

Investigating the Impact of Urban Physical Structure on Public Space and Liveability: A Case of the Town Square in Mirigama.

Dinali Happitiya * ,
Kalpani Kandegamage, Amaya Goonathilaka,
Jeeva Wijesundara

Sri Lanka Institute of Information Technology, Malabe, Sri Lanka

Abstract

Mirigama, situated in Sri Lanka's Western Province, is rapidly evolving with the expansion of the Central Expressway. Serving as a transit hub between Colombo and surrounding regional towns, it has experienced accelerated industrial growth and urbanization. However, this growth remains largely unplanned, leading to congestion, inadequate infrastructure, environmental degradation, and disconnected public spaces that diminish liveability and safety. This study explores how the urban physical structure of Mirigama's town square influences public space use, connectivity, and overall liveability. Focusing on the context of a secondary town, it identifies critical urban challenges, community needs, and opportunities for sustainable design interventions. The findings reveal that the town square's spatial form directly affects social interaction, accessibility, and perceived safety. The research highlights the potential of secondary towns as testing grounds for environmentally conscious and transit-oriented development. By offering context-specific insights and a transferable framework, it contributes to ongoing policy and urban design discussions on inclusive and sustainable urban transformation.

Keywords: Mirigama; Township; Urban Infrastructure; Environment; Liveability; Transit-Oriented Development.

Introduction

Due to increased demographic pressures, industrial activity, and infrastructure growth, Sri Lanka's secondary towns have been more urbanized over the past 20 years (National Physical Planning Department, 2019). Due to its location along the Central Expressway and close proximity to Colombo, Mirigama, which is in the Western Province's Gampaha District, is a town of strategic importance ("Mirigama Area Guide: Discover Insights & Price Trends", 2024). The National Physical Planning Policy and Plan 2017–2050 emphasizes Mirigama's ambition as a secondary town that supports industry, value-added manufacturing, and agriculture. In addition, the Western Region Megapolis Planning Project defines it as a significant industrial hub intended to draw manufacturing, technology, and Agro-based enterprises. Also, the Urban Development Authority envisions Mirigama as a Transit-oriented and Agro-based metropolis, and its export processing zone, tourist attractions, fertile agricultural regions, vast paddy fields, industrial villages, and its advantageous central location, where the bus and train stations meet, all serve to further solidify this recognition. However, unforeseen urban constraints brought about by the quick speed of urbanization have an impact on public space functionality, environmental quality, and liveability.



Fig. 1: Mirigama town square in 2001, 2011 and 2021
Source: google earth pro

Liveability, social cohesiveness, and civic identity are all significantly shaped by public spaces (Aelbrecht & Stevens, 2019). Despite frequently being viewed as neutral, they increasingly represent contentious meanings and cultural values influenced by fast urban transformation (Aelbrecht & Stevens, 2019). Public areas continue to be vital hubs for democratic engagement and communal life despite these obstacles. As the hub of the community, the Mirigama town square is where bus stops, the train station, and retail establishments all come together (Mirigama Police Station, 2024). However, its actual shape has grown congested, disorganized and unsafe. A lack of integrated planning for transportation, business, and community life,

inadequate pedestrian infrastructure, and the S-shaped railway crossing, which causes traffic jams and accident hazards, are some of the main issues (Mirigama Police Station, 2024).

Problem statement:

Mirigama's rapid, largely unplanned urbanization has led to fragmented public spaces, poor pedestrian accessibility, traffic hazards, and environmental degradation, undermining social interaction and liveability. Despite national policies supporting TOD, secondary towns like Mirigama are under-researched, leaving a gap in context-specific strategies for sustainable urban development.

Research Questions:

- How does the physical structure of Mirigama's town square influence public space use, social interaction, and safety?
- What are the community's perceptions and needs regarding accessibility, liveability, and civic amenities in the town square?
- How can Transit-Oriented Development principles be applied to enhance Mirigama's urban sustainability, connectivity, and socio-economic vibrancy?

Research Objectives:

- To examine how the physical structure of Mirigama's town square influences public space usage, social interaction, and perceived safety.
- To assess community perceptions and needs regarding accessibility, liveability, and the adequacy of civic amenities within the town square.
- To explore the application of Transit-Oriented Development (TOD) principles to enhance Mirigama's urban sustainability, connectivity, and socio-economic vibrancy.

Literature review

In South Asian environments, where infrastructural expansion and demographic pressures frequently surpass regulatory frameworks, urbanization in secondary cities has become a crucial topic in current planning discourse (Ellis & Roberts, 2016; Sharma & Dehalwar, 2025). While metropolitan centres are given the majority of planning and investment focus, scholars contend that secondary towns play an equally important role in agro-industrial development, housing growth, and regional economic resilience (Roberts, 2014). Such a secondary urban node is Mirigama, which is well situated in Sri Lanka's Western Province and where transit-oriented growth imperatives connect with competing land uses, including residential, agricultural, and industrial.

Transit-Oriented Development and Secondary Cities:

A popular planning technique that combines land use and transportation to create walkable, accessible, and sustainable urban environments is called Transit-Oriented Development (TOD) ("Transforming the Urban Space Through Transit-Oriented Development: The 3V Approach", 2025; C40 Cities Climate Leadership Group, 2019). Compact development around transit hubs is emphasized by TOD, which lessens reliance on private automobiles while fostering social inclusion

and economic vibrancy (Dittmar & Ohland, 2003; Sharma & Dehalwar, 2025). By focusing development on urban clusters along important transportation routes like the Central Expressway and railroad lines, the National Physical Planning Policy and Plan 2017–2050 in Sri Lanka advances TOD concepts and establishes towns like Mirigama as key hubs (National Physical Planning Department, 2019). However, there is still a dearth of research on TOD in Sri Lanka, with the majority of studies focusing on the metropolitan area of Colombo (Wanigasekara, Mahanama, & Jayasinghe, 2022). This disparity emphasizes the necessity of looking at smaller nodes where industrial expansion and transit connectivity meet.

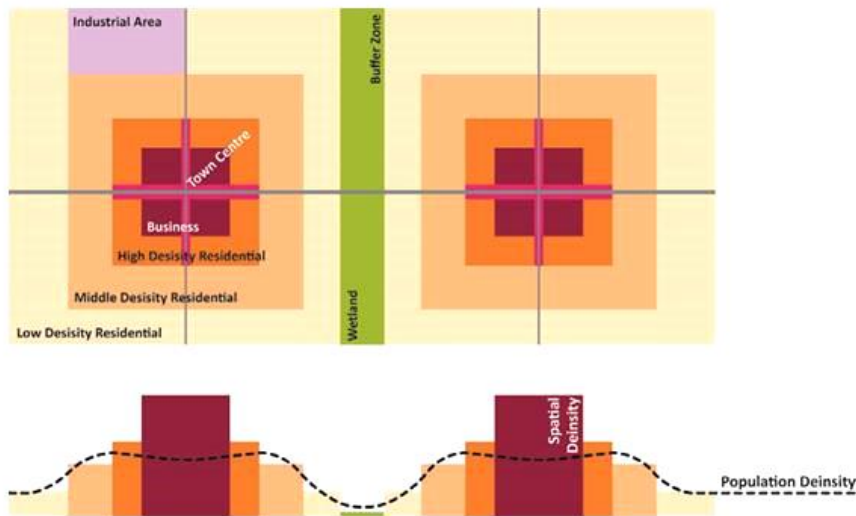


Fig. 2: The conceptual model for land use zoning

Source: Township Development Component- Local Area Development plans, modified by CoMTrans Study Team

Public Spaces and Liveability:

Public spaces are central to urban life, influencing social interaction, civic engagement, and community identity (Gehl, 2008; Mouratidis, 2021). In South Asian secondary towns, public areas often serve both transit and commercial functions, complicating their design and use (Aelbrecht & Stevens, 2019; Kamalipour & Peimani, 2025). Mirigama's town square, located at the intersection of bus and rail stations with nearby businesses, faces challenges typical of rapidly urbanizing secondary towns: crowding, unsafe pedestrian conditions, and environmental degradation. Without coordinated planning, civic and transit functions of public spaces are compromised, limiting social interaction and liveability (Jacobs, 2022; Southern Urbanism, 2025).

Urban Challenges in Sri Lanka's Secondary Towns:

According to research on secondary towns in Sri Lanka, persistent issues include poor urban governance, a lack of integration between land-use planning and transportation, and a failure to adequately consider ecological and cultural resources (UN-Habitat, n.d.). Although towns like Mirigama are envisioned as agro-industrial centres by the Urban Development Authority (UDA), ground-level spatial concerns like pedestrian connectivity, traffic safety, and place identity are frequently overlooked during implementation (Urban Development Authority, 2021). As a result,

policies prioritise industrialization and economic expansion above human-centred design strategies that prioritise sustainability and liveability.

Mirigama Sub-Urban Context: Town Square, Characteristics, Challenges, and Potentials:

Mirigama located in the Gampaha District of the Western Province of Sri Lanka, is a secondary town that is ideally situated near important rail routes and the Central Expressway (Mirigama Area Guide: Discover Insights & Price Trends, 2024). With the advantages of being close to Bandaranaike International Airport and the Export Processing Zone, it acts as a crucial link between Colombo and the interior of the island. In line with national development goals like the National Physical Planning Policy and Plan 2017–2050, the town, which has historically been known for its agricultural foundation, is now becoming a transportation and agro-industrial centre (Urban Development Authority, 2021).

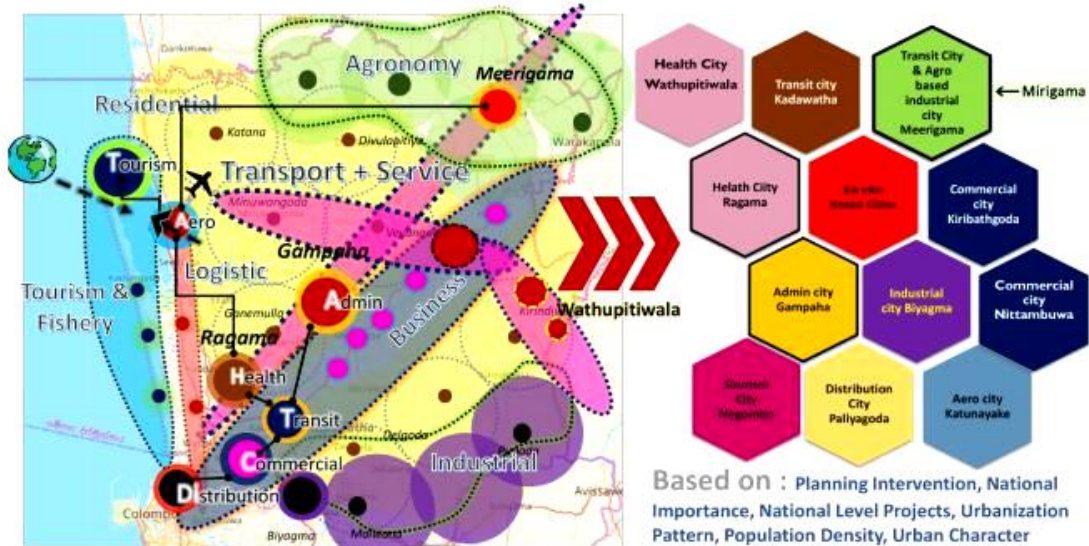


Fig. 3: Development Strategy - Gamapaha Master Plan
 Source: Urban Development Authority - Gampaha District Office

A unique fusion of rural and urban activities is created by Mirigama's combination of small-scale enterprises, traditional agriculture, and service-based business. The bus stop and train station, which serve as the centre of social and commercial activities, are at the heart of its small-town centre. While the Central Expressway has speed up urban expansion, changing land use and raising demand for real estate, the surrounding residential areas, farmlands, and water bodies preserve the area's rural character. With a variety of small businesses, banks, restaurants, and service outlets, the town square, anchored by transportation hubs and retail stores, acts as the primary meeting place for locals. Despite the absence of structured public areas, flora, and contemporary conveniences, it continues to be the bustling centre of Mirigama due to its lively pedestrian traffic, unofficial vending, and convergent traffic. The square has great potential to be transformed into a more welcoming civic area because of its solid community linkages and expanding infrastructure.

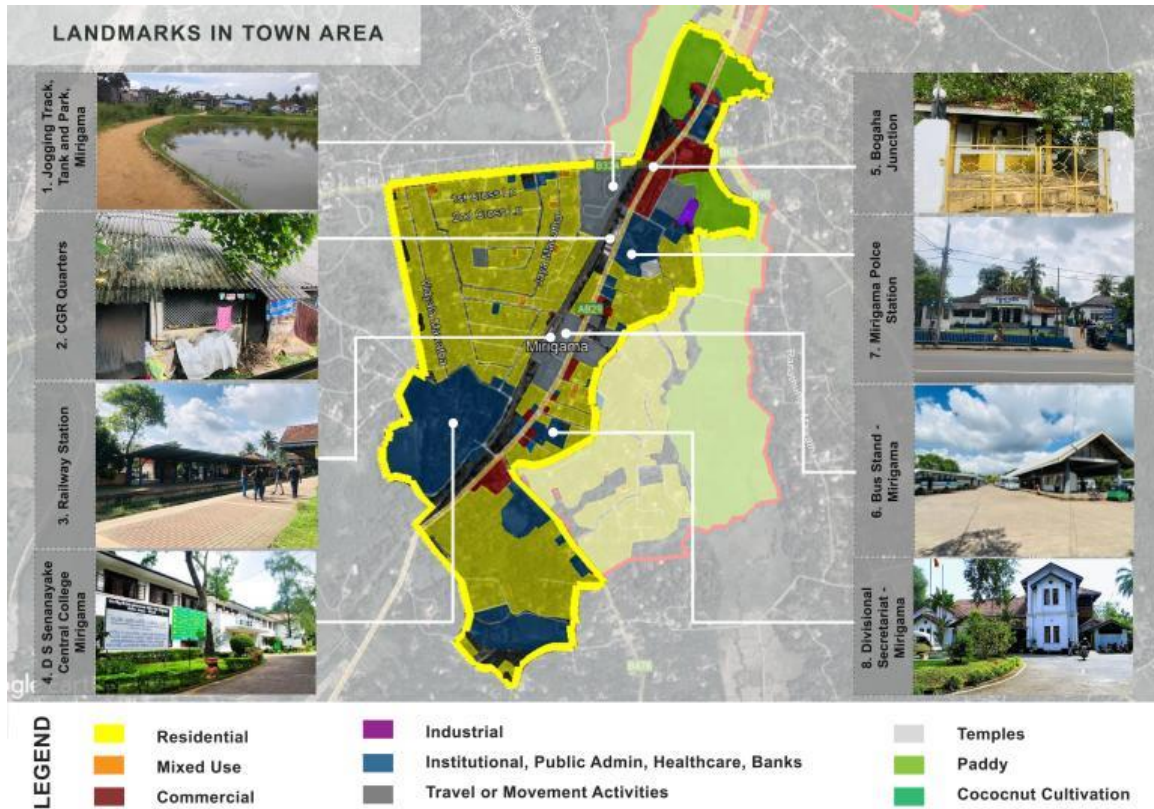


Fig. 4: Land use and Landmarks in Mirigama Town square
 Source: author



Fig. 5: Building character in Town area
 Source: author

A lack of public services to meet the increasing demand, traffic congestion, inadequate infrastructure for walkers and cyclists, and environmental harm from uncontrolled growth are some of Mirigama's pressing issues. Furthermore, the new commercial building close to the train station is still underutilized; only the ground floor stores are completely operational, and many suppliers have moved their operations elsewhere because the top floors are not as profitable. However, Mirigama's advantageous location within national transit networks and its lush agricultural fields present a major possibility for tourist, agro-industrial growth, and transit-oriented development (TOD). With planned infrastructure upgrades, research and employment centres, and sustainable neighbourhood plans, Mirigama might develop into a secondary city that is resilient, walkable, and economically productive, boosting Colombo's metropolitan network.

Methodology

This study adopted a mixed-methods approach to examine the relationship between the physical structure of Mirigama's town square and its impact on public space use and liveability. Secondary data were collected from statutory planning reports, development plans, and urban design literature to understand the regulatory and theoretical context. Primary data were gathered through site observations, stakeholder mapping, and semi-structured community interviews, focusing on users, business owners, commuters, and residents within the town square and its surrounding 500-meter radius. Observational data were analysed thematically to identify patterns of movement, spatial conflicts, and social behaviour, while interview responses were coded to assess perceptions of safety, accessibility, and comfort. Triangulation of findings from multiple data sources ensured reliability and contextual grounding. However, the study acknowledges certain limitations, including a limited sample size due to time constraints, potential respondent bias in self-reported data, and the restricted temporal scope of field observation. Despite these constraints, the methodology provides a balanced framework for understanding the spatial and social dynamics of Mirigama's town square.


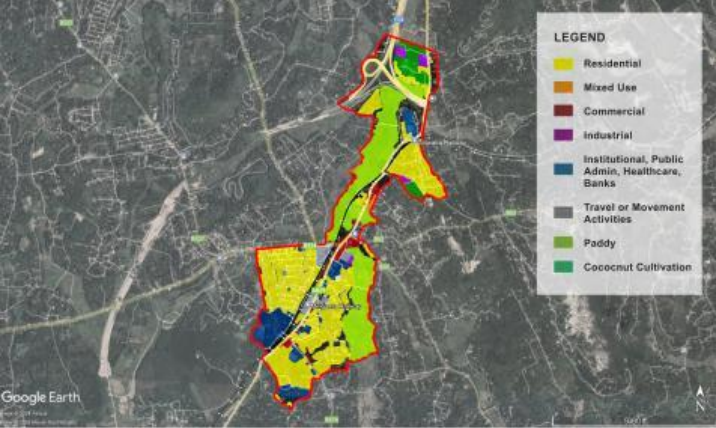
Analysis and discussion




This section critically examines the accessibility, safety, and social interaction within Mirigama Town Square and its surrounding areas. Drawing on stakeholder mapping, field observations, and planning frameworks, the findings are analysed in relation to the study's three objectives and grounded in Transit-Oriented Development (TOD) and liveability theories.



Evaluation of Physical and Spatial Characteristics:

Mirigama's town square, anchored by its bus and railway stations, functions as the primary transportation and commercial hub. Surrounding it, small retail outlets, eateries, and informal vendors create a vibrant but fragmented urban form. As shown in Table 1, the area benefits from strong regional connectivity through the Central Expressway and railway, yet suffers from scattered land uses, poor pedestrian infrastructure, and limited green space.

Table 4: Key Physical and Spatial Characteristics of Mirigama Town Square

Attribute	Observation	Image
Location	Centrally positioned, adjoining the bus stand and railway station	 <p>The map displays the regional context of Mirigama. It is situated at the intersection of several key roads: the A1 Road (Colombo-Kandy Road) in red, the Negombo Road (A3 Road) in dark blue, the Negombo-Mirigama Road in light blue, the A6 Road (Kurunegala-Anuradhapura) in green, the Rathnapura Road in brown, the Warakapola Road in grey, the Mirigama Highway (E4) in orange, and the Colombo-Kandy Main Line in purple. Other towns shown include Negombo, Kurunegala, Kandy, Ratnapura, Warakapola, Nittambuwa, and Gampaha.</p>
Land Use Mix	Predominantly retail and service-based, supported by small-scale commerce, residents	 <p>The satellite map shows the land use pattern in Mirigama. The legend identifies the following categories: Residential (yellow), Mixed Use (orange), Commercial (red), Industrial (purple), Institutional, Public Admin, Healthcare, Banks (dark blue), Travel or Movement Activities (grey), Paddy (green), and Coconut Cultivation (light green). The map shows a mix of these uses, with residential and commercial areas being prominent.</p>

<p>Urban Form</p>	<p>Compact, but fragmented with unplanned extensions</p>	 <p>The image consists of two parts. The top part is an aerial map showing a dense urban area with a dark, irregularly shaped boundary, indicating a compact but fragmented urban form. The bottom part is a street-level photograph showing a narrow road with a blue awning on the left, a motorcycle on the right, and a building in the background, illustrating the unplanned extensions.</p>
<p>Pedestrian Space</p>	<p>Narrow, often obstructed by informal vendors</p>	 <p>The photograph shows a narrow street with a car on the left and pedestrians on the right. The street is narrow and appears to be obstructed by informal vendors, as indicated by the text.</p>
<p>Green/Public Space</p>	<p>Minimal, lacking organized civic or recreational areas</p>	 <p>The photograph shows a small pond with a dirt path leading to it, illustrating minimal green or public space.</p>

<p>Transport Connectivity</p>	<p>High accessibility via rail, bus, and Central Expressway</p>	
<p>Built Environment</p>	<p>Low-rise structures, dense commercial clustering</p>	

These findings reflect a mismatch between functional vitality and spatial quality, a phenomenon common in secondary South Asian towns where growth is transport-led but not design-led. The lack of coordinated land-use planning and civic space integration undermines the TOD principle of compact, mixed-use, and walkable development (Dittmar & Ohland, 2003). Although the square operates as Mirigama’s economic heart, its fragmented structure weakens its potential as a socially cohesive and environmentally sustainable civic core.

Accessibility, Safety, and Social Interaction:

Accessibility is simultaneously Mirigama’s greatest strength and challenge. While the town square benefits from multi-modal connectivity, internal accessibility is constrained by narrow pavements, encroaching vendors, and the absence of safe crossings. The S-shaped railway crossing represents a critical safety concern, with frequent accidents and traffic congestion during peak hours. These findings align with Gehl’s (2008) concept of human-scale urbanism, which emphasizes the need for pedestrian comfort and spatial continuity to enhance liveability.

Field observations and stakeholder feedback revealed that inadequate street lighting, poor signage, and limited cycling facilities contribute to both real and perceived insecurity. Despite this, the square remains a vibrant space for social interaction, supported by community institutions and small businesses. However, the lack of shaded seating, greenery, and organized public zones limits inclusive engagement. As summarized in Table 2, accessibility and activity levels are high, but the quality of public experience is low highlighting the gap between physical connectivity and social liveability.

Table 2: Accessibility, Safety, and Social Interaction Analysis

	Positive Attributes	Challenges/Concerns
Accessibility	High connectivity to regional transport networks	Narrow sidewalks, lack of crossings, poor cycling facilities
Safety	Central visibility, active use during day	Railway crossing hazards, traffic congestion, poor lighting
Social Interaction	Strong community presence, active commerce	Lack of public seating, greenery, and inclusive civic spaces

Design and Planning Interventions for Liveability:

To address these challenges, interventions were developed to align with TOD and liveability frameworks, integrating spatial, infrastructural, policy, and community-based solutions (Table 3). The proposed redesign of the town square into a civic hub with green spaces, shaded seating, and organized vendor areas seeks to enhance both environmental quality and social inclusivity.

Infrastructure interventions such as pedestrian crossings, cycling lanes, and improved lighting support the TOD goals of walkability and safety. Policy measures recommending zoning enforcement and integrated land-use transport planning strengthen the institutional foundation for sustainable development. Moreover, community engagement in the co-design process ensures that interventions remain culturally appropriate and locally accepted.

Table 3: Proposed Interventions for Enhancing Liveability

	Proposed Interventions
Spatial	Redesign the town square into a civic hub with green spaces, shaded seating, and organized vendor zones
Infrastructural	Introduce pedestrian crossings, traffic-calming measures, and cycling lanes; improve street lighting
Policy/Planning	Strengthen integration of land use and transit planning through TOD principles; enforce zoning regulations to prevent ribbon sprawl
Community Engagement	Co-design interventions with local stakeholders to ensure cultural fit and inclusivity

Widening the Pasyala–Giriulla Main Road:

Identified Issues: Heavy traffic congestion, narrow pedestrian pathways and absence of bicycle pathways, increasing traffic accidents, and insufficient road capacity.



Fig. 6: Identified issues of the main road (narrow pedestrian pathways and roads)
Source: author

Proposed Interventions:

- Road widening from 8m to 15m, ensuring smoother vehicular flow and reducing congestion.
- Introduction of 1.5m pedestrian pathways on both sides to promote safe walking.
- Allocation of 3m for two bicycle lanes, encouraging eco-friendly transport.
- Tree lining along pedestrian paths for shade, aesthetics, and improved air quality.
- Seating and bicycle parking areas to foster inclusive and convenient urban mobility.



Fig. 7: Proposed Pasyala- Giriulla Main Road
Source: author

Expected Outcomes: Enhanced vehicular and pedestrian safety, promotion of non-motorised transport, reduced carbon footprint, and improved street aesthetics, supporting the principles of a walkable and sustainable city.

Proposing New Parking Facilities:

Identified Issues: Limited availability of parking facilities, and on-street parking congestion.

Proposed Interventions:

- Development of public parking on both sides of the main road, including bicycle parking.
- Introduction of park-and-ride facilities within 500m of the town centre to reduce inner-city traffic.
- Removal of on-street parking in front of shops to prioritise pedestrian and cyclist movement.

Expected Outcomes: Reduced traffic congestion, improved accessibility for residents and visitors, enhanced pedestrian safety, and encouragement of sustainable travel modes.

Bicycle and Pedestrian Path Along the Edge of the Paddy Fields:

Identified Issues: Lack of recreational spaces, bicycle pathways, and public health concerns due to sedentary lifestyles.

Information about non-communicable diseases						
Divisional Secretariat Division	Diabetes	High Blood Pressure	Cholesterol	Kidney Disease	Cancer	Other Diseases
Mirigama Hospital	Diseases are not counted separately. 80,267 patient visits for all specialties.					
Bokalagama	145	312	296	5	0	68

Health Information

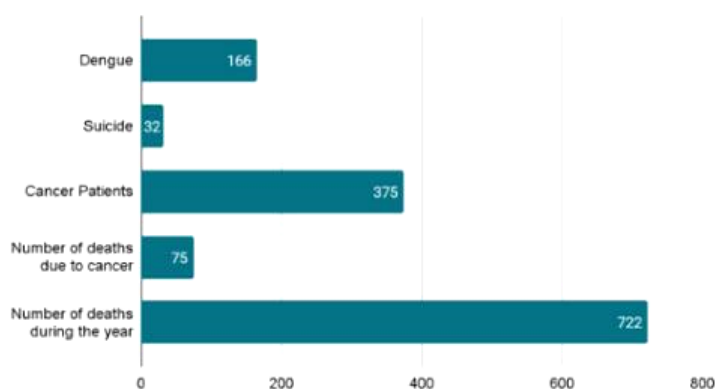


Fig. 8: Health Information

Source: Sampath Pathikada report 2022- Mirigama Divisional Secretariat

Proposed Interventions:

- Construction of a 3m-wide cycling path alongside paddy fields with scenic landscaping.
- Installation of small, eco-friendly shop huts and seating areas along the path to support local entrepreneurship.

- Integration with jogging tracks and connectivity to commercial and transit hubs.

Expected Outcomes: Encourages physical activity, promotes social interaction, reduces vehicular dependence, and boosts eco-tourism potential.

Railway and Bus Station Revitalization:

Identified Issues: Lack of visibility, inadequate seating, poor sanitary and dining facilities, and absence of interactive spaces.

Proposed Interventions:

- Highlighting the railway station as a landmark with signage and a clock tower.
- Creating a central open plaza between transit hubs with shaded seating and vendor zones.
- Upgrading cafeterias and washrooms; repurposing train blocks for street food stalls.
- Expanding adjacent recreational facilities to support community activities.

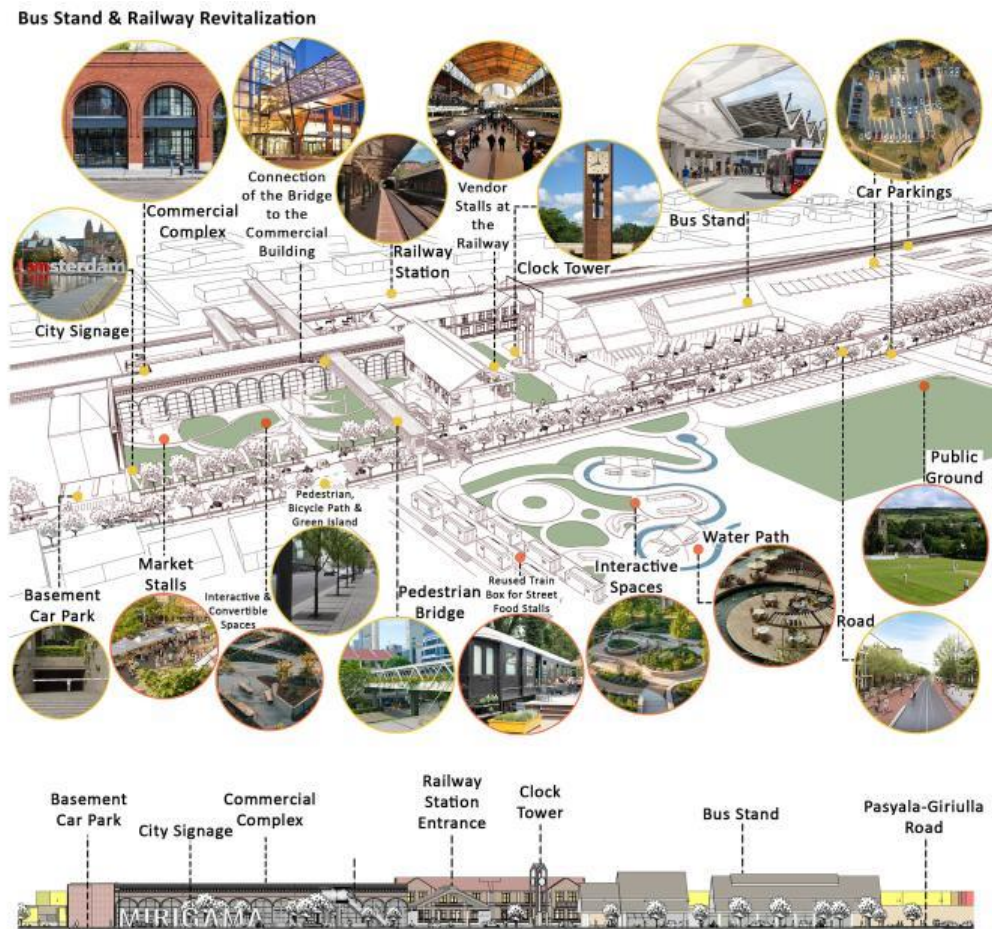


Fig. 9: Mood Board of railway and bus station revitalization

Source: author

Expected Outcomes: Strengthened civic identity, improved commuter experience, enhanced social interaction, and environmentally sustainable reuse of materials.

Proposing a Pedestrian Bridge Infront of the bus station:

Identified Issues: Frequent pedestrian crossings are causing congestion, safety risks.

Proposed Interventions:



Fig. 10: Frequent pedestrian crossing in front of the bus station
Source: author

- Elevated pedestrian bridge with lifts and stairs for universal access.
- Integration of vertical gardens and greenery to enhance aesthetics and reduce heat.
- Seamless connection between commercial and residential areas despite terrain variations.

Expected Outcomes: Improved safety for pedestrians, uninterrupted vehicular flow, and a functional link between neighbourhoods and the town centre, while promoting urban greening.

Redesigning Commercial Buildings:

Identified Issues: Disorganized commercial layout, informal vendor encroachment, and underutilized upper floors.

Proposed Interventions:

- Aesthetic and functional redesign of shops with consistent facades, arcades, and covered walkways.
- Mixed-use development integrating commercial, retail, and leisure activities.
- Designated vendor zones, better connectivity with pedestrian bridge to activate upper floors.
- New commercial malls with parking facilities and open green corridors around transit hubs.

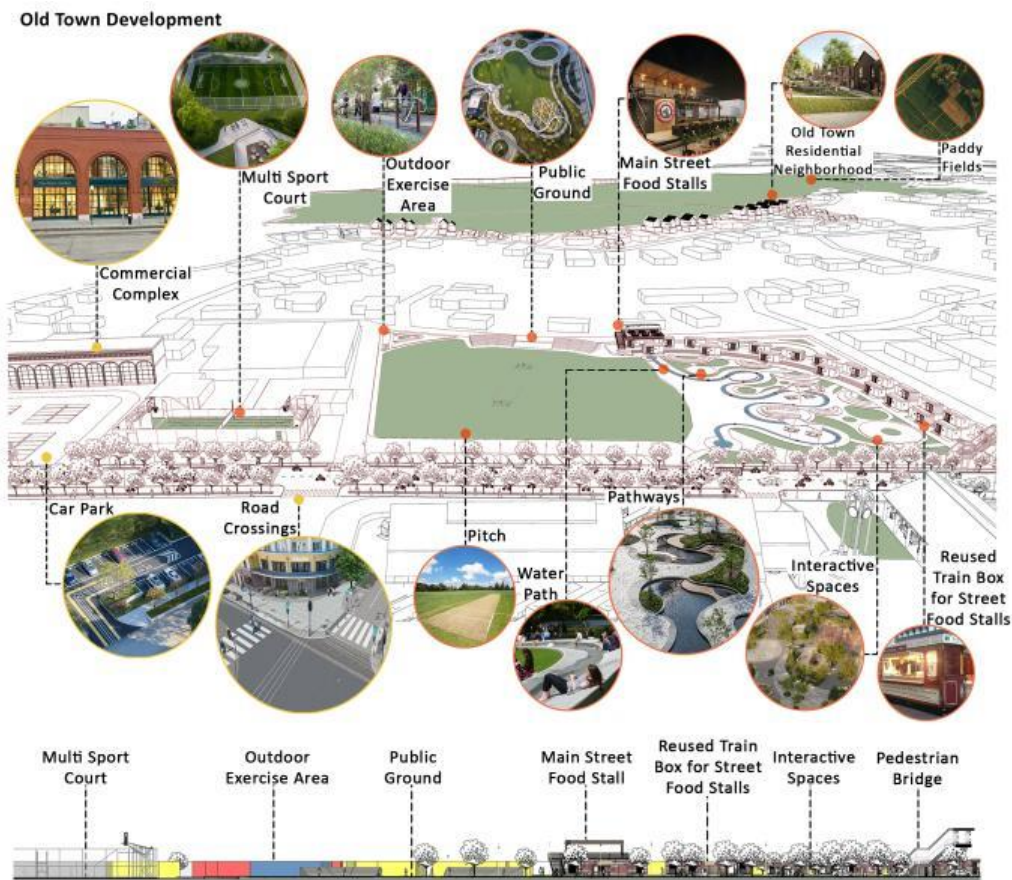


Fig. 11: Town Development proposal
 Source: author

Expected Outcomes: Cohesive commercial identity improved economic activity, pedestrian-friendly environment, and better integration of informal and formal commerce.

Proposing a Shuttle Service centred on Transit Hubs:

Identified Issues: High dependence on private vehicles, limited affordable transport for villagers, and poor access to urban markets.

Proposed Interventions:

- Affordable shuttle service connecting transit hubs, commercial areas, residential neighbourhoods, and the export zone.
- Scheduled, reliable service supporting commuting, market access, and tourism.

Expected Outcomes: Reduced carbon footprint, enhanced mobility for residents, improved access to markets and services, and strengthened local economic activity.

The issues of accessibility, safety, social interaction, and environmental sustainability in Mirigama are all addressed by these measures taken together. The plans seek to make Mirigama Town Square a lively, secure, and liveable secondary city centre by fusing TOD principles with pedestrian-friendly design, mixed-use development, and integrated transportation options.

Key Intervention Analyses:

Projects such as the widening of the Pasyala–Giriulla Main Road and the creation of bicycle and pedestrian paths along the paddy fields reflect TOD's emphasis on multimodal accessibility and reduced carbon emissions. Similarly, the revitalization of railway and bus stations transforms transit nodes into civic anchors, resonating with Jacobs' (2022) notion of socially active streets as urban lifelines. The pedestrian bridge, redesign of commercial buildings, and proposed shuttle service extend these ideas, fostering connectivity, inclusivity, and economic resilience.

All of these suggestions work together to convert theoretical ideas into useful, context-sensitive design techniques that support Mirigama's development as a secondary city that is walkable, linked, and socially active.

Policy Implications and Summary of Challenges:

The results show that poor coordination between land-use and transportation planning, fragmented urban government, and a lack of emphasis on public spaces in secondary towns are the main causes of Mirigama's problems. Although TOD principles are promoted by national programs like the National Physical Planning Policy and Plan 2017–2050, smaller urban nodes are frequently overlooked in their implementation.

Therefore, policy interventions must prioritize secondary towns as critical urban laboratories for sustainable development. This includes:

- Increasing the level of interagency cooperation among municipal councils, transportation agencies, and the UDA.
- Presenting design principles that prioritize mixed-use, transit-connected, and human-scale development.
- Putting participatory planning into practice to integrate community viewpoints into redevelopment.

In conclusion, the town square in Mirigama captures both the challenges and possibilities of the rapid urbanization of Sri Lanka's secondary towns. The study shows how TOD-based, liveability-driven urban design can turn fragmented transit nodes into resilient civic hubs that improve accessibility, safety, and social well-being by fusing theoretical frameworks with grounded design techniques.

Conclusion

This study examined how planning and design interventions might improve liveability in secondary towns that are fast becoming more urbanized. It specifically looked at how the physical and spatial characteristics of Mirigama's town square affect social interaction, safety, and accessibility. Mirigama's strategic location as a transit hub creates both benefits and challenges, according to the findings. While the bus and train terminals improve economic vitality and regional connectivity, risks like the S-shaped railway crossing compromise safety and liveability, as do poorly designed pedestrian infrastructure and disorganized public areas.

The study emphasizes that Mirigama is representative of a larger problem in Sri Lanka's secondary towns: although being acknowledged by policy as important hubs for transit-oriented and agro-industrial development, these communities frequently lack integrated, human-centered urban design initiatives. It was demonstrated that the town square's physical design significantly influences accessibility trends and social interactions, highlighting the significance of inclusive planning that strikes a balance between community well-being, safety, and practicality.

Short-term and long-term techniques were used to classify the suggested interventions. Improving pedestrian crossings, updating signage and lighting, setting up vendor sections, and adding covered seating areas are some short-term solutions to improve comfort and safety. Long-term plans include reviving transit hubs, reworking business districts, adding bike lanes and walkways to major thoroughfares, and creating unified land-use and transportation planning regulations. When combined, these measures support sustainability, safety, and social interaction in line with the ideas of transit-oriented development, or TOD.

The study identifies a number of research gaps in spite of its contributions. Measurable measures of improved livability could be obtained by quantitative evaluations of economic performance, pedestrian mobility, and air quality before and after changes. Furthermore, comparative research conducted in other secondary towns may confirm that Mirigama's TOD-based framework is transferable and aid in the development of national secondary city development guidelines.

The sustainable urban transformation of Sri Lanka can ultimately be tested in secondary towns, as Mirigama shows. By addressing their issues with scalable, context-sensitive, and participatory design methods, secondary cities across the country can be strengthened. Therefore, improving Mirigama Town Square is not simply a regional architectural solution but also a calculated chance to incorporate sustainability, inclusion, and resilience into the nation's larger urban development goal.

Acknowledgement

We sincerely acknowledge the contributions of all individuals who supported the completion of our urban design research in the MSc Architecture programme, 2025. Our profound gratitude is extended to our guest lecturers, academic supervisors, and external tutors, whose expert guidance, insightful critique, and constructive feedback were pivotal in shaping the scope, rigour, and quality of this study. We also sincerely thank all officials who provided essential data and information, which were critical to the research. Furthermore, we express our deep appreciation to our parents for their unwavering support, and to our peers and group members for their dedication, collaborative engagement, and commitment, without which this research endeavour would not have been possible.

References

Book – single author / multiple authors:

Ellis, P., & Roberts, M. (2016). *South Asia Development Matters - Leveraging Urbanization in South Asia*. Washington, DC: World Bank Group. doi:10.1596/978-1-4648-0662-9

Roberts, B. H. (2014). *Managing Systems of Secondary Cities*. Belgium: Cities Alliance. Retrieved August 27, 2025, from https://www.researchgate.net/publication/273442050_Managing_Systems_of_Secondary_Cities_Policy_Responses_in_International_Development

Book chapter:

Aelbrecht, P., & Stevens, Q. (2019). From Mixing with Strangers to Collective Placemaking: Existing Theories, Policies and Practices around Social Cohesion in Public Space Design. In P. Aelbrecht, & Q. Stevens, *Public Space Design and Social Cohesion: An International Comparison* (p. 33). Routledge. Retrieved August 26, 2025, from https://www.researchgate.net/publication/329423939_Public_Space_Design_and_Social_Cohesion_An_International_Comparison

Journal article:

Dittmar, H., & Ohland, G. (2003, 01). The New Transit Town: Best Practices In Transit-Oriented Development. *Research Gate*.

Kamalipour, H., & Peimani, N. (2025). Public space and informal urbanism in the Global South. *Public Space and the Sustainable Development Goals*, 170.

Mouratidis, K. (2021, August). Urban planning and quality of life: A review of pathways linking the built environment to subjective well-being. *Elsevier*. doi:<https://doi.org/10.1016/j.cities.2021.103229>
National Physical Planning Department. (2019). *National Physical Planning Policy*. Battaramulla: National Physical Planning Department.

Sharma, S. N., & Dehalwar, K. (2025, June 04). A Systematic Literature Review of Transit-Oriented Development to Assess Its Role in Economic Development of City. *Transportation in Developing Economies*, 11(2). doi:10.1007/s40890-025-00245-1

Reports:

Department, N. P. (2019). *National Physical Planning Policy & The Plan — 2017 - 2050*. Battaramulla: National Physical Planning Department.

Urban Development Authority. (2021). *Development Strategy - Gampaha Master Plan*. Gamapaha, Western, Sri Lanka.

UN-Habitat. (2020). *The Value of Sustainable Urbanization*. Kenya: United Nations Human Settlements Programme. Retrieved August 29, 2025, from https://unhabitat.org/sites/default/files/2020/10/wcr_2020_report.pdf

(2014). *Urban Transport System Development Project*. OrientalConsultants .
Development, T. M. (n.d.). Retrieved from THE MEGAPOLIS Western Region Master Plan- 2030: <http://www.slembassykorea.com/eng/download/Megapolis%20Master%20Plan.pdf>

Interviews:

Mirigama Police Station. (2024, October 01). Mirigama Main Issues. (D. M. Happitiya, K. I. Kandegamage, & M. A. Goonathilake, Interviewers)

Website documents:

Southern Urbanism. (2025, March 19). *Jane Jacobs: 4 Rules for Fostering Good Urbanism*. Retrieved 08 29, 2025, from Southern Urbanism: <https://www.southernurbanism.org/p/jane-jacobs-4-rules-for-fostering>

Mirigama Area Guide: Discover Insights & Price Trends. (2024). Retrieved August 26, 2025, from Property Guide: <https://propertyguide.lk/en/area-guide/mirigama>

Transforming the Urban Space Through Transit-Oriented Development: The 3V Approach. (2025). Retrieved August 28, 2025, from World Bank Group: [https://www.worldbank.org/en/topic/transport/publication/transforming-the-urban-space-through-transit-oriented-development-the-3v-approach#:~:text=Transit%2Doriented%20development%20\(TOD\)%20is%20a%20planning%20and,service%2C%20and%20amenities%20around%20](https://www.worldbank.org/en/topic/transport/publication/transforming-the-urban-space-through-transit-oriented-development-the-3v-approach#:~:text=Transit%2Doriented%20development%20(TOD)%20is%20a%20planning%20and,service%2C%20and%20amenities%20around%20)

UN-Habitat. (n.d.). *Urbanization in Sri Lanka : Building Inclusive and sustainable cities*. Retrieved 08 29, 2025, from unhabitat.org: <https://unhabitat.org/srilanka#:~:text=Urban%20sprawl%2C%20land%20scarcity%2C%20climate%20change%20and,plantations%20are%20some%20of%20the%20main%20challenges>

C40 Cities Climate Leadership Group, C. K. (2019, March). *How to Implement Transit-oriented Development*. Retrieved August 28, 2025, from www.c40knowledgehub.org: https://www.c40knowledgehub.org/s/article/How-to-implement-transit-oriented-development?language=en_US

Gehl, J. (2008, December 31). *Project for Public Spaces*. Retrieved 08 29, 2025, from www.pps.org: <https://www.pps.org/article/jgehl#:~:text=%22The%20social%20changes%20of%20our,life%20and%20a%20full%20life>.

Jacobs, J. (2022, 2 2). *The University of Chicago*. Retrieved 08 29, 2025, from Woman is a Rational Animal: <https://womanisrational.uchicago.edu/2022/02/02/jane-jacobs/#:~:text=In%20The%20Death%20and%20Life%20of%20Great%20American%20Cities%2C%20Jacob%20s,urban%20planning%20at%20the%20time>).

Conference paper:

Wanigasekara, G., Mahanama, P., & Jayasinghe, A. (2022). Investigation of tod-ness of Small and Medium Towns in Sri Lanka. *International Conference on Research for Transport and Logistics Industry*. Sri Lanka Society of Transport and Logistics. Retrieved August 28, 2025, from <http://dl.lib.uom.lk/handle/123/19415>