

Kilkenny Sustainable Urban Mobility Plan





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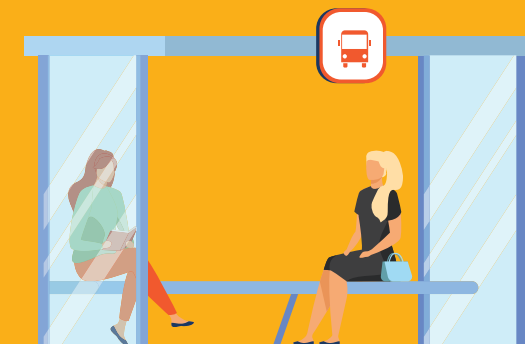
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Section 1

Introduction



1. Introduction

Kilkenny City Council (KCC) has commissioned Arup to produce a Sustainable Urban Mobility Plan (SUMP) to help manage future growth in the area promoting positive outcomes for the local community, with a focus on transport and mobility. The SUMP will guide the transport requirements for the future development of Kilkenny focusing on supporting and facilitating the use of sustainable transport modes.

1.1 Purpose of the study

The aim of this study is to propose a set of measures that can be implemented to optimise accessibility in Kilkenny by improving access to schools, employment, and other essential services and opportunities, focusing on improving the sustainable transport networks and reducing car dependency. Encouraging a modal shift to active travel and public transport, the SUMP aims to reduce the transport-related environmental impacts, aligning with national and local transport policy and improving local quality of life.

1.2 Background

A SUMP is a “strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles.”

The Kilkenny Sustainable Urban Mobility Plan (this report) builds on the work undertaken previously as part of the preparation of the Kilkenny Local Transport Study, which was commissioned as part of the preparation of the Kilkenny City and County Development Plan, 2021 – 2027.

The documents produced as part of the work carried out to date are outlined in Figure 1-1. The Baseline Conditions and Policy Report, dated 2020, covered the baseline assessment (Part 1 of the ABTA process) and established the context of the study (Part 2a of the ABTA process). Then the Options Development and Refinement Report (2021) covered the Part 2b of the ABTA process, and the Kilkenny City Area Based Transport Assessment: Update (2024) covered the Part 3 (Option Assessment). The latest document, prior to the present report, was Kilkenny Sustainable Urban Mobility Plan Discussion Document (2025) which provided an overview of the public consultation and community engagement process undertaken to inform the SUMP. More detail on the work completed to date is provided in Section 2.

The SUMP (this report) builds on the earlier assessment carried out previously, revisiting the baseline and context of the study and revising the Options Development process. The study then continues with the Options Assessment (Part 3 of the ABTA process) and the Preparation and Finalisation of the SUMP (Parts 4 and 5 of the ABTA process) identifying the recommended transport networks and proposing an implementation and priority plan.

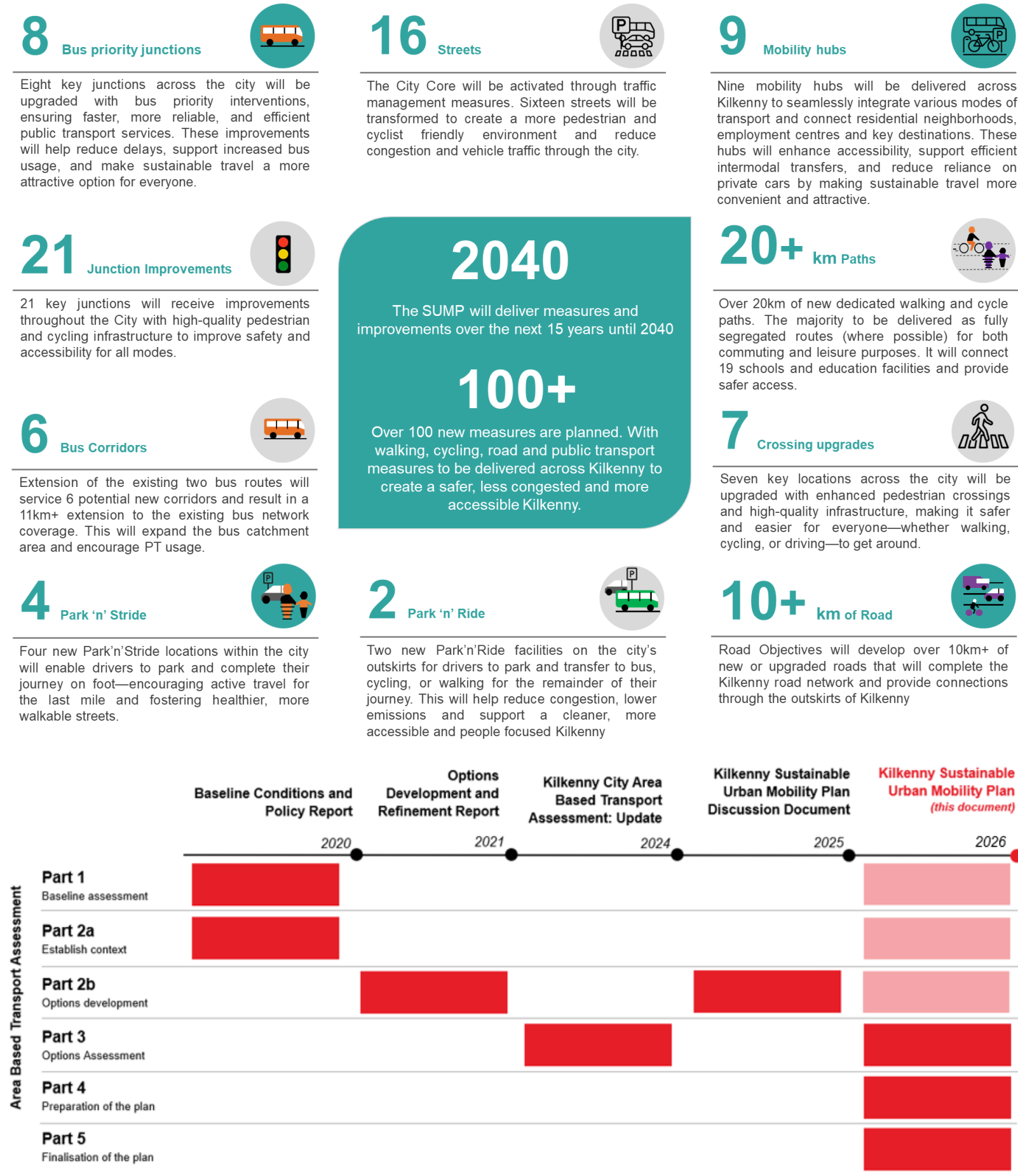


Figure 1-1 Background to the study

1.2.1 Study Area

Kilkenny is in the southeast region of Ireland, in the province of Leinster, and is built on the banks of the River Nore, about 120 kilometres southwest of Dublin and 50 kilometres north of Waterford.

It is the fourth largest urban area in the Southern Region and the sixth largest employment centre in the State, with a population of 27,184 people (2022), and a daytime working population of 15,479 people.

Kilkenny is a predominantly flat, compact city with a population density of 2,348 per km². The city is approximately 3km wide and 4.5km long, defined broadly by Kilkenny Ring Road to the north, east and south, and bounded by open farmland to the west. A map of the study area is provided in Figure 1-2.

Kilkenny is renowned as an historic medieval city with major tourist attractions and an important regional centre for arts and culture, including high-profile annual festivals. It is a self-sustaining regional driver and a major centre for the delivery of public services, as well as its economic and business role and higher order retail function.

It also has a strong agri-business and finance industry, with Cillin Hill Agri-Business Park, and Kilkenny Industrial and Business Park located to the east of Kilkenny Ring Road.

1.3 Purpose of this report

This report presents the outcome of the review, update and continuation of the work carried out to date for the Kilkenny Local Transport Study (KLT Study) forming a SUMP for Kilkenny to guide the transport requirements for supporting future growth in the area.

The report is structured as follows:

Section 1: Introduction introduces the study area, as well as the purpose of the study and this report.

Section 2: Summary of work completed to date provides an overview of the documents produced as part of the earlier work on the KLT Study.

Section 3: Revisiting the baseline and context summarises the study area characteristics and the realignment of the objectives of the SUMP.

Section 4: Options Development provides an overview of the measures developed for each transport mode to achieve sustainable outcomes.

Section 5: Options Assessment presents the process followed for the assessment of the options and identify the preferred ones.

Section 6: Recommended Transport Networks summarises the preferred package of measures recommended as part of the SUMP.

Section 7: Implementation and Priority Plan outlines the proposed timeframes for managing the implementation of measures.

Section 8: Summary provides an overview of the key points and outcomes of the study.

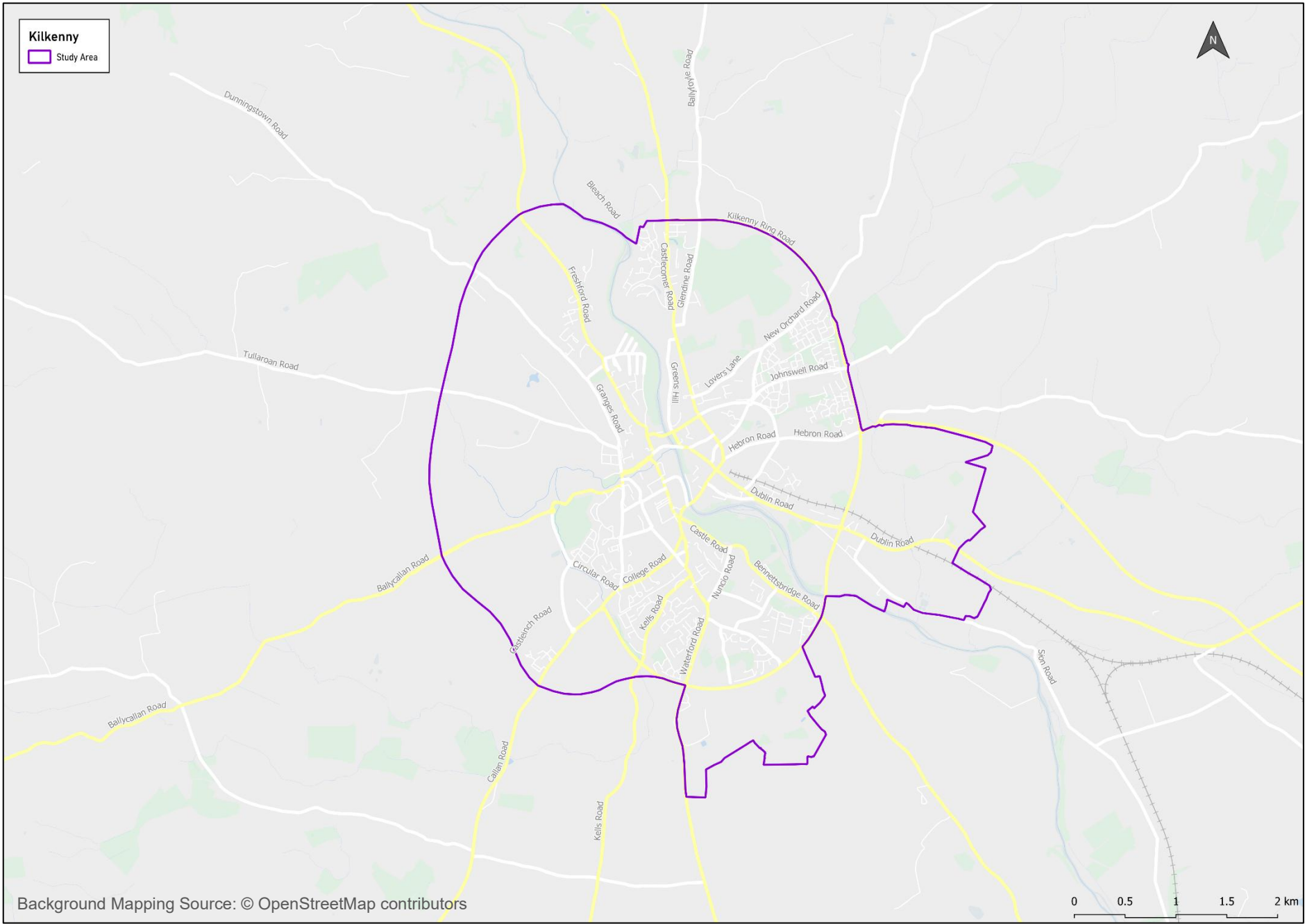


Figure 1-2: Study Area

Section 2

Summary of work completed to date



2. Summary of work completed to date

As part of preparation of the Kilkenny City and County Development Plan, 2021 – 2027, KCC commissioned the preparation of a local transport study for Kilkenny Local Transport Study. It was initially envisaged as a short-to-medium term plan to support the development of a comprehensive, sustainable transport network for the city. A main objective under the development plan was for the KLTP to be developed within the concept of a '10-minute City'.

KCC initially commissioned Jacobs, in 2019, to conduct a Local Transport Study following the Area-Based Transport Assessment (ABTA) process established by the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII). A series of reports were compiled as part of this process, together with a broad community engagement process facilitated by Connect the Dots, specialists in community engagement. The outputs of the process were a suite of proposed objectives and corresponding measures aimed at addressing the identified transport challenges and achieving the overarching aim of transforming Kilkenny into a 10-minute city.

The following section provides a summary of the key stages and main outputs from this process which provide the basis for the development of this SUMP.

2.1 Baseline Conditions and Policy Context Report

2.1.1 Summary

The first output of the KLT Study exercise was the Kilkenny Local Transport Study: Baseline Conditions and Policy Context Report, dated September 2020 (Baseline Conditions Report). The aim of the Baseline Conditions Report was to establish a clear understanding of the existing conditions in Kilkenny City and environs from a transportation perspective, to inform completion of an ABTA process and provide robust evidence base for future transport planning and investment in the city. Specifically, this included developing a clear picture of Kilkenny's spatial characteristics, existing transport network, travel patterns, relevant land-use plans and transport policies, and environmental conditions.

The Baseline Conditions Report contains analysis of the study area characteristics, including population growth and densities, employment statistics and land use zoning. The primary data source for much of this analysis was 2016 census results. An assessment of the transport network is also provided, from the perspective of the then-existing transport offerings in the city, as well as the main features of transport demand.

The main output of the Baseline Conditions Report was a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis, the key findings of which are discussed in Section 2.5.

The Baseline Conditions Report is provided as separate Supporting Information, published alongside the SUMP.

2.2 Options Development and Refinement Report

2.2.1 Summary

The KLT Study Optimisation and Refinement Report dated December 2021 (Optimisation Report) builds upon the earlier Baseline Conditions Report and an intervening Network Development Report prepared by Jacobs. The Optimisation Report represents the third tier in the options identification and refinement approach adopted by Jacobs, as shown in Figure 2-1. This report presents a more detailed analysis of the long list of preliminary options set out in the Network Development Report, using the South East Regional Model (SERM) and multi-criteria analysis to produce a more refined, preferred list of possible transport options for implementation in the KLT Study.

The Optimisation Report also takes account of relevant national policy updates which came into effect during the period since the earlier report documents were completed. Specifically, this includes accounting for updates to the Climate Action Plan (CAP) 2021 and the National Investment Framework for Transport in Ireland (NIFTI).

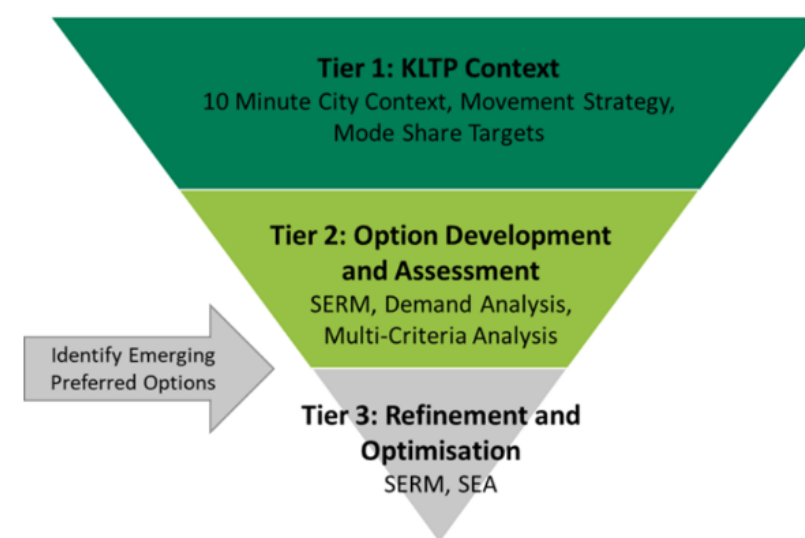


Figure 2-1: Options identification and refinement approach adopted by Jacobs

The Optimisation Report utilises NTA's planning datasheets for Kilkenny, together with National Planning Framework (NPF) 2040 and Regional Spatial and Economic Strategy (RSES) for the Southern Region forecasts to present land use, population, education and employment projections for the study area, to aid in devising a set of transport interventions designed to meet the growth projections for the city. These projections point towards concentrations in population and education growth in the western and southwestern regions of the study area, with a forecasted growth in employment in the city core and southeastern areas. A key finding of the Optimisation Report is that, left unchecked, the projected growth of Kilkenny and its environs will likely give rise to an increase in private car journeys, together with the resultant problems of congestion, air pollution and health detriments.

Having identified these future growth areas, the Optimisation Report sets out a more developed, focused set of measures aimed at meeting the future transport needs of Kilkenny and its surrounds. Public transport improvements to address an increase in travel demand to the city core and

key employment areas, together with active travel measures such as low-traffic neighbourhoods, safe school zones and cycle lanes and increased permeability, targeting shorter journeys for school children, are seen as key measures to meet the identified threats.

The Optimisation Report is provided as separate Supporting Information, published alongside the SUMP.

2.3 Kilkenny City Area Based Transport Assessment: Update 2024

The Kilkenny City Area Based Transport Assessment: Update 2024 (Update Report) presents an update to, and a consolidation of, the earlier transport assessment reports. The Update Report, compiled by KCC, presents a revised assessment of the study area characteristics, existing transport networks and travel patterns which accounts for updated national and local policy, as well as up-to-date travel and population data derived from the 2022 Census.

Key legal and policy changes which inform the Update Report include the European Climate Law transposed via the Climate Action and Low Carbon Development (Amendment) Act, 2021, the National Sustainable Mobility Policy, the CAP 2024, the Town Centre First Policy, the revised Kilkenny City and County Development Plan 2021 – 2027 and the Kilkenny County Council CAP 2024-2029.

The Updated Report presents a revised assessment of the study area characteristics in light of more recent 2022 Census data, Pobal HP Deprivation Index data and new traffic count data gathered by KCC in 2023.

The 2024 Update Report is provided as separate Supporting Information, published alongside the SUMP.

2.4 Kilkenny Sustainable Urban Mobility Plan Discussion Document

2.4.1 Summary

The Kilkenny City Sustainable Urban Mobility Plan Discussion Document (the Discussion Document) presents the culmination of preparatory work undertaken prior to the development of the final KSUMP document. The Discussion Document provides a detailed overview of the extensive public consultation and community engagement process undertaken between September 2022 and October 2024 and presents the results from this process in the form of the emerging vision, principles and objectives for the Kilkenny SUMP.

The Discussion Document is provided as separate Supporting Information, published alongside the SUMP.

2.4.2 Consultation Process

Multiple public consultation and community engagement events were held between September 2022 and November 2024, facilitated by Connect the Dots, community engagement specialists. A summary of the public consultation events and the process are shown in Table 2-1 and Figure 2-2, respectively.

The consultation process was conducted over three phases, with each involving an interdepartmental meeting of KCC, a key stakeholder focused group session and a public consultation session. To achieve a comprehensive level of community engagement, the consultation process utilised a ‘Quintuple Helix Model’ to identify and gain input from all key stakeholder groups across academia, industry, local government, civil society and the environment.

The final public consultation stage, planned for the second quarter of 2026, will involve publication and presentation of the draft KSUMP, providing the local community with an opportunity to provide feedback on any issues or concerns, or potential opportunities, arising in connection with the final set of proposed measures.

Table 2-1 Public consultation events

Event	Date	Location	Attendance
Focus Group 1	30 September 2022	The Ormonde Hotel, Kilkenny	33 key stakeholders
Public Event 1	22 November 2022	The Medieval Mile Museum	120 adult attendees, 60 students
Focus Group 2	25 January 2023	The Ormonde Hotel, Kilkenny	31 key stakeholders
Public Event 2	4 April 2023	MacDonagh Junction & Market Cross Shopping Centre	420 survey responses, 39 in-person attendees
Focus Group 3 (Stakeholders and Local Businesses)	21 October 2024	River Court Hotel, Kilkenny	26 participants (local stakeholder cohort) and 38 participants (local businesses cohort)

The outcomes of the public consultation process were a set of key themes central to the vision of an ideal city and a set of emerging visions, principles and objectives for Kilkenny City.

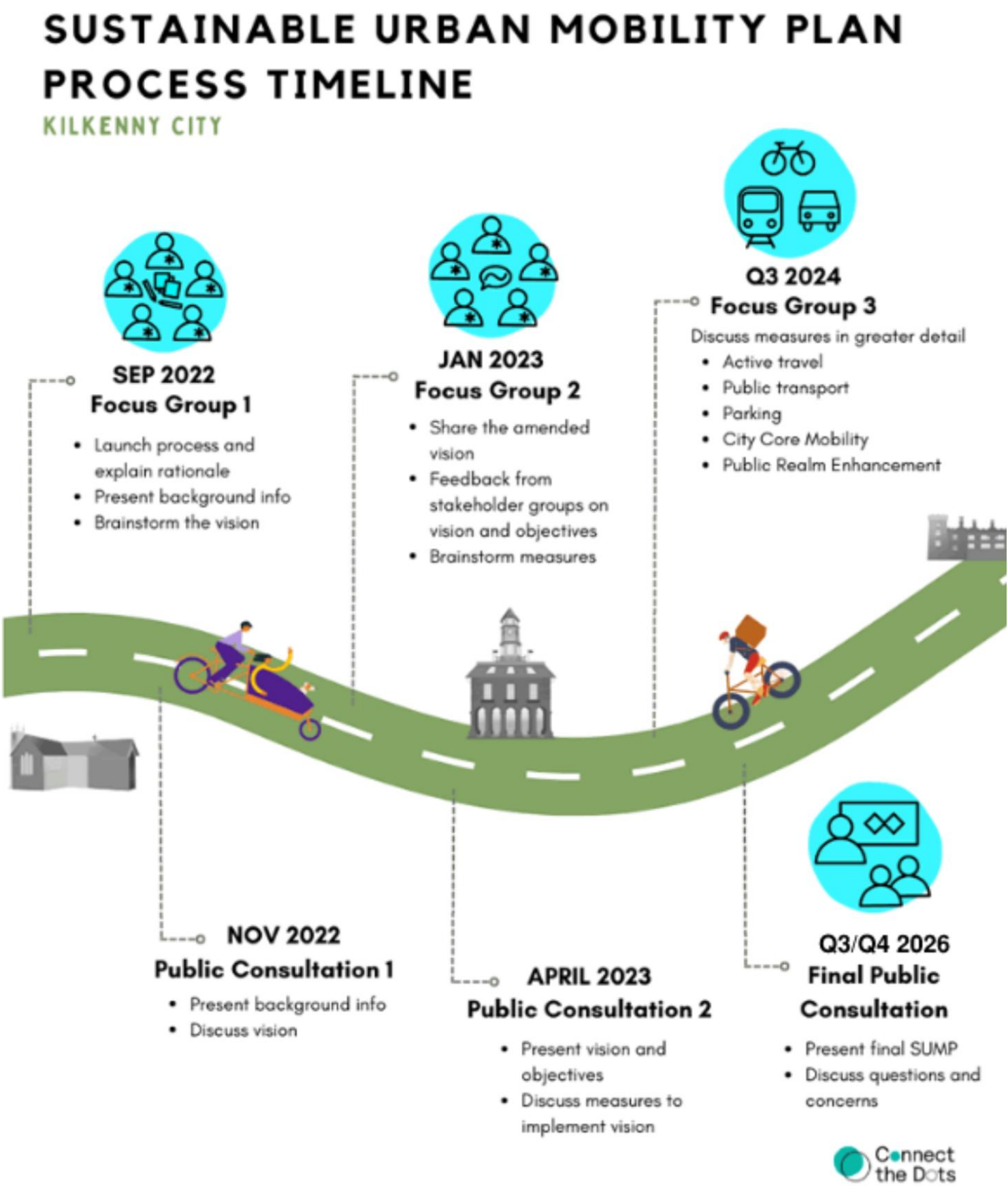


Figure 2-2: Public consultation process timeline

2.4.3 Vision, Principles, Objectives and Measures

The emerging vision for Kilkenny City, arising from the public consultation process, revolves around the main themes of safety, inclusivity, accessibility, vibrancy, community and greenery (Figure 2-3).

Vision

The strategic aim is to provide for the planning and delivery of transport infrastructure and services in Kilkenny City and its environs over the period of the City and County Development Plan and beyond, which will:

“transform Kilkenny into an accessible city with sustainable mobility options for everyone”

Core Principles

- Integrate land-use and transport planning to support the realisation of the 10-minute city, thereby reducing transport demand and avoiding unsustainable journeys.
- Facilitate the transition to a low carbon and climate resilient city through supporting a shift to sustainable mobility options and reducing greenhouse gas emissions, air and noise pollution and energy consumption from transport, thereby improving the quality of life of people in Kilkenny City
- Collaborate with different stakeholders, communities and across different governance levels to implement the measures of the SUMP.
- Provide equitable, efficient, integrated, smart and cost-effective transport solutions that enhance access to jobs, retail, leisure and education and consider transport poverty, the gender divide and other social gradients in transport.
- Enrich urban vitality and biodiversity through greening and placemaking with inspiration from Kilkenny’s unique arts and culture traditions and medieval heritage to create a people centred city that promotes people's health and well-being.

Objectives

1. Reallocate urban space towards the sustainable movement of people and placemaking.
2. Conserve and seek opportunities to expand green blue infrastructure and incorporate nature-based solutions.
3. Encourage independent journeys for all.
4. Enhance permeability to and within the city centre.
5. Work with the National Transport Authority to enhance public transport options within the city.
6. Facilitate public and private organisations to enhance connectivity to surrounding rural areas and the region.
7. Enable a shift to sustainable modes through the effective management of parking.

8. Provide a safe, coherent, direct, attractive and comfortable cycle network.
9. Enable businesses and service providers to connect with potential suppliers, customers and employees.
10. Integrate transport modes.
11. Create safe routes to schools.
12. Communicate solutions and raise awareness.



Figure 2-3: Main themes of the vision for Kilkenny (Source: KCC and Connect the Dots, 2024)

2.5 Key findings from previous studies

2.5.1 Key Issues

The findings from the previous analysis carried out for the study area show that Kilkenny’s good connectivity with the wider local and national transport network, as well as its compact footprint favour sustainable growth, availing of opportunities that lie in redevelopment of brownfield sites and improving sustainable transport. However, challenges including car dependency, limited connectivity between certain areas, and gaps in public transport coverage have also been highlighted in the previous studies and therefore inform the assessment carried out as part of this SUMP.

For walking and cycling, the key issues identified include poor wayfinding and legibility, particularly between MacDonagh Junction Station and the city core, limited dedicated cycle infrastructure, and severance caused by barriers like the river, the ring road, and walled estates.

In terms of public transport, the key weaknesses identified include the lack of a central transport hub, lack of bus priority measures and long journey times due to gaps in coverage, limited connections to villages, towns, and rural areas, and the absence of park-and-ride facilities. In addition, a key weakness associated with rail usage is the poor pedestrian and cyclist wayfinding between the rail station and the city core, which reduces accessibility and integration with other modes.

Finally, the key issues identified for private car are mainly associated with heavy reliance on private cars especially in the rural areas and areas further from the city core, contributing to congestion on approaches to the city, while the poor rural-urban connectivity for other modes limits the appeal of sustainable alternatives. In addition, the continued presence of heavy goods vehicles in the city centre is also highlighted as key issue of the road transport network.

Strengths

- Recognition in the RSES as a Key Town and a significant zone of influence centrally located in the South-East Region.
- Strong international connectivity with direct access routes to the Ports of Waterford, Rosslare and Dublin, and airports at Dublin and Waterford.
- Kilkenny Ring Road connects to all National roads in the vicinity as well as the M9 and M8 linking with Dublin, Waterford and Cork.
- MacDonagh Junction Train Station connects the City to the Dublin-Waterford InterCity route.
- Compact urban footprint that supports the '10-minute city' concept which is a long-standing policy objective of KCC.
- Strong policy basis for compact growth and the integration of land use and sustainable transport.
- Existing street network provides a strong basis to provide for sustainable transport.
- New city bus services funded by the NTA commenced operation in December 2019.
- Favourable topography and compact urban structure for walking and cycling.
- Recent improvements to the pedestrian environment including public realm around The Parade and the pedestrianisation of St. Kiernan's St.
- Kilkenny is internationally renowned as a historic medieval city with major tourist attractions and an important centre for arts and culture lending to a vibrant sense of place for residents and visitors.
- Extensive existing analysis and reporting providing for evidence-based delivery.

Weaknesses

- Lack of formal transport hub to facilitate interchange between bus and rail services.
- Lack of bus priority measures.
- Gaps in coverage with existing bus routes.
- Circuitous city bus alignments leading to long journey times and lack of coverage.
- Heavy reliance on the private car as a means of travel into and around Kilkenny, particularly in Kilkenny Rural, will invariably worsen with future growth if not managed.
- Lack of public transport options to villages and towns in commuter catchment.
- Poor pedestrian and cyclist wayfinding and legibility, particularly between MacDonagh Junction Station, Kilkenny Castle and the City Centre Core.
- Lack of dedicated cycle provision in the City.
- Substandard footpaths and lack of pedestrian priority in the city core.
- Severance barriers caused by the river Nore, the ring road and walled estates.
- Lack of Park and Ride/Strides for rural commuter.
- High presence of HGVs in the city and along school routes due to lack of connectivity from Castlecomer Road in the North to the Callan Road in the South.
- Lack of adequate connectivity from the Breaghagh Valley/Loughmacask to the city centre.

Opportunities

- Opportunity to further consolidate growth within the City's existing built-up footprint.
- Realisation of the Abbey Quarter, a brownfield site in the heart of the City Centre, earmarked for mixed-use development.
- Urban regeneration of other brownfield sites in the City Centre such as the Old Mart Site.
- Development of the 'Medieval Mile' which brings together public realm and wayfinding improvements.
- Potential to significantly improve sustainable transport mode share and network priority measures.
- Build on existing walking and cycling infrastructure and complete the Pedestrian and Cycle Network including gateways, pedestrian portals and the River Nore linear park.

Threats

- High car dependency and ownership, especially outside the City Centre.
- A 'Business as Usual' approach to land use, transport planning, sustainable transport provision and parking policy.
- A change in the economic outlook leading to uncertainty about required capital infrastructure funding and private investment.
- Proliferation of out-of-town retail and commercial uses; and Over-provision of parking in City Centre locations attracting vehicular traffic into the core retail area and undermining sustainable modes.
- Continued population growth in rural areas resulting in increased car-dependency.

Figure 2-4: SWOT Analysis

2.6 Methodology of this study

To obtain a comprehensive picture of the study area characteristics, key issues and potential opportunities, a review of existing data and all relevant documents was completed. This included a review of existing policy documents such as the Kilkenny City and County Council Development Plan 2021-2027, as well as the previous studies carried out to date, including the Baseline Conditions Report, the Optimisation Report, the 2024 Update Report, and the Discussion Document, as described in Section 2.

This process allowed the identification of the key issues observed in the study area through the detailed transport study, modelling and community engagement, as well as gaining understanding of the local and wider context providing a robust basis for this study. To ensure that the most up to date information is incorporated in the study, the baseline was revisited to include additional information and analysis. This additional information incorporated the most up to date information on key trip attractors including new facilities located in the study area, zoning data obtained from the CDP, up to date population, employment and education figures obtained from Census 2022 and the latest NTA (V2) Planning Sheets, up to date data on Pobal HP deprivation index, and mode shares, as well as additional accessibility analysis using ATOS (Access to Opportunities and Services) and PTAL (Public Transport Accessibility Level) tools¹.

In addition, a realignment of the objectives was also done to facilitate the assessment of the measures in the next stages setting out clearly the objectives of the SUMP.

On the basis of the information provided from the previous studies and the additional baseline assessment, a gap analysis was carried out between the findings of the previous work and the current assessment to identify potential areas not covered as part of the previous work. This allowed the identification of additional recommendations for potential improvements to optimise the future transport network and maximise benefits.

The findings from the gap analysis were used to develop a list of proposed measures for each transport mode. These options were then evaluated against the SUMP objectives to determine the recommended transport network.

The recommended measures were prioritised, resulting in an implementation and priority plan.

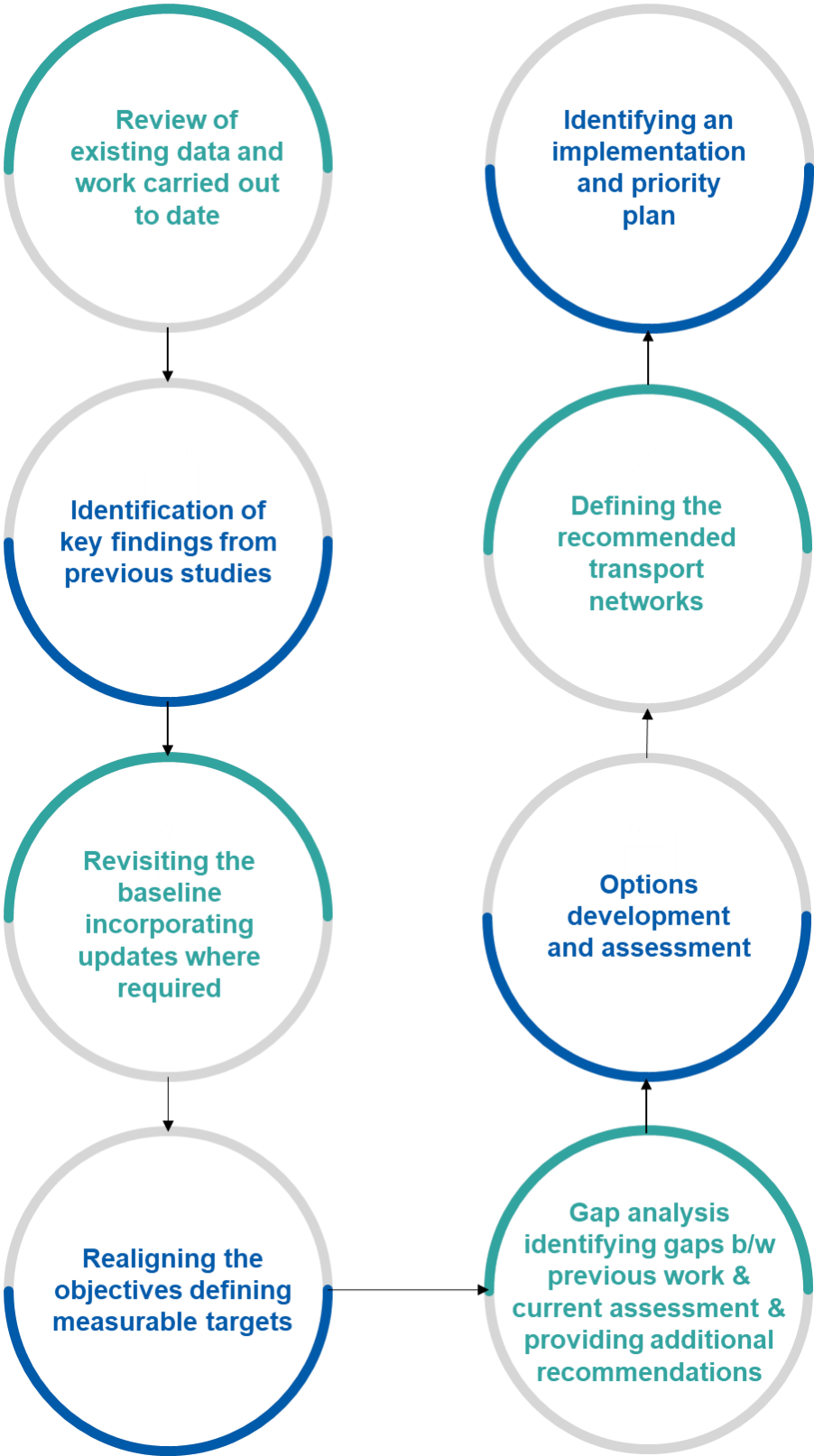


Figure 2-5: Study Methodology

¹ ATOS is a metric which serves as an indicator of a location’s connectivity to essential key services and opportunities. PTAL analysis combines the walk or cycle journey time to a Public Transport stop with the level of service at that stop. It gives an idea of how well connected an area is to Public Transport services.

Section 3

Revisiting the baseline and context



3. Revisiting the baseline and context

3.1 Overview

It is important to analyse the baseline data in the context of the SUMP to understand the current travel patterns within Kilkenny and surrounding areas. The SUMP needs to reflect the demand to ensure that people can access their daily needs including education, employment, services and leisure.

3.2 Land use

3.2.1 Key trip attractors

Key trip attractors are shown in Figure 3-1. This includes various key event and tourism generating points of interest such as Kilkenny Castle and Nowlan Park which are located within the city core. Other facilities such as retail and education are also centred on the western district of Kilkenny.

Figure 3-1 shows the recently relocated CBS secondary school in Loughmacask at point 2. The planned relocation of two secondary schools to the Breaghagh Valley, is illustrated at point 8.

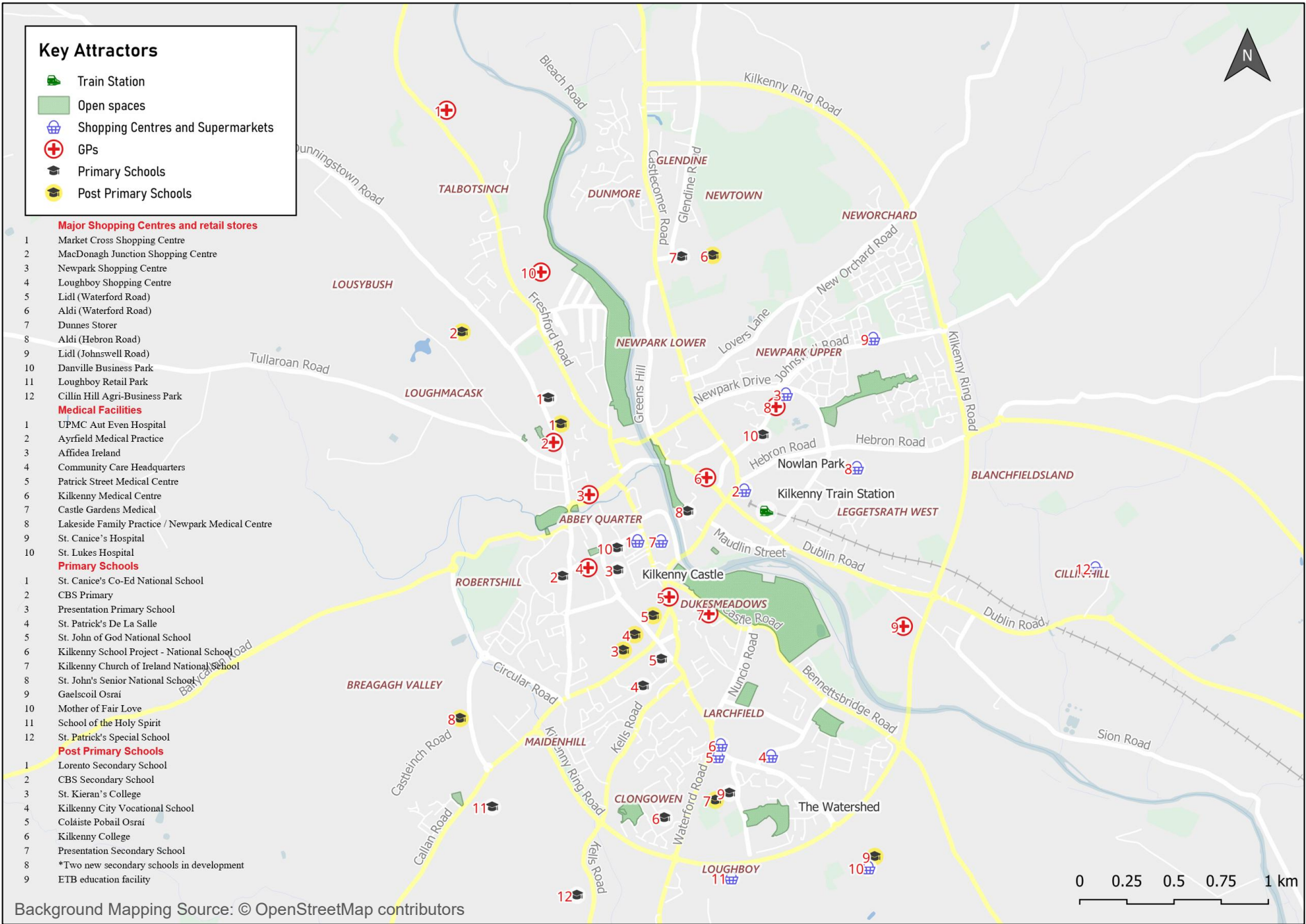


Figure 3-1: Key Attractors in Kilkenny

3.2.2 Zoning

The Kilkenny City and County Development Plan 2021 as amended by Variations 1 to 8 sets out the zoning strategy for Kilkenny which is shown in Figure 3-2.

In terms of employment zoning, lands in the city centre are zoned for ‘General Business’ providing urban-scale commercial and retail activity.

Lands to the east and south of the centre are zoned for ‘Business Park’ and ‘Industrial/Technology Park’. The lands zoned for ‘Business Park’ support office, enterprise, and business park-type development, while the ‘Industrial/Technology Park’ lands are allocated for industrial, manufacturing, and tech-oriented uses.

In terms of residential use, Kilkenny is divided into four neighbourhoods, see Section Kilkenny City Neighbourhoods3.2.3. In addition, certain areas to the east of the city, east of the ring-road, are zoned for low-density residential use preserving lower-density suburban-style housing areas.

Ample amenity, open space and recreation areas are spread throughout, providing for public parks, recreation grounds, and green corridors. Community facilities are also provided throughout the city, including schools, healthcare, cultural and civic services.

The lands near the western boundary of the city are mainly zoned for agricultural use, with the objective to conserve and protect agricultural land from interference from non-agricultural uses.

It should be noted that all the analysis that has been undertaken for the SUMP has been based on the current zoning information from the CDP and has informed the development of the transport networks and arising measures. Any significant changes to the zoning after the completion of this SUMP may require for the proposed transport measures to be reviewed.

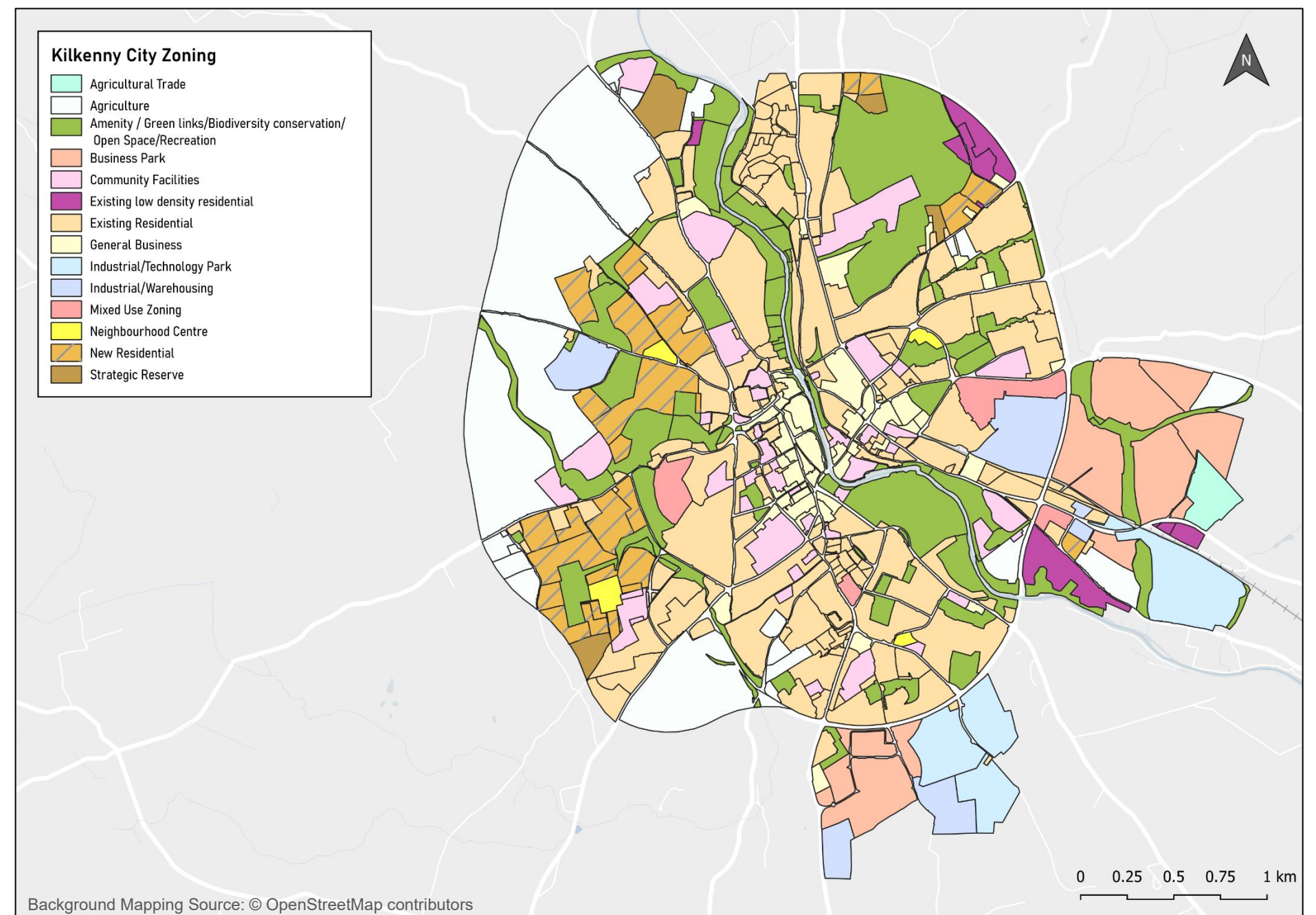


Figure 3-2: Kilkenny Zoning

3.2.3 Kilkenny City Neighbourhoods

Kilkenny is divided into four neighbourhoods: Newpark, Loughboy, Loughmacask, and Breaghagh Valley (Figure 3-3). Newpark and Loughboy are substantially built out, while Loughmacask and the Breaghagh Valley are identified as areas targeted for greenfield development. The KCCDP identified the potential for future development in each neighbourhood as described below:

- Newpark, formerly known as the Eastern Environs, is substantially built out. It is an established neighbourhood with community facilities and services already in place, including St John's Senior National School, retail facilities, such as Newpark Shopping Centre, and health services, such as Newpark Primary Care Centre and other small practices.
- Loughboy is another established neighbourhood providing all necessary facilities and services to the local community, including both primary and secondary schools, retail services, such as Loughboy Shopping Centre, health facilities and other small practices.
- Loughmacask is identified as a future development area and is currently under development. The Loughmacask neighbourhood has the potential to accommodate up to 1,500 housing units. Development of the area is also linked to objectives for new road connections and active travel improvements, as per the KCCDP (as varied by Variation 4).
- Breaghagh Valley, formerly known as the Western Environs, has the potential to accommodate up to 3,000 units. In addition, the KCCDP reserves land for two secondary schools and a primary school which are planned for the neighbourhood, while an area has also been reserved for neighbourhood uses and for open space. Variation 8A sets out the indicative road framework and active travel and public transport criteria for developments in Breaghagh Valley.

The KCCDP has also identified a significant opportunity for development in the city centre on the former Smithwick's brewery site. The regeneration of this brown-field site presented the opportunity to develop Abbey Quarter, a mixed-use development providing commercial, office, retail, residential, education, community and recreational uses. Other city centre sites identified for regeneration include The Fair Green, The Old Mart Site, St Canice's Lands and The Butts.

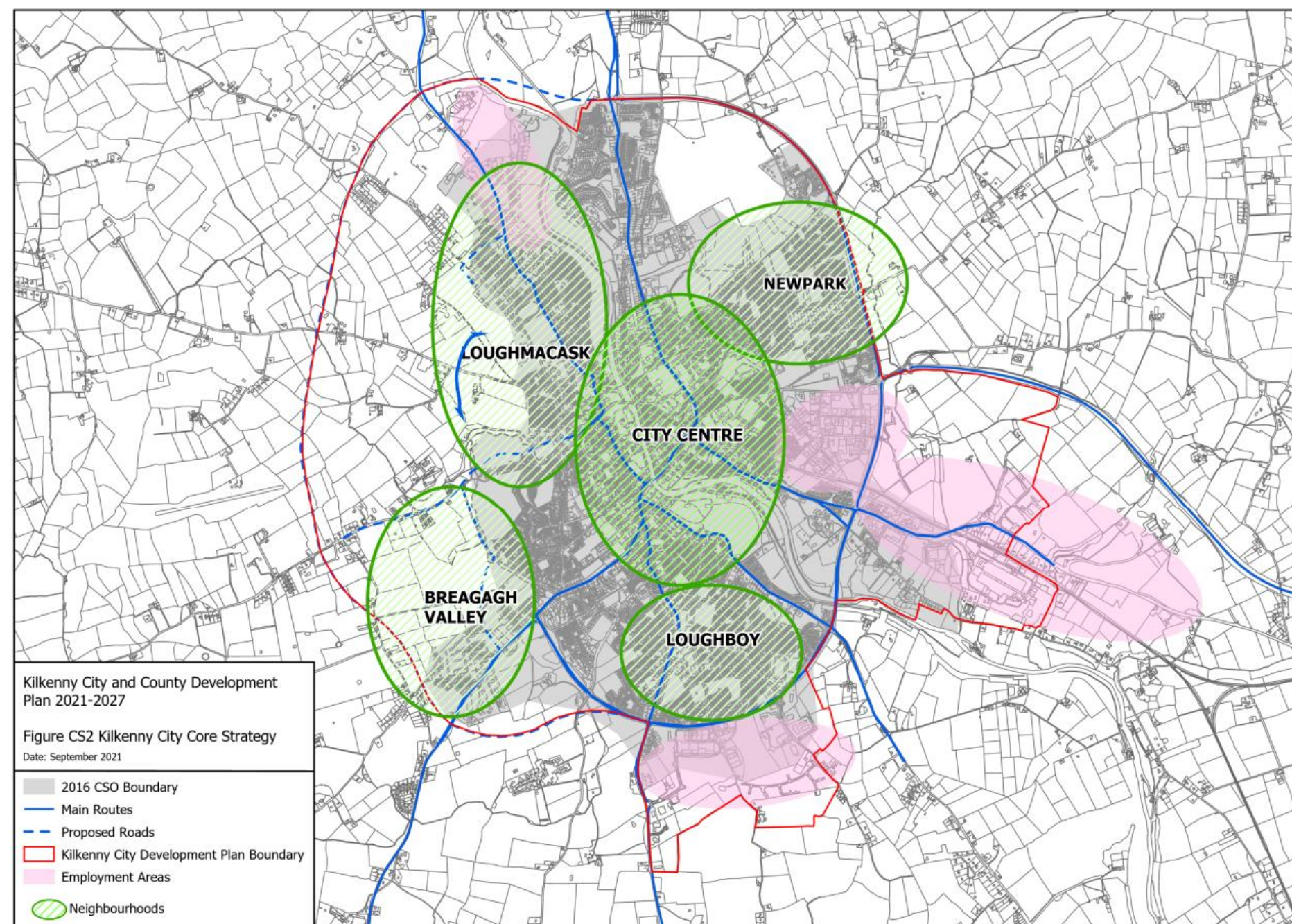


Figure 3-3: Kilkenny City neighbourhoods (Source: Kilkenny City and County Development Plan 2021-2027)

Figure 3-4 shows the 1km catchment for all four neighbourhoods described above showing the key facilities existing within catchment.

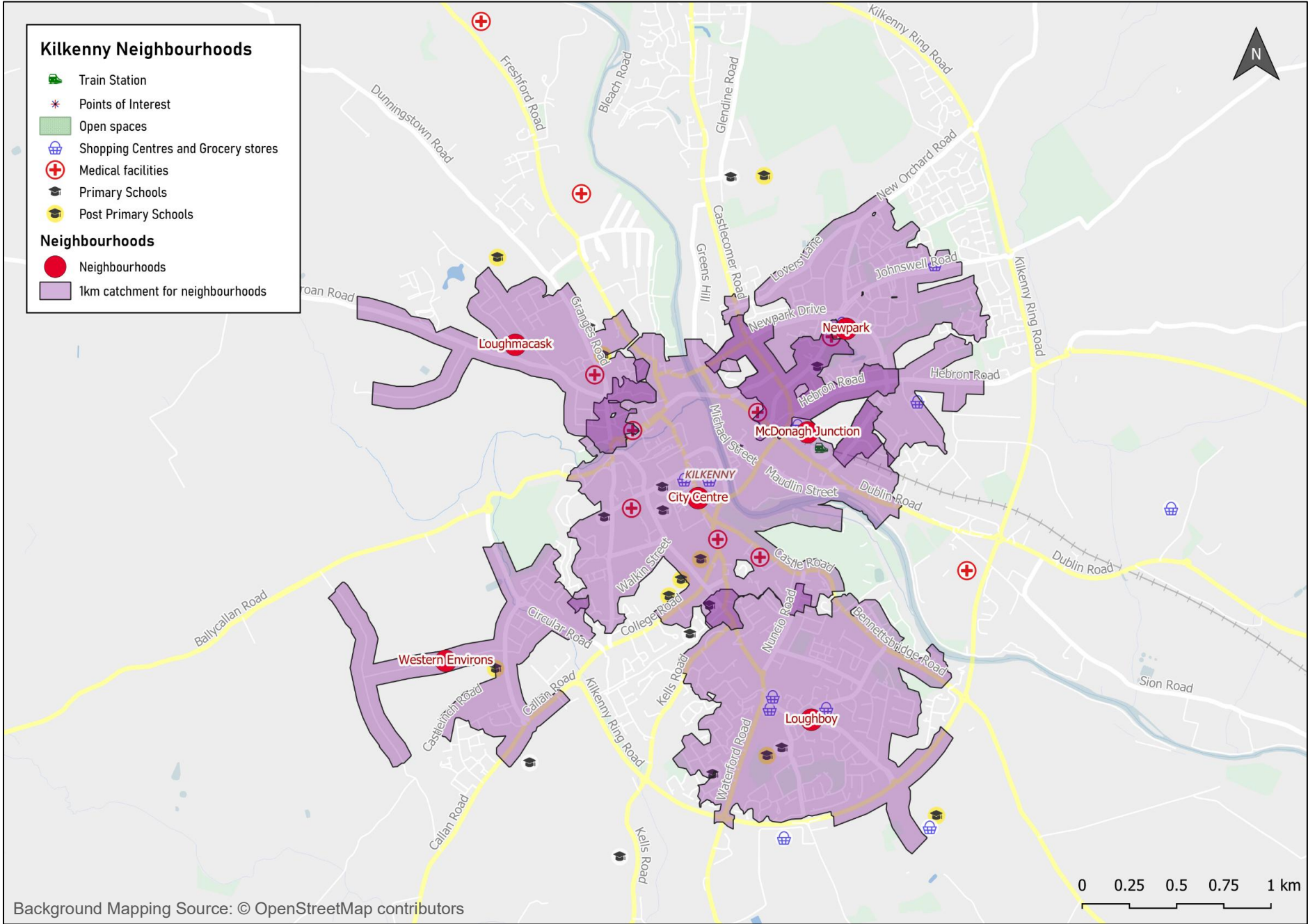


Figure 3-4: Kilkenny City neighbourhoods - 1km catchment

3.2.4 Population

Population data for Kilkenny was extracted from the latest NTA planning sheets. The existing and future population density anticipated in the Kilkenny Study Area is shown in Figure 3-5 and Figure 3-6. It is anticipated that population in Kilkenny will increase by over 5,000 people by 2040.

Table 3-1: Anticipated population growth as per NTA planning forecasts.

Year	Population
2022 Census	27,100
2025	31,100
2040	36,300
2025 to 2040 Growth	+5,100

The existing 2025 and future 2040 population densities were then derived from this data and shown in Figure 3-5 and Figure 3-6, respectively.

Higher population densities are observed at the southwestern and the northeastern parts of Kilkenny, particularly at Robertshill and Newpark Upper.

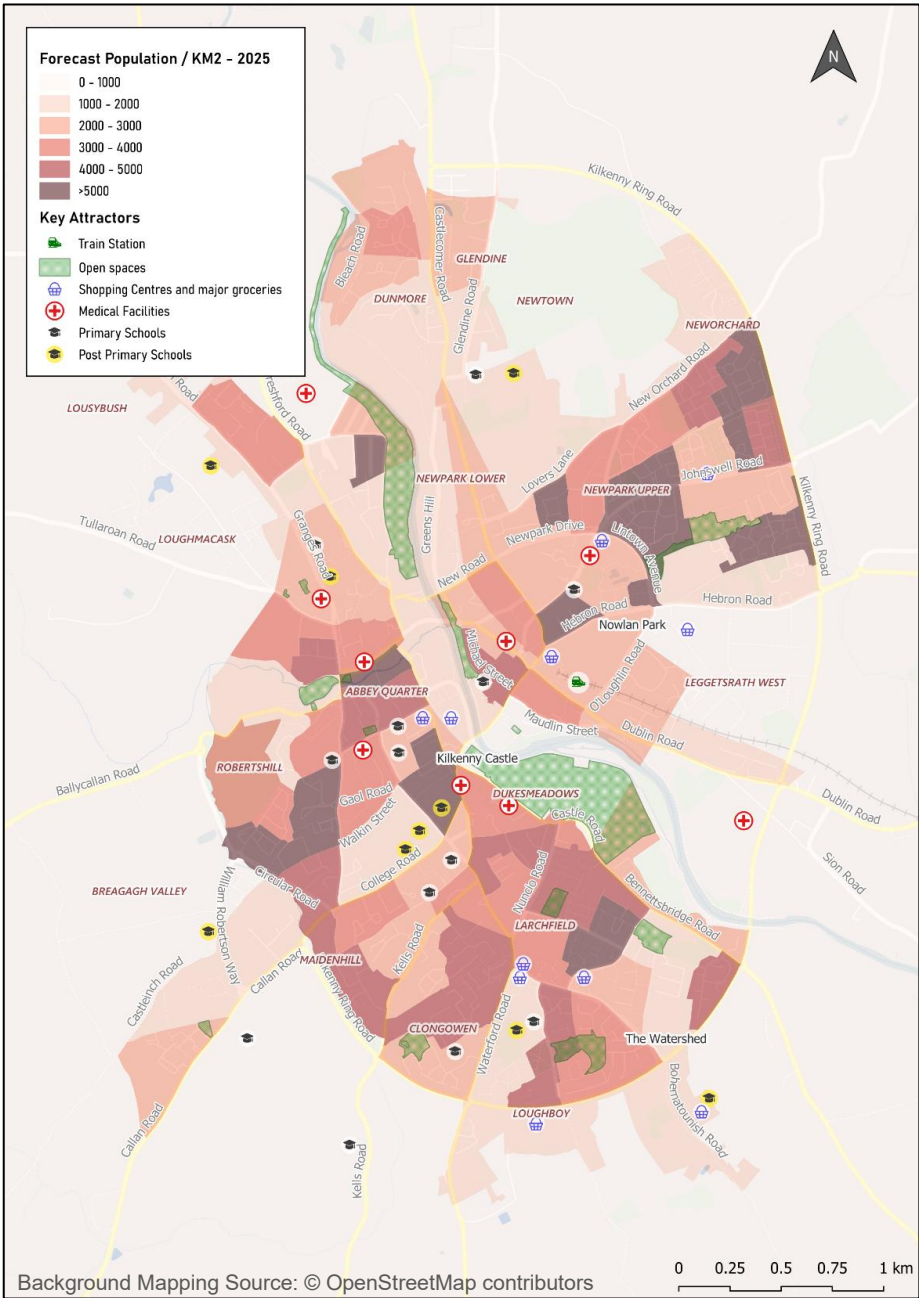


Figure 3-5: 2025 Kilkenny population density

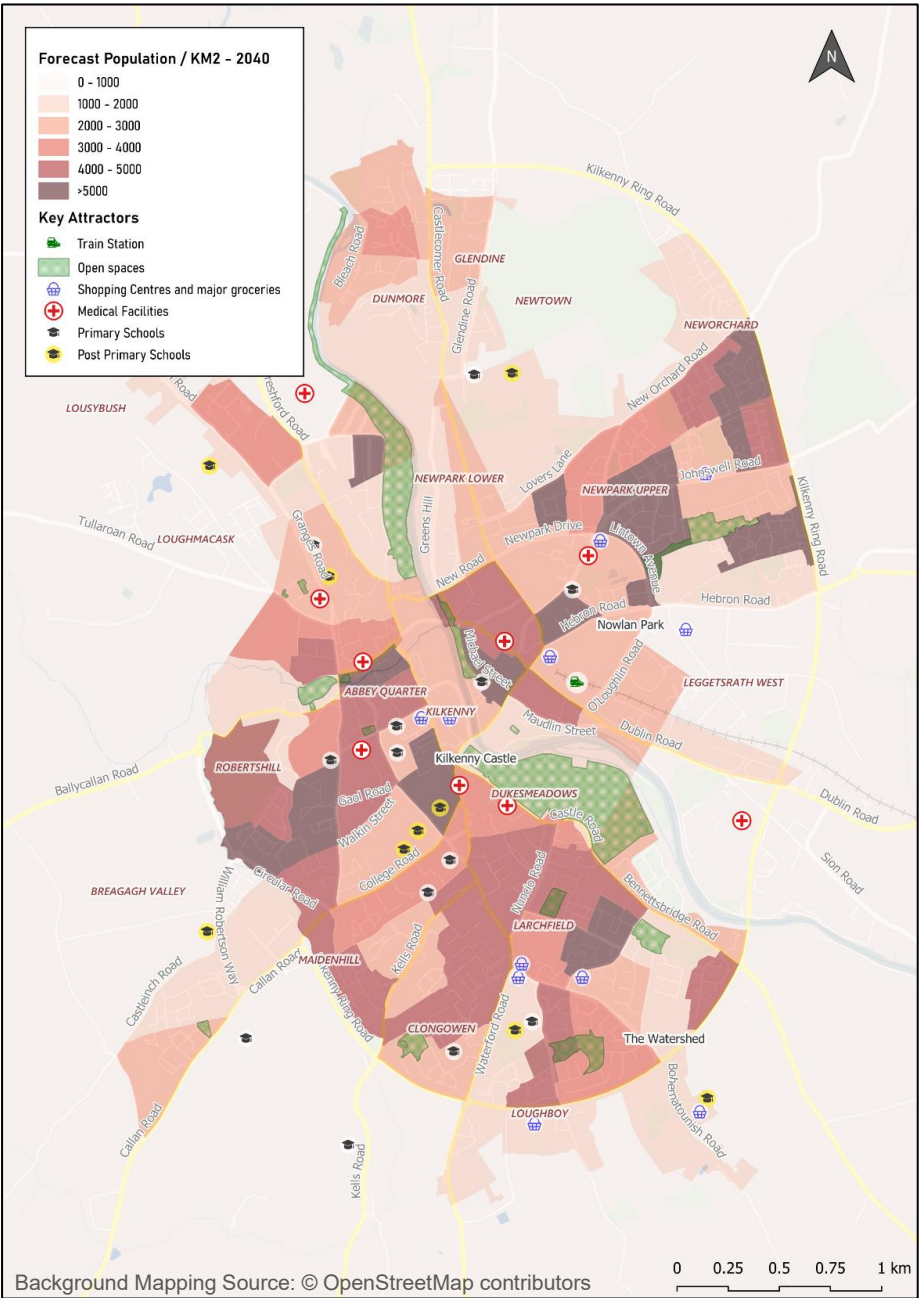


Figure 3-6: 2040 Kilkenny population density

The anticipated population growth across the study area, presented in Figure 3-7, shows that higher growth is expected in the Loughmacask and Breagh Valley neighbourhoods and the city core, especially the areas northwest of the train station, and the areas near Robertshill.

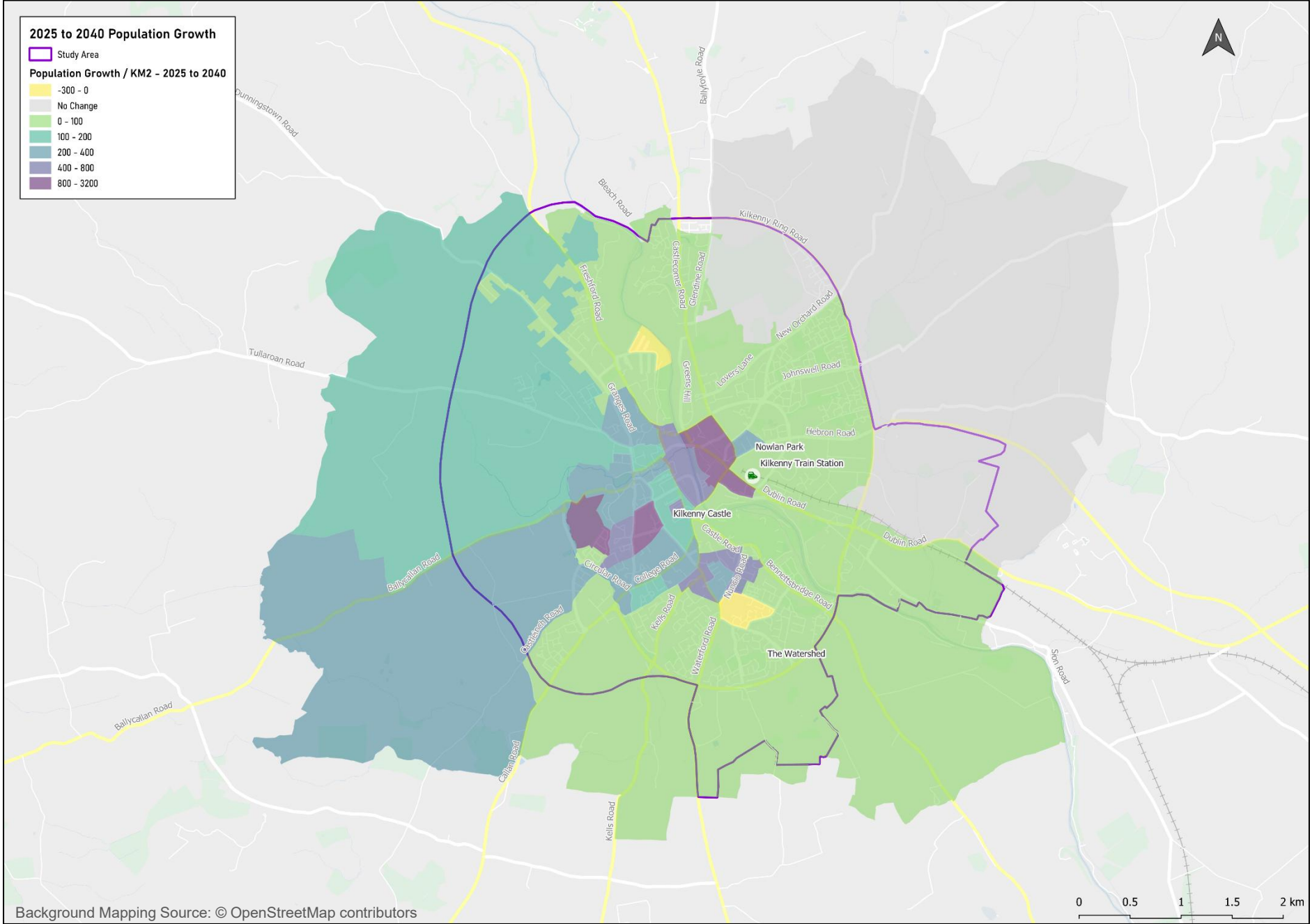


Figure 3-7: 2025 to 2040 Population Growth

3.2.5 Employment

Employment data for Kilkenny was extracted from the latest NTA planning sheets. The forecast existing 2025 and future 2040 employment densities were derived from this data and shown in Figure 3-8 and Figure 3-9 respectively.

Higher employment densities are observed at the core city centre, especially the area to the west River Nore, where several commercial and retail facilities are located. High employment densities are also observed at the areas south of Kilkenny Castle and near the Kilkenny train station. Other areas with high employment density further from the core centre include Talbotsinch in the north, the Hebron Industrial Estate to the east of the city, as well as the areas to the southeast of the Kilkenny Ring Road including Kilkenny Commercial Centre, Purcellsinch Business Park and Cillin Hill Agri-Business Park.

It is noted that the information presented in these maps reflects the latest NTA planning sheets’ projections for employment distribution based on the High Growth Scenarios from the NPF. Additional sites may be identified by KCC for employment growth in the future years based on site specific plans. Such areas of potential employment growth include for example the proposed IDA and ETB sites south of the existing IDA Business & Technology Park at Outrath Road.

The anticipated employment growth in the Kilkenny Study Area is shown in Table 3-2. It is anticipated that employment in Kilkenny will increase by over 2,000 jobs by 2040. Overall, the observed growth patterns are concentrated in locations supporting compact and sustainable growth.

Table 3-2: Anticipated employment growth as per NTA planning forecasts.

Year	Employment
2025	17,100
2040	19,400
2025 to 2040 Growth	+2,300

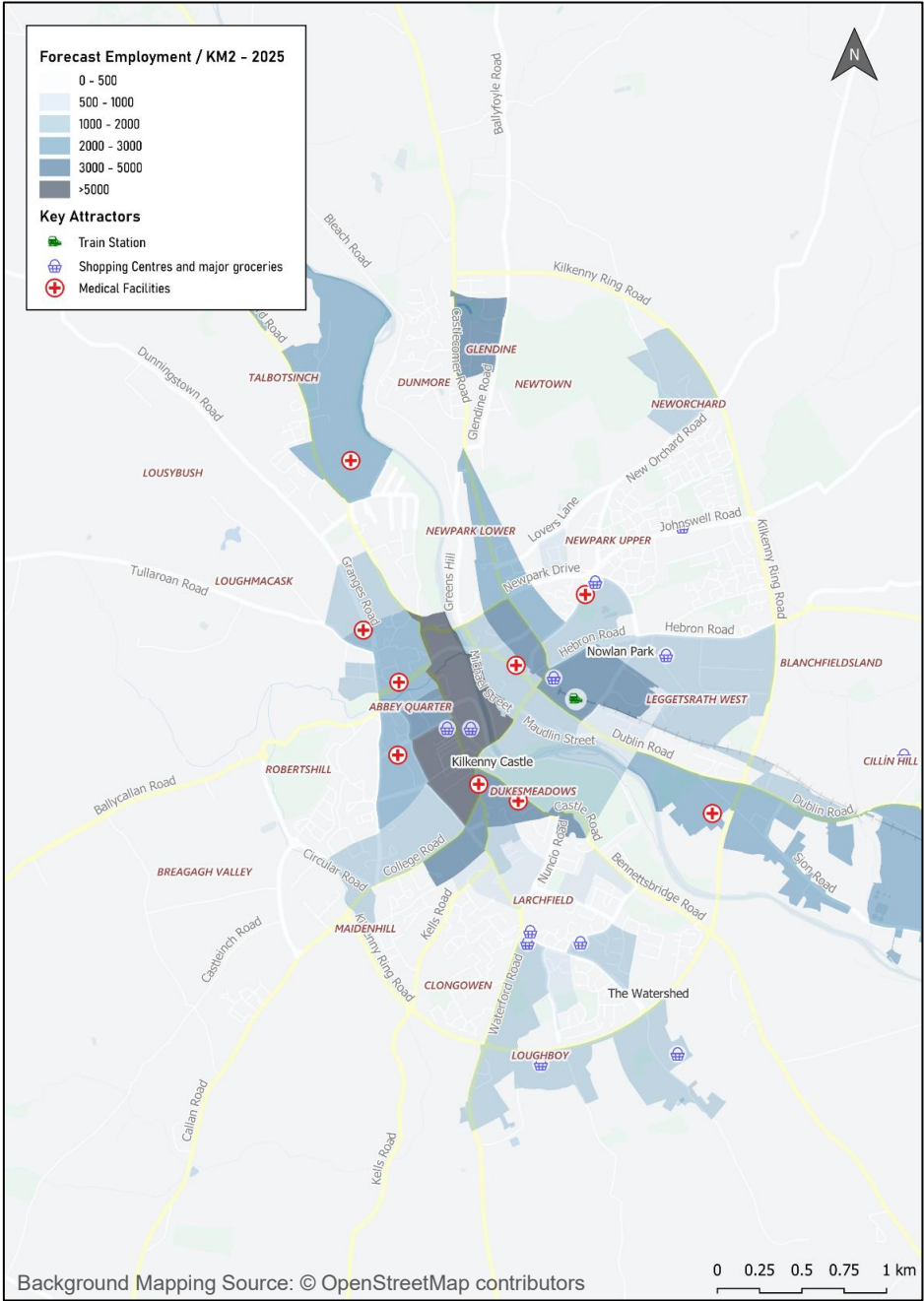


Figure 3-8: 2025 Kilkenny Employment density

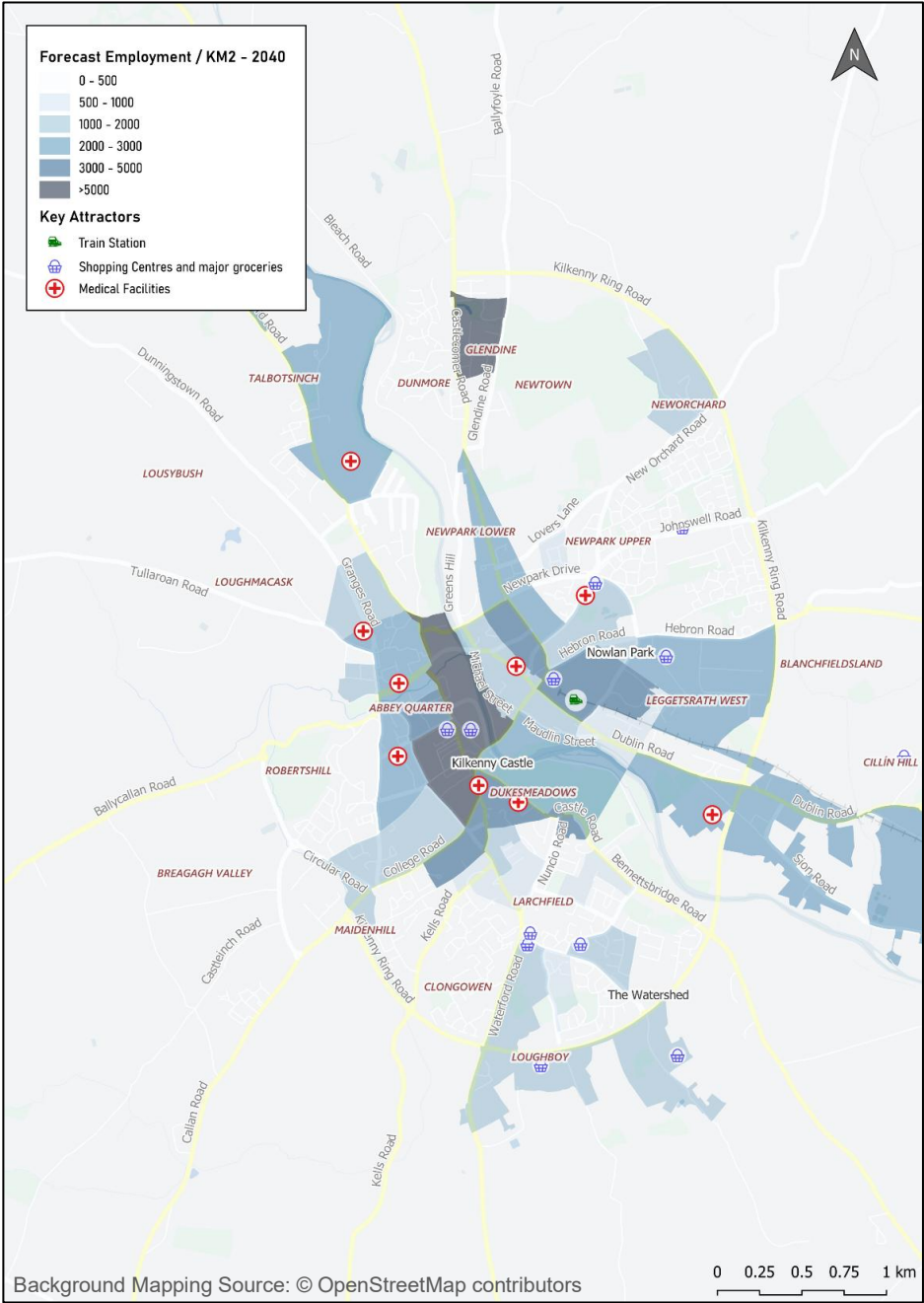


Figure 3-9: 2040 Kilkenny Employment density

Figure 3-10 shows the anticipated growth in employment density across the study area. Higher employment growth is expected mainly at the core centre of Kilkenny, while some increase is also expected further out to the southeast, at Middleknock and Purcellsinch. Some growth is also anticipated in the north Talbotsinch.

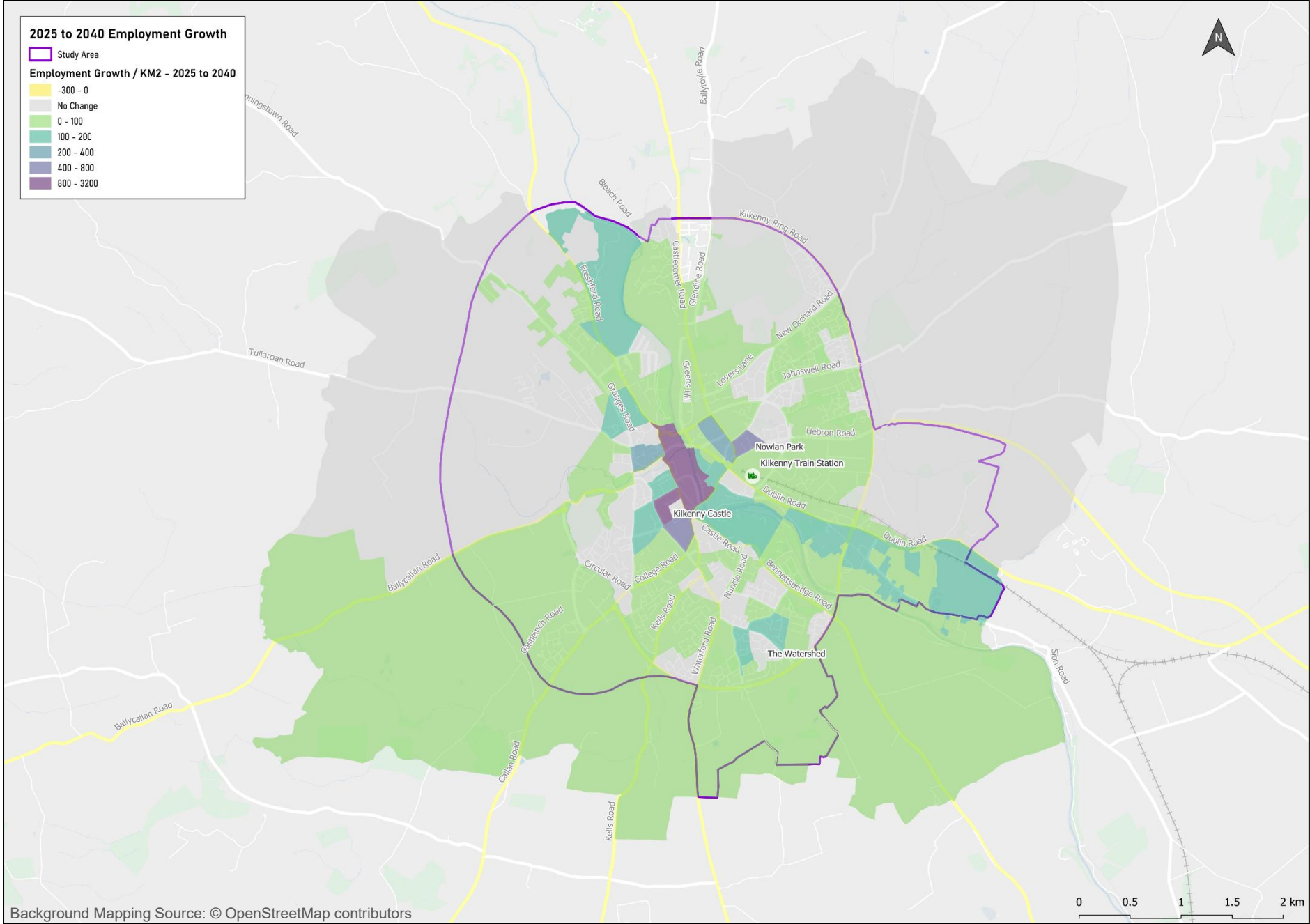


Figure 3-10: 2025 to 2040 Employment Growth

3.2.6 Education

Data for school-aged population in Kilkenny was extracted from the latest NTA planning sheets. Then, the density of population in education across the study area was derived from this data. The density of population in education for years 2025 and 2040 are shown in Figure 3-11 and Figure 3-12 respectively.

It is noted that the information presented in these maps reflects the NTA’s projections for education distribution based on the High Growth Scenarios from the National Planning Framework, as these were derived from the latest NTA planning sheets.

Higher densities of school-aged population are observed in the northeastern parts of the city, especially at the areas near Johnswell Road, New Orchard Road, and Hebron Park. The areas near Robertshill are also characterised by high density of population in education.

The anticipated growth in education in the Kilkenny Study Area is shown in Table 3-3. It is anticipated that the number of pupils and students in Kilkenny will increase by around 900 by 2040.

Table 3-3 Anticipated education growth as per NTA planning forecasts.

Year	Education
2025	6,200
2040	7,100
2025 to 2040 Growth	+900

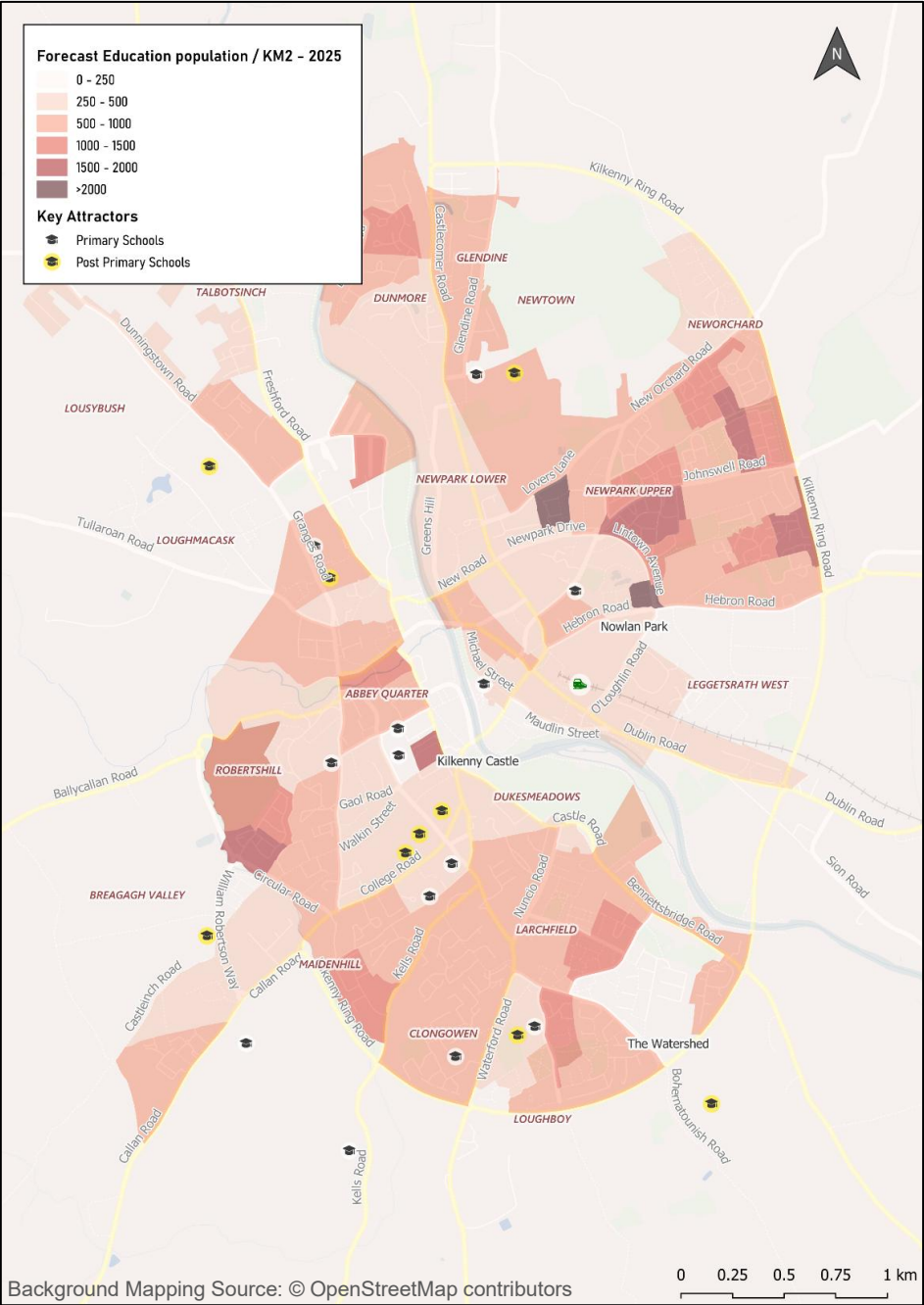


Figure 3-11: 2025 Kilkenny Education Population density

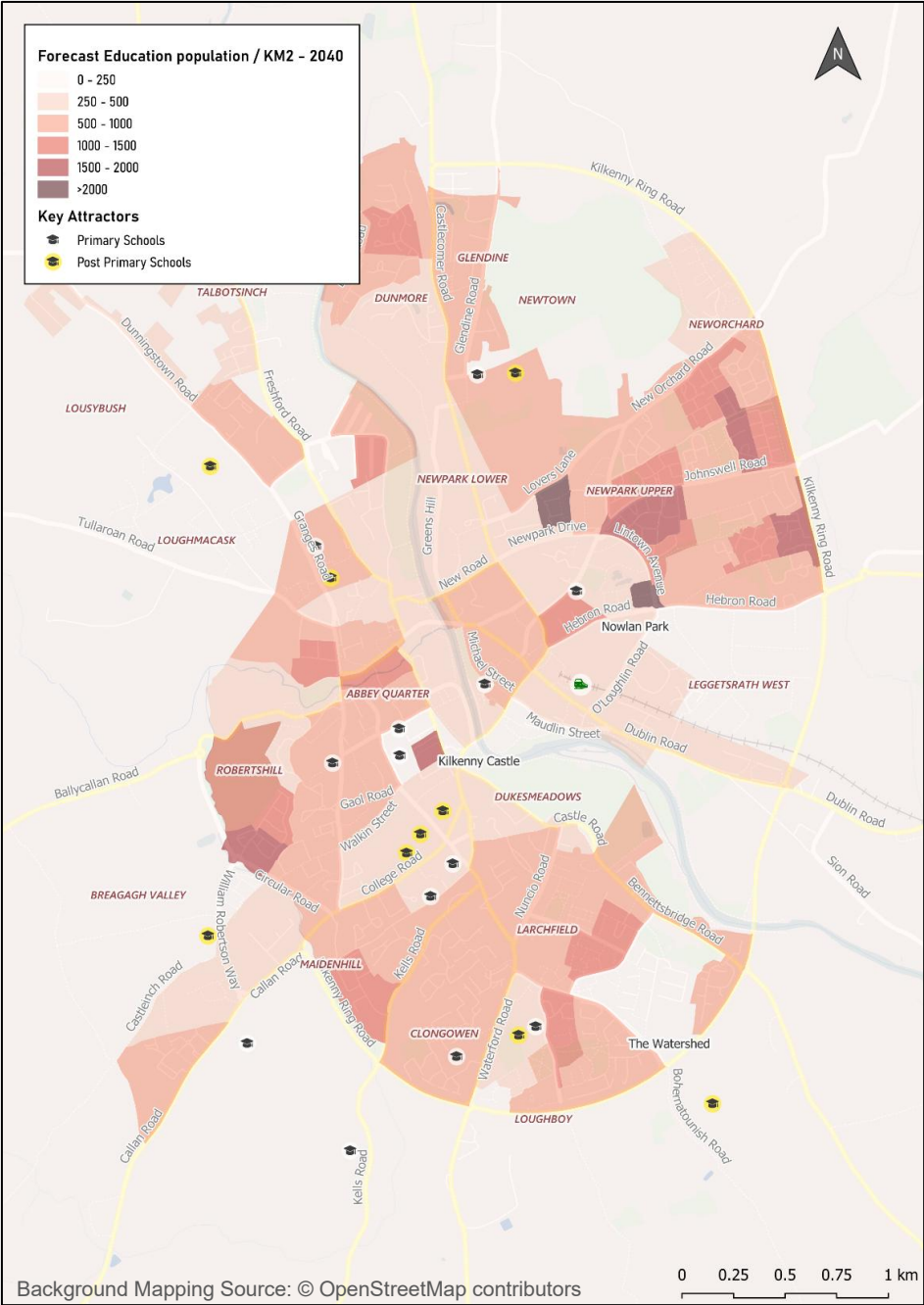


Figure 3-12: 2040 Kilkenny Education Population density

Figure 3-13 shows the anticipated growth in school-aged population across the study area. This highlights that Robertshill, Fairgreen, and the areas near Wolfe Tone Street will present a significant growth in population attending school.

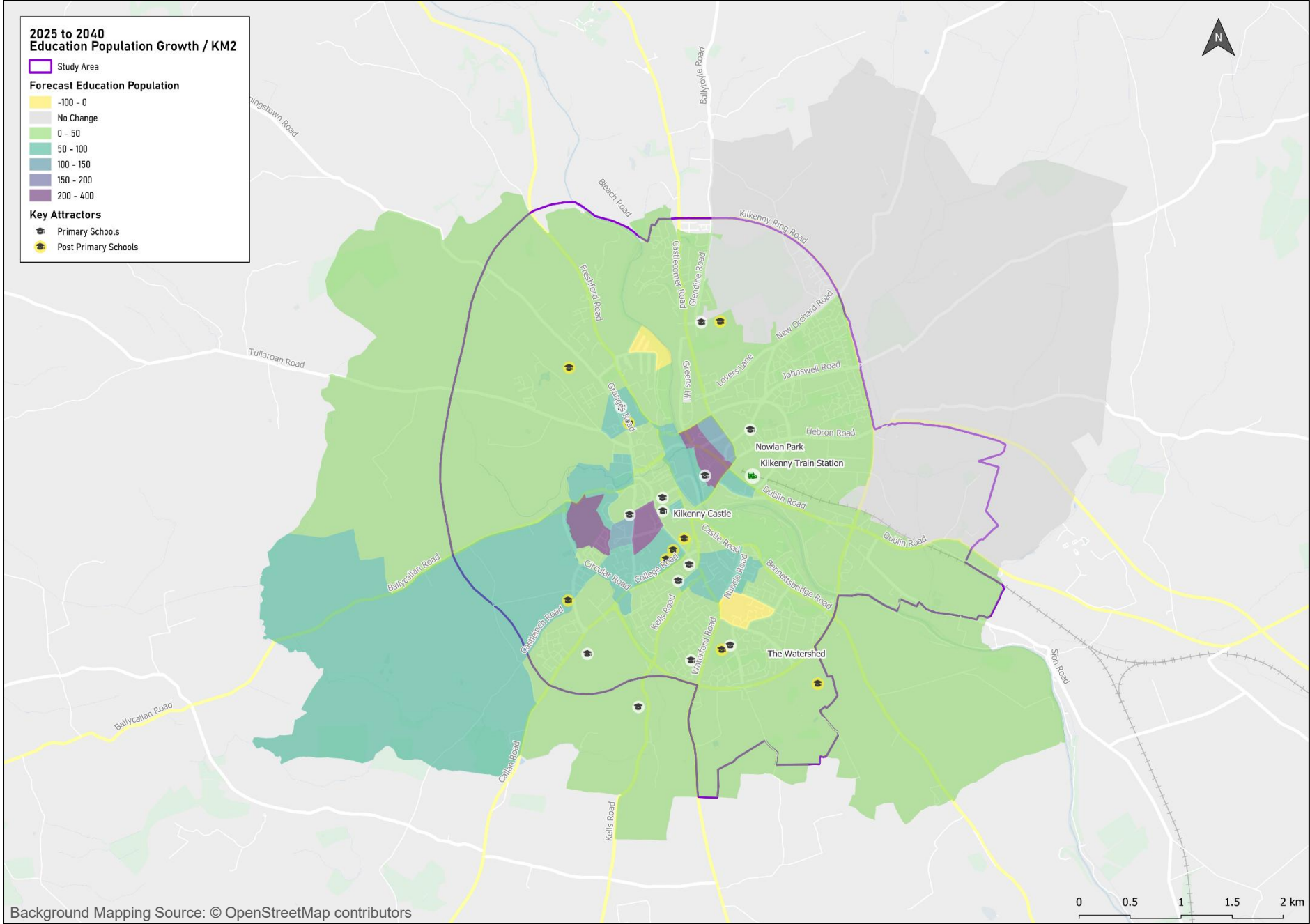


Figure 3-13: 2025 to 2040 Education Population Growth

3.2.7 Pobal HP Deprivation Index

The Pobal HP Deprivation Index provides a measure of an area's level of disadvantage using data from Census 2022. A relative index score is calculated for each of the census small areas accounting for indicators such as population change, age dependency, education attainment, unemployment rate, type of profession and number of individuals per household.

Figure 3-14 shows the Pobal HP Deprivation Index scores across the study area. This shows that the eastern part of the city, including Newpark and the areas near Hebron Road and MacDonagh Junction are classified as 'disadvantaged' and 'very disadvantaged', while the areas at Archerstreet Lot, in the south, and the areas near Granges Road and Lord Edward Street, in the west, are also classified as 'very disadvantaged'.

A different picture is observed for the rest of the study area, with a significant part of the study area being 'marginally above average', while the areas to the northeast of the ring road are 'affluent'.

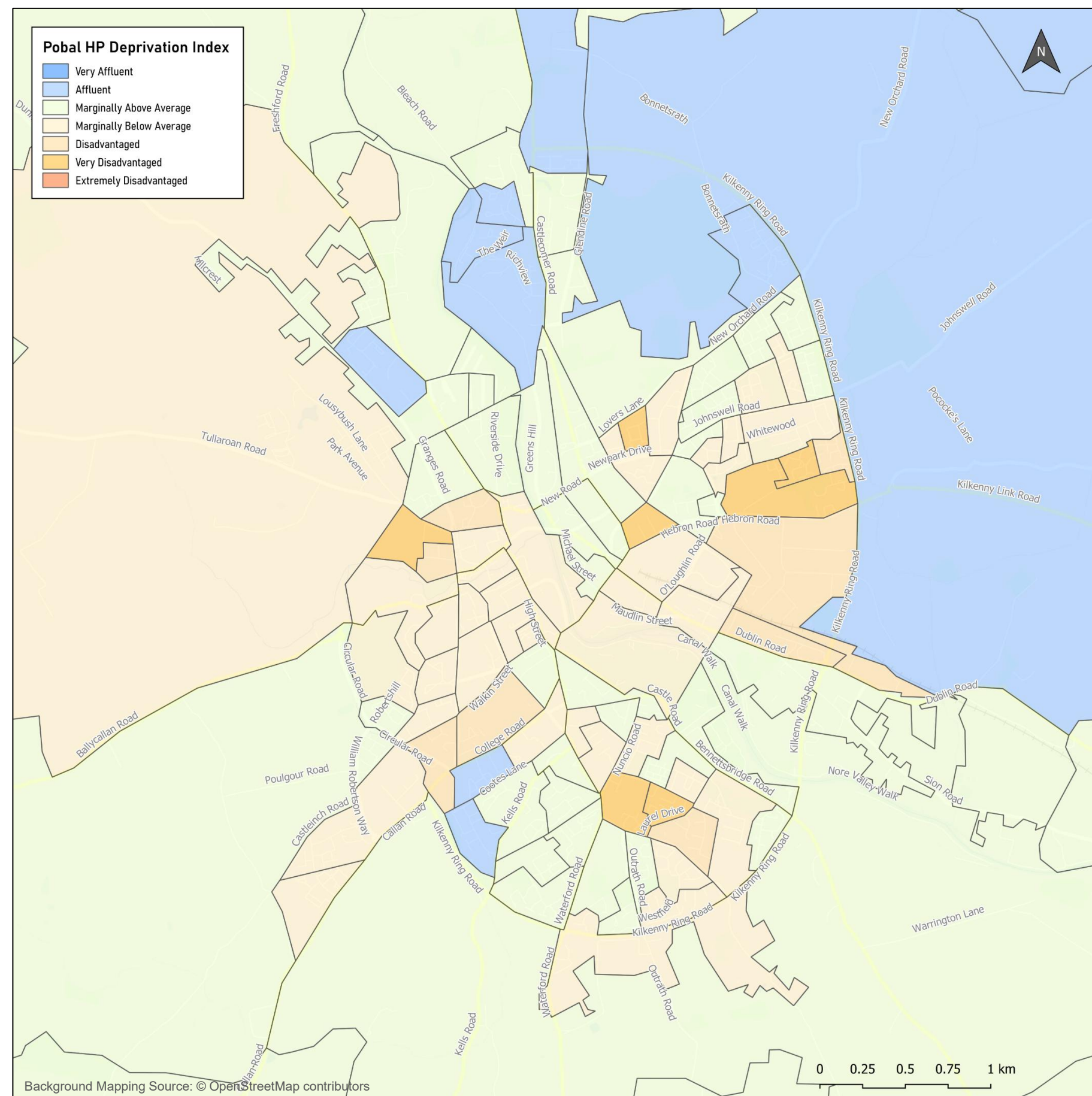


Figure 3-14: Pobal HP Deprivation Index

3.3 Transport

3.3.1 Mode share

A mode share benchmarking exercise has been undertaken to inform the future mode share targets to be achieved through implementation of the SUMP. This exercise has involved an analysis of past mode share data for Kilkenny as well as data available for other Irish towns and cities of comparable size. Existing mode shares and future targets have also been assessed against relevant national and local policy.

3.3.1.1 Kilkenny mode share

Mode share analysis for Kilkenny was performed as part of both the Baseline Conditions Report (by reference to 2016 census data) and the 2024 Update Report, using 2022 census data. A summary of the existing transport mode share (work and education combined) for Kilkenny, based on 2022 census data, is provided in Figure 3-15.

Mode share data for all trips (work and education), shown in Figure 3-15 demonstrates the private car is the dominant mode of transport, accounting for 58% of all trips (whether as driver or passenger). The walking mode share is the second largest, with 23%, reflecting the compact and walkable nature of the city. It should be noted that this mode share reflects only the travel behaviour of residents living within Kilkenny City and does not capture incoming commuters.

The census data also show reliance on the private car as the primary mode of transport for both work and school trips. It should be noted that a large proportion of educational trips are made on foot, however the cycling mode share remains small by comparison.

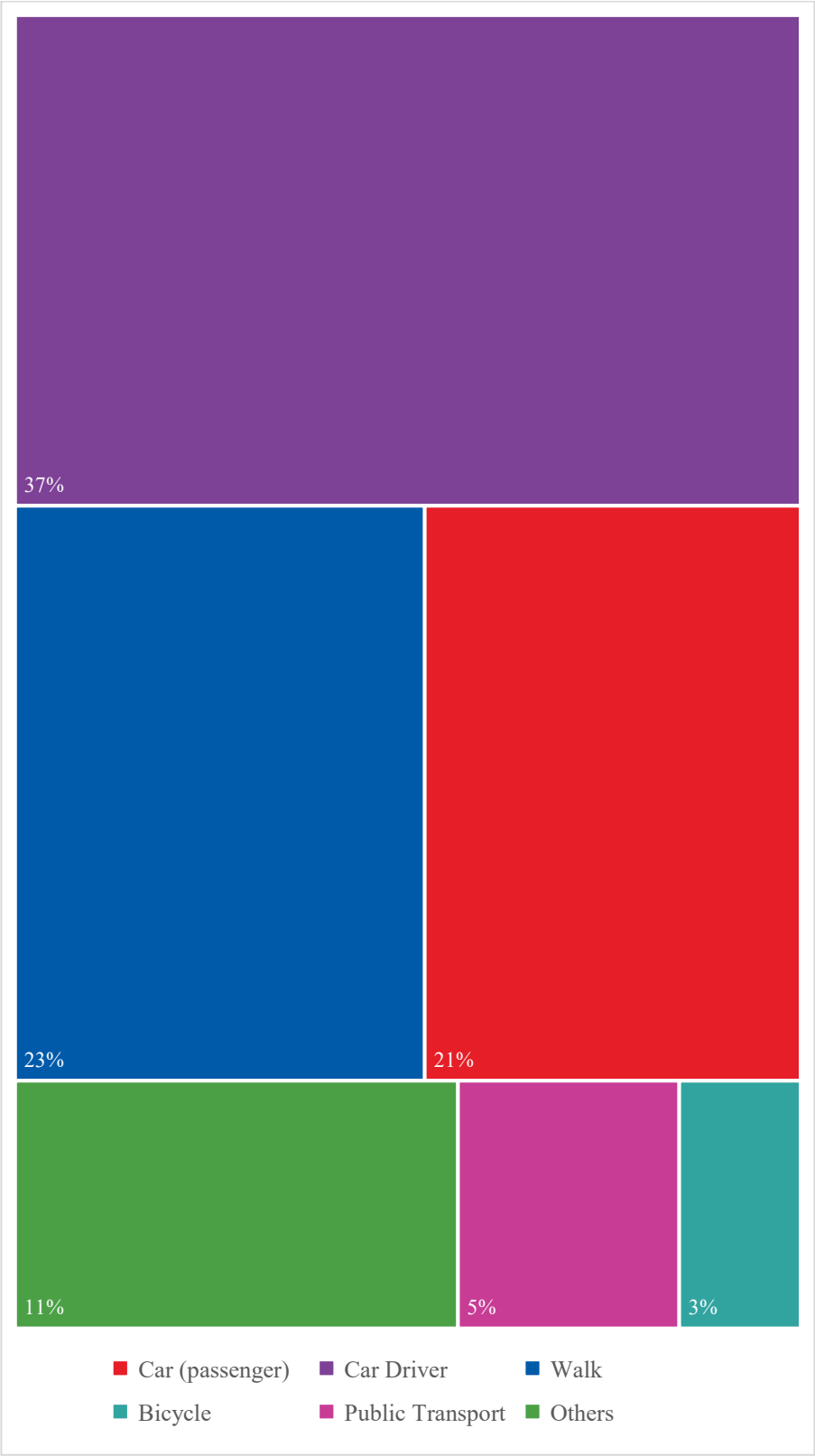


Figure 3-15: Transport mode share (work and education trips), 2022 (CSO)

3.3.2 Commuters

Commuter data for the town of Kilkenny has been sourced from the 2022 Census, as shown in Figure 3-16. The analysis shows that the majority of commuters to Kilkenny reside outside the town itself with 2022 Census data (Central Statistics Office, 2022) showing approximately 9,000 persons commuting into the Kilkenny City, and approximately 6,500 persons working and residing in Kilkenny City. Other significant origins of commuters include Callan, Carlow, Thomastown, Waterford City and its surrounding areas, and Castlecomer, which are the next largest contributors.

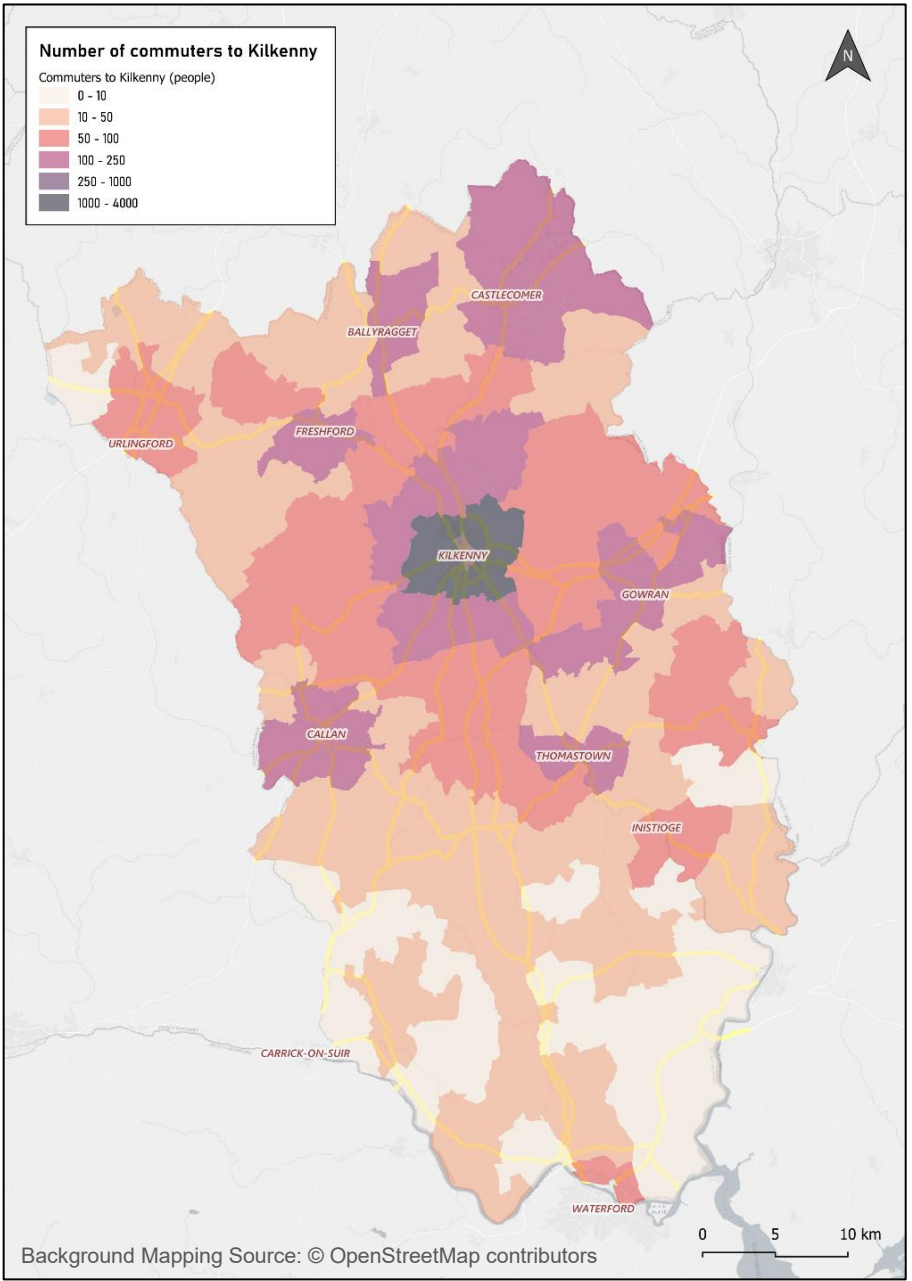


Figure 3-16 Commuters to Kilkenny

3.3.3 Mode share comparators and benchmarking

A selection of large Irish settlements with population sizes comparable to Kilkenny have been chosen as benchmarking comparators. In the case of each, comparisons have been compiled based on mode shares from 2016 and 2022 census data.

Mode share comparisons for each of the selected settlements are presented in Table 3-4, Figure 3-17 and Figure 3-18.

The analysis demonstrates that Kilkenny performs well relative to similar sized settlements, with a higher-than-average active travel mode share (walking and cycling) and a below average private motor vehicle mode share across the 2016 and 2022 census data. The analysis also indicates that Kilkenny performs below average in terms of public transport (bus and train) mode share. Overall, the dominance of the private motor vehicle in Irish towns and cities is evident from the comparisons provided.

3.3.4 Mode share targets as per the CDP

The Kilkenny City and County Development Plan 2021–2027 sets out ambitious mode share targets to be achieved by 2040, aiming to promote sustainable transport across Kilkenny City and County. These targets are shown in Table 3-5 and are informed by the current travel patterns, car ownership levels, and national policy objectives.

According to the 2016 Census, commuting in Kilkenny City is dominated by private car use (63.5%), with walking accounting for 23.3% and public transport representing only 4% of trips. Car ownership is significantly lower in the City Centre, where 40-50% of households do not own a car, highlighting the potential for increased uptake of sustainable transport modes.

In alignment with national sustainability goals, the SUMP sets a target of 60% sustainable mode share by 2040, representing a 23% increase from the 2020 baseline.

When compared to the 2022 Census data, these targets reflect a clear policy direction to reduce car dependency and significantly grow the share of sustainable transport modes within the city, supported by investment in infrastructure and active promotion of alternatives to private car use.

3.3.5 Potential target groups for modal shift

To achieve Kilkenny’s vision of reducing the reliance on the private car in favour of more sustainable transport modes, a focus should be placed on target groups to tailor proposed measures to their needs. The target groups would be the residents and businesses who live, study and work within the city centre.

Additionally, residential, educational and employment areas that are within a 10- to 15-minute walk from public transport interchanges and mobility hubs would be part of this target group.

The target group also includes areas of higher transport need which would benefit from being able to walk, cycle and avail of public transport without needing the use of cars.

Table 3-4: Mode share benchmarking comparators - 2016 and 2022 populations

Settlement	2016 Population	2022 Population
Carlow	24,272	27,351
Kilkenny	26,512	27,184
Tralee	23,691	26,079
Letterkenny	19,274	22,549
Athlone	21,349	22,869
Mullingar	20,928	22,667
Ennis	25,276	27,923
Navan	30,173	33,868

Table 3-5: 2040 mode share targets for Kilkenny City (Kilkenny City and County Development Plan 2021-2027)

Walking	Cycling	Public Transport	Car
35%	10%	15%	40%

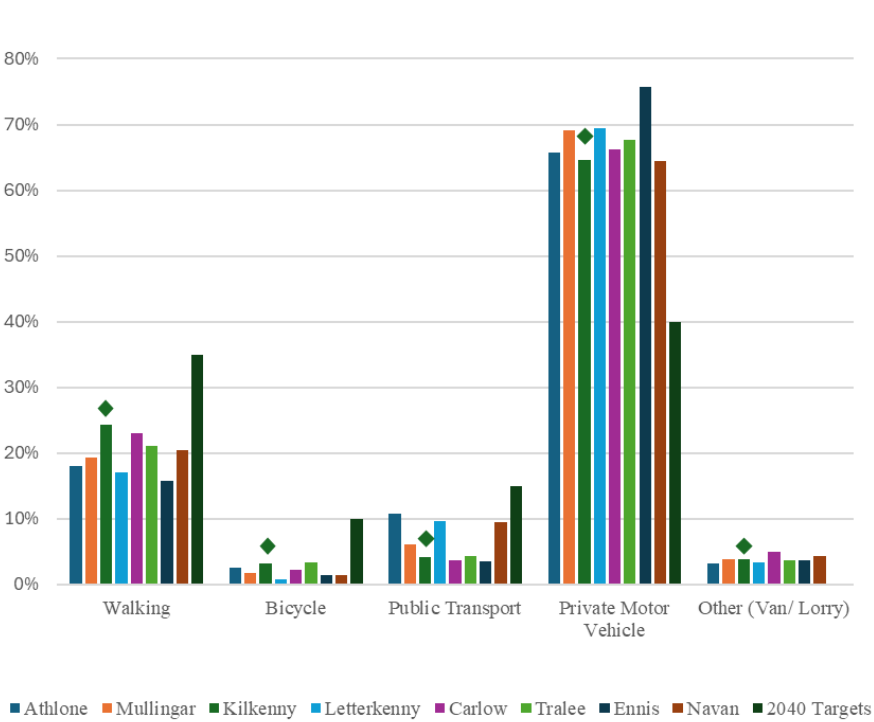


Figure 3-17: Mode share comparisons, 2016 (CSO)

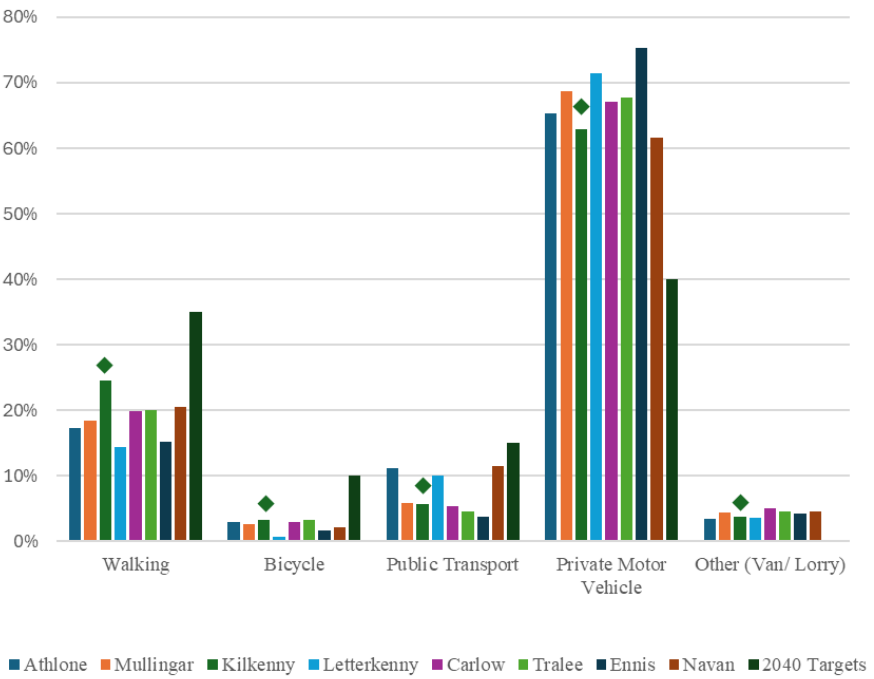


Figure 3-18: Mode share comparisons, 2022 (CSO)

3.3.6 Accessibility to Opportunities and Services (ATOS)

The NTA's ATOS tool provides an indicator of how easy it is to access essential key services and opportunities, such as schools, medical facilities, food retail, and employment, by walk and cycle. This information provides insight on the current accessibility levels across the study area helping to identify the areas where access to key services by active modes is limited and should therefore be considered for proposed improvements as part of the SUMP.

ATOS analyses the study area at a 100m grid level and provides a score of the relative connectivity of a grid square to a given service within the entire selected grid area. A 100m grid square will have a better ATOS score if there are many of a given service type within easy reach to the grid square, or if the network in the vicinity of the grid square is dense and well developed since this should reduce travel time to service locations. ATOS scores range between A and E, where A indicates the best level of connectivity.

Figure 3-19 and Figure 3-20 show the ATOS scores for access to primary schools based on walk and cycle travel time to the nearest schools from each grid square centroid within the study area.

Figure 3-19 shows that the city core and the areas to the southwest of River Nore have better access to primary schools, while the eastern part of the city is characterised by low accessibility levels. Talbotsinch and Glendine in the north of the city, are also characterised by low accessibility to schools, mainly due to the pedestrian network being less dense in those areas. These patterns are even more prevalent when analysing accessibility to post-primary schools, as most of the facilities are concentrated at the eastern and southwestern part of the city.

The ATOS scores for cycle accessibility to primary schools, shown in Figure 3-20 shows a similar picture, with the eastern and northern parts of the study area presenting lower accessibility levels, and even more so for access to post-primary schools.

The ATOS scores for accessibility to post-primary schools, food retail, medical facilities, open spaces and employment are shown in Figure 3-21 to Figure 3-30 overleaf.

Due to the compact size of Kilkenny city, access to employment by walk is generally high for all the areas within the ring road, while it reduces for areas further afield. The accessibility by cycling is even higher.

Access to retail facilities is high in the city core, as well as Newpark and Loughboy, where more retail facilities are located. On the contrary, the northern part of the city is characterised by very low accessibility levels, particularly areas at Glendine and the wider Loughmacask area. A similar pattern is observed for access to medical facilities, with the areas in the northern part of the city being currently underserved.

It should be noted that analysis has been based on best available data and some of new permeability links have not been reflected accordingly.

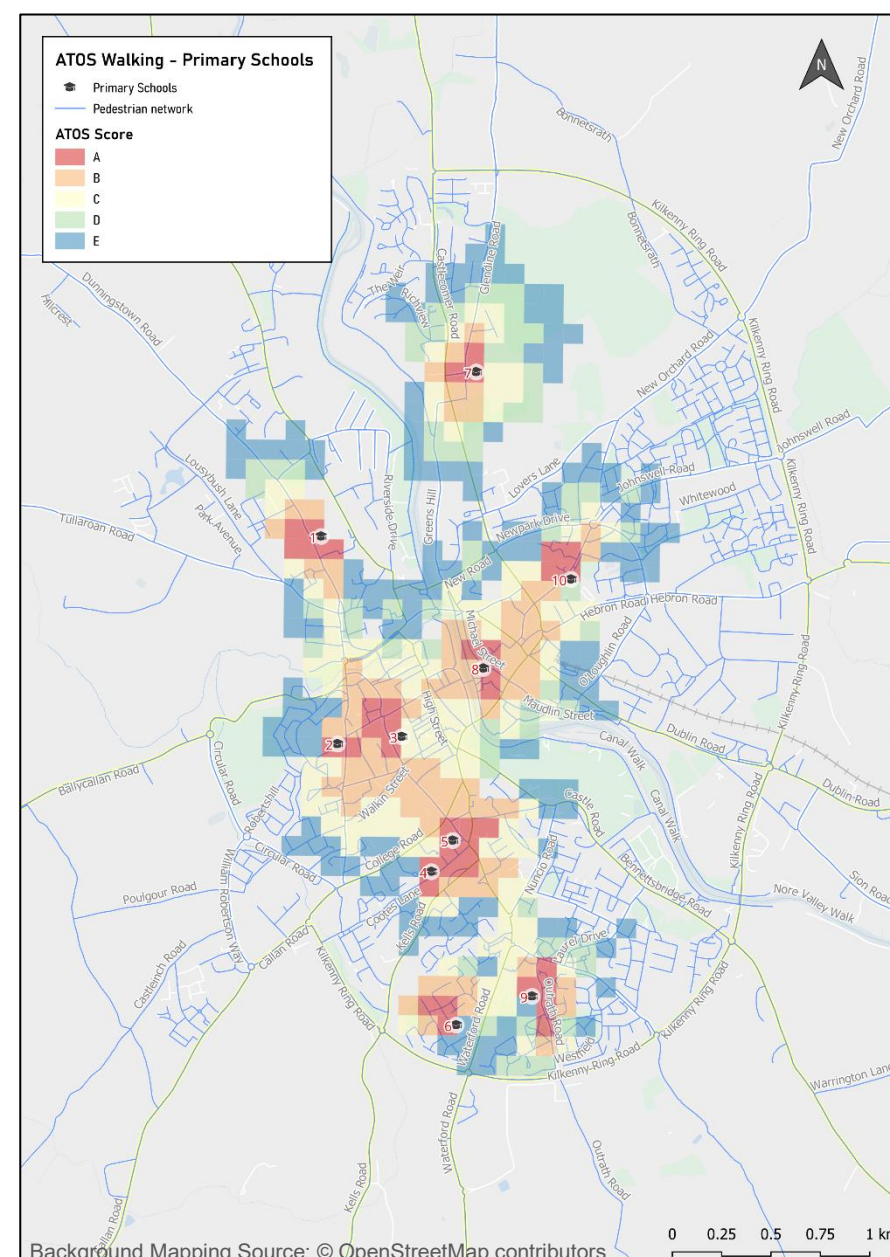


Figure 3-19: ATOS walk - primary schools

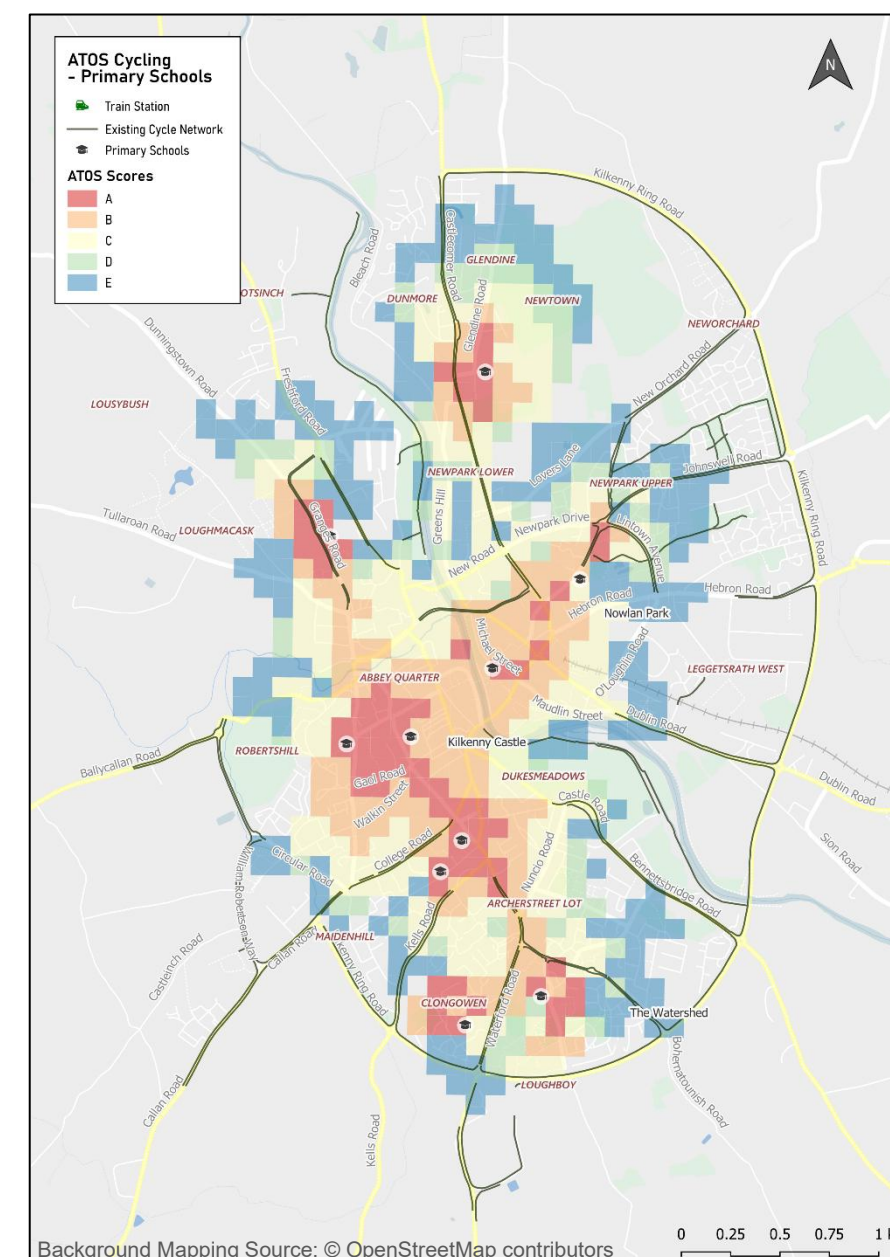


Figure 3-20: ATOS cycle - primary schools

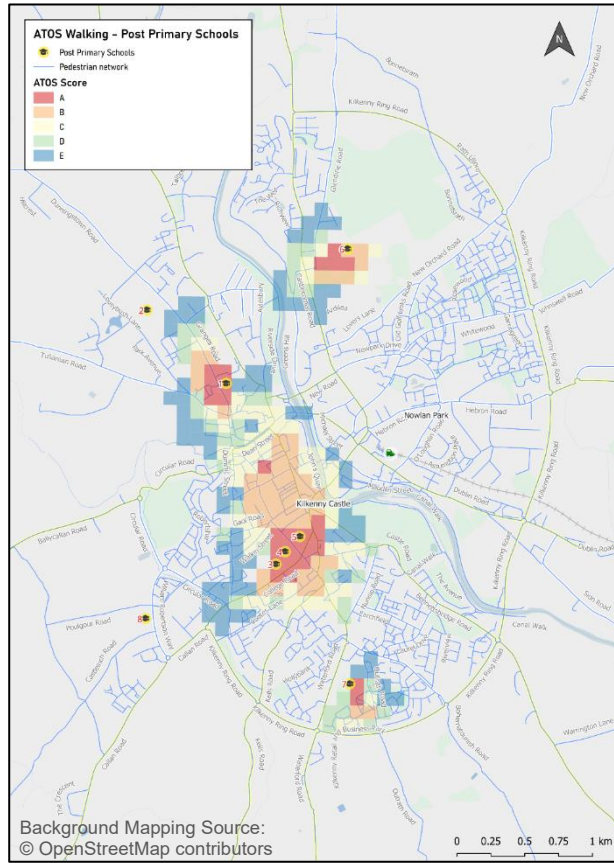


Figure 3-21 ATOS Walking – Post Primary Schools

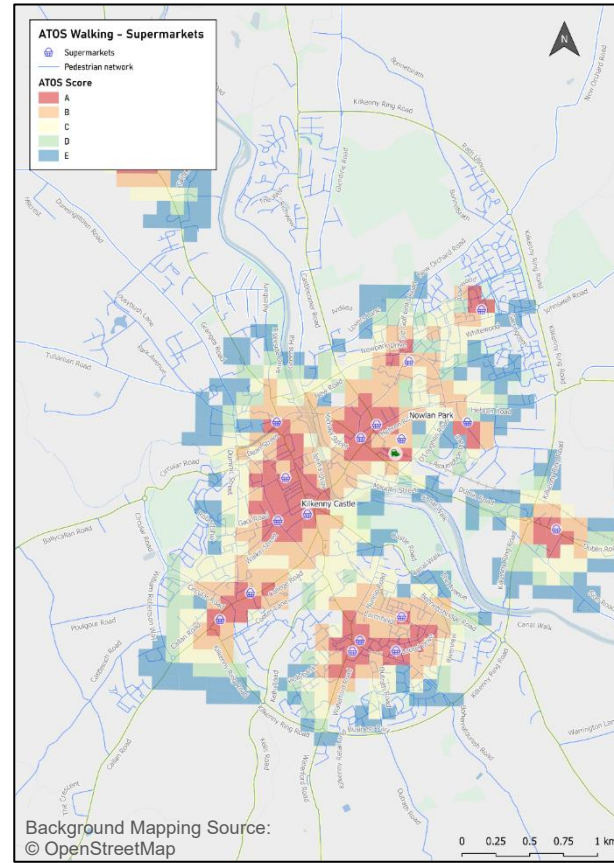


Figure 3-22 ATOS Walking – Retail

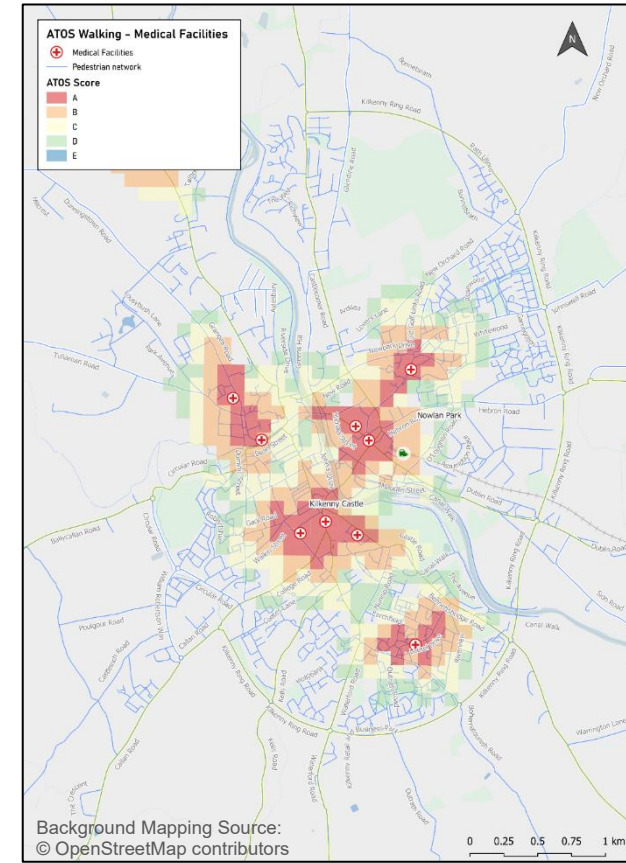


Figure 3-24 ATOS Walking – Medical Facilities

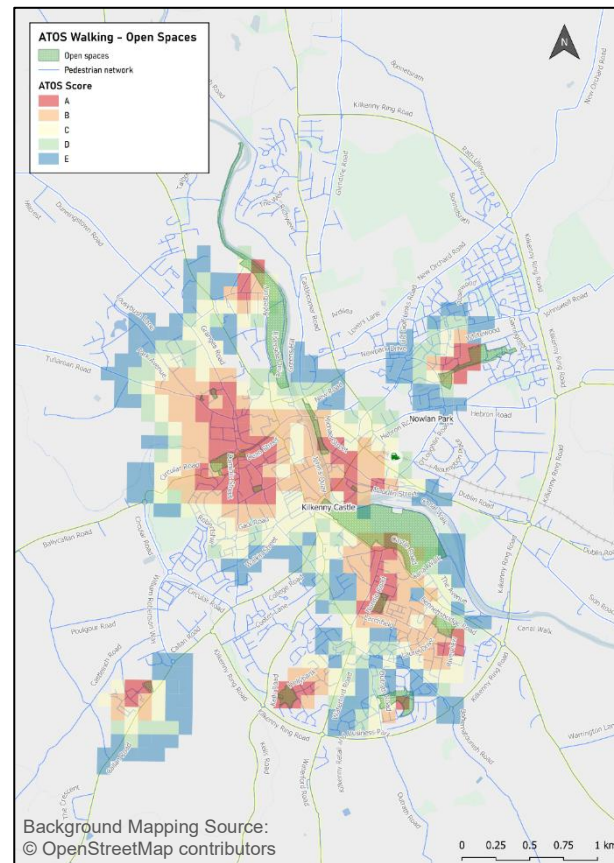


Figure 3-23 ATOS Walking – Open Spaces

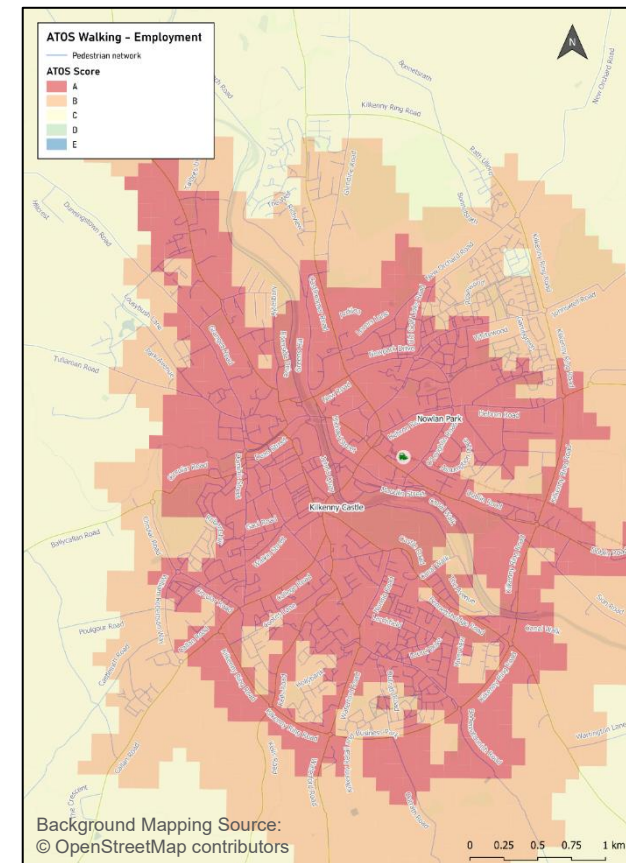


Figure 3-25 ATOS Walking – Employment

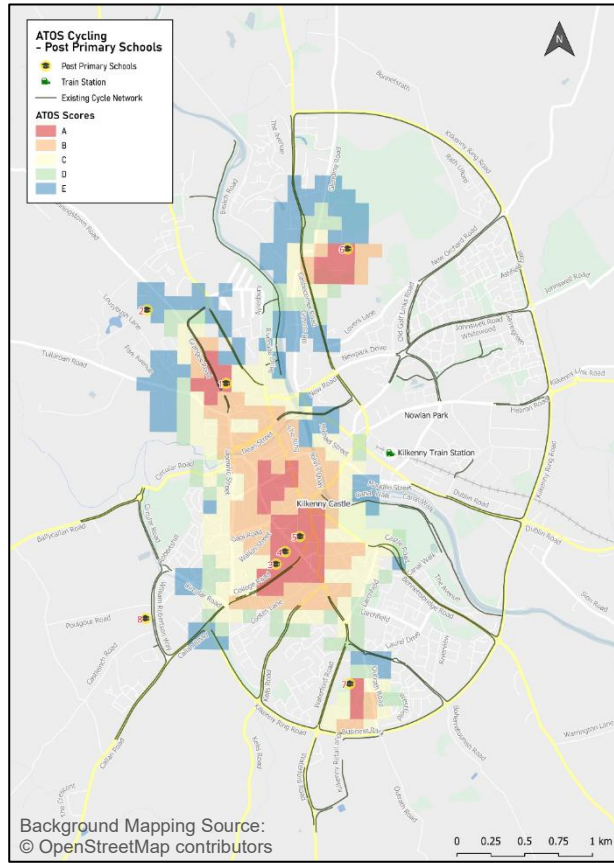


Figure 3-26 ATOS Cycling – Post Primary Schools

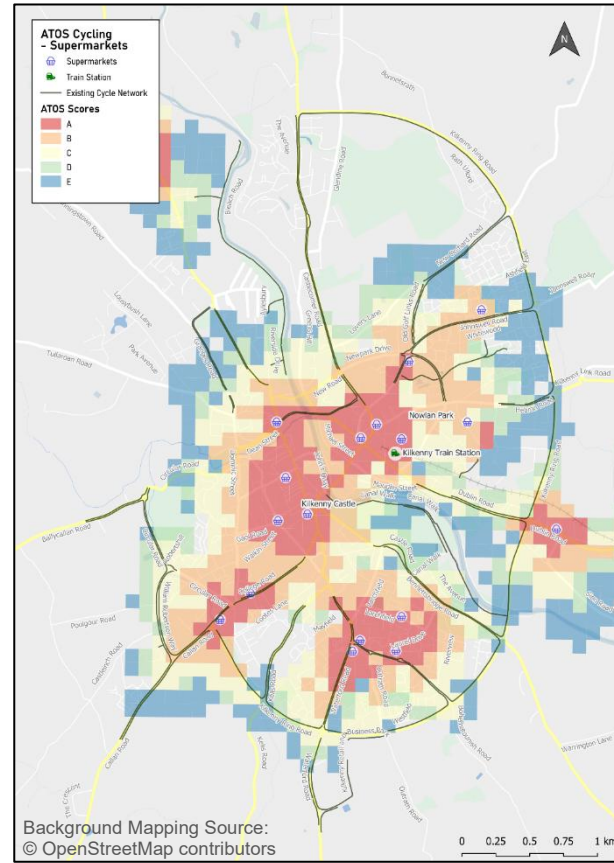


Figure 3-27 ATOS Cycling – Retail

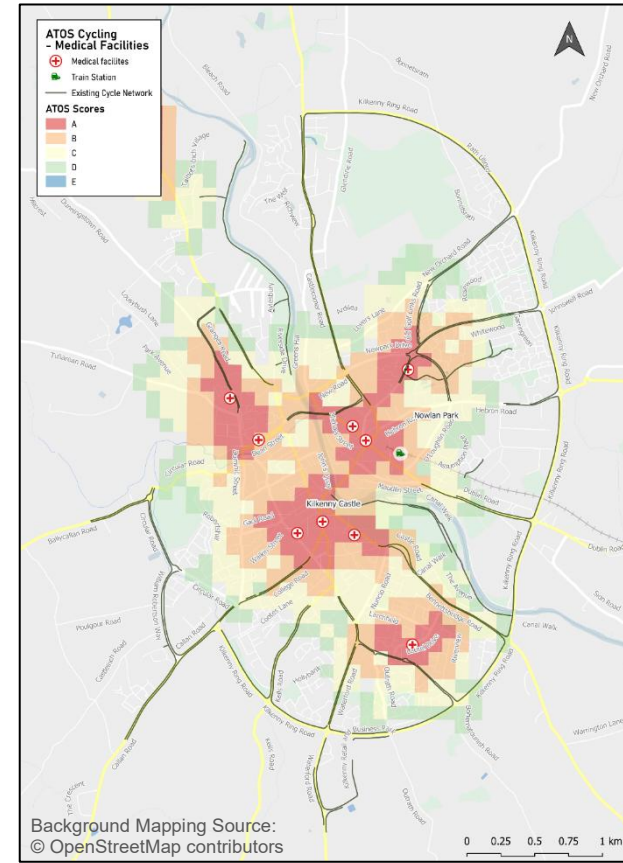


Figure 3-29 ATOS Cycling – Medical Facilities

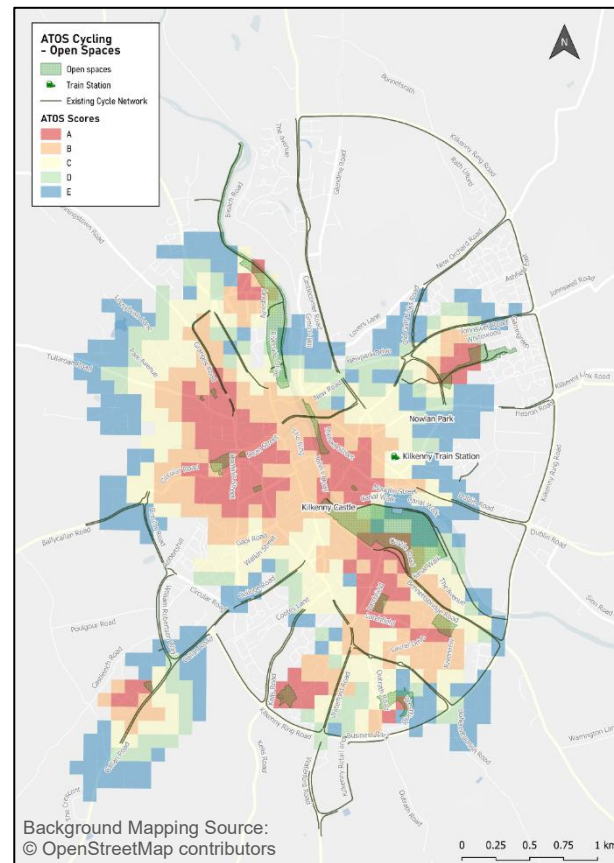


Figure 3-28 ATOS Cycling – Open Spaces

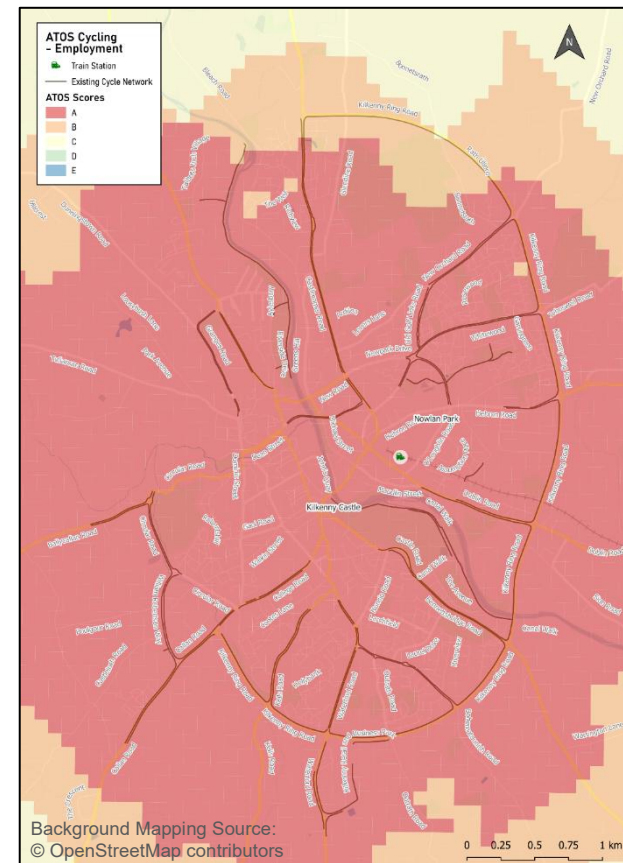


Figure 3-30 ATOS Cycling – Employment

3.3.7 Public Transport Accessibility Level Analysis (PTAL)

Kilkenny is currently served by two local bus routes operated by City Direct:

- Route KK1: Runs from Loughboy Retail Park to the N77 Roundabout, serving key locations such as Upper Patrick Street, MacDonagh Junction, and Castlecomer Road.
- Route KK2: Operates between Purcellsinch and St. Luke's Hospital, with stops at Dublin Road, Newpark Shopping Centre, MacDonagh Station, Nowlan Park, and Loreto.

Together, these routes serve 33 stops, converging at a central spine that crosses St. John's Bridge and connects to the city centre. Shared stops include Parliament Street, Market Yard, and John Street Upper.

Public transport accessibility in the study area was assessed using the NTA's Public Transport Accessibility Level (PTAL) tool. This tool allows users to identify the gaps in the coverage of the existing public transport network in Kilkenny, showing the areas which are currently underserved. This analysis is important for informing the proposed improvements as part of the SUMP targeting investment where is most needed and where it can deliver the greatest accessibility gains.

The PTAL tool analysis combines the walk or cycle journey time to a public transport stop with the level of service at the stop. It gives an idea of how well connected an area is to public transport services. In general, an area will have a higher PTAL if:

- It is a short walk to the nearest station or stop
- There are short waiting times
- Multiple services passing the stop

PTAL results for Kilkenny between 8am and 9am are shown in Figure 3-31 while the existing public transport facilities and walking catchment to/from these facilities are shown in Figure 3-32. Generally, most of the core city area and surrounds have a medium to high level of service, especially areas around Parliament Street and John Street, along which both local bus services are running, as well as areas along Castlecomer Road, O'Loughlin Road, Waterford Road, Bohernatounish Road, and Freshford Road.

However, the majority of Kilkenny have low to medium level of service, with the former being in the areas at Glendine and Talbotsinch in the north, Johnswell Road and Dublin Road in the east, Loughboy and Danville in the south, and Robertshill in the west.

The PTAL results also showed that there are areas within the N10 / N77 ring road that do not have access to public transport, including Clongowen, Smithsland South, Gallowshill, Garrincreen and Kilcreene.

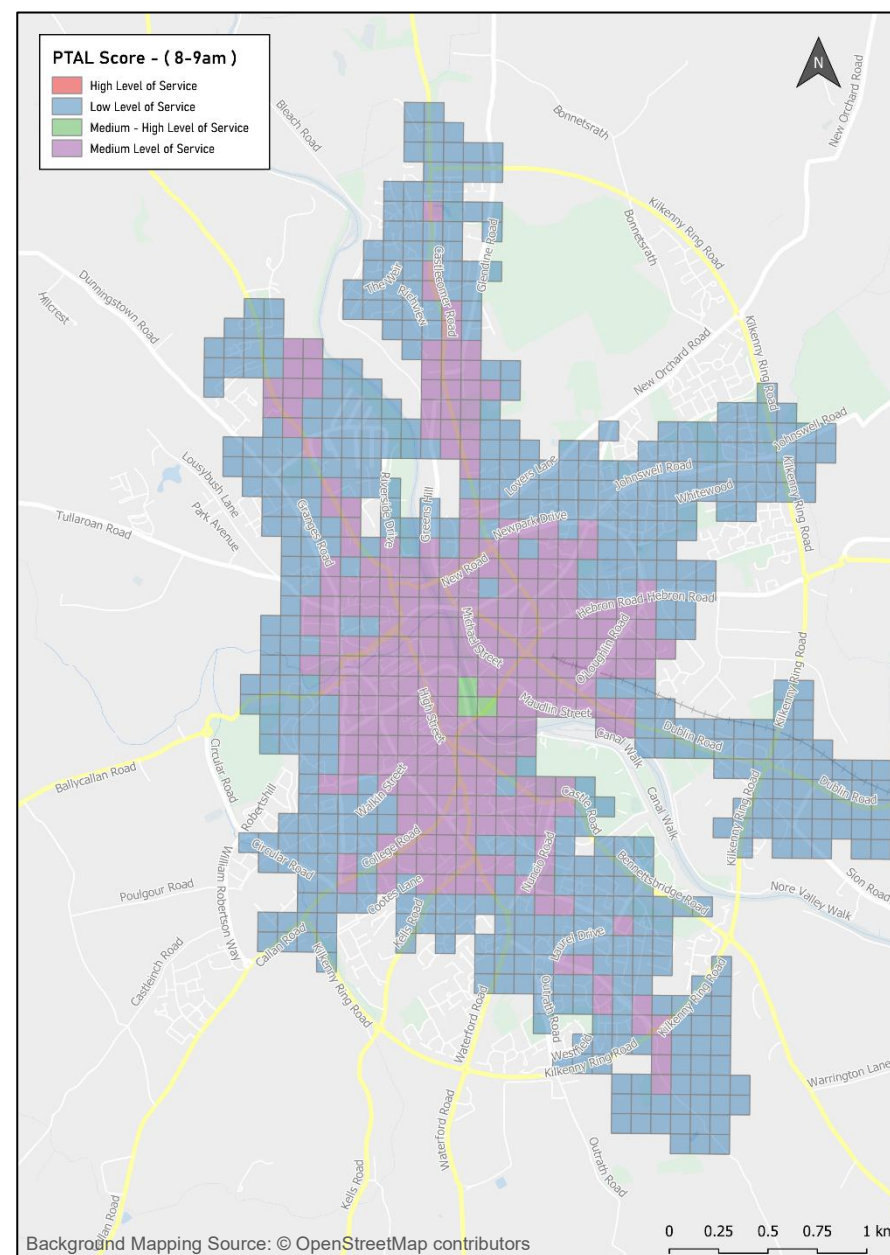


Figure 3-31: PTAL results 8-9am

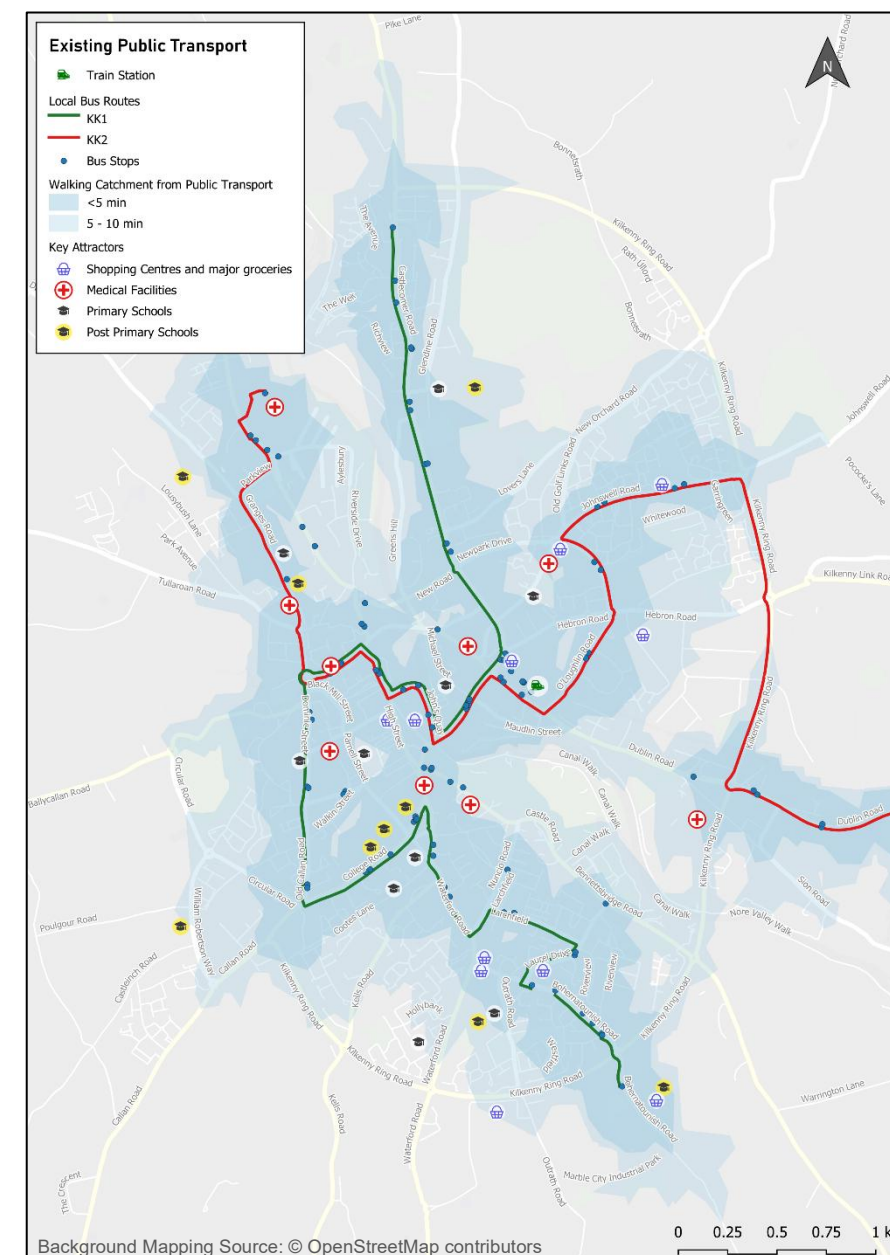


Figure 3-32: Public transport facilities

3.3.8 Regional Bus and Rail Network

The regional bus network that connects Kilkenny with the wider network is shown in Figure 3-33.

Although Kilkenny is served by bus and rail connections to major cities such as Dublin, Galway, Cork, Waterford and Limerick, the All-Island Strategic Rail Review (AISRR) and the Connecting Ireland Rural Mobility Plan propose further measures to strengthen public transport links to, from, and through Kilkenny.

AISRR proposes several improvements that would significantly enhance public transport connectivity for Kilkenny. The Intercity network interventions suggested in AISRR are shown in Figure 3-34. On the Dublin–Waterford line, which serves the city, the Review recommends faster and more frequent intercity services, targeting an hourly Dublin–Waterford service and substantial journey time reductions through speed upgrades, dual-tracking on constrained sections, and removal of bottlenecks. These upgrades would make rail much more competitive for commuters and visitors travelling between Kilkenny, Dublin, and Waterford. The Review also highlights the longer-term value of a cross-Dublin rail tunnel linking northern and southern corridors, which could improve onward national connectivity for passengers from Kilkenny. Regionally, the Review supports upgrading the Limerick Junction–Waterford line and reinstating the South Wexford line to strengthen east–west and coastal transport links, which would indirectly improve Kilkenny’s regional accessibility. It also proposes a minimum service standard of one train every two hours on regional routes and better integration of timetables across the network, combined with a move towards seamless, nationwide ticketing. Strengthened rail–bus coordination is a central theme: where rail cannot feasibly reach, regional and local buses should be scheduled and integrated with rail arrivals and departures, creating smoother connections into Kilkenny from surrounding rural areas.

The Connecting Ireland Rural Mobility Plan (shown in Figure 3-35) proposes key regional bus corridors would be upgraded, with more frequent and better-timed services from Thomastown, Graiguenamanagh, Callan, Castlecomer, Urlingford, Freshford and Ballyragget, ensuring at least hourly or two-hourly frequencies throughout the day. Enhanced inter-urban links to Waterford, Carlow, Laois, and the Clonmel–Carrick-on-Suir corridor would further support employment, education, and leisure travel, complementing ongoing improvements to the Dublin–Waterford rail line. Locally, new rural bus routes operating every two hours would connect dispersed settlements to Kilkenny City, with timetables aligned to work and school peaks and with additional services aimed at supporting tourism and access to heritage areas.

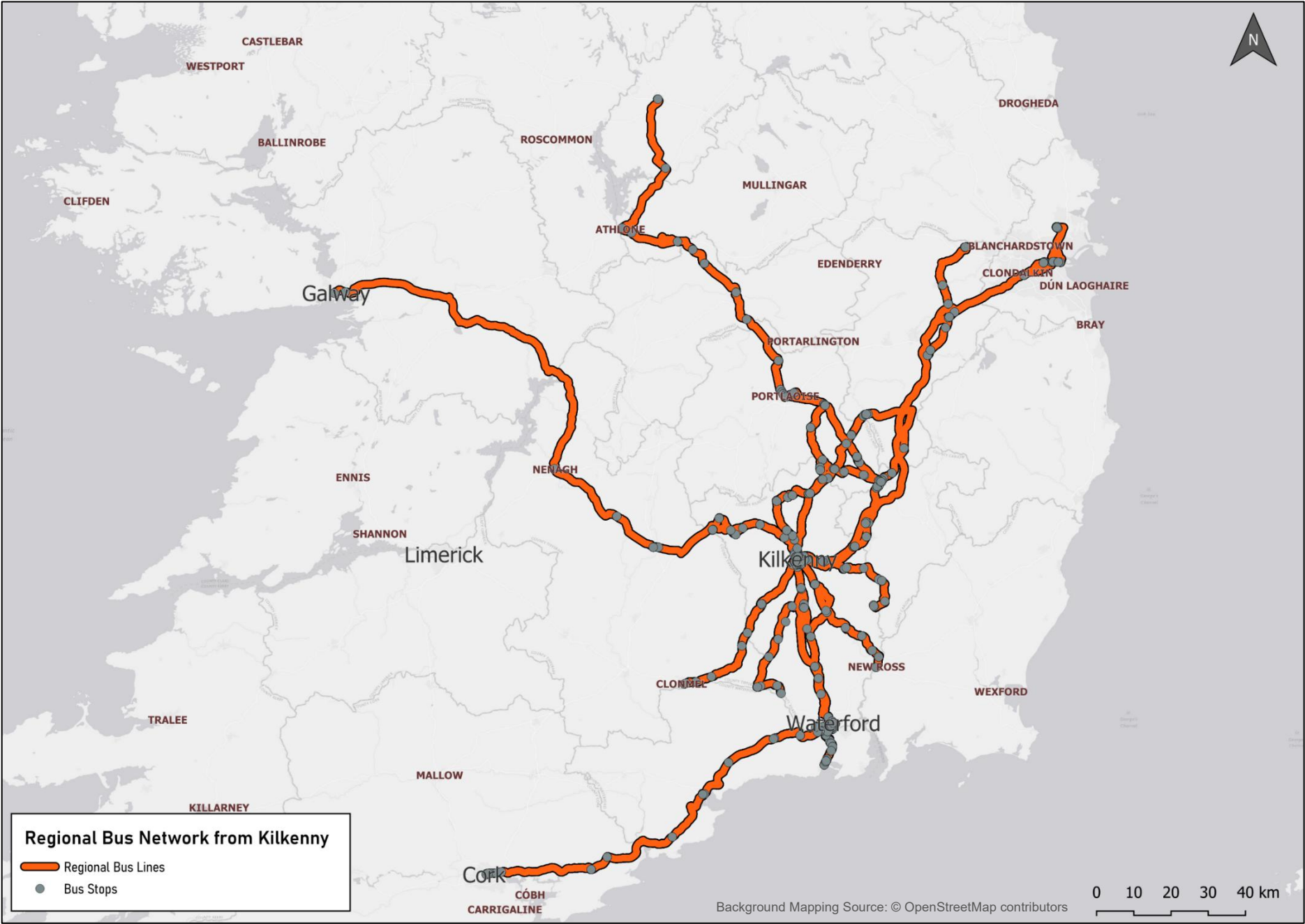


Figure 3-33 Existing regional bus network

These bus enhancements dovetail with planned rail upgrades, including faster and more frequent Dublin–Waterford services, improved journey times through infrastructure upgrades on the Kildare–Kilkenny–Waterford corridor, and stronger national connections via Waterford, Limerick Junction and Dublin. To ensure seamless travel, Connecting Ireland emphasises integrated bus–rail scheduling, particularly at Thomastown, Muine Bheag and Waterford, and the expansion of integrated ticketing across both modes. For visitors, more frequent evening and weekend bus options, improved access to regional gateways, and better public transport to festivals and events in Kilkenny are supported. Both plans also prioritise accessibility, including step-free station access, upgraded waiting facilities and improved walking and cycling links to stops and stations. Together, these measures offer a coordinated, multimodal approach to improving mobility for those travelling to, from and within Kilkenny.

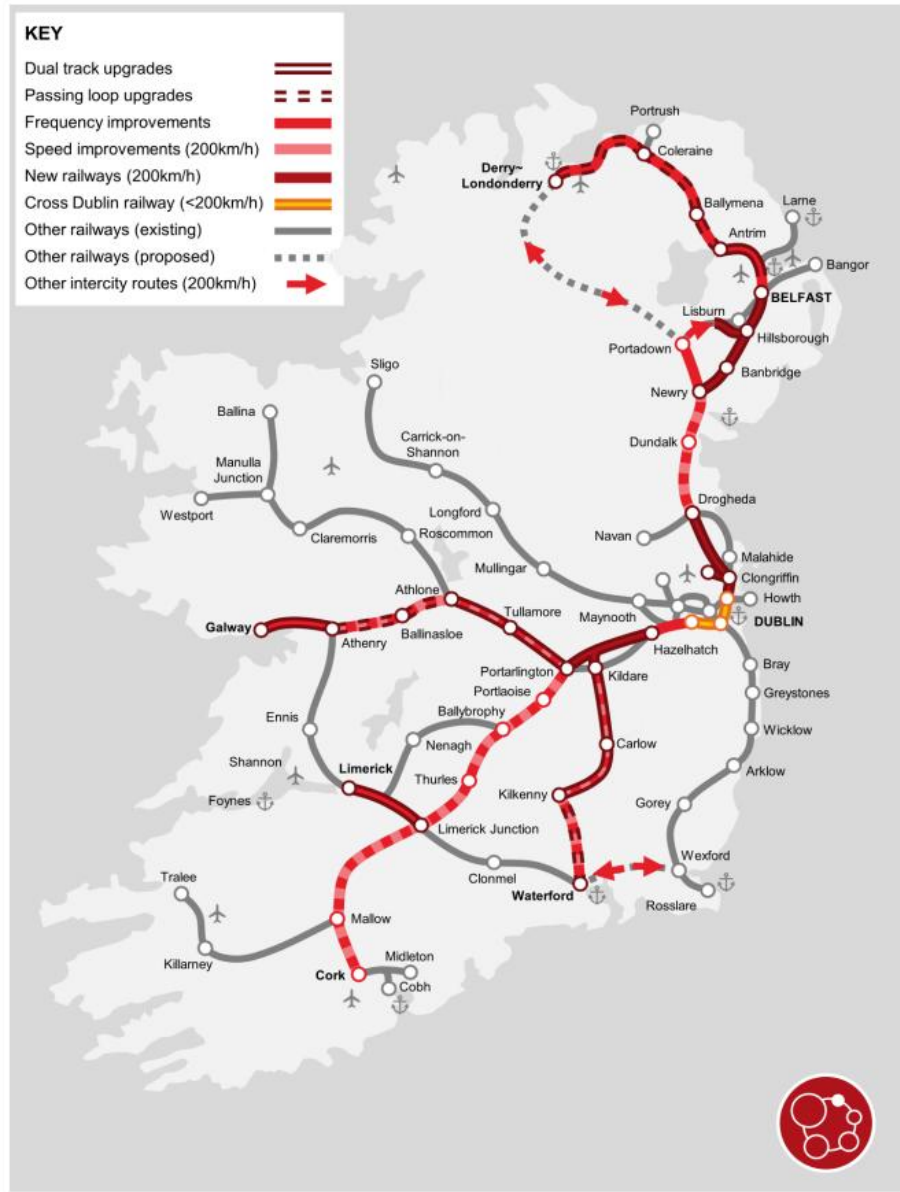


Figure 3-34: Intercity network interventions suggested in AISRR

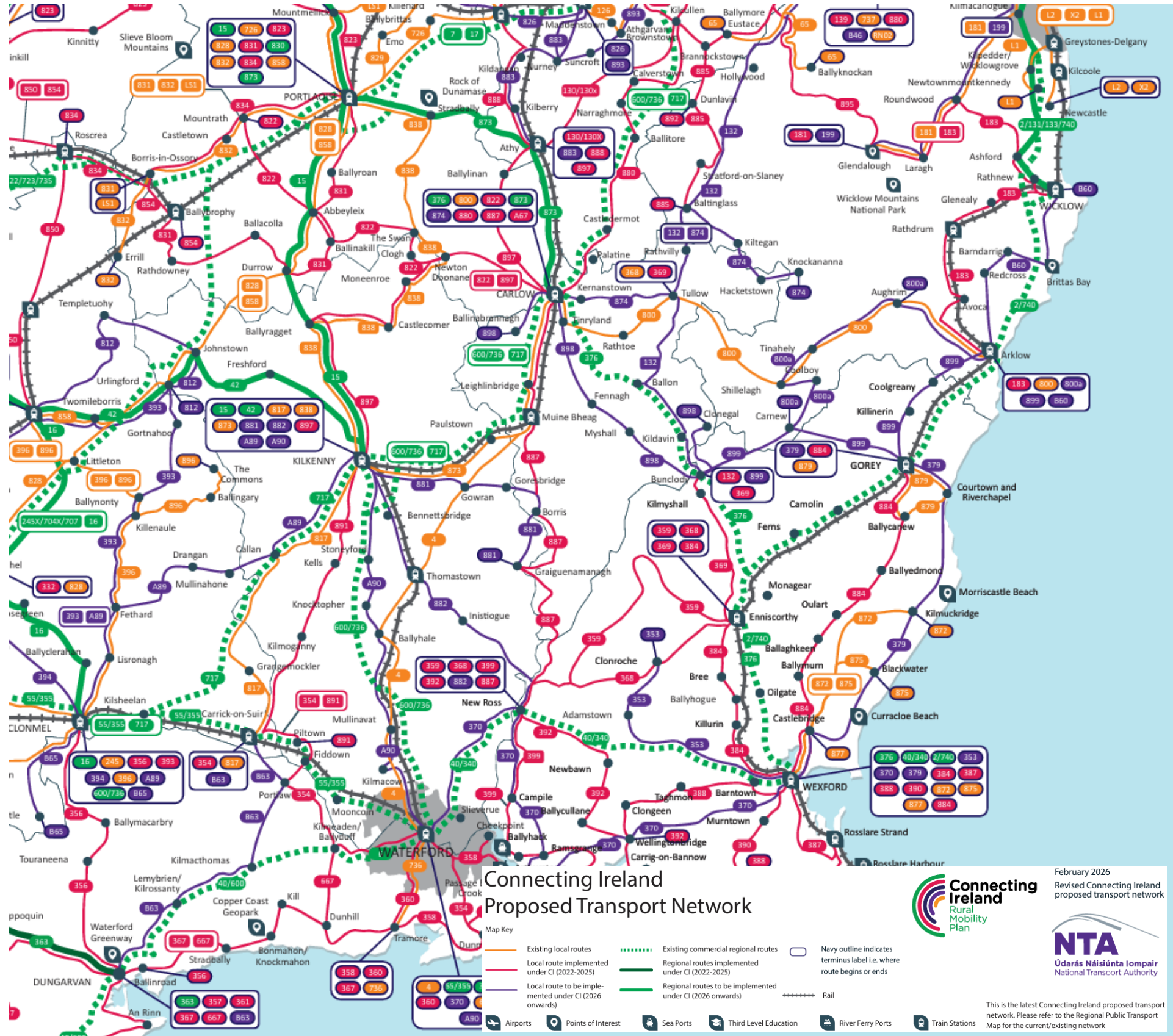


Figure 3-35: Excerpt from the revised February 2026 Connecting Ireland proposed transport network, showing existing and proposed regional routes serving Kilkenny

3.3.9 Road network

The KCCDP sets out a number of key road objectives for the study area. Figure 3-36 illustrates the existing and future road network including these road objectives.

The KCCDP road objectives include a proposed extension of the Kilkenny Northern Ring Road from the Castlecomer Roundabout to the west connecting with Freshford Road, which will ultimately form the first phase of the creation of a western bypass for the city from the Castlecomer Road to the Waterford Road (Objectives R1 and R4).

Objective R7 of the Development Plan proposed the development of sustainable links connecting Kilmanagh Road to Tullaroan Road, and the latter to Freshford Road, identifying some indicative potential routes, as shown in Figure 3-36.

Other objectives focus on improving connections at the employment areas to the south and the east of the Ring Road. R2 and R3 focus on the employment area south of Loughboy proposing the completion of the Outrath Road improvement scheme linking to the Bohernatounish Road and providing a link road from Outrath Road onto Waterford Road.

The Development Plan proposes some new road links within the city including a potential new route from Kilcreene to Waterbarrack (Objective R5).

Objectives R8 to R11 are focused on improving connections at the employment areas to the east of the city centre. These objectives include proposals for a new connection from the Hebron Business Park to the N10 and Dublin Road (R9), as well as a second entrance to the Hebron Business Park from Hebron Road (R10), while a traffic strategy is proposed to be implemented for the whole Hebron area (R11). In addition, a route connection from the existing roundabout on the N10 at Blanchfieldsland to Dublin Road is also proposed as part of objective R8.

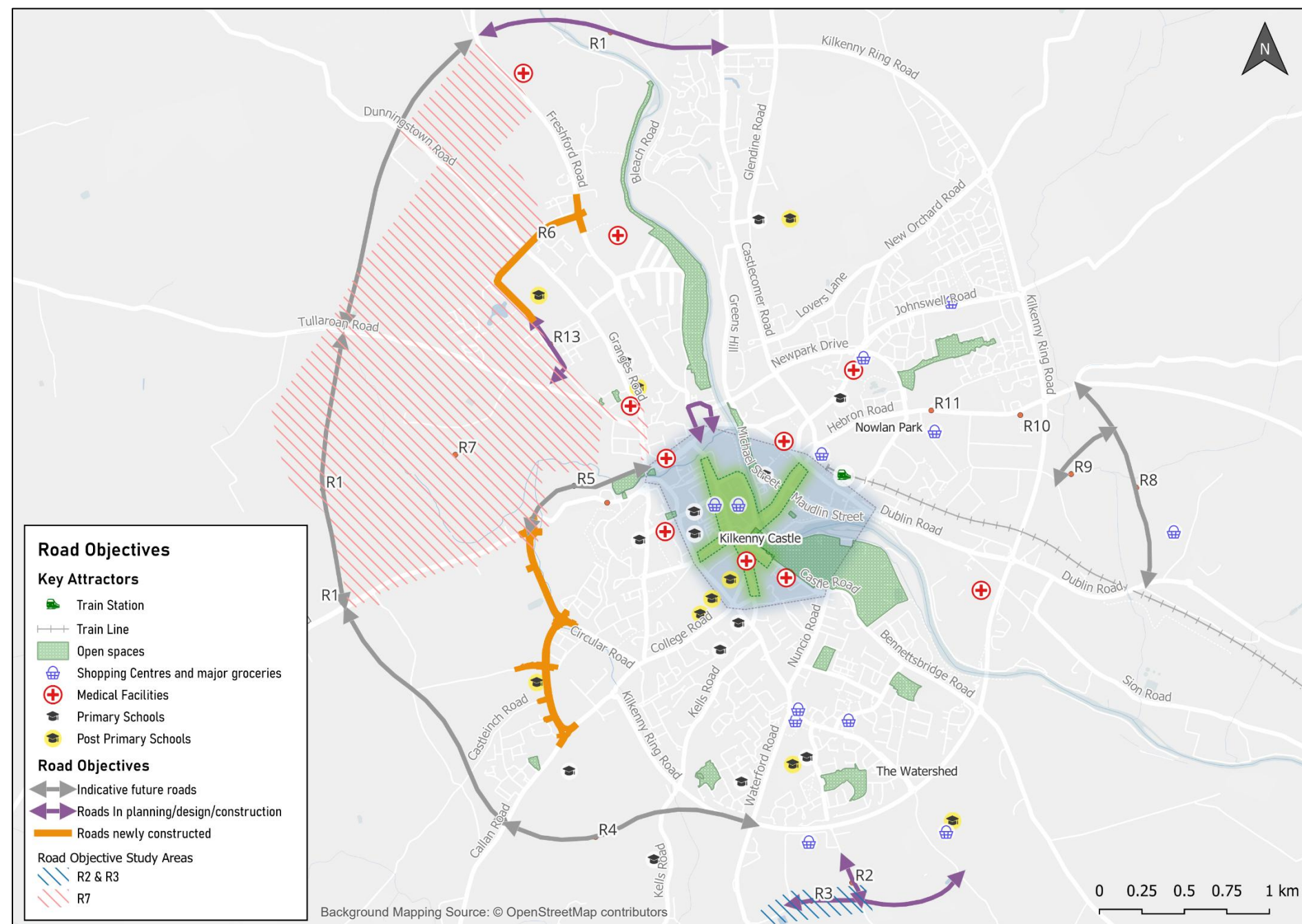


Figure 3-36: Existing and future road network including road objectives

3.3.10 Car parking

The parking arrangements in Kilkenny are shown in Figure 3-37.

Kilkenny provides car parking at several locations across the city, including both on-street and off-street parking. The majority of off-street parking is publicly owned, with a few of them being privately operated.

The largest car park is at MacDonagh Junction, which provides over 1,000 spaces and is privately operated. Other large car parks in the area include the Ormond Street Car Park, which is a privately operated car park providing about 800 spaces, and the Market Cross Shopping Centre car park, which is a privately operated car park providing about 500 spaces.

In addition, there is also a small number of private car parks spread throughout the city, and some residents-only parking areas at residential estates.

As shown in Figure 3-37, on-street parking is not permitted along certain sections of the road network at the city core, while paid on-street parking is provided along some other sections.

Loading bays are provided at several locations across the city, with a number of them located at Parliament Street, High Street, and the surrounding areas where commercial and retail activity is concentrated.

Disabled parking spaces are provided throughout the city to ensure that access is provided for all users. Some older person parking is also provided at certain locations, including St Canice’s Church, Wolfe Tone Street, and Black Mill Street.

The parking locations for taxis along Bateman Quay, John Street, and The Parade will be reviewed. Parking for coaches and some seasonal bus parking is located along Castle Road and the Abbey Quarter.

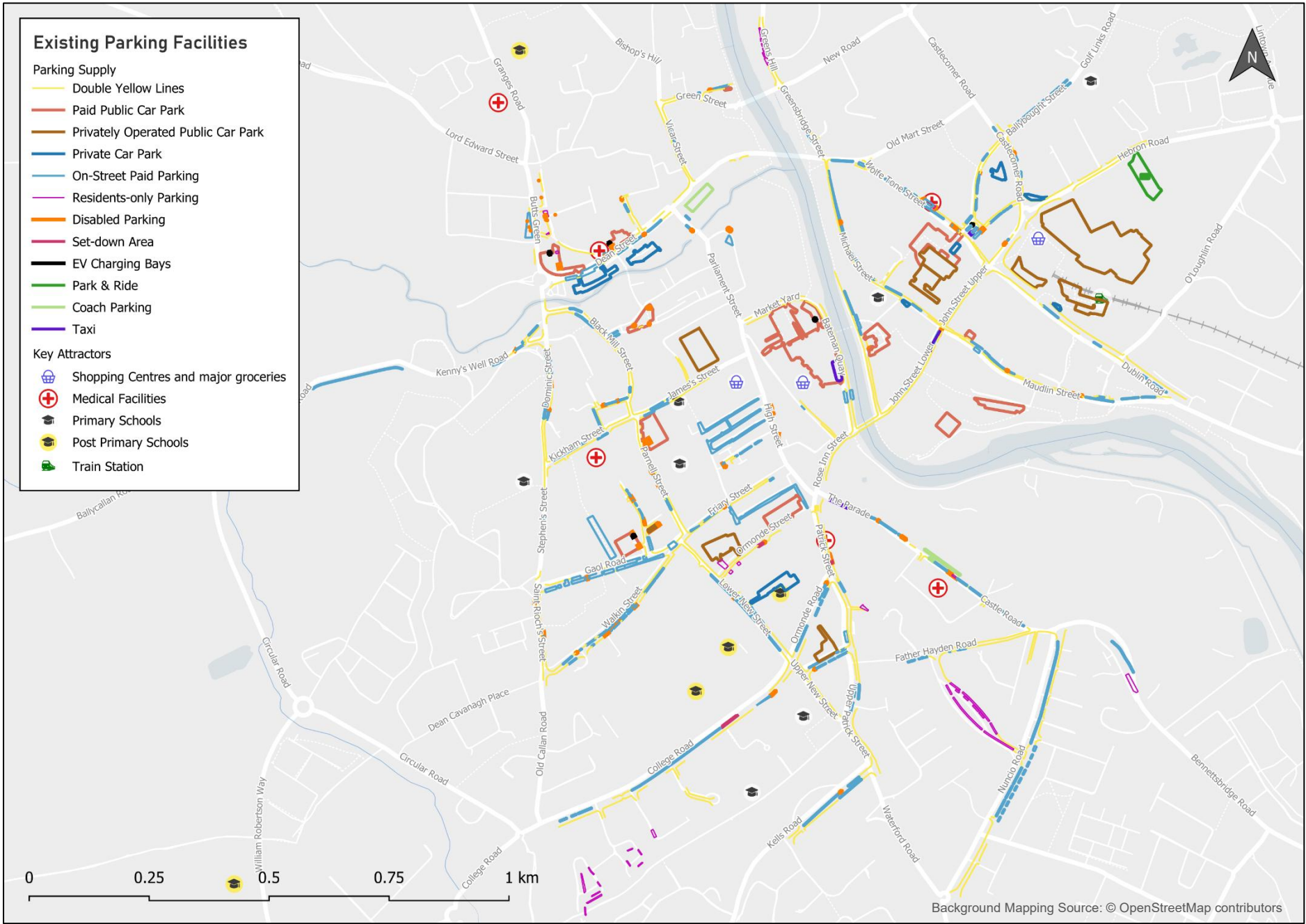


Figure 3-37: Existing Parking Facilities

3.4 Aligning the objectives

Following the review of the work carried out to date and considering the vision, principles, and objectives set out in the Discussion Document, the objectives of the SUMP were formulated as described below. The SUMP objectives were directly informed by the baseline assessment,

which provided the evidence base for refining them. As part of the SUMP, the objectives were updated to emphasise accessibility, safety, social equity and sustainable development. These updated objectives built on the previously defined objectives and remain aligned with those, as well as with the core principles of the SUMP.

Table 3-6 summarises the proposed SUMP objectives and shows how these match with the core principles and the objectives set out in the Discussion Document.

Table 3-6: Kilkenny SUMP Objectives

Kilkenny SUMP Objectives	Core Principles	Objectives from Previous Study
 1. Develop and enhance the public transport network to increase coverage, frequency, and reliability for all users.	- Shift to sustainable mobility - Improve access for all	5. Enhance public transport 6. Enhance rural and regional connectivity 10. Integrate transport modes
 2. Promote active travel options such as walking and cycling through infrastructure improvements	- Support 10-minute city - Improve quality of life - Promote health and well-being	1. Reallocate urban space 3. Encourage independent journeys 8. Safe and attractive cycle network
 3. Reduce greenhouse gas emissions from the transport sector by encouraging sustainable travel modes	- Facilitate low carbon transition - Reduce emissions and energy use	7. Manage parking effectively
 4. Improve air and noise quality by encouraging sustainable modes of travel especially for shorter journeys	- Improve environmental quality - Enhance liveability	2. Connectivity to green-blue infrastructure
 5. Enhance connectivity to urban green and blue infrastructure by active modes	- Enrich urban vitality and biodiversity - Use nature-based solutions	2. Connectivity to green-blue infrastructure
 6. Improve access to transport services for currently underserved areas	- Provide equitable, inclusive transport - Address transport poverty and social gradients	4. Enhance permeability 6. Enhance rural connectivity
 7. Support the implementation of the 10-minute city concept by facilitating convenient access to key services and amenities, including education, business, employment and public transport, within short travel times	- Integrate land-use and transport - Avoid unsustainable journeys	1. Reallocate space for people movement 3. Encourage independent journeys
 8. Integrate multiple transport modes to provide seamless journey experience.	- Provide integrated transport solutions	10. Integrate transport modes
 9. Improve safety for all vulnerable users, including the development of safe routes to schools.	- Enable safe, independent travel for all	3. Encourage independent journeys 11. Create safe routes to schools
 10. Improve public realm through placemaking to enhance community identity and liveability	- Support placemaking and cultural identity - Foster health and well-being	1. Reallocate space 2. Expand green-blue infrastructure
 11. Implement effective parking and demand management strategies to optimise urban space and reduce congestion	- Shift to sustainable modes - Reduce car dependency	7. Manage parking effectively
 12. Support the local economy and improve employment access by enhancing connectivity between residential areas and job centres	- Improve access to jobs, retail, services - Enable business and employee mobility	9. Support business connectivity
 13. Safeguard the strategic function and levels of safety of the national road network in accordance with the requirements of official policy and maintain ongoing consultation and engagement with TII to ensure alignment with TII Publications	- Collaborate with key stakeholders	N/A

Section 4

Options Development



4. Options Development

4.1 Introduction

This chapter outlines the process followed in developing the transportation options to overcome some of the weaknesses and constraints identified in the gap analysis and previous studies undertaken, as well as build upon the strengths and opportunities presented for the study area.

The development of the options considered accessibility for active modes, permeability of the area, traffic management measures and traffic calming, as well as other safety improvements at junctions and roads where needed to accommodate all users.

Adhering to the Department of Transport's NIFTI, as shown in Figure 4-1, the long list of potential measures developed were first considered in relation to active modes, with pedestrians placed on top of the hierarchy followed by cyclists, then public transport, and finally general vehicular traffic. In addition, in line with the NIFTI intervention hierarchy, the SUMP aims to make best use of existing assets, prioritising maintenance, optimisation and improvement to existing infrastructure, before new infrastructure.

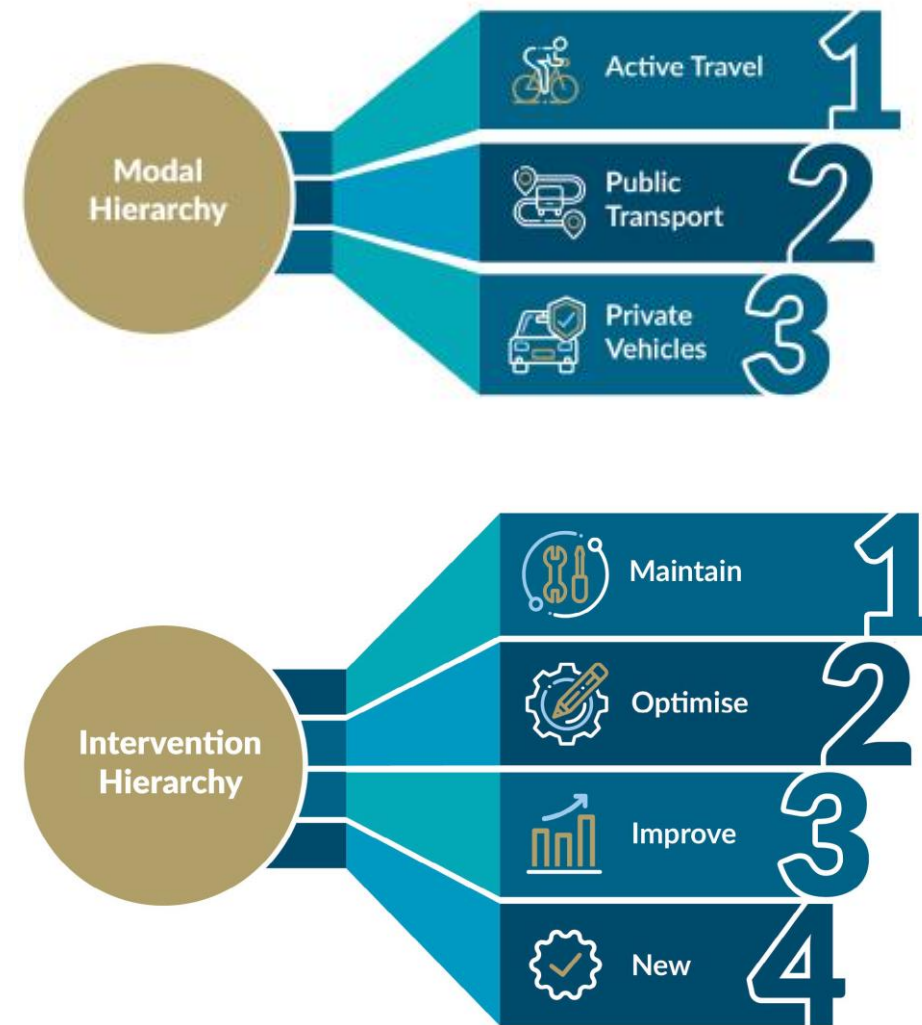


Figure 4-1: NIFTI Modal and Intervention Hierarchy (Source: NIFTI)

4.2 Walking

There is opportunity for the future of pedestrian environment in the Kilkenny to support the vision of a ‘10-minute city’.

Options have been developed for the pedestrian environment to provide links and connections which address key desire lines and improve permeability within Kilkenny. The proposed measures for the walking network in Kilkenny are shown in Figure 4-2.

The key issues identified for the pedestrian environment as part of the previous studies carried out to date, in particular the LTP and the Discussion Document, as well as the review of the walking network as part of this study included the following:

- Severance caused by the River Nore and the Ring Road has the potential to deter walking journeys. Kilkenny County Council will continue to engage and advocate with the TII for safe crossing points for pedestrians and cyclists on the Ring Road roundabouts and in particular where there are strong desire lines to residential areas/employment centres.
- Poor permeability through housing estates and access to local schools leading to continued car dependency and low levels of short distance walking trips;
- Poor public realm in certain locations within the city centre with accompanying high levels of noise pollution;
- Hostile junction layouts which prioritise vehicular traffic above all other modes, causing significant barriers for pedestrian movement; and
- Lack of tactile paving and dropped kerbs resulting in accessibility issues.

In addition, key recommendations and options were considered in the LTP focusing on the improvement and development of existing pedestrian facilities. The future updates and development of the pedestrian facilities consider the following key locations:

- City Centre Gateways and Pedestrian Portals
- Neighbourhood Centres (Loughboy and Newpark/Eastern Environs)
- MacDonagh Junction Interchange Hub
- Major Junction Improvements
- School Permeability

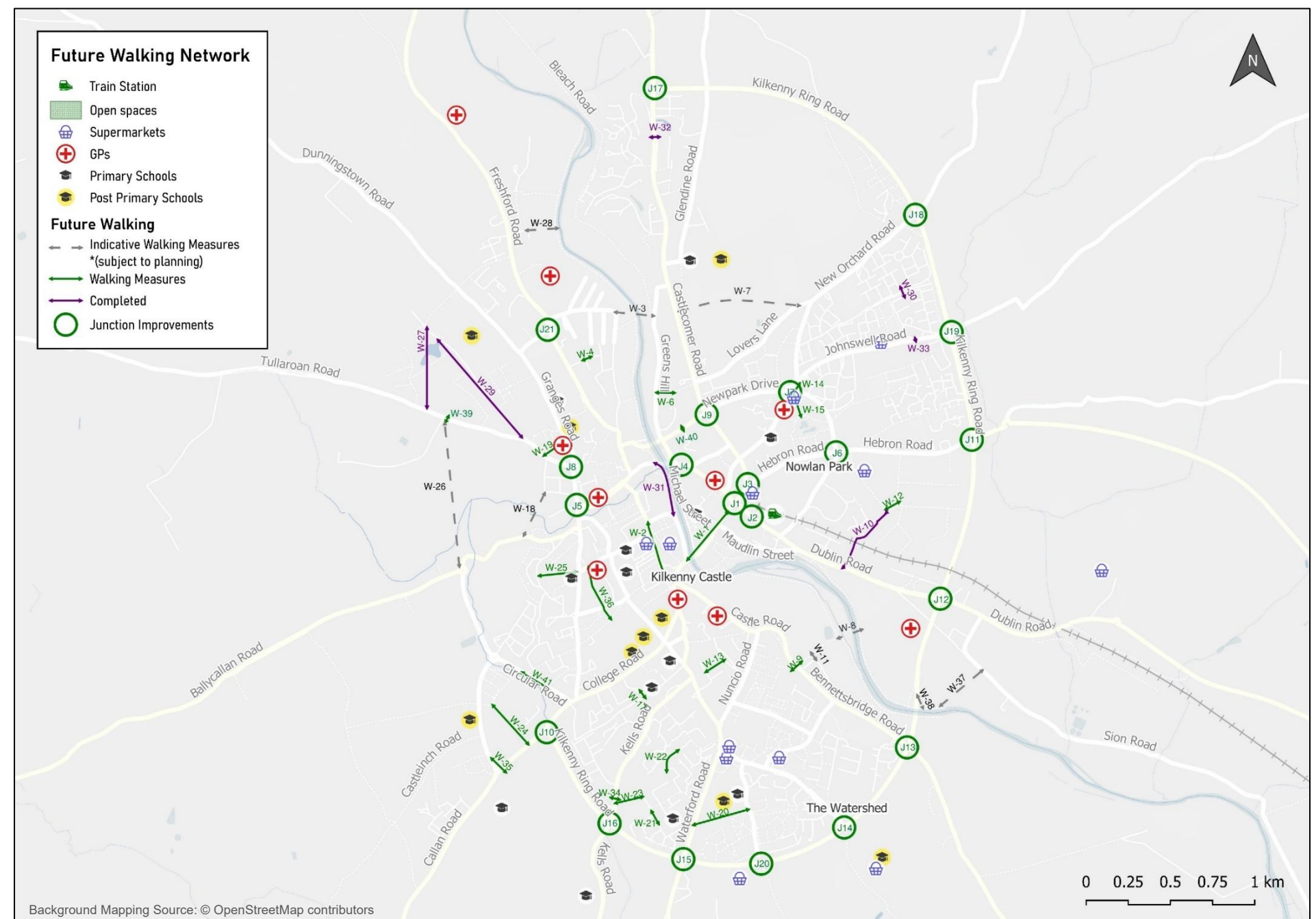


Figure 4-2: Proposed measures for the walking network

4.3 Cycling

The key issues identified for cycling include:

- Lack of dedicated cycle infrastructure;
- Severance caused by the River Nore, the Ring Road, and walled estates;
- Poor wayfinding and signage between key points, e.g. between MacDonagh Junction and the city centre;
- Intermittent and/or low standard cycle infrastructure at certain areas;
- Limited integration with other modes; and
- Lack of secure cycle parking.

A number of opportunities for cycling within Kilkenny have been identified by KCC as shown in Figure 4-3. These include proposals for new greenways, segregated cycle lanes, shared pedestrian and cyclist facilities, and other links feeding to the main cycling routes.

At a high level, the SUMP identifies a series of core network routes running through the city centre and connecting outwards to the various residential neighbourhoods providing routes to Breagh Valley, Loughboy, Newpark and Loughmacask, and connecting with other secondary links. Links proposed along Freshford Road, Bennettsbridge Road, and Waterford Road will form part of inter-urban links to serve longer-distance trips. Potential junction improvements for better cycling facilities and river crossings across River Nore are also identified.

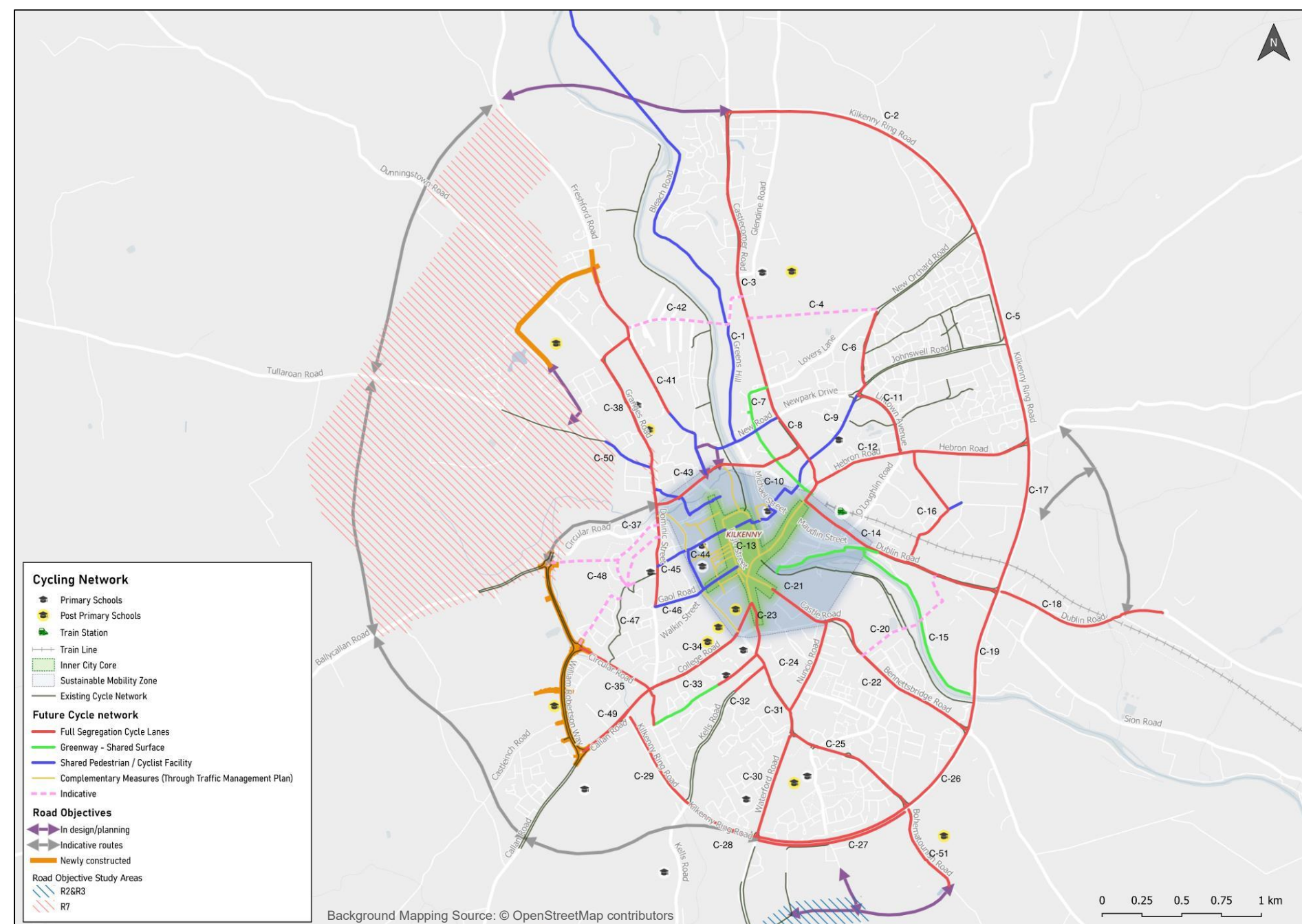


Figure 4-3: Proposed measures for the cycling network

These proposals closely align with the urban cycle network planned for Kilkenny as part of CycleConnects as shown in Figure 4-4. CycleConnects identifies various potential cycle route options through and around Kilkenny, categorised into Urban Primary routes, Urban Secondary routes and Inter-Urban routes.

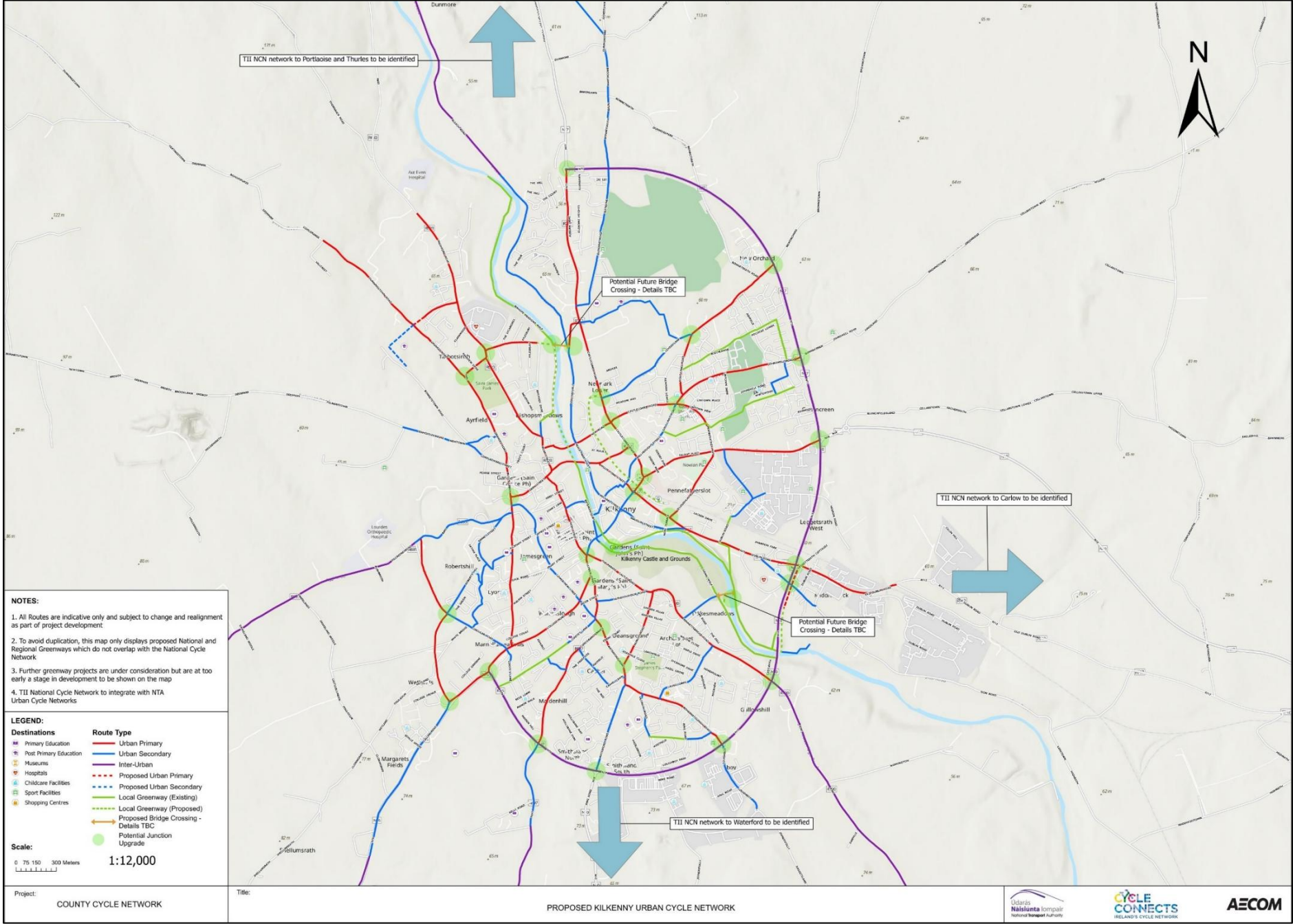


Figure 4-4 CycleConnects Kilkenny Urban Cycle Network

4.4 Public Transport

As described in section 3.3.7, Kilkenny City is currently served by two local bus routes. Route KK1 runs from Loughboy Retail Park to the N77 Roundabout, serving key locations such as Upper Patrick Street, MacDonagh Junction, and Castlecomer Road, while Route KK2 runs between Purcellsinch and St. Luke’s Hospital, with stops at Dublin Road, Newpark Shopping Centre, MacDonagh Station, Nowlan Park, and Loreto.

The key issues identified for the existing bus network are the following:

- Long run times
- Gaps in coverage
- Limited east-west connectivity
- Limited capacity to serve future transport demand

The SUMP identifies the need to rationalise existing routes to reduce travel times from origin to destination, improve reliability and frequency, and thereby encourage modal shift from private cars to public transport.

The SUMP recognises that some existing bus routes may need adjustments to align with the proposed traffic management arrangements. Figure 4-5 illustrates the proposed corridors for new bus routes, while also showing increase in the extent of the bus network with the introduction of new corridors serving key areas which are currently underserved. Table 4-1 provides a description for each of the proposed corridors and junctions that would benefit from bus priority improvements.

It is noted that the corridors presented in this section are based on one of the three traffic management options considered at Bateman’s Quay, John’s Bridge, and Rose Inn Street. These may therefore be altered in the future depending on the traffic management option that will emerge as the preferred one through traffic modelling carried out by KCC.

Bus priority junction measures could entail various improvements to the junction such as bus lanes on junction approaches and/or bus signal priority. A further study may be required to assess the level of intervention required at each junction.

In addition to the proposed redesign of the bus network, the SUMP includes the development of mobility hubs at key locations to facilitate seamless transitions between different modes of transport. These hubs will be categorised into two types:

- Primary Mobility Hubs: These will integrate multiple modes of transport including rail, bus services, shared micromobility options (e.g. bikes, mobility devices), taxis, and other supporting facilities. *Proposed locations:* Dean Street, Ormonde Road, and MacDonagh Junction.
- Secondary Mobility Hubs: Smaller in scale, these will mainly offer bike-sharing services and support local connectivity. *Proposed locations:* Sweeney’s Orchard, Bateman Quay, College Road, Waterford Road, Old Mart Road, and Newpark Drive.
- Park and Ride facilities are also proposed to be provided at locations outside the city centre served by the bus network, allowing users to intercept longer distance car trips at the Ring Road and complete the last leg by bus.

Together, these measures aim to enhance accessibility, encourage sustainable travel, and improve the overall efficiency of the transport network.

The phased public transport measures identified will help inform the National Transport Authority’s future bus network plans for the city and will be aligned with broader transport and public realm improvements across the city.

Table 4-1: Proposed bus routes

Corridor No.	Route Description	Route Characteristics
Corridor 1	Castlecomer Road Roundabout → Loughboy Industrial Estate	• Serves northern and southern employment zones • Connects via MacDonagh Junction, Ormonde Street, and Bateman Quay • Supports workers and visitors across the city
Corridor 2	Loughmacask → Cillin Hill Agri-Business Park	• Serves new housing in Loughmacask • Connects to the city centre via Bateman Quay and MacDonagh Junction • Ends at Cillin Hill, supporting access to employment and events
Corridor 3	Breagagh Valley → Johnswell Road	• Connects southwest residential areas to north-eastern residential/employment zones • Travels via Ormonde Street and Bateman Quay
Corridor 4	Aut Even Hospital → Kilkenny Retail Centre (Loughboy)	• Provides direct access to healthcare and retail • Passes through the city centre via Bateman Quay • Supports commuting and shopping trips
Corridor 5	Kilcreene Hospital → Hebron Industrial Estate	• Provides direct access to healthcare, retail, and employment • Connects to the currently underserved Hebron Industrial Estate during peak commuting hours • Provides access to Kilkenny train station • Potential to extend further east to serve Archersrath Nursing Home
Corridor 6	Waterford Road → Johnswell Road Roundabout	• School bus route operating during school hours • Provides access to retail • Provides connection between the currently underserved residential areas at Newpark and employment in the south

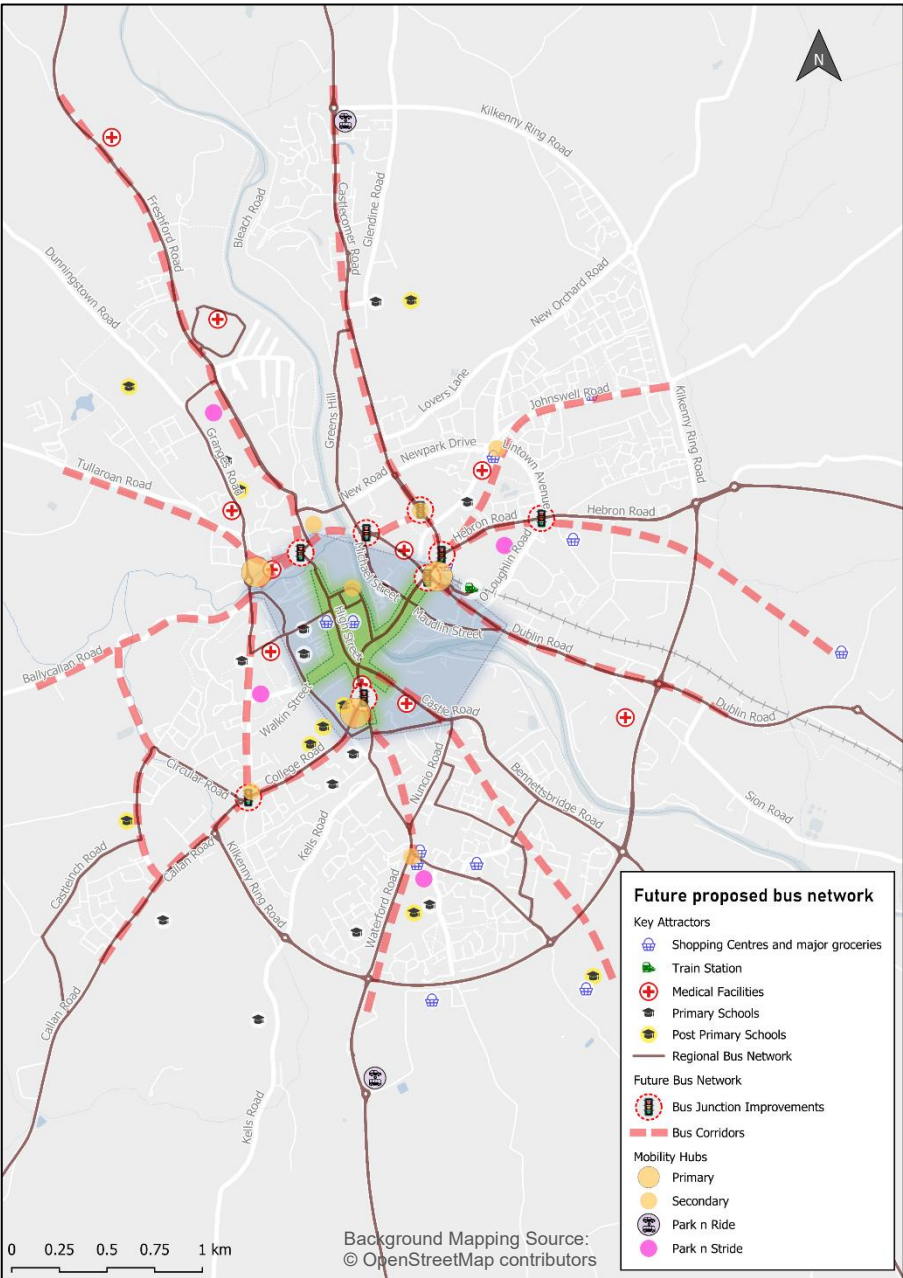


Figure 4-5: Proposed future bus network

4.5 Traffic Management Measures

The SUMP brings forward the Traffic Management Measures (TMMs) identified in the previous study. These have been tested in a previous study using the Kilkenny Local Area Model (LAM) in October 2024.

A key objective of the TMMs is to minimise through traffic traversing the city centre by implementing a system of one-way streets. This approach aims to reduce congestion, improve safety, and create a more liveable urban environment.

Table 4-2 outlines the “softer” measures discussed above, which support the transition between Scheme 4 and Scheme 5. Table 4-3 presents the proposed TMMs, grouped according to their respective ‘Schemes/Packages’.

Modelling has been conducted to date on various scenarios which will help inform future proposals to be put forward for delivery and forms part of Scheme 3 (S3). This will assist in identifying the option that reduces through-traffic movement within the city centre while also considering the potential impact of redistributed traffic on congestion levels elsewhere across the network. The final traffic management measures for Rose Inn Street, Bateman Quay, John’s Bridge, and John Street Lower will be determined based on the outcomes of the on-going business cases outside this SUMP.

In addition to the previously identified TMMs, the SUMP introduces a set of “softer” behavioural change measures. These involve converting selected two-way streets into shared streets that prioritise pedestrians and cyclists over motorised traffic where feasible. Such measures often require minimal physical intervention such as traffic calming measures and surface treatments, where possible, to encourage behavioural change. They would also act as transitional interventions which are intended to bridge the gap between the implementation of Scheme 4 and Scheme 5, allowing the city to begin realising benefits in terms of walking, cycling and public realm improvements ahead of full scheme delivery. These “softer” measures would require further planning and discussion.

The successful implementation of Scheme 5, followed by Scheme 6, is contingent on the delivery of Road Objective 5, which is expected to be realised in the long term (see Section 3.3.8 for further details). The softer measures proposed in this plan are therefore not only beneficial but also serve as enablers for the more infrastructure-intensive schemes to follow.

Table 4-2: Proposed "soft" measures

TMM	Scheme Description
TMM16	Black Mill Street as a quiet street
TMM17	James St as street shared street where cyclists and motor vehicles share the carriageway.
TMM18	Kickham Street as a quiet street
TMM19	Parnell Street as a quiet street
TMM20	Michael Street as a quiet street

Table 4-3: Proposed Traffic Management Measures

TMM	Scheme	Scheme Description
TMM1	S1	Maintaining existing traffic free access only environment on St Kieran's Street (all day)
TMM2		Maintaining existing one-way traffic movement on High Street
TMM3		Maintaining existing one-way traffic movement on Rose Inn Street (all day)
TMM4		Maintaining existing traffic free environment on part of James Street from 11:00 – 19:00 with one-way inbound movement allowed outside those hours
TMM5	S2	Phased introduction of pedestrianisation on High Street to coincide with festivals/events or other time periods from 11:00 to 19:00 (with exception for public transport, deliveries, emergency vehicles, residents, blue badge holders and business owners), as agreed.
TMM6	S3	S3a: One-way traffic movement on Bateman Quay from Market Yard car park to Rose Inn Street (all day) One-way traffic movement on John’s Bridge and John Street Lower (all day)
		S3b: One-way traffic movement on Rose Inn Street, Johns Bridge and Johns Street Lower (all day)
TMM7	S4	One-way inbound traffic movement on Ormond Road (all day)
TMM8		One-way outbound traffic movement on Patrick Street Upper (all day)
TMM9		Contra flow traffic movement (driving on the right side of the road) on Jacob Street (all day)
TMM10	S5	One-way inbound traffic movement on Black Mill Street (all day)
TMM11		One-way outbound traffic movement on Kickham Street (all day)
TMM12		One-way northbound traffic movement on Dominic Street from Kickham Street to Kennyswell Road (all day)
TMM13		One-way southbound traffic movement on Stephen Street (all day)
TMM14		One-way northbound traffic movement on Parnell Street (all day)
TMM15	S6	One-way system on Green’s bridge. Dependent on extension of the ring road and Sweeney’s Orchard Masterplan

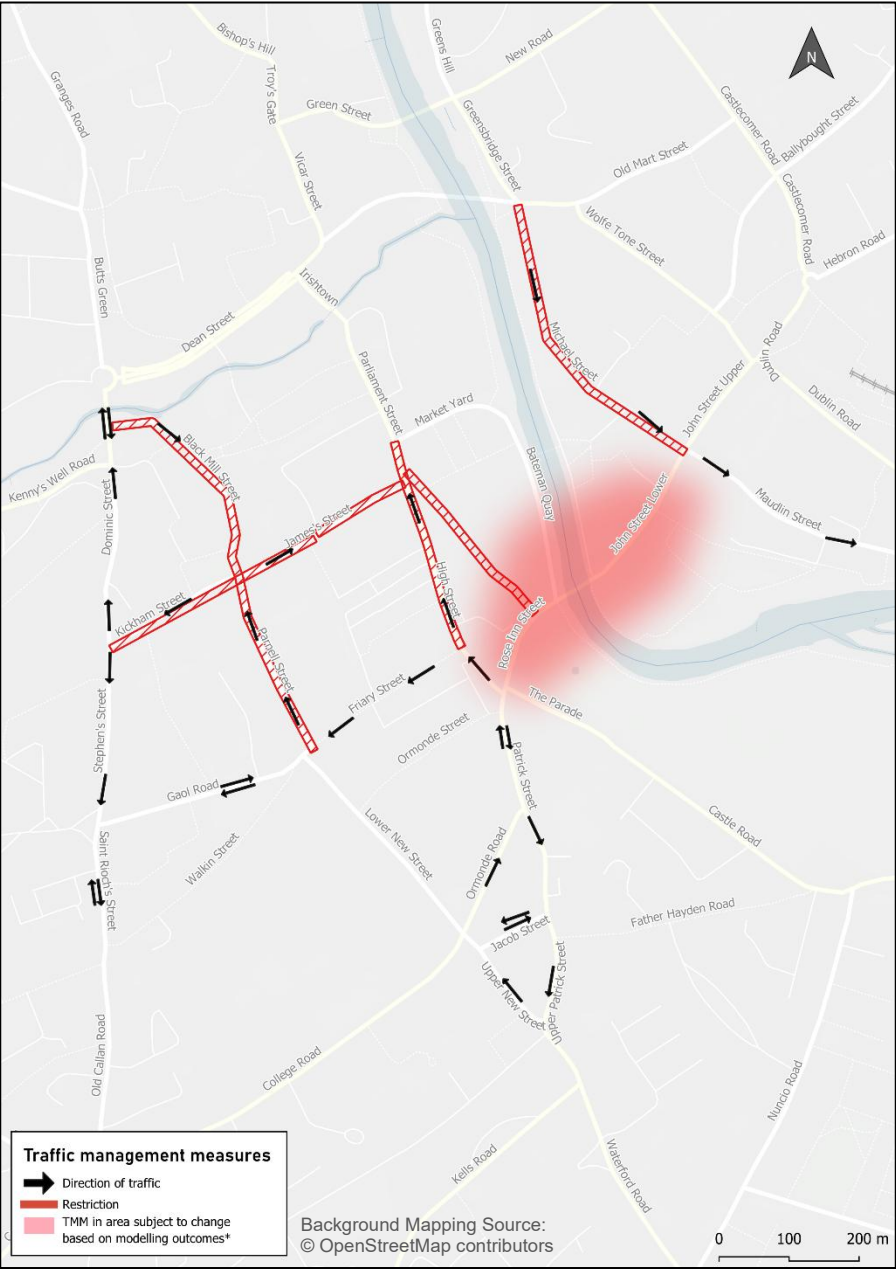


Figure 4-6: Traffic Management Measures

4.5.1 HGV Plan

One of the weaknesses identified as part of the baseline assessment and the SWOT analysis carried out was the high presence of HGVs in the city and along school routes. This contributes to traffic in the city centre and raises safety issues around school areas.

Ensuring access for deliveries while also managing the movement of HGVs balancing the needs of local businesses with the safety and quality of the transport environment for all road users is a key consideration for KCC.

KCC's HGV Plan set out as part of the Discussion Document and work carried out to date by KCC was reviewed as part of the preparation of the SUMP, and additional suggestions were made. Figure 4-7 illustrates the HGV Plan for Kilkenny.

As shown in Figure 4-7, HGV movement will be facilitated through the main arterial and collector roads in Kilkenny which will allow two-way access, while one-way access will be provided along certain links such as New Road, Kennyswell Road, and Freshford Road. HGV movement will not be allowed on local access links where the nature of the surrounding area does not allow the movement of heavy vehicles, while access to businesses and industrial premises will be maintained using alternative links.

Overall, the aim of the SUMP is to maintain efficient access to key retail, commercial and industrial zones, while also minimising unnecessary HGV movements through the city core, as well as residential and school areas.

In this context, it is proposed that a delivery schedule is developed, that notes certain delivery time restrictions are implemented in the city core, such as restricting HGV movements between 8am and 6pm for the central part of the city, as well as along Waterford Road, which provides access to the schools in that area.

In addition, KCC will explore the provision of a logistics hub to provide a central facility where goods from suppliers will be consolidated, sorted, and transferred to smaller vehicles for final delivery. This will allow for more efficient logistics within the city connecting supply chains with local distribution networks, providing multiple benefits for the city, such as alleviating traffic congestion by moving HGVs outside the city centre, reducing noise and improving local air quality. The potential park and ride locations identified as part of the SUMP could also be considered by KCC for the implementation of a potential logistics hub in the future. Parcel lockers could also be provided outside the city centre at strategic locations such as transport hubs, retail centres and community centres allowing residents to collect and return parcels without the need for home deliveries. By consolidating multiple deliveries to a single secure location, these would help reduce the number of individual van trips into residential areas.

To ensure the effectiveness of the proposed HGV movement strategy and enhance safety and traffic flow, HGV restrictions including permitted routes, time-based access limitations, and restricted zones should be clearly enforced and visibly communicated at all relevant locations. These may include strategic signage at key junctions and entry points to restricted areas, real-time digital wayfinding systems to guide HGV drivers, physical indicators such as road markings or barriers where applicable. Doing so would help ensure compliance, reduce unintended violations, and support the broader goals of traffic reduction, improved safety, and more active travel friendly areas.

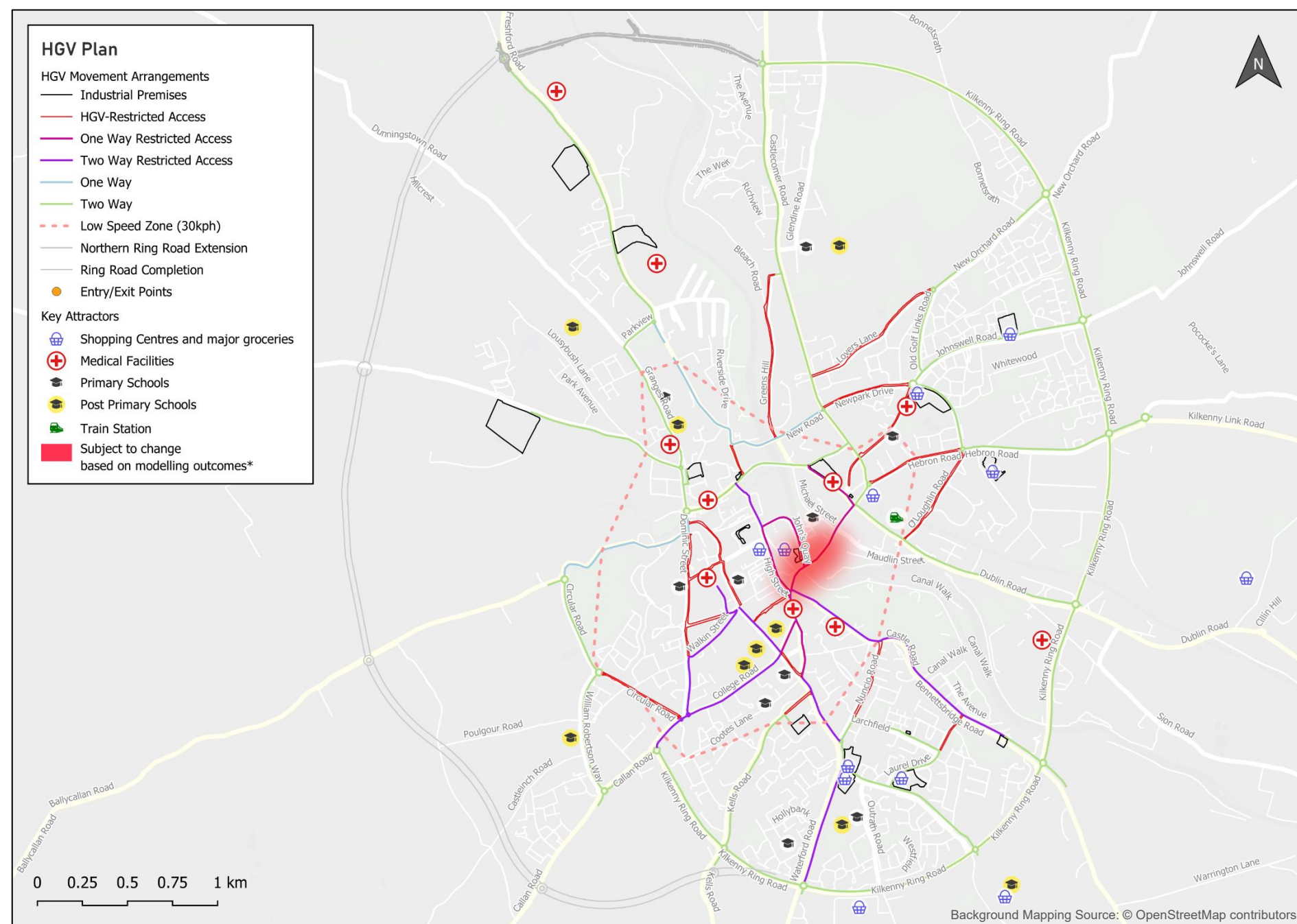
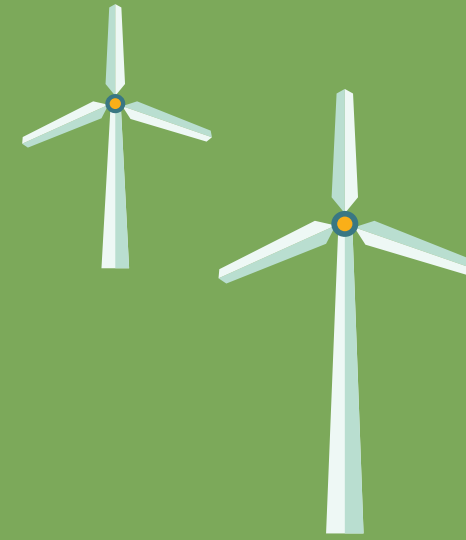


Figure 4-7: HGV Plan

Section 5

Options Assessment



5. Options Assessment

This chapter outlines the process applied to assess the long list of potential transport options developed as described in chapter Options Development.

5.1 Methodology

To determine the preferred options for the inclusion in the KSUMP, the long list of options were passed through the following process:

- **Stage 1 Options Screening:** The long list of options were screened against a set of criteria, such as cost, feasibility, environmental impact, and alignment with the overarching principles and objectives. This is to identify which ones should be discontinued, which could pass directly to the draft SUMP, and which require further assessment.
- **Stage 2 Interim Multi-Criteria Analysis (MCA):** Options requiring further analysis were passed through an MCA with qualitative and quantitative indicators used to score each option against the study objectives. Then, the overall assessment under each objective took the form of a score according to a five-point scale as described in Table 5-1.
- **Stage 3 Recommended Transport Network:** Options passing Stage 1 and Stage 2 formed the initial draft SUMP for public consultation.
- **Stage 4 Final Transport Network:** Feedback from key stakeholders and the public consultation process will be used to refine the preferred Plan. The following sections provide a more detailed description of each of the stages outlined above.

It is noted that the measures proposed for the public transport network were not passed through the same MCA process given the nature of the proposals, which essentially constitute part of an overall plan proposed to be implemented in a phased manner. In this context, there was no need for a comparative assessment of these measures.

In addition, the complementary measures proposed as part of the SUMP were also not assessed through an MCA given that all these measures are proposed to be implemented to support the recommended transport networks and therefore, a comparative assessment of those were not deemed necessary.

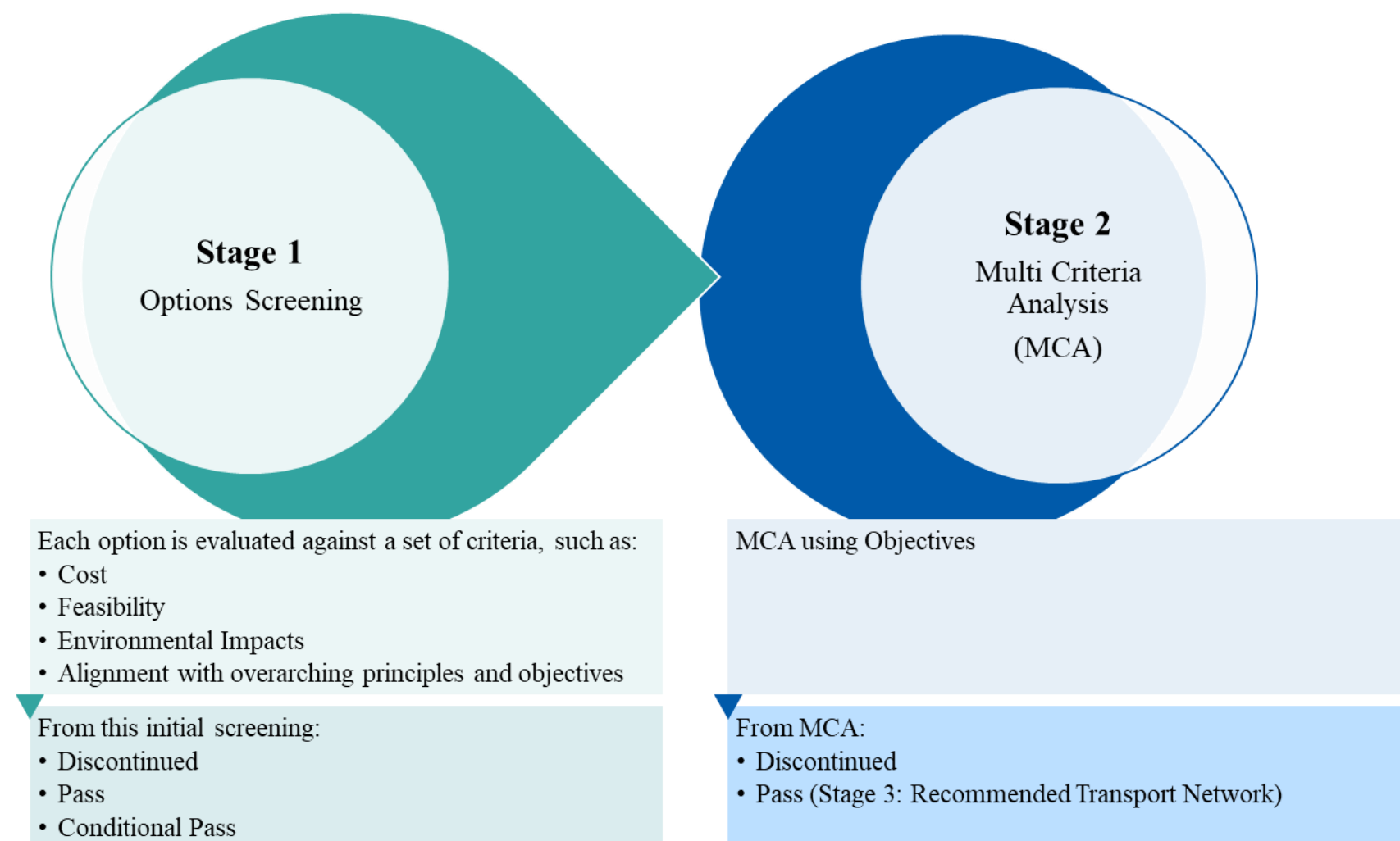


Figure 5-1: Options Assessment Process

Table 5-1: MCA scoring system

	Highly Positive Impact
	Positive Impact
	Neutral Impact
	Negative Impact
	Highly Negative Impact

5.2 Walking

The proposed walking measures are shown in Figure 4-2.

The assessment of the long list of options for the pedestrian network under the SUMP objectives is presented in Table 5-2. This includes options for walking and junction improvements. All proposed schemes score well across all objectives, indicating the potential to deliver significant benefits.

Among the measures that score higher, it is noted that the proposed new pedestrian and cycle links across River Nore (W3 and W8) both achieve particularly high scores, showing the importance of addressing the severance caused by the river, providing more direct east-west connections.

The proposed pedestrianisation at High Street (W2), and the proposed new pedestrian link from Wolfe Tone Bridge to Bateman Quay linking to the skate park (W31) also perform strongly, which highlights their importance due to their location in the inner-city core area.

Permeability improvements also perform well under most criteria, particularly measures W11, W14, W15, and W20, improving access to key facilities and amenities in the area.

The assessment of the complexity of delivery considering the potential challenges of implementation, such as land acquisition, engineering constraints and cost highlight the measures that can be quick wins, presenting low-complexity and high potential benefits, as well as more ambitious schemes that, while requiring greater investment, will play an important role for achieving the goals of the Plan.

Overall, the MCA results show that all measures constitute worthwhile priorities and pass the assessment.

Table 5-2: Walking measures MCA

Measure	Scheme Description	SUMP Objectives													Complexity of Delivering [L, M, H]	Pass/Fail
		O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13		
W-1	Improve pedestrian wayfinding and legibility between Kilkenny Station and City Core														L	Pass
W-2	Phased introduction of pedestrianisation on High Street to coincide with festivals/events or other time periods from 11:00 to 19:00 (with exception for public transport, deliveries, emergency vehicles, residents, blue badge holders and business owners), as agreed.														M	Pass
W-3	New cycle/ pedestrian link at the River Nore – north crossing														H	Pass
W-4	New pedestrian link at Greensfields Court to Loreto Avenue														M	Pass
W-6	New pedestrian link at Broguemakers hill to Greenhill to facilitate shared walking and cycling facilities.														L	Pass
W-7	New pedestrian link at Newpark to Northwest														M	Pass
W-8	New cycle/ pedestrian link at River Nore – south crossing														H	Pass
W-9	New crossing facility Bennettsbridge road crossing to canal walk														L	Pass
W-10	Bishop Birch Link to Dublin Road														M	Pass
W-11	Dukesmeadow to Canal Walk														H	Pass
W-12	Bishop Birch Link to Hebron Road														M	Pass
W-13	Deans Court and Village Court to St Fiacre’s Place														M	Pass
W-14	Remove fencing from Lintown Grove to Newpark Shopping Centre														L	Pass
W-15	Lakeview Drive to Newpark Shopping Centre through Lakeside Medical														L	Pass
W-17	Coote’s Lane north-south connection														M	Pass
W-18	Kenneyswell Road to Lord Edward St via Waterbarracks														M	Pass
W-19	Lord Edward St to Granges Rd via Ayrefield Medical Centre														M	Pass
W-20	Waterford Road to Parcnogown via Presentation Secondary School														M	Pass
W-21	Hollybank Lane to Kilkenny Project National School														M	Pass
W-22	Springfields to Clongowan and Cashel Downs														M	Pass
W-23	The Paddocks to Kells Road														M	Pass
W-24	New Pedestrian Link from Callan Road to Castle Oaks														M	Pass
W-25	Emmet Street to Kickham Street/CBS primary														M	Pass
W-26	Pedestrian Link from Ballycallan Road to Tullaroan Road														H	Pass
W-27	Pedestrian Link from Bonnetstown Road to Dunningstown Road														H	Pass
W-28	Pedestrian Link from Freshford Road to River Nore North														H	Pass

Measure	Scheme Description	SUMP Objectives													Complexity of Delivering [L, M H]	Pass /Fail
		O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13		
W-29	Improved Pedestrian Link on Lousybush Lane														M	Pass
W-30	Pocoke Park to Old Golf Links Road														L	Pass
W-31	New Pedestrian link from St Francis Bridge to Bateman Quay linking to skate park														M	Pass
W-32	Castlecome Road (North) pedestrian crossing near new bus stop														L	Pass
W-33	Johnswell road pedestrian crossing near bus stop														L	Pass
W-34	Kells Road pedestrian crossing														L	Pass
W-35	Callan Road at William Roberston Way crossing improvements														L	Pass
W-36	Walkin Street to Kickham Street pedestrian improvements														L	Pass
W-37	Link from Ossory Pedestrian bridge to Dublin Road														M	Pass
W-38	Link from Ossory Pedestrian bridge to N10														M	Pass
W-39	Tullaroan Road near Dicksboro GAA crossing improvements														M	Pass
W-40	New crossing at New Road to connect to future greenway														L	Pass
W-41	New footpath along Circular Road southern section														M	Pass

Among the junction measures presented in Table 5-3, J1, J2, J3 are ranked highly and work as a suite of improvements which enhance the walkability and permeability of the MacDonagh Junction area and improving the connection from the train station to the city core. All junction improvements also improve on the severance of the ring road, improving permeability across and through to Kilkenny City.

Table 5-3: Walking measures - junction improvement measures MCA

Measure	Scheme Description	SUMP Objectives													Complexity of Delivering [L, M H]	Pass/Fail
		O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13		
J1	John Street / Dublin Road junction improvements														M	Pass
J2	MacDonagh junction / Dublin Road junction improvements														M	Pass
J3	Hebron Road / Castlecomer Street junction improvements														M	Pass
J4	Greens Bridge St / Wolfe Ton bridge junction improvements														M	Pass
J5	Dean Street / Water Barrack roundabout improvement														M	Pass
J6	Hebron Road / Pennyfeather Way / O'loughlin Road roundabout improvement														M	Pass
J7	Johnswell Road / Newpark Drive / Pennyfeather Way roundabout improvement														M	Pass
J8	Lord Edward St / Granges Rd/Butt's Green/Loreto View roundabout improvement														M	Pass
J9	Newpark Drive / Castlecomer New Road roundabout improvement														M	Pass
J10	Callan Road roundabout														M	Pass
J11	Hebron Road / Kilkenny Ring Road roundabout														M	Pass
J12	Dublin Road / Kilkenny Ring Road roundabout														M	Pass
J13	Bennettsbridge Road / Kilkenny Ring Road roundabout														M	Pass
J14	Bohernatounish Road / Kilkenny Ring Road roundabout														M	Pass
J15	Waterford Road / Kilkenny Ring Road roundabout														M	Pass
J16	Kells Road / Kilkenny Ring Road roundabout														M	Pass
J17	Castlecomer Road / Kilkenny Ring Road roundabout														M	Pass
J18	New Orchard Road / Kilkenny Ring Road roundabout														M	Pass
J19	Johnswell Road / Kilkenny Ring Road roundabout														M	Pass
J20	Kilkenny Retail Park / Kilkenny Ring Road roundabout														M	Pass
J21	Granges Road/ Freshford Road roundabout														M	Pass

5.3 Cycling

The proposed measures for cycling network are shown in Figure 4-3.

The assessment of the long list of options for the cycling network under the SUMP objectives is summarised in Table 5-4. The results show that all the proposed schemes would help to achieve the objectives of the SUMP delivering a coherent and well-connected cycling network.

Among the measures that score higher in the MCA, measure C-44, which proposes upgrades to the shared pedestrian/ cycle facilities west of High Street, performs particularly well highlighting the benefits of the measure for local connectivity, supporting the 10-minute city concept by improving access to key services and amenities, as well as supporting local economy and improving employment access by enhancing connectivity with those areas which present high employment density.

Measure C-14, which proposes a new and upgraded fully segregated cycle lane along Dublin Road from MacDonagh Junction to Old Dublin Road Roundabout, also performs strongly across the objectives, highlighting the importance of supporting integration with other transport modes by improving access to the rail station.

In addition, measures C-34 and C-38, which propose new and upgraded fully segregated cycle lanes along Ormonde Road and College Road, as well as Butt's Green, Granges Road and Parkview Drive, receive high scores across multiple criteria, while also improving safety of routes to school.

Overall, the MCA results show that all measures are important elements of the future cycling network and pass the assessment.

Table 5-4: Cycling measures MCA

Scheme	Scheme Description	SUMP Objectives													Pass/Fail
		O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13	
C-1	Upgrade Greens Hill, Bleach Road and Green’s Bridge to shared pedestrian / cycle facility														Pass
C-2	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along N77 (Castlecomer Roundabout to New Orchard Road Roundabout)														Pass
C-3	Upgrade existing on-road cycle lane to fully segregated cycle lane along R712 Castlecomer Road (Castlecomer Roundabout to New Road Roundabout)														Pass
C-4	New cycle facilities connecting Castlecomer Road / Green's Hill with Lovers Lane														Pass
C-5	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along N77 (New Orchard Road Roundabout to Hebron Road Roundabout)														Pass
C-6	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along Golf Links Road (Johnswell Road to New Orchard Road)														Pass
C-7	New Greenway connecting MacDonagh Junction to Newpark Lower along disused railway line														Pass
C-8	Upgrade existing on-road cycle lane to fully segregated cycle lane along R712 Castlecomer New Road (New Road Roundabout to Dublin Road)														Pass
C-9	Upgraded and new shared pedestrian / cyclist facility along Golf Links Road / Ballybought Street														Pass
C-10	New shared pedestrian / cyclist facility connecting Castlecomer New Road to Michal Street (via Barrack Street and Wolfe Tone Street Car Park)														Pass
C-11	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along Pennyfeather Way														Pass
C-12	New and upgraded cycle facilities along Hebron Road to N77 / Hebron Road Roundabout														Pass
C-13	New shared pedestrian / cyclist facility connecting Bateman Quay to Michael Street														Pass
C-14	Upgraded cycle facilities along Dublin Road from MacDonagh Junction to Old Dublin Road Roundabout														Pass
C-15	New and upgraded cycle facilities connecting Canal Walk to Lacken Walk Boardwalk / N10 along Lacken Walk														Pass
C-16	New and upgraded fully segregated cycle lane connecting Dublin Road to Hebron Road (via Hebron Industrial Estate)														Pass
C-17	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along N10 (Hebron Road Roundabout to Old Dublin Road Roundabout)														Pass
C-18	New and upgraded cycle facilities along R712 Dublin Road (east of N10)														Pass
C-19	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along N10 (Old Dublin Road Roundabout to Bennettsbridge Road Roundabout)														Pass
C-20	New cycle facilities connecting Dublin Road to Bennettsbridge Road via new active travel bridge														Pass
C-21	Upgraded cycle facilities along the Parade (R700) between Kilkenny Castle and Castle Road														Pass
C-22	New cycle facilities along Bennettsbridge Road (R700) between Canal Walk and Bennettsbridge Road Roundabout														Pass
C-23	Provision of cycle facilities along Upper Patrick Street between Jacob Street and Waterford Road														Pass
C-24	Upgraded cycle facilities along Nuncio Road														Pass
C-25	Upgrade existing on-road advisory cycle lane to full segregated cycle lane along Bohernatounish Road from Waterford Road to Bohernatounish Road Roundabout														Pass
C-26	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along N10 (Bennettsbridge Road Roundabout to Bohernatounish Road Roundabout)														Pass
C-27	Provide upgraded cycle facilities along both sides of the N10 (Bohernatounish Road Roundabout to Waterford Road Roundabout)														Pass
C-28	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along the N76 (Waterford Road Roundabout to Kells Road Roundabout)														Pass

Scheme	Scheme Description	SUMP Objectives													Pass/Fail
		O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13	
C-29	Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along N76 (Bennettsbridge Road Roundabout to Bohernatounish Road Roundabout)														Pass
C-30	Upgrade existing on-road advisory cycle lane to full segregated cycle lane along Waterford Road (R910) between Bohernatounish Road Roundabout and Waterford Road Roundabout														Pass
C-31	New and upgraded cycling facilities along Waterford Road (R910) between Upper Patrick Street / Upper New Street and Bohernatounish Road														Pass
C-32	New and upgraded cycling facilities along Corcoran Terrace (R679) between Waterford Road and Kells Road														Pass
C-33	Improvements of the link along Coote's Lane which forms a greenway														Pass
C-34	New and upgraded fully segregated cycle lane along Ormonde Road and College Road (R909) between Upper Patrick Street and College Road Roundabout														Pass
C-35	Upgrade cycling facilities along Callan Road (R909) between Callan Road Roundabout and College Road Roundabout														Pass
C-37	New cycle facilities along Dominic Street to Dean Street														Pass
C-38	New cycle facilities along Butt's Green and upgrade Granges Road and Parkview Drive to fully segregated cycle lane														Pass
C-41	Upgrade to existing on-road mandatory cycle lane along Freshford Road / Bishop's Hill / Troy's Gate to fully segregated cycle lane and shared pedestrian / cycling facilities at Bishop's Hill / Troy's Gate due to space constraints														Pass
C-42	New cycle facility connecting Freshford Road (R693) and Castlecomer Road (R712) via The Sycamores and new active travel bridge over the Nore														Pass
C-43	New cycle facilities connecting Butt's Green and Parliament Street														Pass
C-44	Upgrades to shared pedestrian / cycle facilities west of High Street														Pass
C-45	Provision of Cycling Facilities on Kickham Street and James Street														Pass
C-46	Provision of Cycling Facilities on Gaol Road and Parnell Street														Pass
C-47	Provision of Cycling Facilities through Roberts Hill														Pass
C-48	Provision of active travel links from Breaghagh Valley to City Centre														Pass
C-49	Upgrade Cycling facilities on Callan Road Roundabout to William Robertson Way														Pass
C-50	Provision of cycle facilities on Lord Edward St														Pass
C-51	Provision of Cycle Facilities from Abbott roundabout to Ring Road														Pass

5.4 Road Network

5.4.1 Road Objectives

The assessment of the Road Objectives (shown in Figure 3-36) for the road network is presented in Table 5-5.

It is noted that road objective R6, which refers to the provision of a road link from Freshford Road to the new secondary school at Loughmacask and has already been completed, was removed from the assessment. Similarly, R12, which is already in progress, setting out the road infrastructure requirements in order to support additional future development with access off the Tullaroan Road, was also removed from the assessment.

In addition, following consultation with KCC, certain road objectives are not assessed here as they are currently going through full scheme assessments.

Measures R2 and R3 refer to the completion of the Outrath Road improvement scheme linking to the Bohernatounish Road, and providing a link road from Outrath Road onto Waterford Road, which constitute important measures for improving connections at the employment areas south of Loughboy. Consultants have been appointed to prepare the Preliminary Business Case for each project, and both projects are expected to be completed by 2029.

R5 requires further appraisal to determine its need following the implementation of other measures, such as the expansion of the public transport network and the development of complementary road infrastructure. It is suggested that R5’s role within the overall strategy be reassessed once the impacts of other interventions are better understood.

Measures R8 to R11 are focused on improving connections at the employment areas to the east of the city centre. These include proposals for a new connection from the Hebron Business Park to the N10 and Dublin Road (R9), as well as a second entrance to the Hebron Business Park from Hebron Road (R10), while a traffic strategy is proposed to be implemented for the whole Hebron area (R11). In addition, a route connection from the existing roundabout on the N10 at Blanchfieldsland to the Dublin Road (R8) is also among the proposals in the area. All these measures highlight the importance of increasing accessibility to the employment areas in the east, where the existing road network is less well-developed.

The results of the rest of the measures that were passed through the MCA show that all the measures receive satisfactory scores under all the SUMP objectives. Measure R7, which refers to the proposed link connecting Kilmanagh Road to Freshford Road received the highest score overall. It is noted that consultants have been appointed to complete the Preliminary Business Case for the connection from Kilmanagh to Freshford Road. Construction from Freshford Road to Tullaroan Road is expected to be complete by 2029, while the second section from Tullaroan Road Kilmanagh Road is expected by 2032.

It is also noted that the assessment for scheme R1 focuses on the remaining section between Freshford Road and Kilmanagh Road, excluding the section of the scheme between Castlecomer Road to Freshford Road for which a Project Outline Document has already been submitted and construction is scheduled to be complete by 2034.

Table 5-5: Road Objectives MCA

RO	Scheme Description	SUMP Objectives												
		O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13
R1	R1 (Section1): Reserve the proposed line of the western by-pass for the city from the Castlecomer Road to the Waterford Road free from development, including for a river crossing and seek approval from An Bord Pleanála for Phase 1 of the Western By-pass, the Kilkenny Northern Ring Road Extension.													
R4	Reserve the proposed line of a new road link from the Callan Road to the Waterford Road roundabout free from development.													
R5	Reserve the line of Phase 2 of the Central Access Scheme from the Waterbarrack roundabout to the roundabout on the Kilcreene Road. Proposed to link the circular road to the Central Access scheme. It is intended that this will alleviate traffic congestion along Kennyswell Road and allow for the introduction of a Scheme 5 of Traffic Management Schemes.													
R7	Progress the route selection, planning, and development of a road connecting Kilmanagh Road to Freshford Road.													
R13	To investigate, how the Objective R6 can be connected with the Tullaroan Road subject to appropriate traffic management regime.													

5.4.2 Traffic Management Measures

Table 5-6 summarises the assessment of the proposed traffic management measures against the objectives of the SUMP. The results show that all the proposed measures score well across the criteria, with measures TMM5, TMM6, TMM8 and TMM16, receiving the highest scores among all the measures.

Measures TMM5 and TMM6* refer to traffic management proposals focused on the inner-city core. Measure TMM5 forms part of Scheme 2 and proposes the phased introduction of pedestrianisation of High Street from 11am to 7pm with the exception of public transport. This measure is expected to have significant benefits, which are reflected on particularly high scores under almost all the objectives, while the complexity of delivery of this measure is classified as medium to high.

Measure TMM6 proposes changing Bateman Quay to one-way from Market Yard car park to Rose Inn Street. This measure forms part of scheme S3 along with TMM7, which proposes changing John’s Bridge and John Street Lower to one-way. Measure TMM6 receives high scores across all the objectives, while it presents medium complexity of delivery.

Measure TMM8 proposes changing Ormond Street to one-way inbound, forming part of scheme S4 along with one-way outbound movement on Patrick Street Upper (TMM9) and contra-flow movement (driving on the right side of the road) on Jacob Street (TMM10). Measure TM8 scores high across most of the objectives, while the complexity of delivery is classified as medium.

Measure TMM16, which also presents significant benefits for the achievement of SUMP objectives as reflected in the MCA, forms part of scheme S6 proposing a one-way system on Green’s Bridge. This measure is dependent on the extension of the Ring Road and Sweeney’s Orchard Masterplan, while the complexity of delivery is classified as high.

Overall, the results of the MCA show that all measures present benefits in terms of achieving the objectives of the SUMP and therefore pass the assessment at this stage. The measures that score higher in the MCA are more ambitious proposals presenting a medium or high complexity of delivery, but they are all worthwhile measures due to their capability to achieve higher benefits. On the other hand, other measures such as the measures that form part of scheme S1, constitute quick wins as they can bring about some positive outcomes while also presenting low complexity of delivery.

**As noted in an earlier section of the Plan, TMM6 modelling has been conducted to date on various scenarios which will help inform future proposals to be put forward for delivery, which forms part of Scheme 3 in Table 5-6. While an MCA has been completed for one of the options (S3a as per Table 4-3) for the purpose of this assessment, the final traffic management measures for Rose Inn Street, Bateman Quay, John’s Bridge, and John Street Lower will be informed by the outcome of the ongoing business case exercise.*

Table 5-6: Traffic Management Measures MCA

TMM	Scheme	Scheme Description	SUMP Objectives													Complexity of Delivering [L, M H]	Pass/Fail
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13		
TMM1	S1	Maintaining existing traffic free access only environment on St Kieran's Street (10:30 – 19:00)														Low	Pass
TMM2		Maintaining existing one-way traffic movement on High Street														Low	Pass
TMM3		Maintaining existing one-way traffic movement on Rose Inn Street (all day)														Low	Pass
TMM4		Maintaining existing traffic free environment on part of James Street from 11:00 – 19:00 with one-way inbound movement allowed outside those hours														Low	Pass
TMM5	S2	Phased introduction of pedestrianisation on High Street to coincide with festivals/events or other time periods from 11:00 to 19:00 (with exception for public transport, deliveries, emergency vehicles, residents blue badge holders and business owners) as agreed.														Medium/High	Pass
TMM6*	S3*	One-way traffic movement on Bateman Quay from Market Yard car park to Rose Inn Street (all day)														Medium	Pass
		One-way traffic movement on John’s Bridge and John Street Lower (all day)														Medium	Pass
TMM7	S4	One-way inbound traffic movement on Ormond Road (all day)														Medium	Pass
TMM8		One-way outbound traffic movement on Patrick Street Upper (all day)														Medium	Pass
TMM9		Contra flow traffic movement on Jacob Street (all day)														Medium	Pass
TMM10	S5	One-way inbound traffic movement on Black Mill Street (all day)														High	Pass
TMM11		One-way outbound traffic movement on Kickham Street (all day)														High	Pass
TMM12		One-way northbound traffic movement on Dominic Street from Kickham Street to Kennyswell Road (all day)														High	Pass
TMM13		One-way southbound traffic movement on Stephen Street (all day)														High	Pass
TMM14		One-way northbound traffic movement on Parnell Street (all day)														High	Pass
TMM15	S6	One-way system on Green’s bridge. Dependent on extension of the ring road and Sweeney’s Orchard Masterplan														High	Pass
TMM16	-	Black Mill Street as low-speed street shared street where cyclists and motor vehicles share the carriageway														Medium	Pass
TMM17		James St as low-speed street shared street where cyclists and motor vehicles share the carriageway.														Medium	Pass
TMM18		Kickham Street as low-speed street shared street where cyclists and motor vehicles share the carriageway														Medium	Pass
TMM19		Parnell Street as low-speed street shared street where cyclists and motor vehicles share the carriageway														Medium	Pass
TMM20		Michael Street as low-speed street shared street where cyclists and motor vehicles share the carriageway														Medium	Pass

Section 6

Recommended Transport Networks



6. Recommended Transport Network

6.1 Introduction

The recommended transport network for Kilkenny outlines the development and implementation of transport measures designed to achieve the SUMP's objectives.

Collectively, these interventions aim to create a balanced and integrated transport network, facilitating the sustainable growth of Kilkenny and enhancing the quality of life for its residents.

6.2 Kilkenny City

The recommended transport network shown in Figure 6-1, consists of the following:

- Recommended Walking and Cycling Network
- Recommended Road Network
- Recommended Public Transport Network
- Proposed Complementary Measures
 - Supporting measures for active travel
 - Supporting measures for public transport
 - Proposed Car Parking Strategy

6.2.1 Recommended Active Travel Network

The recommended active travel network is comprised of:

- Core network cycle routes providing both east-west and north-south connectivity.
- Inter-urban links along Freshford Road, Bennettsbridge Road, and Waterford Road and crossing improvements at the Ring Road roundabouts.
- New active travel connections addressing key desire lines and improving permeability.
- Improvements of existing facilities at key locations including the city centre, school areas, neighbourhood centres (Loughboy and Newpark).
- Improved access to MacDonagh Junction Interchange Hub.
- Major junction improvements.
- Traffic calming measures.
- Wayfinding and signage improvements.

6.2.2 Recommended Road Network

The recommended road network is comprised of:

- Key road objectives identified in the KCCDP, including the extension of the Kilkenny Ring Road.

- New road links where required, including connections to the employment areas to the east of the city centre such as Hebron Business Park, as well as other links proposed such as link from the R695 Kilmanagh Road to Freshford Road.
- Traffic management measures to minimise through-traffic at the city centre implementing a system of one-way streets.
- “Soft” measures including converting streets to shared spaces that prioritise pedestrians and cyclists over motorised traffic.
- HGV Plan proposed to reduce the presence of heavy vehicles in the city alleviating the associated traffic while ensuring access to businesses and industrial premises is maintained (refer to Section 4.5.1 for more detail).
- Car parking strategy (refer to Section 6.4.3 for more detail)

6.2.3 Recommended Public Transport Network

As described in Section 4.4, the recommended public transport network consists of a series of measures which are proposed to be implemented in a phased manner. The proposals include the following:

- Extension of bus route KK1 to serve Aut Even Hospital in the north and the new CBS Secondary School during school hours, with opportunities to increase the frequency of services in the future.
 - Rationalisation of existing bus routes to improve directness and reduce journey times between key origins-destinations.
 - Introduction of new bus corridors to cover gaps in coverage and serve future demand.
 - Introduction of bus priority improvements at key junctions within the city centre to avoid disruption to services due to congestion.
 - Mobility Hubs; and
- Park & Ride facilities.

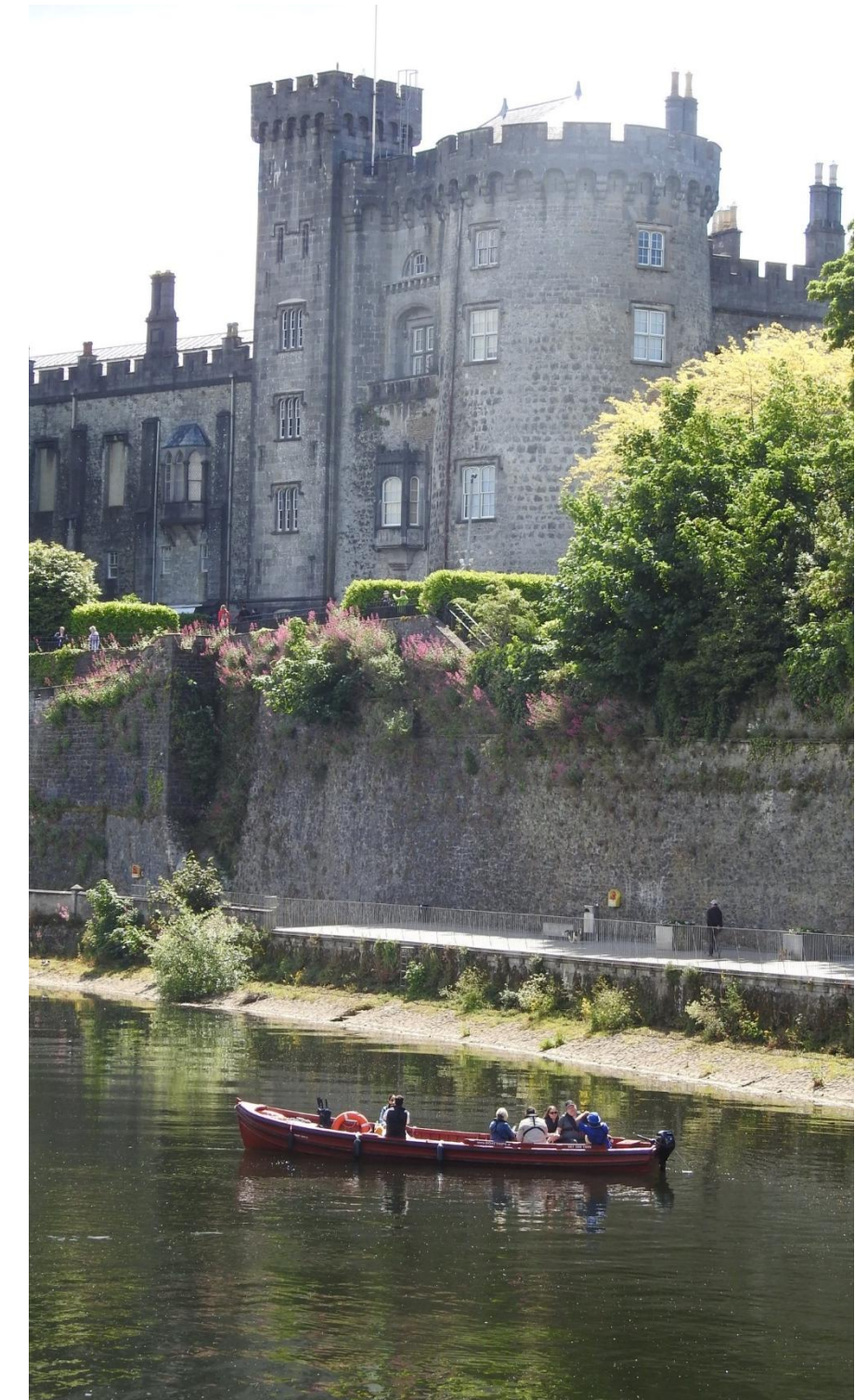
6.3 Kilkenny City Centre

Figure 6-1 illustrates the recommended transport network for Kilkenny City Centre focusing on the measures that apply to the city core area.

The recommended measures for the city centre include:

- Wayfinding improvements, particularly between Kilkenny train station and city core.
- Phased pedestrianisation of High Street prioritising active modes over car traffic.
- New greenway connecting Broguemaker's Hill to MacDonagh Junction.
- Cycle lane upgrades and expansion.
- New pedestrian and cyclist links to form a coherent network and provide more direct connections to key facilities.

- Improvement of pedestrian and cyclist facilities at key junctions, such as John Street / Dublin Road junction, MacDonagh junction, and other key junctions.
- Mobility hubs at key locations include MacDonagh Junction, Ormonde Road, Dean Street, Abbey Quarter, Bateman Quay, Old Mart Road, Newpark Drive, College Road and/or other.
- Traffic management in the city core to minimise through-traffic
- Implementation of a car parking strategy.



Recommended Transport Network

- Train Station
- Train Network
- Sustainable Mobility Zone
- Inner City Core
- Transport Network**
 - Walking Measures
 - Junction Improvements
 - Cycling Network
 - Bus Corridors
- Road Objectives**
 - In design/planning
 - Indicative routes
 - Newly Constructed
- Road Objective Study Areas**
 - R2&R3
 - R7
- Mobility Hubs**
 - Primary
 - Secondary
 - Park n Ride
 - Park n Stride

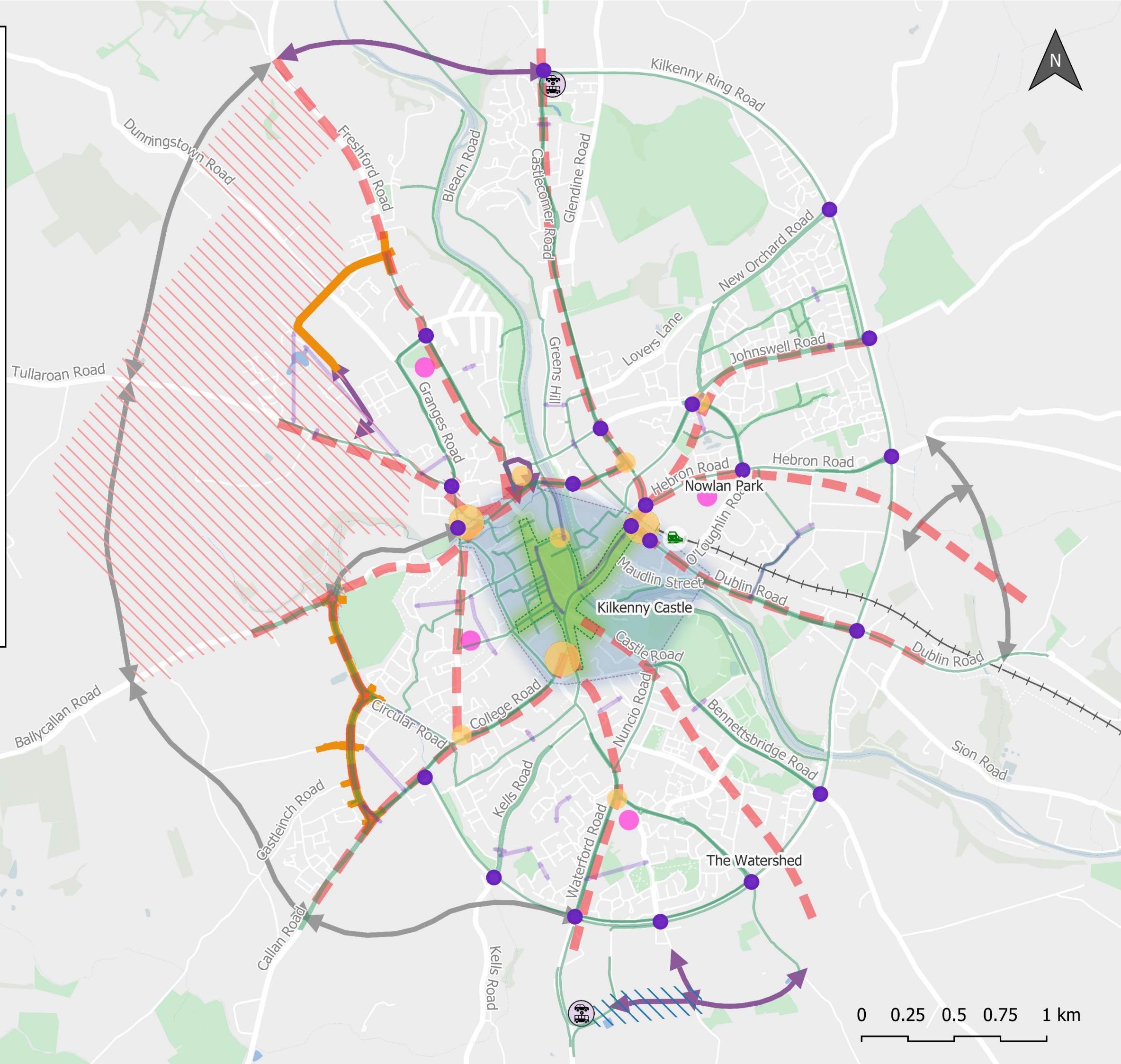
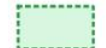


Figure 6-1 Recommended Transport Network

Recommended Transport Network - City Core

 Sustainable Mobility Zone

 Inner City Core

 Train Station

 Train Network

Transport Network

 Walking Measures

 Cycling Network

 Bus Corridors

 Bus Junction Improvements

Traffic Management Measures

 Direction of traffic

 Restriction

 TMMs in area subject to change based on modelling outcomes

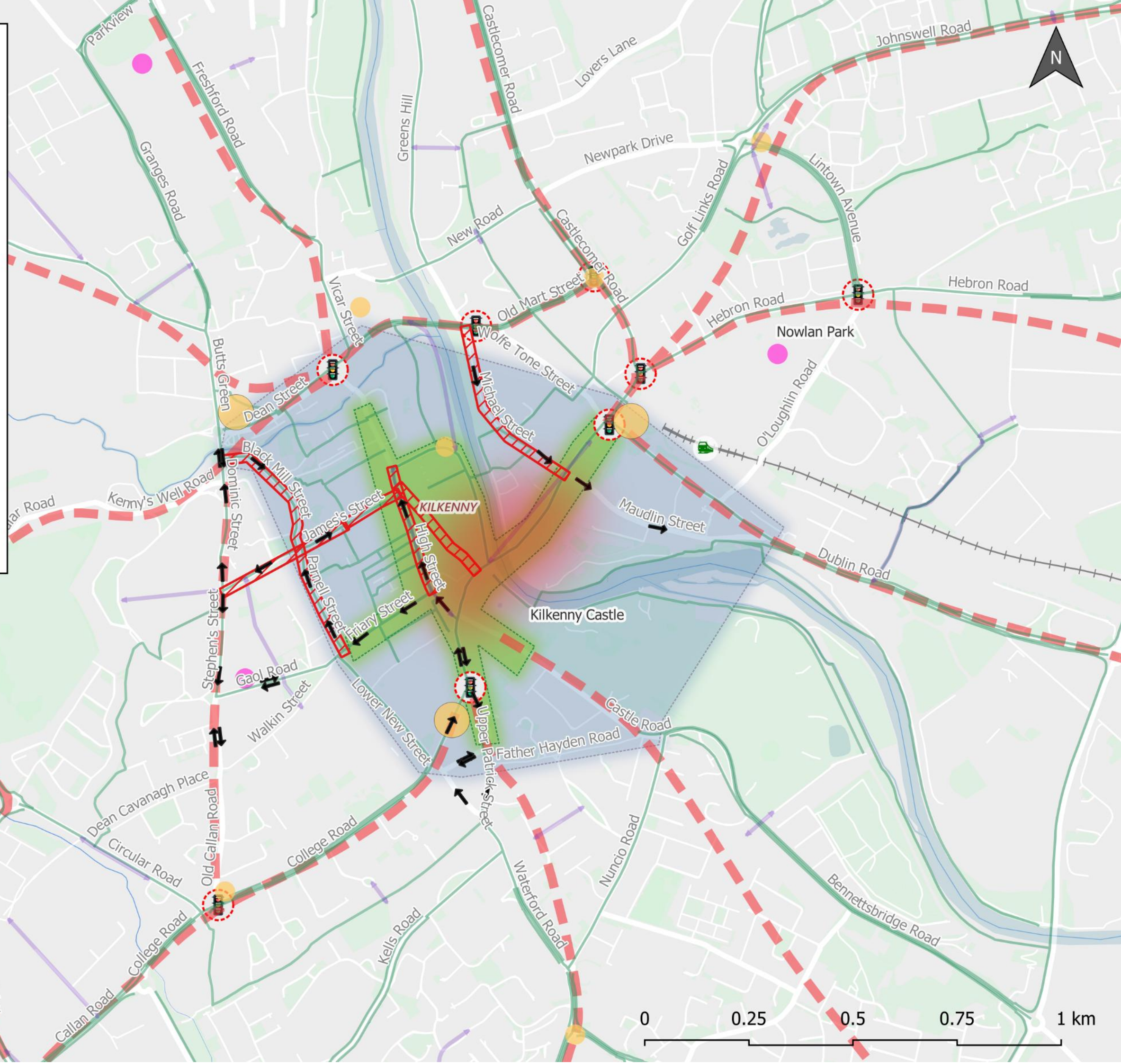
Mobility Hubs

 Primary

 Secondary

 Park N Stride

Figure 6-2 Recommended Transport Network - City Core



6.4 Complementary Measures

In addition to the measures outlined in the previous sections, a series of complementary measures are also proposed to support the principles and objectives of the SUMP.

Complementary measures for active modes and public transport are described in sections 6.4.1 and 6.4.2, respectively. In addition, section 6.4.3 presents a set of measures focused on car parking setting out a car parking strategy proposed for Kilkenny.

6.4.1 Complementary measures for active modes

Pedestrian and cyclist signal improvements

Improving and prioritising pedestrian and cyclist movements by optimising traffic signals where possible to facilitate the unhindered movement of pedestrians and cyclists and reduce interaction with vehicular traffic.

Bicycle parking

Maintenance and upgrade of existing bicycle parking facilities where deemed required in order to provide high quality facilities for users. Additional provision of bicycle parking at key locations such as public parks, schools, shopping areas, employment centres, as well as near bus stops to facilitate multi-modal trips.

Bike Share and Cargo Bike Rental Scheme

Availability of a bike share scheme in Kilkenny to promote the benefits of cycling providing easy access to bicycles for everyone, which could help to promote cycling culture. In addition, a cargo bike rental scheme could also be implemented to facilitate the use of bicycles for additional purposes requiring load carrying, such as shopping, transporting children to school or other.

Safe Routes to School Zones

Improvements along the access routes to schools by improving the walking and cycling infrastructure, highlighting the presence of schools using road surface treatments and road painting, encouraging traffic to slow down in the school zone area, and preventing parking in those areas using pencil bollards or similar.

Wayfinding

Improvements in signage at key locations, particularly between MacDonagh Junction Station and the city core, including directional signs and information, as well as area maps provided at strategic locations across the study area to improve understanding of the place and orientation for both locals and visitors.

Car Sharing and Carpooling Scheme

By reducing the number on single occupancy vehicles on the road, car sharing can significantly alleviate traffic congestion, lower greenhouse gas emissions, and decrease the demand for parking infrastructure. Implementing shared mobility solutions can also offer cost-effective transport alternatives for residents, support last-mile connectivity and complement existing public transport provision. To encourage adoption, KCC could investigate implementing targeted incentives such as mandating

carpooling for specific user groups (e.g., school transport), allocating dedicated parking spaces for shared vehicles in high-demand areas, and integrating car sharing into broader urban mobility platforms.

Traffic Calming

To provide a safe and pleasant environment for people to walk and cycle in Kilkenny, additional traffic calming measures could be implemented where appropriate. These may include the implementation of speed bumps, road surface treatments and/or reduction of junction corner radii at certain locations.

Placemaking and Public Realm Improvements

Enhancement of public spaces through landscape improvements including trees and planting, lighting, benches, public art, and other elements that improve the quality of space making it more functional, welcoming and aesthetically pleasant for pedestrians and cyclists.

Some of the key current plans for placemaking in Kilkenny include Abbey Quarter, which will regenerate the brownfield site providing mixed uses and creating new public spaces, the reconfiguration of the Market Yard car park to form a Market Square with upgraded landscaping and public spaces, St Kieran's Street improvement scheme, and Carnegie Library refurbishment project which will also enhance the surrounding public realm.

Kilkenny County Council will continue to engage with the access group and older persons council and ensure that all schemes comply with Universal design guidance.

Filtered Permeability

Filtered permeability is also a way to create more walkable and cycle-friendly spaces designing areas in a way that pedestrians and cyclists can pass through freely while through motor traffic is not allowed. Bollards, planters, and other street furniture can be used for this purpose, creating at the same time a more aesthetically pleasant area.

6.4.2 Complementary measures for public transport

Improved access to bus stops and train station

Improvements in walking and cycling infrastructure near bus stops and the train station ensuring that footpaths and cycleways leading to those are well-maintained, wide and free of obstacles. In addition, KCC can ensure that direct access to bus stops is built-in to any new development areas to encourage the use of public transport from the outset. Furthermore, the provision of ramps and low kerb designs to enhance accessibility for people with mobility impairments should also be a key priority.

Bus Stops

Installation of shelters and seating at bus stops to provide weather protection and make waiting more comfortable, especially during adverse weather conditions. In addition, improvements in lighting to improve safety and visibility at night where needed, as well as the provision of real-time information displays to facilitate users better plan their trip, would improve quality of bus stop facilities.

Bike Parking at Bus Stops and Train Station

Providing good quality, secure and covered cycle parking at selected bus stops, as well as MacDonagh train station, is important for facilitating intermodal trips allowing people to cycle to the bus stop or train station and securely park their bike to continue their trip using public transport.

Mobility Hubs

Creating mobility hubs at strategic locations where people can access and transition between various modes of transport, including bike sharing, public transport, micromobility options and potentially car sharing.

Enhance Rail Frequency at Rail station

Improving the frequency of rail services between Kilkenny and key surrounding towns and cities could support both tourism and commuter travel. It would be beneficial to investigate the need for a more reliable and frequent rail service that would offer a practical and sustainable alternative to car travel, encouraging a modal shift among those who currently drive to Kilkenny for work or leisure. By enhancing rail accessibility, the city can reduce road congestion, lower transport-related emissions, and improve overall connectivity, making Kilkenny more attractive and accessible for residents and visitors alike.



Figure 6-3: Examples of Public Realm Improvements and Filtered Permeability Measures

6.4.3 School Services

School services are currently catered for in the city, either adjacent to individual schools or in bus bays such as the facility on Gaol Road. The relocation of secondary schools and greater geographical distribution of schools may result in a requirement for additional parking provision or relocation of school bus services from the Gaol Road. This will be monitored in conjunction with the school bus service providers and the Department of Education and Youth.

The council will facilitate the provision of bus shelters where feasible in the city as the need arises and as resources permit.

6.4.4 Car Parking Strategy

The strategy will aim to use existing public and private parking more efficiently and will be delivered in phases, beginning with manageable changes and moving toward a long-term vision of people-first city centre.

Defining the zones (Figure 6-4)

Inner City Core Zone (green) - This is Kilkenny’s historic centre, with narrow streets and high pedestrian activity. It includes Parliament Street, High Street, St Kieran’s Street, The Parade, Patrick Street, Rose Inn Street, Bateman Quay, John’s Bridge and adjacent streets accessible via High Street. This area has the highest footfall and tourism activity, with several narrow, medieval streets, it is a priority zone for reducing car traffic to improve safety, air quality, and the experience for pedestrians and cyclists while retaining accessible parking.

Sustainable Mobility Zone (blue) - A wider zone around the Inner-City Core where on-street parking will gradually be displaced, to enable segregated cycle infrastructure, wider footpaths, and public realm improvements, with the exception of parking for people with disabilities.

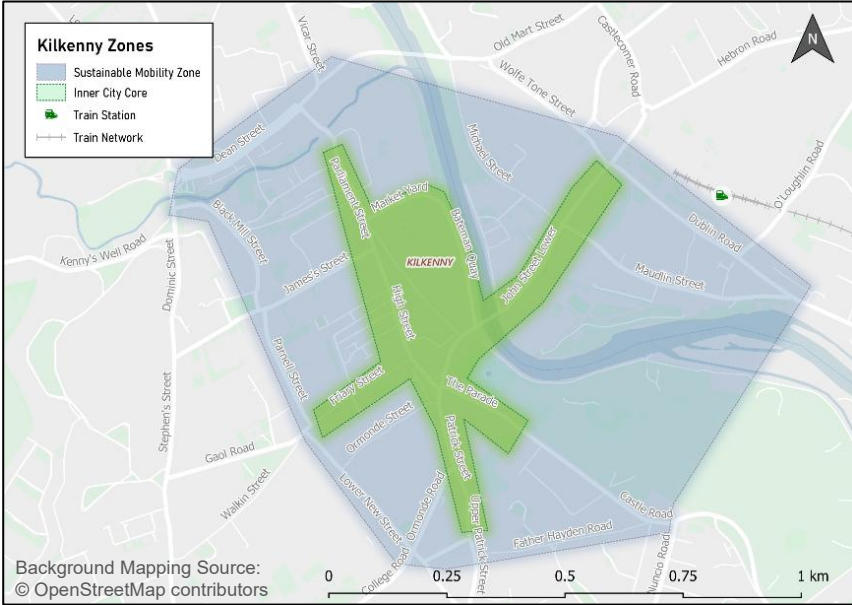


Figure 6-4 Kilkenny Zones

Within this zone, the Abbey Quarter Masterplan highlights the need to provide appropriate levels of car parking to support development in the Sweeney’s Orchard area, located just north of the Breaghagh River. It also emphasises that any car parking provision should remain under the control of the Local Authority, ensuring effective management and enabling a gradual shift toward more sustainable travel options.

Parking Strategy Implementation Plan

Phase 1: Short-Term Measures (up to 2030)

Parking Pricing: Currently, it is often more convenient and affordable to park in the city centre than to use alternative options. Higher costs discourage long-stay and non-essential trips while preserving short-stay turnover and access for those who truly need it. Pricing can be used to shift parking behaviour; therefore, a core principle of this strategy is demand management through pricing.

Under Phase 1, it is proposed that parking in the Inner-City Core is offered at a higher cost than in peripheral locations. This includes off-street public car parks like Market Yard, Friary Street and on-street parking with all parking spaces accessed via High Street and adjacent streets.

Traffic Management: Traffic management changes will limit car movements within the core at:

- Market Cross: No right turn onto Bateman Quay to prevent cars cutting through Bateman Quay
- Ormond Q-Park & Desart Court: Entry only via The Parade, exit via Lower New Street to prevent congestion around The Parade and promote smoother flow.

These changes are proposed to reduce unnecessary vehicle movements in high-footfall areas, reduce queueing, emissions, while prioritising safety and creating a more pedestrian and cycle friendly environment.

Proposed Park & Stride Facilities: Three new Park and Stride (P&S) facilities are proposed at the following locations:

1. Off Hebron Road
2. To the west of Inner-City Core Zone, close to Gaol Road
3. Close to St James Park

The Hebron Road P&S would offer lower-cost, long-stay parking. It is proposed to be well integrated with the walking and cycling measures providing safe, well-lit walking and cycling paths into the city centre, upgraded public realm along Hebron Road, with footpath widening, crossings and cycle paths, and landscaping.

Collectively, in the short-term, the P&S facilities help reduce pressure on central parking, while activating key walking routes. Therefore, it is anticipated that the provision of this P&S facility, offering lower costs compared to parking options within the City Centre Core, will encourage car users to park at the P&S location and continue their journey to the City Centre or nearby areas by walking or cycling, thereby reducing vehicular movement in the core area.

This model supports sustainable travel while still providing for car access. It’s ideal for tourists, day visitors, parents doing school drop-offs and local workers who can walk up to 10-15 minutes.

Proposed P&R Site, at the Castlecomer Road Roundabout:

The introduction of a P&R at this location would encourage motorists travelling into Kilkenny from the north to park on the city’s periphery and take the bus into the city centre, thereby helping to reduce traffic congestion within the core.

Phase 2: Medium-Term Measures (up to 2035)

Peripheral Low-Cost Parking: To accommodate displaced parking demand, existing car parks outside the core will be promoted and priced attractively. Car parks including Wolfe Tone Street Car Park and Fair Green are proposed to be lower cost than those in the Inner Core Area to attract demand and prevent drivers from parking in the city centre.

These locations are proposed to be the preferred low-cost options for users, including long-stay. Improved pedestrian and cycle links will be provided from these car parks into the city centre.

Removal of On-Street Parking (except Disabled Bays and Loading Bays)

With three P&S facilities and one P&R facility proposed in the short term, peripheral parking becomes available. In the medium term, it is proposed to gradually remove on-street parking within the Inner-City Core, with the exception of designated spaces for individuals with disabilities and loading bays. The anticipated outcomes of this measure is a reduction in vehicular traffic entering the city centre and to repurpose the space reclaimed through the removal of on-street parking to provide enhanced walking and cycling infrastructure, improved public realm features, placemaking elements, and landscaping enhancements.

Implementation of the Sustainable Mobility Zone: On-street parking will be removed from specific routes within the Sustainable Mobility Zone.

Introduction of Sustainable Mobility Portals: “Sustainable Mobility Portals” will mark the transition from car-priority to pedestrian/cyclist-priority zones. Features could include paving changes, signage, landscaping, limited car access (residents, deliveries only).

Sustainable Mobility Portals may be introduced in the following locations:

- Castle Road to The Parade
- Parliament Street, John Street and High Street access points
- Entrances to St Kieran’s Street or Rose Inn Street

These portals are proposed to help signal the transition into a more sustainable, low-traffic zone. They create intuitive boundaries without relying solely on signage or enforcement.

Proposed Park & Stride Facility, close to Waterford Road/Bohernatounish Road/ St Rioch’s Ct Roundabout: The proposed facility, similar to the other short-term P&S sites, will allow people to park at this location and walk into the city.

Proposed P&R facility, near the Waterford Road Roundabout: This facility would encourage people travelling from the south of Kilkenny to park and take the bus into the city centre, helping to reduce traffic congestion within the core.

A full network of P&R and P&S sites is anticipated to support commuters and visitors who may otherwise drive into the city centre. Each site is proposed to offer low-cost parking, secure bicycle parking, frequent and direct bus or shuttle services to the city centre, e-bike or scooter sharing, signage and real-time information boards. However, it should be noted that the currently proposed P&R locations are indicative and will be confirmed in coordination with future bus routes and emerging commuter travel patterns.

Supporting Measures:

Signage and wayfinding, real time parking info: Digital boards and apps to show available spaces and guide drivers.

A high-level summary of the car parks where the proposed pricing strategy will be implemented, along with the corresponding implementation phase and indicative parking charges, is presented in Table 6-1.

Table 6-2 presents a high-level percentage of on-street parking within the Sustainable Mobility Zones that is proposed to be displaced as part of this plan in the short and medium-term, excluding designated spaces for people with disabilities and loading bays where appropriate.

It should be noted that the figures presented are indicative and subject to refinement. Further detailed assessments during the design stage will inform the final number of parking spaces to be removed and the precise implementation approach.

Coach Parking: Coach parking is currently available along Castle Road and the Abbey Quarter, with coach set down provision continuing to be maintained at these locations. The provision of longer-term coach parking will be explored outside of the city core.

Table 6-1 Off-Street Car Parking Locations – Pricing Strategy by Phase

Name	Existing / Proposed Public / Private Ownership	Spaces	Pricing Strategy by Implementation Phase		
			Short Term	Medium Term	Long Term
St Canice’s Church	Existing/ Public	71		€ €	€ €
Dean Street	Existing/ Public	24	€ €	€ €	€ €
Black Abbey	Existing/ Public	39	€ €	€ €	€ €
St. Mary’s	Existing/ Public	90	€ €	€ €	€ €
Fair Green	Existing/ Public	63	€ €	€ €	€ €
Rear of Fair Green	Existing/ Public	50	€ €	€ €	€ €
Watergate	Existing/ Public	8	€ € €	€ € €	€ € €
Friary Street	Existing/ Public	41	€ € €	€ € €	€ € €
Market Yard	Existing/ Public	425	€ € €	€ € €	€ € €
Carnegie Library	Existing/ Public	21	€ € €	€ € €	€ € €
MacDonagh Junction	Existing/ Public	1,100	€ €	€ €	€ €
John’s Green	Existing/ Public	37	€ €	€ €	€ €
Wolfe Tone Street	Existing/ Public	122		€ €	€ €

Further assessment required to finalise the level and location of provision for Park and Ride facilities

Proportion of Existing Parking Displaced (with the exception of designated spaces for people with disabilities and loading bays)

Table 6-2: On-Street Car Parking Locations

Location	Implementation Phase	Proportion of Parking Displaced
Bateman Quay	Short Term	100%
Castle Road	Long Term	80%
Dean Street	Medium Term	100%
Friary Street	Short Term	100%
John Street	Short Term	50%
Windgap Hill	Medium Term	100%
Ormonde Road	Medium Term	50%
Parnell Street	Medium Term	100%
Penneyfeather Lane	Medium Term	100%
The Parade	Medium Term	100%

Section 7

Implementation and Priority Plan



7. Implementation and Priority Plan

7.1 Introduction

To maximise the effectiveness of the SUMP, KCC will collaborate with the NTA, TII and other key stakeholders and:

- Secure capital investment for the design, planning and implementation of the schemes and initiatives;
- Use National Cycle Design Manual for the design of all new or improved cycle facilities where appropriate, unless otherwise agreed with the relevant oversight body.
- Undertake consultation with TII on proposals, including indicative park and ride locations, with the potential to impact the national road network.
- Apply TII Publications complementary to DMURS for measures impacting the national road network, and will comply with the requirement for a Design Report in accordance with TII Publications DN-GEO-03030 for works to national roads where applicable.
- Communicate solutions and raise awareness of sustainable transport modes with the wider community.
- Implement the SUMP’s recommended transport network, supporting measures and demand management measures; and
- Monitor and review progress.

KCC acknowledges that the sequencing of measures proposed with the SUMP is essential to its successful delivery. It recognises the interdependencies between the implementation of a measure with other measures and, for Part 8 developments, will determine the impacts, benefits and viability of proposed measures based on the prevailing conditions at the time.

7.2 Mechanisms for delivery

To implement the SUMP, several mechanisms will be utilised, including the ones summarised in Table 7-1 below.

Table 7-1: Mechanisms for delivery

Mechanism	Scheme Description
Section 38 Developments	This involves traffic calming, minor road enhancements, and specific measures to improve public bus services, as allowed under Section 38 of the Road Traffic Act 1994 (as amended).
Part 8 Developments	Numerous walking, cycling, and road projects fall under the Part 8 process, where projects exceeding a certain threshold but below the EIA threshold are evaluated by the Council’s Elected Members.
Bus Operational Changes	These changes fall under the jurisdiction of the National Transport Authority.
EIA Applications to An Coimisiún Pleanála	Transport projects exceeding a certain threshold must comply with the Environmental Impact Assessment Directive and related legislation. Such projects are submitted to An Coimisiún Pleanála for evaluation, with major road schemes included in this category. The requirement for public consultation related to the above processes is set out in legislation.

Proposals to introduce permanent pedestrianisation or a one-way traffic system on any street, road or lane within Kilkenny City Municipal District will be brought through a statutory planning process in accordance with Part 8 of the Planning & Development Regulations 2001, as amended, unless the features of the scheme require the submission of an application to An Coimisiún Pleanála.

Proposals to introduce permanent pedestrianisation or a one-way traffic system on any street, road or lane within Kilkenny Municipal District will be evaluated to determine the impacts, benefits and viability based on the prevailing conditions at the time. A report of the evaluation will be presented to the Kilkenny City Municipal District for consideration by the members, prior to progressing to public consultation and full Council

approval in accordance with Part 8 of the Planning & Development Regulations 2001, as amended, unless the features of the scheme require the submission of an application to An Coimisiún Pleanála.

7.3 Funding and costs

The delivery of Kilkenny SUMP will be subject to availability of funding. It is anticipated that funding for active travel projects (i.e. walking and cycling) will be sourced from the NTA’s Active Travel Investment Programme. As per the NTA Rapid Build Advice Note (Feb 2023), active travel infrastructure proposals should include options using rapid-build, cost-effective methods.

Business cases will be required for each of the major infrastructure proposals included in the SUMP, in line with the Public Spending Code (PSC) and the Transport Appraisal Framework (TAF).

The European Union (EU) also supports SUMPs through various initiatives that could be sourced for funding, including the Connecting Europe Facility (CEF) and L’Instrument Financier pour l’Environnement (LIFE).

7.4 Implementation Plan

The process followed for determining the prioritisation of the measures involved the assessment of the measures in terms of the following criteria:

- Scheme location/ likely scale of users impacted.
- Location with respect to education, employment or public transport catchment.
- Scale of positive impact or mitigation of issues.
- Interdependencies between the implementation of a measure with other measures.
- Indicative cost.
- Complexity of delivery.

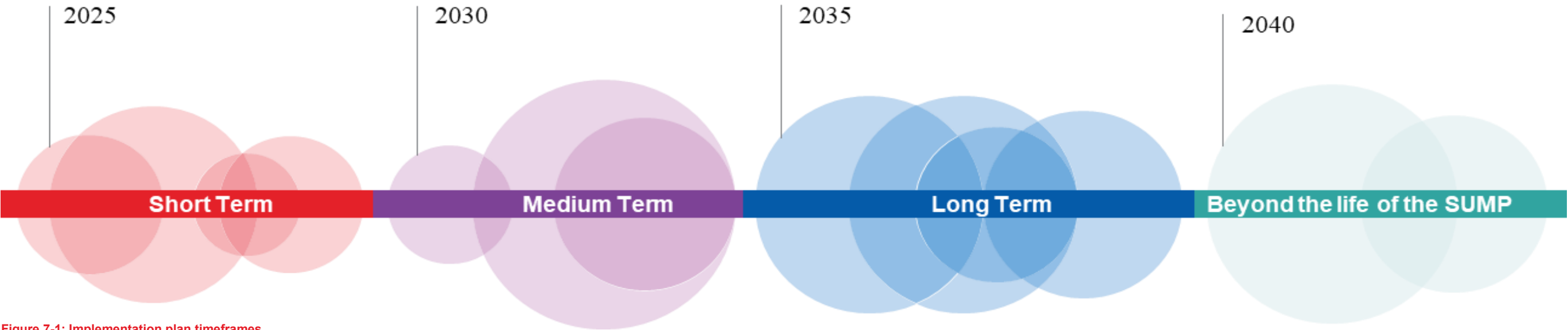


Figure 7-1: Implementation plan timeframes

The implementation plan has outlined three proposal timeframes for managing the implementation of measures and are illustrated in Figure 7-1. These are as follows:

- **Short-term proposals (By 2030):** Proposals within the city core, and/or within catchment from key facilities, that are most impactful and/or have reduced implementation cost and complexity of delivery.
- **Medium-term proposals (From 2030 to 2035):** Proposals further from the city core, that resolve medium impact issues and/or have a higher implementation cost and complexity of delivery.

Long-term proposals (Beyond 2035): Proposals further from the city core that resolve lower impact issues following the implementation of short-term and medium-term proposals, have a potentially higher implementation cost and high complexity of delivery.

7.4.1 Walking and Cycling

The short- to long-term implementation plan for walking and cycling measures are shown in Figure 7-2 and Figure 7-3 respectively.

The immediate priority is to meet the urgent demand for improved infrastructure by providing higher-quality, more direct walking and cycling routes, especially within the city core and near key services such as schools. Short-term walking initiatives target “quick wins” that enhance permeability and access to essential services. For cycling, the focus is on strengthening routes in city core and improving connections to schools and major employment areas.

The walking network will expand to serve growing residential and employment areas, particularly addressing future development in the Loughmacask neighbourhood. Additional east-west connections will be established to reduce the severance created by the River Nore. For cycling, the focus will be on developing an inner cycle loop and radial routes that connect directly to the city core. These radial routes will also be extended outwards to the Kilkenny Ring Road, including key corridors such as Freshford Road, Castlecomer Road, Dublin Road, Bennetsbridge Road, Bohernatounish Road, and Tullaroan Road.

Long-term plans prioritise connectivity between key areas outside the ring road, with a focus on the Breaghagh Valley to the southwest and a new link from the Ossory Pedestrian Bridge to Old Dublin Road in the southeast. The cycling network will be extended to include the ring road, aligning with the implementation of Road Objective R1, to create a continuous cycling route. Additionally, a cycle route connecting Tullaroan Road to Ballycallan Road via Loughmacask will be developed, contingent on the delivery of Road Objective R7.

Together, the long-term walking and cycling measures will contribute towards achieving the 10-minute city objective by improving permeability and by overcoming the severance caused by the River Nore and the Ring Road. Prioritising these routes will encourage a shift from motorised vehicles to active modes of transport, supporting a broader transition toward more sustainable travel choices.

7.4.2 Public Transport

It is anticipated that in the short-term, in addition to the two existing bus routes, a third route along a public transport corridor would be provided, increasing the coverage of the bus network to serve areas that are currently

underserved. The third route will connect Breaghagh Valley in the southwest with growing employment areas in Hebron Industrial Estate, and Cillín Hill during peak hours in the east. This would provide connection between the southwest residential areas and the eastern employment zones.

One primary mobility hub and two secondary mobility hubs are planned to be implemented in the short term at key locations to facilitate intermodal trips. These locations include:

- MacDonagh Junction (Primary)
- Old Mart Road (Secondary)
- Abbey Quarter (Secondary)

One Park and Ride (P&R) facility will also be implemented in the short term at Castlecomer Road to facilitate the use of public transport for trips to the city centre.

In the medium term, one primary mobility hub and two secondary mobility hubs are proposed at the following locations:

- Ormond Street (Primary)
- College Road (Secondary)
- Bateman Quay (Secondary)

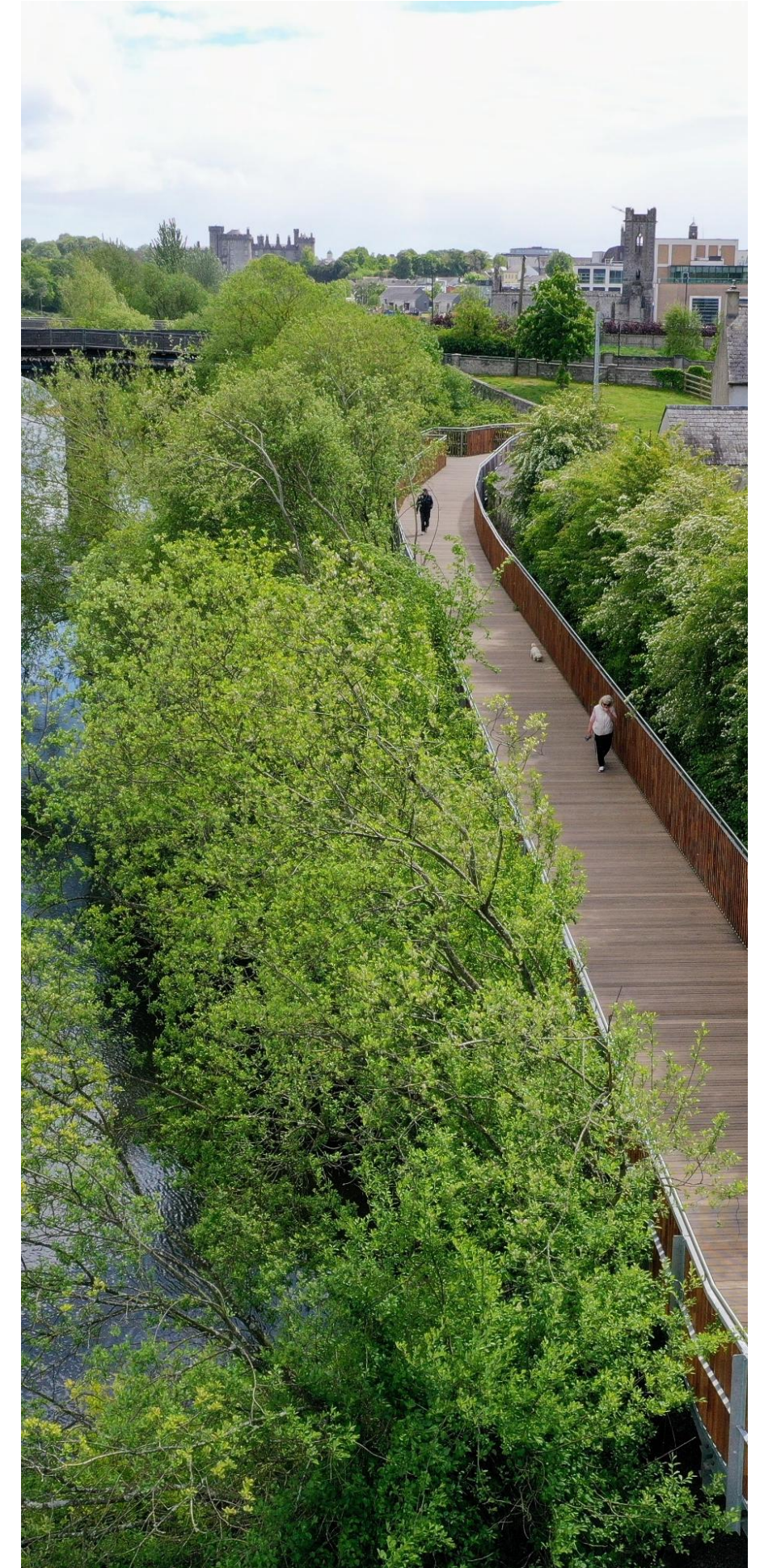
In addition to these hubs, one new P&R facility is proposed on Waterford Road. This facility will encourage commuters to use bus services from Waterford Road to the city centre. In particular, people traveling to the Loughboy will benefit from the P&R options and the bus routes serving it.

In the long term, bus network is expected to cover nearly all key corridors, offering shorter journey times and more direct routes. In the long term, one primary mobility hub and two secondary mobility hubs are proposed at the following locations:

- Dean Street (Primary)
- Waterford Road (Secondary)
- Newpark Drive (Secondary)

These interventions are anticipated to improve reliability and encourage more people to use buses for longer journeys, while relying on active modes for first and last mile connections from the mobility hubs.

For the short, medium, and long term, key junctions have been identified where bus priority measures are proposed to minimise congestion-related disruptions and ensure smooth and reliable bus operations. Several of these improvements are coordinated with pedestrian junction upgrades, with a strong emphasis on enhancing connectivity within the city centre.



7.4.3 Road Network

Road Objectives

The short- to long-term implementation plan for the road objectives are shown in Figure 7-5. In the short-term, it is anticipated that improvements at Outrath Road outside the Ring Road will be completed. These include the Outrath Road improvement scheme linking to the Bohernatounish Road (R2) and providing a link road from Outrath Road onto Waterford Road (R3), which constitute important measures for improving connections at the employment areas south of Loughboy.

In the medium-term, the Northern Ring Road extension (R1) is expected to be completed, as well as the planned links connecting Ballycallan Road and Tullaroan Road, and the latter to Granges Road (R7).

In the long-term, it is anticipated that the proposed link from Ballycallan Road to the Waterford Roundabout (R4) will be delivered. Other links planned to be delivered in the long term include the proposed improvements at the employment areas to the east of the city, including a connection from the N10 to Dublin Road (R8), and a new connection from Hebron Business Park (R9). The planned link between Kilcreene and Waterbarracks (R5) is also anticipated to be delivered in the long term however further assessment is required to determine its need following the implementation other complementary measures including the public transport network upgrades.

It is noted that the remaining section of the western bypass from Freshford Road to Kilmanagh Road (R1) is expected to be delivered beyond the timeframe of this SUMP.

Traffic Management Measures

The implementation plan for the short- to long-term measures, as shown in Figure 7-6 is based on the KSUMP Discussion Document, with some additional ‘softer’ measures introduced in the medium term to support behavioural change and prioritise active modes over others.

In the short term, the existing one-way circulation system in the City Core is expected to remain in place. This includes:

- Rose Inn Street – southbound only
- High Street – northbound only

To enhance the pedestrian environment and reduce congestion during peak hours, general traffic will be restricted on High Street on a phased basis between 11:00 and 19:00. However, buses will continue to operate northbound on High Street during these hours.

In the medium-term, additional one-way systems are proposed to further reduce traffic entering the City Core. These changes aim to redirect through-traffic away from the city centre and encourage use of alternative routes. The proposed measures include:

- Bateman Quay – southbound only*
- John’s Bridge – northbound only*
- Ormond Road – northbound only
- Upper Patrick Street – southbound only
- Upper New Street – north-westbound only

In addition, the introduction of shared streets with low-speed limits, where cyclists are given priority over motor vehicles, is proposed to encourage a shift in travel behaviour. These shared streets are planned for Black Mill Street, Kickham Street, James Street and Parnell Street. This approach supports a more sustainable and people-focused transport network within the City Core and the Sustainable Mobility Zone. Similar proposals are planned for Michael Street which has strong potential to serve as a high-quality cycle route. These enhancements aim to support active travel and further integrate cycling into the city’s transport network.

In the long-term, some streets proposed as shared spaces in the medium-term are planned to transition into one-way streets. These changes aim to further discourage through-traffic from entering the City Core while maintaining access to all streets. The proposed long-term adjustments include:

- Black Mill Street – clockwise movement only
- Kickham Street – westbound only
- Parnell Street – northbound only
- Stephen’s Street – southbound only
- Dominic Street – northbound only

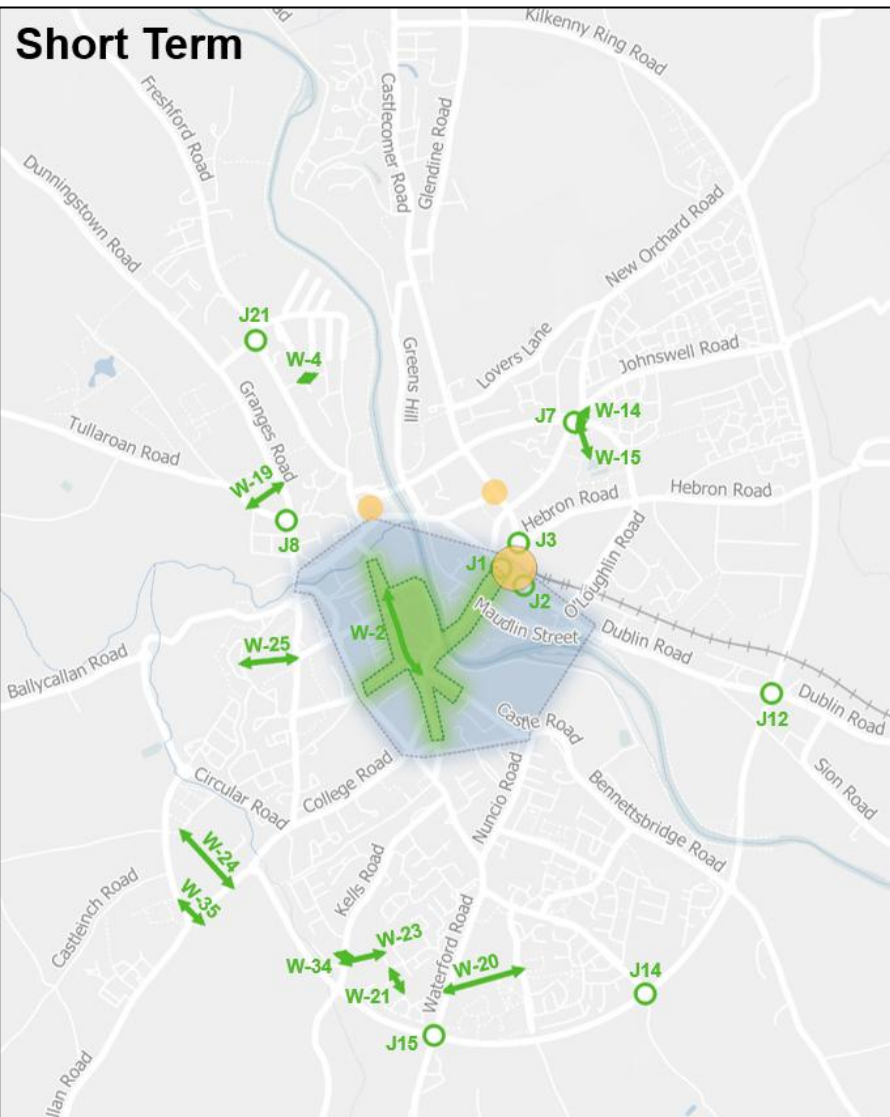
These interventions are designed to support a more efficient traffic circulation system while preserving access and enhancing the pedestrian and cycling environment.

It should be noted that the implementation of the long-term measures is closely linked to the delivery of Road Objective R5, as this is expected to influence overall traffic movements within and around the City Core.

**The proposed traffic directions at Bateman Quay and John’s Bridge are indicative and will be subject to confirmation following the completion of KCC’s ongoing modelling exercise as mentioned in earlier sections of the Plan.*

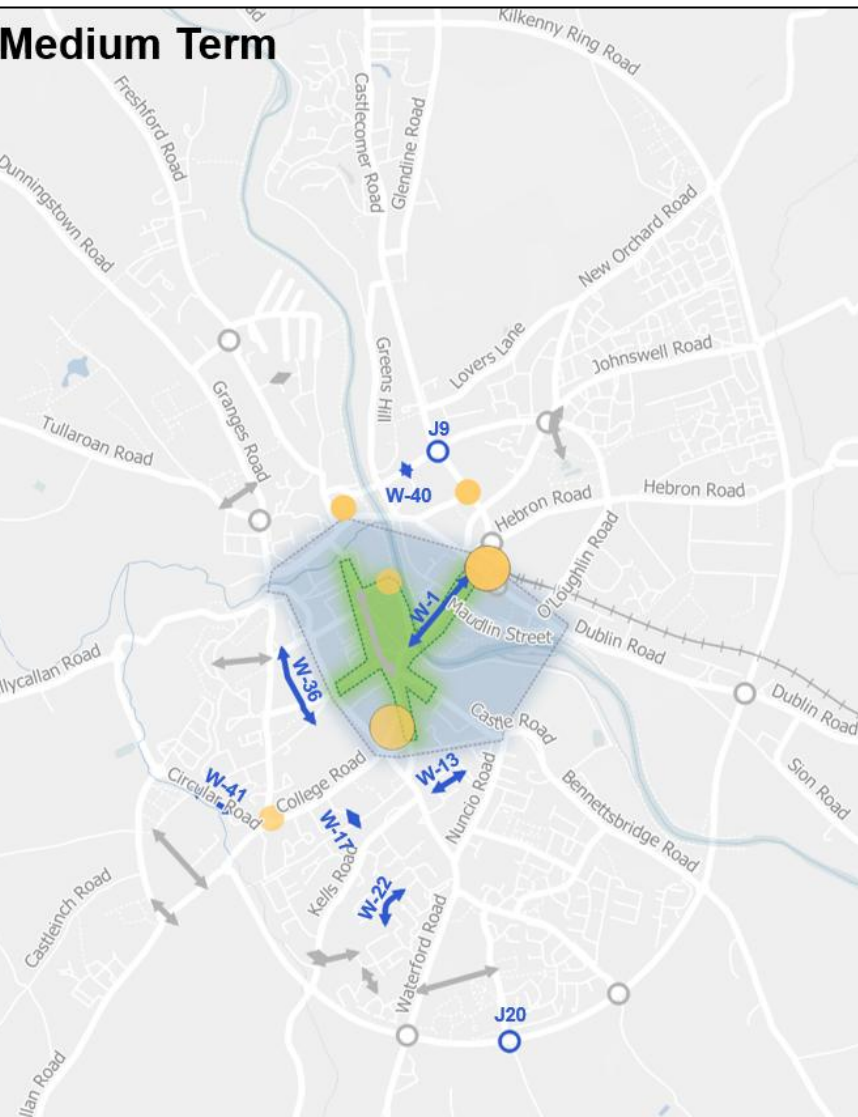


Short Term



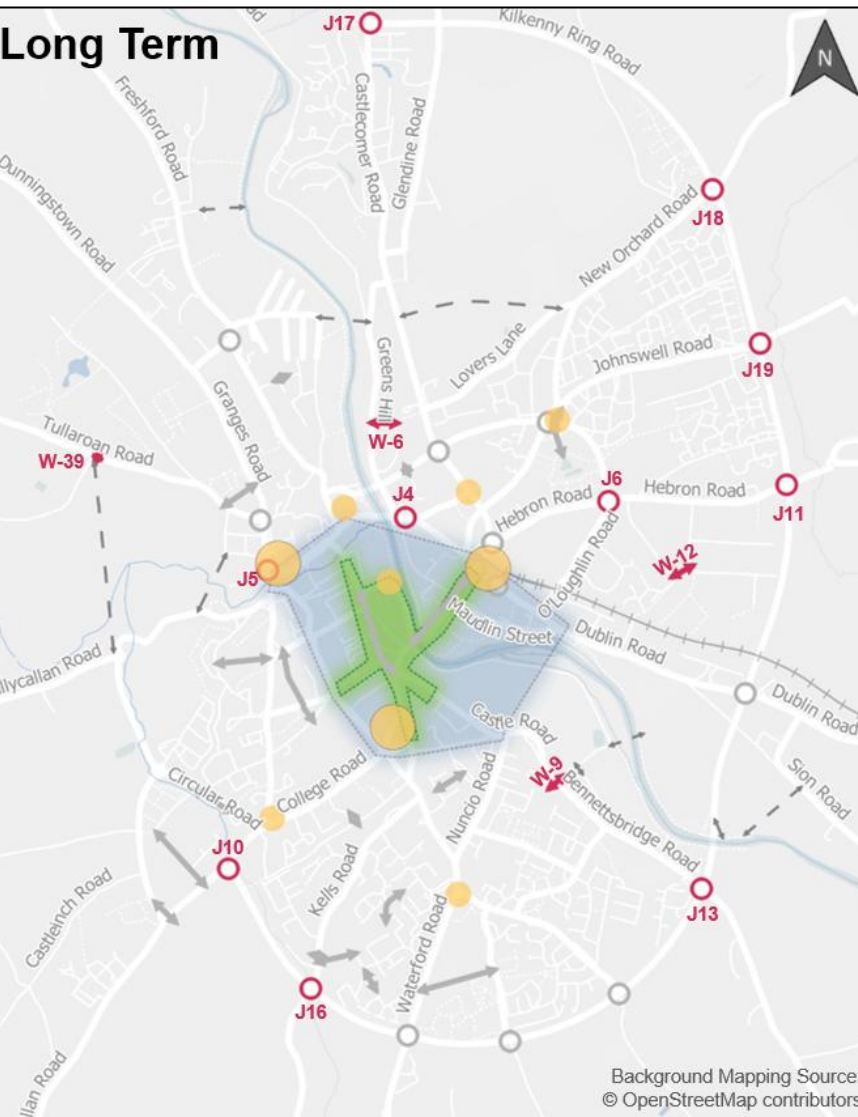
- W-2 Phased introduction of pedestrianisation on High Street, as agreed
- W-4 New pedestrian link at Greensfields Court to Loreto Avenue
- W-14 Remove fencing from Lintown Grove to Newpark Shopping Centre
- W-15 Lakeview Drive to Newpark Shopping Centre through Lakeside Medical
- W-19 Lord Edward St to Granges Rd via Ayrefield Medical Centre
- W-20 Waterford Road to Parcnogown via Presentation Secondary School
- W-21 Hollybank Lane to Kilkenny Project National School
- W-23 The Paddocks to Kells Road
- W-24 New Pedestrian Link from Callan Road to Castle Oaks
- W-25 Emmet Street to Kickham Street/CBS primary
- W-34 Kells Road pedestrian crossing
- W-35 Callan Road at William Roberston Way crossing improvements
- J1 John Street / Dublin Road junction improvements
- J2 Macdonagh junction / Dublin Road junction improvements
- J3 Hebron Road / Castlecomer Street junction improvements
- J7 Johnswell Road / Newpark Drive / Pennyfeather Way roundabout improvement
- J8 Lord Edward St / Granges Rd/Butt's Green/Loreto View roundabout improvement
- J12 Dublin Road / Kilkenny Ring Road roundabout
- J14 Bohernatounish Road / Kilkenny Ring Road roundabout
- J15 Waterford Road / Kilkenny Ring Road roundabout
- J21 Granges Road/ Freshford Road roundabout

Medium Term



- W-1 Improve pedestrian wayfinding and legibility between Kilkenny Station and City Core
- W-13 Deans Court and Village Court to St Fiacre's Place
- W-17 Coote's Lane north-south connection
- W-22 Springfields to Clongowan and Cashel Downs
- W-36 Walkin Street to Kickham Street pedestrian improvements
- W-40 New crossing at New Road to connect to future greenway
- W-41 New footpath along Circular Road southern section
- J9 Newpark Drive / Castlecomer New Road roundabout improvement
- J20 Kilkenny Retail Park / Kilkenny Ring Road roundabout

Long Term



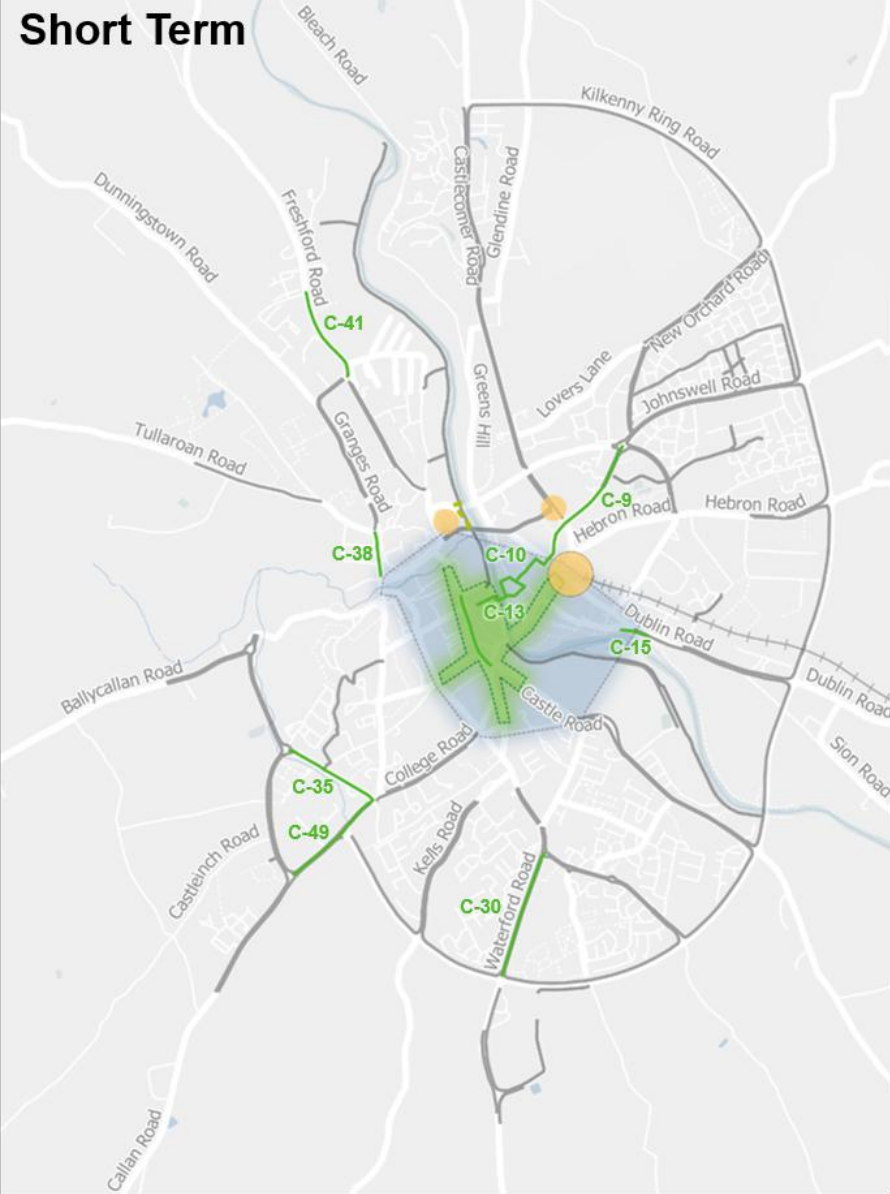
- W-6 New pedestrian link at Broguemakers hill to Greenshill to facilitate shared walking and cycling facilities.
- W-9 New crossing facility Bennettsbridge road crossing to canal walk
- W-12 Bishop Birch Link to Hebron Road
- W-39 Tullaroan Road near Dicksboro GAA crossing improvements
- J4 Greens Bridge St / Wolfe Ton bridge junction improvements
- J5 Dean Street / Water Barrack roundabout improvement
- J6 Hebron Road / Pennyfeather Way / O'loughlin Road roundabout improvement
- J10 Callan Road roundabout
- J11 Hebron Road / Kilkenny Ring Road roundabout
- J13 Bennettsbridge Road / Kilkenny Ring Road roundabout
- J16 Kells Road / Kilkenny Ring Road roundabout
- J17 Castlecomer Road / Kilkenny Ring Road roundabout
- J18 New Orchard Road / Kilkenny Ring Road roundabout
- J19 Johnswell Road / Kilkenny Ring Road roundabout

Walking Implementation Plan

Sustainable Mobility Zone	Mobility Hubs	Walking Measures	Links Under Construction
Inner City Core	Primary	Short	Indicative
30kph Low speed zone	Secondary	Medium	
Train Station	Junction Improvements	Long	

Figure 7-2: Walking Implementation Plan

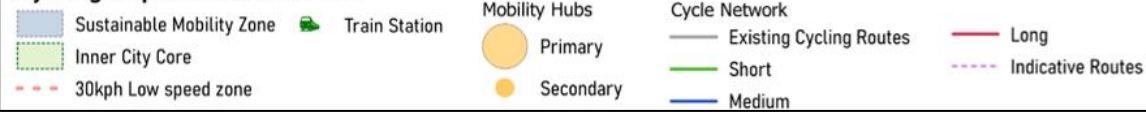
Short Term



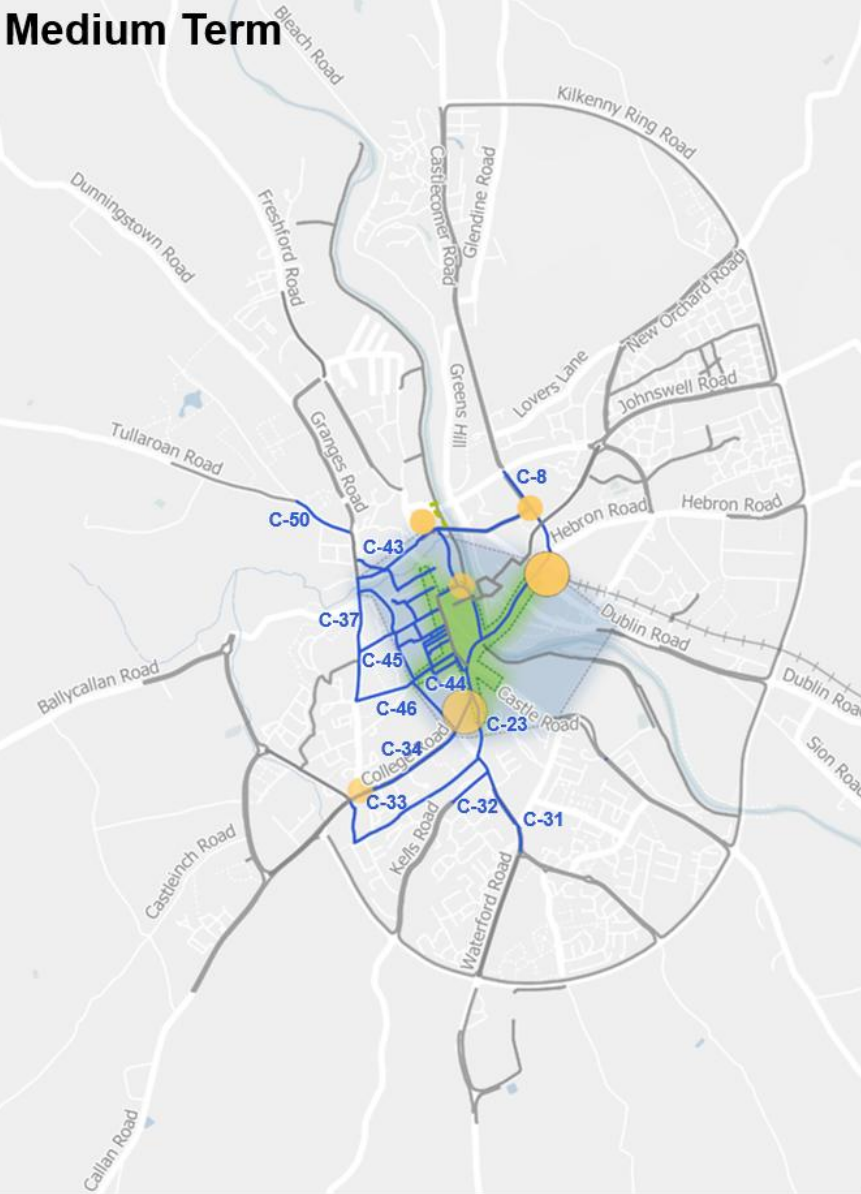
- C-9 Upgraded and new shared pedestrian / cyclist facility along Golf Links Road / Ballybought Street
- C-10 New shared pedestrian / cyclist facility connecting Castlecomer New Road to Michal Street (via Barrack Street and Wolfe Tone Street Car Park)
- C-13 New shared pedestrian / cyclist facility connecting Bateman Quay to Michael Street
- C-15* New and upgraded cycle facilities connecting Canal Walk to Lacken Walk Boardwalk / N10 along Lacken Walk
- C-30 Upgrade existing on-road advisory cycle lane to full segregated cycle lane along Waterford Road (R910) between Bohernatounish Road Roundabout and Waterford Road Roundabout
- C-35 Upgrade cycling facilities along Callan Road (R909) between Callan Road Roundabout and College Road Roundabout
- C-38* New cycle facilities along Butt's Green and upgrade Granges Road and Parkview Drive to fully segregated cycle lane
- C-41* Upgrade to existing on-road mandatory cycle lane along Freshford Road / Bishop's Hill / Troy's Gate to fully segregated cycle lane and shared pedestrian / cycling facilities at Bishop's Hill / Troy's Gate due to space constraints
- C-49 Upgrade Cycling facilities on Callan Road Roundabout to William Robertson Way

* Routes undergoing a phased roll-out with completion in long term.

Cycling Implementation Plan

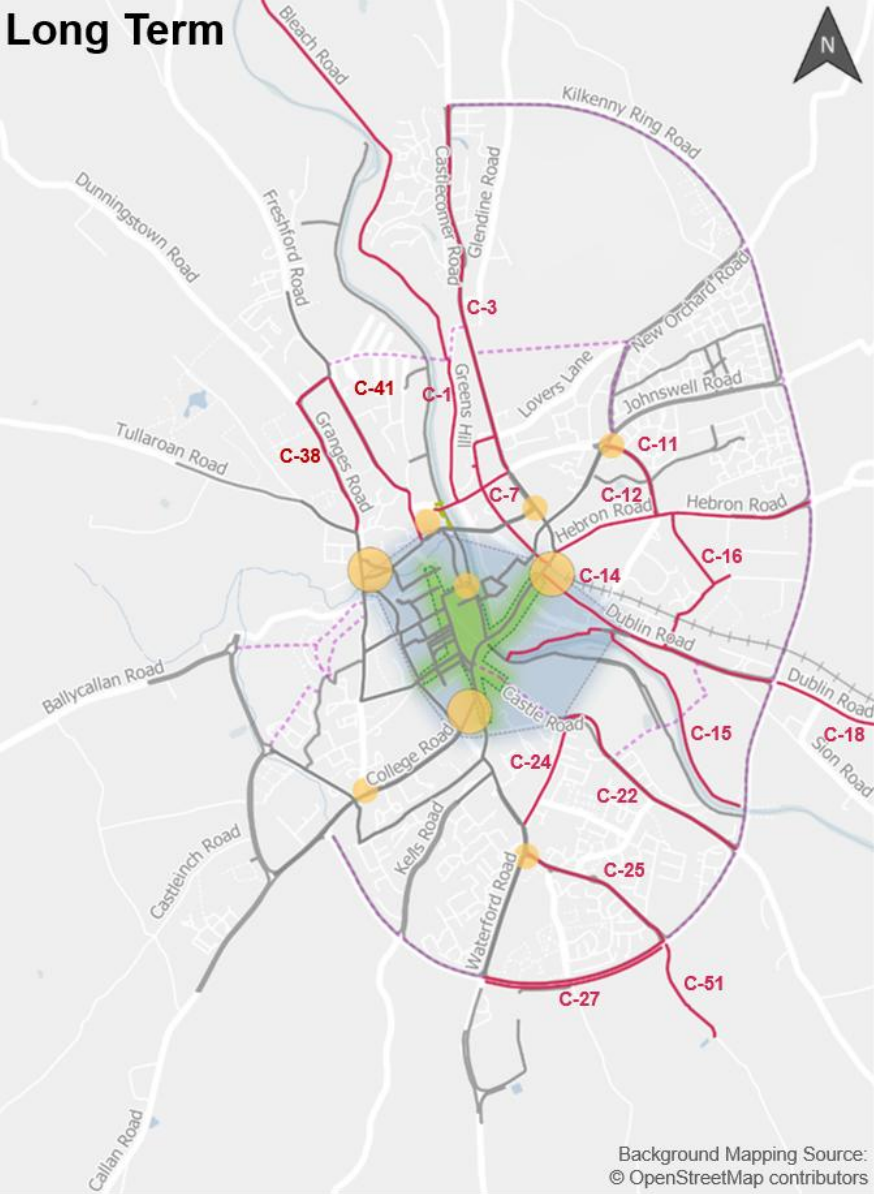


Medium Term



- C-8 Upgrade existing on-road cycle lane to fully segregated cycle lane along R712 Castlecomer New Road (New Road Roundabout to Dublin Road)
- C-23 Provision of cycle facilities along Upper Patrick Street between Jacob Street and Waterford Road
- C-31 New and upgraded cycling facilities along Waterford Road (R910) between Upper Patrick Street / Upper New Street and Bohernatounish Road
- C-32 New and upgraded cycling facilities along Corcoran Terrace (R679) between Waterford Road and Kells Road
- C-33 Improvements of the link along Coote's Lane which forms a greenway
- C-34 New and upgraded fully segregated cycle lane along Ormonde Road and College Road (R909) between Upper Patrick Street and College Road Roundabout
- C-37 New cycle facilities along Dominic Street to Dean Street
- C-43 New cycle facilities connecting Butt's Green and Parliament Street
- C-44 Upgrades to shared pedestrian / cycle facilities west of High Street
- C-45 Provision of Cycling Facilities on Kickham Street and James Street
- C-46 Provision of Cycling Facilities on Gaol Road and Parnell Street
- C-50 Provision of cycle facilities on Lord Edward St

Long Term



- C-1 Upgrade Greens Hill, Bleach Road and Green's Bridge to shared pedestrian / cycle facility
- C-3 Upgrade existing on-road cycle lane to fully segregated cycle lane along R712 Castlecomer Road (Castlecomer Roundabout to New Road Roundabout)
- C-7 New Greenway connecting MacDonagh Junction to Newpark Lower along disused railway line
- C-11 Upgrade existing shared pedestrian / cycle facility to fully segregated cycle lane along Pennyfeather Way
- C-12 New and upgraded cycle facilities along Hebron Road to N77 / Hebron Road Roundabout
- C-14 Upgraded cycle facilities along Dublin Road from MacDonagh Junction to Old Dublin Road Roundabout
- C-16 New and upgraded fully segregated cycle lane connecting Dublin Road to Hebron Road (via Hebron Industrial Estate)
- C-18 New and upgraded cycle facilities along R712 Dublin Road (east of N10)
- C-22 New cycle facilities along Bennettsbridge Road (R700) between Canal Walk and Bennettsbridge Road Roundabout
- C-24 Upgraded cycle facilities along Nuncio Road
- C-25 Upgrade existing on-road advisory cycle lane to full segregated cycle lane along Bohernatounish Road from Waterford Road to Bohernatounish Road Roundabout
- C-27 Provide upgraded cycle facilities along both sides of the N10 (Bohernatounish Road Roundabout to Waterford Road Roundabout)
- C-51 Provision of Cycle Facilities from Abbott roundabout to Ring Road

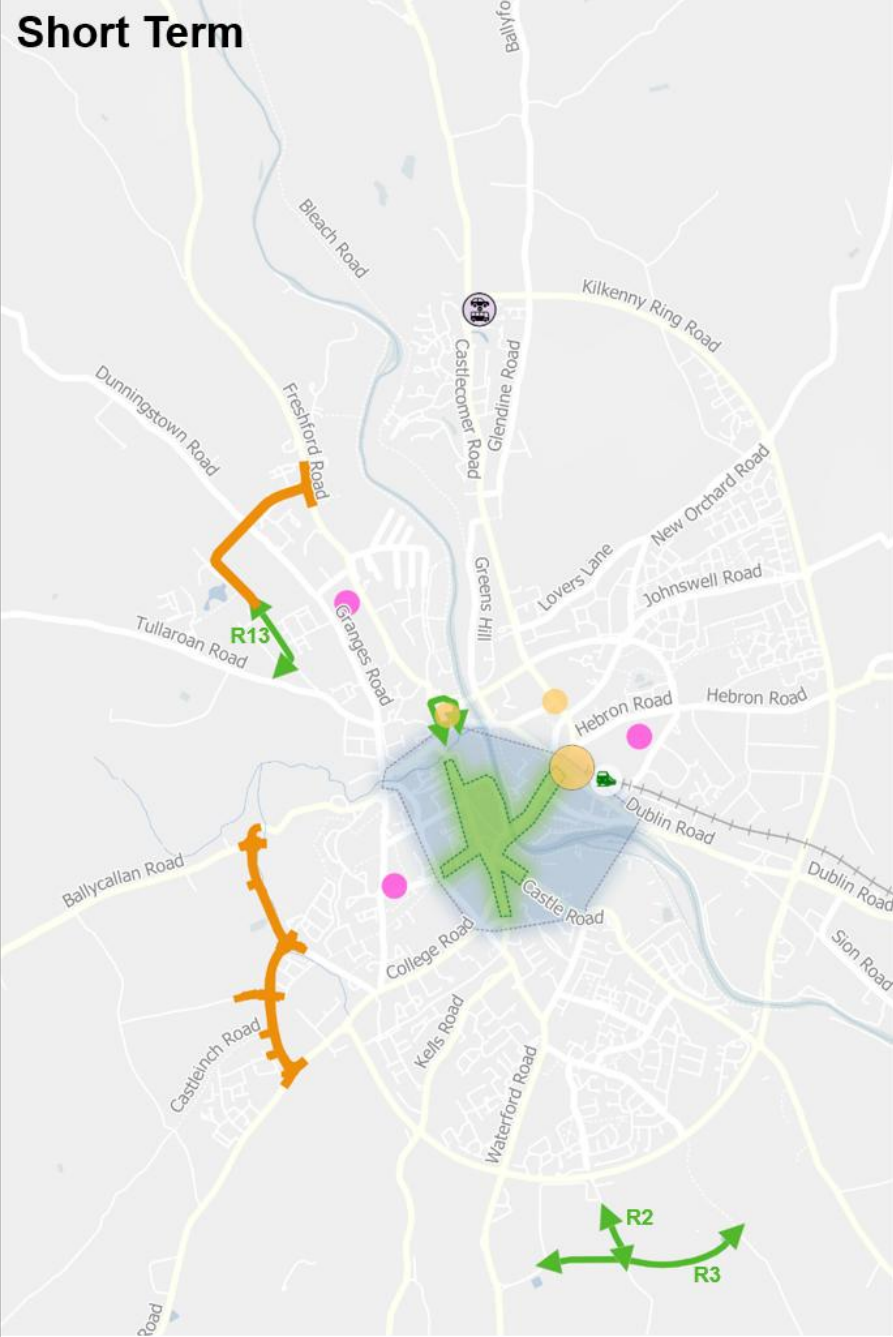
Background Mapping Source:
© OpenStreetMap contributors

Figure 7-3: Cycling Implementation Plan



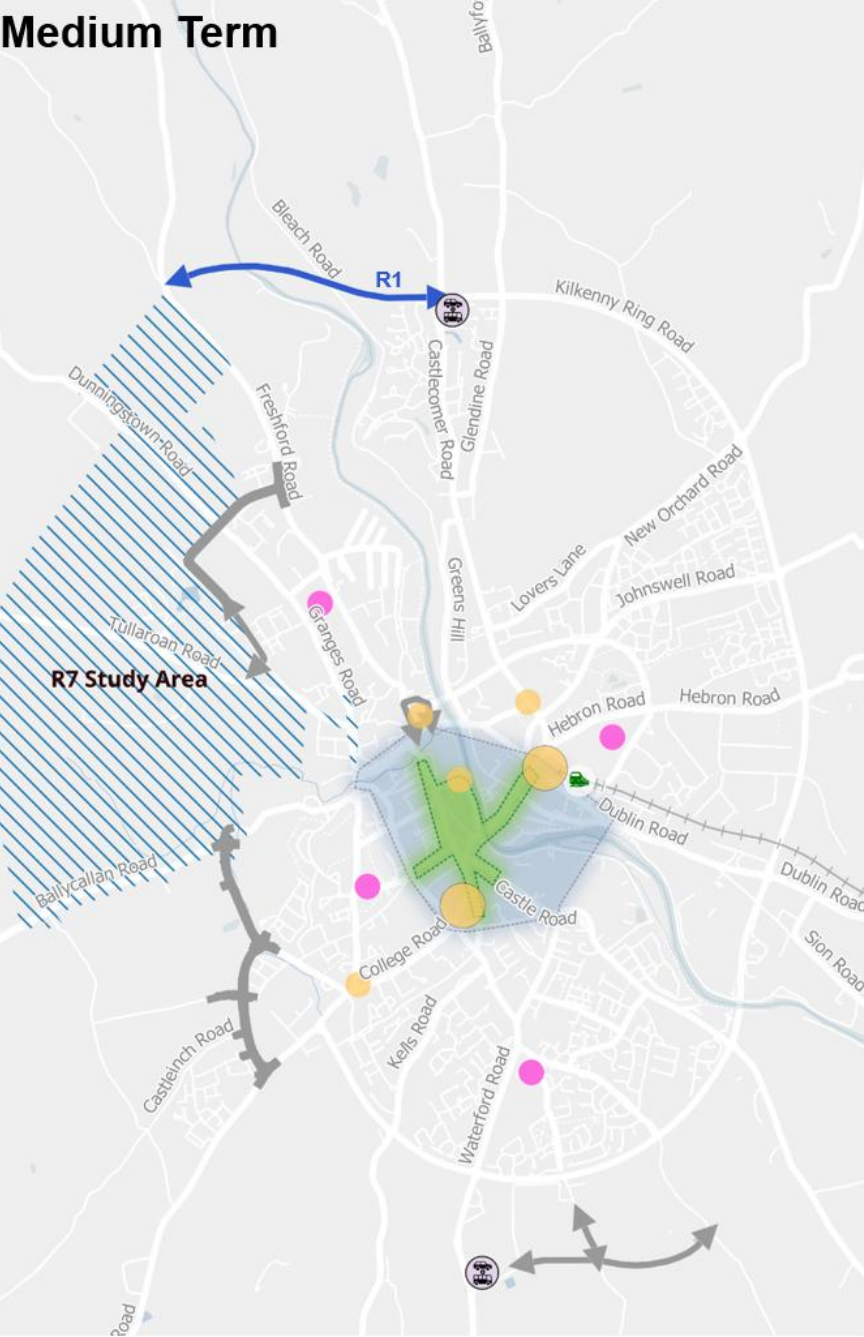
Figure 7-4: Public Transport Implementation Plan

Short Term



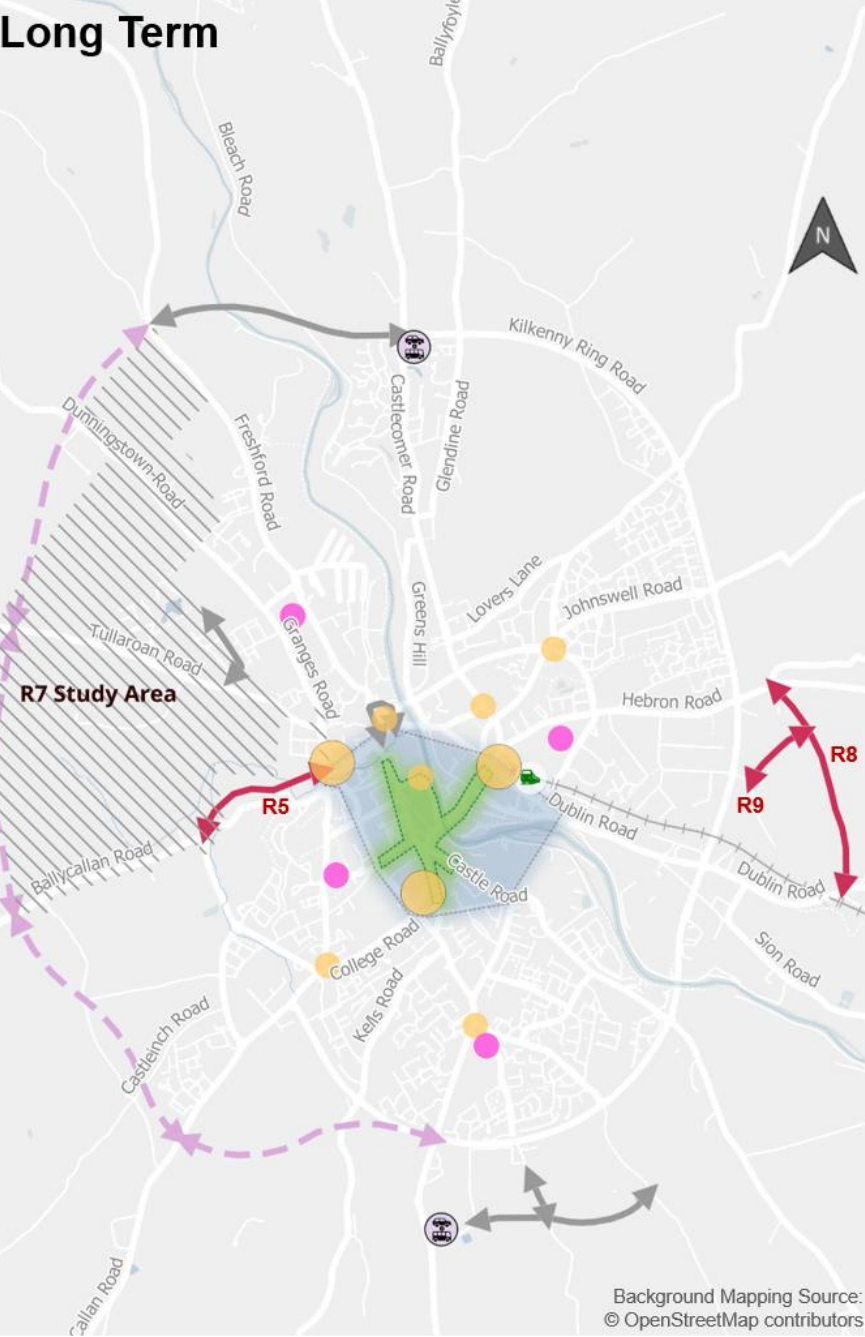
- R2 Complete the Outrath Road Improvement Scheme and link the Bohernatounish Road to the Outrath Road.
- R3 To provide for a link road through development lands linking the Outrath Road through to the existing Smithlands business park and onto the Waterford Road.
- R13 To investigate, how the Objective R6 can be connected with the Tullaroan Road subject to appropriate traffic management regime.

Medium Term



- R1 Kilkenny City North Transport Project
- R7 To progress the route selection, planning and development of a road connecting the R695 Kilmanagh Road to the R693 Freshford Road.

Long Term

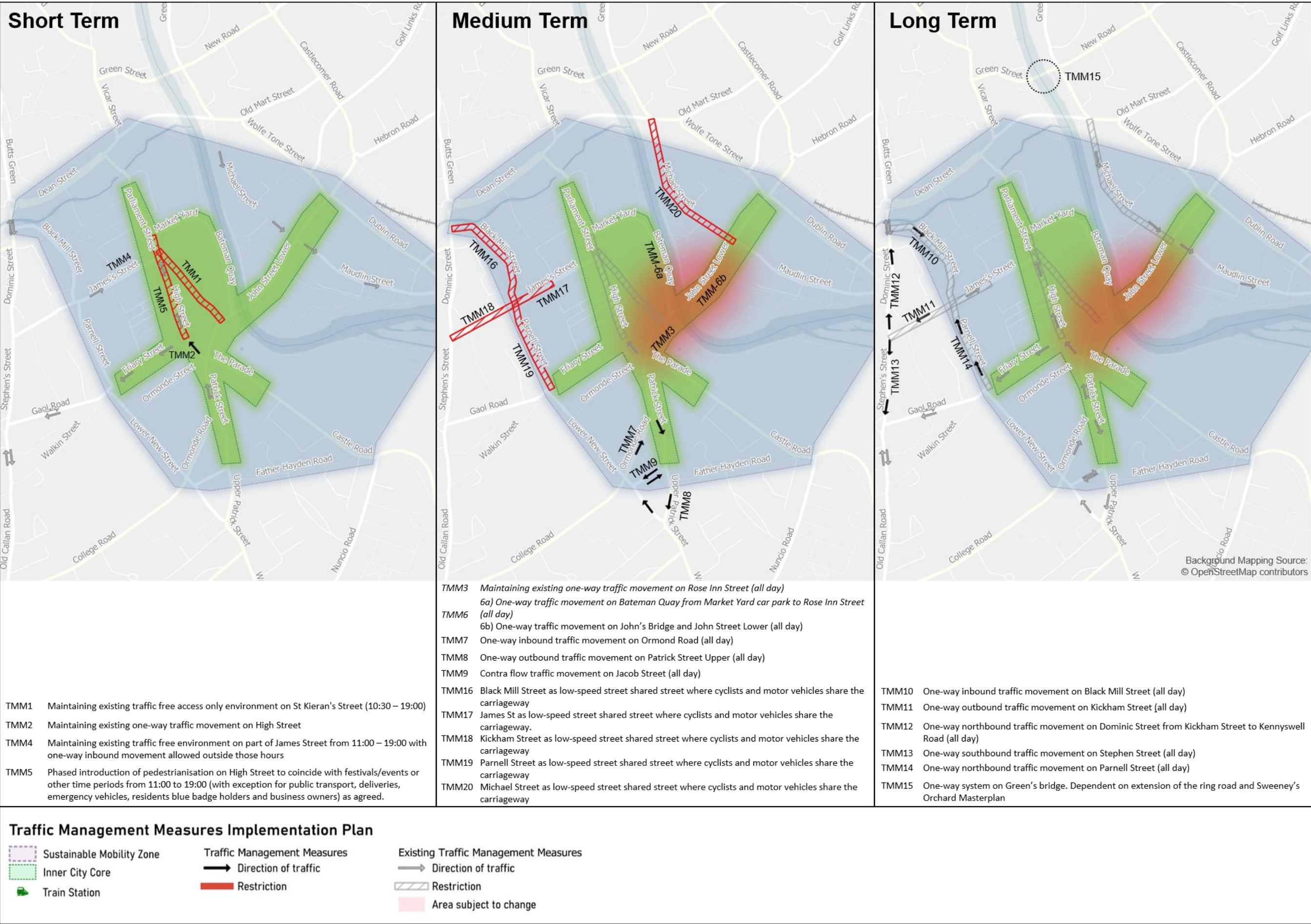


- R5 Reserve the line of Phase 2 of the Central Access Scheme from the Waterbarrack roundabout to the roundabout on the Kilcreene Road.
- R8 To progress the planning and development of a route connection from the existing roundabout on the N10 to the R712 (old Dublin Road) and to reserve such route free from development.
- R9 To progress the planning and development of a route connection from the Hebron Business park to the N10 and the R712 via R8 and to reserve this route free from development.

Road Objectives Implementation Plan

Train Station	Mobility Hubs	Road Network	Long
Train Network	Primary	Newly Constructed	Indicative
Sustainable Mobility Zone	Secondary	Existing	
Inner City Core	Park n Ride	Short	
	Park n Stride	Medium	

Figure 7-5: Road Network Implementation Plan



7.4.4 Key Performance Indicators

A comprehensive set of Key Performance Indicators (KPIs), listed in Table 7-2, has been developed to support the monitoring and evaluation of the Plan. These indicators, such as pedestrian area coverage, cycle path length, bus route accessibility, and air quality, enable tracking of progress and effectiveness of the proposals. They include measurable elements such as pedestrian space, cycle infrastructure, public transport accessibility, and environmental factors like air and noise quality and others.

In addition to these quantifiable outcomes, the SUMP is also expected to deliver broader, less easily measured benefits, including improved physical health and fitness, enhanced wellbeing, better journey quality, and increased urban liveability. Other unmeasurable benefits may also include stronger community ties, reduced stress levels, and a more vibrant and inclusive public realm.

7.4.5 Monitoring Programme

The progression of measures will be monitored on a regular basis by Kilkenny County Council's Urban Mobility and URDF Steering Committee.

In addition, a broader steering group will be established to review progress on the implementation of the SUMP. The group will comprise members of the focus group that were involved in the development of the SUMP, with representatives from local government, community, industry and academia, and other key stakeholders that may be identified in the future. The steering group will meet annually to review a report on the progression of measures and key performance indicators as set out in Table 7-2.

In addition, KCC will make this report available to Kilkenny Chamber and the City Taskforce and meet as required to update on the planning, implementation and monitoring of schemes in the City Centre, and to review the KPIs identified in Table 7-2.

Table 7-2: Key Performance Indicators

Category	KPIs
Walking	Square metres of pedestrian areas
	Kilometres of footpaths relative to road network
	Progress of greenways linking to Kilkenny City
	Multi-modal hubs established
	Number of schools progressed through Safe Routes to School programme
	Footfall in the City Centre
Cycling	Kilometres of cycle paths relative to road network
	Kilometres of Shared/Quiet Streets
	Kilometres of cycle paths
	Percentage of junctions with cyclist provisions
	Number of bike parking locations

Category	KPIs
Cycling	Number of bike parking spaces
	Number of covered bike sharing locations
	Bike share scheme in place
	Progress of greenways linking to Kilkenny City
	Multi-modal hubs established
	Number of schools progressed through Safe Routes to School programme
	Number of cyclists using the cycle facilities
Public Transport	Number of bus routes
	Population within 10 min walking catchment of bus routes
	Number of key destinations within 10min walking catchment of bus routes
	Mobility hubs established
Car Parking	Parking strategy in place
	Park and Stride/Ride facilities developed
HGVs	HGV plan implemented
	Delivery schedule in place
Road Network	Air Quality
	Noise Emissions
General	Wayfinding system developed and implemented
Economic Assessment	Footfall Data for the City
	Vacancy Rates
	Commercial Rental Rates
	Visitors to Key Attractions
	Employment Figures
	Business Performance Indicators where available



Section 8

Summary



8. Summary

This report details the development process of the draft Sustainable Urban Mobility Plan (SUMP) for Kilkenny. The SUMP will help manage future growth in the area promoting positive outcomes for the local community, with a focus on transport and mobility. It will guide the transport requirements for the future development of Kilkenny focusing on supporting and facilitating the use of sustainable transport modes.

Arup developed the SUMP based on current findings, as well as the inclusion of findings and outcomes from previous studies. The SUMP also follows the guidelines outlined in TII/NTA's 'Area Based Transport Assessment' (ABTA) Guidance Notes.

The core study objectives for the SUMP were established based on National, Regional, and Local policies. Through site visits, reviews of existing conditions, relevant policies, studies and plans, and multi-criteria assessments, a recommended transport network was formulated to support Kilkenny's future transport needs.

A set of measures for all modes of transport has been proposed in this report that can be implemented to optimise accessibility in Kilkenny by improving access to schools, employment, and other essential services and opportunities, focusing on improving the sustainable transport networks and reducing car dependency. Encouraging a modal shift to active travel and public transport, the SUMP aims to reduce the transport-related environmental impacts, aligning with national and local transport policy and improving local quality of life.

The SUMP is designed to be adaptable, scalable and resilient to accommodate changes in population and employment growth in Kilkenny. It should be treated as a live document which will be regularly reviewed and updated.



