

Kilkenny City Area Based Transport Assessment: Update 2024

IN PREPARATION FOR KILKENNY SUSTAINABLE URBAN
MOBILITY PLAN
KILKENNY COUNTY COUNCIL



Comhairle Chontae Chill Chainnigh
Kilkenny County Council



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1. Introduction

This report is an update to the area based transport assessment, initially conducted by Jacobs in 2019/2020 for Kilkenny City and its hinterland, “the Study Area”. The purpose of the initial assessment was to seek to ensure integration of land use objectives and transport planning and identify the scale and nature of transport interventions required to encourage a shift to sustainable modes, whilst providing a long-term strategic planning framework for the development of transport infrastructure and services in the Study Area. This report will build on the earlier assessment and inform the Sustainable Urban Mobility Plan for Kilkenny City.

A Sustainable Urban Mobility Plan 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.”

Connect the Dots engagement specialists worked on behalf of Kilkenny County Council to carry out a programme of engaging participatory events, collaborating with key stakeholders and citizens to develop the Kilkenny Sustainable Urban Mobility Plan (KSUMP).

2. Policy Context

International Policy Framework

The national policy context for transport in Ireland is underpinned by the Sustainable Development Goals and the European Green Deal. The 2030 Agenda adopted by all United Nations Member States in 2015, provides a blueprint for peace and prosperity for people and the planet, now and into the future, underpinned by the 17 Sustainable Development Goals (SDGs). This is an urgent call for action by all countries in a global partnership. They recognise that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – while tackling climate change and preserving our oceans and forests. Today, the Division for Sustainable Development Goals (DSDG) in the United Nations Department of Economic and Social Affairs (UNDESA) provides support and capacity-building for the SDGs and their related thematic issues, including transport. The Global Sustainable Development Report (GSDR), is produced every 4 years.

Under the 2019 European Green Deal, the European Union (EU) aims to be the first climate neutral continent by 2050. It will result in a cleaner environment with more affordable energy and smarter transport and aims to reduce greenhouse gas emissions by 90% by 2050, compared to 1990 levels whilst ensuring that economic growth is decoupled from resource use and no person and no place is left behind. The European Commission has produced its ‘Sustainable and Smart Mobility Strategy’ together with an Action Plan of 82 initiatives. Action 35 aims to increase the modal shares of collective transport walking and cycling with an increase in the provision of safe cycling infrastructure. Action 37 calls for the delivery of provisions for first/last mile solutions that include multimodal mobility hubs, park-and-ride facilities, and safe infrastructure for walking and cycling.





European Climate Law

The European Climate Law writes into law the goal set out in the European Green Deal for Europe's economy and society to become climate-neutral by 2050, with an intermediate target of reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Climate neutrality by 2050 means achieving net zero greenhouse gas emissions for EU countries as a whole, mainly by cutting emissions, investing in green technologies and protecting the natural environment. The European Climate Law entered into force in July 2021 (European Commission, 2024). In Ireland, on 23rd July, The Climate Action and Low Carbon Development (Amendment) Act 2021 was signed into law committing the State to 2030 and 2050 targets for reducing greenhouse gas emissions and providing the governance framework by which this is to be realised. The act sets ambitious and legally binding targets for Ireland to achieve net-zero greenhouse gas (GHG) emissions by 2050 and reduce emissions by 51% by 2030 compared to 2018 levels. This Act establishes a comprehensive legal framework, ensuring the necessary structures and processes, such as carbon budgets and sectoral emissions ceilings, are in place to support Ireland's climate goals (Department of the Environment Communications and Climate Change, 2023). The legally binding nature of these targets obligates current and future governments to sustain climate action. The Environmental Protection Agency's annual GHG inventories and projections, along with the Climate Change Advisory Council's (CCAC) annual review, inform the monitoring of progress towards carbon budgets and sectoral emissions ceilings. Following the CCAC's annual review by 30 October each year, relevant Ministers must report their performance to an Oireachtas Committee. Ministers failing to meet targets must present corrective measures and respond to Committee recommendations within three months, ensuring accountability. Ireland may face significant compliance costs if it fails. More stringent limits will have to be applied in the second budget period from 2026-2030, as excess GHG emissions from the preceding budget period must be carried forward to the next period. Economic activities with higher associated carbon, such as in industry or agriculture, may have to be curbed (Ryan, 2024b).

National Policy Framework

Project Ireland 2040

Project Ireland 2040 is the Irish government's long-term overarching strategy to build a more resilient and sustainable future. The National Planning Framework (NPF) and the National Development Plan (NDP) 2021-2030 combine to form Project Ireland 2040. The NPF sets the vision and strategy and the NDP provides the enabling investment to implement that strategy. The aim of Project Ireland 2040 is to cater for additional population growth that will require sustainable urban development, enhanced regional connectivity and improved environmental sustainability (Department of Housing Local Government and Heritage, 2019; Department of Public Expenditure and Reform, 2021). The NPF aims to "Enable more effective traffic management within and around cities and re-allocation of inner-city road-space in favour of bus-based public transport services and walking/cycling facilities". Some of the objectives include; ensure the creation of attractive, liveable, well designed, high quality urban places that are home to diverse and integrated communities that enjoy a high quality of life and well-being; regenerate and rejuvenate cities, towns and villages of all types and scale as environmental assets, that can accommodate changing roles and functions, increased residential population





and employment activity and enhanced levels of amenity and design quality, in order to sustainably influence and support their surrounding area; and ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments and integrating physical activity facilities for all ages.

The NDP provides for significant investment in active travel, bus and rail infrastructure over the next ten years in terms of expanding sustainable mobility options in our cities, towns and villages, supporting our ambition for compact growth and seeking to develop our regional cities as centres of scale in line with the NPF targets. This NDP represents a step-change in the approach towards funding active travel in Ireland. Over the next 10 years approximately €360 million per annum will be invested in walking and cycling infrastructure in cities, town and villages across the country, including Greenways.

The Programme for Government, Our Shared Future commits to achieving a 51% reduction in Ireland's overall GHG emissions by 2030, on 2018 levels. The actions include reducing demand for travel by car, travel distances, and journey times, increasing travel choices, reducing car dependency, and mitigating traffic congestion, reducing air pollution and promoting cleaner and more active modes of transport, sustaining economic and social activity at street level creating vibrant communities and increasing access to shops, employment, transport services, and local amenities by sustainable modes. Specific measures include an additional 500,000 walking, cycling and public transport journeys per day by 2030 (€360 million granted to support the delivery of improved walking and cycling infrastructure), reducing the overall total kilometres driven by 20%, replacements for bus and customer rail to be low or zero carbon by 2030 and increased rollout of rural public transport through Connecting Ireland (Department of the Taoiseach, 2020).

National Investment Framework for Transport in Ireland (NIFTI)

The purpose of the NIFTI Framework is to “Deliver Clean, Low-Carbon and Environmentally Sustainable Mobility”. The reduction in greenhouse gas emissions is a foremost priority. It is a national objective to achieve a low-carbon, economically competitive and environmentally sustainable economy by 2050. NIFTI will support investment in public transport, walking and cycling within cities and large towns to encourage modal shift away from the private car.

National Sustainable Mobility Policy

Ireland's Sustainable Mobility Policy promotes safe, green, people focused and better integrated mobility. In regional and rural areas, actions include expanding availability of sustainable mobility in regional and rural areas, the development and implementation of an active travel infrastructure programme, urban cycle networks, models for bike share schemes (including the potential for electric bikes) for regional growth centres and key towns and the provision of park and ride/share. Additional actions include the publication of national and county cycle network plans and the expansions of the greenway network establishing linkages with towns and villages in line with the strategic national cycle network (Department of Transport, 2022).





The Climate Action Plan 2024

The Climate Action Plan 2024 lays out a roadmap of actions to meet the national climate objective of achieving the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy by 2050 and for the transport sector, a 50% reduction by 2030 from its 2018 emissions baseline. It aligns with the legally binding economy-wide carbon budgets and sectoral emissions ceilings that were agreed by Government in July 2022. The plan recognises the challenge of decoupling economic and social activity from transport emissions. Recommended actions include compact growth and the integration of land use and transport planning, public transport and school transport investment, implementation of demand measures, provision of Park and Rides, improvements in charging structures (Department of the Environment Communications and Climate Change, 2023).

Healthy Ireland

Healthy Ireland is the national framework for action to improve the health and wellbeing of everyone living in Ireland. Keeping active is one of the priority focus areas for Healthy Ireland for 2021–2023 and includes encouraging workplaces to facilitate workers who cycle and run to work, ramping up the Cycle Right Programme to ensure that all children are offered cycling training in primary school, widening the eligibility of the Bike to Work scheme to provide an increased proportionate allowance for e-bikes and cargo bikes, promoting the take up of walking and cycling in urban areas and investing in strategies for the development at local level of walking, swimming, cycling and running, in partnership with Sport Ireland (Department of Health, 2013).

The Town Centre First Policy

The Town Centre First Policy aims to tackle vacancy and dereliction in town centres. It advocates for a place-based approach to sustainable rural development. It aims to create vibrant towns centres for people to live, work and visit, whilst also functioning as a hub for the local community (Department of Housing Local Government and Heritage & Department of Rural and Community Development, 2022). Town Centre First (TCF) recognises that every town is unique and the policy will facilitate the response by towns of all sizes across the country so that their centres can function as the sustainable and vibrant heart of the communities they serve, in ways that are adaptable and appropriate to 21st century needs.

National Roads 2040

This document is TII's strategy to enable Project Ireland 2040, responding to evolving national policy and aligning to the Department of Transport's National Investment Framework for Transport in Ireland (NIFTI). The National Roads network is essential for all sectors of society and communities, serving public transport, freight and personal travel. TII has set several objectives and of upmost importance is to continue to deliver a safe and efficient transport network for people and goods. The investment priorities include decarbonisation, protection and renewal, movement of people and goods in urban areas and enhanced regional and rural connectivity. Decarbonisation is the National Road network's greatest challenge. It





encompasses three investment portfolio themes: Integrated Mobility; Electric Vehicle Charging; and Active Travel. TII is committed to delivering improved active travel provision in all its projects, such as improving the safety of the National Roads network for active travel users and reducing the severance caused by some National Roads in urban areas. TII will collaborate with stakeholders to progress the National Cycle Network plan to cater for more active trips and expand the Greenway network nationwide, on behalf of the Department of Transport. Provision of safe, high quality active travel infrastructure will encourage modal shift and may result in reduction in carbon emissions.

National Cycle Network (NCN) Plan (2024)

The planned NCN links cities and towns of over 5,000 people with a safe, connected and inviting cycle network. One of the most ambitious and wide-reaching infrastructure plans in the history of the State, the proposed cycle network of approximately 3,500km will connect more than 200 settlements and 2.8m1 people. The NCN will link to destinations such as transport hubs, centres of education, centres of employment, leisure, and tourist destinations with the intention of facilitating greater cycling and walking amongst students, leisure users, tourists, and commuters alike. The network was developed by looking at each county and ensuring that as many settlements as possible are connected. Additionally, it was important to ensure that there was intercounty connectivity, by allowing for interurban connections across the county borders. The proposed CycleConnects cycle network plans are comprised of 22 county maps and 57 urban maps. The following corridors converge at Kilkenny City and the Ring Road is located within the 4-kilometre-wide corridors, namely: Corridor 41 Kilkenny to Portlaoise Corridor 42 Kilkenny to Carlow Corridor 44 Kilkenny to Waterford.

Urban maps were developed for the towns with a population over 5,000 people (2016 Census Data). An urban cycle network has been developed for Kilkenny City which is comprised of a primary orbital route and a larger amalgamation of both primary and secondary routes that encompasses the town. The Kilkenny Ring Road (along the N77) is identified as an outer orbital route of the urban cycle network.

Road Safety Strategy 2021 – 2030

The primary aim of the new road safety strategy is to reduce the number of deaths and serious injuries on Irish roads by 50% over the next 10 years. Adopting a strategic, coordinated and multi-sectoral approach to road safety across government and key stakeholders will be critical to achieving a safer, better Ireland for all. A summary of the 50 high-impact actions for the Phase 1 2021 – 2024 action plan is provided under each of the seven Safe System priority intervention areas below, a few of which are: Safe Roads and Roadsides During 2021 – 2025, construct 1,000 km of segregated walking and cycling facilities to provide safe cycling and walking arrangements for users of all ages. Safe and Healthy Modes of Travel Continue to implement an active travel infrastructure scheme for local authorities. Encourage modal shift to support environmental, safety and health objectives.





The National Physical Activity Plan

The national framework for whole of Government and whole of society action to improve the health and wellbeing of people living in Ireland sets out four central goals and outlines actions under six thematic areas, in which society can participate to achieve these goals. This Plan sets out eight areas for action which are broadly based on the approach taken in the Toronto Charter and other international physical activity plans. Action Area 4 on the theme of environment, includes actions to develop and promote walking and cycling strategies in each Local Authority area; ensure that the planning, development and design of towns, cities and schools promotes cycling and walking with the aim of delivering a network of cycle routes and footpaths and prioritise the planning and development of walking and cycling and general recreational /physical activity infrastructure.

The Regional Spatial and Economic Strategy (RSES)

The RSES for the Southern Region of Ireland sets out the strategic regional development framework for the Region, with a primary aim to implement Project Ireland 2040 - the National Planning Framework, at the regional tier of Government and to support the achievement of balanced regional development (Southern Regional Assembly, 2020).

Local Policy

Kilkenny City and County Development Plan 2021 – 2027

Kilkenny City and County Development Plan, Volume 2: City (2021-2027), addresses the interconnectedness of transport and land use within the City. This strategy is aimed at reducing travel demand and promoting sustainable transport modes, which includes walking, cycling, and public transport. Kilkenny County Council aims to contribute to a modal shift away from carbon-intensive modes to more sustainable alternatives, ultimately fostering a more efficient land use pattern and enhancing the quality of life for both residents and visitors.

The 10-Minute City underpins the Development Plan and is an urban design concept where residents can access essential services and amenities 10 minutes walking distance from their homes. Kilkenny has historically been designed with a compact urban form that facilitates this concept through the four neighbourhoods designed around its medieval core.

A strategic objective is to "co-ordinate transport and land use planning, reduce the demand for travel and the reliance on the private car in favour of public transport, walking and cycling". The proposed mode share targets are 10% of trips by bike and 35% on foot by 2040 and a reduction in car share to 40%. Given the projected population growth of 30% for Kilkenny, significant increases in the numbers choosing public transport and active transport is required to meet this target.

Kilkenny County Council Climate Action Plan

Kilkenny County Council adopted its first Climate Action Plan in 2024, with the aim of being a climate resilient organisation that inspires and supports the county's transition to a biodiversity





rich, sustainable and climate neutral economy by 2050. Actions include the adoption of the Kilkenny City Sustainable Urban Mobility Plan, the reallocation of space towards sustainable movement of people and the development of a cycle network (Kilkenny County Council, 2024b). The plan also designates Kilkenny City as a Decarbonisation Zone. Transport currently accounts for 36% of emissions within the zone and one of the six objectives is the greater provision and use of active and sustainable travel.

3. Plan Area Characteristics

Study Area

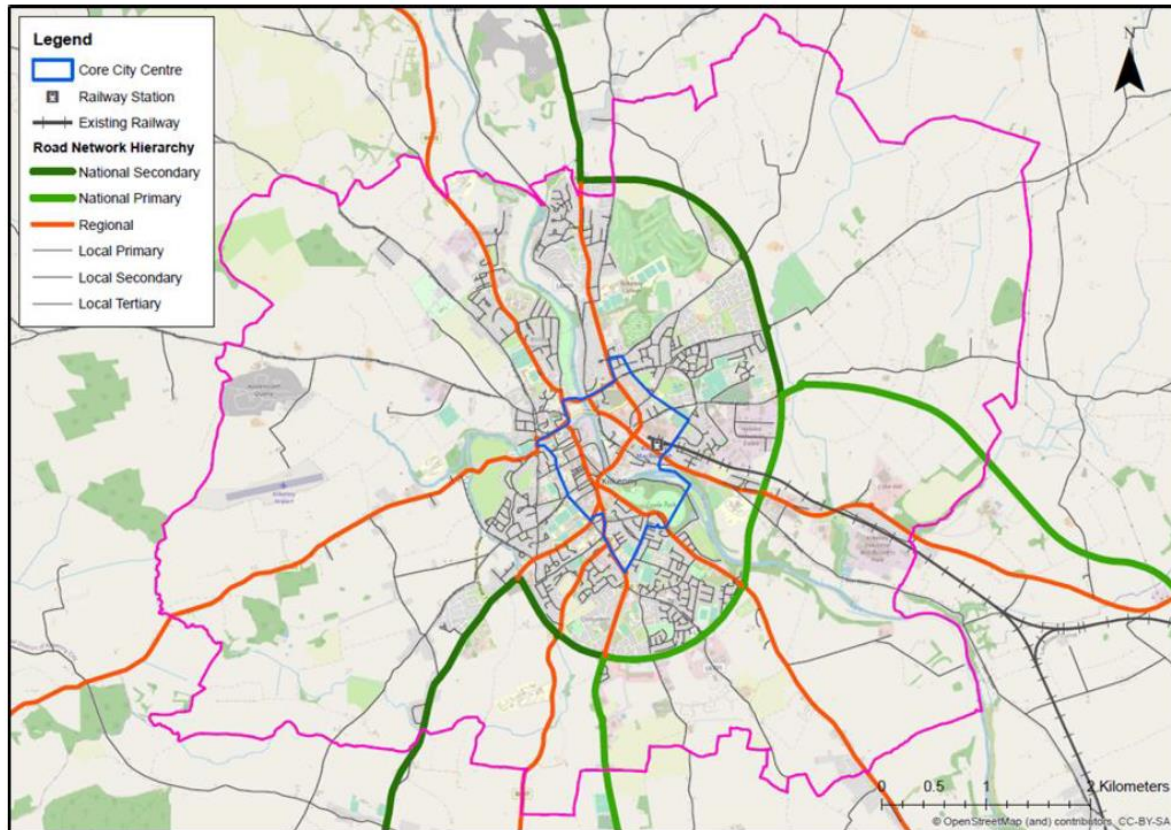
Kilkenny City is the fourth-largest settlement in the Southern Region with a population of 27,184 (2022). Projections indicate a significant population increase of 35% from 2016 by 2040, underscoring the city's growing importance as a regional hub. The Regional Spatial and Economic Strategy in consideration of the people and places of the region and the overall approach to development identifies Kilkenny as a Key Town. The City 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 has a strong agri-business and finance industry. It is the sixth-largest employment centre in the state with a daytime working population of 15,479.

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. The city has a compact, urban structure shaped by natural features, the Rivers Nore, Breaghagh and Pockocke and the medieval streetscape with Kilkenny Castle and St. Canice's Cathedral flanking either end of the "Medieval Mile". The cityscape is characterised by a network of slips and laneways. The River Nore flows through the centre of the city and is the focal point for the Linear Parks along its banks. However, it is also a physical barrier in the city. It is crossed by two old bridges, John's Bridge and Green's Bridge, the Lady Dysart Pedestrian Bridge and St. Francis Abbey Bridge, complete in 2017. The City is mostly contained by the Ring Road which stretches from the Castlecomer Road in the North East to the Callan Road in the South West. The study area is shown below in Figure 1.





Figure 1 Study Area (Baseline Conditions and Policy Context Report, Jacobs, 2020)



Kilkenny City has good motorway links (M9) to Dublin and Waterford as shown in Figure 2. Kilkenny City is a spur off the Dublin Waterford railway line. The transport networks are discussed in detail in Section 4.





Figure 2 Kilkenny's Road Links



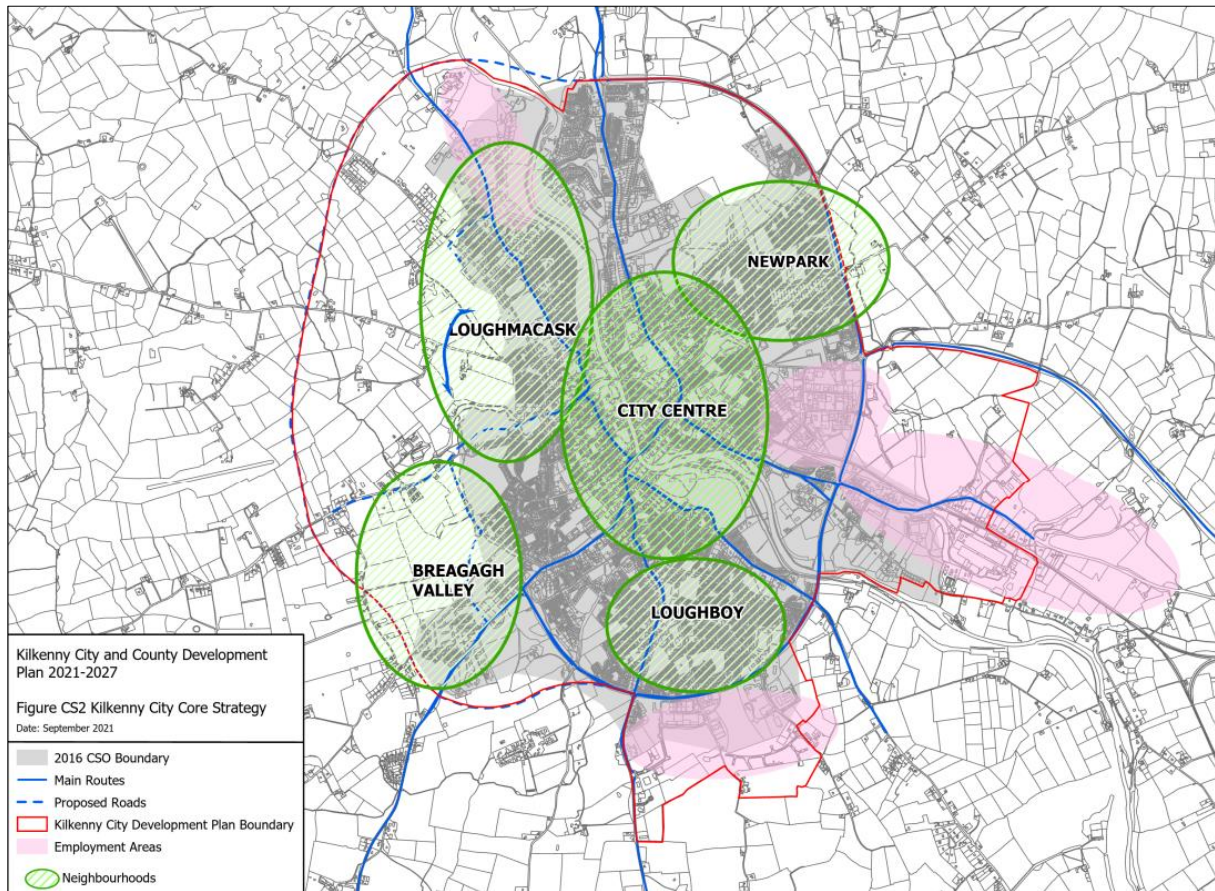
Development Patterns - The City Centre and Four Neighbourhood Concept

Population projections indicate a population growth of 35% from 2016 by 2040, underscoring the city's growing importance as a regional hub. This is an increase of 9,280 people. In response to this anticipated growth, Kilkenny City is set to expand through the development of new neighbourhoods, Loughmacask and Breagh Valley. These areas will play a crucial role in meeting the city's rising housing demand. Almost 2,000 housing units have been approved in the two new neighbourhoods, and as of the end of 2024, over half of these have commenced. These new neighbourhoods are integral to Kilkenny City's broader four-neighbourhood development strategy, based around the city core, which also includes the established communities of Newpark and Loughboy. Both Newpark and Loughboy boast vibrant community centres that offer essential retail, education, and health services, helping to reduce overall transport demand by providing amenities close to residents. There is ongoing development and regeneration efforts in the city centre.





Figure 3 Kilkenny City's Core Strategy: Four Neighbourhood Concept (Kilkenny City and County Development Plan 2021-2027)



In the inter-censal period, 2016 – 2022, there has been a population increase of 2.59% in the settlement area, with the city centre core remaining relatively stable. The population density of Kilkenny City increased from 2,116 to 2,348 per square kilometre, representing an 11% increase in population density.





Figure 4 Kilkenny City multi-unit housing schemes with permission, commenced in green, not commenced in orange (Kilkenny County Council, 2024)

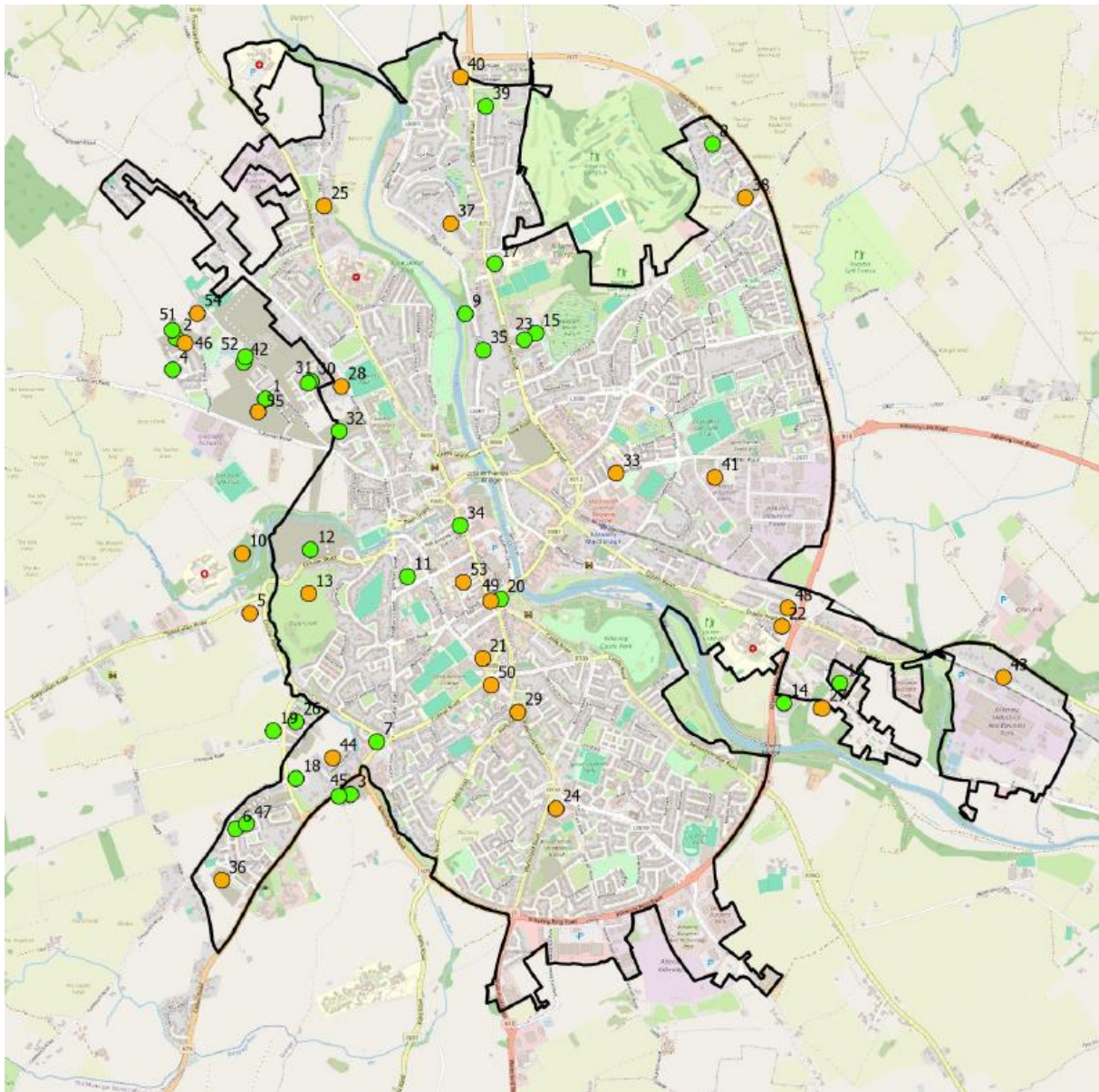




Figure 5 Population Density by Small Area (Baseline Conditions and Policy Context Report, Jacobs, 2020)

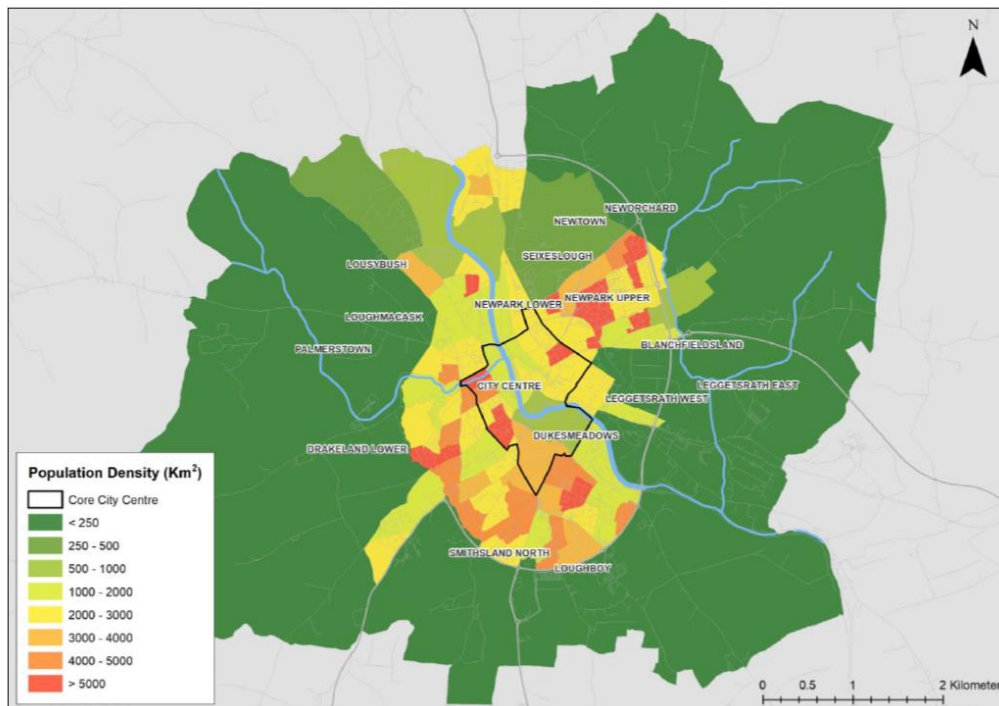
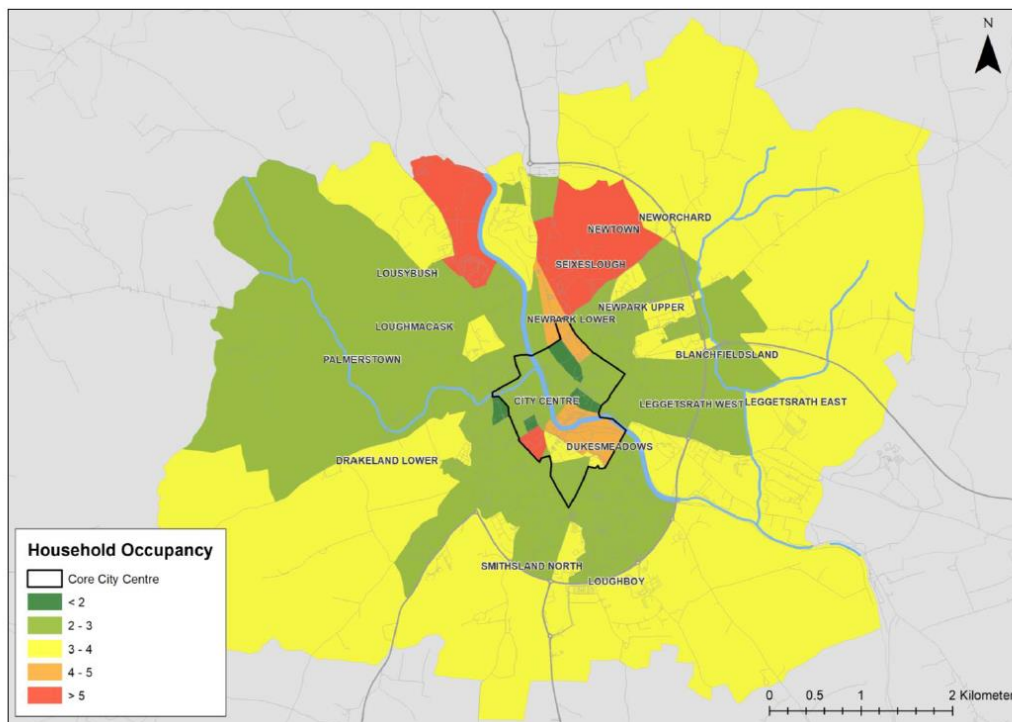


Figure 6 Household Occupancy showing larger households located on the outskirts and to the north of the city (Baseline Conditions and Policy Context Report, Jacobs, 2020).





The following figures illustrate the percentage share of household car ownership, the percentage of journeys under 15 minutes and the percentage of those walking to work, school or education by small area in Kilkenny City from the 2022 census. In Kilkenny City and Environs, there are 1,791 households with no car. There are many parts of the city and environs where over 50% of the residents have journey times under 15 minutes.

Figure 8 illustrates that the modal share of walking for their daily commute is greater than 25% for many small areas in Kilkenny and in particular to the west of the River Nore.

Figure 7 Household Car Ownership from Census 2022

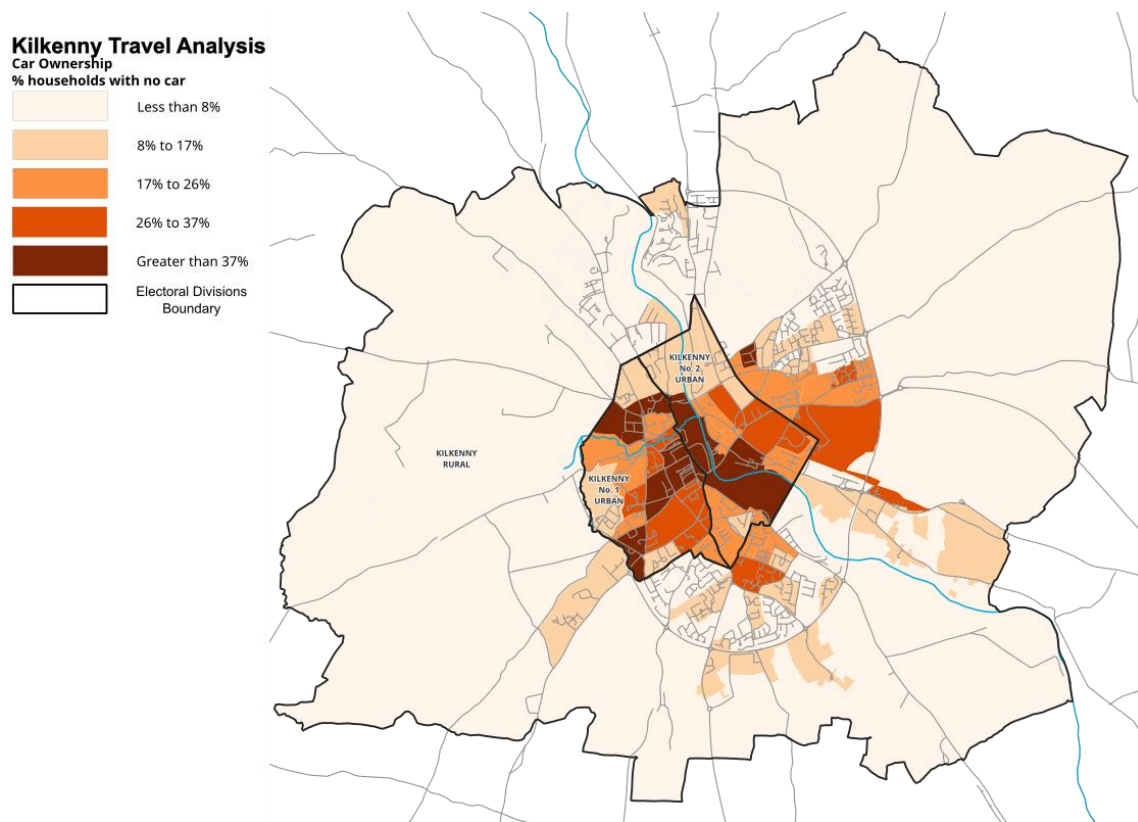




Figure 8 Journeys Under 15 minutes from Census 2022

Kilkenny Travel Analysis
Journeys under 15 minutes
total (%)

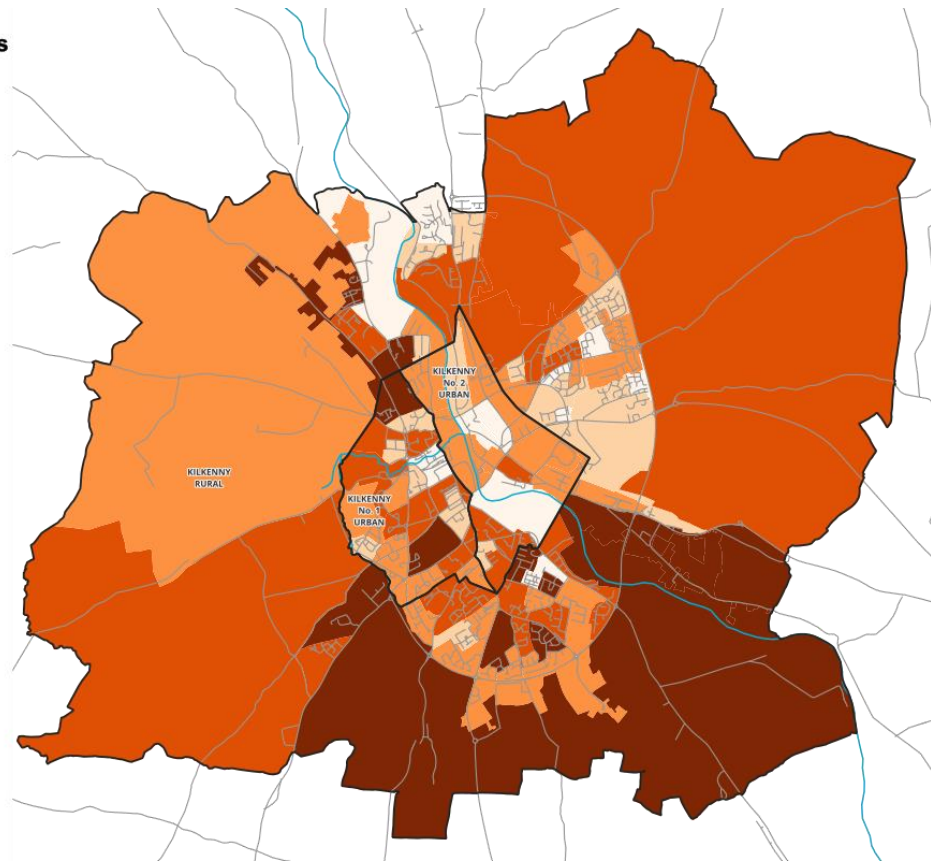
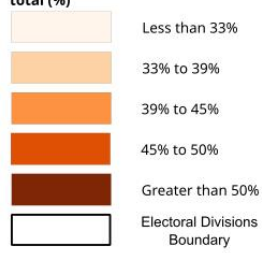
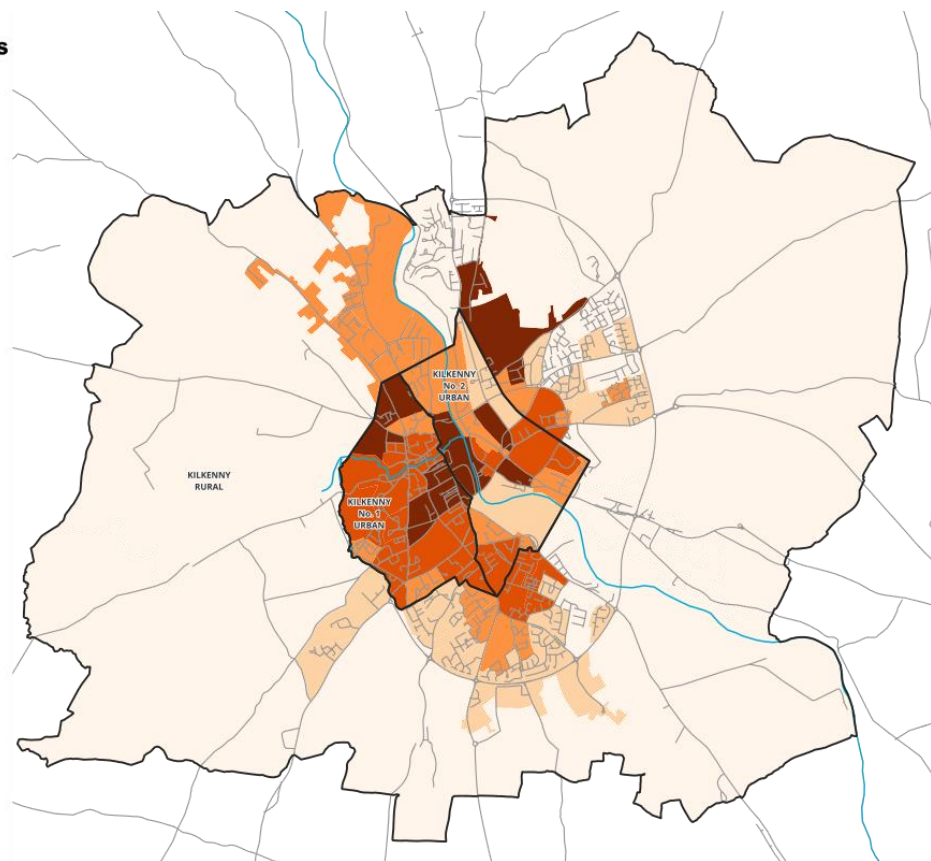
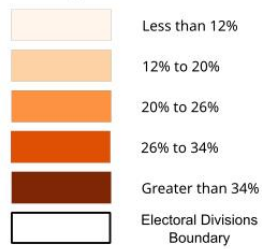


Figure 9 Percentage of those with a modal share of walking to work or education from Census 2022

Kilkenny Travel Analysis
Walking - total (%)

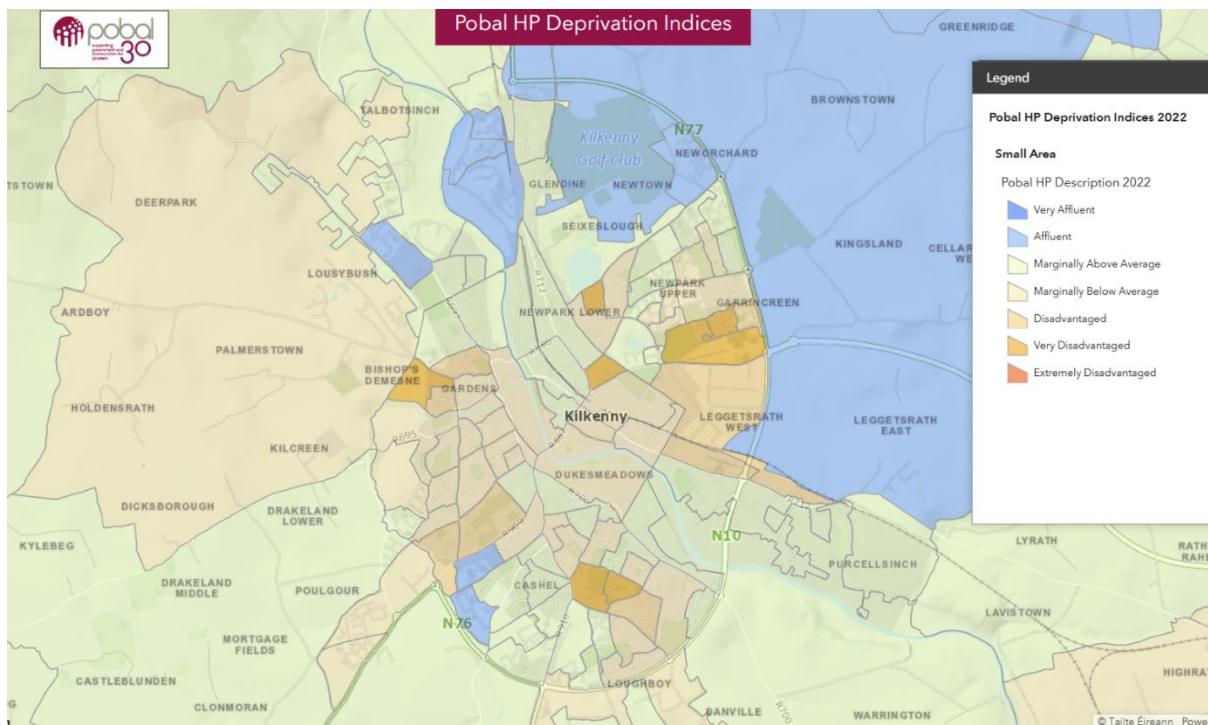




Pobal HP Deprivation Index

The Pobal HP Deprivation Index (Haase and Pratschke, 2017) is the core index for the Republic of Ireland and covers the small areas (SA) of the 2022 Censuses. The index is based on the combination of three dimensions of relative affluence and deprivation: Demographic Profile, Social Class Composition, Labour Market Situation. The deprivation index is an important consideration in transport provision as the areas of higher deprivation should be prioritised for the provision of sustainable transport choices to address transport poverty.

Figure 10 Pobal Deprivation Indices 2023



Land Use Zoning and Employment

The City Centre is the highest concentration of employment, particularly around High St., St. Kiernan’s St., Parnell St. and James’s St. And the Abbey Quarter where the job density is greater than 5,000 jobs per km² (Jacobs, 2020). A vast range of retail outlets such as the Market Cross Shopping Centre, independent shops and international chains are located here, as well as offices, restaurants, cafés and services such as An Post, banks and travel agents.

Another area of note is to the south-east of the Study Area where the job density is between 1,000 and 1,500 per km² (Jacobs, 2020). This includes St. Canice’s Hospital, Hebron Industrial Estate, Purcellsinch Business Park (VHI Healthcare, Veolia Water Ireland) and Cillín Hill Agri-Business Park.

Kilkenny Retail Park and the IDA Loughboy Business and Technology Park, comprising a wide range of companies such as Statestreet, TaxBack, Bank of Ireland and Abbott are located to the south of the Ring Road, west of the River Nore. Glanbia, a global agri-food and nutrition business, has its headquarters in Kilkenny with several premises across these parks.

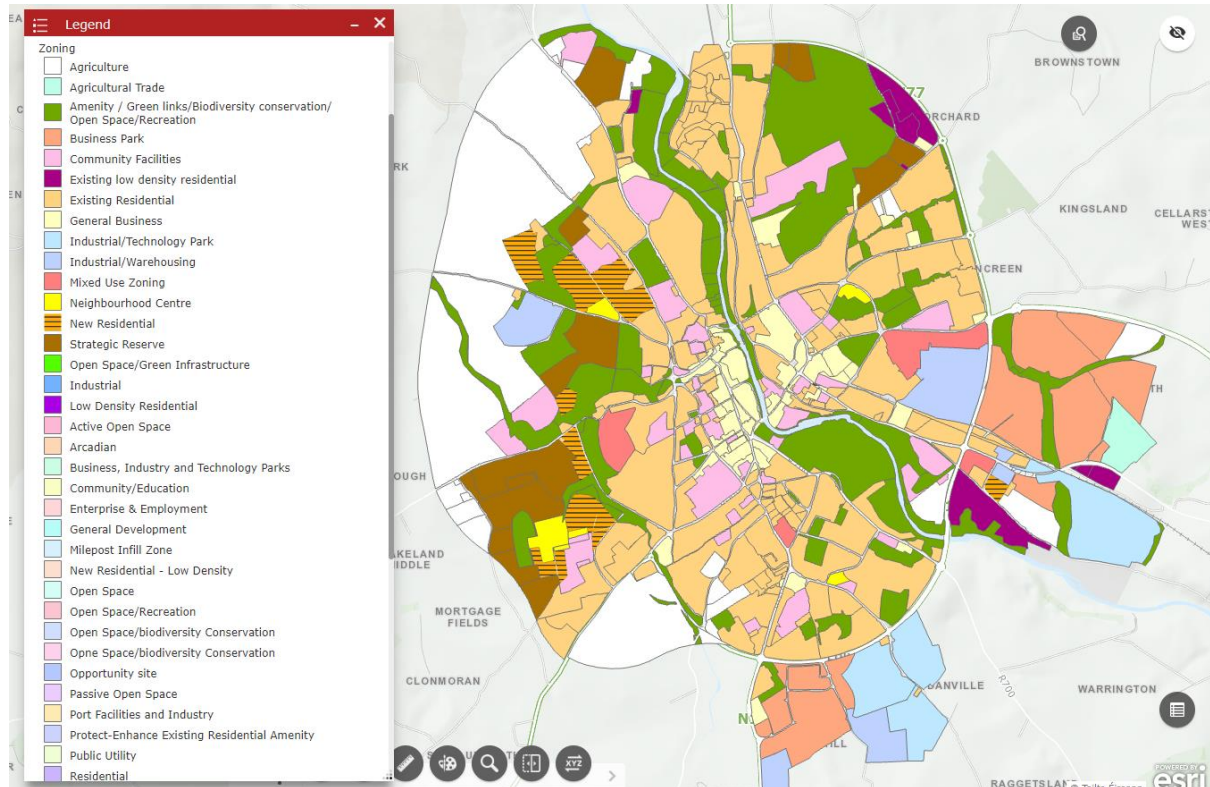




Other clusters include an area to the north of the Study Area where Aut Even Hospital and St. Luke's General Hospital are located has a job density of between 1,500 and 3,000 per km² (Jacobs, 2020).

There are a number of out-of-town retail outlets such as LIDL, ALDI, along the Waterford Road, Bohernatounish Road, Hebron Rd and Johnswell Road.

Figure 11 Kilkenny City Zoning Map (Kilkenny County Council, 2025)



Other notable trip generators, due to the vehicle type, include Grassland Fertilisers on the Tullaroan Rd and PRL and Daltons Chancellors Mills on the Freshford Rd. PRL provides international freight services and distribution services in Ireland and is located off the Freshford Rd. These three businesses generate a large number of HGV trips. These sites have no direct access to the Ring Road, resulting in a higher percentage of HGVs (~8 -10%) in these localities and in the west of the city, particularly on the following routes; Freshford Road, Granges Rd, Dunningstown Road and Lord Edward St.





4. Existing Transport Networks

Road Network

National Road Network

The national road network provides the basis for Kilkenny's national-level and inter-regional connectivity. There are a number of National roads in the Study Area N10 (National Primary), the N76 (National Secondary), the N77 (National Secondary) and the N78 (National Secondary). The M9 (Motorway) is, while outside of the Study Area, located in proximity to it. These roads connect the following:

- M9: Dublin to Waterford;
- N10: Radial route linking Kilkenny to the M9 Dublin to Waterford;
- N76: Radial route linking Kilkenny to the N24 east of Clonmel, County Tipperary;
- N77: Radial route linking Kilkenny to the M7 at Portlaoise, County Laois; and
- N78: Links the N77 north of Kilkenny to the M9 at Mullamast, County Kildare.

Kilkenny Ring Road

The Kilkenny Ring Road is a key part of Kilkenny's road network, comprising the N76, N10 and N77. This orbital route bounds most of the Study Area, stretching from the south-west at Callan Road to the north at Castlecomer Road, as follows:

- N76: Callan Road Roundabout to Waterford Road Roundabout;
- N10: Waterford Road Roundabout to Hebron Road Roundabout including a bridge crossing over the River Nore; and
- N77: Hebron Road Roundabout to Castlecomer Road Roundabout.
- The feasibility of the section R1 (northern extension of the ring road from the Castlecomer Road to the Freshford Road) is currently under review with the Department of Transport.

The road's cross-section consists of single and dual lane carriageways with a cycle track and footpath on the urban side, separated from the road by a grass verge. The speed limit along the length of this road is 100kph. There are ten roundabouts along the route and an access point to the Loughboy IDA Business and Technology Park. Some roundabouts provide dropped kerbs and tactile paving to facilitate crossing for pedestrians and cyclists.

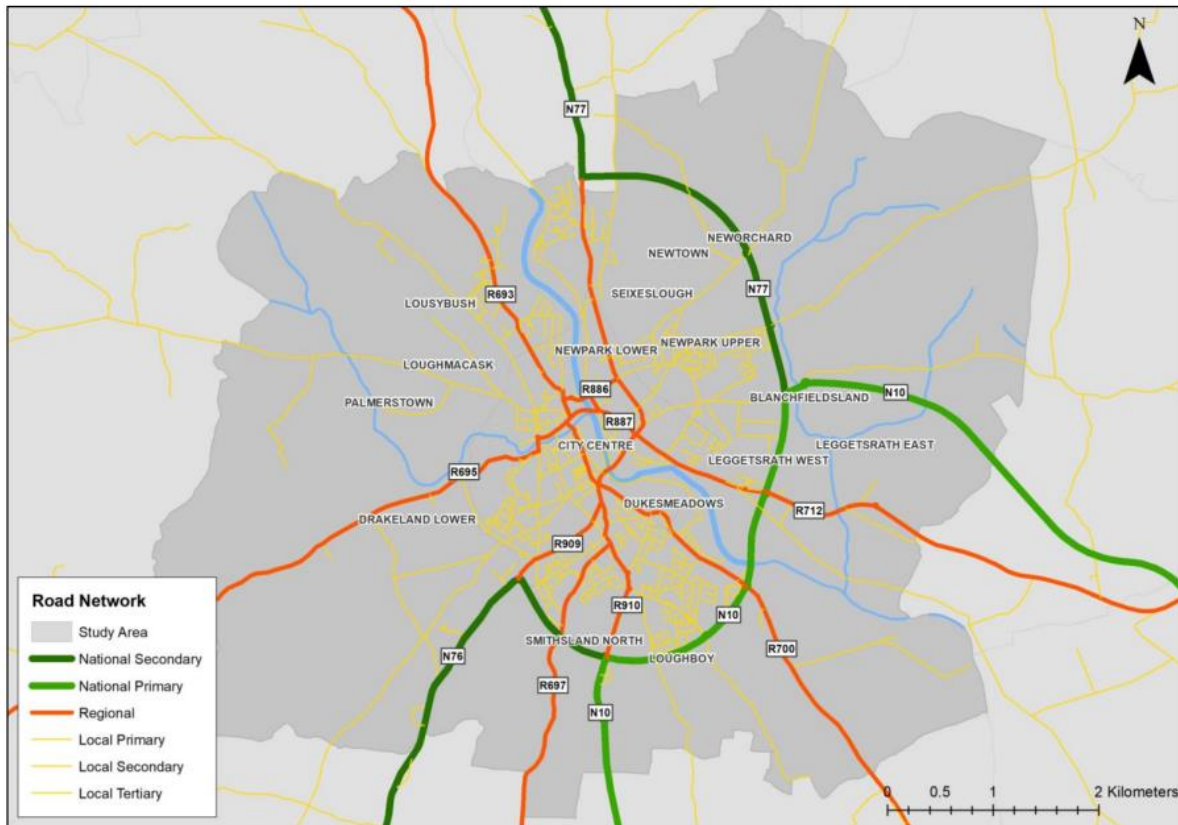




Regional Road Network

The Study Area's regional road network comprises mainly of radial routes connecting the City Centre to the national road network and wider environs.

Figure 12 Existing Road Network (Kilkenny City and County Development Plan, Volume 2 City, 2021)



Connectivity to the Western Environs: Breagagh Valley

Phase 1 of the Central Access Scheme was completed in 2016, comprising the construction of St. Francis Bridge, a single-carriageway road providing east-west connectivity over the River Nore. It also links the Abbey Quarter to the Old Mart Site – two brownfield sites earmarked for significant development.

The Circular Road and William Robertson Way connecting the Callan and Kilmanagh Roads, were completed in 2021, opening up the Breagagh Valley neighbourhood for future residential expansion.

A second phase of the Central Access Scheme, R5 is 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 one-way system along Dominic Street, Stephen Street and Parnell St area.





Connectivity to the Western Environs: Loughmacask

R6, from the Freshford Road to the Dunningstown Road and onto the CBS site is currently at construction. R7 sustainable links (from the Tullaroan Rd to the Freshford Road R693 and from the Tullaroan Rd to the Kilmanagh Road R695) are currently at feasibility stage. These links will create the infrastructure necessary to facilitate additional developments as outlined in the Loughmacask Area Masterplan and will meet the requirement of objective R12 and R13 of the proposed variation no. 4 of the Kilkenny City and County Development Plan 2021 – 2027 as described below:

Objective R12 : Subject to the appropriate Zoning being in place and a Traffic Impact Assessment, additional developments (over and above the permitted quantum of housing at the time of making the masterplan 2023) with access off the Tullaroan Road will not be permitted unless a clear timeframe for delivery of the necessary support road infrastructure Objective R7 or other satisfactory road infrastructure (being either Kilmanagh Road to Tullaroan road) or (the Tullaroan Road to Freshford road) in the City and County Development Plan is in place.

Objective R13: To investigate, how the Objective R6 (Vol 2 Chapter 5 of the City & County Development Plan) can be connected with the Tullaroan Road subject to appropriate traffic management regime.

Bridge Crossings

Five bridges provide connectivity between eastern and western banks of the River Nore, as follows (from south to north):

- N10: Part of the Kilkenny Ring Road;
- St. John's Bridge: Narrow footpaths on both sides;
- Lady Desart Bridge: Pedestrian bridge;
- St. Francis Bridge: Footpaths and unprotected cycle lanes on both sides; and
- Green's Bridge: Narrow footpath on one side.

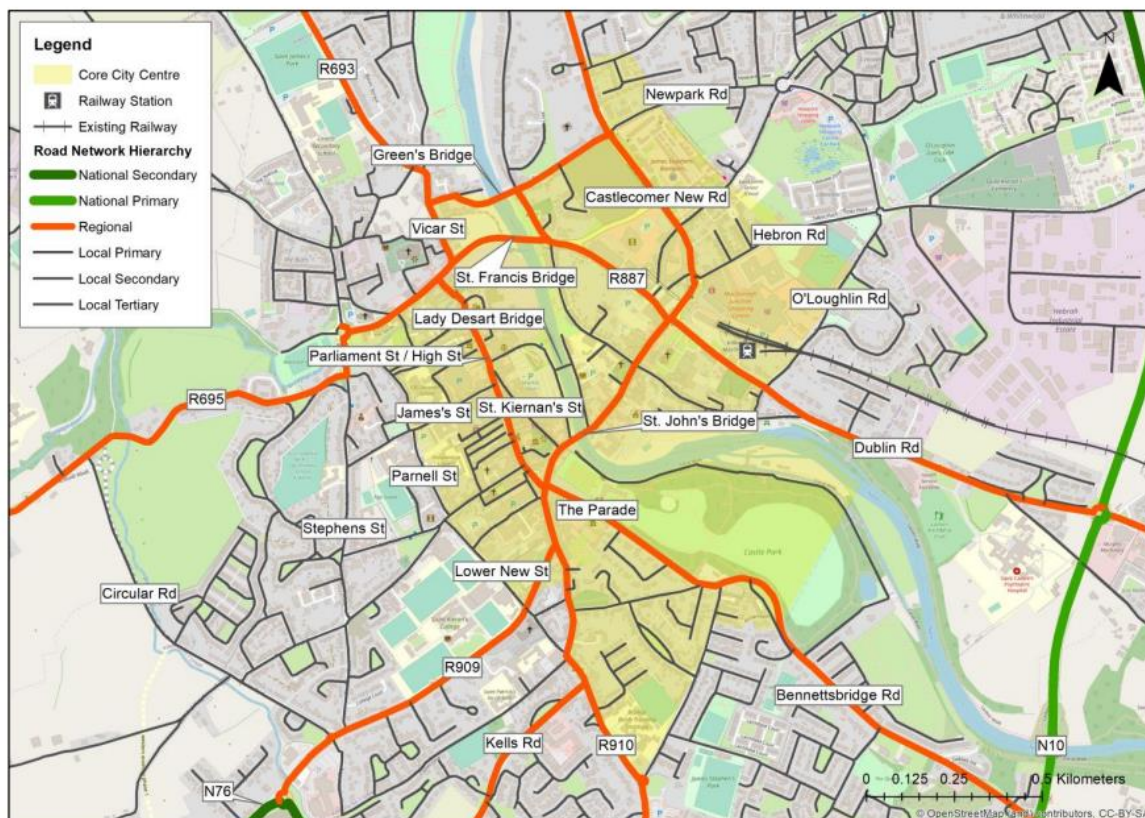
City Centre Street Network

Kilkenny's City Street Network is characterised by its medieval origins, the City Centre contains a streets network of back lanes, or 'slips'. Some serve as short cuts for pedestrians across the width of particularly long blocks and offer enhanced permeability and connectivity such as New Building Lane, Pennyfeather Lane or St. Mary's Lane. However, the medieval fabric and street pattern of the City Centre also creates challenges in trying to cater for all modes and varying needs of the community. The majority of the City's urban roads and streets have adopted a speed limit of 30kph which begin at defined gateways on the periphery of the City Centre Core.





Figure 13 City Centre Street Network (Baseline Conditions and Policy Context Report, Jacobs, 2020)



Rail Network

[Irish Rail](#) operates MacDonagh Station adjoins MacDonagh Shopping Centre and is located at the top of John St, convenient to the city centre. It is approximately 700m to High St. or Kilkenny Castle. The station is on the Dublin-Waterford route, with connections to Cork, Limerick and Galway. Future plans include a dual track for the Kildare - Kilkenny line, this would greatly increase the capacity for more frequent services and allow more commuter services to serve intermediate stations and thus enable intercity services to deliver faster city to-city journey times. There are eight services on weekdays and five services on Sundays. Currently, the service frequency does not accommodate the daily commuter journey inwards to Kilkenny City, from Dublin or Waterford.

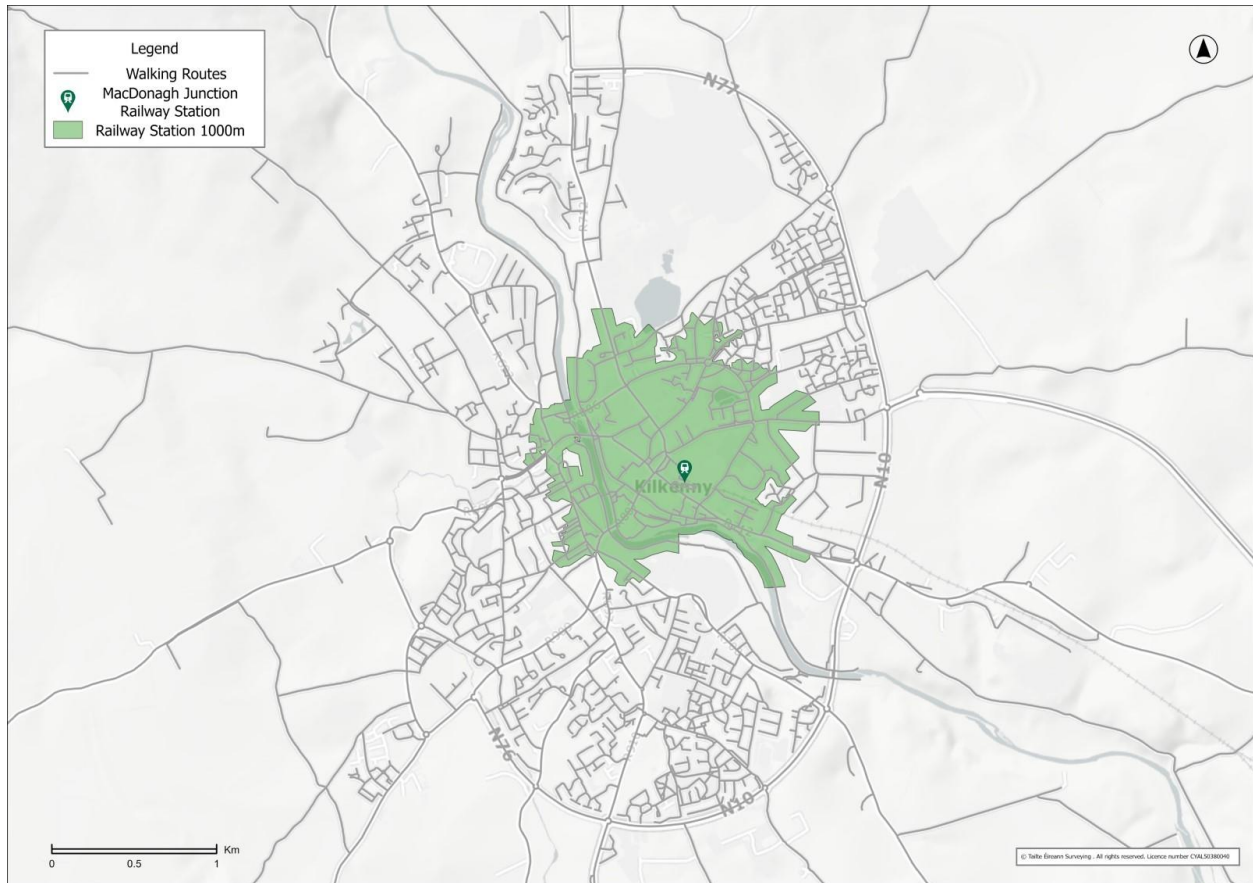
The Station building is equipped with a ticket vending machine, a ticket office, a small newsagents and toilet facilities. Paid parking is available at the station at daily, monthly and yearly rates. There are approximately 170 parking spaces in the car park, with 7 disabled spaces and 2 Electric Vehicle Charging Points (EVCP). Sheltered cycle parking is located near the entrance of the station building. The station is served by both city bus routes and shared cars and bikes are available at MacDonagh Junction. The Station is located at the top of a long ramp which has a narrow footpath on one side. There is a lift at the base of ramp which accesses the Station car park, as well as an entrance to the MacDonagh Junction Shopping Centre, providing a more comfortable and accessible alternative to the steep and narrow path for pedestrians. A ramped access has recently been provided between the station and the shopping centre. The immediate environment around the Station is car dominated and hostile to pedestrians with a





lack of active frontage and wide, multi-stage crossing at junctions. Wayfinding and legibility from the Station to the City Centre is poor. Figure 16 below shows the 1km walking catchment around the train station.

Figure 14 1km Walking Catchment from Rail Station



Bus Network

The first inter-city buses were introduced in Kilkenny in 2019 and passenger numbers have grown steadily. The service operates two routes in Kilkenny City. Route KK1 runs from Loughboy Retail Park to the N77 Roundabout and serves Upper Patrick Street, McDonagh Junction, and Castlecomer Road. Route KK2 runs from Purcellsinch to St Luke's Hospital with stops at Dublin Road, Newpark Shopping Centre, McDonagh Station, Nowlan Park, and Loreto. The two routes combined serve 33 stops, feeding into a central spine crossing St. John's Bridge to the City Centre, sharing stops at Parliament Street, Market Yard and John Street Upper. Bus shelters are currently being rolled out along the two routes. Both routes have circuitous alignments, designed to broaden their catchment areas including areas of high population density and low car ownership. The routes operate every 30 minutes Monday to Saturday. Services on Sunday operate by the hour, with services every half hour during the core part of the day. Late night services operate on Friday and Saturday nights.





Kilkenny bus services



Save up to 30% vs cash singles when you use a TFI Leap Card.

BUS SERVICES

- KK1 - Town Service**
Frequency: Weekday 30 min
Saturday 30 min / Sunday 30-60 min
- KK2 - Town Service**
Frequency: Weekday 30 min
Saturday 30 min / Sunday 30-60 min

KEY

- Bus route
- Stop
- Bus route terminus
- Rail
- Castle
- Hospital
- GAA Stadium
- Shopping Centres

Schematic map. Not to scale. December 2019

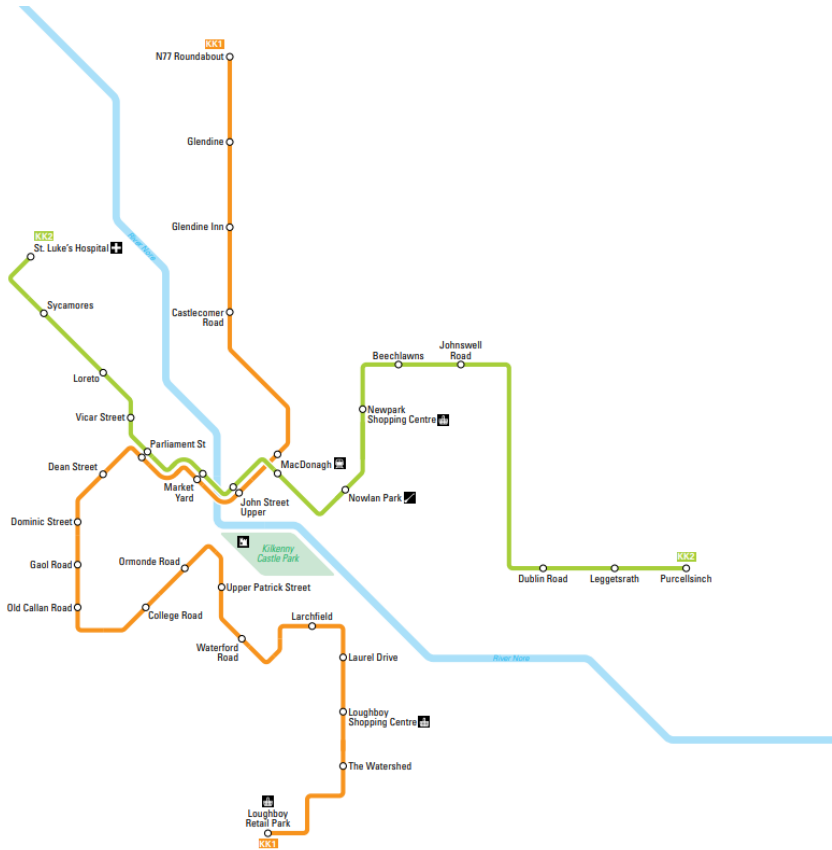
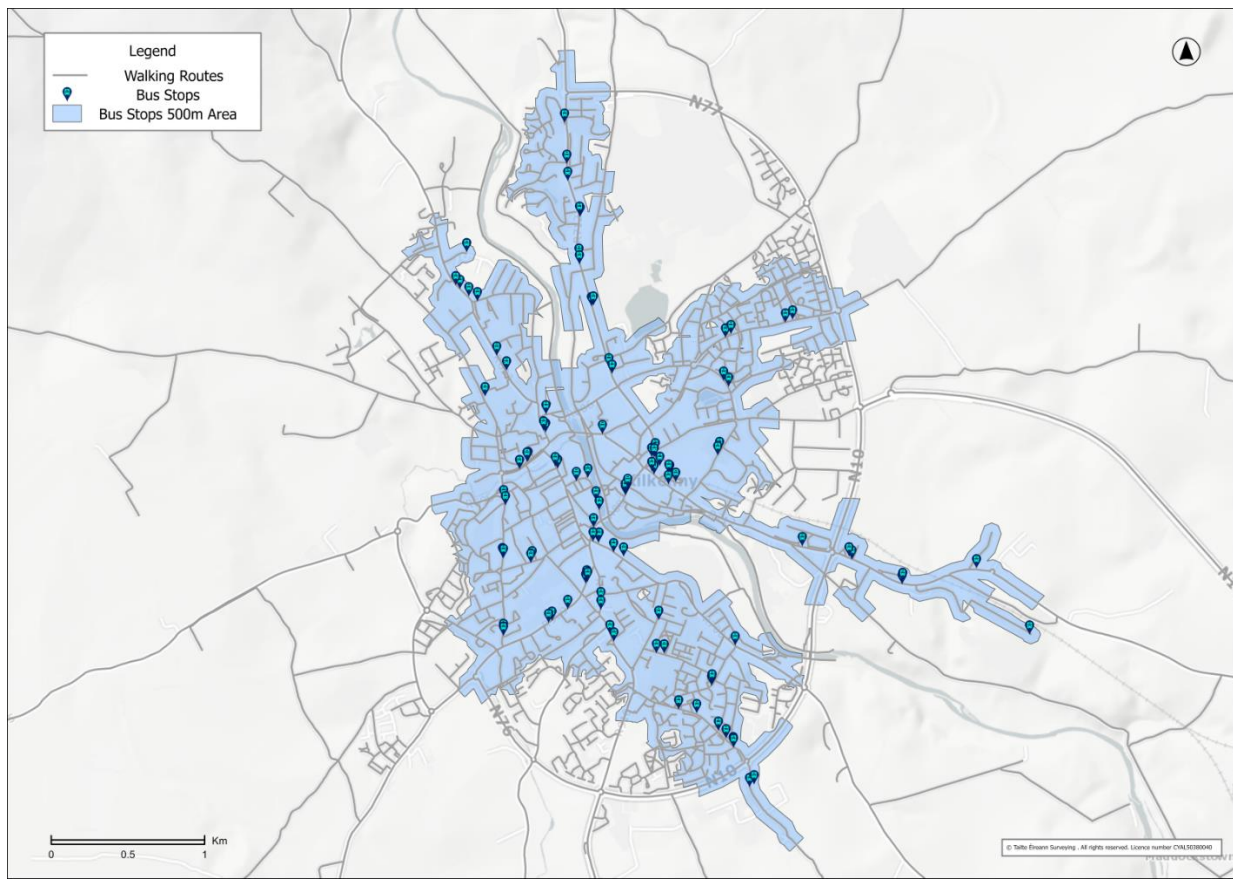


Figure 17 presents the 500m catchment of the existing bus services in Kilkenny, based on the Kilkenny City walking network. This analysis indicates gaps in provision for the residential area between the Waterford Rd and Kells Rd to the south of the city and the residential area between the Hebron Rd and the Johnswell Rd to the east of the city.





Figure 15 Bus Stops 500m Walking Catchment



Local Link

Local Link is a service operated by the NTA to provide rural bus services across Ireland, both door-to-door and scheduled services in towns, villages and rural areas. Local Link operates in Kilkenny under the local name 'Ring a Link'. In addition to a number of scheduled services, some are Demand Responsive and must be booked in advance. These have flexible routes within a defined area to serve dispersed mobility needs, low demand hours and areas of low population. There are approximately 13 routes in operation.

Regional Services

The City is presently served by a number of bus connections to various towns within the county and by a number of inter-city services. In the main, these services set down and pick up passengers at the bus stop on Ormonde Road and at MacDonagh Junction. Bus Éireann and Dublin Coach operate services from MacDonagh junction and Railway station and at the bus stop on Ormonde Road. As there is no formal transport hub in Kilkenny, most regional services stop at Ormond Road, the Parade/ Kilkenny Castle or MacDonagh Junction.





Cycle Network Audit

A complete cycle audit was conducted as part of Kilkenny Local Transport Study in 2020 and is presented in Tabel 4-6, Baseline Conditions and Policy Context Report (Jacobs, 2020). This was conducted using the Quality-of-Service tool and standards that have been superseded by the new National Cycle Manual.

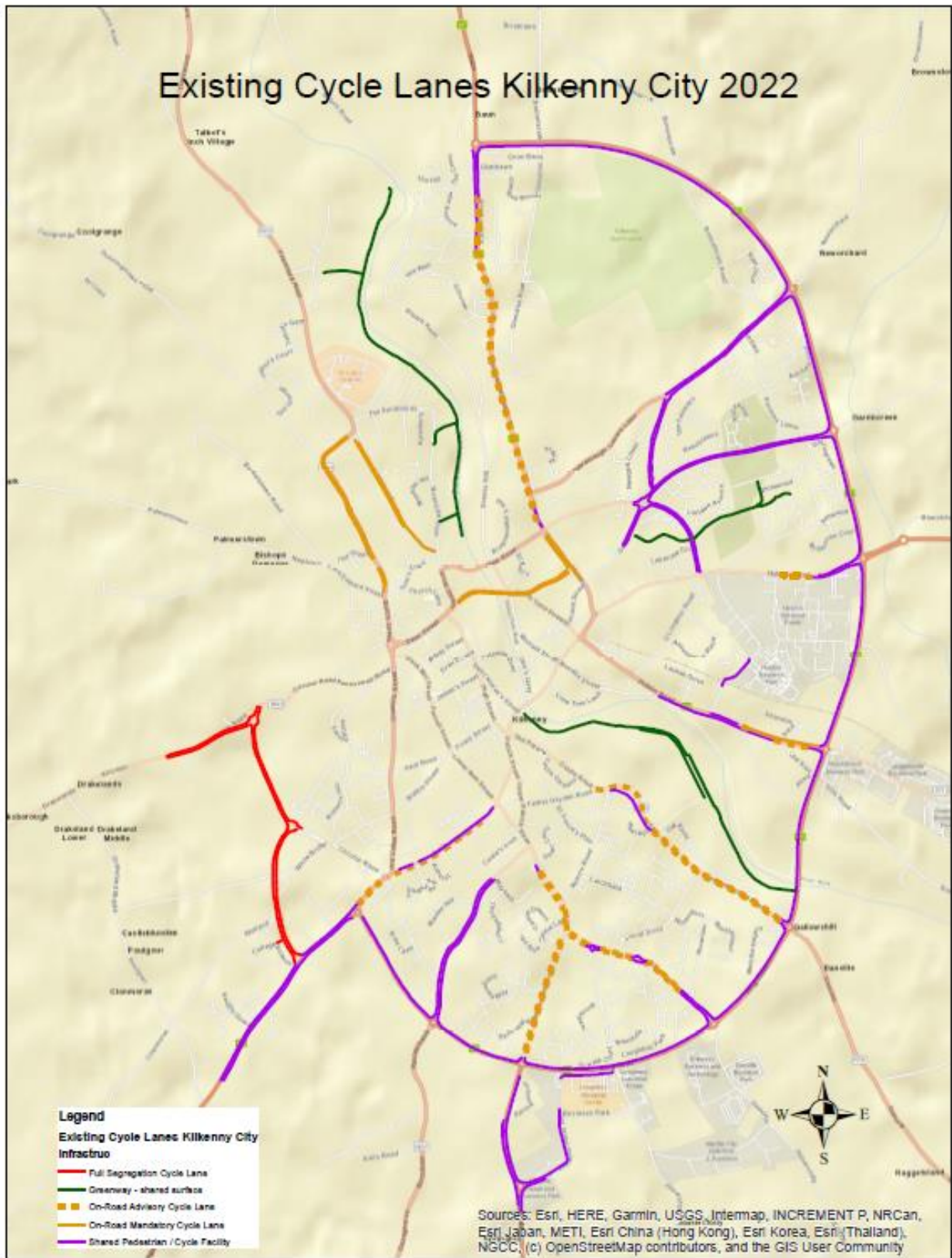
An urban cycle network for Kilkenny City has been developed by the NTA in conjunction with Kilkenny County Council. Figure 18 shows the existing cycle infrastructure.

The Ring Road, the Johnswell Rd, the Kells Rd and the New Orchard Road have cycle paths, vertically segregated from the carriageway. There are no junction treatments for cyclists on these routes resulting in a lack of safety and connectivity for cyclists. Under the Active Travel programme, the Freshford Rd and Granges Rd rapid build cycle paths were substantially complete in 2024, providing improved cycle facilities, segregated from the carriageway by bollards. An extension of the off-road cycle track in Pococke Park and an upgrade of the shared active travel facility in Loughboy Park were provided in 2024. The opening of a new link across the Breagagh, Rosehill Bridge, south of the Callan Road Roundabout, completes the link from the city centre to the ring road facilities in the western environs via Coote's Lane. Improvements to the car road network to the west of the city have also taken place to improve this facility for active travel. These and other planned improvements are delivered through the National Transport Authority's Active Travel Funding programme.





Figure 16 Existing Cycle Network 2022





Pedestrian Network Audit

Despite narrow footpaths due to medieval streets, Kilkenny city is considered a walkable city (Workhouse Union, 2020). The older neighbourhoods have good connectivity and the network of lanes and slips in the city results in a choice of permeability links. However, the medieval physical form presents challenges to accessibility and the river Nore and the Ring Road serve as strong severance lines.

A complete pedestrian audit was conducted in 2020 as part of the Kilkenny Local Transport Study, see Table 4-1 Baseline Conditions and Policy Context Report (Jacobs, 2020). Since this audit, improvements have been made to the network as part of the annual footpath improvements programme as shown in Table 1 below. An audit has been conducted of the pedestrian crossings in the city, as shown in Figure 19.

Table 1 Footpath Improvements

Year	Location
2023	Castle Road
2023	Dublin Road (Northern Side from O'Loughlin Road – Maudlin St)
2023	Leggetsrath
2023	Blackmill St/Abbey St Junction Improvement
2023	Cedarwood Avenue
2023	DeLoughry Place
2023	Saint Fiacre's Place Footpaths
2023	Marble Crest
2023	Talbot's Grove
2023	St. Thomas square
2023	Westfield
2023	Retexturing of Limestone Kerbs in City Centre
2023	Newpark Drive
2023	Circular Road Traffic Calming
2023	Drakelands Footpaths
2024	Blackmill Street/Abbey Square Junction Improvement
2024	Retexturing of Limestone Kerbs in City Centre
2024	Circular Road Traffic Calming
2024	College Court Footpath Improvements



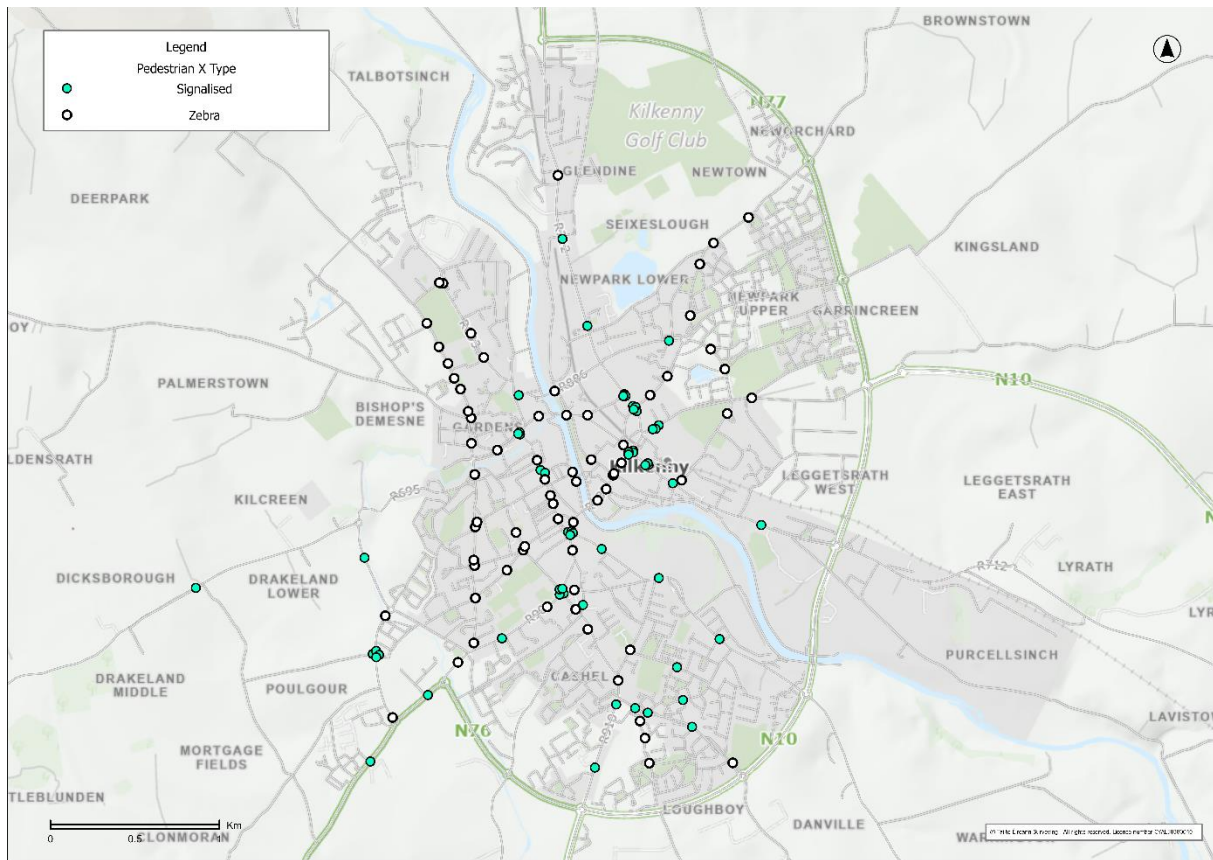


2024	St. Fiacre Place Footpath Improvements
2024	Upper Patrick Street Footpath Improvements
2024	DeLoughry Place Footpath Improvements
2024	Kells Road Footpath Improvements 32-40
2024	Kells Road Footpath Improvements opposite Rose Hill
2024	Garrin Green Traffic Calming
2024	Glendine Road Traffic Calming
2024	Cootes Lane Footpath Improvements @ Village Inn
2024	Bishop Birch Place Footpath Improvements
2024	Newpark Close - Replace cobbled area
2024	Maple Drive Footpath Improvements
2024	Illegal Parking Preventative Measures





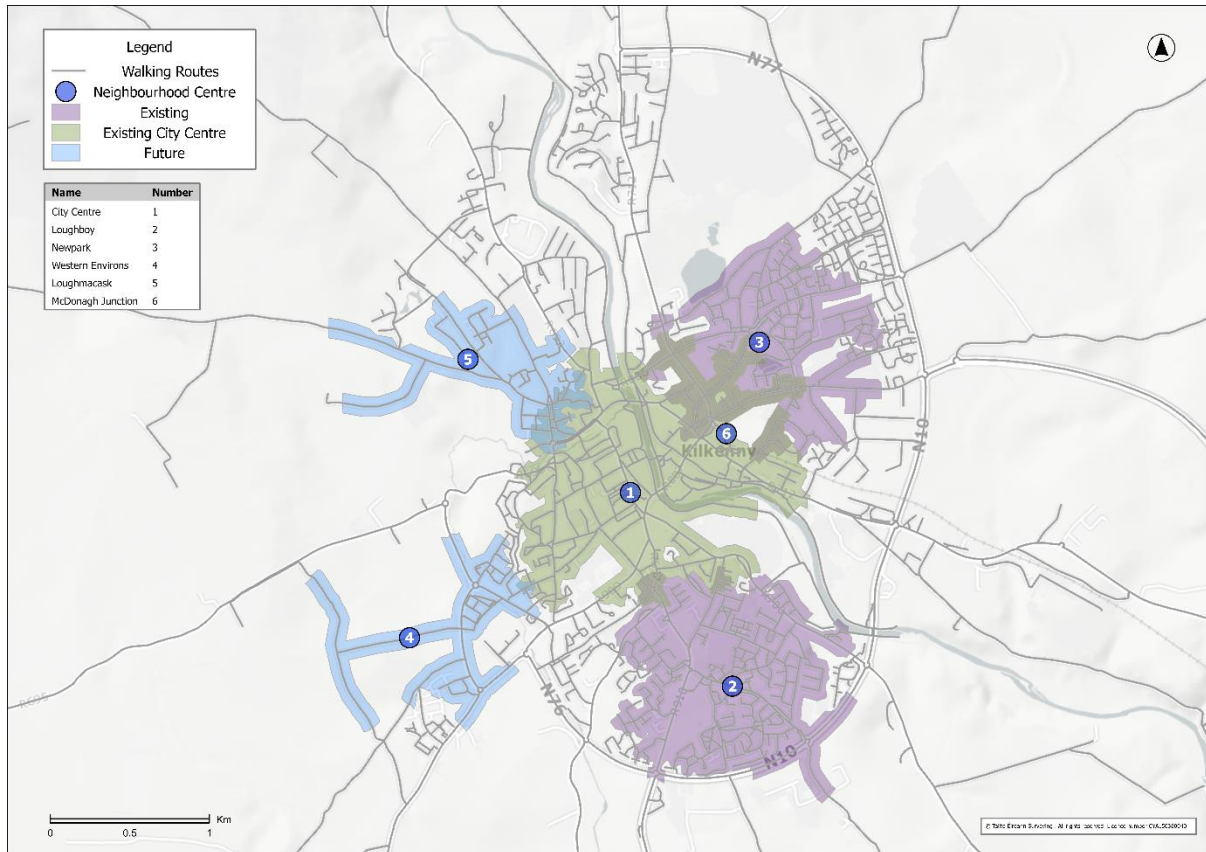
Figure 17 Map showing breakdown of zebra and signalised crossings in Kilkenny City, 125 crossings in total, 69 are zebras and 56 are signalised.





The following map (Figure 20) identifies the walking network in Kilkenny City and overlays the planning model for Kilkenny City. This model was analysed to identify gaps in provision and accessibility to essential services. The locations of the community centres (existing and planned) were mapped onto the walking network map. Two locations were selected for the city, the city centre (High St.) and MacDonagh Junction and a 1000m catchment was mapped. The resulting analysis identifies a lack of access to a community centre in the Northeast and Northwest of the City, either side of the river Nore. There is also a lack of access to services in the southwest between the College Rd and Callan Rd.

Figure 18 Neighbourhood 1km walking catchment

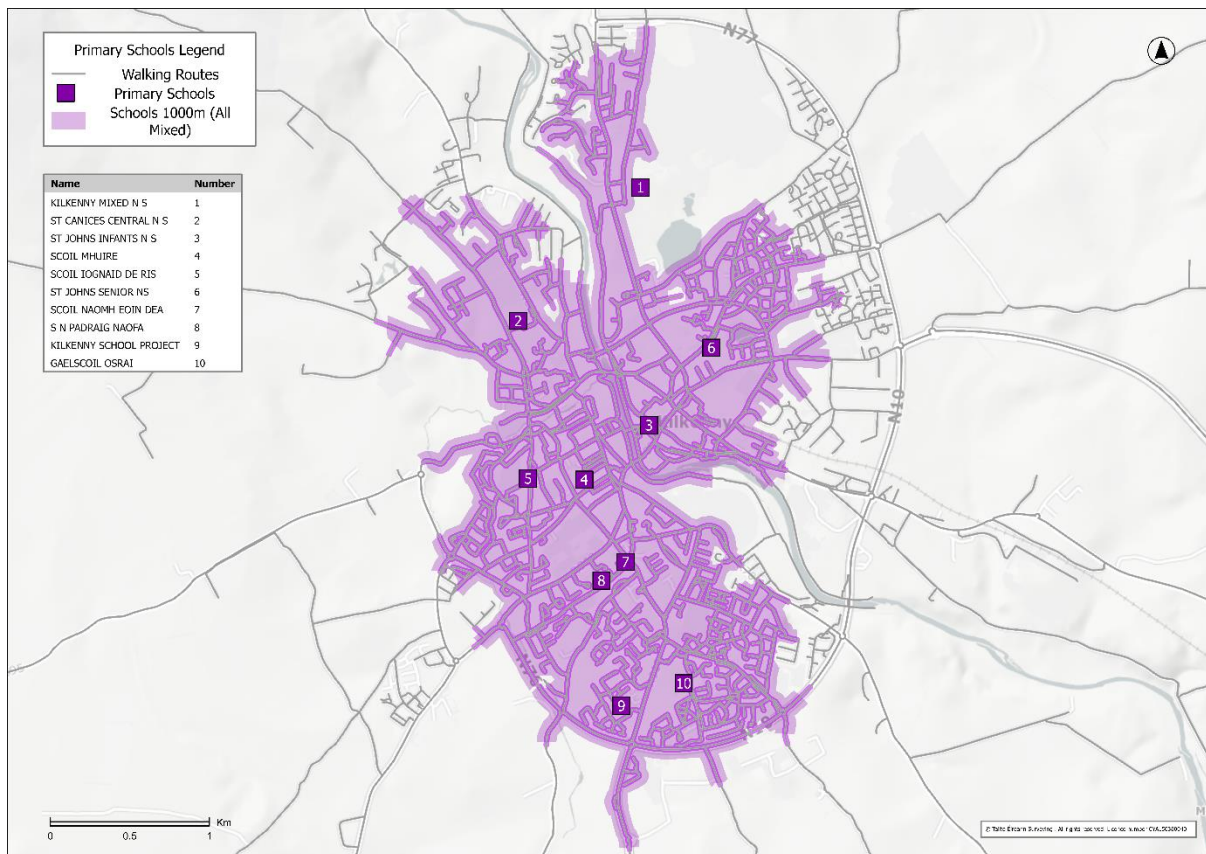


A further analysis was conducted in the accessibility of schools in the city. Figure 21 presents an overview of the accessibility of the primary schools. There are residential areas to the east of the city that are outside the 1km catchment mapped below.





Figure 19 Primary Schools 1km Catchment



The same analysis was conducted for secondary schools in the city (Figure 22). There is one school to the east of the river Nore. This school is a co-educational boys and girls boarding and day school. This school serves as large catchment area, but as the school has a Church of Ireland ethos, it may not necessarily serve students in the surrounding catchment. Therefore, the vast majority of students from Kilkenny city and the wider catchment are attending schools in the west of the city, with very little provision in the east.

The school bus service transports 1900 students to school in Kilkenny City, 1600 of these are post-primary school children. This service includes coaches, minibuses and smaller vehicles to meet the needs of students with additional needs. The buses drop-off and set down in the vicinity of the schools and there is a large school transport hub on the Gaol Road. Buses set down and pick-up in carriage ways or in some cases in allocated bus bays. These services provide a vital social need and should be accommodated and extended for the convenience and safety of students. Additional private buses also serve some of the schools in Kilkenny.

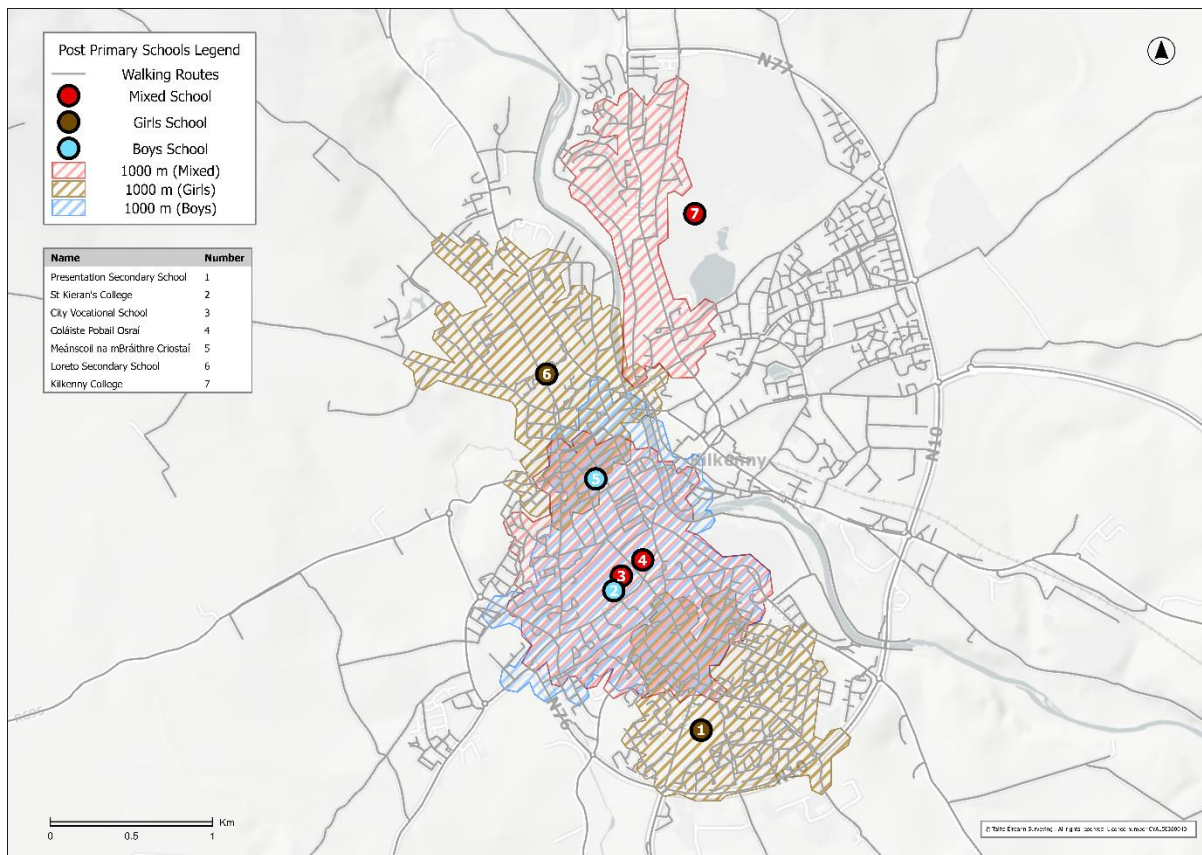
School	Student Number
Colaiste Pobail Osrai	230
Kilkenny College	916 (Boarding and Day Pupils) 501 Day Pupils
Loreto Secondary School	1046





CBS Secondary School	853
Presentation Secondary School	848
Kilkenny City Vocational	236
St. Kierans College	803 (Boys)
Total Students Attending	4,932

Figure 20 Post Primary School 1km Catchment



Permeability Assessment

Providing for permeability is an essential component of supporting a more walkable and cycle friendly environment. Good permeability is achieved through direct connections between origins and destinations that are accessible, safe and secure. A fully permeable environment for pedestrians and cyclists provides a competitive advantage over motorised forms, particularly the private car; thereby incentivising walking and cycling as the modes of choice.

The following section presents a high-level permeability assessment of the Study Area highlighting existing barriers to permeability, which can also be viewed as opportunities to improve permeability.





Figure 23 highlights existing barriers to permeability in the Study Area. Major barriers to permeability include the River Nore, River Breagagh, the railway line and the Kilkenny Ring Road. In general pedestrian and cycle permeability is relatively good in Kilkenny with the networks typically catering for movements between parallel radial streets. There is a proliferation of barriers such as cul-de-sacs and continuous stretches of walls around residential estates and schools with few entrances for pedestrians.

There are three road bridges over the River Nore, and two pedestrian bridges. This limits the connectivity in the city and the use of the attractive routes alongside the Nore as active travel facilities. Green's bridge and John's bridge are both old masonry bridges with insufficient facilities for pedestrians and cyclists. Green's bridge is the most northerly available bridge resulting in severance between the north-east (primarily residential) and north-west of the city with essential educational and health services.

The Ring Road is a very strong severance line. There are no dedicated crossing facilities, and the location of Danville Business Park, IDA Business and Technology Park, Kilkenny Retail Park, Purcell's Inch and Cillín Hill results in forced car use to areas of high employment.

Additional severance is caused by Kilkenny Golf Course, Kilkenny College, the Newpark Fen and the Breagagh River to the west of the city.

There are examples throughout the city of severance caused by kissing gates and a lack of cross-connections in housing estates. These are presented in detail in under permeability.

Figure 21 Permeability and Severance in Kilkenny City (Baseline Conditions and Policy Context Reports, Jacobs, 2020)





Examples of Permeability Barriers

Figure 4-11 shows the distance one must travel at present from a point in Lintown Grove to Newpark Shopping Centre; either 500m or 650m, depending on the route. The distance between these two points as the crow flies is approximately 40m. Permeability could be easily provided by removing a section of the wall.

Figure 25 shows the distance one must travel between the Presentation Secondary School and the entrance to Hollybank Park; 850m. The distance between these two points as the crow flies is approximately 130m. Permeability may be difficult to create here in the short-term due to a row of individual dwellings, but it should be an objective to promote permeability between schools and surrounding residential areas to increase the walking and cycling catchment.

Figure 22 Permeability Example at Lintown





Figure 23 Permeability Example at Waterford Rd



Coach Tours

Coach tour buses are generally facilitated at the larger hotels or near Kilkenny Castle, on the Castle Road. A dedicated bus set down area was provided here during the period of the last Plan. The area of Irishtown and St. Canice's would benefit from additional coach facilities. Permission was granted at Abbey Quarter for a temporary parking facility for coach parking on one of the plots within the Abbey Quarter.

Parking

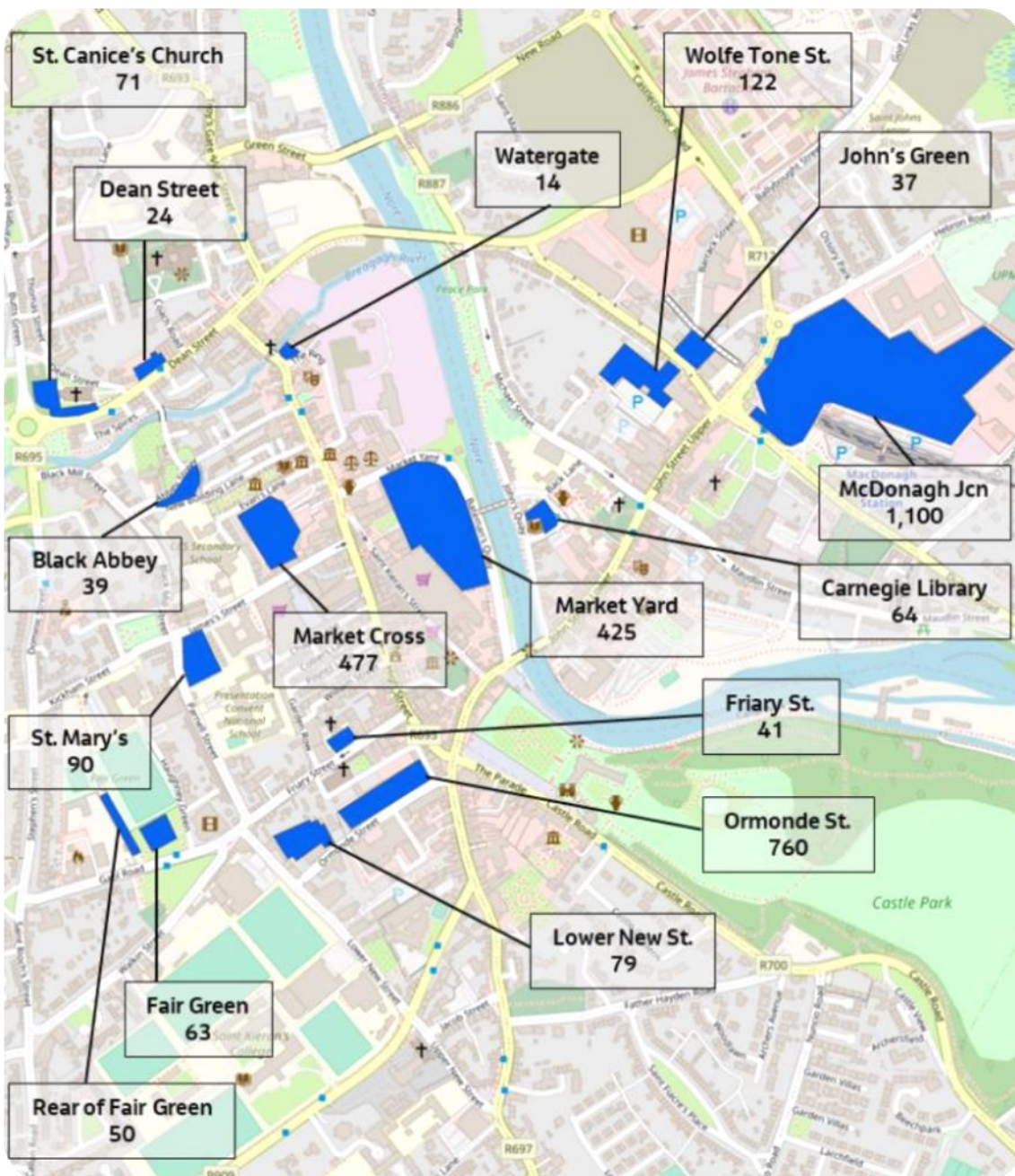
Kilkenny is served by approximately 4,400 parking spaces, on-street and off-street, public and private. Most of these spaces are located in proximity to the commercial and retail core, drawing vehicular traffic into these areas such as The Parade and High St. At present, there are no Park and Ride facilities in the Study Area. Parking provision and management is hugely significant in how an urban area operates from a traffic viewpoint. Providing large volumes of parking in the city core generates large volumes of traffic leading to congestion at peak times. On-street parking takes up space that could be used to improve the public realm, widen footpaths, provide cycle lanes and introduce greening.





Location	Number
Council car parks	1,000 spaces
Private car parks	2,500 spaces
On-street (P&D) parking	900 spaces
Total parking provision	4,400 spaces

Figure 24 Parking Locations in the City





HGV Traffic Plan

Kilkenny City is currently in Phase 2 of the HGV Traffic Plan. This phase follows the completion of the St. Francis Abbey Bridge, thus facilitating a one-way system for HGV's using Green's bridge in the west to east direction and St. Francis Abbey and Dean St. in an east to west direction. Other sites requiring deliveries by HGVs are highlighted in the map below (Figure 27).

Traffic counts show a high percentage of HGVs (~8 -10%) in the west of the city. This is particularly notable on the following routes; Freshford Road, Granges Rd, Dunningstown Road and Lord Edward St. The AADTs of these roads vary from 8,400 on the Granges Rd, 12,300 on the Freshford Rd.

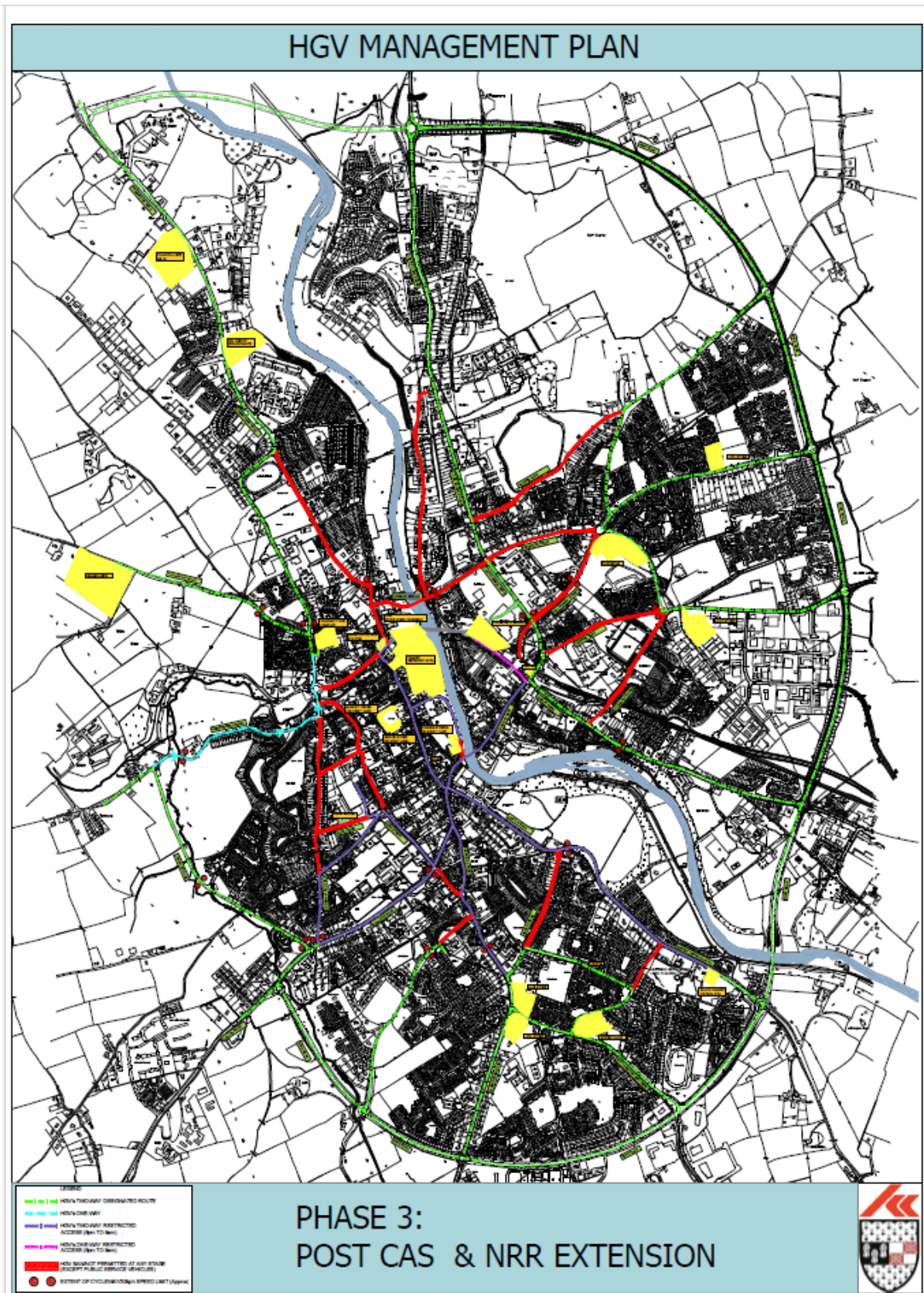
Phase 3 of the HCV Traffic Plan removes HGVs from Green's Bridge, and limits HGVs on St. Francis Abbey Bridge. This is facilitated by the completion of the Northern Ring Road extension. Without an outer connection between the Tullaroan Rd and Granges Rd, the Granges Rd and the Freshford Rd Rural remains as a two-way HGV route. This route serves three of the largest schools in Kilkenny. The high percentage of HGVs presents a hostile environment for active travel. Without additional infrastructure, in Phase 3, HGVs remain one-way on Kennyswell's Road and the Butt's Green, neither of which are suitable for HGVs traffic. Kennyswell Rd has a carriage width of approximately 9 metres with sub-standard footpaths and houses facing directly onto the road. The Butts Green has a wider carriageway but similarly, houses face directly onto the road and the road divides an old residential area from it's community services.

The HGV Management Plan is currently under review.





Figure 28 25 HGV Management Plan Phase 3





5. Existing Travel Patterns and Demand

Kilkenny City is a significant centre for commerce and business in the southeast of Ireland and serves as an industrial centre for agribusiness, financial services, manufacturing, retail, and tourism. Renowned for its rich cultural heritage, medieval architecture, tradition of sports, and events and festivals, the City attracts visitors from across the region and beyond. The city provides important educational facilities, healthcare services, and administrative functions that serve the broader region, resulting in a large commuter catchment.

Employment figures grew since the 2016 census, and Kilkenny is now the 6th largest employment centre in the state, after the five large metropolitan areas. Kilkenny is lacking in regional and inter-city public transport services, resulting in forced car-dependency for much of its work force. The dispersed nature of journey origins, as shown in the Figure 24 below presents economic challenges for sustainable transport provision.

Commuter Journeys

The following section discusses the commuter journeys within and to the city.

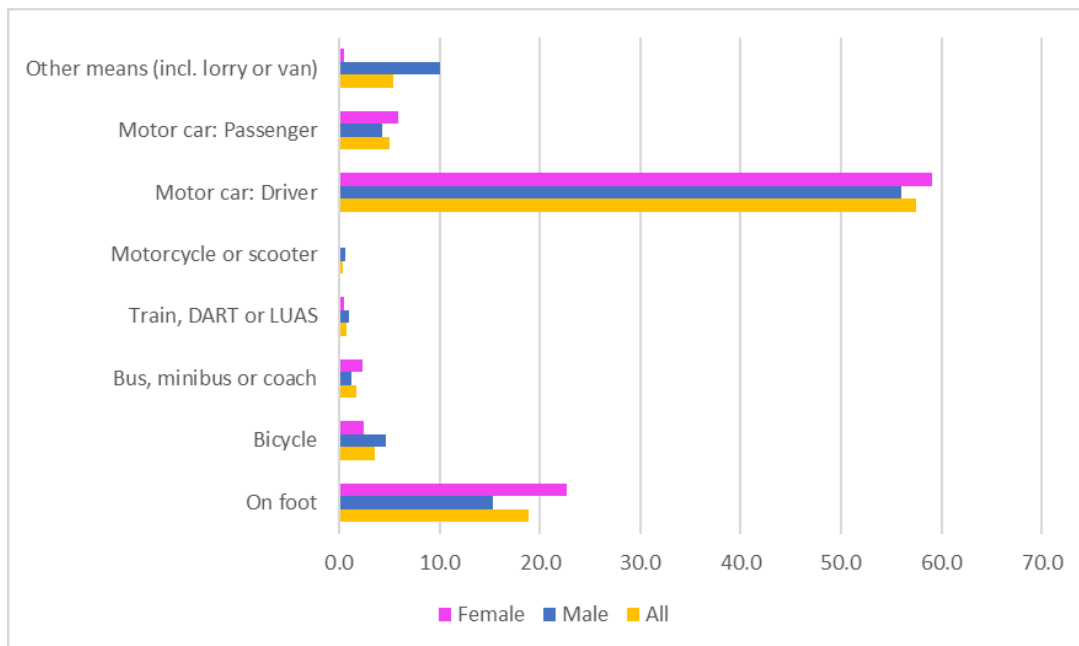
As shown in Figure 29, within Kilkenny City, commuters had a higher share of active travel than the national average with 3.6% of commuters cycling to work and 18.7% walking to work. Only 2.5% of workers used public transport. The private car is still the dominant mode of transport, 67% of journeys originating in Kilkenny are made by car, and a further 5.4% are made by vans or lorries (Census, 2022).

When looking at gender differences, almost a quarter of females walked for their main journey (22.7%), compared with 15.3% of males. Almost 5% (4.6%) of male trips and just 2.5% of female trips are by bike as shown below. The gender gradient for cycling exists across all age groups with the greatest disparities in the 15 to 24 years age group (CSO, 2023b).





Figure 269 Percentage Modal Share to Work in Kilkenny for All Ages by Gender 2022 (CSO, 2022)



Kilkenny City has a daytime working population of 15,479 people (Figure 30). This includes those people working in the town who live in Kilkenny and those who commute to Kilkenny. 58% of Kilkenny’s daytime working population are commuting from outside of the town, representing a high proportion of the workforce. The top commuter towns for Kilkenny are Callan, followed by Carlow, Thomastown, Waterford and Castlecomer. However, the origins of commuter journeys are dispersed and in rural areas with many points of origins, which presents challenges for sustainable transport provision (Figure 31).

Figure 30 Daytime Working Population

Census Year	Towns with a fixed population over 1,500	Total residents with a place of work (A)	Persons working		Persons commuting into the town to work (D)	Daytime working population (E=B+D)	Net Gain/Loss in working population (E-A)
			Persons working in the town of usual residence (B)	Persons working outside the town of usual residence (C)			
2022	Kilkenny	9704	6437	3267	9042	15479	5775

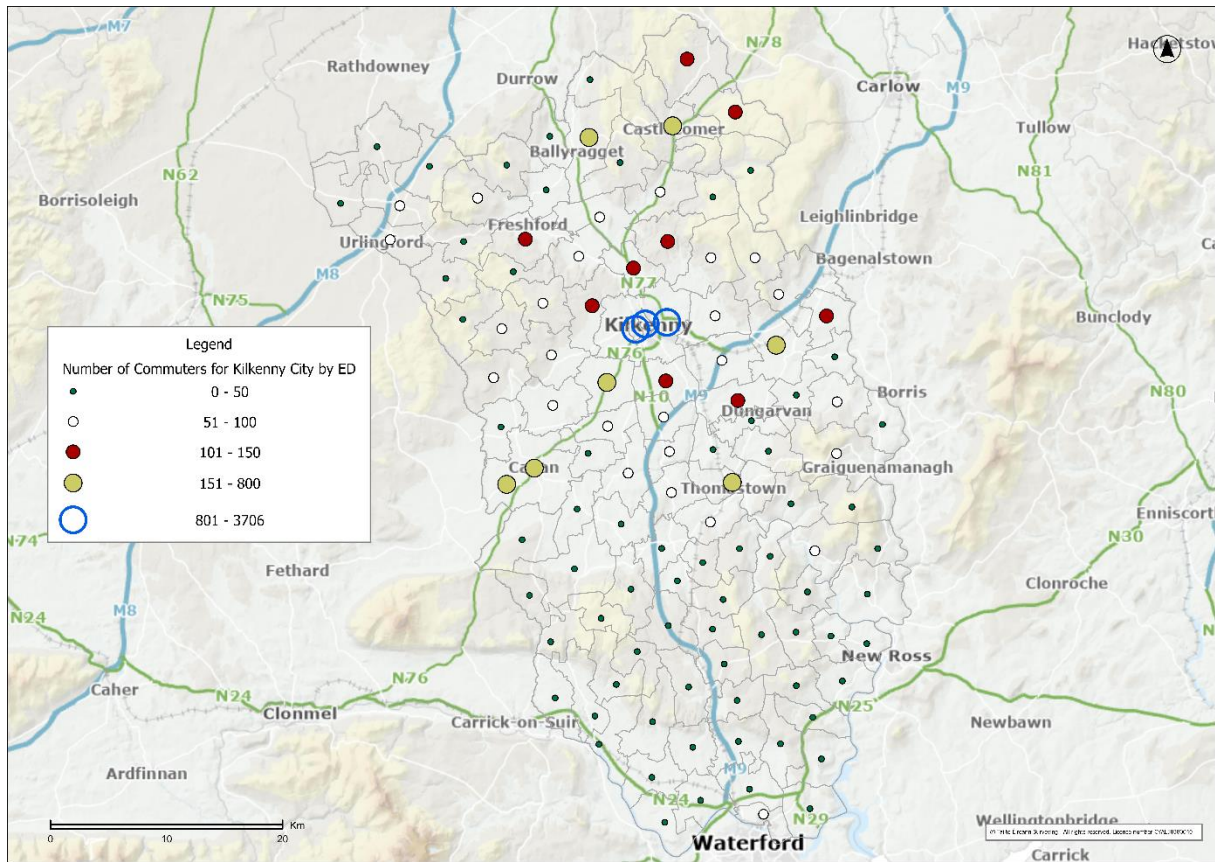
Kilkenny

Callan, Co. Kilkenny	282
Carlow, Counties Carlow and Laois	275
Thomastown, Co. Kilkenny	228
Waterford city and suburbs, Counties Waterford and Kilkenny	216
Castlecomer, Co. Kilkenny	139





Figure 31 Commuters travelling from the electoral divisions with Kilkenny City as their place of work.



As is evident from Figure 32 below, the towns and villages in the wider catchment area have high modal shares of car use, varying from 60% to over 80%. This results in a large influx of private cars into Kilkenny for work and education.





Figure 27 Modal Shares Settlements Outside of Kilkenny

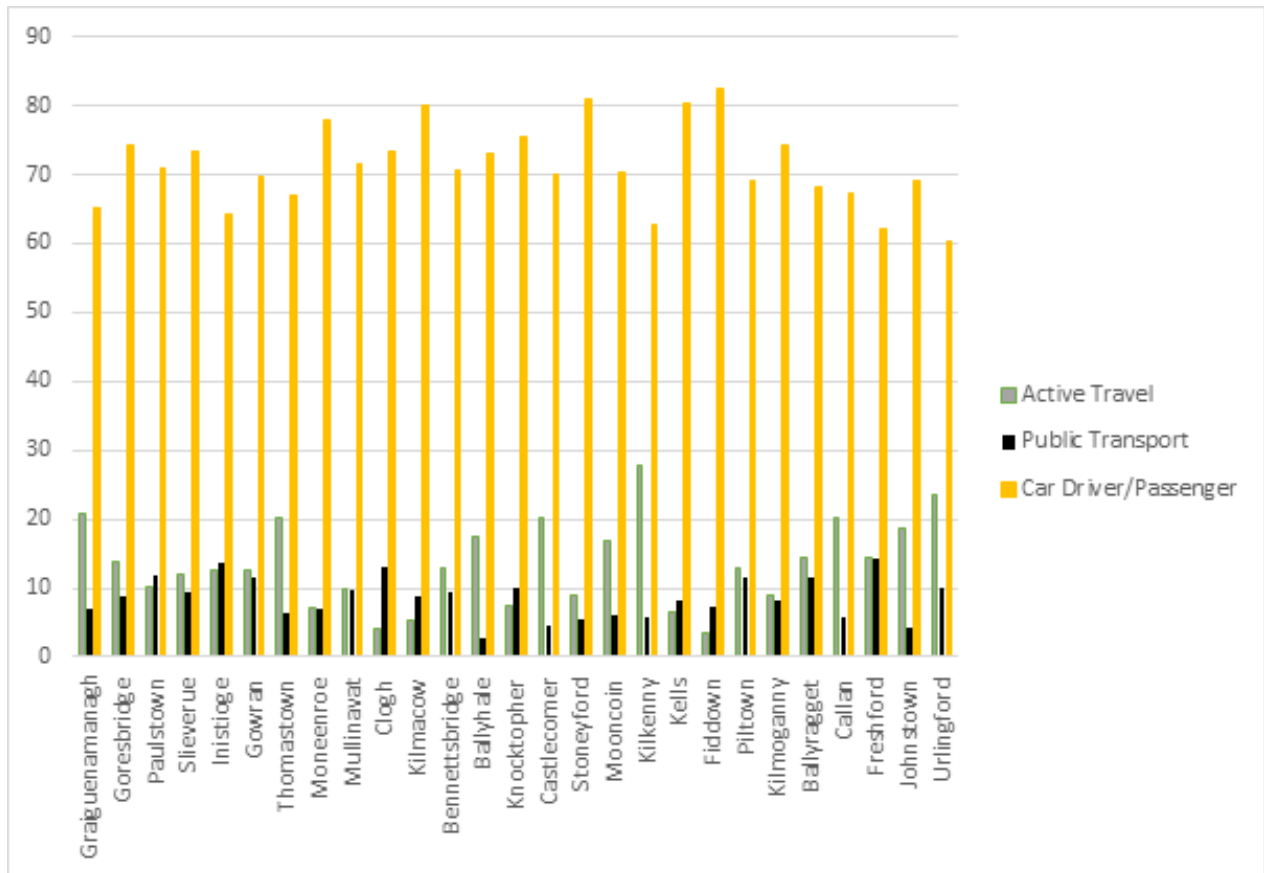
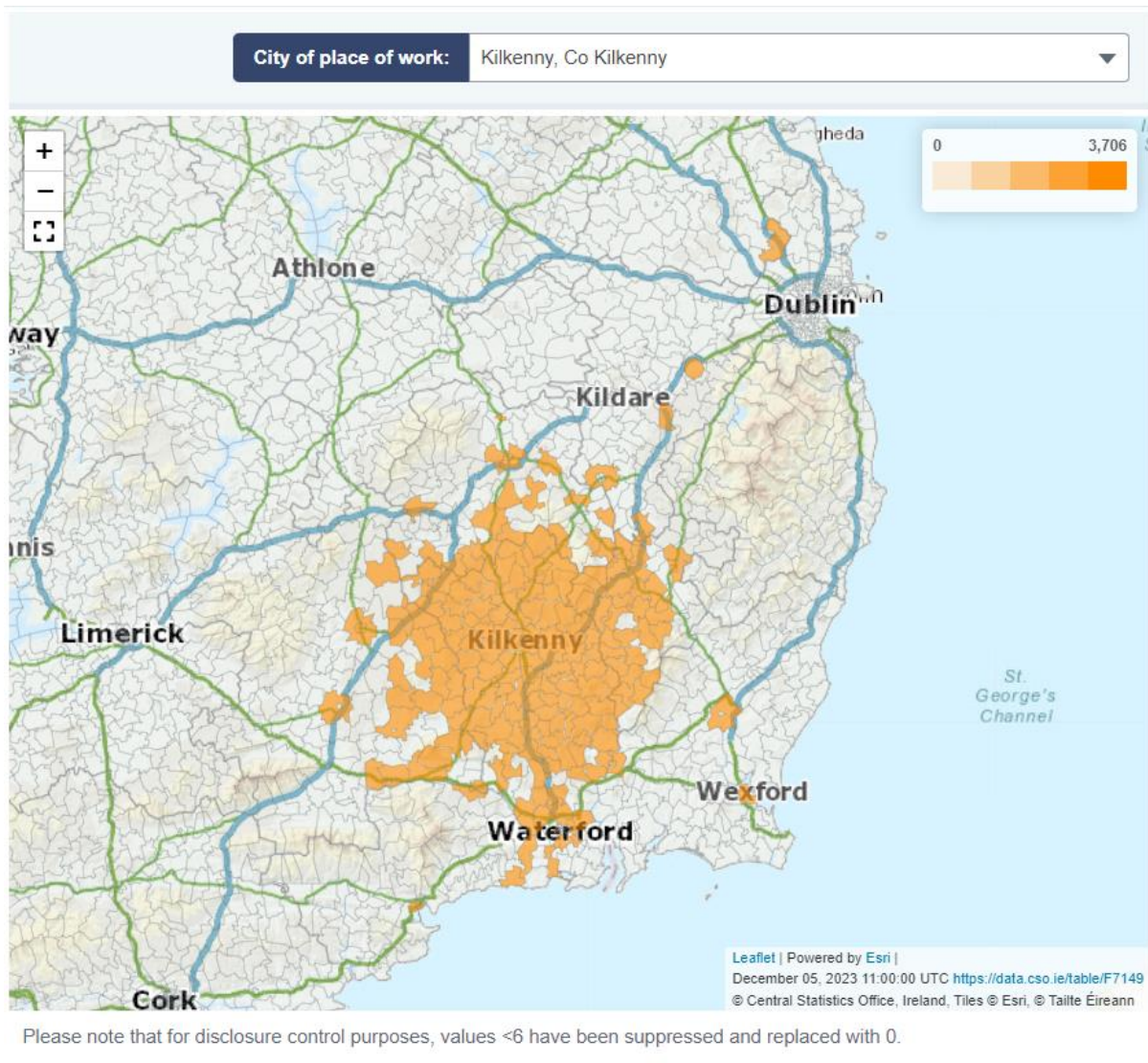




Figure 283 Wider Catchment of Kilkenny



School Journeys

Kilkenny has a large secondary school catchment area, with approximately 4,500 secondary school students attending city schools. Approximately half of all students living in Kilkenny City are driven to school (51%), 30% travel on foot, 11% by bus and 2% by bicycle as shown in Figure 32. A worrying trend amongst those travelling to school, college or childcare in Kilkenny City is the proportion of students driving to school, 4% of students were driving to school in 2022 in Kilkenny from the Kilkenny City catchment. Given that this question captured all children in childcare, primary and secondary school, this represents a very high proportion of those old enough to drive and has increased four-fold from 1% in 2016.

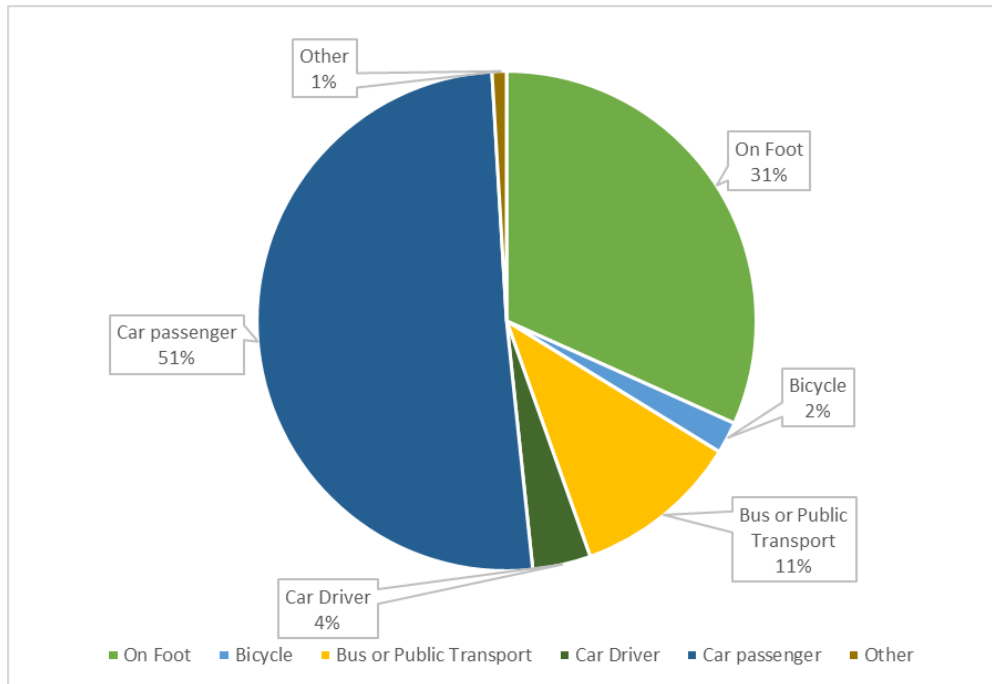
In 2024, preliminary results from surveys conducted in the four largest secondary schools in Kilkenny, by student mobility management teams, representing the vast majority of the secondary school population in the city, (n = 1510), found that over 40% of students travelled from over 5km away, rising to close to 70% for some schools. More than half (53%) of students





travelled by car, 31.5% travelled by bus, 14.5% walked and less than 1% came by bike or scooter.

Figure 34 Means of Travel to School, College or Childcare in Kilkenny in 2022 (CSO, 2023)



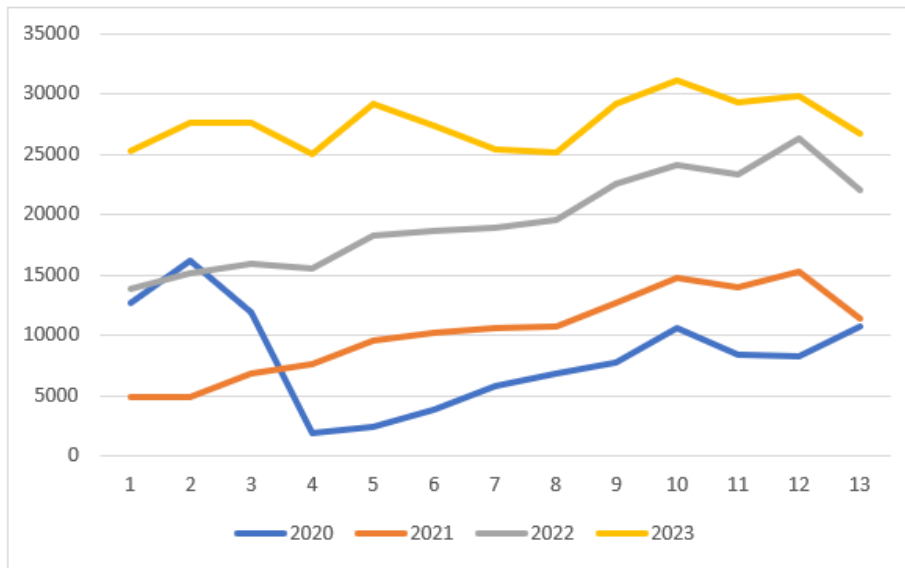
Kilkenny City Bus

Kilkenny City Bus facilitated approximately 30,000 journeys per four-week period in 2023. Of these, 37% constituted free travel trips, underscoring its significance for older adults and other cohorts of the population entitled to free travel. A further 36% comprised child trips, emphasising its importance for independent mobility for children and young people (Figure 35).





Figure 295 Bus Passenger Numbers



Typical Traffic Conditions and Traffic Counts

Traffic counts were conducted on the ring road and the radial routes in 2023.

Ring Road Traffic Counts

The highest volume of vehicles on the Ring Road is on the road section from the Dublin Road Roundabout going southwest towards Bohernatounish Road Roundabout.

- Vehicular Count > 19,000: Along the N10 (Dublin Road Roundabout to Bohernatounish Road Roundabout)
- Vehicular Count between 18,000 to 19,000: Along the N10 (Hebron Road Roundabout to Dublin Road Roundabout)
- Vehicular Count between 16,000 to 18,000: Along the N76 (Waterford Road Roundabout to Callan Road Roundabout) and along the N10 (Bohernatounish Road Roundabout to junction leading to Kilkenny Retail Park)
- Vehicular Count between 13,000 to 16,000: Along the N77 (Johnswell Road Roundabout to Hebron Road Roundabout)
- Vehicular Count between 10,000 to 13,000: Dublin Road (leading to Lyrath Estate Hotel) and along the N77 (The Orchard Road Roundabout to Johnswell Road)
- Vehicular Count less than 10,000: along the N77 (Castlecomer Road Roundabout to The Orchard Rd Roundabout)





Figure 317 Traffic Speeds on Ring Road (Clifton Scannell Emerson Associates, 2023)

Site	Road Link	AADT	Mean Speed	85%ile Speed
			kph	kph
1	Castlecomer Road RA New Orchard Road RA	10,604	80.2	90.9
2	New Orchard Road RA Johnswell Road RA	8,548	69.1	80.3
3	Johnswell Road RA Hebron Road RA	18,230	67.6	77.9
4	Hebron Road RA Dublin Road RA	21,589	69	81.2
5	Dublin Road RA Bennettsbridge Road RA	29,330	65.8	75.4
6	Bennettsbridge Road RA Bohernatounish Road RA	25,533	61.1	70.4
7	Bohernatounish Road RA Waterford Road RA	21,453	66.1	74.4
8	Waterford Road RA Kens Road RA	19,809	60.2	68.9
9	Kells Road RA Callan Road RA	18,733	66.3	75.2

Figure 328 Counts at Junctions on Ring Road (Clifton Scannell Emerson Associates, 2023)





Radial Routes Traffic Counts

As evident from the counts below, the heaviest trafficked roads are the following sections

- between the Callan Rd roundabout and the College Rd Roundabout 17,000
- Between the Waterbarracks Roundabout and the Granges Rd 12,900
- Castlecomer Rd (towards City Centre) 12,400
- Freshford Rd near the hospital 12,300

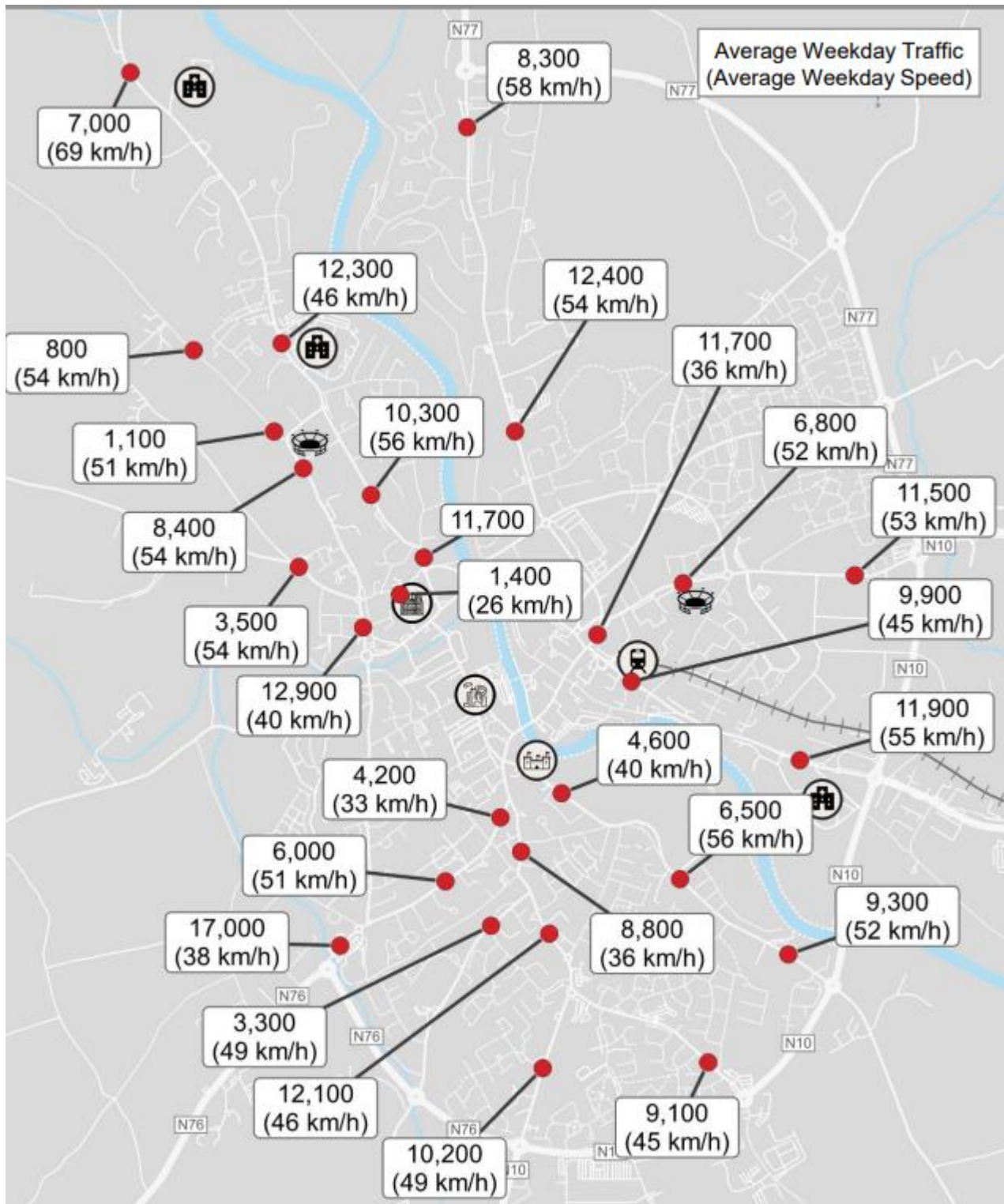
The percentage of HGVs is also of note on the following routes in the North West of the City:

- Freshford Road Rural 8.7 - 11.7%
- Freshford Road Urban 9.1%
- Granges Rd 8.8%
- Granges Rd Rural (Dunningstown Road) 9.2%
- Lord Edward St 9.3%





Figure 39 Traffic Counts on Radial Routes





City Centre Traffic Counts

Kilkenny City installed 3 multi-user counters in August 2023. The following tables show the average figures for cars, pedestrians and cyclists for the periods outlined below. Rose Inn St. (Data only available until May)

On Rose Inn St., the peak time of the day for all user types were Saturday and Sunday afternoon. The peak count for pedestrians was on St. Patricks Day, followed by the Saturday of the October Bank Holiday and Christmas Eve. The peak count for cyclists was during Bike Week. In Market Yard, the peak time of the day for all user types were Friday and Saturday afternoon. Friday 22nd of December was the busiest day of the year, followed by other weekends in December, April and May. On High St, the peak day was the 22nd of December, and throughout the year, Saturdays were consistently the busiest day. Friday and Saturday afternoons were the busiest times of the days.

Rose Inn St: September 30, 2023 → May 16, 2024

Site	Total	Daily Average	Peak Day	Peak Count
Pedestrian	1,845,155	8022	17/03/2024	22,756
Cyclist	39,928	174	16/05/2024	437
Car	1,537,385	6684	27/10/2023	7,694
Bus	218	1	05/10/2023	9
Motorbike	5,212	23	08/10/2023	87
Truck	6,247	27	10/01/2024	52

Market Yard: September 30, 2023 → September 29, 2024

Site	Total	Daily Average	Peak Day	Peak Count
Pedestrian	3,253,894	8,890	22/12/2023	29,682
Cyclist	24,528	67	09/05/2024	395
Car	768,160	5,226	21/12/2023	7,254
Bus	502	3	27/11/2023	18
Motorbike	3,186	22	02/12/2023	131
Truck	7,219	49	20/12/2023	163





High St: September 30, 2023 → September 29, 2024

Site	Total	Daily Average	Peak Day	Peak Count
Pedestrian	4,824,801	13,183	22/12/2023	28,901
Cyclist	40,732	111	16/05/2024	286
Car	1,847,031	5,047	17/05/2024	6,001
Bus	957	3	28/10/2023	10
Motorbike	10,201	28	17/08/2024	161
Truck	13,451	37	29/04/2024	133





6. Summary

The update to the baseline assessment of Kilkenny City and Environs is summarised in the form of a Strength, Weaknesses, Opportunities and Threats analysis.

Strengths	Weaknesses
<p>Recognition in the RSES as a Key Town and a significant zone of influence centrally located in the South-East Region;</p> <p>Strong international connectivity with direct access routes to the Ports of Waterford, Rosslare and Dublin, and airports at Dublin and Waterford;</p> <p>Kilkenny Ring Road connects to all National roads in the vicinity as well as the M9 and M8 linking with Dublin, Waterford and Cork;</p> <p>MacDonagh Junction Train Station connects the City to the Dublin-Waterford InterCity route;</p> <p>Compact urban footprint that supports the '10-minute city' concept which is a long-standing policy objective of KCC;</p> <p>Strong policy basis for compact growth and the integration of land use and sustainable transport;</p> <p>Existing street network provides a strong basis to provide for sustainable transport;</p> <p>New city bus services funded by the NTA commenced operation in December 2019;</p> <p>Favourable topography and compact urban structure for walking and cycling;</p> <p>Recent improvements to the pedestrian environment including public realm around The Parade and the pedestrianisation of St. Kiernan's St.; and</p> <p>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.</p>	<p>Lack of formal transport hub to facilitate interchange between bus and rail services;</p> <p>Lack of bus priority measures;</p> <p>Gaps in coverage with existing bus routes</p> <p>Circuitous city bus alignments leading to long journey times and lack of coverage;</p> <p>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;</p> <p>Lack of public transport options to villages and towns in commuter catchment</p> <p>Poor pedestrian and cyclist wayfinding and legibility, particularly between MacDonagh Junction Station, Kilkenny Castle and the City Centre Core; and</p> <p>Lack of dedicated cycle provision in the City</p> <p>Substandard footpaths and lack of pedestrian priority in the city core</p> <p>Severance barriers caused by the river Nore, the ring road and walled estates</p> <p>Lack of Park and Ride/Strides for rural commuter</p> <p>High presence of HGV's 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.</p> <p>Lack of adequate connectivity from the Breaghagh Valley/Loughmacask to the city centre</p>
Opportunities	Threats
<p>Opportunity to further consolidate growth within the City's existing built-up footprint;</p> <p>Realisation of the Abbey Quarter, a brownfield site in the heart of the City Centre, earmarked for mixed-use development.</p> <p>Urban regeneration of other brownfield sites in the City Centre such as the Old Mart Site;</p> <p>Development of the 'Medieval Mile' which brings together public realm and wayfinding improvements;</p> <p>Potential to significantly improve sustainable transport mode share and network priority measures; and</p> <p>Build on existing walking and cycling infrastructure and complete the Pedestrian and Cycle Network including gateways, pedestrian portals and the River Nore linear park.</p>	<p>High car dependency and ownership, especially outside the City Centre;</p> <p>A 'Business as Usual' approach to land use, transport planning, sustainable transport provision and parking policy;</p> <p>A change in the economic outlook leading to uncertainty about required capital infrastructure funding and private investment;</p> <p>Proliferation of out-of-town retail and commercial uses; and</p> <p>Over-provision of parking in City Centre locations attracting vehicular traffic into the core retail area and undermining sustainable modes.</p> <p>Continued population growth in rural areas resulting in increased car-dependency</p>





7. Conclusion

This report provides an update to the assessment of the baseline conditions in relation to existing transport planning policy, transport infrastructure and services, and travel demand and movement patterns in Kilkenny City and Environs, initially conducted as part of the Kilkenny Local Transport Study in 2020. This report should be read in conjunction with the Baseline Conditions and Policy Context Report which profiles the transport demand and sectoral and link-flow analysis, based on the projections to 2040 (Jacobs, 2020).

There are many long-standing plans and policy objectives in relation to land-use and transport planning at all levels that support sustainable development and transport for the Study Area. This includes the identification of the 10-minute city concept in the last two iterations of the Development Plan. National level policy takes the lead in providing a robust framework for sustainable development and transport, reflecting the international step-change toward creating more liveable cities and tackling climate change. Moreover, whilst there are high levels of car dependency and car ownership throughout some parts of the Study Area, Kilkenny's compact urban form and existing transport network present a strong foundation to facilitate a shift toward sustainable mobility for residents and visitors.



