Comhairle Contae Thiobraid Árann
Tipperary County Council

Thurles & Environs Local Area Plan

2024 - 2030

Appendix 2 **Local Transport Plan**

March 2024

THURLES LOCAL TRANSPORT PLAN

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1. INTRODUCTION

1.1 Project Overview

SYSTRA Ltd and JB Barry & Partners, have been commissioned by Tipperary County Council (TCC) to develop a Local Transport Plan (LTP) for Thurles town and its environs. The key purpose of the LTP is to guide the future transport and mobility needs of the Thurles LTP area, taking into account the transport demand arising from existing and projected development both within the LTP boundary and the wider area of influence.

It is one of a number of complementary assessment processes which has been used in the development of the Thurles Local Area Plan 2024 -2030, which has been prepared by the council. This will help integrate local land use with transport policy with the goal of enhancing quality of life while improving the urban environment. The aim of the report is to provide a long-term vision for sustainable mobility in Thurles and to create an integrated transport system across all modes that is accessible to all.

Transport plays a crucial role in the vitality and growth of a town. It serves as the lifeline that connects the town's residents, businesses, and resources to the outside world, opening up opportunities and facilitating economic development. Reliable and efficient transport infrastructure enables people to commute to work, access essential services, and engage in recreational activities beyond the town's borders. It facilitates the movement of goods, allowing local businesses to import supplies and export their products contributing to trade and the overall prosperity of the community. Additionally, an accessible and well-connected transportation system attracts visitors, boosting tourism and generating revenue for local businesses.

This document has been developed at a strategic level in accordance with national and regional policies. It is important to note that all suggested proposals will undergo further examination to establish the most suitable site-specific interventions. This will involve comprehensive analysis and design processes to ensure that the proposed schemes are meticulously developed.

1.2 Study Purpose

Census 2022[1] identified that the Built-up Area (BUA[2]) of Thurles has a population of 8,185. Though a direct comparison with the settlement area in Census 2016 and the BUA area in Census 2022 cannot be drawn, the geographical areas of the Electoral Districts (EDs) of the town, Thurles Urban and Thurles Rural, have not changed in the inter-census period. The combined population of these EDs has increased from 9,128 in 2016 to 9,487 in 2022, a 3.9% increase in population. This increase in population is below both the state (8.1%) and county (5.2%) growth over the same period. The growth of the Thurles Urban ED is 4.5%, aligning with Tipperary's ambition for more consolidated patterns of growth. This is further demonstrated by the increase in the density of the urban population, increasing from 1,336 persons per square km in 2016 to 1,384 in 2022, a 3.6% increase in density.

Thurles is the third largest town in Tipperary and occupies a central location within the county, directly served by strategic inter-urban road and rail corridors, connecting the Southwest, Mid-West and Greater Dublin Area. It is bounded by the Silvermines to the northwest and the Slievardagh hills to the

[1] While the population data from the 2022 Census is referenced here, the full dataset wasn't available prior to the LTP report being finalised. Therefore, data from the 2016 Census is also presented in this document.
[2] In Census 2022, the CSO introduced a new geographic area to replace the 'Settlements' geographic area in previous Census. Detail on the methodology of the BUA can be found on the CSO website at https://www.cso.ie/en/census/census2022/census2022urbanboundariesandbuiltupareas/

southeast and is set within the valley of the River Suir. The Thurles surrounding area is rich and varied in scenery and history. The castles and monastic settlements which surround Thurles bear lasting evidence to the area's storied history.

Thurles is a compact town which is evenly developed around its central core and has a number of medium to large schools in the centre of the town to the north and east of Liberty Square.

The strategic road network serving Thurles can be characterised as six radial axes, including N62 Brittas Road, N62 Slievenamon Road, N75 Dublin Road and R498 Parnell Street. The town also benefits from a rail line on a north-south alignment, providing connections to Cork, Dublin, and Tralee.

The Local Transport Plan has been prepared to determine the key infrastructure and service measures and key transport policies required in Thurles, and its wider hinterland, to tackle existing constraints in transport capacity, to plan for appropriate levels of development, to facilitate projected growth in population and employment, and to encourage sustainable mobility – while supporting climate change reduction targets and a shift to sustainable modes based on the road user hierarchy.

1.3 ABTA approach

Following the guidelines set out in Transport Infrastructure Ireland (TII)/National Transport Authority's (NTA) 'Area Based Transport Assessment (ABTA) Guidance Notes – April 2018'[3] , and the NTA/TII 'ABTA How To Guide Guidance Document – Pilot Methodology September 2021[4]' the below tasks will be undertaken as part of the ABTA:

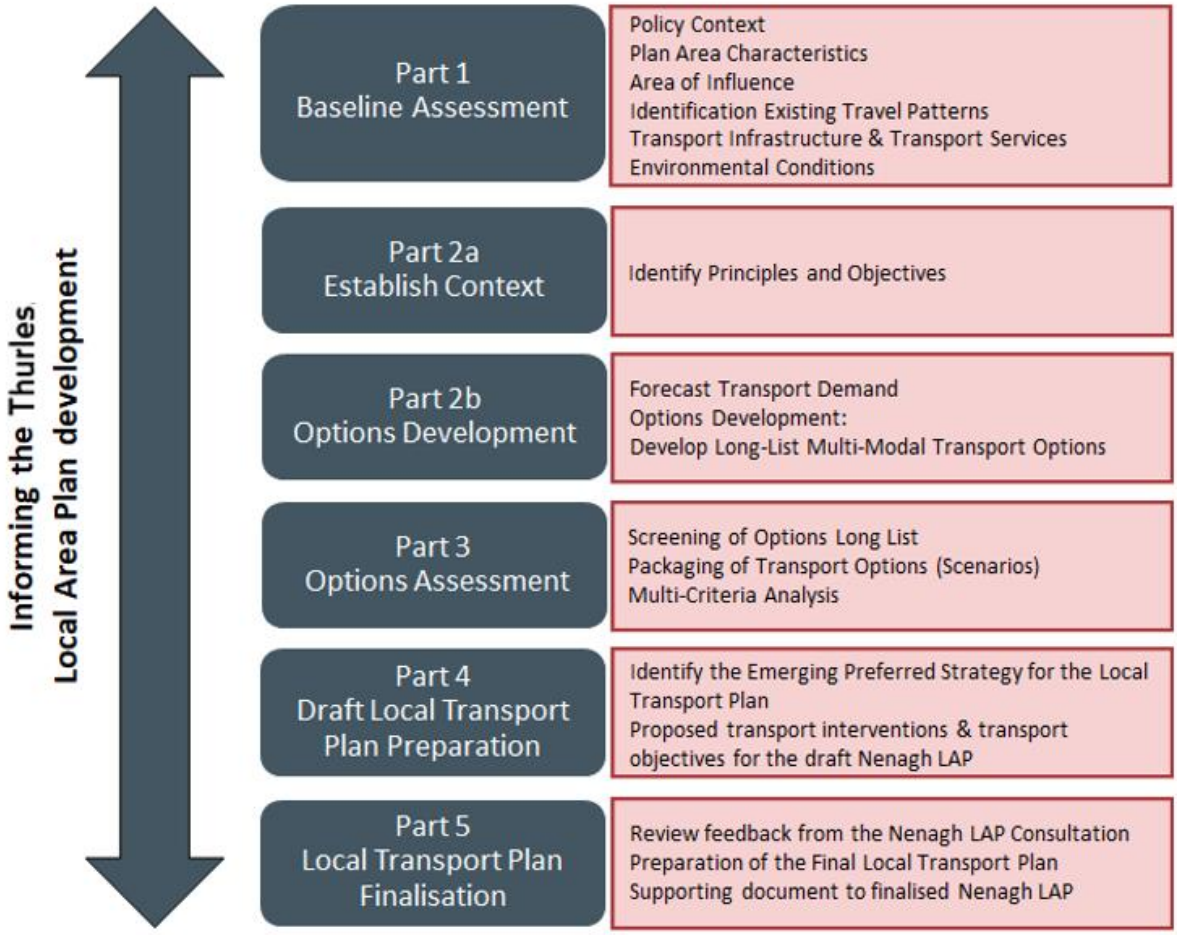


Figure 1.1 Thurles ABTA Study Process

Using an evidence-based approach, the LTP, based on the ABTA methodology, is used to guide and inform suitable infrastructure and policy measures to ensure the projected growth in population and employment is achieved in a sustainable manner.

The LTP takes a considered approach that considers the needs of residents, students, businesses, commuters and visitors as well as the future development aspirations. A key component will be identifying opportunities for smarter travel choices which will enable more people to travel by sustainable modes. The LTP has been developed in accordance with the principles set out in the National Investment Framework for Transport in Ireland (NIFTI). This includes alignment with NIFTI's road user hierarchy which prioritises walking and cycling, then public transport and then vehicular traffic including the private car.

[3] Source: https://www.tiipublications.ie/library/PE-PDV-02046-01.pdf

[4] Source: https://www.nationaltransport.ie/wp-content/uploads/2021/09/20210909-ABTA-How-To-Guidance-Doc-v6.0-Website-Version.pdf

The overall outcome is a Local Transport Plan setting out a series of transport policy recommendations over the short, medium, and long term that will support the sustainable growth of the town.

1.4 Report Structure

The Local Transport Plan (LTP) Report is structured as follows:

- **Chapter 1** outlines the context of this LTP and an overview of the report structure and layout. It also details the overall ABTA approach.
- **Chapter 2** gives an overview of the **Baseline Assessment** phase of the LTP, including the policy and plan context, and a summary of the area characteristics, existing travel patterns and transport conditions along with feedback from the public and schools surveys and a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis.
- **Chapter 3** examines the objectives for the LTP which have been determined from consideration of policy, transport baseline and demand information.
- **Chapter 4** outlines the process for developing the long-list of transport options to overcome existing constraints within the study area.
- **Chapter 5** gives an overview of the options assessment process used to identify the package of measures that assist in achieving the overall study objectives.
- **Chapter 6** details the Emerging Preferred Strategy which sets out recommendations with regard to the combination of transport measures which the LTP will seek to promote and implement (with engagement and assistance from other parties such as the National Transport Authority (NTA) where appropriate);
- **Chapter 7** outlines the monitoring strategy for this LTP; and
- **Chapter 8** provides a summary and conclusion to the report.

2. BASELINE ASSESSMENT

2.1 Introduction

The following chapter provides an overview of the Baseline Assessment undertaken for the Thurles LTP. The aim of the Baseline Assessment was to gain a clear understanding of the existing spatial characteristics, land uses, transport conditions and constraints relating to the Study area, focusing on:

- **Policy Context**: outlining the key policies and plans that inform the LTP.
- **Thurles Area Characteristics**: reviewing the study area including demographics, land-use and physical constraints.
- **Existing Travel Patterns**: outlining the distribution of trips to/from/within the study area, journey lengths by mode, and overall mode share.
- **Existing Transport Infrastructure**: reviewing the existing walking, cycling, public transport and road networks within the study area
- **Consultation Feedback**: insight gained from the Baseline Consultation with key stakeholders and local residents during the initial public consultation process in June 2022
- **Thurles Schools Consultation**

The following sections provide a summary of the key elements outlined above. Further detail is provided in the full Baseline Assessment Report in Appendix A.

At the time of writing this LTP report, headline Census 2022 population figures were available and have been presented in Section 1.2. However, the full Census dataset including Small Area Population Statistics and Place of Work, School or College - Census of Anonymised Records (POWSCAR) are yet to be released.

The Baseline Assessment for Thurles was undertaken in 2022, as such, the analysis of travel characteristics and travel patterns which are presented in this chapter, are derived from the 2016 Census data.

2.2 Policy Context

The table below outlines the key existing National, Regional and local polices, plans, and guidelines, relevant to the development area that were used to inform the Thurles Local Transport Plan during the Baseline Assessment phase of the Study (which was undertaken in 2022).

The following table provides a summary of the Planning and Policy Plans. Further detail is provided in the Baseline Assessment Report in Appendix A.

Table 2.1 Existing Relevant Policies, Plans and Guidance Documents

International Level
• European Union Green Deal 2020 • Fit for 55 Package 2021 • UN Convention for the Rights of People with Disabilities 2019 • UN Sustainable Development Goals (SDGs) – 17 Goals to transform our World (2015)
National Level
• Project Ireland 2040: National Planning Framework 2040 • Project Ireland 2040: National Development Plan 2021 – 2030 • National Sustainable Mobility Policy and Action Plan 2022-2025 • National Climate Action Plan 2021 • National Investment Framework for Transport in Ireland 2021 (NIFTI) • Our Journey Towards Vision Zero: Road Safety Strategy 2021-2030 • CycleConnects: Ireland's Cycle Network Programme (2022) • The National Cycle Network (2022) • Town Centre First, A Policy Approach for Irish Towns (2022) • Connecting Ireland Rural Mobility Plan 2022
Regional Level
• Southern Regional Assembly Regional Spatial & Economic Strategy (RSES) 2040 • Tipperary County Development Plan 2022-2028 • Tipperary County Council Corporate Plan 2020 – 2024 • Southern Regional Assembly Limerick-Shannon Metropolitan Area Strategic Plan
Local Level
• Thurles Walking and Cycling Strategy 2021 • Thurles Town Centre Masterplan 2021 • Thurles and Environs Development Plan 2009-2015 • Thurles Town Centre Renewal Strategy 2020
Guidance Documents
• Common Appraisal Framework for Transport Projects and Programmes • National Cycle Manual • Design Manual for Urban Roads and Streets • Permeability: A Best Practice Guide • Sustainable Urban Housing: Design Standards for New Apartments – Guidelines for Planning Authorities • TII/NTA Area Based Transport Assessment (ABTA) Guidance Notes (2018) • TII/NTA ABTA 'How To' Guide – Pilot Methodology (2021) • TII Publication – The Treatment of Transition Zones to Towns and Villages on National Roads

- TII Publication – Design Phase Procedure for Road Safety Improvement Schemes, Urban Renewal Schemes and Local Improvement Schemes
- Section 28 Ministerial Guidelines 'Spatial Planning and National Roads Guidelines for Planning Authorities' (DoECLG, 2012)

Since the Baseline Assessment report was produced, TII have published a strategy for the National Roads network across Ireland. An overview of the report is provided below. The Department of Transport have also published a new Climate Action Plan document and the NTA have produced a note on Rapid Build Active Travel Facilities. These documents were subsequently taken into account in the LTP Options Development Process. Also prior to the public consultation process for the Local Transport Plan, the Department of Transport have also published a new Transport Appraisal Framework which provides appraisal guidance which aims to promote investment in the transport system which meets the needs of society, fulfils strategic policy objectives, and delivers value for money. While it is acknowledged that CAF has been replaced by the new TAF document, the options assessment process which is detailed in the following sections, has been undertaken in line with CAF.

National Roads Network 2040 – TII Consultation August – October 2022

During 2022, Transport Infrastructure Ireland (TII) sought views on its long term proposed strategy for planning, operating, and maintaining the National Roads network. The Final Report was published in April 2023. National Roads 2040 (NR2040)[5] is TII's long-term strategy for planning, operating, and maintaining the National Roads network. NR2040 has been developed to support the delivery of Project Ireland 2040 objectives and to align with commitments in wider policy including the Climate Action Plan and the DoT's National Sustainable Mobility policy. NR2040 also aligns with the Department of Transport's (DoT) National Investment Framework for Transport in Ireland (NIFTI, December 2021) with the Strategy's investment priorities developed to align closely to the four NIFTI investment priorities:

- Decarbonisation
- Enhanced regional and rural connectivity
- Protection and renewal
- Mobility of people & goods in urban areas

The strategy has been developed to ensure the future needs of the national road network are met and the following issues have identified amongst others, by TII in developing the strategy –

- Future Demographic Growth
- Road Transport Decarbonisation
- Climate Adaption and Resilience
- Sustainability
- Road Safety
- Movement of people and goods
- Urban Congestion
- Integrated Mobility

The Strategy states that:

> ***"In relation to active travel, where national roads are too dangerous for active travel, meaningful interventions should be considered in cooperation with relevant stakeholders and partner agencies. …. TII is committed to delivering improved active***

[5] https://www.tii.ie/tii-library/strategic-planning/national-roads-2040/TII-NR2040-Final-Report-EN-April-2023.pdf

travel provision in all its projects, such as improving the safety of the National Roads network for active travel users and reducing the severance caused by some National Roads in urban areas."

And where there is urban congestion, "the management of national roads must balance increasing mobility demands for all users and finite road space. .... Where the national roads network cannot safely accommodate all users, including active travel modes, adjacent solutions should be explored"

The strategy also defines TII investment portfolios for coming years and provides guidance to Sponsoring Agencies and Local Authorities. TII, through NR2040, will align with the NIFTI Intervention hierarchy and seek to address transport challenges through the use of existing infrastructure before considering the provision of new infrastructure.

Climate Action Plan 2023 – Department of Transport – December 2022

Climate Action Plan 2023 is the second annual update to Ireland's Climate Action Plan 2019. This plan is the first to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021, and following the introduction, in 2022, of economy-wide carbon budgets and sectoral emissions ceilings. The plan implements the carbon budgets and sectoral emissions ceilings and sets a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government.

Active Travel Advice Note: Rapid Build Active Travel Facilities – National Transport Authority – February 2023

In response to the tension between increasing construction costs and the CAP requirement for 1,000km of new active travel infrastructure to be built by 2025, the NTA issued an advice note in February. This note outlines that Cost Effective Rapid Build construction approaches, including road space reallocation, are now required to be the initial options to be considered in new active travel infrastructure.

Rapid Build active travel facilities are schemes that utilise cost-effective measures to deliver walking and cycling infrastructure quicker than traditional (full build) construction methods. They do not typically involve major construction works such as full road reconstruction or significant changes to drainage systems or relocation of utilities etc., however they may involve changes to kerb lines and minor drainage works. The works will also be typically within the boundaries of the existing roadway which can simplify the planning process, which positively effects project programme and delivery.

Rapid Build Schemes do not have to mean bollards, although using bollards to reserve road space for walking and cycling can be a useful interim measure. There are design options available for rapid build projects which use robust materials, with a quality finish, that produces schemes that can remain in place for many years.

Transport Appraisal Framework – Department of Transport – June 2023

The new Transport Appraisal Framework (TAF) document replaces the Common Appraisal Framework (CAF) for Transport Projects and Programmes (published in 2016 and updated subsequently). The TAF provides appraisal and implementation guidance that aims to promote investment in the transport system which meets the needs of society, fulfils strategic policy objectives, and delivers value for

money. The changes will lead to an appraisal framework that facilitates the delivery of transport investment proposals through rigorous and proportionate appraisal, in compliance with Public Spending Code[6] requirements, and by making the appraisal framework more accessible and user-friendly.

2.3 Description of Study Area

Thurles is a strategically located urban centre in the sub-regional context benefitting from well-established road and rail links with important economic hubs, including Limerick, Cork, Waterford and Dublin. The Regional Spatial and Economic Strategy for the Southern Region has identified Thurles, along with two other Tipperary towns, as a 'Key Town' in 'facilitating growth beyond the cities at the sub-regional level'. Specifically, Thurles' employment potential, especially in the context of its proposed role as an emerging centre for the bioeconomy and its potential for regional and inter-regional connectivity were cited as deciding factors in its selection.

A study area boundary for the Thurles LTP was identified and agreed with Tipperary County Council. It broadly aligns with the LAP boundary, with some adjustments applied to account for projected growth, existing pedestrian desire lines, and key employment destinations. The LTP study area was also aligned with Census Small Area (CSA) boundaries for the purpose of undertaking baseline analyses. The figure below shows the final study area boundaries established for the Thurles LTP.

The two boundaries for the Thurles LTP are illustrated in Figure 2-1. ***It should be noted that all data presented in the following sections of this chapter is related to the Thurles LTP Study Area i.e. the blue boundary area illustrated in Figure 2-1.***

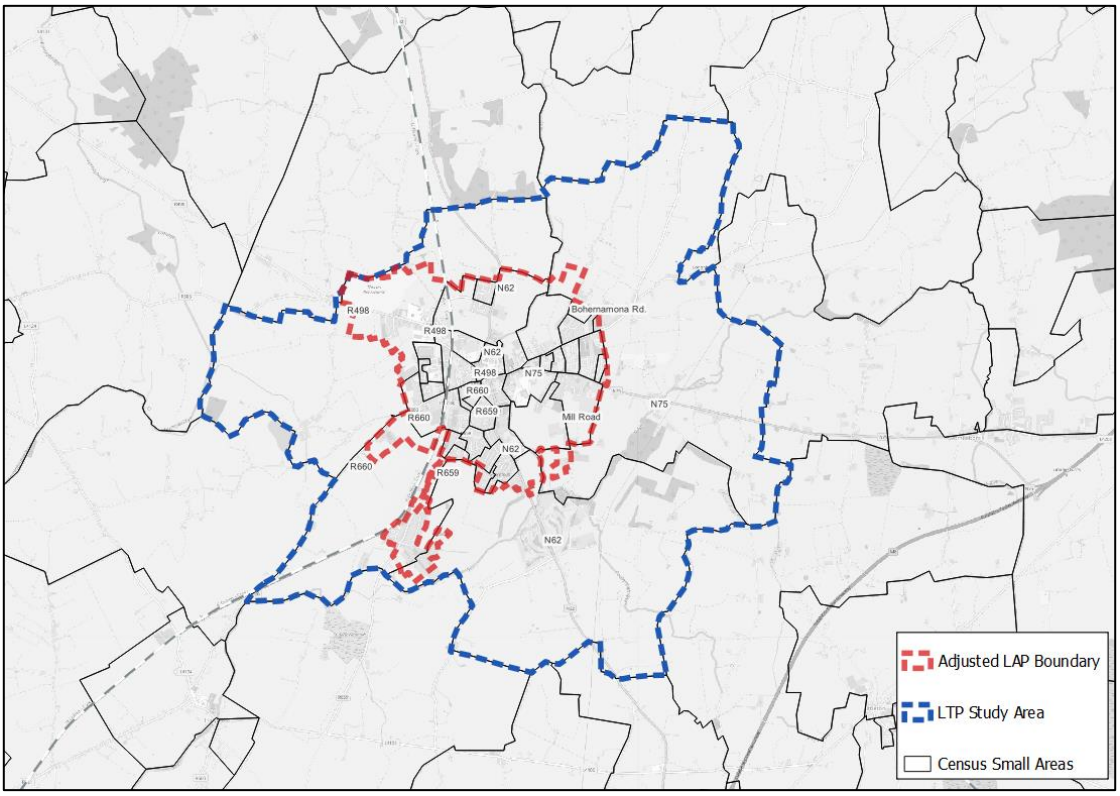


Figure 2-1: Thurles LTP Study Area

[6] https://www.gov.ie/en/publication/public-spending-code/

2.4 Demographic Profile

Total Population

To better understand the profile of residents in the study area, and their travel patterns, this section presents data extracted from the 2016 Census Small Area Population Statistics (SAPS) dataset[7]. The 2016 dataset was used as it was the latest available at the time of undertaking this analysis and thus the demographic information presented in this section and the rest of the chapter, is from the 2016 Census SAPS dataset. It summarises information on the proportion of residents travelling to work and school, what type of jobs people do, as well as high level information on age, gender, and car ownership.

As shown in Table 2.2 below, the LTP Study Area has an estimated population of approximately 7,940 according to the 2016 Census. This represents a population growth of 0.09% against the previous 2011 Census (7,933), which is a significantly lower growth rate than that seen nationally (3.8%). Similarly, to many towns in Tipperary, the population of Thurles has remained relatively static in the period up to 2016 and even declined in Thurles town centre according to the Census data. The National Planning Framework specified a population growth target of 24,500 persons for County Tipperary by 2031, correlating to an additional 2,383 persons for Thurles.

Table 2.2 Thurles Study Area Population

AREA	2011 POPULATION	2016 POPULATION	2011-2016 GROWTH
Thurles ABTA	7,933	7,940	0.09%

2.5 Environmental Conditional & Physical Constraints

The Thurles area has been assessed in terms of the environmental facets including designated sites, ecological receptors, hydrology, cultural heritage and archaeology and sensitive receptors have been identified where present. In summary:

- A number of protected species have been identified, as well as invasive species listed on the Third Schedule of the Birds and Natural Habitats Regulations (S.I. No. 477).
- There are a number of historic flooding events in the Thurles Area, predominantly along the River Suir, and Stream River Drish.
- There are some features of archaeological, architectural and cultural heritage interest in the Thurles Area which needs to be considered when developing options as part of the ABTA.
- It is considered that the identified sensitive receptors herein do not pose a significant constraint at this time. However, further assessments, site inspections, and targeted surveys (in particular in relation to works adjacent to the River Suir) may be required in the future to determine the potential impacts of development in the Thurles Area.

[7] 2016 Census Small Area Population Statistics available on the Central Statistics Office website at: https://www.cso.ie/en/census/census2016reports/census2016smallareapopulationstatistics/

Physical Constraints

Thurles occupies a relatively flat location on the River Suir. Its highest point is located on the north-west periphery of the town along the Parnell Street axis. Historic development patterns have been strongly influenced by the River Suir and also by the Cork-Dublin rail line, acting as significant barriers to movement along the east-west axis as illustrated in Figure 2-2 below.

Figure 2-2: Physical Constraints

2.6 Existing Travel Patterns

Trip Distribution Profile

The 2016 *Census Place of Work, School or College Anonymised Records (POWSCAR)* database was analysed to identify the distribution of employment trips travelling to/from the Thurles LTP study area. For ease of presentation of results, areas have been grouped into sectors for the analysis. The results of the sector distribution analysis are illustrated in the figures below.

Upon analysis of the 1,756 observed employment trips originating within the Thurles LTP study area, the most significant findings included:

- Amongst the work trips originating within the study area that are travelling to the Southern sector, the biggest destinations are Clonmel (134 trips) and 98 trips to Cashel.
- When looking at movements to regional towns surrounding Thurles, there are significant numbers of employment trips to Nenagh (110), Kilkenny (84) and Roscrea (66).
- When looking at movements to cities further afield, there are a significant number of employment trips observed to the Greater Dublin Area (144), and Limerick City and County (102).

Beyond the sector system outlined in the figure below, the remaining employment trips are quite dispersed, with approximately 13% of demand distributed across a large number of settlements. The dispersed nature of these trips can make them difficult to serve via public transport, leading to an increased reliance on the private car.

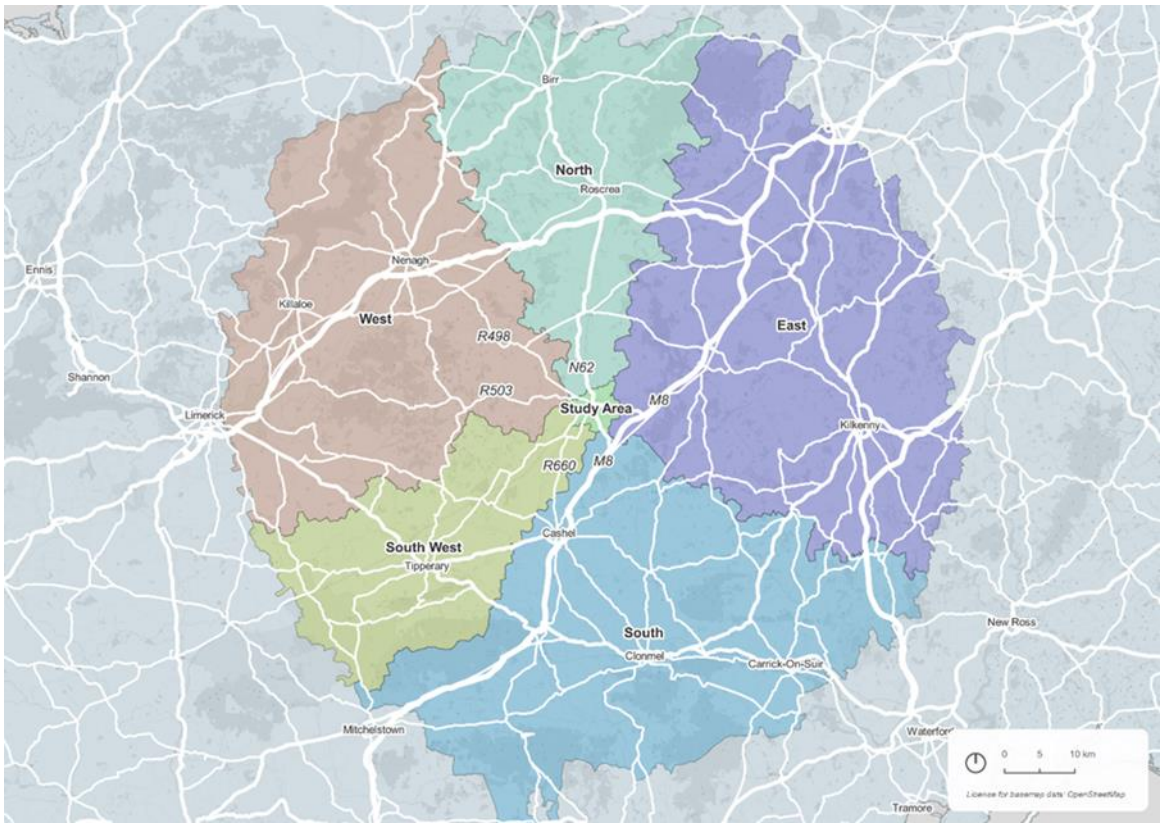


Figure 2-3: Employment Trip Distribution Zones

For employment trips traveling to the study area, approximately 33% (1,722) begin and end within the study area itself. When looking at trips to the study area from the surrounding regional towns, the results were relatively evenly dispersed across the sectors outlined above. The East sector represented the highest number of employment trips to the study area, with 15% (765).

Internal Trip Distribution - Employment

The following figure illustrates the key destinations for employment trips travelling internally within the Thurles LTP study area. As expected, the key destinations align strongly with the employment trip attractors. Thurles town centre and Liberty Square is the largest destination for internal employment trips, representing approximately 31% (529) of all internal employment trips. The dominant areas of origin trips are concentrated in residential areas in Cabra, Cluain Glas, and Moyne Road. Links between these key origins and employment attractors should be strengthened for walking and cycling to support sustainable travel.

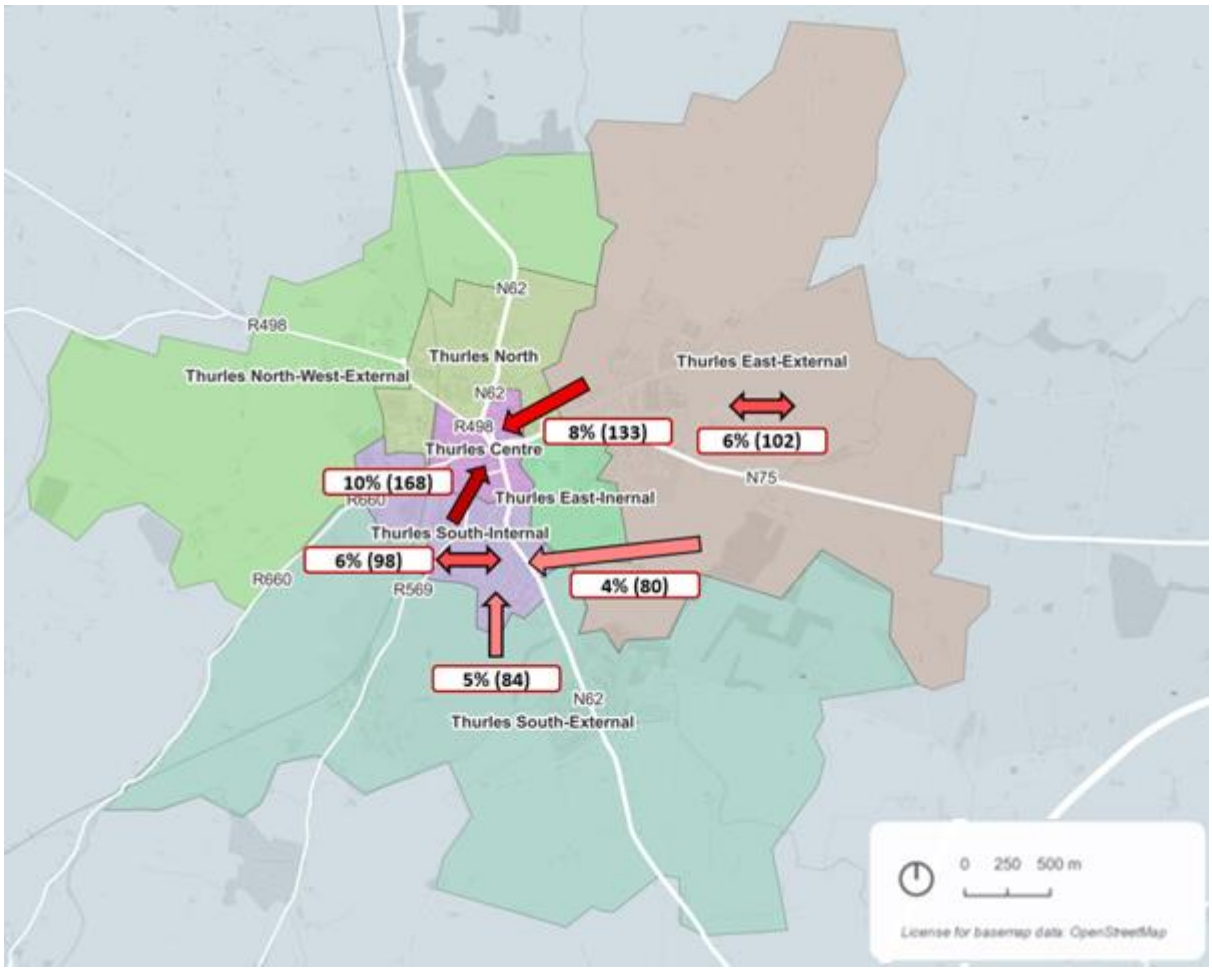


Figure 2-4: Internal Employment Trip Distribution

2.7 Mode Share

Census Small Area Population Statistics (SAPS) data provides information from the census on the typical mode of transport used for travelling to work and education.

Employment Trips

The figure below, illustrates the mode share for trips to work originating within the study area by walk, cycle, public transport (PT) and car (including drivers, passengers, motorcycle/scooters, vans and lorries). It also outlines how the study area compares against the equivalent county and national values.

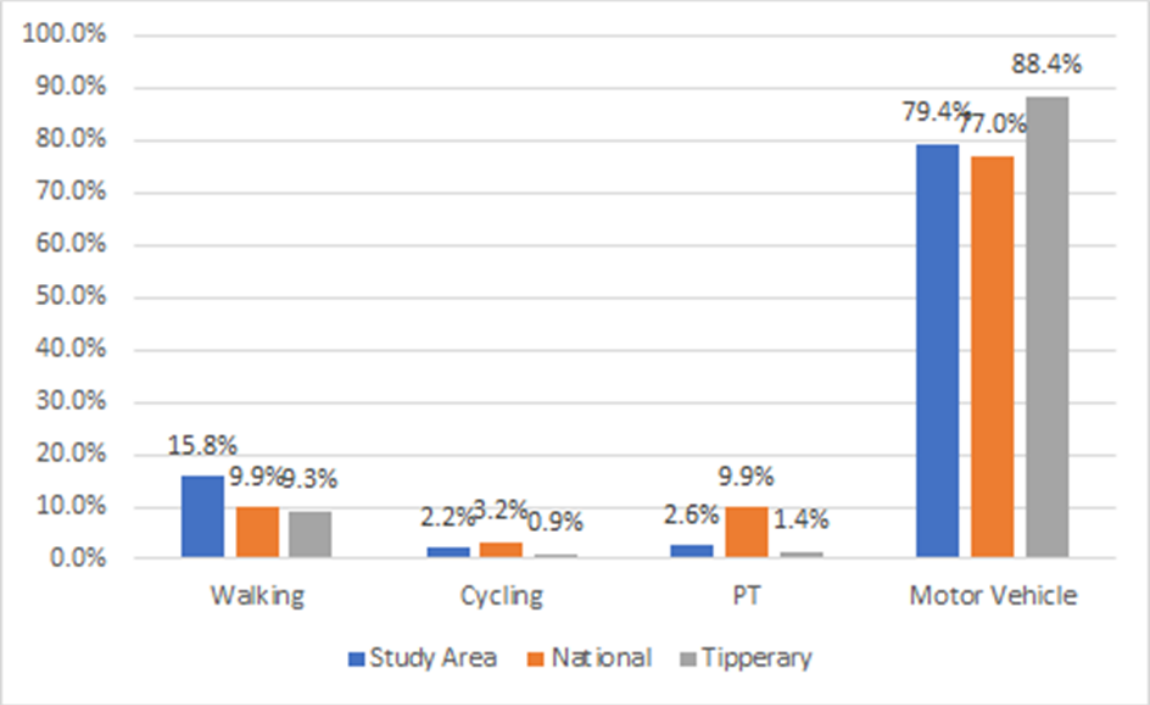


Figure 2-5: Employment Trip Mode Share

Key findings observed from the mode share data for employment trips in the study area include:

- Approx. 18% of commuter trips originating in the study area are undertaken by active modes. Walking trips form the majority of these and are significantly higher than the county and national average. Cycling accounts for just 2.2%, 1% under the national average.
- Public transport represents just 2.6% of the mode share for commuter trips, approx. 7% below the national average.
- The private car is the most dominant mode of transport for work trips from the study area at 79.4%, 2.4% above the national average for this mode.
- Private car use in Thurles, however, is under the County average of 88.4%.

Education Trips

The following figure illustrates the mode share for trips to education originating within the study area. It also outlines how the study area compares against the equivalent county and national values.

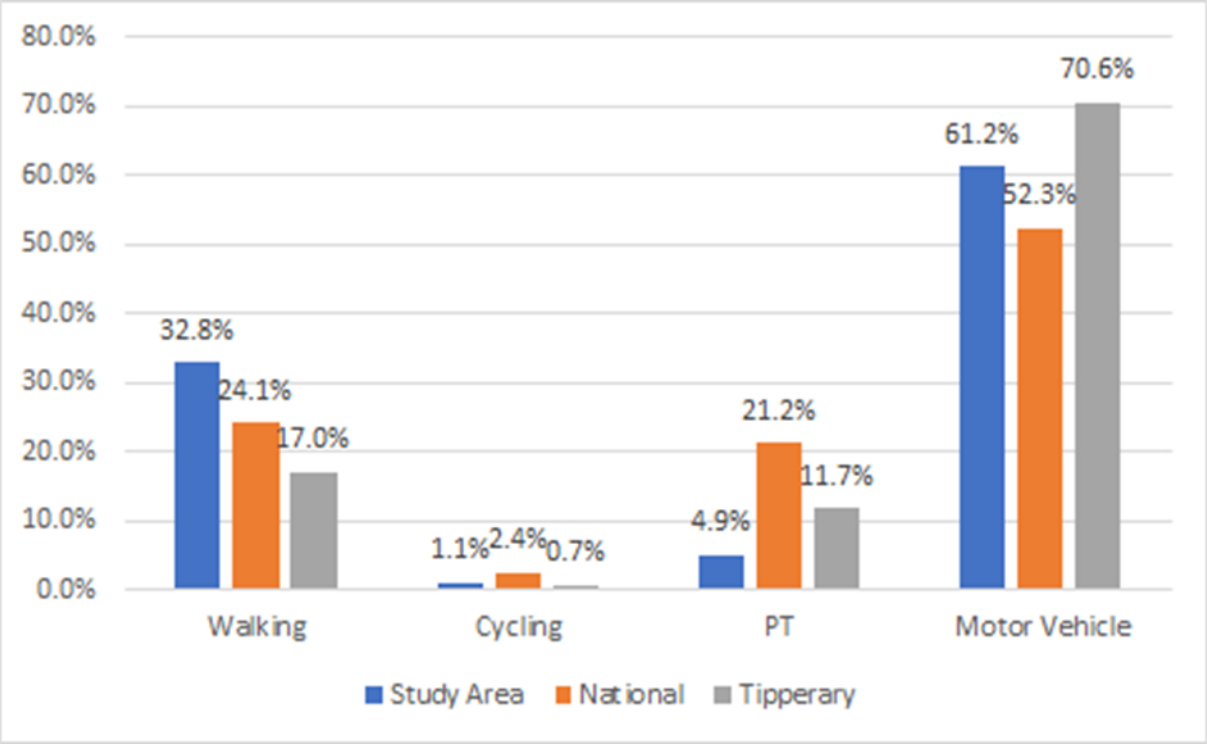


Figure 2-6: Education Trips Mode Share

The key findings for education trips include:

- The overall mode share for active travel (walking and cycling) to education is close to 34%, significantly higher than the national average (26.5%), and County average (17%).
- Cycling however is below the national average by 1.3%.
- Public transport mode share is 5%, falling significantly below the county average of 11.7%.
- Overall, car is still the dominant mode of transport for education-related trips, accounting for 61.2% of all journeys. This is approx. 11% above the national average.

2.8 Trip Length Distribution

Analysis was undertaken to determine the trip length distribution by mode for employment purposes from 2016 Census Place of Work, School or College Anonymised Records (POWSCAR) data. This was used to establish the typical trip lengths, and modes used, for journeys by residents of the study area and help identify where opportunities might exist to further support a shift away from the private car and onto sustainable modes.

Employment Trips

The figure and table below outlines the trip length distribution by mode for all employment trips generated within the Thurles LTP study area. The results indicate:

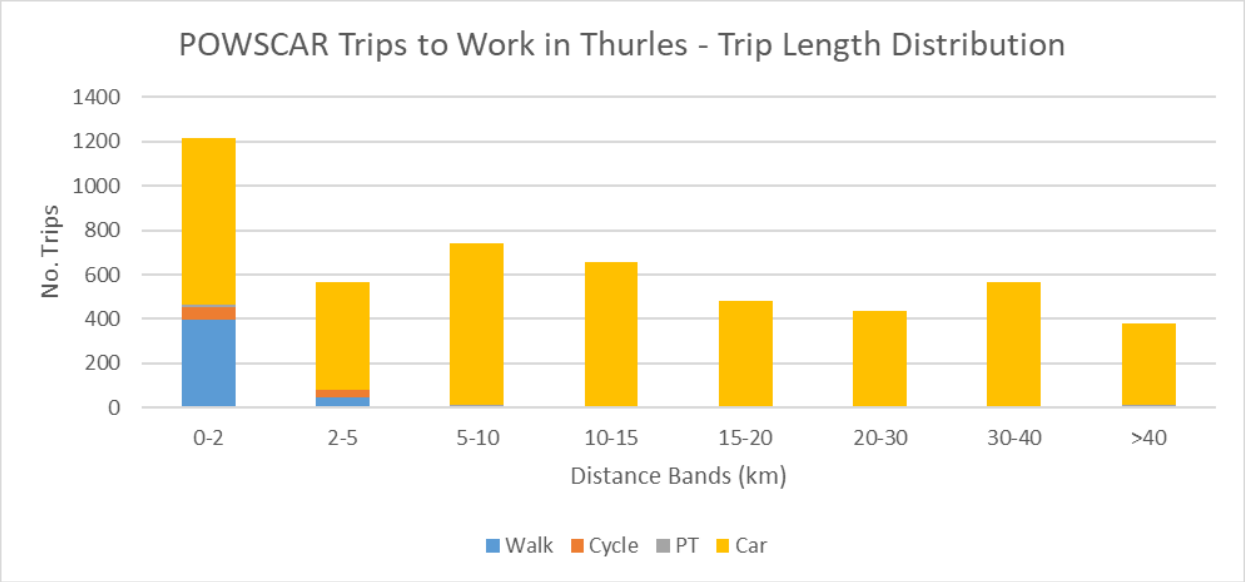


Figure 2-7: Employment Trip Length Distribution by Mode [POWSCAR, 2016]

DISTANCE BANDS (KM)	EMPLOYMEMENT TRIPS				MODE SHARES			
	Walk	Cycle	PT	Car	Walk	Cycle	PT	Car
0-2	399	54	10	754	32.8%	4.4%	0.8%	62.0%
2-5	46	34	0	484	8.2%	6.0%	0.0%	85.8%
5-10	0	6	6	731	0.0%	0.8%	0.8%	98.4%
10-15	0	0	0	655	0.0%	0.0%	0.0%	100.0%
15-20	0	0	2	482	0.0%	0.0%	0.4%	99.6%
20-30	0	0	0	434	0.0%	0.0%	0.0%	100.0%
30-40	0	0	4	562	0.0%	0.0%	0.7%	99.3%
>40	0	0	14	364	0.0%	0.0%	3.7%	96.3%

Table 2.3 Employment Trip Length Distribution, by Mode [POWSCAR, 2016]

Key Findings:

- The majority of trips (63%) are less than 15km in length, with the highest level of demand travelling under 2km (24%; 1,217 trips).
- Although there is a high level of short employment trips under 2km, the car mode share for this cohort is significantly high, where 754 of the 1,217 trips are made by car (62%). Measures should be introduced to encourage walking and cycling for these shorter distance commutes.
- Car is the dominant mode of transport for medium to longer distance trips of between 2-10km. For the short/medium distance journeys of 2-5km, it can be difficult for public transport to compete with journey times by car due to wait times, walking to stops etc.

2.9 Access to Education (ATOS Tool)

Introduction to ATOS

Access to Opportunities and Services (ATOS) is a measure of how easy it is to access key services and employment by walking and cycling. In developing the ATOS tool, the National Transport Authority (NTA) have followed a methodology established by Transport for London and adapted it to make it more suitable for use outside of large metropolitan areas.

The ATOS tool has been run for access to primary and post-primary schools within the study area by walking and cycling. For this analysis, the defined criteria was the ability to access any primary school (at least one) and any post-primary school within a 15 minute walk and 10 minute cycle. The scoring for each grid is then determined by how the travel time compares to the average travel time for all squares that have access to a primary/post-primary school within the specified timeframes. The scores are given on a scale of A to E, with A being the best and E being the worst.

It should be noted again that the score is calculated based on how travel times to the nearest relevant destinations (for the specific type of service) compared to the average travel time across all locations in the study area. The score is comparative, measuring where accessibility is higher and lower than the mean in the study area, rather than an objective score of the levels of accessibility.

The figures below present the ATOS results for accessibility to schools in Thurles by walking and cycling.

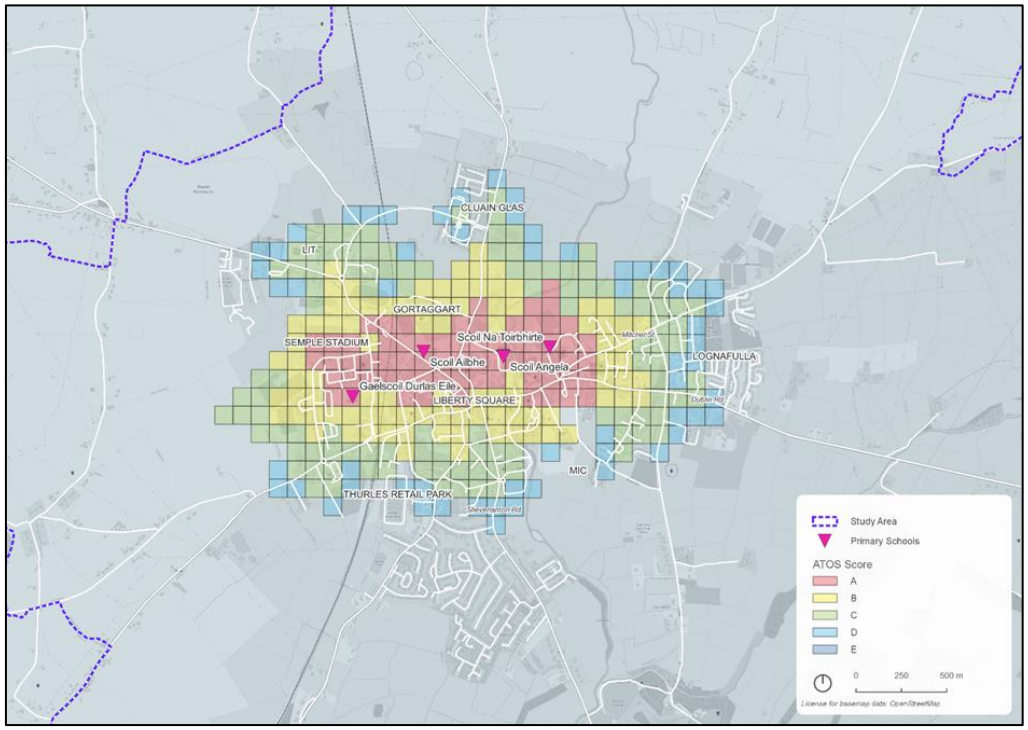


Figure 2-8: ATOS Primary Schools Results - Walking

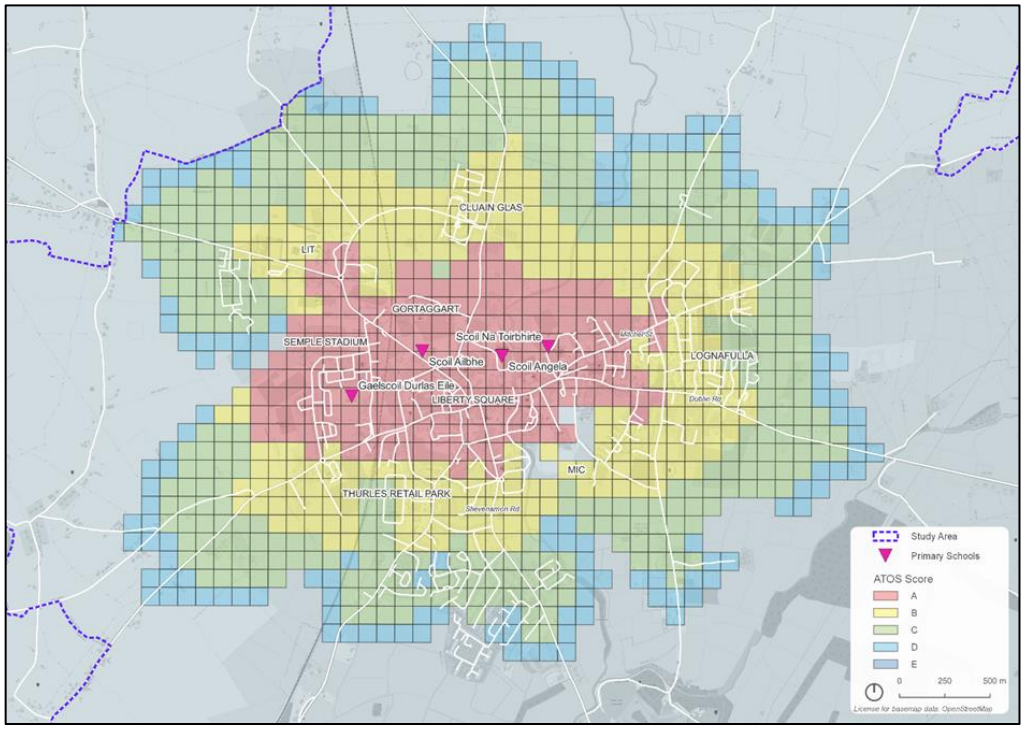


Figure 2-9: ATOS Primary School Results - Cycling

For pedestrians traveling to primary school, access from the north scores higher according to the Access to Opportunities and Services (ATOS) results. While accessibility is generally good throughout the study area, there are observed areas where improvement should be sought from the southern approach from Liberty Square and off roads such as Friar Street and Bohernanave.

The results indicate that there is generally good accessibility by bike to primary schools within the study area. Accessibility levels are marginally better from areas to the north of Liberty Square and the town centre, while small pockets of lower accessibility can be seen to the south by Slievenamon Rd.

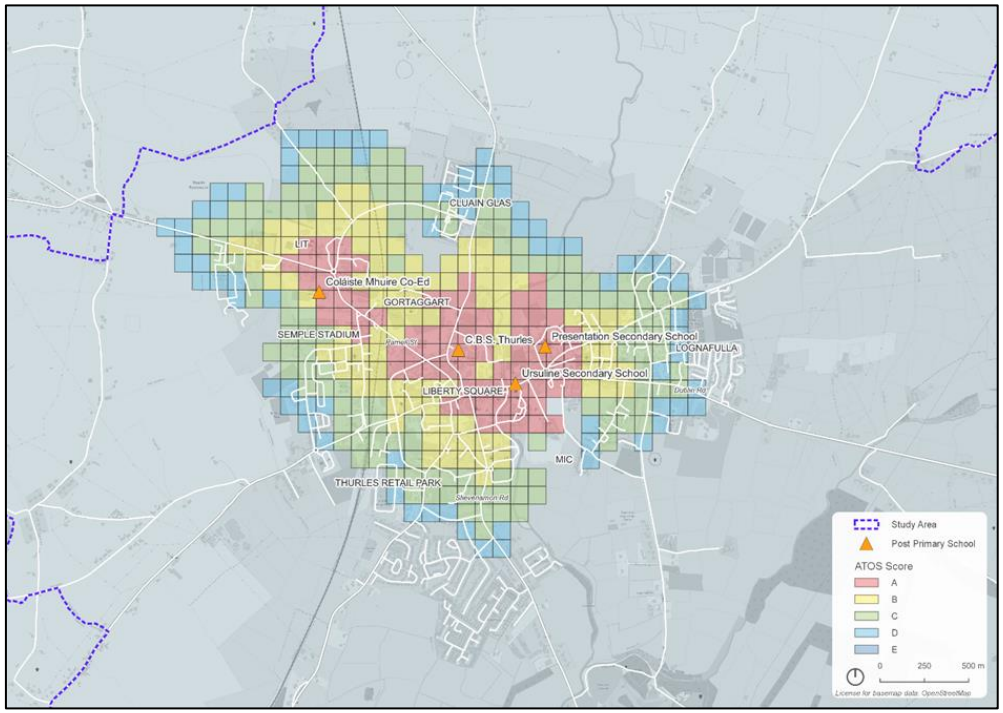


Figure 2-10: ATOS Post-Primary School Results - Walking

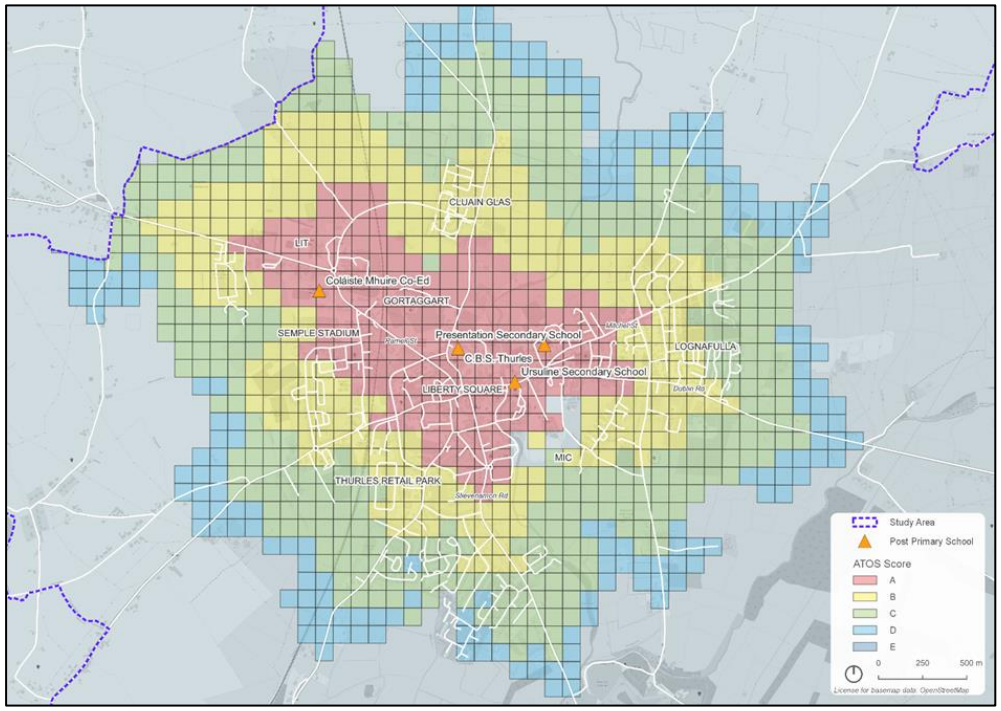


Figure 2-11: ATOS Post-Primary School Results - Cycling

For pedestrians walking to post-primary schools in Thurles, accessibility levels are good. Potential areas for improvement to accessibility may be sought in the areas to the north of the River Suir where permeability is naturally low. Also, accessibility and pedestrian priority may also be of benefit along the approach from Mitchel Street and Dublin Road.

For cycling to post-primary schools, while accessibility is good according to the ATOS results, improvements could be made again along the western approach from Mitchel Street and Dublin Road. To the north, cyclist priority and infrastructure would improve accessibility levels along the northern approach from Cluain Glas and Brittas Road.

2.10 Existing Transport Infrastructure and Services

Walking Network

A detailed review of walking facilities along key links within the study area was undertaken. For walking facilities, the assessment focused on footpath provision and pedestrian crossings.

The Design Manual for Urban Roads and Streets[8] (DMURS) sets out that a minimum footpath width of 1.8m is considered adequate for areas of low pedestrian activity, whilst the desirable width is 2.5m.

A minimum width of 3.0m is considered adequate for areas of moderate to high pedestrian activity and a minimum width of 4.0m, is considered adequate in areas of high pedestrian activity. Pedestrian crossings are described in terms of their frequency, type and provision of dropped kerbs, tactile paving, road markings and pedestrian guard rails.

A description of existing cycle facilities is also provided along each link, referring to availability, cycle facility type (e.g. segregated cycle track, on-road cycle lane, etc.), approximate width and length. Full detail of this Infrastructure Audit, supplemented by maps, is provided within Appendix A.

In summary, the pedestrian infrastructure observed in Thurles is varied throughout the extent of the study area. Footpaths are generally to an adequate standard in terms of width in the town centre and are between 1.5 – 3.0m in width. The recent public realm enhancement works on Liberty Square has significantly improved pedestrian priority, lines of sight, and protection from vehicular traffic. However, other areas along the pedestrian network demonstrated poor levels of service. The western side of Liberty Square has poor connectivity and crossing opportunities and doesn't cater for the natural pedestrian desire line of travel in the area, while its north-west junction with N62 Parnell Street exhibits vehicular dominance and narrow pavement widths. There are signalised crossings on the N75 Cathedral Street, and two zebra crossings along Friar Street adjacent to commercial units and restaurants. Crossings at Liberty Square are low speed and supported by tactile paving and dropped kerbs, with guard rails in some areas.

Throughout the radial approaches to the town centre, the level of pedestrian facilities are more varied. There is generally safe and attractive crossings for pedestrians along radial roads such as the N75 Dublin Road, R660 Abbey Road, and N62 Slievenamon Road. There are pelican crossings provided on the R498 Parnell Street, adjacent to The Oaks. On Brittas Road adjacent to the entrance to Ursuline Secondary School, and on Jimmy Doyle Road at Cluain Glas housing estate. Footpath widths and coverage throughout the radial roads are adequate, however some narrow areas remain at the southern portion of Brittas Road, while most of the northern section of Parnell Street is only served by footpath provision on one side. Finally, although it is a well-established pedestrian desire line, Mill Road/Bohervoroon is a sub-urban/rural road which is mainly absent of footpaths, crossings and signage.

Cycling Network

Regarding the level of service for cycle infrastructure in the Thurles LTP study area, the provision of segregated cycle lanes was observed to be poor. Within the town centre and Liberty Square area, there are no cycle lanes. Beyond the town centre, there is a partial two-way cycle lane on each side of the carriageway along Brittas Road, before discontinuing along the northbound alignment. On the L4039 Jimmy Doyle Road, there is a segregated off-road cycle lane, which merges to on-road before the

[8] Source: https://www.gov.ie/en/publication/3360b1-design-manual-for-urban-roads-and-streets/

approach to the eastern junction with N62 Brittas Road. On the R659 Cabra Road, there is on-street cycle lanes along both sides of the carriageway, which discontinues after approximately 550m.

While cycle lane infrastructure is lacking in the town centre, bicycle parking facilities were noted at a number of locations. At the time of audit, there were approximately 25 Sheffield stands counted, providing parking for 50 bicycles, located predominantly in the town centre including:

- The Source Arts Centre;
- Thurles Town Park;
- Liberty Square (East).

Appendix A provides a summary of the level of service across walking and cycling infrastructure in the Thurles Local Transport Plan study area.

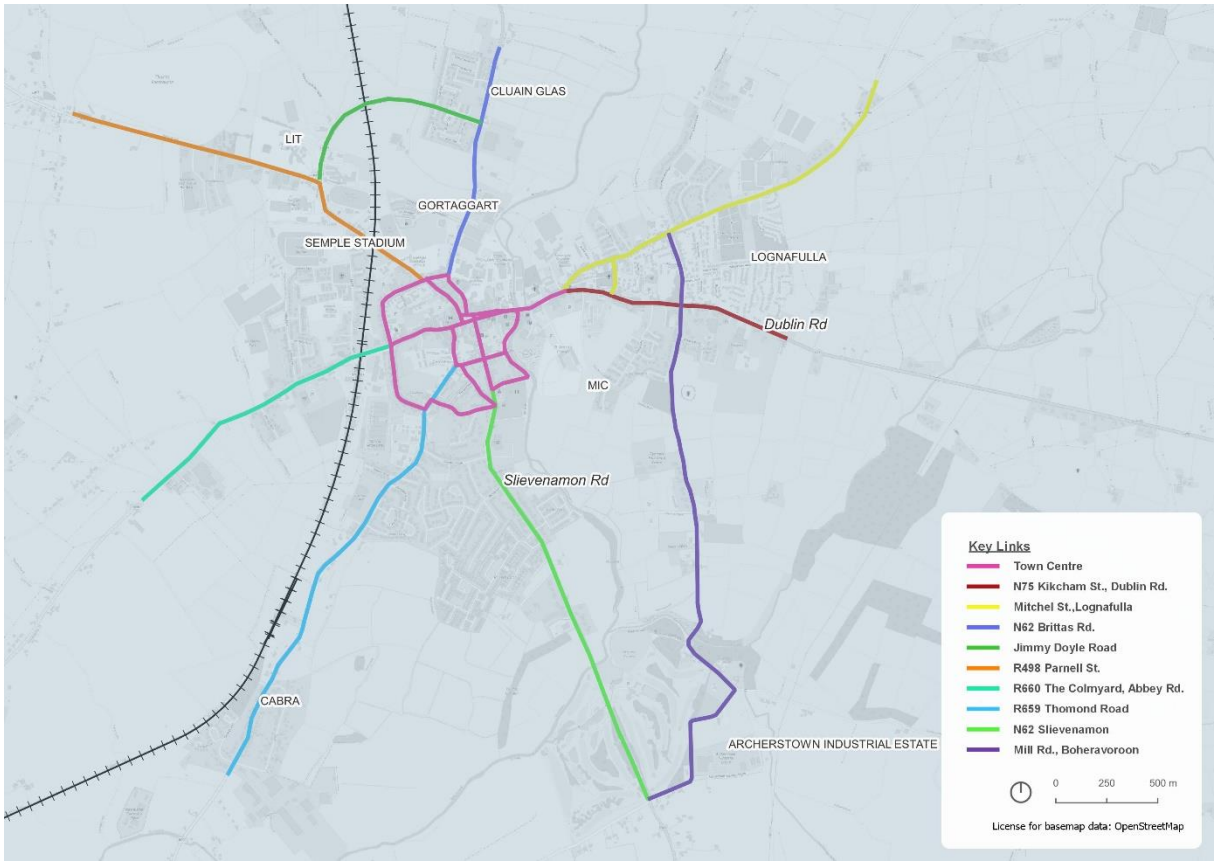


Figure 2-12: Thurles Infrastructure Audit Links

Public Transport

Thurles is served by the Cork - Dublin rail line, and also benefits from bus-based connectivity to a wide range of destinations within County Tipperary and beyond. These include towns such as Nenagh, Clonmel, Athlone, and Kilkenny. Figure 2-13: Existing Public Transport options in Thurles below shows the main public transport corridors that serve the Thurles LTP study area.

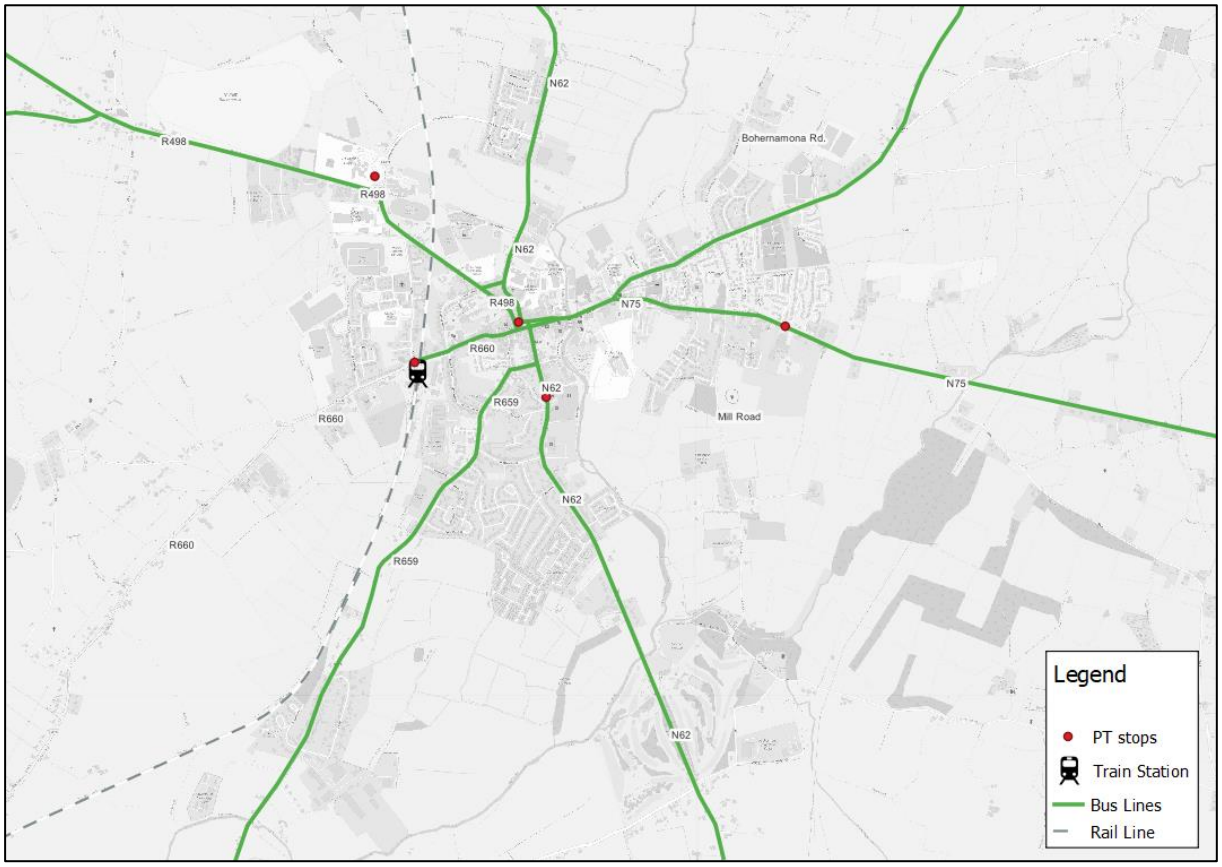


Figure 2-13: Existing Public Transport options in Thurles

Thurles Train Station

Thurles is served by the main Dublin to Limerick, Cork and Kerry rail services lines, providing direct rail connectivity with Ireland's three largest cities; namely Dublin, Limerick and Cork.

The 2019 National Rail Census Report was analysed to determine the level of rail patronage at Thurles train station during pre-COVID conditions. Between 2013 and 2019 there was a significant growth in both daily boardings and alighting's at Thurles station as shown in the table below, illustrating the potential for further development as a transport hub for the wider hinterland.

Table 2.4 Daily Boardings and Alightings at Thurles train station 2012-2019

Thurles Train Station	2012	2013	2014	2015	2016	2017	2018	2019
Daily Boardings	504	483	559	557	563	601	817	706
Daily Alightings	458	463	578	456	574	611	787	724

Bus Services

Thurles is currently served by a number of Transport for Ireland Local Link Routes and private bus services (see table 2.4), however, all inter urban routes completely bypass the town via the M8 motorway, located south of the town.

Table 2.5 Study Area Weekday & Weekend Bus Services

ROUTE NO.	ROUTE	OPERATOR	WEEKDAY SERVICES	WEEKEND SERVICES
391	Thurles to Limerick via Newport and University of Limerick	Tipperary Local Link	07:00, 11:30, 16:00	07:00, 11:30, 16:00
393	Thurles to Clonmel	Bernard Kavanagh & Sons	08:00, 15:30	08:00, 15:30
394 & 396	Clonmel to Thurles	Bernard Kavanagh & Sons	08:00, 14:45	08:00, 14:45
395	Nenagh to Templemore via Thurles	Bernard Kavanagh & Sons	08:50	08:50
896	Ballingarry to Thurles via Killenaule	Tipperary Local Link	08:48, 11:48, 14:48, 17:48	08:48, 11:48, 14:48, 17:48
812	Urlingford to Roscrea via Thurles	Bernard Kavanagh & Sons	08:55, 14:55	08:55, 14:55
858	Portlaoise to Thurles	Local Link Laois Offaly	08:35, 12:50, 17:10	12:05, 16:05

2016 Census data suggests that approx. 3.5% of commuter trips generated within the study area are undertaken by public transport (compared to just under 10% nationally), with Bus services representing the vast majority of public transport demand (96%). In total, commuter trips undertaken by bus accounts for just over 3% of the modal share. This compares to a nation-wide figure of 5.9% for the same period.

The *Connecting Ireland Rural Mobility Plan*[9], developed by the National Transport Authority, has identified the need to enhance public transport across rural Ireland to improve connectivity between villages and towns by linking these areas with a network connecting regional centres and cities nationwide. Within the plan, a number of proposed regional and local public transport improvements have been outlined for Tipperary, several of which will benefit Thurles town directly:

- Regional corridor proposal, Bus route 16 – provision of new bus corridor from Athlone to Clonmel via Birr, Thurles, Cashel, Cahir and other places (2 hour minimum service frequency)

[9] Available at: https://www.nationaltransport.ie/wp-content/uploads/2016/08/Transport_Strategy_for_the_Greater_Dublin_Area_2016-2035.pdf

- Regional corridor proposal, Bus route 42 – provision of new bus corridor from Limerick to Kilkenny via Newport, Thurles, Urlingford, Freshford and other places (2 hour minimum service frequency)

Figure 2-14 below outlines the proposed Connecting Ireland network for the Thurles LTP study area and County Tipperary.

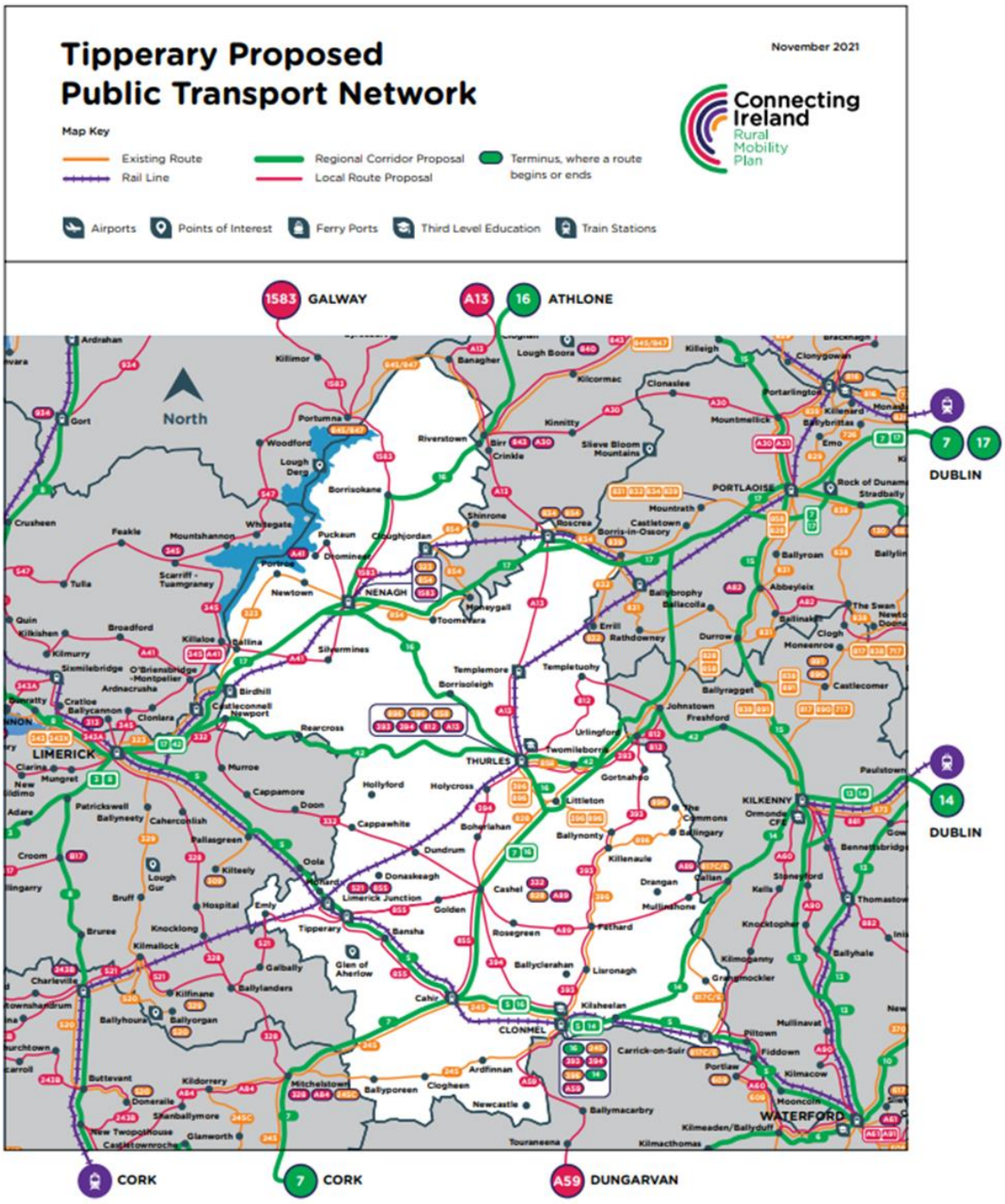


Figure 2-14: Tipperary Proposed Public Transport Network [NTA, 2021]

Road Network

Figure 2.15 below shows the strategic road network serving the town and study area.

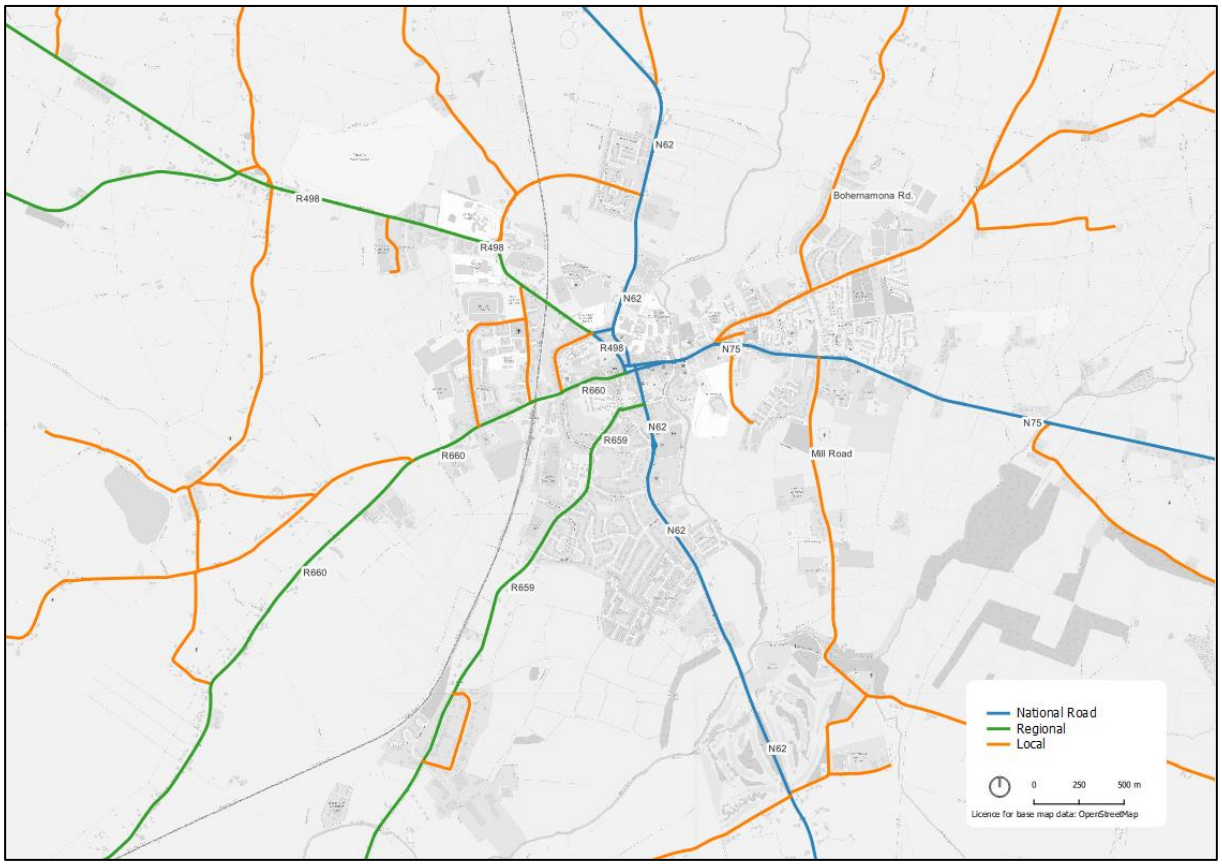


Figure 2.15 Thurles Strategic Road Network

Thurles is directly served by two national roads (the N75 and the N62) which also connect with the M8 motorway. This connects Thurles to the city of Cork, as well as Limerick and Dublin via the M7 motorway. The N75 and the N62 carry most of the strategic traffic to and from the town. The existing road network around Thurles reaches capacity during peak commuter and shopping periods, with a combination of both local and strategic traffic contributing to congestion.

A detailed review was undertaken on the key junctions and links around Thurles which focused on road layouts, facilities for pedestrians/cyclists and highlighting any potential issues noted. This full review can be found in the baseline report which is included in Appendix A.

2.11 Permeability

As part of the detailed review of walking and cycling facilities, combined with observations from the ATOS and catchment analysis, a review of permeability within the town was undertaken. As noted in the policy context, the NTA have produced a Best Practice Guide to Permeability which sets out best practice guidance in relation to encouraging walking and cycling in urban areas. In general, the more

permeable an urban environment is for active modes, the higher the tendency for walking and cycling trips.

However, there are certain areas in Thurles which do not have the same level of permeability. Where possible, small permeability improvement schemes could have a big impact in terms of shortening active travel journey times. Through a mix of permeability upgrades and new linkages, an improved permeable network could be achieved.

2.12 Consultation Methodology & Feedback

Methodology

An online survey was developed using the tool 'Snap Surveys' which was accessible between Friday the 31st of May and Friday 24th June 2022 and was made available through the Tipperary County Council consultations portal. Following completion of the survey, respondents were directed to the map-based platform hosted by PlaceChangers.

The survey was posted on the Tipperary County Council website and was promoted with local newspaper adverts, radio adverts, and on social media channels to generate as much engagement as possible. In addition to this, key stakeholder groups were notified, including local councillors, local schools etc. Some paper based versions were also made available from Tipperary County Council Offices for those with limited digital capabilities and/or online access. These paper-based responses weren't able to access the PlaceChangers map-based tool as it was only accessible via the web-based survey.

A total of 612 responses were received. This is equivalent to 7% of the population of Thurles, which provides a good representation of the community; however not all respondents were residents from within the study area. The map-based part of the consultation received 575 comments, and 110 ideas from 120 respondents.

Feedback

Of the 612 responses in the questionnaire –

- 75% rated cycle facilities as 'poor' or 'very poor'
- 68% rated Public Transport provision as 'poor' or 'very poor'
- 67% rated pedestrian facilities as 'adequate' or better
- 80% rated traffic conditions as 'poor' or very poor

In the map based platform, 110 ideas were received and the figure and bullet points below shows the split of responses, classified under five broad headings: Active Travel, Parking, Public Realm, Public Transport and Traffic Management & Safety.

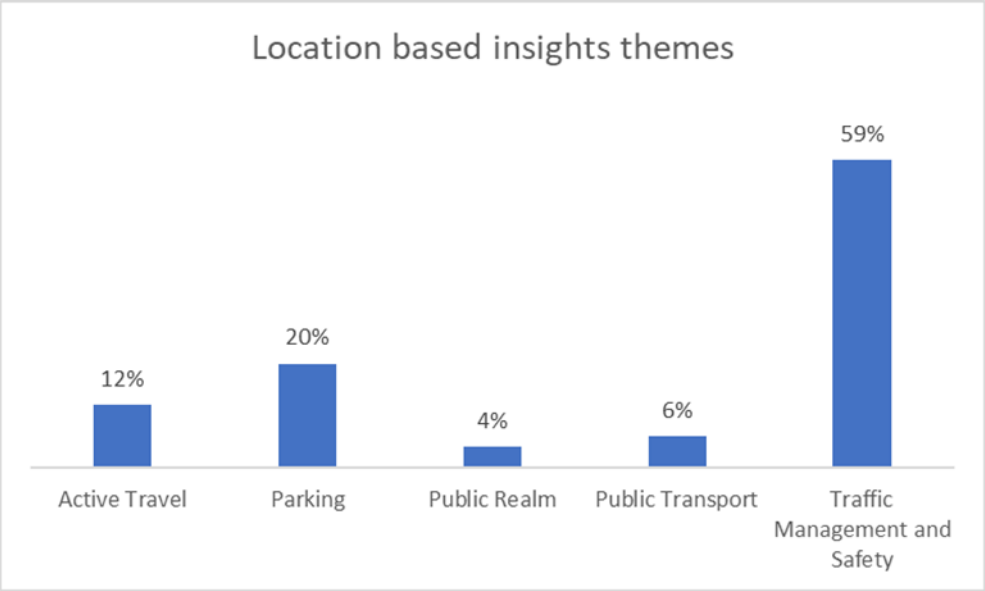


Figure 2.16 Location Based Insights split by Themes

- Active Travel – need for more segregated cycle facilities, more cycle parking needed, safe cycle routes to schools
- Parking – Removal of parking on Parnell St, double parking and parking on footpaths at other locations
- Public Realm – general improvements in footpaths needed in the town, inadequate lighting at some locations
- Public Transport – lack of bus stops, increase in bus services needed
- Traffic Management and Safety – High vehicle speeds in town, routes into Liberty square are too narrow for HGVs, impedes pedestrian safety, high demand for bypass to be built, improved junction crossings

As illustrated by the figure above, the majority of responses can be classified under the Traffic Management & Safety theme. In this theme, the following items were mentioned –

- Liberty Square and main routes serving it - too narrow for HGV traffic. Safety issues were mentioned around HGV traffic (in some cases) needing to mount the pavements and impeding pedestrian safety.
- Vehicle speeds in the town were mentioned and enforcing speed limits and other traffic calming measures to combat high speeds.
- High demand for a bypass to be constructed to allow HGVs bypass the town centre and resolve traffic congestion in the town

The full results from the community consultation can be found in the Baseline assessment which is included in Appendix A.

2.13 Schools Consultation

In addition to the Thurles community consultation, the primary and post primary schools were consulted as part of the Thurles Baseline Assessment. The online survey was issued to all eleven schools in Thurles and of the eleven schools, nine responded. Of the nine responses, 6 were found to be either dissatisfied or very dissatisfied with the level of access to their school.

A question was posed to the respondents to hypothetically consider a range of potential measures and their level of support for them. The measures that were most supported were:

- Speed calming measures to reduce vehicle speeds
- Increase and improve space for pedestrians and cycling by reducing road space for vehicle traffic
- Visual interventions i.e. additional signage for drivers
- New pedestrian/cycle crossings in vicinity of schools
- More cycle parking

The full results from the schools consultation can be found in the Baseline assessment which is included in Appendix A.

2.14 SWOT Assessment

The Baseline Assessment provided an understanding of the key transport issues, opportunities and constraints within the Study area. The findings from the Baseline Assessment have been used to inform a Strengths, Weaknesses, Opportunities and Threats/Constraints (SWOT) analysis for the Thurles LTP study area, and the results are outlined in Table 2.6 and Table 2.7 below. This will be used to provide insight and inform the subsequent stages in development of the Local Transport Plan.

Table 2.6 Strengths and Weaknesses

STRENGTHS
• Close to high frequency rail (13 services per day along Dublin/Cork Line) • Compact town offering retail, leisure, and local employment • Liberty Square East is an example of high quality urban regeneration, attracting active mode users and town centre commerce through increased public realm space, greater accessibility, and safer crossing facilities • Pedestrian trips to work are above the National average by ca. 6% • There is good education opportunity from primary to 3rd level (Technological University of the Shannon: Thurles Campus, and Mary Immaculate College). These are located well within the study area • Pedestrian trips to school/college outrank National average by 8% • Designated as a Key Town in the County Development Plan and Southern RSES • National Bioeconomy Campus at Lisheen, Thurles • Centre of international and national standard sporting facilities.
WEAKNESSES
• Car remains the dominant mode of transport, above the National average by 2.5% for work trips, and 11% for school trips • Public transport use is significantly below the National average • A number of key junctions in the town centre are unattractive to pedestrians and cyclists due to high traffic volumes, conflicting turning movements, and a prevalence of HGV through traffic • There is little continuous cycle infrastructure on key radial routes accessing the town and its centre, e.g. R498 Parnell St. and N62 Slievenamon Rd. • The existing road network reaches capacity during peak commuter and shopping periods, e.g. Slievenamon Rd., Mitchel St., Parnell St., Friar St., and Dublin Rd. • There is little dedicated bus stop/shelter infrastructure beyond the town centre

Table 2.7 Opportunities and Threats

OPPORTUNITIES
• Significant improvements to active travel infrastructure is planned for the town, including public realm works at Liberty Square West, and an orbital cycleway providing permeability across schools • A high number of existing journey times are already under 15 minutes, (50%) presenting a key opportunity for successful mode shift • There are a number of recent amenity links (Suir Walk) and permeability links (College Lane to Mill Rd. back-land link) established, which can be improved by continuation and/or safety additions • There are a number of planned junction improvements in the area, aimed at mitigating congestion and improving safety for all users, e.g. Bowe's Corner • There are several locations of good cycle parking available within the town centre • There are a number of actionable regeneration projects outlined for delivery in the Thurles Town Centre Renewable Strategy including Friar Street/Castle Avenue Masterplan.

THREATS
• Car ownership is quite high within the study area, with 77% of household owning at least one car. If this pattern continues for new developments, it will likely lead to additional vehicular traffic on the network • A continuation of low-density development in areas not supported by public transport will perpetuate unsustainable travel patterns and increase pressure on the strategic road network. • A failure to provide residential and commercial development at the required densities to support public transport investment. • Insufficient investment in public transport service provision and supporting infrastructure may reduce the attractiveness of public transport alternatives and increased car-based congestion. • Narrow pavement and street widths on local links such as Friar Street require choices to be made around which modes to accommodate • Some radial links on the Thurles road network are already operating at capacity and there is competing uses for the available road space • Lines of severance such as that presented by the River Suir and the railway line can be challenging when developing active travel permeability measures

3. LTP OBJECTIVES & FUTURE DEMAND FOR TRAVEL

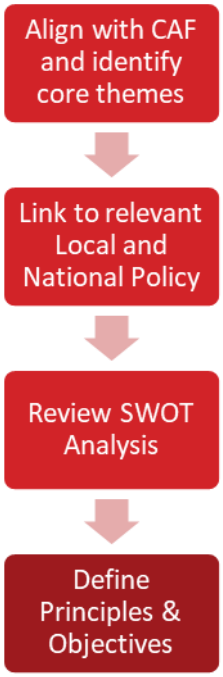
3.1 Introduction

Part 2 of the ABTA process focuses on applying the information gathered from the baseline assessment (including the SWOT analysis) to determine the principles and objectives that guide the development of the Local Transport Plan (LTP). The following sections provide an overview of the methodology used to derive the objectives for the Thurles Local Transport Plan, along with the Key Performance Indicators (KPIs) used to assess the performance of the strategy options in meeting the study objectives.

3.2 Developing the Objectives and KPIs

The development of the principles and objectives for the Thurles LTP were informed by

- The opportunities and constraints identified in the Part 1 Baseline Assessment SWOT Analysis;
- Existing local policies and objectives; and
- National level policy guiding the delivery of sustainable development.



In order to ensure a robust assessment of transport options, the objectives were broadly aligned with the key categories outlined in the Department of Transport's Common Appraisal Framework (CAF) with common themes identified:

- Accessibility & Social Inclusion: supporting local accessibility by walking and cycling within Thurles for all users;
- Environmental: supporting climate change initiatives and a general switch to more sustainable modes of travel;
- Economic: supporting the vibrancy and connectivity to Thurles Town Centre enhancing its economic competitiveness;
- Integration: supporting the integration of land use and transport planning in a manner that can affect significant modal shift to walking, cycling, and public transport; and
- Safety & Physical Activity: promote walking and cycling and provide a safe environment for vulnerable users.

A detailed review was then undertaken of Local and National Policy to identify existing objectives under each of the CAF headings and themes outlined above. In particular, strategic outcomes and policies from the County Development Plan were identified which could inform the principles and objectives for the Thurles LTP. The SWOT analysis from the Baseline Assessment was also reviewed to identify specific constraints and issues currently within the study area which should be addressed by the Thurles LTP objectives. Whilst the objectives developed for the LTP focus on the need to improve travel by sustainable modes in Thurles, in accordance with DoECLG Section 28 Ministerial Guidelines 'Spatial Planning and National Roads Guidelines for Planning Authorities', an overarching aim in the development of all LTP transport measures is the need to safeguard the strategic function, capacity and safety of the existing national road network in the Plan area.

Performance measurement is used to determine if the full set of recommendations proposed under the Thurles LTP achieve the desired outcomes. Key Performance Indicators (KPI's) have been identified and were used to measure the performance of the LTP strategies under the various objectives. Table 3.1 below outlines the objectives and associated KPIs developed for the Thurles LTP.

Table 3.1 Thurles LTP Objectives and KPI's

HEADING	OBJECTIVE	KPI
Accessibility & Social Inclusion	To create and enhance interurban connectivity through delivery of a quality public transport service between Thurles and its neighbouring Key Towns (Nenagh and Clonmel). There should also be improved connections to key settlements throughout the County including towns such as Nenagh, Templemore, Roscrea, Cashel, Cahir, and Clonmel	People within 15min walk of a Public Transport Stop. Narrative qualitative assessment of improved services (Connecting Ireland), and bus stop upgrades and integration with mobility hub
	To promote the application of Universal Design through the delivery of a sustainable transport network for users of all abilities in Thurles, where services are accessible via a comfortable short and safe walk, cycle, or Public Transport service within walking distance.	Length of additional / improved walk and cycle infrastructure
Integration	To promote the '10-minute settlement' concept in Thurles aiming to reduce walking times and provide easy access to essential daily services and facilities through improved integration of land use and transport.	Catchment analysis - population within 10 mins of key destinations (Public Transport, Schools, Shops) by sustainable modes
	To align and integrate with incumbent and upcoming National, Regional, and Local planning policy	Rating Scale - Review against policy compliance
	Provide safe access to schools for vulnerable road users and ensure a safe front of school environment	Qualitive assessment of walking and cycling infrastructure to schools and front of school environment

HEADING	OBJECTIVE	KPI
Safety & Physical Activity	To invest in active travel to benefit the health and wellbeing of residents and visitors of Thurles with schemes that foster a healthy lifestyle to create a more liveable town	Population within 200m of new cycle infrastructure
Environment	To provide an environment which supports and encourages a modal shift from the private car to more sustainable modes. This will support the County to reach Climate Action and Sustainable Energy targets while helping achieve a more environmentally sustainable and circular economy	Qualitative assessment of Mode Share with target which should be monitored
	To improve and create a more appealing town centre environment for pedestrians and reduce harmful air and noise pollution from vehicles. Prioritise improvements at school zones and along the main pedestrian access routes immediately adjacent to schools	Traffic volumes through the town centre core
Economy	To support Thurles's pathway to a low-carbon economy through the delivery of a sustainable transport network, improving access to employment opportunities for all.	Catchment analysis to employment – population within 10-minute walk of key employment sites
	Help grow and enhance Thurles as a renowned centre for activity based and sporting tourism. Complement and capitalise upon the rich cultural and environmental assets inherent in Thurles, enhancing access and movement for local residents and visitors alike.	Qualitative assessment of town centre public realm and access to places of interest

3.3 Future Demand for Travel

In addition to the review of present-day conditions in Thurles, the project team examined the Thurles Land Use Zoning Map contained within the Thurles Local Area Plan, as illustrated in Figure 3-1 below. In collaboration with Tipperary County Council, an assessment of appropriate lands for future potential development was completed. The existing development patterns in Thurles were taken into account during this process. Access to existing and planned development sites was taken into consideration when determining the transport options for the LTP.

Any new residential or employment developments (including expansion of existing) in Thurles will also need to provide active travel infrastructure throughout the proposed developments, which will connect to the proposed set of measures outlined in this LTP. This will ensure that connectivity across the network is maintained as Thurles is developed into the future.

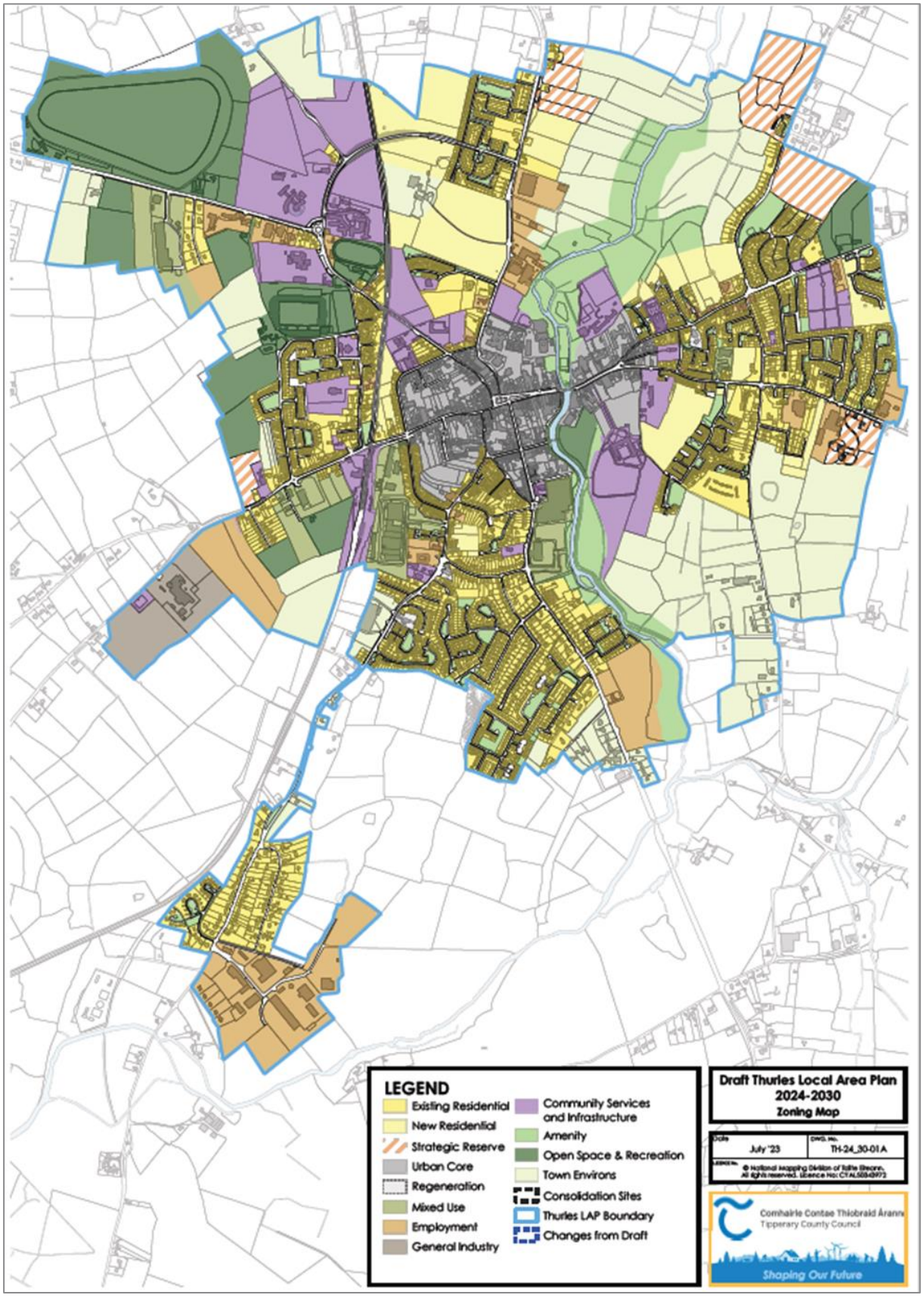


Figure 3-1: Thurles LAP Land Use Zoning

4. OPTIONS DEVELOPMENT

4.1 Options Development Overview

The following chapter outlines the options developed to overcome some of the weaknesses and constraints identified in the baseline assessment and achieve the defined objectives for the LTP. The options list was developed in collaboration with the wider project working group including representatives from TCC and the NTA, through the following:

- Insight from the **Baseline Assessment** phase of the study**,** which includes the Public Consultation elements which sought initial views from the wider public;
- **Data review** to identify proposals from wider policy/strategies/masterplans for the study area and any existing/new data i.e. traffic data;
- **Site visits** to review issues identified in the baseline assessment and opportunities for improvement; and
- **Workshops** between the project working group, Elected Members and Tipperary County Council officials to discuss and agree potential options.

The options have been developed at a strategic level in accordance with national and regional policies. It is important to note that all suggested proposals will undergo further examination to establish the most suitable site-specific interventions. This will involve comprehensive analysis and design processes to ensure that the proposed schemes are meticulously developed.

The options development process followed the Department of Transport's National Investment Framework for Transport in Ireland (NIFTI) modal and intervention hierarchies (Figure 4.1). As such, options for applicable measures were first considered in relation to active modes (walking and cycling), followed by public transport and finally vehicular traffic. Options were also initially focused on maintaining, optimising and improving existing facilities before considering the construction of new infrastructure.

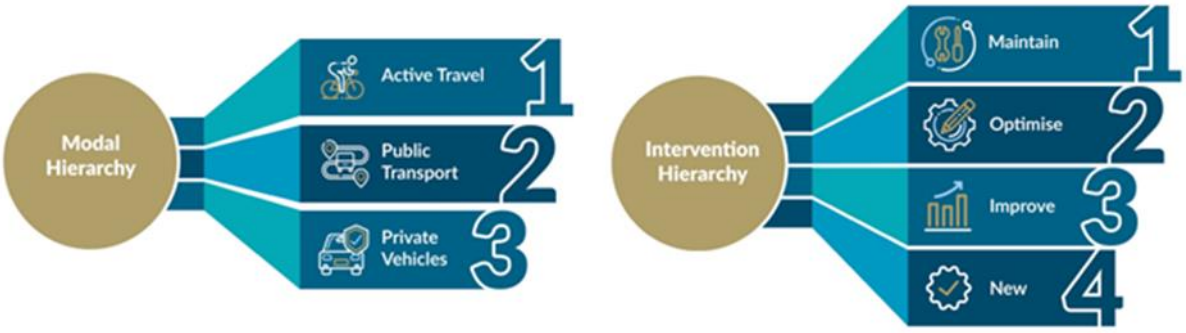


Figure 4-1: NIFTI Modal and Intervention Hierarchy

The following section provides an overview of the options across active modes, public transport, vehicular traffic and supporting measures identified to assist in achieving the overarching Thurles LTP objectives. Full detail on these options including the long list of options, maps and description of each option can be found in Appendix B.

4.2 Active Travel – Walking and Cycling

The development of the LTP active travel measures has been focused on increasing walking and cycling mode share, by providing high quality, attractive alternatives for journeys by car (particularly for short distance car trips which are common in urban areas across Ireland and in Thurles, 62% of commuting trips under 2km are taken by car) and also improving transport choice for those without access to a car.

Providing a safe, low speed, traffic calmed environment for people of all ages and abilities to confidently cycle and walk is also essential to achieve mode shift.

The provision of quality, secure cycle parking in Thurles Town Centre and at other key locations in order to meet future demand will also be critical to achieve this step change towards active travel. This is complemented by a range of supporting behavioural change measures (for example Workplace Travel Plans, School Travel Plans etc.) to lock in the benefits of this investment in active travel.

Where feasible, fully segregated cycle facilities are proposed to improve safety for cyclists. Where segregation was not considered to be possible given constraints, particularly within the town centre, measures have been proposed aimed at providing a safe, low speed, traffic calmed environment for sections of cycle trips which must be made on-road.

Figure 4-2: Example of a Segregated Cycle Track

The key aim in developing Active Travel Options was to provide Thurles with a safe, comfortable and integrated walking and cycling network enabling trips to school, work, shopping and all other purposes to be made using active travel.

Full details on these options including the long list of options, maps and descriptions of each can be found in Appendix B.

4.3 Public Transport Options

While active travel investment focuses on encouraging people to switch from car to cycling or walking for short distance journeys, public transport has the potential to encourage mode shift from car journeys for medium and longer distance trips. Improving public transport also has the potential to

support those who regularly choose active travel to also choose public transport – for example, when weather conditions are particularly inclement.

Development of the LTP public transport options has incorporated insight from the Baseline Assessment phase of the Study (including the improvement of existing public transport services, enhanced passenger information and improved passenger waiting environments and interchange facilities) along with the development of new public transport services to meet future demand (based on desire lines, future land use and Activity Density mapping).

4.4 Demand Management & Supporting Measures Options

In line with the Demand Management tool of 'Avoid-Shift-Reduce-Manage', Transport Demand Management (TDM) Toolkit to reduce carbon, improve air quality and the urban environment, and manage congestion, a limited number of TDM Measures have been identified to support the switch to sustainable modes across the Study Area.

Supporting measures include those to support Active Travel, Public Transport and School Travel. A number of other supporting behavioural change measures are identified, including the role that Mobility Management can play in both avoiding the need to travel and supporting a switch from car travel to sustainable modes on a site-by-site basis.

The Park & Stride concept has also proven effective in promoting modal shift within cities and should be promoted in towns too. It optimizes the utilization of existing town car parks, enabling individuals to complete the last portion of their journey using active modes.

4.5 Road & Traffic Management Options

Options for the Road Network strategy were identified in order to improve performance and safety. The priority in the development of the road network options (as per NIFTI) is to maintain, renew, manage and operate the existing road infrastructure in a more efficient manner, and any new road schemes must demonstrate that public transport, traffic management or demand management measures can't effectively address the problem prompting the road proposal or are not applicable/appropriate.

Further, the core focus of this LTP is increasing the safety, comfort and attractiveness of active travel in the town, particularly for school trips. Therefore, road options that would unduly induce car trips that could otherwise be made by active travel would not be appropriate. However, road options that facilitate the reallocation of road space in the town centre by enabling traffic to bypass the town centre streets are more in line with the LTP objectives and current national policy.

In addition to options concerning upgraded and new road infrastructure, a number of traffic management options were developed in combination with associated Walking & Cycling proposals. These traffic management options are mainly located in the town centre where streets are narrow and active travel facilities are poor. These options and their associated Walking & Cycling measures aim to improve the public realm in key areas and provide a safer environment for people walking, cycling and driving within the town.

Full detail on these options including the long list of options, maps and description of each option can be found in Appendix B.

5. OPTIONS ASSESSMENT METHODOLOGY

5.1 Options Assessment Methodology

The following chapter provides an overview of the options assessment process used to determine the Emerging Preferred Strategy for the Thurles LTP. It includes an initial screening process followed by a more detailed Multi-Criteria Analysis to determine the optimal package of measures to meet the identified study objectives.

To determine the Emerging Preferred Strategy to form the LTP, the long-list of options were passed through a four-stage assessment process as outlined in the Figure 5-1 below, including:

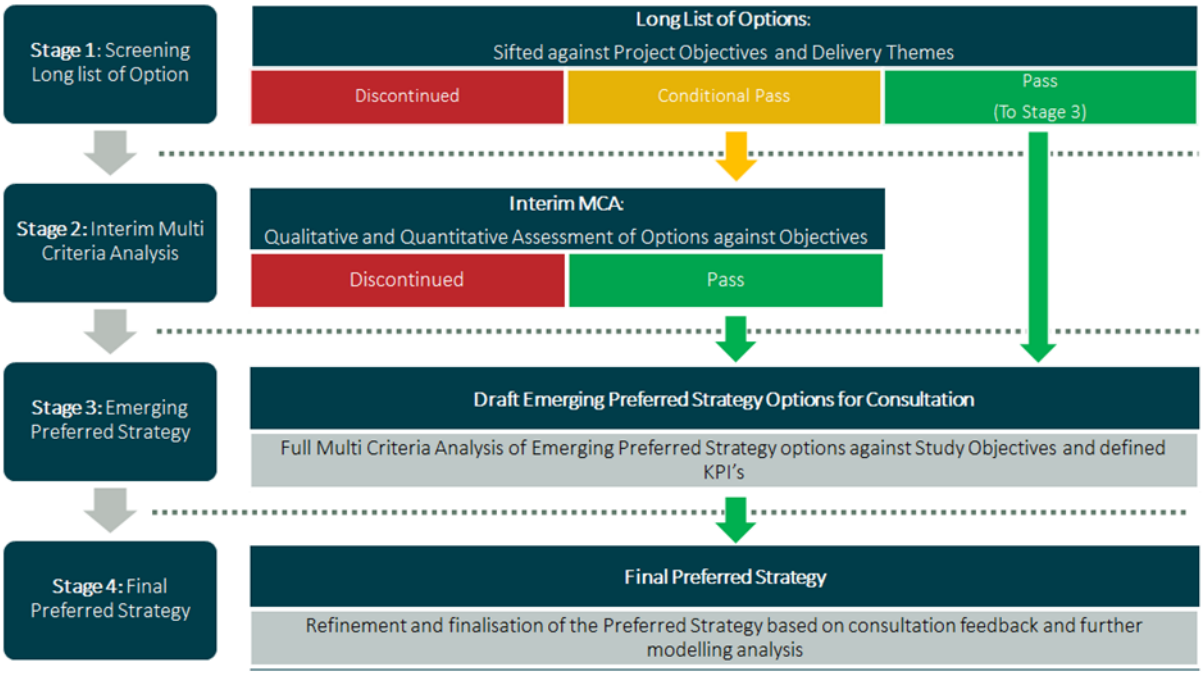


Figure 5-1: Options Assessment Methodology

- **Stage 1 Options Screening:** The long-list of options were screened against the overall project objectives and core delivery themes to identify which ones should be discontinued, which could pass directly to the final strategy, and which required further assessment;
- **Stage 2 Interim Multi-Criteria Analysis (MCA):** Options requiring further analysis were passed through an MCA with qualitative indicators used to score each option against the study objectives;
- **Stage 3 Draft Emerging Preferred Strategy Options for Consultation:** Options passing Stage 1 and Stage 2 form the initial draft Emerging Preferred Strategy for the LTP.
- **Stage 4 Final Preferred Strategy (Post LTP Consultation):** Feedback from the project steering group and public consultation as part of the Thurles LTP process will be used to refine the preferred final strategy for the LTP.

The following sections provide a more detailed description of Stages 1-3 outlined above.

5.2 Stage 1: Options screening

Stage 1 of the Options Assessment examined each of the long-list of measures to see whether they helped to achieve the ABTA themed objectives (Economic; Health and Safety; Environment; Integration; Accessibility and Social Inclusion). The options were also assessed at a high level against the following **core delivery themes**:

- Engineering feasibility;
- Acceptability;
- Funding potential; and
- Value for money

Based on this initial screening, options were classed as follows:

- **Discontinued:** the option did not align with the LTP objectives and therefore is not included in the Emerging Preferred Strategy;
- **Pass:** the option satisfied the project objectives and the core delivery themes, and no alternative proposals were identified in the options development process. These options passed directly into the Emerging Preferred Strategy without the need for an interim assessment.
- **Conditional Pass:** the option aligned with the LTP objectives, however, either didn't fully meet all of the core delivery themes or had a number of alternative proposals identified. In these instances, the options were assessed in further detail as part of the interim MCA.

Further details on the outcomes of the Options Screening process, including all options assessed and associated scoring is provided in Appendix B.

5.3 Stage 2: Interim MCA

The Interim MCA was used to evaluate options classed as having a Conditional Pass (as outlined above). At this stage, options were assessed in more detail based on their ability to meet the core delivery themes outlined above and also the overarching study objectives.

This assessment was predominantly qualitative in nature, however where possible, quantitative information was used to supplement the scoring e.g. survey data, demand data, GIS analysis, traffic modelling etc.

A five-point scoring system, outlined in Table 5.1 below, was used to assess the options across the objectives and delivery themes. This produced a performance matrix which was reviewed to rank the scenarios and identify which ones performed best and therefore, passed into the Emerging Preferred Strategy.

Table 5.1 Interim MCA Scoring System

Scoring	
Major Benefit: The proposal is expected to have a clear and considerable benefit or positive impact when compared to existing conditions.	
Minor Benefit: The proposal is expected to have a minor benefit or positive impact when compared to existing conditions.	
Neutral: Overall, the proposal is expected to have neither a positive nor negative impact when compared to existing conditions.	
Minor Disbenefit: The proposal is only expected to result in a minor negative impact when compared to existing conditions.	
Major Disbenefit: The proposal is expected to have a clear and considerable negative impact when compared to existing conditions.	

To ensure that the options that had advanced to the interim MCA stage were assessed holistically, and that mutually exclusive options were assessed at the same time, certain options were packaged together for the MCA process, where possible/reasonable.

Detailed work was undertaken to balance the positive and negative outcomes of each option to assess whether it would be included in the Emerging Preferred Strategy. Further details on the Interim MCA, including all options assessed and associated scoring is provided in Appendix C.

5.4 Stage 3: Emerging Preferred Strategy Assessment

The options that passed from Stage 1 and Stage 2 of the assessment process formed the Emerging Preferred Strategy for the Thurles LTP. This included a wide range of proposals across walking, cycling, public transport, road network changes and wider supporting measures.

The Emerging Preferred Strategy was then comprehensively reassessed against all of the study objectives using the Key Performance Indicators outlined in Table 3.1. This included qualitative scoring but also more detailed quantitative analysis such as accessibility analysis (ATOS), length of infrastructure improvements, GIS catchment analysis, traffic modelling results etc. Further details on all elements of the Emerging Preferred Strategy, including the MCA results are provided in Chapter 6.

6. EMERGING PREFERRED STRATEGY

6.1 Overview

The previous chapters in this report have detailed the process followed in identifying the Emerging Preferred Strategy for the Thurles LTP. The following sections provide a summary of the proposed measures which have passed through the assessment process and now form part of the Local Transport Plan.

These strategies have been developed in order to determine the key infrastructure and transport policy measures required in Thurles and its wider hinterland in order to effectively address existing constraints in transport capacity, taking all journey purposes and modes of transport into consideration, to plan for the projected growth in population and to facilitate and encourage sustainable mobility.

The Emerging Preferred Strategy of the Thurles LTP will enable the town to further develop and realise its potential as a regional growth centre, supporting a positive modal shift to sustainable transport by identifying and prioritising key transport related investment decisions for the town and its environs, whilst safeguarding and promoting commercial activity within the town.

The Emerging Preferred Strategy sets out at a strategic level transport investment for Thurles in accordance with national and regional policy, and all proposed interventions will be subject to further detailed analysis and design to develop the most appropriate site-specific interventions.

6.2 Active Travel

The development of the LTP active travel measures have been focused on increasing walking and cycling mode share, by providing high quality, attractive alternatives for journeys by car (particularly for short distance car trips) and also improving transport choice for those without access to a car.

Providing a safe and convenient network of routes for people of all ages and abilities to confidently cycle and walk is essential to achieving a mode shift. In keeping with the principles set out in CAP, NIFTI, the Sustainable Mobility Policy (SMP) and the National Cycle Manual, this has primarily been achieved through the reallocation of public road space from vehicular traffic to the provision of protected cycle lanes. Where traffic speeds and volumes are low (typically less than 200 vehicles two-way in the peak hour), cyclists may share the carriageway space with vehicular traffic. In these circumstances, appropriate interventions will be implemented to reinforce low traffic speeds (30kph or less). These will be designed in accordance with the principles set out in the Design Manual for Urban Roads and Streets and will be sympathetic to the character and function of the street.

The provision of quality, secure cycle parking in Thurles Town Centre and at other key locations in order to meet future demand will also be critical to achieve this step change towards active travel. This is complemented by a range of supporting behavioural change measures to lock in the benefits of this investment in active travel.

The overall proposed walking and cycling measures in the Emerging Preferred Strategy for Thurles are illustrated in Figure 6.1 below. These measures will deliver radically improved connectivity and permeability from residential areas to main trip attractors including the town centre, key employment and education sites and leisure opportunities.

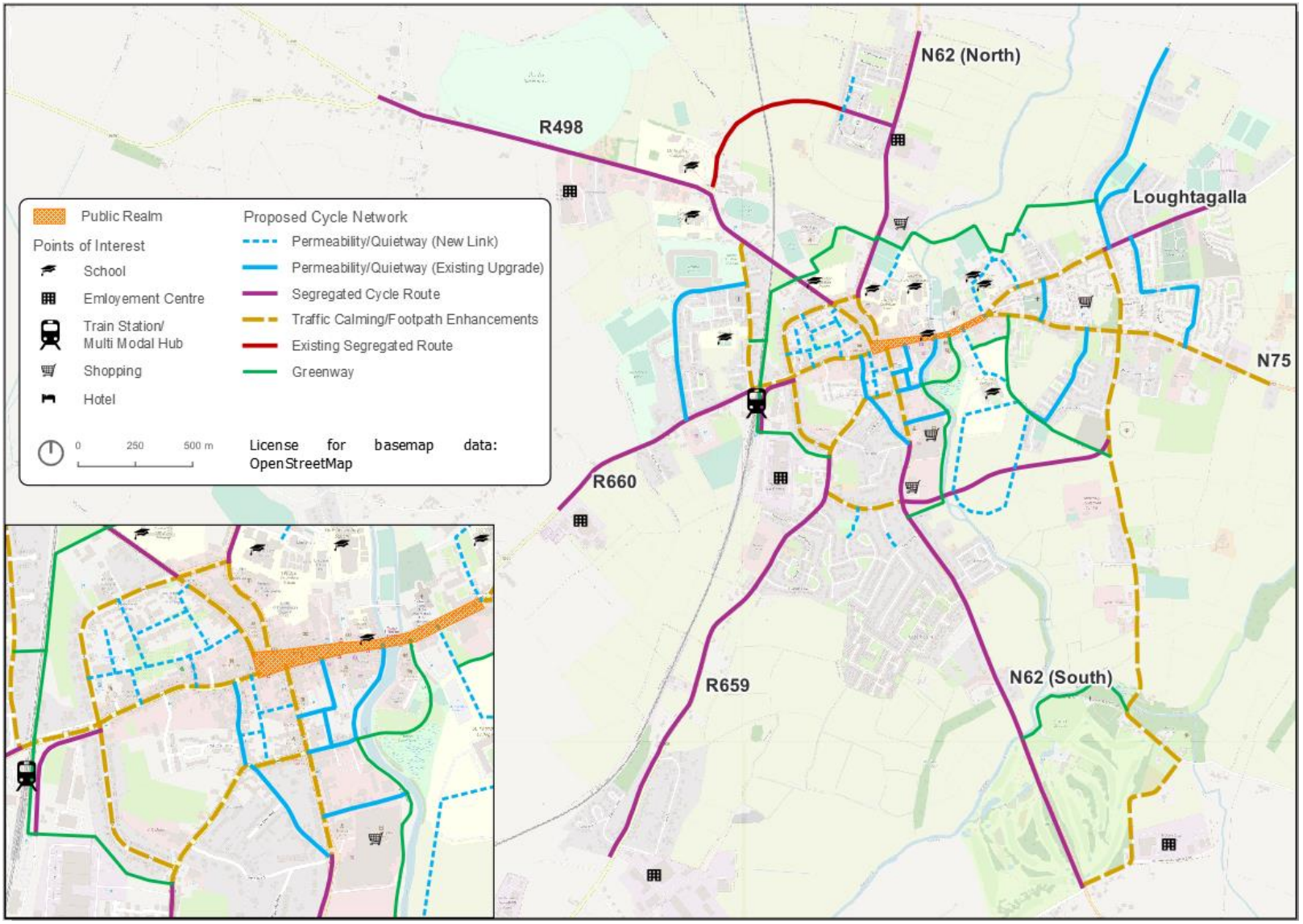


Figure 6.1: Emerging Preferred Strategy Walking & Cycling Measures

Where feasible, segregated cycle infrastructure has been proposed to improve safety and comfort for cyclists across the network. In some locations, delivery of segregated infrastructure will be challenging and other means of delivering a high quality cycling environment will be considered, including Rapid Build/quick win schemes. In addition to high quality segregated cycle lanes, a number of permeability links are proposed which will increase the walking catchment of schools, key employment destinations, the town centre and other key destinations.

The implementation of permeability links within the town centre along key desire lines will reduce walking distances and help create a more pedestrian-friendly environment. This should promote physical activity and a healthier lifestyle, reducing the reliance on cars and decreasing traffic congestion. Several pedestrian desire lines were identified during the baseline assessment, and these have been proposed as part of the active travel network as they would dramatically reduce the walking and cycling distances/times to key destinations.

The network also proposes new and improved footpaths and traffic calming on roads and streets with insufficient width for implementing segregated cycle infrastructure. A full description of the proposed measures included in the *Emerging Preferred Strategy* are provided in Appendix B. The key elements of the active travel strategy are summarised in the remainder of this section with the following terminology used to describe proposed interventions:

Table 6.1 Active Travel Terminology

INTERVENTION	EXAMPLE IMAGE
Cycle Tracks = cycle lanes separated from vehicular traffic with a physical barrier (e.g. Kerb or bollards)	
Traffic Calmed = measures to reduce vehicle speeds and create a safer environment for pedestrians and cyclists. Typical measures include: • Narrowing of the traffic lanes to minimum recommended widths; • Raised pedestrian crossings to provide priority for pedestrians; • Tightening of corner radii at residential estates to reduce crossing distances and improve safety; • Reduced speed limits; and • surface treatments, streetscape and landscaping enhancements.	

INTERVENTION	EXAMPLE IMAGE
Greenway = an off-road trail for use by cyclists, pedestrians and other non-motorised transport, in scenic surroundings with access to nature and urban areas which connect residential areas with key destinations.	
Permeability links = walking and cycling links connecting neighbourhoods and providing greater accessibility along desire lines.	
Quietway = low-trafficked street (typically <2,000 Annual Average Daily Traffic (AADT)) and low-speeds meaning cyclists can safely share the carriageway. Typical measures include: • Traffic calming to enforce low-speeds (if on road); • Improved public realm to encourage active travel; • Improved signage and way-finding to encourage use; and • Surface treatments and landscaping.	
School Zone = front of school works to prioritise safe pedestrian and cycle access to the school, improving school visibility through signposting & placemaking, reducing vehicle congestion & preventing illegal parking in the area.	

Safe Routes to School

Across Ireland, approximately 55%[10] of children are driven to primary school. The provision of a safe and connected active travel network across Thurles will have substantial benefits for both pupils and the wider community including improved road safety, better air quality, reduced levels of congestion and improved health and wellbeing of children.

The active travel measures have been built around creating a safe and attractive network of footpaths and cycle tracks that are suitable for use by children. This will support safe and sustainable access to local schools and support the national objective of ensuring more journeys to education are made by walking and cycling. Figure 6.2 outlines the location of schools within Thurles on the proposed active travel network with information on key measures for each school provided in Table 6.2.

[10] Census 2022

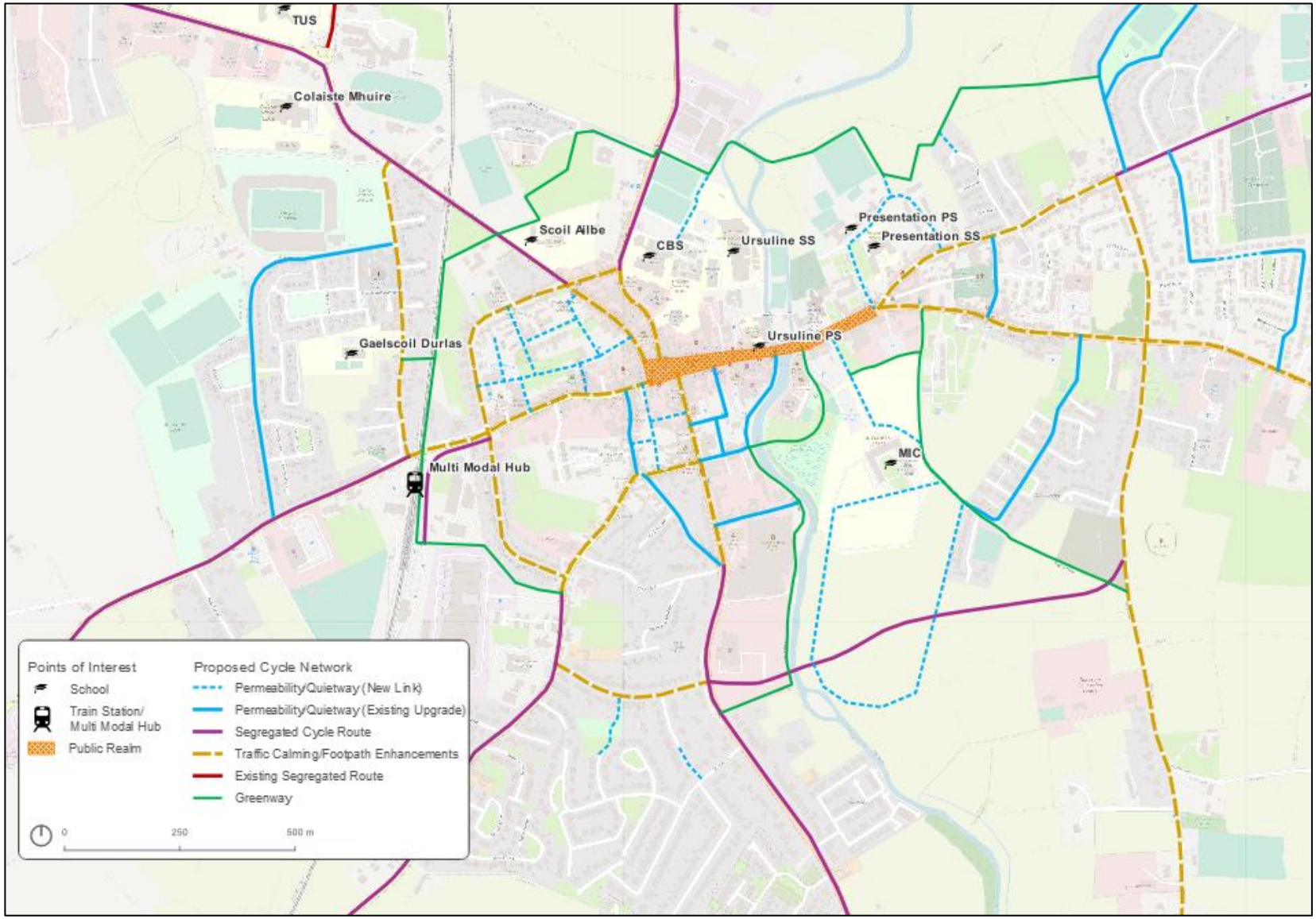


Figure 6.2: Thurles Schools & the Active Travel Network

Table 6.2 Thurles Schools & the Active Travel Network

School	Type	Adjacent Active Travel Measures
Gaelscoil Durlas	Primary	• East-West Main Greenway – Segregated cycle network • Footpath enhancements and traffic calming links on Bohernanave • School Zone Treatment in front of School
Colaiste Mhuire	Secondary	• R498 Castlemeadows – On segregated cycle network • School Zone Treatment in front of Schools
Schoil Ailbe	Primary	• R498 Castlemeadows – On segregated cycle network • East-West Main Greenway – Segregated cycle network • School Zone Treatment in front of Schools
Christian Brothers Secondary School & Ursuline Secondary School	Secondary	• N62 Brittas Road – On segregated cycle network • Permeability links connecting to East-West Main Greenway – Segregated cycle network • School Zone Treatment in front of School
Ursuline Primary School	Primary	• Permeability links connecting to East-West Main Greenway – Segregated cycle network • School Zone Treatment in front of School
Presentation Primary and Secondary School	Primary & Secondary	• Permeability links connecting to East-West Main Greenway – Segregated cycle network • Footpath enhancements and traffic calming links on Mitchel St • School Zone Treatment in front of School

Measures identified include a range of Safe Routes to School connections from key residential areas in the study area, more bicycle parking, new pedestrian crossings, permeability improvements and enhanced walking and cycling routes. As the active travel measures illustrated in Figure 6.2 are delivered, they will provide safe access for children choosing to walk and cycle to school. As noted in Table 6.2, school zone treatments, in accordance with the NTA Safe Routes to School design guidance, are proposed outside each school to encourage safe driver behaviour and create a calmed traffic environment. Exact details on proposed school street works will be defined at the individual project level. Figure 6.3 illustrates active travel infrastructure which could be provided at Castlemeadows, outside of Colaiste Mhuire. This includes segregated cycle tracks and improved footpaths creating a safer and more attractive environment for walking and cycling.

These measures will be supported by a range of behavioural change and Educational Mobility Management initiatives to help encourage local school communities to switch from car based journeys to sustainable and active modes. This could include initiatives such as 'Walk Once a Week', 'Walk on Wednesdays' which encourages pupils and teachers to walk to school and/or home at least once a week.

Figure 6.3: Example of Segregated Cycle Route along R498 outside of Colaiste Mhuire

Main East-West Greenway – Orbital Connectivity

As noted in Table 6.2 above, the East-West Greenway is a key measure for Thurles as it provides a safe segregated cycle link to a number of primary and secondary schools which couldn't be provided otherwise on the existing road network i.e. Gaelscoil Durlas, Ursuline Primary School, Presentation Primary and Secondary Schools, Scoil Ailbhe.

As illustrated in Figure 6.2, it is not possible to provide segregated cycle facilities on all town centre streets due to their narrow width. In the centre of Thurles, particularly on approach to Liberty Square, a number of key routes (E.g. Mitchel Street) do not have the physical space required to provide adequate footpath widths for pedestrians as well as provide segregated on street cycle facilities. Therefore, the greenway would serve as a vital east-west active travel link across the town, connecting a number of proposed radial segregated cycle links to several schools, large residential communities and the town centre.

The greenway would also provide a segregated active travel link to the train station from the eastern side of the town i.e. for Mitchel Street and Loughtagalla residents which otherwise would have to cycle with general traffic. Cycle parking will also be provided at the station and thus enable cyclists the opportunity to interchange with Irish Rail services. As such, the proposed urban greenway is a vital link for the overall active travel network for Thurles as it helps connect residents to key schools/destinations in Thurles, which cannot be serviced by on-street segregated cycle facilities.

Radial Connectivity

Thurles' town centre is a connection point for two national roads, in addition to three other regional roads which for the majority, are well suited for active travel upgrades. Figure 6.4 below shows how these radial links, in combination with the main orbital greenway, serve key employment centres, shopping destinations and schools. Figure 6.5 below gives an example of the type of on street infrastructure that can be delivered on the radial routes. The key proposed radial active travel links are described below:

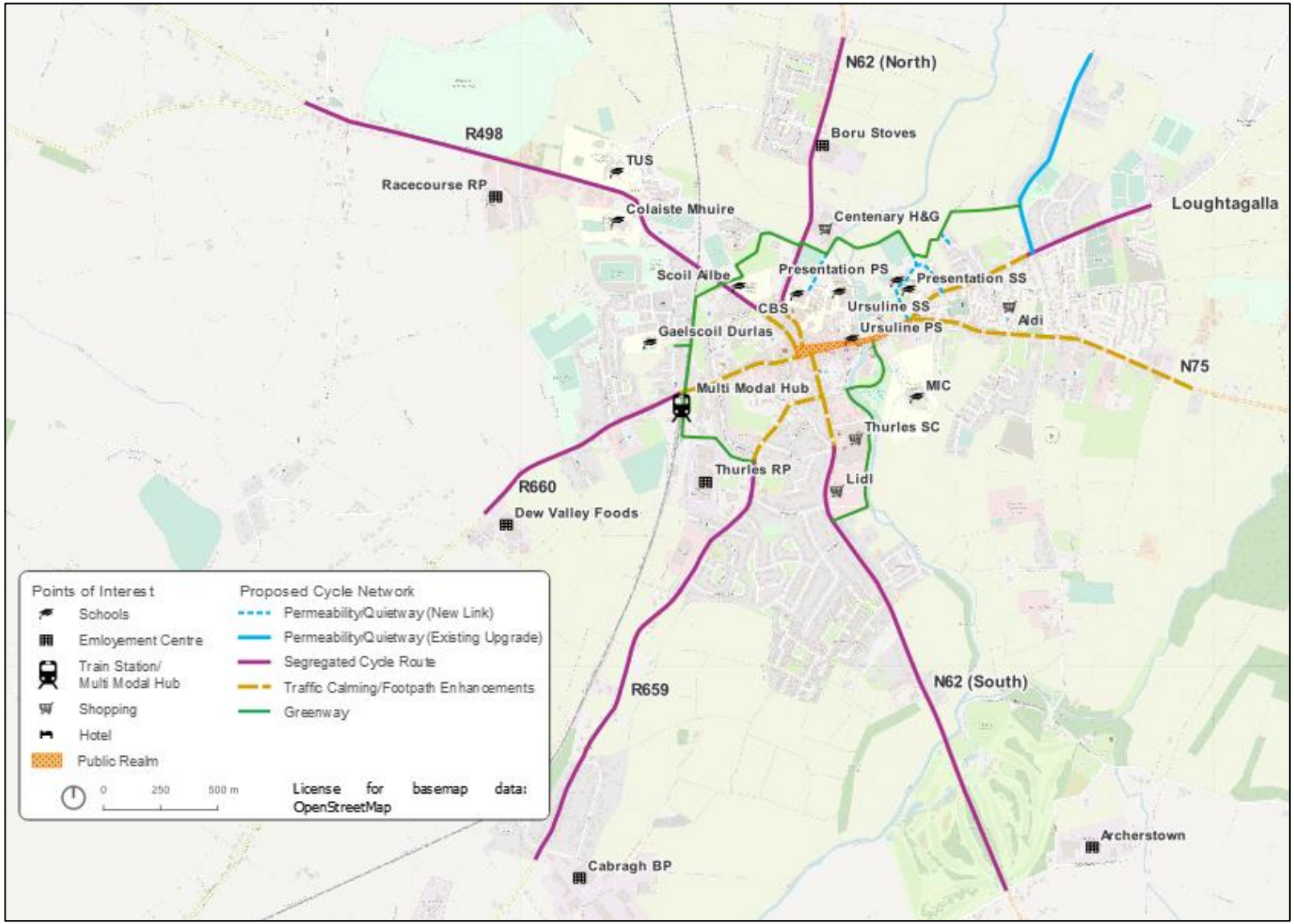


Figure 6.4: Radial and Orbital Active Travel Linkages

- **R660:** The R660 is a key link into the town as it directly connects to the train station as well as to Dew Valley Foods Ltd to the west of the town, which is a key employer in Thurles. As such, the LTP is recommending providing a segregated cycle facility along the R660 between both of these locations. Given the space constraints to the east of the train station, it isn't possible to provide continuous segregated infrastructure into Liberty Square and as such, it is recommended to traffic calm the route in order for cyclists to continue their inbound journey. From the train station, cyclists can also connect onto the main east-west greenway which will provide an orbital link around the town to the majority of other radial routes into the town.
- **R498:** The R498 is a key artery into the town as it directly connects to several schools and the Technological University of Shannon – Thurles campus, along with several employment locations to the west of the TUS roundabout. Part 8 planning has also been secured for an active travel scheme between the TUS roundabout and the Bohernanave junction which would provide segregated cycle lanes along the Castlemeadows section of the R498. As part of the LTP it is recommended that the cycle lanes be continued inbound, along Parnell St, to the Castle Avenue junction. It is acknowledged that there are pinch points along the route however local interventions will be reviewed during the design process with the central aim of providing continuous safe cycle facilities. When delivered in tandem with the proposed School Zone treatments, as highlighted above, this will provide a safe continuous active travel route linking residents to Scoil Ailbhe and Colaiste Mhuire. By doing this, it would also provide a link to the main east-west greenway which will provide an orbital link around the town to the majority of other radial routes into the town. The LTP is also recommending extending the cycle lanes to the west of the TUS roundabout, up to the R503 junction as it would link to several employment locations like the Racecourse Retail Park. Traffic calming beyond the Castle Avenue junction is also recommended in order for cyclists to continue their journey into Liberty Square.
- **N62 (North):** The section of the N62, to the north of Thurles is a key link into the town as it forms part of the national road network. It also provides a link to the residential areas along Brittas Road and Cluain Glas and employment locations like Centenary Home & Garden centre. As part of the LTP it is recommended that segregated cycle infrastructure is provided along the route, up to the Cuchulain Rd junction. When delivered in tandem with the proposed School Zone treatments, this will provide a safe continuous active travel route to the Ursuline and Christian Brothers Secondary Schools. This will also connect to the main east-west greenway which will provide an orbital link around the town to other schools, employment locations and the train station. To the south of the Cuchulain Rd junction, traffic calming and footpath enhancements would be provided in order for cyclist to continue their journey into Liberty Square.
- **N62 (South):** The section of the N62, to the south of Thurles is another key link into the town as it links to numerous residential areas to the south of the town, in addition to shopping areas along the route i.e. Lidl and Dunnes Stores. As such, the LTP is recommending that segregated cycle infrastructure is provided along the route, between the Thurles Shopping Centre roundabout and the Archerstown Industrial Estate junction. There is a section of segregated cycle lanes currently provided between the Thurles Shopping Centre roundabout and the Lidl junction, but these are only provided in the southbound direction. There is also a proposal which has secured Part 8 approval which involves traffic calming, footpath enhancements and resurfacing of the road between the Thurles Shopping Centre roundabout and Liberty Square. This will help cyclists to continue their journey into Liberty Square. The River Suir walkway runs behind the shopping centre and provides an alternative quiet route for pedestrians and cyclists travelling towards Liberty Square via Emmet Street where traffic management measures are proposed to reduce traffic volumes and create a safer environment (see Section 6.4 for further details).
- **R659:** The R659 is a key link into the town from the south-west as it links to numerous residential areas to the south as well as connecting to the Cabragh Business Park and the Thurles Retail Park. Currently there are on street cycle lanes provided on the R659 between the Oakfield Park junction

and the Clongour Rd junction but these are not segregated. As part of the LTP, it is recommended to upgrade these facilities to provide segregation and also extend the facilities to the south of Thurles, to the Cabragh Business Park. This would connect the Business Park and the residential area adjacent to the Business Park, to the rest of the town. The LTP is also recommending continuing the cycle facilities to the north of Clongour Road, just past the Retail Park entrance where it would connect to the east-west greenway which will provide an orbital link around the town and to the train station and numerous schools in Thurles. North of this point on the R659, traffic calming is also recommended in order for cyclists to continue their journey into Liberty Square. An example of the active travel measures which could be provided on the R659, adjacent to Hillview Drive are illustrated in Figure 6.5 below.

Figure 6.5: Example of Segregated Cycle Route along R659, north of Co-Op Livestock Mart

Town Centre Improvements

Whilst substantial public Realm improvements have been implemented in the heart of the town at Liberty Square, a number of the town centre streets within Thurles create an unwelcoming environment for pedestrians and cyclists due to narrow footpaths and a lack of formal crossing points.

Tipperary County Council are currently progressing a plan to extend the existing public realm area (which currently covers the section of Liberty Square between Emmett Street and Slievenamon Road) to also cover the west side of Liberty Square. Where possible, footpath widths on the routes into Liberty Square will also be increased.

To enhance the vibrancy of Thurles town centre, it is also proposed to extend the existing public realm area to include Cathedral Street (up to the Kickham Street roundabout). The goal of these measures is to improve the walkability of the town centre and increase the number of people coming to spend time in the town supporting local businesses. An impression of what proposed interventions on Cathedral Street could look like is illustrated in Figure 6.6. This includes a raised crossing between the Cathedral and Mary Immaculate College, benches along the street and widened footpaths where possible to improve the connection between the town centre and several schools along the street i.e. Ursuline Primary School and Presentation Primary and Secondary Schools.

Figure 6.6: Impression of Cathedral Street upgrades

Figure 6.7 and Figure 6.8 below shows enlarged images of the proposed active travel network around the town centre area. As mentioned above, it is not possible to provide on street cycle facilities into the town centre given the already tight geometries of the road network. The proposed active travel network below does provide alternative safe routes into the centre, for example:

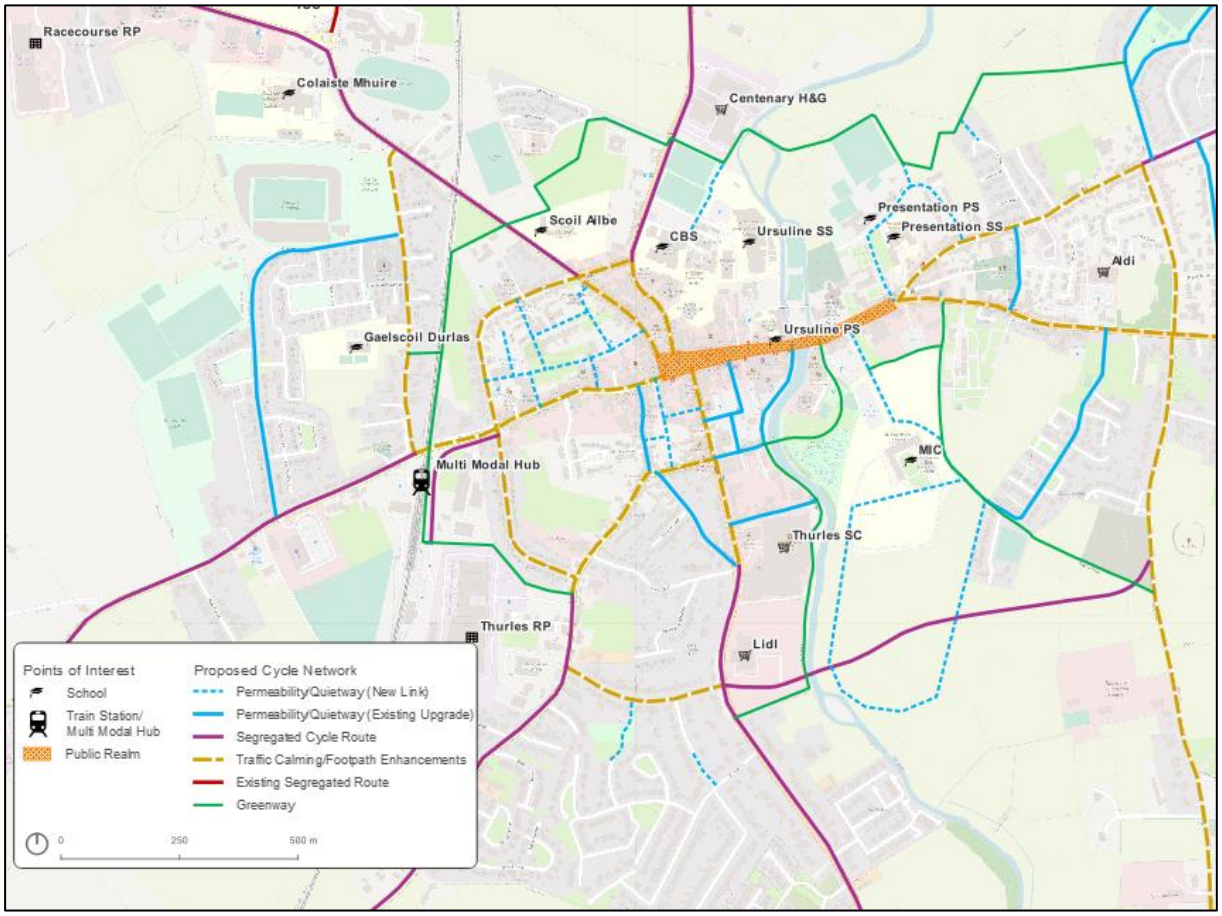


Figure 6.7: Active Travel Network – Town Centre

- **River Suir Greenway and Emmett St Quietway:** For cyclists travelling into the centre from the south, they can use the River Suir Greenway which starts to the south of the Lidl on Slievenamon Road and connects onto Emmett St. From there, cyclists can use the shared space on Emmett Street which will be greatly calmed following the implementation of a partial one-way traffic circulation (mentioned in Traffic Management section below) on the street or they can use the town park greenway which can be accessed via the bridge over the river.
- **Main East-West Greenway:** For cyclists travelling into town centre from the east side of the town i.e. Loughatalla residents, they can use the main East-West greenway (via the Quietway on Bohernamona Road) and from there, they can access the town centre area via permeability links off the greenway e.g. via the Presentation Primary School access onto Cathedral St.

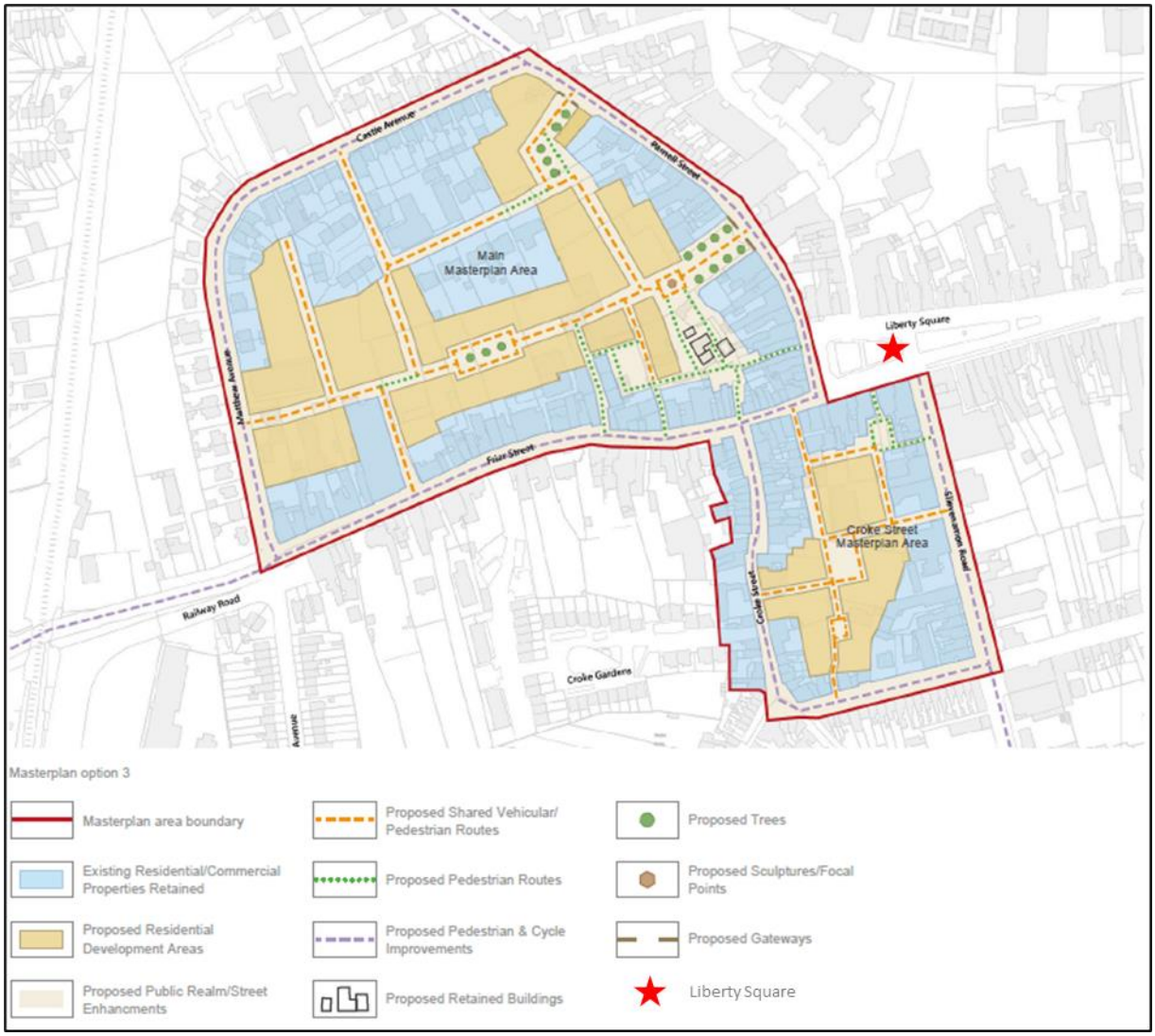


Figure 6.8: Extract from the Thurles Town Centre Masterplan 2021

At the detailed design stage of each active travel scheme, all junctions along the active travel route will be examined and designed to improve safety for pedestrians and cyclists.

Connectivity to Future Zoned Land

As outlined previously in Section 3.3, the proposed LTP measures considered access to existing development but also took cognisance of the Land Use Zoning Map contained within the Thurles Local Area Plan illustrated in Figure 3-1. This was to ensure that all future zoned lands are served by strong active travel infrastructure to support the sustainable growth of Thurles. The following section sets out the key sustainable transport measures which will serve future development lands. Through the planning process, proposed future developments will be required to prioritise active travel infrastructure integrated with the wider active travel network to ensure future residents/employees are provided with a choice of sustainable transport modes.

Residential Lands

As illustrated in Figure 3-1, the largest bank of zoned new residential lands is along Brittas Road and Jimmy Doyle Road, to the north of the town. The Thurles LTP has proposed segregated cycle facilities

serving each of these areas in combination with the East – West Main Greenway which will provide a connection to the wider active travel network and key destinations including the town centre, schools and large employment and retail centres. These lands will also be closely served by the proposed Connecting Ireland bus services, providing additional sustainable travel choices for residents.

Employment Lands

The largest zoned employment lands are mainly related to expansions of existing business/retail parks including the Cabragh Business Park, the Racecourse Retail Park and an undeveloped area along the N62, to the south of the town. As outlined in Section 6.2, these sites are served by strong radial active travel routes connecting to the town centre and residential areas including the R659 (Cabragh Business Park), the R498 (Racecourse Retail Park) and the N62 to the south of the town (undeveloped area).

The majority of these employment sites will also be served by the proposed Connecting Ireland bus routes, providing improved accessibility for local residents. Combined with the wider active travel network, the LTP proposes strong walk, cycle and public transport connections to zoned employment lands supporting the sustainable growth of these sites.

Summary of Key Active Travel Measures

A summary of the key active travel interventions contained in the Emerging Preferred Strategy are shown below in Figure 6.9.

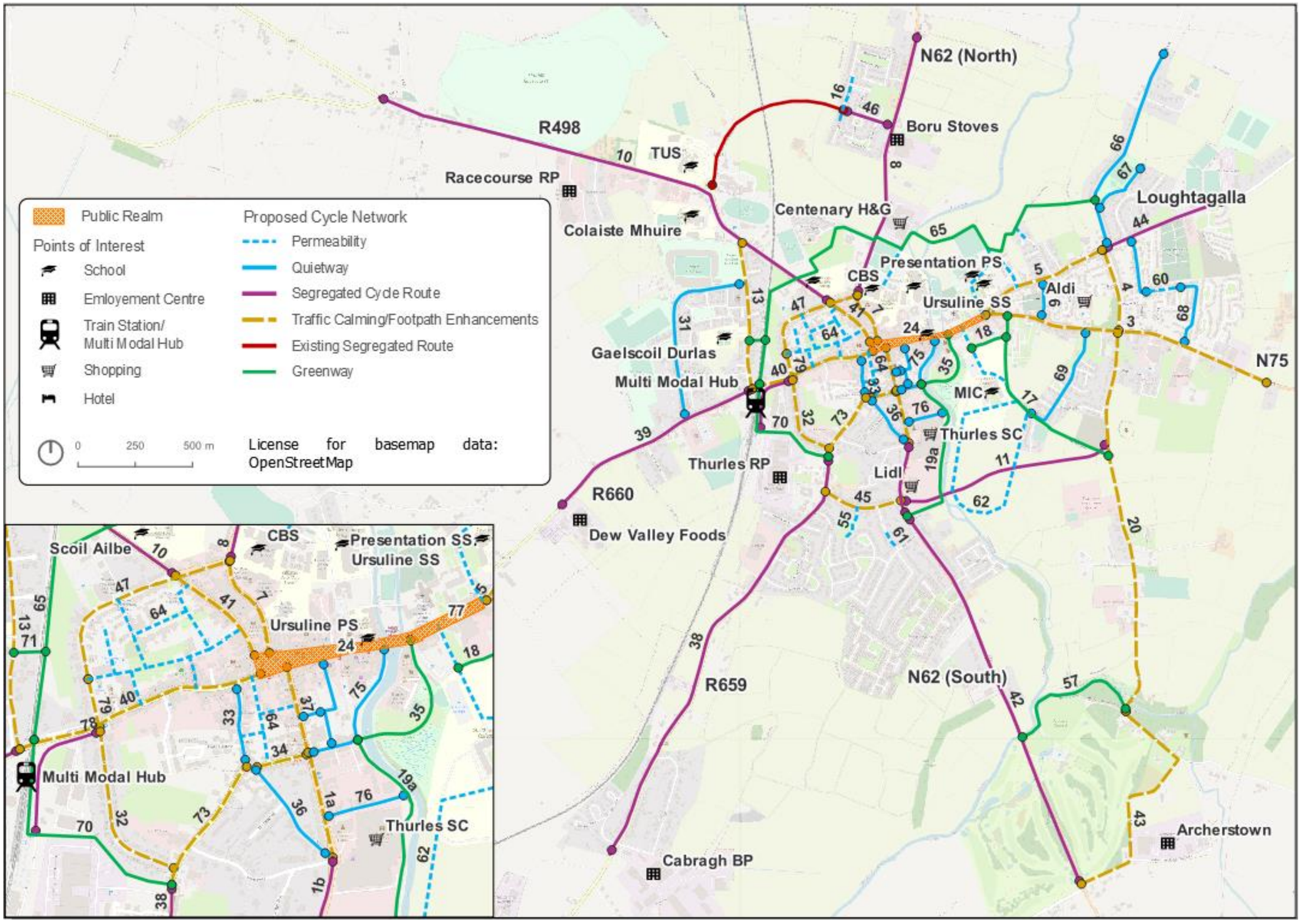


Figure 6.9 Active Travel Network

Table 6.3 Active Travel Interventions

Option	Location	Intervention	Description
AT1a	N62 Slievenamon Road	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of N62 Slievenamon Road between Thurles Shopping Centre roundabout and R659 junction
AT1b	N62 Slievenamon Road	Segregated Cycle Route	Segregated Cycle Route implemented on N62 Slievenamon Road between Thurles Shopping Centre roundabout and Clongour Road
AT3	N75 Dublin Road/Kickham Road	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of N75 Dublin Road and Kickham Road
AT4	Boheravoroon Road	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of Boheravoroon
AT5	Mitchel Street	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of Mitchel Street
AT6	Ikerrin Road	Permeability/Quietway (Existing Upgrade)	Potential to implement a shared surface quietway and associated footpath improvements where necessary.
AT7	N62 O'Donovan Rossa Street	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of N62 O'Donovan Rossa Street
AT8	N62 Brittas Road	Segregated Cycle Route	Segregated Cycle Route implemented on N62 Brittas Road
AT10	R498	Segregated Cycle Route	Segregated Cycle Route implemented on R498
AT11	Proposed Link Road between N62 and Mill Road	Segregated Cycle Route	Segregated Cycle Route and pedestrian facilities implemented on proposed Link Road between N62 and Mill Road. This route would be delivered as part of Road Option (R3) which is a new road objective
AT13	Bohernanave	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of Bohernanave
AT16	Cluain Glas	Permeability/Quietway (New Link)	Potential to implement a permeability measure to increase inter-linkage with housing developments and improve north-south journey times
AT17	College Lane	Greenway	Potential to designate the recently laid permeability link as an active travel desire line to access Monakeeba housing estate and Mill Road
AT18	Munster Hotel rear	Greenway (New)	Potential to link Mill Road to Mary Immaculate College, The Source, and Suir River Walk via connection to the rear of Munster Hotel boundary.

Option	Location	Intervention	Description
AT19a	River Suir Walkway	Greenway	Potential to extend and further enhance Suir River Walk from Emmett Street to Clongour Road
AT20	Mill Road	Traffic Calming/Footpath Enhancements	Potential to cater for an established pedestrian desire line and significantly enhance road safety through provision of pavement.
AT22	Various	Provision of high quality, secure bicycle parking	Potential to install Sheffield stands or other form of secure and convenient bicycle parking at locations where demand is present or potential for latent demand is seen.
AT24	Liberty Square	Public Realm	Potential to complete Liberty Square public realm scheme to provide high quality footpaths and crossing, prioritising movement of pedestrians and cyclists.
AT31	Kennedy Park	Permeability/Quietway (Existing Upgrade)	Potential to implement a shared surface quietway and associated footpath improvements where necessary.
AT32	Butler Avenue	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of Butler Avenue
AT33	Croke Street	Permeability/Quietway (Existing Upgrade)	Potential to implement a shared surface quietway and associated footpath improvements where necessary.
AT34	R659 Fianna Rd	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of R659 Fianna Rd
AT35	Thurles Leisure Centre and The Source	Greenway	Improved Wayfinding to incorporate the link within the wider network and encourage it's use as a pedestrian/cycle link.
AT36	Pearse Terrace	Permeability/Quietway (Existing Upgrade)	Potential to implement a shared surface quietway and associated footpath improvements where necessary.
AT37	N62 Slievenamon Road	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of N62 Slievenamon Road between Liberty Square and R659
AT38	R659 Cabra Road	Segregated Cycle Route	Segregated Cycle Route implemented on R659 Cabra Road
AT39	R660 Abbey Road	Segregated Cycle Route	Segregated Cycle Route implemented on R660 Abbey Road
AT40	R660 Friar St	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of R660 between Butler Avenue and Liberty Square
AT41	N62 Parnell St	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of N62 Parnell St

Option	Location	Intervention	Description
AT42	N62 Slievenamon Road	Segregated Cycle Route	Segregated Cycle Route implemented on N62 Slievenamon Road between Clongour Road and Archerstown Industrial Estate junction
AT43	Thurles Golf Club boundary road	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of Thurles Golf Club boundary road
AT44	Loughtagalla	Segregated Cycle Route	Segregated Cycle Route implemented on Loughtagalla up to Boheravoroon junction
AT45	Clongour Road	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of Clongour Road
AT46	Jimmy Doyle Road	Segregated Cycle Route	Potential to improve existing cyclist priority through enhancement of cycle lanes, and junction interfaces with potential radii increases.
AT47	Castle Avenue	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of Castle Avenue
AT55	Clongour Road, Access to Cluiaine Airne estate	Permeability/Quietway (New Link)	Potential to implement a permeability measure to increase inter-linkage with housing developments and improve journey times
AT60	Moyne Road to Willowmere Drive	Permeability/Quietway (New Link)	Potential to enhance existing permeability link to increase inter-linkage with housing developments and improve journey times
AT61	Connecting both sides of Clongour estate	Permeability/Quietway (New Link)	Potential to implement a permeability measure to increase inter-linkage with housing developments and improve journey times
AT62	Mary Immaculate College campus	Permeability/Quietway (New Link)	Potential to implement a cycle lane in one or both directions, as either a shared surface quietway or if feasible a segregated cycle lane, and associated footpath improvements where necessary. Potential link with proposed Link Road between N62 and Mill Road and it's active travel facilities
AT64	Friar Street/Castle Avenue	Permeability/Quietway (New Link)	Potential to implement a cycle lane in one or both directions, as either a shared surface quietway or if feasible a segregated cycle lane, and associated footpath improvements where necessary.
AT65	Main East-West Greenway	Greenway (New)	Potential to implement a shared surface link for pedestrians and cyclists, providing east-west movement to the rear of the developed town. This would provide a crossing point over River Suir and the rail line, and would link schools with residential areas without the need to negotiate with road traffic.

Option	Location	Intervention	Description
AT66	Bohernamona Road	Permeability/Quietway (Existing Upgrade)	Potential to implement a shared surface link in one or both directions which would connect to AT65 Greenway
AT67	Sean Treacy Ave	Permeability/Quietway (Existing Upgrade)	Potential to implement a shared surface link in one or both directions which would connect to AT66
AT68	Willowmere Dr and Moyne Road	Permeability/Quietway (Existing Upgrade)	Potential to implement a quietway which connects the residential areas of Willowmere Dr and Moyne Rd.
AT69	Kickham St/College Green	Permeability/Quietway (Existing Upgrade)	Potential to implement a quietway which connects the residential area of Kickham St/College Green with the MIC campus
AT70	Train Station to R659	Greenway (New)	Potential to implement a shared surface link for pedestrians and cyclists, providing an extension to AT65 which would continue the east-west movement around the developed town onto the R659.
AT71	Bohernanave to Railway Line	Greenway (New)	Provision of a bridge over the railway line to connect Bohernanave to the proposed Greenway link (AT65)
AT73	R659 Stradavoher	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of R659 Stradavoher
AT75	Emmett Street	Permeability/Quietway (Existing Upgrade)	Potential to implement a quietway on Emmet Street
AT76	Kavanagh Place	Permeability/Quietway (Existing Upgrade)	Potential to implement a quietway on Kavanagh Place which would connect to River Suir Greenway (AT19)
AT77	Cathedral Street	Public Realm	Potential to extend existing public realm area to also cover Cathedral Street
AT78	Railway Road	Segregated Cycle Route	Potential to improve existing cyclist priority through enhancement of cycle lanes, and junction interfaces with potential radii increases.
AT79	Matthew Ave	Traffic Calming/Footpath Enhancements	Traffic Calming/Footpath Enhancements of Matthew Ave
AT80		Cycle Parking	The LTP recommends the provision of high quality secure cycle parking at appropriate locations to be delivered in line with guidance set out within the National Cycle Manual.

6.3 Public Transport

Bus Services

The development of the LTP public transport measures are focused on medium and longer distance trips to and from Thurles. Currently, the town is not considered to be of a scale which would merit the provision of a town bus service, with walking and cycling considered to have considerable potential for local trip making within the town. As the town continues to grow, a town bus service could be examined in future iterations of the LTP process.

The public transport measures in the Emerging Preferred Strategy are focused around the NTA's Connecting Ireland rural mobility bus proposals and will provide enhanced connectivity both within Thurles and to nearby settlements and other regional towns. The Connecting Ireland proposals will bring an increased level of public transport service into the town, increasing the attractiveness and viability of bus-based public transport across a range of journey purposes.

Figure 6.10 below sets out the proposed bus network for Thurles and are split into the following three categories:

- Regional Routes
- New Local Routes
- Existing Local Routes which are to be retained

Regional Bus Services

The proposed regional bus services which are included in the Emerging Preferred Strategy are the following –

- **Route 16** – connects Thurles to Athlone and Clonmel with stops in Nenagh (R498) and Cashel (N62).
- **Route 42** – connects Thurles to Limerick (R503) and Kilkenny with stops in Urlingford (N75).

New Local Bus Services

The proposed new local bus services which are included in the Emerging Preferred Strategy are the following –

- **Route A13** – connects Thurles to Athlone via Templemore (N62).
- **Route 394** – connects Thurles to Clonmel via Cashel (R659).
- **Route 393** – connects Thurles to Clonmel via Urlingford (N75).
- **Route 812** – connects Thurles to Urlingford via Loughtagalla and the Lisheen area.

Existing Local Routes which are to be retained

The existing local bus services which are to be retained are the following –

- **Route 896** – connects Thurles to The Commons (N62).
- **Route 396** – connects Thurles to Clonmel (N62).
- **Route 858** – connects Thurles to Portlaoise via Urlingford (M8).

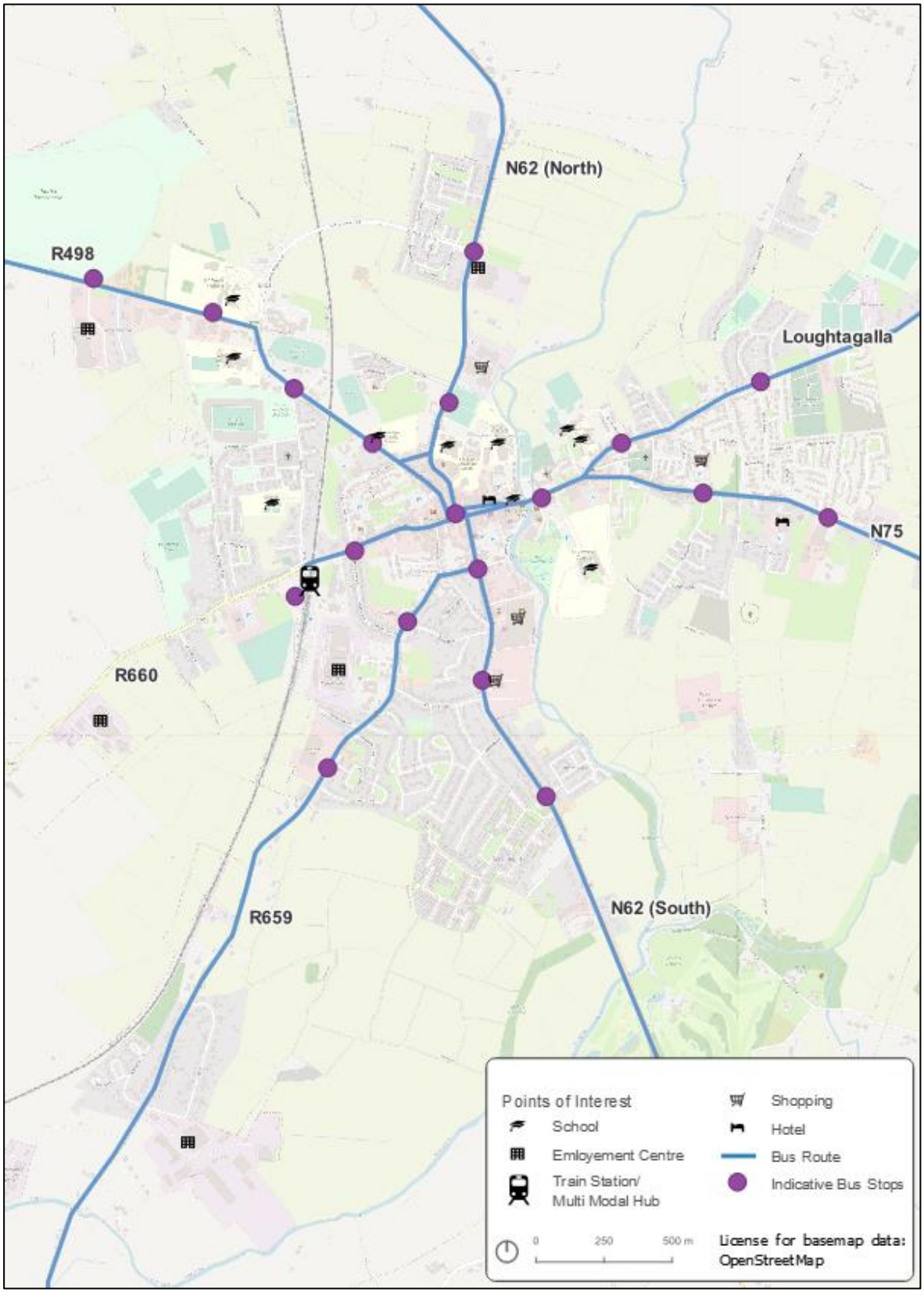


Figure 6.10: Public Transport – Envisaged Network

Bus Stop Provision

Figure 6.10 above also sets out a number of new radial bus stop locations that will serve the study area in the absence of a dedicated town bus service. These stops have been broadly sited at 400 metre intervals and will serve key trip attractors such as residential estates, schools and key employers, including the provision of a conveniently sited bus stop in the heart of the town serving all Thurles bus routes. The inclusion of an appropriate level of bus stop infrastructure and passenger information facilities will also be examined in line with NTA standards.

Mobility Hub

A mobility hub is a conveniently located place which provides people travelling by various modes the opportunity to change onto alternative transport modes. Successful mobility hubs are normally supplemented with a range of travel information and supporting facilities to make the interchange a comfortable and seamless user experience.

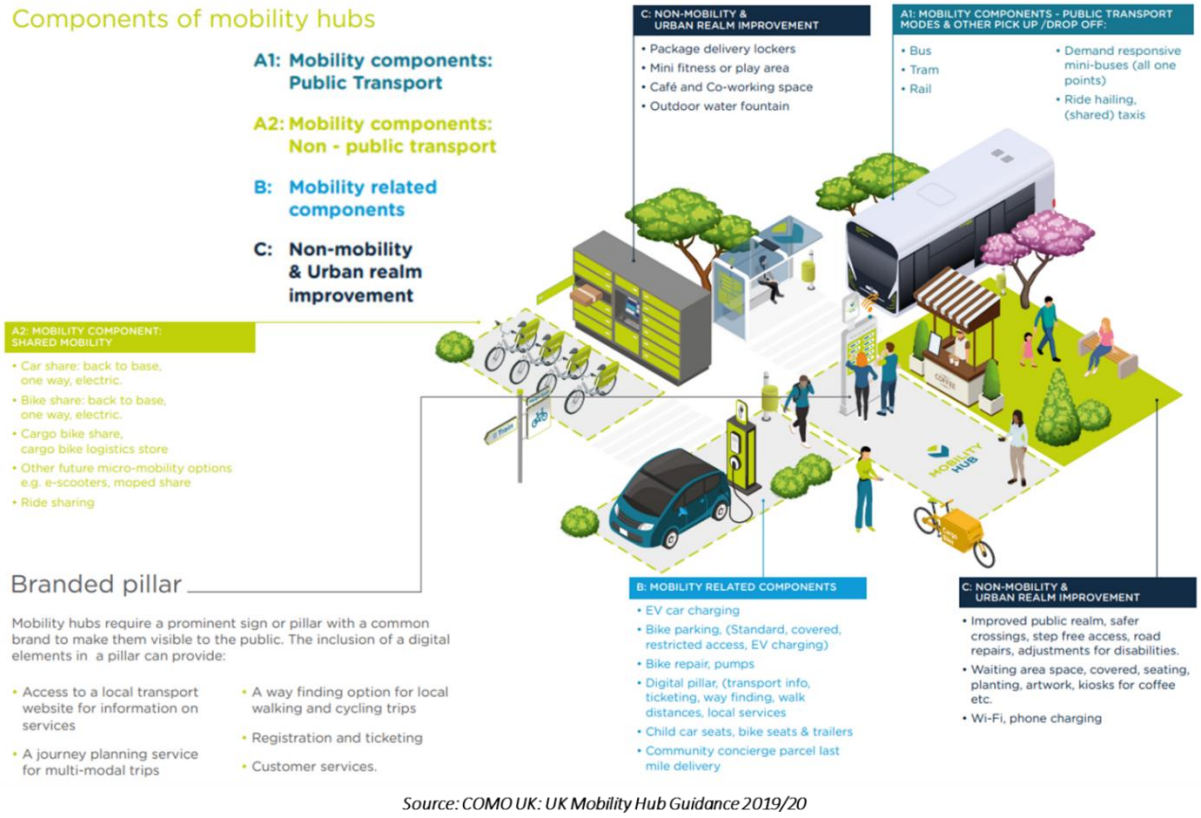
A range of factors contribute to the identification of an appropriate location for a mobility hub, these include:

- **Public Transport**: Routing of existing public transport services (Bus and Rail)
- **Accessibility**: Provision of active travel infrastructure, particularly for those with a mobility impairment
- **Density**: Sufficient density of residents and businesses in the area to create a demand
- **Safety and Activity**: Visibility of the area to passing pedestrians / transport users
- **Space**: Sufficient room on site to accommodate the needs of all integrating modes and supporting drop-off and pickup facilities
- **Growth**: Site is supported by future growth proposal in the Local Area Plan

With these characteristics in mind, Thurles train station is well placed to serve as a mobility hub. It has space for shared mobility infrastructure and public realm upgrades, will serve as an interchange between rail and bus, and is in close proximity to the town centre. The current Bus Éireann depot is also located beside the Thurles train station. This provides opportunities for integrating the bus and rail facilities providing space to create a connected multi-modal hub.

The utlimate design of the mobility hub will respond to the specific setting in Thurles and will need to be developed in a collaborative way with input from various stakeholders and interest groups, however it is envsiaged that it may contain the following elements as illustrated in Figure 6.11 below:

- **Interchange Area**- serving rail, bus (PSO and private services), taxis, cyclist and private vehicles
- **Travel Information –** Centrally located area providing information on external travel destinations, interchange between transport services and internal attractions within Thurles
- **Mobility Supports** – bike parking, bike repairs / rentals, EV charging
- **Non Mobility Supports**- Comfortable waiting area, refreshments, Parcel pick ups and parking



Source: COMO UK: UK Mobility Hub Guidance 2019/20

Figure 6.11: Potential Components of a Mobility Hub

Rail Services

As set out above, the LTP contains a number of active travel measures which will enhance access to the rail station for pedestrians and cyclist. In addition, the creation of a mobility hub at the station will substantially improve integration of transport modes within the town, providing residents with a choice of modes for different journeys and needs.

Whilst the delivery of enhanced rail services is not within the scope of the LTP, Tipperary County Council will work proactively with Irish Rail and the NTA to improve timetabling and frequency for services connecting to Thurles, to further increase the impact and appeal of the Mobility Hub.

Summary of Key Public Transport Measures

The key public transport options contained in the Emerging Preferred Strategy are shown below.

Table 6.4 Public Transport Interventions

Option	Location	Intervention
PT1	Thurles, Co. Tipperary	Regional Corridor 16: Athlone to Clonmel
PT2	Thurles, Co. Tipperary	Regional Corridor 42: Limerick to Kilkenny
PT3	Thurles, Co. Tipperary	Local Route 393: Thurles to Clonmel
PT4	Thurles, Co. Tipperary	Local Route 394: Thurles to Clonmel via Cashel
PT5	Thurles, Co. Tipperary	Local Route 812: Thurles to Urlingford
PT6	Thurles, Co. Tipperary	Local Route A13: Athlone to Thurles
PT7	Thurles Railway Station	Multi-Modal Hub

6.4 Traffic Management Solutions

There are two main traffic management solutions identified in the Emerging Preferred Strategy focused on supporting walking and public realm improvements as well as the performance and safety of the road network. They both involve implementing a one-way traffic operation on the following streets as illustrated in the Figure 6.12 below –

- Emmett Street
- Mitchel Street & Ikerrin Road

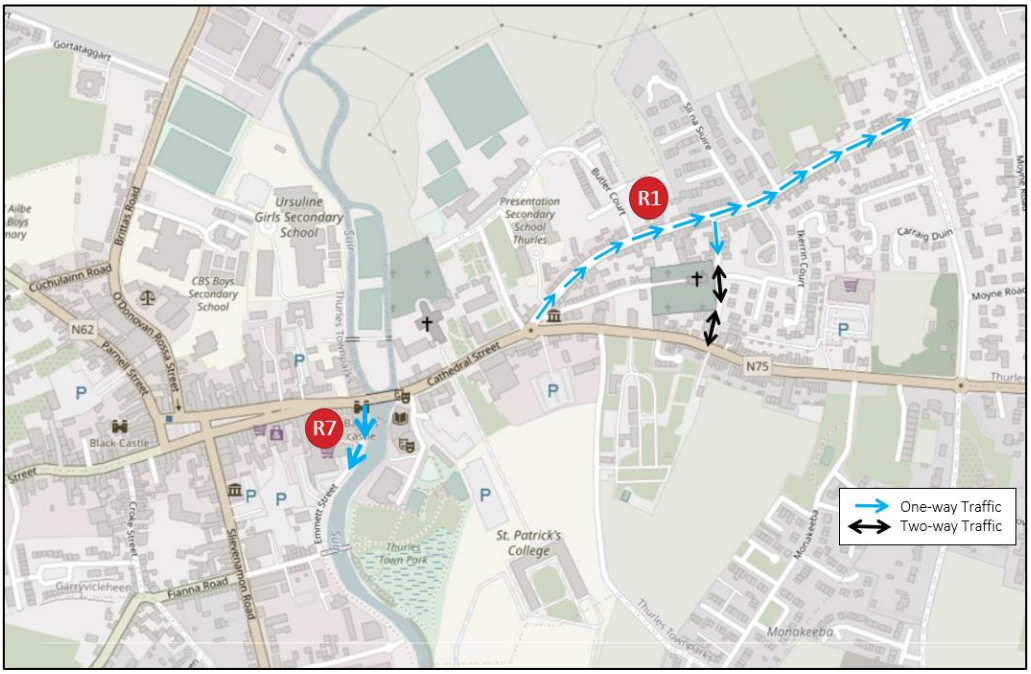


Figure 6.12: Emmett St and Mitchel St one way traffic operations

Table 6.5 Traffic Management Solutions

Option	Location	Intervention
R1	Mitchel Street	Restriction of traffic to permit only one-way traffic along Mitchel Street along the eastbound alignment from Cathedral Street roundabout to Boheravoroon Road Junction. Inbound traffic would divert to Bohervoroon Road and Kickham Street. On Mitchel Street Parking would be formalised on one side of the road and footpath widths extended where possible.
R7	Emmett Street	Potential to upgrade the junction entry to Emmett Street and introduce potential one-way circulation to increase road space for pedestrians and cyclists and improve safety at the junction.

Partial One-Way Street on Emmett Street

Emmett Street is a narrow heavily trafficked two-way street which connects to Liberty square and Thomond Road (a residential street) in the town centre. It also provides a pedestrian link into the Town Park via the bridge over the river Suir and links directly to the Suir Walkway. As illustrated in Figure 6.13, the Emmett Street access onto Liberty Square has very poor sightlines/visibility for drivers, due to the Castle Tower on the corner of the junction. This presents a dangerous situation for traffic merging onto the national road. Analysis of available collision rate data from Transport Infrastructure Ireland (TII)[11] indicate that this section of the N75 passing the tower had twice above the average rate of accidents between 2016 and 2018.

Figure 6.13: Emmet St Access onto Liberty Square

[11] https://data.tii.ie/

In order to alleviate this safety issue, it is proposed to convert the northern end of Emmett Street into a one-way traffic operation (in the southbound direction) down to the Tesco car park. It would remain a two-way traffic street south of the Tesco car park. This will have the following benefits:

- Remove the conflict with traffic turning out from Emmett Street with poor visibility. This will help improve the safety of this junction. It should also help the junction to operate more effectively, removing traffic turning across the N75 while improving traffic flow across the bridge.
- It will significantly reduce traffic volumes on Emmett Street and Thomond Road. This will facilitate public realm and footpath improvements creating a quiet link for pedestrians and cyclists from the Suir Walkway to Liberty Square.

One Way Street on Mitchel Street & Ikerrin Road

Mitchel street is a narrow two-way street which connects Cathedral Street and the Dublin Road to the residential areas off of Mitchel St and Loughtagalla. It also directly links to two schools (Presentation Primary and Secondary schools). Currently, footpath widths are very narrow and as illustrated Figure 6.14 below, cars also park on footpaths which make it difficult for pedestrians moving through the street.

There is insufficient space to maintain two-way traffic flows, retain parking and improve footpath widths on the western end of Mitchel Street. As such, the LTP recommends the conversion of Mitchel Street to one-way for vehicular traffic in an eastern direction between Cathedral St and Boheravoroon. This would provide sufficient space to formalise the on-street parking and improve public realm and widen footpaths along the street. This will provide a significantly improved route for pedestrians accessing the town centre, in addition to providing a safe route for school children who want to access the Presentation Primary and Secondary schools at the western end of the street. Figure 6.15 provides an impression of what Mitchel Street could look like with one-way traffic and improved public realm providing a more attractive route for pedestrians.

Figure 6.14: Mitchel St (Western End)

Figure 6.15: Impression of proposed Mitchel St Upgrades (Western End)

Traffic modelling was undertaken to understand the impact on the wider road network of converting Mitchel Street to one-way. The results indicate that there will be an increase in traffic levels on Boheravoroon Road following the one-way implementation but the proposal would stop the rat running situation that occurs in the morning where cars divert onto Mitchel Street from Kickham Street, in order to try and get through the Cathedral Street roundabout more quickly. The access onto the Cathedral Street roundabout from Mitchel Street would also be removed and the junction could be rationalised to give priority to the Kickham Street traffic.

The Connecting Ireland route 812 (inbound direction only) which connects Thurles to Urlingford via Mitchel Street, would need to be rerouted via Boheravoroon and Kickham Street in order to access the town centre. This would have no effect on the bus service due to the limited extent of the rerouting of the service

As part of this proposal, it is also recommended that Ikerrin Road would be converted to one-way southbound on the northern side only, between Mitchel Street and Ikerrin Court. As illustrated in Figure 6.16, the northern access from Ikerrin Road is very narrow and can only facilitate one vehicle at a time. The conversion to one-way traffic will improve the safety of this junction and allow for the improvement of footpaths. The remainder of Ikerrin Road would remain two-way traffic facilitating access to residents and shops to and from Kickham Street.

Figure 6.16 Ikerrin Road / Mitchel Street Junction

6.5 Road Network

The under investment in road infrastructure in Thurles over a number of decades has led to excessive levels of congestion within the town, impacting on the economic vitality of its centre and quality of life for its residents. Whilst the LTP focusses on the delivery of short term active travel solutions, the level of strategic traffic passing through the centre of Thurles on both the N62 and N75 poses a significant challenge to the implementation of active travel measures in the town centre, limiting the uptake of walking and cycling amongst residents.

In keeping with the 'Town Centre First' approach, there is a need to reinvigorate the centre of Thurles through appropriate investment in national road infrastructure in tandem with the reallocation of road space for active modes, public realm enhancements and public transport in the town centre. This integrated approach to the delivery of transport infrastructure will support the compact growth of Thurles encouraging future businesses and residents to locate in the heart of the town.

The road options identified in the Emerging Preferred Strategy incorporates feedback from the Baseline Assessment phase of the study (including the public consultation element) which in particular highlighted a number of safety concerns at Liberty Square due to the conflict between HGV traffic and pedestrians and cyclists. In some cases, HGVs need to mount the footpaths, given the lack of physical space in the area. If delivered, they would provide a major benefit to the town by helping to remove the high level of strategic traffic that has to travel through the town on a daily basis.

The limited number of road based options developed for Thurles have considered the importance of performance and safety of the road network up to 2040, and have been proposed to ensure the future road network is appropriate to serve the town's needs.

Sustainable Principles of Road Development

Aligned with recent changes in national transport, climate and land policies i.e. NIFTI and CAP23, the following principles have been applied to the consideration of any new roads in Thurles:

- **Alternative Solutions**: Any new road schemes must demonstrate that public transport, traffic management or demand management measures cannot effectively address the circumstances prompting the road proposal or are not appropriate.

- **Road Capacity:** Ensure implementation of the road will not lead to a significant increase in capacity for private vehicles on radial roads leading into Thurles thereby inducing demand for further car travel.
- **Re-allocate road space**: where a road scheme comprises an urban bypass, measures must be proposed and implemented to reallocate road space within the bypassed area to sustainable transport and/or public realm improvements
- **Multi-modal:** Ensuring all road schemes are designed to facilitate walking, cycling and public transport provision.
- **Protection of National Road Network**: Any proposed road must not undermine the capacity and function of National Roads for strategic traffic in accordance with the NPF's objective to 'Enhance Regional Accessibility', as well as DoECLG Section 28 Ministerial Guidelines 'Spatial Planning and National Roads' document.
- **Safety**: All proposed roads or network upgrades improves safety for all users on the national / regional road network.
- **Activation of Development**: Any new road infrastructure required to support new development, must contribute to the delivery of compact growth and not result in additional road capacity on the wider road network
- **Strategy Alignment**: That the development of the road scheme does not diminish the expected beneficial outcomes of the LTP or the LAP

The main road measures included in the Emerging Preferred Strategy are the following –

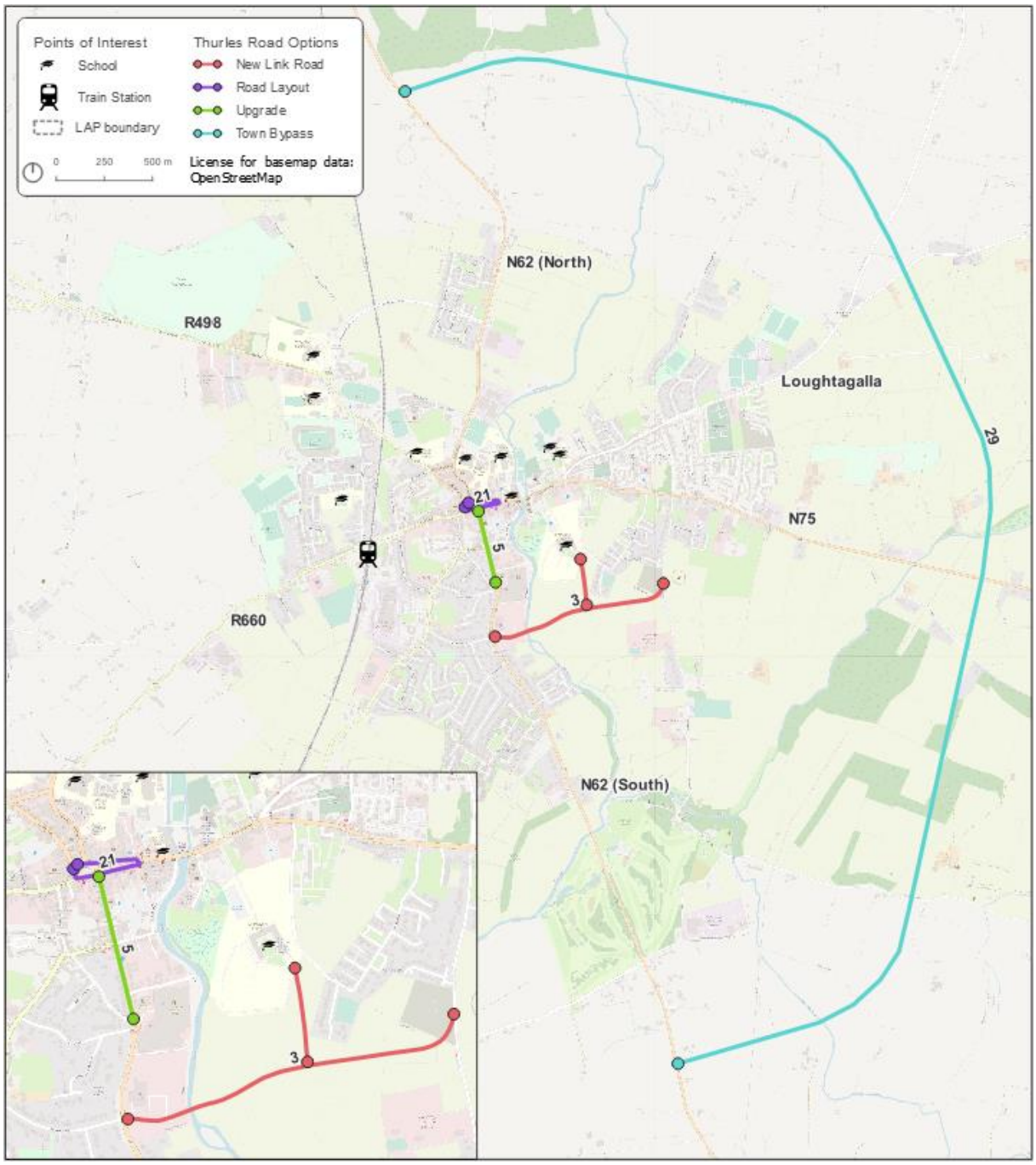


Figure 6.17: Emerging Preferred Strategy Road Infrastructure Measures

(R29) Eastern Town Bypass which connects both national roads (N62 and N75)

As well as a thriving market town, Thurles' town centre is situated at the intersection of two national roads and thus must cater for high levels of cars and goods traffic which move through the national road network. As a result, a large volume of strategic trips pass through the narrow town centre streets, resulting in localised congestion, pollution and an unsafe environment for pedestrians and cyclists. The existence of this large volume of strategic traffic through the streets of Thurles is a major limiting factor on the delivery of sustainable transport solutions for the town.

It is clear that the presence of a significant volume of through traffic on both national roads leads to a heavily vehicle dominated town centre and prevents Thurles achieving an environment which is more

amenable to walking and cycling. The congestion within the town centre also restricts the operation of an efficient bus services and detracts from the creation of a liveable urban centre. As such, the LTP is recommending a bypass[12] to the town to help alleviate the impact of through national road network traffic and create a better town centre environment in Thurles. The town bypass included in the Emerging Preferred Strategy is an eastern bypass which connects both national roads, the N62 (in two locations, north and south of the town) and the N75 to the east. In combination with the Jimmy Doyle Road, it will also provide a full orbital connection between the N62 South, N75 and the R498 Nenagh Road.

The following section is an assessment of the scheme under the sustainable principles of road development, which are mentioned above.

- **Re-allocate Road Space:** A modelling assessment of the road scheme was undertaken and indicated that the road will substantially reduce traffic flows through the town centre. In particular, traffic over the River Suir bridge reduces by 55% with the bypass in place. This substantial reduction of through traffic within the town centre helps create a calmed environment which is more conducive to pedestrian and cycle activity, thus supporting the reallocation of road space to sustainable modes. In particular, the delivery of the eastern bypass could also facilitate turning Bohernanave into a one way traffic system in order to facilitate segregated cycle facilities. This would provide an on-street facility between the R660 and the R498 thus linking the train station, the Gaelscoil, Colaiste Mhuire and the TUS campus. It could also facilitate turning Parnell Street (between Liberty Square and Cuchulain Road) into a one-way traffic system, in order to provide segregated cycle facilities, directly into Liberty Square, but such proposals are not possible with the current traffic volumes in the Town centre.
- **Safety:** In addition to supporting the reallocation of road space to active travel modes, the bypass would also enable a HGV ban (whilst still allowing deliveries) in the town centre as it would provide an alternative route for HGVs who don't need to travel through Thurles. This would greatly improve the safety for pedestrian and cyclists as the current town centre road network layout (around Liberty Square) is too narrow for some HGVs, who have to drive on footpaths at certain locations in order to travel through the area.
- **Multi-modal:** By removing the strategic traffic from the town centre (55% reduction over the River Suir bridge), a bypass would also enable journey time reliability for public transport users to be improved. As such, it would increase the attractiveness of public transport in the area.
- **Alternative Solutions:** The framework for developing solutions to transport problems comes from National Investment Framework for Transport in Ireland (NIFTI) and begins with the Modal Hierarchy. This means that travel needs should be served first and foremost by walking & cycling, then by public transport, and finally road-based solutions as a last resort. In the case of Thurles, active travel infrastructure could result in the removal of some local 'short distance' car trips but would have no effect on long distance trips using the national road network. Active travel infrastructure would also have no effect on goods vehicles. Public transport measures could alleviate some traffic from the town centre but given the dispersed nature of travel movements in the area and the high modal split of cars, it is unlikely to achieve the effect needed to reduce traffic in the area. Public transport would also have no effect on goods vehicles movements. As such, given the specific issues in Thurles regarding strategic through traffic, the road-based option is the only solution that will substantially reduce traffic volumes in the town centre and allow for the reallocation of road space and the creation a safer environment for pedestrians and cyclists.

[12] The scheme would be be progressed in accordance with DoECLG Section 28 Ministerial Guidelines 'Spatial Planning and National Roads Guidelines for Planning Authorities' and TII Publications where there are interactions with the existing national road network

(R3) Thurles Inner Relief Road (connecting the N62 to the N75 via Mill Road)

The Thurles Inner Relief Road which connects the N62 (to the south of the town) to the N75 (via the Mill Road) is included in both the National Development Plan and is a policy objective of the Regional Spatial Economic Strategy for the Southern Regional Assembly. The Scheme received An Bord Pleanala approval in 2014 and has been recently funded by the Department of Transport to progress through Project Appraisal Stages. The following section is an assessment of the scheme under the sustainable principles of road development, which are mentioned above.

- **Re-allocate Road Space:** A modelling assessment of the scheme was undertaken and indicated the road will reduce traffic flows over the River Suir bridge by 15%. This reduction of through traffic within the town centre helps create a calmed environment which is more conducive to pedestrian and cycle activity, thus supporting the reallocation of road space to sustainable modes. In particular, the scheme will significantly reduce traffic volumes using Thomond Road and Emmett Street to access the N75. As such, the delivery of the relief road could facilitate closing the Emmet St junction with Liberty Square, which is mentioned above as a one-way street proposal. Closing the junction, whilst still allowing for deliveries to Tesco during certain periods, would greatly calm the entire street which is residential on one end and stop it being used as a rat run to avoid a congested Liberty Square area.
- **Safety**: As outlined above, the relief road would reduce traffic volumes over the bridge at Cathedral Street by approximately 15%. This would improve the safety of pedestrians and cyclists in the town centre by providing a more calmed environment with less traffic. The section of N75 between Liberty Square and Kickham Street experiences higher than average collision rates. The reduction of traffic volumes along this section will help improve road safety.
- **Multi-modal:** The proposed link road will also facilitate segregated cycle facilities which would provide a connection from the N62 Slievenamon Road to the Mill Road whilst also linking these areas to the Mary Immaculate College campus, where cyclists could then connect onto the public realm areas on Liberty Square and Cathedral Street via the Mary Immaculate College campus links set out in their masterplan for the site. This would help provide an orbital link from the south of Thurles along Slievenamon Road to the Mill Road and subsequently the residential areas to the east of the town i.e. off the Dublin Road and Loughtagalla.
- **Activation of Development:** The proposed Inner Relief Road would connect into the planned expansion of Mary Immaculate College and also has the potential to open up development land zoned along the Mill Road.

Table 6.6 Road Schemes

Option	Location	Intervention
R3	Link Road between N62 Slievenamon Road and Mill Road	New Link Road
R5	N62 Slievenamon Road	Upgrades to the surfacing, footpath, entryways, and parking spots; with an emphasis on improving pedestrian and cyclist movements and safety which is already progressed by TCC and has Part 8 approval
R21	Liberty Square	Potential to examine adding pedestrian crossings and enhanced bus stop infrastructure
R29	Eastern Town Bypass	Town Bypass connecting the N62 to the north and south, and the N75 to the east

6.6 Demand Management/Supporting Measures

In line with the Avoid-Shift-Reduce-Manage Travel Demand Management (TDM) Toolkit to reduce carbon, improve air quality and the urban environment and manage congestion, a range of TDM Measures have been identified to support the switch to sustainable modes across the Study Area.

This includes Traffic Management proposals for Thurles Town Centre, with a focus on improving the public realm in key areas and providing a safer environment for walking and cycling. A number of other supporting behavioural change measures are also identified as set out in Table 6.6, including the role that Mobility Management can play in both avoiding the need to travel and supporting a switch from car travel to sustainable modes on a site-by-site basis. Supporting measures for Active Travel, Public Transport and School Travel can also be found in their respective Strategies.

Diversion of northbound HGV traffic away from Brittas Road

The LTP is recommending diverting northbound HGV traffic away from the N62 Brittas Road and instead via Parnell Street and Jimmy Doyle Road before re-joining the N62 heading northbound away from Thurles. This would help reduce the level of Heavy Goods Vehicle (HGV) traffic on Brittas Road which is home to both the Ursuline and Christian Brothers Secondary Schools and thus provide a safer environment for walking and cycling. Figure 6.18 below shows the new route which would be taken by HGVs in the northbound direction.

Figure 6.18: HGV Diversion

30Km/h Speed Limit in Town Centre & Residential Areas

It is widely recognised that the application of lower speed limits reduces the likelihood and severity of accidents for vulnerable road users and contributes to a more attractive environment for walking and cycling. Research undertaken by Transport for London, concluded that the reduction of speed limits from 50kph to 30pkh in the city on residential roads, produced a 50% reduction in cyclists being fatally or seriously injured. Lower speeds will also provide environmental benefits by reducing traffic noise which benefits the local environment. The lower speeds also improve the perceived safety of the area which in turn makes it more attractive for walking and cycling.

Whilst traffic speeds in Thurles town centre are relatively low, the introduction of a 30kph zone[13] in the centre will reinforce the need to reduce traffic speeds and support the overall implementation of other sustainable transport measures. Figure 6.19 below indicates the potential area for the 30kph zone encompassing the majority of schools, a large proportion of the residential population, the rail station and town centre. To demarcate the extent of the 30kph zone it is recommended that gateway features and signage be installed on the key radial routes leading into the town centre.

[13] The introduction of a 30kph speed zone would need to follow the requirements of the 'The Guidelines for Setting and Managing Speed Limits in Ireland'

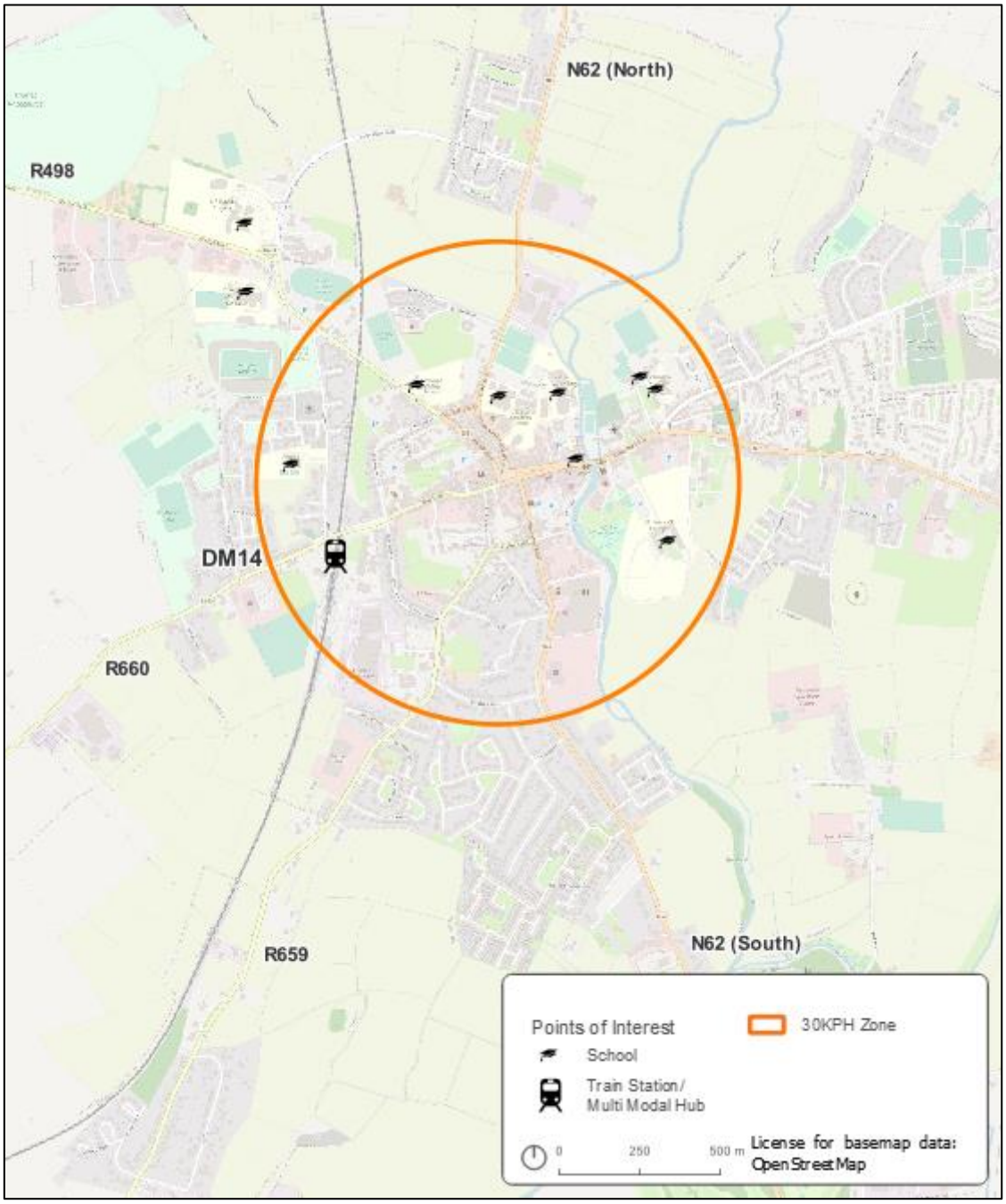


Figure 6.19: Envisaged 30Kp/h Town Centre Zone

Table 6.7 Demand Management/Supporting Measures

Option	Intervention	Description
DM1	School Mobility Management Plans (MMPs)	The town has several schools. Travel Plans can be developed to encourage more sustainable trip making.
DM2	Workplace Mobility Management Plans (MMPs)	The town has a number of significant employment centres: Dew Valley Foods, TUS Thurles, County Council. Travel Plans can be developed for these employment centres to encourage more sustainable trip making.
DM5	Safer Routes to School & School Streets	As the active travel measures illustrated in Figure 6.1 are delivered, they will provide safe access for children choosing to walk and cycle to school. Outside schools should include engineering details to encourage safe driver behaviour and ensure a calmed traffic environment. Exact details on proposed school street works will be defined at the individual project level.
DM7	Park & Stride initiatives	Examine potential of implementing Park & Stride within Thurles, to further enhance and safeguard the economic viability of the town and its sustainable development
DM10	Rationalisation of on street parking on sections of national roads within town centre	Rationalisation of on street parking on sections of national roads within the town centre to maintain the strategic function of the national road network, such as Parnell St. to improve circulation through the area
DM11	Diversion of HGV traffic on Brittas Road	Divert northbound HGV traffic south-west along Parnell Street, away from N62 Cuchulain Road, improving safety of N62 Brittas Road and adjacent school fronts.
DM14	30KPH Speed Limit	Reduced speed limit in town centre and in residential areas. Guidance is expected to be published on a national level which will help inform a reduction to 30kph speed limit in town centres, the LTP proposal should match this.
DM15	Town Car Club / Car Sharing Scheme	A car sharing service should be facilitated for residents of the study area. Car sharing schemes work by allowing those who sign up to book cars online or via an app for short periods of time. The car can be unlocked with a smart phone or card; the keys are in the car, with fuel, insurance and town parking charges all included.
DM16	Dockless Town Bicycle Sharing Scheme	Bicycle sharing schemes are key in the multi-modal transport environment, providing for everyday urban trips as well as 'last mile' journeys from public transport stops to urban destinations. Bicycles can be located and unlocked with a smart phone app. Dockless schemes use existing 'sheffield stands' and don't require dedicated infrastructure.
DM17	Parking Standards	It is recommendation of the LTP that parking requirements for new developments will be in line with the standards set out within the County Development Plan with reduced levels of parking sought in highly accessible locations with good access to services and public transport opportunities. Any proposal for reduced level of parking shall be accompanied by robust justification.

6.7 KPI Assessment

The Emerging Transport Strategy as a whole has been assessed against the objectives and KPIs listed in Table 3.1. The KPIs are both quantitative and qualitative, with local transport modelling and GIS

analysis used to calculate the majority of the quantitative KPIs. The strategy has been assessed against an existing 'Do Nothing' scenario using the 5-point rating scale outlined in Table 5.1. The following sections provide an overview of the performance of the Emerging Preferred Strategy in meeting the overarching study objectives.

Accessibility & Social Inclusion

Table 6.8 Emerging Preferred Strategy Accessibility & Social Inclusion Outcomes

OBJECTIVE	KPI	SCORE
To create and enhance interurban connectivity through delivery of a quality public transport service between Thurles and its neighbouring Key Towns (Nenagh and Clonmel) (and settlements within). There should also be improved connections to key settlements throughout the County including towns such as Templemore, Roscrea, Cahir and Cashel.	People within 10 min walk of a Public Transport Stop.	
To promote the application of Universal Design through the delivery of a sustainable transport network for users of all abilities in Thurles, where services are accessible via a comfortable short and safe walk, cycle, or PT ride from dwellings.	Length of additional / improved walk and cycle infrastructure	

KPI: People within 10 minute walk of a Public Transport Stop

The Thurles LTP supports the further roll out of the NTA's Connecting Ireland Rural Mobility Plan providing additional connectivity to surrounding settlements such as Limerick, Nenagh, Clonmel, Urlingford etc. In addition to this, a number of new radial bus stops have been identified that will serve residential areas and key trip attractors. This will make public transport more accessible to more people living in Thurles.

Figure 6.20 below illustrates the 10-minute walk catchment to public transport in the existing network and also the proposed future network with additional bus stops. The GIS catchment analysis indicates that approximately 3,646 people currently live within a short 10-minute walk (800m) of their nearest public transport stop. This increases to just under 7,048 people (+90%) due to the proposed additional bus stops and permeability improvements contained in the LTP.

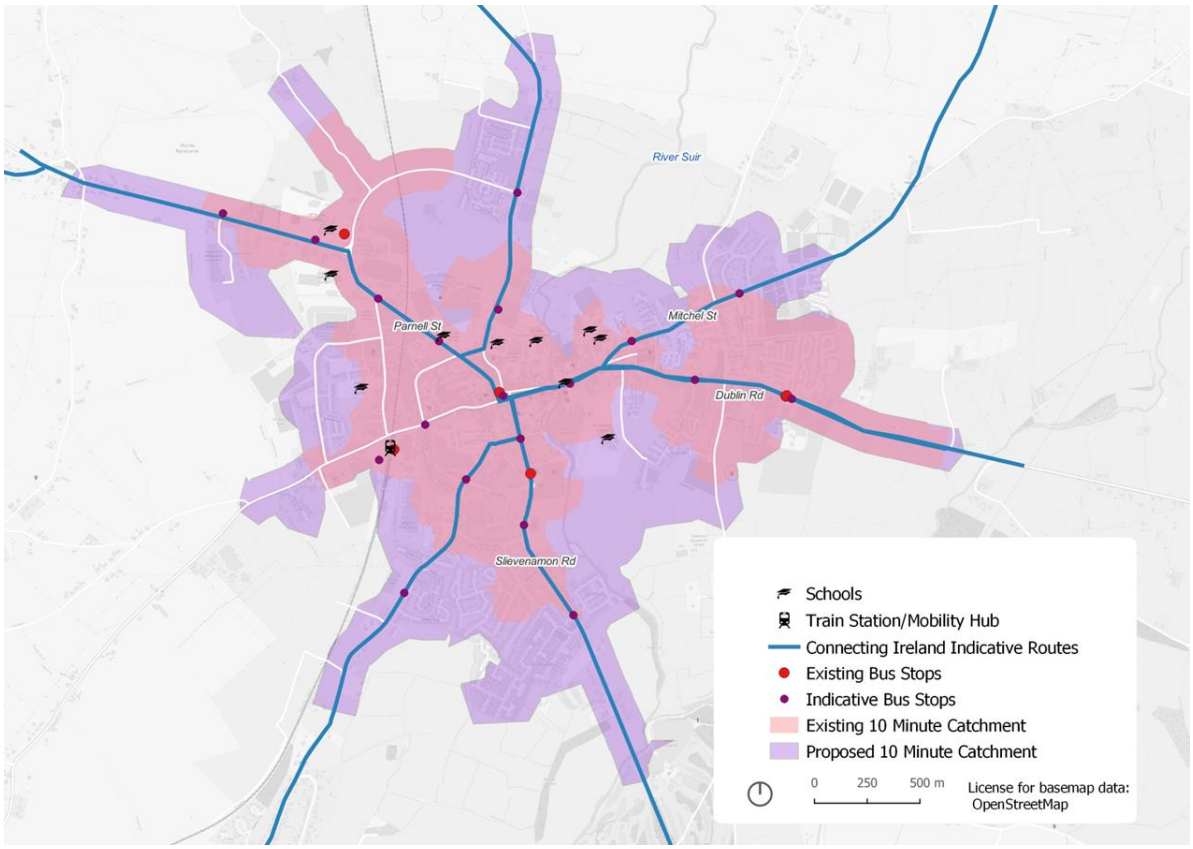


Figure 6.20: Thurles Bus Stop Catchment (Existing vs Proposed)

The active travel measures proposed as part of the LTP will improve the safety and quality of walking and cycling connections to public transport. The creation of a Mobility Hub at Thurles train station will also support integration between bus, rail and other transport services increasing the attractiveness of public transport. Overall, the proposed LTP measures will significantly improve connectivity from Thurles to surrounding settlements by public transport encouraging a mode shift away from private car.

KPI: Length of additional / improved walk and cycle infrastructure

As illustrated in Figure 6.1, the Thurles LTP includes a substantial improvement in active travel infrastructure throughout the town. The LTP will deliver over 17km of segregated cycle facilities providing a safer environment for cyclists, in particular vulnerable users. The upgraded network connects residential areas to a number of schools and other key destinations including the town centre and large employers.

In addition to this, a number of links have been identified for footpath upgrades and public realm enhancements to create a more attractive environment for walking within Thurles.

Integration

Table 6.9 Emerging Preferred Strategy Integration Outcomes

OBJECTIVE	KPI	SCORE
To promote the '10-minute settlement' concept in Thurles aiming to reduce walking times and provide easy access to essential daily services and facilities through improved integration of land use and transport.	Catchment analysis – population within 10 mins of key destinations (Schools and Town Centre) by sustainable modes	
To align and integrate with incumbent and upcoming National, Regional, and Local planning policy	Rating Scale – Review against policy compliance	

KPI: population within 10 minutes of key destinations (Schools and Town Centre) by sustainable modes

Schools

Figure 6.21 illustrates the 5, 10 and 15-minute catchment area to schools within Thurles. In total, approximately 2,800 people will live within a 10-minute walk of their nearest school under the proposed LTP network. This is an increase of around 7% when compared to the existing network. Permeability improvements such as the links in the proposed Matthew Ave/Castle Ave Masterplan will reduce access times for children walking and cycling to school, along with providing an off-road, quiet route. Approximately 5,000 people will be within a 15-minute walk of their nearest school under the proposed network with almost all of the town within a 10-minute cycle. The only exception to this are the residential areas adjacent to Cabragh Business Park to the south west of the town, which falls just outside of a 10-min cycle.

Town Centre

Figure 6.22 illustrates the 10, 15 and 20-minute catchment area to Thurles town centre – taken to be Liberty Square for the purpose of this analysis. The results indicate that just over 3,400 people will live within a 15-minute walk of the town centre with the proposed LTP network. Whilst the overall catchment to the town centre doesn't increase significantly, the LTP proposes substantial changes to the quality of the active travel network. This includes segregated cycle routes on most routes around Thurles. But given the lack of available space in the town centre core, it isn't possible to provide on street segregation all the way into Liberty Square. But alternatives are provided, such as the River Suir Greenway to the south, which connects to the N62 Slievenamon Road to the Town Park Greenway to the north which connects onto Cathedral Street. The main East-West Greenway also provides an orbital loop around the town with multiple connections to the various schools and from there users can access Cathedral Street/Liberty Square. The provision of these upgrades will improve accessibility for pedestrians and cyclists, particularly vulnerable road users by improving the quality and safety of links to the town centre.

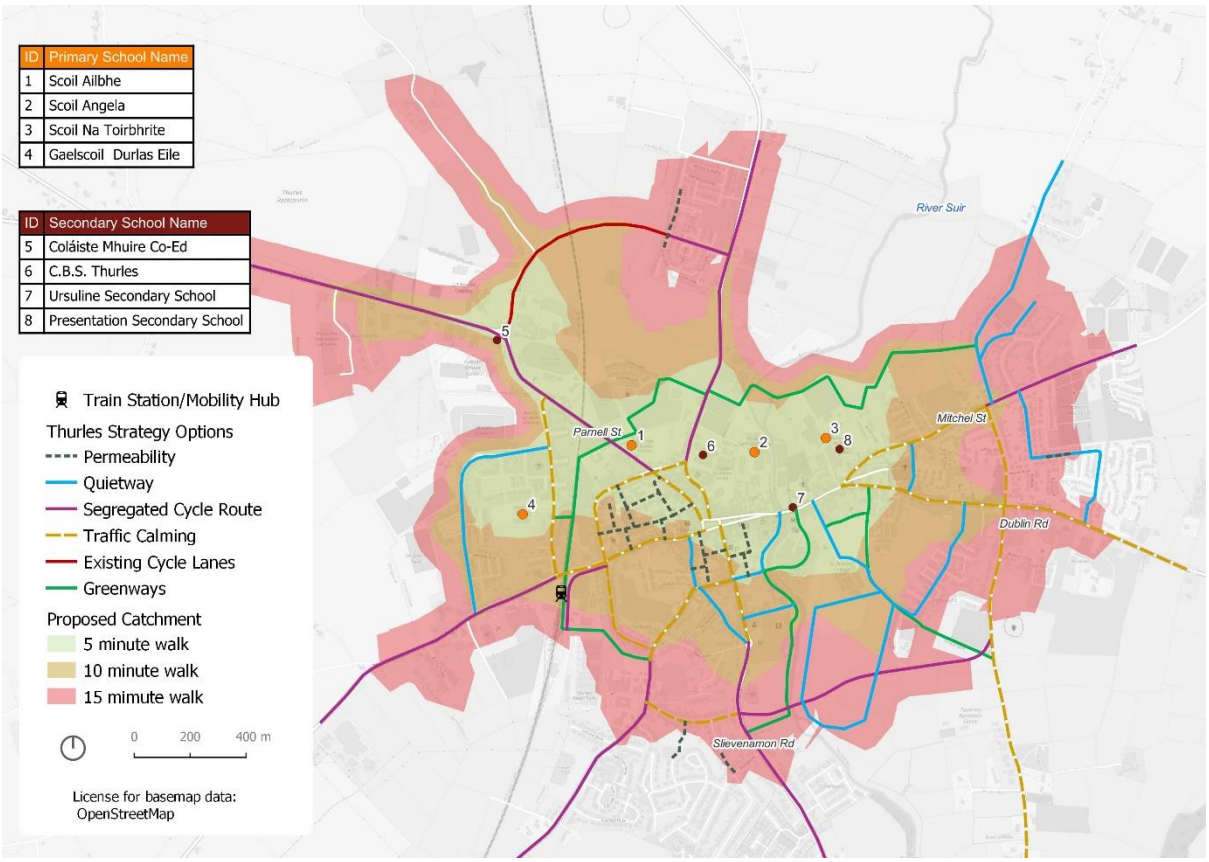


Figure 6.21 School Catchments

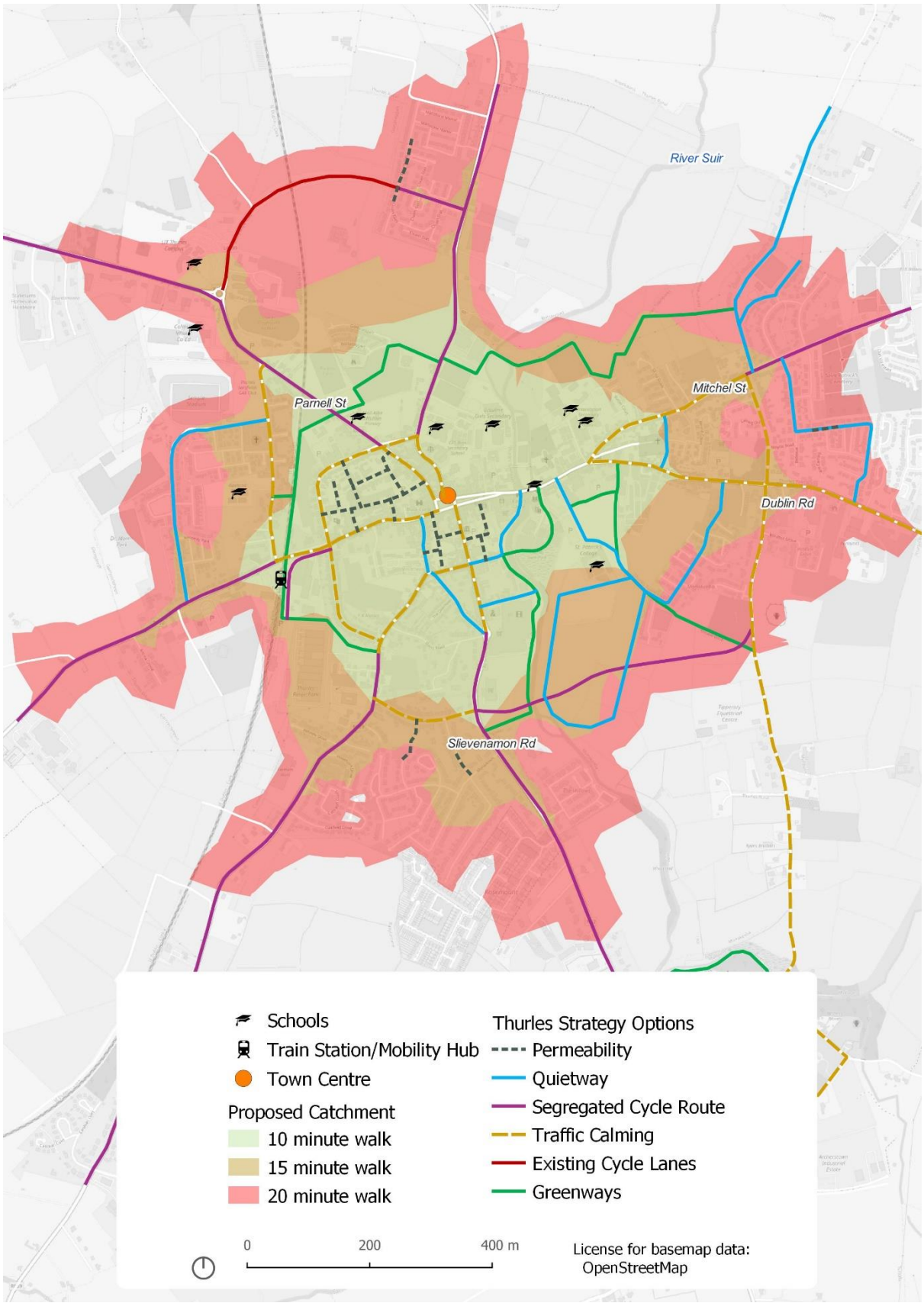


Figure 6.22 Town Centre Catchment

KPI: Rating Sc–le - Review against policy compliance

The focus of the Emerging Preferred Strategy on active modes and urban realm enhancements is deemed to comply with national and regional policy as covered in Section 2.2. In particular, the town centre improvements align with the Town Centre First policy and active travel improvements align with the focus by the NTA on Safe Routes to School. The overall rebalancing of the transport network towards sustainable modes aligns with the National Planning Framework, National Sustainable Mobility Policy, the Climate Action Plan 2023, the Regional Spatial and Economic Strategy and the Tipperary County Development Plan 2022-2028.

Safety & Physical Activity

Table 6.10 Emerging Preferred Strategy Integration Outcomes

OBJECTIVE	KPI	SCORE
Provide safe access to schools for vulnerable road users and ensure a safe front of school environment	Qualitive assessment of walking and cycling infrastructure to schools and front of school environment	
To invest in active travel to benefit the health and wellbeing of residents and visitors of Thurles with schemes that foster a healthy lifestyle to create a more liveable town	Population within 200m of new cycle infrastructure	

KPI: Qualitive assessment of walking and cycling infrastructure to schools and front of school environment

The proposed LTP measures will deliver a step-change in active travel facilities to schools. As illustrated in Figure 6.1 and Table 6.2, segregated cycle facilities are proposed to all schools within the town connecting to residential areas to the north, east and west. These connections to schools are mostly brought through the main east-west greenway which is a pivotal piece of infrastructure for the town, given it is not possible to provide on street segregation directly to some schools around the town centre i.e. Gaelscoil Durlas, Presentation Primary and Secondary school, Scoil Ailbhe and Ursuline Primary school. This will increase safety for children and parents cycling to school and encourage active travel. In addition, school zone treatments are proposed at all schools within the plan area. This includes measures to support reduced vehicular speeds and safer driver behaviour creating a safer environment for children walking and cycling to school.

KPI: Population within 200m of new cycle infrastructure

The LTP measures will facilitate a healthy lifestyle for people living in Thurles by increasing opportunities for active travel journeys to employment, education and leisure with over 34km of improved active travel infrastructure proposed.

This expansion in coverage of the network in both km and catchment will improve safety for those undertaking short journeys by active modes with continuous infrastructure limiting conflicts with motorised road users. Improved connections to employment, education and shopping sites across all areas of the town will help to support a modal shift from private cars and encourage healthy lifestyles.

The figure below illustrates the extent of the proposed segregated cycle network and associated catchment areas. Existing segregated cycle facilities in Thurles are limited to a section along the Jimmy Doyle Road which connects to the TUS Thurles campus. There is also a short section along Slievenamon Road between Dunnes Stores and Lidl, in the southbound direction only. In the proposed LTP network, the provision of segregated cycle facilities significantly improves with segregated infrastructure proposed for the majority of key radial routes into town including the N62 (north and south), the R659, the R660, and the R498. There are also a number of other proposed active travel links which will provide a segregated route for cyclists away from vehicular traffic including the Main East-West Greenway, which provides an orbital route around the town which connects to Loughtagalla, the N62 (North of the town), the R498, the R660 and the R659. The greenway will also have connections to all of the schools in town like Gaelscoil Durlas via a bridge over the railway. The River Suir greenway and the Town Park greenway combined also help to provide a link to the town centre from the south.

In total, it is estimated that the number of people within 200 metres of segregated cycle infrastructure will increase to just over 5,200 (up from approx. 500) due to the delivery of the proposed LTP active travel measures. This improved accessibility to safe cycling infrastructure will encourage a shift towards active travel supporting greater levels of physical activity and associated health benefits.

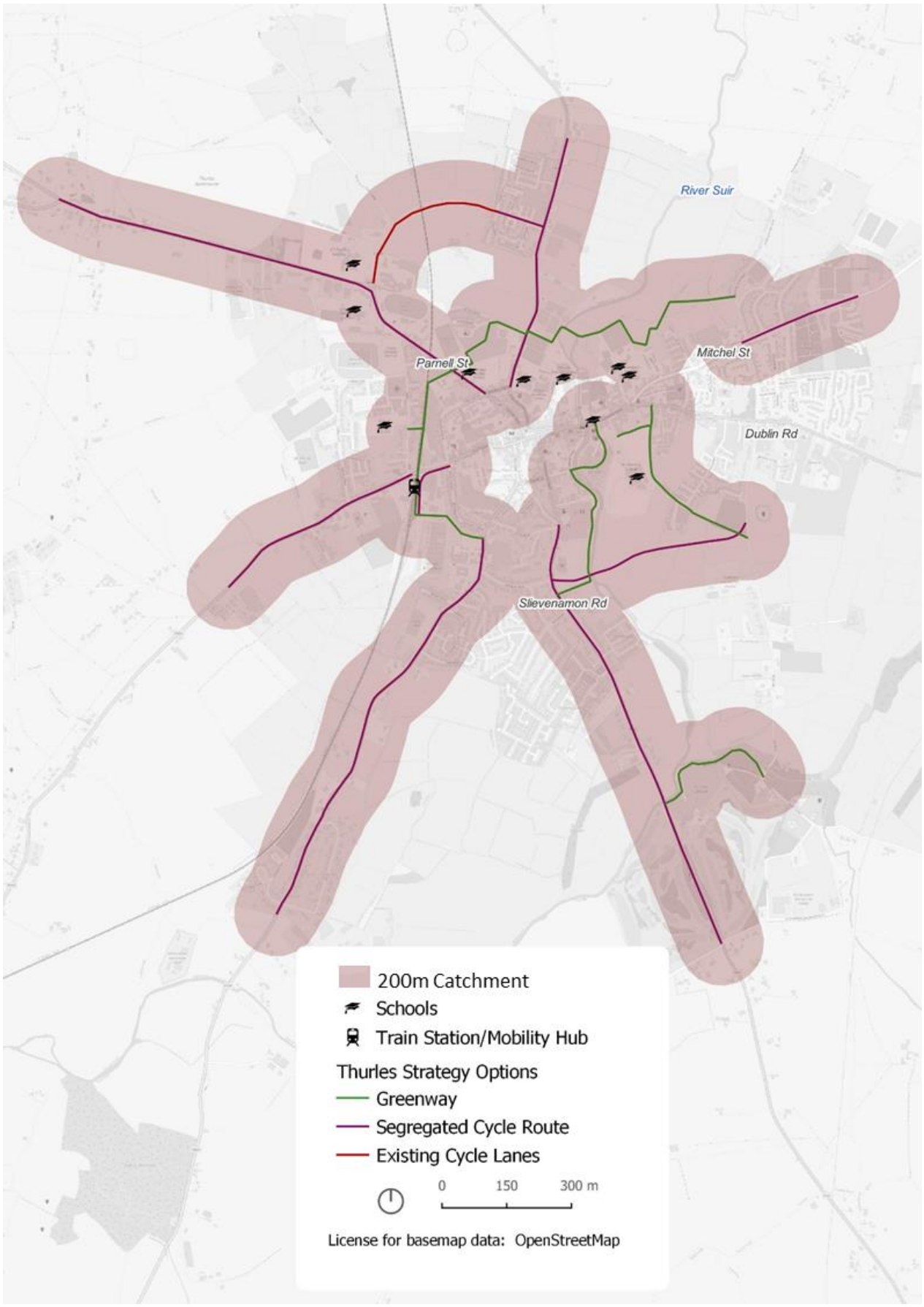


Figure 6.23 Proposed Segregated Cycle Facilities – 200m Catchment

Environment

Table 6.11 Emerging Preferred Strategy Environment Outcomes

OBJECTIVE	KPI	SCORE
To provide an environment which supports and encourages a modal shift from the private car to more sustainable modes. This will support the County to reach Climate Action and Sustainable Energy targets while helping achieve a more environmentally sustainable and circular economy	Qualitative assessment of Walk and Cycle Mode Share with targets	
To improve and create a more appealing town centre environment for pedestrians and reduce harmful air and noise pollution from vehicles. Prioritise improvements at school zones and along the main pedestrian access routes immediately adjacent to schools	Traffic volumes through the town centre core	

KPI: Qualitative assessment of Walk and Cycle Mode Share with targets

One of the key objectives for the Thurles LTP is to create an environment that supports a shift onto sustainable modes, particularly walking and cycling for shorter trips within the town. 2016 Census data indicates that walking represents approximately 20% of all trips to work and to school in the morning, with cycling accounting for just 2%. Taking cognisance of this, along with travel patterns within the town, walk and cycle mode share targets for the Thurles LTP have been developed and are outlined in Figure 6.24.

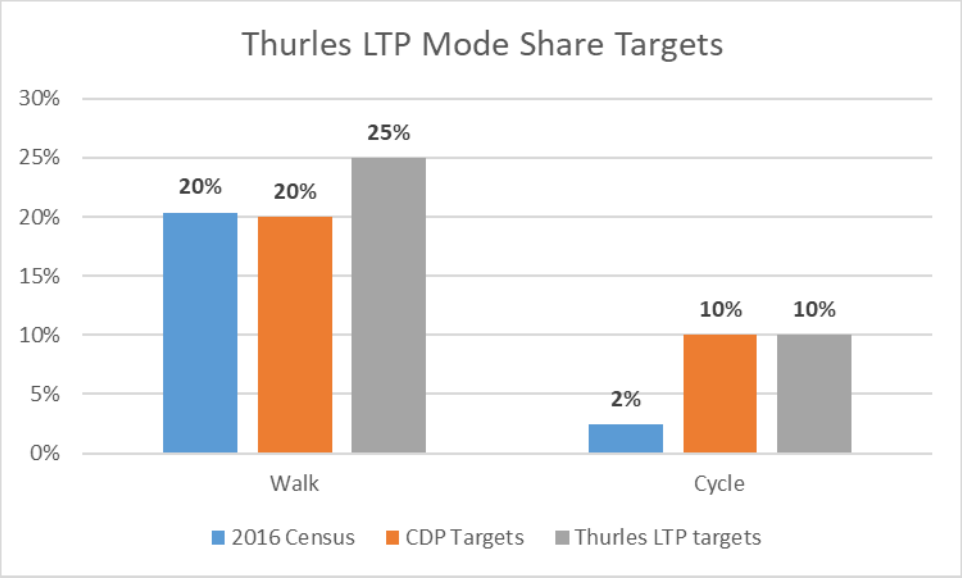


Figure 6.24 Thurles LTP Walk and Cycle Mode Share Targets

The Tipperary County Development Plan has outlined mode share targets at a county level of 20% for walking and 10% for cycling over the lifetime of the Plan. As of Census 2016, the County target for walking had been achieved in Thurles (for trips to work and education combined, at least). As such, a more ambitious target of 25% has been chosen for the LTP to reflect the impact the investment in

proposed measures will have on encouraging increased levels of walking within the town. Cycling mode share is currently low in Thurles, which is reflective of the available infrastructure at present. As such, the County Development Plan target of 10% was identified as being suitably ambitious for the Thurles LTP.

The proposed LTP measures will help support a shift away from private vehicles and assist in achieving the walking and cycling mode share targets for the town. As outlined above, almost 5,000 additional people will have close access to a segregated cycle facility in the new network. The creation of a safe, integrated walking and cycling network across Thurles connecting to schools, the town centre and key employers will make active travel a more attractive choice.

KPI: Traffic volumes through the town centre core

The Thurles LTP recommends the delivery of the Eastern Bypass to help remove traffic from the town centre thereby improving the environment for pedestrians and cyclists and allowing for the reallocation of road space to active mode infrastructure. Detailed traffic modelling was undertaken to understand the impact of these road schemes on traffic around Thurles. Analysis was undertaken on the total volume of traffic travelling in the town centre core in the existing network ('Do Nothing') and the proposed LTP road network ('Do Something').

The proposed road schemes and the town centre core used for this analysis are illustrated in Figure 6.25. The modelling results indicate that the proposed LTP measures will lead to a 20% reduction in total traffic within the town centre core. Approximately 75% of this traffic reduction is strategic traffic which neither has a starting point or end destination within Thurles.

The reduction in traffic volumes will have a number of significant benefits including road safety, reduced air and noise pollution and an improved environment for pedestrians and cyclists.

The results also indicate a reduction in Heavy Goods Vehicles within the town centre of approx. 50%. The removal of these large vehicles will improve safety for pedestrians and cyclists and create a more appealing town centre environment.

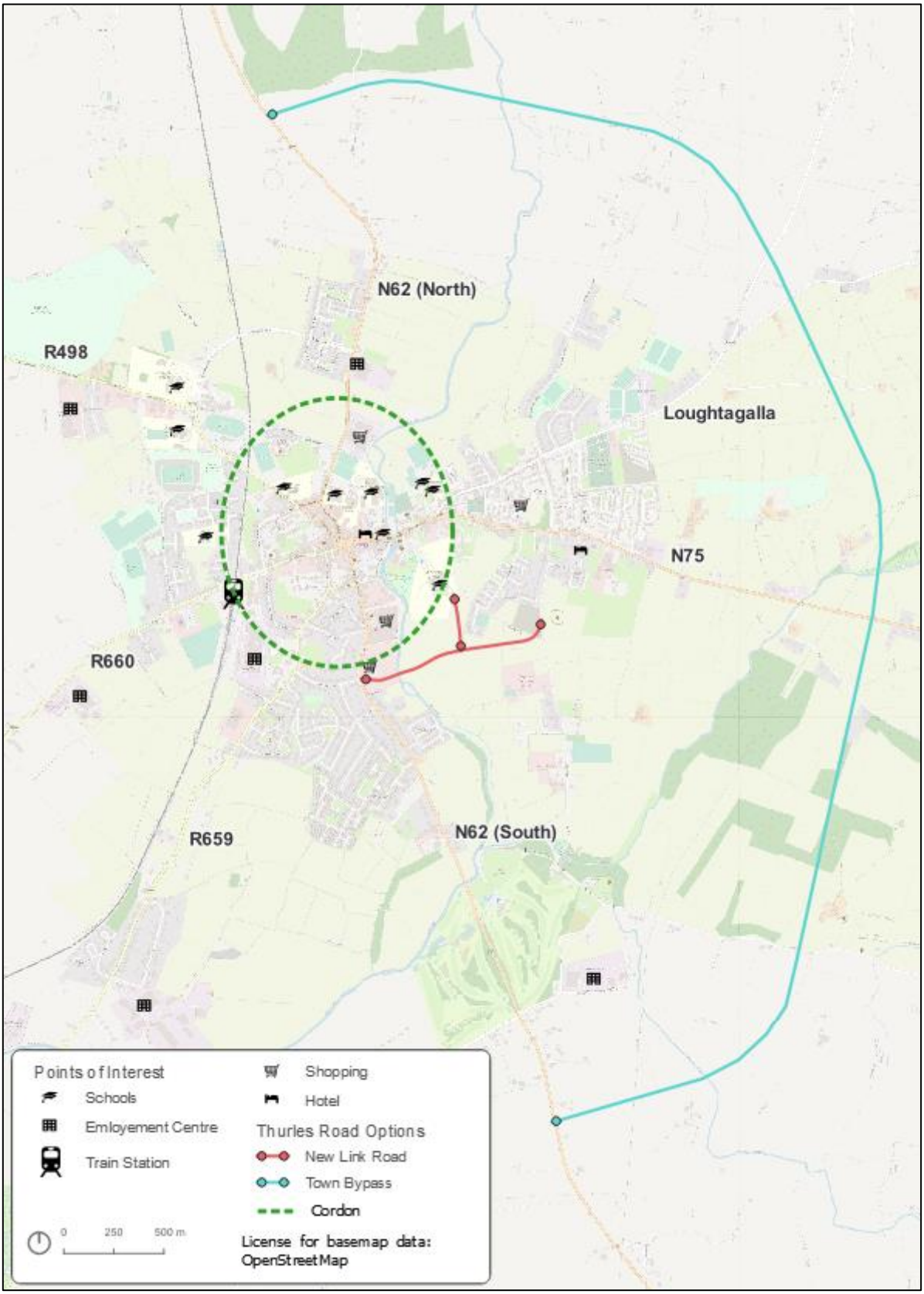


Figure 6.25 Thurles Town Centre Traffic Analysis

Economic

Table 6.12 Emerging Preferred Strategy Economy Outcomes

OBJECTIVE	KPI	SCORE
To support Thurles's pathway to a low-carbon economy through the delivery of a sustainable transport network, improving access to employment, retail and business opportunities for all in Thurles Town.	Catchment analysis to employment – population within 20-minute walk of key employment sites	
Help grow and enhance Thurles as a renowned centre for activity based and sporting tourism. Complement and capitalise upon the rich cultural and environmental assets inherent in Thurles, enhancing access and movement for local residents and visitors alike.	Qualitative assessment of town centre public realm and access to places of interest	

KPI: Catchment analysis to employment

GIS catchment analysis was undertaken to determine the areas within a 10, 15 and 20 minute walk of key employers in Thurles and the results are illustrated in Figure 6.26 for the proposed active travel network. The results indicate that the catchments cover the majority of the residential population in Thurles. The only areas outside of the 20 minute walk catchment, are a small area located on the eastern side of the town off the Dublin Rd and Loughatalla. The employers in the town centre i.e. the majority of schools, TUS Thurles, Thurles Shopping Centre and Retail Park, all have excellent walking access as illustrated by the large 10 minute catchment in the figure below.

In total, approximately 6,000 people will be within a 20-minute walk of these key employers under the proposed LTP active travel network, which represents approx. 75% of the future planned population within the Study Area.

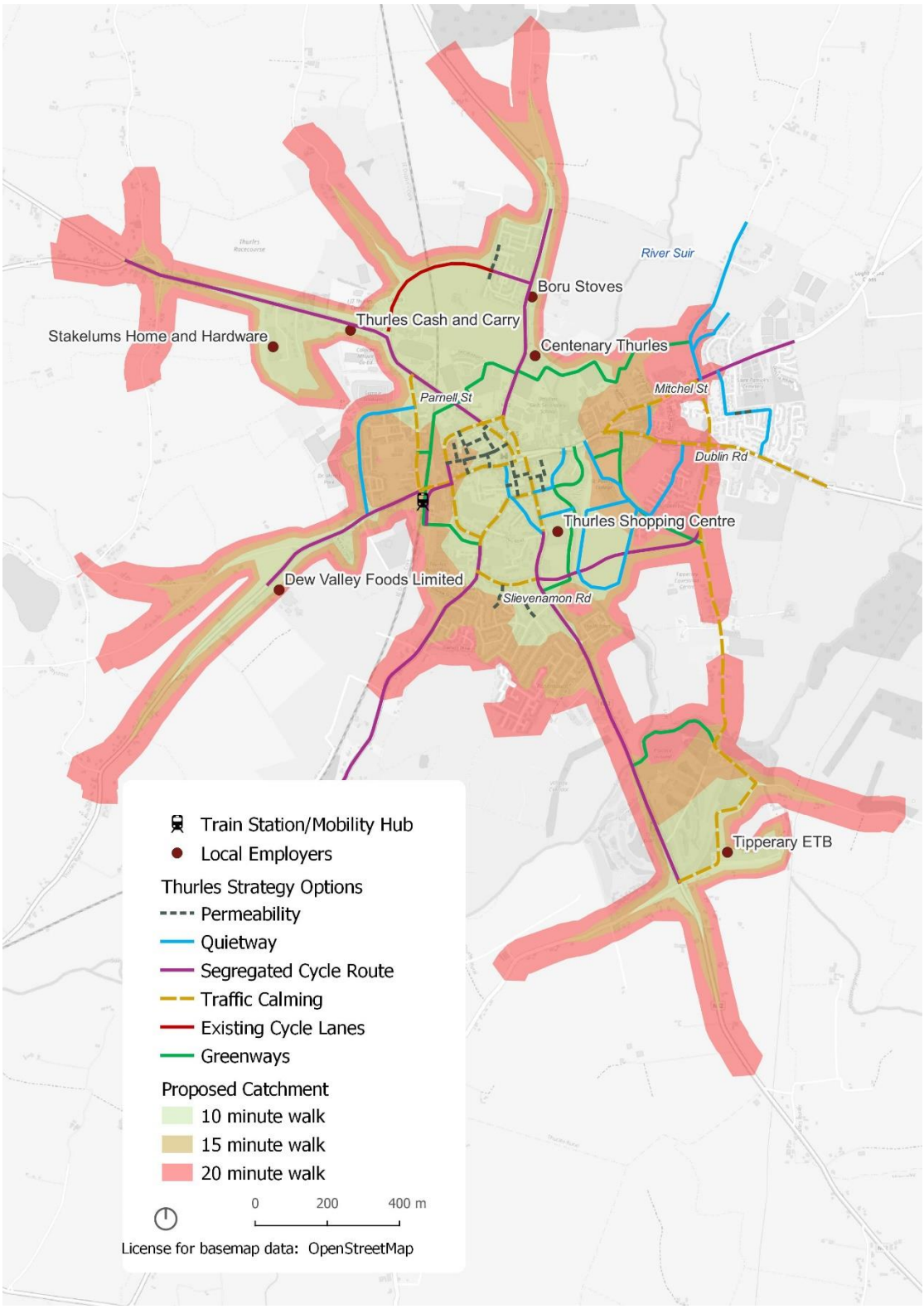


Figure 6.26 Catchments to key employers using proposed active network

KPI: Qualitative assessment of town centre public realm and access to places of interest

The Thurles LTP includes a number of measures aimed at improving the town centre environment and creating a more attractive space for residents and visitors to spend time.

Tipperary County Council are currently progressing plans to extend the existing public realm area to cover the west side of Liberty Square. The LTP recommends the extension of the public realm area eastwards to include Cathedral Street (up to the Kickham Street roundabout). The goal of these measures are to improve the walkability of the town centre and increase the number of people coming to spend time in the town supporting local businesses.

The LTP also recommends the creation of quiet, permeable links into the town centre by regenerating streets, such as Croke Street, creating a safe and attractive route for pedestrians and cyclists. These measures will make Thurles a more attractive destination, increasing footfall within the town centre and supporting the sustainable economic growth of the town.

The delivery of the East West Greenway, in addition to the greenway routes to the south of the town along the River Suir, will provide an excellent leisure route for both local residents and visitors to Thurles.

Overall, the measures proposed within the LTP will help grow Thurles as an attractive destination, encouraging increased footfall within the town and supporting local businesses.

7. IMPLEMENTATION AND MONITORING

This strategy contains a range of transport solutions to support the sustainable compact growth of Thurles as set out in the Local Area Plan. In keeping with the objectives established for the study, the sequencing of measures within the plan seeks to provide existing and future residents of Thurles with a range of sustainable travel choices. As such, the plan provides a strong emphasis on the upfront delivery of active travel and public transport measures, supported by a range of demand management measures encouraging sustainable travel behaviours.

This chapter provides an overview of the mechanism for delivery for transport schemes in Ireland, followed by the proposed phasing of the Thurles transport measures providing commentary on impacts and dependencies. The Chapter then provides a list of key transport measures that should be progressed as priority schemes. Finally, the chapter presents the mode share ambitions for Thurles aligned with regional policy as well as a strategy for monitoring the implementation of the LTP measures.

7.1 Delivery Process

Delivery Mechanisms

As individual measures progress beyond the LTP Strategy to project level, each individual project will need to be delivered in accordance with the relevant guidance and standards, in particular TII's Project Management Guidelines and Project Appraisal Guidelines for National Roads and the NTA's Project Management Guidelines.

Depending on the type and scale of the scheme, there are a number of delivery mechanisms for each of the projects set out in the Thurles LTP. Large transport projects, for example road schemes, exceeding a certain threshold will be subject to Environmental Impact Assessment and will need to be submitted to An Bord Pleanála for approval. As set out in legislation, these projects will need to undergo a statutory public consultation process.

Many of the active travel schemes, as well as some of the smaller road interventions within the town, will be subject to a Part 8 process which will be decided upon by the elected members following a statutory public consultation process.

Certain smaller interventions which improve safety on the road network for all modes of travel may be delivered under Section 38 of the Road Traffic Act 1994 (as amended). Whilst these schemes may not be required to undergo a statutory public consultation process, TCC will engage with local communities impacted by the scheme and may determine the need to undertake non-statutory public consultation.

The need for a rapid rollout of active travel infrastructure nationally, in a cost-effective manner, is urgently needed for several reasons, including:

- The Climate Action Plan 2023 requires the construction of an additional 1,000km of cycling and walking infrastructure by 2025 to help achieve emissions reductions targets. However due to rising costs in the construction sector, combined with the length of time it typically takes to deliver schemes, there is a need to change the traditional delivery approach to achieve these targets.
- The Climate Action Plan 2023 also endorses the recommendations of the report from the Climate Change Advisory Council and OECD (Organisation for Economic Cooperation and Development) on Redesigning Ireland's Transport for Net Zero.

- The National Investment Framework for Transport in Ireland (NIFTI) sets out hierarchies for where investments in transport should be prioritised and stipulates that investments in active travel and public transport should be prioritised ahead of investments in infrastructure for private cars.

Therefore, to maximise the amount of Active Travel infrastructure delivered within available resources and to increase the speed of delivery, Rapid Build active travel facilities should be prioritised where possible. Rapid Build Infrastructure is infrastructure that can generally be accommodated within the existing carriageway or verge and has limited drainage impacts. Therefore, it is more cost-effective and quicker than traditional (full build) construction methods. They can include:

- Road markings/traffic restrictions;
- Narrowing/converting general traffic lanes to active travel facilities;
- Converting on-street parking to active travel facilities;
- Creating Traffic Free streets; and
- Redesigning junctions to provide greater capacity for walking, cycling and public transport

Funding Mechanisms

The delivery of measures contained in the Thurles LTP will be subject to available funding. Each project will be appraised on its own merits through the planning process, with the scale of appraisal required (E.g. Business Cases) commensurate with the size and cost of the project being delivered. Major projects will need to be appraised in line with the requirements of the Public Spending Code and the Department of Transport's recently released Transport Appraisal Framework (TAF).

As mentioned above, there is a need for a rapid rollout of active travel infrastructure nationally, in a cost-effective manner. Therefore, where appropriate, active travel schemes will adhere to the guidance set out in the NTA's Rapid build Active Travel Facilities note and also follow the framework set out in the NTA's Project Approval Guidelines.

Depending on the type of project and its potential benefits, there are a number of potential funding streams for their delivery:

- Projects which seek to **rejuvenate the town centre** (for example public realm enhancements) may obtain funding through the government's Rural Regeneration and Development Fund (RRDF). This government initiative aims to deliver more compact and sustainable development, as envisaged under Project Ireland 2040.
- **Walking and Cycle** projects will primarily be delivered through funding sought from the NTA through their Active Travel Grants Programme. The Active Travel Grants Programme funds important projects supporting strategic pedestrian and cyclist routes, access to schools, permeability links, urban greenways and some minor public transport improvement projects.
- Measures which are targeted at improving **safety on access to schools** and encouraging active travel amongst students may be able to obtain funding through the NTA's Safe Routes to School (SRTS) Programme.
- The NTA funds and oversees Public Service Obligation (PSO) public transport in Ireland, including **Bus and Rail**. Through the NTA's Connecting Ireland programme, improvements to bus service routing/timetables and bus stop provision will be made. Further improvements to rural transport (E.g. Local Link services) will be achieved through the Rural Transport Programme.
- Improvements to the safety or operation of the **National Road network** is funded and managed by Transport Infrastructure Ireland under their capital expenditure programme. TII has developed detailed Project Appraisal Guidelines which describe the processes and detailed methodologies required for the appraisal of projects and their delivery.

- Other **local transport interventions** which are required to improve access to development lands may seek site-specific development contributions through the planning process.

Phased Implementation

The following section outlines the proposed phasing of the LTP Delivery Plan. Measures have been divided into the following phasing's:

- **Short Term (up to 2030):** This timeline corresponds with the completion of the Thurles LAP 2024-2030 and current National Development Plan.
- **Medium Term (up to 2035):** This time period represents a midway point between the end of the Thurles LAP period and the timeline for Project Ireland 2040.
- **Long Term (up to 2040)**: This timeline corresponds with Government's long term sustainable development strategy for the country- Project Ireland 2040.

A summary of the priority actions for immediate action are provided in Section 7.6 below. As noted above, each of these measures will be appraised individually on its own merits, in terms of feasibility, design, planning, approval and available funding. Therefore, the timelines should be considered as indicative only.

7.2 Active Travel

Short Term

- Deliver active travel improvements (Segregated cycleways, footpath improvements and traffic calming) along the radial roads leading into Thurles Town Centre (E.g. N62 North and South of the town, R498 Castlemeadows , R660 Abbey Road, R659 Cabra Road etc.);
- Delivery of East-West Greenway linking residential areas to the north of Thurles to schools, town centre and the railway station;
- School zone treatments to improve safety in front of Schools;
- Development of permeability links to enhance walking at the neighbourhood level and to improve the accessibility of public transport;
- Footpath Improvements on Mitchel Street. This measure is dependent on the conversion of Mitchel Street to one-way for vehicular traffic in an eastern direction between Cathedral Street and Boheravoroon;
- Provide footpath enhancements and traffic calming on Bohernanave to improve access to Gaelscoil Bhride and LIT Thurles;
- Provide footpath enhancements and traffic calming on O'Donovan Rossa Street;
- Enhancement and extension of greenway links to the south of the town centre connecting Slievenamon Road and Mill Road to Cathedral Street via College Lane and the River Suir walkway.
- Traffic calming on Mill Road;
- Completion of the Liberty Square public realm works;
- Regeneration of the Town Centre laneways (e.g. Croke street) to improve access for active modes and encourage street level activity;
- Segregated cycle link along the proposed Link Road between N62 Slievenamon Road and Mill Road. This measure is dependent upon the delivery of the Link Road;
- Deliver high quality cycle parking at key destinations throughout the town.

Medium Term

- Examine feasibility of a revised traffic circulation system around O'Donovan Rossa Street and Parnell Street with road space reallocated to active modes. This medium / long term ambition is dependent upon the delivery of the Eastern Town Bypass (connecting the N62 north and south to the N75) and the reclassification of the existing N62 to a regional road status through the town centre;
- Examine feasibility of a one-way system on Bohernanave with road space reallocated to active modes. This medium / long term ambition is dependent upon the delivery of the Eastern Town Bypass which will result in substantial reductions in traffic in this area;
- Implementation of the network of active travel links and quietways as part of Friar Street/Castle Avenue Masterplan – Proposals dependent upon timeline for delivery of the Masterplan;
- Continuation of East-West Greenway linking to the train station, including examination of an active travel bridge linking the greenway to Bohernanave;
- Extension of Liberty Square Public realm works to include Cathedral Street.

Long Term

- Support NTA and TII in completion of Inter-urban and Greenway Cycle Networks;
- Ongoing maintenance and renewal of footpaths, public realm and full realisation of the walking network proposals.

7.3 Public Transport

Short Term

- Improvements to bus stop waiting infrastructure & passenger information
- Delivery of a Mobility Hub at the train station
- Ongoing support to NTA and Irish Rail in the delivery of enhanced rail services to Thurles
- Ongoing support to NTA in delivering enhanced bus services to Thurles as set out under Connecting Ireland

Medium to Long Term

- Examine feasibility of a town bus service as the town expands beyond its 2030 target population
- Ongoing support to NTA and Irish Rail in the delivery of enhanced rail services to Thurles
- Ongoing support to NTA in delivering enhanced bus services to Thurles as set out under Connecting Ireland

7.4 Road Measures

Short Term

- Conversion of Mitchel Street to one-way for vehicular traffic in an eastern direction between Cathedral Street and Boheravoroon to enable delivery of footpath enhancements
- Conversion of the northern end of Emmett Street into a one-way traffic operation to improve safety (due to poor sightlines) and reduce traffic volumes on Emmett Street and Thomond Road.
- New Link Road between N62 Slievenamon Road and Mill Road.

Medium To Long Term

- Eastern Town Bypass connecting the N62 to the north and south, and the N75 to the east

7.5 Demand Management and Supporting Measures

Short Term

- Safer Routes to School & School Mobility Plans
- Workplace Travel Plans for large employers to encourage sustainable travel behaviours of staff
- Support and encourage Park & Stride initiatives
- Implement 30pkh speed limit area
- Rationalisation of on street parking on sections of national roads within town centre such as Parnell Street to improve circulation
- Diversion of HGV traffic on Brittas Road

Timeframe		Short Term *(Up to 2030)*	Medium Term *(2030 to 2035)*	Long Term *(2035-2040)*
Active Travel	Active travel improvements along all of the radial roads	■		
	East-West Greenway	■		
	School zone treatments	■		
	Development of permeability links to residential Areas	■		
	Footpath Improvements on Mitchel Street	■		
	Footpath Improvements on Bohernanave	■		
	Enhancement of greenway links to south of town centre	■		
	Traffic calming on Mill Road	■		
	Completion of the Liberty Square public realm works	■		
	Regeneration of the Town Centre laneways	■		
	Cycle link along N62 to Mill Road via new Link Road	■		
	High quality cycle parking	■		
	O'Donovan Rossa Street- Active Travel Feasibility		■	
	Bohernanave - Active Travel Feasibility		■	
	East-West Greenway continuation to train station		■	
	Public realm extension to Cathedral Street		■	
	Support NTA and TII - Inter-urban Networks	■	■	■
	Ongoing maintenance and renewal of footpaths	■	■	■

Timeframe		Short Term *(Up to 2030)*	Medium Term *(2030 to 2035)*	Long Term *(2035-2040)*
Active Travel	Traffic Calming/Footpath Enhancements on O'Donovan Rossa St			
	Implement Active Travel Links from Masterplan			
Public Transport	Improvements to bus stop waiting infrastructure			
	Delivery of a Mobility Hub at the train station			
	Examine feasibility of a town bus service			
	Ongoing support in the delivery of enhanced rail services			
	Support in the delivery of enhanced bus services			
Roads	Planning of Eastern Town Bypass			
	Delivery of Eastern Town Bypass			
	One-way traffic Mitchel Street			
	One-way traffic northern end of Emmett Street			
	Link Road N62 to Mill Road			
Supporting Demand Management Measures	Safer Routes to School & School Mobility Plans			
	Workplace Travel Plans			
	Park & Stride initiatives			
	30pkh speed limit area			
	Rationalisation of parking on national roads			
	Diversion of HGV traffic on Brittas Road			

7.6 Priority Actions Summary

The following table sets out the priority actions for the Thurles LTP - with a view to the plan objectives, ease of delivery, potential funding mechanism and likely benefits.

Table 7.1 Thurles LTP – Priority Actions

MEASURE	REASON FOR PRIORITY DELIVERY
R498 Castlemeadows (AT10)	The delivery of this segregated cycle route would provide a continuous safe and attractive active travel corridor linking Thurles LIT, Coláiste Mhuire Co-Ed, Scoil Ailbhe Boys Primary School, Semple Stadium and residential areas situated to the northwest of Thurles to the town centre. This route could be delivered within the confines of the public highway.
Various Permeability Schemes	Delivery of various 'quick win' permeability schemes will improve the network permeability reducing walking distances to schools, local shops and the town centre.
Main East-West Greenway (AT65)	Providing a major active travel artery across the town, this facility would cross over the River Suir and the rail line, linking numerous schools and residential areas to the town centre, without the need to mix with road traffic.
Bus stop enhancements	The delivery of new bus stops and bus stop enhancements will considerably reduce the walking distance to bus stops and improve the legibility of the service.
Mitchel Street one-way (AT5)	Delivery of a one-way system on Mitchel Street would enable creation of safe footpaths on this important street linking the town centre to Presentation Secondary School and residential communities situated to the east of Thurles and the medical centre
One-way traffic northern end of Emmett Street	Implementation of this measure would substantially improve safety at this location, reduce rat running on Emmet Street and create a more attractive route for pedestrians and cyclists along the River Suir. Low cost and effective measure to implement.

MEASURE	REASON FOR PRIORITY DELIVERY
30kph Speed Limit (DM9)	A reduced speed limit in the town centre and in residential areas will have a considerable impact on actual and perceived safety in the town centre, thereby creating an environment more conducive to cycling. This measure could be implemented on a trial basis in the first instance using signage to alert drivers of the new 30pkh area.

7.7 Monitoring Strategy & LTP Review

A Monitoring and Evaluation Plan will be developed and implemented as part of the delivery process for the Thurles LTP. This will benchmark performance during the plan period against the delivery of the planned measures and the key Performance Indicators. In particular the plan will evaluate performance against the mode share ambitions established in section 6.6 of this report which seek to increase the walking mode share to 25% and the cycle mode share to 10% in line with County Development Plan and National targets.

The NTA guidance recommends undertaking reviews during defined timeframes (e.g. short term 1-2 years; medium 2-5 years; long term 5 to 10 years; future-term 10 to 15 years). At the end of each timeframe, monitoring can be conducted to establish the following:

- Progress on the implementation of all infrastructure measures for each mode of transport.
- Progress on the implementation of all public transport service measures for each mode of transport.
- Progress on the implementation of all demand management and supporting smarter travel measures.
- Cross-checking of assumptions in the LTP against current transport patterns and population at the time of monitoring.
- Assessment of actual development and land use outcomes within the LTP Study Area at the time of monitoring against the original LTP assumptions related to land use.

Evaluation of the outcomes of the LTP can also be undertaken within similar timeframes including evaluating the following:

- Sustainable Travel Mode Share – for example via updated Census POWSCAR data, Employment and School Mobility Management Plan data, local residents' surveys, cycling and walking counts and bus patronage data.
- Economic Benefits – for example via town centre footfall and spend surveys, distinguishing between those who travelled to the town centre by car and by sustainable means.
- Health and Safety Benefits – for example via analysis of available local road safety statistics.
- Environmental Benefits – for example via Air Quality and Noise monitors at key locations within the Town Centre. User surveys can also be conducted to determine user satisfaction levels with new active travel infrastructure and public transport services and waiting environments.
- Accessibility and Social Inclusion – updated catchment analysis for access into and within town centre, including for those without access to a car

8. SUMMARY

8.1 Overview

This report outlines the process undertaken to develop the Thurles Local Transport Plan (LTP). The key purpose of the LTP is to guide the future transport and mobility needs of Thurles, taking into account the transport demand arising from existing and projected development both within the study area and the wider area of influence. The LTP has been prepared in accordance with guidelines set out in TII/NTA's 'Area Based Transport Assessment (ABTA) Guidance Notes.

8.1.1 Baseline Assessment

A detailed Baseline Assessment was undertaken to understand existing conditions within Thurles along with potential opportunities and constraints. This included multiple site visits, analysis of census information, review of existing transport conditions and environmental constraints. Public consultation was also undertaken during the Baseline Assessment with online surveys and mapping software allowing residents to raise issues and identify potential solutions. The outcome of the Baseline Assessment was a Strengths, Weaknesses, Opportunities and Threats (SWOT) assessment which was used to inform the objectives of the study and transport options for Thurles.

8.1.2 Local Transport Plan Objectives & Future Demand for Travel

Core study objectives were identified for the Thurles LTP informed by:

- The opportunities and constraints identified in the Baseline Assessment SWOT Analysis;
- Existing local policies and objectives; and
- National level policy guiding the delivery of sustainable development.

In particular, strategic outcomes and policies from the Tipperary County Development Plan 2022-2028 were identified which could inform the objectives for the Thurles LTP. A series of Key Performance Indicators (KPIs) were identified to measure the performance of specific measures in achieving the overarching study objectives.

A review was undertaken of future land-use zoning proposed as part of the Thurles LTP. This was to ensure that any transport proposals for the town took cognisance of future development within Thurles, in particular providing sustainable access to key residential and employment sites.

8.1.3 Options Development

An initial long list of options was developed to overcome some of the weaknesses and constraints identified in the baseline assessment and achieve the defined objectives for the LTP. The options were developed based on insights gained from the Baseline Assessment, public consultation feedback, reviews of proposals from other strategies and plans for Thurles along with workshops with Tipperary County Council and the NTA.

The options development process followed the Department of Transport's National Investment Framework for Transport in Ireland (NIFTI) modal and intervention hierarchies. As such, options for applicable measures were first considered in relation to active modes (walking and cycling), followed by public transport and finally vehicular traffic. Options were also initially focused on maintaining, optimising and improving existing facilities before considering the construction of new infrastructure.

8.1.4 Options Assessment Methodology

The long list of options were then passed through a detailed assessment process to determine the measures that performed best in terms of achieving the overarching study objectives. Initially, the options were screened qualitatively against the study objectives and core delivery themes including engineering feasibility, acceptability and affordability. Options were then classified as follows:

- **Discontinued**: the option did not align with the LTP objectives and therefore was not included in the Emerging Preferred Strategy;
- **Pass**: the option satisfied the project objectives and the core delivery themes, and no alternative proposals were identified in the options development process. These options passed directly into the Emerging Preferred Strategy without the need for an interim assessment.
- **Conditional Pass**: the option aligned with the LTP objectives, however, either didn't fully meet all of the core delivery themes or had a number of alternative proposals identified. In these instances, the options were assessed in further detail as part of the interim Multi-Criteria Analysis (MCA).

At the MCA stage, options were assessed in more detail based on their ability to meet the core delivery themes and also the overarching study objectives. This assessment was predominantly qualitative in nature, however where possible, quantitative information was used to supplement the scoring. A local area traffic model was developed for Thurles to test the impact of proposed measures on the performance of the road network and this information was used to inform the options assessment where required.

Options passing through the initial screening and MCA formed the Emerging Preferred Strategy for the Thurles LTP.

8.1.5 Emerging Preferred Strategy

Active Modes

The proposed LTP active modes measures are focused on the delivery of a safe, integrated walk and cycle network that will improve accessibility across Thurles encouraging an increase in sustainable travel. A number of measures have focused on improving safety for access to local schools, supporting active travel and improving the health and wellbeing of children within the town. This includes segregated cycle facilities on key routes such as Grange Road and Abbey Road along with proposed school zone treatments at the entrances to each of the schools within the town.

Key radial and orbital routes have been identified for improved walking and cycling infrastructure connecting residential areas to the town centre and key employers within Thurles. Where possible, segregated cycle tracks have been proposed on the radial roads leading into the town, including the N62 Brittas Road, R498 Nenagh/Castlemeadows Road and R659 Cabra Road. Where segregation was not possible given constraints, measures have been proposed to provide a safe, low speed, traffic calmed environment for sections of cycle trips which must be made on-road.

In terms of orbital connectivity, the delivery of the proposed East-West Greenway will provide an attractive active travel route across the north of the town, linking numerous schools and residential areas to the town centre, key employment areas and the railway station - without the need to mix with road traffic. Further enhancements to the orbital network are proposed to the south of the town through a series of greenways, segregated cycleways, permeability links and quietways (low trafficked and low speed streets). The combination of orbital and radial active travel links will enable residents

to safely reach their destination by the shortest possible route, thereby increasing the attractiveness of walking and cycling.

Measures within the town centre are focused on improving public realm and the pedestrian environment. Tipperary County Council are currently progressing plans to extend the existing public realm area to cover the west side of Liberty Square. The LTP recommends the extension of the public realm area eastwards to include Cathedral Street (up to the Kickham Street roundabout). The goal of these measures are to improve the walkability of the town centre and increase the number of people coming to spend time in the town supporting local businesses.

The LTP also recommends the creation of quiet, permeable links into the town centre by regenerating streets, such as Croke Street, creating a safe and attractive route for pedestrians and cyclists. These measures will make Thurles a more attractive destination, increasing footfall within the town centre and supporting the sustainable economic growth of the town.

Public Transport

The LTP supports the roll-out of the NTA's Connecting Ireland Rural Mobility Plan which will provide enhanced access to settlements around Thurles via public transport. The LTP recommends the introduction of a number of new radial bus stop locations that will serve the study area in the absence of a dedicated town bus service. These stops will serve key trip attractors such as residential estates and all local schools improving accessibility to public transport for more people in Thurles.

The LTP recommends the development of a Mobility Hub at Thurles train station integrated with the adjacent Bus Eireann depot, to support interchange between bus, rail and other transport services to encourage sustainable trip making. Thurles station is well suited due to its location in close proximity to the town centre and the space available for shared mobility modes and public realm upgrades. The proposed upgrades to the active travel network will also support improved, safe access via walking and cycling to public transport stops within Thurles, including the Mobility Hub, encouraging travel by sustainable modes.

Road Network

A number of traffic management arrangements have been proposed within the study area to support walking, cycling and public realm improvements. In addition to this, the LTP has identified road schemes which would provide major benefits for the town and enable it to grow sustainably into the future by providing access for new developments or by allowing reallocation of road space to sustainable modes.

Thurles town centre is situated at the confluence of two national roads and thus caters for high levels of strategic car and heavy goods traffic. As a result, a large volume of strategic trips pass through the narrow town centre streets, resulting in localised congestion, pollution from vehicle emissions and an unsafe environment for pedestrians and cyclists. The LTP recommends the provision of an eastern bypass of Thurles linking the N62 north and south of the town, via the N75 to the east. Traffic modelling analysis has indicated that it will result in a significant reduction in both car and HGV traffic on sensitive streets in the town centre. In particular, traffic over the River Suir bridge reduces by over 50% with the bypass in place. The reduction of through traffic within the town centre helps create a calmed environment more conducive to pedestrian and cycle activity, supporting the reallocation of road space to sustainable modes.

In accordance with the policy objectives of the National Development Plan and the Regional Spatial Economic Strategy for the Southern Regional Assembly, the LTP also recommends the delivery of the

Thurles Inner Relief Road which connects the N62 (to the south of the town) to the N75 (via Mill Road). The delivery of this road, incorporating segregated cycle facilities, would result in a reduction in town centre traffic and also has the potential to open up development land zoned along the Mill Road.

The LTP also proposes the upgrade of a number of junctions throughout the town to improve safety for all road users. As the active travel measures are delivered, all junctions along the routes will need to be reviewed and upgraded to provide safe access for pedestrians and cyclists. Exact details on proposed upgrade works will be defined at the individual project level.

Demand Management and Supporting Measures

A range of Travel Demand Management Measures have been identified to support the switch to sustainable modes across the Study Area. This includes proposals for the introduction of a 30kph zone within the town centre to reduce the likelihood and severity of accidents for vulnerable road users and contribute to a more attractive environment for walking and cycling. Other recommendations include a suite of behavioural change initiatives aimed at encouraging more sustainable travel such as mobility management plans, workplace travel plans, bike and car sharing schemes.

KPI Assessment

The full suite of LTP measures were assessed against the study objectives using the identified KPIs. The results indicate that the proposed measures score very positively across all objectives. The delivery of an integrated, safe active travel network will improve accessibility for residents in Thurles to key services encouraging a shift to sustainable modes. The proposed measures will deliver significantly improved safety for children walking and cycling to school. Within the town centre, the proposed public realm improvements will make Thurles a more attractive place to spend time, increasing footfall and supporting local businesses. In terms of wider accessibility, the LTP includes upgrades to existing public transport services and facilities, including additional bus stops throughout the town and the creation of a Mobility Hub at Thurles train station.

8.1.6 Implementation & Monitoring

An overview has been provided of the mechanism for delivery and funding of transport schemes in Ireland. A proposed phasing has been outlined determining which measures could be delivered in the short (up to 2030), medium (up to 2035) and long term (up to 2040). A list of key transport measures that should be progressed as priority schemes have been identified along with a strategy for monitoring the implementation of the LTP measures.

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