Way. While PPPs can be successful in the transport sector, it was brought to the attention of the researchers that, irrespective of who finances these projects, the government's inefficiencies should be addressed to initiate successful projects. Literature that exist on PPPs in the transport sector in Sri Lanka identifies political instability, the lack of transparency, and the lack of a robust legal framework as resulting in unsuccessful investment benefits.

## Recommendations:

- Identify priority areas to increase accessibility  
The findings from primary and secondary data revealed that access to services such as health and education even though they are free, involves some sort of cost when accessing them. While the cost of transportation can be a direct measurement of how accessible these services are, services such as bus halts, train stations and three-wheeler parks as well as schools and health care centres such as hospitals and dispensaries also enable access to the respective community. Given adequate funding to create new infrastructure such as schools and hospitals is exacerbated, enabling access through transportation should be given more prominence to ensure that communities benefit from the free services the government provides.
- Declare some roads as agricultural/routes
  - o One of the ways in which to incentivise infrastructure development in and around the estate sector would be to declare some roads as agricultural routes or roads (for tea leaf transportation). This would help budget allocation and streamlining as well.
- Awareness sessions on gendered passenger safety
  - o Such awareness sessions are needed at different levels of society. School students need to be given awareness on the occurrence of harassment on public transport measures available for one to address such issues. Similar sessions should be conducted at community levels, for government officers, for law enforcement authorities, and service providers (bus driver and conductors), for effectiveness.
- Universal design for PWDs and limited mobility
  - o The Estate sector faces a unique geographic challenge when introducing services to the area and building infrastructure. However, these geographic concerns need to consider the difficulties PWDs and limited mobility face when accessing transport. If low-floor buses or lifts do not match the narrow, winding roads, alternative modes of transport need to be provided to increase accessibility. Exploring subsidised private transport could be one option.
- Explore the willingness to pay for transport services
  - Studies on public's willingness to pay should be given more emphasis in order to understand two significant questions within the transport sector;
    - a) Whether the commuters are willing to pay more for more efficient and reliable public transport
    - b) Whether the RDA can increase their revenue through increasing the tolls of expressways which are provisioned under subsidised tolls.
- Share land ownership in a manner that is conducive for infrastructure development
  - o This would also require the enforcement of already gazetted Acts on infrastructure development. If coordination between different organisations is difficult, especially when people's lives and productivity are at stake, centralising road and land ownership or partnerships between the Pradeshiya Sabha and estate management would render infrastructure development easier.
- Allocation of budgets to Pradeshiya Sabha needs to be context specific
  - o The allocation of funding and budgets need to be sensitive to the population size and needs of the Pradeshiya Sabha if infrastructure development is to take place. If only small amounts are allocated

- for smaller Pradheshiya Sabha, expecting them to develop adequate infrastructure is unrealistic.
- Regulation and monitoring of private transport
    - o Private transport in rural areas, especially around Estate sector, are not metred and they charge fares depending on the time of the day amongst other factors. In the absence of reliable transport services, people would then have to rely on expensive private transport. This is especially unavoidable during emergencies. Regulation of three-wheeler fares is urgently needed for a fair and equitable service provision if the state is unable to provide efficient public transport services.
  - Data – consolidated and freely accessible
    - One of the bottlenecks when conducting the analysis was not having access to data in specific sectors. The requirement, availability and free access to data is crucial when prescribing targeted policies to specific regions.
  - Enabling discussion on country specific transport policy
    - One of the recommendations which came out from the focus group discussions when mapping the data was a platform for economists, engineers and other stake holders to brainstorm ideas and to enable coherent policies in the transport sector.

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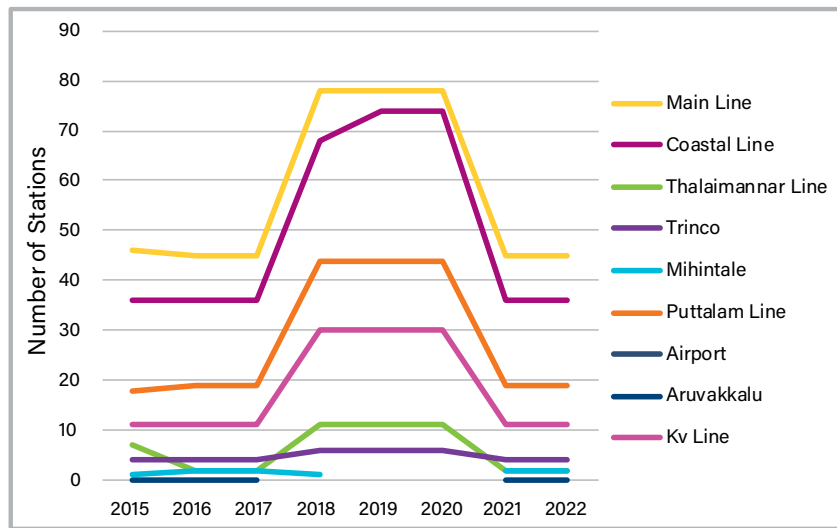
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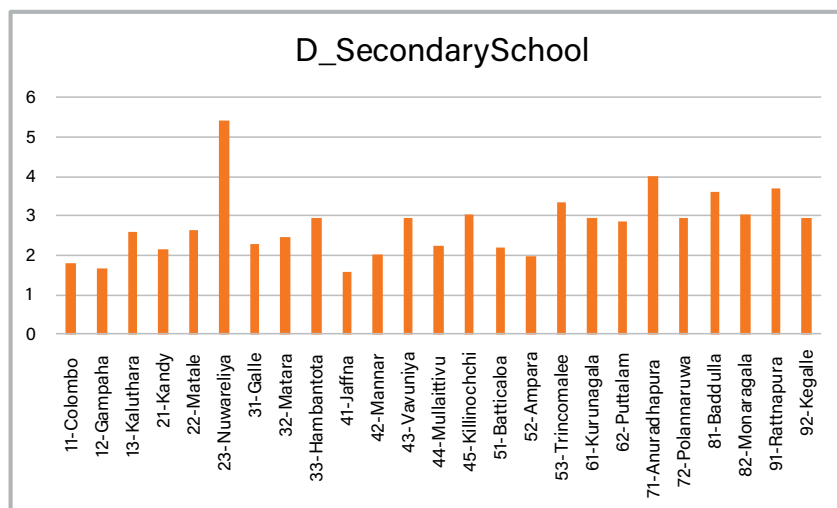
# Appendix A

Number of stations for each line

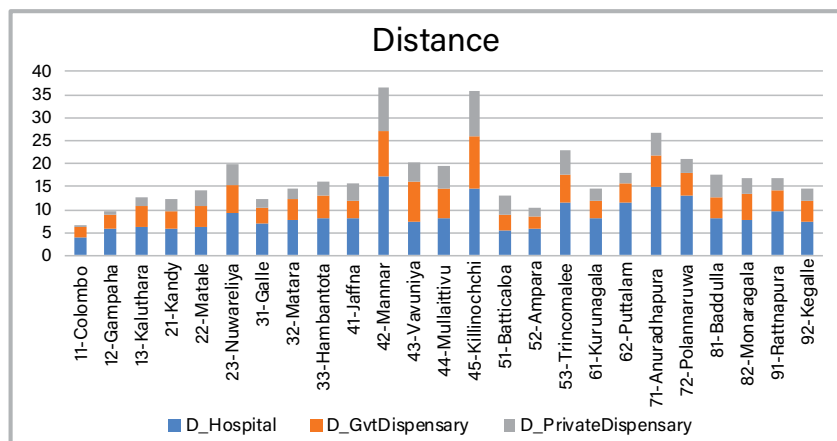


Source: Department of Railways, Sri Lanka

Distances to schools and hospitals for respective districts



Source: Household Income and Expenditure Survey (2019)



Source: Household Income and Expenditure Survey (2019)

## Appendix B

### Full list of consulted persons

Type	Location	Number of Consultations	Parties Involved
Focus Group Discussion (FGD)	Kandy	1	Provincial and divisional level government officers working on health, transport, education; Members from PHDT
	Kandy	1	Institute for Social Development
	Kandy (Panvila)	1	Officers at the Divisional Secretariat; Midwives
	Kandy (Madulkele)	1	Medical staff and minor staff of the divisional hospital
	Battalagalla (Hatton)	3	The elderly; Men working in and around the estate; Young mothers
	Gordon Estate (Nuwara Eliya)	5	The elderly; Men working in and around the estate; Young mothers; The youth
	Spring Valley (Badulla)	1	The elderly; Men working in and around the estate; Young mothers; The youth
	Uduwara (Badulla)	1	Young mothers; The youth; Middle-aged women
Key Person Interviews (KPIs)	Hatton	1	Industry expert
/Key Informant Interviews (KIIs)	Colombo	2	Industry experts/academics

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