



Sustainable Access & Permeability Strategy

Existing Transport Context

INTRODUCTION

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned to prepare a Sustainable Access & Permeability Strategy as part of the Tullamore Town Centre Regeneration Framework.

In preparing the strategy, CS Consulting has made reference to the following:

- CSO 2022 Census data
- Design Manual for Urban Roads and Streets (DMURS) 2019
- NTA Cycle Design Manual (2023)
- NDA: Building for Everyone: A Universal Design Approach
- Tullamore Town Centre Regeneration Framework (2024)
- DBFL: Draft Tullamore Local Transport Plan (November 2023)
- DBFL: Tullamore ABTA – Comparative Census Data Analysis 2016-2022 (November 2023)

This strategy is intended to complement the Tullamore Town Centre Regeneration Framework. It should be read in conjunction with the Framework and with all other technical documentation that accompanies it. Reference is also made to the Tullamore Local Transport Plan (LTP) and Area Based Transport Assessment (ABTA) that are concurrently in preparation by DBFL Consulting Engineers. Brady Shipman Martin (BSM) and CS Consulting have engaged with DBFL Consulting Engineers to ensure consistency between the Tullamore Town Centre Regeneration Framework proposals and those of the Tullamore Local Transport Plan.

Considerable detail on proposed intervention measures is provided in earlier chapters of the framework and in DBFL reports. The strategy therefore does not repeat this detail in full but provides a synopsis of the relevant measures with respect to sustainable transport.

TOWN POPULATION, CAR OWNERSHIP, AND MODAL SPLIT

The 2022 Census conducted by the Central Statistics Office (CSO) recorded a total population of 10,290 people within the Tullamore Urban Area. The average rate of car ownership within the Tullamore Urban Area is of 1.22 cars per household, which is below the national average of 1.43 cars per household.

| Transport Mode | Tullamore Urban Area Modal Shares ¹ |
|----------------------|--|
| Driving a Car or Van | 44.5% |
| Passenger in a Car | 24.2% |
| Bicycle | 3.3% |
| Motorcycle | 0.2% |
| Bus | 7.1% |
| Train or Tram | 2.5% |
| Walking | 18.2% |

Table 1 – CSO 2022 Census Data – Existing Modal Split

¹ Excluding ‘not stated’ responses and those who work mainly from home.

The CSO Census data (Table 1) show that the vast majority of Tullamore Urban Area residents rely on a car or van as their primary mode of transport from home to their places of work or study, whether as a driver (45%) or as a passenger (24%). Public transport accounts for only approximately 10% of regular commuting journeys made by Tullamore residents, and cycling has a relatively low modal share of 3%.

Conversely, trips made on foot represent 18% of regular journeys. This is a relatively high proportion, and would suggest that many Tullamore residents live close to their places of employment or education.

SURVEYED MOTOR VEHICLE TRAFFIC

Junction Turning Count (JTC) traffic surveys conducted by IDASO on the 2nd and 4th of March 2023 recorded vehicle movements at a total of 40no. road junctions in and around Tullamore. The JTC surveys recorded vehicle movements between all arms of each junction, by 15-minute period from 07:00 to 19:00 on each survey day. Vehicles were classified as follows:

Pedal cycles, Motorcycles, Cars, Taxis, LGVs – Light goods vehicles (under 3.5t), OGV1 – Other rigid goods vehicles over 3.5t, with no more than 3 axles, OGV2 – Articulated vehicles and rigid goods vehicles with 4 or more axles and PSVs – Public service vehicles (buses)

Of the 40no. survey junctions, an initial 7no. junctions were considered of particular relevance to the Tullamore Regeneration Framework proposals; these are shown in Figure 1 and are listed in Table 2. Across these 7no. focus junctions, the following peaks in total vehicle movements were established:

- Thursday AM peak between 08:30 and 09:30
- Thursday PM peak between 16:45 and 17:45
- Saturday peak between 11:30 and 12:30

Vehicle movements for these peak hours were converted to Passenger Car Units (PCU). For each focus junction, Annual Average Daily Traffic (AADT) flows were also calculated.

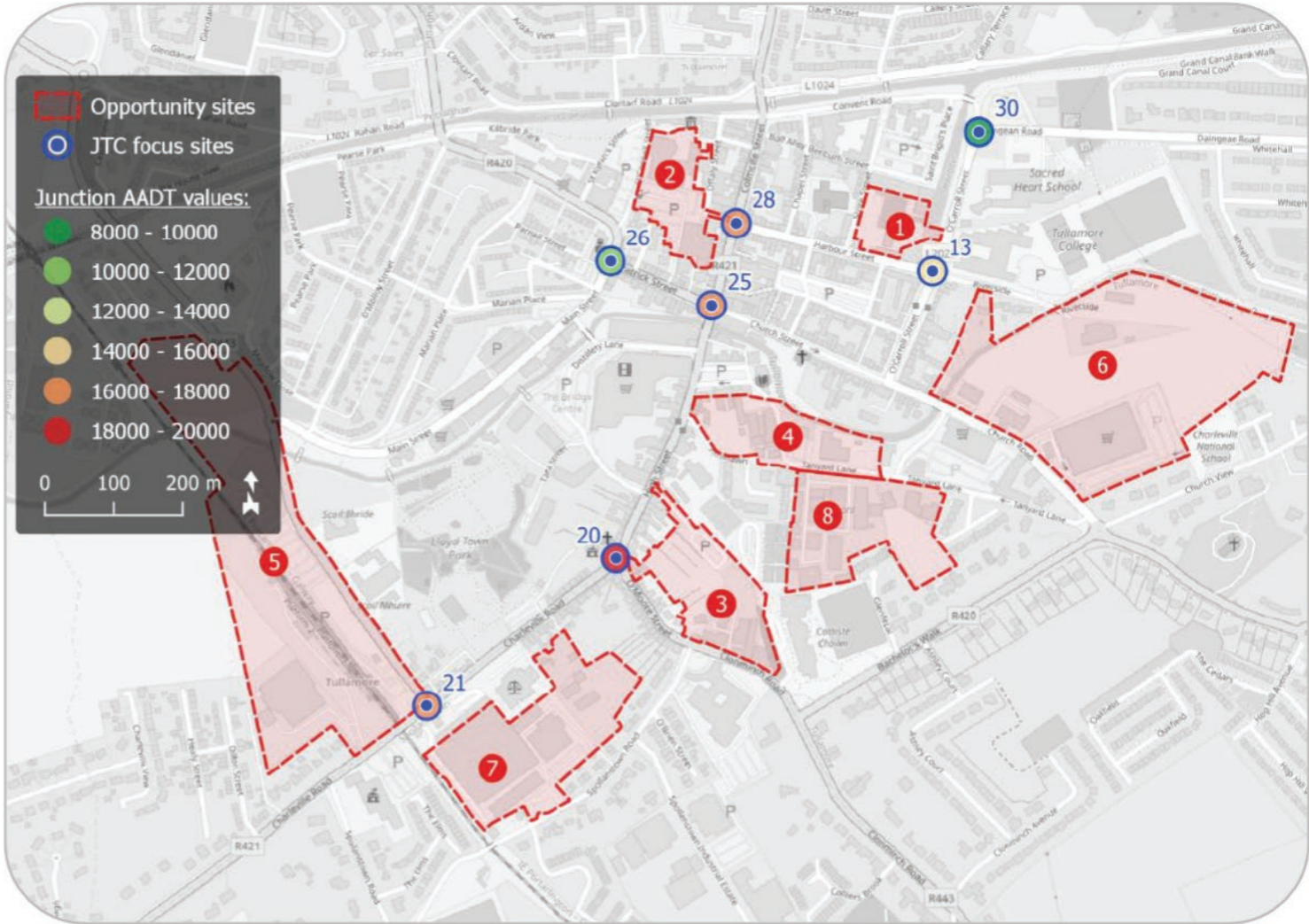


Figure 1 – JTC traffic survey focus junctions (background map imagery: OSM Contributors)

Existing Transport Context

SURVEYED MOTOR VEHICLE TRAFFIC

| Junction ID | Junction Name | Weekday AM (PCU) | Weekday PM (PCU) | Saturday (PCU) | AADT Total |
|-------------|--|------------------|------------------|----------------|------------|
| 13 | O'Carroll St / Riverside / Harbour St | 1,257 | 1,118 | 1,250 | 14,063 |
| 20 | High St / O'Moore St / Charleville Rd | 1,628 | 1,684 | 1,481 | 19,044 |
| 21 | R443 / Charleville Rd / School | 1,680 | 1,665 | 1,188 | 16,326 |
| 25 | Columcille St / Church St / Bridge St / Patrick St | 1,185 | 1,199 | 1,160 | 16,075 |
| 26 | Kilbride St / Patrick St / Water Lane | 825 | 902 | 946 | 11,747 |
| 28 | Columcille St / Harbour St / Offaly St | 1,248 | 1,162 | 1,166 | 16,134 |
| 30 | Convent Rd / Daingean Rd / O'Carroll St | 816 | 791 | 681 | 8,332 |

Table 2: Total vehicle movements

PEDESTRIAN PERMEABILITY

Figure 2 shows walking times in 5-minute increments from the junction of Columcille Street and Bridge Street with Patrick Street and Church Street, based on an average walking speed of 4.5km/h. This departure point represents a natural focal point within Tullamore town centre, as well as being the approximate geographical centroid of the Tullamore Urban Area.

CSO 2022 Census data indicate that there is a population of approximately 1,600 people within the 10-minute walking area shown in Figure 2, and a population of approximately 3,150 people within the 15-minute walking area.

PEDESTRIAN PERMEABILITY



Figure 2 - Walking times from town centre focal point (background map imagery: OSM Contributors)

Existing Transport Context

PUBLIC TRANSPORT SERVICES

The DBFL Draft Tullamore Local Transport Plan notes that Tullamore currently lacks a dedicated town bus service. The town is served only by:

- 2no. national services passing through
- 6no. less frequent regional services passing through
- 8no. Local Link services to the surrounding region

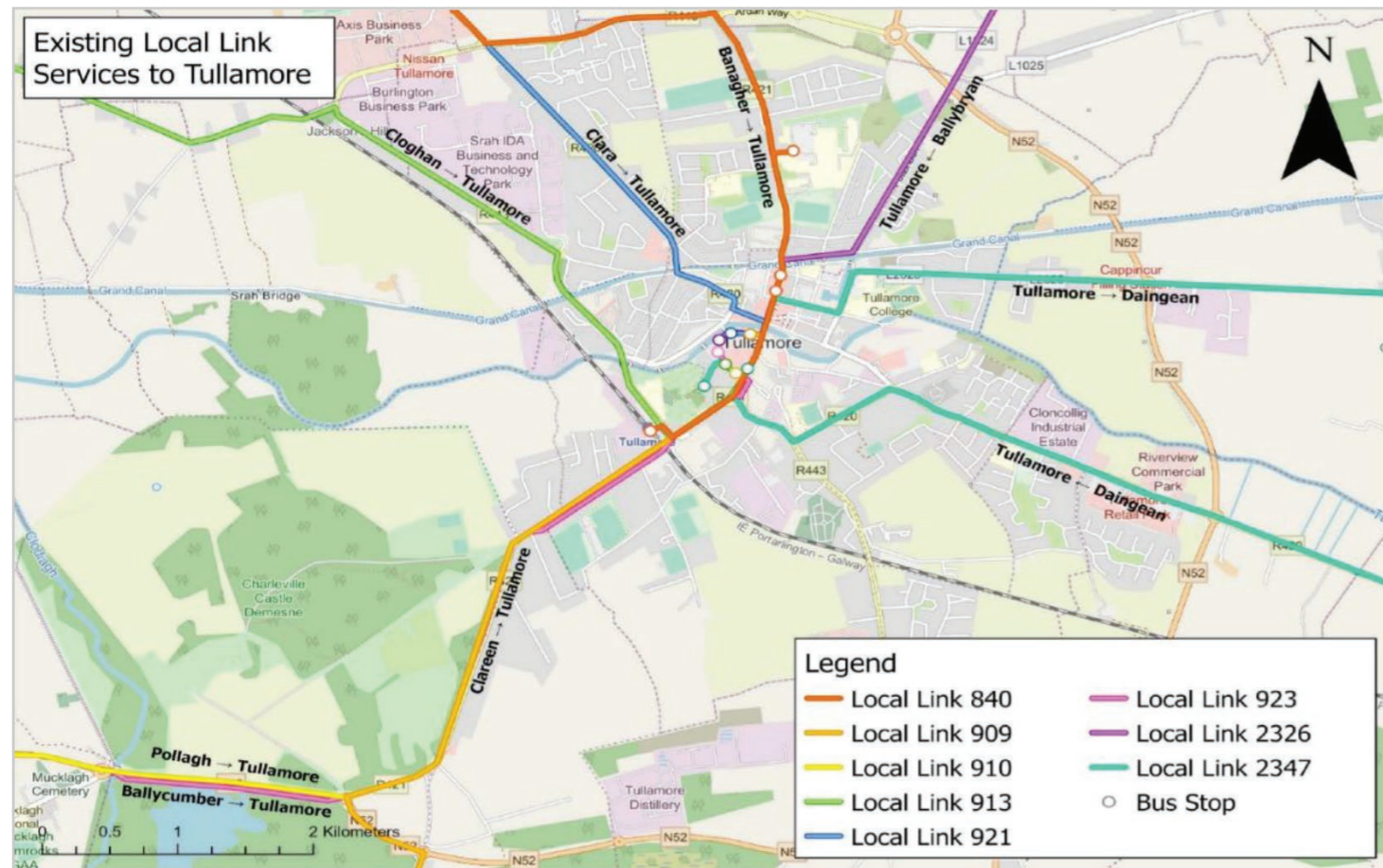


Figure 3 – Existing Local Link Laois-Offaly services operating to Tullamore (source: DBFL Draft Tullamore Local Transport Plan)

ROAD TRAFFIC COLLISION RECORDS

The DBFL Draft Tullamore Local Transport Plan includes analysis of RSA road traffic collision data for the years 2016 to 2020. This analysis identified collision clusters at several locations throughout Tullamore. Key locations included:

- Clara Road / R420
 - o Junction with Srah IDA Business Park
 - o Junction with Axis Business Park
- Ardan Road
 - o Junction at Kilbeggan Bridge
 - o Junction adjacent to Scally's Centra
- Church Road
 - o Junction with Bachelor's Wk. / Church Ave. / Tanyard Ln.
 - o Junction with Hop Hill Ave. / Church Hill
- Clonminch Road
 - o Junction with O'Moore St. / Bachelor's Wk.
- Charleville Road
 - o South of entrance to Charleville Woods

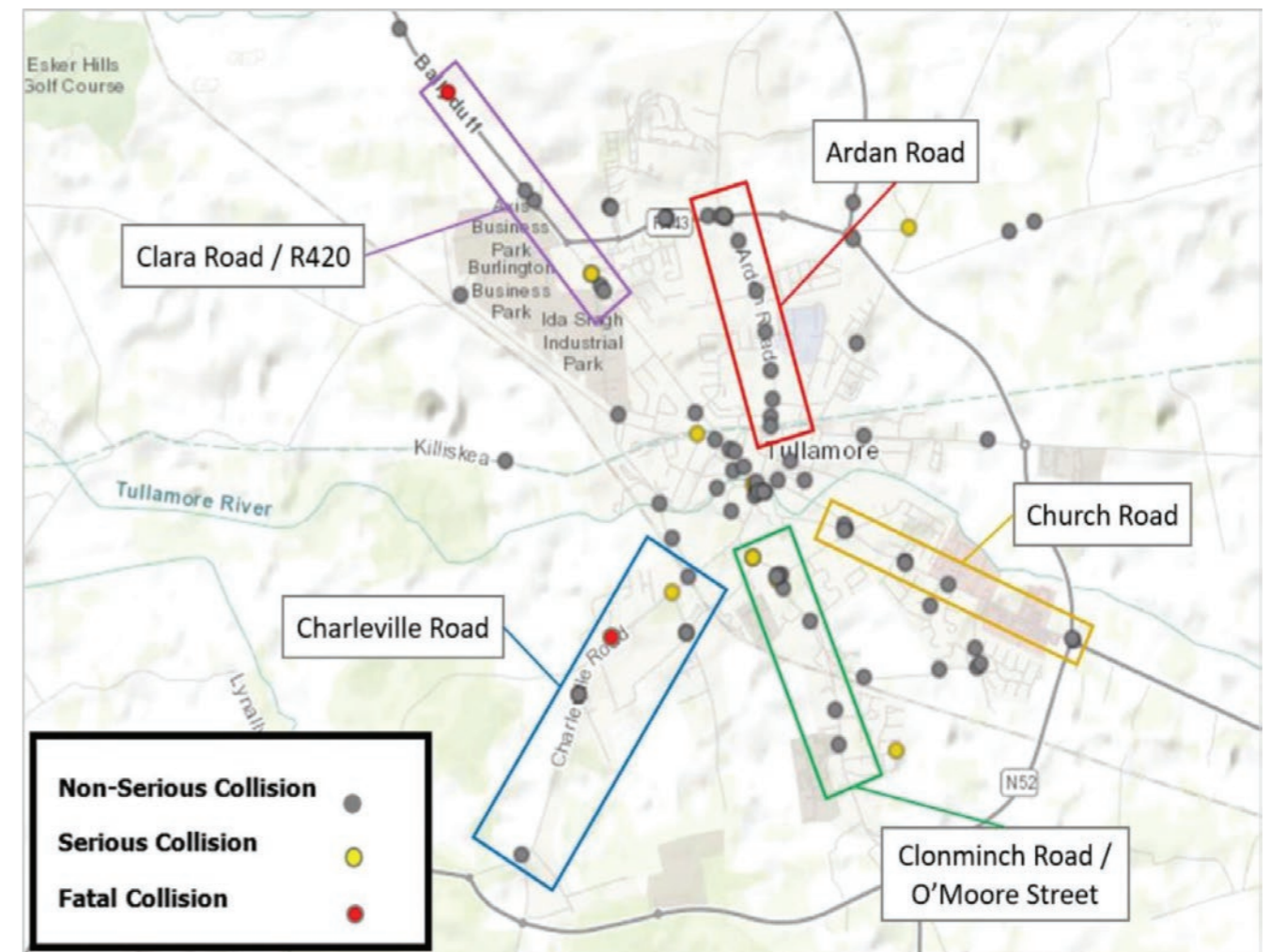


Figure 4 – Collision analysis for Tullamore (2016-2020) (source: DBFL Draft Tullamore Local Transport Plan)

Recommended Actions

RECOMMENDED ACTIONS

The Tullamore Town Centre Regeneration Framework comprises a diverse but complementary set of interventions to improve the quality of the public realm within the town. In tandem with the Tullamore Local Transport Plan (LTP) concurrently in preparation by DBFL Consulting Engineers, these interventions include provisions for reducing the dominance of motor vehicles, creating an environment more conducive to walking and cycling, and supporting more sustainable and lower-carbon transport modes.

REDUCING TRAVEL DEMAND

Tullamore is at present characterised by a relatively low population density, meaning that the majority of people accessing the town centre for work, study, shopping, or other activities are typically required to travel into the town from surrounding areas. In combination with a lack of public transport services and attractive cycling infrastructure, this results in a reliance on private car use to access the town centre.

The demand for vehicular travel into Tullamore may be reduced in the long term by higher-density residential development within and close to the town centre. In this respect, the Opportunity Sites identified in the Tullamore Town Centre Regeneration Framework provide the greatest potential for increasing population density.

PROMOTING SUSTAINABLE MODES OF TRAVEL

Among other objectives, the Tullamore Town Centre Regeneration Framework aims to encourage a modal shift away from unnecessary private car use and towards more sustainable and healthier travel modes. This is a cyclical process, as proposed changes to the public realm will serve to promote this modal shift, which in turn will support the viability and effective function of these interventions.

It is recognised that, particularly in the short term, many residents of Tullamore's surrounding area have little practical alternative to car use for journeys into the town. The Regeneration Framework and the concurrent Tullamore Local Transport Plan (LTP) therefore do not seek to eliminate motor vehicle traffic through the town but instead to rationalise it and reduce its dominance over other transport modes. Measures recommended to achieve this include:

- *High quality pedestrian and cyclist infrastructure within the town, to improve comfort, convenience, and safety for those walking and cycling.*
- *Reorganisation of car parking within the town, with a reallocation of parking space from on-street locations to off-street areas.*
- *Measures to reduce vehicle speeds and to control vehicle movements at key locations.*
- *Implementation of a town bus service, to provide reliable public transport connectivity between the town centre, outlying areas, and railway station.*
- *Park and Ride facilities at the town periphery, to allow car journeys into Tullamore to be completed as public transport, cycling, or walking trips.*

SUPPORTING INFRASTRUCTURE

Specific supporting infrastructure is required or recommended to facilitate the previously-described objectives for promoting sustainable modes of travel. This includes:

- *Implementation of a dedicated Tullamore Cycle Network, to include cycle facilities within the town centre and to connect these to Tullamore's surrounding areas and neighbouring towns.*
- *Implementation of a transport hub at Tullamore railway station, which may take the form of a Mobility Hub. At minimum, this should provide for public transport interchange between bus and rail services.*
- *Provision of Mobility Points at suitable locations within the town. These may integrate car and bicycle sharing services (including cargo bikes), reducing the need for car ownership among residents.*
- *Good quality, sheltered and secure bicycle parking facilities within the town centre and at transport interchange points.*
- *EV charging facilities at suitable car parking locations.*

ACCESS FOR ALL

At detailed design stage, all proposed changes to the public realm within Tullamore town centre are to be designed with regard to the principles of Universal Design, ensuring the public realm is as accessible as possible to all users. Key considerations in this regard include:

- *Providing sufficient footpath widths and avoiding street furniture clutter.*
- *Ensuring appropriate transitions (e.g. dropped kerbs) at changes of level.*
- *Providing tactile paving at crossing/hazard locations, and auditory signals at signal-controlled crossings.*
- *Avoiding excessive gradients on footpaths and cycle facilities.*
- *Ensuring that parking for adapted vehicles (including non-standard cycles) is catered for.*
- *Effectively using surface materials, signage, and other design aspects to ensure that pedestrian and cyclist routes are clear and legible.*
- *Providing comprehensive and good quality public lighting.*

Town Centre Public Realm Interventions

IMPROVED PEDESTRIAN CONNECTIVITY & WAYFINDING

Both the Tullamore Town Centre Regeneration Framework and the DBFL Draft Tullamore Local Transport Plan note that there are discontinuities and obstacles to permeability within the town centre pedestrian infrastructure. Connectivity between principal streets is poor in some places, and the Tullamore River forms a barrier between the northern and southern parts of the town centre.

Tullamore Town Centre Regeneration Framework details proposed new pedestrian and cyclist connections to enhance permeability, as well as identifying locations at which wayfinding measures should be implemented to encourage and facilitate active travel modes (see Figure 5).

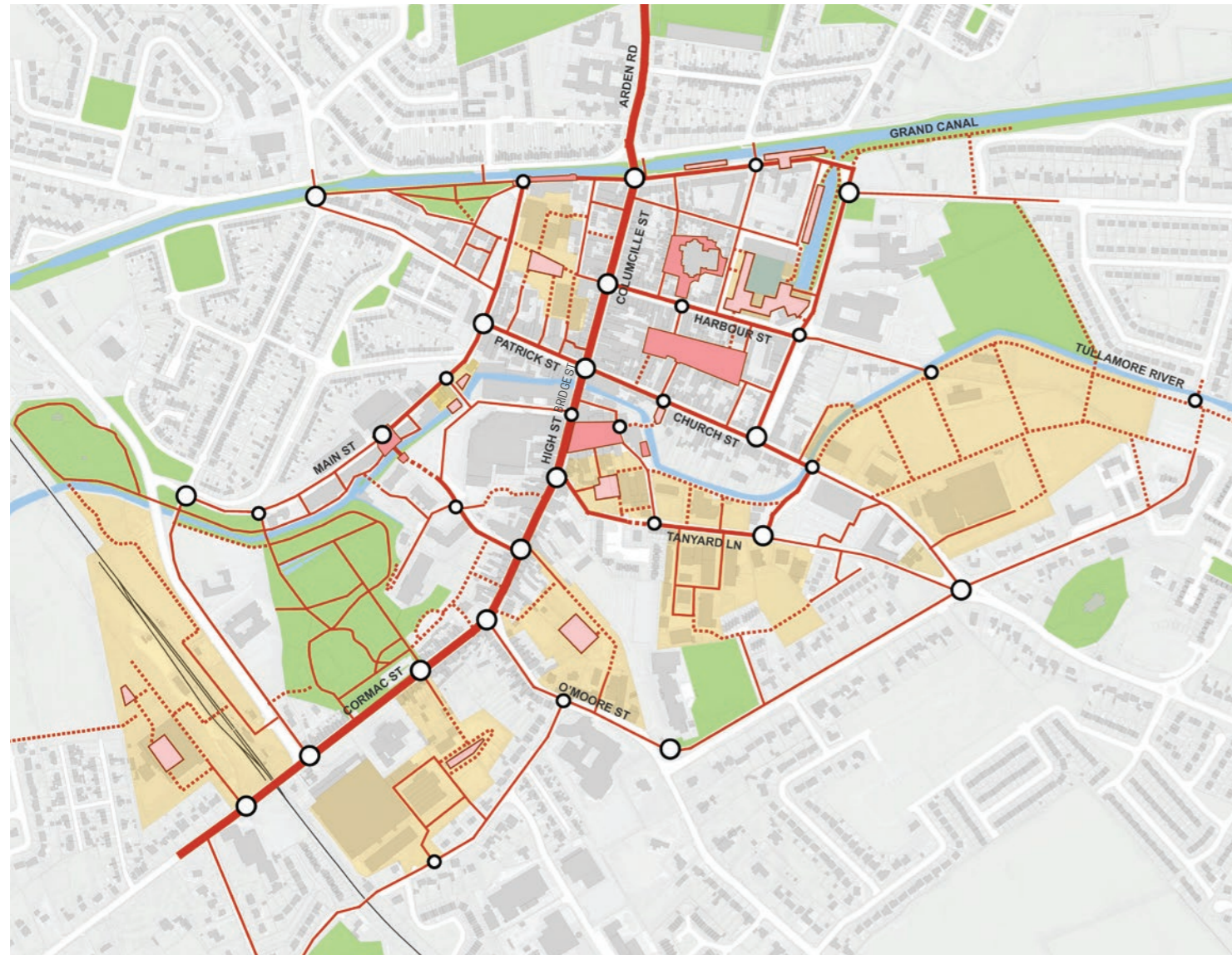


Figure 5 – Potential new connections and wayfinding

- Key opportunity sites
- Existing urban spaces
- Potential/planned spaces/ destinations
- Town centre spine
- Existing network
- Proposed / planned connections
- Key wayfinding locations

VEHICULAR SPEED RESTRICTION

Higher vehicle speeds in an urban environment are associated with a number of negative factors, including:

- Greater risk of collisions between vehicles and vulnerable road users.
- More severe collision outcomes.
- Higher road noise and engine noise levels.
- Increased air pollution from exhaust gases and airborne particulate matter.
- Disincentivisation of sustainable transport modes (in particular cycling).

At present, principal roads and streets traversing Tullamore town centre are subject to a 50km/h speed limit. The Tullamore Town Centre Regeneration Framework proposes to implement a 30km/h speed limit throughout the town centre (see Figure 6), to reduce the above-mentioned negative effects of vehicular traffic and to create an environment that is safer for – and more conducive to – sustainable transport modes such as walking.

JUNCTION AND CROSSING IMPROVEMENTS

The Tullamore Town Centre Regeneration Framework includes proposals for improving junctions and pedestrian crossings, to further reduce the dominance of motor vehicle traffic. The locations of these proposals are shown in Figure 6. They include:

- Tightening junctions by reducing kerb radii, to lower vehicle speeds, improve intervisibility, and give more space to pedestrians.
- Providing new controlled and uncontrolled pedestrian crossings to cater for pedestrian desire lines.
- Providing raised tables at junctions and at crossings, to reduce vehicle speeds and to emphasise pedestrian priority.
- Implementing Cycle Design Manual guidance at junctions to better segregate bicycle and motor vehicle traffic.



Town Centre Public Realm Interventions

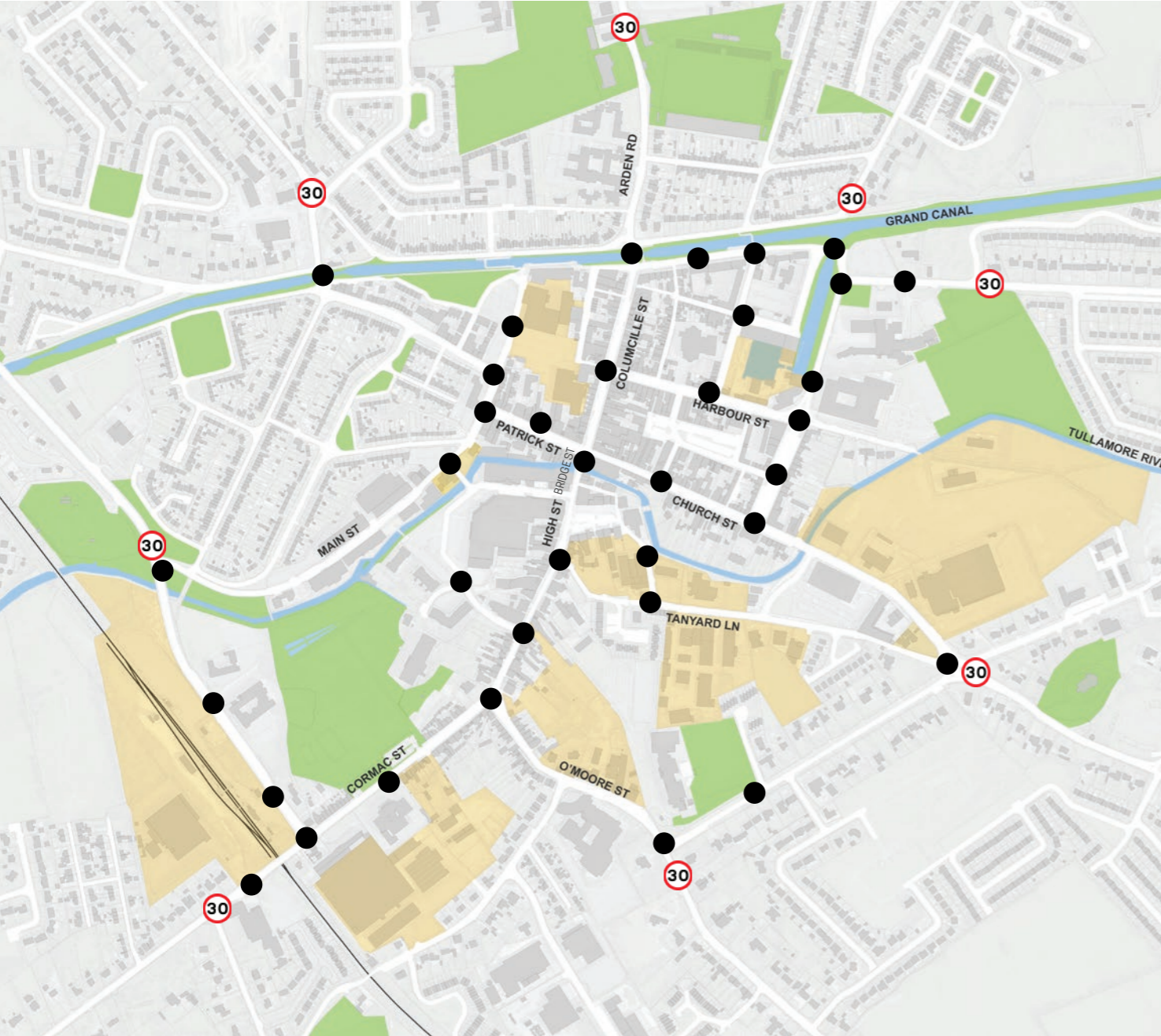


Figure 6 – Existing network potential improvements (see p.69 for more details)

- 30 30kph speed limit in entire town centre to improve pedestrian & cyclists safety
- Potential junction and crossing improvements
- Key opportunity sites

CIVIC SPACES AND STREET LINK IMPROVEMENTS

Tullamore Town Centre Regeneration Framework identifies specific principal streets along which comprehensive public realm improvement measures may be implemented to deliver an environment much more conducive to sustainable transport modes. The measures proposed include:

- Widened footpaths.
- Rationalised car parking.
- Restrictions on certain vehicle movements (including one-way street sections).
- Dedicated cycle tracks and cycle lanes (both with-flow and contraflow).

At key locations, Tullamore Town Centre Regeneration Framework proposes implementing some of these measures to create civic spaces that allow for economic, leisure, and cultural activities as well as the movement of people and vehicles. These locations include, in particular: Market Square, O’Carroll Street, Convent Road, Church Street, Harbour Street, Patrick Street, Store Street and Kilbride Street, Cormac Street Roundabout and Bridge Street.



Church Street Potential



Harbour Street Potential



O’Carroll Street Potential



Convent Road Potential



Store Street Potential



Market Square Potential

Note: Proposals are illustrative only (subject to further investigation prior to detailed design, traffic studies, technical consideration, engagement with private landowners/ stakeholders and planning consent etc.)

Town Centre Public Realm Interventions

LANEWAY IMPROVEMENTS

The Tullamore Town Centre Regeneration Framework report also recognises that laneways within the town centre provide a vital pedestrian permeability function but that these are often in poor condition or feel unsafe to use. Measures are proposed to encourage their use through improvements to surface materials, public lighting, and signage.

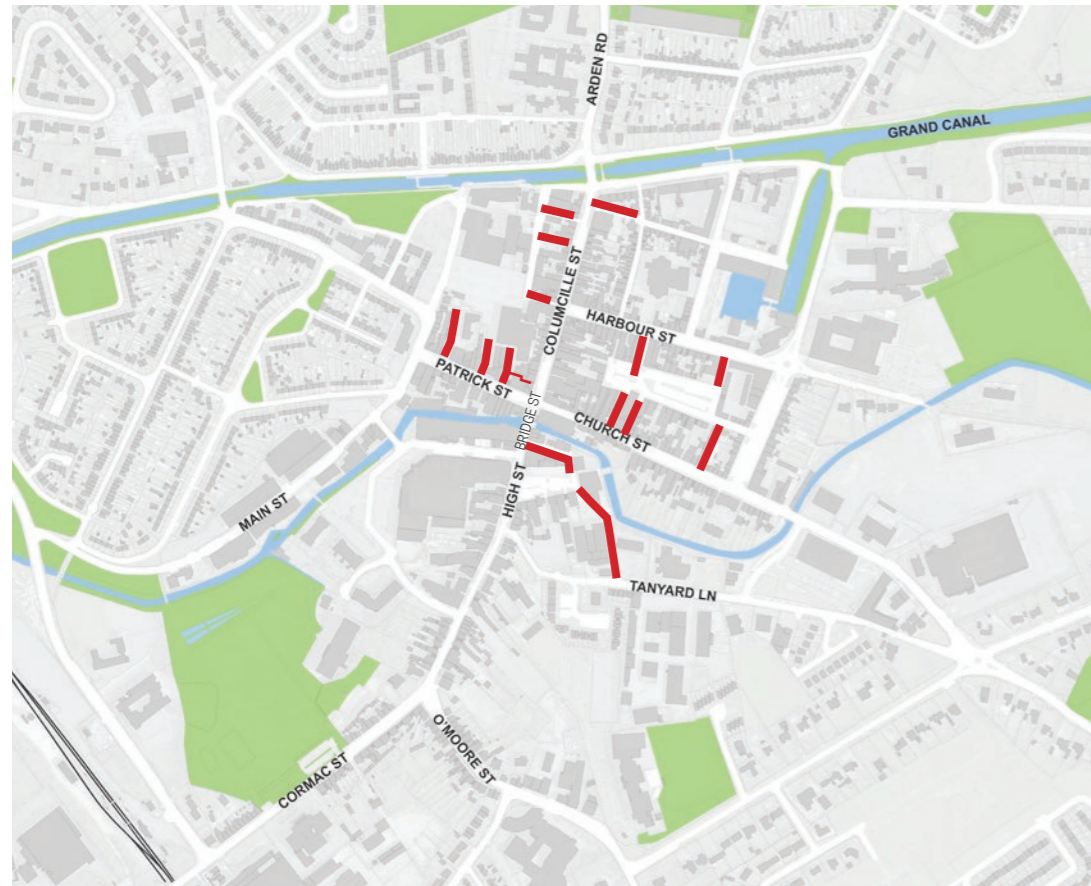


Figure 7 – Existing laneways

SCHOOL ZONES

School zones represent discrete sections of the street network at which it is particularly beneficial to introduce traffic calming and pedestrian-priority Centre Regeneration Framework report identifies several recommended locations for such treatment, as shown in Figure 8.



Figure 8 – Prospective school zones



Market Lane



Gas House Lane



Ball Alley Lane



Durrow Lane



Scoil Mhuire



Sacred Heart Catholic School

Wider Tullamore Transport Improvements

CYCLE NETWORK

The DBFL Draft Tullamore Local Transport Plan notes that existing cycling facilities in and around Tullamore are extremely limited, and that proposals exist to develop a dedicated Tullamore Cycle Network by 2040.

Elements of this cycle network are to be delivered under the following initiatives:

- Draft CycleConnects Network
- Draft National Cycle Network (NCN)
- Draft Tullamore Cycle Network (Phase 1)
- Tullamore Urban Greenway Project

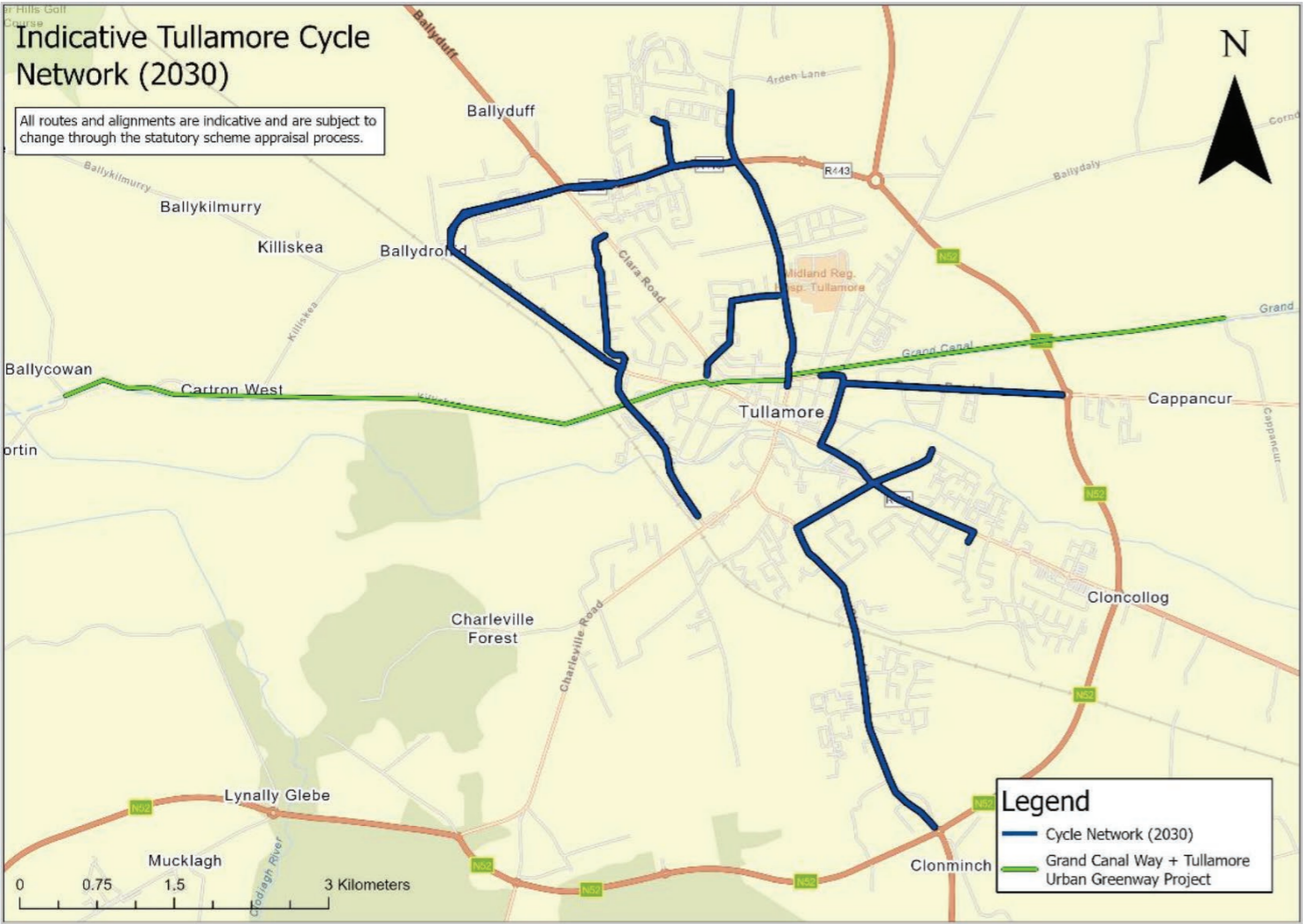


Figure 9 - Indicative Tullamore Cycle Network (2030) (source: DBFL Draft Tullamore Local Transport Plan)

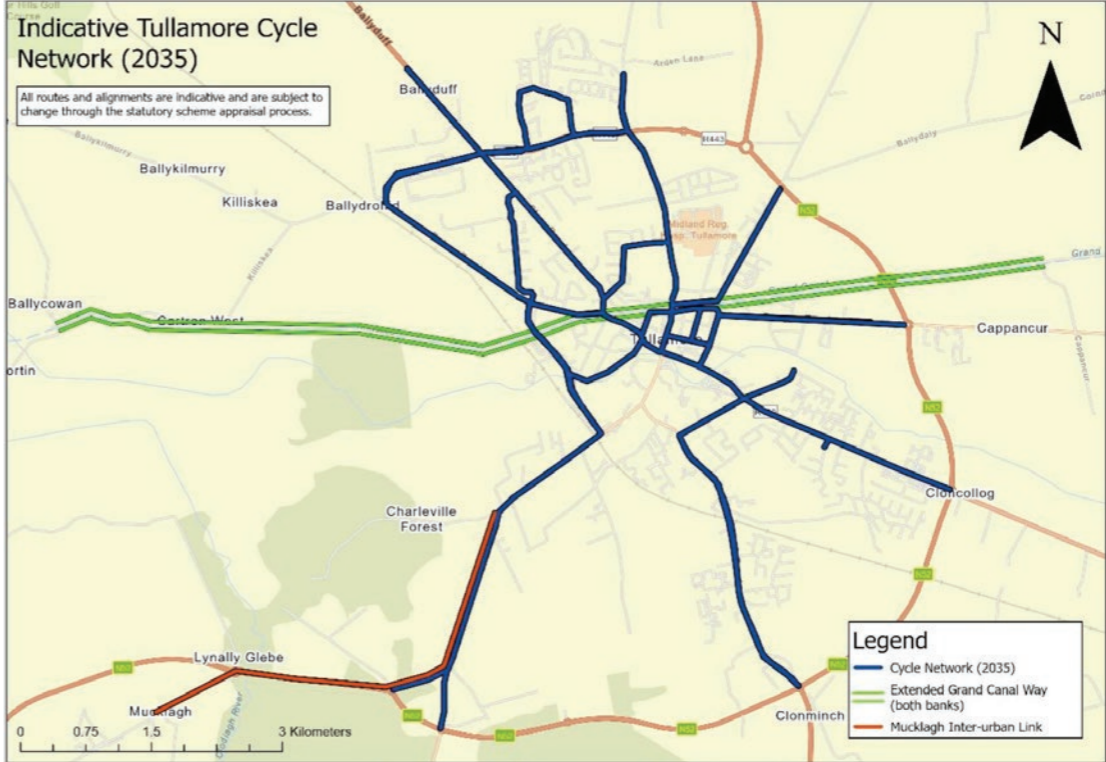


Figure 10 - Indicative Tullamore Cycle Network (2035) (source: DBFL Draft Tullamore Local Transport Plan)

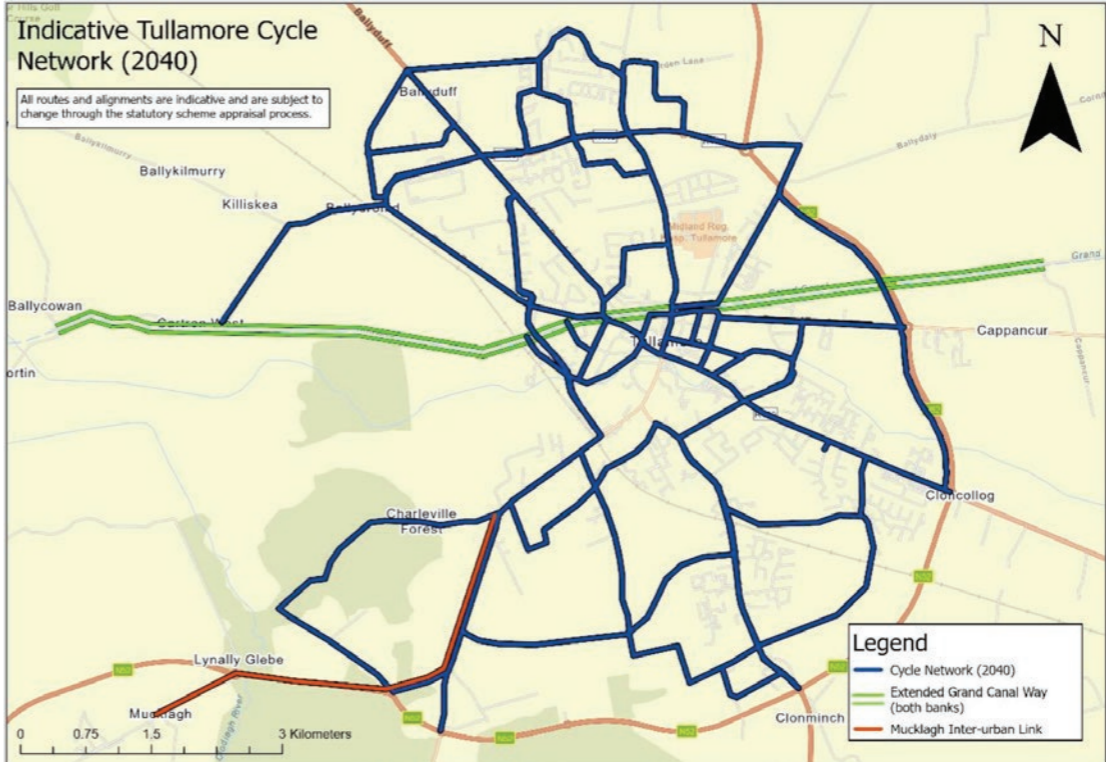


Figure 11 - Indicative Tullamore Cycle Network (2040) (source: DBFL Draft Tullamore Local Transport Plan)

Wider Tullamore Transport Improvements

TOWN BUS SERVICE

The DBFL Draft Tullamore Local Transport Plan strongly recommends “the implementation of a dedicated town bus service for Tullamore, in order to provide improved connectivity to peripheral residential areas, and so increase the ease and attractiveness of taking the bus rather than travelling by car to the town centre or other key locations”.

The DBFL Draft Tullamore Local Transport Plan notes that:

- An ideal town bus service for Tullamore would see a high-frequency timetable operating throughout the town daily, both on weekdays and at weekends.
- Locations chosen for bus depots could additionally serve as termini for a Park and Ride service, should one be deemed feasible for Tullamore.

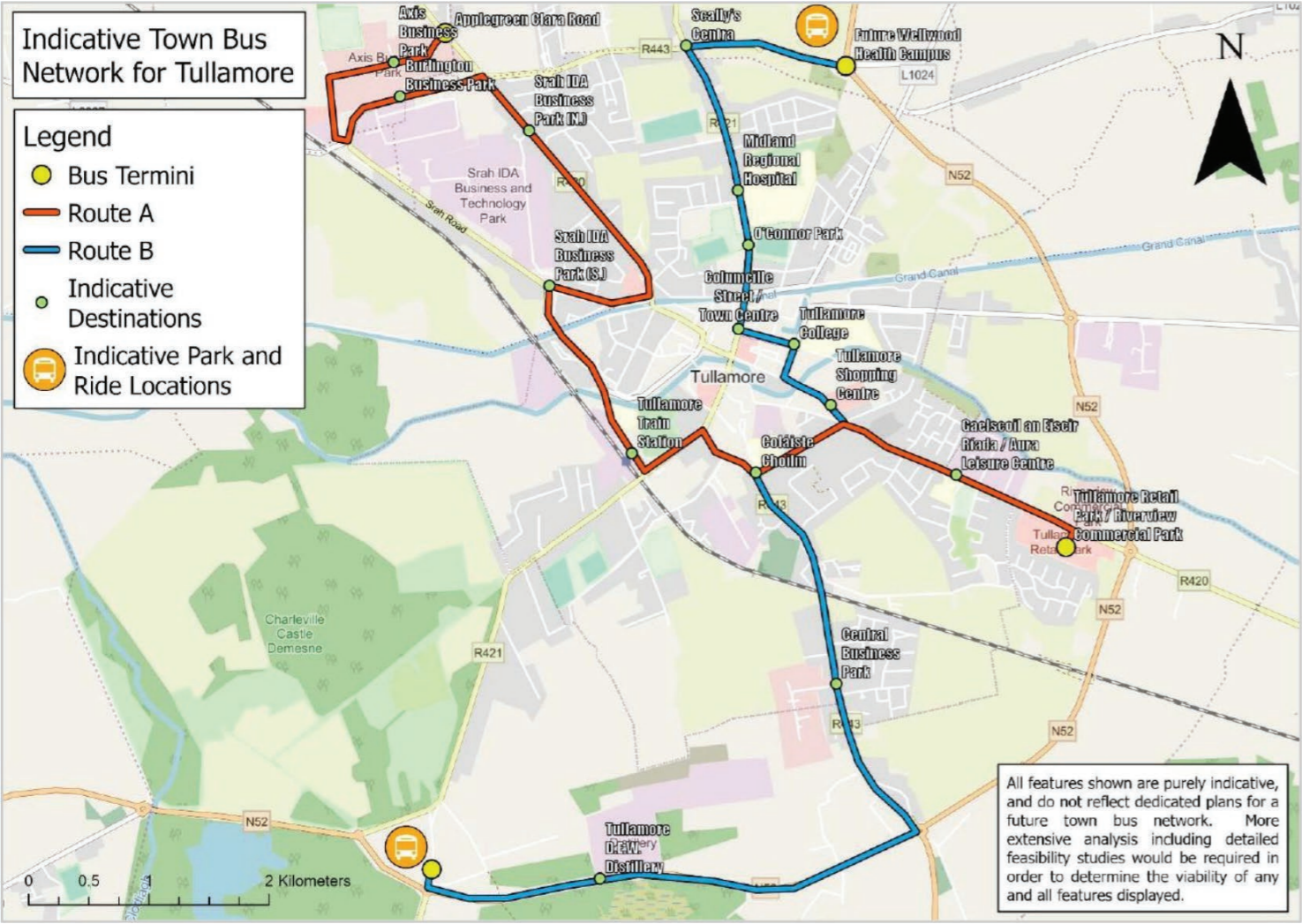


Figure 12 – Indicative potential Tullamore town bus network structure (source: DBFL Draft Tullamore Local Transport Plan)

PARK AND RIDE

The DBFL Draft Tullamore Local Transport Plan discusses the implementation of Park and Ride facilities for Tullamore:

“Park and Rides make it possible for people to reach Town Centre or other destinations, by public transport, walking or cycling. P&R facilities would capture vehicular traffic that originates from areas outside of Tullamore, most likely from more rural areas that do not have frequent public transport connectivity, before it enters the Town Centre. In this way, P&R facilities offer the opportunity to remove long-stay parking from within the centre of Tullamore while still supporting employment, education or social trips that begin outside of the boundaries of Tullamore and end in the Tullamore town centre.”

The DBFL Draft Tullamore Local Transport Plan notes that, to encourage the use of a Park and Ride, it needs to be convenient and offer some advantages over parking in Tullamore Town Centre or closer to their destination, such as:

- Direct and high-quality connections to the Town Centre, including a frequent public transport service and a sustainable bike and/or e-bike share scheme.
- Cheaper parking charges, particularly for long stay parking, compared to the Town Centre
- Electric vehicle charging points.
- Co-locating a Park and Ride with other services and amenities such as parcel collection, public toilets, etc. can make them more attractive.

Figure 13 shows indicative location options for Park and Ride facilities, as identified by DBFL from a review of vehicular traffic movements coming in and out of Tullamore. These include:

- Adjacent to the Arden Road Roundabout, outside of the N52.
- Adjacent to the Charleville Road Roundabout, outside of the N52.

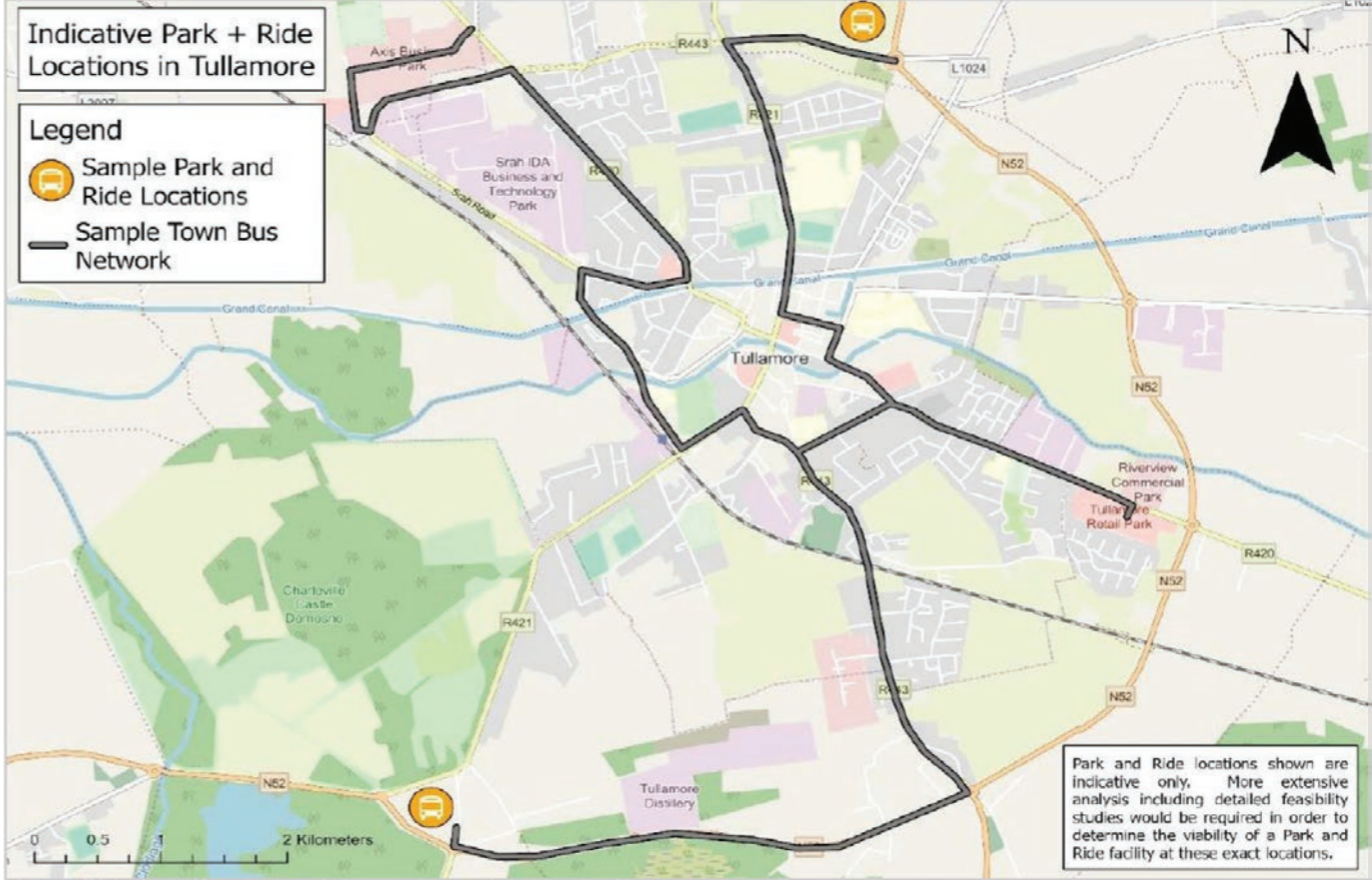


Figure 13 – Indicative location options for Park and Ride facilities (source: DBFL Draft Tullamore Local Transport Plan)

Wider Tullamore Transport Improvements Car Parking Management

MOBILITY HUBS AND MOBILITY POINTS

The DBFL Draft Tullamore Local Transport Plan describes Mobility Hubs as “areas that integrate sustainable transport options (such as public transport, bike share and car clubs) to enhance connectivity and the user experience”, which “are often co-located with consolidated car parking areas that predominantly cater for long-stay residential or commuter use to help facilitate multi-modal trips and support a reduction in car dependency”.

The DBFL Draft Tullamore Local Transport Plan notes that Mobility Hubs typically include features such as:

- Sheltered, secure bike parking (including that for adaptive and cargo bikes) and other end-of-trip facilities
- Bike repair station
- Public toilets
- Bus stop, shelter, and RTP1
- EV charging infrastructure
- Consolidated waste collection and recycling facilities (e.g. bottle banks)
- Urban logistics and ‘last-mile’ delivery solutions, including parcel collection

In the context of Tullamore, the DBFL Draft Tullamore Local Transport Plan notes that Mobility Hubs may be appropriate for:

- Tullamore’s Opportunity Sites
- Retrofitting an existing car parks
- Tullamore Railway Station (Offaly County Development Plan SMAP-17 objective aims to establish the Station and adjoining lands as a transport node)
- Midland Regional Hospital

As described in the DBFL Draft Tullamore Local Transport Plan, Mobility Points differ from Mobility Hubs in that they are “smaller scale, typically on-street interventions entailing the co-location of sustainable transport measures near public transport stops”. At a minimum, Mobility Points include bus stops, cycle parking and car club spaces but can be expanded to include E.V. Charge Points, shared bike schemes and seating.

EXISTING CAR PARKING FACILITIES

Existing car parking facilities within and around Tullamore town centre include:

- 10no. off-street public-use car parks comprising a total of 1,170no. parking spaces (1,061no. paid spaces and 109no. free spaces).
- 8no. off-street privately operated car parking areas at and around the Bridge Centre, comprising a total of 429no. paid parking spaces.
- 27no. on-street parking zones comprising a total of 801no. marked spaces (428no. paid spaces and 373no. free parking spaces).

These parking areas are shown in Figure 14 to Figure 16 and are listed in Table 3 to Table 5.

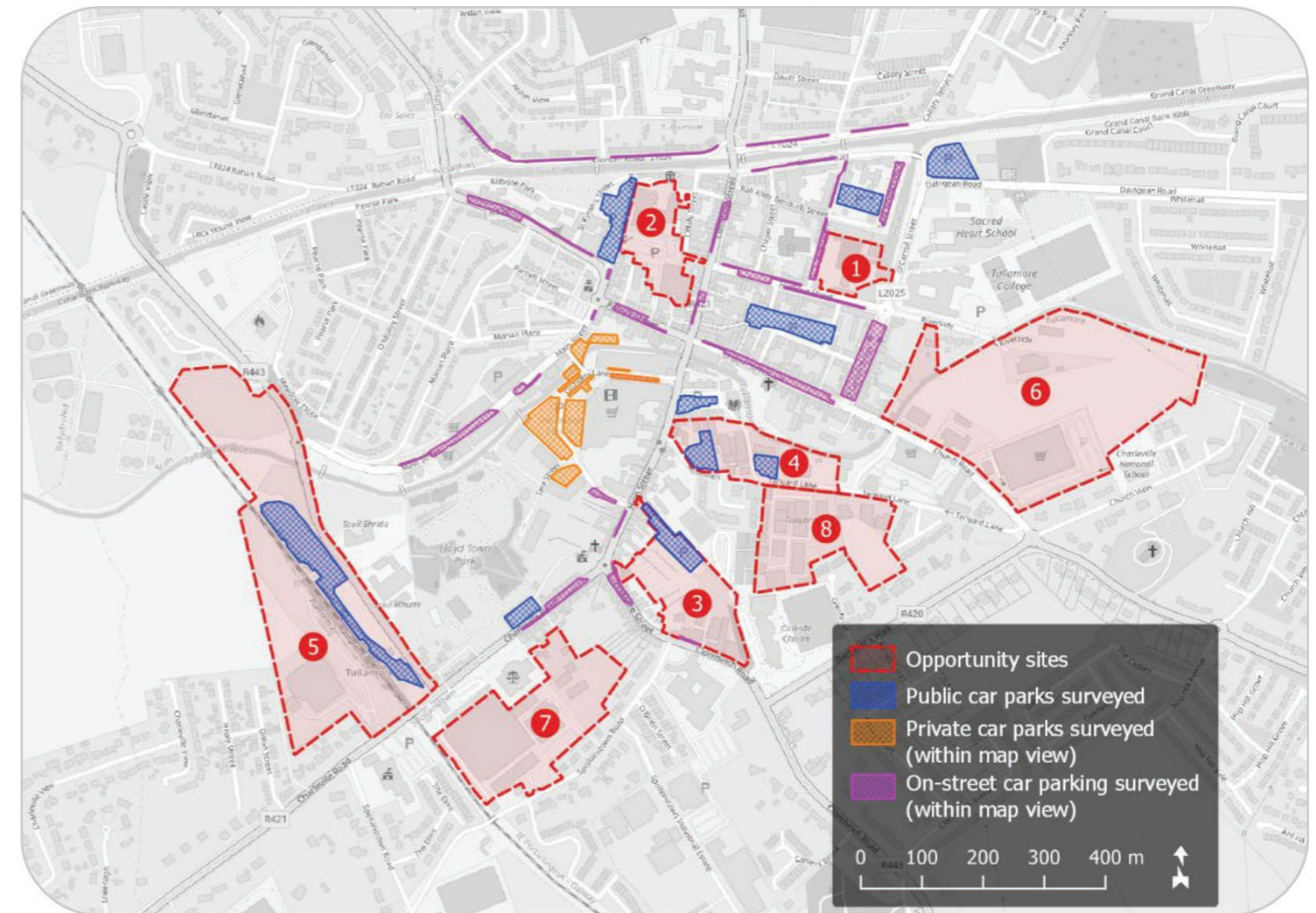


Figure 14 – Surveyed car parking areas (background map imagery: OSM Contributors)

Car Parking Management

EXISTING CAR PARKING FACILITIES



Figure 15 – Surveyed car parking areas (with ID codes) (background map imagery: OSM Contributors)

| Parking Area ID | Name / Location | Free Spaces | Paid Spaces | Total Spaces |
|-----------------|-----------------------|-------------|-------------|--------------|
| CP1 | Opportunity Site 3 | 0 | 109 | 109 |
| CP2 | Cormac St Car Park | 0 | 36 | 36 |
| CP3 | IÉ Station Car Park | 0 | 423 | 423 |
| CP4 | Roselawn Car Park | 0 | 83 | 83 |
| CP5 | O'Connor Square | 0 | 37 | 37 |
| CP6 | Tanyard Ln Car Park | 0 | 43 | 43 |
| CP7 | Market Square | 0 | 132 | 132 |
| CP8 | Store Street Car Park | 0 | 89 | 89 |
| CP9 | Daingean Rd Car Park | 109 | 0 | 109 |
| CP10 | Kilbride St Car Park | 0 | 109 | 109 |
| Totals | | 109 | 1,061 | 1,170 |

Table 3: Public use car parks – Overview

| Parking Area ID | Name / Location | Free Spaces | Paid Spaces | Total Spaces |
|-----------------|---------------------|-------------|-------------|--------------|
| PP1 | Bridge Centre SW | 0 | 154 | 154 |
| PP2 | Park Rite Tara St | 0 | 42 | 42 |
| PP3 | Bridge Centre CS | 0 | 102 | 102 |
| PP4 | Bridge Centre CN | 0 | 28 | 28 |
| PP5 | Bridge Centre N | 0 | 28 | 28 |
| PP7 | Bridge Centre NE | 0 | 18 | 18 |
| PP8 | Water Ln Car Park A | 0 | 11 | 11 |
| PP9 | Water Ln Car Park B | 0 | 46 | 46 |
| Totals | | 0 | 429 | 429 |

Table 4: Bridge Centre area private car parks – Overview

Car Parking Management

EXISTING CAR PARKING FACILITIES



Figure 16 – Surveyed car parking areas (showing number of spaces) (background map imagery: OSM Contributors)

| Parking Zone ID | Name / Location | Free Spaces ² | Paid Spaces | Total Spaces ³ |
|-----------------|---------------------|--------------------------|-------------|---------------------------|
| OS1+2 | Columcille St North | 14 | 9 | 23 |
| OS3+4 | Columcille St South | 24 | 0 | 24 |
| OS5+7 | Harbour St West | 32 | 3 | 35 |
| OS6+8 | Harbour St East | 26 | 5 | 31 |
| OS9+10 | O'Carroll Street | 0 | 94 | 94 |
| OS11+12+13 | Church Street | 14 | 57 | 71 |
| OS14+15 | Patrick Street | 3 | 28 | 31 |
| OS16+17 | Kilbride St West | 5 | 44 | 49 |
| OS18 | Main St North | 0 | 2 | 2 |
| OS19+20 | Main St Centre | 0 | 14 | 14 |
| OS21+22 | Distillery Ln North | 6 | 27 | 33 |
| OS23 | Convent Road | 0 | 20 | 20 |
| OS24 | Store St North | 0 | 15 | 15 |
| OS25+26 | Store St South | 30 | 2 | 32 |
| OS27+28 | St Brigid's Place | 31 | 0 | 31 |
| OS29 | Convent View West | 27 | 0 | 27 |
| OS30 | Convent View East | 20 | 0 | 20 |
| OS31 | Clontarf Rd East | 41 | 3 | 44 |
| OS32 | Clontarf Rd West | 51 | 0 | 51 |
| OS33+34 | Main St South | 1 | 48 | 49 |
| OS35 | Distillery Ln South | 0 | 17 | 17 |
| OS36 | High Street | 0 | 8 | 8 |
| OS37+38 | Charleville Road | 29 | 0 | 29 |
| OS39+40 | O'Moore St North | 12 | 9 | 21 |
| OS41 | O'Moore St South | 0 | 6 | 6 |
| OS42+43 | Ardan Road | 0 | 17 | 17 |
| OS44 | Kilbride St East | 7 | 0 | 7 |
| Totals | | 373 | 428 | 801 |

Table 5: On-street parking areas – Overview

²Including loading bays and taxi bays

³Designated parking & loading bays only

Car Parking Management

CAR PARKING USAGE PATTERNS

Surveys of off-street parking areas and on-street parking were conducted as follows:

- On-street parking surveys conducted by IDASO on Thursday the 2nd of March and Saturday the 4th of March 2023.
- Off-street parking surveys of public car parks conducted by IDASO on Thursday the 2nd of March and Saturday the 4th of March 2023.
- Off-street parking surveys of private car parks conducted by NDC on Thursday the 9th of March and Saturday the 11th of March 2023.

| Parking Zone ID(s) | Name / Location | Mean Occupancy | | Maximum Occupancy | |
|---|-----------------------|----------------|-----|-------------------|-----|
| | | Thu | Sat | Thu | Sat |
| Public use car parks | | | | | |
| CP1 | Opportunity Site 3 | 26% | 26% | 39% | 39% |
| CP2 | Cormac St Car Park | 19% | 14% | 44% | 47% |
| CP3 | IÉ Station Car Park | 32% | 14% | 39% | 19% |
| CP4 | Roselawn Car Park | 45% | 42% | 67% | 63% |
| CP5 | O'Connor Square | 73% | 73% | 95% | 92% |
| CP6 | Tanyard Ln Car Park | 51% | 40% | 77% | 81% |
| CP7 | Market Square | 66% | 62% | 93% | 83% |
| CP8 | Store Street Car Park | 23% | 8% | 97% | 20% |
| CP9 | Daingean Rd Car Park | 56% | 32% | 98% | 65% |
| CP10 | Kilbride St Car Park | 59% | 56% | 92% | 89% |
| Overall | | 42% | 31% | 60% | 41% |
| Bridge Centre area private car parks | | | | | |
| PP1 | Bridge Centre SW | 38% | 48% | 75% | 90% |
| PP2 | Park Rite Tara St | 48% | 35% | 79% | 50% |
| PP3 | Bridge Centre CS | 55% | 62% | 95% | 97% |
| PP4 | Bridge Centre CN | 76% | 73% | 100% | 96% |
| PP5 | Bridge Centre N | 76% | 74% | 100% | 96% |
| PP7 | Bridge Centre NE | 62% | 53% | 94% | 83% |
| PP8 | Water Ln Car Park A | 49% | 41% | 82% | 55% |
| PP9 | Water Ln Car Park B | 48% | 32% | 67% | 48% |
| Overall | | 50% | 52% | 80% | 80% |

Table 6: Surveyed occupancy rates – off-street car parking areas

| Parking Zone ID(s) | Name / Location | Mean Occu-pancy | Mean Occu-pancy | Maximum Occupancy | |
|--------------------|---------------------|-----------------|-----------------|-------------------|------|
| | | Thu | Sat | Thu | Sat |
| OS1+2 | Columcille St North | 64% | 52% | 78% | 74% |
| OS3+4 | Columcille St South | 56% | 49% | 75% | 63% |
| OS5+7 | Harbour St West | 68% | 61% | 80% | 77% |
| OS6+8 | Harbour St East | 58% | 52% | 100% | 81% |
| OS9+10 | O'Carroll Street | 53% | 61% | 78% | 84% |
| OS11+12+13 | Church Street | 70% | 65% | 96% | 92% |
| OS14+15 | Patrick Street | 72% | 72% | 90% | 100% |
| OS16+17 | Kilbride St West | 44% | 49% | 61% | 63% |
| OS18 | Main St North | 96% | 88% | 150% | 150% |
| OS19+20 | Main St Centre | 58% | 74% | 79% | 93% |
| OS21+22 | Distillery Ln North | 92% | 96% | 109% | 127% |
| OS23 | Convent Road | 43% | 64% | 90% | 80% |
| OS24 | Store St North | 33% | 32% | 133% | 127% |
| OS25+26 | Store St South | 58% | 47% | 122% | 100% |
| OS27+28 | St Brigid's Place | 29% | 9% | 110% | 10% |
| OS29 | Convent View West | 40% | 34% | 63% | 52% |
| OS30 | Convent View East | 40% | 38% | 55% | 75% |
| OS31 | Clontarf Rd East | 42% | 42% | 55% | 48% |
| OS32 | Clontarf Rd West | 37% | 51% | 59% | 63% |
| OS33+34 | Main St South | 47% | 57% | 71% | 78% |
| OS35 | Distillery Ln South | 39% | 41% | 88% | 88% |
| OS36 | High Street | 95% | 112% | 125% | 138% |
| OS37+38 | Charleville Road | 54% | 38% | 76% | 52% |
| OS39+40 | O'Moore St North | 57% | 63% | 71% | 86% |
| OS41 | O'Moore St South | 47% | 35% | 83% | 67% |
| OS42+43 | Ardan Road | 57% | 51% | 76% | 82% |
| OS44 | Kilbride St East | 61% | 66% | 100% | 114% |
| Overall | | 54% | 54% | 69% | 62% |

Table 7: Surveyed occupancy rates – on-street parking

Car Parking Management

CAR PARKING USAGE PATTERNS

These surveys recorded the total number of occupied spaces in each survey zone by 30-minute period between the hours of 07:00 and 19:00, on a Thursday and on a Saturday. An overall occupancy for each survey zone has been calculated for each 30-minute survey period; this represents the number of vehicles parked in that zone as a proportion of the number of marked parking bays. Table 6 and Table 7 give the highest recorded occupancy rate for each parking survey zone, as well as the mean average occupancy rate for that day. The maximum occupancy rates are also represented graphically in Figure 17 and Figure 18. For the surveyed public use car parks, all of which are paid parking and more of which are further from the town centre, both mean occupancy and maximum occupancy rates are generally higher on the Thursday than on the Saturday. In the privately operated off-street car parks and the surveyed on-street parking areas, overall Thursday occupancy rates are similar to those on the corresponding Saturday. As would be expected, higher occupancy rates correlate in general with lower parking cost and with proximity to the town centre core.

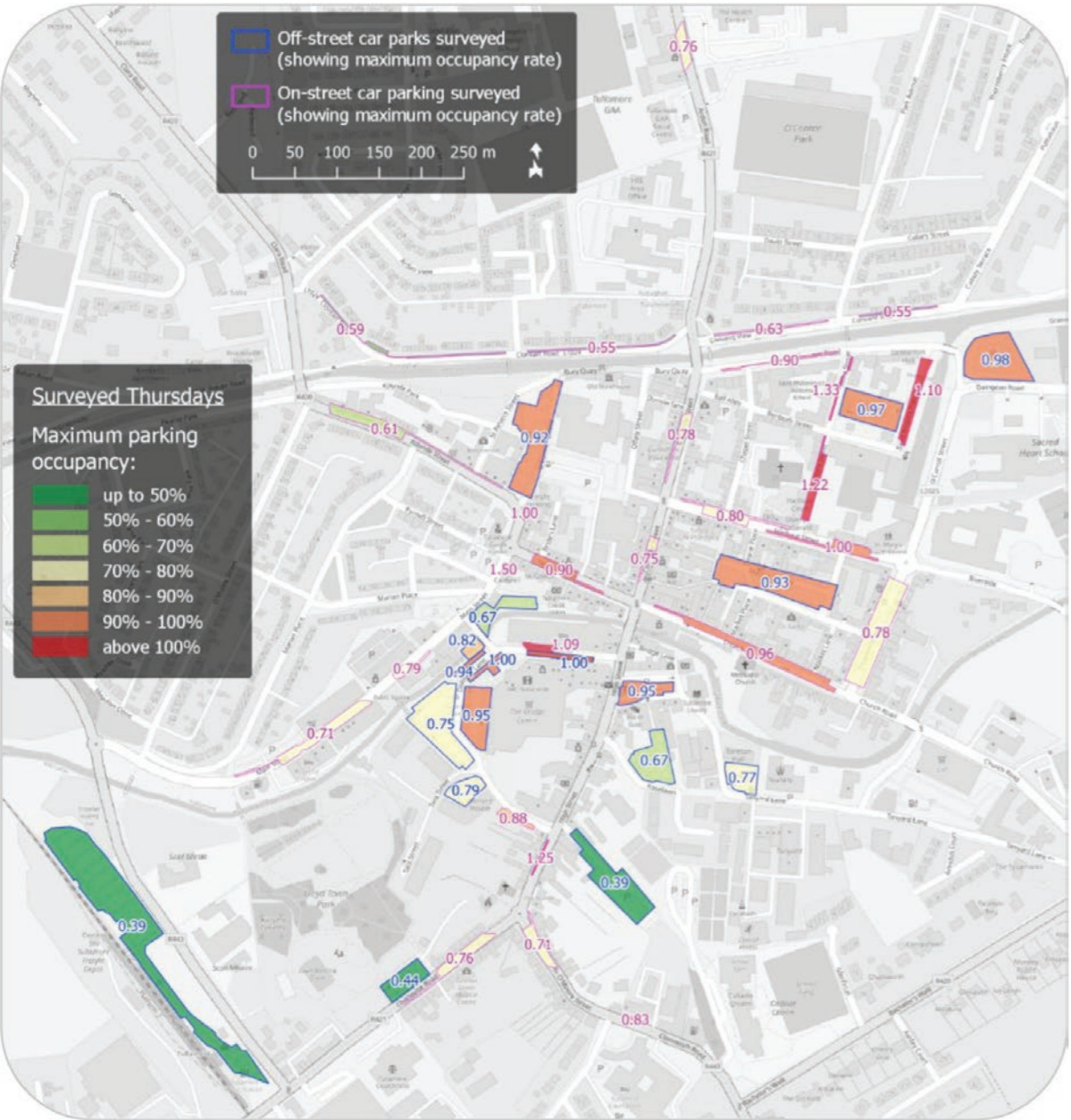


Figure 17 – Surveyed car parking areas – maximum Thursday occupancy (background map imagery: OSM Contributors)

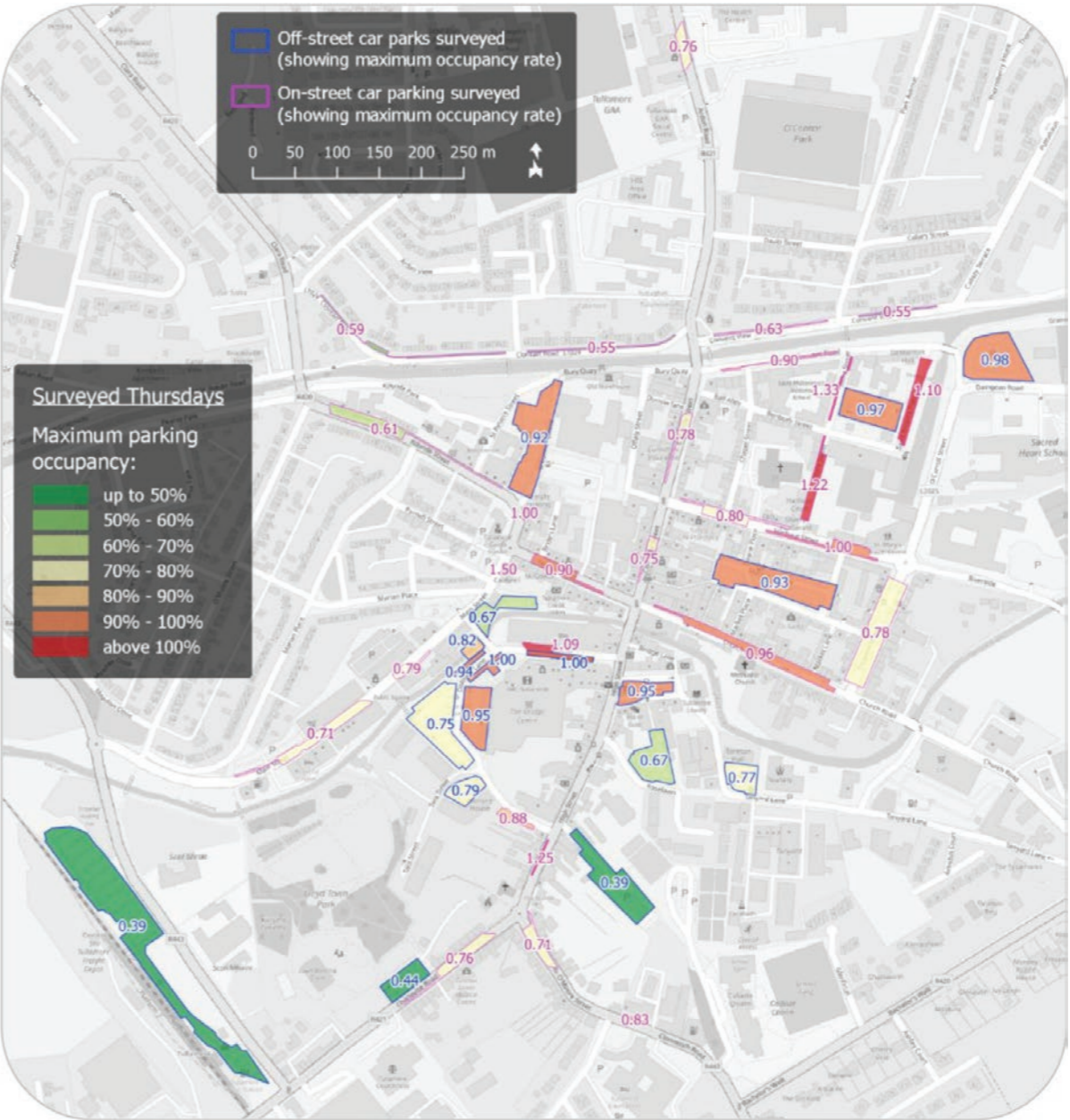


Figure 18 – Surveyed car parking areas – maximum Saturday occupancy (background map imagery: OSM Contributors)

Car Parking Management

CAR PARKING USAGE PATTERNS

The parking surveys also recorded the duration of stay for each vehicle within the surveyed parking zones, within classified time bands (0-30 minutes, 30-60 minutes, 1.0-1.5 hours, and so on). Table 8 and Table 9 give the most common parking duration for each survey zone, on each of the survey days.

On-street parking usage is overwhelmingly of short duration, with the majority of recorded vehicles being parked for 30 minutes or less. The same is generally true of the off-street car parks closer to the town centre, whereas some of those further out are used more frequently for longer stays. Longer parking stays are more common on Thursdays than on the corresponding Saturdays.

| Parking Zone ID(s) | Name / Location | Paid or Free Parking | Total Spaces | Most Common Parking Duration | |
|---|-----------------------|----------------------|--------------|------------------------------|--------------|
| | | | | Thu | Sat |
| Public use car parks | | | | | |
| CP1 | Opportunity Site 3 | Paid | 109 | up to 30 min | up to 30 min |
| CP2 | Cormac St Car Park | Paid | 36 | up to 30 min | up to 30 min |
| CP3 | IÉ Station Car Park | Paid | 423 | over 4 hours | over 4 hours |
| CP4 | Roselawn Car Park | Paid | 83 | over 4 hours | over 4 hours |
| CP5 | O'Connor Square | Paid | 37 | up to 30 min | up to 30 min |
| CP6 | Tanyard Ln Car Park | Paid | 43 | up to 30 min | up to 30 min |
| CP7 | Market Square | Paid | 132 | up to 30 min | up to 30 min |
| CP8 | Store Street Car Park | Paid | 89 | 1 to 1.5 hours | up to 30 min |
| CP9 | Daingean Rd Car Park | Free | 109 | over 4 hours | up to 30 min |
| CP10 | Kilbride St Car Park | Paid | 109 | up to 30 min | up to 30 min |
| Overall | | | 1170 | up to 30 min | up to 30 min |
| Bridge Centre area private car parks | | | | | |
| PP1 | Bridge Centre SW | Paid | 154 | up to 30 min | up to 30 min |
| PP2 | Park Rite Tara St | Paid | 42 | 4.5 to 5 hours | over 4 hours |
| PP3 | Bridge Centre CS | Paid | 102 | up to 30 min | up to 30 min |
| PP4 | Bridge Centre CN | Paid | 28 | up to 30 min | up to 30 min |
| PP5 | Bridge Centre N | Paid | 28 | up to 30 min | up to 30 min |
| PP7 | Bridge Centre NE | Paid | 18 | over 4 hours | up to 30 min |
| PP8 | Water Ln Car Park A | Paid | 11 | over 4 hours | over 4 hours |
| PP9 | Water Ln Car Park B | Paid | 46 | over 4 hours | over 4 hours |
| Overall | | | 429 | up to 30 min | up to 30 min |

Table 8: Typical parking duration – off-street car parking areas

| Parking Zone ID(s) | Name / Location | Paid or Free Parking | Total Spaces | Most Common Parking Duration | |
|--------------------|---------------------|----------------------|--------------|------------------------------|--------------|
| | | | | Thu | Sat |
| OS1+2 | Columcille St North | Mixed | 23 | up to 30 min | up to 30 min |
| OS3+4 | Columcille St South | Free | 24 | up to 30 min | up to 30 min |
| OS5+7 | Harbour St West | Free | 35 | up to 30 min | up to 30 min |
| OS6+8 | Harbour St East | Free | 31 | up to 30 min | up to 30 min |
| OS9+10 | O'Carroll Street | Paid | 94 | up to 30 min | up to 30 min |
| OS11+12+13 | Church Street | Mixed | 71 | up to 30 min | up to 30 min |
| OS14+15 | Patrick Street | Paid | 31 | up to 30 min | up to 30 min |
| OS16+17 | Kilbride St West | Paid | 49 | up to 30 min | up to 30 min |
| OS18 | Main St North | Paid | 2 | up to 30 min | up to 30 min |
| OS19+20 | Main St Centre | Paid | 14 | up to 30 min | up to 30 min |
| OS21+22 | Distillery Ln North | Paid | 33 | up to 30 min | up to 30 min |
| OS23 | Convent Road | Paid | 20 | up to 30 min | up to 30 min |
| OS24 | Store St North | Paid | 15 | up to 30 min | up to 30 min |
| OS25+26 | Store St South | Free | 32 | up to 30 min | up to 30 min |
| OS27+28 | St Brigid's Place | Free | 31 | 1 to 1.5 hours | up to 30 min |
| OS29 | Convent View West | Free | 27 | up to 30 min | up to 30 min |
| OS30 | Convent View East | Free | 20 | up to 30 min | up to 30 min |
| OS31 | Clontarf Rd East | Free | 44 | up to 30 min | up to 30 min |
| OS32 | Clontarf Rd West | Free | 51 | up to 30 min | up to 30 min |
| OS33+34 | Main St South | Paid | 49 | up to 30 min | up to 30 min |
| OS35 | Distillery Ln South | Paid | 17 | up to 30 min | up to 30 min |
| OS36 | High Street | Paid | 8 | up to 30 min | up to 30 min |
| OS37+38 | Charleville Road | Free | 29 | up to 30 min | up to 30 min |
| OS39+40 | O'Moore St North | Mixed | 21 | up to 30 min | up to 30 min |
| OS41 | O'Moore St South | Paid | 6 | up to 30 min | up to 30 min |
| OS42+43 | Ardan Road | Paid | 17 | up to 30 min | up to 30 min |
| OS44 | Kilbride St East | Free | 7 | up to 30 min | up to 30 min |
| Overall | | | 801 | up to 30 min | up to 30 min |

Table 9: Typical parking duration – on-street parking

Car Parking Management

POTENTIAL CHANGES TO CAR PARKING

The Tullamore Town Centre Regeneration Framework report details potential changes to the public realm (all proposals are subject to further investigation prior to detailed design, traffic studies, technical consideration, engagement with private landowners/ stakeholders and planning consent etc.) that include the reorganisation of car parking in several on-street locations and several public use car parks. Figure 19 shows all car parking areas within the town centre core (within a 5-minute walk of the central focal point); the numbers of existing spaces and proposed future spaces within each of these areas is given in Table 10.

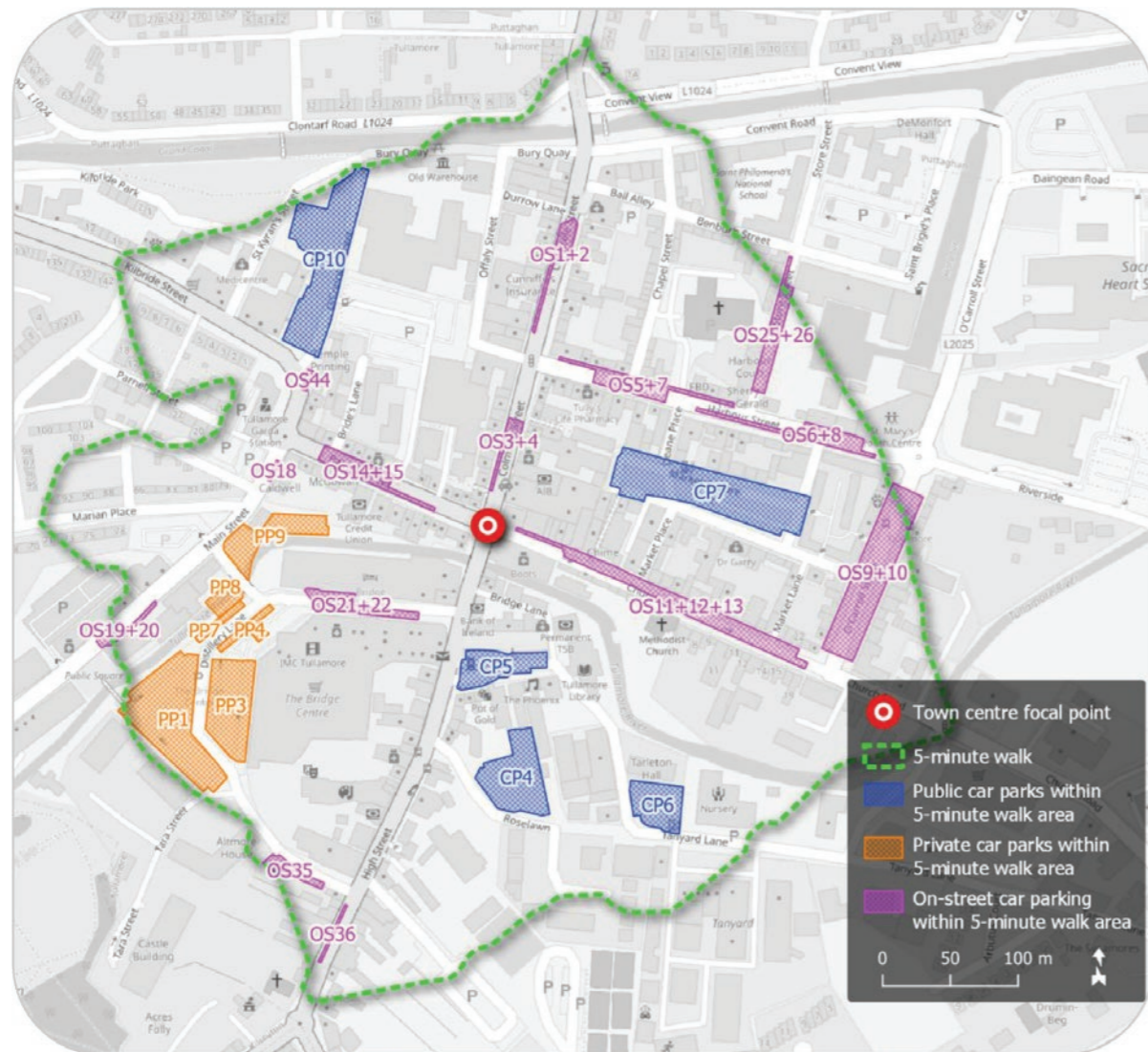


Figure 19 – Car parking areas within town centre core (background map imagery: OSM Contributors)

| Parking Zone ID(s) | Name / Location | Existing Spaces | Future Spaces | Net Change Spaces |
|---|----------------------|-----------------|---------------|-------------------|
| Public use car parks | | | | |
| CP4 | Roselawn Car Park | 83 | 83 | 0 |
| CP5 | O'Connor Square | 37 | 37 | 0 |
| CP6 | Tanyard Ln Car Park | 43 | 43 | 0 |
| CP7 | Market Square | 132 | 79 | -53 |
| CP10 | Kilbride St Car Park | 109 | 84 | -25 |
| Sub-Totals | | 404 | 326 | -78 |
| Bridge Centre area private car parks | | | | |
| PP1 | Bridge Centre SW | 154 | 154 | 0 |
| PP3 | Bridge Centre CS | 102 | 102 | 0 |
| PP4 | Bridge Centre CN | 28 | 28 | 0 |
| PP7 | Bridge Centre NE | 18 | 18 | 0 |
| PP8 | Water Ln Car Park A | 11 | 11 | 0 |
| PP9 | Water Ln Car Park B | 46 | 46 | 0 |
| Sub-Totals | | 359 | 359 | 0 |
| On-street car parking | | | | |
| OS1+2 | Columcille St North | 23 | 23 | 0 |
| OS3+4 | Columcille St South | 24 | 24 | 0 |
| OS5+7 | Harbour St West | 35 | 15 | -20 |
| OS6+8 | Harbour St East | 31 | 17 | -14 |
| OS9+10 | O'Carroll Street | 94 | 46 | -48 |
| OS11+12+13 | Church Street | 71 | 41 | -30 |
| OS14+15 | Patrick Street | 31 | 36 | +5 |
| OS18 | Main St North | 2 | 4 | +2 |
| OS19+20 | Main St Centre | 14 | 14 | 0 |
| OS25+26 | Store St South | 32 | 15 | -17 |
| OS35 | Distillery Ln South | 17 | 17 | 0 |
| OS36 | High Street | 8 | 8 | 0 |
| OS44 | Kilbride St East | 7 | 3 | -4 |
| Sub-Totals | | 389 | 263 | -126 |
| Combined car parking provision | | | | |
| Totals | | 1152 | 948 | -204 |

Table 10: Changes to parking areas within town centre core

Car Parking Management

6.4 MEETING FUTURE PARKING DEMAND

Table 11 compares the future car parking provision within the town centre core (as given previously in Table 10) to the existing maximum car parking demand for each area (as recorded by the parking surveys) and the projected future parking demand. The projected future demand has been established on the assumption of a 10% overall reduction in car use for journeys into Tullamore, which is within the modal shift projection given in the DBFL Draft Tullamore Local Transport Plan. This shows that the proposed future provision of car parking within the town centre core is sufficient to meet the overall projected future demand, allowing for some relocation of parking activity from on-street locations to off-street car parks.

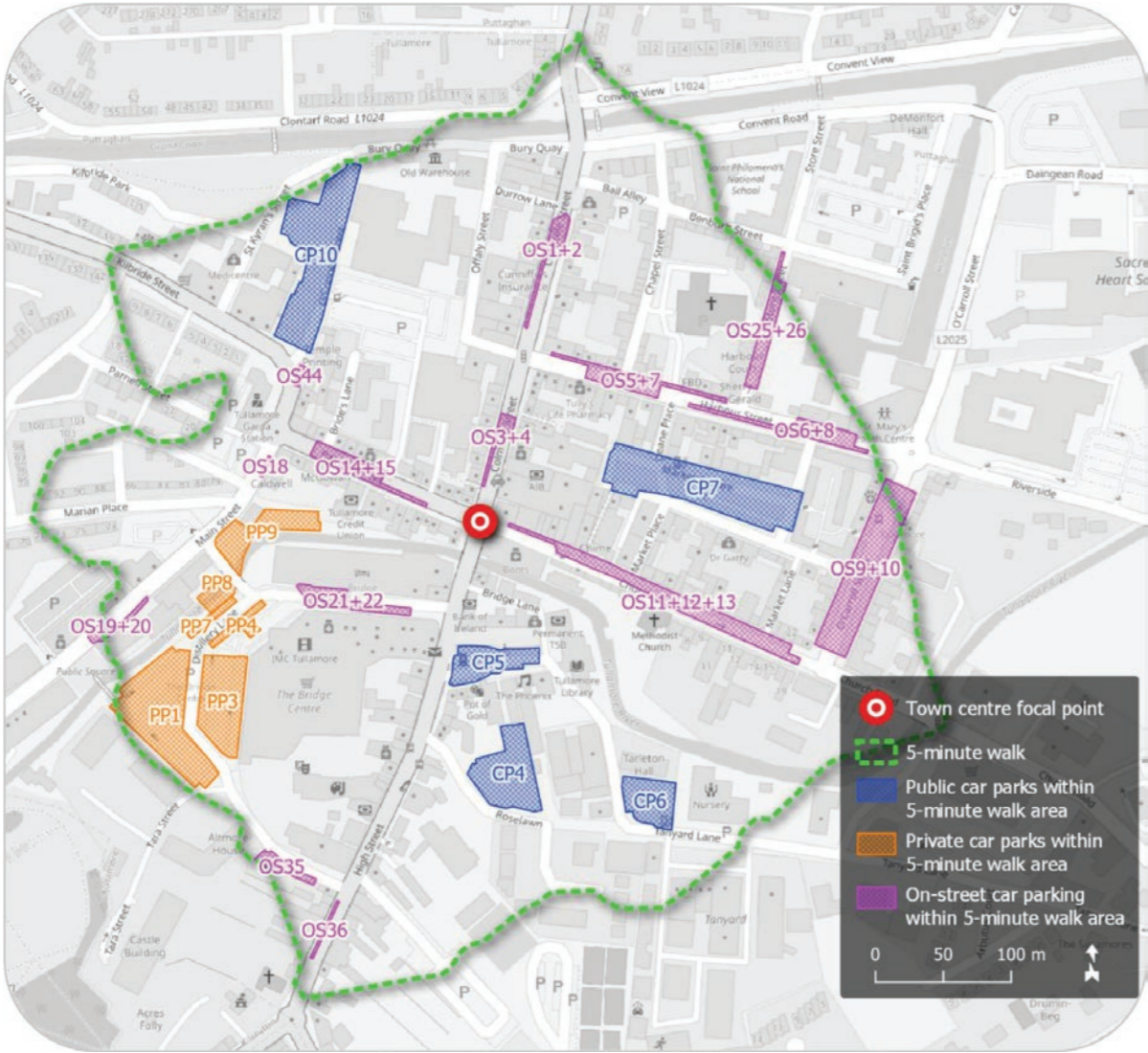


Figure 19 – Car parking areas within town centre core (background map imagery: OSM Contributors)

| Parking Zone ID(s) | Name / Location | Future Spaces | Maximum Current Demand | Projected Max. Future Demand | Projected Max. Future Occupancy |
|---|----------------------|---------------|------------------------|------------------------------|---------------------------------|
| Public use car parks | | | | | |
| CP4 | Roselawn Car Park | 83 | 56 | 50 | 60% |
| CP5 | O'Connor Square | 37 | 35 | 32 | 86% |
| CP6 | Tanyard Ln Car Park | 43 | 35 | 32 | 74% |
| CP7 | Market Square | 79 | 123 | 111 | 141% |
| CP10 | Kilbride St Car Park | 84 | 100 | 90 | 107% |
| Sub-Totals | | 326 | 349 | 315 | 97% |
| Bridge Centre area private car parks | | | | | |
| PP1 | Bridge Centre SW | 154 | 139 | 125 | 81% |
| PP3 | Bridge Centre CS | 102 | 99 | 89 | 87% |
| PP4 | Bridge Centre CN | 28 | 28 | 25 | 89% |
| PP7 | Bridge Centre NE | 18 | 17 | 15 | 83% |
| PP8 | Water Ln Car Park A | 11 | 9 | 8 | 73% |
| PP9 | Water Ln Car Park B | 46 | 31 | 28 | 61% |
| Sub-Totals | | 359 | 323 | 290 | 81% |
| On-street car parking | | | | | |
| OS1+2 | Columcille St North | 23 | 18 | 16 | 70% |
| OS3+4 | Columcille St South | 24 | 18 | 16 | 67% |
| OS5+7 | Harbour St West | 15 | 28 | 25 | 167% |
| OS6+8 | Harbour St East | 17 | 31 | 28 | 165% |
| OS9+10 | O'Carroll Street | 46 | 79 | 71 | 154% |
| OS11+12+13 | Church Street | 41 | 68 | 61 | 149% |
| OS14+15 | Patrick Street | 36 | 31 | 28 | 78% |
| OS18 | Main St North | 4 | 3 | 3 | 75% |
| OS19+20 | Main St Centre | 14 | 13 | 12 | 86% |
| OS25+26 | Store St South | 15 | 39 | 35 | 233% |
| OS35 | Distillery Ln South | 17 | 15 | 14 | 82% |
| OS36 | High Street | 8 | 11 | 10 | 125% |
| OS44 | Kilbride St East | 3 | 8 | 7 | 233% |
| Sub-Totals | | 263 | 362 | 326 | 124% |
| Combined car parking provision | | | | | |
| Totals | | 948 | 1034 | 931 | 98% |

Table 11: Future parking supply and demand within town centre core