



Draft Laois
CYCLE
Network



1. Introduction

AECOM, as part of the NTA Cycle Design Office, have been requested by the NTA to develop comprehensive cycle plans for counties outside the Greater Dublin Area (GDA), including Laois. CycleConnects is intended to form a comprehensive cycle network for all cycle user types across each county in Ireland and to develop on from the cycle network proposed for the counties in the GDA.

This will include existing cycle networks such as urban cycle routes, greenways and interurban routes. This will be supplemented by proposed cycle routes/links outlined in latest development and transport plans, and other networks required to maximise the connection of the network to communities. It should be noted that this network does not specify any infrastructure types on any route and is focused on highlighting the key links required to form a comprehensive cycle network connecting all major communities and destinations.

This note will briefly summarise the proposed cycle network for Laois. For details of methodology, national policy and the overall aspirations for the county cycle networks, please refer to the main report of which this technical note is an appendix of.

2. Laois Population & Settlements

County Laois is in the centre of the country, in the province of Leinster. It is bordered by the counties of Kildare, Carlow, Kilkenny, Tipperary, and Offaly. According to the CSO Census 2016, it has a population of 84,697 inhabitants. Table 2.1 below shows the population of towns within Laois. Portlaoise and Portarlinton are the only settlements with over 5,000 people, with all other towns having a population of less than 5,000.

Table 2.1: Population of settlements in Laois

City/Town	Population (2016)
Portlaoise	22,050
Portarlinton	8,368
Mountmellick	4,777
Mountrath	1,774
Abbeyleix	1,770
Stradbally	1,350
Rathdowney	1,271
Ballylinan	1,101

3. Existing Laois Policies & Plans

Laois County Development Plan 2021-2027

The Laois County Development Plan (LCDP) sets out a framework for the sustainable spatial and physical development of County Laois. The LCDP aims to do this while considering the conservations and protection of the built and natural environment. The Plan aims to consider all the needs of society, its individuals and groups. Key to this is ensuring that equal opportunities are promoted under all the various themes of the Plan.

The strategic vision of the Plan is as follows;

“To improve the quality of life for all citizens in County Laois by creating sustainable communities and an environment that supports a vibrant, growing and well-connected economy, making it a County where people want to live, work, visit and do business, without compromising the environmental integrity of the County.”

Another strategic aim of the report is to provide for sustainable transport infrastructure and connectivity including walking and cycling infrastructure and initiatives, and optimise the return of investment on infrastructure while preserving the natural and built heritage. In addition to this, the Plan aims to achieve a sustainable, integrated and low carbon transport system for the county and to protect, improve and extend water services and other enabling infrastructure in line with national, regional and local population and economic growth for the count.

Transport Proposals

The LCDP notes that the timely implementation of a full range of transportation services is critical if County Laois is to continue to develop as an attractive location for development. The LCDP notes that the current transportation trends are unsustainable, particularly the use of private cars. It aims to facilitate a modal shift to public transport from private cars. Future development layouts should be designed in order to reduce trip generation, particularly by car. Chapter 10 (Transportation) outlines a series of objectives and policies which the development of the CycleConnects network for Laois can assist in meeting:

- **TRANS 10:** Work with the National Trails Office, Coillte, the Department of Planning, Housing and Local Government, the Department of Transport, Tourism and Sport, and other relevant stakeholders, to improve on the existing level of transport infrastructure and facilities for walking and cycling.
- **TRANS 11:** Integrate land use policies and transportation in a manner which reduces reliance on car based travel and promotes more sustainable transport choice and coordinates particular land uses with their accessibility requirements;
- **TRANS 12:** Support sustainable travel in the tourism sector by the promotion of public transport use and by undertaking enhancements to overall accessibility thereby making the County easier for visitors to navigate. Integrate the County’s transport and tourism strategies to promote increasingly sustainable travel patterns among visitors to the County. Support the construction of green routes/cycleways/pedestrian routes.
- **TRANS 13:** Encourage transition towards sustainable and low carbon transport modes, through the promotion of alternative modes of transport, and ‘walkable communities’ together with promotion of compact urban forms close to public transport corridors to encourage more sustainable patterns of movement.
- **TRANS 14:** To undertake transportation studies in the following towns. The purpose of Transportation Studies is to identify the transport strategy to address traffic, parking and active travel deficiencies in the existing network and make recommendations on same.

–Portlaoise & Environs

- Mountrath & Environs
- Mountmellick & Environs
- Durrow & Environs
- Abbeyleix & Environs
- Stradbally & Environs
- Portarlinton & Environs (Joint Study with Offaly Co Co to be explored)
- Graiguecullen & Environs (Joint Study with Carlow Co Co to be expected)

The County Development Plan includes a number of pedestrian and cyclist objectives to encourage cycling.

- **TRANS 36:** Encourage walking and cycling through the provision of the necessary infrastructure and also provide a mix of land uses which generate short trip distances to combat sedentary transport patterns. All new development proposals shall be required to provide for well-integrated pedestrian and cycle networks.
- **TRANS 37:** Support the installation of infrastructure measures (for example new/wider pavements, road crossings and cycle parking facilities), retrofitted if necessary, which facilitates, and encourages safe walking and cycling.
- **TRANS 38:** Promote cycling and pedestrian friendly development layouts, provide facilities at public transport nodes, towns and villages, plan for and make provision for the integration of cyclist and pedestrian needs when considering new development.
- **TRANS 39:** Investigate the possibility of developing and utilising existing abandoned road/ rail infrastructure for the purposes of walking and cycling.
- **TRANS 40:** Support the principle of delivering of cycle links between the following
 - Tullamore – Mountmellick
 - Mountmellick - Portlaoise
 - Portlaoise - Stradbally
 - Stradbally - Graiguecullen/Carlow
 - Routing any link away from the N80 and tying into the Barrow Way
- **TRANS 40:** Seek the establishment of cycle links between the towns of:
 - Portlaoise, Kildare Town, Newbridge and Naas
 - Portlaoise and Athy
 - Portlaoise and Kilkenny via Abbeyleix and Durrow.
- **TRANS 40:** Support the development of on-road cycle lanes to link towns and villages located along the R445 & R639 and if permitted proceed with works
 - Portlaoise – Monasterevin
 - Borris-in-Ossory – Roscrea
 - Durrow – Cullahill.
- **TRANS 41:** Support the development of and secure funding for a Greenway along a dismantled railway line on between Mountmellick, Portlaoise and Abbeyleix.

As part of the Barrow Blueway, there are two policy objectives:

- **TRANS 42:** Promote the Barrow Blueway and surrounding area as an Activity Hub in collaboration with relevant stakeholders.
- **TRANS 43:** Designate on road cycling trails to link the Barrow Navigation with Portlaoise, Stradbally and Portarlinton and to link the Barrow Navigation with the Killeshin Plateau. These trails should include points of interest such as Emo Court and the Rock of Dunmaise.

The County Development Plan also outlines the proposal for the development of the Slieve Bloom Walking and Cycling Activity Hub.

- **TRANS 44:** Investigate the feasibility of developing a National Scale Centre for Off-Road Mountain-Biking in the Slieve Bloom Mountains, subject to planning permission & the Habitats' and Birds Directives.
- **TRANS 45:** Investigate the feasibility of designating and promoting the Slieve Blooms as a Walking and Cycling Activity Hub.
- **TRANS 46:** Continue to audit, maintain, and promote walking trails and walking events in the Slieve Blooms, subject to planning permission & the Habitats' and Birds Directives.
- **TRANS 47:** Designate the following graded on-road cycling trails in the Slieve Blooms; install related signage and improve road surfaces along these trails, as resources allow; produce trail maps and market the trails, subject to the Habitats' and Birds Directives;
 - H1. Cut Cycle Climb
 - H2. Wolftrap Cycle Climb
 - H3. Glendine Cycle Climb
 - H4. Mountrath-Clonaslee Trail
 - H5. Camross Coolrain Trail
 - H6. Castletown Mountrath Trail

Similarly, the development plan also outlines a number of objectives relating to the South Laois Walking and Cycling Hub

- **TRANS 48:** Designate and promote South Laois as an Activity Hub.
- **TRANS 50:** Develop on-road cycle trail with a Rathdowney Trailhead to facilitate sporting and general cycling as well as link points of interest including Donaghmore Workhouse and Museum, Aghaboe Abbey, views of Gortnaclea Castle, Clough Village, Grantstown Lake and River Erkina.
- **TRANS 53:** Foster the development of initiatives such as walking buses to serve schools and continue the Green Schools Programme, cyclist safety and cycling to school during schools-based Road Safety Workshops.
- **TRANS 55:** Encourage the provision of facilities to support commuting by bike by large employers, such as workplace shower rooms and lockers via workplace workshops.
- **TRANS 56:** Support the designation of forest cycling areas in Laois such as at cycle club trails at Durrow, Cullenagh, Fossy and Cullahill Mountain.

Chapter 5 of the LCDP discusses Quality of Life and Sustainable Communities which has the following objective:

- **NRPO 10:** Identify and seek to implement a strategic, coherent, and high-quality cycle and walking network across the County that is integrated with public transport and interconnected with cultural, recreational, retail, educational, and employment destinations and attractions.

Portlaoise Local Area Plan 2018-2024

The Portlaoise Local Area Plan (LAP) was developed in 2018 to last until 2024 by Laois County Council. Portlaoise is the principal town and administrative centre for the County of Laois with a population of 22,050 as of the 2016 Census. The Plan supports the sustainable development and a low carbon economy. As it stands, Portlaoise experiences traffic congestion and vehicle dominated movement. This reduces the attractiveness and safety of cycling and walking in Portlaoise.

The plan has the following strategic aim:

“To promote and facilitate a sustainable transport system that prioritises and provides for walking, cycling and public transport facilities while ensuring sufficient traffic management”

This will be achieved through the following objectives in relation to cycling:

- **TM O1:** To cooperate with NTA and other relevant transport planning bodies in the delivery of a high quality, integrated transport system.
- **TM O7:** Encourage, promote and facilitate a modal shift towards more sustainable forms of transport in all new developments.
- **TM O8:** Promote sustainable and compact forms of development which reduce reliance of private car-based transport.
- **TM O13:** Seek a 40% increase in bicycle use by 2040.

These are furthered by the following policies outlined by Laois County Council:

- **TM P1:** Improve and provide pedestrian linkages, cycle networks and permeability including blueways and greenways throughout the town.
- **TM P3:** Provide adequate, secure and dry bicycle parking facilities at appropriate locations.

Future Local Transport Plans

Laois County Council are required to develop Local Transport Plans as part of their Development Plan process. While the cycle network outlined in this plan has been created to reflect current transport arrangements, it may be subject to change based on the more detailed analysis and recommendations developed as part of the LTP process.

4. Proposed Laois Cycle Network

Introduction

Following a review of existing data, policies and conducting workshops with Laois County Council to review the draft cycle network, the following summarises the methodology and proposed cycle network development for Laois. The full details of how all the CycleConnects networks were developed are available in the NTA Consultation website.

Prior to developing the Laois County Network, a GIS model was established for the county. This model mapped all existing information made available for the county, supplied by various bodies including the NTA, CSO, Department for Transport, Transport Infrastructure Ireland, Department for Education and Laois County Council. The data collected includes;

- Locations of major employment and job density
- Existing cycle infrastructure and routes
- Existing bus stops, rail lines and other public transport
- Location of schools and education centres
- Shopping centres, hospitals and other destinations that may attract cyclists

The collation of this data has aided the selection of cycle routes in Laois that are available to as many people as possible. It has also allowed for the servicing of key destinations within County Laois.

Methodology

Following the collation of existing data, the cycle network plan for Laois was developed. This is based on a three-tier system outlined in Figure 4.1 below.

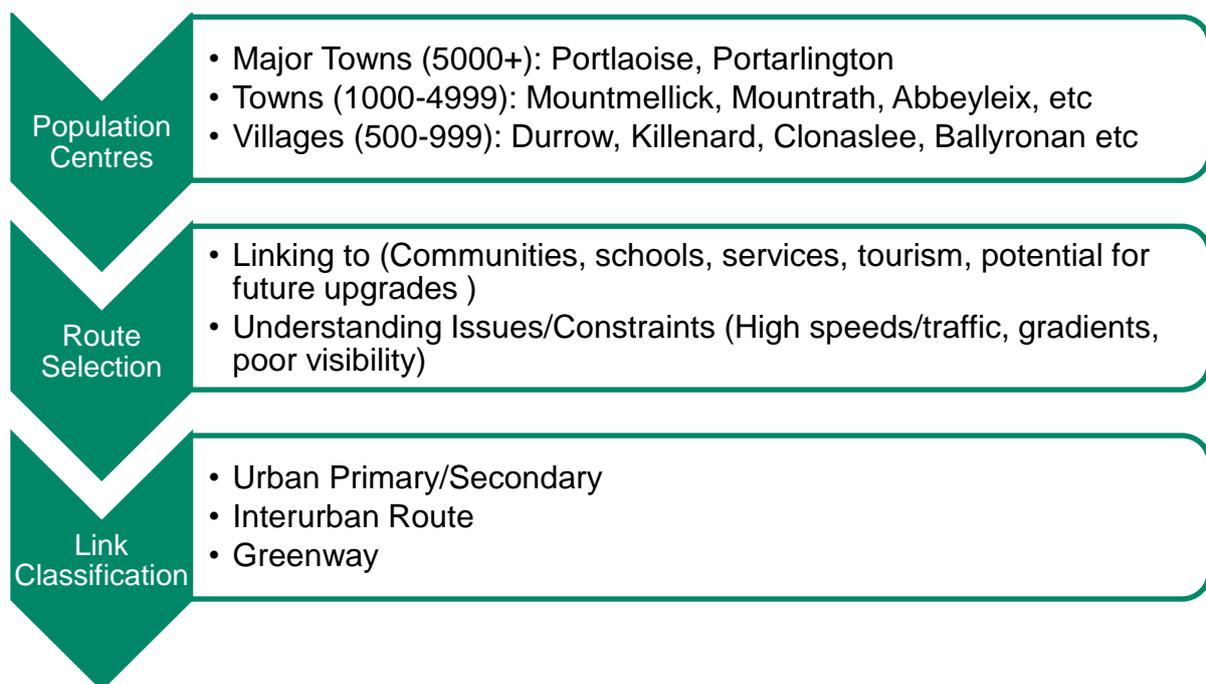


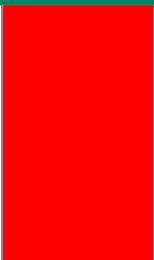
Figure 4.1: Cycle Network Development Methodology

Population Centres: The Laois CycleConnects Network will look to link towns and villages together as part of a fully connected network. Thus, all towns were mapped with the larger towns such as Portlaoise and Portarlington noted. By mapping all towns and villages, a profile emerged of where most people in Laois were situated and where potential cycle routes should be provided. CSO Settlement data was also referenced to inform where people were located within the county.

Route Selection: Once the population areas were established, potential routes were then considered along strategic corridors. This allowed multiple communities to be linked along individual interurban routes both within the county and into adjacent counties. Where possible, these routes were also located within TII National Cycle Network Corridors. This avoided too many parallel cycle routes being developed and for an integrated cycle network to be developed within the county.

Cycle Route Classification: The route classification for each route has been summarised below in Table 4.1. It should be noted that this link classification does not reflect the existing condition of roads for cycling but seeks to highlight their potential for various route classifications. For example, while there are many interurban routes that currently have no cycle infrastructure, the aspiration will be to target these over the next decade for appropriate upgrades.

Table 4.1: CycleConnects Route Classification

City/Town	Colour	Description
Urban Primary		High quality cycle route that can accommodate a high volume of cyclists typical in most urban areas. These will look to feature on major desire lines in town centres and form distinctive radial and orbital cycle routes in the major towns and cities. These primary routes should also form a cohesive and connected network within the urban area that will be simple for cyclists to navigate
Urban Secondary		Second tier cycle route in major urban areas to link with urban primary network to add greater route density and options on the network. These will typically be passing through residential areas, school and employment areas
Interurban		On-road cycle route to link all key settlements and destinations outside urban areas both within the county and into adjacent counties. These may have potential to provide off-road/segregated routes parallel to the existing road in later years.
Greenway		Off-road cycle route with no adjacent traffic for the majority of its route. These are typically located on old rail trails and blueways (routes along rivers, lakes and canals) with cyclists sharing the route with pedestrians.

Proposed Laois County Network

Following the methodology outline above, the Laois CycleConnects Network has been outlined in a series of maps shown in Table 4.2 below. These are also available to view as an individual PDF when selecting county Laois in the NTA consultation page.

Table 4.2: Laois CycleConnects Network – List of Maps

Cycle Map List
Laois County Cycle Network
Portlaoise Urban Cycle Network
Portarlington Urban Cycle Network

The Laois CycleConnects Network primarily extends the network beyond the key settlement area of Portlaoise and Portarlington. In summary, it will consist of an urban cycle network for Portlaoise and Portarlington, with interurban connectors between the towns of Mountmellick, Mountrath, Abbeyleix, Stradbally and Rathdowney etc. These then extend into adjoining counties forming a comprehensive and connecting cycle network nationally.

Interurban Link Development

The primary towns with a population of over 1000 were connected via interurban links. Where possible, towns with a lower population that were located along the route were included in the routes. Connections were also made to larger cross border towns in order to create a more comprehensive cycle network. The selection of interurban routes was also influenced by the location of schools/sports grounds on various parallel routes.

As part of the development of the interurban network, the Google travel planning tool was utilised to assist in selecting the most appropriate route between the various settlements. This included avoiding routes with excessive gradients. In some cases, selecting a sufficiently flat route was not available. Thus, the most available flattest route was selected. However, some routes were modified slightly to connect with adjacent towns/villages or key destinations such as schools, sports pitches or tourist attractions.

The TII National Cycle Network Corridors have also been used to overlap corridors. These include corridors and routes into counties Offaly, Tipperary, Carlow, Kilkenny and Kildare.

Greenway Route Integration

Three greenways are at various stages of development in County Laois. These are the Barrow Blueway, which runs along the towpath beside the River Barrow, the proposed Triogue Blueway in Portlaoise town, and the proposed Mountmellick to Kilkenny via Portlaoise Greenway.

Barrow Way

The Barrow Way is a walking and cycling trail that follows the path of the Barrow River. It is 113 km long and is routed through Kildare, Laois and Carlow, stretching from Robertstown in County Kildare to St. Mullins in County Carlow.

Sections of this trail are paved and suitable for cycling, other sections are grassy and can turn muddy. Waterways Ireland have indicated a plan to replace the grass path with a hard surface consisting of stone and crushed limestone. This greenway also coincides with one of the TII corridors.

Triogue Blueway

In 2022 Laois County Council was given funding for the development of the Triogue Blueway within the town of Portlaoise. The current phase 1-3 blueway plans show a development of a cycle and walking path in Portlaoise. It stretches from Clonrooske Link Road to Triogue Linear Park and on to Portlaoise Retail Park. The majority of this

Mountmellick to Kilkenny via Portlaoise Greenway

This is a proposed greenway that is intended to link Mountmellick in the north of County Laois with Kilkenny City in the south of country. It also intends to link with Portlaoise and Abbeyleix along the proposed route. The finalised route for this greenway is still unknown at this stage so it is shown as being indicative only on the relevant maps and may be subject to change once the finalised route is known.

Urban Network Development: Portlaoise

With a population of over 5,000 inhabitants, an urban cycle network has been developed for Portlaoise. The urban network is comprised of primary orbital routes and a larger amalgamation of both primary and secondary routes that encompasses the town. This also includes the existing Triogue Blueway and Portlaoise to Abbeyleix Greenway as discussed previously.

A primary orbital route is proposed in the town centre and includes Market Square, Old Abbeyleix Road, the N80 and Main Street. A second inner orbital route is also proposed in the town centre that includes Coote Street, Greenmill Lane and Ridge Road

In the south of the town, a proposed primary orbital loop starts west of the town, at the Mountrath Road/R941 junction. It travels southwards along the R941, then continues onto Father Brown Avenue. Travelling eastwards the route continues along New Road before reaching the roundabout and turning left. Once the route reaches the Stradbally road it turns left and continues onto Main Street and Market Square. The route continues travelling westwards and the loop completes when the route re-joins the R941.

In the north-west of the town, a primary orbital route is proposed on the north-west side of the town. It begins on the R445 Grattan Street until reaching the junction with Coote Street. From here the route travels northwards along the N80 Green Road, continuing onto Mountmellick Road. Once the route reaches the N80/Clonroosk roundabout, north of the town, it turns left and travels southwards until it reaches Grattan Street and the route re-joins the R445, completing the orbital loop.

Locations that are served by these orbital routes include:

- Portlaoise Town Centre
- Portlaoise Train Station
- Midland Regional Hospital Portlaoise
- Superkids Childcare Centre
- Darling Buds Montessori & Day-care
- Portlaoise AFC
- Portlaoise Shopping Centre
- Portlaoise Creche & Montessori
- Holy Family Junior and Senior School
- Holy Family Catholic Senior School
- Portlaoise College
- Portlaoise Educate Together Primary School

- Gaelscoil Phortlaoise
- River Triogue Linear Park
- Marlborough National School

In addition to the orbital routes a number of radial routes are also included to provide connectors with interurban routes in addition to serving locations that were not picked up on the orbital loop roads. The radial routes usually travel in a north/south and east/west direction and comprise of normally primary routes, however some secondary routes form part of these routes. The radial routes are also present along these streets

- Borris Road
- Rath Galine
- Stradbally Road
- New Road
- Old Abbeyleix Road
- Mountrath Road
- Ballyfin Road

Locations that are served by the north/south and east/west radial routes include:

- The Maples creche
- St Francis Special School
- Portlaoise Boxing Club
- Portlaoise Golf Club
- Scoil Chríost Rí
- Scoil Bhríde National School
- Suaimhneas Community Childcare

A number of secondary routes are also proposed along streets such as Station Road, Millbrook, New Road, Barrons Court, and Laurel Drive. These are intended to act as interlinks to the orbital and radial routes in addition to serving locations that have not located on orbital or radial routes previously mentioned.

Urban Network Development: Portarlinton

With a population of over 5,000 inhabitants, an urban cycle network has been developed for Portarlinton. The urban network is comprised of an inner primary orbital route and a larger amalgamation of both primary and secondary routes that encompasses the town. A proposed link to the Grand Canal Greenway from Portarlinton is also illustrated in the north of the town.

The orbital route includes streets such as the R420 French Church Street which then continues south along R430 Church Lane, turning onto Main Street. The route then continues from east to west along Crowe Lane and St. Michael's Park, and completes the loop by continuing northward along the R419.

Locations that are served by the orbital route include:

- Portarlinton Town Centre

- People's Park
- Na Páistí Community Creche
- Portarlington Leisure Centre
- The Ferns Playschool
- Sandy Lane Secondary School

In addition to the orbital routes a number of radial routes are also included to provide connectors with interurban routes in addition to serving locations that were not picked up on the orbital loop roads. The radial routes usually travel in a north/south and east/west direction and comprise of normally primary routes; however some secondary routes form part of these routes. The radial routes are described below:

- A north/south radial route begins where the interurban route on the R419 Cushina Road, north of the town comes to an end. The primary radial route travels southwards along the Cushina Road and continues along the Main Street. Once the route reaches the junction with Station Road, it turns right and travels southwards along Station Road. The radial route comes to an end when it reaches the interurban connector at Corrig, south of the town.
- An east/west radial route is proposed to begin west of the Offaly border and continue along Gracefield Road. Once it reaches Patrick Street it turns left and continues eastwards. Once the route reaches Main Street it turns right and travels south-eastwards along the R420.
- Two additional primary radial routes in the south of the town are proposed along Ballymorris Road and R419 Portlaoise Road

Locations that are served by the north/south and east/west radial routes include:

- Portarlington Train Station
- Portarlington GAA Club
- Portarlington Tennis Club
- St. Patrick Boys National School
- Gracefield GAA
- Presentation Primary School Portarlington
- Coláiste Íosagáin
- Portarlington Further Education and Training Centre

A number of secondary routes are also proposed along streets such as Foxcroft Street and Canal Road. These are intended to act as interlinks to the orbital and radial routes in addition to serving locations that have not located on orbital or radial routes previously mentioned.

5. Next Steps

AECOM, as part of the NTA Cycle Design Office, have been requested by the NTA to develop comprehensive cycle routes for County Laois and the towns of Portlaoise and Portarlington.

The network design for Laois has now been made available for public consultation. This will allow for members of the public to submit their feedback. Individual maps are available to view on the National Transport Authority website and are available in the links below:

Table 5.1: Laois CycleConnects Network - List of Maps

Cycle Map List
Laois County Cycle Network
Portlaoise Urban Cycle Network
Portarlington Urban Cycle Network

Following the public consultation, submissions will be reviewed, and the network maps updated as required.